435 North Main Street
La Verkin, Utah 84745
(435) 635-2581 (435) 635-2104 Fax
www.laverkin.org

La Verkin City Council Meeting Agenda
Wednesday, February 4, 2026
6:00 p.m. regular meeting
Council Chambers, 111 S. Main, La Verkin, Utah

A. Meeting Called to Order: Invocation by Invitation; Pledge of Allegiance

B. Consent Agenda: (Items on the consent agenda may not require discussion. These items will be a single motion unless removed at the request of the Mayor or City Council.)

1. Declarations of conflict of interest
2. Agenda
3. Meeting Minutes: January 21, 2026, Work and regular meetings.
4. Checks and Invoices: $ 120,219.15

C. Business:

1. Discussion and possible action to set a public hearing for the secondary water feasibility study, user rate analysis, impact fee analysis and impact fee facilities plan.
2. Discussion regarding an amendment to the La Verkin city code by removing, adding/replacing the following terms in Section 8-1-4 (statement of charges: delinquency): and providing an effective date.
3. Discussion regarding an amendment to the cemetery's rules and regulations.
4. Discussion regarding vacating property at 205 S 100 E.
5. Training for OPTMA/GRAMA.

D. Mayor & Council Reports:

Mayor Wilson:
Kyle Gubler: City updates
Fay: City updates
Gubler: Public Safety, Recreation/City Festivals
Prince: Beautification/Trails Committee, Economic Development/Tourism, DTEC
Pectol: Fire District, Ash Creek Special Service District
Barr: Washington County Solid Waste, Historical Preservation
Valenti: Planning Commission/Zoning, Southwest Mosquito Abatement

E. Citizen Comment & Request for Future Agenda Items: No action may be taken on a matter raised under this agenda item. This item is reserved for the citizens of La Verkin who have items not listed on this agenda. There is a time limit of 20 minutes with each individual taking no more than 3 minutes.

F. Adjourn:

In compliance with the American with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify Nancy Cline, City Recorder, (435) 635-2581, at least 48 hours in advance.

Certificate of Posting

The undersigned City Recorder does hereby certify that the agenda was sent to each member of the governing body, sent to the posted on the State website at, posted on the La Verkin City website at www.laverkin.org and at the city office buildings 111 S. Main and 435 N. Main on January 29, 2026

Nancy Cline, City Recorder

City of La Verkin

435 North Main St., La Verkin, Utah, 84745
(435) 635-2581 Fax (435) 635-2104
www.laverkin.org

La Verkin City Council Work Meeting Minutes
Wednesday, January 21, 2026, 5:00 pm.
111 S. Main, La Verkin, Utah

Present: Mayor Kelly Wilson; Council Members: Amanda Barr, John Valenti, Scot Pectol, and Darren Prince; Staff: Kyle Gubler, Derek Imlay, and Nancy Cline, Public; Blaine Worrell, Paul Anderson.

Called to Order –Mayor Wilson called the work meeting to order at 5:00 pm.

1. Discussion regarding the La Verkin City Secondary Water Feasibility Study.

Blaine explained that this report included a lot of reports into one. It's a master plan for the city, but it's also a user rate analysis. Analyzing if the existing user rates are sufficient to cover costs of the system. It's an impact fee analysis and impact fee facilities plan. The reason that the water district contributed to this project was because it was a feasibility study. It's what led to the pond project coming to life. They did a lot of the study and initial analysis of that project as part of the setting. We're not going to really go into much of those details here. That was really more for the district's need to see where in La Verkin there was to put a pond. Obviously, we found a spot and that project's going forward, hopefully out to construction in the near future. He wanted to discuss a snapshot of the system. He showed all irrigation water rights out of the Virgin River. There are three different rights with a quantity of water. It totals about 2,640 acre feet.

Kyle added that he just received an email That water right is going to change. The total amount is going to stay the same, but that bottom 812481, I think, is down to 9.83 acre feet and the bottom number will increase.

Blaine replied he would get that changed before they finalize the report.

Councilman Pectol asked if that would change things since one is industrial and the other irrigation.

Blaine responded it shouldn't because they are in the process of changing all three of those right now to municipal. There's a change application with the state for all three of these to be changed to municipal instead of irrigation industrial. That's all part of that surplus and exchange agreement with the district to allow it to be stored.

Councilman Valenti added that the dispute is with the test site.

Blaine explained that the irrigation system was once held by an irrigation company that the city purchased. And as part of that irrigation company, there were 600 shares when that went into place. When the city bought that the existing shareholders of that company were given delivery contracts. Equivalenting 600 of those shares. And so there are 290 contract holders have 441 equivalent shares. The city's 2,640 acre feet of available water, they do have an annual duty or obligation that 1,944 of that acre feet, would be to contract holders if every contract holder used their full water. The way that's broke up is each equivalent share for those contract holders is one share that is 4.4 acre feet of water. There are the contract holders and then the leases. The share equivalencies are held by each contract holder. There are 223 contract holders that have one or less shares, or less than one share, 25 that have one to two, so on and so forth. 77% of all the contract holders have one or less share equivalents. The leases have 808 leasee connections currently in the city with 292 connections that are standby right now, meaning that they're not actively using water, but they have a connection. The table and in the graph, what we see is the average leasee user. This isn't exact because we don't have meters. Obviously, we do have some data, and we've been able to work with Derek and his team to pinpoint some areas and usages based on lot sizes, and the district's studies they've done of how much an average household in St. George uses for outdoor watering. We're able to determine that the average leasee user uses approximately 554 gallons per day per connection, whereas the average contract holder is just over 6,000 gallons a day. Part of that crazy high number is it's an average, so there's only 290 users. So that takes into account the people who have the big agricultural fields that are using 20,000 per day and others in a house using a normal amount. The high-efficiency users we will discuss later. This is for all future connections that come onto the city or some that have come recently. This is based on the water district's new standards for outdoor water usage for new houses. Those will come in and be using half as much as what a standard residential user, existing user, uses. They actually will be less as the district's looking to refine that down further. He explained a chart that 2640 water right number. And then in red is the total demand based on current and past usages or your projected demand of how much water you're going to use. The inverse of that is your surplus. This is basically that same gap. Historically, the last several years have been between 700- and 1,000-acre feet a year of water that has not been used by the city. The city staff analyzed that the distribution systems have some leaks and old pipes that we're looking at as if we have about 200-acre feet of water that's just going in the ground to no one's benefit. Once the project is completed the estimate that this blue line would then jump up to an extra almost 200-acre feet. The black line is going to be growth. So, as we get new connections coming into the city we'll see a slight increase in demand with new connections. But unlike your water system, usually when you see a graph like this your water demand is going to be pretty much identical. You're going to have the same kind of growth. With irrigation however, generally speaking, when you have a development that goes in, it develops over a farmer's field or an agricultural piece that was being irrigated. So when it comes to irrigation water, generally speaking, you have something that was being 100% used for irrigation is now being a very, very small percentage, especially now with the high-efficiency houses that are going in. They will still see a pretty good increase in growth for the city with a very slight increase over time with growth. Then what we are assuming here is an assumption based on just available data and projections, is about 2038 will be where all of the standby connections come online. We're assuming all the standbys come on anywhere that doesn't currently have a connection, gets a connection, and we've developed the areas that are not fields. It's the period we're expecting the most demand of irrigation in the city. From that point forward, all future growth would be replacing agriculture, and then you'd start seeing a reduction in usage over time, long term, because we'd be swapping irrigation for culinary water, essentially. The number of delivery contract holders because the assumption there is contract holders that are using their fields when they develop it have nowhere to put that water would be selling it back to the city. Trying to get some recoupment of costs that they're not holding onto and paying for fees that they're not using. That's why there's a 20-38 surplus here, kind of what we're assuming is the worst demand year, and then from there, your surplus is projected to slowly increase over time. This being a master plan, we talked about one of the main things a master plan does is analyzes the needs for the system. What are the recommended improvements to get the system up to where the city wants it and make sure it's ready for future growth. With the city's irrigation system and the approach with this being a feasibility with the water district, it's kind of actually unique when it comes to recommended improvements. Normally we'd have a goal by this year to have this piece of pipe replaced and upsized and we'll get new pipe here and there. With the work of the water district and the pond and pipeline project for the reuse pond and the surplus agreement, the Districts agreed to replace the entire system more or less. Anything that's the aged pipe that is backlot fed connections are all being replaced. That is the list of all the improvements for this year. Those first four projects, we have the pond and pipeline, we have some transmission line improvements, which is on the northwest side of the city. It'd be new pipeline and the purpose of that is when we build the pond the water system is being flipped. Normally it operates from the south to the north. All our pipe sizes are big on the south and get smaller as we go north. But when we're putting all the water source on the north side, now we have all the small pipe up there and big pipe on the south. There need to be bigger transmission lines on the north side of town to make sure no one's negatively impacted by the project. As of right now, if we don't get those transmission lines in, there'll be some people in the city that see a reduction in pressure just because of the small pipelines feeding them. That project will clean that up. With the in-town replacements, and then replacing the 100 East transmission line, which is old pit pipe, we will be at current industry standards. The year of installation, this is anticipated happening this year with that secondary irrigation project.

Councilman Prince asked if the city had seen the 7 million dollars that pipeline will cost.

Councilman Valenti responded that is the districts project not the cities.

Blaine explained that the surplus agreement is $13.6 million from the district. The $7.3 million on there also includes the actual dam and the pipeline. The district is contributing to that as well. About $21 million of projects can be installed in the next year and a half or two years for the city. Beyond that he didn't have any recommended improvements now because the city is getting almost a clean slate as it is. They recommend the plan be updated in five years. The biggest thing with that update is probably just going to be looking at user rates and budgets, especially after getting the pump station up and operating for a couple years, seeing what it takes to maintain that. After these projects go in about a quarter or half of the city won't get replaced because it's newer pipe or it's front lot. So, start to identify when those projects need to be replaced long term.

Councilman Valenti pointed out that all of these monies came about after this plan was written. Were all the fees that are outlined in this meant to pay this cost?

Blaine explained they worked side by side with that agreement and the study.

Councilman Prince asked as we get this project started, have we decided how we're going to help people get water from their backyard to be in the front yard?

Blaine explained it moves the irrigation lines to the front but how are the citizens going to move their connection to the front yard from where it currently is in the back yard.

Derek explained they are talking about 470. The back line is still live. Even though they're being fed from the front, we haven't made that transition over so we can shut the back line off. That's the one that backs off the front, or the backside of 560 West. We have discussed potentially the city paying for the materials and then the citizen could figure out how to get it back. We're going to leave a stake for them to put wherever in their yard best suits them to be able to get to the back. Because normally our standard is within three feet of the culinary water meter, one side or the other. But because they may have obstacles, like concrete, we're going to stake it, and then that's where it can get installed. He suggested the best thing to do, because we really can't figure out an amount, is have the city purchase the materials and then have the citizens figure out how to get to the front. He suggested running a one-inch connection because there coming in through a one-inch yoke. Then coming out on their side would reduce down to a three quarter but they could do the one-inch connection all the way through to carry the volume to the back.

Blaine added that is all to be determined. They have not addressed that part of the replacement yet. The way we're approaching that project is to leave those back lots on. The project will be completed, there'll be connections, but the lines behind the lots will still be live. The city can then determine a date that they're going to be turned off. They will need to inform the public they have X amount of time to get the line connected to the front.

Kyle asked if they get through the project and have extra money left will the district allow them to use it on this? Getting connections to the citizens?

Blaine replied yes, basically it's a blank check for irrigation improvements in La Verkin. As long as they can justify it as an irrigation improvement. They are planning to be out to bid in September, and construction starts in November if it goes smoothly. The project's going to take at least a year to do. They will be working with whatever contractor ends up getting it and doing the design to see how things are phased.

Councilman Valenti was curious how much time they would go without irrigation water.

Blair replied that the pond will be active by that point, they are hoping for minimal days without irrigation. The intent is not to have the contractor go in the backyards at all. We'll do all the work within the city right away.

Councilman Valenti wondered how much culinary water they would have to use if the irrigation was shut off.

Blaine explained that the idea will be to mitigate it so that any construction will be done in pieces so that no one's shut off for more than a couple days. That is the intent.

Kyle added there will be growing pains. They will have some people cut off at some time, but they hope to keep it to a minimum.

Blaine explains the table. On the left is the existing rate structure, how that's set up with leases and contract holders. Leases and contract holders are billed very differently. Leases are billed on a monthly basis based on their lot size, where contract holders are billed either annually or biannually based on the number of contracts they hold. And then there's an annual assessment fee and then there's just the annual or biannual fee based on how many they have.

Paul explained that every share equivalent is $25.45 a year. They pay for the first one and then for each one there after they pay twice a year.

Blaine added that the average existing leasee pays $13 a month or $117 a year. The contract holders pay an average an annual of $89 a year. The city generates $94,500 from leasees and $26,000 from contract holders. Currently the irrigation system is supplemented, or subsidized, for lack of a better word, from the general fund. The irrigation on its own does not generate enough revenue to even fund itself.

Kyle added they have been told that by their auditor for two years in a row now.

Blaine replied that the desire was to see if there's a rate that would have the irrigation be self-sufficient. To make sure they are covering costs to handle the pump station, that's coming online, and what the associate O&M costs will be. If they were to get those costs the irrigation budget at its current rate would be short about $118,000, $120,000 a year. This requires an increase in user rates. It was $21.90 across the board. Every connection in the city on average paying $22 a month. They worked with staff to come up with a method that would increase that or target the $22. Once you have a target there's infinite number of ways to do that. They suggested making an increase in both contract holders and leases.

Paul explained they wanted to keep the same structure that people are already being billed at which we had before the 25 dollars per share equivalent. They found if they kind of blanket increased the prices for the usage across the board to 88%, make the share equivalent cost $47.94, and then continue to pay the delivery contract holders would continue to pay the two installments of half that cost or any above one share equivalent. Similarly, if they increase the user rate for leasses by 88%, there is the cost at the end. They will get to the target number. It did require a slightly higher adjustment to the assessment fee. The contract holders have an annual assessment. It's $50.89 if they hold contracts that would increase to $140, which is a larger step increase, but that made up the difference. Also, it helped to balance the average cost between the lease users and contract holders. Using that approach, the costs go up by 88% for lease users, so the average leasee usage cost is $24.53, and annually that's $220. And for contract holders, it's a little bit cheaper. It's $212 for the year for the average contract holder, which the average contract holder has one and a half. Some people have more, some people have less. Doing that allows them to cover the projected cost next year for next year's budget. The other interesting thing is when you compare this with the projections of people selling the delivery contracts back and gaining more lease users, that the lease users will pay the same amount no matter what. It's just based on lot size. They'll be assessed the same fees, even if we get the high-efficient usage users, they'll be billed the same for the area. And they pay slightly more per month than contract holders. As we lose contract holders, they aren't necessarily losing revenue to the city, but it's very close. They're almost at parity there, just kind of a general approach.

Councilwoman Barr was concerned that someone with 5 acres pays the same as 1 acre. Shouldn't it be a more even ratio?

Blaine asked if she meant right now it's 88% for everyone, was she saying that under half an acre was 50% increase, the half to one acre would be 100% increase, and then over an acre would be like 150% increase.

Councilwoman Barr suggested expanding the rate of pay. Someone who has five acres of land is paying the same as someone who has one acre of land, or an acre and a half. That doesn't make a lot of sense.

Blaine replied that the one thing about that is because there's so few of them, that's not going to move the needle much.

Councilman Valenti added that all of those rates were established by the old agreement, the old exchange agreement with the canal company. They set a premium rate or a Schedule. That's what equivocated that monthly rate to the annual rate for contract holders. That's why that's expressed that way. He didn't know if there was any language about share equivalent lease fees. It was meant to reward the contract holders by establishing that water right. That's in the city code.

Blaine added that there's a clause in those contracts that the city has the right to increase the fees as needed as long as it goes through the proper processes.

Councilman Prince asked if he was trying to get them burned at the stake.

Blaine explained he talked a lot with the Mayor and Derek about the increase because when they increased the culinary water rates the citizens were upset and not prepared for it. His suggestion was to postpone implementing any of these rate increases, but they could adopt it now. Postponing it until the pond project was completed that way there is some tangible quality of improvement with the cost increase because we'll be getting better water with with that project

Councilman Valenti added they could end up with a surplus. With the improvements being made they have a brand-new system, then all of those functions, maintenance, are all going to go down. There won't be breaks like we have all season. There are not going to be any replacements in a new system.

Kyle replied that the maintenance would go down. However, due to the pumping costs, we have never been able to put anything aside for replacement of future maintenance. And that's the state requiring that. Could we get any grants? They have got to be able to show them that we're setting money aside for future repairs or replacements.

Blaine added that goes back to our recommendation, this gets updated in five years or less. He recommends no more than five years. Usually, if a significant change occurs or there's a reason for one or at least five years because then it gives the city a chance to go and look to see if there is a big surplus. Could rates actually be lower? It doesn't happen very often.

Councilman Valenti pointed out they you're predicting now is that every year under the new rates, you're going to bring in $241,136. They are going to bring in a quarter of million every year.

Blaine replied yes but they project to spend a quarter of a million per year.

Councilman Valenti asked what they would be spending that on. He didn't feel like it was explained in the study. He asked what our current expenditures are.

Kyle explained that general fund supplements it, hopefully that stops. There are wages and salaries that we take out of the irrigation fund which are far lower than what they should be based on what actual manpower hours.

Blaine added that right now $133,000 based on fiscal year 26 was in the budget. $133,000 for salaries, there's 21,000 for repairs, which doesn't actually get very far. He thought some of the repairs have been doing 11,000 for just miscellaneous equipment and office materials.

Councilman Valenti commented that most of the salaries are based on repairs.

Blaine explained that the way the city operates is because some of their salaries come out of different categories.

Kyle explained that the way it works is that we take a percentage of the fund, and it doesn't pay its way as far as salaries go. That gets absorbed into the general fund. The general fund pays the crew members and others a higher percentage than it probably should based on where they're actually working.

Blaine continued to explain that there's also $11,000 that's going to an old bond, and then we're assuming about $50,000 for the bond on the filter station.

Kyle added that the bond was for a filter station that is going to go offline. However, they still have to pay it. It's 0% interest, and we've got about 10 more years on that.

Blaine explained that the pump we're assuming based on the pumping rates and power, as of right now, will be around $50,000 a year for maintenance on that. The next one is impact fees. This is where it gets interesting with this master plan because of the dynamic with the district, paying for this project and getting basically an all-new system next year there are no improvements after next year. The way impact fees are set by law is they're going to pay for improvements that are caused by growth and right now we're saying well growth doesn't cause new improvements for irrigation there's no upcoming projects. They don't have anything to put impact fees towards. What the city's charging for impact fees, and it's collecting, and the way the law states is, you collect impact fee, the day you collect an impact fee, the city has six years to spend that money on an approved project that's impact fee eligible and on the city's impact fee facilities plan.

Councilman Valenti asked if the impact fees will go away.

Blaine explained that we don't have projects, but the one thing that the impact fee law does say is you can do studies, those are impact fee eligible, so updating this plan is impact fee eligible. Basically, they can pay for this plan to be updated. Based on that study, the max allowable impact fee per connection that the city will be able to charge is $242 per new connection. Per an equivalent, like, one ERU, so a one-inch connection. That can be increased based on size. The culinary water meter, so two inches has a proportion of area, to get up to the different sizes. Also, currently the city does not charge an impact fee for irrigation to commercial connections, so no commercial connections. For example, when the hot springs came in, they did not pay an irrigation impact fee.

Councilwoman Barr asked why they weren't charged.

Kyle explained it was meant to entice commercial businesses to come into La Verkin a few decades ago.

Derek added that's why this is so important. We need to update all of this. Adopting at least the impact study the residential impact would drop immensely. The commercial will start paying for their part of the drainage.

Kyle added that these big businesses need to pay drainage. They have these big parking lots that don't soak up any water, they create drainage issues.

Blaine explained they needed this study to go to CIB and get some grant money to complete it but with this impact fee in the five-year window with the same assumptions on growth we get enough connections the city would be able to just pay this project outright and not have to seek any funding.

Mayor Wilson asked if the chart was the proposed impact fees and what about commercial rates.

Blaine explained this is based on connection size. Whether you're residential or commercial. And that's generally the standard way to do it. This way it doesn't matter what type of zone it is because its based off of size. If they get an irrigation connection, they pay an impact fee. They will be across the board the same.

Councilman Valenti didn't think the rates needed to be so high. His opinion was they could be lowered.

Councilwoman Barr added it would almost double her small quarter acre property.

Blaine explained the cost of irrigation is up to the council to set. He only looks at the numbers and informs them.

Mayor Wilson said they need to discuss it, set a public hearing, and adopt it or not.

Councilman Valenti suggested if we could get one session in between, take the public hearing, not make a decision that evening.

Mayor Wilson agreed they could do that.

Kyle added that they could adopt it but make the effective date later in the year.

Mayor Wilson agreed and added that they should set the date when the rates go in, but impact fees could go in effect now. There's a 90-day period anyway before they go into effect.

Councilman Valenti thought that was a good idea to break it up.

Councilman Prince commented that the communication needs to be better than the way it happened with the culinary water rate hike. He suggested that the engineers and Mayor make a video explaining the numbers, and deficit and what the plan is, and they put it on social media, so the citizens are more informed.

Kyle agreed and thought about getting as much information as possible but people will still say they didn't know.

Councilman Prince agreed but suggested they direct them toward the video that is out explaining the rate hike.

Kyle replied with the culinary water rate increase they didn't have a video, but a presentation and people still said they didn't see it.

Councilwoman Barr agreed and added that people only see what they want to see sometimes.

Councilman Valenti asked when the last time they raised the secondary water and for how much.

They discussed it was raised in 2010 or 2011. They agreed if they had raised it one dollar a year it wouldn't be so drastic at all at once. It was raised a couple dollars.

Councilman Prince was concerned about the increase because they raised the culinary rates in 2025.

Councilman Valenti agreed. It an 88% increase. He agreed that more information that they can put out there explaining why its happening would help the citizen understand.

Mayor Wilson agreed that the more education they get out there to the people, so they understand that we have a deficit. They've got to come up with some money to cover that. There's going to be increased costs of pumping now that we're coming out of a pond. Yes, we're going to have a new system, and probably the maintenance and repair is going to go down. But you still have to cover the city crews for their portion of that.

Kyle agreed and suggested they wait on the increase until the pond is done, and they have cleaner irrigation water so the public can see why the rates increased and the water can stay on longer.

Councilwoman Barr agreed and commented the public is always talking about the irrigation water being off and muddy.

Councilman Prince added a lot of people don't even use it now because its too dirty. When he lived in Toquerville the irrigation was clean.

Mayor Wilson suggested next council meeting, they set a public hearing date. Get some public input and then at that point set that for the second meeting in February. At the end of March they would pass it. That's going to put the impact fee off. If we don't put the rate increase into effect until we get on the pond that will be another year.

Blaine explained on the corner of 740 and State Street, there's going to be a demonstration facility and a mini version of the botanical gardens, where they're going to use the reuse water to water different plants and stuff. They are doing an advanced treatment center. They are also having a drinking fountain that you can drink from.

Mayor Wilson closed the meeting at 5:52 p.m.

B. Adjourn:
The meeting adjourned at 5:55 p.m.

____
Date Approved

____
Mayor Kelly B. Wilson

ATTEST: ________________________
Nancy Cline
City Recorder

City of La Verkin

435 North Main St., La Verkin, Utah, 84745
(435) 635-2581 Fax (435) 635-2104
www.laverkin.org

La Verkin City Council Meeting Minutes
Wednesday, January 21, 2026, 6:00 pm.
Council Chambers, 111 S. Main, La Verkin, Utah

Present: Mayor Kelly Wilson; Council Members: Darren Prince, Scot Pectol, Amanda Barr, John Valenti; Staff: Kyle Gubler, Derek Imlay, Nancy Cline. Public: Susi Lafaele, Patricia Wise, Mary Williams, Debbie Groves.

A. Called to Order –Scot Pectol gave the invocation and Pledge of Allegiance at 6:00 pm.

B. Presentation:

1. Washington County Fair

Susi Lafaele, fair director, introduced her team. They informed the council of the history of the fair and La Verkin has been chosen for the spotlight city this year. She discussed the scholarships and FFA program they are a part of. The fair now is eight days long. Eighty percent of the food vendors are local, and fifty unique retail vendors attend.

C. Consent Agenda: (Items on the consent agenda may not require discussion. These items will be a single motion unless removed at the request of the Mayor or City Council.)

1. Declarations of conflict of interest
2. Agenda
3. Approval of LVC section 1-6-4: Public Official Bond and/or Insurance Coverage.
4. Meeting Minutes: December 3, 2025, January 7, 2026, regular meetings.
5. Checks & Invoices: $ 399,998.42

The motion was made by Councilwoman Barr to approve the consent agenda as written. LVC section 1-6-4: Public official bond and/or Insurance coverage. Meeting minutes for December 3, 2025, January 7, 2026, regular meetings. Checks and invoices in the amount $399,998.42, second by Councilman Prince. Roll Call Vote: Barr-yes, Valenti-yes, Price-yes, Pectol-yes. The motion carried unanimously.

D. Public Hearing:

1. FY 2025/2026 Budget amendment.

Kyle explained that this is a minor amendment to the budget. On the first page under revenue, there are four places that he was proposing that they increase over the budget. The sales and use tax, which is line 3130, proposed to increase by $20,000. Under sales tax streets 3136 he proposed an increase of $35,000. The revenue franchise tax line 3140 he proposed to increase that by $10,000. Transient room tax line 3150 increased that by $21,000. For a total of $86,000 in general fund taxes. The intergovernmental revenue that's down middle of the page. Class C roads, he proposed an increase that by $80,000. The local road tax line 3357 to be increased by $5,000 for a total of $13,000 in increased revenue.

The interest, which is towards the bottom, shows interest is 3610 he proposed an increase of interest that they have generated in their account by $78,000, and that totals $177,000 in added revenue that they plan on adding to the budget. Expenditures on the middle of the second page. Expenditures for administration, there is an additional expense of $4,000 for an attorney, which is line 4140.310. There is an additional expense of $5,000 for computer equipment. Line 4143 bank charges, which is very bottom line on page two. 4140.600, increasing that by $5,000 to increase the lease expenditure payment for the office car, which is page three. 4140.810 right up near the top, increasing that $4,000. That's for the office car that we have, and the elections on line 4176.10 increasing that by $1,000, which we already have paid to county. That's an increase of $1,000 in expenditure. It was more than what we anticipated. That's the total below administration for $19,000. On page 3. Building and grounds increase the operation and maintenance by $5,000 for tree trimming. We're still under operation of $5,000. Under police, under lease payments, near the bottom of the page. 4210.810 increasing that by $6,500 for the chief's new lease payment on his truck that they discussed earlier in the year.

Those are due to come in a couple of three months. Under inspections for part-time employees line 4253.120 increasing that by $5,000 for Brad Robbins, our city planner who's been helping us out. Highways for street improvements $68,000 for road maintenance and that would be under street improvements 4410.745 that's for ongoing street maintenance projects and also under lease payments increase that by $8,500 for Derek's truck for a total of $76,500. Under community development, which is the last expenditure, about two thirds of the way down 4626.10 increasing that by $65,000. That was the former council that approved it. The cemetery that's now done the research survey that we did so that we could get the grant or funding for the lead and copper. We purchase secondary water out of this fund. We have a willing seller for almost five shares of water; the city has established a point for $2,000 for a full contract share, and he has four and three quarters of shared water. He wants to sell the city, so if they buy that it's right under $10,000. They have three signs that they would like to put up around the city. Those expenditures total $177,000 equals the total revenue that they have now. He would like their consideration over the problems with doors at Power Plant Park. They could in the motion propose that they increase the revenue by $5,000 and increase the expenditure by $5,000 to cover fixing the doors at Power Plant Park. That is something that if they make a motion and they are willing to approve this budget amendment, they could add that into the motion. An additional $5,000, and $5,000 in expenditure.

Mayor Wilson asked what happened to the doors at the park.

Kyle explained that there are problems with the locking mechanism on them, and they have another company that is going to do it. They will be able to control it with their phones. The new bathrooms at Wanless Park will be this way. The city policy is they close at midnight or dark. They adjust those throughout the year so that the restrooms at the parks lock at dark. That's part of the $5,000. They could choose not to, it's up to the council.

Public Hearing opened at 6:21

Patricia Wise asked what the three signs are that are in the budget.

Kyle replied they are the rock signs like at the parks. There will be one at the city office, baseball fields and the police station.

Patricia Wise, a La Verkin resident, commented there is a line item in the budget for trails and thought it would be nice to actually have money set aside there. When trail project maintenance comes up, we don't have to go through a huge process to get approved or have to bring it to the city council again. Over the last year, we gained permission from private landowner to put signage up on the trail. I've submitted all of that paperwork to Derek. I didn't get it done before I left the council, but I submitted everything from a company that's recommended by Hurricane and by Greater Zion. They're just the cross type trail signs with hiking, no mountain biking for Cottonwood Hollow and that is about $1,200-1,300. The Rim to River trail. It's a great trail, gets a ton of use, but there has been erosion and I don't even think it was related to the trail. The erosion probably would have happened from the hillside. It just happened to dump on top of the steps. So that's going to require Dereks crew and it doesn't seem that we should be taking money from roads. By putting a dollar amount for maintenance on trails would be my only comment about this budget amendment.

Debbie Groves, a La Verkin resident, agreed with spending the extra money on the bathroom doors to stop the vandalism that is constantly happening.

Mary Williams, a La Verkin resident, commented that she only found out about the budget amendment from Patty and if citizens are not computer savvy or social media savvy maybe they could put public hearing meetings on the water bill. She commented that she and her husband used to come to meetings but they didn't have any information on what was going to be discussed so they stopped coming. She likes that the packets are on the website now.

Kyle suggested she sign up for the Newsletter.

Public Hearing closed at 6:27

E. **Business:**

1. Discussion and possible action to approve Resolution No. R-2026-*05*; a resolution opening and amending the Fiscal Year 2025-2026 Budget.

Councilman Pectol commented he agreed with the addition of the doors to the budget. It seems like cheap insurance to stop vandalism.

Councilman Prince commented he liked Patty's recommendation to add money into the trails budget. He is on the trails committee this coming year and they created a committee, and it would be great if they could take care of things on the Rim to River Trail. He would like money there to build little projects and shore up erosion. If they have a committee but they didn't have any money for cement or to buy anything, it would be kind of frustrating. He thought this would be a better discussion during the next budget year. But he liked that suggestion.

Kyle suggested they could add $1500 to the budget amendment to pay for the signs Patty is talking about. He advised them that they could put it in the motion. Being a permanent line item would be in their budget retreat when they are looking at what their goals are going forward. He was not being negative about anything, but there are one hundred and one projects that would be awesome to be able to do. They don't have the money to do everything, so that's where the council comes in and decide what's appropriate.

The motion was made by Councilman Prince to approve Resolution No. 2026-05. A resolution opening and amending the Fiscal Year 2025-2026 Budget adding $6,500 to the revenue and expenses, $5,000 for bathroom door locks and $1,500 for the trail budget, seconded by Councilman Valenti. Roll Call Vote: Barr-yes, Valenti-yes, Prince-yes, Pectol-yes. The motion carried unanimously.

2. Discussion and possible action to approve Ordinance No. 2026-*01*, an Ordinance amending the La Verkin city code by deleting, changing, or adding certain terms and definitions to Section 10-1-6.

Derek explained that they have been going through the building code trying to change, amend, and update the code. He found definitions that they don't have or that need to be beefed up or be more explanatory. The impact on accessory buildings or accessory structures attached to primary dwelling block coverage for new definitions we want to have. This particular one the attachment of the building, a lot of people try and get away with a two by four. They would delete the detached accessory dwelling unit, the DADU, because we actually had two definitions that were similar and they were confusing. By deleting this one, it'll make the other one more relevant and more explanatory than this one. They are deleting the accessory user structures which is the first one and beefing up the definition.

The motion was made by Councilman Valenti to approve Ordinance No. 2026-*01*. An ordinance amending the La Verkin city code by deleting, changing or adding certain terms and definitions to Section 10-1-6, seconded by Councilman Pectol. Roll Call Vote: Barr-yes, Valenti-yes, Prince-yes, Pectol-yes. The motion carried unanimously.

3. Discussion and possible action to approve Ordinance No. 2026-*02*. an ordinance amending the La Verkin city code by deleting, changing or adding certain terms and definitions to Section 10-7-21

Derek explained that in all of our residential zones the R-1-8, R-1-10, R-3-6, R-1-14 he thought were the ones that are detailed. There's a provision there that states that if you're typically behind your house, build an accessory dwelling or accessory structure within two feet of the property line, or in a corner, two feet off of each corner property. Over the years they have always been tempted to change that to come into compliance with the fire code which requires it to be five feet off the property line. And over the last couple of years, they have had multiple fires that caught structures on the other side on fire because of how close they were to the property line. It also addresses drainage, getting it further away from the neighboring property. He was proposing that they go to as long as ten feet away from the house, then you can be five feet off the property line unless there's a utility in the back. Right now, they have a lot of irrigation lines that run through backyards. They have a lot of power lines, phone lines and things like that. If there is a structure that already is running in the backyard, you have to maintain a seven-and-a-half-foot setback with utilities. If there are no utilities, then they can have a five-foot setback. The problems they have been having when the utilities or irrigation need to be fixed, and the citizens have a structure on top of them they have to take down the structure enough to fix it and it is the owners responsibility to fix the structure when the city is done with the repair. There are a lot of conflicting ordinances allowing some things that cause them a lot of problems. This clarifies and cleans it all up. In new parts of town, new subdivisions there's no utilities in the backyards; everything is in the front. The irrigation project is coming online; it'll resolve a lot of issues. This simplifies it and puts us back into compliance with the fire code.

Councilman Prince is a big proponent of ADUs and asked if making those setbacks wider would impact the lots in La Verkin and where they could be built?

Derek replied no he had been to the smaller lots. Planning commission is going to hold a public hearing next week about the ADUs. He mapped out an ADU on a smaller lot and it met the requirements. If they have a smaller lot with a house, which is going to allow you to have a smaller ADU. Minimum of two hundred and fifty square feet is what they have to have. That limits it. They may not be able to be as wide, but you can make up for the width by depth.

Councilman Prince added he like the fire code because that's been an issue in municipalities where they have those narrow setbacks. If one neighbor did a two foot setback then the other neighbor needs ten feet for the fire break and then they have to put their seven feet setback not five.

Derek agreed and brought up the fires they had where the structure ignites and its two foot away and the next owner's house or structure is also had a two-foot setback and they both catch fire. It's better for the customer not to have to replace something they put there. Code now doesn't make that allowance for them before they had two codes not really coordinating together.

Councilman Pectol thought this was a good idea to protect citizens. If somebody had a wood pile or something stacked up against the fence and caught on fire, are we protecting folks.

Councilwoman Barr asked how he came up with the five feet. She lived in Las Vegas, and it was four feet and was curious how they came up with the numbers.

Derek replied it's the fire code that requires five feet, so they are following that standard.

Councilman Prince added that buildings need to be ten feet apart so each landowner would be five feet from property line that adds up to ten feet.

Derek added that technically if you are five feet away from another building depending on the type of building or structure, it may not have to be fire rated. It could come within five feet of the unit, fire-rated assemblies, which are going to be done through construction or through sprinklers. Five feet is always the separation you want to have. The further you go, the less stipulations you're going to have as far as fire-rated assemblies. With ten feet they definitely don't have to be fire-rated depending on size. The building would maybe determine whether they can count the sprinkler requirements. Five feet is the standard.

Councilman Prince thought it was a good meeting ground. If one neighbor is only four feet away, then the other neighbor would have to give up six feet to avoid the fire rating.

The motion was made by Councilman Pectol to approve Ordinance No. 2026-*02*. an ordinance amending the La Verkin city code by deleting, changing or adding certain terms and definitions to Section 10-7-21,

seconded by Councilwoman Barr. Roll Call Vote: Barr-yes, Valenti-yes, Prince-yes, Pectol-yes. The motion carried unanimously

4. Discussion and possible action to approve Ordinance No. 2026-*03*. An ordinance amending the modifying regulations in Section 10-6A-5, Section 10-6B-5, 10-6D-5 of the La Verkin City Code.

Derek explained that the state mandated the cities to have ADUs. Under number two letter C, it says: must be attached to the primary dwelling unit. It refers to the definition which was approved on the very first one. That's where they ran into problems. If they have a house and add onto the house and create another room because under the internal dwelling units, you can rent out a bedroom, they can rent out upstairs or downstairs, you can rent out whatever you want as long as health and safety criteria are met. There are criteria on how much you can add to the house to meet the criteria. The biggest problem came down to is what's considered attached. He had people try to say that it's attached by two by four or attached by a piece of metal. They decided to create a strict definition, which is why we changed the internal dwelling unit to refer back to the definition as far as what attached means.

The motion was made by Councilman Prince to approve Ordinance No. 2026-*03*. An ordinance amending the modifying regulations in Section 10-6A-5, Section 10-6B-5, 10-6D-5 of the La Verkin City Code, seconded by Councilman Valenti. Roll Call Vote: Barr-yes, Valenti-yes, Prince-yes, Pectol-yes. The motion carried unanimously.

5. Discussion regarding ZRC (Zion Regional Collaboration) funding.

Mayor Wilson explained that some of the council thought we shouldn't be part of the ZRC. Patty had emailed the council and they read her email. They have been a part of the ZRC for eight years. The county pulled out of it and he didn't know why. He wondered if they would want more money from the cities since the county wasn't contributing anymore.

Kyle added he got an email from the mayor of Springdale and he suggested they would need $20,000 more. In the past it was presented that the cities pay what they want toward it but now there is a short fall of $20,000.

Councilman Valenti commented that he wanted to carry on the work that Patty had been a part of. He felt there's a great value in the collaborative for these cities to support each other in ways that get things accomplished oftentimes behind the scenes. It's also a good information group. When they were talking about repaving Sheep Ridge and putting in an underpass it was good for the city to be aware of and understand how that was going to happen. They just spent five thousand dollars to put locks on the bathrooms. He felt that this is so much more valuable than that. They have a remote administrative position that some don't agree with. But people all over the plant work remotely. He has worked remotely for people in California, Montana, and Florida, so it's not unusual. He thought the salary that they pay their administrative advocate is minimal in comparison to any number of things. At the Mayors request, he had spoken to Mayor Bruno. She confirmed to him that there would be no increase for the city. The city could pay what it paid in the past and that would be fine with them. They could carry it on for a year if it becomes something that the council becomes dissatisfied about at some point they wouldn't renew it again.

Kyle asked if they had come up with the $20,000.

Councilman Valenti responded that she assured him the amount of money is up to the city to decide. That there would be no increase in the donation if the city didn't want to.

Councilwoman Barr thought it was a good deal.

Councilman Prince didn't agree with the coordinator being remote. He felt they needed to be here more than a few times a year.

Councilman Valenti disagreed. He has sat in on teleconferences all around the county.

Councilman Prince commented the county pulled out for some reason.

Councilman Valenti thought all the cities were involved and they are talking about bringing more on.

Councilman Prince asked what was the short fall from? Another organization dropped out.

Kyle thought it was Greater Zion.

Councilman Valenti thought it was important for the communities. There are discussions of Leeds coming on and certainly Toquerville. He felt it would be growing in the future.

Kyle thought they donated $6,700.

Councilman Prince would rather see that money going into La Verkin trails.

Councilman Valenti thought $6700 was a minimal amount. They agreed to spend $5,000 to fix the locks on bathroom doors. He felt La Verkin could afford $6,700.

Councilman Prince asked what the deliverables are? What has the collaborative done for La Verkin.

Councilman Valenti responded mostly it's supporting each other in developing trails. Also, construction issues within the county, roads, Zions, and electronic advertising. He has only attended one meeting so he couldn't speak in great detail but felt it was important for the city to invest in.

Mayor Wilson added that the transportation system was headed up by them from St. George to Springdale.

Councilman Prince thought they helped with the grant application for a trail.

Councilman Valenti expressed it is a year-to-year commitment and if they thought it wasn't valuable they could drop out next year. He would be willing to attend their meetings, and he would be happy to report back to them.

Kyle explained they took it out of community development fund in past years. There is no need to amend the budget. The discussion was whether you wanted to continue or not, and right now it's just a discussion.

Councilman Prince added that his biggest trepidation in not continuing is Patty has put so much work into it and he wanted to honor her too.

Councilwoman Barr replied if his biggest hang up was working remotely she has worked remotely for five years. Her team of ten is all up north and she had been able to manage. We have great repour. We've had two baby showers remotely for her team. They have had Christmas parties and did Secret Santa exchanges. They can do so much remotely and build great repour with people remotely. She travels up north a couple times a year.

Councilman Valenti added that when we have somebody like that who takes up an administrative role, they put so much time and effort into them. They groom, educate, and familiarize them with the area. They become very knowledgeable over time. To switch, even to switch tomorrow to another person, you lose all that institutional ability. He felt it does make a difference.

Councilman Prince didn't want to disagree with them. He is open to the idea.

Mayor Wilson commented they would look into staying in the ZRC.

F. Mayor & Council Reports:

Mayor Wilson: Reported that the water treatment plant will be operational on the first of February. The ribbon cutting is on the second of February.

Kyle Gubler: Reported the fencing around the bridge has been funded. We have a budget item in there of five thousand dollars we paid it to the county or UDOT. February 17th is the Southern Utah Transportation Expo at the Dixie Center. If you are interested in learning about what's going on transportation wise, what projects Utah has or any of the other cities and stuff, it's at the Dixie Center from 10:00 a.m. to 5:00 p.m. The youth city council is up at the capital. They do a lot for the city, and this is a reward.

Valenti: Reported on the planning commission meeting on January 14. The mosquito abatement, first meeting is going to be in February. There'll be some training involved before I go. And the last issue is the legislative body or the legislative advisory committee through the ULCCT. That's an interesting body. The first meeting was kind of looking at three pieces of legislation. The first one is a preferred use that's going to be preemption possibly of city zoning authority, and the parameters of that preemption are not quite done yet. There may be some substitute bills; he was not sure, but what they're looking at is basically creating a use zone. That the city would have the ability to veto, but only if they could come up with certain criteria. The ULCD is against it, but he thought what they were telling us in a conference is that 97% of the bills they get through to vote pass, so if it gets there, it will probably pass. The second issue they talked about is an infrastructure bill and that's going to be looking at providing monies to cities for infrastructure projects. One interesting thing about it is it could affect what's going on with the top side development. The bill hasn't taken form yet; it will fairly shortly. And the last one they discussed was a change bill on the exemption for personal property tax. They're looking at changing the formula from the current 45% reduction or exemption to a 60% exemption, but they're not sure how that's going to affect other categories like businesses and the like. They wanted input from the city on all three items, so he tried to discuss and let them know what's going on in our city because that's what they're always looking for. If the council is interested in more in-depth information about numbers of bills, the sponsors, and that he could provide that for them.

Kyle added that the Top Side property was listed for sale and they have twenty plus developers interested in that property.

Prince: Reported he did go to the D tech, and there are a number of projects starting that are very interesting. They're doing a passing lane on highway 7. George Washington area; they're starting a bridge over on I-15, so that will connect all the way from Hwy 7 to I-15 and then eventually all the way up to Santa Clara. The city of St. George is getting those sound walls on the east side approved it but the west side did not. The way that works is they poll the local residents, and they have to get 75% approval. The city has no choice if they get 75% approval, then they build the wall on the west side. There is a bunch of work going on between exit 12 down there by the Washington exit.

Micah Gubler: Not present.

Pectol: Reported he will be attending Ash Creek Special Service District's meeting tomorrow.

Barr: Reported that the solid waste meeting isn't until next month.

Fay: No present

G. Citizen Comment & Request for Future Agenda Items:

Mary would like them to bring back dumpster days. She knows that people came and dumped there that were not from La Verkin and thought maybe they could ask for ID. She has noticed a lot of big garbage items around the city. She wondered what happened to upgrading the park. She saw four different models then nothing else.

Kyle responded they needed a plan the sticking point is it's estimated to be seven million dollars to fix it like the model, so that's put us on hold for now.

Mary also was part of a stakeholders meeting with UDOT about making main Street one way and then has heard nothing about that.

Mayor Wilson commented that their proposal didn't work. That was a lot of money spent and was wasted.

Patricia Wise encouraged the council to improve public outreach. I know we all talk about it that we should do it and it's difficult to do, but each of you is assigned to a different committee like John is with the legislature, and planning commission, Amanda Historical Society. You know all of this. We need to let the people in La Verkin know what the council and the staff are doing. And Kyle does post the one-page newsletter; it's just not enough. It doesn't cover everything. People who have their kids and things, yes, they're interested, the rest of them really don't care that much. The way to do that is the website. And I know that we've got money in it been working on it, but there are links that are still not operational after some time in that. So if it's a matter of not having the right website company or paying more, I really think the council each of the council members should look at the Website and make recommendations to the mayor and Kyle. What would you like to see for the areas that you cover on the council? What would you like to see put out to the public and really make an effort to educate the public? Darren, you know people are on the trails. You need a trail committee. I know of eight people who would love to be on a trail committee. I just don't want to run it. And Scott, you know all of the things that you are going to be involved in, historical James Gubler has tried to do an amazing job. He has, but he needs that person to take him over the line. He needs to get the articles through and onto the website. La Verkin has such a rich history and there is just nothing there. And I know that Kyle has put a lot of effort into it, but it's not a one-man job. But I think collaborative you all can do an amazing job on public outreach. And mayor, have you talked to people from Hurricane lately? And have all of you seen "the loop"? Mayor Fawcett on the Hurricane city website and social media has started new ideas. He puts it out once a week and it's called "In the Loop." And he just gives people a list of about Six or seven things that were happening in the city. Like they are sealing the roads, you know, all that kind of thing.

Councilman Prince added what if there was just a really great former city council person? I am not saying any names, but we did a little podcast so cheap and so easy and we interviewed. A mayor, a city councilman, a city manager, a police chief. Once a week we just spend twenty minutes.

Councilwoman Barr added she thinks we just need to invite people and maybe bribe them with cookies or something. Say hey please just come attend the meeting and personally send out invitations go door to door because that's the only way to get people here. I know I've tried a few months ago like hey show up at this meeting. If we were able to watch the meeting once we get the technology in here fixed. I think more people would be involved. But it seems like more people show up here when they're pissed off about something.

Councilman Valenti added Toquerville has their meetings on YouTube.

Mayor Wilson suggested maybe we have those two signs out on the highway. There are speed signs now, but we just for information maybe a day or two before city council can announce it on the signs.

H. Adjourn:

The mayor closed the meeting at 7:15 p.m.

____
Date Approved

____
Mayor Kelly B. Wilson

ATTEST: ________________________
Nancy Cline
City Recorder

La Verkin City
Invoice Register: 1/16/2026 to 1/28/2026 - All Invoices

Invoice No.	Vendor	Check No.	Ledger Date	Due Date	Amount	Account No.	Account Name.	Description
RFD 100041750.	*Soriano, Diego		1/28/2026	1/28/2026	$233.20			
					233.20	512330	Turn on Fee/Renter Deposit	Deposit Refund: 100041750 - *S
Refund: 1000418	*Tapia, Maria	54719	1/28/2026	1/28/2026	$122.50			
					122.50	511311	Accounts Receivable	Refund: 100041853 - *Tapia, Ma
012626	*Venesky, Michael	54720	1/26/2026	1/26/2026	$9,358.00			
PO# 6295					9,358.00	104620.610	Comm COMMUNITY DEVELOP	Refund for property purchase in
RFD 100039622.	A&B, Management	54722	1/26/2026	1/26/2026	$200.00			
					200.00	512330	Turn on Fee/Renter Deposit	Deposit Refund: 100039622 - A
PR012326-258	AFLAC	54723	1/28/2026	1/28/2026	$27.90			
					27.90	102224	Health Savings Account	AFLAC EE
LSTG1223827	ALSCO	54724	1/26/2026	1/26/2026	$43.76			
					0.87	104160.250	Bldg EQUIPMENT OPERATING	
					7.44	104410.250	Streets EQUIPMENT OPERATI	
					3.06	104510.250	Parks EQUIPMENT OPERATIN	
					18.38	516340.250	O&M EQUIPMENT OPERATIN	
					6.13	536310.250	Irrigation EQUIPMENT OPERA	
					7.88	556350.250	Drainage EQUIPMENT OPERA	
368786	BUCK'S ACE HARDWARE	54725	1/26/2026	1/26/2026	$10.00			
					10.00	104253.250	Animal EQUIPMENT OPERATI	Door knob
012126	Campbell, Clay M	54726	1/21/2026	1/21/2026	$165.00			
					165.00	104410.230	Streets TRAVEL & TRAINING	Reimbursement for Utah Weed
03-785137	Davis Food & Drug #4/Farmers Market	54727	1/22/2026	1/22/2026	$61.45			
					61.45	104540.610	Rec EVENTS, FAIRS, & FESTI	Wreaths Across America 5th Gra
65-622302	Davis Food & Drug #4/Farmers Market	54727	1/26/2026	1/26/2026	$3.99			
					0.07	104160.250	Bldg EQUIPMENT OPERATING	Hide a Key
					0.68	104410.250	Streets EQUIPMENT OPERATI	
					0.28	104510.250	Parks EQUIPMENT OPERATIN	
					1.68	516340.250	O&M EQUIPMENT OPERATIN	
					0.56	536310.250	Irrigation EQUIPMENT OPERA	
					0.72	556350.250	Drainage EQUIPMENT OPERA	
66-532405	Davis Food & Drug #4/Farmers Market	54727	1/23/2026	1/23/2026	$25.73			
					25.73	104160.250	Bldg EQUIPMENT OPERATING	Air Fresheners
	Vendor Total:				**$91.17**			
RFD 100039533.	Ekker, Dixie	54700	1/20/2026	1/20/2026	$114.54			
					114.54	512330	Turn on Fee/Renter Deposit	Deposit Refund: 100039533 - Ek
COMM47412026	EMI Health	54701	1/21/2026	1/21/2026	$2,515.60			
					2,515.60	101562	PEHP/AFLAC Insurance Clearin	Dental and Vision Insurance
057-2026	Five County Association Of Government	54728	1/21/2026	1/21/2026	$2,000.00			
PO# 6280					2,000.00	104620.610	Comm COMMUNITY DEVELOP	Vote Share for the MPO
PR012326-6099	Health Equity		1/28/2026	1/28/2026	$761.40			
					536.40	102224	Health Savings Account	PEHP Health Equity-Family
					225.00	102224	Health Savings Account	PEHP Health Equity-Double
2026-2870	HURRICANE CITY JUSTICE COURT	54702	1/16/2026	1/16/2026	$745.00			
					745.00	104121.240	Police JUSTICE COURT	Reimbursement for Indigent Cou
11-760	HURRICANE CITY WATER DEPT	54729	1/27/2026	1/27/2026	$119.00			
					25.00	516340.410	O&M PRODUCT OR SERVICE	Power for Ash Creek Springs @
					94.00	516340.410	O&M PRODUCT OR SERVICE	Chlorine & Cylinder rental for bot
34582	KENWORTHY SIGN & MONUMENTS	54730	1/23/2026	1/23/2026	$10,350.00			
PO# 6290					10,350.00	104620.610	Comm COMMUNITY DEVELOP	Signs for the three buildings

Invoice No.	Vendor	Check No.	Ledger Date	Due Date	Amount	Account No.	Account Name.	Description
PR012326-147	LEGAL SHIELD	54731	1/28/2026	1/28/2026	$100.28			
					100.28	102225	Misc Payable	LegalShield
024343	McMahon, Macon	54733	1/28/2026	1/28/2026	$20.28			
					20.28	104210.240	Police OFFICE EXPENSE, SUP	Reimburse for cards
961011	NAPA AUTO PARTS	54734	1/23/2026	1/23/2026	$123.74			
					2.48	104160.250	Bldg EQUIPMENT OPERATING	Battery
					21.04	104410.250	Streets EQUIPMENT OPERATI	
					8.66	104510.250	Parks EQUIPMENT OPERATIN	
					51.97	516340.250	O&M EQUIPMENT OPERATIN	
					17.32	536310.250	Irrigation EQUIPMENT OPERA	
					22.27	556350.250	Drainage EQUIPMENT OPERA	
961474	NAPA AUTO PARTS	54734	1/26/2026	1/26/2026	$105.75			
					2.10	104160.250	Bldg EQUIPMENT OPERATING	Battery
					17.98	104410.250	Streets EQUIPMENT OPERATI	
					7.40	104510.250	Parks EQUIPMENT OPERATIN	
					44.42	516340.250	O&M EQUIPMENT OPERATIN	
					14.81	536310.250	Irrigation EQUIPMENT OPERA	
					19.04	556350.250	Drainage EQUIPMENT OPERA	
	Vendor Total:				**$229.49**			
RFD 100040434.	Niskanen, Kyla	54703	1/20/2026	1/20/2026	$118.84			
					118.84	512330	Turn on Fee/Renter Deposit	Deposit Refund: 100040434 - Ni
0126	PEHP	54704	1/16/2026	1/16/2026	$22,589.04			
					22,589.04	101562	PEHP/AFLAC Insurance Clearin	Health Insurance
012026	PEHP Group Insurance	54705	1/20/2026	1/20/2026	$990.20			
					990.20	101563	PEHP Life Insurance Clearing	Life Insurance
INV1007	R Jones Masonry	54715	1/22/2026	1/22/2026	$24,730.00			
PO# 6282					24,730.00	104620.610	Comm COMMUNITY DEVELOP	Block wall on the north side of th
11316	RED MOUNTAIN TECHNOLOGY SOLU	54716	1/21/2026	1/21/2026	$831.25			
PO# 6279					831.25	104140.315	Admin COMPUTER EQUIPME	Work on failed card reader
1206439	RED MOUNTAIN TECHNOLOGY SOLU	54735	1/27/2026	1/27/2026	$441.13			
					441.13	104210.250	Police EQUIPMENT OPERATIN	Phone System
1206440	RED MOUNTAIN TECHNOLOGY SOLU	54706	1/16/2026	1/16/2026	$428.77			
					428.77	104140.290	Admin TELEPHONE/COMMUNI	Phone system
	Vendor Total:				**$1,701.15**			
77390	ROADRUNNER AUTOMOTIVE AND DI	54707	1/19/2026	1/19/2026	$79.11			
					79.11	104210.450	Police VEHICLE MAINTANCE	Oil change-21 Dodge, Trevor
0016-0126	ROCKY MOUNTAIN POWER	54736	1/16/2026	1/16/2026	$250.55			
					250.55	104253.280	Animal UTILITIES	Animal shelter
0017-0126	ROCKY MOUNTAIN POWER	54740	1/16/2026	1/16/2026	$4,447.66			
					777.50	104140.280	Admin UTILITIES	435 N Main, 1/2 111 S Main
					247.24	104210.280	Police UTLITIES	1/2 111 S Main
					2,736.38	104410.280	Streets UTILITIES	Street lights
					257.48	104510.280	Parks UTILITIES	Parks
					410.11	516660.280	Admin UTILITIES	Pump station
					18.95	536310.250	Irrigation EQUIPMENT OPERA	filter station
0024-0126	ROCKY MOUNTAIN POWER	54736	1/16/2026	1/16/2026	$61.61			
					61.61	104510.280	Parks UTILITIES	Power Plant park
	Vendor Total:				**$4,759.82**			
RFD 100040956.	Royal T Enterprises, Inc.	54708	1/21/2026	1/21/2026	$972.68			
					972.68	512330	Turn on Fee/Renter Deposit	Deposit Refund: 100040956 - R

Invoice No.	Vendor	Check No.	Ledger Date	Due Date	Amount	Account No.	Account Name.	Description
3055424	SCHOLZEN PRODUCTS CO INC	54709	1/16/2026	1/16/2026	$9.60			
					0.20	104160.250	Bldg EQUIPMENT OPERATING	
					1.63	104410.250	Streets EQUIPMENT OPERATI	
					0.67	104510.250	Parks EQUIPMENT OPERATIN	
					4.03	516340.250	O&M EQUIPMENT OPERATIN	
					1.34	536310.250	Irrigation EQUIPMENT OPERA	
					1.73	556350.250	Drainage EQUIPMENT OPERA	
6962192	SCHOLZEN PRODUCTS CO INC	54737	1/21/2026	1/21/2026	$78.57			
					78.57	516340.440	O&M NEW SERVICES	Tan Wire nut and burial splice kit
6963645	SCHOLZEN PRODUCTS CO INC	54737	1/28/2026	1/28/2026	$397.48			
					397.48	516340.110	O&M SALARIES & WAGES	Allegro Cellular Pit Unit
	Vendor Total:				**$485.65**			
5358/4012026	Shred St. George	54710	1/20/2026	1/20/2026	$39.95			
					28.76	104140.280	Admin UTILITIES	
					9.99	516660.280	Admin UTILITIES	
					1.20	556350.250	Drainage EQUIPMENT OPERA	
INV3259	TAGG N GO EXPRESS CAR WASH	54738	1/22/2026	1/22/2026	$2,010.00			
					40.20	104160.250	Bldg EQUIPMENT OPERATING	
					341.70	104410.250	Streets EQUIPMENT OPERATI	
					140.70	104510.250	Parks EQUIPMENT OPERATIN	
					844.20	516340.250	O&M EQUIPMENT OPERATIN	
					281.40	536310.250	Irrigation EQUIPMENT OPERA	
					361.80	556350.250	Drainage EQUIPMENT OPERA	
PR012326-501	UTAH RETIREMENT SYSTEMS		1/28/2026	1/28/2026	$13,223.24			
					890.57	102223	Retirement Payable	401k
					10,528.62	102223	Retirement Payable	Retirement
					928.90	102223	Retirement Payable	457
					614.00	102223	Retirement Payable	Roth IRA
					261.15	102223	Retirement Payable	457 Loan
PR012326-449	Utah State Tax Commission		1/28/2026	1/28/2026	$2,582.04			
					2,582.04	102222	State Witholding	State Income Tax
251201-1 PO# 6286	UTAH STATE UNIVERSITY	54717	1/22/2026	1/22/2026	$500.00			
					500.00	104620.610	Comm COMMUNITY DEVELOP	Utah Well Being Project
0126	Wallis, Cassidi	54739	1/25/2026	1/25/2026	$550.00			
					2.00	104160.250	Bldg EQUIPMENT OPERATING	
					450.00	104160.270	Bldg B&G OPERATION AND M	January cleaning
					17.00	104410.250	Streets EQUIPMENT OPERATI	
					7.00	104510.250	Parks EQUIPMENT OPERATIN	
					42.00	516340.250	O&M EQUIPMENT OPERATIN	
					14.00	536310.250	Irrigation EQUIPMENT OPERA	
					18.00	556350.250	Drainage EQUIPMENT OPERA	
0010	ZIONS FIRST NATIONAL BANK CC		1/23/2026	1/23/2026	$299.99			
					299.99	516660.210	Admin BOOKS, SUBCRIPTION	American Water College
00583	ZIONS FIRST NATIONAL BANK CC		1/21/2026	1/21/2026	$95.03			
					95.03	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-food
015611 PO# 6277	ZIONS FIRST NATIONAL BANK CC		1/16/2026	1/16/2026	$584.46			
					584.46	104111.230	Council TRAVEL & TRAINING	Appreciation Dinner for City Cou
020119	ZIONS FIRST NATIONAL BANK CC		1/20/2026	1/20/2026	$41.50			
					41.50	104240.460	Inspect ENGINEER	Washington County Recorders o
020997	ZIONS FIRST NATIONAL BANK CC		1/20/2026	1/20/2026	$18.58			
					18.58	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-gas

Invoice No.	Vendor	Check No.	Ledger Date	Due Date	Amount	Account No.	Account Name.	Description
021213	ZIONS FIRST NATIONAL BANK CC		1/21/2026	1/21/2026	$91.74			
					91.74	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-food Papa Murph
021478	ZIONS FIRST NATIONAL BANK CC		1/21/2026	1/21/2026	$21.09			
					21.09	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-gas
021752	ZIONS FIRST NATIONAL BANK CC		1/20/2026	1/20/2026	$29.25			
					29.25	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-gas
022551	ZIONS FIRST NATIONAL BANK CC		1/22/2026	1/22/2026	$39.57			
					39.57	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-gas
022746	ZIONS FIRST NATIONAL BANK CC		1/22/2026	1/22/2026	$29.11			
					29.11	104540.610	Rec EVENTS, FAIRS, & FESTI	YC Capital trip-gas
027719	ZIONS FIRST NATIONAL BANK CC		1/27/2026	1/27/2026	$50.00			
					50.00	104210.610	Police MISC SUPPLIES	Flowers for Taunya
102159385	ZIONS FIRST NATIONAL BANK CC		1/27/2026	1/27/2026	$165.00			
					165.00	104240.230	Inspect TRAVEL & TRAINING	ICC online training
3405-8310457	ZIONS FIRST NATIONAL BANK CC		1/28/2026	1/28/2026	$374.62			
					7.49	104160.250	Bldg EQUIPMENT OPERATING	Tires from Big Brand Tire & Servi
					63.69	104410.250	Streets EQUIPMENT OPERATI	
					26.22	104510.250	Parks EQUIPMENT OPERATIN	
					157.34	516340.250	O&M EQUIPMENT OPERATIN	
					52.45	536310.250	Irrigation EQUIPMENT OPERA	
					67.43	556350.250	Drainage EQUIPMENT OPERA	
7005848	ZIONS FIRST NATIONAL BANK CC		1/26/2026	1/26/2026	$160.11			
PO# 6292					160.11	104140.240	Admin OFFICE EXPENSE, SUP	Framed Copy of the Constitution
73-519254	ZIONS FIRST NATIONAL BANK CC		1/22/2026	1/22/2026	$9.26			
					9.26	104540.610	Rec EVENTS, FAIRS, & FESTI	Wreaths Across America 5th Gra
	Vendor Total:				**$2,009.31**			
PR012326-234	ZIONS FIRST NATIONAL BANK.		1/28/2026	1/28/2026	$15,671.00			
					7,850.44	102221	FICA & FWT Witholding	Social Security Tax
					1,836.04	102221	FICA & FWT Witholding	Medicare Tax
					5,984.52	102221	FICA & FWT Witholding	Federal Income Tax
			Total:		**$120,219.15**			

GL Account Summary

Amount	Account No.	Account Name
25,104.64	101562	PEHP/AFLAC Insurance Clearin
990.20	101563	PEHP Life Insurance Clearing
15,671.00	102221	FICA & FWT Witholding
2,582.04	102222	State Witholding
13,223.24	102223	Retirement Payable
789.30	102224	Health Savings Account
100.28	102225	Misc Payable
584.46	104111.230	Council TRAVEL & TRAINING
745.00	104121.240	Police JUSTICE COURT
160.11	104140.240	Admin OFFICE EXPENSE, SUP
806.26	104140.280	Admin UTILITIES
428.77	104140.290	Admin TELEPHONE/COMMUNI
831.25	104140.315	Admin COMPUTER EQUIPME
81.14	104160.250	Bldg EQUIPMENT OPERATING
450.00	104160.270	Bldg B&G OPERATION AND M
20.28	104210.240	Police OFFICE EXPENSE, SUP
441.13	104210.250	Police EQUIPMENT OPERATIN
247.24	104210.280	Police UTLITIES
79.11	104210.450	Police VEHICLE MAINTANCE
50.00	104210.610	Police MISC SUPPLIES

Invoice No.	Vendor	Check No.	Ledger Date	Due Date	Amount	Account No.	Account Name.	Description
					165.00	104240.230	Inspect TRAVEL & TRAINING	
					41.50	104240.460	Inspect ENGINEER	
					10.00	104253.250	Animal EQUIPMENT OPERATI	
					250.55	104253.280	Animal UTILITIES	
					165.00	104410.230	Streets TRAVEL & TRAINING	
					471.16	104410.250	Streets EQUIPMENT OPERATI	
					2,736.38	104410.280	Streets UTILITIES	
					193.99	104510.250	Parks EQUIPMENT OPERATIN	
					319.09	104510.280	Parks UTILITIES	
					395.08	104540.610	Rec EVENTS, FAIRS, & FESTI	
					46,938.00	104620.610	Comm COMMUNITY DEVELOP	
					115,071.20		**Total**	
					122.50	511311	Accounts Receivable	
					1,639.26	512330	Turn on Fee/Renter Deposit	
					397.48	516340.110	O&M SALARIES & WAGES	
					1,164.02	516340.250	O&M EQUIPMENT OPERATIN	
					119.00	516340.410	O&M PRODUCT OR SERVICE	
					78.57	516340.440	O&M NEW SERVICES	
					299.99	516660.210	Admin BOOKS, SUBCRIPTION	
					420.10	516660.280	Admin UTILITIES	
					4,240.92		**Total**	
					406.96	536310.250	Irrigation EQUIPMENT OPERA	
					500.07	556350.250	Drainage EQUIPMENT OPERA	
					$120,219.15		**GL Account Summary Total**	

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

LA VERKIN
CITY
EST. 1898

LAVERKIN CITY & WCWCD

SECONDARY WATER FEASIBILITY STUDY, USER RATE ANALYSIS, IMPACT FEE ANALYSIS & IMPACT FEE FACILITIES PLAN 2025

NOVEMBER 2025

PREPARED BY:

SUNRISE
ENGINEERING

SUNRISE ENGINEERING, LLC.
11 North 300 West
Washington, UT 84780
TEL: 435-652-8450
FAX: 435-652-8416

Paul Andersen, E.I.T.
Project Manager

Blaine Worrell, P.E.
Project Engineer
State of Utah No. 13229751

Table of Contents

APPENDICES

I. EXECUTIVE SUMMARY

This Secondary Water Feasibility Study evaluates LaVerkin City's existing secondary water system and provides a comprehensive plan for meeting projected demands through 2044. In coordination with the Washington County Water Conservancy District (WCWCD), the Study also explores opportunities for shared storage and the beneficial use of reuse water generated at the Confluence Park Water Reclamation Facility (CPWRF).

LaVerkin City (LaVerkin, the City) currently operates a pressurized irrigation system without any storage capacity. To improve water quality, pressure reliability, and system redundancy, a new shared-use pond is recommended. This facility would serve both LaVerkin City and WCWCD, with a recommended storage volume of 7.84 million gallons (23.5 acre-feet). This Study identified three alternative sites where a pond might feasibly be located. The preferred location is near Cottonwood Hollow Phase 5, as this site offers the largest storage volume and construction feasibility.

To integrate the new pond and improve operational serviceability, the following improvements are recommended to WCWCD:

i) LaVerkin Pond & Pipeline Project

Which consists of the following components:

- Extend WCWCD's 15-inch HDPE fill line north of 500 North to the pond; transitioning to 18-inch diameter north of 500 N.
- Construct a new 24-inch outlet transmission line from the pond to 500 North, and tie-in to the City's 15-inch trunkline along 100 East.
- Construct a booster pump station to raise system pressure by ~80 feet (35 psi) where gravity pressure is insufficient, with capacity up to 3,590 gpm.

ii) LaVerkin Transmission Line Improvements

Which consists of the following components:

- Repurpose an existing, unused 10-inch culinary line crossing under State Street for the secondary system.
- Replace an existing 6-inch pipe with a 10-inch trunkline from the cemetery crossing to 500 N.
- Extend the 10-inch trunkline along 500 N to 360 West and south along 300 West to 200 North.
- Install a new 8-inch looping line to connect 360 West to 600 North.

Other needed improvements to LaVerkin's secondary water distribution system were also identified and recommended to LaVerkin City. These include:

iii) LaVerkin City In-Town Replacements

Which consists of:

- Relocate irrigation lines in back lots to City street rights-of-way.

iv) 100 E Transmission Line Improvement

Consisting of:

- Replacement of a 15-inch aging plastic irrigation pipe trunkline along the length of 100 E.

The Study includes a detailed financial analysis to determine the user rates required to fund ongoing operation and maintenance of the system, including the future booster pump station. Based on projected 2026 expenses and system growth, the average secondary water user rate must increase by approximately 88% to ensure full cost recovery and maintain system viability.

Revenue projections, expense breakdowns, and deficit analyses are detailed in Section XIV of this Study.

This Study also serves as LaVerkin City's official Impact Fee Facilities Plan and includes an Impact Fee Analysis in accordance with Utah Code. Although WCWCD is expected to fund construction of the major capital improvements outlined in this Study, LaVerkin City may assess an impact fee to fund eligible planning costs and future capital needs. Based on the current growth model and project scope, the maximum allowable impact fee is $241.62 per new 1-inch secondary water connection.

A 20-year cash flow analysis is included in Appendix I.

II. INTRODUCTION

A) PREFACE

LaVerkin and WCWCD have partnered to contract Sunrise Engineering, LLC to prepare this feasibility study, master plan, impact fee facilities plan and impact fee analysis (Study).

For LaVerkin, this Study evaluates the position of the City's irrigation system relative to managing irrigation water rights, irrigation source and storage capacity, and the capability of the irrigation distribution system to meet the existing and projected demands to the system. This Study recommends management strategies and capital system improvements that make the system more efficient, facilitate maintenance and distribute cleaner irrigation water to the end user at delivery pressures that are as good or better than the existing conditions. The Study evaluates the financial requirements to implement the recommended improvements. This Study also serves as the City's Impact Facilities Plan and includes an Impact Fee Analysis.

For WCWCD, this Study presented a valuable early opportunity to utilize the reuse water generated by the CPWRF treatment facility which is nearing completion. The Study outlines a practical method to benefit from the reuse water close to the treatment facility—namely, enabling LaVerkin City's irrigation system to be supplied in part by the reuse water. In exchange, LaVerkin will allow a like-kind amount of its Virgin River water right to continue downstream to Quail Creek Reservoir for other beneficial use. The Study also identifies potential storage sites to serve as both a storage pond and forebay for LaVerkin's irrigation system, and simultaneously as a forebay for WCWCD to pump reuse water into the broader interconnected reuse system. Additionally, the Study presents a comparative assessment of the selected sites from both engineering and cost perspectives.

A joint advantage of the Study is the capture of significant water lost through slippage in LaVerkin's irrigation network.

B) LAVERKIN IRRIGATION SYSTEM DESCRIPTION

In 2007, LaVerkin City acquired the LaVerkin Bench Canal Company, which previously provided irrigation water to the service area, which is described as "those lands bounded on the south by the Virgin River, on the north and west by LaVerkin Creek, and on the east by the Hurricane cliffs."

The acquisition included the existing irrigation distribution network of, at the time, approximately 76,000 linear feet of irrigation pipe, the Company's water rights and financial assets. At present, a portion of LaVerkin's irrigation customers consist of former stockholders in the LaVerkin Bench Canal Company, whose stock has been exchanged for a water delivery contract, which entitles contract holders to receive their equivalent share of water available to the Company.

Today, LaVerkin City owns the irrigation distribution system, which consists of approximately 150,000 linear feet of main line irrigation pipes. The City of LaVerkin receives irrigation water from an onstream diversion of the Virgin River via a connection to the Quail Creek Pipeline, which is owned and maintained/operated by WCWCD. The onstream diversion is located upstream of the Pah Tempe Hot Springs, at a diversion structure owned and operated by WCWCD.

The diverted irrigation water passes through the Chance Hardy filter station before entering LaVerkin's distribution system. The filter station is located at the south end of the City. A map of LaVerkin's secondary water system is provided in Appendix A. The filter station houses three Amiad EBS 10,000 automatic filters that are equipped with 500-micron weave-wire screens. The filters reduce the quantity of suspended solids in the Virgin River water by capturing particles larger than 500 microns in size. However, during runoff events, the total suspended solids in the Virgin River is high enough that the system needs to be taken offline.

Historically, the secondary water distribution system is operational 9 months out of the year, from March to November. From time to time, LaVerkin has purchased water delivery contracts and, during the irrigation season, leases the use of this water to residents who are not in possession of a delivery contract. Many water users in LaVerkin elect not to use irrigation water at all, or to use culinary water instead of irrigation water, preferring the better-quality culinary water.

Users of irrigation water in LaVerkin can be divided into those with ownership of a delivery contract, hereafter called contract holders, and those that lease water from the City, hereafter called lease users. There is a third, but smaller, category called Standby users that have an irrigation water connection but do not actively use irrigation water.

C) CONTRACT HOLDERS

Contract holders are those irrigation users which formerly held stock in the LaVerkin Bench Canal Company. At the time that LaVerkin City purchased the Canal Company, there were 600 shares of stock with each individual share representing approximately 4.40 acre-feet annually (afa). Under the terms of the acquisition, LaVerkin City became obligated to deliver to contract holders the quantity of available water to which a former stockholder was entitled with the Canal Company, or their "share equivalent". Former stockholders that surrendered their stock in the Canal Company in exchange for a water delivery contract became "contract holders".

At the time of the acquisition the City gained a share of delivery contracts for its own use. Since then, the City has increased its delivery contract position by purchasing individual delivery contracts from time to time. As of July 2024, there are 290 unique delivery contract holders, excluding LaVerkin City.

The City's billing statements record the number of contract holders and the number of share equivalents for which they are billed on a semi-annual basis. The distribution of share equivalents held by contract holders and the average contract holder statistics are summarized from these records in Table II.C-1 and Table II.C-2. As Table II.C-1 demonstrates, most of the delivery contract holders maintain ownership of between 0 and 1 share equivalents. However, as Table II.C-2 illustrates, the average number of share equivalents per contract holder is 1.51.

Table II.C-1: Contract Holder summary

Contract Holder Summary			
No. Share Equivalents Held	No. of Contract Holders	% Representation	Acre Feet Represented
0-1	223	77%	521.9
1 to 2	25	9%	178.5
2 to 5	26	9%	388.3
5 to 10	10	3%	343.6
10 to 20	5	2%	277.6
>20	1	0%	262.9
Total	290	100%	1972.8

Table II.C-2: Delivery Contract Holder statistics

Average Contract Holder Statistics	
Total Contract Holders Excluding LaVerkin City	290
Total Contract Holder Share Equivalents	441.86
Total Contract Holder Obligation (AFA)	1944.18
	Average
Share Equivalents per Contract Holder	1.51
Irrigatable Acreage per Contract Holder (acre)	1.11
Obligation per Contract Holder (AFA)	6.66

Each year, if all contract holders were to exercise their full contractual entitlement to water, LaVerkin City's obligation to fulfill these contracts would amount to approximately 1944.2 acre-feet.

D) LEASE & STANDBY USERS

LaVerkin City does not have a complete recordation of the delivery contracts which it claims. This Study assumes that the City owns the remainder of the water not obligated by the delivery contracts described in Section II.C.

The City leases its available irrigation water to users within its service area. The city tracks lessees according to the size of the user's parcel. There are also users that have an irrigation connection, but that do not actively use irrigation water on a monthly basis. These are tracked and billed separately from leases. Based on the available data from past billing records, the City has 808 lease users and 292 standby connections as shown in Table II.D-1.

Table II.D-1: Lease & Standby user statistics

Lease & Standby User Statistics	
Lease Users	
Total Lease Users	808
Lots < 1/2 Acre	780
Lots 1/2 Acre to < 1 Acre	18
Lots > 1 Acre	10
Standby Connections	
Total Standby Connections	292

III. SYSTEM USERS ANALYSIS

A. HISTORICAL SECONDARY WATER USAGE

Secondary water usage data was provided by the City and is shown in Table III.A-1. This data comes from a master meter located at the Chance Hardy Filter Station and includes the total secondary water usage by month for years 2016 through 2024. The water usage reports include usage for the irrigation water year, which begins in March and ends in November.

Table III.A-1: Secondary water usage measured at the Chance Hardy Filter Station

Monthly Secondary Water Usage (Acre-Feet)										
Month	2016	2017	2018	2019	2020	2021	2022	2023	2024	Average
MAR	123	104	121	49	155	87	119	14	78	94
APR	109	135	186	138	142	218	267	96	182	164
MAY	184	213	234	409	271	300	307	226	238	265
JUN	290	303	353	285	324	298	385	250	319	312
JUL	328	288	242	361	352	222	314	359	360	314
AUG	163	272	222	312	353	244	157	182	205	234
SEP	195	213	270	296	298	272	233	162	225	240
OCT	189	208	91	210	262	133	200	253	244	199
NOV	103	121	0	109	66	109	25	85	84	78
Total Annual Usage	1,683	1,857	1,719	2,169	2,223	1,883	2,007	1,627	1,935	1,900
Surplus	957	783	921	471	417	757	633	1,013	705	740

Table III.A-1 compares the annual secondary water usage against the City's available water right duty of 2640 afa. The difference between these is surplus secondary water. Between 2016 and 2024 the volume of surplus secondary water has fluctuated between 417 acre-feet and 1,013 acre-feet, with an average of 740 afa during that time period.

Monthly consumption data for 2022 to 2024 is shown in Table III.A-2. The monthly average of secondary water consumption during this period has been 206 acre-feet. Figure III.A-1 depicts the 3-year monthly average usage as a percentage of the total use over the 9-month irrigation season.

Table III.A-2: Secondary water usage by month

Month & Year	Monthly Water Usage Data (Acre-Feet)			
	2022	2023	2024	Average
MAR	119	14	78	70
APR	267	96	182	182
MAY	307	226	238	257
JUN	385	250	319	318
JUL	314	359	360	344
AUG	157	182	205	181
SEP	233	162	225	207
OCT	200	253	244	232
NOV	25	85	84	65
DEC	0	0	0	0
Average	**223**	**181**	**215**	**206**

Monthly % of Usage		
Month	% of Annual	% of Average
MAR	3.8%	34.1%
APR	9.8%	88.1%
MAY	13.8%	124.6%
JUN	17.1%	154.2%
JUL	18.5%	166.9%
AUG	9.8%	87.9%
SEP	11.1%	100.2%
OCT	12.5%	112.6%
NOV	3.5%	31.4%
DEC	0.0%	0.0%

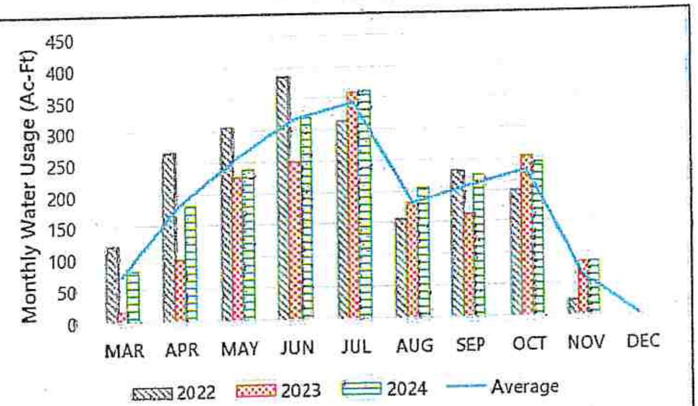


Figure III.A-1: Seasonal distribution of secondary water between 2022 and 2024

B. USAGE BY CONNECTION TYPE

Information regarding the number of secondary water connections was provided by LaVerkin City. As of the most recent 2024 data, there were 1,087 total secondary water connections, including 1,013 residential, 1 commercial, 1 industrial, 11 institutional and 61 agricultural connections. The number of connections between 2022 and 2024 is summarized below in Table III.B-1.

Table III.B-1: LaVerkin City secondary water connections 2022-2024

Year	Secondary Water Connection Data					
	Residential Connections	Commercial Connections	Industrial Connections	Institutional Connections	Agricultural Connections	Total Connections
2022	1,003	3	1	7	61	1,075
2023	1,003	1	1	7	61	1,073
2024	1,013	1	1	11	61	1,087

The City's secondary water system is unmetered and does not have reliable methods to monitor the consumption of each end user. Based on estimates provided by the City, secondary water usage is approximately distributed among the different connection types as shown in Table III.B-2. The Equivalent Residential Unit (ERU) ratio is also shown in Table III.B-2. The ERU ratio is simply the average usage for a given connection type divided by the average usage of a residential connection. Computing the average usage value per ERU allows for the comparison between a residential connection and any other type of connection. For example, Table III.B-2 shows that the average agricultural connection used 5.8 times more water than the average residential connection in 2022.

Table III.B-2: Share of usage by connection type and ERU ratio by connection type

Year	Total Monthly Average Water Use (gal)					Equivalent Residential Unit Ratio			
	Residential	Commercial	Industrial	Institutional	Agricultural	Commercial	Industrial	Institutional	Agricultural
2022	47,232,008	726,646	726,646	7,266,463	16,712,864	5.1	15.4	22.0	5.8
2023	38,289,226	589,065	589,065	5,890,650	13,548,495	15.4	15.4	22.0	5.8
2024	46,238,164	700,578	700,578	7,706,361	14,712,143	15.3	15.3	15.3	5.3
				Average ERU Ratio		12.0	15.4	19.8	5.6

The total number of ERUs in the system can then be determined by multiplying the number of connections of each type by their respective ERU ratios. The total number of ERUs for each connection type are shown in Table III.B-3. The distribution of ERUs by connection type is given in Table III.B-4.

Table III.B-3: Total ERUs by connection type

Year	Equivalent Residential Units					
	Residential ERUs	Commercial ERUs	Industrial ERUs	Institutional ERUs	Agricultural ERUs	Total ERUs
2022	1,075.0	15.4	15.4	154.3	354.9	1,615.1
2023	1,073.0	15.4	15.4	154.3	354.9	1,613.1
2024	1,087.0	15.3	15.3	168.8	322.3	1,608.8

Table III.B-4: Estimated distribution of secondary water usage by connection type according to City staff

Connection Type	Average % Usage
Residential	66.9%
Commercial	1.0%
Industrial	1.0%
Institutional	9.9%
Agricultural	21.3%

The estimated average usage per ERU is given in Table III.B-4. The three-year average is 1,028 gpd per ERU.

Table III.B-4: Average usage per ERU

Year	Average Total Usage Per ERU		
	Yearly (gal)	Monthly (gal)	Daily (gal)
2022	404,923	33,744	1,109
2023	328,663	27,389	900
2024	391,908	32,659	1,074
3 Yr Ave	375,165	31,264	1,028

C. USAGE BY BILLING TYPE

Under the City's existing billing structure irrigation water users are billed either as contract holders or lease users. This Study assumes that most contract holders have agricultural type connections, and that some contract holders use less, and some more, than the amount allotted to them. This Study also assumes that all commercial, industrial, and institutional connection types lease water, and that a majority of users who lease water do so for lawns and gardens.

Where no meters are in place to measure the usage of each user, the procedure used to estimate the average daily usage of lease users and contract holders is explained in this section.

This Study used the guidelines for determining outdoor use given in Section R309-510-3 of the State of Utah Administrative Rules to determine lessee usage. This guideline suggests that in LaVerkin the average annual usage should be approximately 3.26 acre-feet is used per year per acre of irrigated acre. City staff provided data on the average lot size and open space representing residential irrigation users. Based on the data provided, an average of 0.14 irrigable acres per lease user was estimated.

The average 0.14 irrigable acres per lease user was multiplied by the assumed usage of 3.26 afa per irrigated acre to determine the estimated average usage per lease user. The resulting estimated average lessee usage is presented in Table III.C-1.

As mentioned in this section all users of irrigation water can be categorized as either lease users or contract holders. Therefore, the total contract holder usage is equal to the total system usage less the lessee usage. This amount was distributed evenly across the 292 total contract holders to obtain the average contract holder usage values given in Table III.C-1. As the table shows, the estimated average usage per contract holder is approximately 5.1 afa. This does not seem unreasonable since each contract holder owns an average of 1.51 share equivalents, and each share equivalent allows for delivery of up to 4.4 afa. This means that on average, each contract holder has the right to delivery of up to 6.64 afa.

The numbers presented in Table III.C-1 will be used as the average lessee and contract holder usages throughout the rest of this Study.

Table III.C-1: Estimated average usage between lessee and contract holders

Estimated Average Usage by Billing Type				
Billing Type	AFA	gal/year	gal/month	gal/day
Average Lease User	0.459	149,549	16,617	554
Average Contract Holder	5.087	1,657,711	184,190	6,140

D. AVERAGE DAY DEMAND

The Average Day Demand (ADD) for both lease users and delivery contract holders was determined as described in Section III.C and reported in Table III.C-1. The average usage for lessees and contract holders is estimated to be:

- Lease Users: 554 gpd
- Contract Holders: 6,140 gpd

E. PEAK DAY DEMAND

Peak Day Demand (PDD) is defined by the Utah Administrative Code as the water system's demand on the day of highest water consumption. Several approaches were used to estimate the expected peak day demand of the system.

The first approach assumes that peak day demand in LaVerkin City would follow the guidelines for irrigation use given in Utah Administrative Code R309-510-7. This section of the code directs design for culinary water systems but provides general guidelines for water systems that provide culinary water for irrigation. According to Table 510-3, LaVerkin' secondary water system should be capable of providing at least 4.90 gpm per irrigated acre. Based on the average land use assumptions stated in Section II.C and Section III.C, the total irrigated acreage by the City's billing records is shown in Table III.E-1. By this approach the irrigation system should be capable of providing 2,179 gpm.

Table III.E-1: Estimated average irrigable area and minimum required source capacity

Connection Type	Average Irrigable Area per Connection (acres)	Total Connections	Total Irrigable Area (acres)
Delivery Contract	1.133	292	330.9
Lease User	0.141	808	113.8
Total		1,100	444.7
State Required Source Capacity (gpm/irrigable acre)		**Total Required Source Capacity (gpm)**	
4.90		2,179	

The PDD was also estimated by reviewing historical use data from prior irrigation seasons. As shown in Table III.A-1, July is the month with the highest average usage. A ratio was computed to compare the secondary water usage from a typical month to the usage of the average peak month (July) and the maximum historical month usage recorded since 2016. These ratios, called peaking ratios, and the PDD associated with each are reported in Table III.E-2.

Table III.E-2: Peaking factors used to determine the system PDD

System Peak Day Demand Determination			
Demand	Method of Determination	Required Source Capacity (gpm/system)	Peaking Factor
Average Day Demand	Historical Usage	1,556	1
Peak Day Demand - Approach 1	R309-510 Table 510-3	2,179	1.40
Peak Day Demand - Approach 2	Average Peak Month (July)	2,368	1.52
Peak Day Demand - Approach 3	Historical Peak Month (May '19)	3,085	1.98

Based on the spread of the historical peaking ratios, this Study concludes that the PDD is between 2,179 gpm and 3,085 gpm. Whereas the peaking factor in the average peak month is 1.52, and the maximum peaking factor recorded since 2016 was 1.98, this Study estimates the PDD using a peaking factor of two times the historical average system demand, or 3,111 gpm, as reported in Table III.E-3. The usage values for lessee and delivery contract holder associated with the PDD are also given in Table III.E-3.

Table III.E-3: PDD for the system, lease users and contract holders

Peak Day Demand		
Design Peak Day Demand	3,111	gpm/system
Design Peak Day Demand Lessee Usage	1,108	gpd/Conn.
Design Delivery Contract Peak Day Demand Usage	12,278	gpd/Conn.

F. PEAK INSTANTANEOUS DEMAND

Peak Instantaneous Demand (PID) for outdoor irrigation is defined as the highest demand on the system at any one instance. This can be determined based on peak instantaneous water flow data if such data is available.

Based on master meter data available at the Chance Hardy Filter Station, the City has recorded peak instantaneous demands as high as 8 cfs, or approximately 3590 gpm.

G. USAGE REDUCTION - CONSERVATION

This Study assumes that future development within LaVerkin will comply with WCWCD's long-term water efficiency and conservation goals, as written in the *Regional Water Master Plan* (WCWCD, update 2023). Specifically, the plan reports an average annual metered water use per ERC and targets a 23.19% water use reduction goal for future use. The plan also estimates that approximately 57% of water usage for new development will come from outdoor use.

Based on these projections, this Study estimates outdoor usage for new development of approximately 0.20 afa, or 238 gallons per day, as shown in Table III.G-1.

Table III.G-1: Estimated outdoor usage of future development in LaVerkin City based on figures from the *Regional Water Master Plan (WCWCD, 2023)*

Future Development (Hi-Efficient Water Use)		
Average annual metered water use per ERC	198,568.00	gal/year
2030 conservation target	23.19%	
Average daily metered use per ERC	544.0	gal/day
Estimated annual use with conservation target	152,520.08	gal/year
Estimated daily use with conservation target	417.9	gal/day
Estimated outdoor use fraction	57%	
Estimated daily outdoor use	238.2	gal/day
Estimated monthly outdoor use	7,145	gal/month
Estimated yearly outdoor use	64,309	gal/year
Estimated yearly outdoor use	0.20	afa

H. BUILD-OUT ANALYSIS

In addition to the 20-year planning window this Study considers outdoor water use for the scenario in which all existing zoning within the Lower Bench is filled. This scenario is referred to as the "build-out" condition.

The Study incorporates findings from the *LaVerkin City Culinary Water Master Plan (CWMP) Update (2025)* and adopts its buildout estimates while recognizing differing growth trajectories between the culinary and secondary water systems. For example, secondary water demand on the lower bench is anticipated to be less at the buildout condition than in the proximate future. This is due to the aforementioned conservation targets, as well as the reduction in irrigation demand as agriculturally zoned properties are exchanged for other types of development.

The CWMP presented a build-out projection on the lower bench. As can be seen in Table III.H-1, the CWMP projects 4,222 residential culinary water ERUs and 5,419 total culinary water ERUs at the build-out condition.

Table III.H-1: LaVerkin City lower bench culinary water build-out as reported in the *LaVerkin City CWMP Update (Sunrise, 2025)*

Lower Bench Build Out Analysis	
Residential ERU	4,222
Other ERU	1,197
Total ERU	5,419
Projected Build Out Year	2075

This Study adapts the build-out projection from the CWMP to the City's secondary water system. This Study assumes that at the build-out condition, all culinary water connections will also have a secondary water connection. The projected number of commercial, institutional and industrial connections shown in Table III.H-2 were calculated by dividing the ERUs of each connection type by the respective equivalent ERU ratios per connection provided in the CWMP.

This Study also assumes that not all delivery contracts will be held by the City at the build-out condition. This Study assumes that there will be a residual of approximately 10% of the now 290 delivery contract holders, and that there is an average of 1.11 irrigable acres per contract holder.

Based on these assumptions, a projection of the number and type of irrigation connections comprising LaVerkin's secondary water system at the build out condition is presented in Table III.H-2.

Table III.H-2: LaVerkin City lower bench secondary water system at build-out

Lower Bench Secondary Water System Build-Out Summary	
Delivery Contract Holders	30
Lessees	4,542
Residential Connections	4,222
Commercial Connections	310
Institutional Connections	30
Industrical Connections	10
Total Connections	4572

IV. SYSTEM GROWTH ANALYSIS

A. LENGTH OF PLANNING PERIOD

It is typical for a master plan to use a 10- or 20-year planning period. For example, if the first year of a 10-year planning period were 2025, the 10th and final year would be 2034. This Study will use calendar years and will assume a 20-year planning period when considering recommended improvements, beginning in the year 2025 and concluding in the year 2044. This planning period will allow an adequate evaluation of the system for the potential infrastructure improvements or other needs. Revenue sources should be carefully evaluated each year as budgets are set by the city council.

B. PROJECTED GROWTH RATE

An important element in the development of a master plan and capacity analysis is the projection of the City's population growth rate. This projection gives the planner an idea of the potential future demands on the system in question for the length of the planning period. All planning for the future should be based on the expected population growth.

Sunrise has recently performed a master plan study for LaVerkin's culinary water system. The Culinary Water Master Plan (CWMP) was written for the planning period between 2025 and 2044, and analyzed historical population records, census data, water connection data and water population data to determine a growth rate for the planning period. This Study uses the growth figures presented in the CWMP and considers differences to these growth projections that are specific to the City's secondary water system.

Historic population growth and population growth rates are presented in Table IV.B-1 and Table IV.B-2.

Table IV.B-1: LaVerkin City historic population data

	POPULATION ESTIMATE - PAST			
YEAR	CENSUS DATA	RESIDENTIAL WATER CONNECTION DATA	WATER POPULATION DATA	AVERAGE
2016	4,182	4,170	4,800	4,384
2017	4,225	4,256	4,870	4,450
2018	4,268	4,327	4,700	4,432
2019	4,329	4,420	4,485	4,411
2020	4,383	4,485	4,520	4,463
2021	4,286	4,587	4,575	4,483
2022	4,360	4,284	4,605	4,416
2023	4,400	4,453	4,650	4,501

Table IV.B-2: LaVerkin City historic growth rate

YEAR	CENSUS DATA	RESIDENTIAL WATER CONNECTION DATA	WATER POPULATION DATA	AVERAGE
	PERCENT GROWTH			
2016	0.63%	1.27%	0.00%	0.63%
2017	1.03%	2.53%	2.05%	1.87%
2018	1.02%	2.07%	1.66%	1.58%
2019	1.43%	3.17%	2.16%	2.25%
2020	1.25%	1.13%	1.47%	1.28%
2021	-0.99%	3.12%	2.26%	1.46%
2022	1.73%	0.32%	-6.60%	-1.52%
2023	0.92%	1.72%	3.94%	2.19%
		2016-2023 AVERAGE		1.61%

The City's anticipated growth rate between 2016 and 2023 was 2.5% to 2.75%, which is higher than the observed growth rates reported in Table IV.B-2. In working with City staff to review past growth rates and upcoming developments, it was determined that a higher growth rate is expected over the next several years. This Study will use two growth rates: one for the first five years and a second for the remainder of the planning period. The growth rates used in this Study are presented in Table IV.B-3.

Table IV.B-3: Growth rates for the planning period

Predicted Growth Rate
3.00% 5 Year Growth Rate (2025-2029)
2.50% Extended Growth Rate (2030-2044)

C. 20-YEAR PROJECTED GROWTH

The forecasted growth of secondary water connections in LaVerkin is dependent on several factors. Firstly, growth in the secondary water system is constrained by the limits of the City's service area. This area was defined in Section II.B and is known as the "lower bench". At the time of writing of this Study the City has no intention to deliver secondary water to future development on the upper bench. This Study assumes that the secondary water system will not be expanded to the upper bench.

This Study assumes that all future development on the lower bench will be provided with a secondary water connection. New secondary water connections are assumed to grow at the growth rates given in Table IV.B-3. The projected growth of secondary water connections through 2045 is presented in Table IV.C-1.

Table IV.C-1: 20-year projected growth of secondary water connections

Year	Estimated Growth Rate	Total Contract Holders	Lessees Connected	Prospective Lessees not Connected	Prospective Lessees Converted	Added Development (Lower Bench)	Total New Development (Lower Bench)	Total Lessee Connections	Total Irrigation Connections
2024	3.0%	292	808	560	40	0	0	808	1,100
2025	3.0%	288	848	520	40	24	24	872	1,160
2026	3.0%	283	888	480	40	26	50	938	1,222
2027	3.0%	279	928	440	40	28	79	1,007	1,286
2028	3.0%	275	968	400	40	30	109	1,077	1,352
2029	2.5%	271	1,008	360	40	27	136	1,144	1,414
2030	2.5%	267	1,048	320	40	29	164	1,212	1,479
2031	2.5%	263	1,088	280	40	30	195	1,283	1,545
2032	2.5%	259	1,128	240	40	32	227	1,355	1,613
2033	2.5%	255	1,168	200	40	34	261	1,429	1,683
2034	2.5%	251	1,208	160	40	36	296	1,504	1,755
2035	2.5%	247	1,248	120	40	38	334	1,582	1,829
2036	2.5%	244	1,288	80	40	40	373	1,661	1,905
2037	2.5%	240	1,328	40	40	42	415	1,743	1,983
2038	2.5%	236	1,368	0	0	44	458	1,826	2,063
2039	2.5%	233	1,368	0	0	46	504	1,872	2,105
2040	2.5%	229	1,368	0	0	47	551	1,919	2,148
2041	2.5%	226	1,368	0	0	48	599	1,967	2,193
2042	2.5%	222	1,368	0	0	49	648	2,016	2,239
2043	2.5%	219	1,368	0	0	50	698	2,066	2,286
2044	2.5%	216	1,368	0	0	52	750	2,118	2,334
2045	2.5%	213	1,368	0	0	53	803	2,171	2,384

As part of the City's conservation measures, they are working to make secondary water available to all connections. The number of prospective secondary water users is shown in Table IV.C-2 and these were estimated by subtracting the number contract holders, active lessees and standby connections from the number of existing culinary water connections. This Study assumes that the City will connect all 268 of these users to secondary water, and that standby connections will begin using secondary water at a rate of approximately 40 connections per year between 2025 and 2038, as shown in Table IV.C-1.

Table IV.C-2: Unconnected Secondary Water Users in 2024

Unconnected Secondary Water Users	
Total Culinary Water Connections	1,660
Contract Holders	292
Active Lessee	808
Standby Connections	292
Unconnected Secondary Water Users	268

As build-out occurs this Study anticipates that contract holders will sell their delivery contracts to LaVerkin City at a rate of -1.50% per year for the planning period. Delivery contracts will decrease as properties with agricultural connections are sold and developed into properties with residential type secondary water connections.

V. WATER RIGHTS ANALYSIS

A. EXISTING WATER RIGHTS PORTFOLIO

LaVerkin's existing secondary water rights were acquired from the LaVerkin Bench Canal Company and are identified in Table V.A-1 below. The water rights are listed according to number, source, and flow.

Table V.A-1: LaVerkin City total secondary water rights

Secondary Water Rights			Flow		Duty
W.R. #	Type	Source	gpm	cfs	ac-ft
81-2481	Industrial	Virgin River	13.3	0.0297	20.0
81-2477 a13530	Irrigation	Virgin River	2,230.5	4.970	1,630.0
81-4334	Irrigation	Virgin River	1,346.4	3.000	990.0
		Total Other Water Rights	3,590.20	8.00	2,640.00

B. EXISTING REQUIRED WATER RIGHT

The City's required water right is determined from the ADD on the system. The ADD for lease users and contract holders was determined in Section III.D. These estimates of individual usage can be converted to an average system-wide demand of 1,882 afa.

Table IV.B-1 subdivides the average system-wide demand between contract holders and lease users. This is done firstly to account for the different projected growth patterns between lessees and contract holders, and secondly, to ensure that the lessee usage does not exceed the delivery contracts owned by the City.

Based on the total number of delivery contract holders plus lease users, and the estimated average usage for each, the City has access to enough water rights to supply its existing water right demand, with a surplus of 758 acre-feet, as shown in Table V.B-1.

Table V.B-1: LaVerkin total secondary water right surplus

Existing Average Demand (Total Use)							
292 Delivery	X	6,140 gpd X	1 day X	1 hr	=	1,245	gpm
Contract Holder		DC	24 hr	60 min.			
292 Delivery	X	6,140 gpd X	274 day X	1 ac-ft.	=	1,506	ac-ft
Contract Holder		DC	1 yr	325,829 gal			
808 Lessee	X	554 gpd X	1 day X	1 hr	=	311	gpm
Connections		LC	24 hr	60 min.			
808 Lessee	X	554 gpd X	274 day X	1 ac-ft.	=	376	ac-ft
Connections		LC	1 yr	325,829 gal			
				Total Required Water Right		1,882	ac-ft
				Existing Secondary System Water Right Surplus		758	ac-ft

C. PROJECTED REQUIRED WATER RIGHT

Using the same method of calculating water right demand, projections for the 10-, 20-, and 40-year planning horizons indicate that the City will maintain a surplus of water rights through the entire 40-year period, as shown in Table V.C-1. In the near-term, due to the relatively rapid addition of the unconnected secondary water users and additional growth, combined with the relatively slow attrition of high-usage delivery contracts, this Study estimates that a peak demand year, or worst-case demand year, will occur by the year 2038.

Table V.C-1: Projected growth of lease users, contract holders, unconnected users, irrigation demand, and water right surplus through 2065

Year	Total Lease Users	Total Contract Holders	Total Unconnected	Projected Irrigation Demand (afa)	Projected Total Water Right Surplus/Deficit (afa)
2025	872	288	520	1,857	976
2030	1212	267	320	1,870	963
2035	1582	247	120	1,897	936
2038	1826	236	0	1,920	912
2040	1919	229	0	1,903	930
2045	2171	213	0	1,868	965
2050	2456	197	0	1,845	987
2055	2779	183	0	1,836	997
2060	3144	169	0	1,841	992
2065	3558	157	0	1,825	1007

Figure V.C-1 shows the forecasted growth conditions described in this section. The forecasted number of total connections is shown by the black line in the figure. The number of total connections (represented by the black line) grows as the delivery contract connections are converted to lease connections. As the City purchases the delivery contracts the obligation to delivery contract holders (light blue line) decreases. The total irrigation demand remains relatively constant as higher consumption delivery contracts convert to more efficient lease connections.

The green line in Figure V.C-1. represents the City's priority Virgin River water right. LaVerkin's surplus water (dark blue line) is the difference between the City's water right and the total secondary water demand (red line). The dashed surplus line represents the available surplus after repairs to the system to reduce slippage in the system. The values corresponding to the dashed line are those reported in Table V.C-1. For a discussion on these repairs see Section IX.C.

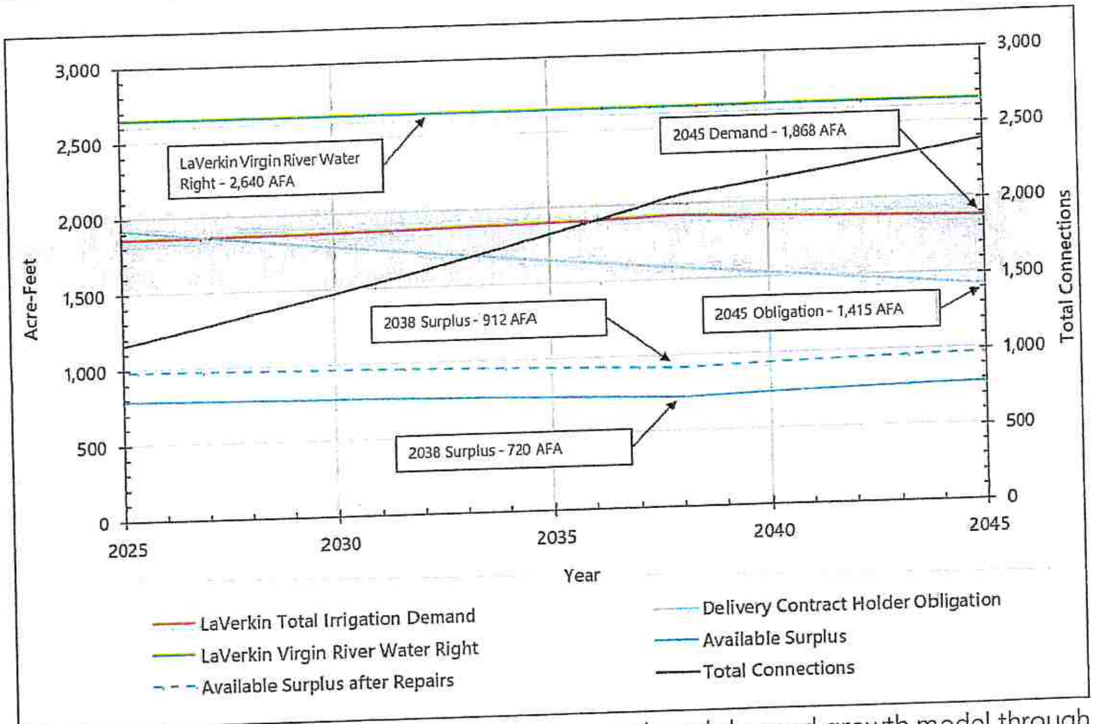


Figure V.C-1: Projected secondary water system growth and demand growth model through 2045

D. RECOMMENDED WATER RIGHTS IMPROVEMENTS

The projections in this analysis show that the City has sufficient water rights to meet the secondary water demands through the year 2065. Due to this sufficient capacity, this Study does not provide any recommended water rights improvements.

In 2026, Ash Creek Special Services District (ACSSD) will complete construction of a new water reclamation facility within the LaVerkin City boundary. The facility will receive wastewater from the surrounding region and produce Type I effluent. In conjunction with this treatment facility, WCWCD is currently developing a regional reuse program which could make additional water rights available to the City for irrigation.

VI. WATER SOURCE ANALYSIS

A. EXISTING WATER SOURCE CAPACITY

The City's sole secondary water source comes from a piped connection to the Quail Creek Diversion structure. Sufficient data is not available to determine a total source capacity. The capacity of the pipeline exceeds the City's water rights in the Virgin River and the measured historical usage. The City's source capacity used in this Study will be the 8.0 cfs (3590 gpm) flow rate limit established by the water rights given in Table V.A-1.

B. EXISTING REQUIRED WATER SOURCE CAPACITY

The source capacity calculation uses the PDD, which was determined in Section III.E to be:

- 1,108 gpd for lease users and
- 12,278 gpd for contract holders.

Based on the existing number of delivery contract holders plus lease users, and the estimated PDD for each, the City's secondary water system source demand is 3,111 gpm as shown in Table VI.B-1. The table shows that there is an existing source capacity surplus of 479 gpm.

Table VI.B-1: LaVerkin City water source capacity versus existing demand

Existing Required Source Capacity						
808 Lessee Conn X	1,108 gpd X / ERU	1 day X / 24 hr	1 hr / 60 min.	=	622	gpm
292 Delivery Contr X	12,278 gpd X / ERU	1 day X / 24 hr	1 hr / 60 min	=	2,490	gpm
Total Required Source Capacity					**3,111**	**gpm**
Source Capacity Surplus/Deficit					**479**	**gpm**

C. PROJECTED REQUIRED WATER SOURCE CAPACITY

Applying the same PDD to the projected growth of the irrigation system, outlined in Section IV, this Study anticipates that the City will have sufficient source capacity to exceed the secondary water demands throughout the planning period. Table VI.C-1 illustrates the surplus of available source relative to the projected demand from lease users.

As described in Section V.C, this Study anticipates that the irrigation system will experience a year of peak demand by the year 2038. In that year, this Study estimates excess source capacity of 371 gpm as shown in Table VI.C-1.

Table VI.C-1: LaVerkin City water source capacity versus projected demand

Year	Total Lease Users	Total Contract Holders	Total Unconnected	Required Source Capacity (gpm)	Projected Source Capacity Surplus/Deficit (gpm)
2025	872	288	520	3,113	477
2030	1212	267	320	3,134	456
2035	1582	247	120	3,179	411
2038	1826	236	0	3,219	371
2040	1919	229	0	3,190	401
2045	2171	213	0	3,131	459
2050	2456	197	0	3,093	497
2055	2779	183	0	3,078	513
2060	3144	169	0	3,085	505
2065	3558	157	0	3,117	474

This Study also evaluated how many additional lease users could be supplied without any attrition of delivery contract usage. If the existing usage patterns persist, and there is no attrition of contract holders, the source capacity of the system can support an additional 645 lease users, as demonstrated in Table VI.C-2.

Table VI.C-2: Maximum additional connections supportable by existing source capacity

Maximum Allowable Connections at Peak Day Demand						
1,453 Lessee Conn X	1,108 gpd X / ERU	1 day X / 24 hr	1 hr / 60 min.	=	1,117	gpm
290 Delivery Contr X	12,278 gpd X / ERU	1 day X / 24 hr	1 hr / 60 min	=	2,473	gpm
Total Required Source Capacity					**3,590**	**gpm**
Source Capacity Surplus/Deficit					**0**	**gpm**
Total Allowable New Lessee Connections					**645**	

D. RECOMMENDED WATER SOURCE CAPACITY IMPROVEMENTS

The source capacity analysis shows that the existing available source is sufficient to accommodate an existing peak day demand through the planning period, though at the peak projected use in the year 2038, the surplus source capacity is only 371 gpm. The system growth model anticipates that the system's excess source capacity will increase beyond 2038 as the demand from contract holders decreases and is replaced by development with lesser irrigation demand.

VII. WATER STORAGE CAPACITY ANALYSIS

A. EXISTING WATER STORAGE CAPACITY

LaVerkin City currently has no storage for secondary water.

B. EXISTING REQUIRED WATER STORAGE CAPACITY

The State does not require secondary water systems to provide storage. However, for culinary water systems that provide secondary water, guidelines for secondary water storage are found in the State of Utah Public Drinking Water Regulations, R309-510. For LaVerkin the guideline would be to use the maximum of either 4,964 gallons per irrigated acre, or the ADD, plus emergency storage. Whereas LaVerkin uses culinary water only for fire suppression, no additional secondary water storage is necessary for fire suppression.

The ADD was determined to govern, and the minimum required storage was determined to be approximately 2.24 million gallons (MG) as shown in Table VII.B-1.

Table VII.B-1: Recommended secondary water capacity to satisfy existing ADD

Existing Required Storage Capacity				
LaVerkin City Historic Average Day Consumption				
554 gpd Conn.	X	808 Lessee Conn.	=	447,538 gpd
6139 gpd	X	292 Delivery Contract Holders	=	1,792,635 gpd
		Total Existing Required Storage		2,240,174 gal.
		Total Existing Capacity		0 gal.
		Existing Capacity Deficit		(2,240,174) gal.

C. PROJECTED REQUIRED WATER STORAGE CAPACITY

Based on the projected growth model outlined in Section IV, and the peak anticipated demand in the year 2038 explained in Section V.C, this Study anticipates that the required storage capacity based on one average day demand will be as shown in Table VII.C-1. According to these projections, this Study anticipates that in 2038 a storage capacity of approximately 2.32 MG will be needed to supply one ADD.

Table VII.C-1: LaVerkin City projected required secondary water storage capacity

Year	Total Lease Users	Daily Lessee Usage (gal)	Total Contract Holders	Daily Contract Holder Usage (gal)	Total 1 Day Required Storage (gal)
2025	872	475,467	288	1,765,746	2,241,213
2030	1,212	619,596	267	1,637,229	2,256,824
2035	1,582	770,757	247	1,518,066	2,288,823
2038	1,826	866,913	236	1,450,772	2,317,685
2040	1,919	888,937	229	1,407,575	2,296,512
2045	2,171	948,998	213	1,305,127	2,254,125
2050	2,456	1,016,951	197	1,210,135	2,227,087
2055	2,779	1,093,835	183	1,122,058	2,215,892
2060	3,144	1,180,821	169	1,040,390	2,221,211
2065	3,558	1,279,238	157	964,667	2,243,905

D. RECOMMENDED WATER STORAGE CAPACITY IMPROVEMENTS

While the existing source currently provides a reliable and consistent supply sufficient to meet the City's secondary water demands without the need for storage, the addition of a storage facility could offer several operational benefits. Storage would help buffer peak demands on the source and support pressure regulation throughout the distribution network. Additionally, a properly designed storage facility could facilitate sediment removal prior to water entering the distribution system, thereby improving overall water quality.

VIII. SECONDARY WATER FILTERING STATION ANALYSIS

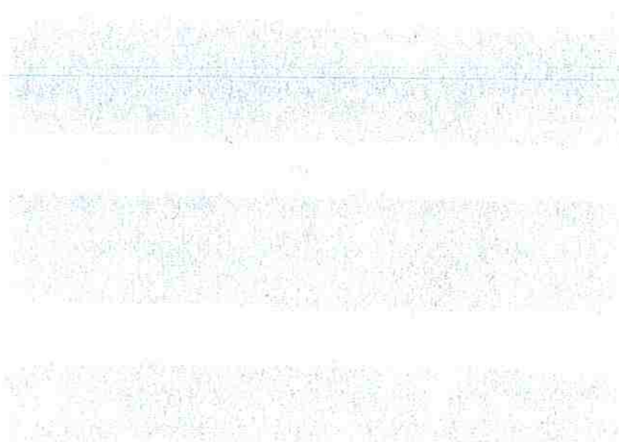
A. EXISTING FILTER STATION

LaVerkin City currently filters its secondary water following diversion from the Virgin River, which is known for carrying significant amounts of sediment and other debris. During storm events, when the river experiences elevated turbidity and flow, the City typically shuts down the secondary irrigation system to prevent sediment-related clogging and damage.

The existing filtration system, constructed in 2010, consists of three Amiad filters in parallel, each equipped with electronic backwash capabilities. These filters utilize screens rated to capture particles down to 500 microns (0.5 mm) in diameter, primarily targeting coarse sand and larger debris. While the installation represented a substantial improvement at the time, the system still allows fine sediment and silt to pass through.

A) RECOMMENDED WATER FILTERING IMPROVEMENTS

Should the City pursue a secondary water storage facility, as recommended in Section VII, the facility could act as a sedimentation basin and remove the need for filtration.



IX. SECONDARY WATER DISTRIBUTION SYSTEM ANALYSIS

LaVerkin City's existing distribution system is fed and pressurized directly from the Virgin River through the Chance Hardy filter station. From the filter station the water is conveyed to the system through three separate pipelines.

The pressurized pipe network distributes water to the end users throughout the City. This Study used the computer modeling software, AquaTwin, by Aquanuity©, to analyze the performance of the existing distribution network under PDD and PID conditions. The system performance was evaluated based on the pressure and flow available to end users. Operating pressures between 40 and 80 psi, and flow velocities of less than 5 feet/second were deemed acceptable for this Study.

The evaluation identified potential areas of improvement throughout the system. A map of the existing irrigation system model is presented as Appendix B of this report. The labels on the map indicate the corresponding number of each node in the irrigation system model.

A. EXISTING DISTRIBUTION SYSTEM ANALYSIS

The existing Average Day Demand, Peak Day Demand and Peak Instantaneous Demand were calculated in Section III. These flows were converted from gallons per day per end user to gallons per minute for the distribution system and are shown in Table IX.A-1 below.

Table IX.A-1: LaVerkin City existing secondary water demand

Average Day Demand		
Lease User (gpd)	Contract Holder (gpd)	System (gpm)
554	6,139	1,556
Peak Day Demand		
Lease User (gpd)	Contract Holder (gpd)	System (gpm)
1,108	12,278	3,111
Peak Instantaneous Demand		
System (gpm)		
3,590		

The existing model scenarios for PDD, PID and PDD demonstrate that the existing system is adequate to meet these demands. The resulting pressure at each node of the irrigation system under the three demand scenarios is presented in tabular form in Appendix B of this report. In general, under ADD conditions, the irrigation system provides adequate performance, as described above, throughout the City.

Under PDD and PID conditions, the area where irrigation service pressure is less than 40 psi extends into the east side of Zion View Estates.

B. PROJECTED DISTRIBUTION SYSTEM ANALYSIS

The projected system analysis is performed using the same assumptions in the existing system analysis, except that the projected demands from the worst-case irrigation demand year (2038), as defined in Section V.C, are used. The projected future demands are as follows:

- ADD – 1,628 gpm
- PDD – 3,257 gpm
- PID – 3,758 gpm

The existing distribution system was modeled considering the projected system demands. Based on these projected demands, the model identifies a slight increase in the total area where service pressures are less than 40 psi. However, this area remains confined to the Zion View Estates, Sunset View Estates, and Cottonwood Hollow subdivisions.

Maps and tables of the model output results for the projected secondary water demand are given in Appendix B of this report.

C. RECOMMENDED DISTRIBUTION SYSTEM IMPROVEMENTS

The projected distribution analysis indicates that the existing system has the capacity to maintain the described levels of service through the planning window. However, the system experiences several significant challenges which require attention. The following paragraphs list recommended system improvement projects to help with operation and maintenance of the system.

First, the 15-inch distribution line in 100 E is made of plastic irrigation pipe (PIP), which is old and brittle, and requires regular repair. This Study recommends replacing the full length of 15-inch trunkline from 500 N to 400 S. If a pressure regulating irrigation pond is constructed (as recommended in the PER section of this study), the 15-inch PIP line may be replaced with a 16-inch PVC line that can taper to a 12- and then 8-inch pipe to the south, as shown in Appendix C.

Second, many of the irrigation lines run along the backs and sides of private lots, outside of the right-of-way of City streets. This creates significant maintenance challenges when City staff need to access the lines for repairs. Relocating lines to City streets has been on the City's project priority list since the *LaVerkin City Secondary Water Master Plan* was published in 2010. Some of the lines requiring relocation which were identified in that report have been relocated as a result of other projects. A current map of the lines located outside of the City's right-of-way is presented as Appendix C of this report. The area of this project encompasses the entirety of LaVerkin City.

D. SYSTEM SLIPPAGE

LaVerkin City has reported that they anticipate as much as 0.4 cubic feet per second (cfs) of secondary water is lost due to slippage, or leakage, in the existing irrigation distribution network. It is estimated that this slippage value is constant when the system is in use. This equates to approximately 180 gpm, or 214 acre-feet during the typical 9-month irrigation season.

The City anticipates that the recommended improvements would help reduce the amount of observed slippage in the system. However, the exact location where the slippage occurs is unknown. The implementation of the recommended projects represents significant replacement of the existing irrigation system, approximately 25% of the system by pipe length.

LaVerkin City anticipates that most of the estimated slippage occurs within the area of the proposed improvement projects. By implementing these projects, it is anticipated that 90% of the observed slippage will be recaptured, representing nearly 8 percent of the City's annually available water.

X. SECONDARY WATER & REUSE FEASIBILITY STUDY INTRODUCTION

This Study includes an evaluation of the potential for mutual benefits of coordinated water resource planning between LaVerkin City and WCWCD. The concept of developing a new storage pond further developed from the need to identify practical uses and storage options for the reuse water produced by the Confluence Park Water Reclamation Facility (CPWRF) as part of the WCWCD Regional Reuse Purification System.

Early discussions considered alternatives such as sending the water directly to the Toquerville Secondary Water System (TSWS) and potentially back feeding into LaVerkin. One of the key purposes of a storage pond was to provide an intermediate storage location that could be filled without relying on high-pressure pumping—allowing water to be lifted once from Confluence Park to LaVerkin, and then a second time from LaVerkin to TSWS with more moderate pumping requirements. Furthermore, the reuse water could be used immediately in LaVerkin. Through these discussions, the idea of a LaVerkin-based storage pond emerged, and this report evaluates the feasibility of such a facility, identifies potential locations, and recommends a preferred site.

LaVerkin City has previously considered constructing a secondary water storage facility to support its system. This Study builds upon that earlier groundwork. The facility would be designed to store both reuse water and Virgin River water that the City uses for its secondary water system.

The following sections of the report establish the objectives and evaluation criteria for a potential pond site. A suitable location would need to meet the moderate head requirements associated with pumping from Confluence Park while also tying conveniently into LaVerkin's existing irrigation distribution system. Ideally, the pond would be situated at an elevation high enough to provide direct pressurization of the secondary irrigation network. In addition, the site must be large enough to store a practical volume of water, while remaining constructible and cost-effective to develop.

A. TARGET OBJECTIVES

For WCWCD, the strategic objectives relate to the regional reuse water program. Primary objectives include:

- Develop a storage facility to accommodate reuse water generated at the CPWRF.
- Strategically locate the storage facility to gain the operational flexibility to deliver reuse water to other interconnected facilities within its broader reuse network.

LaVerkin City's objectives in this joint study are focused on improving the reliability, efficiency, and sustainability of its secondary water system. These can be summarized as follows:

- Establish a storage facility that can regulate water quality and provide backup supply when river conditions are unsuitable for direct diversion.
- Improve the quality of water delivered to end users, which can be degraded by elevated total suspended solids (TSS) and silt—especially during or after flooding events on the Virgin River.

B. STORAGE FACILITY SELECTION CRITERIA

One component of this Study is to identify a potential site for a shared storage facility. The following criteria used to identify an appropriate location for a storage facility:

- target hydraulic grade line,
- target storage volume,
- operational efficiency, and
- the availability of suitable land.

These practical and technical considerations formed the basis of the site selection process used to identify and evaluate potential storage pond locations.

i) Target Hydraulic Grade Line

The elevation of the proposed storage pond is a critical factor in site selection, as it directly influences both the ability to fill the facility from the Virgin River and the potential to supply LaVerkin's secondary system under gravity pressure. An ideal location would strike a balance—low enough to be filled by gravity using existing infrastructure, yet high enough to preserve hydraulic energy and provide useful pressure to the distribution network without the need for additional pumping.

The context of the current operations provides the following hydraulic constraints. First, the existing hydraulic grade line at the Chance Hardy filter station under terminal head loss is shown in Table X.B-1. At the terminal head loss condition, the HGL is approximately 3382 feet at the filter station.

Table X.B-1: Hydraulic grade line at Chance Hardy filter station

HGL at Chance Hardy Filter Station		
Parameter	Clean Filters	Terminal Head Loss
Elevation (ft)	3151	3151
System Pressures (psi)	105	100
Total Head (ft)	3393	3382

WCWCD operates an existing 15-inch HDPE transmission line that runs north from the Chance Hardy Filter Station along Main Street. A target achievable hydraulic grade line was identified after accounting for head loss along the line between the filter station and prospective pond sites. As the topography of LaVerkin slopes gradually upward to the north, and because more available parcels for siting a pond are also located on the north end of town, the longest potential fill line was assumed to extend to near the Interstate Rock pit, approximately 14,500 feet from the filter station.

The head loss at that distance was calculated based on the Hazen-Williams friction head loss formula shown in Equation 1.

Equation 1

$$h_f = \frac{3.022v^{1.85}L}{C^{1.85}D^{1.17}}$$

Where h_f is the friction head loss in the pipe, v is the flow velocity in the pipe in ft/sec, L is the length of the pipe, C is a roughness coefficient dependent on the type of pipe material, and D is the pipe diameter in feet. Based on the calculated head loss, the approximate elevation range to which the Virgin River water can be delivered near the north end of the City is shown in Table X.B-2. A design fill rate of 2,500 gpm was used since this is slightly higher than the average demand in the peak month of July and would be required to keep the pond full at that demand. To provide a conservative buffer against variability in system performance and hydraulic conditions, a 10-foot safety factor was applied, establishing a target high-water elevation of between 3,320 and 3,330 feet for the proposed storage pond.

Table X.B-2: Target pond elevation range

Pond Elevation Range		
Design Flow Rate	2,500	gpm
Pipe Diameter, D	15	in
Flow Velocity, v	4.5	ft/sec
Pipe Length, L	14,500	ft
Roughness Coefficient, C	140	
Head Loss, h_f	51.9	ft
Maximum Pond Elevation at		
Terminal Head Loss	3330	ft
Clean Filters	3341	ft

To provide adequate pressure throughout LaVerkin's secondary system—where operating pressures typically range between 30 and 80 psi—the pond surface would need to be situated at least 70 to 185 feet above typical service elevations. Zion View Estates, at a typical elevation of 3290 feet, represents the highest point in LaVerkin's existing distribution system that receives typical irrigation pressures. Pressures are generally reduced in the higher Sunset View Estates. Without a booster pump, a pond elevation of approximately 3360 feet would be required to provide 30 psi pressure at Zion View Estates under peak instantaneous demand conditions.

Whereas this is higher than elevation to which the Virgin River water can be delivered, it was determined that a booster station would likely be required to raise the HGL of the pond.

Considerations were given to lifting water to a storage tank on the "Upper Bench". Through a cost-benefit analysis it was found that pumping water to the "Upper Bench" would be cost prohibitive. Feasible sites were therefore limited to the bench and hillside areas east of town.

ii) Target Storage Volume

The target storage volume for the proposed pond was determined based on LaVerkin City's projected irrigation demands in the highest demand year, projected by this Study in the year 2038. The goal was to provide storage capacity equal to at least two full days of demand in the average July month.

To estimate peak day demand, a peaking factor was applied to the average daily usage of lessees and contract holders. This peaking factor—calculated as the ratio of the average instantaneous demand in July to the average instantaneous demand—was found to be 1.52. The adjusted daily usage was then projected forward to the highest demand forecast year, 2038, to account for system growth. Under this worst-case scenario, the estimated peak day demand was calculated to be approximately 3.91 MGD, as shown in Table X.B-3.

Table X.B-3: Required storage capacity in projected peak demand year

Required Storage Capacity at Worst Case (2038) LaVerkin City Historic Peak Day Summer Month Consumption						
9345 gpd / ERU	X	254	ERU	=	2,370,665	gpd
843 gpd / ERU	X	1,826	ERU	=	1,539,989	gpd
1 Day Required Storage					3,910,654	gal.
2 Day Required Storage					7,821,308	gal.
Average Depth					10	ft
Required Pond Footprint					104,563	ft^2
Required Pond Footprint					2.40	acres

To meet the target of two days of storage, the required total storage volume was set at 7.82 million gallons, or approximately 24 acre-feet. For planning purposes, the pond was assumed to have an average depth of 10 feet. Based on that depth, the required surface area of the pond would be approximately 2.40 acres. This footprint informed the site selection process, ensuring each potential location could accommodate both the storage volume and pond grading.

iii) Operational Efficiency

The new storage facility would need to be integrated with LaVerkin City's existing distribution system. As such, the preferred location would utilize as much of the existing distribution system as possible to avoid costly improvements. Furthermore, costs of everyday operation such as pumping and maintenance or operation of the storage facility should be kept to a minimum.

iv) Site Suitability

In addition to hydraulic and operational criteria, the search for suitable sites required the availability of open land within the city boundaries capable of accommodating the proposed facility footprint. Each site requires consideration of how to resolve its own unique construction challenges.

Just as importantly, the land had to be owned by a party willing to sell to WCWCD.

XI. CONSIDERED POND SITE ALTERNATIVES

Given the selection criteria described, three candidate pond sites were identified, all on the north end of the City. Consideration was also given to siting a storage facility on the "Upper Bench." However, cost–benefit analysis showed that the pumping requirements for this option would be prohibitive. As a result, feasible locations were limited to bench and hillside areas east of town.

The location of the three potential pond sites, and the target contour line are shown in Appendix D of this report. An assessment of the three candidate sites is given in the following sections.

A. ALTERNATIVE 1 – PARCEL LV-154-A

i) Description

The first pond site is located on the foothills along the east side of LaVerkin City, near the north end of town. The property lies within the platted Cottonwood Hollow Phase 5 subdivision and is currently owned by Interstate Rock Products. The site is positioned on a hillside that contains elevations within the target range for storage. However, the area is characterized by relatively steep slopes, and portions of the site may be constrained by local hillside protection ordinances, which could limit the buildable area.

ii) Hydraulic Grade Line

The site is situated approximately 11,900 feet from the Chance Hardy Filter Station. At the design flow rate of 2,500 gpm, the calculated head loss along the 15-inch HDPE fill line is approximately 48.4 feet. Under these conditions, the Virgin River water could be delivered to a maximum elevation of roughly 3,330 to 3,340 feet, excluding the 10-foot factor of safety applied in previous evaluations.

The target elevation contour crosses the east side of this site. Substantial raising of the west side of the site would be required to attain a high-water elevation of 3320.

iii) Storage Volume

The challenging topography of the site would necessitate construction of an earthen embankment dam to provide adequate storage. Specifically, the west side of the site would require fill ranging from 20 to 40 feet in height to achieve the target pond elevation. Preliminary grading models assuming 2:1 interior side slopes and a maximum depth of 20 feet, indicate that, with a high-water elevation of 3,320 feet, the site could provide a total storage volume of approximately 7.3 million gallons (MG).

iv) Operational Efficiency

The site has several operational efficiencies. Firstly, the existing 15-inch HDPE line along Main Street could continue to be used as the pond fill line without requiring major realignment. Secondly, this site is approximately 6,000 feet from the CPWRF, meaning the generated reuse water could be delivered to the pond via a short and direct pipeline.

The pond would tie into LaVerkin's irrigation system from the north end with a new outlet line. To maintain existing service pressures, a booster pump station would be required. This station would house a high-flow, low-head pump designed to raise the HGL from the 3,320 foot pond elevation to approximately 3,375 feet.

v) Site Suitability

Several challenges affect the suitability of this site. The most significant physical constraint is the topography: the pond would be located on a hillside, requiring substantial grading. To achieve a target high-water elevation of 3,320 feet, the west embankment would need to be raised by importing fill material. Alternatively, if the pond elevation were lowered to reduce the amount of fill, the system would rely more heavily on booster pumps to meet required pressures, increasing ongoing operational costs.

Geotechnical considerations also introduce concerns. According to USGS Quaternary fault mapping, the Hurricane Fault is mapped as crossing the east side of this site. While a site-specific fault study conducted by Rosenberg Associates for the Cottonwood Hollow Phase 5 Subdivision did not identify any direct trace of the fault, its proximity and known seismic activity increase the risk of structural damage to a reservoir in the event of a significant earthquake. This geologic risk represents a notable disadvantage when evaluating the long-term reliability and safety of this location.

The site is owned by Interstate Rock Products, a landowner with an established and positive working relationship with WCWCD. Furthermore, due to the steep topography and hillside protection ordinances, portions of the property may be unsuitable for residential development.

B. ALTERNATIVE 2 – PARCEL T-3-1-13-40001

i) Description

The second alternative pond site is located in the Land at Mesa Views, within the Trail View Estates subdivision. The site lies just north of the access road running east–west north of the Interstate Rock pit. The proposed location is situated on a knoll, the top of which coincides with the target contour elevation of 3,320 feet. The knoll is a prominent landform and includes a portion of the popular Nephi's Twist trail, which would need to be considered in project planning.

ii) Hydraulic Grade Line

The site is approximately 14,500 feet from the filter station. Hydraulic modeling indicates that, accounting for head losses in the existing 15-inch HDPE line at the design flow of 2,500 gpm, water from the Virgin River could be delivered to the site at the target elevation of 3,320 feet while maintaining the 10-foot factor of safety. This makes the site hydraulically feasible within the established design parameters.

iii) Storage Volume

Preliminary grading analyses, assuming 2:1 interior side slopes and a maximum excavation depth of 20 feet, estimate a storage capacity of approximately 6.09 million gallons. The footprint of the knoll limits the achievable storage volume compared to other alternatives, though it still provides a usable capacity.

iv) Operational Efficiency

From an operational perspective, the existing 15-inch HDPE fill line could continue to serve as the pond fill line with only an extension required. However, the new outlet line connecting the pond to the distribution system would be longer than in other alternatives, leading to higher construction costs and a minor reduction in hydraulic efficiency.

Similar to the first alternative, a booster pump station would be required to raise the hydraulic grade from the pond elevation of 3,320 feet to approximately 3,375 feet to maintain the desired level of service across LaVerkin's irrigation system.

v) Site Suitability

Construction of a reservoir at this location would involve excavating into the knoll, resulting in a substantial net export of material. Given the proximity to Interstate Rock's active pit, the cost of material removal and export may be relatively low.

The site is located directly on a section of the Hurricane Fault that is mapped as concealed. A detailed fault hazard study would therefore be required prior to development. Geologic mapping indicates the knoll consists primarily of alluvial fan deposits. Nearby geologic formations may also provide suitable materials for use as pond liner construction, potentially reducing import costs for lining materials.

C. ALTERNATIVE 3 – PRIVATE PARCEL IN TRAIL RIDGE ESTATES

i) Description

The third alternative pond site is located within Trail Ridge Estates, just east of the second alternative along the same access road. The site occupies a natural drainage basin, the rim of which lies near the target contour elevation of 3,320 feet. The property is privately owned. Because of its natural basin configuration, the site was considered as a potential reservoir location with the idea that a dam across the west side of the basin could provide storage with minimal earthwork compared to hillside excavation alternatives.

ii) Hydraulic Grade Line

The rim of the basin lies at the target elevation contour of 3,320 feet. The site is located approximately 14,500 feet from the filter station. Hydraulic analysis indicates that water from the Virgin River could be delivered to the site at the design fill rate of 2,500 gpm while maintaining the 10 foot safety factor, making the site hydraulically feasible.

iii) Storage Volume

Although the basin appears favorable in aerial imagery, field reconnaissance and grading models show that it is relatively narrow and deep, with a limited surface area. Assuming 2:1 interior side slopes from the 3,320-foot contour, the pond would have a depth of approximately 40 feet and result in a total storage capacity of only 4.5 million gallons. This represents the smallest storage volume of the three alternatives, limiting the site's ability to meet seasonal irrigation demands.

iv) Operational Efficiency

Operationally, this site would function similarly to the second alternative. The existing 15-inch HDPE fill line could continue to serve as the pond fill line with an extension, while a new outlet line would need to be constructed to connect to the distribution system. A booster pump station would also be required to raise the hydraulic grade from 3,320 feet to approximately 3,375 feet to maintain current service levels.

v) Site Suitability

The limited storage volume and challenging geometry make this site less desirable than the other alternatives. A deep dam embankment would be required across the drainage basin, introducing both construction challenges and long-term stability risks.

In addition, because the site is an active drainage basin, a streamflow alteration permit would be required, and the reservoir would need to accommodate inflow from the basin's design flood.

The limited surface area and steep basin walls leave little additional storage capacity to safely route storm inflows, increasing the complexity and risk of development.

D. COMPARISON OF POND SITE ALTERNATIVES

The three pond sites present advantages and challenges that influence their overall suitability.

The first site (Cottonwood Hollow Phase 5) offers the greatest storage capacity at approximately 7.3 MG, with room to expand. However, it requires significant embankment construction on steep hillsides. Additionally, its proximity to the Hurricane Fault introduces long-term seismic risk, making it less favorable from a geotechnical standpoint.

The second site (Mesa Views / Trail View Estates knoll) provides moderate storage at approximately 6.1 MG and is situated on a knoll at the target elevation, minimizing the need for high embankment fills. However, it would require substantial excavation with a large net export of material. While the proximity to Interstate Rock's pit may mitigate costs, the site sits directly on a mapped concealed trace of the Hurricane Fault, requiring additional fault studies. The site would also require longer outlet connections, slightly reducing operational efficiency compared to the first site.

The third site (Trail Ridge Estates drainage basin) presents the lowest storage volume at only 4.5 MG, which significantly limits its ability to meet irrigation demands. While it appears attractive as a natural basin with a rim at the correct elevation, detailed evaluation shows that it would require a tall embankment dam, creating both construction and long-term stability concerns. Further complications include the need for a streamflow alteration permit and limited space to route storm inflows, reducing both safety and reliability.

A comparison of the three alternatives is given in Table XI.D-1.

Table XI.D-1: Comparison of alternative pond sites

Alternative Pond Site Comparison			
	Alternative 1	Alternative 2	Alternative 3
Location (Parcel ID)	LV-154-A	T-3-1-13-40001	NA
Parcel ID	Cottonwood Hollow Ph 5	Land in Mesa Views at Trail Ridge Est.	Trail Ridge Estates
Hydraulic Grade Line	Interstate Rock Products	Sanpete Investors, LLC - Lloyd Baker	Privately Owned
Storage Volume (gal)	7,325,695.08	6,090,305.76	4,536,221.54
Surface Area (ft2)	71,330.84	60,567.67	39,266.18
Depth	20.00	20.00	40.00
Average Depth	13.78	13.45	24.75
High Water El.	3,320	3,320	3,320
Pros	•Most storage capacity •Possibility to expand •Landowner is favorable to project	•Simplified construction methods •Safer site •Proximity to Interstate Rock pit	•Existing basin and site access •Proximity to Interstate Rock pit
Cons	•Substantial import material required •Likely high hazard rating •Proximity to Hurricane Fault	•Substantial export material required •Inability to expand •Outside of LaVerkin City limits	•Substantial inflow design flood •Deep fill dam required •Outside of LaVerkin City limits

XII. SELECTED ALTERNATIVE

Alternative 3 was quickly eliminated from consideration. While the natural basin initially appeared attractive, the steep and confined topography limited usable storage volume to only 4.5 million gallons. Achieving this volume would require a tall embankment dam, introducing construction challenges and long-term stability concerns. In addition, development of this site would trigger streamflow alteration permitting due to the large contributing drainage basin, further complicating its feasibility.

Between Alternative 1 and Alternative 2, both sites were determined capable of meeting system demands with near equal efficiency. Each would require similar integration projects—including extension of the existing 15-inch HDPE fill line, construction of a booster pump station, and new outlet connections to the irrigation system. At a high level, construction at Site 2 appeared somewhat more straightforward, as the pond would be excavated into a knoll rather than constructed with a large embankment. However, both sites presented geotechnical risks associated with the Hurricane Fault and would require detailed fault investigations prior to construction.

Ultimately, Alternative 1 was selected as the preferred option due to its larger storage capacity, and the positive working relationship between WCWCD and the landowner, Interstate Rock Products. Preliminary discussions with the landowner regarding use of the property for a reservoir were favorable, providing additional assurance of project feasibility. Site 2 remains identified as a potential backup location should issues arise during more detailed investigations at Site 1.

This section discusses the requirements to construct and integrate the pond in greater detail.

A. REQUIRED SYSTEM IMPROVEMENTS

The preferred alternative pond site was evaluated using network hydraulic modeling to assess system performance following its integration into the irrigation network. The evaluation was guided by the following performance criteria:

- Provide irrigation water of equal or better quality than that currently delivered,
- At pressures equal to or greater than those currently delivered, even under projected future demands.

Hydraulic modeling evaluated combinations of pipeline sizes, lengths, and configurations to identify the minimum set of projects necessary to satisfy these performance criteria. Through this iterative process, a system of improvements was developed that satisfies the performance requirements.

For the ease of construction phasing, the required system improvements are divided into two projects. The first project consists of those improvements needed to construct and fill the pond, and connect the pond to the existing irrigation system, known as the LaVerkin Pond & Pipeline improvements. The second project consists of the pipeline improvements required to maintain the existing levels of service, known as the LaVerkin Transmission Line improvements.

i) *LaVerkin Pond & Pipeline Improvements*

1. Construction of a pond to store approximately 8 million gallons of irrigation water.
2. Extension of the existing 15-inch HDPE fill line from 500 North to the pond. From 500 North, the fill line transitions from 15-inch to 18-inch diameter.
3. Construction of a new 24-inch transmission line from the pond site to 500 North, where it will be bored under 500 North and tied into the existing 15-inch trunkline along 100 East.
4. Construction of a booster pump station to raise the hydraulic grade by approximately 80 feet (~35 psi), ensuring the pond can pressurize the distribution system and maintain existing levels of service.

ii) *LaVerkin Transmission Line Improvements*

1. Repurposing of an existing, unused 10-inch culinary water crossing beneath State Street as part of the secondary irrigation system. Downstream of this crossing, an existing 6-inch line will be replaced with a new 10-inch trunkline extending to 500 North and westward to 360 West. The 10-inch trunkline will also extend along 300 West between 500 North and 200 North.
2. Installation of a new 8-inch looping line to connect 360 West with 600 North.

The proposed booster pump station will be somewhat unique in that the required pump head is essentially constant at about 80 feet (~35 psi), while the flow range will vary from near zero up to the maximum projected demand of 3,590 gpm. To reliably meet this demand, this Study anticipates installation of a multi-stage vertical centrifugal pump capable of operating efficiently across this flow range and delivering the necessary pressure increase to the irrigation distribution system.

Hydraulic modeling of the improved network indicates that the proposed configuration maintains, and in most areas improves, levels of service across LaVerkin City. Modeled results show an average increase of approximately 6 psi in system pressure.

The scope of these projects is illustrated in Appendix E of this report.

B. BOOSTER STATION EVALUATION

A high-level evaluation was performed to estimate the expected capital, operation, and maintenance (O&M) costs of the proposed booster station facility at the preferred alternative. The analysis was intended to establish a realistic expectation of long-term ownership costs and provide a basis for comparing alternatives.

For the purposes of this Study, it was assumed that booster station would serve only the lower bench demand. Electricity rates were based on Rocky Mountain Power's 2024 commercial service schedule. Assumptions on other pumping characteristics are given in Table XII.B-1.

Table XII.B-1: Assumed pumping characteristics

Parameter	Summer	Spring/Fall
Peak Demand (gpm)	3,590.4	2,715.2
Average Demand (gpm)	2,715.2	1,795.2
Pump Head Required (ft)	80.0	80.0
Pump Head Required (psi)	34.7	34.7
Daily Peak Pumping Time (hours)	4.0	2.0
Daily Average Pumping Time (hours)	12.0	8.0

Using the given assumptions, the required pump performance characteristics, and the monthly electricity costs for both the summer and spring/fall seasons were determined. These are presented in Table XII.B-2.

Table XII.B-2: Required pump performance characteristics

Parameter	Summer	Spring/Fall
Average Brake hP Required (hP)	78.5	51.9
Peak Brake hP Required (hP)	103.7	78.5
Average Demand Input Power (hP)	104.6	69.2
Peak Demand Input Power (hP)	138.3	104.6
Daily kWH	1,347.4	568.1
Electrical Base Charge	$320.00	$320.00
Monthly Electricity Cost	$3,011.21	$1,454.63
Monthly Pump Hours (hours)	480.0	300.0

Additional pumping and storage alternatives were also evaluated to assess the feasibility of extending irrigation service to LaVerkin's upper bench. The evaluation found that these options would result in significantly initial construction costs and higher operating costs, with estimated pumping expenses on the order of three to four times greater than those for the lower bench booster station.

Based on this cost analysis, it was ultimately determined that extending irrigation water service to the upper bench was not financially viable.

C. POND CONSTRUCTION

The proposed irrigation pond at the selected site was evaluated for constructability to establish a basis for the cost estimates included in this Study. Due to the proximity of the site to residential areas and schools, and at an elevation above surrounding development, the pond was assumed to be constructed as a synthetically double-lined system to provide reliable water retention and minimize seepage risk.

The embankment was modeled as a homogenous rolled earth embankment with typical 3:1 interior side slopes and 2:1 exterior side slopes. The preliminary grading models of the site indicate the approximate earthwork necessary to construct the pond. Based on the preliminary site grading, approximately 1500 cubic yards of net import is required as shown in Table XII.C-1.

Table XII.C-1: Estimated earthwork volumes from preliminary site grading

Approximate Earthwork Volumes	
Cut (yd^3)	9,621.09
Fill (yd^3)	11,067.17
Net (yd^3)	1,446.08

In addition to the lined embankment, it was assumed that a separate settling basin or transfer structure would be constructed upstream of the pond. This facility would allow sediment to settle out of the Virgin River water prior to entering the pond, thereby extending the useful life of the liner system and reducing long-term maintenance.

The proposed pond, booster pump facility, and pipe network improvements will hereafter be called collectively the LaVerkin Pond & Pipeline Project. An opinion of probable cost for the LaVerkin Pond & Pipeline project is provided in Appendix F of this report.

XIII. SUMMARY OF RECOMMENDED IMPROVEMENTS

Recommended system improvements have been given in Section IX.C and X.G of this Study.

A. RECOMMENDED SYSTEM IMPROVEMENTS

Table XIII.A.1 below shows a summary of each recommended improvement, along with its expected year of construction, estimated cost, and inflated costs. Inflation costs for this Study assume a 3% increase per year.

Table XIII.A-1: Cost summary of recommended system improvements

Project	Current Cost Estimate	Est. Year of Installation	Estimated Inflated Costs
LaVerkin Pond & Pipeline Project	$ 7,376,300.00	2026	$ 7,597,600.00
LaVerkin Transmission Line Improvements	$ 1,152,100.00	2026	$ 1,186,700.00
LaVerkin City In-Town Replacements	$ 10,111,800.00	2026	$ 10,415,200.00
100 E Transmission Line Improvement	$ 2,487,200.00	2026	$ 2,561,800.00
Capital Facilities Plan and IFFP & IFA Update (2030)	$ 64,600.00	2030	$ 74,900.00
Capital Facilities Plan and IFFP & IFA Update (2035)	$ 64,600.00	2035	$ 86,800.00
Total	**$ 21,256,600.00**		**$ 21,923,000.00**

B. ENGINEER'S OPINION OF PROBABLE COST

An Engineer's Opinion of Probable Cost (EOPC) for each recommended improvement has been included in Appendix F. Opinions of probable cost of each of the recommended improvements are based on experience with similar projects, bid tabulations from past projects, and from information provided by the City through prior experience.

The opinions of probable project costs included in this report are planning-level costs only. As the City seeks to undertake specific projects, more detailed and updated costs should be prepared to guide project development through the preliminary engineering and budgeting phases of the project.

C. POSSIBLE FINANCING PLAN

The City is in discussion with WCWCD to provide funding for the capital improvement projects listed in Table XIII.A.1. The Capital Facilities Plans are anticipated to be paid for with impact fee money. Therefore, this Study did not investigate funding agency options or provide a possible financing plan.

The calculations in the subsequent sections of this report assume that the costs of the recommended improvements will be paid for by WCWCD. If funding is not available through WCWCD, it is recommended that the City reevaluate the financial analysis provided in the subsequent section.

XIV. FINANCIAL ANALYSIS

LaVerkin City has different secondary water user rate structures for delivery contract holders and for lease users.

A. EXISTING DELIVERY CONTRACT RATE

The current fee schedule for delivery contract holders is shown in Table XIV.A-1. Each contract holder is assessed a one-time annual fee of $50.89 and $25.45 for the first share equivalent or partial share equivalent of secondary water. For each additional share equivalent, delivery contract holders pay a twice annual fee of $12.72.

Based on the existing billing records, the average delivery contract holder owns a delivery contract worth an average of 1.51 share equivalents. The average annual fee paid by a delivery contract holder is therefore equal to the one-time assessment fee plus an additional $38.51 for additional share equivalents. The total annual fee is equal to $89.40, or $9.93 per month on a 9-month irrigation schedule.

Table XII.A-1: LaVerkin City existing delivery contract holder fee schedule

Delivery Contract Holder Fee Schedule		
Annual Assessment Fee	$	50.89
Usage Fee - 1 Share or Less	$	25.45
Usage Fee - Additional Contracts	$	12.72
Average Number of Share Equivalents Held	1.51	
Average Contract Holder Usage Fee	$	38.51
Average Annual Contract Holder Fee	**$**	**89.40**
Average Monthly Contract Holder Fee	**$**	**9.93**
Annual Contract Holder Fees Collected	**$**	**26,103.72**

B. EXISTING LEASE USER RATE

The fee schedule for lease users of secondary water is presented in Table XIV.B-1 and is dependent upon the lot size of the end user. The monthly fee assessed for lots one acre and larger is $25.42, for lots smaller than one-half acre-$12.72, and for lots between one-half acre and one acre-$19.08.

The monthly cost for a typical lease user, based on a weighted average, is $13.02.

Table XII.B-1: LaVerkin City existing lease user fee schedule

Existing Lease User Cost		
Lot Size	**Existing Users (2025)**	**Billing Schedule**
Lots < 1/2 Acre	780	$ 12.72
Lots 1/2 Acre to <1 Acre	18	$ 19.08
Lots > 1 Acre	10	$ 25.45
Total Users (2025)	808	
Monthly Leasee Fees Collected	**$ 10,519.54**	
Average Leasee User Monthly Cost	**$ 13.02**	
Annual Lease User Fees Collected	**$ 94,675.86**	

C. REQUIRED AVERAGE RATE DETERMINATION

This Study provides an average rate analysis to determine the average rate required by each connection in order to cover the expenses of the secondary water system. The analysis uses recent fiscal year expenses and annual budgets to project the expenses in fiscal year 2026. New expenses associated with the implementation of the new booster pump station to support the recommended pond alternative are also considered. This analysis considers projected expenses and income sources to determine the amount of revenue needed to be generated by user rates.

The target revenue needed from user rates is divided by the estimated number of connections serviced by the system and converted to an average monthly user rate. This gives an average user rate needed per connection to cover the expenses of the secondary water system. The analysis results in an average user rate per connection of $21.99/mo., based on a 9-month irrigation schedule. The user rate analysis is presented in Table XIV.C-1.

Table XII.C-1: LaVerkin City average user rate analysis

LAVERKIN CITY AVERAGE USER RATE DETERMINATION FY 2026	
Irrigation Fund O&M Expenses (FY 2026)	**Total**
Salaries, Benefits, & Pension	$ 133,404.00
New Water Mains, Water Main Repair & Contractual Services	$ 21,557.12
Phone, Office, Material & Equipment Supplies	$ 11,250.66
Depreciation / Rewnewal & Replacement Expense	$ 18,811.40
Insurance	$ 7,832.68
Booster Pump O&M	$ 47,750.00
Total Water Fund O&M Expenses	**$ 240,605.86**
EXISTING DEBT SERVICE	
2010 Irrigation Water Revenue Bond	$ 11,000.00
Subtotal Existing Debt Service	**$ 11,000.00**
Total Debt Service/Financial Expense	**$ 11,000.00**
Other Income (Besides Water Sales)	
Impact Fees	$ 2,174.56
Interest Earned	$ 1,600.00
Connection Fees	$ 4,538.80
Assessment Fees	$ -
Other (Penalties & Miscellaneous)	$ 1,592.20
Total Other Income	**$ 9,905.56**
Expenses Less Income	**$ 241,700.30**
Required Costs Per Connection	
Connections (FY 2026)	1,222
Average Monthly Use/Billed Connection (Gal)	62,323
Monthly Cost/Connection in FY 2026	**$ 21.99**
Annual Cost/Connection in FY 2026	**$ 197.84**
Cost/1000 Gallons	**$ 0.35**

D. FEE SCHEDULE DETERMINATION

Based on the anticipated revenue deficits under the existing user rate structure, the analysis shows that the City will not be able to cover the projected capital, operation, and ongoing maintenance expenses of the secondary water system if rates remain unchanged.

To ensure the system remains financially sustainable, it is recommended that the City establish a revised rate structure that generates sufficient revenue to meet these expenses. The financial analysis indicates that an average user rate of $21.99 is needed to balance revenues and costs. There are multiple approaches available to achieve this target.

This Study provides a possible rate structure that is an adaptation of the existing rate structure, which will provide enough revenue to cover the anticipated system costs. Sunrise worked with City staff and elected officials to adapt the existing user rate structure to meet the projected expenses. The proposed rate structure is given in Table XIV.D-1.

Table XII.D-2: Proposed adjusted secondary water fee schedule

Proposed Lease User Fees			
Lot Size	**Number of Users**	**Monthly Billing Schedule**	**% Increase From Existing**
Lots < 1/2 Acre	780	$ 23.97	88%
Lots 1/2 Acre to <1 Acre	18	$ 35.95	88%
Lots > 1 Acre	10	$ 47.94	88%
Proposed Contract Holder Fees			
Annual Contract Holder Assessment Fee		$ 140.00	175%
Annual Usage Fee - 1 Share or Less		$ 47.94	88%
Bi-Annual Usage Fee - Additional Contracts		$ 23.97	88%

XV. IMPACT FEES

This report constitutes a Capital Facilities Plan, which determines the public facilities required to serve new development. A community may charge an impact fee to provide funding for projects required by this growth. The total cost that is eligible for the impact fee assessment is equal to the portion of any planned improvement projects that will be constructed in the planning window. The combined costs for these projects are divided by the projected number of new connections that will be added to the secondary water system to determine the impact fee allowable.

A. EXISTING IMPACT FEES

The existing impact fees charged by the City for secondary water connections is shown in Table XV.A-1. The existing impact fees are associated with residential zoning.

Table XV.A-1: LaVerkin City existing secondary water impact fee schedule

LaVerkin City Secondary Water Impact Fee Schedule	
Zoning	Impact Fee
R-A-1	$ 6,644.00
R-1-14	$ 1,545.00
R-1-10	$ 850.00
R-1-8	$ 618.00
R-3-6	$ 386.00

B. PROPOSED IMPACT FEES

This Study includes an Impact Fee Analysis to determine the maximum allowable impact fee that the City can assess as its secondary water impact fee. As stated above, an impact fee covers the cost of projects falling within the planning window, which for this analysis is 10 years. The impact fee can also cover debt services for past projects that can be attributed to growth.

According to state impact fee laws, impact fees must be used within six years of their receipt. This Study accounts for incoming fees to be used for eligible projects and debts in the continuous six-year window.

As stated in Section XI.C, this Study assumes that the recommended improvements will be funded by WCWCD. Where these projects are being funding by WCWCD and anticipated to be constructed in the near future they are not considered impact fee eligible. This Study does include a recommendation for future updates to this Study every 5 years. According to the impact fee law these updates are considered 100% impact fee eligible.

Based on these assumptions, the maximum allowable impact fee for a new 1-inch secondary water connection is calculated to be $241.62. See Table XIII.B-1 for the impact fee analysis.

Table XV.B-1: LaVerkin City allowable impact fee determination

LaVerkin City Impact Fee Analysis						
Existing Debt Service	**Debt to be paid 2025-2034**				**IF Eligibility (%)**	**IF Eligibility ($)**
2010 Irrigation Water Revenue Bond	$ 117,000.00				0%	$0.00
Subtotal	$ 117,000.00				0%	$0.00
Secondary Water Improvements Project	**Total Estimated Project Costs**	**Year of Improvement**	**Inflated Costs ($)**	**Financed Cost ($)**	**IF Eligibility (%)**	**IF Eligibility ($)**
LaVerkin City In-Town Replacements	$ -	2026	$ -	$0.00	0.0%	$0.00
100 E Transmission Line Improvement	$ -	2026	$ -	$0.00	0.0%	$0.00
Subtotal	$ -		$ -	$0.00	0.0%	$0.00
Future Planning Projects	**Current Cost**	**Year of Improvement**	**Inflated Costs ($)**	**Financed Cost ($)**	**IF Eligibility (%)**	**IF Eligibility ($)**
Capital Facilities Plan and IFFP & IFA Update	$ 64,600.00	2030	$ 74,900.00		100%	$ 74,900.00
Capital Facilities Plan and IFFP & IFA Update	$ 64,600.00	2035	$ 86,800.00		100%	$ 86,800.00
Subtotal	$ 129,200.00		$ 161,700.00			$ 161,700.00
Total Impact Fee Eligible						$161,700.00
Number of New Irrigation Connections by 2035						669
Maximum Allowable Impact Fee per Connection						$241.62

Whereas larger meter connections are considered to consume larger amounts of secondary water, these are therefore required to pay a higher impact fee based on the meter size. The maximum allowable impact fee for each meter size is shown in the table below.

Table XV.B-2: LaVerkin City proposed secondary water impact fee schedule

LaVerkin City Secondary Water Proposed Impact Fee Schedule	
Meter Size	**Impact Fee**
1"	$ 241.62
2"	$ 569.30
3"	$ 948.83
4"	$ 1,328.37
6"	$ 3,795.33

C. IMPACT FEE RELATED ITEMS

In general, it is beneficial to update this impact fee facilities plan analysis at least every five years, or more frequently if drastic growth or changes affect the assumptions and data in this Study. It is assumed that this Study will be updated as recommended.

City staff should be aware that, in conformance with Utah Code 11-36a-602, impact fees can generally only be expended for a system improvement that is defined in the Impact Fee Facilities

Plan and that is for the specific public facility type for which the fee was collected (i.e., the transportation impact fees cannot be used for water or sewer projects). Also, impact fees in Utah must be expended or encumbered for a permissible use within six years of their receipt unless 11-36a-602(2)(b) applies. Additionally, impact fees must have proper accounting (track each fee in and out) in accordance with Utah Code 11-63a-601.

In accordance with Utah Code 11-36a-306 a certification of impact fee analysis is provided in Appendix G.

D. CONNECTION FEE

Currently the City charges a $100 connection fee for any new service that is connected to the system. According to Utah State Law, connection fees are not to be more than the actual cost of establishing the connection including a water meter and labor to connect the meter to the water main line.

These fees should be looked at periodically and adjusted as prices for materials and labor increases.

E. CASH FLOW

A 20-year cash flow analysis was prepared as part of this Study. This cash flow shows several years of past revenues and expenses, along with twenty years of projected revenues and expenses for the secondary water system. These projections are based on assumptions of inflation, growth, average rates, proposed projects, etc. Calculations for average rates and impact fees have been carried over to the cash flow analysis. The cash flow analysis is presented in Appendix I.

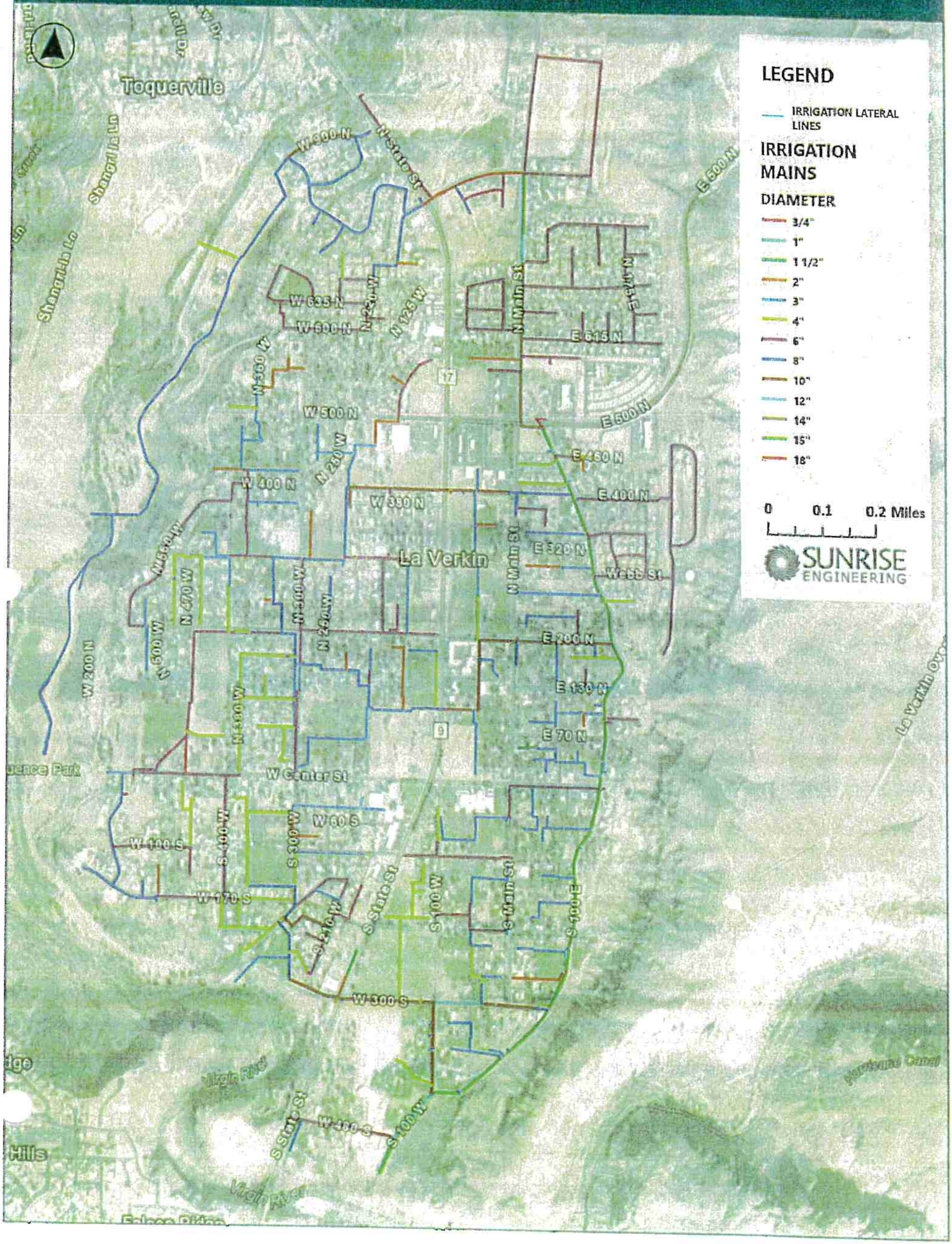
Secondary water user rates and fees should be reviewed by the City periodically to ensure that they keep up with inflation and increased costs in system maintenance. LaVerkin City does not have to adopt the amounts shown in the rate analysis. However, the rates suggested are calculated to cover the anticipated expenses and ensure that the water fund remains viable.

APPENDIX A

LaVerkin City

Secondary Water System Map

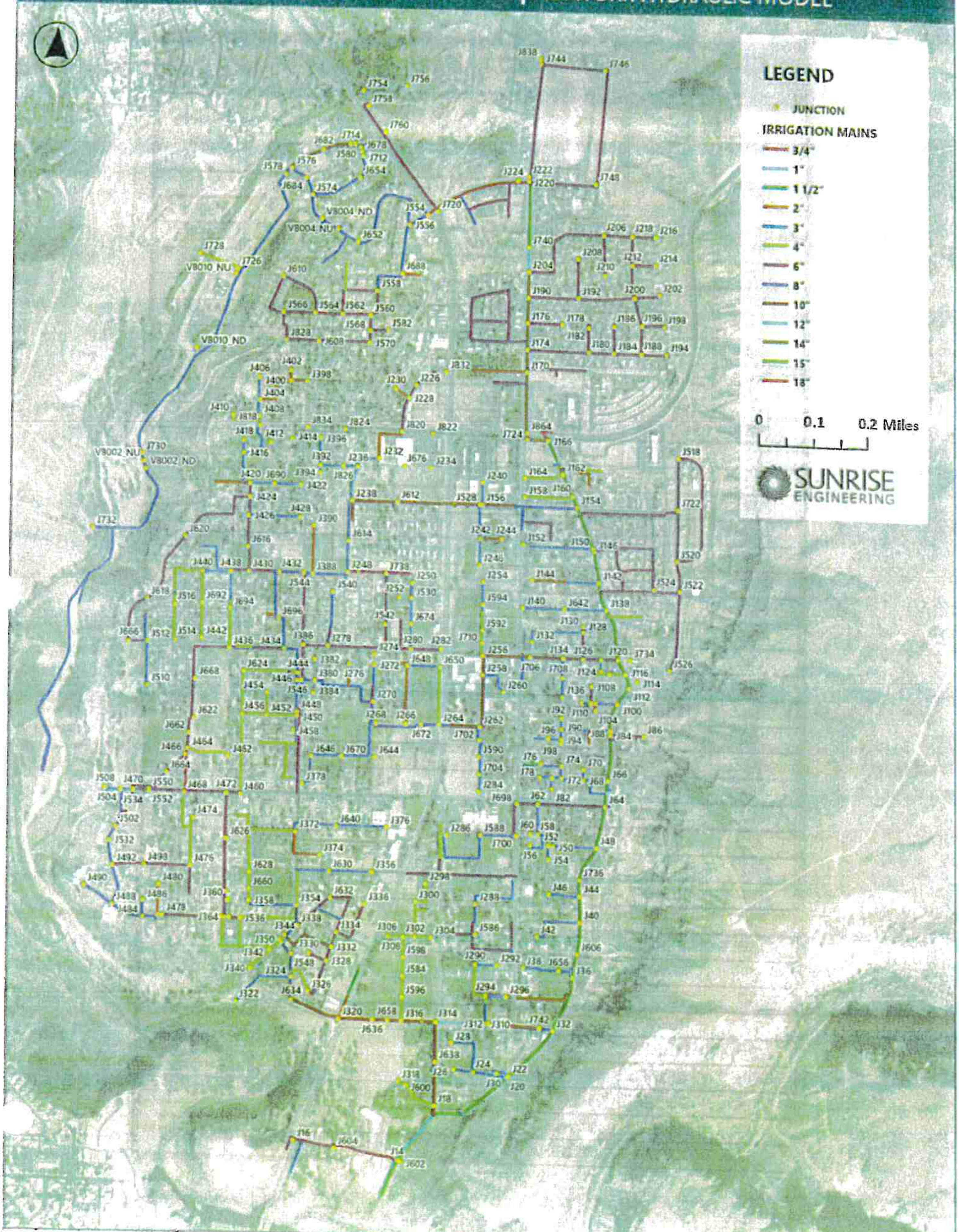
LAVERKIN CITY EXISTING IRRIGATION SYSTEM



APPENDIX B

Network Hydraulic Model & Output
AquaTwin by Aquanuity

LAVERKIN CITY EXISTING IRRIGATION SYSTEM | NETWORK HYDRAULIC MODEL



Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999.3	10043006	3254	4.24	3384.96	56.75
J102	1125788.6	10043009	3236	4.24	3384.59	64.38
J104	1125787.1	10042941	3240	4.24	3384.58	62.65
J106	1125744.9	10043014	3234	4.24	3384.56	65.24
J108	1125746.4	10043169	3238	4.24	3384.56	63.5
J110	1125653.1	10043014	3227	4.24	3384.55	68.27
J112	1126111	10043156	3255	4.24	3384.92	56.3
J114	1126189.2	10043213	3260	4.24	3384.83	54.09
J116	1126077.9	10043285	3250	4.24	3384.89	58.45
J118	1125925.8	10043283	3244	4.24	3384.89	61.05
J120	1126005.6	10043423	3248	4.24	3384.86	59.3
J122	1125841.3	10043421	3242	4.24	3384.74	61.85
J124	1125842.9	10043313	3239	4.24	3384.73	63.15
J126	1125666.8	10043422	3228	4.24	3384.63	67.87
J128	1125668.3	10043677	3232	4.24	3384.46	66.06
J130	1125668.3	10043732	3233	4.24	3384.45	65.62
J132	1125164.1	10043574	3220	4.24	3384.4	71.24
J134	1125471.1	10043427	3218	4.24	3384.51	72.15
J136	1125463.6	10043063	3215	4.24	3384.44	73.42
J138	1125894	10043888	3247	4.24	3384.85	59.73
J14	1123884.3	10038702	3170	4.24	3386.87	93.97
J140	1125067.4	10043894	3220	4.24	3384.68	71.36
J142	1125820	10044147	3253	4.24	3384.85	57.13
J144	1125157.7	10044156	3229	4.24	3384.79	67.5
J146	1125772	10044440	3249	4.24	3384.84	58.86
J150	1125760.2	10044468	3249	4.24	3384.84	58.86
J152	1125070.4	10044495	3230	4.24	3384.78	67.07
J154	1125604.7	10044857	3250	4.24	3384.84	58.43
J156	1124669.9	10044862	3224	4.24	3384.41	69.51
J158	1125083.8	10044940	3234	4.24	3384.84	65.36
J16	1122873.1	10038869	3220	4.24	3386.87	72.3
J160	1125559.4	10044955	3250	4.24	3384.85	58.43
J162	1125461.5	10045164	3250	4.24	3384.86	58.43
J164	1125082.3	10045119	3237	4.24	3384.85	64.06
J166	1125311.2	10045480	3248	4.24	3384.87	59.31
J170	1125095.7	10046118	3253	4.24	3384.82	57.12
J174	1125098.7	10046332	3255	4.24	3384.8	56.24
J176	1125100.3	10046582	3252	4.24	3384.78	57.53

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446.5	10046575	3264	4.24	3384.78	52.33
J18	1124240	10039216	3210	4.24	3386.65	76.54
J180	1125708.8	10046321	3268	4.24	3384.72	50.58
J182	1125708.8	10046551	3274	4.24	3384.72	47.98
J184	1125954.1	10046316	3277	4.24	3384.7	46.67
J186	1125958.6	10046567	3282	4.24	3384.7	44.5
J188	1126222	10046313	3287	4.24	3384.7	42.33
J190	1125106.7	10046822	3249	4.24	3384.76	58.82
J192	1125604.9	10046828	3267	4.24	3384.72	51.01
J194	1126476.6	10046310	3290	4.24	3384.69	41.03
J196	1126225.2	10046578	3288	4.24	3384.69	41.9
J198	1126452.5	10046572	3290	4.24	3384.69	41.03
J20	1124935.7	10039498	3260	4.24	3386.3	54.72
J200	1126153	10046838	3286	4.24	3384.69	42.76
J202	1126401.3	10046870	3290	4.24	3384.69	41.03
J204	1125109.7	10047063	3250	4.24	3384.74	58.38
J206	1125853.2	10047423	3272	4.24	3384.7	48.83
J208	1125600.4	10047197	3268	4.24	3384.72	50.57
J210	1125865.3	10047045	3275	4.24	3384.69	47.53
J212	1126130.5	10047146	3284	4.24	3384.69	43.63
J214	1126359.2	10047149	3290	4.24	3384.69	41.03
J216	1126359.2	10047412	3285	4.24	3384.69	43.2
J218	1126130.5	10047418	3278	4.24	3384.69	46.23
J22	1124947.8	10039509	3260	4.24	3386.28	54.72
J220	1125104.9	10047917	3205	4.24	3384.7	77.86
J222	1125104.9	10047957	3205	4.24	3384.7	77.86
J224	1124995	10047917	3197	4.24	3384.7	81.33
J226	1124010.1	10045975	3250	4.24	3379.12	55.95
J228	1123938.1	10045852	3250	4.24	3379.21	55.99
J230	1123803.7	10045935	3245	4.24	3379.11	58.11
J232	1123645.1	10045276	3242	4.24	3383.17	61.17
J234	1124171.6	10045197	3230	4.24	3383.05	66.32
J236	1123445.4	10045194	3248	4.24	3383.86	58.87
J238	1123390.9	10044874	3240	4.24	3383.93	62.36
J24	1124612.1	10039537	3227	4.24	3386.07	68.93
J240	1124671	10045070	3230	4.24	3384.4	66.9
J242	1124652.8	10044538	3220	4.24	3384.18	71.14
J244	1124858.6	10044541	3218	4.24	3384.16	72

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124643.7	10044290	3218	4.24	3384.16	72
J248	1123356.6	10044196	3234	4.24	3383.46	64.76
J250	1123989.9	10044107	3214	4.24	3382.67	73.08
J252	1123858.9	10043966	3210	4.24	3382.6	74.79
J254	1124682.6	10044130	3212	4.24	3383.69	74.39
J256	1124684	10043432	3205	4.24	3384.12	77.61
J258	1124684	10043249	3203	4.24	3384.04	78.45
J26	1124424	10039560	3211	4.24	3386.06	75.85
J260	1124881.9	10043093	3198	4.24	3384.02	80.6
J262	1124653.5	10042762	3194	4.24	3383.87	82.27
J264	1124261.5	10042774	3190	4.24	3383.76	83.96
J266	1123934.2	10042774	3190	4.24	3383.56	83.87
J268	1123637.4	10042774	3190	4.24	3383.42	83.81
J270	1123610.7	10042979	3200	4.24	3383.34	79.44
J272	1123619.5	10043324	3207	4.24	3383.34	76.41
J274	1123621.4	10043427	3212	4.24	3383.28	74.21
J276	1123381.7	10043327	3221	4.24	3383.19	70.28
J278	1123166.1	10043500	3225	4.24	3383.12	68.51
J28	1124399.9	10039807	3203	4.24	3386.03	79.31
J280	1123977.2	10043483	3198	4.24	3383.12	80.21
J282	1124278.7	10043485	3198	4.24	3383.12	80.21
J284	1124647.5	10042156	3188	4.24	3383.55	84.73
J286	1124341.1	10041745	3188	4.24	3384.95	85.34
J288	1124622.2	10041108	3188	4.24	3385.64	85.64
J290	1124622.2	10040543	3195	4.24	3385.76	82.66
J292	1124828	10040539	3198	4.24	3385.74	81.35
J294	1124725.1	10040253	3195	4.24	3385.87	82.71
J296	1124918.3	10040249	3203	4.24	3385.86	79.23
J298	1124145.4	10041286	3188	4.24	3385	85.36
J30	1124834.9	10039531	3244	4.24	3386.27	61.64
J300	1124042.5	10041114	3188	4.24	3385	85.36
J302	1124040.4	10040785	3189	4.24	3385.03	84.94
J304	1124195.8	10040785	3188	4.24	3385.03	85.37
J306	1123769.5	10040791	3189	4.24	3385.06	84.95
J308	1123922.8	10040785	3189	4.24	3385.06	84.95
J310	1124727.2	10039992	3198	4.24	3386.03	81.47
J312	1124756.6	10039992	3198	4.24	3386.03	81.47
J314	1124252.5	10039999	3195	4.24	3386.03	82.77

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914.4	10040005	3193	4.24	3385.81	83.55
J318	1123886.8	10039438	3210	4.24	3386.62	76.53
J32	1125375.6	10039941	3260	4.24	3386.03	54.61
J320	1123306.8	10040009	3190	4.24	3385.52	84.72
J322	1122289.5	10040159	3030	4.24	3385.15	153.89
J324	1122839.8	10040396	3184	4.24	3385.21	87.18
J326	1122999.4	10040261	3186	4.24	3385.07	86.26
J328	1123180.1	10040549	3182	4.24	3385.07	87.99
J330	1123007.8	10040618	3178	4.24	3385.09	89.73
J332	1123230.5	10040679	3182	4.24	3385.06	87.98
J334	1123283	10040818	3179	4.24	3385.05	89.28
J336	1123545.5	10041082	3185	4.24	3384.73	86.54
J338	1122894.4	10040872	3178	4.24	3385.02	89.7
J340	1122440.4	10040465	3169	4.24	3384.61	93.43
J342	1122623.3	10040641	3178	4.24	3384.62	89.53
J344	1122772.2	10040780	3178	4.24	3385.07	89.72
J346	1122741.5	10040713	3178	4.24	3385.08	89.73
J350	1122729.7	10040740	3178	4.24	3385.07	89.72
J352	1122722.3	10040733	3178	4.24	3385.08	89.73
J354	1122884.2	10041060	3183	4.24	3384.96	87.51
J356	1123612	10041383	3188	4.24	3384.9	85.32
J358	1122415.4	10041101	3192	4.24	3384.95	83.6
J36	1125567.1	10040443	3255	4.24	3385.82	56.69
J360	1122205.7	10041099	3192	4.24	3384.95	83.6
J364	1122181.1	10040941	3189	4.24	3382.95	84.04
J366	1122148.2	10040941	3189	4.24	3382.94	84.04
J368	1122218.1	10040941	3188	4.24	3383	84.49
J370	1122183.1	10041179	3194	4.24	3382.86	81.83
J372	1122865.7	10041749	3195	4.24	3384.57	82.14
J374	1123108.3	10041533	3188	4.24	3384.28	85.05
J376	1123749.9	10041802	3188	4.24	3384.53	85.16
J378	1122925.9	10042198	3198	4.24	3382.72	80.04
J38	1125085.4	10040522	3214	4.24	3385.73	74.41
J380	1123041.2	10043167	3222	4.24	3383.14	69.82
J382	1123039.2	10043368	3226	4.24	3383.14	68.09
J384	1123030.9	10043048	3222	4.24	3383.06	69.79
J386	1122922.2	10043502	3228	4.24	3383.13	67.22
J388	1123012.2	10044175	3237	4.24	3383.21	63.35

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018.4	10044630	3245	4.24	3382.92	59.76
J392	1123078	10045202	3250	4.24	3383.61	57.89
J394	1123075.9	10045132	3248	4.24	3383.6	58.76
J396	1123078	10045461	3252	4.24	3383.59	57.02
J398	1122933.5	10045990	3220	4.24	3376.23	67.7
J40	1125639.4	10040959	3255	4.24	3385.62	56.6
J400	1122775.2	10045992	3220	4.24	3376.34	67.74
J402	1122775.2	10046090	3205	4.24	3376.27	74.21
J404	1122470.9	10045807	3208	4.24	3378.72	73.97
J406	1122464.8	10046021	3204	4.24	3378.7	75.7
J408	1122468.9	10045657	3214	4.24	3378.98	71.49
J410	1122207.8	10045663	3212	4.24	3378.98	72.35
J412	1122586.1	10045406	3233	4.24	3379.94	63.67
J414	1122795.8	10045445	3245	4.24	3375.98	56.75
J416	1122322.9	10045307	3222	4.24	3381.84	69.26
J418	1122320.8	10045427	3220	4.24	3381.82	70.12
J42	1125221	10040818	3221	4.24	3385.57	71.31
J420	1122388.7	10045020	3209	4.24	3381.93	74.93
J422	1122884.2	10045014	3238	4.24	3381.83	62.32
J424	1122388.6	10044892	3209	4.24	3381.98	74.95
J426	1122376.3	10044717	3215	4.24	3382.13	72.42
J428	1122880	10044707	3242	4.24	3382.09	60.7
J430	1122384.4	10044188	3240	4.24	3382.66	61.82
J432	1122684.6	10044186	3240	4.24	3383.06	61.99
J434	1122742.1	10043462	3232	4.24	3383.06	65.45
J436	1122197.2	10043462	3228	4.24	3382.89	67.11
J438	1122207.5	10044182	3236	4.24	3382.65	63.54
J44	1125638	10041202	3255	4.24	3385.53	56.56
J440	1121938.2	10044182	3240	4.24	3382.53	61.76
J442	1121938.2	10043551	3234	4.24	3382.5	64.34
J444	1122875.7	10043237	3224	4.24	3383.09	68.93
J446	1122869.5	10043168	3223	4.24	3383.1	69.37
J448	1122869.5	10042870	3222	4.24	3382.94	69.74
J450	1122869.5	10042833	3222	4.24	3382.93	69.73
J452	1122577.6	10042833	3220	4.24	3382.89	70.58
J454	1122577.6	10043042	3224	4.24	3382.89	68.85
J456	1122332.9	10042839	3220	4.24	3382.89	70.58
J458	1122832.5	10042692	3221	4.24	3382.91	70.16

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125333.9	10041215	3220	4.24	3385.5	71.71
J460	1122321.2	10042093	3208	4.24	3382.81	75.75
J462	1122197.2	10042443	3216	4.24	3382.78	72.27
J464	1121806.6	10042513	3224	4.24	3382.79	68.8
J466	1121781.6	10042455	3224	4.24	3382.79	68.8
J468	1121773.3	10042102	3218	4.24	3382.79	71.4
J470	1121275.8	10042124	3222	4.24	3382.78	69.67
J472	1122184.8	10042099	3208	4.24	3382.81	75.74
J474	1121872.3	10041867	3209	4.24	3382.83	75.32
J476	1121843.5	10041417	3202	4.24	3382.84	78.36
J478	1121573.4	10040954	3197	4.24	3382.85	80.53
J48	1125796.1	10041657	3255	4.24	3385.35	56.48
J480	1121534.4	10041237	3208	4.24	3382.84	75.76
J482	1121530.2	10040954	3195	4.24	3382.84	81.39
J484	1121380.2	10040935	3195	4.24	3382.83	81.39
J486	1121376	10041089	3205	4.24	3382.83	77.05
J488	1121080	10041046	3195	4.24	3382.82	81.38
J490	1120796.2	10041219	3195	4.24	3382.82	81.38
J492	1121080	10041410	3215	4.24	3382.81	72.71
J498	1121390.4	10041422	3216	4.24	3382.83	72.29
J50	1125374.5	10041666	3215	4.24	3384.98	73.65
J502	1121106.7	10041773	3220	4.24	3382.79	70.54
J504	1121151.6	10042114	3220	4.24	3382.78	70.53
J508	1120997.8	10042132	3200	4.24	3382.76	79.19
J510	1121404.9	10043101	3215	4.24	3381.85	72.3
J512	1121400.8	10043516	3225	4.24	3381.89	67.98
J514	1121674.3	10043531	3228	4.24	3382.48	66.93
J516	1121668.1	10043862	3234	4.24	3382.48	64.34
J518	1126598.3	10045335	3307	4.24	3384.84	33.73
J52	1125329.4	10041667	3213	4.24	3384.95	74.51
J520	1126585.9	10044363	3315	4.24	3384.84	30.26
J522	1126614.9	10044079	3320	4.24	3384.84	28.1
J524	1126475.1	10044087	3300	4.24	3384.85	36.76
J526	1126512	10043330	3310	4.24	3384.84	32.43
J528	1124645.6	10044860	3224	4.24	3384.4	69.5
J530	1123982.9	10043964	3210	4.24	3382.68	74.82
J532	1121044.8	10041644	3220	4.24	3382.8	70.54
J534	1121275.6	10042112	3222	4.24	3382.78	69.67

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328.1	10040934	3188	4.24	3383.14	84.56
J54	1125327.9	10041538	3216	4.24	3384.94	73.2
J540	1123216.8	10044007	3230	4.24	3383.12	66.35
J542	1123717.6	10043709	3210	4.24	3383.46	75.16
J544	1122921.4	10044178	3238	4.24	3383.15	62.89
J546	1122910.7	10043167	3223	4.24	3383.11	69.38
J548	1122836.4	10040607	3178	4.24	3385.12	89.74
J550	1121429.3	10042126	3224	4.24	3382.78	68.8
J552	1121429.7	10042109	3224	4.24	3382.78	68.8
J554	1124113.5	10047573	3180	4.24	3384.62	88.66
J556	1123927.3	10047480	3182	4.24	3384.5	87.74
J558	1123608.1	10046856	3178	4.24	3384.44	89.45
J56	1125148.8	10041667	3203	4.24	3384.94	78.83
J560	1123546	10046621	3188	4.24	3384.42	85.11
J562	1123275.6	10046630	3188	4.24	3384.41	85.11
J564	1123000.7	10046638	3194	4.24	3384.41	82.5
J566	1122690.4	10046638	3194	4.24	3384.4	82.5
J568	1123546	10046479	3195	4.24	3384.41	82.07
J570	1123541.6	10046364	3198	4.24	3384.41	80.77
J572	1123541.6	10046093	3218	4.24	3384.4	72.1
J574	1122965.3	10047746	3090	4.24	3235.34	62.98
J576	1122756.9	10047990	3078	4.24	3235.32	68.17
J578	1122699.2	10047932	3082	4.24	3235.32	66.43
J58	1125227	10041771	3200	4.24	3384.99	80.16
J580	1123430.8	10048198	3110	4.24	3235.32	54.3
J582	1123719	10046486	3205	4.24	3384.41	77.74
J584	1123918.9	10040419	3193	4.24	3385.32	83.33
J586	1124622.2	10040824	3190	4.24	3385.67	84.78
J588	1124667	10041753	3190	4.24	3385.01	84.5
J590	1124650.8	10042484	3190	4.24	3383.62	83.89
J592	1124676.5	10043672	3208	4.24	3383.9	76.22
J594	1124679.8	10043917	3210	4.24	3383.77	75.29
J596	1123916.8	10040224	3192	4.24	3385.53	83.86
J598	1123920.7	10040593	3190	4.24	3385.18	84.57
J60	1125153.3	10041773	3200	4.24	3384.99	80.15
J600	1123960.9	10039405	3210	4.24	3386.62	76.53
J602	1123915.7	10038691	3170	4.24	3386.87	93.97
J604	1123276.7	10038802	3200	4.24	3386.87	80.97

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125613.8	10040660	3255	4.24	3385.74	56.65
J608	1123041.2	10046372	3196	4.24	3384.4	81.63
J610	1122685.5	10046975	3192	4.24	3384.4	83.37
J612	1123831	10044869	3240	4.24	3384.09	62.43
J614	1123362.1	10044494	3236	4.24	3383.65	63.98
J616	1122374.6	10044421	3225	4.24	3382.41	68.21
J618	1121393.2	10043917	3230	4.24	3381.9	65.82
J62	1125227	10042052	3195	4.24	3385.14	82.39
J620	1121762.7	10044511	3220	4.24	3381.93	70.16
J622	1121867.2	10042802	3220	4.24	3382.8	70.54
J624	1122343.9	10043246	3222	4.24	3382.95	69.74
J626	1122184	10041675	3200	4.24	3382.83	79.22
J628	1122418.5	10041365	3193	4.24	3384.81	83.11
J630	1123200.4	10041386	3187	4.24	3384.91	85.76
J632	1123215.5	10041139	3184	4.24	3385.03	87.11
J634	1122840.7	10040181	3187	4.24	3385.3	85.92
J636	1123632.3	10040007	3192	4.24	3385.67	83.92
J638	1124246.6	10039627	3205	4.24	3386.32	78.57
J64	1125882	10042044	3255	4.24	3385.22	56.42
J640	1123271.9	10041808	3192	4.24	3384.54	83.43
J642	1125480.4	10043891	3222	4.24	3384.72	70.51
J644	1123629.7	10042456	3193	4.24	3383.06	82.35
J646	1123015	10042460	3196	4.24	3382.75	80.92
J648	1123944.2	10043324	3200	4.24	3383.38	79.46
J650	1124266.5	10043316	3194	4.24	3383.36	82.05
J652	1123418.2	10047310	3135	4.24	3384.26	108.01
J654	1123431.2	10047915	3100	4.24	3235.33	58.64
J656	1125435.9	10040502	3230	4.24	3385.76	67.49
J658	1123772.5	10040006	3192	4.24	3385.74	83.95
J66	1125912	10042285	3254	4.24	3385.15	56.83
J660	1122416.7	10041207	3193	4.24	3384.88	83.14
J662	1121815.8	10042660	3222	4.24	3382.79	69.67
J664	1121600.9	10042286	3224	4.24	3382.78	68.8
J666	1121217.4	10043511	3223	4.24	3381.89	68.85
J668	1121875.6	10043169	3224	4.24	3382.83	68.82
J670	1123316.2	10042458	3193	4.24	3382.84	82.26
J672	1124092	10042774	3190	4.24	3383.66	83.91
J674	1123980	10043719	3204	4.24	3382.85	77.49

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903.4	10045204	3235	4.24	3383.07	64.16
J678	1123442.7	10048158	3110	4.24	3235.32	54.3
J68	1125672.7	10042286	3228	4.24	3384.14	67.66
J680	1123380.6	10048225	3110	4.24	3235.32	54.3
J682	1123063.1	10048169	3100	4.24	3235.32	58.63
J684	1122895.5	10047898	3086	4.24	3235.33	64.7
J688	1123855.6	10047023	3180	4.24	3384.46	88.59
J690	1122626.7	10045017	3218	4.24	3381.85	71
J692	1121938.2	10043885	3238	4.24	3382.51	62.61
J694	1122202.5	10043832	3238	4.24	3382.74	62.71
J696	1122682.3	10043746	3238	4.24	3383.06	62.85
J698	1125018.8	10042054	3193	4.24	3385.13	83.25
J70	1125672.7	10042387	3228	4.24	3384.13	67.65
J700	1125011	10041754	3192	4.24	3385.13	83.68
J702	1124652.3	10042638	3192	4.24	3383.72	83.07
J704	1124649.1	10042317	3189	4.24	3383.56	84.3
J706	1125145.1	10043429	3210	4.24	3384.34	75.54
J708	1125467.3	10043244	3216	4.24	3384.45	72.99
J710	1124674.9	10043553	3206	4.24	3383.99	77.12
J712	1123455.6	10048115	3110	4.24	3235.32	54.3
J714	1123332.5	10048225	3110	4.24	3235.32	54.3
J72	1125457.5	10042300	3214	4.24	3383.58	73.48
J720	1124205.5	10047608	3180	4.24	3384.68	88.69
J722	1126592.1	10044849	3307	4.24	3384.84	33.73
J724	1125103.4	10045484	3250	4.24	3384.89	58.45
J726	1122233.4	10047038	3065	4.24	3235.28	73.78
J728	1121872.3	10047177	3060	4.24	3235.28	75.95
J730	1121326.8	10045288	3045	4.24	3235.26	82.44
J732	1120850	10044576	3015	4.24	3235.26	95.44
J734	1126122	10043420	3248	4.24	3384.86	59.3
J736	1125636.5	10041358	3257	4.24	3385.47	55.67
J738	1123723	10044190	3224	4.24	3383.46	69.09
J74	1125457.5	10042413	3214	4.24	3383.55	73.46
J740	1125109.4	10047292	3249	4.24	3384.73	58.81
J742	1125247.9	10039961	3260	4.24	3386.03	54.61
J744	1125220.9	10049016	3197	4.24	3384.7	81.33
J746	1125859.8	10048968	3223	4.24	3384.7	70.06
J748	1125769.5	10047902	3247	4.24	3384.7	59.67

Existing System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124992.9	10050432	3220	4.24	3384.7	71.37
J752	1124948.6	10050389	3218	4.24	3384.7	72.23
J754	1123449.9	10048728	3085	4.24	3384.67	129.85
J756	1123880.9	10048778	3111	4.24	3384.66	118.58
J758	1123501.1	10048585	3113	4.24	3384.67	117.71
J76	1125255.8	10042431	3205	4.24	3383.53	77.36
J760	1123667.7	10048341	3130	4.24	3384.67	110.35
J762	1123896.5	10038697	3170	4.24	3386.87	93.97
J78	1125242.3	10042303	3205	4.24	3383.5	77.35
J80	1125361.2	10042301	3209	4.24	3383.52	75.62
J82	1125361.2	10042198	3210	4.24	3383.51	75.18
J84	1125934.7	10042714	3255	4.24	3385.04	56.35
J86	1126252.3	10042705	3287	4.24	3385.04	42.48
J88	1125934.6	10042756	3255	4.24	3385.02	56.34
J90	1125457.4	10042761	3225	4.24	3384.19	68.98
J92	1125457.4	10042860	3218	4.24	3384.18	72.01
J94	1125454.4	10042665	3221	4.24	3384.12	70.68
J96	1125323.5	10042668	3209	4.24	3384.11	75.88
J98	1125452.9	10042630	3217	4.24	3384.12	72.41
V8002_NU	1121346.3	10045216	3043	4.24	3235.26	83.31
V8002_ND	1121366.9	10045146	3043	4.24	3235.26	83.31
V8004_NU	1123221.5	10047426	3120	4.24	3384.18	114.47
V8004_ND	1123060.2	10047523	3120	4.24	3235.39	50
V8010_NU	1122217.1	10046991	3065	4.24	3235.28	73.78
V8010_ND	1121854.4	10046291	3065	4.24	3235.28	73.78

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999.3	10043006	3254	8.48	3379.61	54.43
J102	1125788.6	10043009	3236	8.48	3378.27	61.65
J104	1125787.1	10042941	3240	8.48	3378.25	59.9
J106	1125744.9	10043014	3234	8.48	3378.15	62.46
J108	1125746.4	10043169	3238	8.48	3378.15	60.73
J110	1125653.1	10043014	3227	8.48	3378.12	65.48
J112	1126111	10043156	3255	8.48	3379.47	53.93
J114	1126189.2	10043213	3260	8.48	3379.15	51.63
J116	1126077.9	10043285	3250	8.48	3379.36	56.05
J118	1125925.8	10043283	3244	8.48	3379.35	58.65
J120	1126005.6	10043423	3248	8.48	3379.24	56.87
J122	1125841.3	10043421	3242	8.48	3378.82	59.28
J124	1125842.9	10043313	3239	8.48	3378.78	60.57
J126	1125666.8	10043422	3228	8.48	3378.4	65.17
J128	1125668.3	10043677	3232	8.48	3377.77	63.16
J130	1125668.3	10043732	3233	8.48	3377.75	62.72
J132	1125164.1	10043574	3220	8.48	3377.58	68.28
J134	1125471.1	10043427	3218	8.48	3377.98	69.32
J136	1125463.6	10043063	3215	8.48	3377.71	70.5
J138	1125894	10043888	3247	8.48	3379.21	57.29
J14	1123884.3	10038702	3170	8.48	3386.54	93.83
J140	1125067.4	10043894	3220	8.48	3378.6	68.72
J142	1125820	10044147	3253	8.48	3379.2	54.68
J144	1125157.7	10044156	3229	8.48	3378.99	64.99
J146	1125772	10044440	3249	8.48	3379.19	56.41
J150	1125760.2	10044468	3249	8.48	3379.19	56.41
J152	1125070.4	10044495	3230	8.48	3378.96	64.54
J154	1125604.7	10044857	3250	8.48	3379.18	55.97
J156	1124669.9	10044862	3224	8.48	3377.63	66.57
J158	1125083.8	10044940	3234	8.48	3379.16	62.9
J16	1122873.1	10038869	3220	8.48	3386.51	72.15
J160	1125559.4	10044955	3250	8.48	3379.2	55.98
J162	1125461.5	10045164	3250	8.48	3379.23	56
J164	1125082.3	10045119	3237	8.48	3379.2	61.62
J166	1125311.2	10045480	3248	8.48	3379.3	56.89
J170	1125095.7	10046118	3253	8.48	3379.11	54.64
J174	1125098.7	10046332	3255	8.48	3379.03	53.74
J176	1125100.3	10046582	3252	8.48	3378.95	55.01

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446.5	10046575	3264	8.48	3378.95	49.81
J18	1124240	10039216	3210	8.48	3385.73	76.14
J180	1125708.8	10046321	3268	8.48	3378.74	47.99
J182	1125708.8	10046551	3274	8.48	3378.74	45.38
J184	1125954.1	10046316	3277	8.48	3378.68	44.06
J186	1125958.6	10046567	3282	8.48	3378.68	41.89
J188	1126222	10046313	3287	8.48	3378.65	39.71
J190	1125106.7	10046822	3249	8.48	3378.88	56.28
J192	1125604.9	10046828	3267	8.48	3378.72	48.41
J194	1126476.6	10046310	3290	8.48	3378.64	38.41
J196	1126225.2	10046578	3288	8.48	3378.64	39.27
J198	1126452.5	10046572	3290	8.48	3378.64	38.41
J20	1124935.7	10039498	3260	8.48	3384.45	53.93
J200	1126153	10046838	3286	8.48	3378.64	40.14
J202	1126401.3	10046870	3290	8.48	3378.64	38.41
J204	1125109.7	10047063	3250	8.48	3378.82	55.82
J206	1125853.2	10047423	3272	8.48	3378.65	46.21
J208	1125600.4	10047197	3268	8.48	3378.72	47.97
J210	1125865.3	10047045	3275	8.48	3378.64	44.91
J212	1126130.5	10047146	3284	8.48	3378.63	41
J214	1126359.2	10047149	3290	8.48	3378.63	38.4
J216	1126359.2	10047412	3285	8.48	3378.63	40.57
J218	1126130.5	10047418	3278	8.48	3378.63	43.6
J22	1124947.8	10039509	3260	8.48	3384.39	53.9
J220	1125104.9	10047917	3205	8.48	3378.67	75.25
J222	1125104.9	10047957	3205	8.48	3378.67	75.25
J224	1124995	10047917	3197	8.48	3378.66	78.71
J226	1124010.1	10045975	3250	8.48	3358.49	47.01
J228	1123938.1	10045852	3250	8.48	3358.82	47.15
J230	1123803.7	10045935	3245	8.48	3358.45	49.16
J232	1123645.1	10045276	3242	8.48	3373.14	56.82
J234	1124171.6	10045197	3230	8.48	3372.68	61.82
J236	1123445.4	10045194	3248	8.48	3375.61	55.29
J238	1123390.9	10044874	3240	8.48	3375.87	58.87
J24	1124612.1	10039537	3227	8.48	3383.66	67.88
J240	1124671	10045070	3230	8.48	3377.56	63.94
J242	1124652.8	10044538	3220	8.48	3376.77	67.93
J244	1124858.6	10044541	3218	8.48	3376.71	68.77

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124643.7	10044290	3218	8.48	3376.69	68.76
J248	1123356.6	10044196	3234	8.48	3374.16	60.73
J250	1123989.9	10044107	3214	8.48	3371.3	68.16
J252	1123858.9	10043966	3210	8.48	3371.06	69.79
J254	1124682.6	10044130	3212	8.48	3374.98	70.62
J256	1124684	10043432	3205	8.48	3376.54	74.33
J258	1124684	10043249	3203	8.48	3376.28	75.08
J26	1124424	10039560	3211	8.48	3383.59	74.79
J260	1124881.9	10043093	3198	8.48	3376.18	77.2
J262	1124653.5	10042762	3194	8.48	3375.64	78.71
J264	1124261.5	10042774	3190	8.48	3375.24	80.27
J266	1123934.2	10042774	3190	8.48	3374.54	79.96
J268	1123637.4	10042774	3190	8.48	3374.03	79.74
J270	1123610.7	10042979	3200	8.48	3373.74	75.28
J272	1123619.5	10043324	3207	8.48	3373.74	72.25
J274	1123621.4	10043427	3212	8.48	3373.5	69.98
J276	1123381.7	10043327	3221	8.48	3373.19	65.94
J278	1123166.1	10043500	3225	8.48	3372.94	64.1
J28	1124399.9	10039807	3203	8.48	3383.49	78.21
J280	1123977.2	10043483	3198	8.48	3372.94	75.8
J282	1124278.7	10043485	3198	8.48	3372.94	75.8
J284	1124647.5	10042156	3188	8.48	3374.48	80.8
J286	1124341.1	10041745	3188	8.48	3379.57	83.01
J288	1124622.2	10041108	3188	8.48	3382.09	84.1
J290	1124622.2	10040543	3195	8.48	3382.51	81.25
J292	1124828	10040539	3198	8.48	3382.44	79.92
J294	1124725.1	10040253	3195	8.48	3382.92	81.43
J296	1124918.3	10040249	3203	8.48	3382.86	77.93
J298	1124145.4	10041286	3188	8.48	3379.75	83.09
J30	1124834.9	10039531	3244	8.48	3384.35	60.81
J300	1124042.5	10041114	3188	8.48	3379.77	83.09
J302	1124040.4	10040785	3189	8.48	3379.87	82.7
J304	1124195.8	10040785	3188	8.48	3379.85	83.13
J306	1123769.5	10040791	3189	8.48	3379.98	82.75
J308	1123922.8	10040785	3189	8.48	3379.99	82.76
J310	1124727.2	10039992	3198	8.48	3383.5	80.38
J312	1124756.6	10039992	3198	8.48	3383.5	80.38
J314	1124252.5	10039999	3195	8.48	3383.5	81.68

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914.4	10040005	3193	8.48	3382.7	82.2
J318	1123886.8	10039438	3210	8.48	3385.62	76.1
J32	1125375.6	10039941	3260	8.48	3383.5	53.51
J320	1123306.8	10040009	3190	8.48	3381.63	83.03
J322	1122289.5	10040159	3030	8.48	3380.29	151.78
J324	1122839.8	10040396	3184	8.48	3380.5	85.14
J326	1122999.4	10040261	3186	8.48	3379.99	84.05
J328	1123180.1	10040549	3182	8.48	3379.99	85.79
J330	1123007.8	10040618	3178	8.48	3380.08	87.56
J332	1123230.5	10040679	3182	8.48	3379.95	85.77
J334	1123283	10040818	3179	8.48	3379.91	87.06
J336	1123545.5	10041082	3185	8.48	3378.78	83.97
J338	1122894.4	10040872	3178	8.48	3379.82	87.45
J340	1122440.4	10040465	3169	8.48	3378.34	90.71
J342	1122623.3	10040641	3178	8.48	3378.36	86.82
J344	1122772.2	10040780	3178	8.48	3380	87.53
J346	1122741.5	10040713	3178	8.48	3380.03	87.54
J350	1122729.7	10040740	3178	8.48	3380.01	87.53
J352	1122722.3	10040733	3178	8.48	3380.02	87.53
J354	1122884.2	10041060	3183	8.48	3379.61	85.19
J356	1123612	10041383	3188	8.48	3379.4	82.93
J358	1122415.4	10041101	3192	8.48	3379.55	81.26
J36	1125567.1	10040443	3255	8.48	3382.75	55.35
J360	1122205.7	10041099	3192	8.48	3379.55	81.26
J364	1122181.1	10040941	3189	8.48	3372.32	79.43
J366	1122148.2	10040941	3189	8.48	3372.29	79.42
J368	1122218.1	10040941	3188	8.48	3372.51	79.95
J370	1122183.1	10041179	3194	8.48	3371.98	77.12
J372	1122865.7	10041749	3195	8.48	3378.2	79.38
J374	1123108.3	10041533	3188	8.48	3377.16	81.96
J376	1123749.9	10041802	3188	8.48	3378.03	82.34
J378	1122925.9	10042198	3198	8.48	3371.48	75.17
J38	1125085.4	10040522	3214	8.48	3382.41	72.97
J380	1123041.2	10043167	3222	8.48	3373.01	65.43
J382	1123039.2	10043368	3226	8.48	3372.99	63.69
J384	1123030.9	10043048	3222	8.48	3372.73	65.31
J386	1122922.2	10043502	3228	8.48	3372.95	62.81
J388	1123012.2	10044175	3237	8.48	3373.26	59.04

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018.4	10044630	3245	8.48	3372.22	55.12
J392	1123078	10045202	3250	8.48	3374.71	54.04
J394	1123075.9	10045132	3248	8.48	3374.69	54.89
J396	1123078	10045461	3252	8.48	3374.63	53.14
J398	1122933.5	10045990	3220	8.48	3348.03	55.48
J40	1125639.4	10040959	3255	8.48	3382.01	55.03
J400	1122775.2	10045992	3220	8.48	3348.4	55.64
J402	1122775.2	10046090	3205	8.48	3348.17	62.03
J404	1122470.9	10045807	3208	8.48	3357.01	64.56
J406	1122464.8	10046021	3204	8.48	3356.94	66.27
J408	1122468.9	10045657	3214	8.48	3357.97	62.38
J410	1122207.8	10045663	3212	8.48	3357.95	63.24
J412	1122586.1	10045406	3233	8.48	3361.43	55.65
J414	1122795.8	10045445	3245	8.48	3347.11	44.24
J416	1122322.9	10045307	3222	8.48	3368.28	63.38
J418	1122320.8	10045427	3220	8.48	3368.24	64.23
J42	1125221	10040818	3221	8.48	3381.84	69.69
J420	1122388.7	10045020	3209	8.48	3368.61	69.16
J422	1122884.2	10045014	3238	8.48	3368.25	56.44
J424	1122388.6	10044892	3209	8.48	3368.81	69.25
J426	1122376.3	10044717	3215	8.48	3369.35	66.88
J428	1122880	10044707	3242	8.48	3369.19	55.11
J430	1122384.4	10044188	3240	8.48	3371.28	56.88
J432	1122684.6	10044186	3240	8.48	3372.7	57.5
J434	1122742.1	10043462	3232	8.48	3372.7	60.96
J436	1122197.2	10043462	3228	8.48	3372.08	62.43
J438	1122207.5	10044182	3236	8.48	3371.22	58.59
J44	1125638	10041202	3255	8.48	3381.68	54.89
J440	1121938.2	10044182	3240	8.48	3370.8	56.67
J442	1121938.2	10043551	3234	8.48	3370.68	59.23
J444	1122875.7	10043237	3224	8.48	3372.8	64.48
J446	1122869.5	10043168	3223	8.48	3372.85	64.93
J448	1122869.5	10042870	3222	8.48	3372.29	65.12
J450	1122869.5	10042833	3222	8.48	3372.23	65.09
J452	1122577.6	10042833	3220	8.48	3372.1	65.9
J454	1122577.6	10043042	3224	8.48	3372.08	64.16
J456	1122332.9	10042839	3220	8.48	3372.09	65.9
J458	1122832.5	10042692	3221	8.48	3372.18	65.51

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125333.9	10041215	3220	8.48	3381.58	70.01
J460	1122321.2	10042093	3208	8.48	3371.81	70.98
J462	1122197.2	10042443	3216	8.48	3371.71	67.47
J464	1121806.6	10042513	3224	8.48	3371.74	64.02
J466	1121781.6	10042455	3224	8.48	3371.74	64.01
J468	1121773.3	10042102	3218	8.48	3371.74	66.62
J470	1121275.8	10042124	3222	8.48	3371.71	64.87
J472	1122184.8	10042099	3208	8.48	3371.81	70.98
J474	1121872.3	10041867	3209	8.48	3371.88	70.58
J476	1121843.5	10041417	3202	8.48	3371.92	73.63
J478	1121573.4	10040954	3197	8.48	3371.95	75.81
J48	1125796.1	10041657	3255	8.48	3381.02	54.6
J480	1121534.4	10041237	3208	8.48	3371.92	71.03
J482	1121530.2	10040954	3195	8.48	3371.92	76.66
J484	1121380.2	10040935	3195	8.48	3371.88	76.64
J486	1121376	10041089	3205	8.48	3371.88	72.31
J488	1121080	10041046	3195	8.48	3371.84	76.62
J490	1120796.2	10041219	3195	8.48	3371.84	76.62
J492	1121080	10041410	3215	8.48	3371.83	67.95
J498	1121390.4	10041422	3216	8.48	3371.89	67.55
J50	1125374.5	10041666	3215	8.48	3379.7	71.36
J502	1121106.7	10041773	3220	8.48	3371.75	65.75
J504	1121151.6	10042114	3220	8.48	3371.71	65.74
J508	1120997.8	10042132	3200	8.48	3371.62	74.36
J510	1121404.9	10043101	3215	8.48	3368.34	66.44
J512	1121400.8	10043516	3225	8.48	3368.47	62.16
J514	1121674.3	10043531	3228	8.48	3370.6	61.79
J516	1121668.1	10043862	3234	8.48	3370.62	59.2
J518	1126598.3	10045335	3307	8.48	3379.16	31.27
J52	1125329.4	10041667	3213	8.48	3379.58	72.18
J520	1126585.9	10044363	3315	8.48	3379.16	27.8
J522	1126614.9	10044079	3320	8.48	3379.17	25.64
J524	1126475.1	10044087	3300	8.48	3379.19	34.31
J526	1126512	10043330	3310	8.48	3379.16	29.97
J528	1124645.6	10044860	3224	8.48	3377.56	66.54
J530	1123982.9	10043964	3210	8.48	3371.35	69.91
J532	1121044.8	10041644	3220	8.48	3371.77	65.76
J534	1121275.6	10042112	3222	8.48	3371.71	64.87

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328.1	10040934	3188	8.48	3373.03	80.17
J54	1125327.9	10041538	3216	8.48	3379.54	70.86
J540	1123216.8	10044007	3230	8.48	3372.94	61.94
J542	1123717.6	10043709	3210	8.48	3374.16	71.13
J544	1122921.4	10044178	3238	8.48	3373.03	58.51
J546	1122910.7	10043167	3223	8.48	3372.9	64.95
J548	1122836.4	10040607	3178	8.48	3380.18	87.6
J550	1121429.3	10042126	3224	8.48	3371.71	64
J552	1121429.7	10042109	3224	8.48	3371.71	64
J554	1124113.5	10047573	3180	8.48	3378.36	85.95
J556	1123927.3	10047480	3182	8.48	3377.93	84.9
J558	1123608.1	10046856	3178	8.48	3377.71	86.53
J56	1125148.8	10041667	3203	8.48	3379.52	76.49
J560	1123546	10046621	3188	8.48	3377.63	82.17
J562	1123275.6	10046630	3188	8.48	3377.63	82.17
J564	1123000.7	10046638	3194	8.48	3377.6	79.55
J566	1122690.4	10046638	3194	8.48	3377.59	79.55
J568	1123546	10046479	3195	8.48	3377.6	79.12
J570	1123541.6	10046364	3198	8.48	3377.59	77.82
J572	1123541.6	10046093	3218	8.48	3377.59	69.15
J574	1122965.3	10047746	3090	8.48	3235.2	62.92
J576	1122756.9	10047990	3078	8.48	3235.13	68.08
J578	1122699.2	10047932	3082	8.48	3235.11	66.34
J58	1125227	10041771	3200	8.48	3379.73	77.88
J580	1123430.8	10048198	3110	8.48	3235.13	54.22
J582	1123719	10046486	3205	8.48	3377.6	74.79
J584	1123918.9	10040419	3193	8.48	3380.93	81.43
J586	1124622.2	10040824	3190	8.48	3382.18	83.27
J588	1124667	10041753	3190	8.48	3379.81	82.24
J590	1124650.8	10042484	3190	8.48	3374.73	80.04
J592	1124676.5	10043672	3208	8.48	3375.76	72.69
J594	1124679.8	10043917	3210	8.48	3375.28	71.61
J596	1123916.8	10040224	3192	8.48	3381.67	82.18
J598	1123920.7	10040593	3190	8.48	3380.42	82.51
J60	1125153.3	10041773	3200	8.48	3379.7	77.86
J600	1123960.9	10039405	3210	8.48	3385.63	76.1
J602	1123915.7	10038691	3170	8.48	3386.53	93.82
J604	1123276.7	10038802	3200	8.48	3386.52	80.82

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125613.8	10040660	3255	8.48	3382.43	55.21
J608	1123041.2	10046372	3196	8.48	3377.58	78.68
J610	1122685.5	10046975	3192	8.48	3377.59	80.42
J612	1123831	10044869	3240	8.48	3376.46	59.13
J614	1123362.1	10044494	3236	8.48	3374.87	60.17
J616	1122374.6	10044421	3225	8.48	3370.36	62.98
J618	1121393.2	10043917	3230	8.48	3368.52	60.02
J62	1125227	10042052	3195	8.48	3380.24	80.27
J620	1121762.7	10044511	3220	8.48	3368.62	64.4
J622	1121867.2	10042802	3220	8.48	3371.79	65.77
J624	1122343.9	10043246	3222	8.48	3372.31	65.13
J626	1122184	10041675	3200	8.48	3371.87	74.47
J628	1122418.5	10041365	3193	8.48	3379.06	80.62
J630	1123200.4	10041386	3187	8.48	3379.43	83.38
J632	1123215.5	10041139	3184	8.48	3379.85	84.86
J634	1122840.7	10040181	3187	8.48	3380.84	83.99
J636	1123632.3	10040007	3192	8.48	3382.17	82.4
J638	1124246.6	10039627	3205	8.48	3384.55	77.8
J64	1125882	10042044	3255	8.48	3380.55	54.4
J640	1123271.9	10041808	3192	8.48	3378.07	80.62
J642	1125480.4	10043891	3222	8.48	3378.73	67.91
J644	1123629.7	10042456	3193	8.48	3372.7	77.86
J646	1123015	10042460	3196	8.48	3371.58	76.08
J648	1123944.2	10043324	3200	8.48	3373.86	75.33
J650	1124266.5	10043316	3194	8.48	3373.82	77.92
J652	1123418.2	10047310	3135	8.48	3377.09	104.9
J654	1123431.2	10047915	3100	8.48	3235.15	58.56
J656	1125435.9	10040502	3230	8.48	3382.53	66.09
J658	1123772.5	10040006	3192	8.48	3382.43	82.51
J66	1125912	10042285	3254	8.48	3380.28	54.72
J660	1122416.7	10041207	3193	8.48	3379.31	80.73
J662	1121815.8	10042660	3222	8.48	3371.76	64.89
J664	1121600.9	10042286	3224	8.48	3371.7	64
J666	1121217.4	10043511	3223	8.48	3368.48	63.03
J668	1121875.6	10043169	3224	8.48	3371.88	64.08
J670	1123316.2	10042458	3193	8.48	3371.93	77.53
J672	1124092	10042774	3190	8.48	3374.87	80.1
J674	1123980	10043719	3204	8.48	3371.95	72.77

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903.4	10045204	3235	8.48	3372.76	59.69
J678	1123442.7	10048158	3110	8.48	3235.13	54.22
J68	1125672.7	10042286	3228	8.48	3376.65	64.41
J680	1123380.6	10048225	3110	8.48	3235.13	54.22
J682	1123063.1	10048169	3100	8.48	3235.13	58.55
J684	1122895.5	10047898	3086	8.48	3235.16	64.63
J688	1123855.6	10047023	3180	8.48	3377.81	85.71
J690	1122626.7	10045017	3218	8.48	3368.34	65.14
J692	1121938.2	10043885	3238	8.48	3370.71	57.5
J694	1122202.5	10043832	3238	8.48	3371.55	57.87
J696	1122682.3	10043746	3238	8.48	3372.7	58.36
J698	1125018.8	10042054	3193	8.48	3380.21	81.12
J70	1125672.7	10042387	3228	8.48	3376.62	64.4
J700	1125011	10041754	3192	8.48	3380.21	81.55
J702	1124652.3	10042638	3192	8.48	3375.11	79.34
J704	1124649.1	10042317	3189	8.48	3374.54	80.39
J706	1125145.1	10043429	3210	8.48	3377.37	72.52
J708	1125467.3	10043244	3216	8.48	3377.77	70.09
J710	1124674.9	10043553	3206	8.48	3376.08	73.7
J712	1123455.6	10048115	3110	8.48	3235.13	54.22
J714	1123332.5	10048225	3110	8.48	3235.13	54.22
J72	1125457.5	10042300	3214	8.48	3374.63	69.6
J720	1124205.5	10047608	3180	8.48	3378.59	86.05
J722	1126592.1	10044849	3307	8.48	3379.16	31.27
J724	1125103.4	10045484	3250	8.48	3379.35	56.05
J726	1122233.4	10047038	3065	8.48	3234.99	73.65
J728	1121872.3	10047177	3060	8.48	3234.99	75.82
J730	1121326.8	10045288	3045	8.48	3234.91	82.29
J732	1120850	10044576	3015	8.48	3234.91	95.29
J734	1126122	10043420	3248	8.48	3379.24	56.87
J736	1125636.5	10041358	3257	8.48	3381.46	53.93
J738	1123723	10044190	3224	8.48	3374.17	65.07
J74	1125457.5	10042413	3214	8.48	3374.49	69.54
J740	1125109.4	10047292	3249	8.48	3378.78	56.23
J742	1125247.9	10039961	3260	8.48	3383.5	53.51
J744	1125220.9	10049016	3197	8.48	3378.66	78.71
J746	1125859.8	10048968	3223	8.48	3378.66	67.45
J748	1125769.5	10047902	3247	8.48	3378.67	57.05

Existing System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124992.9	10050432	3220	8.48	3378.67	68.75
J752	1124948.6	10050389	3218	8.48	3378.67	69.62
J754	1123449.9	10048728	3085	8.48	3378.54	127.19
J756	1123880.9	10048778	3111	8.48	3378.52	115.92
J758	1123501.1	10048585	3113	8.48	3378.55	115.06
J76	1125255.8	10042431	3205	8.48	3374.43	73.41
J760	1123667.7	10048341	3130	8.48	3378.56	107.7
J762	1123896.5	10038697	3170	8.48	3386.54	93.83
J78	1125242.3	10042303	3205	8.48	3374.34	73.38
J80	1125361.2	10042301	3209	8.48	3374.38	71.66
J82	1125361.2	10042198	3210	8.48	3374.35	71.21
J84	1125934.7	10042714	3255	8.48	3379.89	54.12
J86	1126252.3	10042705	3287	8.48	3379.89	40.25
J88	1125934.6	10042756	3255	8.48	3379.83	54.09
J90	1125457.4	10042761	3225	8.48	3376.83	65.79
J92	1125457.4	10042860	3218	8.48	3376.8	68.81
J94	1125454.4	10042665	3221	8.48	3376.59	67.42
J96	1125323.5	10042668	3209	8.48	3376.54	72.6
J98	1125452.9	10042630	3217	8.48	3376.57	69.14
V8002_NU	1121346.3	10045216	3043	8.48	3234.91	83.16
V8002_ND	1121366.9	10045146	3043	8.48	3234.91	83.16
V8004_NU	1123221.5	10047426	3120	8.48	3376.79	111.27
V8004_ND	1123060.2	10047523	3120	8.48	3235.39	50
V8010_NU	1122217.1	10046991	3065	8.48	3234.98	73.65
V8010_ND	1121854.4	10046291	3065	8.48	3234.98	73.65

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999.3	10043006	3254	9.78	3376.55	53.1
J102	1125788.6	10043009	3236	9.78	3374.65	60.08
J104	1125787.1	10042941	3240	9.78	3374.62	58.33
J106	1125744.9	10043014	3234	9.78	3374.49	60.87
J108	1125746.4	10043169	3238	9.78	3374.49	59.14
J110	1125653.1	10043014	3227	9.78	3374.44	63.89
J112	1126111	10043156	3255	9.78	3376.34	52.58
J114	1126189.2	10043213	3260	9.78	3375.9	50.22
J116	1126077.9	10043285	3250	9.78	3376.19	54.68
J118	1125925.8	10043283	3244	9.78	3376.17	57.27
J120	1126005.6	10043423	3248	9.78	3376.02	55.47
J122	1125841.3	10043421	3242	9.78	3375.43	57.81
J124	1125842.9	10043313	3239	9.78	3375.38	59.09
J126	1125666.8	10043422	3228	9.78	3374.83	63.62
J128	1125668.3	10043677	3232	9.78	3373.94	61.5
J130	1125668.3	10043732	3233	9.78	3373.92	61.06
J132	1125164.1	10043574	3220	9.78	3373.67	66.59
J134	1125471.1	10043427	3218	9.78	3374.24	67.7
J136	1125463.6	10043063	3215	9.78	3373.85	68.83
J138	1125894	10043888	3247	9.78	3375.98	55.89
J14	1123884.3	10038702	3170	9.78	3386.36	93.75
J140	1125067.4	10043894	3220	9.78	3375.12	67.21
J142	1125820	10044147	3253	9.78	3375.96	53.28
J144	1125157.7	10044156	3229	9.78	3375.66	63.55
J146	1125772	10044440	3249	9.78	3375.95	55.01
J150	1125760.2	10044468	3249	9.78	3375.95	55.01
J152	1125070.4	10044495	3230	9.78	3375.63	63.1
J154	1125604.7	10044857	3250	9.78	3375.93	54.57
J156	1124669.9	10044862	3224	9.78	3373.74	64.88
J158	1125083.8	10044940	3234	9.78	3375.91	61.49
J16	1122873.1	10038869	3220	9.78	3386.31	72.06
J160	1125559.4	10044955	3250	9.78	3375.96	54.58
J162	1125461.5	10045164	3250	9.78	3376.02	54.6
J164	1125082.3	10045119	3237	9.78	3375.97	60.22
J166	1125311.2	10045480	3248	9.78	3376.1	55.51
J170	1125095.7	10046118	3253	9.78	3375.84	53.23
J174	1125098.7	10046332	3255	9.78	3375.72	52.31
J176	1125100.3	10046582	3252	9.78	3375.61	53.56

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446.5	10046575	3264	9.78	3375.61	48.36
J18	1124240	10039216	3210	9.78	3385.2	75.91
J180	1125708.8	10046321	3268	9.78	3375.32	46.5
J182	1125708.8	10046551	3274	9.78	3375.32	43.9
J184	1125954.1	10046316	3277	9.78	3375.23	42.56
J186	1125958.6	10046567	3282	9.78	3375.23	40.39
J188	1126222	10046313	3287	9.78	3375.18	38.21
J190	1125106.7	10046822	3249	9.78	3375.51	54.82
J192	1125604.9	10046828	3267	9.78	3375.29	46.92
J194	1126476.6	10046310	3290	9.78	3375.18	36.91
J196	1126225.2	10046578	3288	9.78	3375.18	37.77
J198	1126452.5	10046572	3290	9.78	3375.17	36.9
J20	1124935.7	10039498	3260	9.78	3383.4	53.47
J200	1126153	10046838	3286	9.78	3375.18	38.64
J202	1126401.3	10046870	3290	9.78	3375.17	36.91
J204	1125109.7	10047063	3250	9.78	3375.43	54.35
J206	1125853.2	10047423	3272	9.78	3375.19	44.71
J208	1125600.4	10047197	3268	9.78	3375.29	46.49
J210	1125865.3	10047045	3275	9.78	3375.18	43.41
J212	1126130.5	10047146	3284	9.78	3375.16	39.5
J214	1126359.2	10047149	3290	9.78	3375.16	36.9
J216	1126359.2	10047412	3285	9.78	3375.16	39.07
J218	1126130.5	10047418	3278	9.78	3375.16	42.1
J22	1124947.8	10039509	3260	9.78	3383.31	53.43
J220	1125104.9	10047917	3205	9.78	3375.21	73.75
J222	1125104.9	10047957	3205	9.78	3375.21	73.75
J224	1124995	10047917	3197	9.78	3375.2	77.22
J226	1124010.1	10045975	3250	9.78	3346.69	41.9
J228	1123938.1	10045852	3250	9.78	3347.16	42.1
J230	1123803.7	10045935	3245	9.78	3346.64	44.04
J232	1123645.1	10045276	3242	9.78	3367.4	54.34
J234	1124171.6	10045197	3230	9.78	3366.74	59.25
J236	1123445.4	10045194	3248	9.78	3370.89	53.25
J238	1123390.9	10044874	3240	9.78	3371.26	56.87
J24	1124612.1	10039537	3227	9.78	3382.27	67.28
J240	1124671	10045070	3230	9.78	3373.65	62.24
J242	1124652.8	10044538	3220	9.78	3372.54	66.09
J244	1124858.6	10044541	3218	9.78	3372.44	66.92

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124643.7	10044290	3218	9.78	3372.42	66.91
J248	1123356.6	10044196	3234	9.78	3368.83	58.42
J250	1123989.9	10044107	3214	9.78	3364.79	65.34
J252	1123858.9	10043966	3210	9.78	3364.45	66.92
J254	1124682.6	10044130	3212	9.78	3370	68.46
J256	1124684	10043432	3205	9.78	3372.2	72.45
J258	1124684	10043249	3203	9.78	3371.83	73.16
J26	1124424	10039560	3211	9.78	3382.19	74.18
J260	1124881.9	10043093	3198	9.78	3371.68	75.26
J262	1124653.5	10042762	3194	9.78	3370.93	76.67
J264	1124261.5	10042774	3190	9.78	3370.37	78.15
J266	1123934.2	10042774	3190	9.78	3369.37	77.72
J268	1123637.4	10042774	3190	9.78	3368.65	77.41
J270	1123610.7	10042979	3200	9.78	3368.24	72.9
J272	1123619.5	10043324	3207	9.78	3368.24	69.86
J274	1123621.4	10043427	3212	9.78	3367.9	67.55
J276	1123381.7	10043327	3221	9.78	3367.46	63.46
J278	1123166.1	10043500	3225	9.78	3367.11	61.58
J28	1124399.9	10039807	3203	9.78	3382.05	77.58
J280	1123977.2	10043483	3198	9.78	3367.11	73.28
J282	1124278.7	10043485	3198	9.78	3367.1	73.27
J284	1124647.5	10042156	3188	9.78	3369.29	78.55
J286	1124341.1	10041745	3188	9.78	3376.49	81.67
J288	1124622.2	10041108	3188	9.78	3380.06	83.22
J290	1124622.2	10040543	3195	9.78	3380.65	80.44
J292	1124828	10040539	3198	9.78	3380.55	79.1
J294	1124725.1	10040253	3195	9.78	3381.23	80.69
J296	1124918.3	10040249	3203	9.78	3381.14	77.19
J298	1124145.4	10041286	3188	9.78	3376.75	81.78
J30	1124834.9	10039531	3244	9.78	3383.25	60.34
J300	1124042.5	10041114	3188	9.78	3376.78	81.8
J302	1124040.4	10040785	3189	9.78	3376.91	81.42
J304	1124195.8	10040785	3188	9.78	3376.89	81.85
J306	1123769.5	10040791	3189	9.78	3377.07	81.49
J308	1123922.8	10040785	3189	9.78	3377.09	81.5
J310	1124727.2	10039992	3198	9.78	3382.04	79.75
J312	1124756.6	10039992	3198	9.78	3382.04	79.75
J314	1124252.5	10039999	3195	9.78	3382.05	81.05

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914.4	10040005	3193	9.78	3380.92	81.42
J318	1123886.8	10039438	3210	9.78	3385.05	75.85
J32	1125375.6	10039941	3260	9.78	3382.05	52.89
J320	1123306.8	10040009	3190	9.78	3379.41	82.07
J322	1122289.5	10040159	3030	9.78	3377.51	150.58
J324	1122839.8	10040396	3184	9.78	3377.8	83.97
J326	1122999.4	10040261	3186	9.78	3377.08	82.79
J328	1123180.1	10040549	3182	9.78	3377.08	84.53
J330	1123007.8	10040618	3178	9.78	3377.21	86.32
J332	1123230.5	10040679	3182	9.78	3377.03	84.51
J334	1123283	10040818	3179	9.78	3376.97	85.78
J336	1123545.5	10041082	3185	9.78	3375.38	82.49
J338	1122894.4	10040872	3178	9.78	3376.85	86.16
J340	1122440.4	10040465	3169	9.78	3374.75	89.15
J342	1122623.3	10040641	3178	9.78	3374.78	85.26
J344	1122772.2	10040780	3178	9.78	3377.1	86.27
J346	1122741.5	10040713	3178	9.78	3377.14	86.29
J350	1122729.7	10040740	3178	9.78	3377.11	86.27
J352	1122722.3	10040733	3178	9.78	3377.12	86.28
J354	1122884.2	10041060	3183	9.78	3376.55	83.86
J356	1123612	10041383	3188	9.78	3376.25	81.57
J358	1122415.4	10041101	3192	9.78	3376.46	79.92
J36	1125567.1	10040443	3255	9.78	3380.99	54.59
J360	1122205.7	10041099	3192	9.78	3376.46	79.92
J364	1122181.1	10040941	3189	9.78	3366.24	76.8
J366	1122148.2	10040941	3189	9.78	3366.2	76.78
J368	1122218.1	10040941	3188	9.78	3366.51	77.35
J370	1122183.1	10041179	3194	9.78	3365.76	74.42
J372	1122865.7	10041749	3195	9.78	3374.56	77.8
J374	1123108.3	10041533	3188	9.78	3373.08	80.19
J376	1123749.9	10041802	3188	9.78	3374.32	80.73
J378	1122925.9	10042198	3198	9.78	3365.04	72.38
J38	1125085.4	10040522	3214	9.78	3380.51	72.15
J380	1123041.2	10043167	3222	9.78	3367.21	62.92
J382	1123039.2	10043368	3226	9.78	3367.19	61.18
J384	1123030.9	10043048	3222	9.78	3366.82	62.75
J386	1122922.2	10043502	3228	9.78	3367.13	60.28
J388	1123012.2	10044175	3237	9.78	3367.56	56.57

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018.4	10044630	3245	9.78	3366.09	52.47
J392	1123078	10045202	3250	9.78	3369.62	51.83
J394	1123075.9	10045132	3248	9.78	3369.59	52.68
J396	1123078	10045461	3252	9.78	3369.5	50.91
J398	1122933.5	10045990	3220	9.78	3331.9	48.49
J40	1125639.4	10040959	3255	9.78	3379.95	54.14
J400	1122775.2	10045992	3220	9.78	3332.42	48.71
J402	1122775.2	10046090	3205	9.78	3332.09	55.07
J404	1122470.9	10045807	3208	9.78	3344.58	59.18
J406	1122464.8	10046021	3204	9.78	3344.49	60.87
J408	1122468.9	10045657	3214	9.78	3345.95	57.17
J410	1122207.8	10045663	3212	9.78	3345.92	58.03
J412	1122586.1	10045406	3233	9.78	3350.83	51.06
J414	1122795.8	10045445	3245	9.78	3330.6	37.09
J416	1122322.9	10045307	3222	9.78	3360.52	60.02
J418	1122320.8	10045427	3220	9.78	3360.46	60.86
J42	1125221	10040818	3221	9.78	3379.7	68.76
J420	1122388.7	10045020	3209	9.78	3360.99	65.86
J422	1122884.2	10045014	3238	9.78	3360.48	53.07
J424	1122388.6	10044892	3209	9.78	3361.27	65.98
J426	1122376.3	10044717	3215	9.78	3362.03	63.71
J428	1122880	10044707	3242	9.78	3361.8	51.91
J430	1122384.4	10044188	3240	9.78	3364.76	54.06
J432	1122684.6	10044186	3240	9.78	3366.77	54.93
J434	1122742.1	10043462	3232	9.78	3366.77	58.39
J436	1122197.2	10043462	3228	9.78	3365.9	59.75
J438	1122207.5	10044182	3236	9.78	3364.67	55.75
J44	1125638	10041202	3255	9.78	3379.48	53.94
J440	1121938.2	10044182	3240	9.78	3364.08	53.76
J442	1121938.2	10043551	3234	9.78	3363.92	56.29
J444	1122875.7	10043237	3224	9.78	3366.92	61.93
J446	1122869.5	10043168	3223	9.78	3366.98	62.39
J448	1122869.5	10042870	3222	9.78	3366.18	62.47
J450	1122869.5	10042833	3222	9.78	3366.11	62.44
J452	1122577.6	10042833	3220	9.78	3365.92	63.23
J454	1122577.6	10043042	3224	9.78	3365.9	61.48
J456	1122332.9	10042839	3220	9.78	3365.91	63.22
J458	1122832.5	10042692	3221	9.78	3366.04	62.84

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125333.9	10041215	3220	9.78	3379.34	69.04
J460	1122321.2	10042093	3208	9.78	3365.52	68.25
J462	1122197.2	10042443	3216	9.78	3365.37	64.72
J464	1121806.6	10042513	3224	9.78	3365.41	61.27
J466	1121781.6	10042455	3224	9.78	3365.41	61.27
J468	1121773.3	10042102	3218	9.78	3365.41	63.87
J470	1121275.8	10042124	3222	9.78	3365.37	62.12
J472	1122184.8	10042099	3208	9.78	3365.51	68.25
J474	1121872.3	10041867	3209	9.78	3365.61	67.86
J476	1121843.5	10041417	3202	9.78	3365.66	70.92
J478	1121573.4	10040954	3197	9.78	3365.71	73.1
J48	1125796.1	10041657	3255	9.78	3378.54	53.53
J480	1121534.4	10041237	3208	9.78	3365.67	68.32
J482	1121530.2	10040954	3195	9.78	3365.68	73.95
J484	1121380.2	10040935	3195	9.78	3365.61	73.93
J486	1121376	10041089	3205	9.78	3365.61	69.59
J488	1121080	10041046	3195	9.78	3365.55	73.9
J490	1120796.2	10041219	3195	9.78	3365.55	73.9
J492	1121080	10041410	3215	9.78	3365.54	65.23
J498	1121390.4	10041422	3216	9.78	3365.62	64.83
J50	1125374.5	10041666	3215	9.78	3376.67	70.05
J502	1121106.7	10041773	3220	9.78	3365.43	63.01
J504	1121151.6	10042114	3220	9.78	3365.38	62.99
J508	1120997.8	10042132	3200	9.78	3365.24	71.6
J510	1121404.9	10043101	3215	9.78	3360.6	63.09
J512	1121400.8	10043516	3225	9.78	3360.79	58.84
J514	1121674.3	10043531	3228	9.78	3363.8	58.84
J516	1121668.1	10043862	3234	9.78	3363.83	56.26
J518	1126598.3	10045335	3307	9.78	3375.9	29.86
J52	1125329.4	10041667	3213	9.78	3376.5	70.85
J520	1126585.9	10044363	3315	9.78	3375.91	26.39
J522	1126614.9	10044079	3320	9.78	3375.92	24.23
J524	1126475.1	10044087	3300	9.78	3375.95	32.91
J526	1126512	10043330	3310	9.78	3375.91	28.56
J528	1124645.6	10044860	3224	9.78	3373.65	64.84
J530	1123982.9	10043964	3210	9.78	3364.86	67.1
J532	1121044.8	10041644	3220	9.78	3365.46	63.03
J534	1121275.6	10042112	3222	9.78	3365.37	62.12

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328.1	10040934	3188	9.78	3367.24	77.67
J54	1125327.9	10041538	3216	9.78	3376.44	69.52
J540	1123216.8	10044007	3230	9.78	3367.11	59.41
J542	1123717.6	10043709	3210	9.78	3368.84	68.82
J544	1122921.4	10044178	3238	9.78	3367.24	56
J546	1122910.7	10043167	3223	9.78	3367.06	62.42
J548	1122836.4	10040607	3178	9.78	3377.35	86.38
J550	1121429.3	10042126	3224	9.78	3365.37	61.25
J552	1121429.7	10042109	3224	9.78	3365.37	61.26
J554	1124113.5	10047573	3180	9.78	3374.78	84.4
J556	1123927.3	10047480	3182	9.78	3374.18	83.27
J558	1123608.1	10046856	3178	9.78	3373.86	84.86
J56	1125148.8	10041667	3203	9.78	3376.42	75.14
J560	1123546	10046621	3188	9.78	3373.74	80.48
J562	1123275.6	10046630	3188	9.78	3373.74	80.48
J564	1123000.7	10046638	3194	9.78	3373.7	77.86
J566	1122690.4	10046638	3194	9.78	3373.69	77.86
J568	1123546	10046479	3195	9.78	3373.7	77.43
J570	1123541.6	10046364	3198	9.78	3373.69	76.13
J572	1123541.6	10046093	3218	9.78	3373.69	67.46
J574	1122965.3	10047746	3090	9.78	3235.12	62.88
J576	1122756.9	10047990	3078	9.78	3235.02	68.03
J578	1122699.2	10047932	3082	9.78	3235	66.29
J58	1125227	10041771	3200	9.78	3376.71	76.57
J580	1123430.8	10048198	3110	9.78	3235.02	54.17
J582	1123719	10046486	3205	9.78	3373.7	73.1
J584	1123918.9	10040419	3193	9.78	3378.42	80.34
J586	1124622.2	10040824	3190	9.78	3380.19	82.41
J588	1124667	10041753	3190	9.78	3376.83	80.95
J590	1124650.8	10042484	3190	9.78	3369.64	77.84
J592	1124676.5	10043672	3208	9.78	3371.09	70.67
J594	1124679.8	10043917	3210	9.78	3370.41	69.51
J596	1123916.8	10040224	3192	9.78	3379.46	81.23
J598	1123920.7	10040593	3190	9.78	3377.69	81.33
J60	1125153.3	10041773	3200	9.78	3376.68	76.55
J600	1123960.9	10039405	3210	9.78	3385.06	75.85
J602	1123915.7	10038691	3170	9.78	3386.34	93.74
J604	1123276.7	10038802	3200	9.78	3386.32	80.73

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125613.8	10040660	3255	9.78	3380.53	54.39
J608	1123041.2	10046372	3196	9.78	3373.67	76.99
J610	1122685.5	10046975	3192	9.78	3373.69	78.73
J612	1123831	10044869	3240	9.78	3372.09	57.23
J614	1123362.1	10044494	3236	9.78	3369.84	57.99
J616	1122374.6	10044421	3225	9.78	3363.46	60
J618	1121393.2	10043917	3230	9.78	3360.85	56.7
J62	1125227	10042052	3195	9.78	3377.45	79.05
J620	1121762.7	10044511	3220	9.78	3361	61.1
J622	1121867.2	10042802	3220	9.78	3365.48	63.04
J624	1122343.9	10043246	3222	9.78	3366.22	62.49
J626	1122184	10041675	3200	9.78	3365.6	71.75
J628	1122418.5	10041365	3193	9.78	3375.76	79.19
J630	1123200.4	10041386	3187	9.78	3376.29	82.02
J632	1123215.5	10041139	3184	9.78	3376.88	83.58
J634	1122840.7	10040181	3187	9.78	3378.29	82.88
J636	1123632.3	10040007	3192	9.78	3380.17	81.53
J638	1124246.6	10039627	3205	9.78	3383.53	77.36
J64	1125882	10042044	3255	9.78	3377.88	53.24
J640	1123271.9	10041808	3192	9.78	3374.37	79.02
J642	1125480.4	10043891	3222	9.78	3375.31	66.43
J644	1123629.7	10042456	3193	9.78	3366.77	75.3
J646	1123015	10042460	3196	9.78	3365.19	73.31
J648	1123944.2	10043324	3200	9.78	3368.41	72.97
J650	1124266.5	10043316	3194	9.78	3368.35	75.55
J652	1123418.2	10047310	3135	9.78	3372.98	103.11
J654	1123431.2	10047915	3100	9.78	3235.05	58.52
J656	1125435.9	10040502	3230	9.78	3380.68	65.29
J658	1123772.5	10040006	3192	9.78	3380.54	81.69
J66	1125912	10042285	3254	9.78	3377.5	53.51
J660	1122416.7	10041207	3193	9.78	3376.12	79.34
J662	1121815.8	10042660	3222	9.78	3365.44	62.15
J664	1121600.9	10042286	3224	9.78	3365.36	61.25
J666	1121217.4	10043511	3223	9.78	3360.8	59.71
J668	1121875.6	10043169	3224	9.78	3365.61	61.36
J670	1123316.2	10042458	3193	9.78	3365.69	74.82
J672	1124092	10042774	3190	9.78	3369.84	77.92
J674	1123980	10043719	3204	9.78	3365.71	70.07

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903.4	10045204	3235	9.78	3366.87	57.14
J678	1123442.7	10048158	3110	9.78	3235.02	54.17
J68	1125672.7	10042286	3228	9.78	3372.36	62.55
J680	1123380.6	10048225	3110	9.78	3235.02	54.17
J682	1123063.1	10048169	3100	9.78	3235.02	58.5
J684	1122895.5	10047898	3086	9.78	3235.06	64.59
J688	1123855.6	10047023	3180	9.78	3373.99	84.06
J690	1122626.7	10045017	3218	9.78	3360.6	61.79
J692	1121938.2	10043885	3238	9.78	3363.96	54.58
J694	1122202.5	10043832	3238	9.78	3365.14	55.09
J696	1122682.3	10043746	3238	9.78	3366.77	55.79
J698	1125018.8	10042054	3193	9.78	3377.4	79.9
J70	1125672.7	10042387	3228	9.78	3372.32	62.53
J700	1125011	10041754	3192	9.78	3377.39	80.33
J702	1124652.3	10042638	3192	9.78	3370.18	77.21
J704	1124649.1	10042317	3189	9.78	3369.37	78.15
J706	1125145.1	10043429	3210	9.78	3373.37	70.79
J708	1125467.3	10043244	3216	9.78	3373.94	68.43
J710	1124674.9	10043553	3206	9.78	3371.55	71.73
J712	1123455.6	10048115	3110	9.78	3235.03	54.17
J714	1123332.5	10048225	3110	9.78	3235.02	54.17
J72	1125457.5	10042300	3214	9.78	3369.5	67.38
J720	1124205.5	10047608	3180	9.78	3375.11	84.54
J722	1126592.1	10044849	3307	9.78	3375.91	29.86
J724	1125103.4	10045484	3250	9.78	3376.18	54.67
J726	1122233.4	10047038	3065	9.78	3234.82	73.58
J728	1121872.3	10047177	3060	9.78	3234.82	75.75
J730	1121326.8	10045288	3045	9.78	3234.72	82.2
J732	1120850	10044576	3015	9.78	3234.71	95.2
J734	1126122	10043420	3248	9.78	3376.02	55.47
J736	1125636.5	10041358	3257	9.78	3379.16	52.93
J738	1123723	10044190	3224	9.78	3368.85	62.76
J74	1125457.5	10042413	3214	9.78	3369.31	67.3
J740	1125109.4	10047292	3249	9.78	3375.37	54.76
J742	1125247.9	10039961	3260	9.78	3382.05	52.88
J744	1125220.9	10049016	3197	9.78	3375.2	77.21
J746	1125859.8	10048968	3223	9.78	3375.2	65.95
J748	1125769.5	10047902	3247	9.78	3375.21	55.56

Existing System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124992.9	10050432	3220	9.78	3375.21	67.25
J752	1124948.6	10050389	3218	9.78	3375.21	68.12
J754	1123449.9	10048728	3085	9.78	3375.04	125.67
J756	1123880.9	10048778	3111	9.78	3375	114.39
J758	1123501.1	10048585	3113	9.78	3375.05	113.55
J76	1125255.8	10042431	3205	9.78	3369.22	71.16
J760	1123667.7	10048341	3130	9.78	3375.06	106.19
J762	1123896.5	10038697	3170	9.78	3386.36	93.75
J78	1125242.3	10042303	3205	9.78	3369.1	71.11
J80	1125361.2	10042301	3209	9.78	3369.16	69.4
J82	1125361.2	10042198	3210	9.78	3369.11	68.94
J84	1125934.7	10042714	3255	9.78	3376.94	52.84
J86	1126252.3	10042705	3287	9.78	3376.94	38.97
J88	1125934.6	10042756	3255	9.78	3376.86	52.8
J90	1125457.4	10042761	3225	9.78	3372.62	63.96
J92	1125457.4	10042860	3218	9.78	3372.57	66.98
J94	1125454.4	10042665	3221	9.78	3372.27	65.55
J96	1125323.5	10042668	3209	9.78	3372.21	70.72
J98	1125452.9	10042630	3217	9.78	3372.26	67.27
V8002_NU	1121346.3	10045216	3043	9.78	3234.71	83.07
V8002_ND	1121366.9	10045146	3043	9.78	3234.71	83.07
V8004_NU	1123221.5	10047426	3120	9.78	3372.56	109.43
V8004_ND	1123060.2	10047523	3120	9.78	3235.39	50
V8010_NU	1122217.1	10046991	3065	9.78	3234.81	73.58
V8010_ND	1121854.4	10046291	3065	9.78	3234.81	73.58

LaVerkin Pond HGL @ 3400 System Performance + (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999	10043006	3254	4.24	3384.96	56.75
J102	1125789	10043009	3236	4.24	3384.59	64.38
J104	1125787	10042941	3240	4.24	3384.58	62.65
J106	1125745	10043014	3234	4.24	3384.56	65.24
J108	1125746	10043169	3238	4.24	3384.56	63.5
J110	1125653	10043014	3227	4.24	3384.55	68.27
J112	1126111	10043156	3255	4.24	3384.92	56.3
J114	1126189	10043213	3260	4.24	3384.83	54.09
J116	1126078	10043285	3250	4.24	3384.89	58.45
J118	1125926	10043283	3244	4.24	3384.89	61.05
J120	1126006	10043423	3248	4.24	3384.86	59.3
J122	1125841	10043421	3242	4.24	3384.74	61.85
J124	1125843	10043313	3239	4.24	3384.73	63.15
J126	1125667	10043422	3228	4.24	3384.63	67.87
J128	1125668	10043677	3232	4.24	3384.46	66.06
J130	1125668	10043732	3233	4.24	3384.45	65.62
J132	1125164	10043574	3220	4.24	3384.4	71.24
J134	1125471	10043427	3218	4.24	3384.51	72.15
J136	1125464	10043063	3215	4.24	3384.44	73.42
J138	1125894	10043888	3247	4.24	3384.85	59.73
J14	1123884	10038702	3170	4.24	3386.87	93.97
J140	1125067	10043894	3220	4.24	3384.68	71.36
J142	1125820	10044147	3253	4.24	3384.85	57.13
J144	1125158	10044156	3229	4.24	3384.79	67.5
J146	1125772	10044440	3249	4.24	3384.84	58.86
J150	1125760	10044468	3249	4.24	3384.84	58.86
J152	1125070	10044495	3230	4.24	3384.78	67.07
J154	1125605	10044857	3250	4.24	3384.84	58.43
J156	1124670	10044862	3224	4.24	3384.41	69.51
J158	1125084	10044940	3234	4.24	3384.84	65.36
J16	1122873	10038869	3220	4.24	3386.87	72.3
J160	1125559	10044955	3250	4.24	3384.85	58.43
J162	1125462	10045164	3250	4.24	3384.86	58.43
J164	1125082	10045119	3237	4.24	3384.85	64.06
J166	1125311	10045480	3248	4.24	3384.87	59.31
J170	1125096	10046118	3253	4.24	3384.82	57.12
J174	1125099	10046332	3255	4.24	3384.8	56.24
J176	1125100	10046582	3252	4.24	3384.78	57.53

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446	10046575	3264	4.24	3384.78	52.33
J18	1124240	10039216	3210	4.24	3386.65	76.54
J180	1125709	10046321	3268	4.24	3384.72	50.58
J182	1125709	10046551	3274	4.24	3384.72	47.98
J184	1125954	10046316	3277	4.24	3384.7	46.67
J186	1125959	10046567	3282	4.24	3384.7	44.5
J188	1126222	10046313	3287	4.24	3384.7	42.33
J190	1125107	10046822	3249	4.24	3384.76	58.82
J192	1125605	10046828	3267	4.24	3384.72	51.01
J194	1126477	10046310	3290	4.24	3384.69	41.03
J196	1126225	10046578	3288	4.24	3384.69	41.9
J198	1126452	10046572	3290	4.24	3384.69	41.03
J20	1124936	10039498	3260	4.24	3386.3	54.72
J200	1126153	10046838	3286	4.24	3384.69	42.76
J202	1126401	10046870	3290	4.24	3384.69	41.03
J204	1125110	10047063	3250	4.24	3384.74	58.38
J206	1125853	10047423	3272	4.24	3384.7	48.83
J208	1125600	10047197	3268	4.24	3384.72	50.57
J210	1125865	10047045	3275	4.24	3384.69	47.53
J212	1126130	10047146	3284	4.24	3384.69	43.63
J214	1126359	10047149	3290	4.24	3384.69	41.03
J216	1126359	10047412	3285	4.24	3384.69	43.2
J218	1126130	10047418	3278	4.24	3384.69	46.23
J22	1124948	10039509	3260	4.24	3386.28	54.72
J220	1125105	10047917	3205	4.24	3384.7	77.86
J222	1125105	10047957	3205	4.24	3384.7	77.86
J224	1124995	10047917	3197	4.24	3384.7	81.33
J226	1124010	10045975	3250	4.24	3379.12	55.95
J228	1123938	10045852	3250	4.24	3379.21	55.99
J230	1123804	10045935	3245	4.24	3379.11	58.11
J232	1123645	10045276	3242	4.24	3383.17	61.17
J234	1124172	10045197	3230	4.24	3383.05	66.32
J236	1123445	10045194	3248	4.24	3383.86	58.87
J238	1123391	10044874	3240	4.24	3383.93	62.36
J24	1124612	10039537	3227	4.24	3386.07	68.93
J240	1124671	10045070	3230	4.24	3384.4	66.9
J242	1124653	10044538	3220	4.24	3384.18	71.14
J244	1124859	10044541	3218	4.24	3384.16	72

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124644	10044290	3218	4.24	3384.16	72
J248	1123357	10044196	3234	4.24	3383.46	64.76
J250	1123990	10044107	3214	4.24	3382.67	73.08
J252	1123859	10043966	3210	4.24	3382.6	74.79
J254	1124683	10044130	3212	4.24	3383.69	74.39
J256	1124684	10043432	3205	4.24	3384.12	77.61
J258	1124684	10043249	3203	4.24	3384.04	78.45
J26	1124424	10039560	3211	4.24	3386.06	75.85
J260	1124882	10043093	3198	4.24	3384.02	80.6
J262	1124654	10042762	3194	4.24	3383.87	82.27
J264	1124262	10042774	3190	4.24	3383.76	83.96
J266	1123934	10042774	3190	4.24	3383.56	83.87
J268	1123637	10042774	3190	4.24	3383.42	83.81
J270	1123611	10042979	3200	4.24	3383.34	79.44
J272	1123620	10043324	3207	4.24	3383.34	76.41
J274	1123621	10043427	3212	4.24	3383.28	74.21
J276	1123382	10043327	3221	4.24	3383.19	70.28
J278	1123166	10043500	3225	4.24	3383.12	68.51
J28	1124400	10039807	3203	4.24	3386.03	79.31
J280	1123977	10043483	3198	4.24	3383.12	80.21
J282	1124279	10043485	3198	4.24	3383.12	80.21
J284	1124647	10042156	3188	4.24	3383.55	84.73
J286	1124341	10041745	3188	4.24	3384.95	85.34
J288	1124622	10041108	3188	4.24	3385.64	85.64
J290	1124622	10040543	3195	4.24	3385.76	82.66
J292	1124828	10040539	3198	4.24	3385.74	81.35
J294	1124725	10040253	3195	4.24	3385.87	82.71
J296	1124918	10040249	3203	4.24	3385.86	79.23
J298	1124145	10041286	3188	4.24	3385	85.36
J30	1124835	10039531	3244	4.24	3386.27	61.64
J300	1124043	10041114	3188	4.24	3385	85.36
J302	1124040	10040785	3189	4.24	3385.03	84.94
J304	1124196	10040785	3188	4.24	3385.03	85.37
J306	1123769	10040791	3189	4.24	3385.06	84.95
J308	1123923	10040785	3189	4.24	3385.06	84.95
J310	1124727	10039992	3198	4.24	3386.03	81.47
J312	1124757	10039992	3198	4.24	3386.03	81.47
J314	1124253	10039999	3195	4.24	3386.03	82.77

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914	10040005	3193	4.24	3385.81	83.55
J318	1123887	10039438	3210	4.24	3386.62	76.53
J32	1125376	10039941	3260	4.24	3386.03	54.61
J320	1123307	10040009	3190	4.24	3385.52	84.72
J322	1122290	10040159	3030	4.24	3385.15	153.89
J324	1122840	10040396	3184	4.24	3385.21	87.18
J326	1122999	10040261	3186	4.24	3385.07	86.26
J328	1123180	10040549	3182	4.24	3385.07	87.99
J330	1123008	10040618	3178	4.24	3385.09	89.73
J332	1123230	10040679	3182	4.24	3385.06	87.98
J334	1123283	10040818	3179	4.24	3385.05	89.28
J336	1123546	10041082	3185	4.24	3384.73	86.54
J338	1122894	10040872	3178	4.24	3385.02	89.7
J340	1122440	10040465	3169	4.24	3384.61	93.43
J342	1122623	10040641	3178	4.24	3384.62	89.53
J344	1122772	10040780	3178	4.24	3385.07	89.72
J346	1122742	10040713	3178	4.24	3385.08	89.73
J350	1122730	10040740	3178	4.24	3385.07	89.72
J352	1122722	10040733	3178	4.24	3385.08	89.73
J354	1122884	10041060	3183	4.24	3384.96	87.51
J356	1123612	10041383	3188	4.24	3384.9	85.32
J358	1122415	10041101	3192	4.24	3384.95	83.6
J36	1125567	10040443	3255	4.24	3385.82	56.69
J360	1122206	10041099	3192	4.24	3384.95	83.6
J364	1122181	10040941	3189	4.24	3382.95	84.04
J366	1122148	10040941	3189	4.24	3382.94	84.04
J368	1122218	10040941	3188	4.24	3383	84.49
J370	1122183	10041179	3194	4.24	3382.86	81.83
J372	1122866	10041749	3195	4.24	3384.57	82.14
J374	1123108	10041533	3188	4.24	3384.28	85.05
J376	1123750	10041802	3188	4.24	3384.53	85.16
J378	1122926	10042198	3198	4.24	3382.72	80.04
J38	1125085	10040522	3214	4.24	3385.73	74.41
J380	1123041	10043167	3222	4.24	3383.14	69.82
J382	1123039	10043368	3226	4.24	3383.14	68.09
J384	1123031	10043048	3222	4.24	3383.06	69.79
J386	1122922	10043502	3228	4.24	3383.13	67.22
J388	1123012	10044175	3237	4.24	3383.21	63.35

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018	10044630	3245	4.24	3382.92	59.76
J392	1123078	10045202	3250	4.24	3383.61	57.89
J394	1123076	10045132	3248	4.24	3383.6	58.76
J396	1123078	10045461	3252	4.24	3383.59	57.02
J398	1122934	10045990	3220	4.24	3376.23	67.7
J40	1125639	10040959	3255	4.24	3385.62	56.6
J400	1122775	10045992	3220	4.24	3376.34	67.74
J402	1122775	10046090	3205	4.24	3376.27	74.21
J404	1122471	10045807	3208	4.24	3378.72	73.97
J406	1122465	10046021	3204	4.24	3378.7	75.7
J408	1122469	10045657	3214	4.24	3378.98	71.49
J410	1122208	10045663	3212	4.24	3378.98	72.35
J412	1122586	10045406	3233	4.24	3379.94	63.67
J414	1122796	10045445	3245	4.24	3375.98	56.75
J416	1122323	10045307	3222	4.24	3381.84	69.26
J418	1122321	10045427	3220	4.24	3381.82	70.12
J42	1125221	10040818	3221	4.24	3385.57	71.31
J420	1122389	10045020	3209	4.24	3381.93	74.93
J422	1122884	10045014	3238	4.24	3381.83	62.32
J424	1122389	10044892	3209	4.24	3381.98	74.95
J426	1122376	10044717	3215	4.24	3382.13	72.42
J428	1122880	10044707	3242	4.24	3382.09	60.7
J430	1122384	10044188	3240	4.24	3382.66	61.82
J432	1122685	10044186	3240	4.24	3383.06	61.99
J434	1122742	10043462	3232	4.24	3383.06	65.45
J436	1122197	10043462	3228	4.24	3382.89	67.11
J438	1122208	10044182	3236	4.24	3382.65	63.54
J44	1125638	10041202	3255	4.24	3385.53	56.56
J440	1121938	10044182	3240	4.24	3382.53	61.76
J442	1121938	10043551	3234	4.24	3382.5	64.34
J444	1122876	10043237	3224	4.24	3383.09	68.93
J446	1122870	10043168	3223	4.24	3383.1	69.37
J448	1122870	10042870	3222	4.24	3382.94	69.74
J450	1122870	10042833	3222	4.24	3382.93	69.73
J452	1122578	10042833	3220	4.24	3382.89	70.58
J454	1122578	10043042	3224	4.24	3382.89	68.85
J456	1122333	10042839	3220	4.24	3382.89	70.58
J458	1122833	10042692	3221	4.24	3382.91	70.16

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125334	10041215	3220	4.24	3385.5	71.71
J460	1122321	10042093	3208	4.24	3382.81	75.75
J462	1122197	10042443	3216	4.24	3382.78	72.27
J464	1121807	10042513	3224	4.24	3382.79	68.8
J466	1121782	10042455	3224	4.24	3382.79	68.8
J468	1121773	10042102	3218	4.24	3382.79	71.4
J470	1121276	10042124	3222	4.24	3382.78	69.67
J472	1122185	10042099	3208	4.24	3382.81	75.74
J474	1121872	10041867	3209	4.24	3382.83	75.32
J476	1121843	10041417	3202	4.24	3382.84	78.36
J478	1121573	10040954	3197	4.24	3382.85	80.53
J48	1125796	10041657	3255	4.24	3385.35	56.48
J480	1121534	10041237	3208	4.24	3382.84	75.76
J482	1121530	10040954	3195	4.24	3382.84	81.39
J484	1121380	10040935	3195	4.24	3382.83	81.39
J486	1121376	10041089	3205	4.24	3382.83	77.05
J488	1121080	10041046	3195	4.24	3382.82	81.38
J490	1120796	10041219	3195	4.24	3382.82	81.38
J492	1121080	10041410	3215	4.24	3382.81	72.71
J498	1121390	10041422	3216	4.24	3382.83	72.29
J50	1125375	10041666	3215	4.24	3384.98	73.65
J502	1121107	10041773	3220	4.24	3382.79	70.54
J504	1121152	10042114	3220	4.24	3382.78	70.53
J508	1120998	10042132	3200	4.24	3382.76	79.19
J510	1121405	10043101	3215	4.24	3381.85	72.3
J512	1121401	10043516	3225	4.24	3381.89	67.98
J514	1121674	10043531	3228	4.24	3382.48	66.93
J516	1121668	10043862	3234	4.24	3382.48	64.34
J518	1126598	10045335	3307	4.24	3384.84	33.73
J52	1125329	10041667	3213	4.24	3384.95	74.51
J520	1126586	10044363	3315	4.24	3384.84	30.26
J522	1126615	10044079	3320	4.24	3384.84	28.1
J524	1126475	10044087	3300	4.24	3384.85	36.76
J526	1126512	10043330	3310	4.24	3384.84	32.43
J528	1124646	10044860	3224	4.24	3384.4	69.5
J530	1123983	10043964	3210	4.24	3382.68	74.82
J532	1121045	10041644	3220	4.24	3382.8	70.54
J534	1121276	10042112	3222	4.24	3382.78	69.67

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328	10040934	3188	4.24	3383.14	84.56
J54	1125328	10041538	3216	4.24	3384.94	73.2
J540	1123217	10044007	3230	4.24	3383.12	66.35
J542	1123718	10043709	3210	4.24	3383.46	75.16
J544	1122921	10044178	3238	4.24	3383.15	62.89
J546	1122911	10043167	3223	4.24	3383.11	69.38
J548	1122836	10040607	3178	4.24	3385.12	89.74
J550	1121429	10042126	3224	4.24	3382.78	68.8
J552	1121430	10042109	3224	4.24	3382.78	68.8
J554	1124114	10047573	3180	4.24	3384.62	88.66
J556	1123927	10047480	3182	4.24	3384.5	87.74
J558	1123608	10046856	3178	4.24	3384.44	89.45
J56	1125149	10041667	3203	4.24	3384.94	78.83
J560	1123546	10046621	3188	4.24	3384.42	85.11
J562	1123276	10046630	3188	4.24	3384.41	85.11
J564	1123001	10046638	3194	4.24	3384.41	82.5
J566	1122690	10046638	3194	4.24	3384.4	82.5
J568	1123546	10046479	3195	4.24	3384.41	82.07
J570	1123542	10046364	3198	4.24	3384.41	80.77
J572	1123542	10046093	3218	4.24	3384.4	72.1
J574	1122965	10047746	3090	4.24	3235.34	62.98
J576	1122757	10047990	3078	4.24	3235.32	68.17
J578	1122699	10047932	3082	4.24	3235.32	66.43
J58	1125227	10041771	3200	4.24	3384.99	80.16
J580	1123431	10048198	3110	4.24	3235.32	54.3
J582	1123719	10046486	3205	4.24	3384.41	77.74
J584	1123919	10040419	3193	4.24	3385.32	83.33
J586	1124622	10040824	3190	4.24	3385.67	84.78
J588	1124667	10041753	3190	4.24	3385.01	84.5
J590	1124651	10042484	3190	4.24	3383.62	83.89
J592	1124676	10043672	3208	4.24	3383.9	76.22
J594	1124680	10043917	3210	4.24	3383.77	75.29
J596	1123917	10040224	3192	4.24	3385.53	83.86
J598	1123921	10040593	3190	4.24	3385.18	84.57
J60	1125153	10041773	3200	4.24	3384.99	80.15
J600	1123961	10039405	3210	4.24	3386.62	76.53
J602	1123916	10038691	3170	4.24	3386.87	93.97
J604	1123277	10038802	3200	4.24	3386.87	80.97

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125614	10040660	3255	4.24	3385.74	56.65
J608	1123041	10046372	3196	4.24	3384.4	81.63
J610	1122686	10046975	3192	4.24	3384.4	83.37
J612	1123831	10044869	3240	4.24	3384.09	62.43
J614	1123362	10044494	3236	4.24	3383.65	63.98
J616	1122375	10044421	3225	4.24	3382.41	68.21
J618	1121393	10043917	3230	4.24	3381.9	65.82
J62	1125227	10042052	3195	4.24	3385.14	82.39
J620	1121763	10044511	3220	4.24	3381.93	70.16
J622	1121867	10042802	3220	4.24	3382.8	70.54
J624	1122344	10043246	3222	4.24	3382.95	69.74
J626	1122184	10041675	3200	4.24	3382.83	79.22
J628	1122419	10041365	3193	4.24	3384.81	83.11
J630	1123200	10041386	3187	4.24	3384.91	85.76
J632	1123216	10041139	3184	4.24	3385.03	87.11
J634	1122841	10040181	3187	4.24	3385.3	85.92
J636	1123632	10040007	3192	4.24	3385.67	83.92
J638	1124247	10039627	3205	4.24	3386.32	78.57
J64	1125882	10042044	3255	4.24	3385.22	56.42
J640	1123272	10041808	3192	4.24	3384.54	83.43
J642	1125480	10043891	3222	4.24	3384.72	70.51
J644	1123630	10042456	3193	4.24	3383.06	82.35
J646	1123015	10042460	3196	4.24	3382.75	80.92
J648	1123944	10043324	3200	4.24	3383.38	79.46
J650	1124266	10043316	3194	4.24	3383.36	82.05
J652	1123418	10047310	3135	4.24	3384.26	108.01
J654	1123431	10047915	3100	4.24	3235.33	58.64
J656	1125436	10040502	3230	4.24	3385.76	67.49
J658	1123772	10040006	3192	4.24	3385.74	83.95
J66	1125912	10042285	3254	4.24	3385.15	56.83
J660	1122417	10041207	3193	4.24	3384.88	83.14
J662	1121816	10042660	3222	4.24	3382.79	69.67
J664	1121601	10042286	3224	4.24	3382.78	68.8
J666	1121217	10043511	3223	4.24	3381.89	68.85
J668	1121876	10043169	3224	4.24	3382.83	68.82
J670	1123316	10042458	3193	4.24	3382.84	82.26
J672	1124092	10042774	3190	4.24	3383.66	83.91
J674	1123980	10043719	3204	4.24	3382.85	77.49

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903	10045204	3235	4.24	3383.07	64.16
J678	1123443	10048158	3110	4.24	3235.32	54.3
J68	1125673	10042286	3228	4.24	3384.14	67.66
J680	1123381	10048225	3110	4.24	3235.32	54.3
J682	1123063	10048169	3100	4.24	3235.32	58.63
J684	1122895	10047898	3086	4.24	3235.33	64.7
J688	1123856	10047023	3180	4.24	3384.46	88.59
J690	1122627	10045017	3218	4.24	3381.85	71
J692	1121938	10043885	3238	4.24	3382.51	62.61
J694	1122203	10043832	3238	4.24	3382.74	62.71
J696	1122682	10043746	3238	4.24	3383.06	62.85
J698	1125019	10042054	3193	4.24	3385.13	83.25
J70	1125673	10042387	3228	4.24	3384.13	67.65
J700	1125011	10041754	3192	4.24	3385.13	83.68
J702	1124652	10042638	3192	4.24	3383.72	83.07
J704	1124649	10042317	3189	4.24	3383.56	84.3
J706	1125145	10043429	3210	4.24	3384.34	75.54
J708	1125467	10043244	3216	4.24	3384.45	72.99
J710	1124675	10043553	3206	4.24	3383.99	77.12
J712	1123456	10048115	3110	4.24	3235.32	54.3
J714	1123332	10048225	3110	4.24	3235.32	54.3
J72	1125458	10042300	3214	4.24	3383.58	73.48
J720	1124206	10047608	3180	4.24	3384.68	88.69
J722	1126592	10044849	3307	4.24	3384.84	33.73
J724	1125103	10045484	3250	4.24	3384.89	58.45
J726	1122233	10047038	3065	4.24	3235.28	73.78
J728	1121872	10047177	3060	4.24	3235.28	75.95
J730	1121327	10045288	3045	4.24	3235.26	82.44
J732	1120850	10044576	3015	4.24	3235.26	95.44
J734	1126122	10043420	3248	4.24	3384.86	59.3
J736	1125637	10041358	3257	4.24	3385.47	55.67
J738	1123723	10044190	3224	4.24	3383.46	69.09
J74	1125458	10042413	3214	4.24	3383.55	73.46
J740	1125109	10047292	3249	4.24	3384.73	58.81
J742	1125248	10039961	3260	4.24	3386.03	54.61
J744	1125221	10049016	3197	4.24	3384.7	81.33
J746	1125860	10048968	3223	4.24	3384.7	70.06
J748	1125770	10047902	3247	4.24	3384.7	59.67

LaVerkin Pond HGL @ 3400 System Performance - (ADD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124993	10050432	3220	4.24	3384.7	71.37
J752	1124949	10050389	3218	4.24	3384.7	72.23
J754	1123450	10048728	3085	4.24	3384.67	129.85
J756	1123881	10048778	3111	4.24	3384.66	118.58
J758	1123501	10048585	3113	4.24	3384.67	117.71
J76	1125256	10042431	3205	4.24	3383.53	77.36
J760	1123668	10048341	3130	4.24	3384.67	110.35
J762	1123897	10038697	3170	4.24	3386.87	93.97
J78	1125242	10042303	3205	4.24	3383.5	77.35
J80	1125361	10042301	3209	4.24	3383.52	75.62
J82	1125361	10042198	3210	4.24	3383.51	75.18
J84	1125935	10042714	3255	4.24	3385.04	56.35
J86	1126252	10042705	3287	4.24	3385.04	42.48
J88	1125935	10042756	3255	4.24	3385.02	56.34
J90	1125457	10042761	3225	4.24	3384.19	68.98
J92	1125457	10042860	3218	4.24	3384.18	72.01
J94	1125454	10042665	3221	4.24	3384.12	70.68
J96	1125323	10042668	3209	4.24	3384.11	75.88
J98	1125453	10042630	3217	4.24	3384.12	72.41
V8002_NU	1121346	10045216	3043	4.24	3235.26	83.31
V8002_ND	1121367	10045146	3043	4.24	3235.26	83.31
V8004_NU	1123222	10047426	3120	4.24	3384.18	114.47
V8004_ND	1123060	10047523	3120	4.24	3235.39	50
V8010_NU	1122217	10046991	3065	4.24	3235.28	73.78
V8010_ND	1121854	10046291	3065	4.24	3235.28	73.78

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999	10043006.15	3254	8.48	3379.61	54.43
J102	1125789	10043009.16	3236	8.48	3378.27	61.65
J104	1125787	10042941.46	3240	8.48	3378.25	59.9
J106	1125745	10043013.67	3234	8.48	3378.15	62.46
J108	1125746	10043168.62	3238	8.48	3378.15	60.73
J110	1125653	10043013.67	3227	8.48	3378.12	65.48
J112	1126111	10043155.56	3255	8.48	3379.47	53.93
J114	1126189	10043212.73	3260	8.48	3379.15	51.63
J116	1126078	10043284.94	3250	8.48	3379.36	56.05
J118	1125926	10043283.43	3244	8.48	3379.35	58.65
J120	1126006	10043423.33	3248	8.48	3379.24	56.87
J122	1125841	10043420.85	3242	8.48	3378.82	59.28
J124	1125843	10043312.54	3239	8.48	3378.78	60.57
J126	1125667	10043422.36	3228	8.48	3378.4	65.17
J128	1125668	10043676.58	3232	8.48	3377.77	63.16
J130	1125668	10043732.24	3233	8.48	3377.75	62.72
J132	1125164	10043574.29	3220	8.48	3377.58	68.28
J134	1125471	10043426.87	3218	8.48	3377.98	69.32
J136	1125464	10043062.82	3215	8.48	3377.71	70.5
J138	1125894	10043887.76	3247	8.48	3379.21	57.29
J14	1123884	10038701.67	3170	8.48	3386.54	93.83
J140	1125067	10043893.79	3220	8.48	3378.6	68.72
J142	1125820	10044146.52	3253	8.48	3379.2	54.68
J144	1125158	10044155.54	3229	8.48	3378.99	64.99
J146	1125772	10044440.44	3249	8.48	3379.19	56.41
J150	1125760	10044467.68	3249	8.48	3379.19	56.41
J152	1125070	10044494.85	3230	8.48	3378.96	64.54
J154	1125605	10044857.39	3250	8.48	3379.18	55.97
J156	1124670	10044862.08	3224	8.48	3377.63	66.57
J158	1125084	10044940.31	3234	8.48	3379.16	62.9
J16	1122873	10038868.78	3220	8.48	3386.51	72.15
J160	1125559	10044955.35	3250	8.48	3379.2	55.98
J162	1125462	10045164.45	3250	8.48	3379.23	56
J164	1125082	10045119.32	3237	8.48	3379.2	61.62
J166	1125311	10045479.58	3248	8.48	3379.3	56.89
J170	1125096	10046118.46	3253	8.48	3379.11	54.64
J174	1125099	10046332.07	3255	8.48	3379.03	53.74
J176	1125100	10046582.25	3252	8.48	3378.95	55.01

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446	10046574.73	3264	8.48	3378.95	49.81
J18	1124240	10039216.28	3210	8.48	3385.73	76.14
J180	1125709	10046320.76	3268	8.48	3378.74	47.99
J182	1125709	10046550.92	3274	8.48	3378.74	45.38
J184	1125954	10046316.24	3277	8.48	3378.68	44.06
J186	1125959	10046567.46	3282	8.48	3378.68	41.89
J188	1126222	10046313.23	3287	8.48	3378.65	39.71
J190	1125107	10046821.69	3249	8.48	3378.88	56.28
J192	1125605	10046827.71	3267	8.48	3378.72	48.41
J194	1126477	10046310.38	3290	8.48	3378.64	38.41
J196	1126225	10046578.15	3288	8.48	3378.64	39.27
J198	1126452	10046572.14	3290	8.48	3378.64	38.41
J20	1124936	10039498.35	3260	8.48	3384.45	53.93
J200	1126153	10046838.4	3286	8.48	3378.64	40.14
J202	1126401	10046869.99	3290	8.48	3378.64	38.41
J204	1125110	10047063.06	3250	8.48	3378.82	55.82
J206	1125853	10047422.59	3272	8.48	3378.65	46.21
J208	1125600	10047196.94	3268	8.48	3378.72	47.97
J210	1125865	10047045.01	3275	8.48	3378.64	44.91
J212	1126130	10047146.03	3284	8.48	3378.63	41
J214	1126359	10047149.04	3290	8.48	3378.63	38.4
J216	1126359	10047412.29	3285	8.48	3378.63	40.57
J218	1126130	10047418.31	3278	8.48	3378.63	43.6
J22	1124948	10039508.88	3260	8.48	3384.39	53.9
J220	1125105	10047916.83	3205	8.48	3378.67	75.25
J222	1125105	10047957.44	3205	8.48	3378.67	75.25
J224	1124995	10047916.83	3197	8.48	3378.66	78.71
J226	1124010	10045974.98	3250	8.48	3358.49	47.01
J228	1123938	10045852.01	3250	8.48	3358.82	47.15
J230	1123804	10045935.25	3245	8.48	3358.45	49.16
J232	1123645	10045276.06	3242	8.48	3373.14	56.82
J234	1124172	10045197.42	3230	8.48	3372.68	61.82
J236	1123445	10045194.39	3248	8.48	3375.61	55.29
J238	1123391	10044873.79	3240	8.48	3375.87	58.87
J24	1124612	10039537.47	3227	8.48	3383.66	67.88
J240	1124671	10045070.39	3230	8.48	3377.56	63.94
J242	1124653	10044538.06	3220	8.48	3376.77	67.93
J244	1124859	10044541.09	3218	8.48	3376.71	68.77

LeVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124644	10044290.05	3218	8.48	3376.69	68.76
J248	1123357	10044196.31	3234	8.48	3374.16	60.73
J250	1123990	10044106.6	3214	8.48	3371.3	68.16
J252	1123859	10043966.22	3210	8.48	3371.06	69.79
J254	1124683	10044130.4	3212	8.48	3374.98	70.62
J256	1124684	10043431.87	3205	8.48	3376.54	74.33
J258	1124684	10043249.28	3203	8.48	3376.28	75.08
J26	1124424	10039560.03	3211	8.48	3383.59	74.79
J260	1124882	10043093.32	3198	8.48	3376.18	77.2
J262	1124654	10042762.38	3194	8.48	3375.64	78.71
J264	1124262	10042773.79	3190	8.48	3375.24	80.27
J266	1123934	10042773.79	3190	8.48	3374.54	79.96
J268	1123637	10042773.79	3190	8.48	3374.03	79.74
J270	1123611	10042979.2	3200	8.48	3373.74	75.28
J272	1123620	10043323.58	3207	8.48	3373.74	72.25
J274	1123621	10043426.53	3212	8.48	3373.5	69.98
J276	1123382	10043327.32	3221	8.48	3373.19	65.94
J278	1123166	10043499.53	3225	8.48	3372.94	64.1
J28	1124400	10039806.74	3203	8.48	3383.49	78.21
J280	1123977	10043482.69	3198	8.48	3372.94	75.8
J282	1124279	10043484.56	3198	8.48	3372.94	75.8
J284	1124647	10042155.56	3188	8.48	3374.48	80.8
J286	1124341	10041745.28	3188	8.48	3379.57	83.01
J288	1124622	10041107.8	3188	8.48	3382.09	84.1
J290	1124622	10040543.11	3195	8.48	3382.51	81.25
J292	1124828	10040538.91	3198	8.48	3382.44	79.92
J294	1124725	10040253.41	3195	8.48	3382.92	81.43
J296	1124918	10040249.22	3203	8.48	3382.86	77.93
J298	1124145	10041286.23	3188	8.48	3379.75	83.09
J30	1124835	10039531.45	3244	8.48	3384.35	60.81
J300	1124043	10041114.1	3188	8.48	3379.77	83.09
J302	1124040	10040784.52	3189	8.48	3379.87	82.7
J304	1124196	10040784.52	3188	8.48	3379.85	83.13
J306	1123769	10040790.82	3189	8.48	3379.98	82.75
J308	1123923	10040784.52	3189	8.48	3379.99	82.76
J310	1124727	10039992.28	3198	8.48	3383.5	80.38
J312	1124757	10039992.28	3198	8.48	3383.5	80.38
J314	1124253	10039998.58	3195	8.48	3383.5	81.68

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914	10040004.87	3193	8.48	3382.7	82.2
J318	1123887	10039437.56	3210	8.48	3385.62	76.1
J32	1125376	10039940.89	3260	8.48	3383.5	53.51
J320	1123307	10040008.87	3190	8.48	3381.63	83.03
J322	1122290	10040158.62	3030	8.48	3380.29	151.78
J324	1122840	10040395.83	3184	8.48	3380.5	85.14
J326	1122999	10040261.48	3186	8.48	3379.99	84.05
J328	1123180	10040549.08	3182	8.48	3379.99	85.79
J330	1123008	10040618.35	3178	8.48	3380.08	87.56
J332	1123230	10040679.23	3182	8.48	3379.95	85.77
J334	1123283	10040817.78	3179	8.48	3379.91	87.06
J336	1123546	10041082.28	3185	8.48	3378.78	83.97
J338	1122894	10040872.36	3178	8.48	3379.82	87.45
J340	1122440	10040465.36	3169	8.48	3378.34	90.71
J342	1122623	10040640.98	3178	8.48	3378.36	86.82
J344	1122772	10040780.43	3178	8.48	3380	87.53
J346	1122742	10040713.3	3178	8.48	3380.03	87.54
J350	1122730	10040740.04	3178	8.48	3380.01	87.53
J352	1122722	10040733.27	3178	8.48	3380.02	87.53
J354	1122884	10041060.03	3183	8.48	3379.61	85.19
J356	1123612	10041382.77	3188	8.48	3379.4	82.93
J358	1122415	10041101.24	3192	8.48	3379.55	81.26
J36	1125567	10040442.66	3255	8.48	3382.75	55.35
J360	1122206	10041099.19	3192	8.48	3379.55	81.26
J364	1122181	10040940.96	3189	8.48	3372.32	79.43
J366	1122148	10040940.96	3189	8.48	3372.29	79.42
J368	1122218	10040940.96	3188	8.48	3372.51	79.95
J370	1122183	10041179.33	3194	8.48	3371.98	77.12
J372	1122866	10041748.55	3195	8.48	3378.2	79.38
J374	1123108	10041532.78	3188	8.48	3377.16	81.96
J376	1123750	10041802.49	3188	8.48	3378.03	82.34
J378	1122926	10042197.86	3198	8.48	3371.48	75.17
J38	1125085	10040522.38	3214	8.48	3382.41	72.97
J380	1123041	10043166.82	3222	8.48	3373.01	65.43
J382	1123039	10043368.2	3226	8.48	3372.99	63.69
J384	1123031	10043047.63	3222	8.48	3372.73	65.31
J386	1122922	10043501.52	3228	8.48	3372.95	62.81
J388	1123012	10044175.36	3237	8.48	3373.26	59.04

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018	10044629.5	3245	8.48	3372.22	55.12
J392	1123078	10045201.71	3250	8.48	3374.71	54.04
J394	1123076	10045131.84	3248	8.48	3374.69	54.89
J396	1123078	10045460.63	3252	8.48	3374.63	53.14
J398	1122934	10045989.69	3220	8.48	3348.03	55.48
J40	1125639	10040959.04	3255	8.48	3382.01	55.03
J400	1122775	10045991.74	3220	8.48	3348.4	55.64
J402	1122775	10046090.38	3205	8.48	3348.17	62.03
J404	1122471	10045806.8	3208	8.48	3357.01	64.56
J406	1122465	10046020.51	3204	8.48	3356.94	66.27
J408	1122469	10045656.79	3214	8.48	3357.97	62.38
J410	1122208	10045662.95	3212	8.48	3357.95	63.24
J412	1122586	10045406.08	3233	8.48	3361.43	55.65
J414	1122796	10045445.13	3245	8.48	3347.11	44.24
J416	1122323	10045307.44	3222	8.48	3368.28	63.38
J418	1122321	10045426.63	3220	8.48	3368.24	64.23
J42	1125221	10040817.64	3221	8.48	3381.84	69.69
J420	1122389	10045019.75	3209	8.48	3368.61	69.16
J422	1122884	10045013.59	3238	8.48	3368.25	56.44
J424	1122389	10044891.58	3209	8.48	3368.81	69.25
J426	1122376	10044716.9	3215	8.48	3369.35	66.88
J428	1122880	10044706.63	3242	8.48	3369.19	55.11
J430	1122384	10044188.21	3240	8.48	3371.28	56.88
J432	1122685	10044186.15	3240	8.48	3372.7	57.5
J434	1122742	10043462.38	3232	8.48	3372.7	60.96
J436	1122197	10043462.38	3228	8.48	3372.08	62.43
J438	1122208	10044181.61	3236	8.48	3371.22	58.59
J44	1125638	10041201.73	3255	8.48	3381.68	54.89
J440	1121938	10044181.61	3240	8.48	3370.8	56.67
J442	1121938	10043550.74	3234	8.48	3370.68	59.23
J444	1122876	10043237.38	3224	8.48	3372.8	64.48
J446	1122870	10043167.51	3223	8.48	3372.85	64.93
J448	1122870	10042869.54	3222	8.48	3372.29	65.12
J450	1122870	10042832.55	3222	8.48	3372.23	65.09
J452	1122578	10042832.55	3220	8.48	3372.1	65.9
J454	1122578	10043042.16	3224	8.48	3372.08	64.16
J456	1122333	10042838.71	3220	8.48	3372.09	65.9
J458	1122833	10042691.99	3221	8.48	3372.18	65.51

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125334	10041215.27	3220	8.48	3381.58	70.01
J460	1122321	10042092.86	3208	8.48	3371.81	70.98
J462	1122197	10042443.34	3216	8.48	3371.71	67.47
J464	1121807	10042513.21	3224	8.48	3371.74	64.02
J466	1121782	10042455.06	3224	8.48	3371.74	64.01
J468	1121773	10042101.51	3218	8.48	3371.74	66.62
J470	1121276	10042124.21	3222	8.48	3371.71	64.87
J472	1122185	10042098.85	3208	8.48	3371.81	70.98
J474	1121872	10041866.64	3209	8.48	3371.88	70.58
J476	1121843	10041416.6	3202	8.48	3371.92	73.63
J478	1121573	10040953.58	3197	8.48	3371.95	75.81
J48	1125796	10041656.67	3255	8.48	3381.02	54.6
J480	1121534	10041237.16	3208	8.48	3371.92	71.03
J482	1121530	10040953.58	3195	8.48	3371.92	76.66
J484	1121380	10040935.08	3195	8.48	3371.88	76.64
J486	1121376	10041089.2	3205	8.48	3371.88	72.31
J488	1121080	10041046.05	3195	8.48	3371.84	76.62
J490	1120796	10041218.67	3195	8.48	3371.84	76.62
J492	1121080	10041409.78	3215	8.48	3371.83	67.95
J498	1121390	10041422.11	3216	8.48	3371.89	67.55
J50	1125375	10041665.7	3215	8.48	3379.7	71.36
J502	1121107	10041773	3220	8.48	3371.75	65.75
J504	1121152	10042114.49	3220	8.48	3371.71	65.74
J508	1120998	10042132.01	3200	8.48	3371.62	74.36
J510	1121405	10043101.18	3215	8.48	3368.34	66.44
J512	1121401	10043516.28	3225	8.48	3368.47	62.16
J514	1121674	10043531.31	3228	8.48	3370.6	61.79
J516	1121668	10043862.16	3234	8.48	3370.62	59.2
J518	1126598	10045335.4	3307	8.48	3379.16	31.27
J52	1125329	10041667.2	3213	8.48	3379.58	72.18
J520	1126586	10044363.41	3315	8.48	3379.16	27.8
J522	1126615	10044078.7	3320	8.48	3379.17	25.64
J524	1126475	10044086.92	3300	8.48	3379.19	34.31
J526	1126512	10043329.84	3310	8.48	3379.16	29.97
J528	1124646	10044859.56	3224	8.48	3377.56	66.54
J530	1123983	10043963.76	3210	8.48	3371.35	69.91
J532	1121045	10041643.81	3220	8.48	3371.77	65.76
J534	1121276	10042111.69	3222	8.48	3371.71	64.87

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328	10040934.14	3188	8.48	3373.03	80.17
J54	1125328	10041537.83	3216	8.48	3379.54	70.86
J540	1123217	10044006.96	3230	8.48	3372.94	61.94
J542	1123718	10043708.89	3210	8.48	3374.16	71.13
J544	1122921	10044178.35	3238	8.48	3373.03	58.51
J546	1122911	10043167.34	3223	8.48	3372.9	64.95
J548	1122836	10040607.49	3178	8.48	3380.18	87.6
J550	1121429	10042126	3224	8.48	3371.71	64
J552	1121430	10042108.54	3224	8.48	3371.71	64
J554	1124114	10047573.47	3180	8.48	3378.36	85.95
J556	1123927	10047480.41	3182	8.48	3377.93	84.9
J558	1123608	10046855.61	3178	8.48	3377.71	86.53
J56	1125149	10041667.2	3203	8.48	3379.52	76.49
J560	1123546	10046620.76	3188	8.48	3377.63	82.17
J562	1123276	10046629.62	3188	8.48	3377.63	82.17
J564	1123001	10046638.48	3194	8.48	3377.6	79.55
J566	1122690	10046638.48	3194	8.48	3377.59	79.55
J568	1123546	10046478.96	3195	8.48	3377.6	79.12
J570	1123542	10046363.75	3198	8.48	3377.59	77.82
J572	1123542	10046093.45	3218	8.48	3377.59	69.15
J574	1122965	10047746.28	3090	8.48	3235.2	62.92
J576	1122757	10047990	3078	8.48	3235.13	68.08
J578	1122699	10047932.39	3082	8.48	3235.11	66.34
J58	1125227	10041771	3200	8.48	3379.73	77.88
J580	1123431	10048198.26	3110	8.48	3235.13	54.22
J582	1123719	10046485.61	3205	8.48	3377.6	74.79
J584	1123919	10040419.38	3193	8.48	3380.93	81.43
J586	1124622	10040823.62	3190	8.48	3382.18	83.27
J588	1124667	10041752.7	3190	8.48	3379.81	82.24
J590	1124651	10042483.64	3190	8.48	3374.73	80.04
J592	1124676	10043672.36	3208	8.48	3375.76	72.69
J594	1124680	10043916.86	3210	8.48	3375.28	71.61
J596	1123917	10040224.41	3192	8.48	3381.67	82.18
J598	1123921	10040593.44	3190	8.48	3380.42	82.51
J60	1125153	10041772.51	3200	8.48	3379.7	77.86
J600	1123961	10039404.97	3210	8.48	3385.63	76.1
J602	1123916	10038690.63	3170	8.48	3386.53	93.82
J604	1123277	10038802.09	3200	8.48	3386.52	80.82

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125614	10040659.62	3255	8.48	3382.43	55.21
J608	1123041	10046371.78	3196	8.48	3377.58	78.68
J610	1122686	10046974.97	3192	8.48	3377.59	80.42
J612	1123831	10044868.8	3240	8.48	3376.46	59.13
J614	1123362	10044493.56	3236	8.48	3374.87	60.17
J616	1122375	10044420.94	3225	8.48	3370.36	62.98
J618	1121393	10043917.14	3230	8.48	3368.52	60.02
J62	1125227	10042052.31	3195	8.48	3380.24	80.27
J620	1121763	10044510.85	3220	8.48	3368.62	64.4
J622	1121867	10042801.6	3220	8.48	3371.79	65.77
J624	1122344	10043245.51	3222	8.48	3372.31	65.13
J626	1122184	10041674.73	3200	8.48	3371.87	74.47
J628	1122419	10041364.82	3193	8.48	3379.06	80.62
J630	1123200	10041386.25	3187	8.48	3379.43	83.38
J632	1123216	10041138.59	3184	8.48	3379.85	84.86
J634	1122841	10040180.52	3187	8.48	3380.84	83.99
J636	1123632	10040006.73	3192	8.48	3382.17	82.4
J638	1124247	10039627.33	3205	8.48	3384.55	77.8
J64	1125882	10042043.75	3255	8.48	3380.55	54.4
J640	1123272	10041808.29	3192	8.48	3378.07	80.62
J642	1125480	10043890.78	3222	8.48	3378.73	67.91
J644	1123630	10042455.51	3193	8.48	3372.7	77.86
J646	1123015	10042459.81	3196	8.48	3371.58	76.08
J648	1123944	10043323.67	3200	8.48	3373.86	75.33
J650	1124266	10043316.47	3194	8.48	3373.82	77.92
J652	1123418	10047309.59	3135	8.48	3377.09	104.9
J654	1123431	10047915.46	3100	8.48	3235.15	58.56
J656	1125436	10040501.92	3230	8.48	3382.53	66.09
J658	1123772	10040005.81	3192	8.48	3382.43	82.51
J66	1125912	10042284.87	3254	8.48	3380.28	54.72
J660	1122417	10041206.64	3193	8.48	3379.31	80.73
J662	1121816	10042659.51	3222	8.48	3371.76	64.89
J664	1121601	10042286.19	3224	8.48	3371.7	64
J666	1121217	10043510.76	3223	8.48	3368.48	63.03
J668	1121876	10043168.63	3224	8.48	3371.88	64.08
J670	1123316	10042457.7	3193	8.48	3371.93	77.53
J672	1124092	10042773.79	3190	8.48	3374.87	80.1
J674	1123980	10043718.54	3204	8.48	3371.95	72.77

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903	10045203.74	3235	8.48	3372.76	59.69
J678	1123443	10048158.37	3110	8.48	3235.13	54.22
J68	1125673	10042286.37	3228	8.48	3376.65	64.41
J680	1123381	10048224.98	3110	8.48	3235.13	54.22
J682	1123063	10048169.28	3100	8.48	3235.13	58.55
J684	1122895	10047897.93	3086	8.48	3235.16	64.63
J688	1123856	10047023.27	3180	8.48	3377.81	85.71
J690	1122627	10045016.79	3218	8.48	3368.34	65.14
J692	1121938	10043885.16	3238	8.48	3370.71	57.5
J694	1122203	10043832.47	3238	8.48	3371.55	57.87
J696	1122682	10043745.94	3238	8.48	3372.7	58.36
J698	1125019	10042053.89	3193	8.48	3380.21	81.12
J70	1125673	10042387.16	3228	8.48	3376.62	64.4
J700	1125011	10041753.69	3192	8.48	3380.21	81.55
J702	1124652	10042638.28	3192	8.48	3375.11	79.34
J704	1124649	10042317.38	3189	8.48	3374.54	80.39
J706	1125145	10043428.94	3210	8.48	3377.37	72.52
J708	1125467	10043244.32	3216	8.48	3377.77	70.09
J710	1124675	10043553.39	3206	8.48	3376.08	73.7
J712	1123456	10048115.41	3110	8.48	3235.13	54.22
J714	1123332	10048224.98	3110	8.48	3235.13	54.22
J72	1125458	10042299.91	3214	8.48	3374.63	69.6
J720	1124206	10047607.9	3180	8.48	3378.59	86.05
J722	1126592	10044849.4	3307	8.48	3379.16	31.27
J724	1125103	10045483.78	3250	8.48	3379.35	56.05
J726	1122233	10047037.76	3065	8.48	3234.99	73.65
J728	1121872	10047176.64	3060	8.48	3234.99	75.82
J730	1121327	10045288.28	3045	8.48	3234.91	82.29
J732	1120850	10044576.25	3015	8.48	3234.91	95.29
J734	1126122	10043419.85	3248	8.48	3379.24	56.87
J736	1125637	10041358.03	3257	8.48	3381.46	53.93
J738	1123723	10044190.25	3224	8.48	3374.17	65.07
J74	1125458	10042412.74	3214	8.48	3374.49	69.54
J740	1125109	10047291.81	3249	8.48	3378.78	56.23
J742	1125248	10039960.93	3260	8.48	3383.5	53.51
J744	1125221	10049016.34	3197	8.48	3378.66	78.71
J746	1125860	10048967.73	3223	8.48	3378.66	67.45
J748	1125770	10047901.75	3247	8.48	3378.67	57.05

LaVerkin Pond HGL @ 3400 System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124993	10050431.92	3220	8.48	3378.67	68.75
J752	1124949	10050388.73	3218	8.48	3378.67	69.62
J754	1123450	10048727.78	3085	8.48	3378.54	127.19
J756	1123881	10048778.13	3111	8.48	3378.52	115.92
J758	1123501	10048584.99	3113	8.48	3378.55	115.06
J76	1125256	10042430.79	3205	8.48	3374.43	73.41
J760	1123668	10048341.5	3130	8.48	3378.56	107.7
J762	1123897	10038697	3170	8.48	3386.54	93.83
J78	1125242	10042302.92	3205	8.48	3374.34	73.38
J80	1125361	10042301.42	3209	8.48	3374.38	71.66
J82	1125361	10042197.62	3210	8.48	3374.35	71.21
J84	1125935	10042714.17	3255	8.48	3379.89	54.12
J86	1126252	10042705.15	3287	8.48	3379.89	40.25
J88	1125935	10042756.43	3255	8.48	3379.83	54.09
J90	1125457	10042760.95	3225	8.48	3376.83	65.79
J92	1125457	10042860.23	3218	8.48	3376.8	68.81
J94	1125454	10042664.67	3221	8.48	3376.59	67.42
J96	1125323	10042667.68	3209	8.48	3376.54	72.6
J98	1125453	10042630.07	3217	8.48	3376.57	69.14
V8002_NU	1121346	10045216.01	3043	8.48	3234.91	83.16
V8002_ND	1121367	10045145.96	3043	8.48	3234.91	83.16
V8004_NU	1123222	10047426.2	3120	8.48	3376.79	111.27
V8004_ND	1123060	10047523.21	3120	8.48	3235.39	50
V8010_NU	1122217	10046990.55	3065	8.48	3234.98	73.65
V8010_ND	1121854	10046290.76	3065	8.48	3234.98	73.65

LaVerkin Pond HGL @ 3400 System Performance - (FID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999	10043006.15	3254	11.87	3384.39	56.5
J102	1125789	10043009.16	3236	11.87	3381.89	63.21
J104	1125787	10042941.46	3240	11.87	3381.85	61.46
J106	1125745	10043013.67	3234	11.87	3381.67	63.99
J108	1125746	10043168.62	3238	11.87	3381.67	62.25
J110	1125653	10043013.67	3227	11.87	3381.61	66.99
J112	1126111	10043155.56	3255	11.87	3384.76	56.22
J114	1126189	10043212.73	3260	11.87	3384.17	53.8
J116	1126078	10043284.94	3250	11.87	3385.05	58.52
J118	1125926	10043283.43	3244	11.87	3385.02	61.11
J120	1126006	10043423.33	3248	11.87	3385.38	59.53
J122	1125841	10043420.85	3242	11.87	3385.13	62.02
J124	1125843	10043312.54	3239	11.87	3385.06	63.29
J126	1125667	10043422.36	3228	11.87	3384.88	67.98
J128	1125668	10043676.58	3232	11.87	3383.72	65.74
J130	1125668	10043732.24	3233	11.87	3383.68	65.29
J132	1125164	10043574.29	3220	11.87	3383.36	70.78
J134	1125471	10043426.87	3218	11.87	3384.67	72.22
J136	1125464	10043062.82	3215	11.87	3384.16	73.3
J138	1125894	10043887.76	3247	11.87	3386.92	60.63
J14	1123884	10038701.67	3170	11.87	3380.48	91.2
J140	1125067	10043893.79	3220	11.87	3385.78	71.83
J142	1125820	10044146.52	3253	11.87	3387.85	58.43
J144	1125158	10044155.54	3229	11.87	3387.46	68.66
J146	1125772	10044440.44	3249	11.87	3388.85	60.6
J150	1125760	10044467.68	3249	11.87	3389.04	60.68
J152	1125070	10044494.85	3230	11.87	3388.62	68.73
J154	1125605	10044857.39	3250	11.87	3390.45	60.86
J156	1124670	10044862.08	3224	11.87	3387.91	71.02
J158	1125084	10044940.31	3234	11.87	3391.04	68.04
J16	1122873	10038868.78	3220	11.87	3380.42	69.51
J160	1125559	10044955.35	3250	11.87	3391.11	61.14
J162	1125462	10045164.45	3250	11.87	3392.35	61.68
J164	1125082	10045119.32	3237	11.87	3392.3	67.29
J166	1125311	10045479.58	3248	11.87	3394.19	63.34
J170	1125096	10046118.46	3253	11.87	3396.18	62.04
J174	1125099	10046332.07	3255	11.87	3396.4	61.27
J176	1125100	10046582.25	3252	11.87	3396.65	62.68

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446	10046574.73	3264	11.87	3396.65	57.48
J18	1124240	10039216.28	3210	11.87	3380.24	73.76
J180	1125709	10046320.76	3268	11.87	3396.22	55.56
J182	1125709	10046550.92	3274	11.87	3396.22	52.96
J184	1125954	10046316.24	3277	11.87	3396.2	51.65
J186	1125959	10046567.46	3282	11.87	3396.2	49.48
J188	1126222	10046313.23	3287	11.87	3396.2	47.32
J190	1125107	10046821.69	3249	11.87	3396.9	64.09
J192	1125605	10046827.71	3267	11.87	3396.52	56.12
J194	1126477	10046310.38	3290	11.87	3396.2	46.02
J196	1126225	10046578.15	3288	11.87	3396.22	46.89
J198	1126452	10046572.14	3290	11.87	3396.22	46.02
J20	1124936	10039498.35	3260	11.87	3380.8	52.34
J200	1126153	10046838.4	3286	11.87	3396.29	47.79
J202	1126401	10046869.99	3290	11.87	3396.28	46.05
J204	1125110	10047063.06	3250	11.87	3397.17	63.77
J206	1125853	10047422.59	3272	11.87	3396.43	53.92
J208	1125600	10047196.94	3268	11.87	3396.51	55.68
J210	1125865	10047045.01	3275	11.87	3396.42	52.61
J212	1126130	10047146.03	3284	11.87	3396.29	48.66
J214	1126359	10047149.04	3290	11.87	3396.29	46.05
J216	1126359	10047412.29	3285	11.87	3396.32	48.24
J218	1126130	10047418.31	3278	11.87	3396.33	51.27
J22	1124948	10039508.88	3260	11.87	3380.81	52.35
J220	1125105	10047916.83	3205	11.87	3398.08	83.66
J222	1125105	10047957.44	3205	11.87	3398.08	83.66
J224	1124995	10047916.83	3197	11.87	3398.05	87.12
J226	1124010	10045974.98	3250	11.87	3392.89	61.91
J228	1123938	10045852.01	3250	11.87	3392.29	61.65
J230	1123804	10045935.25	3245	11.87	3391.61	63.53
J232	1123645	10045276.06	3242	11.87	3386.81	62.75
J234	1124172	10045197.42	3230	11.87	3385.95	67.57
J236	1123445	10045194.39	3248	11.87	3387.18	60.31
J238	1123391	10044873.79	3240	11.87	3387.13	63.75
J24	1124612	10039537.47	3227	11.87	3379.31	66
J240	1124671	10045070.39	3230	11.87	3387.78	68.37
J242	1124653	10044538.06	3220	11.87	3386.4	72.1
J244	1124859	10044541.09	3218	11.87	3386.28	72.92

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124644	10044290.05	3218	11.87	3386.26	72.91
J248	1123357	10044196.31	3234	11.87	3385.79	65.77
J250	1123990	10044106.6	3214	11.87	3380.56	72.17
J252	1123859	10043966.22	3210	11.87	3380.11	73.71
J254	1124683	10044130.4	3212	11.87	3383.44	74.28
J256	1124684	10043431.87	3205	11.87	3384	77.56
J258	1124684	10043249.28	3203	11.87	3383.89	78.38
J26	1124424	10039560.03	3211	11.87	3379.2	72.88
J260	1124882	10043093.32	3198	11.87	3383.69	80.46
J262	1124654	10042762.38	3194	11.87	3383.64	82.17
J264	1124262	10042773.79	3190	11.87	3383.53	83.86
J266	1123934	10042773.79	3190	11.87	3383.28	83.75
J268	1123637	10042773.79	3190	11.87	3383.12	83.68
J270	1123611	10042979.2	3200	11.87	3383.08	79.33
J272	1123620	10043323.58	3207	11.87	3383.06	76.29
J274	1123621	10043426.53	3212	11.87	3382.61	73.93
J276	1123382	10043327.32	3221	11.87	3382.04	69.78
J278	1123166	10043499.53	3225	11.87	3384.26	69.01
J28	1124400	10039806.74	3203	11.87	3379.01	76.27
J280	1123977	10043482.69	3198	11.87	3383.62	80.43
J282	1124279	10043484.56	3198	11.87	3383.62	80.43
J284	1124647	10042155.56	3188	11.87	3381.48	83.83
J286	1124341	10041745.28	3188	11.87	3381.01	83.63
J288	1124622	10041107.8	3188	11.87	3377.21	81.98
J290	1124622	10040543.11	3195	11.87	3377.98	79.29
J292	1124828	10040538.91	3198	11.87	3377.86	77.93
J294	1124725	10040253.41	3195	11.87	3378.75	79.62
J296	1124918	10040249.22	3203	11.87	3378.64	76.1
J298	1124145	10041286.23	3188	11.87	3373.34	80.31
J30	1124835	10039531.45	3244	11.87	3380.74	59.25
J300	1124043	10041114.1	3188	11.87	3373.38	80.33
J302	1124040	10040784.52	3189	11.87	3373.56	79.97
J304	1124196	10040784.52	3188	11.87	3373.54	80.39
J306	1123769	10040790.82	3189	11.87	3373.77	80.06
J308	1123923	10040784.52	3189	11.87	3373.79	80.07
J310	1124727	10039992.28	3198	11.87	3379.83	78.79
J312	1124757	10039992.28	3198	11.87	3379.85	78.8
J314	1124253	10039998.58	3195	11.87	3379.69	80.02

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914	10040004.87	3193	11.87	3378.85	80.53
J318	1123887	10039437.56	3210	11.87	3380.04	73.68
J32	1125376	10039940.89	3260	11.87	3380.95	52.41
J320	1123307	10040008.87	3190	11.87	3377.88	81.41
J322	1122290	10040158.62	3030	11.87	3375.93	149.89
J324	1122840	10040395.83	3184	11.87	3376.31	83.33
J326	1122999	10040261.48	3186	11.87	3374.49	81.67
J328	1123180	10040549.08	3182	11.87	3374.5	83.41
J330	1123008	10040618.35	3178	11.87	3374.5	85.14
J332	1123230	10040679.23	3182	11.87	3374.52	83.42
J334	1123283	10040817.78	3179	11.87	3374.53	84.72
J336	1123546	10041082.28	3185	11.87	3372.42	81.21
J338	1122894	10040872.36	3178	11.87	3374.78	85.26
J340	1122440	10040465.36	3169	11.87	3374.47	89.03
J342	1122623	10040640.98	3178	11.87	3374.5	85.14
J344	1122772	10040780.43	3178	11.87	3375.03	85.37
J346	1122742	10040713.3	3178	11.87	3375.09	85.4
J350	1122730	10040740.04	3178	11.87	3375.04	85.38
J352	1122722	10040733.27	3178	11.87	3375.08	85.39
J354	1122884	10041060.03	3183	11.87	3374.62	83.03
J356	1123612	10041382.77	3188	11.87	3374.22	80.69
J358	1122415	10041101.24	3192	11.87	3374.5	79.08
J36	1125567	10040442.66	3255	11.87	3381.35	54.75
J360	1122206	10041099.19	3192	11.87	3374.49	79.08
J364	1122181	10040940.96	3189	11.87	3373.24	79.83
J366	1122148	10040940.96	3189	11.87	3373.22	79.82
J368	1122218	10040940.96	3188	11.87	3373.26	80.28
J370	1122183	10041179.33	3194	11.87	3373.24	77.66
J372	1122866	10041748.55	3195	11.87	3371.99	76.69
J374	1123108	10041532.78	3188	11.87	3370.04	78.88
J376	1123750	10041802.49	3188	11.87	3371.67	79.58
J378	1122926	10042197.86	3198	11.87	3378.36	78.15
J38	1125085	10040522.38	3214	11.87	3380.73	72.24
J380	1123041	10043166.82	3222	11.87	3383.05	69.78
J382	1123039	10043368.2	3226	11.87	3383.02	68.04
J384	1123031	10043047.63	3222	11.87	3382.53	69.56
J386	1122922	10043501.52	3228	11.87	3384.57	67.84
J388	1123012	10044175.36	3237	11.87	3385.27	64.24

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018	10044629.5	3245	11.87	3383.33	59.94
J392	1123078	10045201.71	3250	11.87	3388.11	59.84
J394	1123076	10045131.84	3248	11.87	3388.07	60.69
J396	1123078	10045460.63	3252	11.87	3387.95	58.91
J398	1122934	10045989.69	3220	11.87	3371.95	65.84
J40	1125639	10040959.04	3255	11.87	3381.8	54.94
J400	1122775	10045991.74	3220	11.87	3372.63	66.14
J402	1122775	10046090.38	3205	11.87	3372.2	72.45
J404	1122471	10045806.8	3208	11.87	3388.69	78.29
J406	1122465	10046020.51	3204	11.87	3388.91	80.12
J408	1122469	10045656.79	3214	11.87	3388.59	75.65
J410	1122208	10045662.95	3212	11.87	3388.55	76.5
J412	1122586	10045406.08	3233	11.87	3384.86	65.8
J414	1122796	10045445.13	3245	11.87	3358.16	49.03
J416	1122323	10045307.44	3222	11.87	3381.66	69.18
J418	1122321	10045426.63	3220	11.87	3381.58	70.01
J42	1125221	10040817.64	3221	11.87	3381.47	69.53
J420	1122389	10045019.75	3209	11.87	3381.62	74.8
J422	1122884	10045013.59	3238	11.87	3380.95	61.94
J424	1122389	10044891.58	3209	11.87	3381.62	74.8
J426	1122376	10044716.9	3215	11.87	3381.76	72.26
J428	1122880	10044706.63	3242	11.87	3381.46	60.43
J430	1122384	10044188.21	3240	11.87	3382.44	61.72
J432	1122685	10044186.15	3240	11.87	3383.97	62.38
J434	1122742	10043462.38	3232	11.87	3382.98	65.42
J436	1122197	10043462.38	3228	11.87	3380.52	66.09
J438	1122208	10044181.61	3236	11.87	3380.98	62.82
J44	1125638	10041201.73	3255	11.87	3382.02	55.04
J440	1121938	10044181.61	3240	11.87	3380.2	60.75
J442	1121938	10043550.74	3234	11.87	3379.99	63.26
J444	1122876	10043237.38	3224	11.87	3382.98	68.88
J446	1122870	10043167.51	3223	11.87	3383	69.33
J448	1122870	10042869.54	3222	11.87	3380.68	68.76
J450	1122870	10042832.55	3222	11.87	3380.42	68.64
J452	1122578	10042832.55	3220	11.87	3379.42	69.07
J454	1122578	10043042.16	3224	11.87	3379.38	67.33
J456	1122333	10042838.71	3220	11.87	3379.05	68.92
J458	1122833	10042691.99	3221	11.87	3380.33	69.04

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125334	10041215.27	3220	11.87	3381.84	70.13
J460	1122321	10042092.86	3208	11.87	3373.94	71.9
J462	1122197	10042443.34	3216	11.87	3374.58	68.71
J464	1121807	10042513.21	3224	11.87	3374.64	65.27
J466	1121782	10042455.06	3224	11.87	3374.43	65.18
J468	1121773	10042101.51	3218	11.87	3373.84	67.53
J470	1121276	10042124.21	3222	11.87	3373.33	65.57
J472	1122185	10042098.85	3208	11.87	3373.84	71.86
J474	1121872	10041866.64	3209	11.87	3373.11	71.11
J476	1121843	10041416.6	3202	11.87	3373.18	74.17
J478	1121573	10040953.58	3197	11.87	3373.08	76.29
J48	1125796	10041656.67	3255	11.87	3382.51	55.25
J480	1121534	10041237.16	3208	11.87	3373.06	71.52
J482	1121530	10040953.58	3195	11.87	3373.07	77.16
J484	1121380	10040935.08	3195	11.87	3373.07	77.16
J486	1121376	10041089.2	3205	11.87	3373.06	72.82
J488	1121080	10041046.05	3195	11.87	3373.07	77.16
J490	1120796	10041218.67	3195	11.87	3373.07	77.16
J492	1121080	10041409.78	3215	11.87	3373.14	68.52
J498	1121390	10041422.11	3216	11.87	3373.16	68.1
J50	1125375	10041665.7	3215	11.87	3380.71	71.8
J502	1121107	10041773	3220	11.87	3373.18	66.37
J504	1121152	10042114.49	3220	11.87	3373.28	66.42
J508	1120998	10042132.01	3200	11.87	3373.17	75.03
J510	1121405	10043101.18	3215	11.87	3380.74	71.82
J512	1121401	10043516.28	3225	11.87	3380.99	67.59
J514	1121674	10043531.31	3228	11.87	3379.83	65.79
J516	1121668	10043862.16	3234	11.87	3379.88	63.21
J518	1126598	10045335.4	3307	11.87	3388.26	35.21
J52	1125329	10041667.2	3213	11.87	3380.49	72.57
J520	1126586	10044363.41	3315	11.87	3388.14	31.69
J522	1126615	10044078.7	3320	11.87	3387.95	29.44
J524	1126352	10044090.03	3300	11.87	3387.86	38.07
J526	1126512	10043329.84	3310	11.87	3387.93	33.77
J528	1124646	10044859.56	3224	11.87	3387.87	71.01
J530	1123983	10043963.76	3210	11.87	3380.65	73.94
J532	1121045	10041643.81	3220	11.87	3373.16	66.36
J534	1121276	10042111.69	3222	11.87	3373.33	65.57

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328	10040934.14	3188	11.87	3373.35	80.31
J54	1125328	10041537.83	3216	11.87	3380.41	71.24
J540	1123217	10044006.96	3230	11.87	3384.26	66.84
J542	1123718	10043708.89	3210	11.87	3385.75	76.15
J544	1122921	10044178.35	3238	11.87	3385.15	63.76
J546	1122911	10043167.34	3223	11.87	3383.05	69.35
J548	1122836	10040607.49	3178	11.87	3375.59	85.62
J550	1121429	10042126	3224	11.87	3373.45	64.76
J552	1121430	10042108.54	3224	11.87	3373.45	64.76
J554	1124114	10047573.47	3180	11.87	3396.96	94.01
J556	1123927	10047480.41	3182	11.87	3395.19	92.38
J558	1123608	10046855.61	3178	11.87	3392.71	93.03
J56	1125149	10041667.2	3203	11.87	3380.38	76.86
J560	1123546	10046620.76	3188	11.87	3392.37	88.55
J562	1123276	10046629.62	3188	11.87	3392.01	88.4
J564	1123001	10046638.48	3194	11.87	3390.84	85.29
J566	1122690	10046638.48	3194	11.87	3390.34	85.07
J568	1123546	10046478.96	3195	11.87	3392.32	85.5
J570	1123542	10046363.75	3198	11.87	3392.3	84.19
J574	1122965	10047746.28	3090	11.87	3235.04	62.84
J576	1122757	10047990	3078	11.87	3234.89	67.98
J578	1122699	10047932.39	3082	11.87	3234.87	66.24
J58	1125227	10041771	3200	11.87	3380.89	78.38
J580	1123431	10048198.26	3110	11.87	3234.9	54.12
J582	1123719	10046485.61	3205	11.87	3392.32	81.16
J584	1123919	10040419.38	3193	11.87	3375.55	79.1
J586	1124622	10040823.62	3190	11.87	3377.38	81.19
J588	1124667	10041752.7	3190	11.87	3381.45	82.96
J590	1124651	10042483.64	3190	11.87	3381.94	83.17
J592	1124676	10043672.36	3208	11.87	3383.6	76.09
J594	1124680	10043916.86	3210	11.87	3383.47	75.16
J596	1123917	10040224.41	3192	11.87	3376.93	80.13
J598	1123921	10040593.44	3190	11.87	3374.58	79.98
J60	1125153	10041772.51	3200	11.87	3380.85	78.36
J600	1123961	10039404.97	3210	11.87	3380.05	73.68
J602	1123916	10038690.63	3170	11.87	3380.58	91.24
J604	1123277	10038802.09	3200	11.87	3380.43	78.18
J606	1125614	10040659.62	3255	11.87	3381.55	54.83

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J608	1123041	10046371.78	3196	11.87	3390.33	84.2
J610	1122686	10046974.97	3192	11.87	3390.54	86.03
J612	1123831	10044868.8	3240	11.87	3387.38	63.86
J614	1123362	10044493.56	3236	11.87	3386.34	65.14
J616	1122375	10044420.94	3225	11.87	3382.1	68.07
J618	1121393	10043917.14	3230	11.87	3381.08	65.46
J62	1125227	10042052.31	3195	11.87	3382.27	81.14
J620	1121763	10044510.85	3220	11.87	3381.27	69.88
J622	1121867	10042801.6	3220	11.87	3375.95	67.57
J624	1122344	10043245.51	3222	11.87	3380.46	68.66
J626	1122184	10041674.73	3200	11.87	3373.52	75.18
J628	1122419	10041364.82	3193	11.87	3373.58	78.24
J630	1123200	10041386.25	3187	11.87	3374.28	81.15
J632	1123216	10041138.59	3184	11.87	3374.64	82.6
J634	1122841	10040180.52	3187	11.87	3377.18	82.41
J636	1123632	10040006.73	3192	11.87	3378.36	80.75
J638	1124247	10039627.33	3205	11.87	3379.94	75.8
J64	1125882	10042043.75	3255	11.87	3382.91	55.42
J640	1123272	10041808.29	3192	11.87	3371.74	77.88
J642	1125480	10043890.78	3222	11.87	3386.03	71.07
J644	1123630	10042455.51	3193	11.87	3380.64	81.3
J646	1123015	10042459.81	3196	11.87	3378.55	79.1
J648	1123944	10043323.67	3200	11.87	3383.05	79.32
J650	1124266	10043316.47	3194	11.87	3383.53	82.12
J652	1123418	10047309.59	3135	11.87	3393.61	112.05
J654	1123431	10047915.46	3100	11.87	3234.94	58.47
J656	1125436	10040501.92	3230	11.87	3380.95	65.4
J658	1123772	10040005.81	3192	11.87	3378.6	80.85
J66	1125912	10042284.87	3254	11.87	3383.22	55.99
J660	1122417	10041206.64	3193	11.87	3374.05	78.45
J662	1121816	10042659.51	3222	11.87	3375.18	66.37
J664	1121601	10042286.19	3224	11.87	3373.7	64.87
J666	1121217	10043510.76	3223	11.87	3381	68.46
J668	1121876	10043168.63	3224	11.87	3377.57	66.54
J670	1123316	10042457.7	3193	11.87	3379.2	80.68
J672	1124092	10042773.79	3190	11.87	3383.39	83.8
J674	1123980	10043718.54	3204	11.87	3381.78	77.03
J676	1123903	10045203.74	3235	11.87	3386.11	65.48

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J678	1123443	10048158.37	3110	11.87	3234.9	54.12
J68	1125673	10042286.37	3228	11.87	3376.44	64.32
J680	1123381	10048224.98	3110	11.87	3234.9	54.12
J682	1123063	10048169.28	3100	11.87	3234.89	58.45
J684	1122895	10047897.93	3086	11.87	3234.96	64.54
J688	1123856	10047023.27	3180	11.87	3393.84	92.66
J690	1122627	10045016.79	3218	11.87	3381.11	70.67
J692	1121938	10043885.16	3238	11.87	3380.04	61.54
J694	1122203	10043832.47	3238	11.87	3380.66	61.82
J696	1122682	10043745.94	3238	11.87	3383.39	63
J698	1125019	10042053.89	3193	11.87	3382.21	81.98
J70	1125673	10042387.16	3228	11.87	3376.38	64.29
J700	1125011	10041753.69	3192	11.87	3382.2	82.41
J702	1124652	10042638.28	3192	11.87	3382.65	82.61
J704	1124649	10042317.38	3189	11.87	3381.57	83.44
J706	1125145	10043428.94	3210	11.87	3384.38	75.56
J708	1125467	10043244.32	3216	11.87	3384.27	72.91
J710	1124675	10043553.39	3206	11.87	3383.74	77.01
J712	1123456	10048115.41	3110	11.87	3234.91	54.12
J714	1123332	10048224.98	3110	11.87	3234.9	54.12
J72	1125458	10042299.91	3214	11.87	3372.67	68.75
J720	1124206	10047607.9	3180	11.87	3397.89	94.41
J722	1126592	10044849.4	3307	11.87	3388.35	35.25
J724	1125103	10045483.78	3250	11.87	3395.82	63.18
J726	1122233	10047037.76	3065	11.87	3234.63	73.5
J728	1121872	10047176.64	3060	11.87	3234.63	75.67
J730	1121327	10045288.28	3045	11.87	3234.5	82.11
J732	1120850	10044576.25	3015	11.87	3234.49	95.1
J734	1126122	10043419.85	3248	11.87	3385.38	59.53
J736	1125637	10041358.03	3257	11.87	3382.18	54.24
J738	1123723	10044190.25	3224	11.87	3385.76	70.09
J74	1125458	10042412.74	3214	11.87	3372.42	68.64
J740	1125109	10047291.81	3249	11.87	3397.44	64.32
J742	1125248	10039960.93	3260	11.87	3380.43	52.18
J744	1125221	10049016.34	3197	11.87	3398.29	87.22
J746	1125860	10048967.73	3223	11.87	3398.48	76.04
J748	1125770	10047901.75	3247	11.87	3398.97	65.85
J750	1124993	10050431.92	3220	11.87	3398.08	77.16

LaVerkin Pond HGL @ 3400 System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J752	1124949	10050388.73	3218	11.87	3398.08	78.03
J754	1123450	10048727.78	3085	11.87	3397.8	135.54
J756	1123881	10048778.13	3111	11.87	3397.76	124.25
J758	1123501	10048584.99	3113	11.87	3397.82	123.41
J76	1125256	10042430.79	3205	11.87	3372.29	72.49
J760	1123668	10048341.5	3130	11.87	3397.83	116.05
J762	1123897	10038697	3170	11.87	3380.52	91.22
J78	1125242	10042302.92	3205	11.87	3372.14	72.42
J80	1125361	10042301.42	3209	11.87	3372.21	70.72
J82	1125361	10042197.62	3210	11.87	3372.15	70.26
J84	1125935	10042714.17	3255	11.87	3383.84	55.83
J86	1126252	10042705.15	3287	11.87	3383.83	41.96
J88	1125935	10042756.43	3255	11.87	3383.94	55.87
J90	1125457	10042760.95	3225	11.87	3378.34	66.44
J92	1125457	10042860.23	3218	11.87	3378.28	69.45
J94	1125454	10042664.67	3221	11.87	3377.89	67.98
J96	1125323	10042667.68	3209	11.87	3377.81	73.14
J98	1125453	10042630.07	3217	11.87	3377.86	69.7
V8002_NU	1121346	10045216.01	3043	11.87	3234.49	82.97
V8002_ND	1121367	10045145.96	3043	11.87	3234.49	82.97
V8004_NU	1123222	10047426.2	3120	11.87	3393.06	118.32
V8004_ND	1123060	10047523.21	3120	11.87	3235.39	50
V8010_NU	1122217	10046990.55	3065	11.87	3234.62	73.5
V8010_ND	1121854	10046290.76	3065	11.87	3234.62	73.5
J828	1122724	10046377.25	3195.06	11.87	3389.44	84.22
J818	1122474	10045568.73	3227.64		3388.54	69.72
J820	1123869	10045533.78	3245.99		3391.06	62.86
J822	1124182	10045517.4	3242		3391.06	64.59
J824	1123316	10045546.89	3252		3389.33	59.51
J826	1123305	10045198.34	3249.3		3389.15	60.6
J832	1124304	10046105.17	3250.91		3394.11	62.05
J838	1125215	10049058.1	3211.79		3398.08	80.72
J834	1122944	10045557.14	3241.24		3388.53	63.82

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999.3	10043006	3254	9.17	3390.34	59.08
J102	1125788.6	10043009	3236	9.17	3388.79	66.2
J104	1125787.1	10042941	3240	9.17	3388.76	64.46
J106	1125744.9	10043014	3234	9.17	3388.66	67.01
J108	1125746.4	10043169	3238	9.17	3388.66	65.28
J110	1125653.1	10043014	3227	9.17	3388.62	70.03
J112	1126111	10043156	3255	9.17	3390.57	58.74
J114	1126189.2	10043213	3260	9.17	3390.2	56.42
J116	1126077.9	10043285	3250	9.17	3390.75	60.99
J118	1125925.8	10043283	3244	9.17	3390.73	63.58
J120	1126005.6	10043423	3248	9.17	3390.95	61.94
J122	1125841.3	10043421	3242	9.17	3390.79	64.47
J124	1125842.9	10043313	3239	9.17	3390.75	65.75
J126	1125666.8	10043422	3228	9.17	3390.64	70.47
J128	1125668.3	10043677	3232	9.17	3389.92	68.43
J130	1125668.3	10043732	3233	9.17	3389.9	67.98
J132	1125164.1	10043574	3220	9.17	3389.7	73.53
J134	1125471.1	10043427	3218	9.17	3390.51	74.75
J136	1125463.6	10043063	3215	9.17	3390.19	75.91
J138	1125894	10043888	3247	9.17	3391.9	62.79
J14	1123884.3	10038702	3170	9.17	3387.92	94.43
J140	1125067.4	10043894	3220	9.17	3391.2	74.18
J142	1125820	10044147	3253	9.17	3392.48	60.44
J144	1125157.7	10044156	3229	9.17	3392.24	70.73
J146	1125772	10044440	3249	9.17	3393.1	62.44
J150	1125760.2	10044468	3249	9.17	3393.21	62.49
J152	1125070.4	10044495	3230	9.17	3392.95	70.61
J154	1125604.7	10044857	3250	9.17	3394.09	62.43
J156	1124669.9	10044862	3224	9.17	3392.51	73.02
J158	1125083.8	10044940	3234	9.17	3394.45	69.52
J16	1122873.1	10038869	3220	9.17	3387.89	72.75
J160	1125559.4	10044955	3250	9.17	3394.49	62.61
J162	1125461.5	10045164	3250	9.17	3395.26	62.94
J164	1125082.3	10045119	3237	9.17	3395.22	68.56
J166	1125311.2	10045480	3248	9.17	3396.4	64.3
J170	1125095.7	10046118	3253	9.17	3397.62	62.67
J174	1125098.7	10046332	3255	9.17	3397.76	61.86
J176	1125100.3	10046582	3252	9.17	3397.92	63.23

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446.5	10046575	3264	9.17	3397.91	58.02
J18	1124240	10039216	3210	9.17	3387.77	77.03
J180	1125708.8	10046321	3268	9.17	3397.65	56.18
J182	1125708.8	10046551	3274	9.17	3397.65	53.58
J184	1125954.1	10046316	3277	9.17	3397.64	52.27
J186	1125958.6	10046567	3282	9.17	3397.64	50.1
J188	1126222	10046313	3287	9.17	3397.64	47.94
J190	1125106.7	10046822	3249	9.17	3398.07	64.59
J192	1125604.9	10046828	3267	9.17	3397.83	56.69
J194	1126476.6	10046310	3290	9.17	3397.64	46.64
J196	1126225.2	10046578	3288	9.17	3397.65	47.51
J198	1126452.5	10046572	3290	9.17	3397.65	46.64
J20	1124935.7	10039498	3260	9.17	3388.12	55.52
J200	1126153	10046838	3286	9.17	3397.69	48.4
J202	1126401.3	10046870	3290	9.17	3397.69	46.66
J204	1125109.7	10047063	3250	9.17	3398.24	64.23
J206	1125853.2	10047423	3272	9.17	3397.78	54.5
J208	1125600.4	10047197	3268	9.17	3397.83	56.26
J210	1125865.3	10047045	3275	9.17	3397.78	53.2
J212	1126130.5	10047146	3284	9.17	3397.69	49.26
J214	1126359.2	10047149	3290	9.17	3397.69	46.66
J216	1126359.2	10047412	3285	9.17	3397.71	48.84
J218	1126130.5	10047418	3278	9.17	3397.72	51.87
J22	1124947.8	10039509	3260	9.17	3388.13	55.52
J220	1125104.9	10047917	3205	9.17	3398.8	83.97
J222	1125104.9	10047957	3205	9.17	3398.81	83.98
J224	1124995	10047917	3197	9.17	3398.79	87.43
J226	1124010.1	10045975	3250	9.17	3395.59	63.08
J228	1123938.1	10045852	3250	9.17	3395.22	62.92
J230	1123803.7	10045935	3245	9.17	3394.8	64.91
J232	1123645.1	10045276	3242	9.17	3391.83	64.92
J234	1124171.6	10045197	3230	9.17	3391.3	69.89
J236	1123445.4	10045194	3248	9.17	3392.06	62.42
J238	1123390.9	10044874	3240	9.17	3392.03	65.87
J24	1124612.1	10039537	3227	9.17	3387.2	69.42
J240	1124671	10045070	3230	9.17	3392.43	70.38
J242	1124652.8	10044538	3220	9.17	3391.58	74.35
J244	1124858.6	10044541	3218	9.17	3391.5	75.18

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124643.7	10044290	3218	9.17	3391.49	75.17
J248	1123356.6	10044196	3234	9.17	3391.2	68.11
J250	1123989.9	10044107	3214	9.17	3387.96	75.38
J252	1123858.9	10043966	3210	9.17	3387.68	76.99
J254	1124682.6	10044130	3212	9.17	3389.75	77.02
J256	1124684	10043432	3205	9.17	3390.09	80.2
J258	1124684	10043249	3203	9.17	3390.03	81.04
J26	1124424	10039560	3211	9.17	3387.13	76.32
J260	1124881.9	10043093	3198	9.17	3389.9	83.15
J262	1124653.5	10042762	3194	9.17	3389.87	84.87
J264	1124261.5	10042774	3190	9.17	3389.8	86.57
J266	1123934.2	10042774	3190	9.17	3389.65	86.51
J268	1123637.4	10042774	3190	9.17	3389.55	86.47
J270	1123610.7	10042979	3200	9.17	3389.52	82.12
J272	1123619.5	10043324	3207	9.17	3389.51	79.08
J274	1123621.4	10043427	3212	9.17	3389.24	76.8
J276	1123381.7	10043327	3221	9.17	3388.88	72.74
J278	1123166.1	10043500	3225	9.17	3390.25	71.6
J28	1124399.9	10039807	3203	9.17	3387.02	79.73
J280	1123977.2	10043483	3198	9.17	3389.86	83.13
J282	1124278.7	10043485	3198	9.17	3389.86	83.13
J284	1124647.5	10042156	3188	9.17	3388.53	86.89
J286	1124341.1	10041745	3188	9.17	3388.25	86.77
J288	1124622.2	10041108	3188	9.17	3385.9	85.75
J290	1124622.2	10040543	3195	9.17	3386.38	82.92
J292	1124828	10040539	3198	9.17	3386.3	81.59
J294	1124725.1	10040253	3195	9.17	3386.86	83.13
J296	1124918.3	10040249	3203	9.17	3386.78	79.63
J298	1124145.4	10041286	3188	9.17	3383.5	84.71
J30	1124834.9	10039531	3244	9.17	3388.08	62.43
J300	1124042.5	10041114	3188	9.17	3383.53	84.72
J302	1124040.4	10040785	3189	9.17	3383.64	84.34
J304	1124195.8	10040785	3188	9.17	3383.62	84.76
J306	1123769.5	10040791	3189	9.17	3383.77	84.39
J308	1123922.8	10040785	3189	9.17	3383.78	84.4
J310	1124727.2	10039992	3198	9.17	3387.52	82.12
J312	1124756.6	10039992	3198	9.17	3387.53	82.12
J314	1124252.5	10039999	3195	9.17	3387.43	83.38

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914.4	10040005	3193	9.17	3386.91	84.02
J318	1123886.8	10039438	3210	9.17	3387.65	76.98
J32	1125375.6	10039941	3260	9.17	3388.22	55.56
J320	1123306.8	10040009	3190	9.17	3386.31	85.06
J322	1122289.5	10040159	3030	9.17	3385.1	153.87
J324	1122839.8	10040396	3184	9.17	3385.34	87.24
J326	1122999.4	10040261	3186	9.17	3384.22	85.89
J328	1123180.1	10040549	3182	9.17	3384.22	87.62
J330	1123007.8	10040618	3178	9.17	3384.22	89.35
J332	1123230.5	10040679	3182	9.17	3384.23	87.63
J334	1123283	10040818	3179	9.17	3384.24	88.93
J336	1123545.5	10041082	3185	9.17	3382.93	85.76
J338	1122894.4	10040872	3178	9.17	3384.39	89.43
J340	1122440.4	10040465	3169	9.17	3384.2	93.25
J342	1122623.3	10040641	3178	9.17	3384.22	89.36
J344	1122772.2	10040780	3178	9.17	3384.55	89.5
J346	1122741.5	10040713	3178	9.17	3384.58	89.51
J350	1122729.7	10040740	3178	9.17	3384.56	89.5
J352	1122722.3	10040733	3178	9.17	3384.58	89.51
J354	1122884.2	10041060	3183	9.17	3384.29	87.22
J356	1123612	10041383	3188	9.17	3384.05	84.95
J358	1122415.4	10041101	3192	9.17	3384.22	83.29
J36	1125567.1	10040443	3255	9.17	3388.47	57.83
J360	1122205.7	10041099	3192	9.17	3384.22	83.29
J364	1122181.1	10040941	3189	9.17	3383.44	84.25
J366	1122148.2	10040941	3189	9.17	3383.43	84.24
J368	1122218.1	10040941	3188	9.17	3383.45	84.69
J370	1122183.1	10041179	3194	9.17	3383.44	82.08
J372	1122865.7	10041749	3195	9.17	3382.67	81.32
J374	1123108.3	10041533	3188	9.17	3381.46	83.82
J376	1123749.9	10041802	3188	9.17	3382.47	84.26
J378	1122925.9	10042198	3198	9.17	3386.6	81.72
J38	1125085.4	10040522	3214	9.17	3388.08	75.43
J380	1123041.2	10043167	3222	9.17	3389.5	72.58
J382	1123039.2	10043368	3226	9.17	3389.49	70.84
J384	1123030.9	10043048	3222	9.17	3389.18	72.44
J386	1122922.2	10043502	3228	9.17	3390.45	70.39
J388	1123012.2	10044175	3237	9.17	3390.88	66.67

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018.4	10044630	3245	9.17	3389.67	62.69
J392	1123078	10045202	3250	9.17	3392.63	61.8
J394	1123075.9	10045132	3248	9.17	3392.61	62.66
J396	1123078	10045461	3252	9.17	3392.54	60.89
J398	1122933.5	10045990	3220	9.17	3382.62	70.46
J40	1125639.4	10040959	3255	9.17	3388.74	57.95
J400	1122775.2	10045992	3220	9.17	3383.04	70.64
J402	1122775.2	10046090	3205	9.17	3382.77	77.03
J404	1122470.9	10045807	3208	9.17	3392.99	80.16
J406	1122464.8	10046021	3204	9.17	3393.13	81.95
J408	1122468.9	10045657	3214	9.17	3392.93	77.53
J410	1122207.8	10045663	3212	9.17	3392.9	78.39
J412	1122586.1	10045406	3233	9.17	3390.62	68.3
J414	1122795.8	10045445	3245	9.17	3374.07	55.93
J416	1122322.9	10045307	3222	9.17	3388.64	72.21
J418	1122320.8	10045427	3220	9.17	3388.6	73.05
J42	1125221	10040818	3221	9.17	3388.54	72.59
J420	1122388.7	10045020	3209	9.17	3388.62	77.83
J422	1122884.2	10045014	3238	9.17	3388.2	65.08
J424	1122388.6	10044892	3209	9.17	3388.62	77.83
J426	1122376.3	10044717	3215	9.17	3388.7	75.27
J428	1122880	10044707	3242	9.17	3388.52	63.49
J430	1122384.4	10044188	3240	9.17	3389.13	64.62
J432	1122684.6	10044186	3240	9.17	3390.07	65.03
J434	1122742.1	10043462	3232	9.17	3389.46	68.23
J436	1122197.2	10043462	3228	9.17	3387.94	69.3
J438	1122207.5	10044182	3236	9.17	3388.23	65.96
J44	1125638	10041202	3255	9.17	3388.88	58.01
J440	1121938.2	10044182	3240	9.17	3387.74	64.01
J442	1121938.2	10043551	3234	9.17	3387.61	66.56
J444	1122875.7	10043237	3224	9.17	3389.46	71.69
J446	1122869.5	10043168	3223	9.17	3389.47	72.13
J448	1122869.5	10042870	3222	9.17	3388.04	71.95
J450	1122869.5	10042833	3222	9.17	3387.88	71.88
J452	1122577.6	10042833	3220	9.17	3387.26	72.47
J454	1122577.6	10043042	3224	9.17	3387.24	70.73
J456	1122332.9	10042839	3220	9.17	3387.03	72.37
J458	1122832.5	10042692	3221	9.17	3387.82	72.28

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125333.9	10041215	3220	9.17	3388.77	73.13
J460	1122321.2	10042093	3208	9.17	3383.87	76.2
J462	1122197.2	10042443	3216	9.17	3384.26	72.91
J464	1121806.6	10042513	3224	9.17	3384.3	69.46
J466	1121781.6	10042455	3224	9.17	3384.17	69.4
J468	1121773.3	10042102	3218	9.17	3383.81	71.84
J470	1121275.8	10042124	3222	9.17	3383.49	69.98
J472	1122184.8	10042099	3208	9.17	3383.8	76.18
J474	1121872.3	10041867	3209	9.17	3383.36	75.55
J476	1121843.5	10041417	3202	9.17	3383.4	78.6
J478	1121573.4	10040954	3197	9.17	3383.33	80.74
J48	1125796.1	10041657	3255	9.17	3389.18	58.14
J480	1121534.4	10041237	3208	9.17	3383.33	75.97
J482	1121530.2	10040954	3195	9.17	3383.33	81.6
J484	1121380.2	10040935	3195	9.17	3383.33	81.6
J486	1121376	10041089	3205	9.17	3383.33	77.27
J488	1121080	10041046	3195	9.17	3383.33	81.61
J490	1120796.2	10041219	3195	9.17	3383.33	81.6
J492	1121080	10041410	3215	9.17	3383.37	72.96
J498	1121390.4	10041422	3216	9.17	3383.39	72.53
J50	1125374.5	10041666	3215	9.17	3388.07	74.99
J502	1121106.7	10041773	3220	9.17	3383.4	70.8
J504	1121151.6	10042114	3220	9.17	3383.46	70.83
J508	1120997.8	10042132	3200	9.17	3383.39	79.46
J510	1121404.9	10043101	3215	9.17	3388.07	74.99
J512	1121400.8	10043516	3225	9.17	3388.23	70.73
J514	1121674.3	10043531	3228	9.17	3387.51	69.11
J516	1121668.1	10043862	3234	9.17	3387.54	66.53
J518	1126598.3	10045335	3307	9.17	3392.73	37.15
J52	1125329.4	10041667	3213	9.17	3387.93	75.8
J520	1126585.9	10044363	3315	9.17	3392.66	33.65
J522	1126614.9	10044079	3320	9.17	3392.54	31.43
J524	1126475.1	10044087	3300	9.17	3392.48	40.07
J526	1126512	10043330	3310	9.17	3392.53	35.76
J528	1124645.6	10044860	3224	9.17	3392.49	73.01
J530	1123982.9	10043964	3210	9.17	3388.02	77.14
J532	1121044.8	10041644	3220	9.17	3383.39	70.79
J534	1121275.6	10042112	3222	9.17	3383.49	69.98

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328.1	10040934	3188	9.17	3383.51	84.71
J54	1125327.9	10041538	3216	9.17	3387.88	74.47
J540	1123216.8	10044007	3230	9.17	3390.25	69.44
J542	1123717.6	10043709	3210	9.17	3391.18	78.5
J544	1122921.4	10044178	3238	9.17	3390.8	66.21
J546	1122910.7	10043167	3223	9.17	3389.5	72.15
J548	1122836.4	10040607	3178	9.17	3384.9	89.65
J550	1121429.3	10042126	3224	9.17	3383.57	69.14
J552	1121429.7	10042109	3224	9.17	3383.57	69.14
J554	1124113.5	10047573	3180	9.17	3398.11	94.51
J556	1123927.3	10047480	3182	9.17	3397.02	93.17
J558	1123608.1	10046856	3178	9.17	3395.48	94.23
J56	1125148.8	10041667	3203	9.17	3387.86	80.1
J560	1123546	10046621	3188	9.17	3395.27	89.81
J562	1123275.6	10046630	3188	9.17	3395.05	89.71
J564	1123000.7	10046638	3194	9.17	3394.32	86.8
J566	1122690.4	10046638	3194	9.17	3394.01	86.67
J568	1123546	10046479	3195	9.17	3395.24	86.76
J570	1123541.6	10046364	3198	9.17	3395.23	85.46
J572	1123541.6	10046093	3218	9.17	3235.17	62.9
J574	1122965.3	10047746	3090	9.17	3235.08	68.06
J576	1122756.9	10047990	3078	9.17	3235.07	66.32
J578	1122699.2	10047932	3082	9.17	3388.18	81.54
J58	1125227	10041771	3200	9.17	3235.09	54.2
J580	1123430.8	10048198	3110	9.17	3395.24	82.43
J582	1123719	10046486	3205	9.17	3384.87	83.14
J584	1123918.9	10040419	3193	9.17	3386	84.93
J586	1124622.2	10040824	3190	9.17	3388.52	86.02
J588	1124667	10041753	3190	9.17	3388.82	86.15
J590	1124650.8	10042484	3190	9.17	3389.85	78.8
J592	1124676.5	10043672	3208	9.17	3389.77	77.89
J594	1124679.8	10043917	3210	9.17	3385.72	83.94
J596	1123916.8	10040224	3192	9.17	3384.27	84.18
J598	1123920.7	10040593	3190	9.17	3388.15	81.52
J60	1125153.3	10041773	3200	9.17	3387.66	76.98
J600	1123960.9	10039405	3210	9.17	3387.99	94.45
J602	1123915.7	10038691	3170	9.17	3387.89	81.41
J604	1123276.7	10038802	3200	9.17	3388.58	57.88

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125613.8	10040660	3255	9.17	3394.01	85.8
J608	1123041.2	10046372	3196	9.17	3394.14	87.59
J610	1122685.5	10046975	3192	9.17	3392.18	65.94
J612	1123831	10044869	3240	9.17	3391.54	67.39
J614	1123362.1	10044494	3236	9.17	3388.91	71.02
J616	1122374.6	10044421	3225	9.17	3388.28	68.58
J618	1121393.2	10043917	3230	9.17	3389.03	84.07
J62	1125227	10042052	3195	9.17	3388.4	72.97
J620	1121762.7	10044511	3220	9.17	3385.11	71.54
J622	1121867.2	10042802	3220	9.17	3387.91	71.89
J624	1122343.9	10043246	3222	9.17	3383.61	79.56
J626	1122184	10041675	3200	9.17	3383.65	82.61
J628	1122418.5	10041365	3193	9.17	3384.08	85.4
J630	1123200.4	10041386	3187	9.17	3384.31	86.79
J632	1123215.5	10041139	3184	9.17	3385.88	86.18
J634	1122840.7	10040181	3187	9.17	3386.61	84.33
J636	1123632.3	10040007	3192	9.17	3387.59	79.12
J638	1124246.6	10039627	3205	9.17	3389.43	58.25
J64	1125882	10042044	3255	9.17	3382.51	82.55
J640	1123271.9	10041808	3192	9.17	3391.35	73.38
J642	1125480.4	10043891	3222	9.17	3388.01	84.5
J644	1123629.7	10042456	3193	9.17	3386.72	82.64
J646	1123015	10042460	3196	9.17	3389.51	82.11
J648	1123944.2	10043324	3200	9.17	3389.8	84.84
J650	1124266.5	10043316	3194	9.17	3396.04	113.11
J652	1123418.2	10047310	3135	9.17	3235.11	58.54
J654	1123431.2	10047915	3100	9.17	3388.21	68.55
J656	1125435.9	10040502	3230	9.17	3386.76	84.39
J658	1123772.5	10040006	3192	9.17	3389.62	58.76
J66	1125912	10042285	3254	9.17	3383.94	82.73
J660	1122416.7	10041207	3193	9.17	3384.64	70.47
J662	1121815.8	10042660	3222	9.17	3383.72	69.21
J664	1121600.9	10042286	3224	9.17	3388.23	71.6
J666	1121217.4	10043511	3223	9.17	3386.11	70.24
J668	1121875.6	10043169	3224	9.17	3387.12	84.11
J670	1123316.2	10042458	3193	9.17	3389.72	86.54
J672	1124092	10042774	3190	9.17	3388.72	80.04
J674	1123980	10043719	3204	9.17	3391.4	67.77

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903.4	10045204	3235	9.17	3235.09	54.2
J678	1123442.7	10048158	3110	9.17	3385.42	68.21
J68	1125672.7	10042286	3228	9.17	3235.09	54.2
J680	1123380.6	10048225	3110	9.17	3235.08	58.53
J682	1123063.1	10048169	3100	9.17	3235.12	64.62
J684	1122895.5	10047898	3086	9.17	3396.18	93.67
J688	1123855.6	10047023	3180	9.17	3388.3	73.79
J690	1122626.7	10045017	3218	9.17	3387.64	64.84
J692	1121938.2	10043885	3238	9.17	3388.03	65.01
J694	1122202.5	10043832	3238	9.17	3389.71	65.74
J696	1122682.3	10043746	3238	9.17	3388.99	84.92
J698	1125018.8	10042054	3193	9.17	3385.38	68.19
J70	1125672.7	10042387	3228	9.17	3388.99	85.35
J700	1125011	10041754	3192	9.17	3389.26	85.47
J702	1124652.3	10042638	3192	9.17	3388.59	86.48
J704	1124649.1	10042317	3189	9.17	3390.33	78.14
J706	1125145.1	10043429	3210	9.17	3390.26	75.51
J708	1125467.3	10043244	3216	9.17	3389.93	79.7
J710	1124674.9	10043553	3206	9.17	3235.09	54.2
J712	1123455.6	10048115	3110	9.17	3235.09	54.2
J714	1123332.5	10048225	3110	9.17	3383.08	73.26
J72	1125457.5	10042300	3214	9.17	3398.69	94.76
J720	1124205.5	10047608	3180	9.17	3392.79	37.17
J722	1126592.1	10044849	3307	9.17	3397.4	63.87
J724	1125103.4	10045484	3250	9.17	3234.92	73.63
J726	1122233.4	10047038	3065	9.17	3234.92	75.79
J728	1121872.3	10047177	3060	9.17	3234.84	82.26
J730	1121326.8	10045288	3045	9.17	3234.83	95.25
J732	1120850	10044576	3015	9.17	3390.95	61.94
J734	1126122	10043420	3248	9.17	3388.98	57.19
J736	1125636.5	10041358	3257	9.17	3391.18	72.44
J738	1123723	10044190	3224	9.17	3382.93	73.2
J74	1125457.5	10042413	3214	9.17	3398.4	64.74
J740	1125109.4	10047292	3249	9.17	3387.9	55.42
J742	1125247.9	10039961	3260	9.17	3398.93	87.5
J744	1125220.9	10049016	3197	9.17	3399.05	76.28
J746	1125859.8	10048968	3223	9.17	3399.36	66.02
J748	1125769.5	10047902	3247	9.17	3398.8	77.48

Projected Worst Case Demand (2038) System Performance - (PDD)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124992.9	10050432	3220	9.17	3398.8	78.34
J752	1124948.6	10050389	3218	9.17	3398.63	135.9
J754	1123449.9	10048728	3085	9.17	3398.6	124.62
J756	1123880.9	10048778	3111	9.17	3398.64	123.77
J758	1123501.1	10048585	3113	9.17	3382.85	77.06
J76	1125255.8	10042431	3205	9.17	3398.65	116.41
J760	1123667.7	10048341	3130	9.17	3387.95	94.44
J762	1123896.5	10038697	3170	9.17	3382.75	77.02
J78	1125242.3	10042303	3205	9.17	3382.8	75.31
J80	1125361.2	10042301	3209	9.17	3382.76	74.86
J82	1125361.2	10042198	3210	9.17	3390	58.5
J84	1125934.7	10042714	3255	9.17	3390	44.63
J86	1126252.3	10042705	3287	9.17	3390.06	58.52
J88	1125934.6	10042756	3255	9.17	3386.59	70.02
J90	1125457.4	10042761	3225	9.17	3386.56	73.04
J92	1125457.4	10042860	3218	9.17	3386.31	71.63
J94	1125454.4	10042665	3221	9.17	3386.26	76.81
J96	1125323.5	10042668	3209	9.17	3386.3	73.36
J98	1125452.9	10042630	3217	9.17	3234.84	83.12
V8002_NU	1121346.3	10045216	3043	9.17	3234.84	83.12
V8002_ND	1121366.9	10045146	3043	9.17	3395.7	119.46
V8004_NU	1123221.5	10047426	3120	9.17	3235.39	50
V8004_ND	1123060.2	10047523	3120	9.17	3234.92	73.62
V8010_NU	1122217.1	10046991	3065	9.17	3234.92	73.62
V8010_ND	1121854.4	10046291	3065	9.17	3393.46	85.97

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J100	1125999.3	10043006	3254	10.59	3387.37	57.79
J102	1125788.6	10043009	3236	10.59	3385.34	64.71
J104	1125787.1	10042941	3240	10.59	3385.31	62.96
J106	1125744.9	10043014	3234	10.59	3385.16	65.5
J108	1125746.4	10043169	3238	10.59	3385.16	63.77
J110	1125653.1	10043014	3227	10.59	3385.12	68.51
J112	1126111	10043156	3255	10.59	3387.66	57.48
J114	1126189.2	10043213	3260	10.59	3387.18	55.11
J116	1126077.9	10043285	3250	10.59	3387.9	59.75
J118	1125925.8	10043283	3244	10.59	3387.88	62.34
J120	1126005.6	10043423	3248	10.59	3388.16	60.73
J122	1125841.3	10043421	3242	10.59	3387.96	63.24
J124	1125842.9	10043313	3239	10.59	3387.9	64.52
J126	1125666.8	10043422	3228	10.59	3387.76	69.22
J128	1125668.3	10043677	3232	10.59	3386.82	67.08
J130	1125668.3	10043732	3233	10.59	3386.79	66.64
J132	1125164.1	10043574	3220	10.59	3386.53	72.16
J134	1125471.1	10043427	3218	10.59	3387.59	73.48
J136	1125463.6	10043063	3215	10.59	3387.18	74.6
J138	1125894	10043888	3247	10.59	3389.41	61.71
J14	1123884.3	10038702	3170	10.59	3384.2	92.81
J140	1125067.4	10043894	3220	10.59	3388.49	73.01
J142	1125820	10044147	3253	10.59	3390.16	59.43
J144	1125157.7	10044156	3229	10.59	3389.84	69.69
J146	1125772	10044440	3249	10.59	3390.97	61.52
J150	1125760.2	10044468	3249	10.59	3391.12	61.58
J152	1125070.4	10044495	3230	10.59	3390.78	69.67
J154	1125604.7	10044857	3250	10.59	3392.26	61.64
J156	1124669.9	10044862	3224	10.59	3390.21	72.02
J158	1125083.8	10044940	3234	10.59	3392.74	68.78
J16	1122873.1	10038869	3220	10.59	3384.16	71.13
J160	1125559.4	10044955	3250	10.59	3392.79	61.87
J162	1125461.5	10045164	3250	10.59	3393.8	62.31
J164	1125082.3	10045119	3237	10.59	3393.75	67.92
J166	1125311.2	10045480	3248	10.59	3395.29	63.82
J170	1125095.7	10046118	3253	10.59	3396.89	62.35
J174	1125098.7	10046332	3255	10.59	3397.07	61.56
J176	1125100.3	10046582	3252	10.59	3397.28	62.95

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J178	1125446.5	10046575	3264	10.59	3397.27	57.75
J18	1124240	10039216	3210	10.59	3384.01	75.4
J180	1125708.8	10046321	3268	10.59	3396.93	55.87
J182	1125708.8	10046551	3274	10.59	3396.93	53.26
J184	1125954.1	10046316	3277	10.59	3396.91	51.96
J186	1125958.6	10046567	3282	10.59	3396.91	49.79
J188	1126222	10046313	3287	10.59	3396.91	47.63
J190	1125106.7	10046822	3249	10.59	3397.48	64.34
J192	1125604.9	10046828	3267	10.59	3397.17	56.4
J194	1126476.6	10046310	3290	10.59	3396.91	46.32
J196	1126225.2	10046578	3288	10.59	3396.93	47.2
J198	1126452.5	10046572	3290	10.59	3396.92	46.33
J20	1124935.7	10039498	3260	10.59	3384.47	53.93
J200	1126153	10046838	3286	10.59	3396.98	48.09
J202	1126401.3	10046870	3290	10.59	3396.98	46.35
J204	1125109.7	10047063	3250	10.59	3397.7	64
J206	1125853.2	10047423	3272	10.59	3397.1	54.21
J208	1125600.4	10047197	3268	10.59	3397.16	55.97
J210	1125865.3	10047045	3275	10.59	3397.09	52.9
J212	1126130.5	10047146	3284	10.59	3396.99	48.96
J214	1126359.2	10047149	3290	10.59	3396.98	46.36
J216	1126359.2	10047412	3285	10.59	3397.01	48.53
J218	1126130.5	10047418	3278	10.59	3397.02	51.57
J22	1124947.8	10039509	3260	10.59	3384.47	53.93
J220	1125104.9	10047917	3205	10.59	3398.44	83.82
J222	1125104.9	10047957	3205	10.59	3398.44	83.82
J224	1124995	10047917	3197	10.59	3398.42	87.27
J226	1124010.1	10045975	3250	10.59	3394.23	62.5
J228	1123938.1	10045852	3250	10.59	3393.75	62.29
J230	1123803.7	10045935	3245	10.59	3393.2	64.21
J232	1123645.1	10045276	3242	10.59	3389.32	63.83
J234	1124171.6	10045197	3230	10.59	3388.62	68.73
J236	1123445.4	10045194	3248	10.59	3389.61	61.36
J238	1123390.9	10044874	3240	10.59	3389.57	64.81
J24	1124612.1	10039537	3227	10.59	3383.26	67.71
J240	1124671	10045070	3230	10.59	3390.1	69.37
J242	1124652.8	10044538	3220	10.59	3388.99	73.22
J244	1124858.6	10044541	3218	10.59	3388.89	74.05

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J246	1124643.7	10044290	3218	10.59	3388.87	74.04
J248	1123356.6	10044196	3234	10.59	3388.49	66.94
J250	1123989.9	10044107	3214	10.59	3384.27	73.78
J252	1123858.9	10043966	3210	10.59	3383.9	75.35
J254	1124682.6	10044130	3212	10.59	3386.59	75.65
J256	1124684	10043432	3205	10.59	3387.04	78.88
J258	1124684	10043249	3203	10.59	3386.96	79.71
J26	1124424	10039560	3211	10.59	3383.17	74.6
J260	1124881.9	10043093	3198	10.59	3386.8	81.81
J262	1124653.5	10042762	3194	10.59	3386.76	83.52
J264	1124261.5	10042774	3190	10.59	3386.67	85.22
J266	1123934.2	10042774	3190	10.59	3386.46	85.13
J268	1123637.4	10042774	3190	10.59	3386.34	85.07
J270	1123610.7	10042979	3200	10.59	3386.3	80.72
J272	1123619.5	10043324	3207	10.59	3386.29	77.69
J274	1123621.4	10043427	3212	10.59	3385.92	75.36
J276	1123381.7	10043327	3221	10.59	3385.46	71.26
J278	1123166.1	10043500	3225	10.59	3387.26	70.31
J28	1124399.9	10039807	3203	10.59	3383.02	78
J280	1123977.2	10043483	3198	10.59	3386.74	81.78
J282	1124278.7	10043485	3198	10.59	3386.74	81.78
J284	1124647.5	10042156	3188	10.59	3385	85.36
J286	1124341.1	10041745	3188	10.59	3384.63	85.2
J288	1124622.2	10041108	3188	10.59	3381.56	83.87
J290	1124622.2	10040543	3195	10.59	3382.18	81.11
J292	1124828	10040539	3198	10.59	3382.08	79.76
J294	1124725.1	10040253	3195	10.59	3382.81	81.38
J296	1124918.3	10040249	3203	10.59	3382.71	77.87
J298	1124145.4	10041286	3188	10.59	3378.43	82.51
J30	1124834.9	10039531	3244	10.59	3384.41	60.84
J300	1124042.5	10041114	3188	10.59	3378.46	82.53
J302	1124040.4	10040785	3189	10.59	3378.6	82.16
J304	1124195.8	10040785	3188	10.59	3378.59	82.58
J306	1123769.5	10040791	3189	10.59	3378.78	82.23
J308	1123922.8	10040785	3189	10.59	3378.79	82.24
J310	1124727.2	10039992	3198	10.59	3383.68	80.45
J312	1124756.6	10039992	3198	10.59	3383.69	80.46
J314	1124252.5	10039999	3195	10.59	3383.56	81.7

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J316	1123914.4	10040005	3193	10.59	3382.88	82.28
J318	1123886.8	10039438	3210	10.59	3383.85	75.33
J32	1125375.6	10039941	3260	10.59	3384.58	53.98
J320	1123306.8	10040009	3190	10.59	3382.1	83.24
J322	1122289.5	10040159	3030	10.59	3380.52	151.88
J324	1122839.8	10040396	3184	10.59	3380.83	85.29
J326	1122999.4	10040261	3186	10.59	3379.36	83.78
J328	1123180.1	10040549	3182	10.59	3379.37	85.52
J330	1123007.8	10040618	3178	10.59	3379.36	87.25
J332	1123230.5	10040679	3182	10.59	3379.38	85.53
J334	1123283	10040818	3179	10.59	3379.39	86.83
J336	1123545.5	10041082	3185	10.59	3377.69	83.49
J338	1122894.4	10040872	3178	10.59	3379.59	87.35
J340	1122440.4	10040465	3169	10.59	3379.34	91.14
J342	1122623.3	10040641	3178	10.59	3379.37	87.25
J344	1122772.2	10040780	3178	10.59	3379.79	87.44
J346	1122741.5	10040713	3178	10.59	3379.84	87.46
J350	1122729.7	10040740	3178	10.59	3379.8	87.44
J352	1122722.3	10040733	3178	10.59	3379.83	87.45
J354	1122884.2	10041060	3183	10.59	3379.46	85.13
J356	1123612	10041383	3188	10.59	3379.14	82.82
J358	1122415.4	10041101	3192	10.59	3379.36	81.18
J36	1125567.1	10040443	3255	10.59	3384.91	56.29
J360	1122205.7	10041099	3192	10.59	3379.36	81.18
J364	1122181.1	10040941	3189	10.59	3378.34	82.04
J366	1122148.2	10040941	3189	10.59	3378.33	82.04
J368	1122218.1	10040941	3188	10.59	3378.36	82.48
J370	1122183.1	10041179	3194	10.59	3378.34	79.88
J372	1122865.7	10041749	3195	10.59	3377.33	79.01
J374	1123108.3	10041533	3188	10.59	3375.75	81.35
J376	1123749.9	10041802	3188	10.59	3377.08	81.93
J378	1122925.9	10042198	3198	10.59	3382.48	79.94
J38	1125085.4	10040522	3214	10.59	3384.41	73.84
J380	1123041.2	10043167	3222	10.59	3386.28	71.18
J382	1123039.2	10043368	3226	10.59	3386.25	69.44
J384	1123030.9	10043048	3222	10.59	3385.86	71
J386	1122922.2	10043502	3228	10.59	3387.51	69.12
J388	1123012.2	10044175	3237	10.59	3388.07	65.46

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J390	1123018.4	10044630	3245	10.59	3386.5	61.31
J392	1123078	10045202	3250	10.59	3390.37	60.82
J394	1123075.9	10045132	3248	10.59	3390.33	61.67
J396	1123078	10045461	3252	10.59	3390.24	59.9
J398	1122933.5	10045990	3220	10.59	3377.29	68.15
J40	1125639.4	10040959	3255	10.59	3385.27	56.45
J400	1122775.2	10045992	3220	10.59	3377.84	68.39
J402	1122775.2	10046090	3205	10.59	3377.49	74.74
J404	1122470.9	10045807	3208	10.59	3390.84	79.22
J406	1122464.8	10046021	3204	10.59	3391.02	81.04
J408	1122468.9	10045657	3214	10.59	3390.75	76.59
J410	1122207.8	10045663	3212	10.59	3390.72	77.44
J412	1122586.1	10045406	3233	10.59	3387.74	67.05
J414	1122795.8	10045445	3245	10.59	3366.13	52.49
J416	1122322.9	10045307	3222	10.59	3385.15	70.69
J418	1122320.8	10045427	3220	10.59	3385.09	71.53
J42	1125221	10040818	3221	10.59	3385.01	71.06
J420	1122388.7	10045020	3209	10.59	3385.12	76.31
J422	1122884.2	10045014	3238	10.59	3384.58	63.51
J424	1122388.6	10044892	3209	10.59	3385.12	76.31
J426	1122376.3	10044717	3215	10.59	3385.23	73.76
J428	1122880	10044707	3242	10.59	3384.99	61.96
J430	1122384.4	10044188	3240	10.59	3385.79	63.17
J432	1122684.6	10044186	3240	10.59	3387.02	63.7
J434	1122742.1	10043462	3232	10.59	3386.22	66.82
J436	1122197.2	10043462	3228	10.59	3384.23	67.69
J438	1122207.5	10044182	3236	10.59	3384.61	64.39
J44	1125638	10041202	3255	10.59	3385.45	56.53
J440	1121938.2	10044182	3240	10.59	3383.97	62.38
J442	1121938.2	10043551	3234	10.59	3383.8	64.91
J444	1122875.7	10043237	3224	10.59	3386.22	70.29
J446	1122869.5	10043168	3223	10.59	3386.23	70.73
J448	1122869.5	10042870	3222	10.59	3384.36	70.35
J450	1122869.5	10042833	3222	10.59	3384.15	70.26
J452	1122577.6	10042833	3220	10.59	3383.34	70.77
J454	1122577.6	10043042	3224	10.59	3383.31	69.03
J456	1122332.9	10042839	3220	10.59	3383.04	70.65
J458	1122832.5	10042692	3221	10.59	3384.08	70.66

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J46	1125333.9	10041215	3220	10.59	3385.31	71.63
J460	1122321.2	10042093	3208	10.59	3378.91	74.06
J462	1122197.2	10042443	3216	10.59	3379.43	70.81
J464	1121806.6	10042513	3224	10.59	3379.48	67.37
J466	1121781.6	10042455	3224	10.59	3379.31	67.3
J468	1121773.3	10042102	3218	10.59	3378.83	69.69
J470	1121275.8	10042124	3222	10.59	3378.42	67.78
J472	1122184.8	10042099	3208	10.59	3378.83	74.02
J474	1121872.3	10041867	3209	10.59	3378.24	73.33
J476	1121843.5	10041417	3202	10.59	3378.3	76.39
J478	1121573.4	10040954	3197	10.59	3378.21	78.52
J48	1125796.1	10041657	3255	10.59	3385.85	56.7
J480	1121534.4	10041237	3208	10.59	3378.2	73.75
J482	1121530.2	10040954	3195	10.59	3378.21	79.38
J484	1121380.2	10040935	3195	10.59	3378.2	79.38
J486	1121376	10041089	3205	10.59	3378.2	75.05
J488	1121080	10041046	3195	10.59	3378.21	79.38
J490	1120796.2	10041219	3195	10.59	3378.2	79.38
J492	1121080	10041410	3215	10.59	3378.26	70.74
J498	1121390.4	10041422	3216	10.59	3378.28	70.32
J50	1125374.5	10041666	3215	10.59	3384.39	73.4
J502	1121106.7	10041773	3220	10.59	3378.3	68.59
J504	1121151.6	10042114	3220	10.59	3378.38	68.62
J508	1120997.8	10042132	3200	10.59	3378.29	77.25
J510	1121404.9	10043101	3215	10.59	3384.41	73.4
J512	1121400.8	10043516	3225	10.59	3384.61	69.16
J514	1121674.3	10043531	3228	10.59	3383.67	67.45
J516	1121668.1	10043862	3234	10.59	3383.71	64.87
J518	1126598.3	10045335	3307	10.59	3390.5	36.18
J52	1125329.4	10041667	3213	10.59	3384.21	74.19
J520	1126585.9	10044363	3315	10.59	3390.4	32.67
J522	1126614.9	10044079	3320	10.59	3390.24	30.43
J524	1126475.1	10044087	3300	10.59	3390.17	39.07
J526	1126512	10043330	3310	10.59	3390.23	34.76
J528	1124645.6	10044860	3224	10.59	3390.18	72.01
J530	1123982.9	10043964	3210	10.59	3384.34	75.54
J532	1121044.8	10041644	3220	10.59	3378.28	68.58
J534	1121275.6	10042112	3222	10.59	3378.42	67.78

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J536	1122328.1	10040934	3188	10.59	3378.44	82.52
J54	1125327.9	10041538	3216	10.59	3384.15	72.86
J540	1123216.8	10044007	3230	10.59	3387.26	68.14
J542	1123717.6	10043709	3210	10.59	3388.46	77.33
J544	1122921.4	10044178	3238	10.59	3387.98	64.98
J546	1122910.7	10043167	3223	10.59	3386.28	70.75
J548	1122836.4	10040607	3178	10.59	3380.25	87.63
J550	1121429.3	10042126	3224	10.59	3378.52	66.95
J552	1121429.7	10042109	3224	10.59	3378.52	66.95
J554	1124113.5	10047573	3180	10.59	3397.53	94.26
J556	1123927.3	10047480	3182	10.59	3396.1	92.77
J558	1123608.1	10046856	3178	10.59	3394.09	93.63
J56	1125148.8	10041667	3203	10.59	3384.12	78.48
J560	1123546	10046621	3188	10.59	3393.81	89.18
J562	1123275.6	10046630	3188	10.59	3393.53	89.05
J564	1123000.7	10046638	3194	10.59	3392.58	86.04
J566	1122690.4	10046638	3194	10.59	3392.17	85.87
J568	1123546	10046479	3195	10.59	3393.78	86.13
J570	1123541.6	10046364	3198	10.59	3393.76	84.82
J572	1123541.6	10046093	3218	10.59	3235.1	62.87
J574	1122965.3	10047746	3090	10.59	3234.99	68.02
J576	1122756.9	10047990	3078	10.59	3234.97	66.28
J578	1122699.2	10047932	3082	10.59	3384.54	79.96
J58	1125227	10041771	3200	10.59	3234.99	54.16
J580	1123430.8	10048198	3110	10.59	3393.78	81.8
J582	1123719	10046486	3205	10.59	3380.21	81.12
J584	1123918.9	10040419	3193	10.59	3381.69	83.06
J586	1124622.2	10040824	3190	10.59	3384.99	84.49
J588	1124667	10041753	3190	10.59	3385.38	84.66
J590	1124650.8	10042484	3190	10.59	3386.72	77.44
J592	1124676.5	10043672	3208	10.59	3386.62	76.53
J594	1124679.8	10043917	3210	10.59	3381.33	82.04
J596	1123916.8	10040224	3192	10.59	3379.43	82.08
J598	1123920.7	10040593	3190	10.59	3384.5	79.94
J60	1125153.3	10041773	3200	10.59	3383.86	75.33
J600	1123960.9	10039405	3210	10.59	3384.29	92.85
J602	1123915.7	10038691	3170	10.59	3384.16	79.8
J604	1123276.7	10038802	3200	10.59	3385.07	56.36

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J606	1125613.8	10040660	3255	10.59	3392.17	85
J608	1123041.2	10046372	3196	10.59	3392.34	86.81
J610	1122685.5	10046975	3192	10.59	3389.78	64.9
J612	1123831	10044869	3240	10.59	3388.93	66.27
J614	1123362.1	10044494	3236	10.59	3385.51	69.55
J616	1122374.6	10044421	3225	10.59	3384.68	67.02
J618	1121393.2	10043917	3230	10.59	3385.65	82.61
J62	1125227	10042052	3195	10.59	3384.84	71.42
J620	1121762.7	10044511	3220	10.59	3380.53	69.56
J622	1121867.2	10042802	3220	10.59	3384.19	70.28
J624	1122343.9	10043246	3222	10.59	3378.57	77.37
J626	1122184	10041675	3200	10.59	3378.62	80.43
J628	1122418.5	10041365	3193	10.59	3379.19	83.27
J630	1123200.4	10041386	3187	10.59	3379.48	84.7
J632	1123215.5	10041139	3184	10.59	3381.53	84.29
J634	1122840.7	10040181	3187	10.59	3382.49	82.54
J636	1123632.3	10040007	3192	10.59	3383.77	77.46
J638	1124246.6	10039627	3205	10.59	3386.17	56.84
J64	1125882	10042044	3255	10.59	3377.13	80.22
J640	1123271.9	10041808	3192	10.59	3388.69	72.23
J642	1125480.4	10043891	3222	10.59	3384.33	82.9
J644	1123629.7	10042456	3193	10.59	3382.64	80.87
J646	1123015	10042460	3196	10.59	3386.28	80.72
J648	1123944.2	10043324	3200	10.59	3386.67	83.48
J650	1124266.5	10043316	3194	10.59	3394.82	112.58
J652	1123418.2	10047310	3135	10.59	3235.03	58.51
J654	1123431.2	10047915	3100	10.59	3384.58	66.98
J656	1125435.9	10040502	3230	10.59	3382.68	82.62
J658	1123772.5	10040006	3192	10.59	3386.42	57.38
J66	1125912	10042285	3254	10.59	3379	80.59
J660	1122416.7	10041207	3193	10.59	3379.91	68.42
J662	1121815.8	10042660	3222	10.59	3378.72	67.04
J664	1121600.9	10042286	3224	10.59	3384.62	70.03
J666	1121217.4	10043511	3223	10.59	3381.84	68.39
J668	1121875.6	10043169	3224	10.59	3383.17	82.4
J670	1123316.2	10042458	3193	10.59	3386.56	85.17
J672	1124092	10042774	3190	10.59	3385.25	78.53
J674	1123980	10043719	3204	10.59	3388.75	66.62

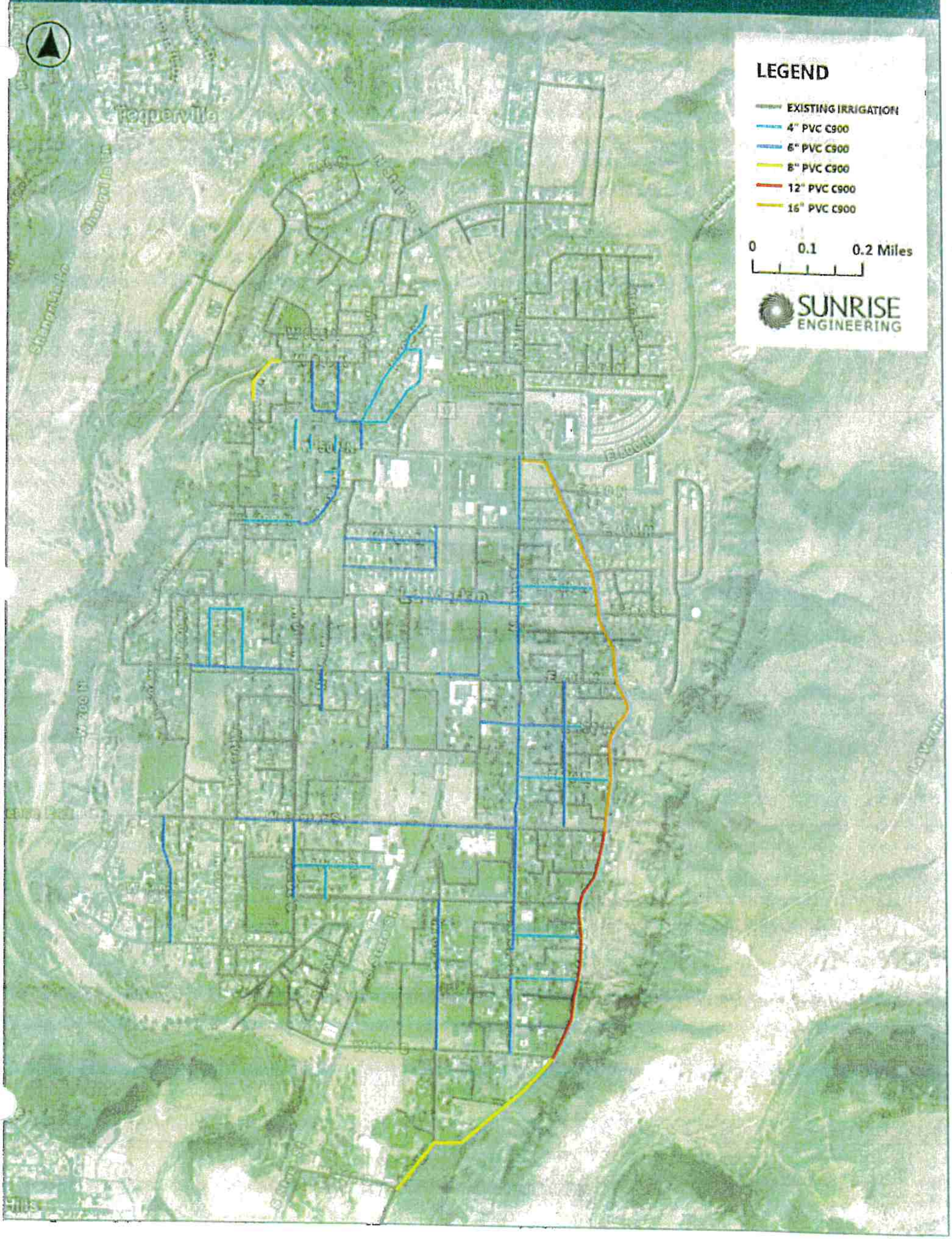
Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J676	1123903.4	10045204	3235	10.59	3235	54.16
J678	1123442.7	10048158	3110	10.59	3380.93	66.27
J68	1125672.7	10042286	3228	10.59	3234.99	54.16
J680	1123380.6	10048225	3110	10.59	3234.99	58.49
J682	1123063.1	10048169	3100	10.59	3235.04	64.58
J684	1122895.5	10047898	3086	10.59	3395.01	93.16
J688	1123855.6	10047023	3180	10.59	3384.7	72.23
J690	1122626.7	10045017	3218	10.59	3383.84	63.19
J692	1121938.2	10043885	3238	10.59	3384.35	63.41
J694	1122202.5	10043832	3238	10.59	3386.55	64.37
J696	1122682.3	10043746	3238	10.59	3385.6	83.45
J698	1125018.8	10042054	3193	10.59	3380.88	66.24
J70	1125672.7	10042387	3228	10.59	3385.59	83.88
J700	1125011	10041754	3192	10.59	3385.96	84.04
J702	1124652.3	10042638	3192	10.59	3385.08	84.96
J704	1124649.1	10042317	3189	10.59	3387.35	76.85
J706	1125145.1	10043429	3210	10.59	3387.26	74.21
J708	1125467.3	10043244	3216	10.59	3386.84	78.36
J710	1124674.9	10043553	3206	10.59	3235	54.16
J712	1123455.6	10048115	3110	10.59	3234.99	54.16
J714	1123332.5	10048225	3110	10.59	3377.88	71.01
J72	1125457.5	10042300	3214	10.59	3398.29	94.58
J720	1124205.5	10047608	3180	10.59	3390.57	36.21
J722	1126592.1	10044849	3307	10.59	3396.6	63.52
J724	1125103.4	10045484	3250	10.59	3234.78	73.56
J726	1122233.4	10047038	3065	10.59	3234.78	75.73
J728	1121872.3	10047177	3060	10.59	3234.67	82.18
J730	1121326.8	10045288	3045	10.59	3234.66	95.18
J732	1120850	10044576	3015	10.59	3388.16	60.73
J734	1126122	10043420	3248	10.59	3385.58	55.71
J736	1125636.5	10041358	3257	10.59	3388.47	71.26
J738	1123723	10044190	3224	10.59	3377.68	70.92
J74	1125457.5	10042413	3214	10.59	3397.91	64.52
J740	1125109.4	10047292	3249	10.59	3384.17	53.8
J742	1125247.9	10039961	3260	10.59	3398.61	87.36
J744	1125220.9	10049016	3197	10.59	3398.77	76.16
J746	1125859.8	10048968	3223	10.59	3399.16	65.93
J748	1125769.5	10047902	3247	10.59	3398.44	77.32

Projected Worst Case Demand (2038) System Performance - (PID)						
Junction ID	X	Y	El. (ft)	Nodal Demand (gpm)	Head (ft)	Pressure (psi)
J750	1124992.9	10050432	3220	10.59	3398.44	78.18
J752	1124948.6	10050389	3218	10.59	3398.21	135.71
J754	1123449.9	10048728	3085	10.59	3398.18	124.43
J756	1123880.9	10048778	3111	10.59	3398.23	123.59
J758	1123501.1	10048585	3113	10.59	3377.58	74.78
J76	1125255.8	10042431	3205	10.59	3398.24	116.23
J760	1123667.7	10048341	3130	10.59	3384.23	92.83
J762	1123896.5	10038697	3170	10.59	3377.45	74.72
J78	1125242.3	10042303	3205	10.59	3377.51	73.02
J80	1125361.2	10042301	3209	10.59	3377.46	72.56
J82	1125361.2	10042198	3210	10.59	3386.92	57.16
J84	1125934.7	10042714	3255	10.59	3386.91	43.29
J86	1126252.3	10042705	3287	10.59	3387	57.2
J88	1125934.6	10042756	3255	10.59	3382.47	68.23
J90	1125457.4	10042761	3225	10.59	3382.42	71.24
J92	1125457.4	10042860	3218	10.59	3382.1	69.81
J94	1125454.4	10042665	3221	10.59	3382.04	74.98
J96	1125323.5	10042668	3209	10.59	3382.08	71.53
J98	1125452.9	10042630	3217	10.59	3234.67	83.05
V8002_NU	1121346.3	10045216	3043	10.59	3234.67	83.05
V8002_ND	1121366.9	10045146	3043	10.59	3394.37	118.89
V8004_NU	1123221.5	10047426	3120	10.59	3235.39	50
V8004_ND	1123060.2	10047523	3120	10.59	3234.77	73.56
V8010_NU	1122217.1	10046991	3065	10.59	3234.77	73.56
V8010_ND	1121854.4	10046291	3065	10.59	3391.45	85.09

APPENDIX C

LaVerkin City
Map of Recommended Improvements

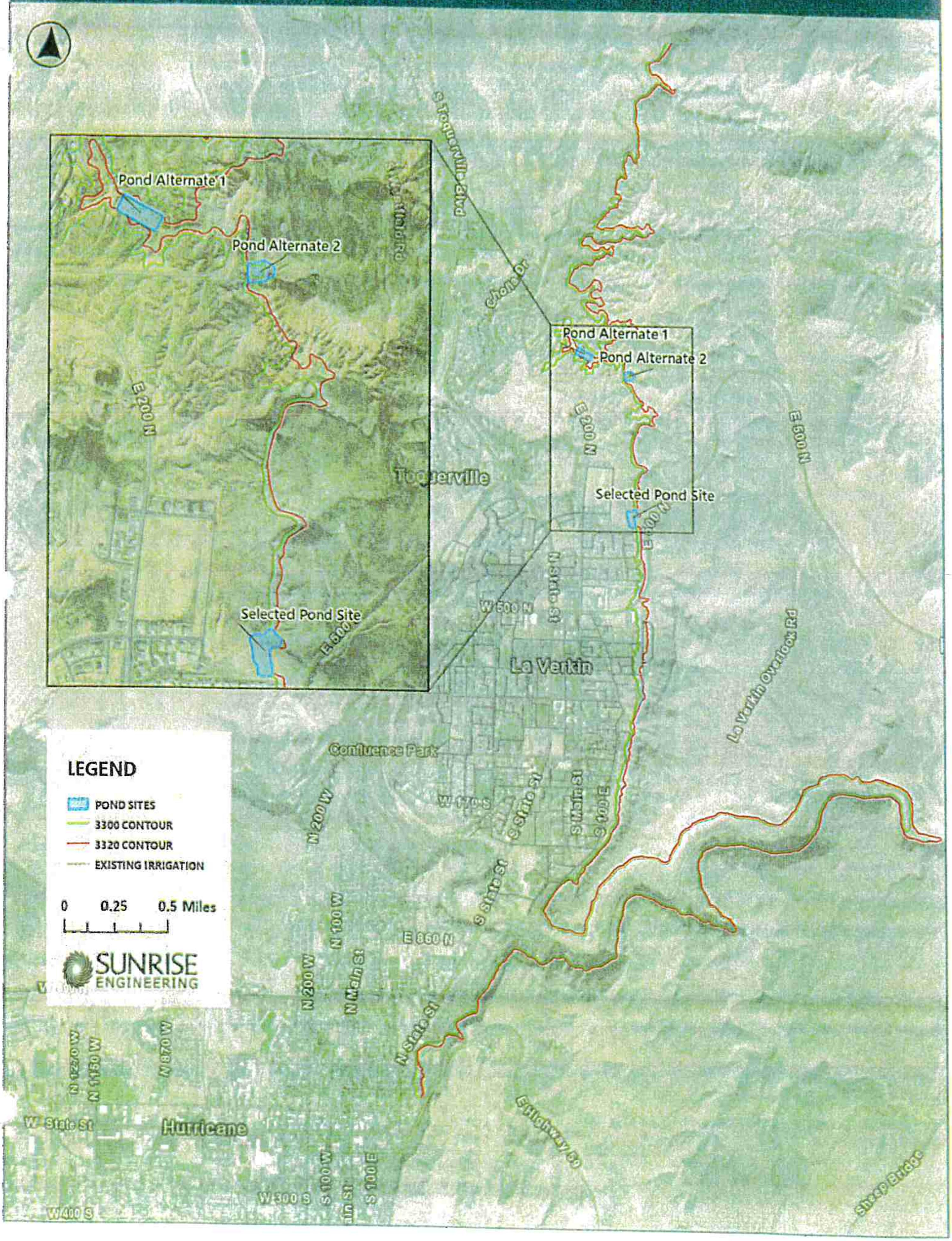
LAVERKIN CITY RECOMMENDED IMPROVEMENT MAP



APPENDIX D

Evaluated Pond Site Locations

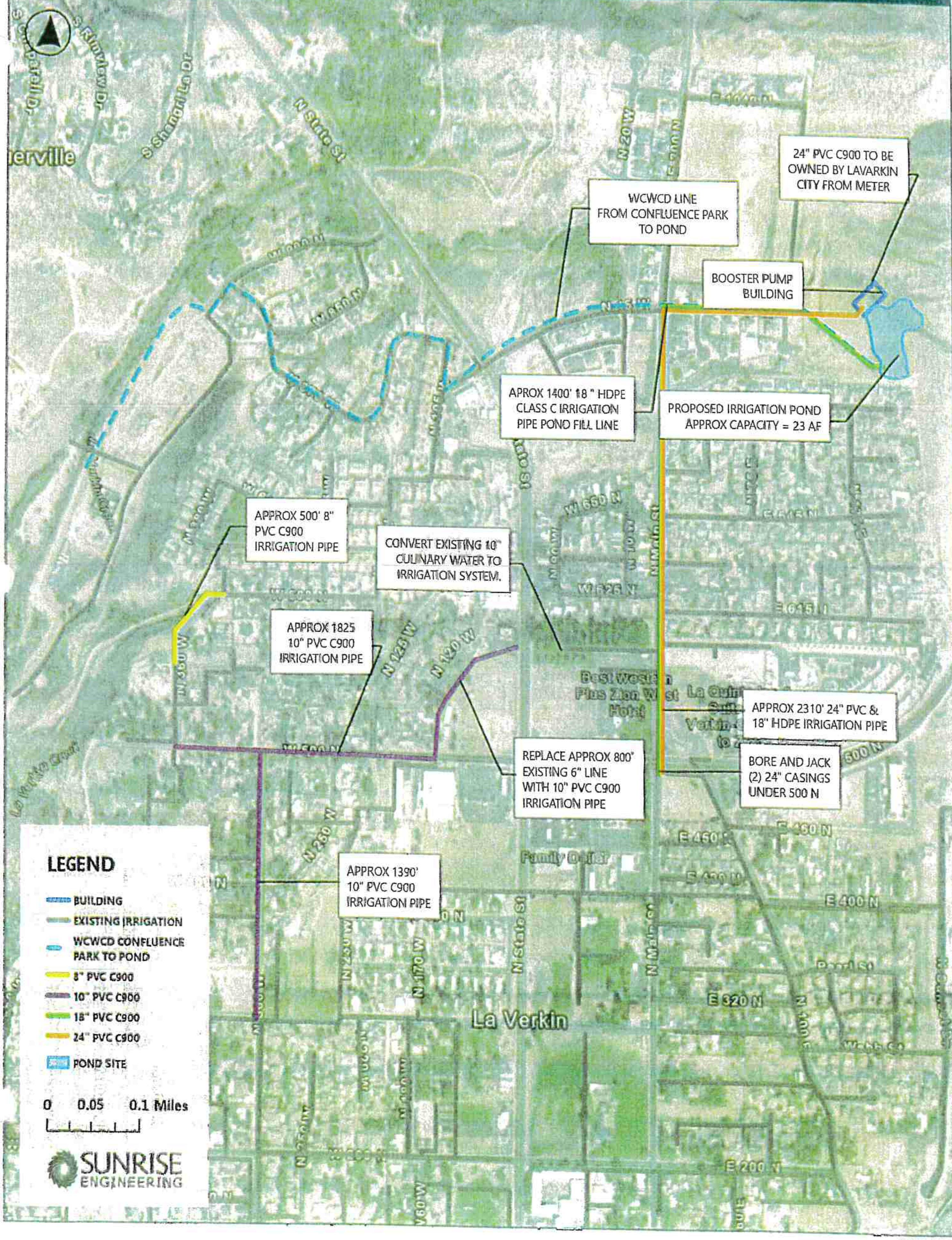
LAVERKIN CITY POTENTIAL POND SITES



APPENDIX E

LaVerkin Pond & Pipeline Project

LAVERKIN POND AND PIPELINE PROJECT



APPENDIX F

Opinions of Probable Cost

Engineer's Opinion of Probable Cost

LaVerkin Pond & Pipeline Project
LaVerkin City & WCWCD

28-Apr-25
PJA/bcw

NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	AMOUNT
GENERAL CONSTRUCTION					
1	Mobilization	1	LS	$ 350,000.00	$ 350,000.00
2	Traffic Control	1	LS	$ 10,000.00	$ 10,000.00
3	Subsurface Investigation	20	HR	$ 225.00	$ 4,500.00
4	Compaction & Materials Testing	1	LS	$ 15,000.00	$ 15,000.00
5	SWPPP Compliance & Erosion Control	1	LS	$ 6,500.00	$ 6,500.00
6	Construction Staking	1	LS	$ 7,000.00	$ 7,000.00
7	Dust Control & Watering	1	LS	$ 10,000.00	$ 10,000.00
8	Restore Surface Improvements	1	LS	$ 25,000.00	$ 25,000.00
			General Construction Subtotal		$ 428,000.00
INSTALL 18" POND FILL LINE AND 24" POND OUTLET LINE FROM POND DOWN MAIN STREET ACROSS 500 N					
9	24" PVC C900, Fittings, & Installation	3,700	LF	$ 165.00	$ 610,500.00
10	18" - HDPE - Irrigation Class C	3,700	LF	$ 75.00	$ 277,500.00
11	Asphalt Removal	27,600	SF	$ 1.00	$ 27,500.00
12	24" Gate Valve Assembly	5	EA	$ 10,500.00	$ 52,500.00
13	18" Gate Valve Assembly	5	EA	$ 7,800.00	$ 39,000.00
14	3" Bituminous Surface Course - Category II	27,400	SF	$ 2.75	$ 75,350.00
15	Boring & Jacking	200	LF	$ 900.00	$ 180,000.00
16	Miscellaneous Connections, Fittings & Tie-Ins	1	LS	$ 35,000.00	$ 35,000.00
17	Concrete Meter Vault	2	LS	$ 115,000.00	$ 230,000.00
			Main Street Lines Subtotal		$ 1,527,350.00
CONSTRUCT 7.4 MG STORAGE POND & BOOSTER PUMP STATION					
18	Earthwork for Irrigation Pond Subgrade	28,000	CY	$ 15.00	$ 420,000.00
19	Imported Select Structural Fill for Pond Embankment	2,000	CY	$ 75.00	$ 150,000.00
20	12" Thick Imported Low Permeable Liner Subgrade	1,500	CY	$ 65.00	$ 97,500.00
21	6" Thick Imported Select Liner Cover Soil	750	CY	$ 75.00	$ 56,500.00
22	Geofabric	51,000	SF	$ 0.85	$ 43,500.00
23	40-mil Reinforced Polyethelyne Liner (2 Layers)	102,000	SF	$ 3.50	$ 357,000.00
24	12" Thick Concrete Lined Settling Basin	1,500	CY	$ 500.00	$ 750,000.00
25	Concrete Transfer Structure	1	EA	$ 100,000.00	$ 100,000.00
26	Pond Aerator	1	EA	$ 5,500.00	$ 5,500.00
27	Concrete Pipe Inlet & Outlet Structures	3	EA	$ 100,000.00	$ 300,000.00
28	12' Gravel Access Road Around Pond	14,400	SF	$ 1.15	$ 16,500.00
29	Booster Pump Station Building	1	LS	$ 450,000.00	$ 450,000.00
30	Booster Pump Skid	1	LS	$ 275,000.00	$ 275,000.00
31	Miscellaneous Electrical Improvements	1	LS	$ 150,000.00	$ 150,000.00
			7.4 MG Storage Pond Subtotal		$ 3,171,500.00
		PROJECT SUBTOTAL			$ 5,126,850.00
		CONTINGENCY		20%	$ 1,025,400.00
		CONSTRUCTION TOTAL			$ 6,152,250.00
INCIDENTALS (PH 2)					
1	Funding & Administration Services	0.1%	EST	$ 7,000.00	$ 7,000.00
2	Bonding Attorney	0.5%	EST	$ 37,000.00	$ 37,000.00
3	Engineering Design Services	5.4%	EST	$ 400,000.00	$ 400,000.00
4	Bidding & Negotiating	0.2%	EST	$ 13,000.00	$ 13,000.00
5	Construction Administration & Observation Services	5.0%	EST	$ 370,000.00	$ 370,000.00
6	SCADA Design	0.6%	EST	$ 44,000.00	$ 44,000.00
7	SCADA Improvements	1.2%	EST	$ 87,000.00	$ 87,000.00
8	Geotechnical Investigations	1.0%	EST	$ 74,000.00	$ 74,000.00
9	Topographic & Property Survey	0.4%	EST	$ 31,000.00	$ 31,000.00
10	Regulatory Compliance	1.2%	EST	$ 87,000.00	$ 87,000.00
11	Miscellaneous Professional Services	1.0%	EST	$ 74,000.00	$ 74,000.00
				PH 2 Subtotal	$ 1,224,000.00
		SUBTOTAL			$ 1,224,000.00
		TOTAL PROJECT COST			$ 7,376,300.00

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

Engineer's Opinion of Probable Cost

LaVerkin City Irrigation Transmission Line Improvements
LaVerkin City & WCWCD

20-May-25
PJA/bcw

NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	AMOUNT
	GENERAL CONSTRUCTION				
1	Mobilization	1	LS	$ 60,000.00	$ 60,000.00
2	Traffic Control	1	LS	$ 10,000.00	$ 10,000.00
3	Subsurface Investigation	20	HR	$ 225.00	$ 4,500.00
4	Compaction & Materials Testing	1	LS	$ 6,500.00	$ 6,500.00
5	SWPPP Compliance & Erosion Control	1	LS	$ 6,500.00	$ 6,500.00
6	Construction Staking	1	LS	$ 7,000.00	$ 7,000.00
7	Dust Control & Watering	1	LS	$ 10,000.00	$ 10,000.00
8	Restore Surface Improvements	1	LS	$ 25,000.00	$ 25,000.00
9	Miscellaneous Connections, Fittings & Tie-Ins	1	LS	$ 20,000.00	$ 20,000.00
10	10" PVC C900, Fittings, & Installation	4,050	LF	$ 96.00	$ 388,800.00
11	8" PVC C900, Fittings, & Installation	500	LF	$ 75.00	$ 37,500.00
12	Asphalt Removal	18,300	SF	$ 1.00	$ 18,300.00
13	10" Butterfly Valve Assembly	6	EA	$ 3,750.00	$ 22,500.00
14	8" Gate Valve Assembly	2	EA	$ 2,800.00	$ 5,600.00
15	1" Setter, Idler, and Meter Barrel	30	EA	$ 1,800.00	$ 54,000.00
16	1" Service Lateral Pipe (Including Service Saddle & Corporation Stop)	2,500	LF	$ 35.00	$ 87,500.00
17	3" Bituminous Surface Course - Category II	18,300	SF	$ 2.75	$ 50,325.00
			SUBTOTAL		$ 814,025.00
			CONTINGENCY	20%	$ 162,800.00
			CONSTRUCTION TOTAL		$ 976,825.00
	INCIDENTALS				
1	Funding & Administration Services	0.9%	EST	$ 9,800.00	$ 9,800.00
2	Bonding Attorney	0.5%	EST	$ 5,900.00	$ 5,900.00
3	Engineering Design Services	5.8%	HR	$ 67,000.00	$ 67,000.00
4	Bidding & Negotiating	0.5%	HR	$ 5,300.00	$ 5,300.00
5	Construction Administration & Observation Services	6.0%	EST	$ 69,000.00	$ 69,000.00
6	GIS Mapping	0.4%	EST	$ 4,900.00	$ 4,900.00
7	Loan Origination Fee	0.5%	EST	$ 5,900.00	$ 5,900.00
8	Miscellaneous Professional Services	0.7%	EST	$ 7,500.00	$ 7,500.00
			SUBTOTAL		$ 175,300.00
			TOTAL PROJECT COST		$ 1,152,100.00

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

Engineer's Opinion of Probable Cost

LaVerkin City In-Town Replacements
LaVerkin City
Approximately 36000 LF Irrigation Pipe

7-Feb-25
PJA/bcw

NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	AMOUNT
GENERAL CONSTRUCTION					
1	Mobilization	1	LS	$ 450,000.00	$ 450,000.00
2	Traffic Control	1	LS	$ 144,000.00	$ 144,000.00
3	SWPPP Compliance & Erosion Control	1	LS	$ 108,000.00	$ 108,000.00
4	Dust Control & Watering	1	LS	$ 107,500.00	$ 107,500.00
5	Construction Staking	1	LS	$ 72,000.00	$ 72,000.00
6	Subsurface Investigation	160	HR	$ 350.00	$ 56,000.00
7	Clearing, Grubbing, & Demolition	1	LS	$ 395,000.00	$ 395,000.00
8	Restore Surface Improvements	1	LS	$ 358,000.00	$ 358,000.00
9	Compaction & Materials Testing	1	LS	$ 50,000.00	$ 50,000.00
10	Miscellaneous Connections, Fittings & Tie-Ins	1	LS	$ 394,000.00	$ 394,000.00
11	6" Purple PVC C900, Fittings, & Installation	20,000	LF	$ 70.00	$ 1,400,000.00
12	4" Purple PVC C900, Fittings, & Installation	10,500	LF	$ 50.00	$ 525,000.00
13	6" Gate Valve Assembly	82	EA	$ 2,500.00	$ 205,000.00
14	4" Gate Valve Assembly	32	EA	$ 1,500.00	$ 48,000.00
15	1" Setter, Idler, and Meter Barrel	510	EA	$ 2,250.00	$ 1,147,500.00
16	1" Service Lateral Pipe (Including Service Saddle & Corporation Stop)	13,400	LF	$ 40.00	$ 536,000.00
17	8" Untreated Base Course	181,800	SF	$ 1.50	$ 272,700.00
18	3" Bituminous Surface Course - Category II	181,800	SF	$ 4.50	$ 818,000.00
19	Boring & Jacking	300	LF	$ 800.00	$ 240,000.00
			SUBTOTAL		$ 7,326,700.00
			CONTINGENCY	20%	$ 1,465,300.00
			CONSTRUCTION TOTAL		$ 8,792,000.00
INCIDENTALS					
1	Funding & Administration Services	0.4%	EST	$ 44,000.00	$ 44,000.00
2	Bonding Attorney	0.4%	EST	$ 45,000.00	$ 45,000.00
3	Engineering Design Services	4.9%	LS	$ 492,000.00	$ 492,000.00
4	Bidding & Negotiating	0.2%	HR	$ 25,000.00	$ 25,000.00
5	Construction Administration & Observation Services	4.6%	HR	$ 466,000.00	$ 466,000.00
6	GIS Mapping	0.4%	EST	$ 36,000.00	$ 36,000.00
7	Loan Origination Fee	0.4%	EST	$ 44,000.00	$ 44,000.00
8	Miscellaneous Professional Services	1.1%	EST	$ 115,000.00	$ 115,000.00
9	Topographic & Property Survey	0.5%	EST	$ 52,800.00	$ 52,800.00
			SUBTOTAL		$ 1,319,800.00
			TOTAL PROJECT COST		$ 10,111,800.00

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

Engineer's Opinion of Probable Cost

100 E Transmission Line Improvement — 7-Feb-25

LaVerkin City — PJA/bcw

Approximately 8000 LF Irrigation Pipe

NO.	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE	AMOUNT
GENERAL CONSTRUCTION					
1	Mobilization	1	LS	$ 135,000.00	$ 135,000.00
2	Traffic Control	1	LS	$ 35,000.00	$ 35,000.00
3	SWPPP Compliance & Erosion Control	1	LS	$ 25,000.00	$ 25,000.00
4	Dust Control & Watering	1	LS	$ 25,000.00	$ 25,000.00
5	Construction Staking	1	LS	$ 16,000.00	$ 16,000.00
6	Subsurface Investigation	100	HR	$ 350.00	$ 35,000.00
7	Clearing, Grubbing, & Demolition	1	LS	$ 100,000.00	$ 100,000.00
8	Restore Surface Improvements	1	LS	$ 80,000.00	$ 80,000.00
9	Compaction & Materials Testing	1	LS	$ 15,000.00	$ 15,000.00
10	Miscellaneous Connections, Fittings & Tie-Ins	1	LS	$ 100,000.00	$ 100,000.00
11	15" Purple PVC C900, Fittings, & Installation	3,800	LF	$ 125.00	$ 475,000.00
12	12" Purple PVC C900, Fittings, & Installation	2,200	LF	$ 115.00	$ 253,000.00
13	8" Purple PVC C900, Fittings, & Installation	2,000	LF	$ 75.00	$ 150,000.00
14	15" Butterfly Valve Assembly	12	EA	$ 6,750.00	$ 81,000.00
15	12" Butterfly Valve Assembly	4	EA	$ 4,100.00	$ 16,400.00
16	10" Butterfly Valve Assembly	1	EA	$ 3,750.00	$ 4,000.00
17	8" Gate Valve Assembly	2	EA	$ 2,800.00	$ 5,600.00
18	6" Gate Valve Assembly	8	EA	$ 2,500.00	$ 20,000.00
19	4" Gate Valve Assembly	5	EA	$ 1,500.00	$ 7,500.00
20	3" Gate Valve Assembly	18	EA	$ 950.00	$ 17,000.00
21	Asphalt Removal	27,000	SF	$ 1.00	$ 27,000.00
22	8" Untreated Base Course	27,000	SF	$ 1.50	$ 40,500.00
23	3" Bituminous Surface Course - Category II	27,000	SF	$ 4.50	$ 122,000.00
24	Remove & Replace 5' Sidewalk	300	SF	$ 20.00	$ 6,000.00
			SUBTOTAL		$ 1,791,000.00
			CONTINGENCY	20%	$ 358,200.00
			CONSTRUCTION TOTAL		$ 2,149,200.00
INCIDENTALS					
1	Funding & Administration Services	0.6%	EST	$ 16,000.00	$ 16,000.00
2	Bonding Attorney	0.3%	EST	$ 8,000.00	$ 8,000.00
3	Engineering Design Services	5.4%	LS	$ 134,000.00	$ 134,000.00
4	Bidding & Negotiating	0.2%	HR	$ 5,000.00	$ 5,000.00
5	Construction Administration & Observation Services	4.6%	HR	$ 114,000.00	$ 114,000.00
6	GIS Mapping	0.4%	EST	$ 9,000.00	$ 9,000.00
7	Loan Origination Fee	0.4%	EST	$ 11,000.00	$ 11,000.00
8	Miscellaneous Professional Services	1.1%	EST	$ 28,000.00	$ 28,000.00
9	Topographic & Property Survey	0.5%	EST	$ 13,000.00	$ 13,000.00
			SUBTOTAL		$ 338,000.00
			TOTAL PROJECT COST		$ 2,487,200.00

In providing opinions of probable construction cost, the Client understands that the Engineer has no control over costs or the price of labor, equipment or materials, or over the Contractor's method of pricing, and that the opinion of probable construction cost provided herein is made on the basis of the Engineer's qualifications and experience. The Engineer makes no warranty, expressed or implied, as to the accuracy of such opinions compared to bid or actual costs.

APPENDIX G

Impact Fee Certification

CERTIFICATION OF IMPACT FEE ANALYSIS BY CONSULTANT

In accordance with Utah Code Annotated § 11-36a-306, Blaine Worrell, P.E., on behalf of Sunrise Engineering, LLC., makes the following certification:

I certify that the attached Impact Fee Facilities Plan and Impact Fee Analysis:

1. Includes only the costs of public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and that methodological standards set forth by the Federal Office of Management and Budget for federal grant reimbursement;
3. Offsets costs with grants or other alternate sources of payment; and
4. Complies in each and every relevant respect with the Impact Fees Act.

Blaine Worrell, P.E., makes this certification with the following qualifications:

1. All of the recommendations for implementation of the Impact Fee Facilities Plan ("IFFP") made in the IFFP documents or in the Impact Fee Analysis documents are followed in their entirety by LaVerkin City, Utah, staff, and elected officials.
2. If all or a portion of the IFFP or Impact Fee Analyses are modified or amended, this certification is no longer valid.
3. All information provided to Sunrise Engineering, LLC., its contractors or suppliers, is assumed to be correct, complete and accurate. This includes information provided by LaVerkin City, Utah, and outside sources.

4. The undersigned is trained and licensed as a professional engineer and has not been trained or licensed as a lawyer. Nothing in the foregoing certification shall be deemed an opinion of law or an opinion of compliance with law which under applicable professional licensing laws or regulations or other laws or regulations must be rendered by a lawyer licensed in the State of Utah.

5. The foregoing Certification is an expression of professional opinion based on the undersigned's best knowledge, information and belief and shall not be construed as a warranty or guaranty of any fact or circumstance.

6. The foregoing certification is made only to the LaVerkin City, Utah, and may not be used or relied upon by any other person or entity without the expressed written authorization of the undersigned.

Sunrise Engineering, LLC.

By: ______________________

Dated: ____________________

APPENDIX H

Lay Person Summary

SUNRISE ENGINEERING

11 North 300 West, Washington, Utah 84780
Tel: 435.652.8450 | **Fax:** 435.652.8416

An Impact Fee Analysis for the LaVerkin City secondary water system has been completed. This summary, designed to be understood by a lay person, has been prepared pursuant to § 11-36a-303 (2) of the Utah Impact Fees Act.

A Secondary Water Impact Fee Analysis, as per the Utah Impact Fees Act, is a study conducted by local authorities to determine the impact of new developments on secondary water management systems. Secondary water refers to water that is not culinary water and is delivered to and used by an end user for the irrigation of landscaping or a garden.

The analysis evaluates how much new developments, like housing or commercial projects, might contribute to secondary water usage and examines use trends to determine the impact of expansion on the secondary water system.

By studying these factors, the analysis helps decide if an Impact Fee, a one-time charge to new development for the purpose of paying for new or expanded public facilities, should be assessed as a condition of development. An Impact Fee is a fair share contribution towards the cost of upgrading or maintaining secondary water infrastructure to handle the increased demand from new development. The Impact Fee Analysis establishes the percentage of each proposed project that serves growth or future development. This percentage is the Impact Fee eligible percentage of each project. The Impact Fee helps ensure that the culinary water system can handle new development projects.

The LaVerkin City Secondary Water Impact Fee Analysis has identified two future Impact Fee Facilities Plans and Impact Fee Analyses to be fully impact fee eligible.

The Town anticipates conducting a new Impact Fee Facilities Plan and Impact Fee Analysis at 5-year intervals. Within the 10-year planning period, the anticipated combined future cost of both plans is $161,700. This fee will be commissioned to study, among other things, the effects of new growth on the system. Impact Fee Facilities Plans and Impact Fee Analyses are generally considered to be 100% Impact Fee eligible.

The total cost of Impact Fee eligible improvements and impact fee eligible debt is $161,700.00. This total is then divided by the total number of anticipated connections over the length of the planning period to determine a maximum allowable impact fee of $241.62 per new connection. Larger meter connections are considered to consume larger amounts of secondary water and are therefore required to pay a higher impact fee based on the meter size. The maximum allowable impact fee for each meter size is shown in Table 1 below.

Table 1 – Maximum allowable impact fee by meter size

LaVerkin City Secondary Water Proposed Impact Fee Schedule	
Meter Size	Impact Fee
1"	$ 241.62
2"	$ 569.30
3"	$ 948.83
4"	$ 1,328.37
6"	$ 3,795.33

APPENDIX I

Cash Flow Analysis

Cash Flow - 20 Year Planning Horizon

	Actual	Actual	Actual	Actual	Actual	Budgeted	Projected	Projected	Projected	Projected	Projected
Fiscal Year Beginning July 1	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Ending June 30	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Average Rate Per Connection	$17.95	$17.00	[illegible]	$17.10	[illegible]	[illegible]	$21.99	$21.99	$21.99	$21.99	$21.99
Impact Fee/Connection						[illegible]	$241.62	$241.62	$241.62	$241.62	$241.62
System Users											
Total Current Hookups/Connections	292	292	292	292	292	292	292	292	292	292	292
Total Lease Users	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1040
New Lease User Connections		8	6	0		40	40	40	40	40	40
IRRIGATION FUND INCOME											
5110 Irrigation Revenue	$ [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$279,546.24
5118 Irrigation Connection Fees	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5120 Irrigation Penalties	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5130 Irrigation Assessments	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5140 Irrigation MISCELLANEOUS	$0.00	$0.00	[illegible]	[illegible]	[illegible]	[illegible]					
5410 Irrigation INTEREST INCOME	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
TOTAL INCOME	$ [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IRRIGATION FUND OPERATING EXPENSES											
110 Irrigation SALARIES & WAGES	$ 51,427.03	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
130 Irrigation EMPLOYEE BENEFITS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
240 Irrigation OFFICE EXPENSE, SUPPLIES & P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
250 Irrigation EQUIPMENT OPERATING SUPPLIES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300 Irrigation NEW WATER MAINS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
280 Irrigation TELEPHONE & COMMUNICATIONS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
311 Irrigation COMPUTER EQUIPMENT	$0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400 Irrigation WATER MAIN REPAIR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
450 Irrigation CONTRACTED SERVICES	$0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
510 Irrigation INSURANCE	$7,229.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
600 Irrigation DEPRECIATION	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]											
Total Operating Expenses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EXISTING DEBT SERVICE											
Irrigation Water Revenue Bond	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-Total Existing Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW DEBT SERVICE											
[illegible]							$0.00	$0.00	$0.00	$0.00	$0.00
[illegible]							$0.00	$0.00	$0.00	$0.00	$0.00
[illegible] Impact Fee Fund Eligible											
Sub-Total New Debt Service	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL EXPENSES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net Cash Flow - Irrigation Fund	($11,561.00)	[illegible]	[illegible]	($25,147.00)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CASH ON HAND											
Cash Reserve Cash	$0.00	$0.00	$0.00	$0.00	$0.00	[illegible]	$0.00	$0.00	$0.00	$0.00	$0.00
Less Impact Fee Eligible Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	$11,000.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Irrigation Fund Balance (FY End [illegible])	$0.00	$0.00	$0.00	$0.00	$0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net Cash Flow to Irrigation Fund						[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Renewal & Replacement Fund Balance											
Total Cash on Hand	$0.00	$0.00	$0.00	$0.00	$0.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IMPACT FEE FUND ACCOUNTING											
Impact Fees Collected	$ 10,532.01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	$9,664.73
Impact Fees Expended							[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Impact Fee Funds on Hand	$ 14,032.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PROJECT IMPLEMENTATION											

	Projected	Projected	Projected	Projected	Projected
Fiscal Year Beginning July 1	2031	2032	2033	2034	2035
Ending June 30	2032	2033	2034	2035	2036
Average Rate Per Connection	$21.99	$21.99	$21.99	$21.99	$23.01
Impact Fee/Connection	$241.62	$241.62	$241.62	$241.62	$241.52
Total Current Hookups/Connections	292	292	292	292	292
Total Lease Users	1085	1123	1163	1203	1243
New Lease User Connections	40	40	40	40	40
5110 Irrigation Revenue	$297,101.44	$297,656.64	$308,211.84	$318,767.04	$345,646.08
5118 Irrigation Connection Fees	$5,341.12	$5,488.00	$5,638.92	$5,793.99	$5,953.32
5120 Irrigation Penalties	$1,163.01	$1,197.90	$1,233.83	$1,270.85	$1,308.97
5130 Irrigation Assessments	$30,351.00	$30,351.00	$30,351.00	$30,351.00	$30,351.00
TOTAL INCOME	[illegible]	[illegible]	[illegible]	$356,182.88	$383,259.38
110 Irrigation SALARIES & WAGES	$72,522.71	[illegible]	[illegible]	$79,247.52	$81,624.95
130 Irrigation EMPLOYEE BENEFITS	[illegible]	$38,524.25	[illegible]	$40,870.18	$42,096.49
240 Irrigation OFFICE EXPENSE, SUPPLIES & P	$1,361.72	$1,402.57	$1,444.64	$1,487.93	$1,532.62
250 Irrigation EQUIPMENT OPERATING SUPPLIES	[illegible]	[illegible]	$5,114.97	$5,268.42	$5,426.47
300 Irrigation NEW WATER MAINS	[illegible]	$411.05	$423.79	$436.50	$449.60
280 Irrigation TELEPHONE & COMMUNICATIONS	$1,123.06	$1,157.57	$1,192.30	$1,228.07	$1,264.91
311 Irrigation COMPUTER EQUIPMENT	[illegible]	[illegible]	$2,083.20	$2,145.70	$2,210.07
400 Irrigation WATER MAIN REPAIR	[illegible]	[illegible]	[illegible]	$18,975.68	$19,542.89
450 Irrigation CONTRACTED SERVICES	$0.00	$0.00	$0.00	$0.00	$0.00
510 Irrigation INSURANCE	[illegible]	$6,647.76	$6,847.19	$7,052.60	$7,264.13
600 Irrigation DEPRECIATION	[illegible]	$15,965.61	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	$55,353.34	$57,015.00	[illegible]	[illegible]
Total Operating Expenses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Irrigation Water Revenue Bond	$11,000.00	$11,000.00	$11,000.00	$11,000.00	$11,000.00
Sub-Total Existing Debt Service	$11,000.00	$11,000.00	$11,000.00	$11,000.00	$11,000.00
[illegible]	$0.00	$0.00	$0.00	$0.00	$0.00
[illegible]	$0.00	$0.00	$0.00	$0.00	$0.00
Sub-Total New Debt Service	$0.00	$0.00	$0.00	$0.00	$0.00
Total Debt Service	$11,000.00	$11,000.00	$11,000.00	$11,000.00	$11,000.00
TOTAL EXPENSES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net Cash Flow - Irrigation Fund	[illegible]	[illegible]	[illegible]	$112,807.62	[illegible]
Cash Reserve Cash	$0.00	$0.00	$0.00	$0.00	[illegible]
Less Impact Fee Eligible Debt Service	$11,000.00	$11,000.00	$11,000.00	$11,000.00	[illegible]
Irrigation Fund Balance (FY End [illegible])	[illegible]	[illegible]	[illegible]	$1,037,901.04	[illegible]
Net Cash Flow to Irrigation Fund	[illegible]	[illegible]	[illegible]	$112,807.62	[illegible]
Total Cash on Hand	[illegible]	[illegible]	[illegible]	$1,037,901.04	[illegible]
Impact Fees Collected	[illegible]	$9,664.73	$9,664.73	[illegible]	$9,664.73
Impact Fees Expended	$0.00	$0.00	$0.00	$0.00	[illegible]
Impact Fee Funds on Hand	[illegible]	[illegible]	[illegible]	[illegible]	$41,907.85

Cash Flow - 20 Year Planning Horizon

	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
Fiscal Year Beginning July 1	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Ending June 30	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Average Rate Per Connection	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Impact Fee/Connection	$241.42	$241.42	$241.42	$241.42	$241.42	$241.42	$241.42	$241.42	$241.42	$241.42
System Users:										
Total Contract Holder Connections	292	292	292	292	292	292	292	292	292	292
Total Lease Users	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
New Lease User Connections	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IRRIGATION FUND INCOME										
5110 Irrigation Revenue	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5110 Irrigation Connection Fees	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5410 Irrigation Penalties	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5530 Irrigation Assessment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5490 Irrigation MISCELLANEOUS										
5610 Irrigation INTEREST INCOME										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IRRIGATION FUND OPERATING EXPENSES										
6310.110 Irrigation SALARIES & WAGES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.130 Irrigation EMPLOYEE BENEFITS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.240 Irrigation OFFICE EXPENSE, SUPPLIES & P	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.250 Irrigation EQUIPMENT OPERATING SUPPLIES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.260 Irrigation NEW WATER MAINS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.280 Irrigation TELEPHONE & COMMUNICATIONS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.315 Irrigation COMPUTER EQUIPMENT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.450 Irrigation WATER MAIN REPAIR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.480 Irrigation CONTRACTED SERVICES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.510 Irrigation INSURANCE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6310.650 Irrigation DEPRECIATION	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Booster Pump O&M	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Operating Expense	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
EXISTING DEBT SERVICE										
2010 Irrigation Water Revenue Bond	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-Total Existing Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NEW DEBT SERVICE										
Combined Payments - Proposed Projects ; La Verkin City In-Town Replacements , 100 E Transmission Line Improvement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
0.0% Impact Fee Fund Eligible	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-Total New Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] TOTAL EXPENSES	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net Cashflow Irrigation Fund	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CASH ON HAND										
Cash Project Costs	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-Impact Fee Eligible Debt Service	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Irrigation Fund Balance (FY End June 30)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Net Cash Flow to Irrigation Fund	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Renewal & Replacement Fund Balance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Cash on Hand	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
IMPACT FEE FUND ACCOUNTING										
Impact Fees Collected	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Impact Fees Expended	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Impact Fee Funds on Hand	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PROJECT IMPLEMENTATION										

Explanation for the proposed changes to code section 8-1-4: STATEMENT OF CHARGES; DELINQUENCY:

The last time this code section was changed was December 19, 2007; since then, technology has evolved in providing better ways of communicating and reaching people

Old provision

(1) *The city manager or his or her designee shall forthwith cause that a delinquency/termination notice (known herein as the "shutoff notice")* **be mailed-*to utility users whose utility accounts remain delinquent and unpaid.***

Lisa sends out an average of 125 shut-off notices each month to Citizens and Landlords. Those who don't respond with payment receive the next step, which is shut-off notices in the form of door hangers.

b. Additionally, at least forty eight (48) hours prior to the shutoff date, the city manager or his or her designee shall cause that a ***shutoff notice be delivered*** **and** ***placed at the residence or usual place of business of the user whose account is delinquent.***

As mentioned earlier, those who do not respond with payment after receiving the initial letters will progress to the next step, which involves issuing shut-off notices in the form of door hangers. On average, 73 door hangers are posted each month to notify citizens and businesses that their water supply may be shut off due to non-payment by the public works crew. This task requires an average of two public works crew members working for three hours each month.

New Provision

(1) The city manager or his or her designee shall forthwith cause that a delinquency/termination notice (known herein as the "shutoff notice") ~~**be mailed**~~ **be sent by mail and or electronically** *to utility users whose utility accounts remain delinquent and unpaid.*

b. Additionally, at least forty eight (48) hours prior to the shutoff date, the city manager or his or her designee shall cause that a shutoff notice be delivered **electronically and or** ~~**and**~~ *placed at the residence or usual place of business of the user whose account is delinquent.*

One of the new technologies introduced in the city is called YOPPIFY. YOPPIFY is a communications platform based in Utah and founded in Riverton, specifically designed for city governments and public utilities to send targeted, multi-channel alerts (such as texts, emails, and voice messages) to residents. The platform focuses on areas such as water conservation, leak notifications, road closures, and emergency updates.

Key details about YOPPIFY in Utah include:

Purpose: *It enables cities to engage residents with personalized, location-specific information.*

Utility Focus: *It provides tools for water managers to send, monitor, and report on high water usage or leaks, often in conjunction with secondary metering.*

Functionality: *The system allows for quick, customized messaging to specific neighborhoods or, during emergencies, to the entire community.*

Background: *Founded around 2021, the company aims to create tools designed "by public employees for public employees."*

YOPPIFY serves as a communication bridge, helping Utah cities and water providers to manage resources and improve transparent, direct communication with their residents.

YOPPIFY came about as a response to Utah legislation, which sought alternative methods to promote water conservation. They issued a Request for Proposal (RFP), a formal document used to announce a project, outline requirements, and solicit bids from qualified vendors for products or services. This process allows for an objective comparison of vendor capabilities, costs, and solutions. Key components of the RFP include project scope, deliverables, timelines, and evaluation criteria. The goal was to create software that cities could use to communicate with their citizens and businesses regarding water leaks and conservation efforts.

Each month, Lisa produces a report through our Advanced Metering Infrastructure (AMI) program, which utilizes smart utility meters to collect real-time, detailed usage data, enhancing billing accuracy and leak detection. Residents and businesses showing a leak alert are notified primarily through YOPPIFY, allowing them to address repairs promptly, conserve water, and avoid unnecessary costs.

Since YOPPIFY is already integrated with our billing and addressing software, we could replace the letters that Lisa currently sends out and the door hangers the public works crew places each month with this software. While we recognize that not everyone can be reached through social media, and that some letters and door hangers will still need to be sent and placed, we believe that using YOPPIFY could result in significant cost and labor savings.

Please see page 2 for a breakdown of costs and savings.

Staff hopes that following the City Council meeting timeline will work for the passage of this ordinance.

* ***February 4th*** *Council will receive in their packets: (1) an explanation page detailing the changes and additions, (2) a red-lined copy highlighting the changes and additions, and (3) a clean draft copy of the proposed changes and additions.*

* ***February 18th*** *Council will have a discussion on the proposed Cemetery changes and additions, at which point any changes or additions can be addressed, and a public hearing can be set for the March 4th Council meeting.*

* ***March 4th*** *council meeting public hearing on the proposed Cemetery updates and possible passage?*

8-1-4: STATEMENT OF CHARGES; DELINQUENCY:

A. Statement: On or before the first day of the month in which payment for utility charges are assessed, due and payable, the city manager or his or her designee shall cause to be prepared and furnished to each user in person, by mail, and/or by delivery at the user's place of residence or usual place of business, a statement of charges (sometimes referred to herein as the "utility bill"). The utility bill shall: 1) issue each month; 2) specify the amount of utility (including water) service charges assessed against the user, as well as any outstanding delinquency related fee(s); and 3) identify the place of payment and the date due.

B. Failure To Pay:

1. Date Of Delinquency And Late Fee:

a. A utility bill is due and payable upon receipt, and shall be paid not later than the twenty fifth calendar day of the month in which the user is billed for utility services.

b. Payments not received by twelve o'clock (12:00) midnight of the twenty fifth shall be deemed delinquent and shall be subject to the immediate assessment and imposition of a utility services late fee, as set by resolution of the city council.

c. From and after the date of delinquency (i.e., the twenty sixth day of the month in which payment was due), and until all charges and associated delinquency related fees are paid in full, the user's utility account shall be considered a delinquent account.

2. Notification Of Delinquency And Possible Termination Of Service:

a. Utility accounts which remain delinquent as of eight o'clock (8:00) A.M. on the fifth day of the month following the imposition of the utility services late fee shall be subject to the immediate assessment and imposition of a notice processing fee set forth by resolution of the city council.

(1) *The city manager or his or her designee shall forthwith cause that a delinquency/termination notice (known herein as the "shutoff notice")* ~~be mailed~~ *be sent by mail and or electronically to utility users whose utility accounts remain delinquent and unpaid.*

(2) The shutoff notice shall state the amount of the delinquency (including any unpaid utility services late fee and notice processing fee) and the anticipated date of termination of water service by the city ("shutoff date").

b. *Additionally, at least forty eight (48) hours prior to the shutoff date, the city manager or his or her designee shall cause that a shutoff notice be delivered electronically and or* ~~**and**~~ *placed at the residence or usual place of business of the user whose account is delinquent.*

3. Shutoff Date; Involuntary Termination Of Water Service:

a. The shutoff date shall be the third Tuesday of the month following the date wherein the account first became delinquent and subject to a late fee.

b. Users whose utility accounts remain delinquent on the shutoff date shall be subject to immediate termination of water service.

4. Intervention Of Nonprofit Charitable Organizations:

a. For purposes of this section, a "nonprofit charitable organization" shall mean and include all charitable organizations or entities which have been classified as tax exempt under state law of the state of Utah or under the federal law of the United States of America, and only while carrying out an act which is within the scope of such tax exempt status and where no profit is directly or indirectly derived by any person, including, but not limited to, religious, charitable assistance, and emergency relief organizations, and includes a chapter, branch, office, congregation, or similar affiliate, and any authorized representative thereof.

c. If, at any time prior to termination of a user's water service, a nonprofit organization should contact the city manager or his or her authorized designee(s) and request the opportunity to pay the amount of the user's delinquency (including all charges and delinquency related fees) on the user's behalf, action to terminate the user's water service shall be stayed for a period of not less than ten (10) days following the shutoff date provided in subsection B3 of this section.

(1) If the user's delinquent utility charges and delinquency related fees are paid in full prior to the end of such stay, then the water service will not be terminated for such delinquency.

(2) If the user's delinquent utility charges and delinquency related fees are not paid in full within the period of such stay, service to said user shall be subject to immediate termination at the expiration of such period of stay.

5. Reconnection: After water service has been terminated to a user pursuant to the terms of this section, it may only be restored to the user after all delinquent utility charges and associated delinquency related fees have been paid (including a reconnection fee, as provided by resolution). (Ord. 2007-33, 12-19-2007)

The staff believes that an update to the Cemetery ordinance is necessary, as the last revision was made in 1998. This need arises from ongoing clarifications and interpretations of the code.

These pages aim to identify the sections of the ordinance that need to be changed or added, along with explanations for each proposed modification.

The following comments are excerpts of recommended changes

7-6-2: (Definitions added)

* *Burial*
* *Burial Lot*
* *Burial Right*
* *Burial Vault*
* *Certificate Of Burial Right*
* *Cremated Remains*
* *Disinterment*
* *Exhumation*
* *Grave*
* *Headstone*
* *Marker*
* *Memorials*
* *Monuments*
* *Plot*

7-6-5-C (Vaults)

* *Since 1982, industry standards have changed significantly, necessitating the approval of alternative vault types.*

7-6-5- (Burials)

* *(D) Burial Days - (E) Internet timeline - (E-1) Service time was adopted by Resolution (R-2022-01), January 6, 2022. We want to include this portion in the Cemetery ordinance to make it easier for people to find and comply with.*

7-6-7: (Lot Sales)

In recent years, we have faced issues with plot owners allowing unauthorized burials in their assigned plots or in plots belonging to others. Some individuals claim that a family member or friend has died and was buried elsewhere, leading them to believe they can use the plot for burial. This situation is further complicated when other family members later express their desire to be buried in the same plot, resulting in confusion when staff unintentionally permit an additional burial in that plot.

This situation creates significant emotional distress for all parties involved, especially for staff members who find themselves caught between these disputes.

To address these issues, we have provided a clear outline of processes to follow, which will help reduce staff involvement in such matters.

(B-1-2-a-b-c) The only ways individuals can transfer burial locations.

7-6-8: (Placement Of Monuments And Markers)

* *This section was added to distinguish monuments from markers, establish limits on headstone base size, and regulate headstone height since it interferes with our sprinklers' ability to maintain lawn coverage, resulting in dead spots within the Cemetery.*

7-6-11: (Rules and Regulations)

* *Placements of Flowers And Plants: Placement of Flowers, plants, and other items of decoration is limited to within the headstone base, as well as notifying the family that once these items become withered, discolored, torn, or broken, the staff has the right to remove them. This was allowed in the existing code under item J*
* *Holidays: We set the header to 'holidays,' but the rest of the text is what is in the code now. We crossed out the requirement to post a notice on the date following each holiday stating that staff would remove the flower/decoration, because the signage we post each year would get stolen and create a problem for staff. The way we have it now allows these items to be left longer until they weather, discolor, or become a maintenance issue.*
* *Temporary Memorials: We added item K, Temporary memorials, to let the family know that after (5) business days, once the flowers, wreaths, and other such decorations start to fade, discolor, become broken, or become a maintenance issue, they will be removed.*

7-6-13: (Unlawful Acts)

* *We have removed the ability to plant around the exterior of the base due to maintenance issues. However, planting is still permitted within the base itself. Existing plants can remain, but we have set a deadline for their upkeep. It is expected that those who have planted live plants will maintain them; however, in reality, most do not take responsibility and leave it to the staff.*

Staff hopes that following the City Council meeting timeline will work for the passage of this ordinance.

- ***February 4th*** *Council will receive in their packets: (1) an explanation page detailing the changes and additions, (2) a red-lined copy highlighting the changes and additions, and (3) a clean draft copy of the proposed changes and additions.*
- ***February 18th*** *Council will have a discussion on the proposed Cemetery changes and additions, at which point any changes or additions can be addressed, and a public hearing can be set for the March 4th Council meeting.*
- ***March 4th*** *council meeting public hearing on the proposed Cemetery updates and possible passage?*

CHAPTER 6
CEMETERIES

SECTION:

7-6-1: CITY CEMETERY:

The burial ground of the city shall be known and designated by the name of LaVerkin Cemetery. (1982 Code § 8-202)

7-6-2: DEFINITIONS:

The following words or phrases shall have the following meanings, unless the context otherwise clearly requires:

BURIAL: *The interment of human remains, including cremated remains.*

BURIAL LOT: *The location, by section and block, identified in a city cemetery for the future exercise of a burial right, or the memorial to a deceased person, including historically created half burial lots.*

BURIAL RIGHT*: The nontransferable, limited right of a specific individual to be buried in a specific burial lot in any land designated by the city as a cemetery or a cremation garden.*

BURIAL VAULT*: A structure used to hold a casket or container of cremated remains.*

CERTIFICATE OF BURIAL RIGHT*: A document issued by the city identifying the individual who may be buried in a burial lot.*

CREMATED REMAINS*: The remains of a deceased human that have been reduced to ashes.*

DISINTERMENT*: The permanent removal of a casket or cremated remains from a burial lot.*

EXHUMATION: *The temporary removal of human remains from a burial lot.*

GRAVE: *A burial lot in which human remains, including cremated remains, have been buried or which has been excavated in anticipation of burial.*

HEADSTONE: *A marker or monument used to identify the person interred in a burial lot.*

LOT: The partial lots or single graves in the city cemetery.

LOT OWNER OR PURCHASER AND GRAVE OWNER OR PURCHASER: The owner or purchaser of burial privileges or the collateral right of use of any burial lot evidenced by a deed or burial right for a described lot or by proved and recognized descent or devise from the original owner. (1982 Code § 8-202)

MARKER: *A headstone that is flat, flush to the natural grade of a grave, identifying the person whose remains are buried in the grave.*

MEMORIALS: *Items placed on a burial lot as a remembrance.*

MONUMENT: *A headstone that is upright, located on a grave, identifying the person whose remains are buried interred in the grave.*

PLOT: *Each single gravesite within a lot, without.*

7-6-3: APPLICABILITY:

All cemeteries owned and/or maintained by the city or which may hereafter be acquired by the city wherever situated are hereby declared subject to the provisions of this chapter. (1982 Code § 8-203)

7-6-4: CEMETERY SEXTON:

A. Created: There is hereby created the position of cemetery sexton. (1982 Code § 8-211; amd. 1998 Code)

B. Duties: The cemetery sexton shall have the general supervision and administration of the city cemetery, including, but not limited to:

1. Recommending to the city council such additional rules and regulations as may be necessary for the operation, maintenance, use and protection of the cemetery.

2. Subdividing the cemetery into lots and grave sites.

3. Maintaining a record of the location of the graves and preventing any lot from being used beyond its capacity.

4. Keeping a duplicate plat of the cemetery and, at the request of any person wishing to purchase any of the lots or parts of lots, pointing out any of the lots or parts of lots for sale; and upon disposal of any lots or part thereof, notifying the city clerk/recorder of such fact. The city clerk/recorder shall, after payment of the lot price has been received

in the treasury, issue a certificate of burial rights which shall describe the lot or grave to which the right to burial is granted. The certificate shall be signed by the mayor and the city clerk/recorder. (1982 Code § 8-212; amd. 1998 Code)

7-6-5: BURIALS:

A. Certificate Required: It shall be unlawful for any person to bury the body of a deceased person in the city cemetery without first obtaining a certificate of burial right for the lot used or producing satisfactory evidence of a right to burial based on a properly acquired certificate of burial right. (1982 Code § 8-222)

B. Registration: Before any deceased person may be buried in the city cemetery, the relatives or person having charge of the deceased shall provide the city clerk/recorder with a written statement which shall be filed by the city clerk/recorder, which statement shall contain, if known, information about the deceased regarding his or her name, when and where born, the date and cause of death, the name of the attending physician, date of burial, name of cemetery and the description of the location of the grave. (1982 Code § 8-223)

C. Vaults:

1. Unless in writing waived by the cemetery sexton, it shall be unlawful for any person to be buried in the cemetery unless the casket shall be placed in a vault made of concrete, fiberglass, steel or brick lined, *Polypropylene, or Industry - standard Vaults of and such* or of such other material approved by the city council, substantially constructed and covered with a similar durable material.

2. No wood shall be used as a permanent part of the construction of any part of the vault. (1982 Code § 8-225; amd. 1998 Code)

D. Burial Days: Monday through Saturday, except City-observed State and Federal holidays, except New Year's Day, Memorial Day, Thanksgiving Day, and Christmas Day. When the City-observed State and Federal holiday falls on a Saturday, this includes the actual holiday and the preceding day; when it falls on a Sunday, this includes the actual holiday and the following day. Except as otherwise ordered by the Mayor (in exceptional circumstances), there shall be no interments on Sundays. New Year's Day. July 4th. Pioneer Day. Veterans Day. Thanksgiving Day. Christmas Day. or Friday through Monday of the Memorial Day weekend

E. Internment: Persons desiring to arrange for an interment must contact the City at least 48 hours prior to the scheduled time of interment. Failure to do so may prevent the scheduling of the interment at the desired time; if the sexton or other applicable City official determines that the interment may practically occur at the desired time of interment,

1. Interment (and associated graveside services or visits) may be scheduled until 2:30 p.m. and shall finish within two hours from the scheduled time; and all visitors will be clear of the grave site prior to the end of such two-hour period and no later than 4:30 p.m. for an afternoon interment, to give City employees sufficient time to complete all associated services and needed site-restoration by 5:00 p.m.

D. Unlawful Acts: It shall be unlawful for any person to:

1. Disinter any body buried in any cemetery, except under the direction of the cemetery sexton who shall, before disinterment, require written permission from both the Southwestern district health officer and the owner of the lot or his or her heirs, which written authorization shall be filed and preserved in a record kept for such purposes.

2. Disinter or remove the body of a person who has died from a contagious disease within two (2) years after the date of burial, unless the body was buried in a hermetically sealed casket or vault and is found to be so incased at the time of disinterment.

3. Inter anything other than the remains of human bodies in cemeteries.

4. Bury the body of any person within the city, except in the city cemetery or a private cemetery, unless by special permission of the city council under such rules and regulations that it may prescribe. (1982 Code § 8-224; amd. 1998 Code)

7-6-6: FEES AND CHARGES:

A. Established; Authority: The city council shall, from time to time by resolution, fix the size of lots, the price at which burial rights shall be sold and the fees which shall be charged for the various cemetery services to be provided. (1982 Code § 8-243)

B. Collection: The city clerk/recorder, and such other persons as the city council may designate, are hereby authorized and required to collect in advance, prices and fees for the opening and closing of graves or other services which shall include, but not be limited to, properly disinterring bodies and properly restoring the earth and grounds, recording each burial, disinterment or removal and raised monument privileges. The fees shall be such amounts as are determined by the city council from time to time by resolution. (1982 Code § 8-241)

C. Opening Graves:

1. No grave shall be opened in the city cemetery until payment of a fee for the labor and expense in so opening the grave shall be paid.

2. The presentation of a receipt from the city clerk/recorder or person designated by the city council when presented to the cemetery sexton, shall be authority to open a grave for the burial of a deceased person. However, upon a contract being entered into between any mortician and the city wherein the mortician agrees to be responsible and liable for fees for the opening of a grave, and wherein that mortician will be personally liable for such fees and for perpetual care payments, the city clerk/recorder or authorized person may give the cemetery sexton authority to open graves without the presentation of a receipt from the city clerk/recorder or authorized person. (1982 Code § 8-242; amd. 1998 Code)

7-6-7: LOT SALES:

A. *Authority and Records: The city clerk/recorder, along with any other individual* *designated by the city council, is authorized to sell burial rights only to individuals. Upon the sale of a burial right, the city will issue a certificate of burial right. This certificate grants the individual named within it the non-transferable right to be buried in the identified burial lot. However, the certificate of burial right only conveys a license for burial and does not confer any title, fee, or other ownership or possessory interest in the burial lot itself.*

B. *An individual may purchase more than one burial right, as long as each issued certificate identifies the individual entitled to be buried in the corresponding lot. However, one individual may be named in no more than two certificates. Any certificate of burial right that does not designate the individual eligible for burial in the identified lot is invalid, except in the following circumstances:*

1. While alive, the individual named in the certificate must provide written consent for any other remains to be interred in the identified burial lot.

2. After that individual has passed away, the burial of any other remains may be authorized by:

a) *The surviving spouse of the individual named in the certificate, or*

b) *If no spouse survives, a descendant who must provide proof of power of attorney for the individual named in the certificate.*

c) *The descendant may either obtain written consent from all surviving descendants of the individual named in the certificate (by representation), or they must notify all descendants in writing of their intent to permit other remains in the burial lot. This notification must explicitly state that any objections to the proposed burial must be submitted to the city in writing within thirty (30) days.*

If the city does not receive any objections within that thirty-day period from the date the last notice was mailed, the descendant may consent to the burial of other remains in the lot. Conversely, if an objection is received within thirty (30) days from that date, the descendant cannot consent to the burial of other remains.

Before notifying descendants of the intent to consent to the burial of other remains, the descendant must inform the city of this intent, provide the names and last known addresses of all known surviving descendants of the individual named in the certificate, and deliver copies of the notices to the city, along with proof of mailing. The legally recognized guardian of any minor or incapacitated descendant may act on behalf of that minor or incapacitated descendant.

C. Purchase Price, Scope Of: A certificate and rights to burial shall be exempt from execution, taxation or assessment for care and maintenance from and after full payment of the purchase price. Payments made pursuant to this section shall not be construed to be in payment for cemetery services other than perpetual care.

D. Services Included: Perpetual care shall be deemed to include the filling of the grave, the placing of topsoil upon the grave, seeding the grave with grass and watering and cutting the grass. No other services are included.

E. Improvements, Changes And Services: No other improvements, changes or service, except perpetual care, shall be made on any lot without the certificate holder or his heirs first submitting to and receiving from the cemetery sexton written approval for such improvements, changes or services, which improvements, changes or services shall be subject to the rules and regulations promulgated by the city council. (1982 Code § 8-251; amd. 1998 Code)

F. Resale Restrictions:

1. From and after March 15, 1982, the lots sold by the city shall not be further sold, transferred, conveyed or assigned to any person except the city. The city hereby agrees to buy back any city cemetery grave lot which it may hereafter sell. The repurchase of such lots shall be for the original price paid by the purchaser or the current selling price of the lot, whichever is less.

2. Whenever a certificate to burial rights or lots reverts to the city, as provided for in this subsection, or becomes vested in the city for any reason, before new certificates are issued, the original certificate shall be canceled or an assignment given and the record shall be so changed. (1982 Code § 8-252)

3. The certificates shall be issued and signed and attested by the city clerk/recorder. All lots or parts of lots, as provided in this subsection, together with all improvements, shall be exempt from execution and from taxation and assessment for care and maintenance charges from and after said payment. (1982 Code § 8-252; amd. 1998 Code

7-6-8: PLACEMENT OF MONUMENTS AND MARKERS

A. Upright monuments and primary headstones are allowed in all sections of the cemetery, but they must not exceed 36 inches in height at their tallest edge. Any monument or headstone that stands above the sod level is classified as an upright stone. Monuments and headstones that are level with the sod are also permitted. The dimensions for monument and headstone bases are restricted; they must not exceed 42 inches in length and 24 inches in width for a single plot. For two consecutive plots, the base length cannot exceed 84 inches while still maintaining the 24-inch width.

1.A plot that has been designated for cremation remains of no more than two people. The Monuments/Markers must be flush with the sod line

B.. If an individual purchased a headstone or marker which exceeds the 36-inch maximum height, that headstone or marker shall be allowed only if written proof is furnished to the sexton showing that the headstone or marker was purchased prior to Month______ Date_______ Year ________.

C. Permitted Markers or Additional Stones. Any secondary marker must be flush with the sod line. The dimensions of the marker or stone shall not exceed 24 by 12 by six inches. The base upon which it is placed may not exceed 36 by 24 by six inches. A secondary marker, stone, may be permitted if the additional marker or stone identifies a currently unidentified individual within the same burial lot. Stones or markers that identify an individual already identified through another stone or marker within that same burial lot shall be prohibited. The *only exception shall be veteran markers. No more than two markers or stones may be permitted in a single burial lot.*

D. *Materials Permitted. All monuments, headstones, or markers shall consist of granite, bronze, or other durable material approved by the sexton.*

E. *Authorization: Any individual, family, group, or the like must obtain approval from the sexton prior to the placement of any monument, headstone, or marker*

7-6-9: PERPETUAL CARE LOTS:

A. Scope Of Care: The essential perpetual care that the city agrees to give shall consist of care of the cemetery generally, and shall include, but is not limited to, mowing of all lots and graves at reasonable intervals, resodding, seeding and filling in sunken graves, sodding the surface of the graves to lot level, removing dead flowers and trimming trees and shrubbery when necessary, raking and cleaning the lots and straightening of tilting stones or markers, but shall not include repairing or replacing markers or memorial structures of any nature, except when the need for repair or replacement is directly caused by the city. (1982 Code § 8-262)

B. Contracting For Care:

1. No grave shall be hereafter opened in the cemetery of this city until perpetual care upon the lot where the grave is to be opened shall have been contracted for with the city, or perpetual care thereon paid. Should it be the desire of any person to have a grave opened and the body interred therein and perpetual care shall not have been previously contracted for or paid in full for the lot therein, the person may either pay the full purchase price for perpetual care or enter into a contract wherein payment shall be agreed. (1982 Code § 8-261)

2. The installment contract for perpetual care of, or purchase of a lot with perpetual care, shall provide for collection by the city in event of a default and such collection shall be by civil action, and the defendant therein shall pay cost of collection, together with reasonable attorney fees to the city, and shall also pay interest at the rate of eight percent (8%) per annum upon the past due installments. All installments shall immediately become due upon the default of any of the installments; provided however, that when perpetual care for any lot in the city cemetery or portion thereof, has not been paid for a period of ten (10) years, then, and in such an event, the unused portion of the lot shall thereafter escheat to the city, and the title thereof shall revert to the city, which shall thereafter have the right, option and privilege to sell and dispose of unused cemetery property, as is in this chapter provided, upon condition that the city shall thereafter maintain perpetually without cost of fee the portion of the lot occupied by a grave or graves prior to the date when the remaining property escheated to the city. (1982 Code § 8-261; amd. Ord. 2005-12, 4-6-2005)

3. The city shall have the power to fix, by resolution, a fee from any person now owning a cemetery lot or portion thereof for the annual maintenance and care thereof. (Ord. 2005-12, 4-6-2005)

C. Fund Created; Use:

1. There hereby is established a perpetual care fund according to the laws of the state and this chapter. All funds received from the sale of perpetual care services shall be placed in a special perpetual care fund, invested in compliance with the laws of the state and used for the purposes herein provided.

2. The income from the perpetual care fund shall be used to pay the upkeep and development of the cemetery. (1982 Code § 8-271; amd. 1998 Code)

D. Duties Of Treasurer: It shall be the duty of the city treasurer to keep an accurate record of the perpetual care trust fund account, including investments, to see that the principal portion thereof is properly invested in accordance with resolutions of the city council and the laws of the state. (1982 Code § 8-272; amd. 1998 Code)

E. Investment Income: All income from investments held in the perpetual care fund shall be quarterly credited to the cemetery maintenance fund for use in providing the perpetual care as required herein. (1982 Code § 8-274)

7-6-*10*: INDIGENTS:

The city council may by resolution designate a portion of the city cemetery to the burial of indigents. Whenever it is made to appear to the mayor and city council by proof submitted to them by the city clerk/recorder that any person who has died does not have an estate sufficient to pay the purchase price of a lot in the cemetery, and that the nearest relative or representative of such deceased person desires to have the body of such deceased interred in the cemetery, the mayor and city council may grant burial space for such deceased person at the request made to him by the city clerk/recorder. (1982 Code § 8-291; amd. 1998 Code)

7-6-*11*: RULES AND REGULATIONS:

A. Authority To Regulate; Procedure:

1. The city council may promulgate by resolution such additional rules and regulations concerning the care, use, operation and maintenance of the cemetery as it shall deem necessary.

2. The mayor may, from time to time as the city council deems necessary, direct and publish a booklet of rules and regulations for the convenience of the purchasers of lots in the city cemetery. Such rules and regulations shall constitute a part of the terms and conditions under which owners and users may utilize the cemetery and shall form a supplement to this chapter after they have been adopted as official by resolution of the city council.

3. Any changes in the rules and regulations shall be adopted by the city council before such changes shall be official. (1982 Code § 8-237)

B. Lots Sold: Every lot or single grave sold is subject to rules and regulations that have been or may be adopted. The rules and regulations shall be subject to such changes as are found necessary for the protection of lot owners, the remains of the dead and the preservation of the cemetery. (1982 Code § 8-227)

C. Traffic Control:

1. The provisions of the city traffic ordinances relative to the operation of vehicles and conduct of pedestrians shall be in effect in the cemetery, except as herein otherwise modified by this chapter.

2. It shall be unlawful for any person to ride or drive within the city cemetery at a speed greater than five (5) miles per hour. (1982 Code § 8-230)

D. **Children:** Children under the age of *Sixteen (16)* years shall not be allowed in cemeteries unless accompanied by their parents or other adults, except for the purposes of attending authorized funerals or, in the company of adults, placing flowers on the grave of a deceased relative or friend, or performing any other customary evidence of respect in accordance with their religious principles. (1982 Code § 8-231)

E. **Animals:** No animal shall be allowed in any cemetery, except in the confines of a vehicle and must be at all times retained within the confines of said vehicle while the vehicle remains in the cemetery. (1982 Code § 8-232)

F. **Decorum:** Cemetery grounds are sacredly devoted to the interment and repose of the dead. Strict observance of decorum due such a place shall be required of all persons. (1982 Code § 8-233)

G. **Errors In Opening Graves**: Under no circumstances will the city assume responsibilities for errors in opening graves when orders are given by telephone. (1982 Code § 8-229)

H. **Religious And Fraternal Organizations**: The city may contract with religious and fraternal organizations to designate a reasonable portion of the cemetery in which burials may be restricted to members of such religious and fraternal organizations and their families. (1982 Code § 8-226)

I. **Placement Of Flowers, Plants And Other Items Of Decoration**: *All adornments should be placed on the headstone or in a prescribed receptacle within the concrete foundation of the headstone. Items should not be placed on or in the grass surrounding the headstone, thus allowing staff to trim and edge without incident or movement of items. Shepard hooks are allowed but are restricted to one per headstone. Adornments, including but not limited to potted plants, flags, floral wreaths, and flowers in vases are allowed, but will be removed without notice by cemetery employees when they become withered, discolored, torn, broken or vandalized.*

J. ***Holidays:*** The city reserves the right to remove all flowers, plants or other items of decoration from the city cemetery grounds after seven (7) calendar days following any holiday or at such earlier time and/or other date if said flowers, plants or other items of decoration have died or become broken. The owner of all such flowers, plants or other items of decoration shall be responsible to remove the same within the above time periods if the owner desires to preserve such items; otherwise, all such items will be removed and disposed of by cemetery personnel

K. ***Temporary memorials:*** *Temporary memorials, including but not limited to potted plants, flags, floral wreaths and flowers in vases, will be removed without notice by cemetery* *employees when they become withered, discolored, torn, broken or vandalized. Funeral flowers will be allowed to remain for three (5) business days, after which cemetery employees may remove them based on the above criteria. Other temporary memorial items such as glass containers, wires, sticks, iron rods, pegs, ceramic pots or other containers that may pose safety hazards will be removed by cemetery employees.*

7-6-*12*: CARE AND MAINTENANCE; RIGHT TO ENTER:

The city reserves the right to enter upon any grave and to perform all work necessary for the care and upkeep of all lots and graves in its cemeteries. (1982 Code § 8-228)

7-6-*13:* UNLAWFUL ACTS:

A. Injury To Property: It shall be unlawful:

1. For any person to tie or attempt to tie any horse, animal or motor vehicle to any monument, gravestone, tablet, marker, tree, shrub, fence or enclosure on the premises of the cemetery for the purpose of injuring, defacing or attempting the removal of same.

2. For any person to injure, deface, break, destroy or remove any headstone, tombstone, monument, tree, shrub or any other property in the cemetery. (1982 Code § 8-234; amd. 1998 Code)

B. Landscaping By Private Persons:

1. Except as provided by the rules and regulations of the city council, it shall be unlawful for any person to erect or maintain any fence, corner post, coping or boundary of any kind, to plant any vegetation upon any lot/*Burial plot* or lots/*Burial plots* lot or lots, street, alley or walk in the cemetery of this section, or to grade the ground or land thereof. The cemetery sexton shall, whenever required, furnish the true lines of any lots according to official survey, shall prevent and prohibit any markings of the same except by official landmarks, and shall prevent and prohibit any grading thereof that might destroy or interfere with the general slope of the land

2. ***PLANTS:*** *Plants that existed from the date of this passing Month______ Day________ Year______ will be able to remain, but if* plants remain unkempt for one year or grow too large, they may be removed by cemetery personnel. The city retains the right to determine when plants have grown too large. (1982 Code § 8-235; amd. 1998 Code; Ord. 2002-14, 12-18-2002)

C. **Placement Of Markers**: It shall be unlawful for any person to erect, place or cause to be placed any marker or monument on any lot in the cemetery in violation of the rules and regulations promulgated by the city council regarding the placement, construction and design of all such markers. (1982 Code § 8-236)

7-6-*14:* PENALTY:

Any person violating any provision of this chapter shall be guilty of a class B misdemeanor and upon conviction thereof, subject to penalty as provided in section 1-4-1 of this code. (1998 Code)

205 S 100 E

Steven Sanders constructed the home located at 205 S 100 E under the flag lot code specified in city regulation 10-7-12.

A. Right of Way or Access Strip:

1. The right-of-way or access strip must have a minimum width of twenty-five feet (25') and a maximum grade of no more than fifteen percent (15%)..

3. No buildings, structures, or parking will be permitted in the right-of-way or access strip, which must be used solely for access to the flag lot.

B. Dwelling Unit Number: Only one one-family dwelling unit is allowed on a flag lot (Ord. 2009-02, 2-18-2009).

After Mr. Sanders passed away, Alan Olsen purchased the property. Mr. Olsen later divided the property into two parcels, which required him to go through the subdivision process (see Exhibit A, recorded mylar). The mylar indicates a dimension of 25.57 feet, demonstrating compliance with the required 25 feet for a flag lot. However, it also shows a 20-foot access easement with an arrow pointing to Lot #1's access, but it lacks a description of its intended use. Typically, there would be a second arrow pointing to Lot #2, or the document would specify shared access if it were intended for multiple lots.

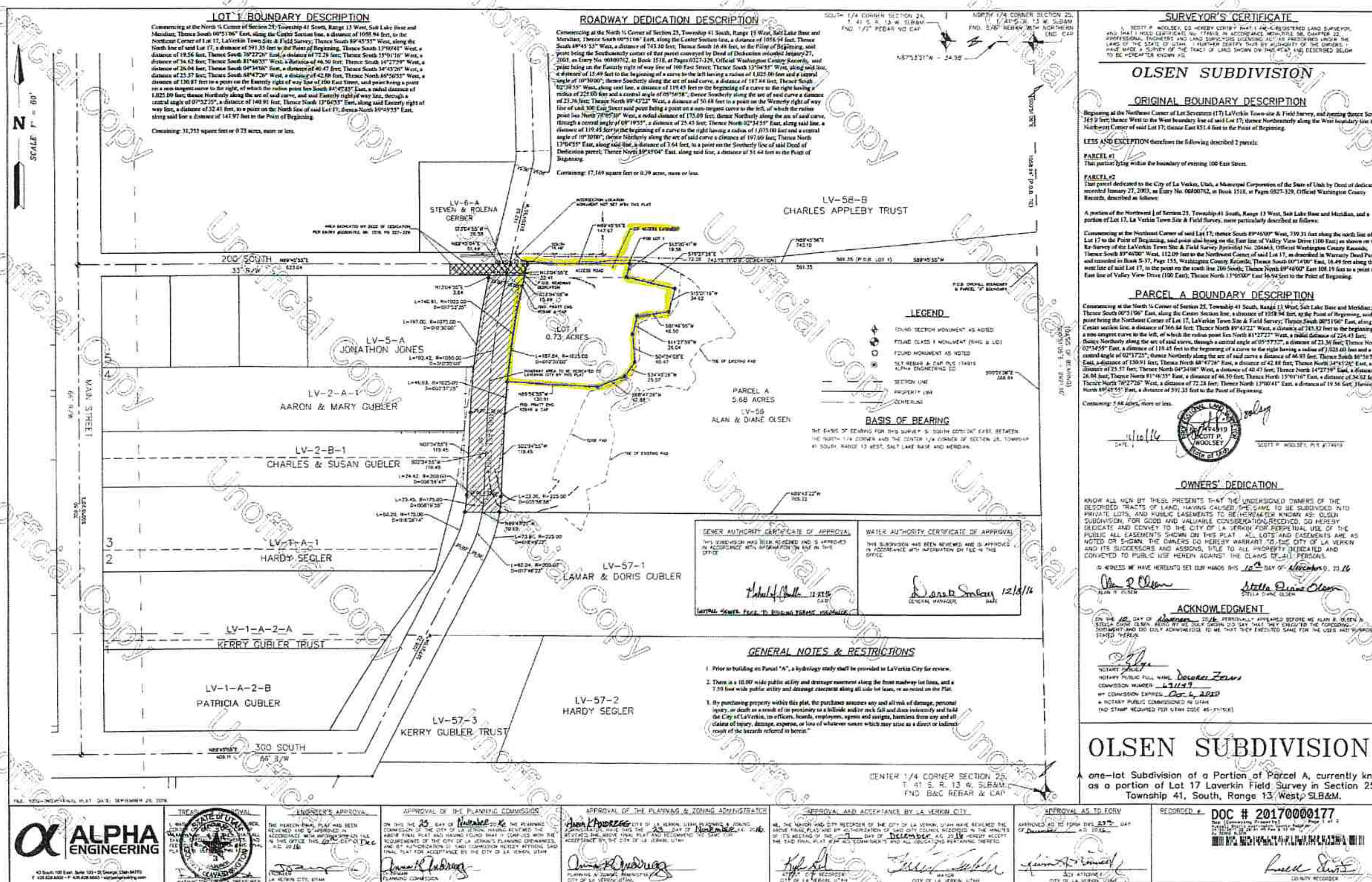
According to our flag lot code, no buildings, structures, or parking are permitted in the right-of-way or access strip, which must be used solely for access to the flag lot. If Mr. Olsen intended to provide access to the newly created property by using 20 feet of the existing flag lot's access, this would contradict our code regarding the requirement for the full 25 feet.

Additionally, under the fire code and the guidelines set by the Hurricane Valley Fire Department, all access routes must be a minimum of 25 feet wide. The proposed 20-foot access to Mr. Olsen's lot (Lot #2) does not meet this requirement.

Moreover, if Mr. Olsen intended to create a second flag lot to gain access to his property by utilizing the primary flag lot's access, this would also violate our regulations, which state that only one single-family dwelling unit is allowed on a flag lot. Therefore, he would need to provide an additional 25 feet alongside the original 25 feet of access. Since he no longer owns the primary flag lot, he would not be able to fulfill this requirement, resulting in the necessity for a standard 50-foot city road.

Under the Owners' Dedication, it states: *"Know all men by these presents that the undersigned owners of the described tracts of land, having caused the same to be subdivided into private lots and public easements to be hereafter known as the Olsen Subdivision, for good and valuable consideration received, hereby dedicate and convey to the City of LaVerkin for perpetual public use all easements shown on this plat. All lots and easements are as noted or shown. The owners do hereby warrant to the City of LaVerkin and its successors and assigns title to all property dedicated and conveyed for public use herein against the claims of all persons."*

Again, the City is unaware of the reason for the inclusion of this 20-foot access easement on the Mylar or why it lacks a description detailing its intended use, as there is no city infrastructure in the 25-foot pole portion of this flag lot (which serves as private access for Lot #1). Additionally, the City has no reason to require access to Lot #2, since access would only be permitted from the approximately 190-foot frontage on 100 East, located just south of Lot #1.


LOT 1 BOUNDARY DESCRIPTION
ROADWAY DEDICATION DESCRIPTION
SURVEYOR'S CERTIFICATE
OLSEN SUBDIVISION
ORIGINAL BOUNDARY DESCRIPTION
PARCEL A BOUNDARY DESCRIPTION
LV-58-B
CHARLES APPLEBY TRUST
LV-6-A
STEVEN & ROLENA GERBER
200 SOUTH
33' R/W
LOT 1
0.73 ACRES
LV-5-A
JONATHON JONES
LV-2-A-1
AARON & MARY GUBLER
LV-2-B-1
CHARLES & SUSAN GUBLER
LV-1-A-1
HARDY SEGLER
LV-1-A-2-A
KERRY GUBLER TRUST
LV-1-A-2-B
PATRICIA GUBLER
300 SOUTH
66' R/W
MAIN STREET
66' R/W
LV-57-3
KERRY GUBLER TRUST
LV-57-2
HARDY SEGLER
LV-57-1
LAMAR & DORIS GUBLER
PARCEL A
5.68 ACRES
LV-56
ALAN & DIANE OLSEN
LEGEND
BASIS OF BEARING
OWNERS' DEDICATION
ACKNOWLEDGMENT
SEWER AUTHORITY CERTIFICATE OF APPROVAL
WATER AUTHORITY CERTIFICATE OF APPROVAL
GENERAL NOTES & RESTRICTIONS
CENTER 1/4 CORNER SECTION 25, T. 41 S., R. 13 W., SLB&M, FND. B&C REBAR & CAP
OLSEN SUBDIVISION
one-lot Subdivision of a Portion of Parcel A, currently know as a portion of Lot 17 Laverkin Field Survey in Section 25, Township 41, South, Range 13 West, SLB&M.
ALPHA ENGINEERING
ENGINEER'S APPROVAL
APPROVAL OF THE PLANNING COMMISSION
APPROVAL OF THE PLANNING & ZONING ADMINISTRATOR
APPROVAL AND ACCEPTANCE BY LA VERKIN CITY
APPROVAL AS TO FORM
RECORDED #
DOC # 20170000177


Olsen
Distance: 190 Feet
Eagleview Technology Corporation

03/05/2024