

NOTICE OF A REGULAR CITY COUNCIL MEETING May 28, 2025, at 6:00 PM

PUBLIC NOTICE is hereby given that the Vineyard City Council will hold a regularly scheduled City Council meeting on Wednesday, May 28, 2025, at 6:00 PM, or as soon thereafter as possible, following the RDA meeting, in the City Council Chambers at City Hall, 125 South Main Street, Vineyard, UT. This meeting can also be viewed on our <u>live stream page</u>.

AGENDA

Presiding Mayor Julie Fullmer

- 1. CALL TO ORDER
- 2. PRESENTATIONS/RECOGNITIONS/AWARDS/PROCLAMATIONS
 - 2.1. Sheriff's Office Awards
- 3. WORK SESSION
 - 3.1. Purchasing Policy

Finance Director Krisite Bayles will lead a discussion about the Purchasing Policy

4. PUBLIC COMMENTS

"Public Comments" is defined as time set aside for citizens to express their views for items not on the agenda. During a period designated for public comment, the mayor or chair may allot each speaker a maximum amount of time to present their comments, subject to extension by the mayor or by a majority vote of the council. Speakers offering duplicate comments may be limited. Because of the need for proper public notice, immediate action cannot be taken in the Council Meeting. The Chair of the meeting reserves the right to organize public comments by topic and may group speakers accordingly. If action is necessary, the item will be listed on a future agenda; however, the Council may elect to discuss the item if it is an immediate matter of concern. Public comments can be submitted ahead of time to pams@vineyardutah.org.

- 5. MAYOR AND COUNCILMEMBERS' REPORTS/DISCLOSURES/RECUSALS
- 6. STAFF, COMMISSION, AND COMMITTEE REPORTS
- 7. CONSENT ITEMS
 - 7.1. Approval of the May 14, 2025 City Council Meeting Minutes

7.2. Amendments to the Vineyard Municipal Code Section 10.20.202 - Streets; Traffic Control (Ordinance 2025-07)

7.3. Contract Award for Penny Springs Pressurized Irrigation Pond Improvement (Concrete Lining)

8. APPOINTMENTS/REMOVALS

9. BUSINESS ITEMS

9.1. PUBLIC HEARING - Fiscal Year 2025 Budget Amendment #3 (Resolution 2025-25)

FY2024-2025 Budget Amendment #3

9.2. PUBLIC HEARING – Adopted Tentative Fiscal Year 2025-2026 Budget

The mayor and City Council will hear public comment regarding the adopted Tentative Fiscal Year 2025-2026 Budget. Utah State Code 10-6-115 states that after the conclusion of the public hearing, the mayor and City Council may continue to review the tentative budget. Approval of the final budget is tentatively scheduled for June 25, 2025.

9.3. PUBLIC HEARING: Wastewater (Sewer) Master Plan and Impact Fee Analysis (IFA) (Ordinance 2025-08)

Public Works will present the Wastewater (Sewer) Master Plan and the Facilities Impact Fee. The Mayor and City Council will act to adopt this plan by ordinance.

9.4. PUBLIC HEARING: Water Master Plan and Impact Fee Analysis (IFA) (Ordinance 2025-09)

Public Works will present the Water Master Plan and the Facilities Impact Fee. The Mayor and City Council will act to adopt this plan by ordinance.

9.5. PUBLIC HEARING - Consolidated Fee Schedule Amendment (Resolution 2025-23)

Utility Bill Clerk Maria Arteaga will present a proposed amendment to the Consolidated Fee Schedule. The mayor and City Council will act to adopt (or deny) this request by resolution.

10. CLOSED SESSION

The Mayor and City Council pursuant to Utah Code 52-4-205 may vote to go into a closed session for the purpose of (these are just a few of the items listed, see Utah Code 52-4-205 for the entire list):

- a discussion of the character, professional competence, or physical or mental health of an individual
- b strategy sessions to discuss collective bargaining
- c strategy sessions to discuss pending or reasonably imminent litigation
- d strategy sessions to discuss the purchase, exchange, or lease of real property, including any form of a water right or water shares
- e strategy sessions to discuss the sale of real property, including any form of a water right or water shares

- f discussion regarding deployment of security personnel, devices, or systems
- g the purpose of considering information that is designated as a trade secret, as defined in Section <u>13-24-2</u>, if the public body's consideration of the information is necessary in order to properly conduct a procurement under <u>Title 63G</u>, <u>Chapter 6a</u>, <u>Utah</u> <u>Procurement Code</u>

11. ADJOURNMENT

The next regularly scheduled meeting is on June 11, 2025.

This meeting may be held in a way that will allow a councilmember to participate electronically.

The public is invited to participate in all City Council meetings. In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the City Recorder at least 24 hours prior to the meeting by calling (385) 338-5183.

I, the undersigned duly appointed City Recorder for Vineyard, Utah, hereby certify that the foregoing notice and agenda was posted at Vineyard City Hall, on the Vineyard City and Utah Public Notice websites, and delivered electronically to staff and to each member of the Governing Body.

AGENDA NOTICING COMPLETED ON:	May 27, 2025		
CERTIFIED (NOTICED) BY:	/s/Pamela Spencer		
	PAMELA SPENCER CITY RECORDER		

PURCHASING POLICY OF VINEYARD CITY

ARTICLE 1 GENERAL PROVISIONS

A. Purpose.

- 1. To ensure fair and equitable treatment of all persons who wish to or do conduct business with Vineyard City.
- 2. To provide for the greatest possible economy in City procurement activities.
- 3. To foster effective broad-based competition within the free-enterprise system to ensure that the City will receive the best possible service or product at the lowest possible price.

B. Compliance.

- 1. This policy shall not prevent the City from complying with the terms and conditions of any grant, gift, or bequest that is otherwise consistent with law.
- 2. When procurement involves the expenditure of federal assistance funds, the City shall comply with applicable federal law and regulations.
- 3. State law (Section 11-39-101 et seq., Utah Code Annotated 1953, as amended) requires the City to follow specific bid procedures for specified types of supplies and services. Except where Vineyard Municipal Code is more restrictive, the City shall comply with State law.

C. Definitions.

- 1. "Business" means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture, or any other private legal entity.
- 2. "Change order" means a written order signed by the purchasing agent, directing the contractor to suspend work or make changes, which the appropriate clauses of the contract authorize the purchasing agent to order without the consent of the contractor or any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provisions of any contract accomplished by mutual action of the parties to the contract.
- 3. "Contract" means any City agreement for the procurement or disposal of supplies, services, or construction.
- 4. "Invitation for bids" means all documents, whether attached or incorporated by reference, used for soliciting bids.
- 5. "Person" means any business, individual, union, committee, club, other organization, or group of individuals.
- 6. "Procurement" means buying, purchasing, renting, leasing, leasing with an option to purchase, or otherwise acquiring any supplies, services, or construction.
- 7. "Public Works Project": The construction, replacement, or repair of:
 - i. A park or recreational facility;
 - ii. A pipeline, culvert, dam, canal, or other system for water, sewage, stormwater, or flood control;
 - iii. A street, transit facility, or transportation facility.

- 8. "Purchasing agent" means the person duly authorized by the governing body of the City to enter into and administer contracts and make written determinations with respect thereto.
- 9. "Purchase description" means the words used in a solicitation to describe the supplies, services, or construction to be purchased, and includes specifications attached to or made a part of the solicitation.
- 10. "Request for proposals" means all documents, whether attached or incorporated by reference, used for soliciting proposals.
- 11. "Request for qualifications" means vendors are required to provide a formal substantiation of credentials, certifications, qualifications, and financial wherewithal, which demonstrate capability in all respects to perform fully the contract requirements. Among the factors to be considered in an RFQ are competency, adequacy of personnel, past record, and experience of the person or business and its employees.
- 12. "Lowest responsible bidder" shall mean the lowest bidder who has substantially complied with all prescribed requirements, has submitted the bid in good faith, has a history of fully performing work at the bid price, and who has not been disqualified as set forth herein.

ARTICLE 2 PURCHASING AGENT

A. Appointment.

The governing bodies appointment or the current Finance Director shall be the Purchasing Agent.

B. Responsibilities.

The Purchasing Agent shall be responsible to make procurements, solicit bids and proposals, enter into and administer contracts, and make written determinations for the City.

C. Authority.

The Purchasing Agent shall not enter into any contract or purchase anything with City funds unless it:

- a. Is funded and itemized in the current fiscal year budget;
- b. Has been approved by the individual(s) as required in Article 3A.
- D. Change Orders.

Accumulated change orders up to the lesser of either (10%) of the bid award amount or \$25,000 may be approved by the Purchasing Agent, as long as the overall project budget is not exceeded.

E. Delegation.

The Purchasing Agent may delegate purchasing responsibilities to other employees when deemed appropriate.

ARTICLE 3 SOURCE SELECTION AND CONTRACT FORMATION; GENERAL PROVISIONS

A. Approval of Purchases

The following approvals are required for all purchases unless otherwise exempted in this chapter:

- 1. Any contract, purchase order, check request, or service request for services and supplies or building improvements in the total amount of \$5,000 or less may be made or approved by the Purchasing Agent, department head, or an employee or supervisor authorized by the Purchasing Agent or department head to make such purchase, purchase order, check request, or service request.
- 2. Any contract, purchase, purchase order, check request, or service request for services, supplies, or building improvements in the total amount of more than \$5,000 but less than or equal to \$25,000 must be made or approved by the Purchasing Agent and department head.
- 3. Any contract, purchase, purchase order, check request, or service request for services and supplies or building improvements in the total amount of more than \$25,000 but less than or equal to \$50,000 must be made or approved by the Purchasing Agent, department head, and mmayor or designee.
- 4. Any contract, purchase, purchase order, check request, or service request for public utilities equipment and supplies, or public works projects, in the total amount of more than \$50,000 but less than or equal to \$125,000 must be made or approved by the department head, the Purchasing Agent, the city manager and Mayor.
- 5. The following contracts and purchases must be approved by the governing body:
 - i. Any contract or purchase in the amount of more than \$50,000, which is not related to public works projects or public utilities equipment and supplies.
 - ii. Any contract or purchase of Public Works Projects or public utilities equipment and supplies in the amount of more than \$125,000.
 - iii. An invoice or check request received pursuant to a governing body approved contract does not require further governing body approval.
 - iv. A purchase order shall be issued in the amount of the approved contract, unless otherwise directed by the Purchasing Agent or designee.
 - v. Any contract awarded through the formal bidding process.
 - vi. Accumulated "change orders" which would increase a previously approved contract by more than either (10%) of the bid award amount or \$25,000, whichever is lower, taking into consideration all previously approved change orders to the contract under consideration.

B. Choice of Bid Process.

Except as otherwise provided by provisions of State or Federal Law, purchases shall follow one (1) of the bid processes outlined below. The cost of the purchase shall not be divided to avoid bid requirements. Any bid alternative listed as acceptable for a given dollar amount shall be acceptable, and the City shall not incur any liability for choosing one (1) alternative over another.

- 1. Purchases and expenditures less than or equal to \$5,000 in total shall not require any bids or quotes of any type, but are otherwise subject to the general policies of this chapter.
- 2. Purchases or Contracts costing greater than \$5,000 but no more than \$50,000 in total, shall at minimum be pursuant to one (1) of the following procedures:
 - i. State Purchasing Contract
 - ii. Three documented price quotations

- 3. Purchases or Contracts costing more than \$50,000 in total (or more than \$125,000 if the purchase or contract is for a Public Works Project), shall be pursuant to one (1) of the following procedures, as determined by the Purchasing Agent or designee:
 - i. State Purchasing Contract
 - ii. Competitive sealed bidding.
 - iii. Request for proposals.
- C. Exceptions to Bid Process. The bid process requirements set forth in Article 3A do not apply in the following situations.
 - 1. Purchases made through the cooperative purchasing contracts administered by the State Division of Purchasing
 - 2. Purchases made from a vendor who was awarded a contract by another Utah governmental entity using a competitive process within the last 180 days.
 - 3. Purchases made from a sole-source provider. When there is only one (1) vendor or supplier who can reasonably provide the needed product or service.
 - 4. Auction, Bankruptcy, or Tax Sales. When purchasing through Auction or Bankruptcy, or Tax sales will be made at a cost below market cost.
 - 5. Projects Performed by City Employees. Employees may be used to complete City projects if the project does not come at an additional cost to the city unless approved by the governing body.
 - 6. Purchases required during an emergency, i.e., an eminent threat to the public's health, welfare, or safety. However, as much competition as practical should be obtained; and, such purchases should be limited to amounts necessary to the resolution of the emergency. The Mayor will determine whether the situation warrants an emergency purchase.
- D. Bid Processes. The City shall substantially comply with the following guidelines for the specific bid process used:
 - 1. Request for Qualifications.
 - i. The City may require prequalification of bidders using a Request for Qualifications.
 - ii. If used, the prequalification process shall be pursuant with State Code 63G-6a-410.
 - 2. Competitive Sealed Bidding.
 - i. Description. Competitive sealed bidding is when vendors or contractors are invited to submit formal bids to provide a designated product or to complete a designated project in accordance with specifications provided by the City.
 - ii. Public Notice Inviting Bids Issued. The City shall provide notice of its invitation for bids.
 - 1. Public Notice includes a general description of the articles to be purchased or work to be performed, location where blank bid forms and specifications may be secured, and the time and place for opening bids.
 - 2. Noticing shall be done at least five (5) working days prior to the time set for bid opening. Bid package shall state requirements to which bidder must respond.

3. All invitations for bids shall be advertised at least once in a generally and widely available medium including but not limited to newspapers, business journals, city websites, and online procurement service.

iii. Bid Procedure

- 1. Sealed bids shall be submitted as designated in the Public Notice
- 2. Bids shall be opened in public and in the presence of one or more witnesses at the time and place stated in the Public Notice
- 3. The amount of each bid, the name of each bidder, and such other relevant information as the Purchasing Agent deems appropriate, shall be recorded; the record and each bid shall be open to public inspection.
- 4. Correction or withdrawal of inadvertently erroneous bids before award, or cancellation of awards or contracts based on such bid mistakes, shall be permitted. After bid opening no changes in bid prices or other material provisions of bids prejudicial to the interest of Vineyard City or fair competition shall be permitted. All decisions to permit the correction or withdrawal of bids or to cancel awards or contracts based on bid mistakes shall be supported by a written determination made by the purchasing agent.
- 5. Bids submitted to the City shall be evaluated on the basis of compliance with specifications and other relevant criteria.

iv. Bid Award.

- 1. If the City elects to proceed with purchase or project, bids shall be awarded to the lowest responsive responsible bidder, this means a bidder who:
 - a. Has submitted bid in compliance with Public Notice
 - b. Is the Lowest Responsible Bidder.
 - c. Furnishes a payment and performance bond as required by law.
 - d. Preference may be given to local vendors.
 - i. If a vendor based in Vineyard City is within 10% of the Lowest Responsible Bidder, the City will have the option to award the bid to that vendor.
 - ii. If a vendor based in Utah County is within 5% of the Lowest Responsible Bidder, the City will have the option to award the bid to that vendor.
- 2. The Purchasing Agent or the governing body may reject any bid not in compliance with all prescribed requirements, and reject all bids if rejection of all bids is determined to be in the best interest of the city. If Vineyard rejects all bids but still intends to undertake purchase, Vineyard will again request sealed bids by following the procedures outlined in Article 3D-2
- 3. If after twice requesting Bids, Vineyard determines that no satisfactory bid has been submitted, the Council may undertake the purchase or contract as they consider appropriate.

- 3. Requests for Proposals.
 - i. Description. Requests for proposals (RFPs) are invitations for suppliers or contractors to submit a proposal on a specific product or service. The City awards the contract for the product or services based on criteria set forth in the request for proposals.
 - ii. Appropriateness. RFPs may be used when required by law, or when the Purchasing Agent determines that the use of formal competitive bidding is either impractical or not advantageous to the City. In making this determination, the Purchasing Agent shall consider factors such as:
 - 1. Whether there may be a need for price and service negotiation;
 - 2. Whether there may be a need for negotiation during performance of the contract;
 - 3. Whether the relative skills or expertise of the offerors will have to be evaluated;
 - 4. Whether cost is secondary to the characteristics of the product or service sought
 - 5. Whether the conditions of the service, product or delivery are unable to be sufficiently described in the invitation for bids;
 - 6. Whether the City is requesting the offer to propose a method or strategy for completing the project; and
 - 7. Whether there may be a need to negotiate completion times related to the project.
 - 8. One-time professional services over \$50,000 or recurring professional services over \$25,000 annually will be procured through the RFP procedure.
 - iii. Notice.
 - 1. Proposals shall be solicited through a RFP.
 - 2. Public notice of the RFP shall be given
 - iv. Request for Proposals. The RFP shall state the relative importance of price and other factors.
 - v. Opening of Proposals. Proposals shall be opened so as to avoid disclosure of contents to competing offerors during the process of negotiation.
 - vi. Revision of Proposals.
 - 1. As provided in the RFP, discussions may be conducted with responsible offerors who submit proposals determined to be reasonable susceptible of being selected for award for the purpose of assuring full understanding of, and responsiveness to, solicitation requirements.
 - 2. Offerors shall be accorded fair and equal treatment with respect to any opportunity for discussion and revision of proposals.
 - 3. In conduction discussions, there shall be no disclosure of any information derived from proposals submitted by competing offerors.
 - vii. Award.

- 1. Award shall be made to the responsible offeror whose proposal is determined to be the most advantageous to the City.
- 2. Vineyard may reject any or all proposals submitted.
- 3. If Vineyard rejects all bids but still intends to undertake purchase, Vineyard will again Send out RFP by following the procedures outlined in Section 3C-2
- 4. If after twice requesting Proposals, Vineyard determines that no satisfactory Proposal has been submitted, the Council may undertake the purchase or contract as they consider appropriate.

4. Documented Price Quotations

- i. Price Quotations. As mentioned above, purchases greater than \$5,000 but no more than \$50,000 (\$125,000 for public works projects) shall be based on at least three (3) Bids (price quotations) and shall be awarded to the lowest responsible bidder.
- ii. Request for Quotations. Bids (price quotations) shall be solicited from prospective vendors online or by written or oral request.
- iii. Records. The person soliciting the price quotations shall keep a record of quotations solicited; including vendor names, date of solicitation and price quoted, and shall include this information with the purchase order.

ARTICLE 4 SPECIFICATIONS

All Specifications shall seek to promote overall economy and best use for the purposes intended and encourages competition in satisfying the City's needs and shall not be unduly restrictive. Where practical and reasonable, and within the scope of this article, Utah products shall be given preference.

ARTICLE 5 APPEALS

- A. Any actual or prospective bidder, offeror, or contractor who is aggrieved in connection with the solicitation or award of a contract may appeal to the purchasing agent. An appeal shall be submitted in writing within 5 working days after the aggrieved person knows or should have known of the facts.
- B. The purchasing agent shall issue a written decision regarding any appeal within fourteen (14) days, if it is not settled by a mutual agreement. The decision shall state the reasons for the action taken and inform the protestor, contractor, or prospective contractor of the right to appeal to the governing board.
- C. The City's governing board shall be the final appeal on the City level.
- D. All further appeals shall be handled as provided in section 63-56-58 through 64 of the Utah Code.

ARTICLE 6 ETHICS IN PUBLIC CONTRACTING

- A. No person involved in making procurement decisions may have personal investments or a financial interest in any business entity which will create a substantial conflict between their private interests and their public duties.
- B. In accordance with the Municipal Officers' and Employees' Ethics Act and other relevant statutes, any person involved in making procurement decisions is guilty of a felony if the person asks, receives, or offers to receive any emolument, gratuity, contribution, loan, or reward, or any promise thereof, either for the person's own use or the use or benefit of any other person or organization from any person or organization interested in selling to the City.
- C. Subject to the limitations of this Procurement Policy, any type of contract which will promote the best interests of the city may be used; provided, that the use of a costplus-a-percentage-of-cost profit contract is prohibited unless specifically approved by the governing body under special circumstances which clearly justify the use of such contracts because the scope of work or the nature of the work is to be closely supervised by the city and the governing body. A cost-reimbursement contract may be used only when a determination is made in writing that such contract is likely to be less costly to the city than any other type of that it is impracticable to obtain the supplies, services, or construction required except under such a contract.
- D. A violation of this Procurement Policy by officers or employees of the City may be cause for disciplinary action up to and including termination. PASSED and dated this

day of

	Mayor Julie Fullmer
Attest:	•
Pamela Spencer City Recorder	

Purchasing Policy Guide

Purchase Amount	Approval Required	Choice of Bid Process
0 - 5,000.00	PA or DH or Designee	No Bid or Quote Requirement
5,000.01 - 25,000.00	PA and DH	State Contract or Three Price Quotes
25,000.01 - 50,000.00	PA and DH and Mayor or Designee	State Contract or Three Price Quotes
50,000.01+ (Non PW Purchase)	PA and DH and Mayor or Designee and GB ¹	State Contract or Sealed Bids or RFP
50,000.01 - 125,000.00 (PW Purchase)	PA and DH and CM and Mayor	State Contract or Sealed Bids or RFP
125,000.01+ (PW Purchase)	PA and DH and CM and Mayor and GB ¹	State Contract or Sealed Bids or RFP

¹ An invoice or check request received pursuant to a GB approved contract does not require further GB approval

PA = Purchasing Agent

DH = Department Head

CM = City Manager

GB = Governing Body

PW = Public Works Project (park or rec facility; water, wastewater, stormwater, or flood control systems; streets; transportation facility)

Exceptions to bid process include:

- 1. Purchases made through the cooperative purchasing contracts administered by the State Division of Purchasing.
- Purchase from a vendor who was awarded a contract by another Utah governmental entity using a competitive process within the last 180 days and on the same commercial terms as that contract.
- 3. Purchases made from a sole-source provider. When there is only one vendor who can reasonably provide what is needed.
- 4. Purchases made from an Auction, Bankruptcy, or Tax sale when such purchase will be made at a cost below market cost.
- 5. Projects performed by city employees if the project does not come at an additional cost to the City unless approved by GB.
- 6. Purchases required during an emergency, i.e., an eminent threat to the public's helath, welfare, or safety. Determined by Mayor.
- 7. Purchases for professional services which by their nature are not reasonably adapted to award by competitive bidding. (e.g., legal, financial, art, or government relations.)



MINUTES OF A REGULAR CITY COUNCIL MEETING

City Council Chambers 125 South Main Street, Vineyard, Utah May 14, 2025, at 6:08 PM

7 8

9

1

3 4

5

6

Present Absent

10 Mayor Julie Fullmer

11 Councilmember Sara Cameron

12 Councilmember Jacob Holdaway

Councilmember Mardi Sifuentes

Councilmember Brett Clawson

141516

17

18

19

13

Staff Present: City Manager Eric Ellis, City Attorney Jayme Blakesley, Lieutenant Holden Rockwell with the Utah County Sheriff's Office, Community Development Director Morgan Brim, Finance Director Kristie Bayles, Public Works Director Naseem Ghandour, Parks and Recreation Director Brian Vawdrey, Senior Planner Cache Hancey, City Recorder Pam Spencer and Deputy Recorder Tony Lara

202122

2324

25

26

Others Speaking: Josh Gibbons with Hales Engineering, Laura Lewis with Lewis Robertson and Burningham, Brad Patterson with Gilmore Bell, Bronson Tatton with Flagborough, David Lauret on behalf of the Heritage Foundation, Jarom Sidwell with the Vineyard City ARCH Commission, Orem Residents Karston Walker and John Barrick. Vineyard residents Julie Gray, Barbara Porter, Darlene Price, Karen Cornelius, Justin Jones, Bryce Brady, Marcus Jessup, and Annika Barkdull.

272829

30

31

Presiding Mayor Julie Fullmer

1. CALL TO ORDER/INVOCATION/INSPIRATIONAL THOUGHT/PLEDGE OF ALLEGIANCE

32 33 Mayor Fullmer called the meeting to order at 6:08pm.

34 35

36

2. PRESENTATIONS/RECOGNITIONS/AWARDS/PROCLAMATIONS

2.1. Transportation Masterplan Presentation

Presentation of the Draft Transportation Masterplan

373839

Josh Gibbons, with Hales Engineering, presented a draft of the Transportation Master Plan.

40 41

42

43

Councilmember Sifuentes noted that the portion of the presentation on projected future congestion was missing certain future projects that were meant to address those concerns. Mr. Gibbons explained that those were in the plan but that what he had presented was a "no build" option but that the final plans would include those projects.

3. WORK SESSION

3.1. Utah State Code 63G-2 Government Records Access and Management Act (GRAMA)

City Recorder Pamela Spencer will lead a discussion on GRAMA Law.

Mayor Fullmer turned the time over to City Recorder Pamela Spencer. Ms. Spencer presented a brief overview of how her office classifies documents and fulfils records requests in accordance with the Government Access and Management Act (GRAMA). The presentation was in response to a request made during the previous city council meeting for information specific to fees normally associated with voluminous records requests.

Ms. Spencer said that there were four requests which met the criteria for a voluminous request in 2024. She detailed the specifics of those requests. She stated that there had been one that took several months to complete and if the requester had been charged it would have been approximately \$2000.

Councilmember Holdaway asked for clarification on that request. Ms. Spencer explained that there had been some technical issues that led to it taking longer to fulfil the request. She also clarified that the request had been made by Councilmember Holdaway regarding Qualtrics.

Ms. Spencer continued her presentation. This included a short clarification on another request from Councilmember Holdaway regarding communication with Y2 Analytics.

Ms. Spencer detailed a request that had been submitted for the general ledger from 2016 to 2024. She explained that as it had been relayed to her, that request would have included approximately 8,000 pages of documents. Each of which would have to be reviewed for protected information before being released. That request had since been closed due to lack of communication from the requester.

Ms. Spencer continued her presentation.

Councilmember Sifuentes asked if there had been any changes to the process of obtaining the ledger that removes some if not all the private information or if there was a way of making the process less labor intensive. City Manager Eric Ellis explained that the software the finance department uses has that information removed automatically when it is interacting with the system used by the state when submitting reports for the Transparency Website. However, that function is not available when reports are manually generated at the city level.

Councilmember Clawson wanted advice on how to narrow down requests so that they were not voluminous. Ms. Spencer advised that requestors should stay away from terms like "any and all communications," and that requests that include more narrow timelines and specific staff or departments often yields better results.

Councilmember Holdaway stated that he had received the ledger and had been able to "De-Identify" 8,000 pages in 20 minutes. Though it was stated that the process had been done in Excel, the details of what exactly had been removed or the process the councilmember had used were unclear. Ms. Spencer asserted that it was the responsibility of the city recorder to determine what would need to be redacted. It was not stated what criteria had been used by Councilmember Holdaway.

A discussion ensued and it was recommended by Mayor Fullmer that Councilmember Holdaway meet with Ms. Spencer and Mr. Ellis as well as Seth Overson from the State Auditor's office to discuss ways that those redactions might be made faster.

Councilmember Sifuentes called for a point of order. She felt that some of the language used in the discussion could constitute an attack on the character of Ms. Spencer. She expressed willingness to enter into a closed session if Councilmember Holdaway felt it necessary to discuss the character of staff.

Councilmember Sifuentes asked Ms. Spencer to repeat the current year's numbers. Ms. Spencer shared that her office had already received 31 records requests. Of those, 13 had been responded to, 2 had withdrawn their requests, 3 had been denied and 9 had been given partial denials due to redaction of information.

4. PUBLIC COMMENTS

Orem resident Karston Walker read a message from Orem resident John Barrick regarding resolutions passed by the Vineyard Redevelopment Agency in 2023.

5. MAYOR AND COUNCILMEMBERS' REPORTS/DISCLOSURES/RECUSALS

Councilmember Cameron shared that she had had discussions with Lakefront regarding their parking issues and that there would be further discussion on the issue at the next meeting.

Councilmember Holdaway reported that he had spent the last month working with the state auditor's office and that they had been conducting an "overview" of the last 10 years of the Redevelopment Agency. He stated that it was imperative that city staff work in a timely fashion with the auditor's office.

Mayor Fullmer stated that she welcomed the auditor's office to the city and that staff were being cooperative.

Finance Director Kristie Bayles clarified that Seth Oveson is not the Deputy State Auditor but rather a Local Government Manager. She stated that she has been working closely with him and providing all requested information. Ms. Bayles also shared that during the course of working with Mr. Oveson a timing issue with reports to the state had been discovered. She explained that because accounts payable had to remain open for 2 months after the last quarter of the fiscal year there were discrepancies in what was being reported. The State Auditor discovered that this was not an issue specific to Vineyard City, but that other cities across the state had been making this same error and issued a correction. Ms. Bayles noted that once the issue had been corrected it was shown that all numbers matched exactly as they should and that there were no actual discrepancies in the city's finances.

Councilmember Holdaway stated that he had been trying during the last six months to obtain the general ledger. He said that he had been denied those records but directed to the Transparent Utah website. He expressed concern that what had been reported on the site was \$3.5 Millon dollars off. Ms. Bayles reiterated that it was a timing issue with reporting and that it had since been resolved.

Councilmember Clawson reported on working with citizens from the LeCheminant subdivision who had reached out to him over speeding concerns. He stated that they had been collecting input from residents and had planned a town hall, which he and Councilmember Cameron would attend.

Mayor Fullmer stated that when a member of the council requests documents that they are provided. Staff will try their best to get the documents to the councilmembers as close as possible to the formats requested. She was pleased that the work done in cooperation with Mr. Oveson had helped to identify a statewide issue and that Vineyard was able to come into compliance. She wanted to clarify that even though numbers had initially looked off, that it was merely a reporting issue and that the actual budget itself was not off in any way.

Councilmember Sifuentes asked if it would be possible for Mr. Oveson to attend a future council meeting so that he could comment on statements made and work that he had done with the city. There was a brief discussion regarding how to go about arranging a meeting. Councilmember Sifuentes also commented that to her it was unlikely that the corruption that had been implied as actually happening. She felt fatigued at what she viewed as constant finger pointing and wanted to know what could be done to resolve the issues. A discussion ensued.

6. STAFF, COMMISSION, AND COMMITTEE REPORTS

City Manager Report

City Manager Eric Ellis gave a monthly report on city operations.

7. CONSENT ITEMS

- 7.1. Approval of the April 30, 2025, City Council Special Session Meeting Minutes
- 7.2. Vineyard Municipal Code Amendments Business Licensing (Ordinance 2025-02)
- 7.3. General Ledger Confidentiality Agreement
- 7.4. Interlocal Agreement with Utah County Warming Center (Resolution 2025-24)
- 7.5. Amendments to the Vineyard Municipal Code Section 10.20.202 Streets; Traffic Control (Ordinance 2025-05)

Councilmember Holdaway asked to pull item 7.3 for discussion.

Motion: COUNCILMEMBER HOLDAWAY MOVED TO APPROVE CONSENT ITEMS 7.1, 7.2, 7.4 AND 7.5 AS PRESENTED. COUNCILMEMBER CLAWSON SECONDED THE MOTION. THE ROLL CALL VOTE WAS AS FOLLOWS: MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

City Attorney Jayme Blakesley gave a summary of item 7.3, the General Ledger Confidentiality Agreement. It had been drafted in response to a request by Councilmember Holdaway to be able to share unredacted information in the general ledger with a member of the public who, in his capacity as a Certified Public Accountant, would be advising Councilmember Holdaway on matters pertaining to the budget. He stated that it was recommended by Mr. Oveson that to facilitate this, it would be beneficial to have all parties enter into a confidentiality agreement to help prevent confidential or protected information from being made public.

Councilmember Holdaway stated that he had received the ledger that he had requested, only 24 hours prior to the meeting. He believed that the council would be approving the budget, and he was concerned that he had not yet had time to consult a CPA. He said that there was nowhere in code that required the council to take a vote in order for him to have access to the general ledger. He stated that he felt his words (his stated intent to "share" the ledger) were being misconstrued in a way so as to block him from having access.

Councilmember Holdaway stated that despite having only had 24 hours with the ledger he had already been able to find what he alleged was \$90,000 in food expenses for the current fiscal year. He stated that not having access to the ledger sooner or that other private citizens were being charged for their records request somehow eroded the public's trust in city government. He accused the city of "gamesmanship."

Councilmember Clawson wanted a clarification added to the record that the council was not approving a budget during the current meeting. Adoption of the tentative budget was simply accepting that it had been received and would be discussed in subsequent meetings.

Mr. Ellis also stated that he felt that any gamesmanship involved in the ledger discussion was on the part of Councilmember Holdaway, for suggesting that any request by him to have the ledger had been denied. That the reality of the situation was that what had been debated was the sharing of protected information with a consultant that had no duty to comply with GRAMA law as it pertained to an unredacted ledger. Mr. Ellis asserted that in multiple meetings staff had offered to give Councilmember Holdaway an unredacted copy of the ledger, but when offered, Councilmember Holdaway had stated that "I don't want it for me, I want to share it with a consultant." He stated that the presence of a non-disclosure agreement would help protect the city in the case of a breach of state law pertaining to protected information.

The meeting was briefly interrupted, Keith Vincent, a Villas resident, and the consultant planning on working with Councilmember Holdaway sought to comment on what Mr. Ellis had said. Mayor Fullmer called the meeting back to order and commented on the need for decorum during the meeting. She also wanted to clarify for the public, that the document had no names on it and that it was meant to be utilized by any of the members of the council and not just Councilmember Holdaway.

There was subsequent discussion on the value of the agreement and if Councilmember Holdaway was satisfied with the draft. The other councilmembers were in agreement that because it was his request that necessitated the drafting of the document, that Councilmember Holdaway's input was vital in moving forward with a resolution.

Mayor Fullmer asked if Councilmember Holdaway felt the item before them was meaningful to him and if he would like to motion on it. He stated that during conversations with the State Auditor that he had been told numerous times that there was nowhere in state code that allows the council to require such a document and that rather it was another delay tactic. Mayor Fullmer disagreed, stating that she had been on the same phone call with Mr. Oveson and that he had never stated that.

Councilmember Holdaway stated that he had recorded that meeting and wanted to know if he had the council's approval to make it public.

Motion: COUNCILMEMBER HOLDAWAY MOVED TO MAKE PUBLIC A RECORDED CONVERSATION OF A MEETING THAT TOOK PLACE ON APRIL 7, 2025, WITH CITY STAFF, MAYOR FULLMER, COUNCILMEMBER HOLDAWAY AND SETH OVESON WITH THE STATE AUDITOR'S OFFICE. THERE WAS NO SECOND AND MOTION FAILED.

Motion: COUNCILMEMBER HOLDAWAY MOVED TO APPROVE CONSENT ITEM 7.3 AS PRESENTED. COUNCILMEMBER SIFUENTES SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

8. APPOINTMENTS/REMOVALS

9. BUSINESS ITEMS

9.1. PUBLIC HEARING - Consolidated Fee Schedule Amendment (Resolution 2025-23)

Parks and Recreation Director Brian Vawdrey will present a proposed amendment to the Consolidated Fee Schedule. The mayor and City Council will act to adopt (or deny) this request by resolution.

Motion: COUNCILMEMBER SIFUENTES MOVED TO CONTINUE THE PUBLIC HEARING UNTIL THE NEXT CITY COUNCIL MEETING ON MAY 28, 2025. COUNCILMEMBER CAMERON SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON, AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

The Council took a short break at 7:26 PM. The meeting resumed at 7:45 PM.

9.2. PUBLIC HEARING - Bond Parameters Resolution

The purpose of the hearing is to receive input from the public with respect to (a) the issuance of that portion of the Series 2025 Bonds issued under the Act and (b) any potential economic impact that the Project to be financed with the proceeds of that portion of the Series 2025 Bonds issued under the Act may have on the private sector. Following the close of the public hearing, the mayor and City Council will discuss and possibly act on Resolution 2025-15 - 2025 Bond Parameters Resolution.

Laura Lewis with LRB gave a short presentation and explanation on the public hearing and a 280 summary of where in the process of bonding the city was currently. 281 282 Councilmember Holdaway had a question concerning sales tax growth rate. 283 284 Ms. Lewis continued her presentation. 285 286 Councilmember Clawson asked about sales tax revenue allocation and the role that the state 287 plays in the process. Ms. Lewis explained the process. A discussion ensued. 288 289 Mayor Fullmer gave a brief overview of the bond process leading up to the public hearing. 290 291 Motion: COUNCILMEMBER SIFUENTES MOVED TO ENTER INTO A PUBLIC 292 HEARING AT 8:06 PM. COUNCILMEMBER CAMERON SECONDED THE MOTION. 293 294 MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY. 295 296 Julie Gray, living in The Villas subdivision, asked questions regarding MAG (Mountainland 297 298 Association of Governments) as well as current city staffing levels and what actions the city had 299 taken to accommodate the growth of city staff. 300 Barbara Porter, living in the Hamptons, suggested that instead of a city center the city should 301 purchase several houses for staff as a short-term solution. She commented that the city should save 302 money and build the city center at a later date. 303 304 Mayor Fullmer asked a clarifying question, she wanted to know if Ms. Porter had a specific 305 306 figure or metric in mind when she stated that city should wait until it is financially stronger. Ms. 307 Porter did not but stated that she teaches her children not to live in a house that was taking all their money. Ms. Porter commented on the state of some of the equipment in Grove Park as well as the 308 splash pad that she felt was not as good comparatively with those of other cities. 309 310 Karston Walker, resident of Orem, read a message from fellow Orem Resident John Barrick. 311 312 Darlene Price, living in The Villas subdivision, asked for clarification on what businesses were 313 314 slated to be in Vineyard. She also asked about the repayment of the bonds with sales tax revenue and what would happen if the city was not able to make that payment due to loss of revenue. 315 316 Karen Cornelius, living in The Villas subdivision, shared that she was worried about the use of 317 the word "anticipate." She was concerned that there were not enough formal agreements in place 318 for the city to move forward with bonding. 319 320 321

Justin Jones, living in The Meadows subdivision, stated that he agreed with the concerns raised by Ms. Cornelius. However, he felt confident in the data presented by LRB that showed that the city would still be able to make its payments with a 1 percent growth rate in sales tax revenue.

322

Bryce Brady, living in The Elms Subdivision, disagreed with the temporary answers to staff overcrowding. He stated that putting them in trailers was not a good way to ensure the city retained experienced staff. He saw the current and future benefits of building a city center. He was concerned that it was too big and wanted a more modest design and price tag.

Marcus Jessup, living in The Garden subdivision, wanted to know if operational cost had been accounted for and would the city be able to afford the ongoing costs once the center was built. He wanted to know what ways the city could take to reduce the overall cost.

Annika Barkdull, living in The Lochs subdivision, wanted to know if the city did not move forward with the city center if the land that was being donated would go away or was it something the city could build on still at a future date. Additionally, she wanted to know if MAG would be a part owner or would it just be a lease agreement. She also asked for clarification on current emergency reserves as there had been some discussion about whether the city had enough. Lastly, she wanted to know if there were any alternative plans in which the proposed center would be smaller but more modular in a way that would support future growth.

Seeing no further comments, Mayor Fullmer invited Ms. Lewis and Brad Patterson with the firm Gilmore Bell (acting as the city's bond counsel) to answer questions raised during public comment.

Before addressing specific questions, Mayor Fullmer asked Mr. Ellis to give a brief overview of the city's current staff levels.

City Manager Eric Ellis commented on staff levels and the challenges the city had been facing in housing all the staff as well as meeting its service requirements and the needs of residents. He also commented on the modularity question asked by Ms. Barkdull.

Mayor Fullmer mentioned Ms. Porter's comments regarding the parks and splash pad operations. Mr. Ellis explained that the parks department had up to nine staff members sharing two offices and that the limited space made it difficult to hire additional park staff.

Mayor Fullmer asked Ms. Lewis to answer questions raised by Councilmember Holdaway regarding sales tax revenue and the impact of Housing and Transit Reinvestment Zones (HTRZ's). Ms. Lewis gave clarification on the issue and a discussion ensued.

Mayor Fullmer restated the remaining questions asked during the public hearing and asked Ms. Lewis to respond. Ms. Lewis, along with Mr. Ellis, answered the remaining questions. There was a discussion about sales tax revenue projections and debt service coverage as well as the effects of inflation as it pertained to property taxes.

Mayor Fullmer addressed the question raised by Mr. Jessup regarding planning for operational costs as well as the question by Ms. Barkdull regarding the emergency reserves. Mr. Ellis stated that those costs had been factored in. Ms. Bayles provided an overview of the current city funds.

Councilmember Sifuentes stated she felt there were still some questions asked by the public that had not yet been answered. There was a short discussion, and further answers provided to those questions.

Motion: COUNCILMEMBER SIFUENTES MOVED TO CLOSE PUBLIC HEARING at 9:08 PM. COUNCILMEMBER CAMERON SECONDED. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY

Mayor Fullmer stated that the current planning was at 15 percent and that there was still time for additional planning and education. She felt that although there would be an additional cost associated with waiting to build that it would be worth it to have better understanding from the public.

Councilmember Sifuentes felt that questions posed during the public hearing indicated a lack of education on the part of the city. She was concerned that there was not the amount of community buy in that she wanted there to be in order to feel comfortable moving forward. She expressed support for the bonding process and that it would be more affordable compared to waiting until later.

Councilmember Clawson shared Councilmember Sifuentes's concerns regarding outreach and the need to get further public buy in.

Councilmember Cameron expressed her frustration with what she viewed as continual misinformation regarding the bond. She stated that facts had been skewed to a point where the public was not able to understand what was being shared.

Mayor Fullmer felt that there was still an option to continue the planning phase, that everyone agreed that the city was growing and there was a need for more space for staff, and she wanted the community to feel more involved in the planning process.

Councilmember Sifuentes said that she wanted to make it clear that she felt that while it was important to keep planning that she did not want it to be planning for the same building, rather that it should be focused on reducing the overall cost.

Mayor Fullmer felt that the council was leaning towards a reconsidering of the bond parameters resolution and asked for a motion. Councilmember Sifuentes asked for clarification on the proposed motion and Mr. Blakesley explained the motion in greater detail.

Motion: COUNCILMEMBER SIFUENTES MOVED TO RECONSIDER RESOLUTION 2025-15 THE 2025 BOND PARAMETERS RESOLUTION. COUNCILMEMBER HOLDAWAY SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED

UNANIMOUSLY.

Motion: COUNCILMEMBER SIFUENTES MOVED TO CANCEL RESOLUTION 2025-15. COUNCILMEMBER CLAWSON SECONDED THE MOTION. THE ROLL CALL VOTE WAS AS FOLLOWS: MAYOR FULLMER, AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

9.3. PUBLIC HEARING – Transfer from Enterprise Funds to Internal Services Fund

 Finance Director Kristie Bayles will present recommendations to transfer enterprise funds to an internal service fund to pay for services such as facilities, fleet, and information systems. The City Council will hear public comment regarding these recommended transfers. No action will be taken.

Motion: COUNCILMEMBER CLAWSON MOVED TO ENTER A PUBLIC HEARING AT 9:25 PM. COUNCILMEMBER SIFUENTES SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

Finance Director Kristie Bayles presented on the transfer of Enterprise Funds to an Internal Services Fund.

Mayor Fullmer called for public comments. Hearing none, she called for a motion to close the public hearing.

Motion: COUNCILMEMBER SIFUENTES MOVED TO CLOSE THE PUBLIC HEARING AT 9:27 PM. COUNCILMEMBER CAMERON SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

9.4. Discussion and Action - Proposed Tentative Fiscal Year 2025-2026 Budget Finance Director Kristie Bayles will present the Tentative Fiscal Year 2025-2026 Budget. The Mayor and City Council will act to adopt (or deny) the proposed tentative budget and set a public hearing for May 28, 2025.

Mayor Fullmer turned time over to Ms. Bayles who presented on the proposed tentative budget.

Councilmember Holdaway said he wanted to clarify statements regarding his receipt of the ledger and a side conversation with Ms. Bayles, held during the recess earlier in the meeting. A discussion ensued.

- **Motion:** COUNCILMEMBER SIFUENTES MOVED TO APPROVE THE PROPOSED 456 TENTATIVE FISCAL YEAR 2025-2026 BUDGET AS PRESENTED AND TO SET A PUBLIC HEARING FOR THE MAY 28, 2025, CITY COUNCIL MEETING.
- 458 COUNCILMEMBER CAMERON SECONDED THE MOTON. THE ROLL CALL VOTE WAS 459 AS FOLLOWS: MAYOR FULLMER, AND COUNCILMEMBERS CAMERON, SIFUENTES,
- 460 CLAWSON AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.

462	9.5. PUBLIC HEARING - Vineyard Zoning Code Update (Ordinance 2025-03)
463	Senior Planner Cache Hancey will propose multiple changes throughout the Vineyard
464	Zoning Code. The mayor and City Council will act to recommend approval (or denial)
465	of the zoning text amendment by ordinance.
466	
467	Motion: COUNCILMEMBER SIFUENTES MOVED TO ENTER INTO A PUBLIC
468	HEARING AT 9:40 PM. COUNCILMEMBER CLAWSON SECONDED THE MOTION.
469	MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON
470	AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.
471	
472	Senior Planner Cache Hancey presented on the proposed zoning code update.
473	
474	Mayor Fullmer called for public comments.
475	
476	Ms. Barkdull asked for clarification on Pay Day Loan businesses. Mr. Hancey replied that
477	the zoning was proactive in nature. A discussion ensued.
478	
479	Ms. Porter asked about public art and if it was required of all businesses. Mr. Hancey
480	explained that project features like that would be discussed during the design phase with the
481	Planning Commission.
482	
483	Mayor Fullmer called for further comments. Hearing none, she called for a motion to close the
484	public hearing.
485	1 3
486	Motion: COUNCILMEMBER CLAWSON MOVED TO CLOSE THE PUBLIC
487	HEARING AT 9:55 PM. COUNCILMEMBER CAMERON SECONDED THE MOTION.
488	MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON
489	AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.
490	THE ALL SOLDIGH AND ADER SHEVEN THE MOVED TO MOVE ODDING NOT 6005 00
491	Motion: COUNCILMEMBER SIFUENTES MOVED TO MOVE ORDINANCE 2025-03
492	TO A FUTURE MEETING. COUNCILMEMBER CLAWSON SECONDED THE MOTION. MAYOR FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON
493 494	AND HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY.
494 495	AND HOLDAWAT VOTED TES. THE MOTION PASSED UNANIMOUSET.
493 496	9.6. PUBLIC HEARING - Vineyard Downtown Special Purpose District Zoning Text
497	Amendment (Ordinance 2025-04)
498	Applicant Initiated Zoning Text Amendment. Bronson Tatton with Flagborough has
499	requested a recommendation for a zoning text amendment that would affect the
500	Downtown Vineyard (Town Center) Special Purpose Zoning District. The mayor and
501	City Council will act to adopt (or deny) this request by ordinance.
502	MTN.
503	Motion: COUNCILMEMBER SIFUENTES MOVED TO ENTER A PUBLIC HEARING AT
504	9:58 PM. COUNCILMEMBER CAMERON SECONDED THE MOTION. MAYOR FULLMER
505	AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY
506	VOTED YES. THE MOTION PASSED UNANIMOUSLY.

Bronson Tatton with Flagborough presented on the proposed Special Purpose District Zoning 508 Text Amendment. 509 510 Mayor Fullmer asked if there were any questions from the public. Hearing none, she called for a 511 motion to close the public hearing. 512 513 Motion: COUNCILMEMBER CLAWSON MOVED TO CLOSE THE PUBLIC HEARING 514 AT 10:03 PM. COUNCILMEMBER CAMERON SECONDED THE MOTION. MAYOR 515 FULLMER AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND 516 HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY. 517 518 Motion: COUNCILMEMBER CAMERON MOVED TO APROVE ORDINANCE 2025-04, 519 520 SPECIAL PURPOSE DISTRICT ZONING TEXT AMENDMENT. COUNCILMEMBER 521 CLAWSON SECONDED THE MOTION. THE ROLL CALL VOTE WAS AS FOLLOWS: MAYOR FULLMER, AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND 522 523 HOLDAWAY VOTED YES. THE MOTION PASSED UNANIMOUSLY. 524 9.7. ARCH Commission RAP Tax Grant Awards (Resolution 2025-22) 525 526 ARCH Commission Chair Jarom Sidwell will present recommendations for the RAP 527 Tax Grant Awards. 528 ARCH Commission Chair Jarom Sidwell presented the grant awards. 529 530 Mayor Fullmer wanted to know what would happen to award money if landowner approval 531 was not obtained for certain projects. Parks and Recreation Director Brian Vawdrey said that the 532 money would be reallocated, potentially to another applicant. 533 534 David Lauret, representing the Heritage Foundation, commented that their group had 535 received tentative approval from the landowner for their project. 536 537 Motion: COUNCILMEMBER CAMERON MOVED TO ADOPT RESOLUTION 2025-22, 538 WITH THE STIPULATION THAT THE GROUP WORK WITH PLANNING AND 539 ENGINEERING AS WELL AS THE REALLOCATION OF FUNDS IF THEY DO NOT 540 541 RECEIVE FORMAL APPROVAL. COUNCILMEMBER CLAWSON SECONDED THE 542 MOTION. THE ROLL CALL VOTE WAS AS FOLLOWS: MAYOR FULLMER, AND COUNCILMEMBERS CAMERON, SIFUENTES, CLAWSON AND HOLDAWAY VOTED 543 544 YES. THE MOTION PASSED UNANIMOUSLY. 545 546 9.8. 45-Day Stay of Vineyard Center Long Range Planning 547 Councilmember Holdaway asked for clarification on the item. 548 549 Mr. Blakesley explained that the impetus for the agenda item was that during the last council 550 meeting, Councilmember Holdaway wanted to propose a stay of all planning and construction 551 552 work associated with the city center during the signature gathering phase of a referendum

associated with the bond parameters resolution. He felt that since that resolution was just repealed

and any associated referendum now considered null and void that the proposed stay was moot.

Page 12 of 13; May 14, 2025, City Council Minutes

553554

10. CLOSED SESSION There was no closed session during this meeting. 558 559 11. ADJOURNMENT

Mayor Fullmer adjourned the meeting at 10:19 PM. 562

563

564565566

567

568569

MINUTES APPROVED ON:

CERTIFIED CORRECT BY:

TONY LARA, DEPUTY CITY RECORDER





VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: Amendments to the Vineyard Municipal Code Section 10.20.202 - Streets;

Traffic Control (Ordinance 2025-07)

Department: Public Workls **Presenter:** Naseem Ghandour

Background/Discussion:

City staff have received ongoing feedback from residents in the Bridgeport and Le Cheminant subdivisions regarding speeding vehicles and related safety concerns. These neighborhoods consist of narrow, residential local streets with a high concentration of families, pedestrians, and on-street parking.

To formally address these concerns, the City held a community meeting on May 19, at which over 90 residents signed a petition requesting that the posted speed limit be reduced to 10 mph or 15 mph. The general sentiment among residents is that lower speeds will promote safer neighborhood conditions and enhance enforcement capabilities.

Following the meeting, City staff consulted with the Vineyard City Division Utah County Sheriff's Office, which supported a posted speed limit of 15 mph as a practical and enforceable standard. This change is consistent with Vineyard's goal to prioritize pedestrian and neighborhood safety, particularly in dense residential zones.

Proposed Changes to Municipal Code 10.02.020 – Speed Table Add the following streets at 15 mph (area shown in Exhibit A)

East 160 North	East 170 North	North 410 East	East 260 North
North 590 East	North 480 East	East Rue De Paris	East Rue Cournot
East Rue Hugo	East Rue De Matth	East Rue De Borda	N Le Cheminant Drive
East 120 North			

City crews will replace all current 25 mph signage and post 15 mph speed limit signs at each subdivision entrance to notify motorists.

Fiscal Impact:

\$1200 for Speed Limit Signs, Approved FY25 Budget Transportation Fund

Recommendation:

City staff recommends approval of the revision to Vineyard City Municipal Code 10.02.020, which reduces the speed limit to 15 mph for the Bridgeport and Le Cheminant subdivisions to address neighborhood safety concerns and support enforcement efforts.

Sample Motion:

"I move to adopt Ordinance 2025-07, approving the amendments to Vineyard City Municipal

Code 10.02.020 (Speed Table), as presented."

Attachments:

- Ord_2025-07 Speed Table Amendment 2 Exhibit A Bridgeport & Le Cheminant 1.
- 2.

VINEYARD ORDINANCE 2025-07

AN ORDINANCE OF THE VINEYARD CITY COUNCIL AMENDING MUNICIPAL CODE 10.02.020 (C)(A) STREETS; TRAFFIC CONTROL

WHEREAS, the Vineyard City Council has the authority under the Utah Code 10-3 to amend the municipal code; and

WHEREAS, the City Council has determined a need to amend Section 10.020020(C) (1) Streets; Traffic Control amending the speed table to include the LeCheminant and Bridgeport Subdivisions.

NOW THEREFORE, be it ordained by the Council of the Vineyard, in the State of Utah, as follows:

SECTION 1: <u>AMENDMENT</u> "10.02.020 Streets; Traffic Control" of the Vineyard Municipal Code is hereby *amended* as follows:

AMENDMENT

10.02.020 Streets; Traffic Control

- A. ADOPTION OF MOTOR VEHICLE AND TRAFFIC CODE. The Motor Vehicle Act, Chapter 1 of Title 41, U.C.A., as amended, is hereby adopted as a Vineyard City ordinance, including The Uniform Act Regulating Traffic on Highways, Chapter 6 of Title 41, U.C.A., as amended. Provided, however, that any provision of the foregoing having a penalty which cannot be imposed for violation of a City ordinance is not adopted.
- B. DEFINITIONS CONTAINED IN CODE. Unless the context otherwise requires, all references in the traffic code to:
 - 1. The State Road Commission or State Department of Transportation shall mean this municipality and its officers, departments, agencies, and agents.
 - 2. Local Authorities shall mean the City Council of this municipality.
 - 3. The Department of Public Safety of the State of Utah shall mean the chief of police of this municipality or his agent.
 - 4. Magistrate shall mean the justice of the peace or judge of this municipality.

C. PRIMA FACIE SPEED — DESIGNATED STREETS

- 1. When appropriate street signs giving notice of the maximum permitted speed thereon are erected, the prima facie speed limits designated in the appropriate appendix (Table-1 Street and Speed Table) of this code shall apply to the appropriate streets listed therein.
- 2. Unless otherwise provided in this section or in any other ordinance of this municipality, the prima facie speed limits on the streets of this municipality

shall be 25 miles per hour.

Appendix: Speed Table -1

City of Vineyard Street a	na Speed Table
Street Name	Speed (mph)
Mill Road	35
North Main Street ¹	35
South Main Street ²	30
Center Street ¹	30
Vineyard Road/400 North ¹	25
Vineyard Loop Road/600 North ¹	25
Vineyard Road/Lake Road	35
1600 North	30
1750 North	30
South Holdaway Road	20
East 400 South Street ¹	30
Sleepy Ridge Subdivision which includes	
South Lake View Drive	
East 430 South Street	20
West 475 South Street	
East Lake View Drive	
South 195 East	
South 150 East	
South 5 West Street	
South 30 West Street	
South 45 East Street	
South 80 East Street	
South 125 East Street	

East 660 South Street	
W 575 South	30
LeCheminant Subdivision which includes	
East Rue De Paris	
East Rue Cournot	
East Rue Hugo	<u>15</u>
East Rue De Matth	
East Rue De Bordo	
North LeCheminant Drive	
Bridgeport Subdivision which includes	
East 160 North	
East 170 North	<u>15</u>
North 410 East	
East 260 North	
North 590 East	
North 480 East	
East 120 North	

¹Contains street segments with Reduced Speed School Zones (RSSZ) in accordance with Utah Manual for Uniform Traffic Control Devices (MUTCD) and per Utah State Code 41-6a-603(2)(a) and Utah State Code 41-6a-604. North Main is north of Center Street

A. ADOPTING OF THE OFF-HIGHWAY VEHICLES ACT

The Off-Highway Vehicles Act, <u>Chapter 22 of Title 41 of the Utah Code</u>, as amended, is hereby adopted as a chapter of the Vineyard Municipal Code. Provided, however, that any provision of the foregoing having a penalty which cannot be imposed for violation of a City ordinance is not adopted (Vineyard has not adopted any code that designates any public roads for off highway vehicle use.)

² South Main is south of Center Street

SECTION 2: <u>REPEALER CLAUSE</u> All ordinances or resolutions or parts thereof, which are in conflict herewith, are hereby repealed.

SECTION 3: SEVERABILITY CLAUSE Should any part or provision of this Ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the Ordinances a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

SECTION 4: EFFECTIVE DATE This Ordinance shall be in full force and effect from May 28, 2025 and after the required approval and publication according to law.

PASSED AND ADOPTED BY	THE VINEY	YARD COUN	CIL		
	AYE	NAY	ABSENT	ABSTAIN	
Mayor Julie Fullmer					
Sara Cameron					
Jacob Holdaway					
Mardi Sifuentes					
Brett Clawson					
Presiding Officer		Attest	İ		
Julie Fullmer, Mayor, Vineyard			Pamela Spencer, City Recorder,		
		Vineya	ard		



Exhibit A Bridgeport Subdivision Le Cheminant Subdivision

Streets

- 1. East 160 North
- 2. East 170 North
- 3. North 410 East
- 4. East 260 North
- 5. North 590 East
- 6. North 480 East
- 7. East 120 North
- 8. East Rue De Paris
- 9. East Rue Cournot
- 10. East Rue Hugo
- 11. East Rue De Matth
- 12. East Rue De Borda
- 13. N Le Cheminant Drive









VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: Contract Award for Penny Springs Pressurized Irrigation Pond Improvement

(Concrete Lining)

Department: Public Works **Presenter:** Naseem Ghandour

Background/Discussion:

On April 21, 2025, Vineyard City issued a Request for Proposals (RFP) to secure qualified contractors for the concrete lining of the City's pressurized irrigation pond at Penny Springs Park. The improvements are intended to reduce seepage, enhance pond durability, and improve long-term maintenance efficiency.

Life Is Good Investment, LLC (LIGI) submitted the sole proposal in response to the RFP by the May 10, 2025, deadline. Although only one bid was received, the proposed pricing was reviewed and found to be consistent with estimates obtained independently by the City and in line with prevailing industry standards. Staff determined that the proposal reflects fair market value and meets the technical and schedule requirements outlined in the RFP.

The scope of work includes providing all labor, materials, and equipment necessary to: excavate and prepare slopes for concrete placement, install 4-inch-thick reinforced concrete lining with fiber mesh, place aggregate and relocate existing rock, complete joint sealing and patching, implement environmental controls, and complete site restoration.

The proposed contract is with Life Is Good Investments, LLC, for a total amount of \$116,604.15. Funding for this project is available in the approved current year's Water Fund budget. The construction is expected to begin within 30 days upon issuance of the Notice to Proceed and is anticipated to take approximately 45 days to complete.

Due to the nature of the work, City Staff also recommends a 20% contingency for the execution of this contract work.

Fiscal Impact:

\$140,000, FY25 Water Fund, Capital Projects

Recommendation:

Staff recommends that City Council approve and authorize the City Manager to execute the Contract Agreement with Life Is Good Investments, LLC for \$140,000 (\$116,604.15 plus 20% contingency), for the Penny Springs Park Irrigation Pond concrete lining project.

Sample Motion:

"I move to approve the construction contract with Life Is Good Investments, LLC for \$140,000 to include contingencies for the concrete lining of the pressurized irrigation pond at Penny Springs Park and authorize the City Manager to execute the agreement."

Attachments:

- 1. RES 2025-28 Bid Award to Life is Good
- 2. Construction Contract Pressurized Pond

RESOLUTION 2025-28

A RESOLUTION OF THE VINEYARD CITY COUNCIL AWARDING THE BID TO Life Is Good Investments, LLC, FOR THE CONCRETE LINING OF THE PRESSURIZED IRRIGATION POND AT PENNY SPRINGS PARK

WHEREAS, notice to bidders has been duly given as required by law; and

WHEREAS, after consideration of all bids filed (see exhibit A or see attached bid sheet), it was determined that Life Is Good Investments, LLC, for the concrete lining of the pressurized irrigation pond at Penny Springs Park.

NOW THEREFORE BE IT RESOLVED BY THE GOVERNING BODY OF VINEYARD AS FOLLOWS:

<u>Section 1.</u> The bid be awarded to Life Is Good Investments, LLC, for the concrete lining of the pressurized irrigation pond at Penny Springs Park for an amount of \$116,604.15 with a not to exceed amount of \$140,000.00.

<u>Section 2.</u> That city staff are hereby authorized and directed to execute the contract with the contractor for the public improvement as is herein referred to.

<u>Section 3.</u> This resolution shall take effect upon passing.

Dassed	and	dated	thic	28th	day	of Ma	v 2025.
E 4886U	anu	ualcu	uns	20UI	uav	OLIVIA	IV ZUZD.

	Mayor
Attest:	
Recorder	



CONSTRUCTION CONTRACT AGREEMENT

1. PARTIES

1.1. This Construction Contract Agreement (hereinafter referred to as the "Agreement") is entered into on 05/23/2025 (the "Effective Date"), by and between <u>Life Is Good Investments</u>, <u>LLC</u>, with an address of 7543 S 5200 W West Jordan, <u>UT 84081</u> (hereinafter referred to as the "Constructor"), and <u>Vineyard City</u>, with an address of 125 S Main Street Vineyard, <u>UT 84059</u> (hereinafter referred to as the "Client") (collectively referred to as the "Parties").

2. CONSTRUCTION PROPERTY

- 2.1. The Property that is to be constructed is located at the following address:
 - 2.1.1. Penny Springs Park 350N 100 E Vineyard, Utah 840559

3. SCOPE OF WORK

- 3.1. The Constructor agrees to perform the specified construction tasks for each project described below:
 - 3.1.1. Concrete Lining of Pressurized Irrigation Pond.

Concrete Lining of Pressurized Irrigation Pond											
Project Tasks	Work Unit	Uni	t Cost	QTY	MAT'L	S & LAB, EQUIP.					
Mobilization	LS	\$	2,000.00	1	\$	2,000.00					
Demobilization	LS	\$	2,000.00	1	\$	2,000.00					
Install Temporary Environmental Controls (Silt Fence, Barriers)	LF	\$	1.00	850	\$	850.00					
Foot Traffic Control (Orange Fencing)	LF	\$	0.79	885	\$	699.15					
4" Thick Reinforced Concrete Lining (w/Fiber Mesh)	SF	\$	6.60	11,675	\$	77,055.00					
Concrete Pump Truck	EA	\$	1,250.00	4	\$	5,000.00					
Environmental Protection Setup (Washout, Containment)	LS	\$	500.00	1	\$	500.00					
Final Cleanup	LS	\$	500.00	1	\$	500.00					
Bid Subtotal					\$	88,604.15					

- 3.1.2. Excavation w/Aggregate Pressurized Irrigation Pond
 - 3.1.2.1. Pricing includes relocating existing rocks to the center of the pond to clear areas designated for new concrete placement, along with supplying and placing aggregate where needed.

Concrete Lining of Pressurized Irrigation Pond – Excavation w/Aggregate											
Project Tasks Work Unit Unit Cost QTY MAT'LS & LAB, EQUIP.											
Excavation w/Aggregate	LF	\$ 2.00	11,675	\$	23,350.00						
Bid Subtotal				\$	23,350.00						

- 3.1.3. Caulking, Backer Rod, Grout/Patching Pressurized Irrigation Pond
 - 3.1.3.1. Below are the proposed cost estimates for caulking, backer rod installation, grout/patching, and associated labor for the concrete lining scope of the Pressurized Irrigation Pond Project.

Concrete Lining of Pressurized Irrigation Pond – Caulking, Backer Rod, Grout/Patching										
Project Tasks	Work Unit	Unit Cost	QTY	MAT'LS	& LAB, EQUIP.					
Caulking, Backer Rod, Grout/Patching	LF	\$ 3.10	1,500	\$	4,650.00					
Bid Subtotal				\$	4,650.00					

3.2. In addition to the afore mentioned, the Constructor agrees to abide by and perform all the work that is shown on the construction plan available on the property's site.

4. <u>TERM</u>

- 4.1. This Agreement shall be effective on the date of the signing this Agreement (hereinafter referred to as the "Effective Date") and will end when the construction services are completed.
- 4.2. The term of this Agreement may be extended upon the provision of written consent from both Parties.
- 4.3. Construction shall commence within thirty (30) days following the issuance of the Notice to Proceed. The overall project schedule, including milestones and completion dates, shall be mutually determined and agreed upon by the Parties after the Notice to Proceed has been issued.

5. PAYMENT AND FEES

- 5.1. The Parties agree that the total cost of the services will be as agreed upon and stated in Section 3 (Scope of Work).
- 5.2. The Parties agree that the Constructor will provide an invoice to the Client after completion of specified project tasks in Section 3.
 - 5.2.1. Payment is due 30 days after specified task completion.
- 5.3. The Parties agree that the means of payment may be issued via:
 - 5.3.1. ACH, Direct Deposit or Certified Check.

6. PERMITS, BONDS, FEES AND TESTING

6.1. For the specified project scope and tasks, the Constructor shall not be responsible for obtaining any city, county, or state permits, licenses, or approvals, nor for furnishing any bonds or covering any associated fees. Additionally, no material or construction testing shall be performed by the Constructor.

7. USAGE OF MATERIALS AND LABOR

- 7.1. The Parties agree that it is the Constructor's responsibility to provide as well as pay for any labor and/or equipment needed to complete the construction as per the Agreement.
- 7.2. The Parties further agree that the materials used for the construction are to be brand new.

8. ADDITIONAL RESPONSIBILITIES OF THE CONSTRUCTOR

- 8.1. The Constructor agrees to the following:
 - 8.1.1. To supervise, manage and complete all the construction services as per this Agreement.
 - 8.1.2. To keep record of the documents in a safe place accessible only to the Constructor and the Client.
 - 8.1.3. To take all necessary precautions for all safety in general.
 - 8.1.4. To provide a guarantee to the Client that the work commenced will be in accordance with the documents of this Agreement.
 - 8.1.5. To maintain the property, keep it clean, and to safely dispose of hazardous materials and waste.

8.1.6. In the event that any hazardous materials are discovered during the course of work, the Constructor shall immediately notify the Client. Work in the affected area will be suspended until the Client has addressed the matter and provided written authorization to proceed.

9. TERMINATION

- 9.1. This Agreement may be terminated in case the following occurs:
- 9.2. Immediately in case one of the Parties breaches this Agreement or one of the conditions set forth in this Agreement and does not amend them within a period of thirty days.
- 9.3. This Agreement will automatically be terminated when both Parties complete their obligations.

10. <u>INDEMNIFICATION</u>

- 10.1. The Constructor agrees to hold harmless as well as indemnify its personnel, employees and others against all liabilities, expenses, claims or other.
- 10.2. The Constructor further agrees to be held responsible for providing a defense against the aforementioned liability, claims and/or demands, if any.

11. GOVERNING LAW

11.1. This Agreement shall be governed by and construed in accordance with the laws of the State of Utah.

12. AMENDMENTS

- 12.1. The Parties agree that any amendments made to this Agreement must be in writing where they must be signed by both Parties to this Agreement.
- 12.2. As such, any amendments made by the Parties will be applied to this Agreement.

13. ASSIGNMENT

13.1. The Parties hereby agree not to assign any of the responsibilities in this Agreement to a third party unless consented to by both Parties in writing.

14. <u>ALTERNATIVE DISPUTE RESOLUTION</u>

14.1. Any dispute or difference whatsoever arising out of or in connection with this Agreement shall be submitted to arbitration in accordance with, and subject to the laws of the State of Utah.

15. ENTIRE AGREEMENT

15.1. This Agreement contains the entire agreement and understanding among the Parties hereto with respect to the subject matter hereof, and supersedes all prior agreements, understandings, inducements and conditions, express or implied, oral or written, of any nature whatsoever with respect to the subject matter hereof. The express terms hereof control and supersede any course of performance and/or usage of the trade inconsistent with any of the terms hereof.

16. SEVERABILITY

16.1. In an event where any provision of this Agreement is found to be void and unenforceable by a court of competent jurisdiction, then the remaining provisions will remain to be enforced in accordance with the Parties' intention.

17. SIGNATURE AND DATE

17.1. The Parties hereby agree to the terms and conditions set forth in this Agreement and such is demonstrated throughout by their signatures below:

CONSTRUCTOR	CLIENT
Name: Jeramy Heinberger	Name:
Signature: <u>Jeramy Heinberger</u>	Signature:
Date: 05/23/2025	Date:



VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: PUBLIC HEARING - Fiscal Year 2025 Budget Amendment #3 (Resolution

2025-25)

Department: Finance

Presenter: Kristie Bayles

Background/Discussion:

Utah Code Section 10-6-128 allows for the amendment of the City's budget up until the last day of the fiscal year for which the budget applies. City Staff recommend the amendment of the Vineyard City Fiscal Year 2024 – 2025 Budget for various items as outlined in the attached detailed worksheet.

Fiscal Impact:

General Fund: \$722,879

Capital Projects Fund: \$174,322

Sewer Fund: (\$350)

Internal Service Fund: - (\$7500)

Recommendation:

Approval of the Resolution

Sample Motion:

I move to adopt Resolution 2025-25, approving the Vineyard City Fiscal Year 2024 – 2025 Budget Amendment #3 as presented by staff.

Attachments:

- 1. Resolution 2025-25 FY2024-2025 Budget Amend #3
- 2. FY25 Working Budget after Amendment #3 05.27.2025

RESOLUTION NO. 2025-25

A RESOLUTION AMENDING THE VINEYARD CITY BUDGET FOR THE 2024-2025 FISCAL YEAR.

WHEREAS, the City Council of Vineyard, Utah has previously adopted a budget for the 2024-2025 fiscal year in accordance with the Utah Fiscal Procedures Act for cities; and

WHEREAS, the city needs to now amend that adopted budget; and

WHEREAS, a public hearing was held on the 28th day of May 2025, on the proposed amendments to the 2024-2025 fiscal year budget for the city of Vineyard, Utah.

NOW THEREFORE BE IT RESOLVED BY THE VINEYARD CITY COUNCIL AS FOLLOWS:

- 1. The attached exhibit A shows the amendments to the Fiscal Year 2024-2025 budget for the city of Vineyard, Utah.
- 2. This resolution shall take effect upon passing.

Passed and dated this 28th day of May 2025.

Pamela Spencer, City Recorder

	Mayor Julie Fullmer
Attest:	



Vineyard City

FY 25 Working Budget after Amend #3 May 28, 2025

GENERAL FUND SUMMARY FY 202	25				
		ACTUAL FY 23	ACTUAL FY 24	AMEND #2 BUDGET FY 25	AMEND #3 BUDGET FY 25
BEGINNING FUND BALANCE:			\$ 3,943,298	\$ 3,983,738	3,983,738
REVENUES:					
PROPERTY TAXES	\$	3,261,171	\$ 3,683,386	\$ 3,953,636	\$ 4,849,636
TRANSPORTATION TAXES		296,945	375,439	310,000	310,000
SALES TAX		3,150,801	3,204,125	3,450,000	3,450,000
RAP TAX		208,953	220,225	220,000	220,000
FRANCHISE TAX		892,696	824,467	915,000	915,000
BUSINESS LICENSES & PERMITS		15,460	17,261	15,000	15,000
BUILDING PERMITS		265,675	781,423	900,000	900,000
FIRE INSPECTION & PLAN REVIEW FEES		8,420	25,112	15,000	15,000
CLASS B&C ROAD FUNDS		515,957	541,193	495,000	495,000
GRANT REVENUE		9,995	10,686	-	0
DEVELOPMENT FEES		219,311	470,627	327,300	327,300
SANITATION FEES		559,156	583,085	640,000	640,000
INSPECTION FEES		120,323	206,911	200,000	200,000
RECREATION FEES		162,334	170,164	198,000	198,000
FINES & FORFEITURES		-	700	1,000	1,000
CREDIT CARD FEES		7,026	4,976	5,000	5,000
INTEREST EARNINGS		166,048	251,081	150,000	150,000
RENTS		20,838	21,558	20,000	20,000
LIBRARY FEES		5	-	-	0
SPONSORSHIPS		30,550	30,455	35,000	35,000
MISCELLANEOUS REVENUE		27,689	8,851	9,972	9,972
DONATIONS		-	1,345	-	1,868
USE OF PRIOR YEAR FUND BALANCE		26,004	-	747,890	25,010.69
TOTAL REVENUE	\$	9,965,355	\$ 11,433,070	\$ 12,607,798	\$ 12,782,787
TRANSFERS IN:					
TRANSFER FROM RDA FUND	\$	330,138	\$ 373,974	\$ 399,002	\$ 399,002
TRANSFER FROM CAPITAL PROJECTS	\$		\$ <u>-</u>	\$ 1,098,686.00	\$ 924,364
TOTAL TRANSFERS IN	\$	330,138	\$ 373,974	\$ 1,497,688	\$ 1,323,366
TOTAL REVENUE & TRANSFERS IN	\$	10,295,493	\$ 11,807,044	\$ 14,105,486	\$ 14,106,153

GENERAL FUND SUMMARY FY 202	5						
					AMEND #2		AMEND #3
		ACTUAL	ACTUAL		BUDGET		BUDGET
		FY 23	FY 24		FY 25		FY 25
GENERAL FUND EXPENDITURES:		-					-
MAYOR & COUNCIL	\$	100,366	\$ 121,651	\$	219,013	\$	219,013
CITY MANAGER		137,192	168,776		223,907		223,907
RECORDER		192,536	191,418		217,496		217,496
FINANCE		247,385	284,192		370,871		370,871
HUMAN RESOURCES		125,254	-		-		0
COMMUNICATIONS		156,960	280,913		335,190		335,190
PLANNING		446,975	481,294		716,273		716,273
BUILDING		386,860	443,187		654,594		654,594
POLICE		2,328,474	2,815,769		3,349,422		3,349,422
FIRE		1,654,069	1,379,625		2,250,807		2,250,807
LIBRARY		29,979	54,609		99,453		97,120
PUBLIC WORKS		745,006	687,503		816,918		816,918
ENGINEERING		152,492	141,201		210,684		210,684
SANITATION		493,381	530,752		595,736		598,736
PARKS		618,442	825,148		1,029,663		1,029,663
RECREATION		359,798	402,811		511,016		511,016
SPECIAL EVENTS		152,440	175,417		256,675		256,675
NON-DEPARTMENTAL		57,076	79,053		187,650		187,650
TOTAL DEPT EXPENSES	\$	8,384,686	\$ 9,063,319	\$	12,045,368	\$	12,046,035
TRANSFERS OUT:							
TRANSFER TO WASTEWATER FUND			\$ 11,055	\$	-	\$	-
TRANSFER TO STORMWATER FUND			26,661		570		570
TRANSFER TO TRANSPORTATION FUND			929,223		1,108,814		1,108,814
TRANSFER TO CAPITAL PROJECTS FUND			805,500		220,000		220,000
TRANSFER TO INTERNAL SERVICE FUND			858,824		730,734		730,734
TOTAL TRANSFERS OUT:	\$	-	\$ 2,631,263	\$	2,060,119	\$	2,060,119
TOTAL EXP. & TRANS.OUT	\$	8,384,686	\$ 11,694,582	\$	14,105,486	\$	14,106,153
		4 040 5	 440 6	_		_	
OPERATING SURPLUS (DEFICIT)	Ş	1,910,807	\$ 112,462	\$	0	\$	0

FY 2025	GENERAL FUND REVENUES	F	Y23 Actual	F	Y24 Actual	Amend #2 Y25 Budget	Amend #3 /25 Budget
		•					
1801.3001	Property Tax	\$	3,261,171	\$	3,683,386	\$ 3,953,636	\$ 4,849,636
1801.3004	Sales Tax - Includes Transient		3,150,801		3,204,125	3,450,000	3,450,000
1801.3007	RAP Tax		208,953		220,225	220,000	220,000
1801.3008	Transportation Tax		296,945		375,439	310,000	310,000
1801.3051	Franchise Tax		892,696		824,467	915,000	915,000
	Total Taxes	\$	7,810,565	\$	8,307,642	\$ 8,848,636	\$ 9,744,636
1801.3101	Business Licenses & Permits	\$	15,460	\$	17,261	\$ 15,000	\$ 15,000
0801.3102	Building Permits		265,675		781,423	900,000	900,000
0801.3301	Fire Inspection & Plan Review Fees		8,420		25,112	15,000	15,000
	Total Licenses & Permits	\$	289,554	\$	823,796	\$ 930,000	\$ 930,000
1801.3152	Class B&C Road Funds	\$	515,957	\$	541,193	\$ 495,000	\$ 495,000
1801.3205	Grant Revenue		9,995		10,686	-	-
	Total Intergovernmental Revenue	\$	525,952	\$	551,879	\$ 495,000	\$ 495,000
0701.3351	Development Fees	\$	219,311	\$	470,627	\$ 327,300	\$ 327,300
1101.3401	Library Fees		5		-	-	-
1301.3254	Inspection Fees		120,323		206,911	200,000	200,000
1401.3604	Sanitation Fees		559,156		583,085	640,000	640,000
1601.3401	Recreation Fees		162,334		170,164	198,000	198,000
1801.3457	Fines & Forfeitures		-		700	1,000	1,000
1801.3501	Interest Earnings		166,048		251,081	150,000	150,000
1501.3355	Rents		20,838		21,558	20,000	20,000
1701.3844	Sponsorships		30,550		30,455	35,000	35,000
1801.3455	Credit Card Fees		7,026		4,976	5,000	5,000
1801.3851	Miscellaneous Revenues		27,689		8,851	9,972	9,972
1801.3853	Donations		1,000		1,345	-	-
1801.3854	Skate Park Donations - RESTRICTED		-		-	-	1,868
	Beg. Fund Appropriation		26,004		-	747,890.00	25,011
	Total Misc Revenue	\$	1,340,283	\$	1,749,753	\$ 2,334,162	\$ 1,613,151
1801.5025	Transfer from RDA Fund - Tax Admin	\$	330,138	\$	373,974	\$ 399,002	\$ 399,002
4901	Transfer from Capital Projects	\$	-	\$	-	\$ 1,098,686	\$ 924,364
	TOTAL GENERAL FUND REV	\$	10,296,493	\$	11,807,044	\$ 14,105,486	\$ 14,106,153
	TOTAL GENERAL FUND EXPEND	\$	11,694,582	\$	11,694,582	\$ 14,105,486	\$ 14,106,153
	Surplus (Deficit)	\$	(1,398,089)		112,462	\$ (0)	0

MAYO	R & MU	NICIPA	AL COUNCIL					Αſ	MEND #2	Α	MEND #3
				ļ	ACTUAL	-	ACTUAL	В	UDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Mayor & C	ouncil									
10	0101	4001	Full Time Regular	\$	-	\$	1,338	\$	93,572	\$	93,572
10	0101	4002	Part Time Regular		86,430		95,947		62,108		62,108
10	0101	4008	Compensation Adjustments		-		-		2,602		2,602
10	0101	4051	Retirement & Taxes		3,473		4,186		23,431		23,431
10	0101	4053	Insurance		-		-		9,600		9,600
10	0101	4105	Membership Dues & Subscriptions	\$	-	\$	-	\$	500	\$	500
10	0101	4108	Meetings		625		4,309		4,500		4,500
10	0101	4257	Programs		3,799		10,009		11,500		11,500
10	0101	4355	Miscellaneous		801		147		1,500		1,500
10	0101	4413	Training		4,194		3,468		5,200		5,200
10	0101	4414	Travel		1,044		2,247		4,500		4,500
			Total Mayor & Council	\$	100,366	\$	121,651	\$	219,013	\$	219,013

CITY M	ANAGER	R						Αľ	MEND #2	F	AMEND #3
				,	ACTUAL		ACTUAL	E	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	City Manag	er									
10	0201	4001	Full Time Regular	\$	79,153	\$	103,233	\$	128,299	\$	128,299
10	0201	4006	Other Compensation		600		750		600		600
10	0201	4007	Car Allowance		3,600		4,000		4,200		4,200
10	0201	4008	Compensation Adjustments		-		-		2,311		2,311
10	0201	4051	Retirement & Taxes		18,701		23,248		30,971		30,971
10	0201	4053	Insurance		15,411		14,546		22,600		22,600
10	0201	4105	Membership Dues & Subscriptions	\$	9,445	\$	15,225	\$	12,825	\$	12,825
10	0201	4108	Meetings		3,313		2,526		4,500		4,500
10	0201	4109	Special Events		2,525		-		3,000		3,000
10	0201	4355	Miscellaneous		3,315		761		3,500		3,500
10	0201	4413	Training		660		2,469		7,300		7,300
10	0201	4414	Travel		469		2,018		3,800		3,800
			Total City Manager	Ś	137.192	Ś	168.776	Ś	223.907	Ś	223.907

RECOR	DER							Al	MEND #2	F	AMEND #3
FUND	ORG	ACCT	DESCRIPTION				ACTUAL FY 24		BUDGET FY 25		BUDGET FY 25
	Daaaudau										
10	Recorder	4004	Full Time Beneder	,	77.400	,	442.402	,	116 010	,	116.010
10	0301	4001	Full Time Regular	\$	77,493	\$	113,192	\$	116,840	\$	116,840
10	0301	4002	Part Time Regular		32,308		793		-		-
10	0301	4005	Overtime		199		110		-		-
10	0301	4006	Other Compensation		520		600		600		600
10	0301	4008	Compensation Adjustments		-		-		2,134		2,134
10	0301	4051	Retirement & Taxes		26,649		28,513		29,637		29,637
10	0301	4053	Insurance		15,445		30,581		32,920		32,920
10	0301	4103	Public Notices	\$	800	\$	335	\$	10,000	\$	10,000
10	0301	4105	Membership Dues & Subscriptions		355		765		975		975
10	0301	4108	Meetings		-		271		240		240
10	0301	4110	Postage		-		-		50		50
10	0301	4151	Equipment		36,954		53		-		-
10	0301	4301	Contract Services		-		14,499		18,000		18,000
10	0301	4355	Miscellaneous		171		140		1,000		1,000
10	0301	4413	Training		593		688		1,100		1,100
10	0301	4414	Travel		1,049		878		4,000		4,000
			Total Recorder	\$	192,536	\$	191,418	\$	217,496	\$	217,496

FINAN	CE							ΑI	MEND #2	ļ	AMEND #3
				1	ACTUAL	1	ACTUAL	E	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Finance										
10	0401	4001	Full Time Regular	\$	113,193	\$	132,136	\$	147,681	\$	147,681
10	0401	4002	Part Time Regular		35,439		38,921		45,887		45,887
10	0401	4003	Seasonal Employees		6,518		6,731		13,853		13,853
10	0401	4005	Overtime		91		8		-		-
10	0401	4006	Other Compensation		1,947		1,243		960		960
10	0401	4007	Car Allowance		2,400		2,200		2,400		2,400
10	0401	4008	Compensation Adjustments		-		-		3,297		3,297
10	0401	4051	Retirement & Taxes		27,203		30,408		39,790		39,790
10	0401	4053	Insurance		12,590		11,524		29,653		29,653
10	0401	4105	Membership Dues & Subscriptions	\$	425	\$	849	\$	1,125	\$	1,125
10	0401	4108	Meetings	т.	402	т.	303	т.	600	-	600
10	0401	4301	Contract Services		9,275		12,515		31,500		31,500
10	0401	4352	Bank Fees		30,354		38,706		40,000		40,000
10	0401	4355	Miscellaneous		285		1,242		2,125		2,125
10	0401	4413	Training		4,469		4,235		4,000		4,000
10	0401	4414	Travel		2,794		3,171		8,000		8,000
	0.01	1127	Total Finance	\$	247,385	\$	284,192	\$	370,871	\$	370,871

COMM	UNICAT	IONS				Αľ	MEND #2	ļ	AMEND #3
				ACTUAL	ACTUAL	В	UDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24		FY 25		FY 25
	Communic	ations							
10	0601	4001	Full Time Regular	\$ 123,300	\$ 127,700	\$	88,981	\$	88,981
10	0601	4002	Part Time Regular	2,066	1,856		52,873		52,873
10	0601	4005	Overtime	180	12		-		-
10	0601	4006	Other Compensation	1,260	690		600		600
10	0601	4008	Compensation Adjustments	-	-		2,110		2,110
10	0601	4051	Retirement & Taxes	25,500	24,330		26,887		26,887
10	0601	4053	Insurance	510	5,824		27,790		27,790
10	0601	4108	Meetings	\$ 366	\$ 786	\$	600	\$	600
10	0601	4151	Equipment	236	587		650		650
10	0601	4152	Supplies	-	391		500		500
10	0601	4257	Communities That Care	2,950	14,138		31,000		31,000
10	0601	4355	Miscellaneous	-	102,518		101,600		101,600
10	0601	4413	Training	290	383		1,100		1,100
10	0601	4414	Travel	305	1,698		500		500
			Total Communications	\$ 156,960	\$ 280,913	\$	335,190	\$	335,190

PLANN	ING					ΑI	MEND #2	Δ	MEND #3
				ACTUAL	ACTUAL	E	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24		FY 25		FY 25
	Planning								
10	0701	4001	Full Time Regular	\$ 234,314	\$ 272,166	\$	354,959	\$	354,959
10	0701	4002	Part Time Regular	40,712	62,229		69,002		69,002
10	0701	4005	Overtime	3,852	1,921		-		-
10	0701	4006	Other Compensation	870	536		960		960
10	0701	4007	Car Allowance	1,286	1,300		1,200		1,200
10	0701	4008	Compensation Adjustments	-	-		7,627		7,627
10	0701	4051	Retirement & Taxes	56,204	74,272		100,514		100,514
10	0701	4053	Insurance	36,483	44,579		81,544		81,544
10	0701	4105	Membership Dues & Subscriptions	\$ 51,054	\$ 1,313	\$	8,825	\$	8,825
10	0701	4108	Meetings	2,039	2,282		9,000		9,000
10	0701	4301	Contract Services	2,658	184		47,000		47,000
10	0701	4355	Miscellaneous	7,364	4,264		14,710		14,710
10	0701	4413	Training	4,437	7,797		10,959		10,959
10	0701	4414	Travel	5,702	8,451		9,973		9,973
			Total Planning	\$ 446,975	\$ 481,294	\$	716,273	\$	716,273

BUILDI	BUILDING							ΑI	MEND #2	A	MEND #3
				4	ACTUAL		ACTUAL	E	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Building										
10	0801	4001	Full Time Regular	\$	287,583	\$	339,407	\$	413,587	\$	413,587
10	0801	4002	Part Time Regular		14,880		-		-		-
10	0801	4003	Seasonal Employee		6,086		6,185		10,834		10,834
10	0801	4006	Other Compensation		180		300		360		360
10	0801	4007	Car Allowance		400		-		2,400		2,400
10	0801	4008	Compensation Adjustments		-		-		7,651		7,651
10	0801	4051	Retirement & Taxes		60,448		75,017		102,205		102,205
10	0801	4053	Insurance		4,191		9,234		59,686		59,686
10	0801	4105	Membership Dues & Subscriptions	\$	1,004	\$	1,313	\$	2,760	\$	2,760
10	0801	4108	Meetings		492		399		2,160		2,160
10	0801	4151	Equipment		-		1,083		3,500		3,500
10	0801	4152	Supplies		4,832		2,845		4,000		4,000
10	0801	4154	Uniforms		424		622		900		900
10	0801	4301	Contract Services		900		-		20,000		20,000
10	0801	4355	Miscellaneous		1,099		254		4,000		4,000
10	0801	4413	Training		2,042		4,060		10,550		10,550
10	0801	4414	Travel		2,189		2,467		10,000		10,000
			Total Building	Ś	386,860	\$	443,187	\$	654,594	\$	654,594

POLICE						ACTUAL		ACTUAL		MEND #2 BUDGET		MEND #3 BUDGET
FUND	ORG	ACCT	DESCRIPTION			FY 23		FY 24		FY 25		FY 25
	Police											
10	0901	4001	Full Time Regular		\$	-	\$	6,476	\$	-	\$	-
10	0901	4002	Part Time Regular			35,452		40,981		51,877		51,877
10	0901	4051	Retirement & Taxes			1,376		2,622		4,643		4,643
10	0901	4151	Equipment		\$	-	\$	-	\$	2,850	\$	2,850
10	0901	4154	Uniforms			-		-		3,000		3,000
10	0901	4301	Contract Services			2,291,436		2,765,443		3,286,053		3,286,053
10	0901	4355	Miscellaneous			210		140		1,000		1,000
				Total Police	Ś	2.328.474	Ś	2.815.769	Ś	3.349.422	Ś	3.349.422

FIRE SE	RVICES					AME	ND #2	Α	MEND #3
				ACTUAL	ACTUAL	BUD	GET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24	FY	25		FY 25
	Fire Services	;							
10	1001	4301	Contract Services	\$ 1,654,069	\$ 1,379,625	\$ 2,2	50,807	\$	2,250,807
			Total Fire Services	\$ 1,654,069	\$ 1,379,625	\$ 2,2	50,807	\$	2,250,807

LIBRARY								MEND #2	MEND #3
FUND	ORG	ACCT	DESCRIPTION		CTUAL FY 23	,	ACTUAL FY 24	BUDGET FY 25	BUDGET FY 25
10115	<u> </u>	7.00.	2230 1131X						
	Library								
10	1101	4001	Full Time Regular	\$	-	\$	455	\$ 39,012	\$ 39,012
10	1101	4002	Part Time Regular		6,829		27,741	-	4,063.80
10	1101	4008	Compensation Adjustments		-		-	702.86	942.32
10	1101	4051	Retirement & Taxes		99		3,048	9,417.61	9,781.32
10	1101	4053	Insurance		-		-	9,600	9,600.00
10	1101	4105	Membership Dues & Subscriptions	\$	-	\$	30	\$ 130	\$ 130
10	1101	4108	Meetings		-		120	220	220
10	1101	4151	Equipment		-		787	1,825	1,825
10	1101	4152	Supplies		4,855		2,792	1,850	1,850
10	1101	4257	Programs		18,197		1,624	1,100	1,100
10	1101	4301	Contract Services		-		-	12,700	5,700
10	1101	4355	Miscellaneous		-		17,350	22,000	22,000
10	1101	4413	Training		-		530	525	525
10	1101	4414	Travel		-		42	370	370
			Total Library	\$	29,979	\$	54,609	\$ 99,453	\$ 97,120

PUBLIC	PUBLIC WORKS								MEND #2		/IEND #3
FUND	ORG	ACCT	DESCRIPTION		ACTUAL FY 23		ACTUAL FY 24	-	BUDGET FY 25	В	UDGET FY 25
	Public Work	s Adminis	stration								
10	1201	4001	Full Time Regular	\$	165,890	\$	59,418	\$	56,934	\$	56,934
10	1201	4002	Part Time Regular		527		-		-		-
10	1201	4005	Overtime		-		-		8,540		8,540
10	1201	4006	Other Compensation		1,950		1,244		-		-
10	1201	4007	Car Allowance		900		-		-		-
10	1201	4008	Compensation Adjustments		-		-		1,029		1,029
10	1201	4051	Retirement & Taxes		32,495		13,518		13,895		13,895
10	1201	4053	Insurance		10,349		34,161		11,300		11,300
10	1201	4101	Maintenance	\$	11,924	\$	2,497	\$	-	\$	-
10	1201	4105	Membership Dues & Subscriptions		14,749		2,710		18,520		18,520
10	1201	4108	Meetings		3,365		1,805		2,500		2,500
10	1201	4151	Equipment		11,103		6,102		9,600		9,600
10	1201	4152	Supplies		4,391		6,300		800		800
10	1201	4154	Uniforms		2,426		3,590		2,800		2,800
10	1201	4160	Salt		29,929				-		-
10	1201	4205	Electric Charges		23,827		24,155		33,390		33,390
10	1201 1201	4301 4303	Contract Services		399,850		65,405		2 000		2 000
10 10	1201	4303	Software Maintenance Miscellaneous		5,682		600 634		2,000		2,000
10	1201	4359	Signs		5,834		-		-		_
10	1201	4365	Trees		17,000		_		_		_
10	1201	4407	Certification & Testing		422		406		7,000		7,000
10	1201	4413	Training		1,535		3,022		4,200		4,200
10	1201	4414	Travel		860		4,728		-		-
			Total Public Works Administration	\$	745,006	\$	230,295	\$	172,508	\$	172,508
	Dublic Work	e Ground	s Maintenance								
10	1202	4001	Full Time Regular	\$	_	\$	80,916	\$	61,741	\$	61,741
10	1202	4002	Part Time Regular	Y	_	Y	1,062	Y	7,498	7	7,498
10	1202	4003	Seasonal Employee				-,		12,155		12,155
10	1202	4005	Overtime		-		3,859		9,261		9,261
10	1202	4006	Other Compensation		-		600		600		600
10	1202	4008	Compensation Adjustments		-		-		1,236		1,236
10	1202	4051	Retirement & Taxes		-		19,870		16,928		16,928
10	1202	4053	Insurance		-		752		27,120		27,120
10	1202	4101	Maintenance	\$	-	\$	7,954	\$	10,000	\$	10,000
10	1202	4103	Public Notices		-		-		250		250
10	1202	4105	Memberships		-		-		1,400		1,400
10	1202	4151	Equipment		-		2,749		4,520		4,520
10	1202	4152	Supplies		-		24,314		27,500		27,500
10	1202	4154	Uniforms		-		-		1,250		1,250
10	1202	4201	Water Charges		-		135,033		150,000		150,000
10	1202	4301	Contract Services		-		152,922		276,950		276,950
10 10	1202 1202	4365 4407	Trees Certification & Testing		-		25,559 850		25,000 2,300		25,000 2,300
10	1202	4413	Training		_		768		3,300		3,300
10	1202	4414	Travel		_		-		5,400		5,400
_0			Total Public Works Grounds Maintenance	\$	_	\$	457,208	\$	644,409	\$	644,409
			Public Works Administration	ċ	74F 00C	ċ	220 205	ċ	172 500	ċ	172 500
			Public Works Administration Public Works Grounds Maintenance	\$ \$	745,006	\$ \$	230,295 457,208	\$ \$	172,508 644,409	\$ \$	172,508 644,409
			Public Works Grounds Maintenance Total Public Works		745,006	Ą	687,503	Ą	816,918	۲	816,918
			Total Labile Works		,		, 5 0 0		,510		

ENGINE	ERING						Αľ	MEND #2	F	AMEND #3
				A	ACTUAL	ACTUAL	Е	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23	FY 24		FY 25		FY 25
	Engineering	3								
10	1301	4001	Full Time Regular	\$	99,494	\$ 73,225	\$	82,537	\$	82,537
10	1301	4006	Other Compensation		990	600		600		600
10	1301	4007	Car Allowance		3,600	3,600		3,600		3,600
10	1301	4008	Compensation Adjustments		-	-		1,493		1,493
10	1301	4051	Retirement & Taxes		22,630	17,326		20,228		20,228
10	1301	4053	Insurance		12,422	13,352		18,080		18,080
10	1301	4105	Membership Dues & Subscriptions	\$	2,062	\$ 3,129	\$	6,745	\$	6,745
10	1301	4108	Meetings		269	533		500		500
10	1301	4151	Equipment		761	347		8,102		8,102
10	1301	4154	Uniforms		358	-		-		-
10	1301	4301	Contract Services		5,232	24,749		61,250		61,250
10	1301	4407	Certification & Testing		378	-		2,300		2,300
10	1301	4413	Training		1,799	3,771		1,050		1,050
10	1301	4414	Travel		2,497	569		4,200		4,200
			Total Engineering	\$	152,492	\$ 141,201	\$	210,684	\$	210,684

SANITA	ATION					Αľ	MEND #2	Α	MEND #3
				ACTUAL	ACTUAL	В	BUDGET	1	BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24		FY 25		FY 25
	Sanitation								
10	1401	4301	Contract Services	\$ 492,166	\$ 530,752	\$	595,736	\$	598,736
10	1401	4808	Bad Debt Expense	1,215	-		-		-
			Total Sanitation	\$ 493,381	\$ 530,752	\$	595,736	\$	598,736

PARKS							Al	MEND #2	Α	MEND #3
					ACTUAL	ACTUAL	E	BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23	FY 24		FY 25		FY 25
	Parks									
10	1501	4001	Full Time Regular	\$	237,558	\$ 267,604	\$	271,614	\$	271,614
10	1501	4002	Part Time Regular		4,738	1,748		6,378		6,378
10	1501	4003	Seasonal Employee		28,494	59,155		47,275		47,275
10	1501	4005	Overtime		2,574	2,606		8,000		8,000
10	1501	4006	Other Compensation		3,747	2,804		2,400		2,400
10	1501	4008	Compensation Adjustments		-	-		4,994		4,994
10	1501	4051	Retirement & Taxes		53,783	60,876		70,369		70,369
10	1501	4053	Insurance		42,740	39,684		60,662		60,662
10	1501	4101	Maintenance	\$	56,171	\$ 86,380	\$	133,000	\$	133,000
10	1501	4105	Membership Dues & Subscriptions		725	-		2,750		2,750
10	1501	4108	Meetings		97	719		720		720
10	1501	4151	Equipment		1,174	53,920		41,000		41,000
10	1501	4152	Supplies		11,723	14,159		24,000		24,000
10	1501	4154	Uniforms		703	1,339		1,600		1,600
10	1501	4201	Water Charges		145,489	81,158		90,000		90,000
10	1501	4205	Electric Charges		8,312	10,436		15,000		15,000
10	1501	4208	Miscellaneous Facilities Charges		3,100	2,735		7,000		7,000
10	1501	4301	Contract Services		7,907	129,502		200,000		200,000
10	1501	4355	Miscellaneous		7,774	3,500		31,500		31,500
10	1501	4365	Trees		-	972		-		-
10	1501	4413	Training		1,255	4,900		6,400		6,400
10	1501	4414	Travel		377	951		5,000		5,000
			Total Par	ks \$	618,442	\$ 825,148	\$	1,029,663	\$	1,029,663

RECREATION							Αſ	MEND #2	Þ	AMEND #3	
ELIND	ORG	ACCT	DESCRIPTION	1	ACTUAL		ACTUAL EV 24	Е	BUDGET		BUDGET
FUND	UKG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Dannatian										
40	Recreation	1001	5 H.T. B. I		474 445		460.040	4	220 672		220 672
10	1601	4001	Full Time Regular	\$,	\$	168,340	\$	230,672	\$	230,672
10	1601	4002	Part Time Regular		3,292		30,816		-		-
10	1601	4003	Seasonal Employee		18,200		31,367		32,292		32,292
10	1601	4005	Overtime		2,495		996		5,000		5,000
10	1601	4006	Other Compensation		733		1,250		1,080		1,080
10	1601	4008	Compensation Adjustments		-		-		4,156		4,156
10	1601	4051	Retirement & Taxes		38,830		38,092		58,574		58,574
10	1601	4053	Insurance		27,952		19,926		37,999		37,999
10	1601	4105	Membership Dues & Subscriptions	\$	330	\$	514	\$	1,220	\$	1,220
10	1601	4108	Meetings		151		440		360		360
10	1601	4151	Equipment		-		-		5,000		5,000
10	1601	4154	Uniforms		100		49		350		350
10	1601	4257	Programs		84,890		94,822		117,512		117,512
10	1601	4355	Miscellaneous		9,282		11,821		11,000		11,000
10	1601	4413	Training		1,924		3,291		3,350		3,350
10	1601	4414	Travel		203		1,087		2,450		2,450
			Total Recreation	\$	359,798	\$	402,811	\$	511,016	\$	511,016

SPECIAI	L EVENT	S					Αľ	MEND #2	A	MEND #3
				ļ	ACTUAL	ACTUAL	В	UDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23	FY 24		FY 25		FY 25
	Special Eve	nts								
10	1701	4001	Full Time Regular	\$	62,451	\$ 72,256	\$	65,433	\$	65,433
10	1701	4002	Part Time Regular		-	-		27,825		27,825
10	1701	4005	Overtime		1,818	2,119		1,500		1,500
10	1701	4006	Other Compensation		592	478		360		360
10	1701	4008	Compensation Adjustments		-	-		1,619		1,619
10	1701	4051	Retirement & Taxes		13,054	15,591		18,286		18,286
10	1701	4053	Insurance		262	322		9,600		9,600
10	1701	4105	Membership Dues & Subscriptions	\$	849	\$ 1,460	\$	2,350	\$	2,350
10	1701	4108	Meetings		-	119		180		180
10	1701	4109	Special Events		69,679	77,767		124,072		124,072
10	1701	4151	Equipment		1,837	4,464		3,000		3,000
10	1701	4304	Marketing		1,669	273		1,200		1,200
10	1701	4413	Training		-	135		600		600
10	1701	4414	Travel		230	433		650		650
			Total Special Events	\$	152,440	\$ 175,417	\$	256,675	\$	256,675

NON-D	EPARTIV	IENTAL				1	AMEND #2	Α	MEND #3
				ACTUAL	ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24		FY 25		FY 25
	Non-Depar	tmental							
10	1801	4110	Postage	\$ -	\$ -	\$	2,000	\$	2,000
10	1801	4152	Supplies	12,216	16,303		18,500		18,500
10	1801	4154	Uniforms	1,137	1,587		7,500		7,500
10	1801	4301	Contract Services	3,686	57,040		128,450		128,450
10	1801	4355	Miscellaneous	21,586	3,398		-		-
10	1801	4356	Community Garden	6,793	581		1,200		1,200
10	1801	4410	Employee Appreciation	11,658	144		-		-
10	1801	4855	General Fee Waivers	-	-		30,000		30,000
10	1801	6049	Transfer to Capital Projects	\$ 523,953	\$ 1,520,225	\$	220,000	\$	220,000
10	1801	6052	Transfer to Wastewater Fund	-	11,055		-		-
10	1801	6053	Transfer to Stormwater Fund	-	26,661.00		570		570
10	1801	6054	Transfer to Transportation Fund	689,594.99	375,439.00		1,108,814		1,108,814
10	1801	6061	Transfer to Internal Service Fund	433,001.00	769,904.00		730,734		730,734
			Total Non-Departmental	\$ 1,703,625	\$ 2,782,337	\$	2,247,769	\$	2,247,769

IMPAC					ACTUAL		ACTUAL		MEND #2 BUDGET	ļ	AMEND #3
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Revenue										
23	2302	3501	Roadway Interest	\$	27,654	\$	50,832	\$	13,800	\$	13,800
23	2302	3754	Roadway Facilities Impact Fees		195,718		802,777		460,000		460,000
23	2304	3754	Storm & Groundwater Facilities Impact Fees		10,784		34,894		34,500		34,500
			Use of Prior Year Fund Balance				-		181,700		181,700
			Total Revenue	\$	234,156	\$	888,503	\$	690,000	\$	690,000
	Public Safet	=									
23	2301	4301	Contract Services	\$	-	\$	-	\$	25,000	\$	25,000
23	2301	4651	Capital Expense								
25	2301	4031	Capital expense		-		-		-		-
			Total Public Safety Facilities	\$	-	\$	-	\$	25,000	\$	25,000
	Roadway Fa	cilities									
23	2302	4301	Contract Services	\$	53,938	\$	-	\$	25,000	\$	25,000
23	2302	4651	Capital Expense		31,373		69,470		535,000		535,000
			Total Roadway Facilities	ċ	85,312	ć	69,470	\$	560,000	ć	560,000
			Total Roadway Facilities	<u>,</u>	05,312	Ą	03,470	Ą	300,000	Ą	360,000
	Park Facilitie	25									
23	2303	4301	Contract Services	\$	_	\$	_	\$	25,000	\$	25,000
23	2303	1501	Contract Services	7		7		Y	23,000	7	23,000
23	2303	4651	Capital Expense		-		-		-		-
			Total Park Facilities	\$	-	\$	-	\$	25,000	\$	25,000
	Storm & Gro										
23	2304	4301	Contract Services	\$	-	\$	40,000	\$	40,000	\$	40,000
23	2304	4651	Capital Expense		10,784		34,037		40,000		40,000
23	2304	4031	Total Storm & Groundwater Facilities	Ś	10,784	\$	74,037	\$	80,000	\$	80,000
			Total Storm & Groundwater ruemites	<u> </u>	10,704	7	74,037	7	00,000	Ţ	50,000
			Public Safety Facilities	\$	-	\$	-	\$	25,000	\$	25,000
			Roadway Facilities	\$	85,312		69,470	\$	560,000		560,000
			Park Facilities	\$	-	\$	-	\$	25,000	\$	25,000
			Storm & Groundwater Facilities	\$	10,784	\$	74,037	\$	80,000	\$	80,000
			Total Impact Fees Fund	\$	96,096	\$	143,507	\$	690,000	\$	690,000
			Surplus (Deficit)	\$	138,061	\$	744,996	\$	-	\$	-

CAPITAL	PROJECTS	;					AMEND #2	AMEND #3
FUND 49				1	ACTUAL	ACTUAL	BUDGET	BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23	FY 24	FY 25	FY 25
	Revenue							
49	4901	5010	Transfer from General Fund	\$	523,953	\$ 1,520,225	\$ 220,000	\$ 220,000
49	4901	3205	Grants		-	-	10,785,025.00	10,799,275.00
			Beginning Fund Balance Appropriation		-	-	5,005,089.00	4,830,767.08
			Total Revenue	\$	523,953	\$ 1,520,225	\$ 16,010,114	\$ 15,850,042
	Capital Proj	ects						
49	4901	4651	Capital Expense	\$	281,063	\$ 637,358	\$ 14,911,428	\$ 14,925,678
49	4901	6010	Transfer to General Fund		-	-	1,098,686.00	924,364
			Total Capital Projects	\$	281,063	\$ 637,358	\$ 16,010,114	\$ 15,850,042
			Surplus (Deficit)	\$	242,889	\$ 882,867	\$ -	\$ -

WATER						ļ	AMEND #2	ļ	AMEND #3
FUND 51	1			ACTUAL	ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 23	FY 24		FY 25		FY 25
	Revenue								
51	5101	3205	Grant Revenue	\$ 1,702,174	\$ 2,000,000	\$	-	\$	-
51	5101	3501	Interest Income	-	426,802		175,000		175,000
51	5101	3602	Utility Service Sales	2,288,371	3,320,268		3,200,000		3,200,000
51	5101	3754	Impact Fees	50,191	117,350		130,000		130,000
51	5101	3803	Connection Fees	23,300	59,072		55,000		55,000
51	5101	3825	Late Fees	19,038	32,404		15,000		15,000
51	5101	3704	Bond Proceeds	-	-		3,477,389		-
			Beginning Fund Balance Appropriation	-			1,225,136		4,702,525
			Total Revenue S	\$ 4,083,074	\$ 7,141,896	\$	8,277,525	\$	8,277,525
			_						
	Water Dist								
51	5101	4001	Full Time Regular	\$ 366,892	\$ 366,744	\$	501,837	\$	501,837
51	5101	4002	Part Time Regular	6,329	1,079		4,999		4,999
51	5101	4003	Seasonal Employee	3,568	-		10,874		10,874
51	5101	4005	Overtime	2,364	570		15,000		15,000
51	5101	4006	Other Compensation	1,890	1,200		1,200		1,200
51	5101	4007	Car Allowance	4,100	1,400		-		-
51	5101	4008	Compensation Adjustments	-	-		9,175		9,175
51	5101	4051	Retirement & Taxes	84,132	47,136		125,147		125,147
51	5101	4053	Insurance	57,154	80,082		137,924		137,924
51	5101	4101	Maintenance	\$ 45,010	\$ 59,021	\$	108,500	\$	108,500
51	5101	4105	Membership Dues & Subscriptions	1,181	1,036		2,300		2,300
51	5101	4108	Meetings	260	283		680		680
51	5101	4151	Equipment	1,368	732		26,500		26,500
51	5101	4152	Supplies	13,102	8,290		40,000		40,000
51	5101	4154	Uniforms	365	898		2,400		2,400
51	5101	4157	Meters	149,095	91,075		150,000		150,000
51	5101	4205	Electric Charges	9,290	8,294		200,000		200,000
51	5101	4301	Contract Services	1,344,098	1,352,683		1,567,000		1,567,000
51	5101	4306	Public Engagement	-,,	-,,		20,800		20,800
51	5101	4355	Miscellaneous	85	934		,		
51	5101	4407	Certification & Testing	3,455	1,688		8,500		8,500
51	5101	4413	Training	695	2,279		3,500		3,500
51	5101	4414	Travel	676	1,216		4,500		4,500
51	5101	4651	Capital Expense	-	-		4,547,389		4,547,389
51	5101	4803	Interest on Debt	_	511,476		610,000		610,000
51	5101	4803	Cost of Issuance	_	183,813		-		-
51	5101	4808	Bad Debt Expense	14,449	-		_		-
•	-		·						
51	5101	6061	Transfer to Internal Service Fund	237,841	 256,688	\$	179,300		179,300
			Total Water Distribution	\$ 2,347,399	\$ 3,178,617	\$	8,277,525	\$	8,277,525
			Surplus (Deficit)	1,735,675	3,963,279		(0)		(0)
				,,	-,,		(0)		(0)

WASTE	WATER							ļ	AMEND #2	1	AMEND #3
FUND!	52				ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Revenue										
52	5201	3602	Utility Service Sales	\$	1,679,575	\$	2,148,222	\$	2,982,000	\$	2,982,000
52	5201	3754	Impact Fees		110,004		480,370		245,000		245,000
52	5201	5010	Transfer from General Fund		-		11,055		-		-
			Beginning Fund Balance Appropriation		116,091		-		1,703,530		1,703,880
			Total Revenu	ıe \$	1,905,670	\$	3,840,647	\$	4,930,530	\$	4,930,880
	Wastewate	r Collectio	on								
52	5201	4001	Full Time Regular	\$	229,258	\$	197,649	\$	300,159	\$	300,159
52	5201	4002	Part Time Regular		2,110		123		-		-
52	5201	4003	Seasonal Employee		455		-		924		924
52	5201	4005	Overtime		985		311		7,000		7,000
52	5201	4006	Other Compensation		550		-		-		-
52	5201	4008	Compensation Adjustments		-		-		5,442		5,442
52	5201	4051	Retirement & Taxes		50,334		25,337		74,115		74,115
52	5201	4053	Insurance		35,941		41,304		74,095		74,095
						_		_			
52	5201	4101	Maintenance	\$	34,351	Ş	95,299	\$	223,000	\$	223,000
52	5201	4105	Membership Dues & Subscriptions		949		872		4,000		4,000
52	5201	4108	Meetings		-		295		480		480
52	5201	4151	Equipment		10,982		5,093		40,400		40,400
52	5201	4152	Supplies		2,860		4,689		73,500		73,500
52	5201	4154	Uniforms		456		506		1,500		1,500
52	5201	4201	Water Usage		-		1,216		1,500		1,500
52	5201	4205	Electric Charges		17,353		17,541		27,000		27,000
52	5201	4301	Contract Services		908,832		1,028,989		1,346,500		1,346,850
52	5201	4306	Public Engagement		-		-		800		800
52	5201	4407	Certification & Testing		631		525		7,500		7,500
52	5201	4413	Training		-		810		3,000		3,000
52	5201	4414	Travel		-		1,160		3,000		3,000
52	5201	4651	Capital Expense		-		-		2,494,880		2,494,880
52	5201	4803	Interest on Debt		-		56,831		100,000		100,000
52	5201	4804	Cost of Issuance		-		20,424		-		-
52	5201	4808	Bad Debt Expense		2,687				-		-
52	5201	6061	Transfer to Internal Service Fund	\$	125,050	\$	141,930	\$	141,734	\$	141,734
			Total Wastewater Collection		1,423,784	\$	1,640,904	\$	4,930,530	\$	4,930,880
			Surplus (Defici	t) \$	481,886	\$	2,199,743	\$	0	\$	0

STORM FUND 53	IWATER 3				ACTUAL		ACTUAL		MEND #2 BUDGET		MEND #3 BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Revenue										
53	5301	3602	Utility Service Sales	\$	328,334	\$	305,713	\$	270,000	\$	270,000
53	5301	5010	Transfer from General Fund		-		26,661		570		570
			Beginning Fund Balance Appropriation		49,220				302,121		302,121
			Total Revenue	\$	377,554	\$	2,370,374	\$	572,691	\$	572,691
	Ctormurator	Adminis	tration 9 Dormitting								
53	5301	4001	tration & Permitting Full Time Regular	\$	79,106	\$	176,151	\$	262,819	\$	262,819
53	5301	4001	Seasonal Employee	Ą	226	Ş	170,131	Ş	924	Ş	924
53	5301	4005	Overtime		198		954		6,000		6,000
53	5301	4005	Other Compensation		196		954		600		600
53	5301	4008			-		-		4,705		4,705
53	5301	4008	Compensation Adjustments Retirement & Taxes		- 17,280		22,401		•		•
53 53	5301	4051			,		•		64,872		64,872
55	5301	4053	Insurance		6,458		14,407		57,285		57,285
53	5301	4101	Maintenance	\$	958	\$	7,439	\$	18,951	\$	18,951
53	5301	4103	Public Notices		-		-		200		200
53	5301	4105	Membership Dues & Subscriptions		963		1,470		1,749		1,749
53	5301	4108	Meetings		-		-		180		180
53	5301	4152	Supplies		1,141		-		3,000		3,000
53	5301	4154	Uniforms		-		312		600		600
53	5301	4301	Contract Services		6,490		-		30,000		30,000
53	5301	4303	Software Maintenance		1,200		1,200		2,000		2,000
53	5301	4306	Public Engagement		462		103		2,650		2,650
53	5301	4355	Miscellaneous				-		_		-
53	5301	4407	Certification & Testing		1,750		1,750		3,950		3,950
53	5301	4413	Training		85		-		600		600
53	5301	4414	Travel		1,339		-		-		-
53	5301	4808	Bad Debt Expense		370		-		-		-
F2	F204	COC1	Transfer to Internal Comice Found	,	E0 C0E	,	00.042	,	111 607	۲.	444.607
53	5301	6061	Transfer to Internal Service Fund	<u> </u>	59,605	\$ \$	89,942	\$ \$	111,607	\$ \$	111,607
			Total Stormwater Admin & Permitting	Þ	177,629	Þ	316,129	Þ	572,691	>	572,691
	Stormwater	Mainten	ance								
53	5302	4101	Maintenance	\$	55	\$	-	\$	-	\$	-
			Total Stormwater Maintenance	\$	55	\$	-	\$	-	\$	-
			-								
			Stormwater Admin & Permitting	\$	177,629	\$	401,661	\$	572,691	\$	572,691
			Stormwater Maintenance		55		-		-		-
			Total Stormwater	\$	177,684	\$	401,661	\$	572,691	\$	572,691
			Surplus (Deficit)	\$	199,870	\$	1,968,713	\$	0	\$	0

TRANSP	PORTATI	ON						,	AMEND #2	A	MEND #3
FUND 54					ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Revenue										
54	5401	3401	Road Cut Fee	\$	16	\$	-	\$	-	\$	-
54	5401	3205	Grant Revenue		-		25,000		-		-
54	5401	5010	Transfer from General Fund		689,595		375,439		1,108,814		1,108,814
			Beginning Fund Balance Appropriation		-		-		550,423		550,423
			Total Revenue	\$	689,611	\$	400,439	\$	1,659,237	\$	1,659,237
	Transporta	tion									
54	5401	4001	Full Time Regular	\$	179,291	¢	157,908	¢	250,672	¢	250,672
54	5401	4002	Part Time Regular	Ţ	1/3,231	Ţ	708	Ļ	8,103	۲	8,103
54	5401	4005	Overtime		574		986		27,000		27,000
54	5401	4006	Other Compensation		1,600		900		1,200		1,200
54	5401	4008	Compensation Adjustments		-		-		4,560		4,560
54	5401	4051	Retirement & Taxes		37,611		20,122		63,351		63,351
54	5401	4053	Insurance		9,412		19,109		63,075		63,075
				_							= 4 = 00
54	5401	4101		\$	4,376	Ş	16,759	Ş	51,500	Ş	51,500
54	5401	4105	Membership Dues & Subscriptions		-		2,420		5,000		5,000
54	5401	4108	Meetings		-		-		240		240
54	5401	4151	Equipment		86,736		11,162		65,900		65,900
54	5401	4152	Supplies		1,466		25,336		47,500		47,500
54	5401	4154	Uniforms		406		269		1,700		1,700
54 54	5401 5401	4301 4355	Contract Services Miscellaneous		272,118		48,196		802,925		802,925
54 54	5401	4333					370		5,000		5,000
54 54	5401	4413 4414	Training Travel		-		941		2,900 2,800		2,900 2,800
54 54	5401	4808	Bad Debt Expense		1,888		941		2,800		2,800
54	3401	4000	bau Debt Expense		1,088		-		-		-
54	5401	6061		\$	123,253	\$	213,216	\$	255,810		255,810
			Total Transportation _	\$	718,732	\$	518,402	\$	1,659,237	\$	1,659,237
			Surplus (Deficit)	\$	(29,121)	\$	(117,963)	\$	0		0

INTERN	IAL SERV	ICE						Α	MEND #2	A	MEND #3
FUND 61	l				ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
	Revenue										
61	6101	5010	Transfer from General Fund	\$	433,001	\$	769,904	\$	730,734	\$	730,734
61	6101	5025	Transfer from RDA Fund		56,420		62,898		75,000		75,000
61	6101	5051	Transfer from Water Fund		237,841		256,688		179,300		179,300
61	6101	5052	Transfer from Wastewater Fund		125,050		141,930		141,734		141,734
61	6101	5053	Transfer from Stormwater Fund		59,605		89,942		111,607		111,607
61	6101	5054	Transfer from Transportation Fund		123,253		213,216		255,810		255,810
			Beginning Fund Balance Appropriation		60,000				203,067		210,687
			Total Revenue	\$	1,095,170	\$	1,580,523	\$	1,697,253	\$	1,704,872
			.tutakuustuu								
61	Internal Ser 6101	vice Adm 4001	inistration Full Time Regular	\$	19,008	۲	14,720	۲		\$	
61	6101	4001	Retirement & Taxes	Ş	3,857	Ş	3,620	Ş	-	Ş	-
61	6101	4051	Insurance		3,637		2,179		-		-
61	6101	4301	Contract Services		120,889		133,428		157,800		165,300
01	0101	4301	Total Internal Service Administration	Ġ	143,843	Ś	153,428	Ś	157,800	Ś	165,300
			=	<u> </u>	143,043	-	133,347	<u> </u>	137,000	7	103,300
	Facilities										
61	6102	4001	Full Time Regular	\$	20,596	\$	32,817	\$	61,741	\$	61,741
61	6102	4002	Part Time Regular		8,074		1,062		7,498		7,498
61	6102	4003	Seasonal Employee		-		-		12,155		12,155
61	6102	4008	Compensation Adjustments		-		-		1,236		1,236
61	6102	4051	Retirement & Taxes		4,030		(10,618)		16,928		16,928
61	6102	4053	Insurance		2,891		10,942		27,120		27,120
61	6102	4101	Maintenance	\$	7,244	\$	6,564	\$	27,000	\$	27,000
61	6102	4105	Memberships Dues & Subscriptions		1,447		_		_		-
61	6102	4107	Lease Payments		67,943		74,130		77,186		77,186
61	6102	4152	Supplies		11,604		11,309		15,900		15,900
61	6102	4201	Water Charges		-		3,060		3,500		3,500
61	6102	4204	Natural Gas Charges		9,877		6,933		13,500		13,500
61	6102	4205	Electric Charges		11,939		13,225		17,600		17,600
61	6102	4206	Telephone & Internet		18,638		22,451		43,000		43,000
61	6102	4208	Miscellaneous Facilities Charges		5,020		948		4,000		4,000
61	6102	4210	Cellular Phone Bills		17,195		23,180		25,000		25,000
61	6102	4301	Contract Services		54,514		80,879		92,226		92,226
61	6102	4355	Miscellaneous				11,321		<u>-</u>		-
			Total Facilities	\$	241,010	\$	288,213	\$	445,590	\$	445,590

INTERNA	AL SER\	/ICE						Α	MEND #2	Α	MEND #3
FUND 61					ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 23		FY 24		FY 25		FY 25
-	Fleet Mana	agement									
61	6103	4101	Maintenance	\$	14,006	\$	17,442	\$	21,250	\$	21,250
61	6103	4107	Lease Payments		15,593		12,539		291,681		291,681
61	6103	4151	Equipment		2,516		432		10,000		10,000
61	6103	4301	Contract Services		121		14,316		29,000		29,000
61	6103	4751	Vehicle Replacement		209		24,290		-		-
61	6103	4759	Vehicle Repairs		7,906		7,636		15,000		15,000
61	6103	4760	Vehicle Fuel		50,597		54,467		82,900		82,900
			Total Fleet Management _	\$	90,948	\$	131,122	\$	449,831	\$	449,831
	Informatio	n Systems									
61	6104	4151		\$	3,210	Ś	8,165	Ś	5,250	Ś	5,250
61	6104	4301	Contract Services	т	64,525	•	73,501	•	158,550	т.	158,550
61	6104	4303	Software Maintenance		67,961		119,238		139,480		139,480
61	6104	4551	Computer Replacement		27,981		33,816		37,500		37,500
			Total Information Systems	\$	163,677	\$	234,720	\$	340,780	\$	340,780
			_								
ı	Human Re	sources									
61	6105	4001	Full Time Regular	\$	68,394	\$	130,828	\$	137,584	\$	137,584
61	6105	4006	Other Compensation		500		2,552		600		720
61	6105	4008	Compensation Adjustments		-		-		2,479		2,479
61	6105	4051	Retirement & Taxes		16,148		30,393		33,213		33,213
61	6105	4053	Insurance		17,157		27,171		44,476		44,476
61	6105	4054	Wellness		-		-		18,360		18,360
61	6105	4105	Membership Dues & Subscriptions	\$	125	\$	961	\$	800	\$	800
61	6105	4108	Meetings		-		69		240		240
61	6105	4152	Supplies		-		21		200		200
61	6105	4355	Miscellaneous		22,510		35,072		42,000		42,000
61	6105	4410	Employee Appreciation		-		15,162		14,000		14,000
61	6105	4413	Training		249		2,490		7,300		7,300
61	6105	4414	Travel		171		1,649		2,000		2,000
			Total Human Resources	\$	125,254	\$	246,368	\$	303,252	\$	303,372
			Internal Service Administration	\$	143,843	\$	153,947	ć	157,800	\$	165,300
				ب \$	241,010	\$	288,213		445,590	\$	445,590
				۶ \$	90,948	۶ \$	131,122		449,831	\$	449,831
			-	ب \$	163,677	\$	234,720	\$	340,780	\$	340,780
				۶ \$	103,077	۶ \$	246,368	۶ \$	303,252	\$	340,780
			Total Internal Service	_	639,478	۶ \$	1,054,370	۶ \$	1,697,253	\$ \$	1,704,873
			· · · · · · · · · · · · · · · · · · ·	•	<u> </u>						
			Surplus (Deficit)	\$	455,692	\$	526,153	\$	(0)	\$	(0)



VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: PUBLIC HEARING – Adopted Tentative Fiscal Year 2025-2026 Budget

Department: Finance

Presenter: Kristie Bayles

Background/Discussion:

Utah Code Section 10-6-111 requires that a tentative budget for the next fiscal year be filed with and tentatively adopted by the governing body of the city on or before the first regularly scheduled meeting of the governing body in May of the current fiscal year.

Utah Code Section 10-6-113 requires that at the meeting at which the tentative budget is adopted, the governing body of the city shall establish the time and place of a public hearing to consider its adoption and shall order that notice of the public hearing to be published at least seven days prior to the hearing. At the May 14, 2025 meeting, the City Council established 6:00 PM on May 28, 2025, at the Council Chambers at Vineyard City Hall as the time and place of the Fiscal Year 2025-2026 Budget public hearing.

Fiscal Impact:

N/A

Recommendation:

No action is required at this time. Final budget adoption is anticipated to occur during the June 25, 2025, City Council Meeting.

Sample Motion:

N/A

Attachments:

1. FY 26 TENTATIVE BUDGET 05.14.2025



FY 2025-2026 Tentative Budget May 14, 2025

GENERAL FUND SUMMARY 2026

		ACTUAL FY 22-23		ACTUAL FY 23-24		AMEND #2 BUDGET FY 24-25	F	PROJECTED BUDGET FY 25-26
REVENUES:						. 1 2-7-23		25 20
PROPERTY TAXES	\$	3,261,171	\$	3,683,386	\$	3,953,636	\$	4,950,000
TRANSPORTATION TAXES		296,945		375,439		310,000		430,000
SALES TAX		3,150,801		3,204,125		3,450,000		3,588,000
RAP TAX		208,953		220,225		220,000		235,000
FRANCHISE TAX		892,696		824,467		915,000		951,600
BUSINESS LICENSES & PERMITS		15,460		17,261		15,000		17,500
BUILDING PERMITS		265,675		781,423		900,000		900,000
FIRE INSPECTION & PLAN REVIEW FEES		8,420		25,112		15,000		15,000
CLASS B&C ROAD FUNDS		515,957		541,193		495,000		529,650
GRANT REVENUE		9,995		10,686		-		-
DEVELOPMENT FEES		219,311		470,627		327,300		370,000
SANITATION FEES		559,156		583,085		640,000		797,610
INSPECTION FEES		120,323		206,911		200,000		375,000
RECREATION FEES		162,334		170,164		198,000		222,000
FINES & FORFEITURES				700		1,000		1,000
CREDIT CARD FEES		7,026		4,976		5,000		6,500
INTEREST EARNINGS		166,048		251,081		150,000		225,000
RENTS		20,838		21,558		20,000		20,000
LIBRARY FEES		30.550		20.455		- 3F 000		- 4E 000
SPONSORSHIPS MISCELLANEOUS REVENUE		30,550		30,455		35,000		45,000
MISCELLANEOUS REVENUE		27,689		8,851		9,972		10,000
DONATIONS		1,000		1,345		747.000		1 026 044
USE OF PRIOR YEAR FUND BALANCE TOTAL REVENUE	\$	9,940,351	\$	11 /22 070	\$	747,890 12,607,798	\$	1,036,844 14,725,704
TOTAL REVENUE	ð	9,940,331	ş	11,433,070	Ģ	12,007,798	ņ	14,725,704
TRANSFERS IN:								
TRANSFER FROM RDA FUND	\$	330,138	\$	373,974	\$	399,002	\$	528,000
TRANSFER FROM CAPITAL PROJECTS	Y	-	Y	3/3,3/4	Y	1,098,686	Y	1,020,300
TOTAL TRANSFERS IN	\$	330,138	\$	373,974	\$	1,497,688	\$	1,548,300
TOTAL REVENUE & TRANSFERS IN		10,270,489	\$	11,807,044	\$	14,105,486	\$	16,274,004
GENERAL FUND EXPENDITURES:	_							
MAYOR & COUNCIL	\$	100,366	\$	121,651	\$	219,013	\$	233,175
CITY MANAGER		137,192		168,776		223,907		229,407
RECORDER		192,536		191,418		217,496		238,886
FINANCE		247,385		284,192		370,871		395,563
HUMAN RESOURCES		125,254		-		-		-
COMMUNICATIONS		156,960		280,913		335,190		256,594
PLANNING		446,975		481,294		716,273		757,777
BUILDING		386,860		443,187		654,594		715,181
POLICE		2,328,474		2,815,769		3,349,422		4,095,625
FIRE		1,654,069		1,379,625		2,250,807		2,520,710
LIBRARY		29,979		54,609		99,453		109,801
PUBLIC WORKS		745,006		687,503		816,918		901,743
ENGINEERING		152,492		141,201		210,684		206,805
SANITATION		493,381		530,752		595,736		653,730
PARKS		618,442		825,148		1,029,663		1,064,760
RECREATION		359,798		402,811		511,016		566,712
SPECIAL EVENTS		152,440		175,417		256,675		272,822
NON-DEPARTMENTAL	_	57,076		79,053	_	187,650	_	220,080
TOTAL DEPT ALLOCATIONS	<u> </u>	8,384,686	Ş	9,063,319	Ş	12,045,368	Ş	13,439,370
TRANSCERS OUT								
TRANSFERS OUT: TRANSFER TO WASTEWATER FUND	\$		\$	11,055	¢		\$	
TRANSFER TO WASTEWATER FUND	ڔ	-	ڔ	26,661	ڔ	570	ڔ	154,576
TRANSFER TO TRANSPORTATION FUND		689,594		375,439		1,108,814		959,650
TRANSFER TO CAPITAL PROJECTS FUND		523,952		1,520,225		220,000		235,000
TRANSFER TO INTERNAL SERVICE FUND		433,001		769,904		730,734		947,172
TRANSFER TO DEBT SERVICE FUND		433,001		,05,504		, 30, 734		538,236
TOTAL TRANSFERS OUT:	\$	1,646,547	\$	2,703,285	\$	2,060,119	\$	2,834,634
TOTAL MARGILIS OUT.		1,040,347	7	2,,03,203	7	2,000,113	7	2,034,034
TOTAL EXP. & TRANS.OUT	\$	10,031,233	\$	11,766,578	\$	14,105,486	\$	16,274,004
ODEDATING CURRILIS (SECTION)	-	220.250	ŕ	40 466	Ļ		¢	
OPERATING SURPLUS (DEFICIT)	<u> </u>	239,256	\$	40,466	\$	-	\$	0

GENERAL FUND REVENUES	F	/22 Actual	F'	Y23 Actual	F	Y24 Actual	Amend #2 FY25 Budget						Projected Y26 Budget
			_										
Property Tax	Ś	2,972,664	\$	3,261,171	\$	3,683,386	\$	3,953,636	\$	4,950,000			
Sales Tax - Includes Transient		2,914,591	Ė	3,150,801	,	3,204,125		3,450,000	,	3,588,000			
RAP Tax		, ,		208,953		220,225		220,000		235,000			
Transportation Tax		274,123		296,945		375,439		310,000		430,000			
Franchise Tax		633,292		892,696		824,467		915,000		951,600			
Total Taxes	\$	6,794,670	\$	7,810,566	\$	8,307,642	\$	8,848,636	\$	10,154,600			
Business Licenses & Permits	\$	14,264	\$	15,460	\$	17,261	\$	15,000	\$	17,500			
Building Permits		577,026		265,675		781,423		900,000		900,000			
Fire Inspection & Plan Review Fees		11,930		8,420		25,112		15,000		15,000			
Total Licenses & Permits	\$	603,220	\$	289,554	\$	823,796	\$	930,000	\$	932,500			
Class B&C Road Funds	\$	457,462	\$	515,957	\$	541,193	\$	495,000	\$	529,650			
Grant Revenue		7,700	Ė	9,995	,	10,686		-	,	-			
Total Intergovernmental Revenue	\$	465,162	\$	525,952	\$	551,879	\$	495,000	\$	529,650			
Development Fees	\$	242,372	\$	219,311	\$	470,627	\$	327,300	\$	370,000			
Library Fees		406		5		-		-		-			
Inspection Fees		437,637		120,323		206,911		200,000		375,000			
Sanitation Fees		525,107		559,156		583,085		640,000		797,610			
Recreation Fees		155,874		162,334		170,164		198,000		222,000			
Fines & Forfeitures		290		-		700		1,000		1,000			
Interest Earnings		21,990		166,048		251,081		150,000		225,000			
Rents		25,755		20,838		21,558		20,000		20,000			
Sponsorships		34,605		30,550		30,455		35,000		45,000			
Credit Card Fees		4,871		7,026		4,976		5,000		6,500			
Miscellaneous Revenues		6,446		27,689		8,851		9,972		10,000			
Beg. Fund Class C													
Donations				1,000		1,345		-		-			
Skate Park Donations - RESTRICTED				-		-		-		-			
Beg. Fund Appropriation				-		-		747,890		1,036,844			
Total Misc Revenue	\$	1,455,353	\$	1,314,279	\$	1,749,753	\$	2,334,162	\$	3,108,954			
Transfer from RDA Fund - Tax Admin	\$	-	\$	330,138	\$	373,974	\$	399,002	\$	528,000			
Transfer from Capital Projects	\$	-	\$	-	\$	-	\$	1,098,686	\$	1,020,300			
TOTAL GENERAL FUND REV	\$	9,318,405	\$	10,270,489	\$	11,807,044	\$	14,105,486	\$	16,274,004			
TOTAL GENERAL FUND EXPEND		9,153,516	÷	10,031,233	\$	11,766,578	\$	14,105,486	\$	16,274,004			
Surplus (Deficit)	\$	164,889	\$	239,256	\$	40,466	\$	(0)	\$	0			

MAYO	R & MU	NICIPA	AL COUNCIL					AMEND #2			ROJECTED
				ļ	ACTUAL	1	ACTUAL	В	BUDGET	ı	BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25	I	Y 25-26
											_
1	Mayor & C	ouncil									
10	0101	4001	Full Time Regular	\$	-	\$	1,338	\$	93,572	\$	97,350
10	0101	4002	Part Time Regular		86,430		95,947		62,108		72,302
10	0101	4008	Compensation Adjustments		-		-		2,602		6,170
10	0101	4051	Retirement & Taxes		3,473		4,186		23,431		23,528
10	0101	4053	Insurance		-		-		9,600		9,600
10	0101	4105	Membership Dues & Subscriptions	\$	-	\$	-	\$	500	\$	600
10	0101	4108	Meetings		625		4,309		4,500		4,500
10	0101	4257	Programs		3,799		10,009		11,500		5,000
10	0101	4355	Miscellaneous		801		147		1,500		2,000
10	0101	4413	Training		4,194		3,468		5,200		6,500
10	0101	4414	Travel		1,044		2,247		4,500		5,625
			Total Mayor & Council	\$	100,366	\$	121,651	\$	219,013	\$	233,175

CITY M	ANAGER	R					AMEND #2			ROJECTED	
FUND ORG ACCT					ACTUAL	ACTUAL 5V 22 24			BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23		FY 23-24	F	Y 24-25		Y 25-26
	City Manag	ger									
10	0201	4001	Full Time Regular	\$	79,153	\$	103,233	\$	128,299	\$	132,036
10	0201	4006	Other Compensation		600		750		600		600
10	0201	4007	Car Allowance		3,600		4,000		4,200		4,200
10	0201	4008	Compensation Adjustments		-		-		2,311		5,144
10	0201	4051	Retirement & Taxes		18,701		23,248		30,971		28,837
10	0201	4053	Insurance		15,411		14,546		22,600		22,600
10	0201	4105	Membership Dues & Subscriptions	\$	9,445	\$	15,225	\$	12,825	\$	13,650
10	0201	4108	Meetings		3,313		2,526		4,500		4,500
10	0201	4109	Special Events		2,525		-		3,000		3,000
10	0201	4355	Miscellaneous		3,315		761		3,500		3,740
10	0201	4413	Training		660		2,469		7,300		7,300
10	0201	4414	Travel		469		2,018		3,800		3,800
			Total City Manager	\$	137,192	\$	168,776	\$	223,907	\$	229,407

RECOR	DER							Α	MEND #2	P	ROJECTED
					ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23		Y 23-24		Y 24-25		FY 25-26
	Recorder										
10	0301	4001	Full Time Regular	\$	77,493	\$	113,192	\$	116,840	\$	119,124
10	0301	4002	Part Time Regular		32,308		793		-		-
10	0301	4005	Overtime		199		110		-		-
10	0301	4006	Other Compensation		520		600		600		600
10	0301	4008	Compensation Adjustments		-		-		2,134		4,689
10	0301	4051	Retirement & Taxes		26,649		28,513		29,637		27,499
10	0301	4053	Insurance		15,445		30,581		32,920		32,920
10	0301	4103	Public Notices	\$	800	\$	335	\$	10,000	\$	10,000
10	0301	4105	Membership Dues & Subscriptions		355		765		975		1,565
10	0301	4108	Meetings		-		271		240		240
10	0301	4110	Postage		-		-		50		50
10	0301	4151	Equipment		36,954		53		-		-
10	0301	4301	Contract Services		-		14,499		18,000		36,000
10	0301	4355	Miscellaneous		171		140		1,000		1,000
10	0301	4413	Training		593		688		1,100		1,200
10	0301	4414	Travel		1,049		878		4,000		4,000
	Total Recorde			r \$	192,536	\$	191,418	\$	217,496	\$	238,886

FINAN	CE			ACTUAL ACTUAL			AMEND #2			ROJECTED	
FUND	ORG	ACCT	DESCRIPTION		ACTUAL Y 22-23		ACTUAL Y 23-24		BUDGET Y 24-25		BUDGET FY 25-26
FUND	UNG	ACCI	DESCRIPTION		1 22-23	-	1 23-24		1 24-25		F1 23-20
	Finance										
10	0401	4001	Full Time Regular	\$	113,193	\$	132,136	\$	147,681	\$	141,906
10	0401	4002	Part Time Regular		35,439		38,921		45,887		63,077
10	0401	4003	Seasonal Employees		6,518		6,731		13,853		14,321
10	0401	4005	Overtime		91		8		-		-
10	0401	4006	Other Compensation		1,947		1,243		960		960
10	0401	4007	Car Allowance		2,400		2,200		2,400		2,400
10	0401	4008	Compensation Adjustments		-		-		3,297		7,527
10	0401	4051	Retirement & Taxes		27,203		30,408		39,790		36,827
10	0401	4053	Insurance		12,590		11,524		29,653		27,421
10	0401	4105	Membership Dues & Subscriptions		425	\$	849	\$	1,125	\$	1,485
10	0401	4108	Meetings		402		303		600		1,200
10	0401	4301	Contract Services		9,275		12,515		31,500		33,990
10	0401	4352	Bank Fees		30,354		38,706		40,000		50,000
10	0401	4355	Miscellaneous		285		1,242		2,125		2,375
10	0401	4413	Training		4,469		4,235		4,000		4,075
10	0401	4414	Travel		2,794		3,171		8,000		8,000
			Total Finance	\$	247,385	\$	284,192	\$	370,871	\$	395,563

COMM	OMMUNICATIONS								MEND #2	P	ROJECTED
					ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23		FY 23-24	F	Y 24-25		FY 25-26
	C	-4:									
	Communic		- 11-1			_				_	
10	0601	4001	Full Time Regular	\$	123,300	\$	127,700	Ş	88,981	\$	91,840
10	0601	4002	Part Time Regular		2,066		1,856		52,873		52,404
10	0601	4005	Overtime		180		12		-		-
10	0601	4006	Other Compensation		1,260		690		600		600
10	0601	4008	Compensation Adjustments		=		-		2,110		4,663
10	0601	4051	Retirement & Taxes		25,500		24,330		26,887		24,748
10	0601	4053	Insurance		510		5,824		27,790		27,790
10	0601	4108	Meetings	\$	366	\$	786	\$	600	\$	1,400
10	0601	4151	Equipment		236		587		650		700
10	0601	4152	Supplies		-		391		500		2,250
10	0601	4257	Communities That Care		2,950		14,138		31,000		31,000
10	0601	4355	Miscellaneous		-		102,518		101,600		15,200
10	0601	4413	Training		290		383		1,100		1,900
10	0601	4414	Travel		305		1,698		500		2,100
			Total Communications	\$	156,960	\$	280,913	\$	335,190	\$	256,594

PLANN	IING							AMEND #2		PROJECTED	
				ACTUAL					BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25		FY 25-26
	Planning										
10	0701	4001	Full Time Regular	\$	234,314	\$	272,166	\$	354,959	\$	348,494
10	0701	4002	Part Time Regular		40,712		62,229		69,002		71,392
10	0701	4005	Overtime		3,852		1,921		-		-
10	0701	4006	Other Compensation		870		536		960		960
10	0701	4007	Car Allowance		1,286		1,300		1,200		1,200
10	0701	4008	Compensation Adjustments		-		-		7,627		17,003
10	0701	4051	Retirement & Taxes		56,204		74,272		100,514		89,525
10	0701	4053	Insurance		36,483		44,579		81,544		71,373
10	0701	4105	Membership Dues & Subscriptions	\$	51,054	\$	1,313	\$	8,825	\$	8,864
10	0701	4108	Meetings		2,039		2,282		9,000		10,500
10	0701	4301	Contract Services		2,658		184		47,000		99,000
10	0701	4355	Miscellaneous		7,364		4,264		14,710		18,510
10	0701	4413	Training		4,437		7,797		10,959		10,284
10	0701	4414	Travel		5,702		8,451		9,973		10,673
			Total Planning	\$	446,975	\$	481,294	\$	716,273	\$	757,777

BUILDI	NG						AMEND #2		2 PROJECTE		
				1	ACTUAL	A	ACTUAL	E	BUDGET	E	BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25	F	Y 25-26
	Destilation of										
	Building			_		_		_		_	
10	0801	4001	Full Time Regular	\$	287,583	\$	339,407	\$	413,587	\$	453,153
10	0801	4002	Part Time Regular		14,880		-		-		-
10	0801	4003	Seasonal Employee		6,086		6,185		10,834		11,213
10	0801	4006	Other Compensation		180		300		360		360
10	0801	4007	Car Allowance		400		-		2,400		2,400
10	0801	4008	Compensation Adjustments		-		-		7,651		17,990
10	0801	4051	Retirement & Taxes		60,448		75,017		102,205		102,410
10	0801	4053	Insurance		4,191		9,234		59,686		62,086
10	0801	4105	Membership Dues & Subscriptions	\$	1,004	\$	1,313	\$	2,760	\$	5,460
10	0801	4108	Meetings		492		399		2,160		2,160
10	0801	4151	Equipment		-		1,083		3,500		3,500
10	0801	4152	Supplies		4,832		2,845		4,000		4,000
10	0801	4154	Uniforms		424		622		900		900
10	0801	4301	Contract Services		900		-		20,000		25,000
10	0801	4355	Miscellaneous		1,099		254		4,000		4,000
10	0801	4413	Training		2,042		4,060		10,550		10,550
10	0801	4414	Travel		2,189		2,467		10,000		10,000
	Total Building						443,187	\$	654,594	\$	715,181

POLICE					Α	MEND #2	Ρ	ROJECTED		
					ACTUAL	ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 22-23	FY 23-24		FY 24-25		FY 25-26
	Police									
10	0901	4001	Full Time Regular		\$ -	\$ 6,476	\$	-	\$	-
10	0901	4002	Part Time Regular		35,452	40,981		51,877		51,140
10	0901	4051	Retirement & Taxes		1,376	2,622		4,643		4,577
10	0901	4151	Equipment		\$ -	\$ -	\$	2,850	\$	2,850
10	0901	4154	Uniforms		-	-		3,000		3,000
10	0901	4301	Contract Services		2,291,436	2,765,443		3,286,053		4,033,058
10	0901	4355	Miscellaneous		210	140		1,000		1,000
				Total Police	\$ 2,328,474	\$ 2,815,769	\$	3,349,422	\$	4,095,625

	FIRE SE	RVICES						AMEND #2	PR	OJECTED
						ACTUAL	ACTUAL	BUDGET	Е	BUDGET
	FUND	ORG	ACCT	DESCRIPTION	I	FY 22-23	FY 23-24	FY 24-25	F	Y 25-26
_										
		Fire Services	i							
	10	1001	4301	Contract Services	\$	1,654,069	\$ 1,379,625	\$ 2,250,807	\$	2,520,710
				Total Fire Serv	vices \$	1,654,069	\$ 1,379,625	\$ 2,250,807	\$	2,520,710

LIBRAR	Υ			ACTUAL				AMEND #2		P	ROJECTED
				Α	CTUAL	A	CTUAL	В	UDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F۱	22-23	F	Y 23-24	F	Y 24-25		FY 25-26
	Library										
10	1101	4001	Full Time Regular	\$	-	\$	455	\$	39,012	\$	40,077
10	1101	4002	Part Time Regular		6,829		27,741		-		15,912
10	1101	4008	Compensation Adjustments		-		-		703		2,115
10	1101	4051	Retirement & Taxes		99		3,048		9,418		10,177
10	1101	4053	Insurance		-		-		9,600		9,600
10	1101	4105	Membership Dues & Subscriptions	\$	-	\$	30	\$	130	\$	130
10	1101	4108	Meetings		-		120		220		220
10	1101	4151	Equipment		-		787		1,825		1,825
10	1101	4152	Supplies		4,855		2,792		1,850		1,850
10	1101	4257	Programs		18,197		1,624		1,100		1,300
10	1101	4301	Contract Services		-		-		12,700		5,700
10	1101	4355	Miscellaneous		-		17,350		22,000		20,000
10	1101	4413	Training		-		530		525		525
10	1101	4414	Travel		-		42		370		370
			Total Library	y \$	29,979	\$	54,609	\$	99,453	\$	109,801

	WORKS			ACTUAL		ACTUAL	E	MEND #2 BUDGET	E	ROJECTED BUDGET
FUND	ORG	ACCT	DESCRIPTION	FY 22-23	F	Y 23-24	F	Y 24-25	F	Y 25-26
	Public Wor	ks Admini	stration							
10	1201	4001	Full Time Regular	\$ 165,890	\$	59,418	\$	56,934	\$	57,483
10	1201	4005	Overtime	-	,	-	т.	8,540	,	8,622
10	1201	4006	Other Compensation	1,950		1,244		-		_
10	1201	4008	Compensation Adjustments	-		-		1,029		2,240
10	1201	4051	Retirement & Taxes	32,495		13,518		13,895		12,554
10	1201	4053	Insurance	10,349		34,161		11,300		10,750
10	1201	4101	Maintenance	\$ 11,924	\$	2,497	\$	-	\$	-
10	1201	4105	Membership Dues & Subscriptions	14,749		2,710		18,520		15,220
10	1201	4108	Meetings	3,365		1,805		2,500		2,329
10	1201	4151	Equipment	11,103		6,102		9,600		9,800
10	1201	4152	Supplies	4,391		6,300		800		2,800
10	1201	4154	Uniforms	2,426		3,590		2,800		8,550
10	1201	4205	Electric Charges	23,827		24,155		33,390		-
10	1201	4301	Contract Services	399,850		65,405		-		-
10	1201	4303	Software Maintenance	-		600		2,000		5,400
10	1201	4355	Miscellaneous	5,682		634		-		, -
10	1201	4407	Certification & Testing	422		406		7,000		11,800
10	1201	4413	Training	1,535		3,022		4,200		6,700
10	1201	4414	Travel	860		4,728		_		_
			Total Public Works Administration		\$	230,295	\$	172,508	\$	154,248
	Public Wor	ks Ground	s Maintenance							
10	1202	4001	Full Time Regular	\$ -	\$	80,916	\$	61,741	\$	66,429
10	1202	4002	Part Time Regular	-		1,062		7,498		7,390
10	1202	4003	Seasonal Employee			-		12,155		13,061
10	1202	4005	Overtime	-		3,859		9,261		9,964
10	1202	4006	Other Compensation	-		600		600		600
10	1202	4008	Compensation Adjustments	-		-		1,236		2,845
10	1202	4051	Retirement & Taxes	-		19,870		16,928		16,338
10	1202	4053	Insurance	-		752		27,120		27,120
10	1202	4101	Maintenance	\$ -	\$	7,954	\$	10,000	\$	15,000
10	1202	4103	Public Notices	-		-		250		250
10	1202	4105	Membership Dues & Subscriptions	-		-		1,400		1,930
10	1202	4151	Equipment	-		2,749		4,520		8,855
10	1202	4152	Supplies	-		24,314		27,500		12,700
10	1202	4154	Uniforms	-		-		1,250		1,575
10	1202	4201	Water Charges	-		135,033		150,000		150,000
10	1202	4301	Contract Services	-		152,922		276,950		366,188
10	1202	4365	Trees	-		25,559		25,000		25,000
10	1202	4407	Certification & Testing	-		850		2,300		3,550
10	1202	4413	Training	-		768		3,300		7,100
10	1202	4414	Travel	-		_		5,400		11,600
			Total Public Works Grounds Maintenance	\$ -	\$	457,208	\$	644,409	\$	747,495
				_						
			Public Works Administration	\$ 745,006	\$	230,295	\$	172,508	\$	154,248
			Public Works Grounds Maintenance			457,208		644,409		747,495
			Total Public Works	\$ 745,006	\$	687,503	\$	816,918	\$	901,743

ENGINEERING					ΑI	MEND #2	P	ROJECTED			
				A	ACTUAL	-	ACTUAL	E	BUDGET	BUDGET	
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25		FY 25-26
	Engineering	3									
10	1301	4001	Full Time Regular	\$	99,494	\$	73,225	\$	82,537	\$	82,526
10	1301	4006	Other Compensation		990		600		600		600
10	1301	4007	Car Allowance		3,600		3,600		3,600		3,600
10	1301	4008	Compensation Adjustments		-		-		1,493		3,215
10	1301	4051	Retirement & Taxes		22,630		17,326		20,228		18,024
10	1301	4053	Insurance		12,422		13,352		18,080		16,980
10	1301	4105	Membership Dues & Subscriptions	\$	2,062	\$	3,129	\$	6,745	\$	9,570
10	1301	4108	Meetings		269		533		500		1,500
10	1301	4151	Equipment		761		347		8,102		3,900
10	1301	4301	Contract Services		5,232		24,749		61,250		56,490
10	1301	4407	Certification & Testing		378		-		2,300		4,100
10	1301	4413	Training		1,799		3,771		1,050		2,100
10	1301	4414	Travel		2,497		569		4,200		4,200
			Total Engineering	\$	152,492	\$	141,201	\$	210,684	\$	206,805

SANITA	NOITA							Αľ	MEND #2	PI	ROJECTED
				-	ACTUAL	-	ACTUAL	В	UDGET	1	BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25	l	FY 25-26
	Sanitation										
10	1401	4301	Contract Services	\$	492,166	\$	530,752	\$	595,736	\$	653,730
10	1401	4808	Bad Debt Expense		1,215		-		-		-
			Total Sanitation	\$	493,381	\$	530,752	\$	595,736	\$	653,730

PARKS							AME		PROJECTED		
					ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25		FY 25-26
4.0	Parks	4004	5 H =		227.550		267.624		074 644		274 762
10	1501	4001	Full Time Regular	\$	237,558	\$	267,604	\$	271,614	\$	274,768
10	1501	4002	Part Time Regular		4,738		1,748		6,378		6,285
10	1501	4003	Seasonal Employee		28,494		59,155		47,275		46,590
10	1501	4005	Overtime		2,574		2,606		8,000		8,000
10	1501	4006	Other Compensation		3,747		2,804		2,400		2,400
10	1501	4008	Compensation Adjustments		-		-		4,994		10,924
10	1501	4051	Retirement & Taxes		53,783		60,876		70,369		64,742
10	1501	4053	Insurance		42,740		39,684		60,662		60,662
10	1501	4101	Maintenance	\$	56,171	\$	86,380	\$	133,000	\$	153,000
10	1501	4105	Membership Dues & Subscriptions		725		-		2,750		3,800
10	1501	4108	Meetings		97		719		720		900
10	1501	4151	Equipment		1,174		53,920		41,000		57,000
10	1501	4152	Supplies		11,723		14,159		24,000		24,000
10	1501	4154	Uniforms		703		1,339		1,600		1,600
10	1501	4201	Water Charges		145,489		81,158		90,000		90,000
10	1501	4205	Electric Charges		8,312		10,436		15,000		15,000
10	1501	4208	Miscellaneous Facilities Charges		3,100		2,735		7,000		2,000
10	1501	4301	Contract Services		7,907		129,502		200,000		221,188
10	1501	4355	Miscellaneous		7,774		3,500		31,500		13,000
10	1501	4365	Trees				972		-		
10	1501	4413	Training		1,255		4,900		6,400		5,400
10	1501	4414	Travel		377		951		5,000		3,500
			Total Par	ks \$	618,442	\$	825,148	\$	1,029,663	\$	1,064,760

RECREATION									MEND #2	PROJECTED		
				1	ACTUAL	,	ACTUAL	E	BUDGET		BUDGET	
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	F	Y 23-24	F	Y 24-25		FY 25-26	
	Recreation											
10	1601	4001	Full Time Regular	\$	171,415	\$	168,340	\$	230,672	\$	236,325	
10	1601	4002	Part Time Regular		3,292		30,816		-		-	
10	1601	4003	Seasonal Employee		18,200		31,367		32,292		47,736	
10	1601	4005	Overtime		2,495		996		5,000		5,000	
10	1601	4006	Other Compensation		733		1,250		1,080		1,320	
10	1601	4008	Compensation Adjustments		-		-		4,156		9,207	
10	1601	4051	Retirement & Taxes		38,830		38,092		58,574		55,886	
10	1601	4053	Insurance		27,952		19,926		37,999		60,600	
10	1601	4105	Membership Dues & Subscriptions	\$	330	\$	514	Ś	1,220	Ś	1,100	
10	1601	4108	Meetings	,	151	*	440	7	360	•	600	
10	1601	4151	Equipment		-		-		5,000		-	
10	1601	4154	Uniforms		100		49		350		350	
10	1601	4257	Programs		84,890		94,822		117,512		129,958	
10	1601	4355	Miscellaneous		9,282		11,821		11,000		12,000	
10	1601	4413	Training		1,924		3,291		3,350		3,605	
10	1601	4414	Travel		203		1,087		2,450		3,025	
			Total Recreation	n \$	359,798	\$	402,811	\$	511,016	\$	566,712	

SPECIAL	LEVENT	S						AMEND #2		PROJECTED	
				Δ	CTUAL		ACTUAL	В	UDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	-	FY 23-24	F	Y 24-25		FY 25-26
	Special Eve	ents									
10	1701	4001	Full Time Regular	\$	62,451	\$	72,256	\$	65,433	\$	67,700
10	1701	4002	Part Time Regular		-		-		27,825		28,960
10	1701	4005	Overtime		1,818		2,119		1,500		1,500
10	1701	4006	Other Compensation		592		478		360		360
10	1701	4008	Compensation Adjustments		-		-		1,619		3,645
10	1701	4051	Retirement & Taxes		13,054		15,591		18,286		17,378
10	1701	4053	Insurance		262		322		9,600		9,600
10	1701	4105	Membership Dues & Subscriptions	\$	849	\$	1,460	\$	2,350	\$	2,450
10	1701	4108	Meetings		-		119		180		180
10	1701	4109	Special Events		69,679		77,767		124,072		135,000
10	1701	4151	Equipment		1,837		4,464		3,000		3,000
10	1701	4304	Marketing		1,669		273		1,200		1,750
10	1701	4413	Training		-		135		600		650
10	1701	4414	Travel		230		433		650		650
			Total Special Events	\$	152,440	\$	175,417	\$	256,675	\$	272,822

NON-DEPARTMENTAL									MEND #2	PROJECTED		
				1	ACTUAL		ACTUAL	E	BUDGET		BUDGET	
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23		FY 23-24	F	Y 24-25		FY 25-26	
	Non-Depar	tmental										
10	1801	4110	Postage	\$	-	\$	-	\$	2,000	\$	2,000	
10	1801	4152	Supplies		12,216		16,303		18,500		18,500	
10	1801	4154	Uniforms		1,137		1,587		7,500		6,000	
10	1801	4301	Contract Services		3,686		57,040		128,450		162,380	
10	1801	4355	Miscellaneous		21,586		3,398		-		-	
10	1801	4356	Community Garden		6,793		581		1,200		1,200	
10	1801	4410	Employee Appreciation		11,658		144		-		-	
10	1801	4855	General Fee Waivers		-		-		30,000		30,000	
10	1801	6049	Transfer to Capital Projects	\$	523,953	\$	1,520,225	\$	220,000	\$	235,000	
10	1801	6052	Transfer to Wastewater Fund		-		11,055		-		-	
10	1801	6053	Transfer to Stormwater Fund		-		26,661		570		154,576	
10	1801	6054	Transfer to Transportation Fund		689,595		375,439		1,108,814		959,650	
10	1801	6061	Transfer to Internal Service Fund		433,001		769,904		730,734		947,172	
			Total Non-Departmental	\$	1,703,625	\$	2,782,337	\$	2,247,769	\$	2,516,478	

IMPACT					ACTUAL		ACTUAL		MEND #2 BUDGET		ROJECTED BUDGET
FUND	ORG	ACCT	DESCRIPTION		Y 22-23		FY 23-24	F	Y 24-25		FY 25-26
	Revenue										
23	2301	3754	Public Safety Impact Fees								
23	2302	3501	Roadway Interest	\$	27,654	\$	50,832	\$	13,800	\$	13,800
23	2302	3754	Roadway Facilities Impact Fees		195,718		802,777		460,000		800,000
23	2303	3754	Park Facilities Impact Fees				-		-		400,000
23	2304	3754	Storm & Groundwater Facilities Impact Fees Use of Prior Year Fund Balance		10,784		34,894 -		34,500 181,700		34,500 1,010,700
			Total Revenue	\$	234,156	\$	888,503	\$	690,000	\$	2,259,000
	Public Safet	ty Facilities									
23	2301	4301	Contract Services	\$	-	\$	-	\$	25,000	\$	25,000
23	2301	4651	Capital Expense		-		-		-		-
			Total Public Safety Facilities	\$	-	\$	-	\$	25,000	\$	25,000
	Roadway Fa	acilities									
23	2302	4301	Contract Services	\$	53,938	\$	-	\$	25,000	\$	25,000
23	2302	4651	Capital Expense		31,373		69,470		535,000		1,612,750
			Total Roadway Facilities	\$	85,312	\$	69,470	\$	560,000	\$	1,637,750
	Park Faciliti	ies									
23	2303	4301	Contract Services	\$	_	\$	_	\$	25,000	\$	25,000
23	2303	4651	Capital Expense					•	-,	\$	400,000
			Total Park Facilities	Ś		\$		\$	25,000	\$	425,000
			Total Fall Care	Ť					23,000	<u> </u>	123,000
	Storm & Gr	oundwater I	Facilities								
23	2304	4301	Contract Services	\$	-	\$	40,000	\$	40,000	\$	40,000
23	2304	4651	Capital Expense		10,784		34,037		40,000		131,250
			Total Storm & Groundwater Facilities	\$	10,784	\$	74,037	\$	80,000	\$	171,250
			Dublic Safaty Facilities	\$		\$		Ļ	25 000	¢	25 000
			Public Safety Facilities	Ş	- 0F 212	Ş	-	\$	25,000	Þ	25,000
			Roadway Facilities Park Facilities		85,312		69,470		560,000		1,637,750
			Storm & Groundwater Facilities		- 10,784		- 74,037		25,000 80,000		425,000 171,250
			Total Impact Fees Fund	Ś	96,096	\$	143,507	\$	690,000	\$	171,250 2,259,000
			Total Impact Tees Fulla	_	30,030	7	1 10,001	7	050,000	7	_,,
			Surplus (Deficit)	\$	138,061	\$	744,996	\$	-	\$	-

CAPITAL	PROJECTS	5					AMEND #2	PROJECTED
FUND 49				,	ACTUAL	ACTUAL	BUDGET	BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23	FY 23-24	FY 24-25	FY 25-26
	Revenue							
49	4901	5010	Transfer from General Fund	\$	523,953	\$ 1,520,225	\$ 220,000	\$ 235,000
49	4901	3205	Grants		-	-	10,785,025	2,392,300
			Beginning Fund Balance Appropriation		-	-	5,005,089	13,695,750
			Total Revenue	\$	523,953	\$ 1,520,225	\$ 16,010,114	\$ 16,323,050
	Capital Pro	jects						
49	4901	4651	Capital Expense	\$	281,063	\$ 637,358	\$ 14,911,428	\$ 15,302,750
49	4901	6010	Transfer to General Fund		-	-	1,098,686	1,020,300
			Total Capital Projects	\$	281,063	\$ 637,358	\$ 16,010,114	\$ 16,323,050
			Surplus (Deficit)	\$	242,889	\$ 882,867	\$ -	\$ -

WATER FUND 51 FUND	ORG	ACCT	DESCRIPTION		ACTUAL FY 22-23		ACTUAL FY 23-24	Å	AMEND #2 BUDGET FY 24-25		PROJECTED BUDGET FY 25-26
	Revenue										
51	5101	3501	Interest Income	\$	-	\$	426,802	\$	175,000	\$	175,000
51	5101	3602	Utility Service Sales		2,288,371		3,320,268		3,200,000		3,700,000
51	5101	3754	Impact Fees		50,191		117,350		130,000		130,000
51	5101	3803	Connection Fees		23,300		59,072		55,000		55,000
51	5101	3825	Late Fees		19,038		32,404		15,000		15,000
			Beginning Fund Balance Appropriation		-				1,225,136		877,834
			Total Revenue	\$	4,083,074	\$	7,141,896	\$	8,277,525	\$	4,952,834
V	Nater Disti	ribution									
51	5101	4001	Full Time Regular	\$	366,892	\$	366,744	\$	501,837	\$	533,799
51	5101	4002	Part Time Regular	•	6,329	•	1,079	•	4,999	•	7,154
51	5101	4003	Seasonal Employee		3,568		-		10,874		11,571
51	5101	4005	Overtime		2,364		570		15,000		15,000
51	5101	4006	Other Compensation		1,890		1,200		1,200		960
51	5101	4007	Car Allowance		4,100		1,400		-		-
51	5101	4008	Compensation Adjustments		-		-		9,175		21,124
51	5101	4051	Retirement & Taxes		84,132		47,136		125,147		120,674
51	5101	4053	Insurance		57,154		80,082		137,924		150,597
51	5101	4101	Maintenance	\$	45,010	\$	59,021	\$	108,500	\$	141,500
51	5101	4105	Membership Dues & Subscriptions		1,181		1,036		2,300		5,040
51	5101	4108	Meetings		260		283		680		1,400
51	5101	4151	Equipment		1,368		732		26,500		37,000
51	5101	4152	Supplies		13,102		8,290		40,000		42,500
51	5101	4154	Uniforms		365		898		2,400		3,350
51	5101	4157	Meters		149,095		91,075		150,000		150,000
51	5101	4205	Electric Charges		9,290		8,294		200,000		210,000
51	5101	4301	Contract Services		1,344,098		1,352,683		1,567,000		1,918,850
51	5101	4303	Software Maintenance				-		-		3,125
51	5101	4306	Public Engagement		-		-		20,800		22,150
51	5101	4355	Miscellaneous		85		934		-		- -
51	5101	4407	Certification & Testing		3,455		1,688		8,500		9,800
51	5101	4413	Training		695		2,279		3,500		8,300
51	5101	4414	Travel		676		1,216		4,500		7,100
51	5101	4651	Capital Expense		-		-		4,547,389		693,750
E1	5101	4803	Interest on Debt				511 <i>176</i>		610,000		600,000
51 51	5101	4804	Cost of Issuance		-		511,476		-		500,000
51	5101	4804	Bad Debt Expense		- 14,449		183,813		-		-
51	5101	6061	Transfer to Internal Service Fund		237,841		256 600		170 200		220 000
21	2101	0001	·	۲		ć	256,688	ć	179,300	ċ	238,089
			Total Water Distribution	þ	2,347,399	\$	3,178,617	\$	8,277,525	þ	4,952,834

Page 23 of 28

Surplus (Deficit) \$ 1,735,675 \$ 3,963,279 \$ (0) \$

0

WASTEWATER FUND 52							ACTUAL	AMEND #2 BUDGET			AMEND #2 BUDGET			PROJECTED BUDGET
FUND	ORG	ACCT	DESCRIPTION		FY 22-23		FY 23-24		FY 24-25		FY 25-26			
	Revenue										_			
52	5201	3602	Utility Service Sales	\$	1,679,575	\$	2,148,222	\$	2,982,000	\$	2,800,000			
52	5201	3754	Impact Fees		110,004		480,370		245,000		245,000			
52	5201	5010	Transfer from General Fund		-		11,055		-		-			
			Beginning Fund Balance Appropriation		116,091		-		1,703,530		2,576,528			
			Total Revenue	\$	1,905,670	\$	3,840,647	\$	4,930,530	\$	5,621,528			
	Wastewate	r Collectio	on.											
52	5201	4001	Full Time Regular	Ś	229,258	\$	197,649	\$	300,159	Ś	311,268			
52	5201	4002	Part Time Regular	Ψ.	2,110	Ψ.	123	7	-	Ψ.	2,228			
52	5201	4003	Seasonal Employee		455		-		924		955			
52	5201	4005	Overtime		985		311		7,000		7,000			
52	5201	4008	Compensation Adjustments		-		-		5,442		12,253			
52	5201	4051	Retirement & Taxes		50,334		25,337		74,115		69,742			
52	5201	4053	Insurance		35,941		41,304		74,095		81,699			
52	5201	4101	Maintenance	\$	34,351	\$	95,299	\$	223,000	\$	247,000			
52	5201	4105	Membership Dues & Subscriptions		949		872		4,000		5,450			
52	5201	4108	Meetings		-		295		480		480			
52	5201	4151	Equipment		10,982		5,093		40,400		40,900			
52	5201	4152	Supplies		2,860		4,689		73,500		108,500			
52	5201	4154	Uniforms		456		506		1,500		2,700			
52	5201	4201	Water Usage		-		1,216		1,500		1,500			
52	5201	4205	Electric Charges		17,353		17,541		27,000		31,050			
52	5201	4301	Contract Services		908,832		1,028,989		1,346,500		1,412,100			
52	5201	4306	Public Engagement		-		-		800		1,400			
52	5201	4407	Certification & Testing		631		525		7,500		7,500			
52	5201	4413	Training		-		810		3,000		4,000			
52	5201	4414	Travel		-		1,160		3,000		4,000			
52	5201	4651	Capital Expense		-		-		2,494,880		3,000,337			
52	5201	4803	Interest on Debt		-		56,831		100,000		100,000			
52	5201	4804	Cost of Issuance		-		20,424		-		-			
52	5201	4808	Bad Debt Expense		2,687				-		-			
52	5201	6061	Transfer to Internal Service Fund	_	125,050		141,930		141,734		169,467			
			Total Wastewater Collection	\$	1,423,784	\$	1,640,904	\$	4,930,530	\$	5,621,528			
			Surplus (Deficit)	\$	481,886	\$	2,199,743	\$	0	\$	0			

STORM FUND 53 FUND		ACCT	DESCRIPTION	ACTUAL Y 22-23	ACTUAL FY 23-24	E	MEND #2 BUDGET Y 24-25	ı	ROJECTED BUDGET FY 25-26
	Revenue								
53	5301	3602	Utility Service Sales	\$ 328,334	\$ 305,713	\$	270,000	\$	350,000
53	5301	5010	Transfer from General Fund	-	26,661		570		154,576
			Beginning Fund Balance Appropriation	 49,220	-		302,121		126,005
			Total Revenue	\$ 377,554	\$ 2,370,374	\$	572,691	\$	630,581
			tration & Permitting						
53	5301	4001	Full Time Regular	\$ 79,106	\$ 176,151	\$	262,819	\$	262,910
53	5301	4002	Part Time Regular	-	-		-		2,228
53	5301	4003	Seasonal Employee	226	-		924		955
53	5301	4005	Overtime	198	954		6,000		6,000
53	5301	4006	Other Compensation	-	-		600		600
53	5301	4008	Compensation Adjustments	-	-		4,705		10,311
53	5301	4051	Retirement & Taxes	17,280	22,401		64,872		59,591
53	5301	4053	Insurance	6,458	14,407		57,285		56,865
53	5301	4101	Maintenance	\$ 1,013	\$ 7,439	\$	18,951	\$	35,000
53	5301	4103	Public Notices	-	-		200		200
53	5301	4105	Membership Dues & Subscriptions	963	1,470		1,749		3,000
53	5301	4108	Meetings	-	-		180		1,240
53	5301	4151	Equipment		-		-		1,400
53	5301	4152	Supplies	1,141	-		3,000		9,500
53	5301	4154	Uniforms	-	312		600		1,850
53	5301	4301	Contract Services	6,490	-		30,000		53,000
53	5301	4303	Software Maintenance	1,200	1,200		2,000		1,400
53	5301	4306	Public Engagement	462	103		2,650		3,500
53	5301	4355	Miscellaneous		-		-		-
53	5301	4407	Certification & Testing	1,750	1,750		3,950		3,400
53	5301	4413	Training	85	-		600		1,000
53	5301	4414	Travel	1,339	-		-		-
53	5301	4808	Bad Debt Expense	370	-		-		-
53	5301	6061	Transfer to Internal Service Fund	59,605	89,942		111,607		116,632
			Total Stormwater Admin & Permitting	\$ 177,684	\$ 316,129	\$	572,691	\$	630,581
			Stormwater Admin & Permitting	\$ 177,684	\$ 401,661	\$	572,691	\$	630,581
			Stormwater Maintenance	 	 <u> </u>				-
			Total Stormwater	\$ 177,684	\$ 401,661	\$	572,691	\$	630,581
			Surplus (Deficit)	\$ 199,870	\$ 1,968,713	\$	0	\$	(0)

TRANSPORTATION							P	AMEND #2	P	ROJECTED	
FUND 54	4			-	ACTUAL		ACTUAL		BUDGET		BUDGET
FUND	ORG	ACCT	DESCRIPTION	F	Y 22-23		FY 23-24		FY 24-25		FY 25-26
	Revenue										
54	5401	3401	Road Cut Fee	\$	16	\$	-	\$	-	\$	-
54	5401	3757	Utility Transportation Fee		-		-		-		1,101,650
54	5401	3205	Grant Revenue		-		25,000		-		-
54	5401	5010	Transfer from General Fund		689,595		375,439		1,108,814		959,650
			Beginning Fund Balance Appropriation		-		-		550,423		
			Total Revenue	\$	689,611	\$	400,439	\$	1,659,237	\$	2,061,300
	Transporta	tion									
54	5401	4001	Full Time Regular	\$	179,291	\$	157,908	\$	250,672	\$	257,673
54	5401	4002	Part Time Regular		· -	•	708		8,103	-	8,707
54	5401	4005	Overtime		574		986		27,000		27,000
54	5401	4006	Other Compensation		1,600		900		1,200		1,200
54	5401	4008	Compensation Adjustments		-		-		4,560		10,099
54	5401	4051	Retirement & Taxes		37,611		20,122		63,351		58,908
54	5401	4053	Insurance		9,412		19,109		63,075		62,250
54	5401	4101	Maintenance	\$	4,376	\$	16,759	\$	51,500	\$	58,000
54	5401	4105	Membership Dues & Subscriptions		-		2,420		5,000		5,890
54	5401	4108	Meetings		-		-		240		600
54	5401	4151	Equipment		86,736		11,162		65,900		22,900
54	5401	4152	Supplies		1,466		25,336		47,500		48,000
54	5401	4154	Uniforms		406		269		1,700		3,750
54	5401	4205	Electrical Charges		272,118		-		-		38,400
54	5401	4301	Contract Services		272,118		48,196		802,925		631,400
54	5401	4355	Miscellaneous				-		5,000		5,000
54	5401	4413	Training		-		370		2,900		6,250
54	5401	4414	Travel		-		941		2,800		4,900
54	5401	4651	Capital Expense				-		-		400,000
54	5401	4808	Bad Debt Expense		1,888		-		-		-
54	5401	6061	Transfer to Internal Service Fund		123,253		213,216		255,810		296,610
			Total Transportation	\$	990,849	\$	518,402	\$	1,659,237	\$	1,947,538
			Surplus (Deficit)	\$	(301,238)	\$	(117,963)	\$	0	\$	113,762

INTERNAL SERVICE								Α	MEND #2	P	ROJECTED
FUND 6							ACTUAL	ACTUAL BUDGET		BUDGET	
FUND	ORG	ACCT	DESCRIPTION	F	FY 22-23		FY 23-24		FY 24-25		FY 25-26
	Revenue										
61	6101	5010	Transfer from General Fund	\$	-	\$	769,904	\$	816,000	\$	947,172
61	6101	5025	Transfer from RDA Fund		56,420		62,898		75,000		75,000
61	6101	5051	Transfer from Water Fund		237,841		256,688		179,300		238,089
61	6101	5052	Transfer from Wastewater Fund		125,050		141,930		141,734		169,467
61	6101	5053	Transfer from Stormwater Fund		59,605		89,942		111,607		116,632
61	6101	5054	Transfer from Transportation Fund		123,253		213,216		255,810		296,610
			Beginning Fund Balance Appropriation		60,000				117,802		32,593
			Total Revenue	\$	1,095,170	\$	1,580,523	\$	1,697,253	\$	1,875,563
	Internal Se	urios Adua	inistration								
61	6101	4001	Full Time Regular	\$	19,008	\$	14,720	خ		\$	
	6101	4001	Retirement & Taxes	Ş	3,857	Ş	3,620	Ş	-	Ş	-
61					,		•		-		-
61	6101 6101	4053	Insurance Contract Services		120.880		2,179		157.000		170 500
61	0101	4301	Total Internal Service Administration	خ -	120,889 143,843	\$	133,428 153,947	\$	157,800 157,800	\$	178,500 178,500
			Total internal Service Administration	Ą	143,643	Ą	133,347	Ą	137,800	Ą	178,300
	Facilities										
61	6102	4001	Full Time Regular	\$	20,596	\$	32,817	\$	61,741	\$	66,429
61	6102	4002	Part Time Regular		8,074	·	1,062	·	7,498	·	7,390
61	6102	4003	Seasonal Employee		-		-		12,155		13,061
61	6102	4008	Compensation Adjustments		-		_		1,236		2,845
61	6102	4051	Retirement & Taxes		4,030		(10,618)		16,928		16,338
61	6102	4053	Insurance		2,891		10,942		27,120		27,120
	2,002 20,012 27,120 27,120								•		
61	6102	4101	Maintenance	\$	7,244	\$	6,564	\$	27,000	\$	49,500
61	6102	4107	Lease Payments		67,943		74,130		77,186		79,500
61	6102	4152	Supplies		11,604		11,309		15,900		16,000
61	6102	4201	Water Charges		-		3,060		3,500		3,850
61	6102	4204	Natural Gas Charges		9,877		6,933		13,500		14,850
61	6102	4205	Electric Charges		11,939		13,225		17,600		19,360
61	6102	4206	Telephone & Internet		18,638		22,451		43,000		44,950
61	6102	4208	Miscellaneous Facilities Charges		5,020		948		4,000		4,000
61	6102	4210	Cellular Phone Bills		17,195		23,180		25,000		28,750
61	6102	4301	Contract Services		54,514		80,879		92,226		98,027
61	6102	4355	Miscellaneous		-		11,321		-		-
			Total Facilities	\$	241,010	\$	288,213	\$	445,590	\$	491,971
	Fleet Mana	_		_					04.050		27.000
61	6103	4101	Maintenance	\$	14,006	Ş	17,442	\$	21,250	Ş	27,000
61	6103	4107	Lease Payments		15,593		12,539		291,681		279,539
61	6103	4151	Equipment		2,516		432		10,000		10,000
61	6103	4301	Contract Services		121		14,316		29,000		29,600
61	6103	4751	Vehicle Replacement		209		24,290				_
61	6103	4759	Vehicle Repairs		7,906		7,636		15,000		15,000
61	6103	4760	Vehicle Fuel		50,597		54,467	,	82,900		160,200
			Total Fleet Management	Ş	90,948	Ş	131,122	\$	449,831	Ş	521,339

INTERNAL SERVICE								Α	MEND #2	P	ROJECTED
FUND 6	FUND 61 ACTUAL ACTUAL			ACTUAL	BUDGET		BUDGET				
FUND	ORG	ACCT	DESCRIPTION	F	FY 22-23 FY 23-24			FY 24-25		FY 25-26	
Information Systems											
61	6104	4151	Equipment	\$	3,210	\$	8,165	\$	5,250	\$	10,050
61	6104	4301	Contract Services		64,525		73,501		158,550		81,900
61	6104	4303	Software Maintenance		67,961		119,238		127,480		243,305
61	6104	4551	Computer Replacement		27,981		33,816		37,500		20,000
			Total Information Systems	\$	163,677	\$	234,720	\$	328,780	\$	355,255
	Human Res	sources									
61	6105	4001	Full Time Regular	\$	68,394	\$	130,828	\$	137,584	\$	147,515
61	6105	4006	Other Compensation		500	•	2,552	•	600	•	720
61	6105	4008	Compensation Adjustments		_		-		2,479		5,747
61	6105	4051	Retirement & Taxes		16,148		30,393		33,213		32,217
61	6105	4053	Insurance		17,157		27,171		44,476		44,476
61	6105	4054	Wellness		-		-		18,360		18,450
61	6105	4105	Membership Dues & Subscriptions	\$	125	\$	961	\$	800	\$	1,480
61	6105	4108	Meetings		-		69		240		240
61	6105	4152	Supplies		-		21		200		200
61	6105	4355	Miscellaneous		22,510		35,072		42,000		45,152
61	6105	4410	Employee Appreciation		-		15,162		14,000		13,000
61	6105	4413	Training		249		2,490		7,300		17,300
61	6105	4414	Travel		171		1,649		2,000		2,000
			Total Human Resources	\$	125,254	\$	246,368	\$	303,252	\$	328,498
			Internal Service Administration	\$	143,843	\$	153,947	\$	157,800	\$	178,500
			Facilities		241,010		288,213		445,590		491,971
			Fleet Management		90,948		131,122		449,831		521,339
			Information Systems		163,677		234,720		340,780		355,255
			Human Resources		-		246,368		303,252		328,498
			Total Internal Service	\$	639,478	\$	1,054,370	\$	1,697,253	\$	1,875,563
Surplus (Deficit) \$ 455,692 \$ 526,153 \$					\$	0	\$	0			



VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: PUBLIC HEARING: Wastewater (Sewer) Master Plan and Impact Fee Analysis

(IFA) (Ordinance 2025-08)

Department: Public Works **Presenter:** Naseem Ghandour

Background/Discussion:

In response to Vineyard City's continued growth and increasing development pressures, the City Council contracted HAL in 2023 (Resolution 2023-03) to prepare comprehensive Wastewater Master Plan and Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA).

On March 27, 2024, HAL presented the draft Wastewater Master Plans to the City Council for review and direction. During that meeting, the Council provided initial feedback and authorized staff to proceed towards scheduling public hearings for formal consideration and community input. The IFFP and IFA were developed concurrently and align with the system improvements identified in the master plan.

These efforts ensure that future development pays its fair share of infrastructure costs, aligning system planning with fiscal responsibility and regulatory compliance.

PLAN OVERVIEW Wastewater Master Plan

- Evaluates existing infrastructure, including sewer mains, lift stations, and regional treatment connections.
- Projects future flows based on population growth and land use planning.
- Identifies capacity constraints and prioritizes improvements.
- Recommends a Capital Improvement Plan (CIP) to guide future investments.

Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA)

- Identifies eligible wastewater system improvements needed to serve new growth.
- Establishes a proportionate share methodology consistent with Utah Code Title 11, Chapter 36a.
- Calculates proposed impact fees based on growth-related capital costs.
- Provides the legal and financial justification required for the City to charge wastewater impact fees for new development.

Proposed Facility Impact Fee

Existing (per ERU)

\$539 Area A \$2,391 Area B Proposed for 2025 (per ERU)* \$637 TSSD Impact Fee Pass-Thru as of 2025 (per \$5,092 ERU)**

PURPOSE OF PUBLIC HEARING

- Present the draft Wastewater Master Plan, IFFP, and IFA.
- Invite the community for feedback on infrastructure needs and funding strategies.

POLICY ALIGNMENT

- These documents support Vineyard City's General Plan goals for responsible growth, infrastructure planning, and financial sustainability. Adoption will:
- Ensure that new development contributes fairly to the cost of expanded services.
- Provide a roadmap for strategic investments in wastewater infrastructure.
- Protect environmental and public health through reliable service delivery.

Fiscal Impact:

NONE. Future improvements identified in the plan will be funded through capital budgeting, impact fees, and potential grants.

Recommendation:

Staff recommends that the City Council approve the adoption of the Wastewater Master Plan & Impact Facility Fee Assessment (IFFA) by ordinance.

Sample Motion:

"I move to adopt Ordinance 2025-08 Water Master Plan as presented."

Attachments:

- 1. DRAFT Vineyard Sewer IFA
- 2. DRAFT Vineyard Sewer Master Plan Report
- 3. DRAFT Vineyard Sewer IFFP Report

^{*} No separate Impact Fee Areas

^{**} Non-Vineyard Assessed Fee.





VINEYARD

DRAFT Wastewater Collection System
Impact Fee Analysis
May 2025





EXECUTIVE SUMMARY

An impact fee is a one-time fee imposed on new development activity to mitigate the impact of new development on capital facilities. In conjunction with this Impact Fee Analysis, Hansen Allen & Luce, Inc. prepared the Vineyard Wastewater Collection System Impact Fee Facilities Plan (IFFP) April 2025. The IFFP forms the basis for this impact fee analysis.

The recommended impact fee structure presented in this analysis has been prepared to satisfy the Impact Fees Act, Utah Code Ann. § 11-36a-101 et. seq., and represents the maximum impact fees Vineyard ("City") may assess. The City will be required to use revenue sources other than impact fees to fund any projects that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

Wastewater¹ Demand

The City is anticipated to grow by 10,598 equivalent residential units (ERUs) between 2023 and 2033 – the timeframe of the IFFP analysis.²

Wastewater Service Levels

Level of service (LOS) defines the wastewater capital facility demands that a typical Equivalent Residential Unit (ERU), will require as 160 gpd.

Wastewater Service Area

There is one service area for wastewater that encompasses the boundaries of Vineyard City.

Excess Capacity

According to the IFFP, there is excess capacity in the wastewater system in the amount of \$3,463,047 that will serve new development over the next 10 years.

New Construction

Total new construction costs required by growth over the next 10 years are projected to reach \$5,109,327.

Wastewater System Impact Fee Calculation

The gross fee is first calculated, followed by credits to be made for the portion of future projects that will benefit existing development.

TABLE 1: MAXIMUM GROSS FEE PER ERU

Summary	Amount				
Existing Buy-In Costs	\$326.76				
Interest on Bonds	\$43.10				
New Construction	\$482.10				
Consultant Costs	\$6.00				

¹ The terms "sewer" and "wastewater" are used interchangeably in this analysis.

1

² IFFP, p. 2-1.



Summary	Amount
Fund Balance	(\$37.80)
Subtotal before Credits	\$820.17

Credits must be made for the proportionate share of new projects that benefit existing development so that new development does not pay more than its proportionate share of costs. According to the IFFP, the cost of new projects that benefit existing development is \$2,492,000. These projects are anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

Credits must also be made for future payments on the outstanding Series 2023 Water and Wastewater Revenue Bond issued in the amount of \$14,350,000. Wastewater is responsible for ten percent of the bond. Credits for future payments are then subtracted from the maximum gross fee shown in Table 1 to show the maximum impact fee per year.

TABLE 2: MAXIMUM FEE PER ERU

	Gross Fee before	NPV* Deficiency	NPV*	Maximum Fee per
	Credits	Projects	Outstanding Bond	ERU
2025	\$820.17	\$165.53	\$18.39	\$636.25
2026	\$820.17	\$140.41	\$16.85	\$662.91
2027	\$820.17	\$120.17	\$15.70	\$684.31
2028	\$820.17	\$102.35	\$14.73	\$703.09
2029	\$820.17	\$85.89	\$13.89	\$720.40
2030	\$820.17	\$70.40	\$13.13	\$736.65
2031	\$820.17	\$55.66	\$12.44	\$752.07
2032	\$820.17	\$41.36	\$11.81	\$767.00
2033	\$820.17	\$27.38	\$11.23	\$781.56
2034	\$820.17	\$13.63	\$10.68	\$795.86

Non-Standard Fee Adjustment

For development with unique characteristics and circumstances, a fee adjustment may be made by using the following formula:

Average gpd/160 gpd x the maximum fee per ERU per year

CHAPTER 1: OVERVIEW OF THE WASTEWATER IMPACT FEES

Summary

An impact fee is intended to recover the City's costs of building wastewater system capacity to serve new residential and non-residential development rather than passing these growth-related costs on to existing users through rates. The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid for by the City is assessed through an impact fee.



Costs to be Included in the Impact Fee

The impact fees proposed in this analysis are calculated based upon:

- Buy-in to existing, excess capacity;
- New capital infrastructure that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.
- Necessary credits

The costs that cannot be included in the impact fee are as follows:

- Costs for projects that cure system deficiencies;
- Costs for projects that increase the LOS above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Utah Code Legal Requirements

Utah law requires that communities and special districts prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities/districts give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained Zions Public Finance, Inc. (ZPFI) to prepare this Impact Fee Analysis in accordance with legal requirements.

Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice.

Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to:

- (1) An impact fee analysis shall:
 - (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
 - (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;



- (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
- (d) estimate the proportionate share of:
 - (i) the costs for existing capacity that will be recouped; and
 - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
- (e) identify how the impact fee was calculated.
- (2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:
 - (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
 - (b) the cost of system improvements for each public facility;
 - (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
 - (d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;
 - (e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
 - (f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
 - (g) extraordinary costs, if any, in servicing the newly-developed properties; and
 - (h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.



CHAPTER 2: IMPACT FROM GROWTH UPON THE CITY'S FACILITIES AND LEVEL OF SERVICE

Utah Code 11-36a-304(1)(a)

Projected Wastewater Demands

Table 3 shows ERU growth projections which will place additional demand on the City's wastewater system. The City's wastewater system serves 5,878 equivalent residential units (ERUs) which will grow to an estimated 16,476 ERUs by 2033. The IFFP is based on 2023 data and calculates the growth between 2023 and 2033 as 10,598 ERUs.

Water Service Area

ERUs within Vineyard are projected to grow as follows:

TABLE 3: GROWTH IN DEMAND

Year	ERUs
2023	5,878
2024	6,358
2025	7,462
2026	9,141
2027	10,456
2028	11,549
2029	12,598
2030	13,646
2031	14,586
2032	15,536
2033	16,476
Growth, 2023-2033	10,598
Source: IFFP, 3-1	

Existing and Proposed LOS Analysis

Level of service (LOS) defines the wastewater capital facility demands that a typical ERU will require and should pay for with impact fees. The IFFP defines service levels as 160 gpd per ERU.3

Utah Code 11-36a-304(1)(b)(c)

Excess Capacity

The IFFP identifies 80 percent excess capacity in the existing system which has an actual cost of \$9,516,028 for impact-fee eligible projects. 4 Of this amount, \$3,463,047 represents excess capacity

³ IFFP, p. iii

⁴ Vineyard Asset List



that will be consumed by 2033, calculated as the percentage of ERU growth by 2033 (10,598 ERUs) compared to total capacity of the existing system (29,122 ERUs).

TABLE 4: EXISTING EXCESS CAPACITY

Excess Capacity	Amount
Total Excess Capacity	\$9,516,028
Total Capacity ERUs	29,122
Capacity Consumed 2023-2033, ERUs	10,598
Percent of Total Capacity	36.39%
Cost of Capacity Consumed 2023-2033	\$3,463,047
Source: IFFP, 3-2	

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(b)(c)

The means by which the City will meet growth demands include constructing the following projects as set forth in the Impact Fee Facilities Plan. The cost of impact-fee eligible capital facility construction projects over the next 10 years total \$5,109,327.

TABLE 5: NEW CONSTRUCTION IMPROVEMENTS

Project	Total Cost	Existing Dev	10-Yr Cost	Growth Beyond 10 Yrs
Install 4,500 ft of 6" force main	\$1,147,000	\$1,147,000		
Install 2,560 ft of 12" gravity line	\$1,345,000	\$1,345,000		
Install 1,700 ft of 10" gravity line	\$858,000	\$0	\$391,201	\$466,799
Install 2,400 ft of 15" gravity line	\$1,337,000	\$0	\$609,599	\$727,401
Install 1,200 ft of 12" gravity line and 4,600 ft of 15" gravity line	\$3,193,000	\$0	\$1,455,834	\$1,737,166
Install 4,500 ft of 8" gravity line	\$2,192,000	\$0	\$999,433	\$1,192,567
Install 1,800 ft of 8" gravity line, 1,700 ft of 10" gravity line, and 3,050 ft of 15" gravity line	\$3,434,000	\$0	\$1,565,717	\$1,868,283
Install two new pumps at Lift Station 2	\$192,000	\$0	\$87,542	\$104,458
Total	\$11,206,000	\$2,492,000	\$5,109,327	\$6,096,673



CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

Maximum Legal Wastewater Impact Fee per ERU

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and actual cost of existing system improvements that benefit new growth that can be recouped through impact fees. The impact fee for existing assets must be based on the actual costs (when excess capacity is available) while the fees for construction of new facilities can be based on reasonable future costs of the system.

Existing Excess Capacity

The actual cost of the City's wastewater system that will serve an additional 10,598 ERUs by 2033 is \$9,516,029, with \$3,463,047 of the cost of the excess capacity allocated to growth between 2023 and 2033. Therefore, the buy-in cost is \$326.76 per ERU.

TABLE 6: EXCESS CAPACITY PROPORTIONATE SHARE CALCULATION

Excess Capacity	Amount
Total Excess Capacity	\$9,516,028
Total Capacity ERUs	29,122
Capacity Consumed 2023-2033, ERUs	10,598
Percent of Total Capacity	36.39%
Cost of Capacity Consumed 2023-2033	\$3,463,047
Growth in ERUs, 2023-2033	10,598
Buy-In Cost per ERU	\$326.76

Interest costs can be included for the Series 2023 Water and Sewer Revenue Bonds which are used to fund existing facilities. The total interest cost on the bond is \$12,551,493. Wastewater is responsible for ten percent of the interest cost which is spread among the total capacity (29,122 ERUs) served by the projects funded by the bond.

TABLE 7: INTEREST COST CALCULATION

Interest Calculation on Outstanding Bond				
Total Interest	\$1,255,149			
Capacity ERUs of Outstanding Bond	29,122			
Interest Cost per ERU	\$43.10			

New Construction

New construction projects estimated to benefit new development within the next 10 years total \$5,109,327. When divided by the projected growth in ERUs, this results in a cost of \$482.10 per ERU.

TABLE 8: NEW CONSTRUCTION PROJECTS

New Improvements	Amount
Cost to 10-Year Growth	\$5,109,326.62
Growth in ERUs, 2023-2033	10,598
Cost per ERU	\$482.10



Consultant Costs

Consultant costs are an allowable expense and result in a proportionate share cost of \$6.00 per ERU.

TABLE 9: CONSULTANT COSTS

Consultant Cost	
Consultant Costs	\$63,640
Growth in ERUs, 2023-2033	10,598
Cost per ERU	\$6.00

Fund Balance

The fund balance of \$400,588.86⁵ can be used to offset some of the construction costs of new projects shown in Table 5. A credit of \$37.80 per ERU is therefore applied to the new construction cost per ERU.

TABLE 10: IMPACT FEE FUND BALANCE

Impact Fee Fund Balance		Amount
Fund Balance		\$400,588.86
Growth in ERUs, 2023-2033		10,598
Credit per ERU		(\$37.80)

Summary of Gross Impact Fee Before Credits

The gross impact fee includes buy-in costs for existing, excess capacity, interest cost on the outstanding bond, new construction costs (less fund balance) and consultant costs.

TABLE 11: IMPACT FEE FUND BALANCE

Summary	Amount
Existing Buy-In Costs	\$326.76
Interest on Bonds	\$43.10
New Construction	\$482.10
Consultant Costs	\$6.00
Fund Balance	(\$37.80)
Subtotal before Credits	\$820.17

Credits Against Impact Fees

Credits must be made for the proportionate share of new projects that benefit existing development as well as the Series 2023 Water/Wastewater Revenue Bond so that new development is not charged more than its fair share.

Ξ

⁵ Source: Vineyard City



The proportionate share of new projects benefitting existing development is \$2,492,000 based on the IFFP which is anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

TABLE 12: CREDITS ON PROJECTS BENEFITTING EXISTING DEVELOPMENT

Year	ERUs	Payment	Payment per ERU	NPV* - Deficiency Projects
2025	7,462	\$249,200	\$33.40	\$165.53
2026	9,141	\$249,200	\$27.26	\$140.41
2027	10,456	\$249,200	\$23.83	\$120.17
2028	11,549	\$249,200	\$21.58	\$102.35
2029	12,598	\$249,200	\$19.78	\$85.89
2030	13,646	\$249,200	\$18.26	\$70.40
2031	14,586	\$249,200	\$17.08	\$55.66
2032	15,536	\$249,200	\$16.04	\$41.36
2033	16,476	\$249,200	\$15.13	\$27.38
2034	17,416	\$249,200	\$14.31	\$13.63

NPV = net present value discounted at 5 percent

There is an outstanding Series 2023 Water/Wastewater Revenue Bond issued for \$14,350,000. Wastewater is responsible for ten percent of the bond costs, and existing development costs represent 20.2 percent⁶ of the total costs, which must be credited against the gross impact fee.

TABLE 13: CREDITS FOR SERIES 2023 WATER/WASTEWATER REVENUE BOND

Year	P+I	Wastewater Share	Existing Share	ERUs	Payment per ERU	NPV*
2025	\$907,638	\$90,764	\$18,320	7,462	\$2.46	\$18.39
2026	\$906,138	\$90,614	\$18,290	9,141	\$2.00	\$16.85
2027	\$904,138	\$90,414	\$18,249	10,456	\$1.75	\$15.70
2028	\$906,638	\$90,664	\$18,300	11,549	\$1.58	\$14.73
2029	\$908,388	\$90,839	\$18,335	12,598	\$1.46	\$13.89
2030	\$904,388	\$90,439	\$18,254	13,646	\$1.34	\$13.13
2031	\$904,888	\$90,489	\$18,264	14,586	\$1.25	\$12.44
2032	\$904,638	\$90,464	\$18,259	15,536	\$1.18	\$11.81
2033	\$903,638	\$90,364	\$18,239	16,476	\$1.11	\$11.23

*NPV = net present value discounted at 5 percent

The maximum impact fee per ERU is calculated by subtracting the two credits from the gross impact fee shown in Table 11.

⁶ Calculated by dividing the 5,878 existing ERUs by the capacity served by the bond projects (29,122 ERUs).



TABLE 14: MAXIMUM FEE PER ERU

	Gross Fee before Credits	NPV* Deficiency Projects	NPV* Outstanding Bond	Maximum Fee per ERU
2025	\$820.17	\$165.53	\$18.39	\$636.25
2026	\$820.17	\$140.41	\$16.85	\$662.91
2027	\$820.17	\$120.17	\$15.70	\$684.31
2028	\$820.17	\$102.35	\$14.73	\$703.09
2029	\$820.17	\$85.89	\$13.89	\$720.40
2030	\$820.17	\$70.40	\$13.13	\$736.65
2031	\$820.17	\$55.66	\$12.44	\$752.07
2032	\$820.17	\$41.36	\$11.81	\$767.00
2033	\$820.17	\$27.38	\$11.23	\$781.56
2034	\$820.17	\$13.63	\$10.68	\$795.86

^{*}NPV = net present value discounted at 5 percent

Non-Standard Fee Adjustment

For development with unique characteristics and circumstances, a fee adjustment may be made by using the following formula:

Average gpd/160 gpd x the maximum fee per ERU per year

CERTIFICATION

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

- 1. includes only the cost 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; or
 - b. cost 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;
- 3. offset costs with grants or other alternate sources of payment; and
- 4. complies in each and every relevant respect with the Impact Fees Act.



WASTEWATER COLLECTION SYSTEM MASTER PLAN

(HAL Project No.: 319.10.100)

DRAFT

May 2025



VINEYARD CITY

WASTEWATER COLLECTION SYSTEM MASTER PLAN

(HAL Project No.: 319.10.100)

DRAFT

Ridley Griggs, P.E. Project Engineer



May 2025

ACKNOWLEDGEMENTS

Successful completion of this master plan was made possible by the cooperation and assistance of many individuals, including those listed below:

City of Vineyard

Mayor

Julie Fullmer

City Council

Brett Clawson Jacob Holdaway Mardi Sifuentes Sara Cameron

City Staff

Eric Ellis, City Manager

Naseem Ghandour, P.E., Public Works Director/ City Engineer
Devan Peterson, Environmental Utilities Manager
Chris Jackson, Environmental Utilities Crew Lead
Morgan Brim, Community Development Director
Kristie Bayles, Finance Director
Patrick James, Assistant City Engineer
Cache Hancey, Senior Planner

Hansen, Allen & Luce, Inc.

Steven C. Jones, P.E., CEO Ridley Griggs, P.E., Project Manager Jason Biesinger, P.E., Staff Engineer

TABLE OF CONTENTS

TITLE	PAGE
ACKNOWLEDGEMENTS	i
TABLE OF CONTENTS	ii
LIST OF TABLES	
LIST OF FIGURES	
EXECUTIVE SUMMARY	
PURPOSE OF STUDY	
PLANNING HORIZONS	
COMPONENTS OF A WASTEWATER COLLECTION SYSTEM	
METHODS	
EVALUATION CRITERIASYSTEM VULNERABILITIES	
CAPITAL FACILITY PLAN	
CONCLUSIONS	
CONCLUSIONS	
CHAPTER 1 INTRODUCTION	1-1
BACKGROUND AND PURPOSE	
SCOPE OF WORK	
CHAPTER 2 EXISTING WASTEWATER SYSTEM	
INTRODUCTION	
SERVICE AREA	
EXISTING WASTEWATER SYSTEM	
Sources of Data	
Collection Network	
Water Reclamation Facility	
Lift Stations	2-2
CHAPTER 3 FLOW MONITORING	3-1
FLOW MONITORING	
Local Flow Monitoring	
CHAPTER 4 FLOW CHARACTERIZATION	
METHODOLOGY	
UNIT FLOWS	
DAILY FLOW VARIATION	
Peaking Factors	4-2
ANNUAL FLOW VARIATION	
Infiltration	
InflowLONG TERM FLOW VARIATION	4-4
EXTRAORDINARY FLOWS	4-5
CHAPTER 5 WASTEWATER FLOW PROJECTIONS	5-1
PLANNING PERIOD	
GROWTH PROJECTIONS	
FLOW PROJECTIONS	
Buildout Infiltration	
Buildout Inflow	5-4
10-Year Flows	5-4

(TABLE OF CONTENTS - CONTINUED)

TITLE		PAGE
Buildout	Flows	5-5
	WASTEWATER COLLECTION SYSTEM EVALUATION	
	ELECTION	
	AYOUT AND MODEL CONSTRUCTION	
	Facilities	
	n Areas	
	ocation	
	on	
	ON CRITERIA	
	CENARIOS	
	PRAULIC LOADING	
	DEFICIENCIES F LIFT STATION CAPACITY	
	TION OPTIMIZATIONon 1	
	on 3	
LIII SIAII	ION PROJECT PHASING	0-0
ELITTIDE II	MPROVEMENTS	0-0
	ST	
CONTINUE	ED MODEL UPDATES	6-8
CONTINUI	LD MODEL OF DATES	0-0
CHAPTER 7	OPERATIONS AND MAINTENANCE ALTERNATIVES	7-1
	MONITORING	
	IMPROVEMENTS	
	1	
	ment Sewers	
•	Sewers/Re-routing Flows	
New Sev	vers	7-1
Alternativ	ve Construction Technologies	7-2
COMPARI	SON OF IMPROVEMENT ALTERNATIVES	7-2
Sewers.		7-2
	Considerations	
ELIMINATI	E UNNECESSARY WASTEWATER	7-2
CUADTED 0	CAPITAL IMPROVEMENTS PLAN	0.4
-	COST ESTIMATES	
	COST ESTIMATES	
	ENDED IMPROVEMENT PROJECTS	
	L CONSIDERATIONS	
SHMMAR	Y OF CAPITAL FACILITY RECOMMENDATIONS	0-5 1-1
	nendations	
	ES	
APPENDICE	is	
A 11 A	Flow Otrodo Populis	
Appendix A	Flow Study Results	
Appendix B	Growth Projections and Projected ERUs	
Appendix C	Cost Estimates	

LIST OF TABLES

TABLE	TITLE	PAGE
TABLE 2-2	LIFT STATION INVENTORY	2-3
TABLE 2-2	LIFT STATION INVENTORY	2-3
TABLE 5-1	5-2	
TABLE 5-2	PROJECTED FUTURE TOWN CENTER ERU DENSITIES	5-3
TABLE 5-3	PROJECTED FUTURE NONRESIDENTIAL OR MIXED-USE ERU DEN	ISITIES 5-3
TABLE 5-4	SYSTEM FLOW PROJECTIONS TO TSSD	5-5
TABLE 5-4	SYSTEM FLOW PROJECTIONS TO OREM	5-5
TABLE 6-1	EVALUATION CRITERIA	6-3
TABLE 6-2	MODEL SCENARIOS	6-4
TABLE 6-3	PEAK HYDRAULIC LOADING	6-4
TABLE 6-4	EXISTING PIPE CAPACITY DEFICIENCIES AND SOLUTIONS	6-5
TABLE 6-5	BUILDOUT LIFT STATION REQUIREMENTS	6-5
TABLE 6-6	FUTURE 10-YEAR AND BUILDOUT IMPROVEMENT PROJECTS	6-7
TABLE 6-7	WATCH LIST PROJECTS	6-8
TABLE 8-1	EXISTING IMPROVEMENT PROJECTS AND COST ESTIMATES	8-2
TABLE 8-2	FUTURE IMPROVEMENT PROJECTS & COST ESTIMATES	8-3
TABLE 8-2	FUTURE IMPROVEMENT PROJECTS & COST ESTIMATES	8-3
	LIST OF FIGURES	
	<u>LIST OF FIGURES</u>	
FIGURE	TITLE	PAGE
FIGURE 2-	-1 EXISTING SEWER SYSTEM	AFTER 2-1
FIGURE 2-	-2 EXISTING SEWER SYSTEM LIFT STATIONS AND FORCE MAINS	AFTER 2-1
FIGURE 3-	-1 FLOW MONITORING LOCATIONS	AFTER 3-1
FIGURE 4	-1 COMPOSITE FLOW PATTERN	4-2
FIGURE 4	-2 LIFT STATION 2 ANNUAL FLOW VARIATION	4-3
FIGURE 4	-3 INFLOW EVENT AT LIFT STATION 2	4-4
FIGURE 5-	-1 POPULATION AND ERU PROJECTIONS	5-1
	-2 PROJECTED 10-YEAR CAPITAL FACILITIES PLAN GROWTH	_
FIGURE 5	-3 PROJECTED BUILDOUT LAND USES	AFTER 5-5
FIGURE 6-	-1 COLLECTION AREAS AND COLLECTION POINTS	AFTER 6-1
FIGURE 6-	-2 INFLOW AND INFILTRATION LOADING LOCATIONS	AFTER 6-2
FIGURE 6-	-3 EXISTING SEWER SYSTEM PROJECTS	AFTER 6-4
FIGURE 6-	-4 10-YEAR GROWTH PROJECTS	AFTER 6-7
FIGURE 6-	-5 BUILDOUT PROJECTS	AFTER 6-7
FIGURE 6-	-6 WATCH LIST PROJECTS	AFTER 6-8

EXECUTIVE SUMMARY

PURPOSE OF STUDY

The purpose of this study is to help Vineyard City provide efficient and reliable wastewater collection service to its customers, both now and into the future, at the lowest reasonable cost. The master plan identifies a prioritized list of capital projects that can most efficiently accommodate existing users and future development at the City's selected level of service. By carefully planning for properly sized infrastructure projects, the City will not waste money by constructing infrastructure projects which are either over-sized or under-sized.

PLANNING HORIZONS

The ultimate planning horizon for this study is the buildout condition of Vineyard City, which is projected to take place at approximately year 2050. However, this report provides guidance applicable at the following time intervals:

- 1. <u>Near future</u>: low-cost actions and best practices the City can implement to reduce costs and improve operations.
- 2. <u>10-year</u>: system improvements needed within 10 years to provide capacity for anticipated new development. The cost of these improvements will be used to set impact fees and guide the formulation of near-term budgets.
- 3. <u>Buildout</u>: all system improvements necessary to serve the City at year 2050 or when it is developed at the density defined by the City's current general plan and zoning ordinances. These recommendations will help the City secure land and work with developers to plan for infrastructure that is necessary for the future system.

COMPONENTS OF A WASTEWATER COLLECTION SYSTEM

The following components of a wastewater collections system were analyzed to determine the capacity and ability of the water system to meet existing and future loading:

- 1. Collection network gravity and force mains that convey wastewater to the Timpanogos Special Service District through the system.
- 2. Lift stations used to pump wastewater from low-elevation points in the system up to higher-elevation gravity mains.

Each of these components must have enough capacity and capability to serve existing and future loading.

METHODS

The existing wastewater collection facilities, including pipelines and lift stations, were evaluated to ensure adequate collection and conveyance capacity. Flow monitoring was performed at key locations in the City to assist with system evaluation and calibration. Flows within the collection system were characterized based on available data. Hydraulic models were then constructed to evaluate the system under existing and expected future scenarios.

EVALUATION CRITERIA

A range of potential evaluation criteria and values were suggested by HAL and reviewed by the City. The criteria and values adopted for this master plan and the modeling effort are included in Table ES-1.

TABLE ES-1 EVALUATION CRITERIA

CRITERIA	VALUE OR ASSUMPTION
System Loading	Existing system loading was developed based on a level of service (LOS) of 160 gpd per equivalent residential unit (ERU), plus observed infiltration and inflow (I&I). Future hydraulic loading was developed based on growth projections and the LOS of 160 gpd per ERU. I&I was considered separately.
Daily Flow Variation	Diurnal curves were developed from winter drinking water production data and validated using data from the wastewater SCADA system.
Peak Flow	Peaking factors were developed from diurnal water demand curves. Predicted peak flows were developed from the AutoCAD Storm and Sanitary Analysis (SSA) model.
Inflow and Infiltration	Inflow and infiltration values were estimated by reviewing flow data collected at the lift stations both for dry-weather periods and during storm events. Infiltration and inflow were distributed throughout the City. Modeled values are as follows (all values are for the entire system): Existing Inflow = 1.15 million gallons per day (MGD) Buildout Inflow = 1.5 MGD Existing Infiltration = 0.12 MGD Buildout Infiltration = 0.20 MGD
Future Planning Periods	Years 2033 (10-year) and estimated buildout.
Land Use & Population Projections	Land uses in undeveloped areas were assumed to occur as specified in the Vineyard City General Plan. Where available, development plans were used to further refine projections for future land use. Population projections were based on historic trends and projected rates and timing of growth as identified by the Community Development Department.
Pipe Capacity (Depth/Diameter or d/D)	Roughness Coefficient = 0.013 Manning's n Maximum d/D = 0.5 for all pipes smaller than 12 inches in diameter; Maximum d/D = 0.75 for all pipes larger than or equal to 12 inches in diameter.

SYSTEM VULNERABILITIES

Vulnerabilities refer to conditions within the collection system that are satisfactory now, but which merit special attention so that capacity problems do not occur in the future. The system was analyzed to identify existing vulnerabilities and areas which will need improvements to support future growth. Table ES-2 contains a summary of system vulnerabilities. Further information about these vulnerabilities is described in subsequent sections.

TABLE ES-2 SYSTEM VULNERABILITIES

ID	Description	Notes
V1	Lift Station Performance and Redundancy	Capacity in the two force mains associated with Lift Station 2 will eventually be consumed by growth, at which point, the City would have few options if one of these force mains were to break or need to be shut down. Lift Station 2 is currently pumping at capacity. Lift Station 3 currently surcharges several pipes directly downstream of where the force main terminates.
V2	Growth	Vineyard City is currently one of the fastest growing cities in Utah. Vacant parcels are developing quickly.
V3	Infiltration and Inflow	Based on recent measured flow data, significant inflow to the sewer system occurs during storm events. Infiltration also occurs. Infiltration and inflow consume capacity in pipes and lift stations and lead to increased treatment volumes.

Recommended solutions to these vulnerabilities are shown in Table ES-3 and described in further detail in subsequent Chapters.

TABLE ES-3
PROPOSED SOLUTIONS TO SYSTEM VULNERABILITIES

Description	Notes	Vulnerabilities Addressed
Parallel Force Main Project	Injumped wastewater and provide a redundant nathway in case of	
Increase Lift Station 2 Capacity	lation 2 Increase pump capacity in Lift Station 2 where additional capacity is	
Lift Station 3 Force Main Project	Force Main Re-route the force main from Lift Station 3 to discharge at a location with adequate downstream capacity.	
Modeling Reviews Periodically conduct a review of hydraulic models to update them with new information and re-calibrate them to current conditions. Use updated models to help identify unknown deficiencies, determine timing of projected projects, and find any changes needed to the projected projects.		V2
Inflow Mitigation Reduce inflow by improving stormwater conveyance. Consider discontinuing use of vented manholes in problem areas unless venting is needed to dissipate sewer gas or provide air monitoring access.		V3

CAPITAL FACILITY PLAN

Projects necessary to support growth over the next 20 years are identified and described in the Capital Facility Plan. Conceptual-level cost estimates were prepared for each project. Projects recommended to address existing deficiencies are summarized in Table ES-4.

TABLE ES-4 EXISTING IMPROVEMENT PROJECTS AND COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹
E-1	Install 4,500 ft of 6" force main.	\$1,147,000
E-2	Install 2,560 ft of 12" gravity line.	\$1,345,000
	TOTAL	\$2,492,000

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

Projects recommended to accommodate future growth are summarized in Table ES-5.

TABLE ES-5 FUTURE IMPROVEMENT PROJECTS & COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹
	10-Year Projects	
10-1	Install 1,700 ft of 10" gravity line.	\$858,000
10-2	Install 2,400 ft of 15" gravity line.	\$1,337,000
10-3	Install 1,200 ft of 12" gravity line and 4,600 ft of 15" gravity line.	\$3,193,000
10-4	Install 4,500 ft of 8" gravity line.	\$2,192,000
10-5	Install 1,800 ft of 8" gravity line, 1,700 ft of 10" gravity line, and 3,050 ft of 15" gravity line.	\$3,434,000
10-LS2	Install two new pumps at Lift Station 2.	\$192,000
	Buildout Projects	
B-1	Install 2,100 ft of 10" gravity line and 650 ft of 15" gravity line.	\$1,422,000
B-2	Install 2,500 ft of 12" gravity line.	\$1,313,000
B-LS2-1	Replace two existing pumps at Lift Station 2.	\$192,000
B-LS2-2	Build new lift station.	\$3,480,000
B-LS2-FM	Install 9,800 ft of 14" force main.	\$3,475,000
	TOTAL	\$21,088,000

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

TABLE ES-6 WATCH LIST PROJECTS AND COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹
W-1	Install 400 ft of 12" gravity line.	\$210,000
W-2	Install 1,400 ft of 36" gravity line.	\$1,215,000
	TOTAL	\$1,425,000

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

CONCLUSIONS

Key conclusions from the master plan are as follows:

- There is a need for additional capacity in Lift Station 2.
- Flows from Lift Station 3 cause surcharging downstream.
- Capital projects are necessary to improve the performance of the existing system and accommodate future growth.
- Infiltration and inflow contribute to flows in the wastewater collection system. Actions taken to reduce infiltration and inflow can extend the capacity of the collection system pipes and reduce treatment costs.

CHAPTER 1 INTRODUCTION

BACKGROUND AND PURPOSE

Vineyard City retained Hansen, Allen & Luce, Inc. (HAL) to prepare a wastewater collection system master plan. The purpose of the master plan is to 1) estimate wastewater generation and flow rates for the existing system, 2) evaluate the existing system's ability to convey existing wastewater flows, 3) prepare growth projections, 4) project growth areas with City input, 5) prepare future wastewater flow rate estimates based on projected growth, 6) evaluate future infrastructure needs, and 7) recommend projects that will create the additional needed wastewater conveyance capacity.

While considerable effort has been made to ensure an accurate study based on the best available data, the results of this study are limited by the accuracy of the development projections and other assumptions used in preparing the master plan.

Planned development can change in density and timing. Therefore, it is expected that the City will continue to review and update this master plan every 5-10 years, or more frequently if the assumptions included in this effort change significantly.

SCOPE OF WORK

A summary of the scope of work is as follows:

- 1. Communicating and coordinating and with City personnel and other relevant entities
- 2. Evaluating results of wastewater flow monitoring
- 3. Analyzing flow data and characterizing the flow
- 4. Investigating and characterizing inflow and infiltration
- 5. Creating a hydraulic model
- 6. Identifying existing system deficiencies
- 7. Projecting future wastewater generation and flow rates in the sewer system
- 8. Identifying the capital facilities necessary to correct existing deficiencies and accommodate future growth
- 9. Preparing the capital facilities plan

CHAPTER 2 EXISTING WASTEWATER SYSTEM

INTRODUCTION

A key component of this master plan is evaluating the existing system, including its physical facilities and their current performance. This section presents key information about the existing system, including the wastewater collection service area, pipe network, and lift stations.

SERVICE AREA

The service area of the City's wastewater collection system includes all land areas within the Vineyard City municipal boundary and a small area of Orem City. It is not anticipated that the service area boundary will change significantly in the future. The service area is shown on Figure 2-1.

EXISTING WASTEWATER SYSTEM

The existing wastewater system consists of lift stations, force mains, and gravity sewers; including laterals, collectors, interceptors, and outfalls. The existing system, its service area, and areas draining to each lift station or outfall are shown on Figures 2-1 and 2-2.

Sources of Data

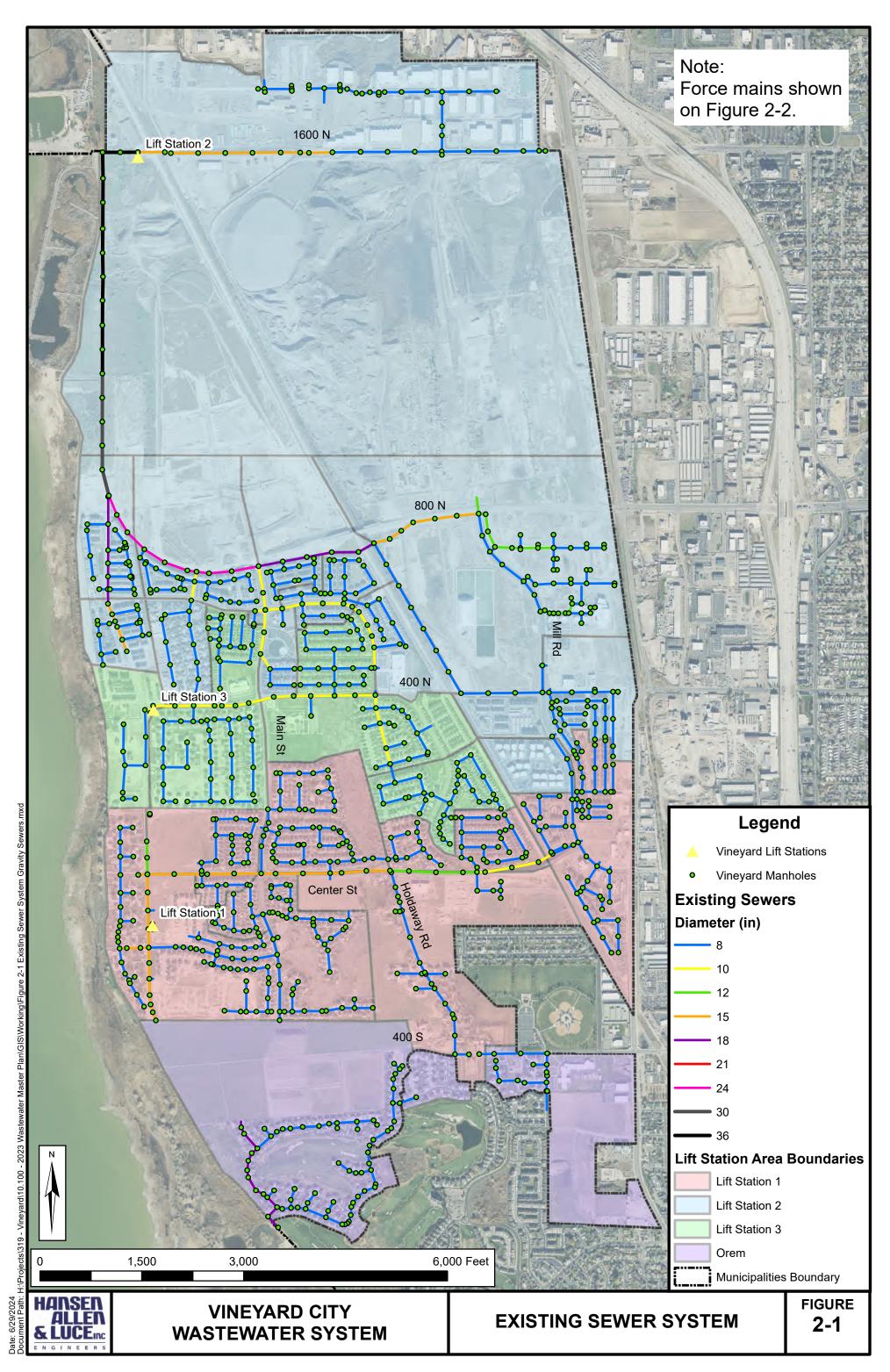
Data for the existing wastewater collection system facilities were provided by Vineyard City, including the following:

- GIS files with information on manholes, sewers, lift stations, and force mains
- Elevation data for manhole rims and inverts
- Subdivision and project record drawings
- · A verbal description of wastewater facilities from City personnel with knowledge of the system

Collection Network

The existing City wastewater collection system consists of approximately 36 miles of pipeline and 922 manholes. Pipe sizes range from 8-inch to 36-inch diameter. The most common pipe diameter in the system is 8 inches, totaling around 28 miles. Table 2-1 displays the total length of each diameter pipe are found in the City's system.

2-1



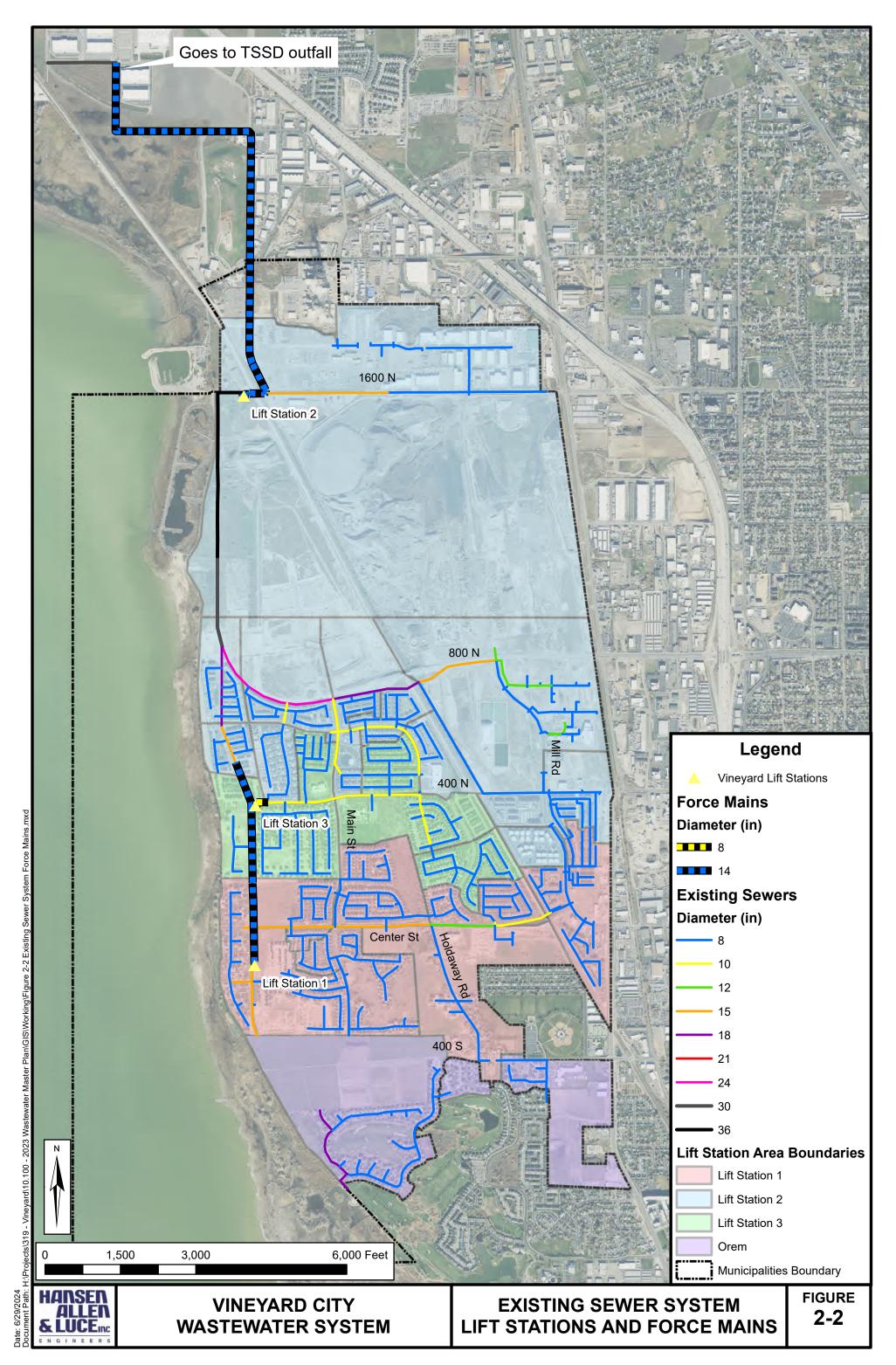


TABLE 2-1 LENGTH OF SEWER PIPES BY DIAMETER

Diameter (in)	Approx. Length (ft)	Approx. Length (mi)
8	148,550	28.14
10	10,150	1.92
12	4,370	0.83
15	11,690	2.21
18	5,010	0.95
21	450	0.09
24	2,720	0.52
30	1,800	0.34
36	3,470	0.66

Water Reclamation Facility

The majority of the wastewater from Vineyard City is conveyed to the water reclamation facility operated by Timpanogos Special Service District. A small portion of the wastewater generated in the City drains south to the Orem City collection system and is subsequently treated at the water reclamation facility operated by Orem City.

Lift Stations

Lift stations are wastewater pumping stations used to pump wastewater through pressurized pipes (called force mains) from low-elevation points in the system uphill to higher-elevation gravity mains and the outfall to Timpanogos Special Service District.

Vineyard City owns and operates three lift stations. All three lift stations have backup power, SCADA, and a variable frequency drive (VFD), which helps maintain a flow rate under a variety of flow conditions. Lift Stations 1 and 3 pump into single force main pipes. Lift Station 2 has been constructed with the ability to utilize two 14-inch force mains to convey wastewater to the TSSD outfall. Currently, one of the force mains is being used. The other is available for use as growth occurs. Lift Station 2 also has room for two additional pumps to help accommodate future flows.

TABLE 2-2 LIFT STATION INVENTORY

Lift Station Number	ADDRESS	PUMP CONFIGURATION (GPM)	RATED CAPACITY (GPM)	PEAK HOUR FLOW (GPM)
1	140 S 300 W	2 x 1,300 1 x 990	2,290	740
2	260 W 1600 N	2 x 1,200	1,200	2,350
3	390 N 300 W	2 x740	740	405

CHAPTER 3 FLOW MONITORING

FLOW MONITORING

Flow monitoring was performed at key locations within the City's wastewater collection service area. The purpose of flow monitoring is to obtain flow data which will be used to identify peak flow rates and then compared with the capacity of the existing system. The flow data will be compared to the results of the City's wastewater hydraulic model to determine if the model is accurate. Model adjustments will be made as needed.

Local Flow Monitoring

Flow monitoring was performed at the following three sites:

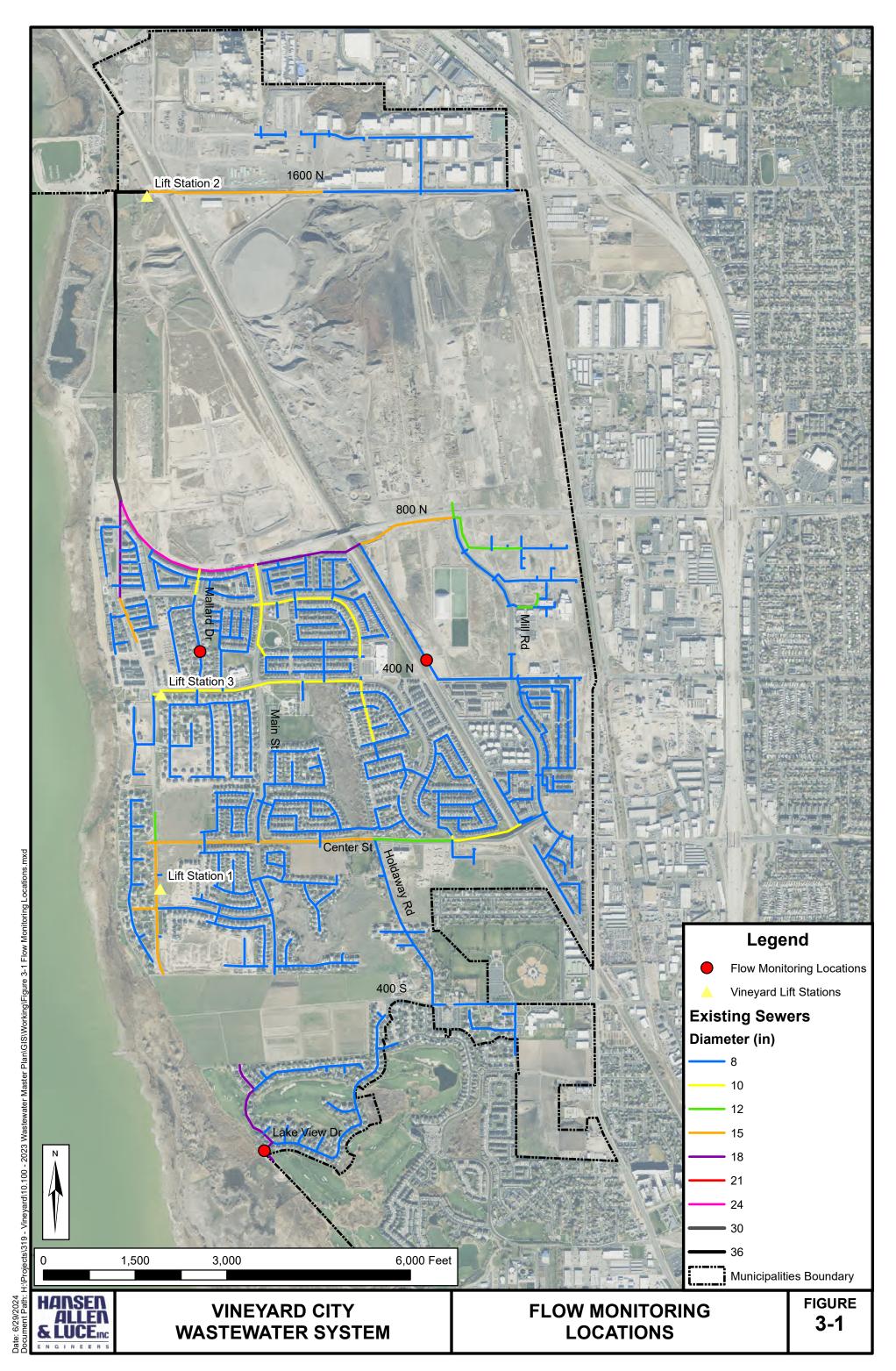
- Downstream of Lift Station 3 on Mallard Drive
- West of the UVU Dome next to the railroad
- Southwest of Sleepy Ridge Golf Course near Lake View Drive

These sites were chosen to assess existing conditions and assist with model calibration. At least one week's data (wastewater flow rates, velocities, and water depth) were collected at each site (See Appendix A). Figure 3-1 shows the flow monitoring locations.

For Mallard Drive, the wastewater hydraulic model showed surcharging and capacity problems downstream of Lift Station 3. To confirm this, flow monitoring was performed on Mallard Drive, which also recorded the sewer pipe flowing over capacity. City personnel were also able to visually check the manholes in the area and saw that surcharging is occurring directly downstream of Lift Station 3.

The wastewater pipeline located southwest of the UVU Dome was chosen due to known capacity issues in the area. Flow monitoring results were used to assist with model calibration.

Flow monitoring was also performed southwest of the Sleepy Ridge Golf Course. This area drains to Orem City. The results gathered here were used for model calibration.



CHAPTER 4 FLOW CHARACTERIZATION

METHODOLOGY

The purpose of flow characterization is to determine the flow patterns and variations that may be experienced by a wastewater system so that sewer pipes, lift stations, and treatment facilities can be evaluated and sized appropriately. The following wastewater flow characteristics were evaluated:

- Unit Flows
- Daily Flow Variation
- Annual Flow Variation
- Long Term Flow Variation
- Extraordinary Flows

UNIT FLOWS

Unit flows were estimated within the City and are expressed in terms of Equivalent Residential Units (ERUs). An ERU represents the flow generation of an average residential unit. Flow generation for commercial, industrial, and other types of uses can be expressed in ERUs. For example, a commercial development that generates a flow 5 times that of an average residence will be designated as representing 5 ERUs. This does not account for inflow and infiltration.

A reasonable flow rate was developed using on winter drinking water billing data. With virtually no irrigation occurring in the winter, it is assumed that winter water use is representative of indoor water use. With little consumptive use of water indoors, it is assumed that the volume of water used indoors is roughly equal to the volume of water discharged to the wastewater collection system. This evaluation showed an average unit flow rate of 150 gpd/ERU. A factor of safety was added to produce the following unit flow rate:

Hydraulic Loading / ERU = 160 gallons/day

DAILY FLOW VARIATION

Flow in a wastewater collection system varies throughout the day. Available flow data were evaluated to determine the magnitude and timing of flow variation. Diurnal curves were developed using winter drinking water production data and validated using SCADA data from the wastewater collection system. As described in the previous paragraph, winter water use patterns are assumed to be representative of wastewater generation patterns.

Minimum flow generally occurs during the early morning between 3:00 AM and 5:00 AM. Maximum or peak flows typically occur in the late morning, between 7:00 AM and 9:00 AM, with a smaller peak occurring in the evening between 7:00 PM and 9:00 PM.

Peaking Factors

Peaking factors were developed for the City's wastewater collection system. The peaking factor is the ratio between the peak instantaneous flow and the average daily flow. These peaking factors were calculated based on winter drinking water production data (assuming winter production data mirrors indoor water use and wastewater generation) and validated using SCADA data from the wastewater collection system. Figure 4-1 shows the composite flow pattern.

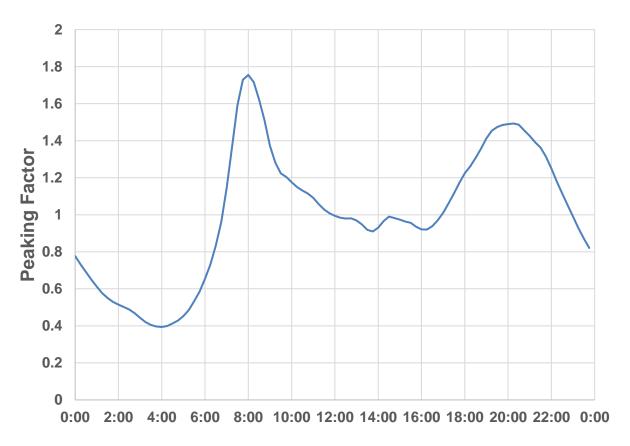


FIGURE 4-1 COMPOSITE FLOW PATTERN

A maximum peaking factor of 1.8 was identified for the system.

ANNUAL FLOW VARIATION

Some wastewater collection systems experience annual flow variations related to factors such as changing groundwater levels, rainfall, snowmelt, or seasonal changes in customer behavior. Flow records in the Vineyard system were evaluated to determine whether a clear seasonal trend exists. See Figure 4-2.

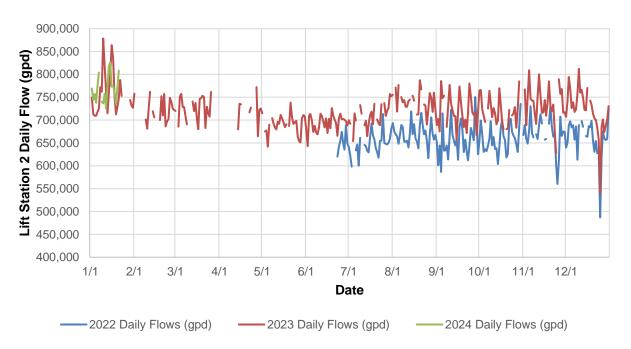


FIGURE 4-2 LIFT STATION 2 ANNUAL FLOW VARIATION

Observations from the data shown on Figure 4-2 are as follows:

- The two lowest days for wastewater generation were Christmas Day in 2022 and 2023.
- The highest observed flow rates occurred in January, possibly related to winter/spring rain events or snowmelt runoff.
- There is an overall upward trend in flow over the period of analysis, most likely related to the City's ongoing growth.
- Significant seasonal trends were not identified from the data available. Growth appears to be the controlling factor in overall trends, with inflow contributing to the highest flow events.

Infiltration

Infiltration is defined as groundwater which enters a wastewater collection system through pipe joints, cracks in the pipe, and leaks in manholes. Variations in infiltration may occur due to seasonal increases in groundwater level or storm events.

Flow data recorded by the SCADA system indicate that baseflows (minimum flows) in the system occur at approximately 3:00 AM. During the night, most homes and businesses are not contributing any flows to the sewers and, therefore, these baseflows are thought to represent infiltration in the sewers. SCADA data indicates a maximum baseflow of about 0.12 MGD. This value was assumed to represent the constant rate of infiltration in the system.

Inflow

Inflow is defined as surface water that enters a wastewater collection system during a rainfall or snowmelt event. Inflow can enter through rain gutters, foundation drains, area drains, cooling water discharges, manhole covers, cross connections from storm drains, and any other place where surface water can physically enter a sewer pipe.

Flow data were obtained from the SCADA system for 2023 for lift stations no. 1, 2, and 3. These data were compared with precipitation data from the MesoWest precipitation data repository (MesoWest) and were evaluated to identify the quantity of water entering the system before and immediately following major storm events. The largest inflow event observed occurred on August 2, 2023. Figure 4-3 shows flow rates at Lift Station 2 during the August 2 inflow event, as well as an average day prior to the storm.

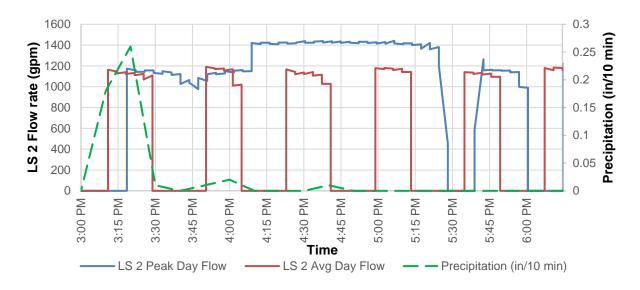


FIGURE 4-3 INFLOW EVENT AT LIFT STATION 2

Between approximately 3:00 PM and 3:30 PM, a short and intense rainstorm occurred. To accommodate inflows from the storm, Lift Station 2 had to run at a higher flow rate than normal, and ran continuously for a period of more than 2 hours. Without the storm event, it would have likely cycled on and off three times, and at lower flow rates. The difference between the amount of water pumped during the storm event and the average amount pumped during dry weather is estimated as the volume of inflow from the storm. The estimated flow rate for this storm event is 1.15 MGD for all areas of the system treated at TSSD. The normal average customer flows in the system are about 0.89 MGD, meaning that the estimated inflow of 1.15 MGD is more than average flows generated by customers. Therefore, the effects of storm events can create much larger than normal flows within the sewer system. Collection system pipes must be sized to accommodate these flows.

Similar patterns were observed during other storm events and at other lift stations, suggesting that inflow regularly occurs during precipitation events. Inflow and infiltration are believed to occur throughout the system.

LONG TERM FLOW VARIATION

Average annual wastewater flow rates typically vary from year to year. The most predictable changes in average annual flows are typically associated with changes in population.

Changes in weather patterns can result in changes in infiltration and water use patterns. Decreased precipitation results in lower groundwater levels and less infiltration. Water conservation measures implemented during droughts may result in reduction in both indoor and outdoor water use. A reduction in indoor use results in less domestic wastewater generation. A reduction in outside use for watering lawns and gardens may lead to lowering of the groundwater table and less infiltration.

In the case of Vineyard City, where a land drain system exists, weather pattern changes are not expected to significantly impact the long-term system flow variation. Long-term flow projections were based on the best available data and growth projections (see Chapter 5).

EXTRAORDINARY FLOWS

Extraordinarily high flows may occasionally occur due to industrial activities or large gatherings of people. HAL evaluated the City's flow data and did not find any unusual flows except those attributable to storms. It is recommended that some excess capacity be included in the sewers for such unexpected events (see further discussion in Chapter 6).

CHAPTER 5 WASTEWATER FLOW PROJECTIONS

PLANNING PERIOD

The periods of time evaluated using the hydraulic model include existing conditions, year 2033 (10-year scenario), and the projected buildout condition. Growth areas and growth projections were developed based on the best available data and in cooperation with City personnel.

GROWTH PROJECTIONS

Future population growth rates were estimated based on an evaluation of expected future land uses as indicated by Vineyard City planning documents and personnel from the Community Development Department. See Figure 5-1, below, for estimated growth in population and ERUs throughout the planning period for the entire system. Details regarding these projections are included in this chapter and in Appendix B.

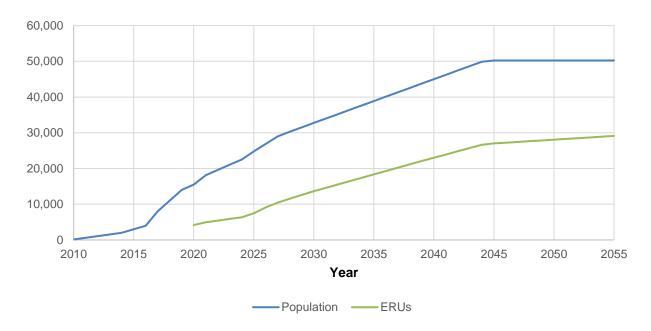


FIGURE 5-1 POPULATION AND ERU PROJECTIONS

Total ERUs in the wastewater collection system were projected for each planning period. See Table 5-1. Projections by year are listed in Appendix B.

TABLE 5-1 EXISTING CONDITIONS AND PROJECTIONS

Approximate Year	Cumulative Additional ERUs	Total ERUs	Description				
	Treated at TSSD						
2023	0	5,592	Existing System				
2033 (10-Year)	10,404	15,996	10-Year Development				
Buildout	23,051	28,643	System at Buildout				
	Treated at Orem	WRF					
2023	0	286	Existing System				
2033 (10-Year)	193	479	10-Year Development				
Buildout	193	479	System at Buildout				
	Entire System						
2023	0	5,878	Existing System				
2033 (10-Year)	10,598	16,476	10-Year Development				
Buildout	23,245	29,122	System at Buildout				

The following section includes discussion about the numbers listed in Table 5-1.

FLOW PROJECTIONS

The magnitude and location of projected future wastewater flows were estimated based on population projection and estimated inflow and infiltration. These projections considered future land use projections, the acreage of projected future development areas, the estimated wastewater generation for each land use type (expressed as ERUs/acre), and the level of service of 160 gpd/ERU.

Table 5-2 shows projected land uses in the Downtown area (see Figure 5-2), as indicated by the master developer of the site.

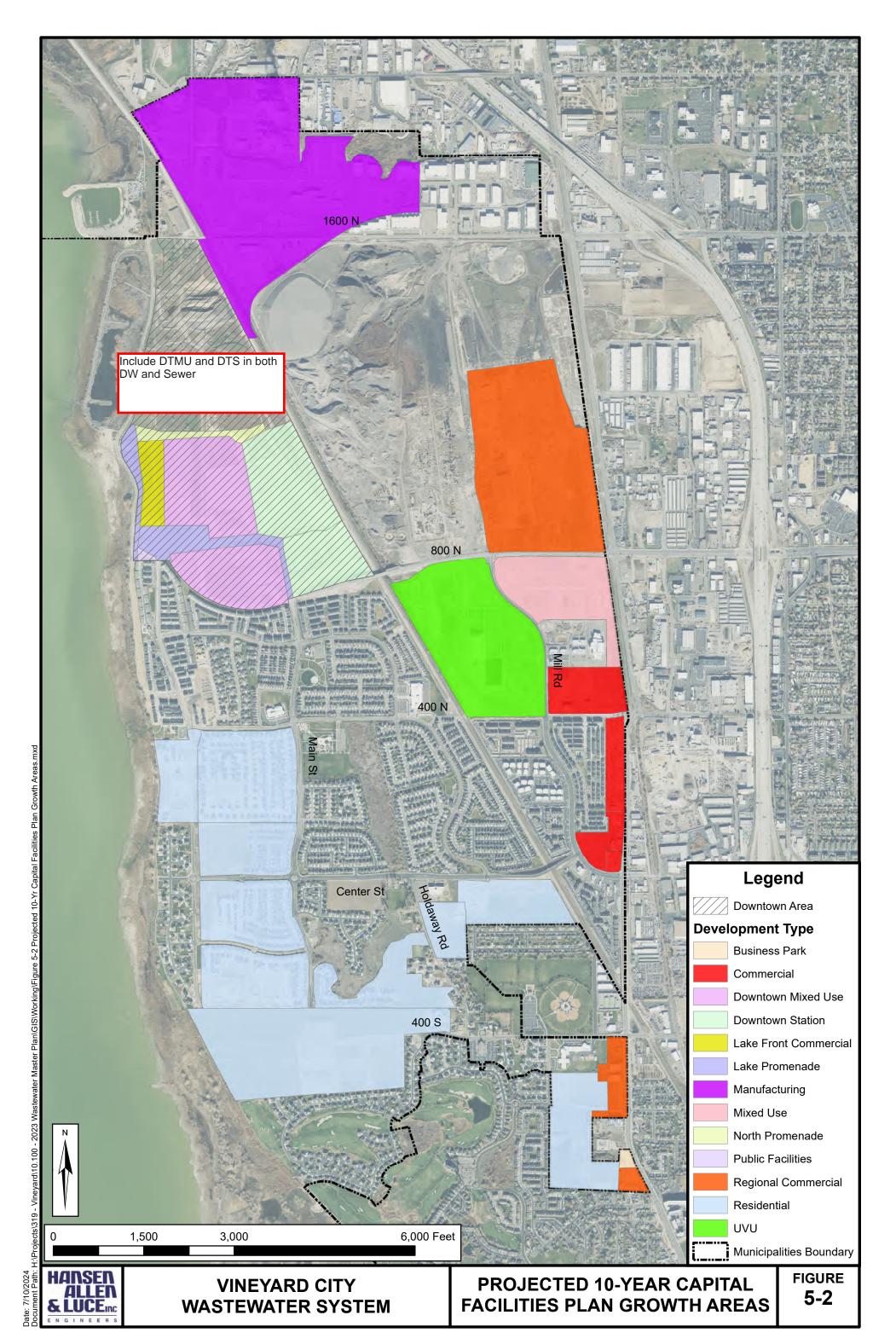


TABLE 5-2 PROJECTED FUTURE TOWN CENTER ERU DENSITIES

Downtown District	Area (ac)	Residential Units (count)	Commercial Area (s.f.)	Office Area (s.f.)
Downtown Station	73.9	5,600	200,000	450,000
Downtown Mixed Use	87.2	4,200	125,000	375,000
Lake Promenade	18.7	0	0	0
Lake Open Space	6.8	0	0	0
North Promenade	7.1	0	0	0
Village General	61.7	2,800	50,000	525,000
Geneva Park	29.4	0	0	0
Lakefront Commercial	38.5	1,400	125,000	150,000
Totals	323.3	14,000	500,000	1,500,000

Table 5-3 shows the projected ERU densities for future non-residential or mixed-use development. See Figure 5-2 for locations where growth is projected to occur within the next 10 years.

TABLE 5-3 PROJECTED FUTURE NONRESIDENTIAL OR MIXED-USE ERU DENSITIES

Land Use Type	Assumed Maximum Future Land Use Density ERUs/Acre	
Business Park	4	
Commercial	4	
Downtown Mixed Use	46	
Downtown Station	72	
Flex Office Industry	4	
Lakefront Commercial	38	
Manufacturing/Industrial	3	
Park	1	
Public Facilities	4.5	
Regional Commercial	4	
School	1.5	
The Forge (Mixed-Use)	23	
University	19	
Village General	44	

ERUs for future single-family or townhome residential areas were computed based on unit counts from approved development plans.

Buildout Infiltration

As growth occurs, infiltration is expected to increase as the number of manholes and length of pipes in the system increases. The 10-year projection for infiltration flow rates is estimated to be about 0.15 MGD. This was calculated based on the projected number of ERUs in the system in 10 years.

The total amount of infiltration estimated as buildout conditions occur is about 0.20 MGD. This was calculated using an area weighted ratio of existing and future developed areas. The current developed area is approximately 1,310 acres, whereas the current undeveloped amount of land is approximately 893 acres, meaning that 68% of land is currently developed. Assuming that the existing amount of infiltration (0.12 MGD) represents 68% of buildout infiltration, a total infiltration of 0.20 MGD is estimated at buildout.

The areas within the City boundaries that drain to Orem aren't very large and infiltration isn't expected to contribute greatly to existing and future flows. However, infiltration was estimated for these areas and was based on an infiltration per ERU ratio from Vineyard's service area's buildout scenario.

Buildout Inflow

As noted in Chapter 4, the estimate inflow to the TSSD is 1.15 MGD. As growth occurs, inflow is expected to increase due to construction of more manholes, pipes, and developed impervious areas. Total inflow in areas treated at TSSD is estimated to be about 1.50 MGD at buildout. This value was estimated using the existing rate of inflow and considering areas of undeveloped land. It is assumed that inflow will increase proportional to the amount of developed land until the buildout condition is reached. The estimated inflow rate of 1.50 MGD was compared to inflow experienced in nearby collection systems and found to be generally consistent after adjusting for system size.

The 10-year projection for inflow is estimated to be about 1.28 MGD for areas treated at TSSD. This was calculated based on the projected developed land in the system in 10 years and assuming that inflow will increase proportional to increases in total developed land area. Inflow was estimated for the areas treated at the Orem WRF assuming that inflow per ERU at buildout will be identical to that projected for the remainder of the system.

10-Year Flows

Areas where growth is expected to occur within the next 10 years were identified in consultation with the Community Development Department. Future wastewater flow rates were projected for these areas. A planned Central Utah Water Conservancy District water treatment plant is expected to be built within 10 years and its future wastewater generation was also included in ERU and flow projections.

Buildout Flows

Future wastewater flow rates were projected for the entire service area at the buildout condition. For each planned land use type in Vineyard, future wastewater flow projections were forecasted on a per-acre basis based on the characteristics of the planned land use at the developed condition (see Table 5-3). Values in Table 5-3 were used together with land use plans to forecast future ERUs at the buildout condition. See Figure 5-3 for projected land uses at the buildout condition.

Table 5-4 shows the existing and projected average wastewater generated in the areas treated by TSSD. The flows presented include the influence of inflow and infiltration but are not peaked.

Projected Peak Customer Flow Approximate Total Inflow Infiltration Generation **Daily Flow** Year **ERUs** (MGD) (MGD) (MGD) (MGD) 5,592 0.89 1.15 0.12 2023 2.16 2033 (10-Year) 15,996 2.56 1.28 0.15 3.99 4.58 0.20 Buildout 28.643 1.5 6.28

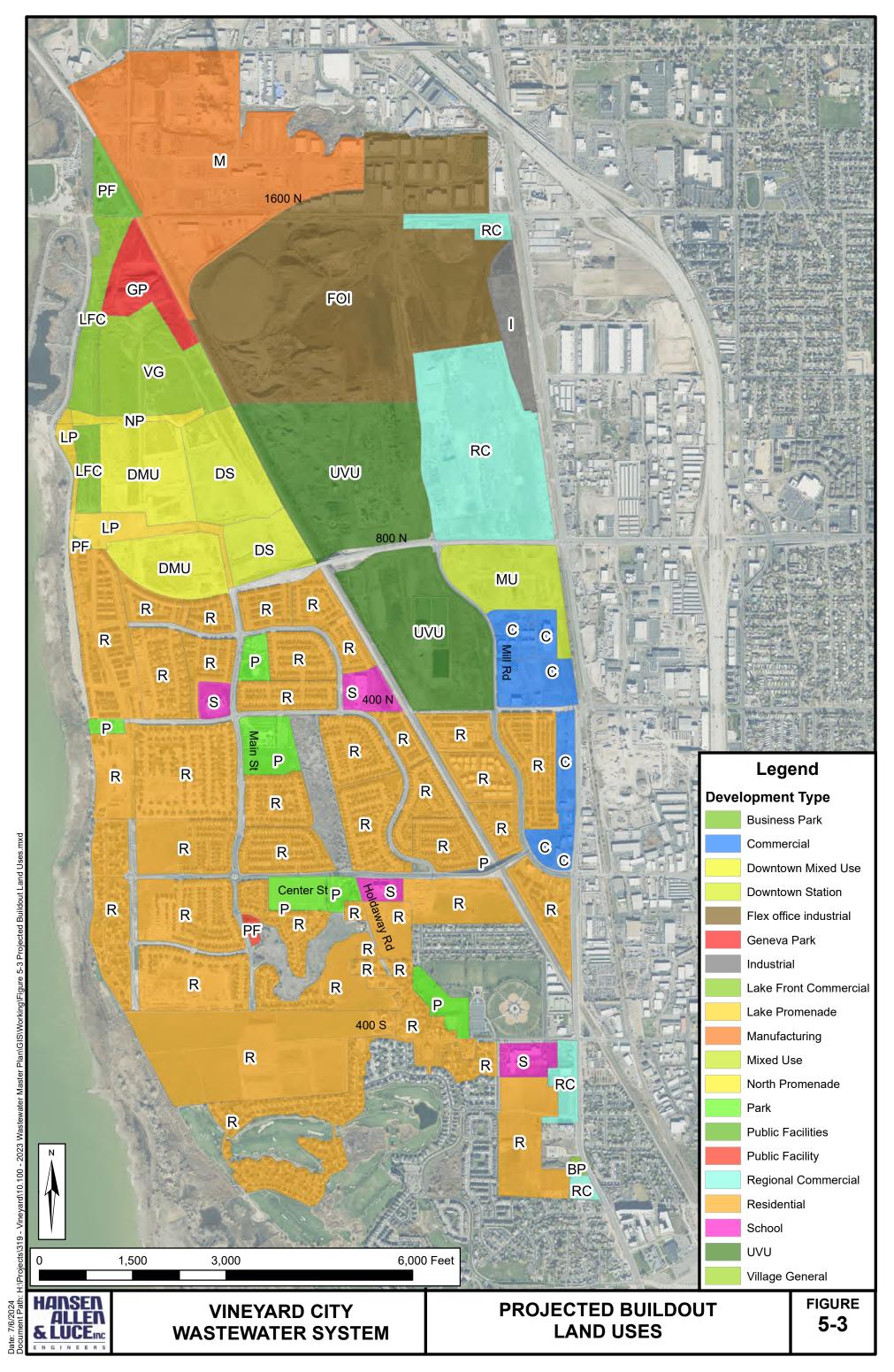
TABLE 5-4 SYSTEM FLOW PROJECTIONS TO TSSD

Table 5-5 shows the existing and projected average wastewater generated in the areas treated by the Orem WRF. The flows presented include the influence of inflow and infiltration but are not peaked.

Approximate Year	Total ERUs	Customer Flow Generation (GPD)	Inflow (GPD)	Infiltration (GPD)	Projected Peak Daily Flow (GPD)
2023	286	45,760	15,000	2,000	62,760
2033 (10-Year)	479	76,640	25,100	3,350	105,090
Buildout	479	76,640	25,100	3,350	105,090

TABLE 5-5 SYSTEM FLOW PROJECTIONS TO OREM

As shown in the tables above, substantial growth is expected to occur in Vineyard City. The total number of ERUs is estimated to grow almost three times what it is now within the next 10 years, and about five times by buildout.



CHAPTER 6 WASTEWATER COLLECTION SYSTEM EVALUATION

This chapter describes the wastewater collection system evaluation, including developing the model. The steps are as follows:

- · Choosing the model software
- Establishing the system layout in the model
- Developing the design criteria for the collection system
- Calibrating the model
- Creating different scenarios in the model
- Performing modeling
- Reviewing and evaluating results
- Identifying existing deficiencies
- Developing solutions

MODEL SELECTION

HAL and City personnel decided to use the Autodesk Storm and Sanitary Analysis (SSA) Model Software for the master plan hydraulic analysis. The software was selected because it is freely available with an AutoCAD license and because of its ability to import GIS data and export models to EPA SWMM (free distribution).

SYSTEM LAYOUT AND MODEL CONSTRUCTION

Information about how the model was built and calibrated is included in this section.

System Facilities

The wastewater collection system layout was provided by the City of Vineyard in a GIS data format. The GIS database included information about the material and diameter of collection system pipes, invert elevations of pipes, and manhole rim elevations. Each of these elements was imported into the model.

Design drawings and design reports provided layout information for each wet well and for the pumping characteristics of each lift station pump. HAL and City personnel reviewed the information together so that City personnel could verify that the information was correct.

Collection Areas

A collection area is defined as a geographic area that contributes flow to a common point in the collection system. Collection areas in the collection system consisted of generally 400 ERUs or less. This level of detail is standard in wastewater master planning. Delineated collection areas are shown on Figure 6-1. The total existing or projected future wastewater flow from each collection area was assigned to an associated model node.



Flow Allocation

Wastewater flow was spatially allocated in the model to match flow values and projections listed in Chapter 5. Infiltration and inflow were distributed across the system at locations shown on Figure 6-2. For the existing model, flows were distributed using billed wintertime drinking water sales data. Using this data assumes that winter water use is representative of indoor water use, and that there is little consumptive use of water indoors, which equates the sewer loading and the indoor water use. For future projections, wastewater flow generated by customers was allocated based on the planned future land use of the area and the projected density of ERUs per acre for each land use type.

Calibration

After the model was initially constructed, its output was compared to available SCADA data and recorded flow data to investigate how closely the model matched reality. Lift station pump curves were adjusted to better match observed flow rates. Scale factors were applied to the billed drinking water sales data to better match the amount discharged to the wastewater system rather than sold through the drinking water meter, because not everything sold through the drinking water meter makes it back to the sewer system. After making these adjustments, a reasonable match was achieved.

EVALUATION CRITERIA

A range of potential evaluation criteria and values were suggested by HAL and reviewed by the City. These inputs were used to create the hydraulic model and account for average customer wastewater generation, inflow and infiltration, daily flow variation, peak flows, and planning for buildout conditions. The criteria and values adopted for modeling are included in Table 6-1.

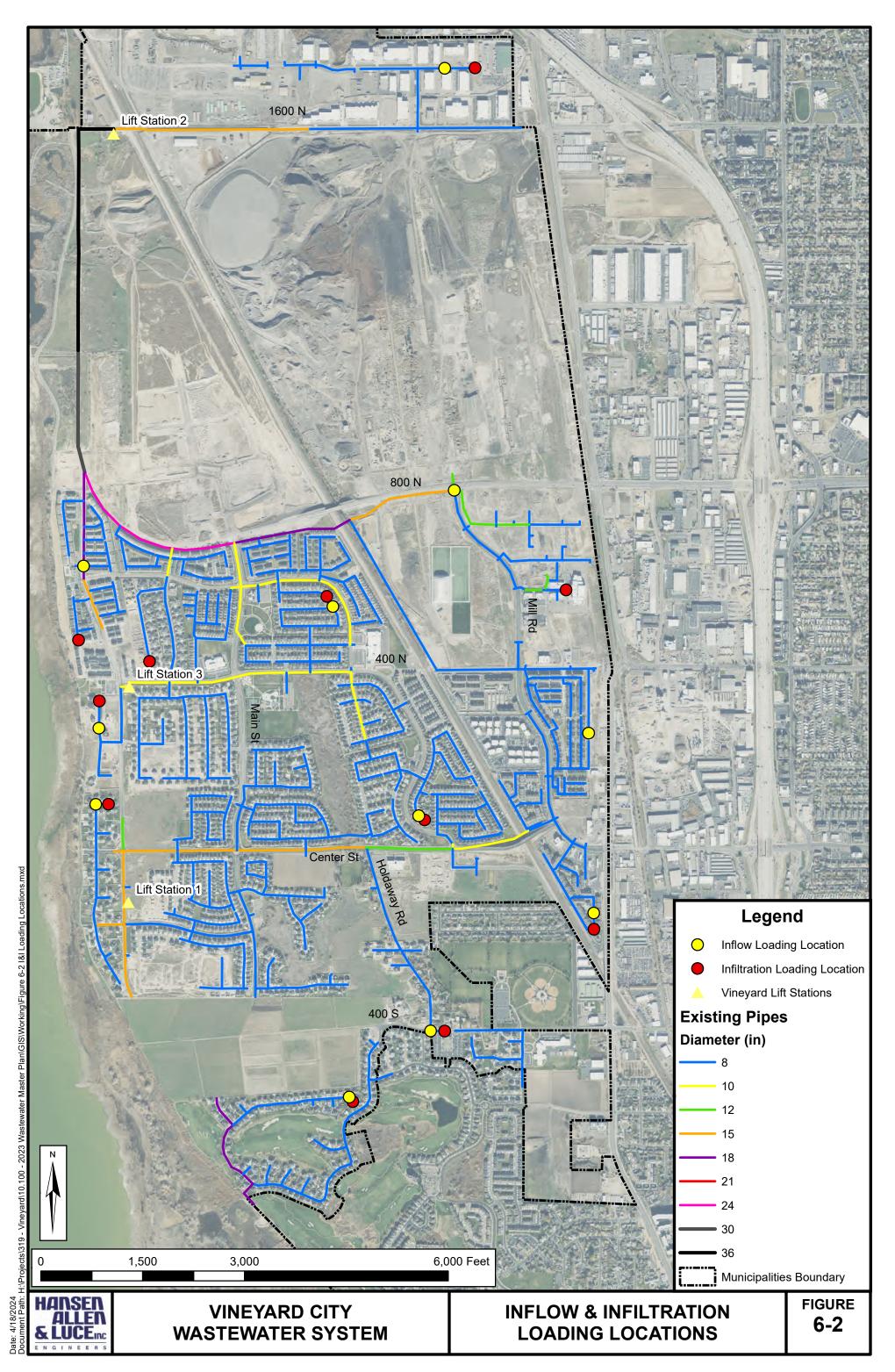


TABLE 6-1 EVALUATION CRITERIA

CRITERIA	VALUE OR ASSUMPTION
System Loading	Existing system loading was developed based on a level of service (LOS) of 160 gpd per ERU and observed infiltration and inflow. Future hydraulic loading was developed based on growth projections and the LOS of 160 gpd per ERU.
Daily Flow Variation	Diurnal curves were developed from winter drinking water production data and validated using data from the wastewater SCADA system.
Peak Flow	Peaking factors were developed from diurnal water demand curves. Predicted peak flows were developed from the AutoCAD SSA model.
Inflow and Infiltration	Inflow and infiltration values were estimated by reviewing flow data collected at the lift stations both for dry-weather periods and during storm events. Infiltration and inflow were distributed throughout the City. Modeled values are as follows: Existing Inflow = 1.15 MGD Buildout Inflow = 1.5 MGD Existing Infiltration = 0.12 MGD Buildout Infiltration = 0.20 MGD
Future Planning Periods	Years 2033 (10-year) and estimated buildout.
Land Use & Population Projections	Land uses in undeveloped areas were assumed to occur as specified in the Vineyard City General Plan. Where available, development plans were used to further refine projections for future land use. Population projections were based on historic trends and projected rates and timing of growth as identified by the Community Development Department.
Pipe Capacity (Depth/Diameter)	Roughness Coefficient = 0.013 Manning's n Maximum d/D = 0.5 for all pipes smaller than 12 inches in diameter. Maximum d/D = 0.75 for all pipes larger than or equal to 12 inches in diameter.

MODEL SCENARIOS

Three modeling scenarios were developed and evaluated for the City's wastewater collection system as shown in Table 6-2.

TABLE 6-2 MODEL SCENARIOS

SCENARIO	DESCRIPTION
Existing	The existing scenario was used to identify deficiencies in the wastewater collection system, and to establish a baseline for evaluation of future conditions.
Buildout	The buildout scenario includes projected future wastewater flows but only existing infrastructure. It was used to identify areas where the buildout projected flows exceed the existing pipe capacity criteria or lift station capacity.
Buildout Corrected	The corrected scenario includes system improvements that accommodate all projected buildout flows.

PEAK HYDRAULIC LOADING

The hydraulic models were used to analyze the collection system. For each scenario, projected average daily flow rates, infiltration, and inflow were spatially allocated in the model. The models applied peaking factors to generate peak flow rates at the lift stations. The existing and future peak flow rates are listed in Table 6-3.

TABLE 6-3 PEAK HYDRAULIC LOADING

Planning Period	System Hydraulic Loading to TSSD (MGD) ¹	System Hydraulic Loading to Orem (MGD) ²
Existing Conditions	3.4731	0.0676
2033	4.5045 ³	0.1349 ³
Buildout	9.5465	0.1349

- 1. Modeled peak flow rates entering Lift Station 2.
- 2. Modeled peak flow rates leaving Vineyard to Orem.
- 3. Calculated peak flow rates.

It should be noted that results listed in Table 6-3 are peak instantaneous system hydraulic loading, whereas results in Table 5-4 are daily hydraulic loading values (including infiltration and inflow) but are not peaked.

EXISTING DEFICIENCIES

The maximum depth ratio is the ratio between the maximum flow depth in the sewer and the diameter of the pipe (d/D). Pipes less than 12 inches in diameter were considered deficient if, in the model, the d/D exceeded 0.5 during peak flow conditions. Pipes 12 inches in diameter or larger were considered deficient if, in the model, the d/D exceeded 0.75 during peak flow conditions or if the pipe is surcharged.

Pipe capacity deficiencies identified in the Existing Scenario models are summarized in Table 6-4 along with the recommended solutions. Existing deficiencies are shown on Figure 6-3.

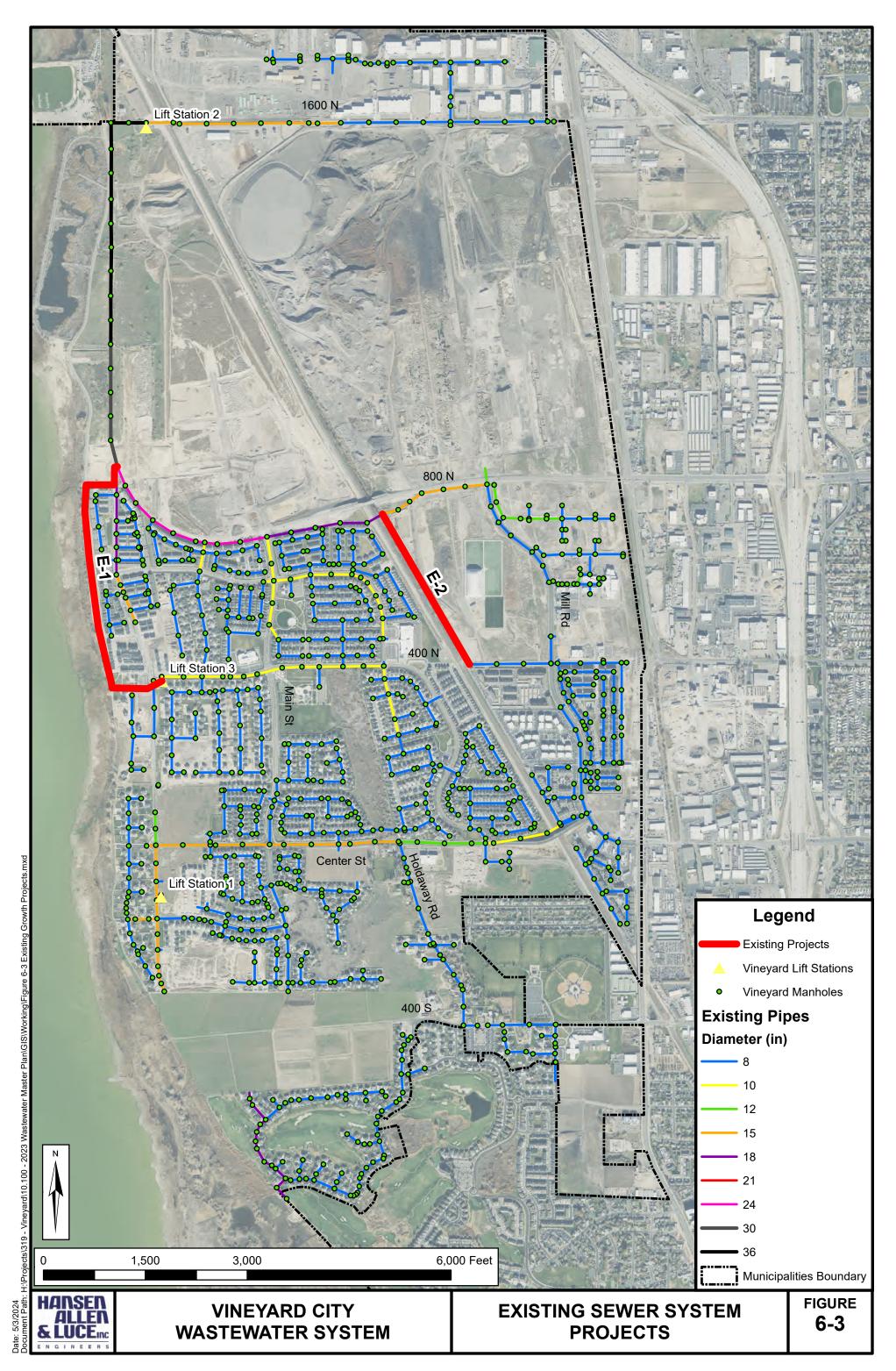


TABLE 6-4 EXISTING PIPE CAPACITY DEFICIENCIES AND SOLUTIONS

PROJECT ID	LOCATION	ISSUE	RECOMMENDED SOLUTION
E-1	Mallard Drive between 400 North and 800 North	First three manholes surcharging just downstream of Lift Station 3, as observed by City crew. The rest of Mallard Drive is over capacity.	Install 4,500 ft of 6" force main to reroute flows to 800 North.1
E-2	Next to railroad between 400 North and 800 North	d/D > 0.5 (0.81)	Replace 2,560 ft of existing 8" gravity line with 12" gravity line.1

^{1.} Lengths are approximate. Alignments should be refined with further study.

BUILDOUT LIFT STATION CAPACITY

Lift Station 1 and Lift Station 3 have adequate capacity for existing conditions. However, Lift Station 2 is currently running at capacity. The capacity of Lift Station 2 is not projected to be sufficient for buildout system demands. Table 6-5 shows future lift station rated capacity, buildout requirements, and future surplus or deficit capacity. Refer to Table 2-2 for existing lift station inventory.

TABLE 6-5 BUILDOUT LIFT STATION REQUIREMENTS

Lift Station Number	RATED CAPACITY (GPM)	Buildout Peak Hour Requirement (GPM)	Future Surplus/ Deficit
1	2,290	865	1,425
2	1,200	6,580	-5,380
3	740	405	335

It is recommended that the City monitor flows in Lift Station 2 as growth occurs and increase pump capacity when demand nears capacity. It is also recommended that a third force main be constructed for redundancy and future needed capacity. Currently, Lift Station 2 is discharging through one 14-inch force main and has a dry 14-inch force main and room for two additional pumps to help accommodate future flows.

LIFT STATION OPTIMIZATION

Ways to optimize the performance of lift stations and their associated downstream pipes are discussed in this section.

Lift Station 1

Lift Station 1 discharges into a 15-inch gravity line on 300 West. The current flow rate in the force main results in d/D ratios slightly above the level of service criterion in the gravity line directly downstream. Using VFD control to run Lift Station 1 at a lower flow rate would eliminate this deficiency. According to modeling results, running the VFD at 45 hertz (corresponding to the lowest functional speed setting) produces maximum flow rates up to approximately 865 gpm, which is sufficient to maintain the level of service in the downstream gravity pipes.

Lift Station 3

Gravity pipes downstream of the force main associated with Lift Station 3 surcharge and exceed the d/D criterion in the level of service. Initially, adjusting the VFD control of the lift station pumps was investigated to see if it might be possible to pump at a lower flow rate for a longer period of time; however, the existing pumps are already running at their lowest practical VFD setting. Replacing the existing pumps with ones with a smaller flow rate was investigated; however, it was found that pumping at a lower flow rate would cause the wet well to back up during periods of high flow. The following alternatives were identified as ways to address surcharging and deficient d/D ratios downstream of the force main:

- Replace the existing pipes in Mallard Drive with larger gravity pipes (approximately 2,300 feet of 15-inch diameter gravity pipe).
 - Estimated cost: \$1,280,000.
- Re-route the Lift Station 3 force main to the main trunkline in 800 North (approximately 4,500 feet of 6-inch diameter pressurized pipe).
 - Estimated cost: \$1,150,000.

Estimated construction costs for both options are similar. Re-routing flows through a new force main is the recommended alternative because construction impacts would likely be less with this option.

LIFT STATION PROJECT PHASING

Lift Station 2 is currently running at capacity and needs upgrades to accommodate continued growth. Lift Station 2 has been constructed with the ability to utilize two 14-inch force mains to convey wastewater to the TSSD outfall. Currently, one of the force mains is being used. The other is available for use as growth occurs. Lift Station 2 also has room for two additional pumps to help accommodate future flows.

Currently the two existing pumps have a total capacity of about 2,400 gpm. For the next phase of operations, two new pumps with a design capacity of about 1,500 gpm each should be installed. This would give the lift station a total capacity of about 5,400 gpm, with a rated capacity of 3,900 gpm. However, confirmation of the above approach is needed before implementation. The City should conduct a detailed piping and electrical equipment review prior to beginning design.

The two existing pumps will need to be replaced sometime in the future with two 1,500 gpm pumps. By the year 2033, peak flows entering Lift Station 2 are estimated to be around 3,900 gpm, which would be when the lift station would need to upgrade the two existing pumps. It is recommended that in 2030, the City begin designing and construction of the lift station upgrade so that it is ready by the time it is needed.

With four 1,500 gpm pumps, the total capacity would be 6,000 gpm, with a rated capacity of 4,500 gpm. By the year 2036, peak flows entering Lift Station 2 are estimated to be around 4,500 gpm. At this point, a new lift station will need to be built.

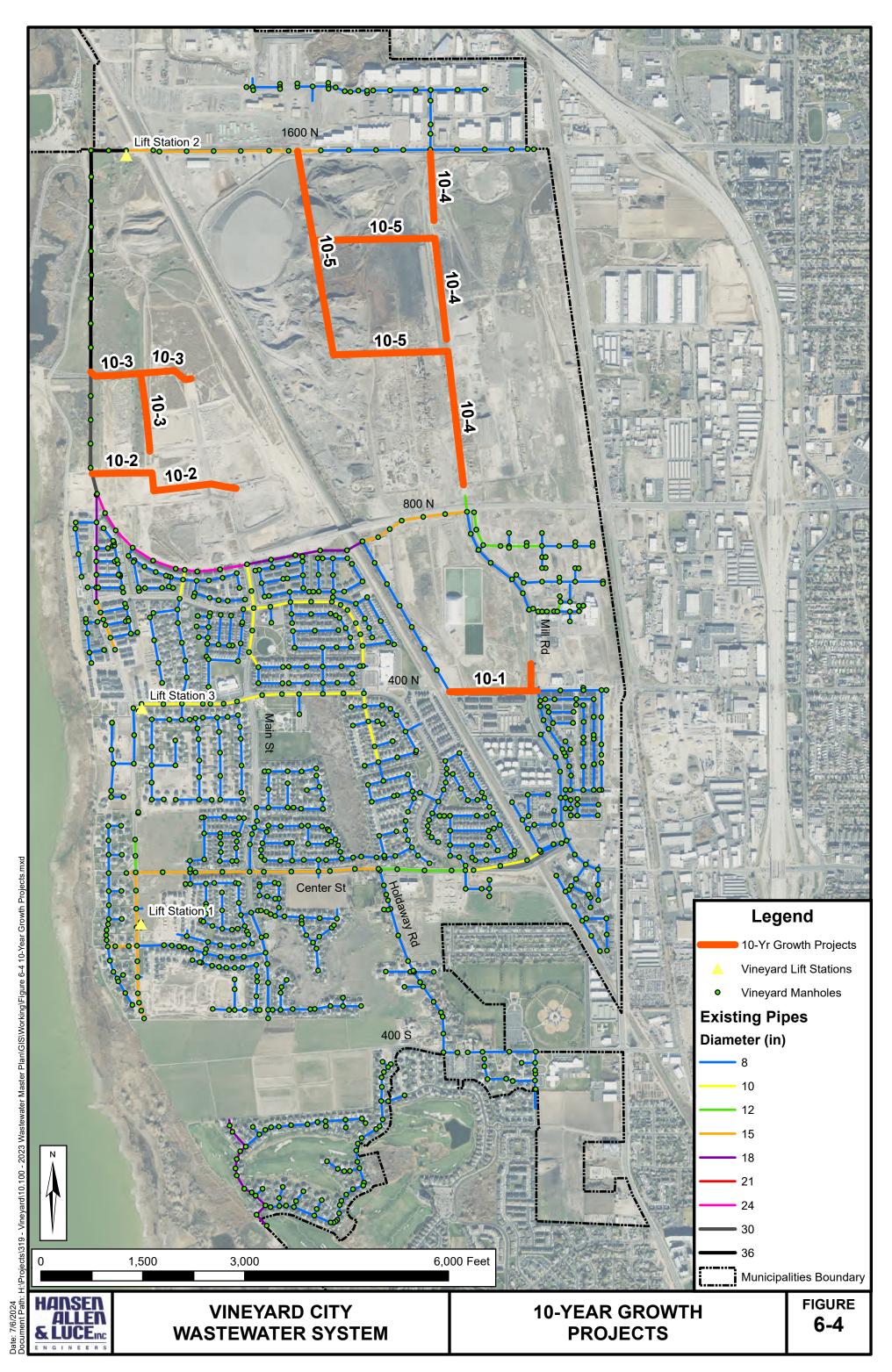
FUTURE IMPROVEMENTS

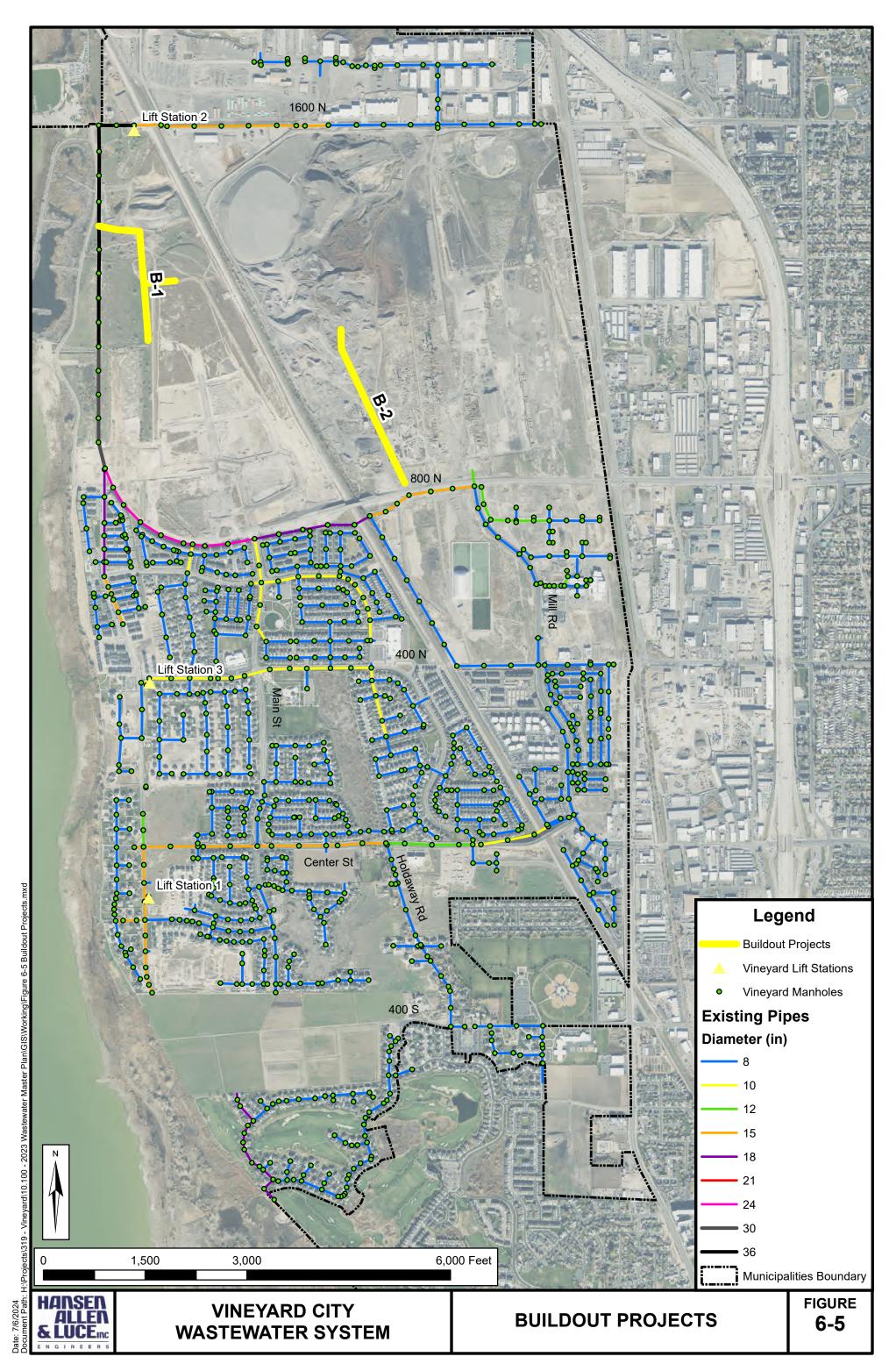
Future improvements were identified using the hydraulic model and are designed to accommodate projected future wastewater flows. Pipe capacity improvements required to serve projected future growth are shown on Figures 6-4 and 6-5 and are summarized in Table 6-6.

TABLE 6-6 FUTURE 10-YEAR AND BUILDOUT IMPROVEMENT PROJECTS

PROJECT ID	LOCATION	ISSUE	SOLUTION			
	10-Year Projects					
10-1	400 N between Mill Road and the railroad; and Mill Road from 400 N to about 470 N	d/D > 0.5 (1)	Install 1,700 ft of 10" gravity line. 1			
10-2	Future downtown area	Future development	Install approximately 2,400 ft of 15" gravity line.1			
10-3	Future downtown area	Future development	Install 1,200 ft of 12" gravity line and 4,600 ft of 15" gravity line.1			
10-4	Future Mill Road	Future development	Install 4,500 ft of 8" gravity line.1			
10-5	Future East Geneva area	Future development	Install 1,800 ft of 8" gravity line, 1,700 ft of 10" gravity line, and 3,050 ft of 15" gravity line.1			
10-LS2	Lift Station 2	Future development	Install two new pumps.			
		Buildout Projects				
B-1	Future downtown area	Future development	Install 2,100 ft of 10" gravity line and 2,500 ft of 15" gravity line.1			
B-2	Future UVU area in East Geneva	Future development	Install 2,500 ft of 12" gravity line.1			
B-LS2-1	Lift Station 2	Future development	Replace two existing pumps.			
B-LS2-2	Lift Station 2	Future development	Build new lift station.			
B-LS2-FM	From Lift Station 2 to TSSD	Future development	Install 9,800 ft of 14" force main.1			

^{1.} Lengths are approximate and will be refined further as development plans in these areas are better defined.





WATCH LIST

The model shows several areas that show slight deficiencies related to pipe slope. These may be actual deficiencies, or may be the result of limitations in the accuracy of available data. In these areas, flow monitoring is recommended to verify the occurrence or extent of any deficiency. Elevation data should also be verified to confirm that the model is representing the pipes correctly.

For these areas, a "watch list" was created. Capital projects to address these types of deficiencies should only be planned for after the deficiency has been field-verified. Projects to address this type of deficiency are found in Table 6-7 and on Figure 6-6.

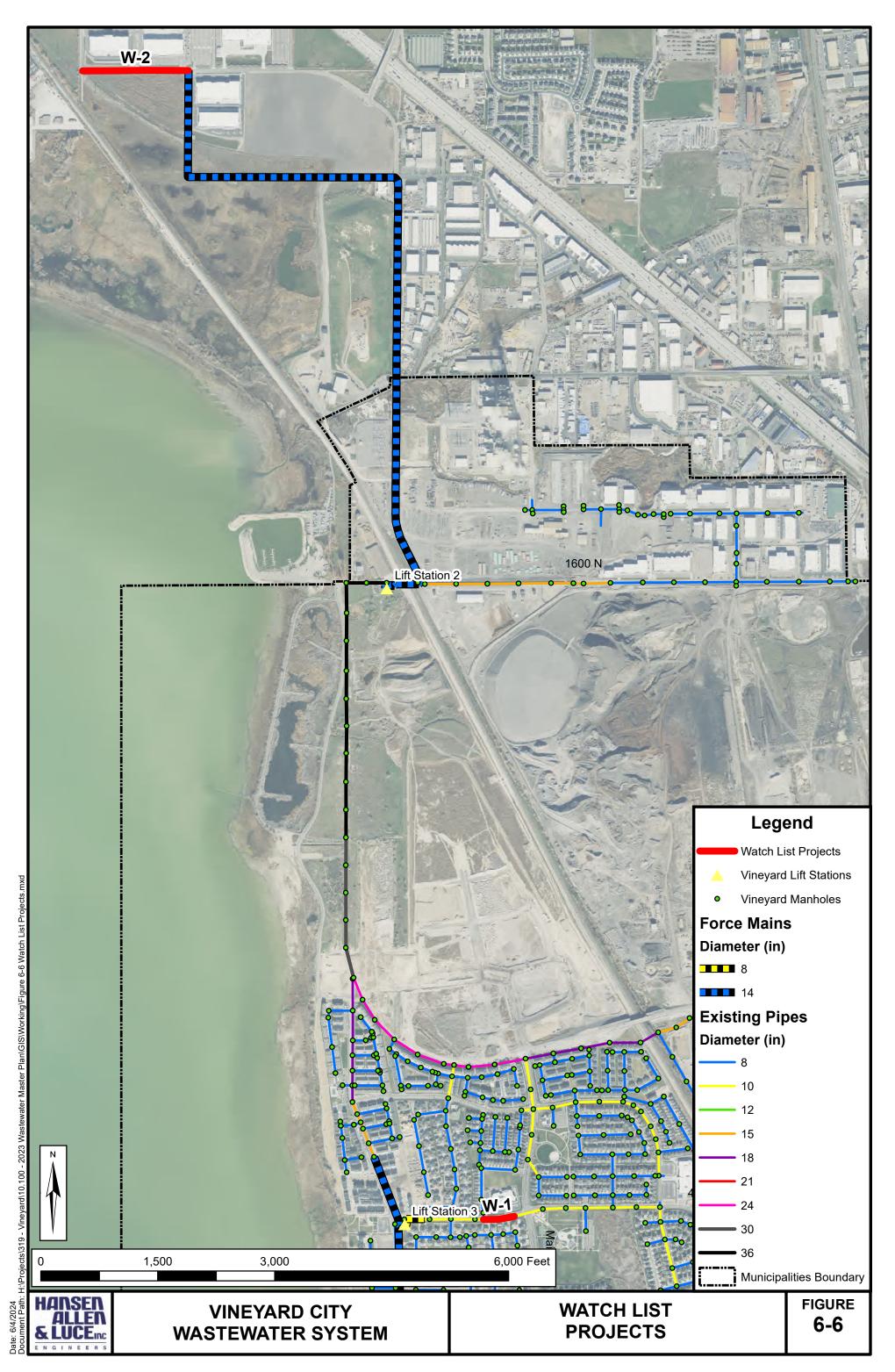
TABLE	6-7	WATCH	LIST	PRO	JECTS
--------------	-----	-------	------	------------	-------

PROJECT ID	LOCATION	ISSUE	SOLUTION
W-1	400 N (Vineyard street grid) in front of the Freedom Preparatory Academy school	d/D > 0.5 (0.57) under existing and future conditions	Install 400 ft of 12" gravity line. 1
W-2	400 N from 2800 W to ~2585 W (Lindon street grid; east of TSSD)	d/D > 0.75 (0.78) under future conditions	Install 1,400 ft of 36" gravity line.1

^{1.} Lengths are approximate and should be refined with further study.

CONTINUED MODEL UPDATES

In order to ensure that the hydraulic model is up to date and is providing accurate collection and system performance information, the model should continually be updated with new information and re-calibrated to match current conditions. The model can then continue to be used to evaluate planned developments and refine the timing and characteristics of master planned projects as additional information becomes available.



CHAPTER 7 OPERATIONS AND MAINTENANCE ALTERNATIVES

Recommendations for key operations and maintenance procedures have been developed. Many of these recommendations are a continuation of procedures already in effect. A discussion is included below, along with a recommendation for continued practice.

SYSTEM MONITORING

It is difficult to determine the condition of the wastewater collection system based on age alone. The typical design life for a sanitary sewer is between 50 and 100 years. Factors affecting design life may include pipe material, soil conditions and quality of construction. The City uses sewer video inspection technology to evaluate the structural integrity of the pipes in the sewer network. Sewer video inspection is very useful at identifying cracks, holes, offset joints, erosion, low points in pipes, and significant inflow/infiltration. It is recommended that the City continue the system video schedule and use the inspection to plan for future repair projects.

PIPELINE IMPROVEMENTS

The following improvement alternatives are typically considered when addressing pipeline deficiencies.

Cleaning

If the slope of the pipe is insufficient to provide adequate flow velocity, deposition of solids will occur. Solids deposition decreases pipe capacity. Several locations within the City's collection system are relatively flat, resulting in slopes less than that necessary to produce scour velocity. It is recommended that City crews continue cleaning pipes in the system on a regular schedule. Problem areas should be cleaned more frequently.

Replacement Sewers

Historically, where pipe capacity has been identified as being insufficient, the typical solution has been to provide additional capacity by replacing the existing sewer with a larger sewer. Portions of the recommended projects are replacement projects.

Bypass Sewers/Re-routing Flows

While replacement of an existing sewer may be appropriate when the existing sewer is structurally inadequate, construction of a bypass or parallel sewer to supplement the capacity of the existing sewer may be a less expensive alternative.

New Sewers

New sewers are often the only option to collect flows from future development or previously inaccessible areas. Because some future growth within City's service area is expected to occur

in some areas without existing sewer networks, new sewer networks are expected to be constructed in the foreseeable future.

Alternative Construction Technologies

Within the last few years, several alternative technologies have become popular when sewers need to be replaced, when pipeline capacity needs to be increased, or when there are significant constraints to more conventional construction methods. Typical alternative technologies include:

New Construction

- Steered Auger Boring (Directional Drilling)
- Micro-tunneling

Sewer Pipe Rehabilitation

- Cured-in-Place Pipe
- Slip Lining
- Pipe Bursting
- Pipe Eating (drilling away the old pipe as a new pipe is installed)
- Thermoforming (Fold and Form)

COMPARISON OF IMPROVEMENT ALTERNATIVES

Sewers

For the purposes of this report, sewer replacements were assumed to be open-cut.

Future Considerations

During design of the recommended improvements, the City will review all assumptions, compare improvement alternatives, and will decide on the most cost-effective and appropriate improvement method at that time.

ELIMINATE UNNECESSARY WASTEWATER

One way to increase capacity and reduce treatment costs in the wastewater collection system is to identify and eliminate inflow and infiltration. The City produces about 1.15 MGD of inflow and another 0.12 MGD of infiltration. During a peak event, approximately 38% of the wastewater collected comes from inflow and infiltration.

CHAPTER 8 CAPITAL IMPROVEMENTS PLAN

Recommended capital improvements and their estimated construction costs were identified based on the findings described in the previous chapters. These recommendations are intended to correct existing deficiencies and support population growth and development.

PROJECT COST ESTIMATES

Typical representative unit costs were used to develop the project construction cost estimates. Sources of typical unit costs included HAL's bid tabulation records for similar recent projects in Utah, and the 2023 RS Means Heavy Construction Cost Index. Project cost estimates and related material are included in Appendix C.

ACCURACY OF COST ESTIMATES

When considering cost estimates, there are several levels or degrees of accuracy, depending on the purpose of the estimate and the percentage of detailed design that has been completed. The following levels of accuracy are typical:

Type of Estimate	<u>Accuracy</u>
Master Plan	-50% to +100%
Preliminary Design	-30% to +50%
Final Design or Bid	-10% to +10%

For example, at the master plan level (or conceptual or feasibility design level), if a project is estimated to cost \$1,000,000, then the accuracy or reliability of the cost estimate would typically be expected to range between approximately \$500,000 and \$2,000,000. While this may not seem very accurate, the purpose of master planning is to develop general sizing, location, cost and scheduling information on a number of individual projects that may be designed and constructed over a period of many years. Master planning also typically includes the selection of common design criteria to help ensure uniformity and compatibility among future individual projects. Details such as the exact capacity of individual projects, the level of redundancy, the location of facilities, the alignment and depth of pipelines, the extent of utility conflicts, the cost of land and easements, the construction methodology, the types of equipment and material to be used, the time of construction, interest and inflation rates, permitting requirements, etc., are typically developed during the more detailed levels of design.

At the preliminary design level, some of the aforementioned information will have been developed. Major design decisions such as the size of facilities, selection of facility sites, pipeline alignments and depths, and the selection of the types of equipment and material to be used during construction, will typically have been made. At this level of design, the accuracy of the cost estimate for the same \$1,000,000 project would typically be expected to range between approximately \$700,000 and \$1,500,000.

After the project has been completely designed, and is ready to bid, all design plans and technical specifications will have been completed and nearly all of the significant details about the project should be known. At this level of design, the accuracy of the cost estimate for the same \$1,000,000 project would typically be expected to range between approximately \$900,000 and \$1,100,000.

RECOMMENDED IMPROVEMENT PROJECTS

Factors considered as recommended projects were identified including the following:

- Input by City sewer system operation personnel regarding their experience with, and opinions regarding, the deficiency and potential solutions.
- Input from City management regarding a wide range of issues, including development schedules, budgeting issues and coordination with other public works projects.
- Priority indicated by hydraulic modeling
- Project cost estimates

Table 8-1 identifies projects recommended to correct existing deficiencies. Table 8-2 identifies projects recommended to provide capacity for projected future 10-year and buildout flows in the wastewater system.

TABLE 8-1 EXISTING IMPROVEMENT PROJECTS AND COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹
E-1	Install 4,500 ft of 6" force main.	\$1,147,000
E-2	Install 2,560 ft of 12" gravity line.	\$1,345,000
	TOTAL	\$2,492,000

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

TABLE 8-2 FUTURE IMPROVEMENT PROJECTS & COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹	
	10-Year Projects		
10-1	Install 1,700 ft of 10" gravity line.	\$858,000	
10-2	Install 2,400 ft of 15" gravity line.	\$1,337,000	
10-3	Install 1,200 ft of 12" gravity line and 4,600 ft of 15" gravity line.	\$3,193,000	
10-4	Install 4,500 ft of 8" gravity line.	\$2,192,000	
10-5	Install 1,800 ft of 8" gravity line, 1,700 ft of 10" gravity line, and 3,050 ft of 15" gravity line.	\$3,434,000	
10-LS2	Install two new pumps at Lift Station 2.		
Buildout Projects			
B-1	Install 2,100 ft of 10" gravity line and 650 ft of 15" gravity line.	\$1,422,000	
B-2	Install 2,500 ft of 12" gravity line.	\$1,313,000	
B-LS2-1	Replace two existing pumps at Lift Station 2.	\$192,000	
B-LS2-2	Build new lift station.	\$3,480,000	
B-LS2-FM	Install 9,800 ft of 14" force main.	\$3,475,000	
	TOTAL	\$21,088,000	

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

TABLE 8-3 WATCH LIST PROJECTS AND COST ESTIMATES

PROJECT ID	DESCRIPTION	COST ¹
W-1	Install 400 ft of 12" gravity line.	\$210,000
W-2	Install 1,400 ft of 36" gravity line.	\$1,215,000
	TOTAL	\$1,425,000

¹ All costs include 20% for engineering, administrative costs, and contingencies. Costs are shown in 2023 dollars.

Before constructing each of these projects, additional flow monitoring and data collection (including survey to verify elevations) should occur to verify current conditions and confirm the need for the project.

FINANCIAL CONSIDERATIONS

Cost for construction, materials, and labor have changed significantly in the last several years. To maintain adequate funding for the wastewater collection system, the following actions are recommended:

- Periodically review and update sanitary sewer rates
- Regularly update impact fees to fund projects to meet future needs

SUMMARY OF CAPITAL FACILITY RECOMMENDATIONS

Recommendations

- Plan for and allocate funds for the recommended projects.
- Maintain and replace aging or inadequate infrastructure.
- Periodically review sanitary sewer user rates.
- Regularly update impact fees to fund projects to meet future needs.
- Periodically perform model reviews.
- Update the master plan and capital facilities plan regularly and on an as-needed basis.
- Eliminate infiltration and inflow to reduce flows and increase capacity. Reduce inflow by improving stormwater conveyance. Consider discontinuing use of vented manholes in problem areas.
- Monitor flows in areas of concern and where projects are recommended.
- Lift Station 2 is currently running at capacity and serves areas experiencing significant growth. Pump capacity should be increased in the near future. In the longer term, the City should consider constructing an additional force main from Lift Station 2 to the TSSD outfall to provide redundancy.

REFERENCES

MesoWest website. Retrieved October 28, 2023, from mesowest.utah.edu

RS Means, 2023. *RS Means Heavy Construction Cost Data*. Norwell, MA: Construction Publishers & Consultants.

Utah Division of Administrative Rules. 2023. *Utah Administrative Code, R317-3*. The Department of Administrative Services.

Timpanogos Special Service District website. Retrieved April 10, 2024, from https://timpssd.org/

APPENDIX A Flow Study Results

Custom MH0910 471 N Mallard Dr. 02/08/2024 01:39 PM - 03/05/2024 08:10 AM

(Downstream of Lift Station 3)

Data Channel	Maximum Time	Maximum	Minimum Time	Minimum	Average	Total
Lvl	02/08/2024 07:51	5.34 (in)	02/11/2024 01:22	0.56 (in)	1.54 (in)	
Vel	02/14/2024 04:06	5.24 (fps)	02/09/2024 01:54	0.00 (fps)	1.45 (fps)	
Flow	02/08/2024 08:15	492.22 (gpm)	02/09/2024 01:54	0.00 (gpm)	59.65 (gpm)	2213608.9 (gal)

03/06/2024 06:03 AM

Custom MH0910 471 N Mallard Dr. (Downstream of Lift Station 3)

02/01/2024 01:19 PM - 02/08/2024 01:38 PM

Data Channel	Maximum Time	Maximum	Minimum Time	Minimum	Average	Total
Lvl	02/05/2024 08:04	4.87 (in)	02/04/2024 05:27	0.09 (in)	1.33 (in)	
Vel	02/04/2024 05:33	5.48 (fps)	02/02/2024 12:39	0.00 (fps)	1.67 (fps)	
Flow	02/05/2024 09:13	439.25 (gpm)	02/02/2024 12:39	0.00 (gpm)	73.44 (gpm)	741668.4 (gal)

02/09/2024 12:42 PM

Custom MH 0270

southwest UVU dome

01/01/2024 12:00 AM - 01/31/2024 08:30 AM

Data Channel	Maximum Time	Maximum	Minimum Time	Minimum	Average	Total
Lvl	01/14/2024 11:15	3.42 (in)	01/07/2024 05:45	1.31 (in)	2.29 (in)	
Vel	01/20/2024 01:15	3.78 (fps)	01/07/2024 05:00	1.08 (fps)	2.68 (fps)	
Flow	01/14/2024 12:00	226.33 (gpm)	01/07/2024 05:00	17.99 (gpm)	106.48 (gpm)	4654369.9 (gal)

01/31/2024 11:18 AM

Custom MH 0270

southwest UVU dome

12/13/2023 12:00 PM - 12/31/2023 11:59 PM

Data Channel	Maximum Time	Maximum	Minimum Time	Minimum	Average	Total
Lvl	12/17/2023 12:45	3.32 (in)	12/18/2023 04:30	1.25 (in)	2.26 (in)	
Vel	12/31/2023 12:00	3.63 (fps)	12/26/2023 05:00	1.07 (fps)	2.66 (fps)	
Flow	12/17/2023 12:15	211.38 (gpm)	12/26/2023 05:00	16.67 (gpm)	103.54 (gpm)	2758323.4 (gal)

01/10/2024 08:07 AM

Custom MH#0054 sleepy ridge

03/05/2024 11:45 AM - 03/27/2024 01:30 PM

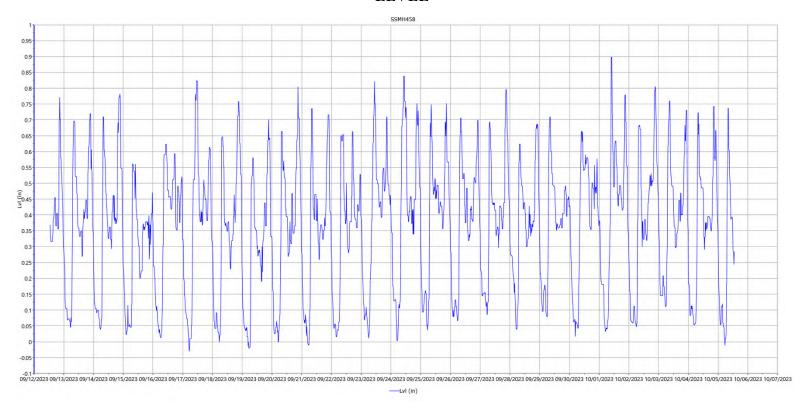
Data Channel	Maximum Time	Maximum	Minimum Time	Minimum	Average	Total
LvI	03/10/2024 10:00	1.54 (in)	03/05/2024 12:00	0.33 (in)	0.78 (in)	
Vel	03/20/2024 06:45	2.14 (fps)	03/21/2024 03:00	0.00 (fps)	1.39 (fps)	
Flow	03/10/2024 11:00	38.52 (gpm)	03/21/2024 03:00	0.00 (gpm)	11.43 (gpm)	363198.3 (gal)

03/28/2024 06:16 AM

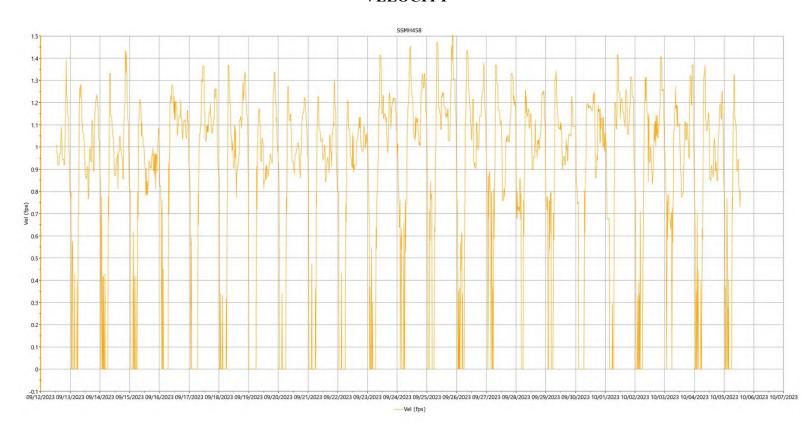
FLOW METER 12 Sept To 05 Oct 2023

(Sleepy Ridge-Goes to Orem)

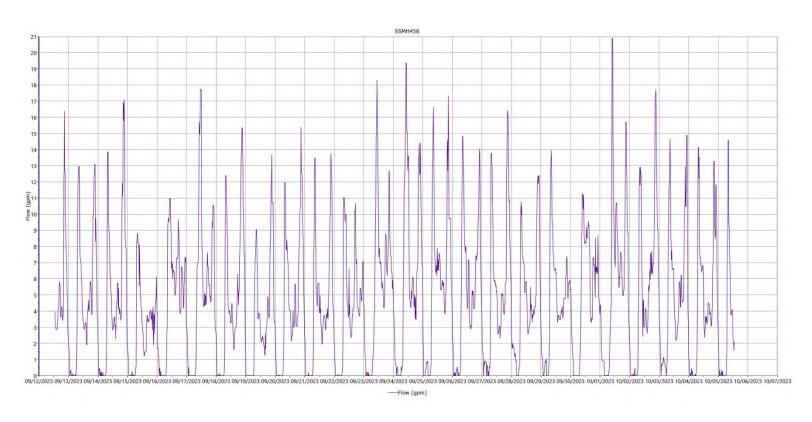
LEVEL



VELOCITY



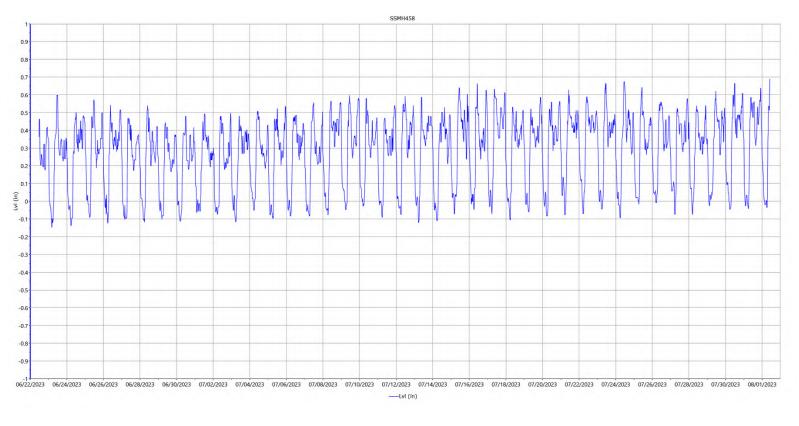
FLOW



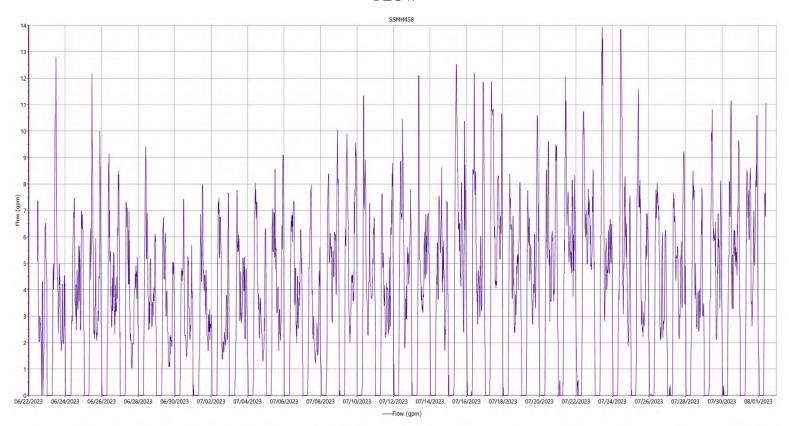
FLOW METER 22 JUNE TO 01 AUG 2023

(Sleepy Ridge-Goes to Orem)

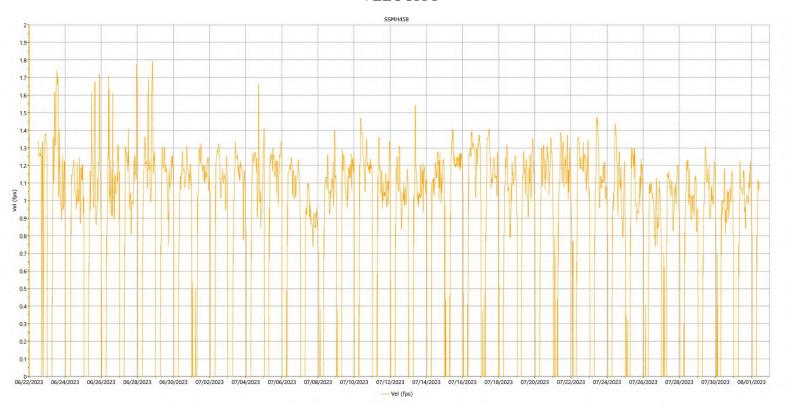
LEVEL



FLOW



VELOCITY



APPENDIX B Growth Projections and Projected ERUs

V	Projected	Projected
Year	Population	ERUs
2010	139	
2014	2,000	
2016	3,953	
2017	8,000	
2019	14,000	
2020	15,472	4174
2021	18,112	4936
2022	19,620	5416
2023	21,060	5878
2024	22,500	6358
2025	24,816	7462
2026	26,904	9141
2027	28,992	10456
2028	30,312	11549
2029	31,536	12598
2030	32,760	13646
2031	33,984	14586
2032	35,208	15536
2033	36,432	16476
2034	37,656	17415
2035	38,880	18354
2036	40,104	19293
2037	41,328	20232
2038	42,552	21171
2039	43,776	22110
2040	45,000	23015
2041	46,224	23919
2042	47,448	24824
2043	48,672	25728
2044	49,896	26633
2045	50,236	27018
2046	50,236	27229
2047	50,236	27439
2048	50,236	27649
2049	50,236	27860
2050	50,236	28070
2051	50,236	28281
2052	50,236	28491
2053	50,236	28702
2054	50,236	28912
2055	50,236	29122

APPENDIX C Cost Estimates

Vineyard City Capital Facility Plan Wastewater Existing Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	Unit	Price	Quantity	Ţ	otal Price	
E-1.	Option 1 - Mallard Drive Sewer Line							
	Install 15" gravity line	LF	\$	464	2300	\$	1,067,667	
	,	•	•	*	Total	\$	1,067,66	
			Eng	ineering	& Admin. (10%)	\$	106,76	
			_	Cor	ntingency (10%)	\$	106,76	
	Total to Option 1 - Mallard Drive Sewer Line							
	Option 2 - Re-route Lift Station 3 to 800 North							
	Install 6" force main	LF	\$	212	4500	\$	955,66	
					Total	\$	955,66	
			Eng	ineering (& Admin. (10%)	\$	95,56	
		\$	95,56					
	Total to Opt	tion 2 - Re-r	oute Lif	t Station	3 to 800 North	\$	1,147,00	
E-2 .	Sewer Line Along Railroad Between 400 N and 800	N						
	Install 12" gravity line	LF	\$	438	2560	\$	1,120,64	
		•	4		Total	\$	1,120,64	
			Eng	ineering	& Admin. (10%)	\$	112,06	
				Cor	ntingency (10%)	\$	112,06	
	Total to Sewer Line	Along Rai	Iroad Be	tween 4	00 N and 800 N	\$	1,345,000	

Total Costs \$ 2,492,000

Vineyard City Capital Facility Plan Wastewater 10-Year and Buildout Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	Uni	t Price	Quantity	Ţ	otal Price		
10-1.	400 N in front of school Sewer Line Install 10" gravity line	LF	\$	421	1700	\$	714,88		
	ilistali 10 gravity lilie	LF	ĮΨ	421	Total	\$	714,88		
			Enc	ineering 8	& Admin. (10%)	\$	71,48		
					tingency (10%)		71,48		
		Total to 400	N in fro		ool Sewer Line		858,00		
							·		
10-2.	Future Downtown Area Sewer Lines	1 15	Ι φ	404	0.400	<u></u>	4 444 00		
	Install 15" gravity line	LF	\$	464	2400 Total	\$ \$	1,114,08		
			Enc	inooring !		э \$	1,114,08 111,40		
	Engineering & Admin. (10%) Contingency (10%)								
		Total to Futur	e Down		a Sewer Lines		111,40 1,337,00		
						*	1,001,00		
10-3.	Future Downtown Area Sewer Lines								
	Install 12" gravity line	LF	\$	438	1200	\$	525,30		
	Install 15" gravity line	LF	\$	464	4600	\$	2,135,33		
			_		Total	\$	2,660,63		
			Eng		& Admin. (10%)	\$	266,06		
			_		tingency (10%)	\$	266,06		
		Total to Futur	e Down	town Are	a Sewer Lines	\$	3,193,00		
10-4.	Future Mill Road Sewer Lines								
	Install 8" gravity line	LF	\$	406	4500	\$	1,826,40		
					Total	\$	1,826,40		
			Eng	ineering 8	& Admin. (10%)	\$	182,64		
				Con	tingency (10%)	\$	182,64		
		Total to	Future	Mill Roa	d Sewer Lines	\$	2,192,00		
10-5.	Future East Geneva Area								
	Install 8" gravity line	LF	\$	406	1800	\$	730,56		
	Install 10" gravity line	LF	\$	421	1700	\$	714,88		
	Install 15" gravity line		\$	464	3050	\$	1,415,81		
	Illistali 15 gravity lille	LF		-					
	install 15 gravity line	LF			Total	\$	2,861,26		
	ilistali 13. gravity ilile	LF	Eng	ineering 8	i otai & Admin. (10%)				
	Illistali 13. gravity line	LF	Eng			\$ \$	286,12		
	Install 13 gravity line			Con	& Admin. (10%)	\$ \$ \$	286,12 286,12		
10.1 52				Con	& Admin. (10%) tingency (10%)	\$ \$ \$	286,12 286,12		
10-LS2	Lift Station 2 Upgrades	То	tal to Fu	Con uture Eas	& Admin. (10%) tingency (10%)	\$ \$ \$	286,12 286,12 3,434,00		
10-LS2			tal to Fu	Con	& Admin. (10%) tingency (10%) t Geneva Area	\$ \$ \$	286,12 286,12 3,434,00		
10-LS2	Lift Station 2 Upgrades	То	tal to Fu	Con uture Eas	& Admin. (10%) tingency (10%) t Geneva Area	\$ \$ \$	286,12 286,12 3,434,00 160,00		
10-LS2	Lift Station 2 Upgrades	То	tal to Fu	Con uture Eas 160,000	& Admin. (10%) tingency (10%) t Geneva Area	\$ \$ \$ \$ \$ \$	286,12 286,12 3,434,00 160,00 160,00 16,00		
10-LS2	Lift Station 2 Upgrades	To	tal to Fu	Conuture Eas	& Admin. (10%) tingency (10%) t Geneva Area	\$ \$ \$ \$	286,12 286,12 3,434,00 160,00 16,00 16,00		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors	To	tal to Fu	Conuture Eas	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%)	\$ \$ \$ \$	286,12 286,12 3,434,00 160,00 16,00 16,00		
10-LS2 B-1.	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines	To LS	tal to Fu	Conuture Eas 160,000 Inneering & Conutift Station	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades	\$\$\$\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line	To LS .	tal to Fu	Conuture Eas 160,000 Inneering & Conutift Station 421	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines	To LS	tal to Fu	Conuture Eas 160,000 Inneering & Conutift Station	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line	To LS .	Eng	Conuture Eas	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line	To LS .	Eng	Conuture Eas 160,000 Inneering & Conutift Station 421 464 Inneering & Conutift Station Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%)	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82 118,48			
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line	LF LF	tal to Fu	Consture Eas 160,000 Inneering & Constit Station 421 464 Inneering & Constit Station Constit Stat	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82 118,48 118,48		
B-1.	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line Install 15" gravity line	LF LF	tal to Fu	Consture Eas 160,000 Inneering & Constit Station 421 464 Inneering & Constit Station Constit Stat	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%) tingency (10%) tingency (10%)	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82 118,48 118,48		
	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line Install 15" gravity line Future UVU Area in East Geneva	LF LF	Eng Total to \$ Eng Fore Down	Con uture Eas 160,000 ineering & Con Lift Statio 421 464 ineering & Con town Are	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%) tingency (10%) a Sewer Lines	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82 118,48 1,422,00		
B-1.	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line Install 15" gravity line	LF LF	tal to Fu	Consture Eas 160,000 Inneering & Constit Station 421 464 Inneering & Constit Station Constit Stat	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%) tingency (10%) a Sewer Lines	\$	286,12 286,12 3,434,00 160,00 16,00 192,00 883,09 301,73 1,184,82 118,48 1,422,00		
B-1.	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line Install 15" gravity line Future UVU Area in East Geneva	LF LF	Eng Total to S Eng For Eng Fo	Conuture Eas 160,000 Inneering & Conutift Station 421	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%) tingency (10%) a Sewer Lines	\$	286,12 286,12 3,434,00 160,00 16,00 16,00 192,00 883,09 301,73 1,184,82 118,48 1,422,00		
B-1.	Lift Station 2 Upgrades Lift Station 2 - New Pumps and Motors Future Downtown Area Sewer Lines Install 10" gravity line Install 15" gravity line Future UVU Area in East Geneva	LF LF	Eng Total to S Eng For Eng Fo	dineering & Contown Are	Admin. (10%) tingency (10%) t Geneva Area 1 Total Admin. (10%) tingency (10%) on 2 Upgrades 2100 650 Total Admin. (10%) tingency (10%) a Sewer Lines	999 5	2,861,26 286,12 286,12 3,434,00 160,00 160,00 16,00 192,00 883,09 301,73 1,184,82 118,48 1,422,00 1,094,37 1,094,37 1,094,37		

Vineyard City Capital Facility Plan Wastewater 10-Year and Buildout Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	U	nit Price	Quantity	1	otal Price
B-LS2-1	Lift Station 2 Upgrades						
	Replace two existing pumps at Lift Station 2	LS	\$	160,000	1	\$	160,000
					Total	\$	160,000
			Eı	ngineering	& Admin. (10%)	\$	16,000
				Cor	ntingency (10%)	\$	16,000
			Total t	o Lift Stati	on 2 Upgrades	\$	192,000
B-LS2-2	New Lift Station						
	Build new lift station (2,500 gpm capacity)	LS	\$ 2	2,900,000	1	\$	2,900,000
		•			Total	\$	2,900,000
			Eı	ngineering	& Admin. (10%)	\$	290,000
				Cor	ntingency (10%)	\$	290,000
				Total to N	ew Lift Station	\$	3,480,000
B-LS2-FM	Lift Station 2 Redundant 14" Force Main						
	Install 14" force main	LF	\$	296	9800	\$	2,895,998
		'			Total	\$	2,895,998
			Eı	naineerina	& Admin. (10%)	\$	289,600
					ntingency (10%)		289,600
		Total to Lift Stat	ion 2 R		0 , (,		3,475,000

Total Costs \$ 21,088,000

Vineyard City Capital Facility Plan Wastewater Buildout Recommended Improvements (Watch List) Preliminary Engineers Cost Estimates

	Item	Unit	Unit Price	Quantity	T	otal Price
W-1.	400 N in front of Freedom Preparatory Academy					
	Install 400 ft of 12" gravity line	LF	\$ 438	400	\$	175,100
			•	Total	\$	175,100
			Engineerin	g & Admin. (10%)	\$	17,510
			C	ontingency (10%)	\$	17,510
	Total to 400 N	in front of I	reedom Prepa	ratory Academy	\$	210,000
W-2.	400 N from 2800 W to ~2585 W (east of TSSD)					
	Install 1,400 ft of 36" gravity line	LF	\$ 723	1400	\$	1,012,415
	-		•	Total	\$	1,012,415
			Engineerin	g & Admin. (10%)	\$	101,241
			C	ontingency (10%)	\$	101,241
	Total to 400	N from 280	0 W to ~2585 \	V (east of TSSD)	\$	1,215,000

Total Costs \$ 1,425,000



WASTEWATER COLLECTION SYSTEM IMPACT FEE FACILITY PLAN

(HAL Project No.: 319.10.100)

DRAFT

May 2025



VINEYARD CITY

WASTEWATER COLLECTION AND TREATMENT SYSTEM IMPACT FEE FACILITY PLAN

(HAL Project No.: 319.10.100)

DRAFT

Ridley J. Griggs, P.E.

Project Manager



May 2025

IMPACT FEE CERTIFICATION

The Utah Impact Fee Act requires certification for the Impact Fee Facilities Plan (IFFP). Hansen, Allen & Luce provides this certification with the understanding that the recommendations in the IFFP are followed by City Staff and elected officials. If all or a portion of the IFFP is modified or amended, or if assumptions presented in this analysis change substantially, this certification is no longer valid. All information provided to Hansen, Allen & Luce, Inc. is assumed to be correct, complete, and accurate.

IFFP Certification

Hansen, Allen & Luce, Inc. certifies that the Impact Fee Facilities Plan (IFFP) prepared for the wastewater collection system:

- 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;
 - 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;
 - an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
- 3. complies in each and every relevant respect with the Impact Fees Act.

HANSEN, ALLEN & LUCE, INC.

TABLE OF CONTENTS

		Page No
IMP	ACT FEE SUMMARY	iii
CHA	APTER 1 – INTRODUCTION	
1.2 1.3	Background Purpose Impact Fee Collection Master Planning	1-1 1-1
CHA	APTER 2 – EXISTING AND FUTURE WASTEWATER COLLECTION SYSTEM	
2.2 2.3 2.4 2.5 2.6	General Existing and Future Equivalent Residential Units Level of Service Methodology Used to Determine Existing System Capacity Collections Capital Facilities to Meet System Deficiencies	2-1 2-3 2-3
CHA	APTER 3 – IMPACT FEE FACILITIES PLAN	
3.2 3.3	General Growth Projections Capacity of Existing Facilities Capacity of Future Facilities	3-1 3-2
REF	FERENCES	R-1
App	pendix A Information from the Vineyard Wastewater Collection System Master Plan	

Appendix B
Estimated Future Project Costs

LIST OF FIGURES

		Page No
Figure 3-1:	Areas of Projected Growth	After 3-1
	LIST OF TABLES	
		Page No
Table 2-1:	System ERUs	2-1
	TSSD System I&I Projections	
	Orem System I&I Projections	
	Existing Pipe Capacity Deficiencies and Estimated Cost	
	Growth Projections	
Table 3-2:	Impact Fee Eligibility of Existing Collection Facilities	3-2
	Estimated Cost of Future Collection Facilities	
Table 3-4:	System Flow Projections to TSSD	3-3
	System Flow Projections to Orem	
Table 3-6	Planning Component of Impact Fee	3-4

IMPACT FEE SUMMARY

In recent years, construction costs have risen substantially due to a number of factors, including material shortages, labor shortages, and supply chain constraints. To properly account for these changes, Vineyard City commissioned this impact fee update.

This Impact Fee Facility Plan addresses the **collection system**. Vineyard's existing collection system conveys wastewater to the TSSD system and Orem WRF, where it is treated. The impact fee **service area** is outlined in Figures 2-1 and 2-2 of the Wastewater Collection System Master Plan, which are included in Appendix A for reference.

The impact fee unit for wastewater collection is based on the Equivalent Residential Unit (ERU). An ERU is equal to the average hydraulic loading of one residential connection. The method of using ERUs for analysis is a way for allocating existing and future demands of non-residential land uses. The level of service for wastewater collection is 160 gpd per ERU.

The existing system served about 5,878 ERUs at the end of 2023. Projected **growth** adds 10,598 equivalent residential units in the next 10 years for a total of 16,476 connections or equivalent by 2033.

Impact fee calculations are based on the proportional historical buy-in costs of **excess capacity** in existing facilities and **new projects** required entirely to provide capacity for new development. The cost of providing capacity to resolve existing deficiencies is not included in the impact fee. Available capacity in existing facilities and capacity that is created through new projects is included in the impact fee. In addition to the proportionate share of costs of existing facilities, the impact fee is based on infrastructure that will be constructed within the next 10 years.

The purpose of this Impact Fee Facilities Plan is to provide key information to support the calculation of an impact fee. Impact fee calculations will be included in a separate Impact Fee Analysis document.

CHAPTER 1 INTRODUCTION

1.1 Background

Vineyard is located in northern Utah County. Vineyard owns and manages a wastewater collection system that serves the City. Most wastewater from Vineyard is conveyed to the water reclamation facility operated by Timpanogos Special Services District (TSSD). A small portion of the wastewater generated in the City drains south to the Orem City collection system and is subsequently treated at the Orem Water Reclamation Facility (Orem WRF).

1.2 Purpose

The City has recognized the need to plan for increased demands on its wastewater collection system as a result of growth. To do so, an Impact Fee Facility Plan (IFFP) was prepared to form the basis for an Impact Fee Analysis (IFA), which will allow the City to charge an impact fee to help pay for capital projects necessary to support future growth.

In recent years, construction costs have risen substantially due to a number of factors, including material shortages, labor shortages, and supply chain constraints. To account for rising construction costs, Vineyard City commissioned this impact fee update.

This report identifies those items that the Utah Impact Fees Act specifically requires, including demands placed upon existing facilities by new development and the proposed means by which the municipality will meet those demands. The Wastewater Collection Master Plan that was prepared in 2024 was also used to support this analysis. The master plan identified several growth-related projects needed within the 10-year planning window. Therefore, the calculated impact fee is based on excess capacity and documented historic costs, as well as future capital projects.

1.3 Impact Fee Collection

Impact fees enable local governments to finance public facility improvements necessary for growth, without burdening existing customers with costs that are exclusively attributable to growth.

An impact fee is a one-time charge on new development to pay for that portion of a public facility that is required to support that new development.

In order to determine the appropriate impact fee, the cost of the facilities associated with future development must be proportionately distributed. As a guideline in determining the "proportionate share," the fee must be found to be roughly proportionate and reasonably related to the impact caused by the new development.

1.4 Master Planning

The Vineyard City Wastewater Collection System Master Plan was prepared in 2024 and is incorporated by reference into this analysis. The master plan for the City's wastewater collection system is more comprehensive than the IFFP. It provides the basis for the IFFP and identifies all capital facilities required for the wastewater system inside the 20-year planning range, including maintenance, repair, replacement, and growth-related projects.

The recommendations made within the master plan are in compliance with current City policies and standard engineering practices.

A hydraulic model of the wastewater collection system was used to complete the Wastewater Collection System Master Plan. The model was used to assess existing performance, to establish a proposed level of service, and to confirm the effectiveness of the proposed capital facility projects to maintain the proposed level of service over the next 10 years.

CHAPTER 2 EXISTING AND FUTURE WASTEWATER COLLECTION SYSTEM

2.1 General

The purpose of this chapter is to provide information regarding the existing wastewater collection system, identify the current and proposed levels of service, and analyze the remaining capacity of the existing system's facilities.

Vineyard's existing wastewater collection system is comprised of gravity pipes including laterals, collectors, interceptors, lift stations, and force mains. Most wastewater generated within the service area is conveyed to an outfall to the TSSD system, although a small portion of the generated wastewater is conveyed to Orem WRF. Figures 2-1 and 2-2 of the Wastewater Collection System Master Plan illustrate the existing wastewater system and are included for reference in Appendix A.

2.2 Existing and Future Equivalent Residential Units

In order to compare the relative quantities of wastewater loading between different types of land use, it is helpful to use a common unit of measure. The unit of measure that is used with this analysis is the Equivalent Residential Unit (ERU). The use of ERUs is a typical approach to describe the wastewater collection system's usage. An ERU is equal to the average loading of residential connections. Once the ERU is established, non-residential uses can be quantified in terms of multiples or fractions of an ERU. An ERU is the ratio of non-residential wastewater loadings in comparison to an equivalent residential level of service. For this analysis all residential connections, including townhouses and apartments were equated to one ERU for indoor water demands.

Table 2-1 is a summary of ERUs in the existing system and the system at the 10-year design condition as described in the Vineyard City Wastewater Collection System Master Plan.

Table 2-1 System ERUs

Condition	Treated at TSSD (ERUs)	Treated at Orem WRF (ERUs)	Total ERUs
Existing	5,592	286	5,878
10-Year	15,996	479	16,476
Difference	+10,404	+193	+10,598

2.3 Level of Service

The level of service designated for the wastewater collection system has been established by the City to provide adequate wastewater collection capacity. It is based on analysis of data as described in the Wastewater Collection System Master Plan.

ERU Loading and Treatment

The existing level of service is for average daily flow is 160 gpd per ERU.

Infiltration and Inflow

Infiltration and inflow (I&I) occur in wastewater collection systems. While Vineyard City has employed and will continue to employ a number of techniques to manage I&I, it is not practical or cost-effective to completely eliminate it. During the master plan, pipes were sized to accommodate expected quantities of I&I for existing and future scenarios. Tables 2-2 and 2-3 summarize the I&I projections as described in the Wastewater Collection System Master Plan.

Table 2-2
TSSD System I&I Projections

Condition	Inflow (MGD)	Infiltration (MGD)	
Existing	1.15	0.12	
10-Year	1.28	0.15	
Buildout	1.5	0.20	

Table 2-3
Orem System I&I Projections

Condition	Inflow (GPD)	Infiltration (GPD)
Existing	15,000	2,000
10-Year	25,100	3,350
Buildout	25,000	3,350

These flow rates are included in the hydraulic model.

Wastewater Collection System Capacity

- Peak daily flow in the pipe must not exceed a depth/diameter ratio of 0.75 for pipe diameters 12 inches and greater and 0.50 for pipe diameters less than 12 inches. The remaining capacity is reserved for unexpected flows, peaking, or flow restrictions.
- Per State of Utah standards, no newly installed collection pipe may be less than 8 inches in diameter.

2.4 Methodology Used to Determine Existing System Capacity

The method for determining the remaining capacity in the wastewater collection system was based on the defined level of service in terms of ERUs. The difference between the ERU capacity and ERU existing demand for each component is the remaining capacity.

Collection System Capacity

A hydraulic model was developed for the purpose of assessing system operation and capacity taking into account additional water that results from I&I. Inflow for Vineyard was assessed by evaluating wastewater flow records before and after storm events. Infiltration was determined by comparing billed winter water sales to wastewater flow records. For the collection system, the model was used to calculate remaining system capacity in terms of ERUs.

Wastewater Treatment Capacity

Vineyard City maintains agreements with Orem City and TSSD for wastewater treatment. Treatment capacity is as specified in the City's existing agreements.

2.5 Collections

The existing Vineyard City wastewater collection system consists of nearly 36 miles of pipeline and approximately 922 manholes. The pipes range in size from 8-inch diameter to 36-inch diameter. Lift stations are used to pump wastewater where gravity flow sewers are not capable of conveying flow to the TSSD outfall.

2.6 Capital Facilities to Meet System Deficiencies

The existing wastewater collection system is generally adequate to convey the anticipated wastewater to the wastewater treatment plant. However, there are a few areas with inadequate capacity, which are described in Table 2-4 below (same as Table 6-4 in the Wastewater Collection System Master Plan). Estimated costs for improving pipe deficiencies were also included in the table (same as Table ES-4 in Wastewater Collection System Master Plan). These projects are not eligible for impact fee reimbursement and are not discussed further in this report.

Table 2-4
Existing Pipe Capacity Deficiencies and Estimated Cost

Project ID	Location	Cost
E-1	Mallard Drive between 400 North and 800 North	\$1,147,000
E-2	Next to railroad between 400 North and 800 North	\$1,345,000

CHAPTER 3 IMPACT FEE FACILITIES PLAN

3.1 General

This chapter relies on the data presented in the previous chapters to determine impact fee eligibility for projects planned in the next 10 years to increase capacity for new growth and an appropriate buy-in cost of available existing excess capacity previously purchased by the City.

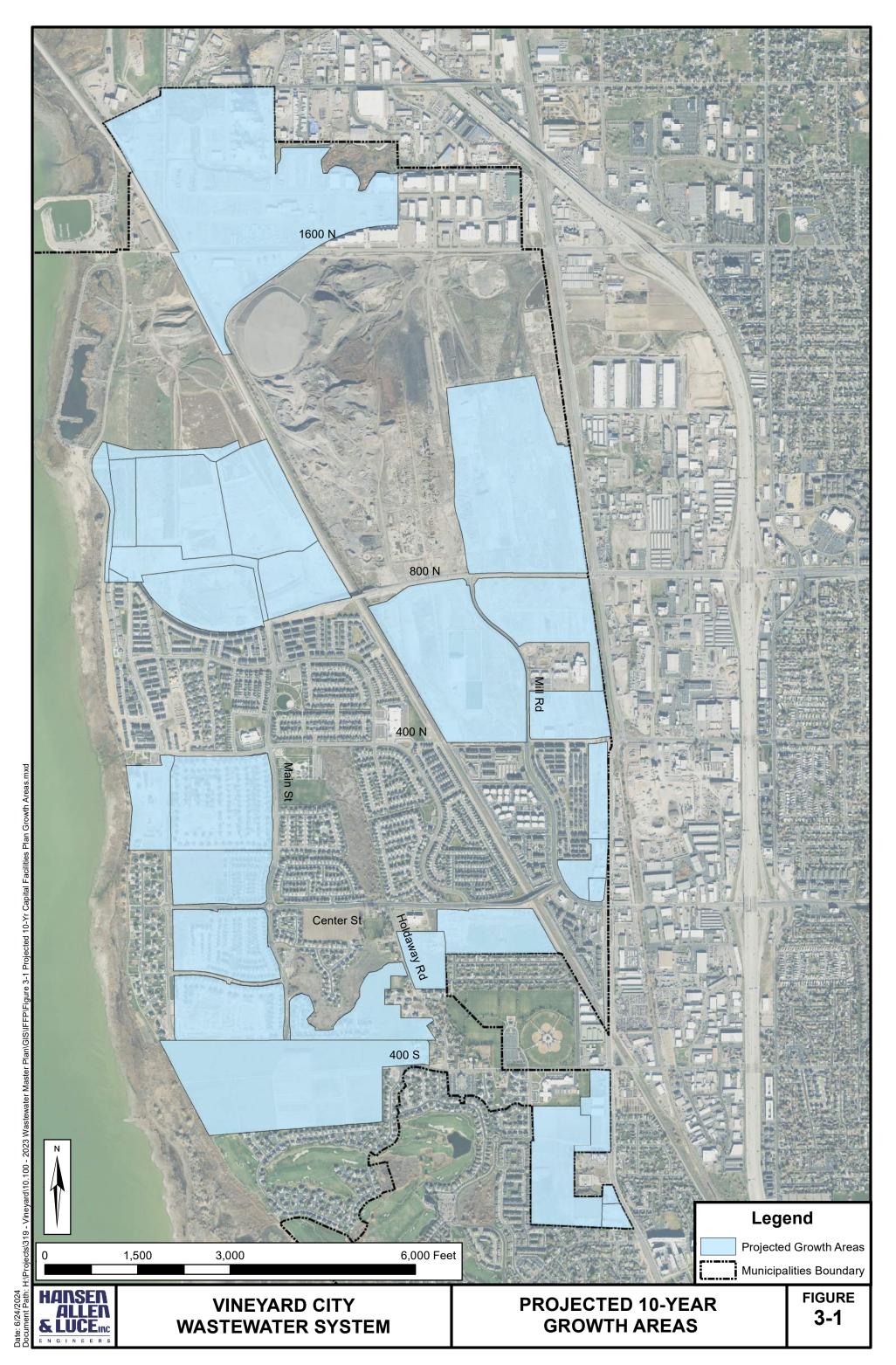
The wastewater collection system facility projects planned in the next 10 years to increase capacity for new growth included within the IFFP are presented.

3.2 Growth Projections

The development of impact fees requires growth projections over the next ten years. Growth projections for Vineyard were made using the rates provided in the Wastewater Collection System Master Plan. The existing system serves about 5,878 ERUs. Projected growth adds 10,598 ERUs in the next 10 years for a total of 16,476 ERUs. Total growth projections are summarized in Table 3-1. Further information on growth projections can be found in Figure 5-1 of the Wastewater Collection System Master Plan. This has been included in Appendix A for reference. The projected 10-year growth is shown in Figure 3-1.

Table 3-1 Growth Projections

Year	Total ERUs
2023	5,878
2024	6,358
2025	7,462
2026	9,141
2027	10,456
2028	11,549
2029	12,598
2030	13,646
2031	14,586
2032	15,536
2033	16,476
Change	+10,598



3.3 Capacity of Existing Facilities

Future growth can be served either by excess capacity in existing facilities or by constructing new facilities. This section will focus on the existing capacity within the existing facilities.

Collection

The impact fee eligibility for the existing collection facilities is shown in Table 3-2. Capacity remaining in existing facilities was conservatively estimated as the difference between the existing ERU count and the projected ERU count at buildout. The cost of each facility associated with its remaining capacity is attributable to growth and can be counted towards the impact fee.

Table 3-2
Impact Fee Eligibility of Existing Collection Facilities

Existing ERU Count	Projected Buildout ERU Count	Difference	% Impact Fee Eligible
5,878	29,122	23,244	80%

Treatment

Vineyard City has secured treatment capacity in TSSD and Orem WRF.

3.4 Capacity of Future Facilities

This section will discuss the impact fee eligible costs for future facilities for the wastewater collection system.

Collection

The facilities and costs presented in Table 3-3 are proposed collection projects essential to maintain the current level of service while accommodating future growth within the next 10 years. The facility sizing for the future proposed projects were developed in the 2024 Wastewater Collection System Master Plan. They were based on the level of service, the City's land use plan, and hydraulic modeling. All future projects have a design life greater than 10 years, as required by the Impact Fee Act. Detailed cost estimates are included in Appendix B. Depictions of these projects are shown in Figure 6-4 of the Wastewater Collection System Master Plan, which has been included in Appendix A for reference. Further details are included in the Wastewater Collection System Master Plan.

Table 3-3
Estimated Cost of Future Collection Facilities

Project	Map ID¹	Total Cost
Install 1,700 ft of 10" gravity line	10-1	\$858,000
Install 2,400 ft of 15" gravity line	10-2	\$1,337,000
Install 1,200 ft of 12" gravity line and 4,600 ft of 15" gravity line	10-3	\$3,193,000
Install 4,500 ft of 8" gravity line	10-4	\$2,192,000
Install 1,800 ft of 8" gravity line, 1,700 ft of 10" gravity line, and 3,050 ft of 15" gravity line	10-5	\$3,434,000
Install two new pumps at Lift Station 2	10-LS2	\$192,000
Total	\$11,206,000	

^{1.} Refer to Figure 6-4 of the Wastewater Collection System Master Plan for the project number. This figure is included in Appendix A for reference.

Treatment

TSSD and Orem WRF currently manage the treatment facilities and all upgrades. Table 3-4 shows the existing and projected monthly average wastewater generated in the areas treated by TSSD.

Table 3-4
System Flow Projections to TSSD

Approximate Year	Total ERUs	Customer Flow Generation (MGD)	Inflow (MGD)	Infiltration (MGD)	Peak Daily Flow (MGD)	Average Monthly Flow (MGD)
2023	5,592	0.89	1.15	0.12	2.16	1.01
2033	15,996	2.56	1.28	0.15	3.99	2.71

Table 3-5 shows the existing and projected monthly average wastewater generated in the areas treated by the Orem WRF.

Table 3-5
System Flow Projections to Orem

Approximate Year	Total ERUs	Customer Flow Generation (GPD)	Inflow (GPD)	Infiltration	Peak Daily Flow (GPD)	Average Monthly Flow (GPD)
2023	286	45,760	15,000	2,000	62,760	47,760
2033	479	76,640	25,100	3,350	105,090	79,990

Planning

Planning services are also needed to support growth. The City intends to update their master plans approximately every 5 years and their impact fee studies approximately every 3 years. Considering this schedule, and the cost of the most recent impact fee updates, the ERUs served by each plan update were calculated as shown in Table 3-9.

Table 3-6
Planning Component of Impact Fee

Planning Document	Cost	% of Plan Associated with Growth ¹	ERUs Served ²
2024 Wastewater Collection System Master Plan	\$76,400.00	60%	5,671
2024 IFFP and IFA	\$17,800.00	100%	3,263
Total	\$94,200.00	-	-

^{1.} Percentages to growth for the master plan was based on a review of the scope of the plan and associated fees for tasks associated with the existing system and future growth. The IFFP and IFA are 100% associated with growth.

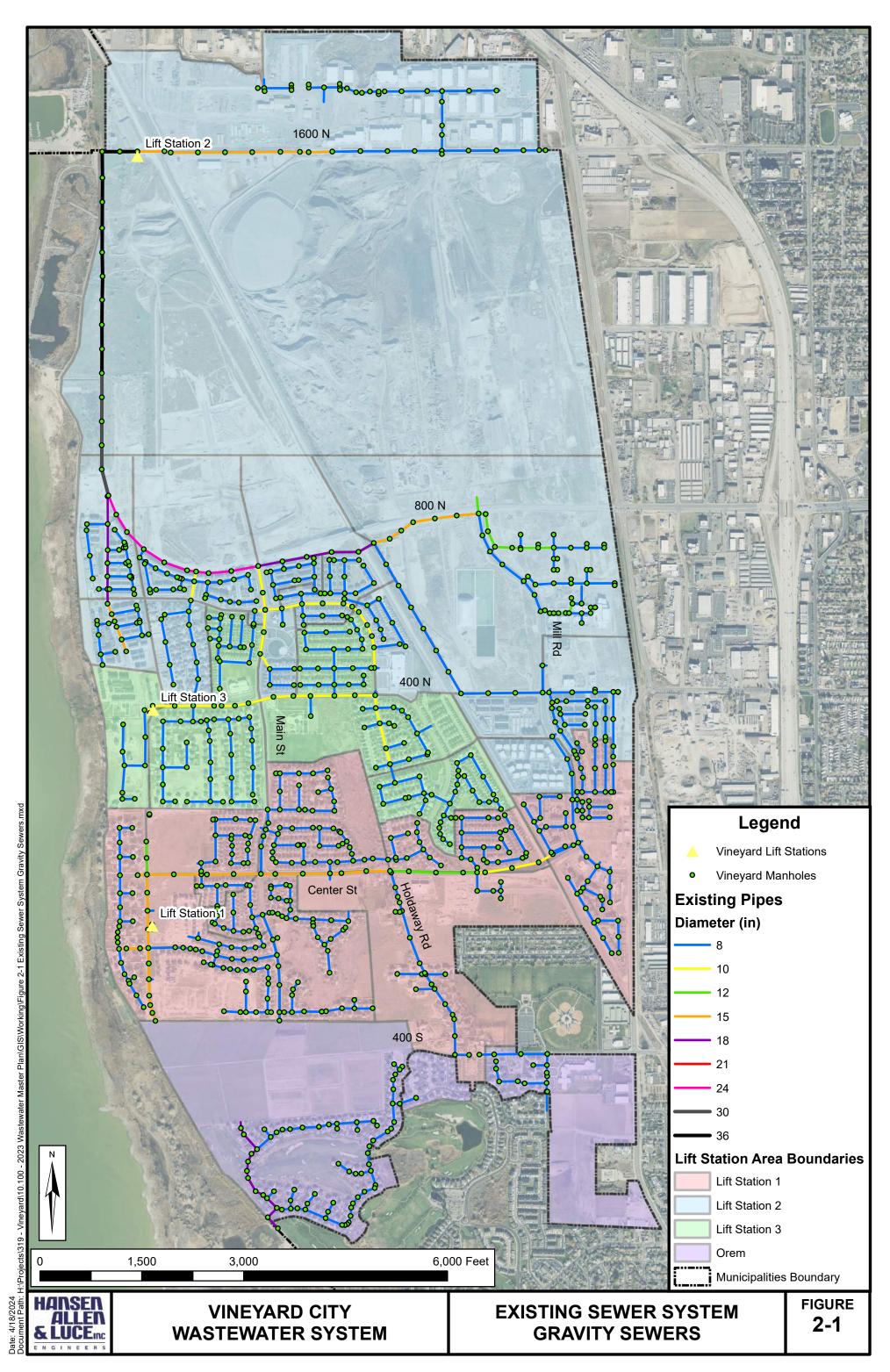
^{2.} ERUs served was defined as the amount of ERUs expected to develop during the 5-year life of the master plan and the 3-year life of the IFFP and IFA, respectively. See Table 3-1.

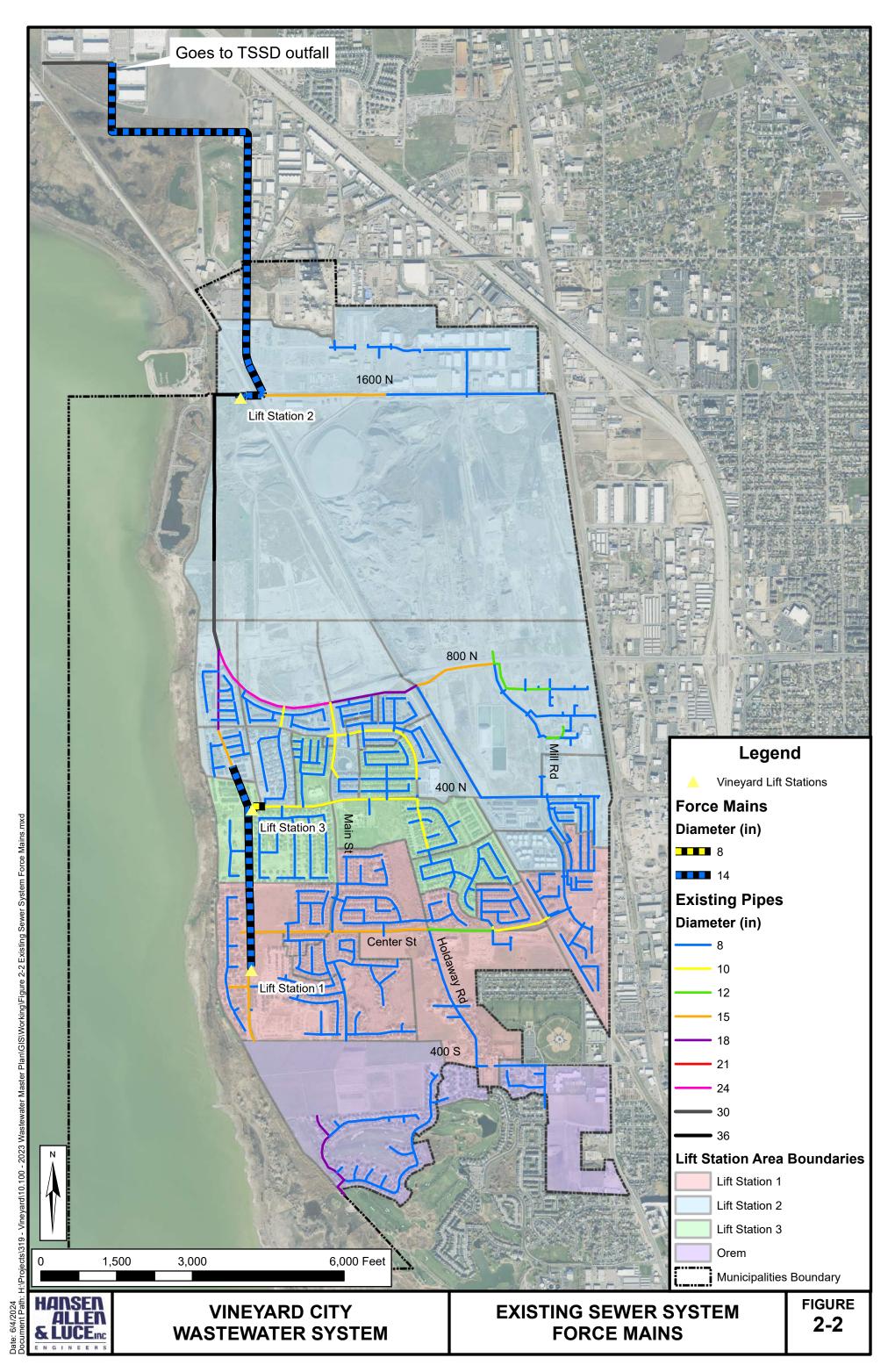
REFERENCES

State of Utah. 2014c. Utah Code Annotated, Section Utah Code 11-36a: Impact Fees Act Hansen, Allen & Luce. 2024. "Vineyard Wastewater Collection System Master Plan"

APPENDIX A

Information from the Vineyard City Wastewater Collection System Master Plan





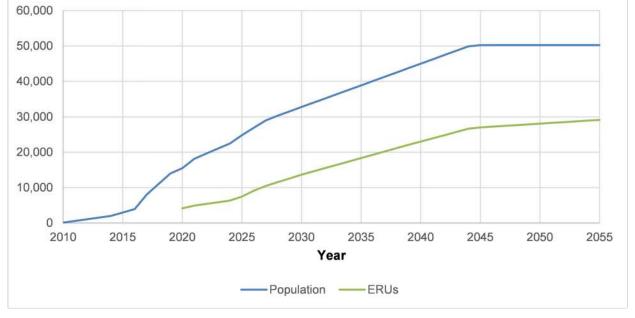
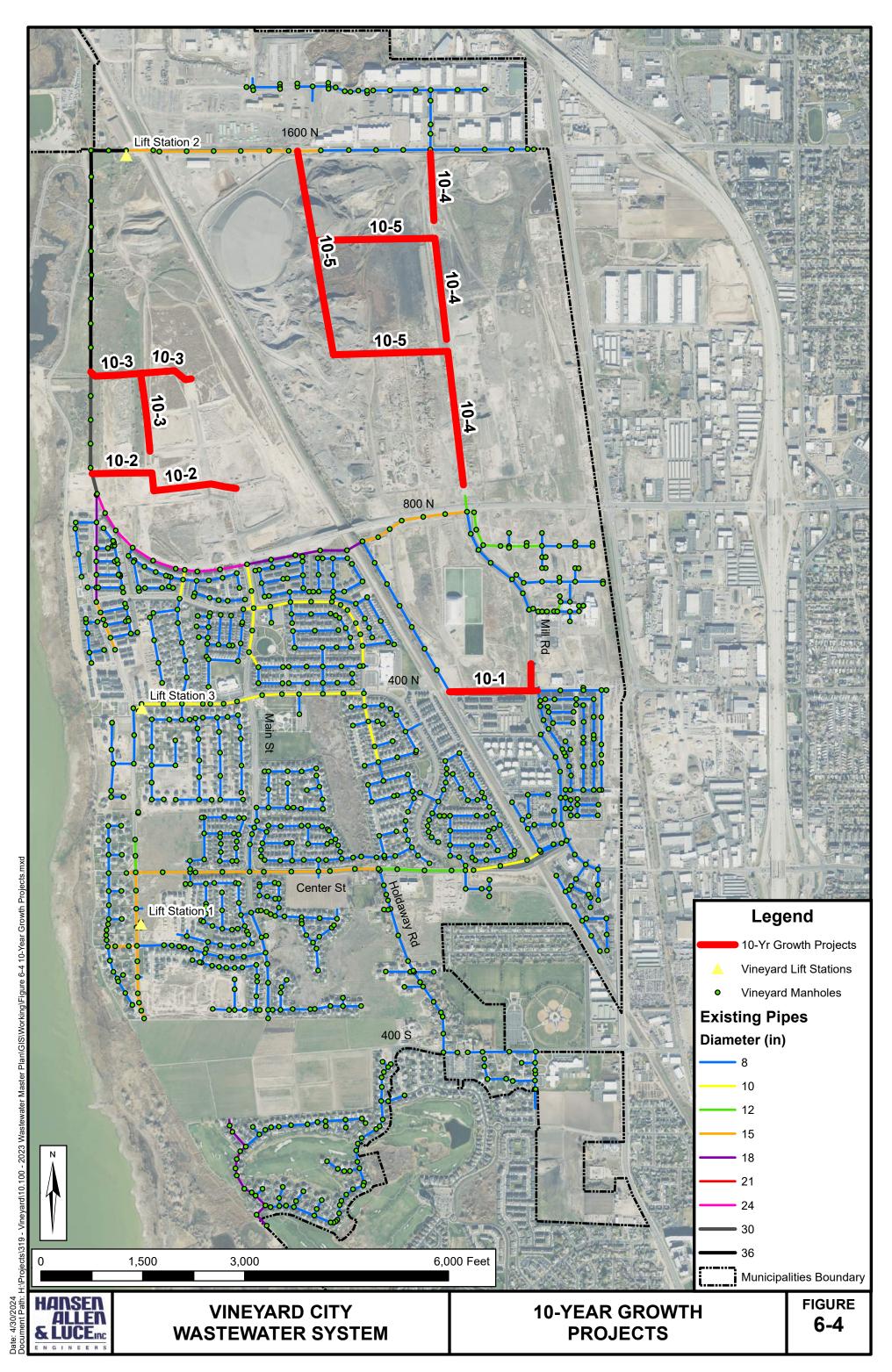
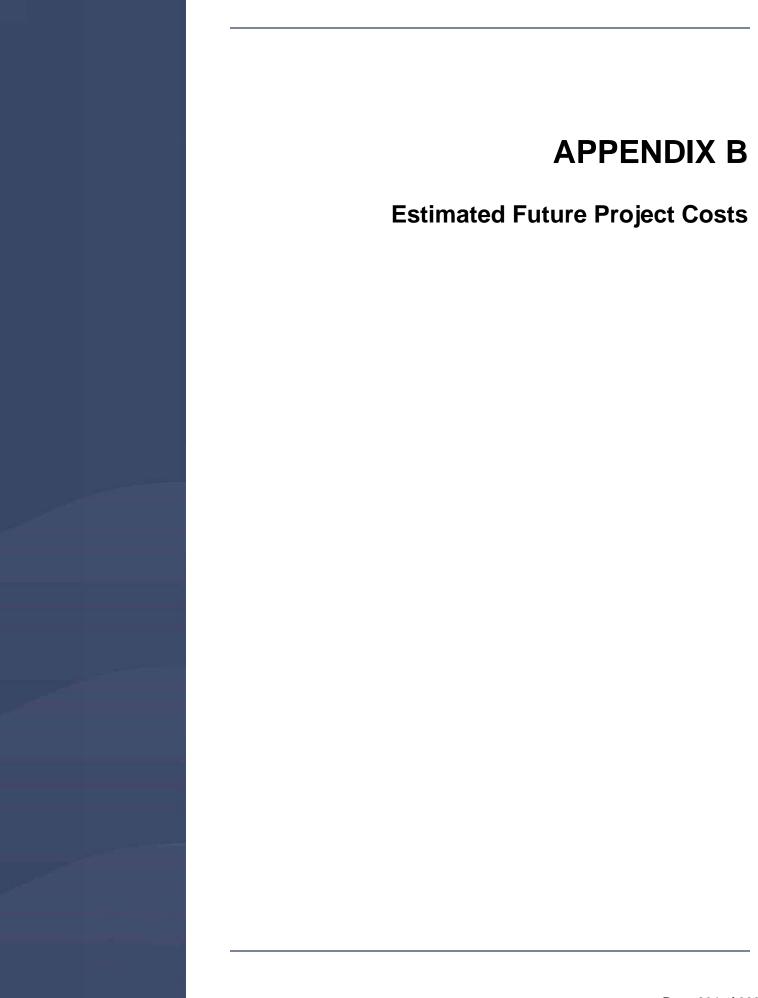


FIGURE 5-1 POPULATION AND ERU PROJECTIONS

Page 202 of 330





Vineyard City Capital Facility Plan Wastewater 10-Year Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	Unit	Price	Quantity	T	otal Price
10-1.	Install 10" gravity line	l LF	 \$	421	1700	<u></u>	714,888
	Install 10° gravity line	LF	φ .	421	Total	\$	
			Ena	incoring 0		\$	714,888 71,489
			Eng		Admin. (10%) ngency (10%)	\$,
		Total to 400	N in fron		ol Sewer Line		71,48
		10tal to 400	N III II'OI	it or scriot	o Sewer Line	Ф	858,00
10-2.	Future Downtown Area Sewer Lines						
	Install 15" gravity line	LF	\$	464	2400	\$	1,114,08
	<u> </u>	•			Total	\$	1,114,08
			Eng	ineering &	Admin. (10%)	\$	111,40
			J		ngency (10%)	\$	111,40
		Total to Futu	e Down	town Area	Sewer Lines	\$	1,337,00
40.0	5. 5						
10-3.	Future Downtown Area Sewer Lines Install 12" gravity line	LF	\$	438	1200	\$	525,30
	Install 15" gravity line	I F	\$	464	4600	\$	2,135,33
	mistair 15 gravity line		Ψ	707	Total	\$	2,660,63
			Eng	inaarina &	Admin. (10%)	\$	266,06
			LIIG				
			Ü				
		Total to Futu	J	Conti	ngency (10%) Sewer Lines	\$	266,06 3,193,00
10-4.	Future Mill Road Sewer Lines		e Down	Conti town Area	ngency (10%) Sewer Lines	\$ \$	266,06 3,193,00
10-4.	Future Mill Road Sewer Lines Install 8" gravity line	Total to Futu	J	Conti	ngency (10%) Sewer Lines	\$ \$	266,06 3,193,00 1,826,40
10-4.			re Down	Conti town Area	ngency (10%) Sewer Lines 4500 Total	\$ \$ \$	266,06 3,193,00 1,826,40 1,826,40
10-4.			re Down	Contitown Area 406 ineering &	ngency (10%) Sewer Lines 4500 Total Admin. (10%)	\$ \$ \$ \$	266,06 3,193,00 1,826,40 1,826,40 182,64
10-4.		LF	re Down	Conti town Area 406 ineering & Conti	A500 Total Admin. (10%) ngency (10%)	\$ \$	266,06 3,193,00 1,826,40 1,826,40 182,64 182,64
10-4.		LF	re Down	Conti town Area 406 ineering & Conti	ngency (10%) Sewer Lines 4500 Total Admin. (10%)	\$ \$	266,06 3,193,00 1,826,40 1,826,40 182,64 182,64
10-4. 10-5.	Install 8" gravity line Future East Geneva Area	LF Total t	Eng	Conti town Area 406 ineering & Conti	A500 Total Admin. (10%) ngency (10%)	\$ \$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00
	Install 8" gravity line Future East Geneva Area Install 8" gravity line	Total to	Eng Future	Contitown Area 406 ineering & Contiton Mill Road	4500 Total Admin. (10%) ngency (10%) Sewer Lines	\$\$ \$\$ \$\$ \$\$ \$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 182,64 2,192,00
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future	Contitown Area 406 ineering & Contitor Mill Road 406 421	4500 Total Admin. (10%) ngency (10%) Sewer Lines	\$\$ \$\\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88
	Install 8" gravity line Future East Geneva Area Install 8" gravity line	Total to	Eng Future	Contitown Area 406 ineering & Contiton Mill Road	4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050	* * * * * * * * * * * * * * * * * * *	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future \$	Contitown Area 406 ineering & Conti Mill Road 406 406 406 421 464	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future \$	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering &	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%)	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future S Eng	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) ngency (10%)	\$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 286,12
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future S Eng	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%)	\$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 286,12
10-5.	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line Install 15" gravity line	Total to	Eng Future S Eng	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) ngency (10%)	\$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 286,12
10-5.	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line	Total to	Eng Future \$ Eng Future	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) ngency (10%)	\$\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 3,434,00
10-5.	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line Install 15" gravity line Install 5" gravity line	Total to	Eng Future \$ Eng Future	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti inture East	4500 Total Admin. (10%) Sewer Lines 4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) ngency (10%) Geneva Area	\$\$ \$\\$	266,06 3,193,00 1,826,40 1,826,40 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 286,12 3,434,00
10-5.	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line Install 15" gravity line Install 5" gravity line	Total to	Eng Future \$ Eng tal to Fu	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti ture East	4500 Total Admin. (10%) ngency (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) ngency (10%) Geneva Area	\$\$ \$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\\$\	266,06 3,193,00 1,826,40 1,826,40 182,64 182,64 2,192,00 730,56 714,88 1,415,81 2,861,26 286,12 2,434,00 160,00 160,00
	Install 8" gravity line Future East Geneva Area Install 8" gravity line Install 10" gravity line Install 15" gravity line Install 5" gravity line	Total to	Eng Future \$ Eng tal to Fu	Contitown Area 406 ineering & Conti Mill Road 406 421 464 ineering & Conti Iture East	4500 Total Admin. (10%) Sewer Lines 1800 1700 3050 Total Admin. (10%) Geneva Area	\$\$	266,06

Total Costs \$ 11,206,000



VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: PUBLIC HEARING: Water Master Plan and Impact Fee Analysis (IFA)

(Ordinance 2025-09)

Department: Public Works **Presenter:** Naseem Ghandour

Background/Discussion:

Vineyard City has experienced significant growth, necessitating proactive planning to ensure the reliability and sustainability of its water services. In March 2023, the City Council awarded a contract to Hansen Allen & Luce (HAL) Engineering to develop comprehensive Water and Wastewater Master Plans, along with their corresponding Impact Fee Facilities Plan (IFFP), and Impact Fee Analysis (IFA). On March 27, 2024, HAL presented the draft Water and Wastewater Master Plans to the City Council for initial review and feedback.

PLAN OVERVIEW

Water Master Plan

The Water Master Plan evaluates Vineyard City's existing water infrastructure, including supply sources, treatment facilities, storage, and distribution networks. It projects future water demands based on anticipated population growth and land use changes. The plan identifies necessary improvements to meet these demands and recommends a prioritized Capital Improvement Plan (CIP) to guide future investments.

Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA)

The IFFP and IFA identify the water infrastructure improvements required to support new development. They allocate the costs of these improvements to new development using a fair-share methodology, as mandated by the Utah Impact Fees Act (UCA 11-36a). The analysis establishes proposed water impact fee rates to adequately fund growth-related capital projects.

Proposed Facility Impact Fee

Existing ¹	\$873
Proposed – 2025 ²	\$4,207
Change	+\$3,334

- 1. Area B has a fee of \$521 per ERU
- 2. Increases to \$5,185 in 2034
- Previous fee did not account for source and storage facilities
- Fees for water rights/supply will be additional to those listed above

WATER CONSERVATION INITIATIVES

In alignment with the city's commitment to sustainable water management, Vineyard City adopted a Water Conservation Plan in 2022. The plan outlines strategies such as efficient irrigation practices, public awareness campaigns, and the implementation of water-saving technologies. These initiatives aim to promote responsible water usage and ensure the long-term availability of water resources for the community.

POLICY ALIGNMENT

- Support Vineyard City's General Plan objectives by:
- Ensuring that new development contributes fairly to the cost of expanded water services.
- Providing a roadmap for strategic investments in water infrastructure.
- Promoting environmental stewardship through sustainable water management practices.

Fiscal Impact:

NONE. Future water system improvements will be funded through capital budgeting, including the use of legally defensible impact fees as outlined in the IFA.

Recommendation:

Staff recommends that the City Council approve the adoption of the Water Master Plan & Impact Facility Fee Assessment (IFFA) by ordinance.

Sample Motion:

"I move to adopt Ordinance 2025-09 the Water Master Plan as presented."

Attachments:

- 1. DRAFT Vineyard Water IFA
- 2. DRAFT Vineyard DWMP May 2025
- 3. DRAFT Vineyard DW IFFP Report 2025





VINEYARD

DRAFT Drinking Water Impact Fee Analysis

May 2025





EXECUTIVE SUMMARY

An impact fee is a one-time fee imposed on new development activity to mitigate the impact of new development on capital facilities. In conjunction with this Impact Fee Analysis, Hansen Allen & Luce, Inc. prepared the Vineyard Drinking Water Impact Fee Facilities Plan (IFFP) dated May 2025. The IFFP forms the basis for this impact fee analysis.

The recommended impact fee structure presented in this analysis has been prepared to satisfy the Impact Fees Act, Utah Code Ann. § 11-36a-101 et. seq., and represents the maximum impact fees Vineyard ("City") may assess. The City will be required to use revenue sources other than impact fees to fund any projects that constitute repair and replacement, cure any existing deficiencies, or increase the level of service for existing users.

Drinking Water Demand

The City is anticipated to grow by 4,280 equivalent residential connections (ERCs) between 2024 and 2034 – the timeframe of the IFFP analysis.¹

Drinking Water Service Levels

Drinking water service levels have been designed to ensure that service levels are maintained to meet the demands of new development and are included, in detail, later in this IFA.

Water Service Area

There is one service area for water that encompasses the boundaries of Vineyard City.

Excess Capacity

According to the IFFP, there is excess capacity in the water distribution system to serve an additional 6,930 ERCs. A review of the City's Asset List calculates the impact fee eligible amount at \$1,299,730 that will serve new development over the next 10 years. No source capacity has been included in the IFFP because this capacity is currently provided separately through agreements with the City of Orem and CUWCD. Water storage capacity is showing an existing deficiency of 3.57 MG. This deficiency cannot be paid for with impact fees.

New Construction

Total new construction costs required by growth over the next 10 years are projected to reach \$6,746,015 for storage and \$22,207,367 for distribution projects.

Water System Impact Fee Calculation

The gross fee is first calculated, followed by credits to be made for the portion of future projects that will benefit existing development.

TABLE 1: MAXIMUM GROSS FEE PER ERC

Summary	Amount
Existing Buy-In Costs	\$187.55

¹ IFFP, p. 3-1.

-



Summary	Amount
Interest on Bonds	\$1,101.01
New Construction	\$4,343.67
Consultant Costs	\$41.72
Fund Balance	(\$14.13)
Subtotal before Credits	\$5,659.82

Credits must be made for the proportionate share of new projects that benefit existing development so that new development does not pay more than its proportionate share of costs. According to the IFFP, the cost of new projects that benefit existing development is \$10,705,055. These projects are anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

Credits must also be made for future payments on the outstanding Series 2023 Water and Wastewater Revenue Bond issued in the amount of \$14,350,000. Water is responsible for 90 percent of the bond. Credits for future payments are then subtracted from the maximum gross fee shown in Table 1 to show the maximum impact fee per year.

TABLE 2: MAXIMUM GROSS FEE PER ERC PER YEAR

Year	ear Gross Fee per NPV - De ERC Project		NPV - Outstanding Bond Credit	Maximum Fee per ERC
2025	\$5,659.82	\$1,467.51	\$596.99	\$3,595.32
2026	\$5,659.82	\$1,268.84	\$559.47	\$3,831.52
2027	\$5,659.82	\$1,096.96	\$529.25	\$4,033.61
2028	\$5,659.82	\$946.96	\$505.18	\$4,207.68
2029	\$5,659.82	\$804.40	\$483.46	\$4,371.96
2030	\$5,659.82	\$666.18	\$463.40	\$4,530.25
2031	\$5,659.82	\$531.19	\$445.04	\$4,683.59
2032	\$5,659.82	\$397.71	\$427.77	\$4,834.34
2033	\$5,659.82	\$266.40	\$411.84	\$4,981.59
2034	\$5,659.82	\$133.97	\$396.49	\$5,129.36

Residential units (per door) are charged based on a $\frac{3}{4}$ " meter size (1 ERC) while all nonresidential development is charged based on meter size.

TABLE 3: FEES BASED ON METER SIZE

Meter Size	ERCs	2025	2026	2027	2028	2029	2030
3/4"	1	\$3,595.32	\$3,831.52	\$4,033.61	\$4,207.68	\$4,371.96	\$4,530.25
1"	1.67	\$6,004.18	\$6,398.63	\$6,736.13	\$7,026.83	\$7,301.18	\$7,565.51
1 ½"	3.33	\$11,972.41	\$12,758.95	\$13,431.93	\$14,011.58	\$14,558.64	\$15,085.73
2"	5.33	\$19,163.04	\$20,421.98	\$21,499.16	\$22,426.94	\$23,302.56	\$24,146.22
3"	10	\$35,953.17	\$38,315.15	\$40,336.13	\$42,076.82	\$43,719.63	\$45,302.48



Meter Size	ERCs	2025	2026	2027	2028	2029	2030
4"	16.67	\$59,933.94	\$63,871.36	\$67,240.34	\$70,142.05	\$72,880.62	\$75,519.24
6"	33.33	\$119,831.92	\$127,704.41	\$134,440.34	\$140,242.03	\$145,717.52	\$150,993.18
8"	53.33	\$191,738.27	\$204,334.71	\$215,112.60	\$224,395.66	\$233,156.77	\$241,598.15
10"	76.67	\$275,652.97	\$293,762.28	\$309,257.14	\$322,602.94	\$335,198.38	\$347,334.15

Non-Standard Fee Adjustment

In cases where it is determined that the use of meter sizes to assess impact fees would not lead to an equitable result, ERCs may instead be calculated based on estimated peak day demand as follows:

ERCs = (peak day demand, gpd) / (1,248 gpd/ERC)

Examples where a meter size may not produce an equitable result include instances where a development uses multiple meters rather than a single meter or when the meter multiplier does not accurately reflect the expected multiplier of the customer as compared to a standard ERC.

The resulting number of ERCs is then multiplied by the $\frac{3}{4}$ " (1 ERC) maximum fee for the appropriate year as shown in Table 2.

CHAPTER 1: OVERVIEW OF THE CULINARY WATER IMPACT FEES

Summary

An impact fee is intended to recover the City's costs of building culinary water system capacity to serve new residential and non-residential development rather than passing these growth-related costs on to existing users through rates. The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid for by the City is assessed through an impact fee.

Costs to be Included in the Impact Fee

The impact fees proposed in this analysis are calculated based upon:

- Buy-in to existing, excess capacity;
- New capital infrastructure that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.
- Necessary credits

The costs that cannot be included in the impact fee are as follows:

- Costs for projects that cure system deficiencies;
- Costs for projects that increase the LOS above that which is currently provided;



- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Utah Code Legal Requirements

Utah law requires that communities and special districts prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities/districts give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained Zions Public Finance, Inc. (ZPFI) to prepare this Impact Fee Analysis in accordance with legal requirements.

Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA by posting notice.

Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to:

- (1) An impact fee analysis shall:
 - (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
 - (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
 - (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
 - (d) estimate the proportionate share of:
 - (i) the costs for existing capacity that will be recouped; and
 - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
 - (e) identify how the impact fee was calculated.
- (2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:



- (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
- (b) the cost of system improvements for each public facility;
- (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
- (d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;
- (e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
- (f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
- (g) extraordinary costs, if any, in servicing the newly-developed properties; and
- (h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.



CHAPTER 2: IMPACT FROM GROWTH ON THE CITY'S FACILITIES AND LEVEL OF SERVICE

Utah Code 11-36a-304(1)(a)

Projected Water Demand

Table 4 shows ERC growth projections which will place additional demand on the City's culinary water system. The City's culinary water system serves 3,330 equivalent residential connections (ERCs) which will grow to an estimated 7,610 ERCs by 2034.

Water Service Area

ERCs within Vineyard are projected to grow as follows:

TABLE 4: GROWTH IN DEMAND

Year	ERCs
2024	3,330
2025	3,935
2026	4,549
2027	5,226
2028	5,637
2029	5,999
2030	6,361
2031	6,689
2032	7,080
2033	7,345
2034	7,610
Source: IFFP, 3-1	

Source: IFFP, 3-1

Existing and Proposed LOS Analysis

Level of service (LOS) defines the water capital facility demands that a typical ERC will require and should pay for with impact fees. The IFFP defines service levels as follows:

Level of Service

- Peak Day Demand: 1,248 gpd/ERC
- Indoor Storage Capacity (Equalization): 590 gallons/ERC
- Indoor Fire Storage Capacity: 58 gallons/ERC (0.6 MG fire storage requirement at buildout divided by the number of ERCs at buildout (10,260))
- Distribution Capacity: 40 psi minimum during peak day demand conditions, and 30 psi minimum during peak instantaneous conditions

Fire Suppression

• Minimum Fire Flow: 1,500 gpm for 2 hours



- Maximum Fire Flow: 2,500 gpm for 4 hours
- Fire Storage (buildout): 600,000 gallons
- Minimum Pressure: 20 psi residual during peak day + fire flow event²

Utah Code 11-36a-304(1)(b)(c)

Excess Capacity

No source capacity has been included in the IFFP because this capacity is currently provided separately through agreements with the City of Orem and CUWCD. Water storage capacity is showing an existing deficit of 3.57MG. This deficiency cannot be paid for with impact fees.

TABLE 5: WATER STORAGE EXISTING DEFICIT

10-Year	Level of Service	Requirement (MG)	Capacity	Surplus/Deficit
Growth (ERCs)	(gal/ERC)		Remaining (MG)	(MG)
4,280	590	2.53	-1.04	-3.57

The IFFP identifies total capacity of the distribution system as 10,260 ERCs. With 3,330 existing ERCs, that leaves capacity for another 6,930 ERCs. The existing system has an actual cost of \$1,924,276 for impact-fee eligible projects.³ Of this amount, \$1,299,730 represents excess capacity, calculated as the percentage of remaining capacity (6,930 ERCs) compared to total capacity of the existing system (10,260 ERCs).

TABLE 6: EXISTING EXCESS CAPACITY

Excess Capacity	Amount
Total Excess Capacity Distribution Cost	\$1,924,276
Remaining Capacity - ERCs	6,930
% of Capacity Remaining	67.5%
Cost of Excess Capacity to New Growth	\$1,299,730
Source: Vineyard Asset List; IFFP p. 2-3; ZPFI	

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(b)(c)

The means by which the City will meet growth demands include constructing the following projects as set forth in the Impact Fee Facilities Plan. Table 6 includes projects that will partially benefit existing development as well as new development.

-

² IFFP, p. 2-1

³ Vineyard Asset List



TABLE 7: NEW CONSTRUCTION IMPROVEMENTS - EXISTING AND NEW DEVELOPMENT

Project	Total Cost	Туре	% Impact Fee Eligible	Total Impact Fee Eligible Cost	Capacity ERCs	Cost to Existing Developme nt
6.0 MG Storage Tank	\$10,539,102	Storage	64%	\$6,746,015	9,252	\$3,793,087
Booster Pump Station	\$7,026,068	Distribution	68%	\$4,745,678	10,260	\$2,280,390
Pipeline Projects	\$14,270,267	Distribution	68%	\$9,638,689	10,260	\$4,631,578
TOTAL Source: IFFP,	\$31,835,437		-	\$21,130,381		\$10,705,055

Table 8 includes new construction projects that are solely needed to meet the demands of new growth in Vineyard.

TABLE 8: NEW CONSTRUCTION IMPROVEMENTS - NEW DEVELOPMENT

Project	Distribution	Storage	Total
Mill Road North Extension	\$2,191,000	\$0	\$2,191,000
Pump Station Upgrade	\$708,000	\$0	\$708,000
South Downtown Distribution	\$2,191,000	\$0	\$2,191,000
Holdaway Farms Distribution	\$911,000	\$0	\$911,000
East Geneva Distribution	\$1,822,000	\$0	\$1,822,000
TOTAL	\$7,823,000	\$0	\$7,823,000
Source: IFFP, p. 3-3			

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

Maximum Legal Culinary Water Impact Fee per ERC

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future and actual cost of existing system improvements that benefit new growth that can be recouped through impact fees. The impact fee for existing assets must be based on the actual costs (when excess capacity is available) while the fees for construction of new facilities can be based on reasonable future costs of the system.

Existing Excess Capacity

The impact-fee eligible actual cost of the City's culinary water system that will serve an additional 6,930 ERCs by 2034 is \$1,924,276 with \$1,299,730 of the cost of the excess capacity allocated to growth between 2024 and 2034. Therefore, the buy-in cost is \$187.55 per ERC.



TABLE 9: EXCESS CAPACITY PROPORTIONATE SHARE CALCULATION

Excess Capacity	Amount
Total Excess Capacity Distribution Cost	\$1,924,276
Remaining Capacity - ERCs	6,930
% of Capacity Remaining	67.5%
Cost of Excess Capacity to New Growth	\$1,299,730
Cost per ERC	\$187.55

Interest costs can be included for the Series 2023 Water and Sewer Revenue Bonds which are used to fund existing facilities. The total interest cost on the bond is \$12,551,493. Culinary water is responsible for 90 percent of the interest cost which is spread among the total capacity (10,260 ERCs) served by the projects funded by the bond.

TABLE 10: INTEREST COST PROPORTIONATE SHARE CALCULATION

Interest Calculation on Outstanding Bond	Amount
Total Interest Cost to Culinary Water	\$11,296,344
Capacity ERCs of Outstanding Bond	10,260
Interest Cost per ERC	\$1,101.01

New Construction

The storage construction project identified in Table 7 previously has a total capacity of 9,252 ERCs. With 3,330 existing ERCs, capacity remains to serve another 5,922 ERCs. New development between 2024 and 2034 represents 72.3 percent of the remaining capacity. Therefore, this results in a cost of \$1,139.14 per ERC.

TABLE 11: NEW CONSTRUCTION PROJECTS - STORAGE

New Improvements - Storage	Amount
Impact-Fee Eligible Cost	\$6,746,015
Total ERC Capacity	9,252
Total ERC Capacity Remaining	5,922
Growth in ERCs, 2024-2034	4,280
% of Total Capacity Consumed, 2024-2034	72.3%
Cost to Growth, 2024-2034	\$4,875,539
Cost per ERC	\$1,139.14

The distribution construction projects identified in Tables 7 and 8 previously have a total capacity of 10,260 ERCs. With 3,330 existing ERCs, capacity remains to serve another 6,930 ERCs. New development between 2024 and 2034 represents 61.76 percent of the remaining capacity $(4,280 \, \text{ERCs} / 6,930 \, \text{ERCs})$. Therefore, this results in a cost of \$3,204.53 per ERC.

TABLE 12: NEW CONSTRUCTION PROJECTS - DISTRIBUTION

New Improvements - Distribution	Amount
Impact-Fee Eligible	\$22,207,367
Total ERC Capacity	10,260



New Improvements - Distribution	Amount
Total ERC Capacity Remaining	6,930
Capacity Consumed 2024-2034	61.76%
Cost to Growth, 2024-2034	\$13,715,372
Growth in ERCs, 2024-2034	4,280
Cost per ERC	\$3,204.53
Consultant Costs	

Consultant costs are an allowable expense and result in a proportionate share cost of \$41.72 per ERC.

TABLE 13: CONSULTANT COSTS

Consultant Cost	Amount
Master Plan Cost to Growth	\$64,759.20
ERCs Served	1,896
Cost per ERC	\$34.16
IFFP/IFA Cost to Growth	\$20,200
ERCs Served	2,669
Cost per ERC	\$7.57
TOTAL	\$41.72

Fund Balance

The fund balance of \$60,480.25⁴ can be used to offset some of the construction costs of new projects shown in Tables 7 and 8. A credit of \$14.13 per ERC is therefore applied to the new construction cost per ERC.

TABLE 14: IMPACT FEE FUND BALANCE CREDIT

Impact Fee Fund Balance	Amount
Fund Balance	\$60,480.25
Growth in ERCs, 2024-2034	4,280
Credit per ERC	(\$14.13)

Summary of Gross Impact Fee Before Credits

The gross impact fee includes buy-in costs for existing, excess capacity, interest cost on the outstanding bond, new construction costs (less fund balance) and consultant costs.

TABLE 15: SUMMARY OF GROSS FEE

Summary	Amount
Existing Buy-In Costs	\$187.55
Interest on Bonds	\$1,101.01
New Construction	\$4,343.67

⁴ Source: Vineyard City

10



Summary	Amount
Consultant Costs	\$41.72
Fund Balance	(\$14.13)
Subtotal before Credits	\$5,659.82

Credits Against Impact Fees

Credits must be made for the proportionate share of new projects that benefit existing development as well as the Series 2023 Water/Wastewater Revenue Bond so that new development is not charged more than its fair share.

The proportionate share of new projects benefitting existing development is \$10,705,055 based on the IFFP which is anticipated to be paid for with increased rates, spread over 10 years, and therefore new development must be credited so that it does not pay the full impact fee as well as higher rates.

TABLE 16: CREDITS ON PROJECTS BENEFITTING EXISTING DEVELOPMENT

Year	ERCs	Payment	Payment per ERC	NPV*
2025	3,935	\$1,070,506	\$272.05	\$1,467.51
2026	4,549	\$1,070,506	\$235.33	\$1,268.84
2027	5,226	\$1,070,506	\$204.84	\$1,096.96
2028	5,637	\$1,070,506	\$189.91	\$946.96
2029	5,999	\$1,070,506	\$178.45	\$804.40
2030	6,361	\$1,070,506	\$168.29	\$666.18
2031	6,689	\$1,070,506	\$160.04	\$531.19
2032	7,080	\$1,070,506	\$151.20	\$397.71
2033	7,345	\$1,070,506	\$145.75	\$266.40
2034	7,610	\$1,070,506	\$140.67	\$133.97

^{*}NPV = net present value discounted at 5 percent

There is an outstanding Series 2023 Water/Wastewater Revenue Bond issued for \$14,350,000. Culinary water is responsible for 90 percent of the bond costs. Impact fees should cover the bond costs associated with new development; however, a credit must be made for the portion of the bond that benefits existing development so that new development does not pay more than its fair share.

TABLE 17: CREDITS FOR SERIES 2023 WATER/WASTEWATER REVENUE BOND

Year	P+I	Proportionate Share	Existing Development Share	ERCs	Payment per ERC	NPV*
2025	\$907,638	\$816,874	\$265,126	3,935	\$67.38	\$596.99
2026	\$906,138	\$815,524	\$264,688	4,549	\$58.19	\$559.47
2027	\$904,138	\$813,724	\$264,103	5,226	\$50.54	\$529.25
2028	\$906,638	\$815,974	\$264,834	5,637	\$46.98	\$505.18



Year	P+I	Proportionate Share	Existing Development Share	ERCs	Payment per ERC	NPV*
2029	\$908,388	\$817,549	\$265,345	5,999	\$44.23	\$483.46
2030	\$904,388	\$813,949	\$264,176	6,361	\$41.53	\$463.40
2031	\$904,888	\$814,399	\$264,322	6,689	\$39.52	\$445.04
2032	\$904,638	\$814,174	\$264,249	7,080	\$37.32	\$427.77
2033	\$903,638	\$813,274	\$263,957	7,345	\$35.94	\$411.84

^{*}NPV = net present value discounted at 5 percent

The maximum impact fee per ERC is calculated by subtracting the two credits from the gross impact fee shown in Table 15.

TABLE 18: MAXIMUM FEE PER ERC

Year	Gross Fee per ERC	NPV - Deficiency Projects Credit	NPV - Outstanding Bond Credit	Maximum Fee per ERC
2025	\$5,659.82	\$1,467.51	\$596.99	\$3,595.32
2026	\$5,659.82	\$1,268.84	\$559.47	\$3,831.52
2027	\$5,659.82	\$1,096.96	\$529.25	\$4,033.61
2028	\$5,659.82	\$946.96	\$505.18	\$4,207.68
2029	\$5,659.82	\$804.40	\$483.46	\$4,371.96
2030	\$5,659.82	\$666.18	\$463.40	\$4,530.25
2031	\$5,659.82	\$531.19	\$445.04	\$4,683.59
2032	\$5,659.82	\$397.71	\$427.77	\$4,834.34
2033	\$5,659.82	\$266.40	\$411.84	\$4,981.59
2034	\$5,659.82	\$133.97	\$396.49	\$5,129.36

CHAPTER 6: MAXIMUM FEES

Residential units (per door) are charged based on a ¾" meter size (1 ERC) while all nonresidential development is charged based on meter size.

TABLE 19: MAXIMUM FEE PER ERC BY METER SIZE

Meter Size	ERCs	2025	2026	2027	2028	2029	2030
3/4"	1	\$3,595.32	\$3,831.52	\$4,033.61	\$4,207.68	\$4,371.96	\$4,530.25
1"	1.67	\$6,004.18	\$6,398.63	\$6,736.13	\$7,026.83	\$7,301.18	\$7,565.51
1 ½"	3.33	\$11,972.41	\$12,758.95	\$13,431.93	\$14,011.58	\$14,558.64	\$15,085.73
2"	5.33	\$19,163.04	\$20,421.98	\$21,499.16	\$22,426.94	\$23,302.56	\$24,146.22
3"	10	\$35,953.17	\$38,315.15	\$40,336.13	\$42,076.82	\$43,719.63	\$45,302.48
4"	16.67	\$59,933.94	\$63,871.36	\$67,240.34	\$70,142.05	\$72,880.62	\$75,519.24
6"	33.33	\$119,831.92	\$127,704.41	\$134,440.34	\$140,242.03	\$145,717.52	\$150,993.18



8"	53.33	\$191,738.27	\$204,334.71	\$215,112.60	\$224,395.66	\$233,156.77	\$241,598.15
10"	76.67	\$275,652.97	\$293,762.28	\$309,257.14	\$322,602.94	\$335,198.38	\$347,334.15

Non-Standard Fee Adjustment

In cases where it is determined that the use of meter sizes to assess impact fees would not lead to an equitable result, ERCs may instead be calculated based on estimated peak day demand as follows:

ERCs = (peak day demand, gpd) / (1,248 gpd/ERC)

Examples where a meter size may not produce an equitable result include instances where a development uses multiple meters rather than a single meter or when the meter multiplier does not accurately reflect the expected multiplier of the customer as compared to a standard ERC.

The resulting number of ERCs is then multiplied by the $\frac{3}{4}$ " (1 ERC) maximum fee for the appropriate year.

CERTIFICATION

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

- 1. includes only the cost 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; or
 - b. cost 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;
- 3. offset costs with grants or other alternate sources of payment; and
- 4. complies in each and every relevant respect with the Impact Fees Act.



DRINKING WATER MASTER PLAN AND CAPITAL FACILITIES PLAN

(HAL Project No.: 319.04.100)

DRAFT

May 2025



VINEYARD CITY

DRINKING WATER MASTER PLAN AND CAPITAL FACILITY PLAN

(HAL Project No.: 319.04.100)

DRAFT



May 2025

ACKNOWLEDGEMENTS

Hansen, Allen & Luce thanks the following individuals for their contributions to this project:

Vineyard City Government

Julie Fullmer, Mayor Sara Cameron, Councilmember Jacob Holdaway, Councilmember Brett Clawson, Councilmember Mardi Sifuentes, Councilmember

Vineyard City Staff

Eric Ellis, City Manager

Naseem Ghandour, P.E., Public Works Director/City Engineer
Devan Peterson, Environmental Utilities Manager
Chris Jackson, Environmental Utilities Crew Lead
Morgan Brim, Community Development Director
Kristie Bayles, Finance Director
Patrick James, Assistant City Engineer
Cache Hancey, Senior Planner

Hansen, Allen & Luce, Inc.

Steven C. Jones, P.E., CEO Marvin E. Allen, P.E., Senior Technical Advisor Ridley J. Griggs, P.E., Project Manager

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	
TABLE OF CONTENTS	
LIST OF TABLES	
LIST OF FIGURES	
GLOSSARY OF TECHNICAL TERMS	
ABBREVIATIONS AND UNITS	
EXECUTIVE SUMMARY	
PURPOSE OF STUDY	
PLANNING HORIZONS	
COMPONENTS OF A WATER DISTRIBUTION SYSTEM	
METHODS	
SYSTEM VULNERABILITIES	
CAPITAL FACILITY PLAN	
CONCLUSIONS	ES-5
OUARTER 4 INTRODUCTION	4.4
CHAPTER 1 INTRODUCTION	
PURPOSE AND SCOPE	
BACKGROUND	
WATER SUPPLY AND DEMAND	
MASTER PLANNING METHODOLOGY	1-2
CHAPTER 2 EXISTING SYSTEM	2-1
PHYSICAL INFRASTRUCTURE	
North Pressure Zone	
South Pressure Zone	
Sources	
Storage Facilities	
Pressurized Irrigation System	
EQUIVALENT RESIDENTIAL CONNECTIONS	
EXISTING SERVICE	
CHAPTER 3 WATER SOURCES AND DEMAND	
EXISTING WATER SOURCES	
LEVEL OF SERVICE	
EXISTING WATER SOURCE REQUIREMENTS	
Existing Peak Day Demand	
Existing Peak Instantaneous Demand	
Existing Pump Stations	
Existing Average Yearly Demand	3-3
SUMMARY – EXISTING SOURCES	3-3
CHAPTER 4 WATER STORAGE	A A
EXISTING WATER STORAGE	
EXISTING WATER STORAGE REQUIREMENTS	
Fire Suppression Storage	
Equalization Storage	
Emergency Storage	
SUMMARY – EXISTING STORAGE	

CHAPTER 5 WATER DISTRIBUTION	5-1
HYDRAULIC MODEL	5-1
Development	5-1
Model Components	
ANALYSIS METHODOLOGY	5-2
EXISTING WATER DISTRIBUTION SYSTEM	5-2
Fire Flow	
CHAPTER 6 SYSTEM GROWTH	
GROWTH PROJECTIONS	
FUTURE SERVICE	6-1
CHAPTER 7 FUTURE WATER REQUIREMENTS	7-1
WATER USE BY LAND USE	
PROJECTED WATER REQUIREMENTS	
Future Peak Day Demand	
Future Average Yearly Demand	
Future Storage	
Future System Flow Requirements	7-3
DESIGN AND PERFORMANCE CRITERIA	7-4
DEGIGINAND I ERI ORMANOE GRITERIA	
CHAPTER 8 FUTURE SYSTEM	
FUTURE NEEDS AND STRATEGIES	
Source Needs	8-1
Storage Needs	8-2
Distribution Needs	8-2
FUTURE SYSTEM	8-2
Sources	8-3
Storage Facilities	8-3
Pressure Zones	8-3
Pump Stations	8-3
Distribution Pipes	
Hydraulic Performance	
CHAPTER 9 CAPITAL FACILITY PLAN	
INTRODUCTION	
GROWTH PROJECTIONS	
METHODOLOGY	
RECOMMENDED PROJECTS AND COSTS	
Precision of Cost Estimates	
GROWTH-RELATED PROJECTS	9-2
FUNDING OPTIONS	
General Obligation Bonds	9-4
Revenue Bonds	9-5
State or Federal Grants and Loans	9-5
Impact Fees	
DEEDENCES	D 4

APPENDIX A

System-Specific Sizing Requirements

APPENDIX B

Model Calibration Data

APPENDIX C

Growth Projections

APPENDIX D

Estimated Project Costs

APPENDIX E

Checklist for Hydraulic Model Design Elements Report

LIST OF TABLES

NO.	TITLE	PAGE
ES-1	System Vulnerabilities	ES-2
ES-2	Proposed Solutions to System Vulnerabilities	
ES-3	System Growth-Related Capital Projects (0 – 20 Years)	ES-4
2-1	Existing Service by Pressure Zone	
3-1	Existing Drinking Water Sources	3-1
3-2	Level of Service Parameters	3-2
3-3	Existing Peak Day Demand by Pressure Zone	3-2
3-4	Existing Average Yearly Demand by Pressure Zone	3-3
4-1	Capacity of Existing Storage	4-1
4-2	Existing Fire Suppression Storage by Zone	
4-3	Level of Service Parameters	
4-4	Existing Drinking Water Storage Requirements by Zone	
5-1	Summary of Pipe Length by Diameter	
5-2	Compliance of Existing Distribution System with Utah Rule	5-3
6-1	Projected Future Service	
7-1	Projected Water Use by Land Use – Nonresidential or Mixed Use	
7-2	Projected Water Use by Land Use – Residential	
7-3	Projected Future Peak Day Demand	7-2
7-4	Projected Future Average Yearly Demand	
7-5	Projected Future Storage Requirements	
7-6	Design Parameters for Future Distribution System	7-3
7-7	System Design Criteria	
8-1	Comparison of Future Average Yearly Supply and Projected Demand	
8-2	Comparison of Existing Storage Capacity and Projected Requirements	
8-3	Comparison of Future Peak Instantaneous Supply and Projected Demand	
9-1	Recommended Growth Projects	9-3
9-2	Development-Driven Projects	9-4

LIST OF FIGURES

NO.	TITLE	PAGE
2-1	Existing Drinking Water System	After 2-1
2-2	Pressurized Irrigation Service Areas	After 2-1
5-1	Modeled Existing Peak Instantaneous Pressure	After 5-3
5-2	Modeled Existing Fire Flow Capacity	After 5-3
6-1	Vineyard City Historic and Projected Population	6-1
6-2	Planned Future Land Uses and Anticipated Growth Timing	After 6-1
8-1	Future Drinking Water System	
8-2	Modeled Future Minimum Pressures	After 8-4
9-1	Capital Facilities Plan Projects	After 9-2

GLOSSARY OF TECHNICAL TERMS

<u>Average Daily Flow</u>: The average yearly demand volume expressed in a flow rate.

Average Yearly Demand: The volume of water used during an entire year.

Buildout: When the development density reaches maximum allowed by planned development.

<u>Demand</u>: Required water flow rate or volume.

<u>Distribution System</u>: The network of pipes, valves and appurtenances contained within a water system.

<u>Drinking Water</u>: Water of sufficient quality for human consumption. Also referred to as Culinary or Potable water.

<u>Equivalent Residential Connection</u>: A measure used in comparing water demand from non-residential connections to residential connections.

<u>Fire Flow Requirements</u>: The rate of water delivery required to extinguish a particular fire. Usually, it is given in rate of flow (gallons per minute) for a specific period of time (hours).

<u>Head</u>: A measure of the pressure in a distribution system that is exerted by the water. Head represents the height of the free water surface (or pressure reduction valve setting) above any point in the hydraulic system.

<u>Head Loss</u>: The amount of pressure lost in a distribution system under dynamic conditions due to the wall roughness and other physical characteristics of pipes in the system.

<u>Peak Day</u>: The day(s) of the year in which a maximum amount of water is used in a 24-hour period.

<u>Peak Day Demand</u>: The average daily flow required to meet the needs imposed on a water system during the peak day(s) of the year.

<u>Peak Instantaneous Demand</u>: The flow required to meet the needs imposed on a water system during maximum flow on a peak day.

<u>Pressure Reducing Valve (PRV)</u>: A valve used to reduce excessive pressure in a water distribution system.

<u>Pressure Zone</u>: The area within a distribution system in which water pressure is maintained within specified limits.

<u>Service Area</u>: Typically, the area within the boundaries of the entity or entities that participate in the ownership, planning, design, construction, operation and maintenance of a water system.

<u>Static Pressure</u>: The pressure exerted by water within the pipelines and other water system appurtenances when water is not flowing through the system, i.e., during periods of little or no water use.

<u>Storage Reservoir</u>: A facility used to store, contain and protect water until it is needed by the customers of a water system. Also referred to as a Storage Tank.

<u>Transmission Pipeline</u>: A pipeline that transfers water from a source to a reservoir or from a reservoir to a distribution system.

Water Conservation: Planned management of water to prevent waste.

ABBREVIATIONS AND UNITS

ac acre [area]

ac-ft acre-foot (1 ac-ft = 325,851 gal) [volume]

ASR Aquifer Storage and Recovery
CIP Capital Improvement Plan
CFP Capital Facilities Plan

CUWCD Central Utah Water Conservancy District

DIP Ductile Iron Pipe
DBP disinfection byproduct

EPA U.S. Environmental Protection Agency EPANET EPA hydraulic network modeling software

ERC Equivalent Residential Connection

ft foot [length]

ft/s feet per second [velocity]

gal gallon [volume]

gpd gallons per day [flow rate]
gpm gallons per minute [flow rate]
HAL Hansen, Allen & Luce, Inc.

hp horsepower [power]

hr hour [time]

IFA Impact Fee Analysis
IFC International Fire Code
IFFP Impact Fee Facilities Plan

in. inch [length]

kgal thousand gallons [volume]

kW kilowatt [power] kWh kilowatt hour [energy] MG million gallons [volume]

MGD million gallons per day [flow rate] mg/L milligram per liter [concentration] µg/L microgram per liter [concentration]

mi mile [length]

psi pounds per square inch [pressure]

s second [time]

SCADA Supervisory Control and Data Acquisition

THM trihalomethane

UV ultraviolet radiation (disinfection method)

wsfu water supply fixture unit

yr year[time]

EXECUTIVE SUMMARY

PURPOSE OF STUDY

The purpose of this study is to help Vineyard City provide safe, efficient, and reliable drinking water service to its customers, both now and into the future, at the lowest reasonable cost.

PLANNING HORIZONS

The ultimate planning horizon for this study is the buildout condition of Vineyard City, which is projected to take place at approximately year 2055. However, this report provides guidance applicable at the following time intervals:

- 1. Near future: low-cost actions and best practices the City can implement to reduce costs and improve operations.
- 2. 10-year: system improvements needed within 10 years to provide capacity for anticipated new development. The cost of these improvements will be used to set impact fees and guide the formulation of near-term budgets.
- 20-year: system improvements needed within 20 years for anticipated new development.
 These improvements are included in the capital facility plan to guide the formulation of longer-term budgets.
- 4. Future: all system improvements necessary to serve the City at year 2055 or when it is developed at the density defined by the City's current general plan and zoning ordinances. These recommendations will help the City secure key pieces of land and work with developers to properly plan for infrastructure that is compatible with the future system.

COMPONENTS OF A WATER DISTRIBUTION SYSTEM

The following components of a water distribution system were analyzed to determine the capacity and ability of the water system to meet existing and future water demands:

- 1. Source the water used to supply the system.
- 2. Storage a location to store water between the time it is delivered to the system and the time it is used by a customer.
- 3. Transmission pipelines used to convey water between sources and storage locations.
- 4. Distribution pipelines used to deliver water from storage locations to the customer.

Each of these components must have enough capacity and capability to serve existing and future customers. To ensure adequate capacity, this study proposes a level of service as a design standard for new development (as discussed in the following section).

METHODS

Water usage and water system data were used to develop a responsible level of service for each component (source, storage, transmission, distribution) of the water system. The level of service was used to develop a computer model of the existing system, evaluate the existing system, and identify existing deficiencies.

The land use element of the general plan, population projections, development concept plans, and the proposed level of service were used to forecast the magnitude and locations of future

water demands in the City. Computer modeling and other tools were used to determine what infrastructure is necessary to best meet these demands.

SYSTEM VULNERABILITIES

The system was analyzed to identify existing vulnerabilities and areas which need improvements to support future growth. Table ES-1 contains a summary of system vulnerabilities. Further information about these vulnerabilities is described in detail in the report.

Table ES-1 System Vulnerabilities

ID	Description	Notes
V1	Source Water Availability	Some current water supply agreements are temporary. The City has secured approximately 3,500 ac-ft/yr in long-term water supply through Central Utah Water Conservancy District (CUWCD), but additional water will be necessary to meet projected future demands.
V2	Storage Capacity	Vineyard relies on temporary agreements for storage capacity.
V3	Distribution Limitations	Existing distribution pipes have finite capacity. Some are nearing their maximum capacity.
V4	Rapid Growth	Heavy development pressure and increased development densities can put a strain on available water resources and infrastructure capacity.

Recommended solutions to these vulnerabilities are shown in Table ES-2 and described in detail in the report.

Table ES-2
Proposed Solutions to System Vulnerabilities

Description	Notes	Vulnerabilities Addressed
Source Acquisition Strategy	 This plan highlights the need for a multifaceted source acquisition strategy that includes the following: Working to secure additional source capacity Commissioning a secondary water master plan to determine the most cost-effective ways to provide irrigation-quality water to landscapes currently irrigated from the drinking water system Acquiring water rights and water shares as they become available Update City policy to require that developers provide their own water for development 	V1, V4
Backbone Infrastructure Project	Major water distribution infrastructure necessary to accommodate future growth and independent system operation when temporary contracts expire was identified as part of the master planning process and is now under construction. This infrastructure included the following: • A 6.0 MG storage tank • A pump station • Distribution pipelines	V2, V3, V4
Distribution Projects	Properly sized pipelines will be installed as development occurs to preserve capacity for existing users while accommodating growth.	V3, V4

CAPITAL FACILITY PLAN

Projects necessary to address system vulnerabilities and support growth over the next 20 years are identified and described in the Capital Facility Plan. Conceptual-level cost estimates were prepared for each project. Projects were classified as either (1) Projects related to growth in the system as a whole; or (2) Projects that will become necessary only when an area develops. Projects related to system growth are needed within a specific timeframe and are eligible to be repaid by impact fees. Development-driven projects also provide a system benefit and are impact fee-eligible, but do not need to be scheduled for a specific timeframe. Typically, the City works with developers to get these projects installed as growth occurs.

System growth will necessitate four major capital projects within the next 20 years. These projects have an estimated cost of \$38,454,000 (see Table ES-3).

Table ES-3
System Growth-Related Capital Projects (0 – 20 Years)

Type & Phasing Year	Map ID	Recommended Project	Cost (2024 Dollars)¹			
Storage, Distribution – Growth Project 2024	1	Backbone Infrastructure Project: Construct major storage and distribution facilities. This project includes the following (quantities are approximate): • Pump Station • 6.0 MG Storage Tank • 800 ft of 36-inch pipe (Vineyard Connector) • 2,700 ft of 30-inch pipe (Vineyard Connector) • 10,400 ft of 24-inch pipe (Vineyard Connector) • 2,500 ft of 18-inch pipe (between Vineyard Connector and 400 N along train tracks) • 1,300 ft of 16-inch pipe (400 N) • 2,300 ft of 12-inch pipe (Mill Rd)	\$30,155,157			
Distribution - Growth Project 2026	2	Mill Road North Extension: Construct about 5,500 feet of 16-inch diameter pipeline between Vineyard Connector and 1600 N as Mill Road is constructed.	\$2,191,000			
Distribution - Growth Project 5-10 yrs	3	Pump Station Upgrade: Equip the pump station with additional pumps to meet growing demands.	\$708,000			
Storage – Growth Project 10+ yrs	4	Storage Expansion: Construct an additional 3 MG storage tank.	\$5,400,000			
	Total \$38,454,000					

^{1.} Costs listed are in 2024 dollars and are not adjusted for inflation.

Development will require additional distribution pipelines and booster stations to be installed or upsized throughout the 20-year capital facility planning project period. These projects are discussed in detail in Chapter 9.

CONCLUSIONS

Key conclusions from this master planning effort are as follows:

- 1. More annual source capacity will be needed to meet projected future demands. The City should take all possible actions to bolster their water supply. Key strategies to pursue are as follows:
 - a. Pursue additional source water.
 - b. Prepare a secondary water master plan to find ways to use irrigation-quality water to replace current irrigation demands served by drinking water.
 - c. Acquire additional water rights and water shares.
 - d. Explore developing independent water sources.
- 2. Planned infrastructure projects must be constructed at the proper size and at an appropriate pace to support development.

CHAPTER 1 INTRODUCTION

PURPOSE AND SCOPE

The purpose of this master plan is to provide direction to Vineyard City regarding decisions that will be made now and into the future to provide an adequate drinking water system for its customers at the most reasonable cost. Recommendations are based on demand data, growth projections, standards of the Utah Division of Drinking Water (DDW), city zoning, the Vineyard City general plan, known planned developments, and standard engineering practices.

The master plan is a study of the City's drinking water system and customer water use. The following topics are addressed herein: general planning, growth projections, water rights, water loss, water rates, impact fees, source requirements, storage requirements, and distribution system requirements. Operational parameters for the City's drinking water system were reviewed, and recommendations were made to optimize the system based on stability, ease of use, and cost. Based on this study, needed capital improvements have been identified with conceptual-level cost estimates for the recommended improvements.

The results of the study are limited by the accuracy of growth projections, data provided by the City, and other assumptions used in preparing the study. It is expected that the City will review and update this master plan every 5–10 years as new information about development, system performance, or water use becomes available.

BACKGROUND

The City of Vineyard is located in north-central Utah County on the eastern shore of Utah Lake. Vineyard began as an agricultural settlement when its first settlers arrived in 1855. In the 1940s, the Geneva Steel Mill was constructed on about 1600 acres of land in Vineyard where it operated until the 1990s. The Geneva Steel Mill property remained idle throughout the 1990s and 2000s until market conditions motivated investors to redevelop the site beginning in 2013.

Vineyard has earned the distinction as one of the most rapidly growing cities in Utah with a population of just 139 residents in 2010 expanding to an estimated 14,000 by year 2018 (Vineyard General Plan, 2019). Continued rapid growth in Vineyard is expected due to its welcoming atmosphere, proximity to the thriving Provo-Orem metropolitan area, excellent recreational opportunities, and a variety of appealing and affordable housing options.

Vineyard must soon make several key decisions to ensure their drinking water facilities will have adequate capacity to serve future growth. The City commissioned this study to ensure that decisions made now will be appropriate for the future and that the drinking water system will support Vineyard as it grows.

WATER SUPPLY AND DEMAND

Water supply and customer demand are key components of the master plan. Sufficient water must be available to supply the demands placed upon the system by its customers, both now and in the future. Existing demand in the system and projected future water use were considered as a part of the master planning effort.

MASTER PLANNING METHODOLOGY

Drinking water systems consist of water sources, storage facilities, transmission pipes, distribution pipes, pump stations, valves, and other components. Design and operation of the individual components must be coordinated so that they operate efficiently under a range of demands and conditions. The system must be capable of responding to daily and seasonal variations in demand while simultaneously providing sufficient capacity for firefighting and other emergency situations.

Identifying present and future water system needs is essential in the management and planning of a water system. Existing water demands were calculated from SCADA data and billed water use. Existing water use data, together with planned land uses in the City General Plan (and proposed development concepts), were used to project future water use.

This report follows the DDW requirements of Rule R309-510 ("Facility Design and Operation: Minimum Sizing Requirements") and Rule R309-105 ("Administration: General Responsibilities of Public Water Systems") of the Utah Administrative Code. The report addresses sources, storage, distribution, minimum pressures, hydraulic modeling, capital improvements, funding, and other topics pertinent to Vineyard City's drinking water system.

A level of service (LOS) has been designated for the water system. The level of service is the water volume and pressure standard that the drinking water system is designed to meet. Level of service is regulated by Utah Administrative Rule 309, which is administered by DDW. Development of LOS criteria is discussed in subsequent chapters.

Computer models of the City's drinking water system were prepared to simulate the performance of facilities under existing and future conditions. System improvement recommendations were prepared from the analysis and are presented in this report.

CHAPTER 2 EXISTING SYSTEM

This chapter addresses key aspects of the existing drinking water system. It is intended to give an overview and provide context for subsequent chapters, which will contain more detailed information.

PHYSICAL INFRASTRUCTURE

Vineyard City operates a drinking water system that serves most of the residents and businesses within its boundaries. The existing drinking water system includes 2 pressure zones and about 40 miles of pipe with diameters ranging from 8 inches to 14 inches. Figure 2-1 shows an overview of key existing drinking water infrastructure.

The system is presently divided into two pressure zones.

North Pressure Zone

The North Pressure Zone is served by wholesale connections to Central Utah Water Conservancy District (CUWCD). A PRV vault located near the intersection of 800 N and Geneva Road provides the majority of flow to the zone. A connection on 1600 N provides additional capacity. Water is provided from CUWCD on demand. Emergency interconnections with Lindon City also exist in two locations.

South Pressure Zone

The South Pressure Zone is served from the Orem drinking water system, with the majority of flow supplied through a connection near the intersection of Center Street and Geneva Road. Additional connections on 400 S and within the Sleepy Ridge subdivision are available on an emergency basis. Water is provided from Orem on demand.

Sources

Sources supplying the Vineyard City water system are as follows:

- CUWCD: The CUWCD system provides source to the north pressure zone.
- Orem City: Orem City provides source to the south pressure zone.

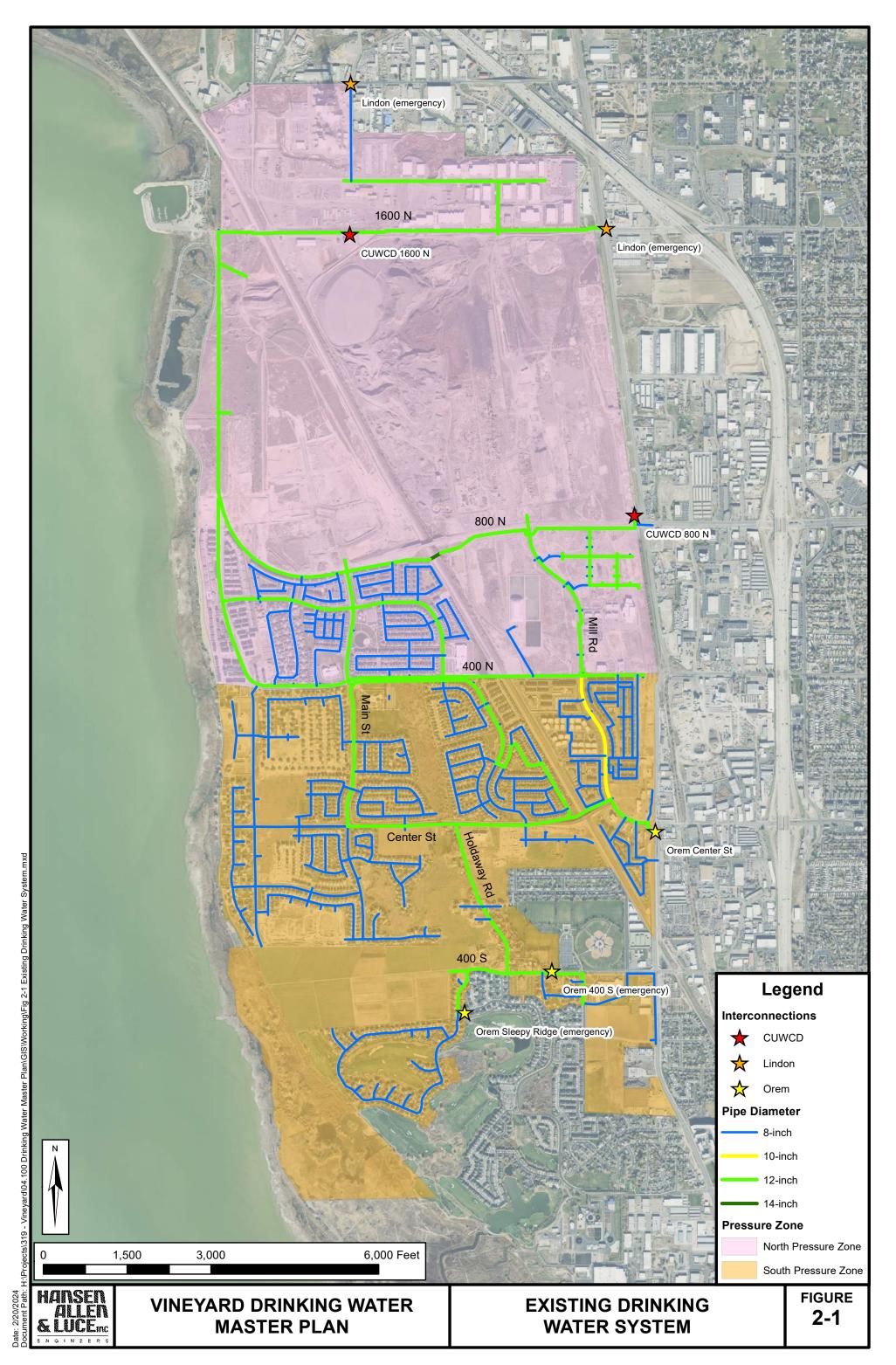
Vineyard City has supply contracts with each entity to provide capacity for peak day, peak instantaneous, peak day plus fire, and average yearly flows.

Storage Facilities

The drinking water system is presently served by storage held in the CUWCD and Orem systems. These facilities provide fire protection storage and equalization storage to the system.

Pressurized Irrigation System

Vineyard operates a pressurized irrigation (PI) system that provides water service to certain institutional properties. It will also be expanded to some other properties in the future. Figure 2-2 shows the existing service area of the PI system.





The PI system is supplied by Lake Bottom Canal Co. and several shallow wells. There is also a crossover connection that can be utilized to provide water from the drinking water system, if necessary, although it has not been used in several years. The PI system is not discussed in detail in this master plan, although its effects on existing and future drinking water demand have been taken into account.

EQUIVALENT RESIDENTIAL CONNECTIONS

Drinking water demands are expressed in terms of equivalent residential connections (ERCs), also sometimes referred to as equivalent residential units (ERUs). The use of ERCs is a standard engineering practice to describe the entire system in a common unit of measurement. One ERC is equal to the average demand of an average single-family, detached residential connection in the R-1-8 zoning districts. Other types of residential and non-residential demands are converted to ERCs for planning purposes. For example, a commercial building requiring six times as much water as a typical single-family, detached residential connection is assigned an ERC count of 6.

EXISTING SERVICE

A review of available information revealed an estimated 3,330 ERCs was served by the drinking water system at the beginning of year 2023. A characterization of ERCs by pressure zone is included in Table 2-1.

Table 2-1
Existing Service by Pressure Zone

Pressure Zone	ERCs
North	1,090
South	2,240
Total	3,330

CHAPTER 3 WATER SOURCES AND DEMAND

This chapter presents an overview of existing source requirements and water demands.

EXISTING WATER SOURCES

Vineyard uses drinking water from the Orem City drinking water system and CUWCD. The City also has emergency connections to the Lindon City drinking water system. Table 3-1 contains the capacity of each drinking water source.

Table 3-1
Existing Drinking Water Sources

Source	Zone	Connection Diameter (inch)	Peak Instantaneous Source Capacity ¹ (gpm)	Annual Source Capacity ² (ac-ft)	
1600 N CUWCD Vault	North	6"	2,100	4.000	
800 N CUWCD Vault	North	6" and 12"	5,800	1,036	
Mill Rd Orem Vault	South	2" and 8"	4,500		
400 S Orem Vault	South	10"	2,100	1,435	
Sleepy Ridge Orem Vault ³	South	8"	2,100		
Total		-	11,300	2,471	

- 1. Rated meter capacity or modeled pipe capacity, whichever is limiting. Listed total is less than the sum of each meter's capacity because some meters have incompatible hydraulic grades and cannot be used at the same time.
- 2. Contract capacity. Defined as the amount of water contracted to be sold to Vineyard by Orem City and CUWCD. Orem total includes 35 ac-ft owned by Vineyard through CWP.
- 3. The Sleepy Ridge vault is strictly for emergency uses. The hydraulic grade provided by Orem at this location is less than the normal operating hydraulic grade in the Vineyard system.

Vineyard owns 35 ac-ft of CUWCD water that is currently delivered to the South pressure zone through the Orem system. All other water used in Vineyard is owned either by CUWCD or Orem City and made accessible to Vineyard through legal agreements and purchase contracts.

LEVEL OF SERVICE

In 2018, House Bill 303 amended Section 19-4-114 of the Utah Code (the Safe Drinking Water Act). The new code directs the Utah Division of Drinking Water to establish system-specific water source and storage minimum sizing requirements (rather than prescribing statewide sizing standards) based on at least three years of water use data and/or an engineering study.

Vineyard City commissioned HAL to prepare an engineering study to determine sizing requirements for the system. This study is included in Appendix A. A summary of the level of service is included in Table 3-2.

Table 3-2
Level of Service Parameters

Parameter	Level of Service ¹	
Peak Day Demand	1,248 gpd/ERC	
Average Yearly Demand	590 gpd/ERC 0.66 ac-ft/ERC	

^{1.} The level of service accounts for both indoor uses and irrigation from the drinking water system.

EXISTING WATER SOURCE REQUIREMENTS

According to DDW standards (Section R309-510-7), water sources must be able to meet both the expected water demand on the peak day (flow requirement) and the average demand over the course of one year (volume requirement).

Existing Peak Day Demand

Peak day demand is the water demand on the day of the year with the highest water use. Existing peak day demand is computed according to the level of service.

Existing Peak Instantaneous Demand

Peak instantaneous demand was determined by evaluating measured source flow data to identify diurnal trends. It was determined that peak instantaneous flow in the system is approximately 1.7 times the peak day flow.

Table 3-3 shows the computed peak day and peak instantaneous demand by pressure zone.

Table 3-3
Existing Peak Day Demand by Pressure Zone

Existing Zone(s)	ERCs	Peak Day Demand (gpm) ¹	Peak Instantaneous Demand (gpm) ¹	Existing Supply (gpm)	Surplus (+) or Deficit (-)
North	1,090	945	1,606	6,800	+5,194
South	2,240	1,941	3,300	4,500	+1,200
Total	3,330	2,886	4,906	11,300	6,394

^{1.} Demand accounts for both indoor uses and irrigation from the drinking water system.

System facilities have physical capacity to meet peak day demand at the level of service. Contract capacity is an additional constraint not accounted for in Table 3-3.

Existing Pump Stations

Vineyard does not currently operate any pump stations.

Existing Average Yearly Demand

Average yearly demand is the volume of water used during an entire year, and is evaluated to verify that system sources can supply enough annual volume to meet demand under existing and future conditions. Average yearly demand must be considered for both indoor use and all irrigable acreage served by the drinking water system. Table 3-4 includes a summary of average yearly demand requirements for the drinking water system.

Table 3-4
Existing Average Yearly Demand by Pressure Zone

Existing Zone(s)	ERCs	Existing Demand (ac-ft/yr)	Existing Supply (ac-ft/yr)	Surplus (+) or Deficit (-)
North	1,090	719	1,036	+317
South	2,240	1,478	1,435	-43
Total	3,330	2,198	2,136	+273

Demand accounts for both indoor uses and irrigation from the drinking water system.

At the level of service, there is a slight existing deficiency in the South Zone. However, due to ongoing conservation efforts, actual water use has been lower than the level of service in recent years, and has stayed within contract limits.

SUMMARY - EXISTING SOURCES

Key aspects of existing sources are as follows:

- Vineyard is supplied solely through wholesale connections.
- At the level of service in this master plan, existing sources have physical capacity to meet demands at the peak day condition.
- Annual source volumes are provided based on wholesale contracts. At the level of service, a slight deficit exists in the South Zone. However, recent conservation efforts have kept actual use below the contract maximum volume.

CHAPTER 4 WATER STORAGE

EXISTING WATER STORAGE

The City's existing drinking water system is served by storage located in the CUWCD and Orem drinking water systems. Available storage capacity in these systems is shown in Table 4-1.

Table 4-1
Capacity of Existing Storage

Existing Zone	Orem Storage (MG)	CUWCD Storage (MG) ²	Total Storage (MG)
North	0.0	2.0	2.0
South	0.5 ¹	2.0	2.5
Total	0.5	4.0	4.5

- Vineyard owns 0.5 MG of storage in the CUWCD tank that serves the Orem system
- Vineyard currently has agreement to use 4.0 MG of storage in the CUWCD system, of which up to 2.0 MG can be utilized via delivery through the Orem system

EXISTING WATER STORAGE REQUIREMENTS

According to DDW standards outlined in Section R309-510-8, storage tanks must be able to provide: 1) fire suppression storage to supply water for firefighting; 2) emergency storage, as deemed necessary; and 3) equalization storage volume to make up the difference between source and demand. Each of the requirements is addressed below.

Fire Suppression Storage

Fire suppression storage is required for water systems that provide water for firefighting (Subsection R309-510-8(3)). The local fire authority determines the need for fire suppression storage.

Vineyard City is served by the Orem City Fire Department. Contact information for the Orem City Fire department is as follows:

Fire Chief: Marc Sanderson

Phone: 801-229-7021

Address: 300 E 1000 S

Orem, UT 84058

Vineyard City personnel reported that a fire flow capacity of 2,500 gpm for 4 hours would satisfy requirements for existing buildings in the North Zone, and that a requirement of 2,000 gpm for 4 hours would satisfy requirements in the South Zone. Table 4-2 summarizes the existing fire suppression storage assumed in each zone.

Table 4-2
Existing Required Fire Suppression Storage by Zone

Existing Zone	Fire Suppression Storage (MG)
North	0.60
South	0.48
Total	1.08

Equalization Storage

The proposed level of service for equalization storage in the drinking water system is 590 gal/ERC as calculated in the City's sizing study. See Appendix A.

Emergency Storage

While there are no specific DDW requirements for emergency storage (Subsection R309-510-8(4)), water systems can choose to maintain emergency storage to mitigate risks, provide system reliability, and protect public health and welfare. Emergency storage may be used in case of pipeline failures, equipment failures, power outages, source contamination, and natural disasters.

Vineyard has not specified emergency storage additional to the equalization and fire flow requirements in the system.

A summary of level of service for water storage is included in Table 4-3.

Table 4-3
Level of Service Parameters

Parameter	Level of Service	
Equalization Storage	590 gal/ERC	
Minimum Fire Storage	1,500 gpm for 2 hours	
Maximum Fire Storage	2,500 gpm for 4 hours	

Table 4-4 lists the equalization storage requirement by pressure zone, as well as total storage requirements, computed according to the level of service.

Table 4-4
Existing Drinking Water Storage Requirements by Zone

Zone	ERCs	Equalization (MG)	Fire (MG)	Emergency (MG)	Total Required Storage (MG)	Existing Storage (MG)	Remaining Capacity (MG)
North	1,090	0.64	0.60	0	1.24	2.0	+0.76
South	2,240	1.32	0.48	0	1.80	2.5	+0.70
Total	3,330	1.96	1.08	0	3.04	4.5	+1.46

SUMMARY - EXISTING STORAGE

Key aspects of existing storage facilities are as follows:

- Vineyard City has adequate storage capacity remaining in both pressure zones.
- The 2.5 MG of storage capacity serving the South Zone is defined in a temporary agreement set to expire in 2025. This capacity will need to be replaced.
- The 2.0 MG of storage capacity in the CUWCD system (currently serving the north zone) is defined in a perpetual agreement and will be used into the future.

CHAPTER 5 WATER DISTRIBUTION

HYDRAULIC MODEL

Development

A computer model of the City's drinking water distribution system was developed to analyze the performance of the existing and future distribution system and to prepare solutions for existing facilities not meeting the distribution system requirements. The model was developed with the software EPANET 2.0, published by the U.S. Environmental Protection Agency (EPA 2014; Rossman 2000). EPANET simulates the hydraulic behavior of pipe networks. Sources, pipes, tanks, valves, controls, and other data used to develop the model were obtained from GIS data of the city's drinking water system and other information supplied by the City.

HAL developed models for two phases of drinking water system development. The first phase was a model representing the existing system (existing model). This model was used to calibrate the model and identify deficiencies in the existing system. Calibration was performed using fire hydrant tests and by comparing model results to the City's SCADA output. Calibration data is included in Appendix B. The second phase was a model representing future conditions and the improvements necessary to accommodate growth (future model).

Model Components

The two basic elements of the model are pipes and nodes. A pipe is described by its inside diameter, length, minor friction loss factors, and a roughness value associated with friction head losses. A pipe can contain elbows, bends, valves, pumps, and other operational elements. Nodes are the endpoints of a pipe and can be categorized as junction nodes or boundary nodes. A junction node is a point where two or more pipes meet, where a change in pipe diameter occurs, or where flow is added (source) or removed (demand). A boundary node is a point where the hydraulic grade is known (a reservoir, tank, or PRV). Other components include tanks, reservoirs, pumps, valves, and controls.

The model is not an exact replica of the actual water system. Pipeline locations used in the model are approximate and not every pipeline may be included in the model, although efforts were made to make the model as complete and accurate as possible. Moreover, it is not necessary to include all of the distribution system pipes in the model to accurately simulate its performance.

Pipe Network

The pipe network layout originated from GIS data provided by the City. Elevation information was obtained from LIDAR data. Pipes in the system are generally PVC. Darcy-Weisbach roughness coefficients for pipes in this model ranged from 0.4 – 1.0, which is typical for these pipe materials in EPANET (Rossman 2000, 31).

Water Demands

Water demands were allocated in the model based on billed usage and billing addresses. Demand was determined for each billing address, and the addresses were geocoded in order to link the demands to a physical location. The geocoded demands were then assigned to the closest model node. With the proper spatial distribution, demands were scaled to reach the peak day demand determined in Chapter 3. For the future model, future demands were estimated according to the zoning and density shown in the City's general plan, and development concepts with

approval. Future demands were assigned to new nodes representing the expected location of new development in each pressure zone.

The pattern of water demand over a 24-hour period is called the diurnal curve or daily demand curve. Output from the Vineyard City SCADA system was used to derive a diurnal curve for the system. It has a peaking factor of 1.7, meaning that peak instantaneous demand is approximately 1.7 times the peak day demand. The diurnal curve was put into the model to simulate changes in water demand throughout the day.

In summary, the spatial distribution of demands followed geocoded water use data; the flow and volume of demands followed the proposed level of service described in Chapter 3; and the temporal pattern of demand followed typical diurnal curves.

Water Sources and Storage Tanks

The sources of water in the model are the City's existing and planned future wholesale connections. These connections are represented by a reservoir and a control valve. Future tank location, height, diameter, and volume are represented in the future model scenarios. The extended-period model predicts water levels in the planned future tank as it fills and empties to meet demand in the system.

ANALYSIS METHODOLOGY

HAL used extended-period and steady-state modeling to analyze the performance of the water system with current and projected future demands. An extended-period model represents system behavior over a period of time: tanks filling and draining, pumps turning on or off, pressures fluctuating, and flows shifting in response to demands. A steady-state model represents a snapshot of system performance. The peak day extended period model was used to set system conditions for the steady-state model, analyze system controls and the performance of the system over time, and to analyze system recommendations for performance over time. The steady-state model was used for analyzing the peak day plus fire flow conditions.

Four operating conditions were analyzed with the extended period model: Static conditions, peak day conditions, peak instantaneous conditions, and peak day plus fire flow conditions. Each of these conditions is a worst-case situation so the performance of the distribution system may be analyzed for compliance with DDW standards and City preferences.

EXISTING WATER DISTRIBUTION SYSTEM

Vineyard City's drinking water distribution system consists of all pipelines, valves, fittings, and other appurtenances used to convey water from sources and storage tanks to water users. The existing water system contains approximately 40 miles of pipe with diameters of 8 inches to 14 inches. Table 5-2 presents a summary of pipe length by diameter.

Table 5-1
Summary of Pipe Length by Diameter

Pipe Diameter (inches)	Total Length (Miles)
8	25.8
10	0.45
12	14.1
14	0.04

Performance of the drinking water system was evaluated using the hydraulic model according to the requirements listed in Table 5-2.

Table 5-2
Compliance of Existing
Distribution System with Utah Rule

Condition	Requirement ¹	System Design Flow ²	Compliance Status
Peak Day	Minimum 40 psi service pressure	2,886 gpm	All connections comply.
Peak Instantaneous	Minimum 30 psi service pressure	4,906 gpm	All connections comply.
Peak Day plus Fire Flow ³	Minimum 20 psi service pressure	2,886 gpm plus fire flow	Results are as shown on Figure 5-2.

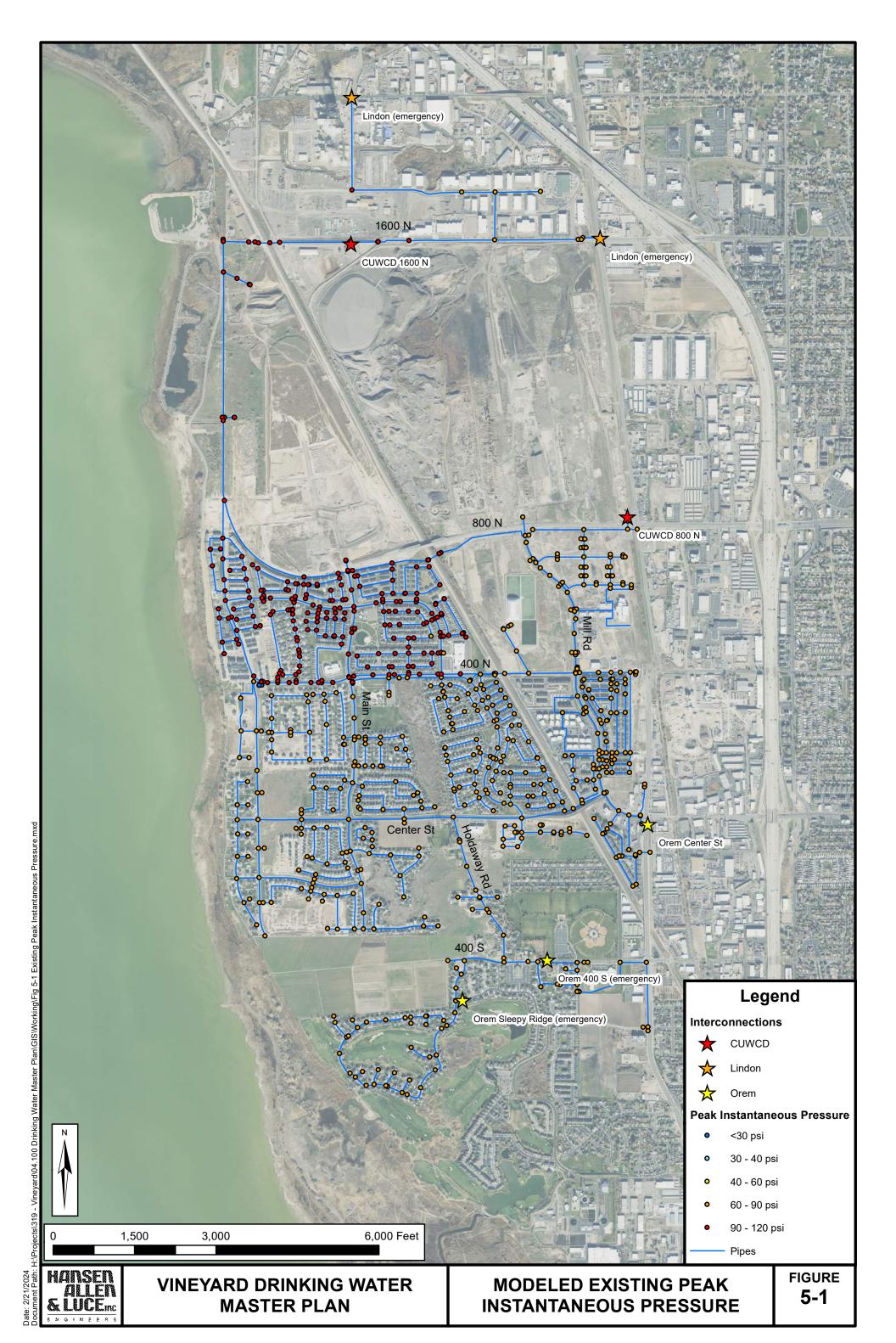
- 1. Requirements are as stated in Utah Code R309-105-9(2).
- 2. Peak day flow was multiplied by a factor of 1.7 to produce peak instantaneous flow.
- 3. The maximum fire flow requirement in Vineyard is 2,500 gpm. See Chapter 4 for details.

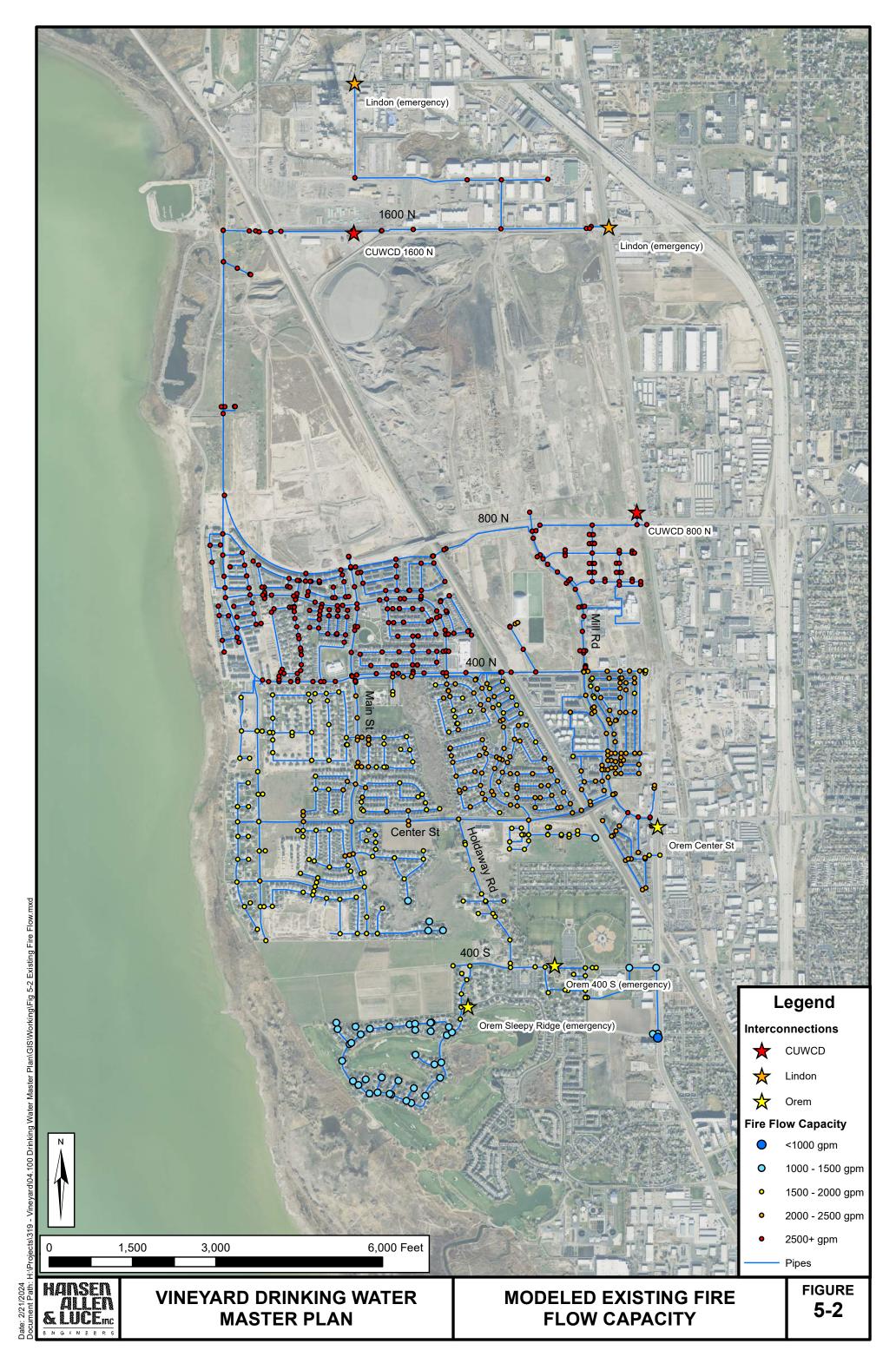
Modeled peak instantaneous pressures are shown on Figure 5-1.

Fire Flow

Figure 5-2 shows the modeled fire flow capacity available to the system. Noteworthy observations regarding fire flow are listed below:

- All residential areas of the system have a minimum available fire flow of 1,500 gpm except for Sleepy Ridge, which is slightly below 1,500 gpm during the peak day condition due to increasing system demands.
- All commercial and industrial areas have a minimum available fire flow of 2,000 gpm.
- The dead-end pipe along Geneva Road at approximately 575 S does not have 1,500 gpm of available fire flow capacity. However, it does not appear to provide fire protection to any structures at that location, so it is not consequential at this time. Any future proposed developments in the area should be carefully evaluated to ensure minimum fire flow capacity is available to them.





The Capital Facility Plan in Chapter 9 includes recommended projects to improve fire flow in these areas. Further consultation with the fire authority may be needed to determine which of these areas are deficient vs. which have appropriate exceptions.

Modeling should not always be viewed as a substitution for physical hydrant testing. Ideally, the model and physical testing will both be used to better understand the distribution system. For best results, physical fire flow tests should be conducted during periods of peak demand (July and August) and during times of day when demands are not at a minimum. If physical fire flow tests are performed at times other than peak demand, they will not represent the peak day demand case, when pressures are likely to be lowest. When compared to flow tests not taken at peak day demand, the hydraulic model will typically be more conservative than the physical test, because it simulates peak day demand.

Physical hydrant tests are still valuable and recommended because they provide model calibration points and enable the City to detect limitations in the field which may not be reflected in the hydraulic model (such as closed or partially closed valves, construction flaws, discrepancies between reality and GIS data, or other unexpected conditions which would affect fire flow).

When designing fire suppression systems for buildings, designers should be advised that results obtained during a flow test are not necessarily representative of peak day or anticipated future demands. The level of service is to provide a residual pressure of 20 psi during fire flow events, so it is recommended that fire suppression system designers should not assume that a residual pressure of more than 20 psi will be available.

CHAPTER 6 SYSTEM GROWTH

This chapter addresses existing and projected future growth in the service area of the Vineyard City drinking water system.

GROWTH PROJECTIONS

The development of impact fees requires growth projections over the next ten years. In addition to impact fee projects, this report will also highlight anticipated projects 10-20 years out in the Capital Facilities Plan section of this report.

Historic trends in growth, input from the Vineyard City Community Development Department, and development plans were considered in the development of growth projections used for this study. Detailed information is included in Appendix C. Figure 6-1 shows the historic and projected population for Vineyard City through 2050. Residential population is not expected to grow substantially past about 2050.

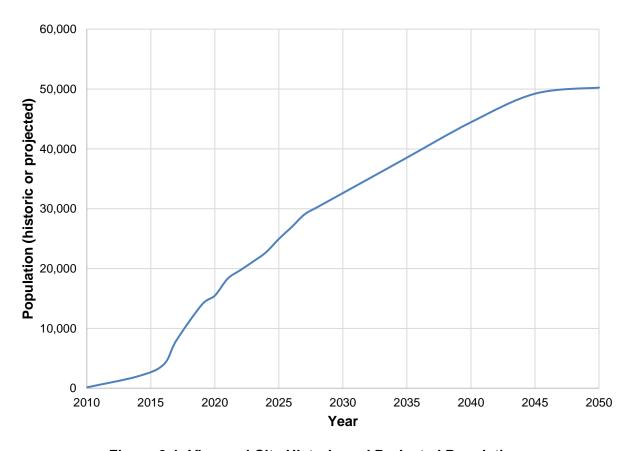
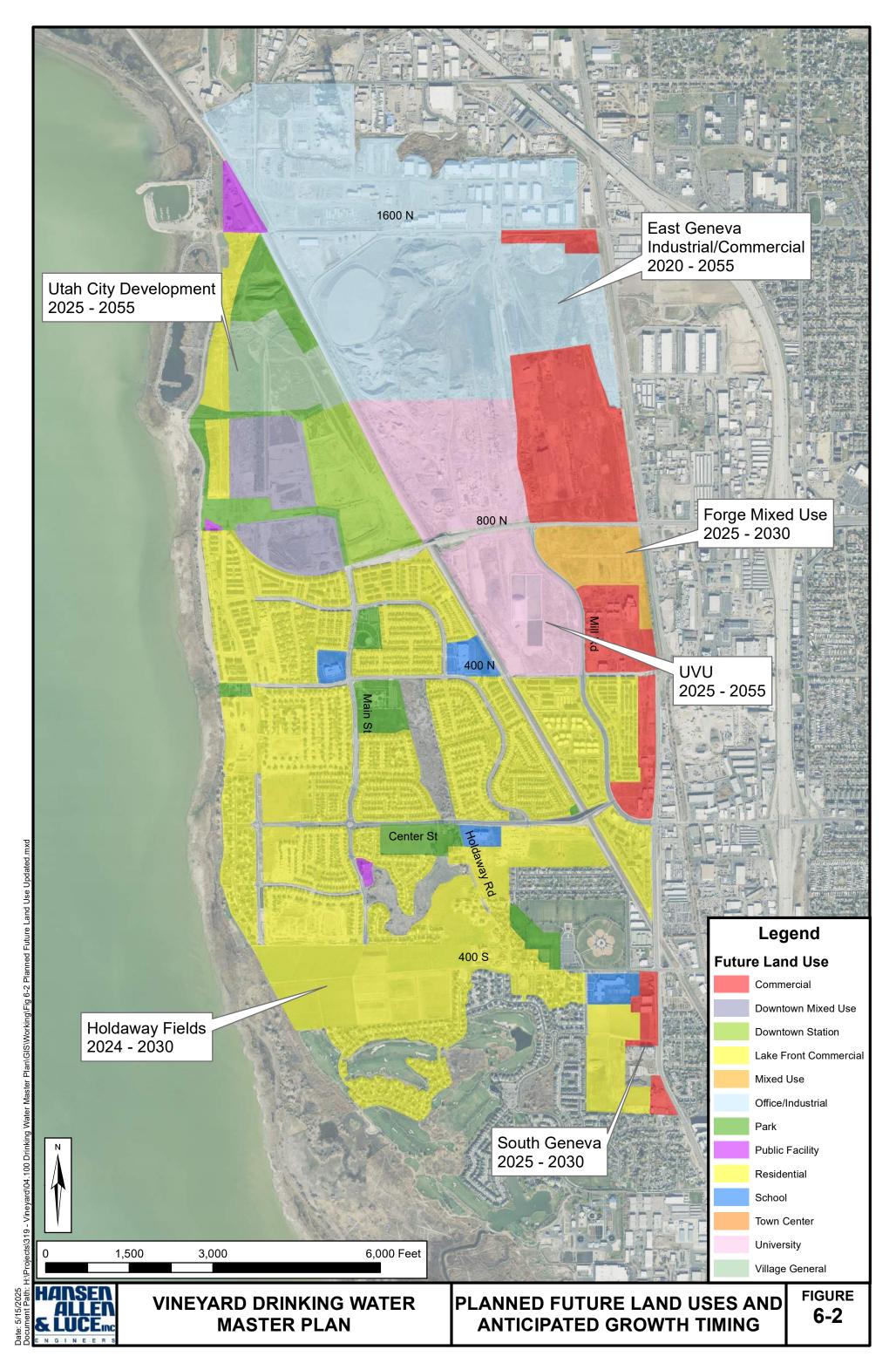


Figure 6-1: Vineyard City Historic and Projected Population

FUTURE SERVICE

Expected future water service in Vineyard was forecasted based on projected growth in population and anticipated future land uses. Detailed information on growth projections is included in Appendix C. Planned future land uses within the service area of the Vineyard City water system and expected timing of growth are shown in Figure 6-2.



Projected areas of growth are intended to represent a reasonable projection based on information available at this time. However, this master plan can be adapted if growth occurs faster or slower than projected. Table 6-1 includes projected ERCs and irrigated acreage at selected time intervals.

Table 6-1
Projected Future Service

Time Period	Projected ERCs
Existing	3,330
10 Year	7,610
20 Year	9,420
Buildout	10,260

Year-by-year projections used to develop the Capital Facility Plan are included in Appendix C.

While growth projections are an essential component of this master plan, it should be noted that system capacity is dependent on the number of ERCs in the system. Infrastructure improvements should be made when certain ERC counts are reached – which may occur in a different year than is projected in this plan. Timing for capital improvement projects should be determined based on the development that actually occurs in the system, rather than a target date which is not known with certainty.

CHAPTER 7 FUTURE WATER REQUIREMENTS

This chapter addresses future water source and storage needs in Vineyard based on projected growth.

WATER USE BY LAND USE

Peak day and average yearly water use for existing and planned future nonresidential and mixed-use land use types within Vineyard City are shown in Table 7-1.

Table 7-1
Projected Water Use by Land Use – Nonresidential or Mixed Use

Land Use Type	Peak Day Demand (gpm/ac)	Average Yearly Demand (ac-ft/ac)
Business Park	1.90	1.10
Commercial	1.90	1.10
Downtown Mixed Use	5.64	8.36
Downtown Station	8.91	13.16
Flex Office Industry	2.90	1.65
Lakefront Commercial	4.64	6.31
Manufacturing/Industrial	2.90	1.65
Park (with PI service)	0.70	0.25
Park (without PI service)	6.70	3.50
Public Facilities	3.80	2.00
Regional Commercial	1.90	1.10
School	4.80	2.50
The Forge (Mixed-Use)	3.38	6.05
University	2.27	2.81
Village General	5.46	7.88

Peak day and average yearly water use for residential uses are shown in Table 7-2. These were based on analysis of actual data for existing users and projected indoor usage for future urban condo units.

Table 7-2
Projected Water Use by Land Use – Residential

Land Use Type	Peak Day Demand (gpd/unit)	Average Yearly Demand (ac-ft/unit)	
Single-Family Unit	1,248	0.66	
Townhome	621	0.32	
Condo	414	0.22	
Urban Condo¹	155	0.17	

Urban condos are smaller units on average and are expected in the downtown area and in the Forge Development. They will have no associated irrigated acreage. Other condo units in Vineyard are associated with irrigated areas, which results in a higher water requirement.

PROJECTED WATER REQUIREMENTS

Projected future water requirements for the water system are based on projected population growth and development, the level of service for the water system, and projected water uses as shown in Tables 7-1 and 7-2.

Future Peak Day Demand

Projected peak day demand at key intervals is computed as shown in Table 7-3.

Table 7-3
Projected Future Peak Day Demand

Time Period	ERCs	Peak Day Demand (gpm)
Existing	3,330	2,886
10 Year	7,610	6,595
20 Year	9,420	8,164
Buildout	10,260	8,892

Future peak day demand will be supplied through wholesale connections to CUWCD.

Future Average Yearly Demand

Projected average yearly demand at key intervals is shown in Table 7-4.

Table 7-4
Projected Future Average Yearly Demand

Time Period	Average Yearly Demand (ac-ft/yr)
Existing	2,198
10 Year	5,615
20 Year	8,450
Buildout	8,528

Future Storage

Future storage requirements were computed at the level of service of and assuming a maximum fire flow requirement of 2,500 gpm for 4 hours (600,000 gal) once the zones are combined. Table 7-5 shows computed total requirements at key time intervals.

Table 7-5
Projected Future Storage Requirements

Time Period	Equalization Storage (MG)	Fire Storage (MG)	Total Storage Required (MG)
Existing	1.96	1.08	3.04
10 Year	5.01	0.60	5.61
20 Year	7.54	0.60	8.14
Buildout	7.61	0.60	8.21

Future System Flow Requirements

Demands and requirements for the future water distribution system are shown in Table 7-6.

Table 7-6
Design Parameters for
Future Distribution System

Condition	Requirement ¹	System Design Flow ²
Peak Day	Minimum 40 psi service pressure	8,892
Peak Instantaneous	Minimum 30 psi service pressure	15,116
Peak Day plus Fire Flow ³	Minimum 20 psi service pressure	11,392

- 1. Requirements are as stated in Utah Code R309-105-9(2).
- 2. Peak day flow was multiplied by a factor of 1.7 to produce peak instantaneous flow.
- 3. The maximum fire flow requirement at buildout is projected to be 2,500 gpm.

DESIGN AND PERFORMANCE CRITERIA

Summaries of the key design criteria and demand requirements for the drinking water system are included in Table 7-7 for reference.

Table 7-7
System Design Criteria

	Criteria	Existing Requirements	Estimated Future Requirements
Equivalent Residential Connections	Billing data/LOS	3,330 ERC	10,260 ERC
Source Peak Day Demand Average Yearly Demand	Section R309-510-7/LOS Section R309-510-7/LOS	2,886 gpm 2,198 ac-ft	8,892 gpm 8,528 ac-ft
Storage Equalization Emergency Fire Suppression Total	Section R309-501-8/LOS City preference IFC/ Fire Marshall	1.96 MG 0.00 MG <u>1.08 MG</u> 3.04 MG	7.61 MG 0.00 MG <u>0.60 MG</u> 8.21 MG
Distribution Peak Instantaneous Minimum Peak Day Fire Flow Min. Pressure: Preferred Peak Day Peak Instantaneous	Meter data/LOS IFC/ Fire Marshall/LOS City Preference Section R309-510-9/LOS ¹ Section R309-510-9/LOS ¹	4,906 gpm 1,500 gpm @ 20psi 75 psi 40 psi 30 psi	15,116 gpm 1,500 gpm @ 20psi 75 psi 40 psi 30 psi

^{1.} Minimum pressure values match State of Utah standards. Vineyard City has indicated preference for the system to operate at service pressures of at least 75 psi.

CHAPTER 8 FUTURE SYSTEM

This chapter addresses the recommended future construction and operation of the distribution system.

FUTURE NEEDS AND STRATEGIES

Strategies to secure necessary water and infrastructure capacity are discussed in this section.

Source Needs

A comparison of projected buildout average yearly demands and the currently planned 5-year contract buydown with CUWCD is shown in Table 8-1.

Table 8-1
Comparison of Future Average
Yearly Supply and Projected Demand

Condition	Average Yearly Demand (ac-ft/yr)
5-Year Contract Buydown	3,500
10-Year Projected Demand	5,332
Buildout Projected Demand	8,528
Future Need	5,028

It must be noted that Vineyard currently has sufficient source capacity to meet existing demands and support some growth; however, more source capacity is required for the City to even meet projected 10-year future average yearly demand. Additional source water must be secured to serve planned development.

Presently, CUWCD is the only source for the existing drinking water system, and has indicated that there is no capacity for Vineyard to secure additional water beyond the 5-year contract buydown amount of 3,500 ac-ft. As such, Vineyard will need to seek additional supply in other ways. Possible strategies to provide adequate source water for future needs are as follows:

- Explore the possibility of leasing or otherwise securing additional source capacity from neighboring cities, water districts, or water entities.
- Reduce existing drinking water demand using any of the following alternatives:
 - Expand secondary water use
 - Conserve additional water
- Develop independent water sources
- Update City policy to require that developers provide their own water for development

It is anticipated that a combination of the above strategies will be implemented over time. Considering the time it takes to develop and construct water sources, immediate effort will be needed to keep up with projected growth in demand. A secondary water master plan is recommended as soon as possible to evaluate the extent to which secondary water can be used

within the City. As a high-level estimate, a City-wide secondary water system could replace between 2,000 and 3,000 ac-ft of projected demand at the buildout condition.

Storage Needs

Vineyard is currently constructing a rectangular 6.0 MG concrete tank. Additional area is available to accommodate an additional concrete tank at the time when more storage capacity becomes necessary. Additionally, Vineyard has secured 2.0 MG of storage capacity in the CUWCD system under a perpetual agreement.

A comparison of the capacity of the storage tank under construction and the estimated future buildout storage requirement is shown in Table 8-2.

Table 8-2
Comparison of Existing Storage
Capacity and Projected Requirements

Condition	Capacity (MG)
Tank Phase 1 Capacity	6.00
Tank Phase 2 Expansion ¹	3.00
CUWCD Agreement ²	2.00
Buildout Projected Requirement	8.21
Future Surplus	+2.79

Extra capacity is needed due to changing plans in the Town Center and future sizing will be refined with further study.

When additional storage capacity becomes necessary, an additional tank will be constructed. As land use plans and regulations evolve, the size of the additional tank will be studied and defined in more detail prior to design and construction.

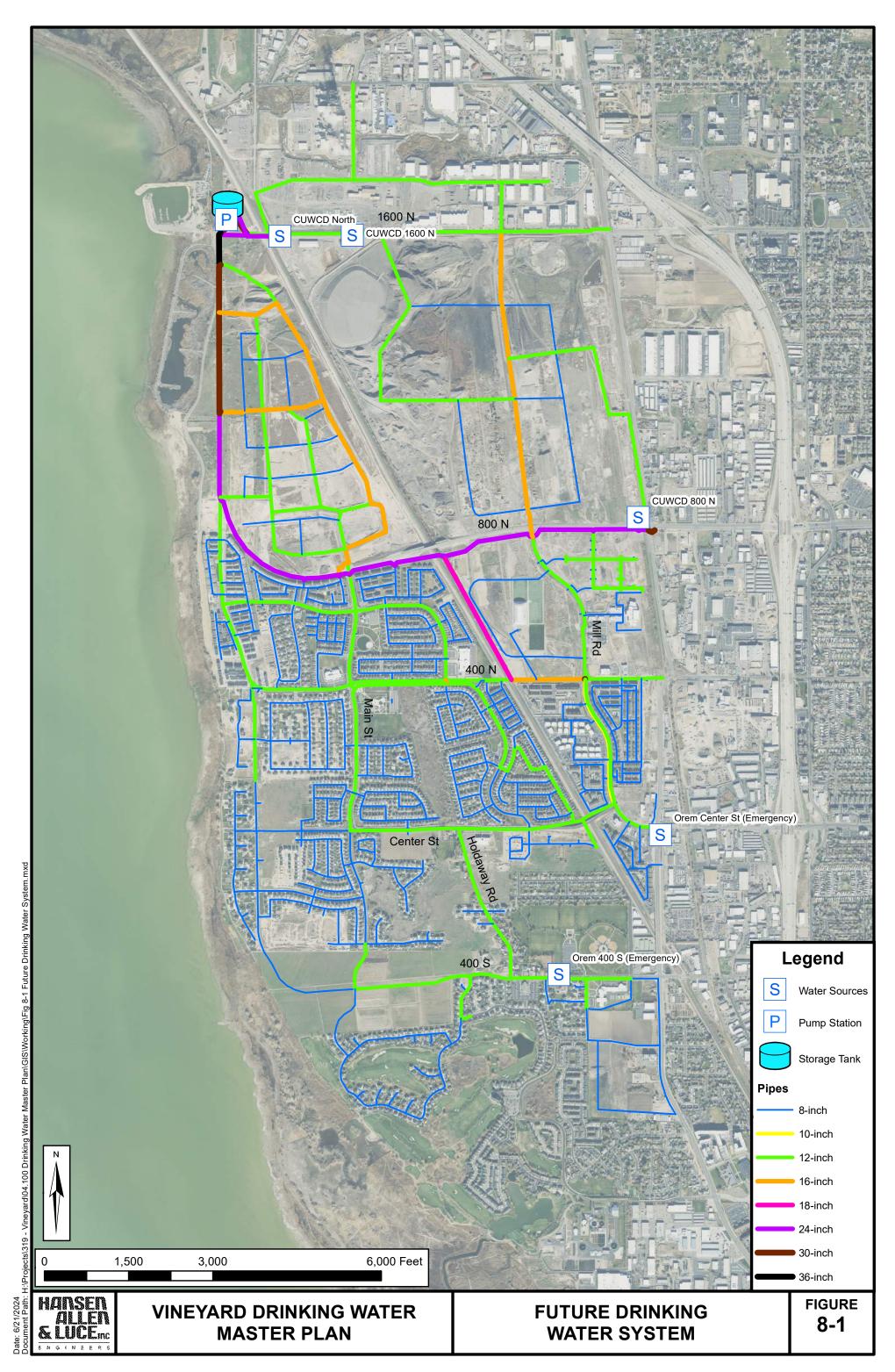
Distribution Needs

Additional distribution pipes will be needed to serve developing areas. As developments are proposed, detailed hydraulic modeling evaluations will be conducted on proposed infrastructure to verify that adequate pressure and fire flow capacity will be available to serve the proposed development.

FUTURE SYSTEM

Important aspects of the future system are discussed in this section. Figure 8-1 shows a summary of key system infrastructure.

CUWCD storage to be used for fire flow and emergency storage.



Sources

The City's water supply arrangement with Orem City is temporary. The City has entered into a long-term supply agreement with CUWCD to provide additional source capacity. Planned future connections to the CUWCD system are as follows:

- 800 N and Geneva Road: this connection is anticipated to provide the majority of flow to the system and will be operated to provide constant daily flow to the system. It is being reconstructed to increase its flow capacity.
- Existing 1600 N: this existing connection will remain available for use as needed.
- Future 1600 N tank fill: this connection will allow Vineyard to fill the tank directly from the CUWCD system.

Storage Facilities

All necessary storage will be constructed on a single site at the northern end of the City. The City is currently constructing a rectangular tank with 6 MG of capacity. The tank is situated on the site so that an additional tank can be constructed to add more volume when needed.

The preliminary planned size of the future tank is 3 MG. Vineyard City personnel selected this size to achieve good cost value (in terms of dollars per gallon) and provide additional buffer for operation and emergency events. Before construction, more detailed study will be performed to verify the tank is appropriately sized.

Pressure Zones

The existing pressure zones were mainly established for administrative reasons. Once the City stops receiving water from the Orem system, a single pressure zone will be established.

Pump Stations

A single pump station will serve the system. Water from the CUWCD system will be provided to the Vineyard system at a constant daily flow rate, with the tank and pump station being used to meet varying demands. During times when system demand exceeds the source flow rate, the pump station will supply additional water from the tank to meet demands. During times when the source flow rate exceeds system demands, a pressure sustaining valve will operate to send excess water to the storage tank. The pump station will also provide fire flow capacity.

Under normal operations, peak instantaneous demand will be supplied from connections to CUWCD and by the pump station. In rare circumstances where normal pressure is not available from the CUWCD system, the pump station will need to provide flow to the entire system.

Table 8-3 includes a summary of the capacity of the pump station and projected buildout peak instantaneous demand. The pump station has been designed to supply peak instantaneous capacity at the projected buildout condition.

Table 8-3
Comparison of Future Peak
Instantaneous Supply and Projected Demand

Condition	Peak Day Demand (gpm)
Pump Station Capacity	16,000
Buildout Peak Instantaneous Demand	15,116
Surplus	+884

Distribution Pipes

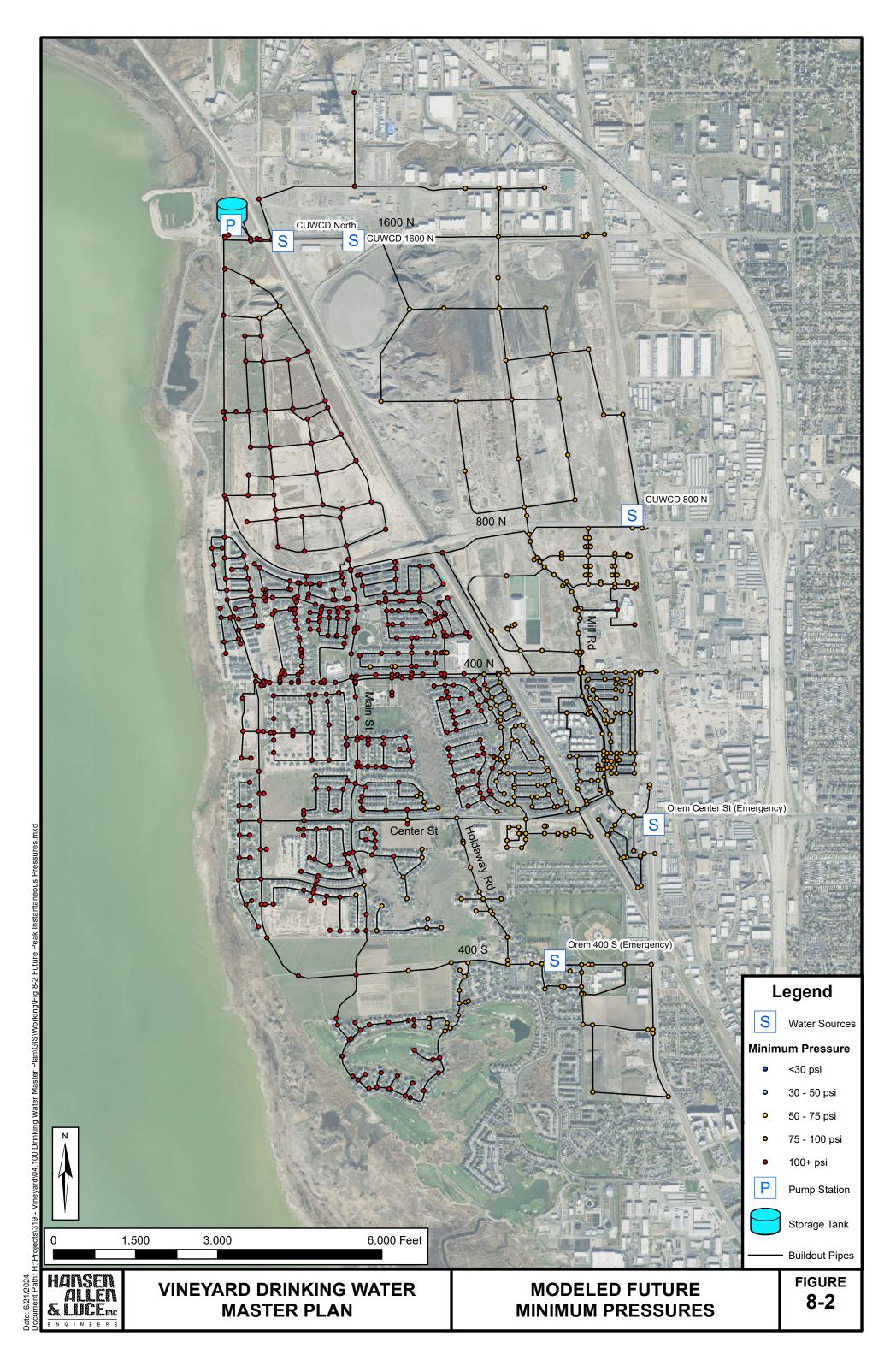
The hydraulic model was used to determine the necessary size of major distribution pipes along preferred alignments as identified by City personnel.

The alignment of the future Vineyard Connector Road was identified as the preferred alignment for major backbone infrastructure. Additional major distribution pipelines south of Vineyard connector were also necessary. The preferred alignment for these pipelines was identified as extending alongside the train tracks between Vineyard Connector and 400 N, as well as additional segments of pipe in 400 N and Mill Road. All of these pipelines were designed as a single project, which is currently under construction as of the date of publication.

Additional distribution pipelines will need to be constructed as development occurs. Sizes and alignments of these pipes should generally mirror those shown in Figure 8-1. Additional 8-inch diameter pipelines to provide local distribution will also be necessary. Refinement is expected to occur as developments are proposed and as road alignments are better defined in the future.

Hydraulic Performance

The buildout system was designed to meet all regulatory requirements while supplying projected demands as shown in Table 7-4. Future modeled peak instantaneous pressures are shown on Figure 8-2.



CHAPTER 9 CAPITAL FACILITY PLAN

INTRODUCTION

The purpose of this section is to identify the drinking water facilities that are required for the 20-year planning period to meet the demands placed on the system by future development. Proposed facilities were sized to meet buildout requirements and located to accommodate 20-year growth projections. Each capital facility plan project will require a detailed design analysis before construction to ensure that the location and sizing is appropriate for the actual growth that has taken place since this capital facility plan (CFP) was developed. Specific projects with estimated costs are presented in this chapter.

GROWTH PROJECTIONS

Capital Facilities Plan projects were identified based on the projected growth as described in Chapter 6 and the planned future water system as described in Chapter 8.

METHODOLOGY

Growth projections were used to forecast future water demands on a year-by-year basis, which were then compared to the capacity of existing source and storage facilities. This analysis showed the year that additional capacity would be necessary. Solutions were then identified to enable the City to meet demands at the proposed level of service.

Hydraulic modeling scenarios were developed for the purpose of assessing the system operation and capacity with future demands added to the system. The models were used to identify problem areas in the system and to identify the most efficient way to make improvements to distribution pipelines, sources, pumps, and storage facilities. Solutions and alternatives were discussed with City staff.

The future system was evaluated in the same manner as the existing system, by modeling (1) peak instantaneous demands and (2) peak day demands plus fire flow conditions.

RECOMMENDED PROJECTS AND COSTS

As discussed in previous chapters, source, storage, and distribution system capacity expansion will be needed to meet the demands of future growth. Cost estimates for the recommended projects are summarized in the following tables and included with further detail in Appendix D.

Unit costs for the construction cost estimates are based on conceptual level engineering. Sources used to estimate construction costs include:

- 1. "Means Heavy Construction Cost Data, 2024"
- 2. Price quotes from equipment suppliers
- 3. Recent construction bids for similar work

All costs are presented in 2024 dollars.

Precision of Cost Estimates

Master plan projects are a high-level representation of the infrastructure the City will need to construct in order to correct deficiencies or meet growth. However, due to the many unknown factors at this stage of design (such as alignment and depth of pipelines, utility conflicts, the cost of land and easements, construction methodology, types of equipment and material to be used, interest and inflation rates, permitting requirements, etc.), there is a significant level of uncertainty in estimated costs.

Every effort has been made to produce cost estimates which will help the City prepare a responsible budget that will meet the City's needs without being excessive or unreasonable. However, it is recommended that the City plan additional contingency into the budget when preparing to complete individual projects.

GROWTH-RELATED PROJECTS

Projects were defined based on projected growth in water demand, projected development patterns, and output from the hydraulic model. Cost estimates were defined for projects anticipated to develop within 10-year and 20-year horizons. Costs were also estimated for projects which are chiefly development-driven.

Table 9-1 includes summary information about projects related to system growth. These projects are shown on Figure 9-1.

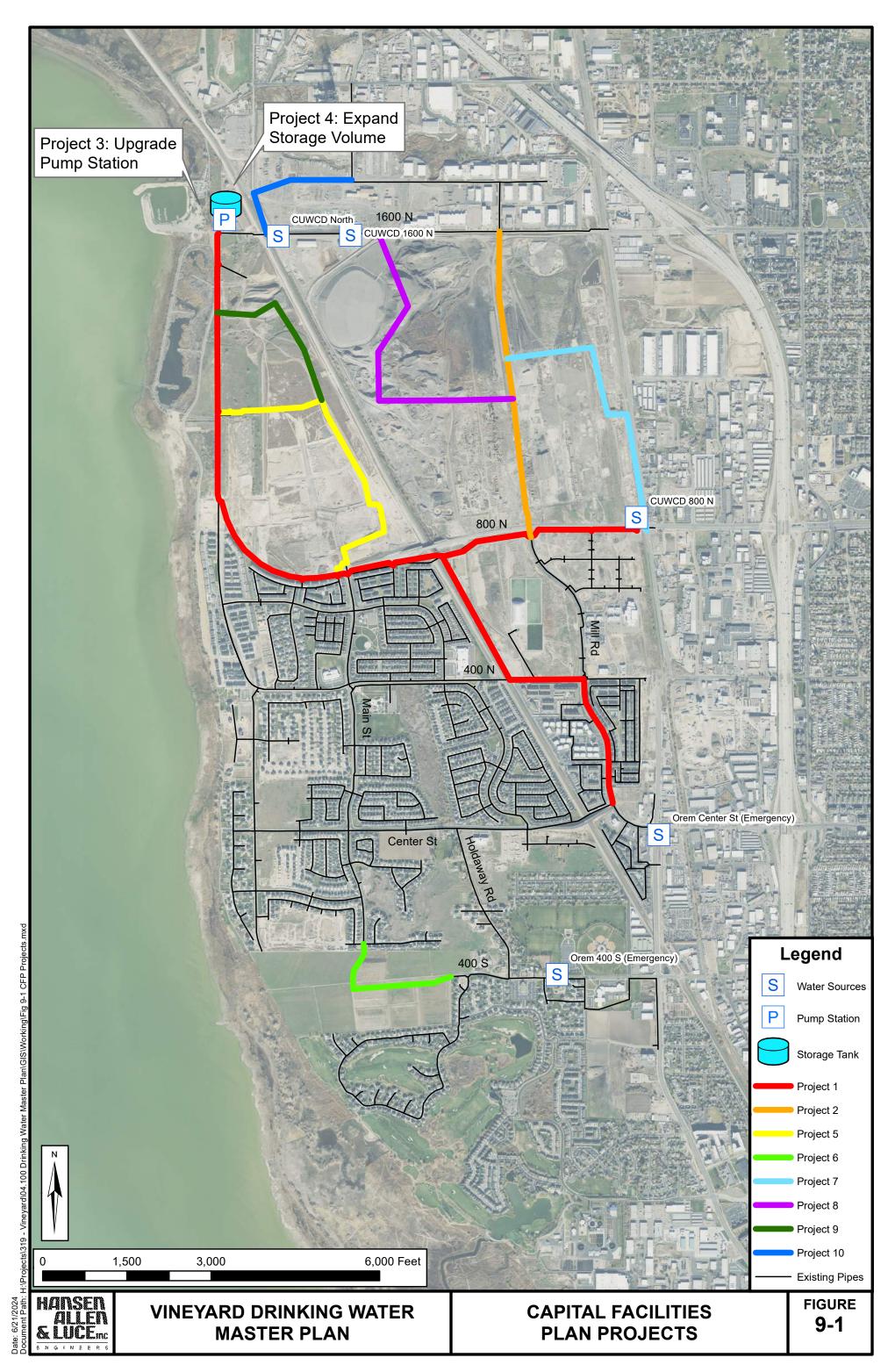


Table 9-1 Recommended Growth Projects

Type & Phasing Year	Map ID	Recommended Project	Cost (2024 Dollars) ^{1,2}
Storage, Distribution – Growth Project 2024	1	Backbone Infrastructure Project: Construct major storage and distribution facilities. This project includes the following (quantities are approximate): • Pump Station • 6.0 MG Storage Tank • 800 ft of 36-inch pipe (Vineyard Connector) • 2,700 ft of 30-inch pipe (Vineyard Connector) • 10,400 ft of 24-inch pipe (Vineyard Connector) • 2,500 ft of 18-inch pipe (between Vineyard Connector and 400 N along train tracks) • 1,300 ft of 16-inch pipe (400 N) • 2,300 ft of 12-inch pipe (Mill Rd)	\$30,155,157
Distribution - Growth Project 2026	2	Mill Road North Extension: Construct about 5,500 feet of 16-inch diameter pipeline between Vineyard Connector and 1600 N as Mill Road is constructed.	\$2,191,000
Distribution - Growth Project 5-10 yrs	3	Pump Station Upgrade: Equip the pump station with additional pumps to meet growing demands.	\$708,000
Storage – Growth Project 10+ yrs	4	Storage Expansion: Construct an additional 3 MG storage tank.	\$5,400,000
Total \$38			\$38,454,000

- 1. Costs listed are in 2024 dollars and are not adjusted for inflation.
- 2. Costs for Project 1 are final construction costs. Costs for other projects are estimated.

Some pipelines must be installed as developments occur. Many of these will provide local conveyance only and will not be addressed in detail in this master plan. Some development-driven projects have more regional implications and need to have adequate capacity for future users. These projects are shown on Figure 9-1 and summarized in Table 9-2.

Table 9-2 Development-Driven Projects

Type & Est. Phasing Year	Map ID	Recommended Project	Total Cost ^{1,2} (2024 Dollars)			
Distribution – Development Driven 0-10 yrs	5	South Downtown Distribution: Construct about 5,500 feet of 16-inch diameter pipeline through the southern Downtown area to provide distribution and fire flow capacity as the area develops.	\$2,191,000			
Distribution – Development Driven 0-10 yrs	6	Holdaway Farms Distribution: Construct about 2,600 feet of 12-inch diameter pipeline through the Holdaway Farms area to connect existing pipes in 400 S and Main St.	\$911,000			
Distribution – Development Driven 5-10 yrs	7	East Geneva Distribution 1: Construct about 5,200 feet of 12-inch diameter pipeline to create a looped connection from Vineyard Connector/Geneva Road through to Mill Road to provide distribution and fire flow capacity.	\$1,822,000			
Distribution – Development Driven 10+ yrs	8	East Geneva Distribution 2: Construct about 5,600 feet of 12-inch diameter pipeline to create a looped connection from 1600 N through to Mill Road to provide distribution and fire flow capacity.	\$1,962,000			
Distribution – Development Driven 10+ yrs	9	North Downtown Distribution: Construct about 3,000 feet of 16-inch diameter pipeline through the northern Downtown area to provide distribution and fire flow capacity as the area develops.	\$1,195,000			
Distribution – Development Driven 10+ yrs	10	North Industrial Distribution: Construct about 2,600 feet of 12-inch diameter pipeline to connect 2000 N and 1600 N as the area develops.	\$911,000			
	Total					

- 1. Costs listed are in 2024 dollars and are not adjusted for inflation.
- 2. It is anticipated that these projects may be installed by the developer with City participation.

FUNDING OPTIONS

Funding options for the recommended projects, in addition to water use fees, include: general obligation bonds, revenue bonds, State/Federal grants and loans, and impact fees. In reality, the City may need to consider a combination of these funding options. The following discussion describes each of these options.

General Obligation Bonds

This form of debt enables the City to issue general obligation bonds for capital improvements and replacement. General Obligation (G.O.) bonds would be used for items not typically financed through the Water Revenue Bonds (for example, the purchase of water source to ensure a sufficient water supply for the City in the future). G.O. bonds are debt instruments backed by the full faith and credit of the City which would be secured by an unconditional pledge of the City to levy assessments, charges, or ad valorem taxes necessary to retire the bonds. G.O. bonds are

the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fees, or special assessment charges to form a dual security through the City's revenue-generating authority. These bonds are supported by the City as a whole, so the amount of debt issued for the water system is limited to a fixed percentage of the real market value for taxable property within the City. G.O. bonds must be approved by a citizen vote.

Revenue Bonds

This form of debt financing is also available to the City for utility-related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the City as a whole, but constitute a lien against the water service charge revenues of a Water Utility. Revenue bonds present a greater risk to the lender than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure, and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally require a higher interest rate than G.O. bonds, although current interest rates are quite low. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. Typically, voter approval is not required when issuing revenue bonds.

State or Federal Grants and Loans

Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal expenditure pressures and virtual elimination of federal revenue sharing are clear indicators that local government may be left to its own devices regarding infrastructure finance in general. However, state or federal grants and loans should be further investigated as a possible funding source for needed water system improvements.

It is also important to assess likely trends regarding state or federal assistance in infrastructure financing. Future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds by demonstrating both the need for and the ability to repay the borrowed monies, with interest. As with the revenue bonds discussed earlier, the ability of infrastructure programs to wisely manage their own finances will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the City.

Impact Fees

The Utah Impact Fees Act, codified in Title 11, Chapter 36a, of the Utah Code, authorizes municipalities to collect impact fees to fund public facilities. An impact fee is "a payment of money imposed upon new development activity . . . to mitigate the impact of the new development on public infrastructure" (Subsection 11-36a-102(8)). Impact fees enable local governments to finance infrastructure improvements without burdening existing development with costs that are exclusively attributable to growth.

Impact fees can be applied to water-related facilities under the Utah Impact Fees Act. The Act is designed to provide a logical and clear framework for establishing new development assessments. It is also designed to establish the basis for the fee calculation which the City must follow in order to comply with the statute. The fundamental objective for the fee structure is the

imposition on new development of infrastructure to meet the capacity cannot be applied retroactively.	f only those costs associated with needs created by that specific ne	providing or expanding water w development. Impact fees
Vin overd City	0.6	Drinking Water Master Plan

REFERENCES

- DWRi (Utah Division of Water Rights). 2024. Public Water Supplier Information, Vineyard City (Culinary). Accessed April 3.

 https://www.waterrights.utah.gov/asp apps/viewEditPWS/pwsView.asp?SYSTEM ID=1 1295
- EPA (U.S. Environmental Protection Agency). 2019. "EPANET: Application for Modeling Drinking Water Distribution Systems." EPA. Accessed April 20. http://www.epa.gov/nrmrl/wswrd/dw/epanet.html.
- EPA (U.S. Environmental Protection Agency). 2013. "Water Audits and Water Loss Control for Public Water Systems." EPA 816-F-13-002. Office of Water. http://www.epa.gov/sites/production/files/2015-04/documents/epa816f13002.pdf.
- International Fire Code. 2021. "Appendix B Fire Flow Requirements for Buildings." Accessed May 4, 2023. https://codes.iccsafe.org/content/IFC2021P1/appendix-b-fire-flow-requirements-for-buildings.
- Rossman, Lewis A. 2000. *EPANET 2 User's Manual*. EPA/600/R-00/057. Cincinnati, Oh.: U.S. Environmental Protection Agency, National Risk Management Research Laboratory. http://nepis.epa.gov/Adobe/PDF/P1007WWU.pdf.
- State of Utah. 2019a. Utah Administrative Code, Section R309-105: Administration: General Responsibilities of Public Water Systems. In effect Mar. 1. Accessed Apr 3. https://rules.utah.gov/publicat/code/r309/r309-105.htm.
- 2019b. Utah Administrative Code, Section R309-510: Facility Design and Operation: Minimum Sizing Requirements. In effect Mar. 1. Accessed May 4, 2023. https://rules.utah.gov/publicat/code/r309/r309-510.htm.
- ——. 2014c. Utah Administrative Code, Section R309-550: Facility Design and Operation: Transmission and Distribution Pipelines. In effect Nov. 10. Accessed May 4, 2023. https://rules.utah.gov/publicat/code/r309/r309-510.htm.
- 2014d. Utah Code Annotated, Section 11-36: Impact Fees Act. Accessed Apr. 20. https://le.utah.gov/xcode/Title11/Chapter36A/11-36a.html?v=C11-36a 1800010118000101.
- ——. 2019e. Utah State Legislature, House Bill 31: Water Supply and Surplus Water Amendments. Accessed Jan. 15, 2021. https://le.utah.gov/~2019/bills/static/HB0031.html.
- . 2019f. Utah State Legislature, House Joint Resolution 1: Proposal to Amend Utah Constitution Municipal Water Resources. Accessed Jan. 15, 2021. https://le.utah.gov/~2019/bills/static/HJR001.html.
- Utah Division of Drinking Water, "General Guidance for Water Use Data Reporting and Setting System-Specific Source and Storage Sizing Requirements," DDW-ENG-0048 (Oct. 15,

2018), https://documents.deq.utah.gov/drinking-water/engineering/DDW-2018-009165.pdf.

Utah Division of Drinking Water, "Detailed Guidance for Water Use Data Reporting and Setting System-Specific Source and Storage Sizing Requirements," DDW-ENG-0047 (Oct. 18, 2018), https://documents.deq.utah.gov/drinking-water/engineering/DDW-2018-011527.pdf.

Utah Geological Survey, "Groundwater & Wetlands," https://geology.utah.gov/water/groundwater-levels/.

APPENDIX A

System-Specific Sizing Requirements



MEMORANDUM

DATE: December 31, 2023

TO: Nathan Lunstad

Plan Review Program Manager Utah Division of Drinking Water

195 North 1950 West Salt Lake City, UT 84116

FROM: Ridley Griggs, M.Eng., P.E.

Hansen, Allen & Luce, Inc. (HAL) 859 W South Jordan Parkway South Jordan, Utah 84095

SUBJECT: Vineyard City system-specific sizing

Summary

The purpose of this memorandum is to request updated system-specific sizing requirements for Vineyard City, Utah.

Vineyard's sizing standards were last defined based on an engineering study provided by HAL to the DDW in 2019. Since then, several years have passed, and additional water use data is available.

The proposed system-specific sizing requirements in this memorandum are based on standard DDW guidance and actual water use data. The minimum sizing requirements proposed in this study are summarized in **Table 1**. Supporting information, assumptions, and justifications used to produce these numbers are included in subsequent sections and appendices.

Table 1: Proposed Vineyard City System-Specific Sizing Requirements

	Requirement	Value	
Proposed Equalization Storage Sizing	Average Annual	590 gallons per ERC	
Proposed Source Sizing	Peak Day	1,248 gallons per day per ERC (0.87 gpm/ERC)	

Background

Water production and billing data have been extensively evaluated during this effort, and are used herein to propose minimum sizing requirements for the Vineyard City drinking water system. The past three years of water use data (2020-2022) were reviewed and found acceptable for purposes of establishing minimum sizing requirements.

Available data

Vineyard City meters and bills customers for their drinking water use. The billing reports obtained from Vineyard included monthly totals of drinking water use separated into four categories: Commercial, Institutional, Residential and Industrial. The billing data showed highest usage in the months of July and August. The billing data was found to be complete.

Vineyard City purchases its water from Orem City and CUWCD.

<u>Methodology</u>

The methodology used for calculations is consistent with that found in DDW guidance.

Equivalent Residential Connections

Table 2 shows the ERC count for Vineyard City at the end of years 2020 through 2022.

Table 2: Vineyard City ERCs

Year	ERCs
2022	3,326
2021	3,179
2020	3,017

Storage and Average Yearly Demand

The proposed storage requirement is equivalent to the volume of water used by one ERC on an average day. Average Yearly Demand was calculated per ERC, based on water production and consumption data provided by the City.

Table 4 shows the average yearly demand and storage requirements for years 2020 through 2022.

Table 4: Vineyard City Proposed Storage Requirement per ERC

Year	ERCs	Water Produced (ac-ft)	Water Wholesaled (ac-ft)	Average Yearly Demand (ac-ft/ERC)	Storage Requirement (gal/ERC)
2022	3,326	1,916.17	0	0.58	514
2021	3,179	1,952.75	94.36	0.58	522
2020	3,017	2,155.41	159.18	0.66	590

Average Yearly Demand is calculated as follows:

Average Yearly Demand per ERC = (Water Produced – Water Wholesaled) / ERC

Storage Requirement is calculated as follows:

Storage Requirement = (Avg Yearly Demand per ERC) / (365 days/yr)

The highest requirement of these three years is 590 gal/ERC or 0.66 ac-ft/ERC.

Peak Day Source

Peak Day production data was recorded and reported for years 2020 through 2022 and used to compute peak day demand per ERC. See **Table 5**.

Table 5: Vineyard City Peak Day Source Requirement per ERC

		•	
Year	ERCs	Peak Day Production (Ac-Ft)	Peak Day Requirement (gpd/ERC)
2022	3,326	10.99	1,077
2021	3,179	10.62	1,088
2020	3,017	11.56	1,248

Peak Month Residential Production is calculated as follows:

Peak Month Production = Peak Month Billed * (1 + Percent Non-Revenue Water)

Peak Day Requirement is calculated as follows:

Peak Day Requirement = Peak Day Production / ERCs

The highest requirement of these three years is 1,248 gpd/ERC.

Proposed System Sizing

The proposed system sizing values for one ERC are shown in **Table 6**.

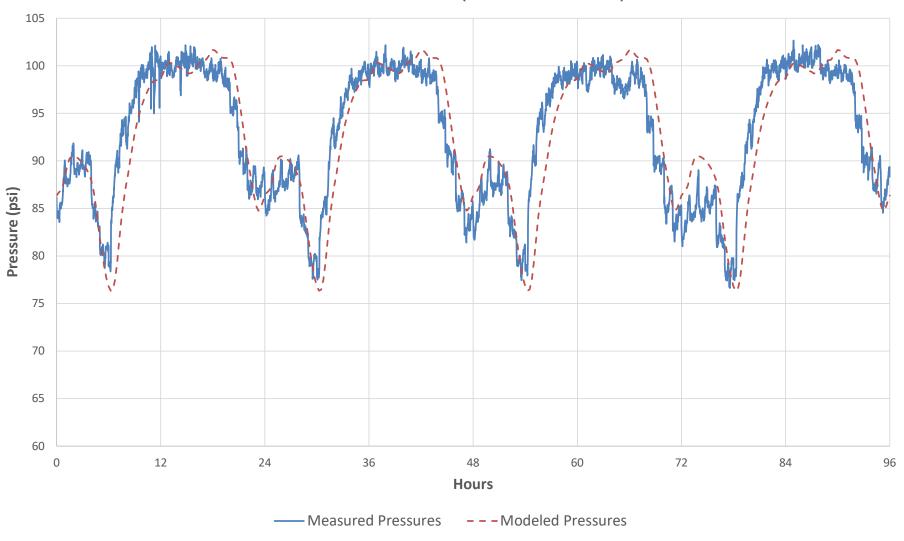
Table 6: Proposed minimum sizing requirements

Requirement per ERC	Proposed Value	
Peak Day Source (gpd)	1,248	
Storage (gal)	590	

APPENDIX B Model Calibration Data

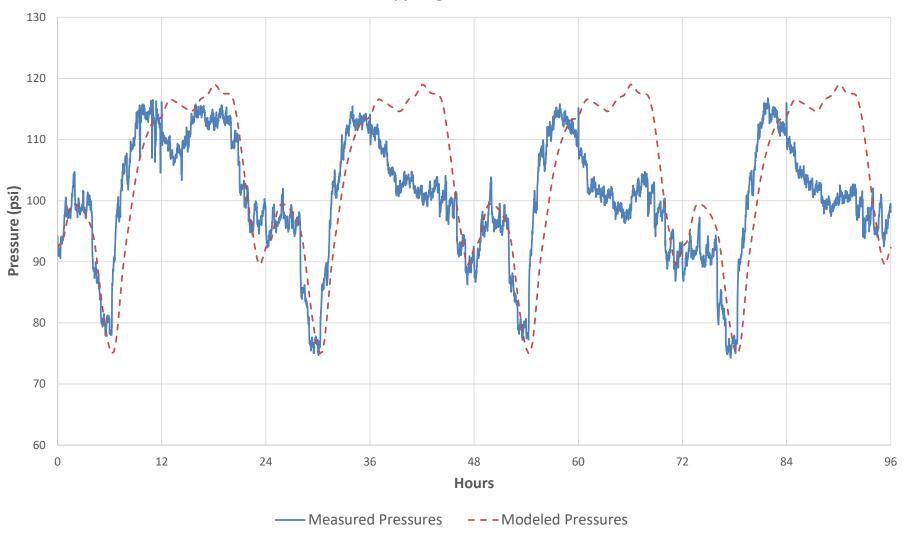
2020 Measured Pressures vs. Modeled Pressures

Mill Road and Geneva Road (Orem Center St. Meter)



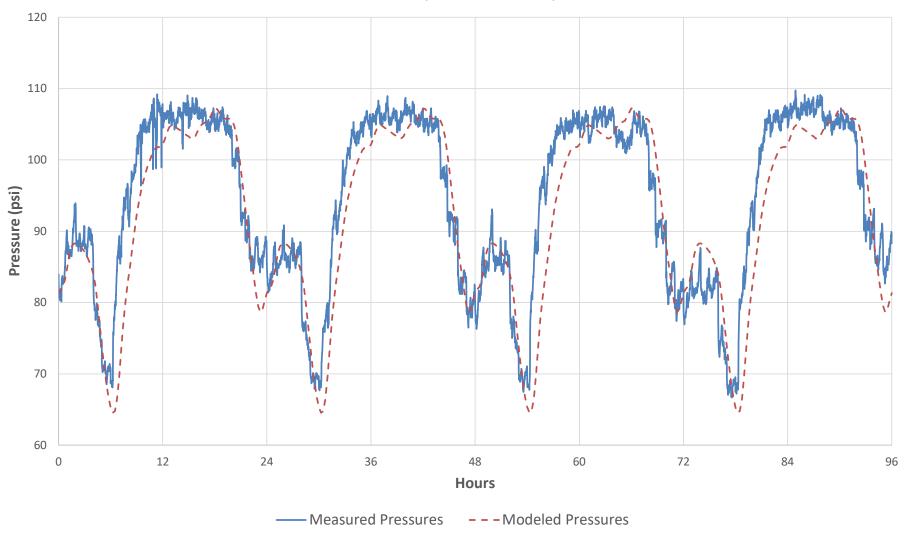
2020 Measured Pressures vs. Modeled Pressures

Sleepy Ridge Subdivision



2020 Measured Pressures vs. Modeled Pressures

200 E 400 S (Orem 400 S Meter)



APPENDIX C Growth Projections

Residential Demand Summary

	Housing units						1	Water Requireme	nts
Year	Single- family units	Townhomes	Town Center/Forge Condos	Other condos	Total units	Population	Peak Day Demand (gpm)	Average Yearly Demand (ac-ft/yr)	Storage Requirement (MG)
2023	1935	1355	0	2335	5625	22500	3047	2130	1.99
2024	2151	1412	720	2335	6618	24816	3336	2555	2.39
2025	2367	1412	1440	2335	7554	26904	3601	2962	2.77
2026	2583	1412	2160	2335	8490	28992	3866	3369	3.15
2027	2607	1412	2880	2335	9234	30312	3964	3666	3.42
2028	2607	1412	3600	2335	9954	31536	4042	3949	3.67
2029	2607	1412	4320	2335	10674	32760	4119	4233	3.92
2030	2607	1412	5040	2335	11394	33984	4197	4516	4.18
2031	2607	1412	5760	2335	12114	35208	4274	4800	4.43
2032	2607	1412	6480	2335	12834	36432	4352	5083	4.68
2033	2607	1412	7200	2335	13554	37656	4429	5366	4.94
2034	2607	1412	7920	2335	14274	38880	4507	5650	5.19
2035	2607	1412	8640	2335	14994	40104	4584	5933	5.44
2036	2607	1412	9360	2335	15714	41328	4662	6217	5.70
2037	2607	1412	10080	2335	16434	42552	4739	6500	5.95
2038	2607	1412	10800	2335	17154	43776	4817	6783	6.20
2039	2607	1412	11520	2335	17874	45000	4894	7067	6.46
2040	2607	1412	12240	2335	18594	46224	4972	7350	6.71
2041	2607	1412	12960	2335	19314	47448	5049	7634	6.96
2042	2607	1412	13680	2335	20034	48672	5127	7917	7.22
2043	2607	1412	14400	2335	20754	49896	5204	8200	7.47
2044	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2045	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2046	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2047	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2048	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2049	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2050	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2051	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2052	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2053	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2054	2607	1412	14600	2335	20954	50236	5226	8279	7.54
2055	2607	1412	14600	2335	20954	50236	5226	8279	7.54

Nonresidential Demand Summary

Area	Acreage	Buildout PDD (gpm)	Buildout Av. Yearly Demand (ac-ft/yr)	Year Development Starts	Years to Buildout
North Industrial/East Geneva	593.0	1719.7	978.5	2020	35
υνυ	225.0	532.0	658.4	2025	30
East Side Commercial	130.0	247.0	143.0	2024	15
Megaplex/The Yard	40.8	77.5	44.9	2020	5
Geneva Frontage Central	23.2	44.1	25.5	2020	10
Geneva Frontage South	16.9	32.1	18.6	2025	3
Town Center	323.3	158.2	218.8	2024	20
The Forge	46.0	87.7	278.3	2025	5

Year	Peak Day Demand (gpm)	Average Yearly Demand (ac-ft/yr)	Storage Requirement (MG)
2023	381	221.0	0.20
2024	470	278.4	0.25
2025	589	410.5	0.37
2026	709	542.6	0.48
2027	828	674.7	0.60
2028	938	801.1	0.72
2029	1047	927.5	0.83
2030	1135	995.9	0.89
2031	1223	1064.4	0.95
2032	1311	1132.8	1.01
2033	1399	1201.3	1.07
2034	1488	1269.7	1.13
2035	1576	1338.2	1.19
2036	1664	1406.6	1.26
2037	1752	1475.1	1.32
2038	1840	1543.5	1.38
2039	1911	1602.4	1.43
2040	1983	1661.3	1.48
2041	2055	1720.3	1.54
2042	2126	1779.2	1.59
2043	2198	1838.1	1.64
2044	2261	1886.1	1.68
2045	2325	1934.1	1.73
2046	2389	1982.0	1.77
2047	2452	2030.0	1.81
2048	2516	2078.0	1.86
2049	2580	2126.0	1.90
2050	2644	2174.0	1.94
2051	2707	2221.9	1.98
2052	2771	2269.9	2.03
2053	2835	2317.9	2.07
2054	2898	2365.9	2.11
2055	2898	2365.9	2.11

Total Demand Summary

	Peak Day	Average Yearly	
Year	Demand	Demand	ERCs
	(gpm)	(ac-ft/yr)	
2023	3917	2234.7	4519
2024	4295	2660.0	4956
2025	4679	3066.9	5399
2026	5102	3494.4	5887
2027	5359	3812.1	6184
2028	5586	4116.0	6445
2029	5812	4419.9	6706
2030	6017	4723.8	6943
2031	6262	5048.6	7225
2032	6427	5332.0	7416
2033	6593	5615.4	7607
2034	6758	5898.8	7798
2035	6924	6182.2	7989
2036	7089	6465.6	8180
2037	7255	6749.1	8371
2038	7421	7032.5	8562
2039	7570	7315.9	8734
2040	7719	7599.3	8906
2041	7868	7882.7	9078
2042	8017	8166.2	9250
2043	8166	8449.6	9422
2044	8251	8528.3	9521
2045	8315	8528.3	9594
2046	8379	8528.3	9668
2047	8442	8528.3	9741
2048	8506	8528.3	9815
2049	8570	8528.3	9888
2050	8633	8528.3	9962
2051	8697	8528.3	10035
2052	8761	8528.3	10109
2053	8824	8528.3	10182
2054	8888	8528.3	10255
2055	8888	8528.3	10255

APPENDIX D Estimated Project Costs

Vineyard City Capital Facility Plan Drinking Water Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	Unit Price	Quantity	T	otal Price
1	Backbone Infrastructure Project 6 MG Tank and Pump Station*	LS	\$16,401,404.69	1	\$	16,401,405
	Pipelines*	LS	\$13,753,752.52	1	\$	13,753,753
	* Actual Contract Costs		ineering & Admin. (i	· ·	_	-
		•		ntingency (N/A)		-
		Total to	o Backbone Infrasti			30,155,157
2	Mill Road North Extension		,			
	16-inch diameter pipe	LF	\$ 332	5500	\$	1,826,000
			0 0	& Admin. (10%)		182,600
		_		ntingency (10%)		182,600
		'	otal to Mill Road N	ortn Extension	\$	2,191,000
3	Pump Station Upgrade 400 hP pump	LS	\$ 120,000	2	\$	240,000
	VFD and Conductors	LS	\$ 120,000	2	\$	200,000
	Generator	LS	\$ 150,000	1	\$	150,000
	Generator	10		& Admin. (10%)		59,000
				ntingency (10%)		59,000
			Total to Pump S			708,000
4	Storage Expansion					
-	Concrete Storage Tank	GAL	\$ 1.50	3000000	\$	4,500,000
		•	Engineering	& Admin. (10%)	\$	450,000
				ntingency (10%)		450,000
				age Expansion		5,400,000
5	South Downtown Distribution					
	16-inch diameter pipe	LF	\$ 332	5500	\$	1,826,000
			Engineering of	& Admin. (10%)	\$	182,600
				ntingency (10%)		182,600
		Tota	I to South Downton	vn Distribution	\$	2,191,000
6	Holdaway Farms Distribution		T			
	12-inch diameter pipe	LF	\$ 292	2600	\$	759,200
				& Admin. (10%)		75,920
		T-4.		ntingency (10%)		75,920
		lota	al to Holdaway Farn	ns Distribution	Þ	911,000
7	East Geneva Distribution 1					
,	12-inch diameter pipe	LF	\$ 292	5200	\$	1,518,400
				& Admin. (10%)		151,840
				ntingency (10%)		151,840
		T	otal to East Geneva	Distribution 1	\$	1,822,000
8	East Geneva Distribution 2					
	12-inch diameter pipe	LF	\$ 292	5600	\$	1,635,200
				& Admin. (10%)		163,520
		т	Cor otal to East Genev a	ntingency (10%) Distribution 2		163,520 1,962,000
_		-			•	-,,
	North Downtown Distribution		Let 222	3000	φ	006 000
9		LF	\$ 332	3000	\$	996,000
9	16-inch diameter pipe		Engineering	9 Admin (100/)	Ф	
9	16-inch diameter pipe			& Admin. (10%)		99,600
9	16-inch diameter pipe	Tota		ntingency (10%)	\$	99,600 99,600 1,195,000
		Tota	Cor	ntingency (10%)	\$	99,600
9	North Industrial Distribution 12-inch diameter pipe	Tota	Cor	ntingency (10%)	\$	99,600
	North Industrial Distribution		Cor al to North Downtov	ntingency (10%) vn Distribution	\$ \$	99,600 1,195,000
	North Industrial Distribution	LF	Cor al to North Downtov \$ 292 Engineering	tingency (10%) vn Distribution 2600 & Admin. (10%) ntingency (10%)	\$ \$ \$ \$	99,600 1,195,000 759,200

Total Costs \$ 47,446,000

APPENDIX E

Checklist for Hydraulic Model Design Elements Report



DRINKING WATER IMPACT FEE FACILITY PLAN

(HAL Project No.: 319.04.100)

DRAFT

May 2025



VINEYARD CITY

DRINKING WATER IMPACT FEE FACILITY PLAN

(HAL Project No.: 319.04.100)

DRAFT

Ridley J. Griggs, P.E. Project Manager



May 2025

TABLE OF CONTENTS

TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES	iv
CHAPTER 1 INTRODUCTION	1-1
PURPOSE AND SCOPE	1-1
IMPACT FEE COLLECTION	
CAPITAL FACILITIES PLAN	
CHAPTER 2 SYSTEM DEMAND AND CAPACITY	2-1
GENERAL	
LEVEL OF SERVICE	2-1
EXISTING AND FUTURE EQUIVALENT RESIDENTIAL CONNECTIONS	
METHODOLOGY USED TO DETERMINE EXISTING SYSTEM CAPACITY	
SOURCE CAPACITY	
STORAGE CAPACITY	
DISTRIBUTION SYSTEM	
CHAPTER 3 IMPACT FEE FACILITY PLAN	3-1
GROWTH PROJECTIONS	
FUTURE STORAGE REQUIREMENTS	
COST OF FUTURE FACILITIES	
Planning	3-3
IMPACT FEES BY METER SIZE	
NON-STANDARD IMPACT FEES	
REFERENCES	R-1

APPENDIX A

Estimated Project Costs

APPENDIX B

AWWA Meter Multipliers

LIST OF TABLES

NO.	TITLE	PAGE
2-1	Existing and Future Service by Pressure Zone	2-2
2-2	Existing Storage Capacity	
2-3	Capacity of Distribution Pipes	
3-1	Growth Projections	
3-2	10-Year Source Requirements and Capacity	
3-3	Estimated Cost of Future Facilities Partially Impact Fee Eligible	3-3
3-4	Estimated Cost of Future Facilities Fully Impact Fee Eligible	3-3
3-5	Planning Component of Impact Fee	3-4
3-6	ERCs by Meter Size	3-4
LIS	T OF FIGURES	
NO.	TITLE	PAGE
2-1	Existing Drinking Water System	After 2-1
3-1	Projected 10-Year Growth Areas	After 3-3

CHAPTER 1 INTRODUCTION

PURPOSE AND SCOPE

The City of Vineyard is located in north-central Utah County on the eastern shore of Utah Lake. The City is experiencing growth. To ensure availability of funds for growth-related infrastructure projects, an Impact Fee Facility Plan (IFFP) was commissioned by the City.

This report identifies those items that the Utah Impact Fees Act specifically requires, including demands placed upon existing facilities by new development and the proposed means by which the municipality will meet those demands.

IMPACT FEE COLLECTION

An impact fee is a one-time charge on new development to pay for that portion of a public facility that is required to support that new development. Impact fees enable local governments to finance public facility improvements necessary for growth, without burdening existing customers with costs that are exclusively attributable to growth.

In order to determine the appropriate impact fee, the cost of the facilities associated with future development must be proportionately distributed. As a guideline in determining the "proportionate share", the fee must be found to be roughly proportionate and reasonably related to the impact caused by the new development.

CAPITAL FACILITIES PLAN

A drinking water system master plan was prepared in conjunction with this analysis and is incorporated by reference into this analysis.

The master plan for the City's drinking water system is more comprehensive than the IFFP. It provides the basis for the IFFP and IFA and identifies all capital facilities required of the drinking water system for the 20-year planning range, including maintenance, repair, replacement, and growth-related projects. The recommendations made within the master plan are in compliance with current City policies and standard engineering practices.

A hydraulic model of the drinking water system was prepared to aid in the analyses performed to complete the drinking water system master plan. The model was used to assess existing performance, to establish a proposed level of service and to confirm the effectiveness of the proposed capital facility projects to maintain the proposed level of service over the next 10 years.

CHAPTER 2 SYSTEM DEMAND AND CAPACITY

GENERAL

The purpose of this section is to identify the current level of service, characterize the facilities of the existing system, and determine the remaining capacity of these facilities.

The existing drinking water system is comprised of a distribution network, water storage facilities, and water sources. These facilities are found within two pressure zones. Figure 2-1 illustrates the existing water system and its service area.

LEVEL OF SERVICE

A level of service (LOS) has been established for Vineyard City for the drinking water system. The level of service establishes the sizing criteria for the Area's distribution facilities, source facilities, storage facilities, and water rights. The level of service standards are shown below:

Level of Service

- Peak Day Demand: 1,248 gpd/ERC
- Indoor Storage Capacity (Equalization): 590 gallons/ERC
- Indoor Fire Storage Capacity: 58 gallons/ERC (0.6 MG fire storage requirement at buildout divided by the number of ERCs at buildout (10,260))
- Distribution Capacity: 40 psi minimum during peak day demand conditions, and 30 psi minimum during peak instantaneous conditions

Fire Suppression

- Minimum Fire Flow: 1,500 gpm for 2 hours
- Maximum Fire Flow: 2,500 gpm for 4 hours
- Fire Storage (buildout): 600,000 gallons
- Minimum Pressure: 20 psi residual during peak day + fire flow event

EXISTING AND FUTURE EQUIVALENT RESIDENTIAL CONNECTIONS

Water demands from non-residential water users, such as commercial, industrial, or civic water users have been determined in terms of an Equivalent Residential Connection (ERC). The use of ERCs is a common engineering practice used to describe the entire system's usage based on a common unit of measurement. An ERC is equal to the average demand of one average single-family residential connection in Vineyard City. Using ERCs for analysis is a way to allocate existing and future demands over non-residential land uses.

Vineyard operates a pressurized irrigation (PI) system that provides water service to certain institutional properties. It will also be expanded to some other properties in the future.

Table 2-1 includes a summary of ERCs for each pressure zone under existing conditions and at buildout.

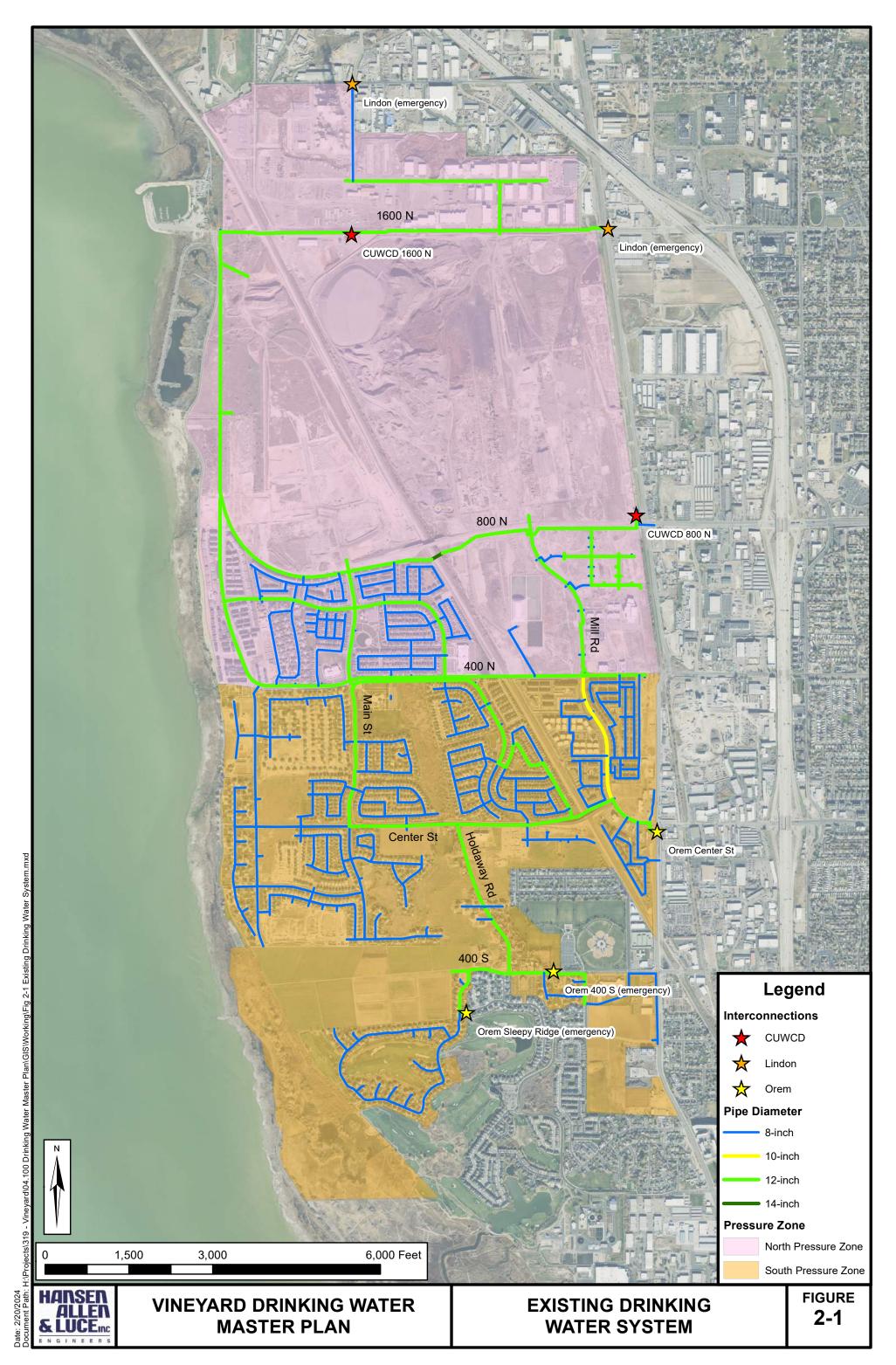


Table 2-1
Existing and Future Service by Pressure Zone

Pressure Zone	Existing ERCs	Buildout ERCs ¹
North	1,090	-
South	2,240	-
Total	3,330	10,260

At buildout, the system will have one pressure zone.

METHODOLOGY USED TO DETERMINE EXISTING SYSTEM CAPACITY

Each component of the drinking water system were assessed in terms of gallons per minute (for peak day source), acre-feet per year (for annual source), or gallons (for storage). Demands on each component were computed by applying the level of service to the number of ERCs. The difference between the capacity of the component and the demand on the component is the component's remaining capacity, which can be used to serve ERCs. A hydraulic model was developed for the purpose of assessing system operation and distribution capacity.

SOURCE CAPACITY

Source capacity in the drinking water system is currently provided through agreements with the City of Orem and Central Utah Water Conservancy District (CUWCD). Vineyard is currently working to secure additional source capacity with CUWCD and is planning to assess fees for this water separate from the impact fee. As such, source capacity is not covered in detail in this IFFP.

STORAGE CAPACITY

Storage capacity in the drinking water system is currently provided through agreements with the City of Orem and Central Utah Water Conservancy District (CUWCD). The City has secured long-term storage capacity in the CUWCD system. The storage agreement with the City of Orem is temporary. Storage capacity secured through long-term agreement is listed in Table 2-2. Capacity secured through temporary agreements is not listed.

Table 2-2 Existing Storage Capacity

Parameter	Storage (MG)
Long-Term Capacity ¹	2.00
System Requirement ²	3.04
Difference	-1.04

Long-term storage capacity secured through agreements with CUWCD.

^{2.} See Table 4-4 in the Drinking Water Master Plan

Currently, the City does not have long-term excess storage capacity secured through contract agreements but is meeting current requirements through a temporary agreement with Orem.

DISTRIBUTION SYSTEM

Pipe diameters range from 4 inches to 20 inches, with the majority being 8 inches in diameter. The function of the larger pipes in the system is to facilitate filling of the storage tanks and meet peak day and fire flow demands. Smaller pipes facilitate local distribution. Figure 2-1 in the Drinking Water Master Plan illustrates the existing distribution pipelines. A hydraulic model was used to identify future pipeline projects (see Chapter 3 for details). All pipeline projects were sized to meet projected buildout requirements. A summary of capacity remaining in the distribution system is summarized in Table 2-3.

Table 2-3
Capacity of Distribution Pipes

System Component			Remaining Capacity (ERCs)
Distribution Pipes	10,260	3,330	6,930

CHAPTER 3 IMPACT FEE FACILITY PLAN

This section relies on the data presented in the previous sections to identify projects needed to support future growth, their planned capacity, and their estimated costs. Also included in this section are the possible revenue sources that the City may consider for funding the recommended projects.

GROWTH PROJECTIONS

The development of impact fees requires growth projections over the next ten years. Growth projections for Vineyard City were made by incorporating the growth rate presented in the Master Plan. Total growth projections for the City through the 10-year planning horizon are summarized in Table 3-1. Areas of projected growth are shown in Figure 3-1.

Table 3-1 Growth Projections

Year	ERCs
2024	3,330
2025	3,935
2026	4,549
2027	5,226
2028	5,637
2029	5,999
2030	6,361
2031	6,689
2032	7,080
2033	7,345
2034	7,610
10-year Difference	+4,280

The existing system served about 3,330 ERCs at the beginning of 2024. Projected growth adds 4,280 ERCs in the next 10 years for a total of 7,610 ERCs.

FUTURE STORAGE REQUIREMENTS

Projected storage requirements for Vineyard City are calculated based on anticipated growth in the next ten years and the LOS. Table 3-2 shows source requirements for future growth.

Table 3-2
10-Year Storage Requirements and Capacity

10-Year Growth (ERCs)	Level of Service (gal/ERC)	Requirement (MG)	Capacity Remaining ¹ (MG)	Surplus/Deficit (MG)
4,280	590	2.53	-1.04	-3.57

^{1.} See Table 2-2.

Table 3-3 indicates that the existing storage capacity is inadequate to meet demands in the 10-year window. Additional storage capacity is needed.

Impact fees for source and storage will be computed based on the cost of existing facilities and future projects needed to provide capacity within the 10-year planning window.

COST OF FUTURE FACILITIES

The facilities and costs presented in Table 3-3 and Table 3-4 and shown on Figure 9-1 in the Drinking Water Master Plan represent future projects that are impact fee eligible. These proposed projects are essential to maintain the current level of service while accommodating future growth within the next 10 years. The facility sizing for the future proposed projects was based on the proposed level of service with growth projections and hydraulic modeling. The proposed impact fee will be based on the projected cost of future construction projects. Detailed cost estimates for the impact fee-eligible projects are included in Appendix A.

There are no projects listed in the Drinking Water Master Plan which are 100% related to correcting existing deficiencies.

Cost estimates of the projects that are only partially impact fee eligible are described in Table 3-3.

Table 3-3
Estimated Cost of Future Facilities Partially Impact Fee Eligible

Project	Map ID	Type of Project	Total Cost	% Impact Fee Eligible	Total Impact Fee Eligible Cost
6.0 MG Storage Tank	1	Storage	\$10,539,102	64%¹	\$6,746,015
Booster Pump Station	1	Distribution	\$7,026,068	68%²	\$4,745,678
Pipeline Projects (see Table 9-1 of the Drinking Water Master Plan)	1	Distribution	\$14,270,267	68%²	\$9,638,689
Total	=	-	\$31,835,437	-	\$21,130,381

^{1.} Eligible cost is calculated as the remainder of the total number of existing ERCs (3,330) divided by the total number of ERCs (9,252) served from 6.0 MG storage tanks. Number of ERCs were found by dividing the storage capacity the LOS at buildout (Equalization: 590 gal/ERC & Fire Storage: 58 gal/ERC).

Cost estimates for the future projects shown in Table 3-4 are considered to be 100% eligible as they are only necessary to support future growth. Each of these projects is planned to be constructed within the next 10 years and are sized to provide capacity through buildout.

Table 3-4
Estimated Cost of Future Facilities Fully Impact Fee Eligible

Project	Map ID	Distribution	Storage	Total
Mill Road North Extension	2	\$2,191,000	\$0	\$2,191,000
Pump Station Upgrade	3	\$708,000	\$0	\$708,000
South Downtown Distribution	5	\$2,191,000	\$0	\$2,191,000
Holdaway Farms Distribution	6	\$911,000	\$0	\$911,000
East Geneva Distribution 1	7	\$1,822,000	\$0	\$1,822,000
Total	_	\$7,823,000	\$0	\$7,823,000

Planning

Planning services are also needed to support growth. The City intends to update their master plans approximately every 5 years and their impact fee studies approximately every 3 years. Considering this schedule, and the cost of the most recent impact fee updates, the ERCs served by each plan update were calculated as shown in Table 3-5.

^{2.} Impact fee eligible for the distribution facilities was conservatively estimated as the difference between the existing ERC count (3,330) and the projected ERC count at 2060 (10,260).



Table 3-5
Planning Component of Impact Fee

Planning Document	Cost	% of Plan Associated with Growth ¹	ERCs Served ²
2024 Drinking Water System Master Plan	\$107,932.00	60%	1,896
2024 IFFP and IFA	\$20,200.00	100%	2,669
Total	\$128,132.00	-	-

- 1. Percentages to growth for the master plan was based on a review of the scope of the plan and associated fees for tasks associated with the existing system and future growth. The IFFP and IFA are 100% associated with growth.
- 2. ERCs served was defined as the amount of ERCs expected to develop during the 5-year life of the master plan and the 3-year life of the IFFP and IFA, respectively. See Table 3-1.

IMPACT FEES BY METER SIZE

Vineyard City assesses impact fees based on meter size. Vineyard considers a standard 3/4-inch meter as one ERC. Larger meters are assessed a capacity in ERCs based on American Water Works Association (AWWA) capacity factors. See Appendix B. Table 3-6 includes a summary of ERCs by meter size.

Table 3-6 ERCs by Meter Size

Meter Size	ERCs
3/4"	1
1"	1.67
1 ½"	3.33
2"	5.33
3"	10.00
4"	16.67
6"	33.33
8"	53.33
10"	76.67

NON-STANDARD IMPACT FEES

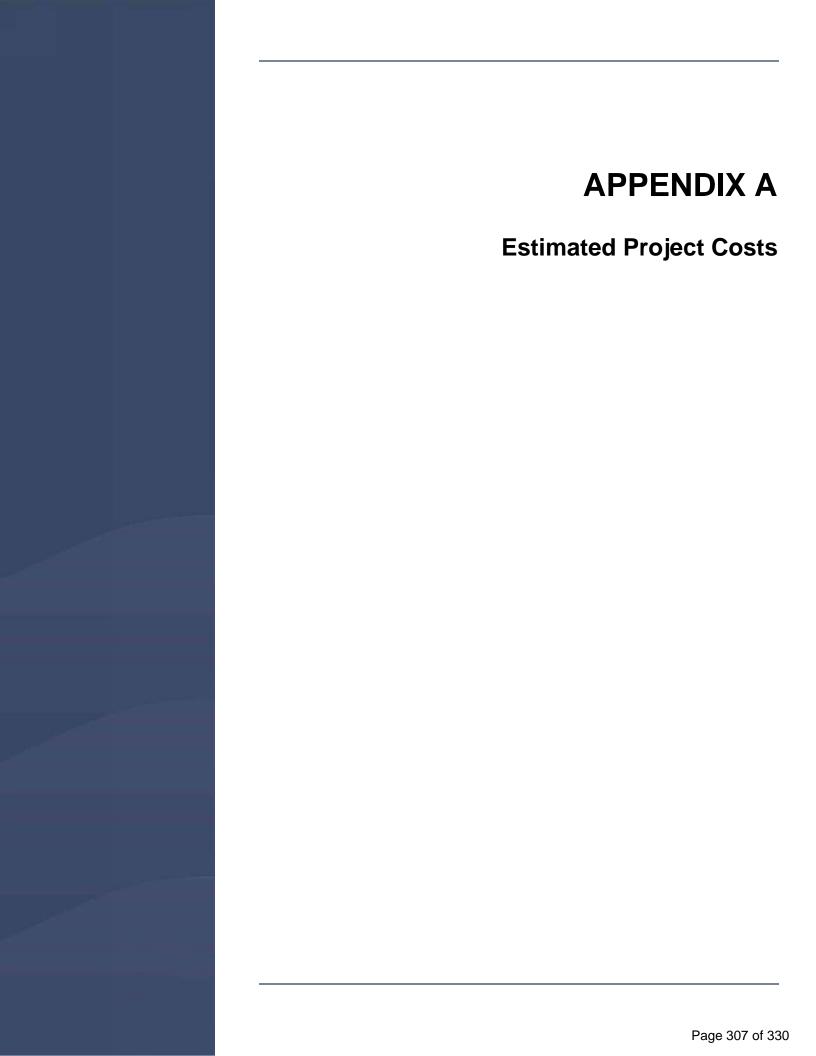
In cases where it is determined that the use of meter sizes to assess impact fees would not lead to an equitable result, ERCs may instead be calculated based on estimated peak day demand as follows:

ERCs = (peak day demand, gpd) / (1,248 gpd/ERC)

Examples where a meter size may not produce an equitable result include instances where a development uses multiple meters rather than a single meter or when the meter multiplier does not accurately reflect the expected multiplier of the customer as compared to a standard ERC.

REFERENCES

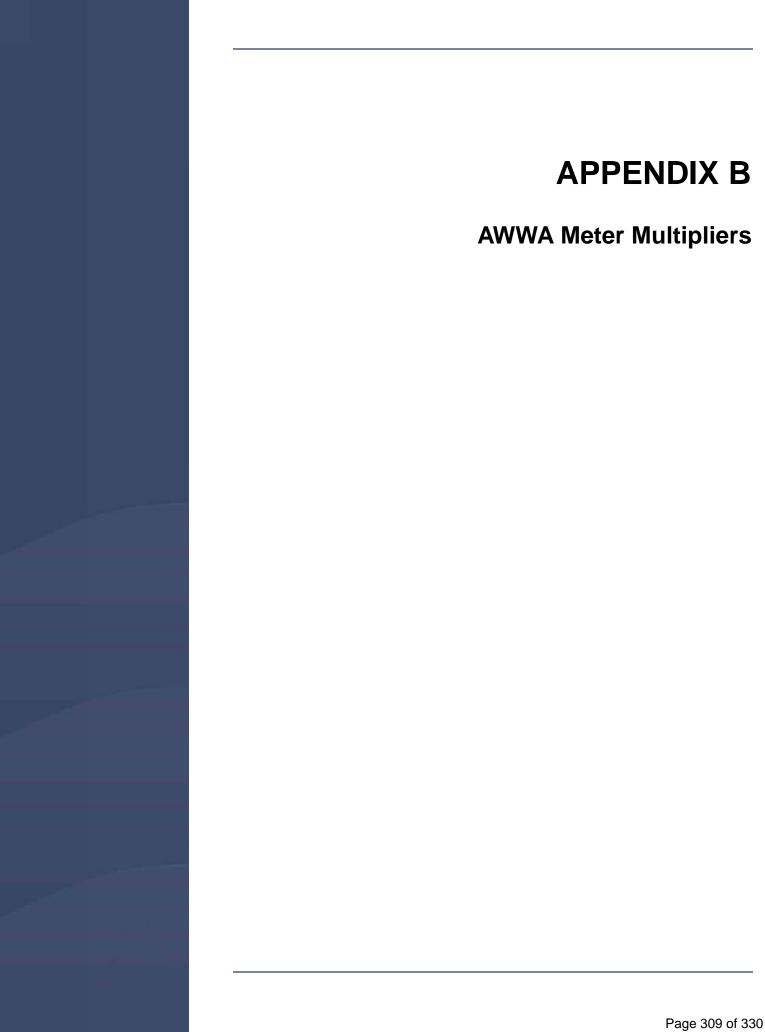
State of Utah. 2014c. Utah Code Annotated, Section Utah Code 11-36a: Impact Fees Act Vineyard City. 2025. Hansen, Allen & Luce. Drinking Water System Master Plan



Vineyard City Capital Facility Plan Drinking Water Recommended Improvements Preliminary Engineers Cost Estimates

	Item	Unit	Unit Price	Quantity	T	otal Price
	Double and Information Desired					
1	Backbone Infrastructure Project 6 MG Tank and Pump Station*	LS	\$16,401,404.69	1	\$	16,401,405
	Pipelines*	LS	\$13,753,752.52	1	\$	13,753,753
	* Actual Contract Costs		ineering & Admin. (i	•		-
		•		ntingency (N/A)		-
		Total to	Backbone Infrasti			30,155,157
2	Mill Road North Extension					
	16-inch diameter pipe	LF	\$ 332	5500	\$	1,826,000
			0 0	& Admin. (10%)		182,600
		_		tingency (10%)		182,600
		ı	otal to Mill Road N	ortn Extension	\$	2,191,000
3	Pump Station Upgrade 400 hP pump	LS	\$ 120,000	2	\$	240,000
	VFD and Conductors	LS	\$ 120,000	2	\$	200,000
	Generator	LS	\$ 150,000	1	\$	150,000
	Generator	10		4 Admin. (10%)		59,000
				itingency (10%)		59,000
			Total to Pump St			708,000
4	Storage Expansion					
-	Concrete Storage Tank	GAL	\$ 1.50	3000000	\$	4,500,000
		!	Engineering	& Admin. (10%)	\$	450,000
				itingency (10%)		450,000
				age Expansion		5,400,000
5	South Downtown Distribution					
	16-inch diameter pipe	LF	\$ 332	5500	\$	1,826,000
			Engineering a	& Admin. (10%)	\$	182,600
				itingency (10%)		182,600
		Tota	I to South Downtov	vn Distribution	\$	2,191,000
6	Holdaway Farms Distribution	T				
	12-inch diameter pipe	LF	\$ 292	2600	\$	759,200
				& Admin. (10%)		75,920
		T-4-		tingency (10%)		75,920
		lota	il to Holdaway Farn	ns Distribution	Þ	911,000
7	East Geneva Distribution 1					
•	12-inch diameter pipe	LF	\$ 292	5200	\$	1,518,400
				& Admin. (10%)		151,840
				ntingency (10%)		151,840
		To	otal to East Geneva	Distribution 1	\$	1,822,000
8	East Geneva Distribution 2					
	12-inch diameter pipe	LF	\$ 292	5600	\$	1,635,200
				& Admin. (10%)		163,520
		T	Cor otal to East Geneva	tingency (10%) Distribution 2		163,520 1,962,000
		.,	otal to East Geneva	Distribution 2	•	1,302,000
	North Downtown Distribution	T	\$ 332	3000	·	000 000
9						
9	16-inch diameter pipe	LF			\$	996,000
9		LF	Engineering a	& Admin. (10%)	\$	99,600
9			Engineering a	& Admin. (10%) atingency (10%)	\$ \$	
	16-inch diameter pipe		Engineering & Cor	& Admin. (10%) atingency (10%)	\$ \$	99,600 99,600
9	16-inch diameter pipe North Industrial Distribution		Engineering of Cor Cor Il to North Downtov	& Admin. (10%) htingency (10%) vn Distribution	\$ \$ \$	99,600 99,600 1,195,000
	16-inch diameter pipe	Tota	Engineering Cor Cor I to North Downtov	& Admin. (10%) htingency (10%) vn Distribution 2600 & Admin. (10%)	\$ \$ \$	99,600 99,600 1,195,000 759,200 75,920
	16-inch diameter pipe North Industrial Distribution	Tota	Engineering Cor Cor I to North Downtov	& Admin. (10%) htingency (10%) yn Distribution 2600 & Admin. (10%) htingency (10%)	\$ \$ \$	99,600 99,600 1,195,000 759,200

Total Costs \$ 47,446,000



-		
Meter Size	AWWA (capacity)	Factor based on 3/4
_		
5/8 inch	20	0.67
3/4 inch	30	1.00
1 inch	50	1.67
1-1/2 inch	100	3.33
2 inch	160	5.33
3 inch	300	10.00
4 inch	500	16.67
6 inch	1,000	33.33
8 inch	1,600	53.33
10 inch	2,300	76.67
12 inch	4,300	143.33
14 inch	6,400	213.33
16 inch	9,160	305.33
18 inch	14,650	488.33
20 inch	18,500	616.67



VINEYARD CITY COUNCIL STAFF REPORT

Meeting Date: May 28, 2025

Agenda Item: PUBLIC HEARING - Consolidated Fee Schedule Amendment (Resolution

2025-23)

Department: Finance

Presenter: Maria Arteaga

Background/Discussion:

Vineyard City occasionally updates the Consolidated Fee Schedule to adapt to changing costs. The changes proposed today include a Parks and Recreation Facilities Master Plan Impact Fees, The Memorial Bench and Memorial Tree Fee, The Grove Park Concessions Contract fees, Water and Wastewater Master Plans Impact Fees, as well as housekeeping type clarifying words and statements.

Fiscal Impact:

N/A

Recommendation:

Staff Recommends approving the Consolidated Fee Schedule amendments as presented.

Sample Motion:

I move to adopt Resolution 2025-23, Consolidated Fee Schedule amendments, as presented.

Attachments:

- 1. RES 2025 -23 Consolidated Fee Schedule Amendments
- 2. Consolidated Fee Schedule 05.28.2025 Redlined

RESOLUTION NO. 2025-23

A RESOLUTION AMENDING THE CONSOLIDATED FEE SCHEDULE

WHEREAS, Section 10-3-717 UCA authorizes cities to establish the amounts of fees to be charged for municipal services to be set by resolution, and

WHEREAS, The City Ordinances, in various locations, provides for the establishment of fee amounts for certain municipal services, by resolution of the City Council, and

WHEREAS, a Public Hearing was duly noticed and was held on the 28th day of May 2025 on the proposed amendments.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF VINEYARD, UTAH AS FOLLOWS:

- Section 1. The City Council hereby adopts the amended Consolidated Fee Schedule, which is attached hereto and incorporated herein by reference.
- Section 2. A copy of the Consolidated Fee Schedule shall be placed in the Vineyard City Offices and be available for review.
- Section 3. This resolution shall take effect upon passage.
- Section 4. All other resolutions, ordinances, and policies in conflict herewith, either in whole or in part, are hereby repealed.

PASSED and ADOPTED by the City Council of Vineyard, Utah this 28th day of May 2025.

	APPROVED:	
ATTEST:	Julie Fullmer, Mayor	
Pamela Spencer, City Recorder	SEAL	

TAH



Consolidated Fee Schedule 2024–2025 Fiscal Year

Table of Contents

Administrative	2
Recreation	3
Utilities	5
Sanitation	6
Facilities	6
Special Event Permit	8
Code Enforcement Fees	9
Business Licensing	10
Land Use Application	11
Building Permit Fees	14
Building Inspection Fees	15
mpact Fees	16
Pass-through Fees	16
Utility Meter & Connection Fees	17



ADMINISTRATIVE FEES		
Records (GRAMA) Requests	per hour for staff time after the first 15 minutes (based on the lowest paid employee working on the request) Copies - \$0.10 per page	
Returned Checks	\$14	
Colored Map Copies – 8 ½ by 11	\$3.00	
Black and White Maps Copies	Free	
Notarization	Free	
Library Card/Fitness Center Reimbursement	\$80 annual reimbursement per Vineyard household (can be used toward non-resident library card OR municipal fitness center membership)	
Weed Abatement	Actual Abatement Costs	
Bond Processing Fee	\$60	
Administrative Citation	\$100	
Credit Card Fee	3% of Transaction Total	
Candidate Filing Fee	\$50	
Candidate Late Financial Disclosure Statement	\$50	
City Offense Fines	Class B misdemeanor – not to exceed \$1,000 Class C misdemeanor – not to exceed \$750	
Sixteen-Year-Old Curfew (Class C)	\$75	
Eighteen-Year-Old Curfew (Class C)	\$75	



Parent Liability (Class C)	\$125
Prohibited Travel on Trails (Infraction)	\$40
Leash Requirement (Infraction)	\$40
Sleeping on Public Property (Class C)	\$75
Camping Prohibited (Class C)	\$75
Unlawful Parking (Infraction)	\$40
Parking w/Snow Present (Infraction)	\$40
Driving or Riding on Sidewalk (infraction)	\$40
Engine Brake Restriction (Class C)	\$75
Hours of Operation (Infraction)	\$75
Fires and Campfires (Class C)	\$125
City Council-Designated Local Residential Streets	\$20 Per Permit
City Council-Designated Amenity Roads	\$60

RECREATION FEES		
Adult Pickleball	\$50 – Team	
Adult Soccer	Team - \$500	
	Individual - \$50	
Adult Soccer Tournament	Team - \$160	
	Individual - \$20	
Adult Tennis Clinic	\$50 – Individual	
Cornhole Tournament	Team - \$30	
	Individual - \$15	



CUTA Tennis	\$100 – Individual
E-Sports	\$50 – Individual
Pickleball Tournament	Team - \$30
	Individual – 15
Race Registration	5k/10k - \$25
	Kids 1k – \$10
	Household Discount - \$55
	Group Rate – \$20 per person
Race T-Shirts	\$15 – individual
Senior Program	\$50 – Individual
Spikeball Tournament	Team – \$30
	Individual – \$15
Sports Trivia/Fantasy Class	\$50 – Individual
Pee-wee Sports Clinic	\$60 – Individual
Youth Arts	\$50 – Individual
Youth Baseball Clinic	\$50 – Individual
Youth Basketball Clinic	\$55 – Individual
Youth Coach Pitch	\$55 – Individual
Youth Street Hockey League	\$65 – Individual
Youth Pickleball League	\$100 – Individual
Wiffleball Tournament	\$100 – Team
Youth Flag Football	\$70 – Individual
Youth Jr Jazz Basketball	\$100 – Individual
Youth Kickball	\$50 – Individual
Youth Machine Pitch	\$70 – Individual
Youth Pickleball Programs	\$50 – Individual
Youth Soccer Programs	\$75 – Individual
Youth T-Ball	\$55 – Individual
Youth Tennis Clinic	\$50 – Individual
Youth Ultimate Frisbee	\$50 – Individual
Youth Volleyball	\$90 – Individual



Youth Wrestling	\$50 – Individual
Bingo	\$10 – Individual
Additional Non-Residential Fee	Team - \$50
	\$10 – Individual
Recreation Program Cancellation	Up to 100% of Registration Cost
Fee	
Memorial Bench	\$1,500
Memorial Tree	\$500
Grove Park Concessions Food Truck	\$500 Per Month
Contract (Non-City Events)	
Grove Park Concessions Semi-	\$1,000 Per Month
Permanent Structure Contract (Non-	
City Events)	
Concessions Contract Late Fee	\$25 Per Day

UTILITY USE FEES*		
Water Base Rate ¾" Meter	\$30.99 first 5,000 gallons	
Water Base Rate 1" Meter	\$43.39 first 5,000 gallons	
Water Base Rate 1 ½" Meter	\$55.79 first 5,000 gallons	
Water Base Rate 2" Meter	\$89.88 first 5,000 gallons	
Water Base Rate 3' Meter	\$340.90 first 5,000 gallons	
Water Base Rate 4" Meter	\$442.14 first 5,000 gallons	
Water Base Rate 6" Meter	\$650.81 first 5,000 gallons	
Water Base Rate 8" Meter	\$867.74 first 5,000 gallons	
Water Multi-Family Residential Base	\$18.20 per unit	
Rate		
Residential Water Usage Rates: Tier 1 (5,001 – 15,000) Tier 2 (15,001 – 30,000+) Tier 3 (30,001 – 50,000)	\$2.03 per 1,000 gallons \$2.32 per 1,000 gallons \$2.86 per 1,000 gallons	
Tier 4 (50,001+)	\$3.15 per 1,000 gallons	



Commercial Water Usage Rates:	
Tier 1 (5,001 - 30,000)	\$2.03 per 1,000 gallons
Tier 2 (30,001 - 100,000)	\$2.86 per 1,000 gallons
Tier 3 (100,001+)	\$3.15 per 1,000 gallons
Sewer Baser Rate	\$18.30 per 1,000 gallons
Sewer Multi-Family Residential	\$10.20 per unit per month
Base Rate	
Sewer Usage Rate	\$5.97 per 1,000 gallons
Transportation Utility	\$3.50 per ERU
Storm Water Utility	\$6.50 per ERU
*Non-Vineyard Resident &	Rate X2
Business Fee	
Collection for Any Unpaid Utility	May be subject to collections if
Bills, Fees, or Civil Penalties	payment has not been made within
	30 days of the due date at the cost
	of the resident

SANITATION FEES		
90-Gallon Residential Can	\$16.25	
Second 90-Gallon Residential Can	\$10	
Recycling Can	\$7.50	
Replacement Can	\$90	

FACILITIES RENTAL FEES	
Council Chambers Rental	\$75 per hour for Resident
	\$150 per hour for Non-Resident
Council Chambers Cleaning Deposit	\$75 for Resident
	\$150 for Non-Resident



Small Park Pavilion Rental	\$40 for Resident
	\$80 for Non-Resident
Small Park Pavilion Cleaning Deposit	\$40
Large Park Pavilion Rental	\$75 for Resident
	\$150 for Non-Resident
Large Park Pavilion Cleaning Deposit	\$75
Special Event Rental Deposit	\$300
Multi-Day Special Event Rental	\$500 per day
Deposit	
Pavilion Rental Cancellation Fee	Up to 100% of reservation cost
Hourly Field Rental at Gammon Park	\$300 Deposit + \$20 for Residents,
(Monday – Thursday)	\$40 for Non-Resident or Holiday
	Reservations
4 Hour Field Rental at Gammon Park	\$300 Deposit + \$75 for Residents,
(Monday – Thursday)	\$150 for Non-Resident or Holiday
	Reservations
Hourly Field Rental at Gammon Park	\$300 Deposit + \$30 for Residents,
(Weekend)	\$60 for Non-Resident or Holiday
	Reservations
4 Hour Field Rental at Gammon Park	\$300 Deposit + \$100 for Residents,
(Weekend)	\$200 for Non-Resident or Holiday
	Reservations
All other parks, Single Soccer Hourly	\$300 Deposit + \$40 for Residents,
Field Rental (Monday – Thursday)	\$80 for Non-Resident or Holiday
	Reservations
All other parks, Single Soccer 4 Hour	\$300 Deposit + \$150 for Residents,
Field Rental (Monday - Thursday)	\$300 for Non-Resident or Holiday
	Reservations
All other parks, Single Soccer Hour	\$300 Deposit + \$60 for Residents,
Field Rental (Weekends)	\$120 for Non-Resident or Holiday
	Reservations



All other parks, Single Soccer 4 Hour	\$300 Deposit + \$200 for Residents,
(Weekend)	\$400 for Non-Resident or Holiday
	Reservations
Hourly Rental per Soccer Goal Set	\$10 for Residents
	\$20 for Non-Residents
Hourly Rental per Soccer Corner Flag	\$10 for Residents
Set	\$20 for Non-Residents
Court Rental	\$25 per hour per court
Pickleball Net Rental	\$50 Refundable Deposit
Pickleball Net Repair/Replacement	Up to \$300
Fee	
Non-Existing Line Painting – Per Field	1-499 Feet - \$100
	500-999 Feet - \$150
	1500+ Feet - \$200
Remarking Line Painting – Per Field	1–499 Feet – \$50
	500-999 Feet - \$60
	1500+ Feet - \$80

SPECIAL EVENT FEES*	
Special Event Permit	\$50
Special Event with Vendors	\$75
Special Events with >250	\$100
Participants	
Special Events longer than 6 hours	\$150
Multi-Day Special Event	\$200
Film Permit	\$50
Children's Market	\$25
Vineyard Days Vendors	\$100
Boo-A-Palooza Vendor Fee	\$50
Bounce House Deposit	\$100
Food Truck Vendor	\$50 – 100



Onsite Dumpster or Equipment	\$72 per dumpster
Permit	
Additional Dumpster Reserved	\$174 per 6-yard dumpster
Excess Garbage Pickup	Up to \$600 based on quantity
	picked up
Extra trash cans with bags	\$15 per 5 cans
Personnel (total compensation per	City staff per person- \$35
employee, per hour, during regular	Parks Department – \$35
business hours)	Streets Department – \$35
	Special Events Department – \$32
Penalty for operating without a	Double the application fee and any
permit	damage caused by the special event
*Special Events and facility rental fees may be waived at the discretion of the	
City Council. See Special Event Code for fee waiver consideration reasons.	

CODE ENFORCEMENT FEES	
Code Violation Fee (per calendar	1 st Offense – \$100
year from first offense)	2 nd Offense – \$200
	3 rd (or more) Offense –
	\$400
Civil Penalty Fee	\$25 minimum to \$1,000 maximum
	per day, per violation
Civil Penalty Fee- Occupancy	\$100 per day, per violation
Violation	
Civil Penalty Fee- Home Occupation	\$25 per day, per violation
Operating without License	
Civil Penalty Fee- Commercial	\$50 per day, per violation
Business Operating without License	
Code Violation Fee – Interest	20% per annum of total
	outstanding amounts
Default/Administrative Code	\$100
Enforcement Hearing Fee	



Animal Defecation without Removal	\$250
Fine	
Off-Leash Animal Fine	\$250
Illegal Trash Dumping	\$250
Illicit Discharge and Stormwater Runoff	As Found in State Code 10-5-100
Code Violation by City (via Contract	Cost plus 10%
Services)	

BUSINESS LICENSING FEES	
Home-Based Occupation (exceeds	\$50
residential impact)	
Home-Based Occupation (does not	\$0
exceed residential impact)	
Accessory Dwelling Unit Business	Initial Fee \$100
License (Biennial)	Renewal Fee \$50
Industrial	\$250
Manufacturing/Distribution	
Restaurant/Food	\$190
Food Truck Fee (Based in Vineyard)	\$25
Retail	\$215
Service Related	\$150
Fire Inspection	Equal to Orem Fire's fee as dictated
	in Orem City's Fee Schedule
Accessory Dwelling Unit Re-	\$85
Inspection Fee	
Renewal Fee (all license types except	\$25
Alcohol and Towing/Parking	
Alcohol and Towing/Parking	Same as Initial Fee
Enforcement Renewal Fee	
Solicitor License	\$30
Temporary/Seasonal Use Business	\$50
License	



Temporary/Seasonal Use Business	\$300
License Refundable Deposit	
Towing/Parking Enforcement	\$50
Qualification	
Class A – D Beer License	\$400 + Proof of \$5,000 Bond
Class E Beer License	\$400 + Proof of \$10,000 Bond
Class A Liquor License	\$300 + Proof of \$10,000 bond
Class B Liquor License - Limited-	\$300 + Proof of \$5,000 bond
service Restaurant	
Class B Liquor License - Full-service	\$300 + Proof of \$10,000 bond
Restaurant	
Class C Liquor License	\$300 + Proof of \$1,000 Bond
Unclassified Business	\$25 Base fee until classification
	established by Resolution
Business fitting in 2+ Categories	Higher rate
Late Renewal Fee (during renewal	\$25
grace period)	
Daily penalty fee if license not renewed	Half of the license fee
by end of renewal grace period	
Penalty Fee for doing business	Equivalent to the license fee
without a Vineyard Business License	

LAND USE APPLICATION FEES	
Development Agreement	\$1,500
Development Agreement	\$1,500
Subdivision – Preliminary Plat	\$1,930 + \$6.20 per lot
Subdivision – Preliminary Plat –	\$786 + \$2.50 per lot
Additional Review	
Subdivision – Final Plat	\$1,940 + \$6.20 per lot
Subdivision – Final Plat	\$1,010 + \$2.50 per lot
Additional Reviews	
Condominium Plat – New or	\$1,406 + \$25 per unit



Conversion	
Major Plat Amendment	\$1,706
Minor Plat Amendment	\$1,406
Neighborhood Plan	≥ 10 acres = \$2,663
	< 10 acres = \$500
Planned Unit Development	\$1,000
Recording Fees	As charged by Utah County Recorder
Site Plan – Residential	\$2,663
Site Plan – Non-Residential	\$3,756
Site Plan – Non-Residential –	\$1,693 for each additional review
Additional Reviews	after two reviews
Site Plan – Minor Amendment	\$500
General Plan Text Amendment	\$1,000
General Plan Map Amendment	\$1,000
Land Use Text Amendment	\$1,000
Land Uset Map Amendment	\$1,000
Lot Line/Property Boundary Line	\$300
Adjustment	
Conditional Use Permit	\$400
Temporary Use Permit	\$75
Variance	\$100
Appeals	\$100
Zoning Verification	\$100
Sign Permit	\$150
Sign Standard Waiver	\$250
Commercial Temporary Sign Permit	\$25
Special Planning Commission	\$390 per meeting
Meeting	
Water Sampling	Lab Cost + 10% & \$300
Land Disturbance Permit	\$50 + \$20 per acre + \$30 per month
Land Disturbance Permit –	Included in engineering inspection
Subdivision and Site Plan	fees



Site Plans Technical Review	\$1,500 per application, first 50 plan sheets. Up to 3 revisions
Additional Site Plan Technical Review	\$65 per additional plan sheet or each sheet after 3 rd revision
Engineering/Public Works	3% of certified bid tabulation,
Inspection/Service Fees –	approved by Engineering Office
Subdivision – Related	
Engineering/Public Works	\$150 per hour
Inspection/Service Fees - Non-	
Subdivision Related	
Engineering/Public Works Re–Inspection Fees	\$150 per hour, 2-hour minimum
After Hours Engineering/Public	\$300 per hour, 2-hour minimum
Works (M-F between 5pm and 8am	
OR Saturdays, Sundays)	
New Street Light Install Fee	\$10,000 per light
Street Sign Fee	Cost plus 10%
Demolition	\$500 plan review fee
Encroachment Permit	\$150 plus \$1 per square foot of
	disturbed asphalt
Driveway Approach in Public Right-of-	\$250 for up to 2 inspections
Way Inspection Fee (after	\$150 per reinspection
Encroachment Permit)	
Vacuum Truck	\$250/hour, minimum of 2 hours
Fine for Use of Public Right of Way	\$300 plus \$150 per hour
without Approved Permit	
Infrastructure Construction Bond	Bond/Escrow account as
	determined by bid tabulation
	110% Performance
	10% Warranty
Final Grading Residential Lot Bond	\$1,000 up to 1 acre, \$500 each



	additional half acre
Building Relocation	\$500 Plan Review Fee
Full or Partial Road Closure Application	\$50 per Road Segment Plan
	Review Fee
City Barricades for Road Closure, if	\$150 Application Fee, \$75 per
approved by the Public Works Director	barricade per day. \$100 refundable
	deposit per set of barricades
Repair to Damaged Public	Cost plus 10% Administrative Fee
Infrastructure (All Streets or Utilities)	
by Contract	
Red Curb Request Application	\$50
Address Change Request/ADU	\$150
Secondary Address Request*	
Tree Replacement Due to Damage:	
Diameter < or = 1"	\$500 per tree
Diameter > 1" and < or = 2"	\$750 per tree
Diameter > 2" and < or = 3"	\$950 per tree
Diameter > 3"	Cost assessed by City Arborist,
	minimum of \$1,200 per tree
*Doos not include Cost of Additional Dhy	raigal Mailhay abaysad ta Dyanayty

^{*}Does not include Cost of Additional Physical Mailbox charged to Property Owner by USPS

BUILDING PERMIT FEES	
TOTAL VALUATION	FEE
\$1 to \$1,300	\$86
\$1,301 to \$2,000	\$86 for the first \$1,300; plus \$3 for
	each additional \$100 or fraction
	thereof, to and including \$2,000
\$2,001 to \$40,000	\$107 for the first \$2,000; plus \$11 for
	each additional \$1,000 or fraction
	thereof, to and including \$40,000



\$40,001 to \$100,000	\$525 for the first \$40,000; plus \$9 for each additional \$1,000 or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$1,065 for the first \$100,000; plus \$7 for each additional \$1,000 or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,865 for the first \$500,000; plus \$5 for each additional \$1,000 or fraction thereof, to and including \$1,000,000
\$5,000,001 and over	\$20,354 for the first \$5,000,000; plus \$2 for each additional \$1,000 or fraction thereof
Residential Plan Review	65% of Building Permit Fee
Commercial Plan Review	65% of Building Permit Fee
Simple/Duplicate Plan Review	25% of Building Permit Fee
Reinstating an Expired Permit	\$50 + any additional review time
Fire Inspection & Plan Review	10% of Building Permit Fee

BUILDING INSPECTION FEES	
Inspections outside of normal Business	\$75 per hour, two-hour minimum
hours	
Re-inspection	\$75 per hour
Inspection for which no specific fee is	\$75 per hour, one-hour minimum
indicated	
Additional plan review required by	\$85 per hour, one-hour minimum
changes, additions, or revisions to	
plans	



Use of outside consultants for plan	Actual costs, including administrative
checking and inspections, or both	and overhead costs
Fire Inspection	See Business License Fees
Work Without a Permit*	\$100 per infraction
Working Beyond a Stop Work Order*	\$200 per infraction
*Fines doubled for each subsequent infraction	

IMPACT FEES	
(Impact Fee Area Maps may be found on the City's Website)	
Sewer Facilities	• \$637 Per ERU
Drinking Water Per Equivalent Residential Unit (ERU) ^{1,2}	• \$4,708 per ERU
Roadway Facilities	 Area A – \$3,586 per Trip End
Per Trip End Unit based on ITE	 Area B (RDA) - \$1,286 per Trip
	End
Storm and Ground Water Per ERU ^{1,4}	 Area A – \$222 per ERU
	 Area B – \$337 per ERU
	 Area C – \$237 per ERU
Parks and Recreation Facilities	\$3,422.88 Per Household ⁵

³⁴ inch water connection is 1 ERU

⁵Household as defined by US Census Bureau

PASS THROUGH FEES	
Timpanogos Special Service District	Equal to District's impact fee as
	dictated current Impact Fee
	Facilities

 $^{^{\}rm 2}$ Additional fees may apply to units with more than 5-bathroom equivalent drains.

 $^{^3}$ Additional fees may apply to certain high water uses (e.g., Car Wash) without water reduction measures in place.

⁴Additional fee may apply to certain sites if above city's maximum impervious area requirement.



Orem Water Reclamation	Equal to Orem City's impact fee as dictated by the current Impact Fee
Orem Water Rights	Equal to Orem City's Water Rights as dictated in their up-to-date Consolidated Fee Schedule
All impact fees will be assessed at the time building permits are issued. All other development Impact Fees will be calculated based on Equivalent	

All impact fees will be assessed at the time building permits are issued. All other development Impact Fees will be calculated based on Equivalent Residential Units.

UTILITY METER & CONNECTION FEES	
34" Water Meter & Connection Fee	\$580
1" Water Meter & Connection Fee	\$795
1½" Water Meter & Connection Fee	\$1,240
2" Water Meter & Connection Fee	\$1,930
Water Meter Reconnect Fee	\$50
After Hours Fee (between 5pm and	Reconnect Fee plus \$150
8am)	
Utility/Hydrant Meter Application Fee	\$20
Fire Hydrant Meter Rental Deposit	\$2100
Residential Daily Rental Rate –	\$10 daily rental fee -
Fire Hydrant Meter	Water will be billed at the residential water
(Residence Must have Certificate of	usage rate as shown on utility use fees
Occupancy)	
Water Usage Rate – Fire Hydrant	Monthly rental rate will be at the base
Meter	rate of a 3" meter with water usage to
	be billed at commercial water usage
	rates and will be billed monthly
Residential Construction Water	\$100 minimum
Non-Residential Construction Water	\$100 minimum
Unauthorized Connection to System	\$2,000 per occurrence



Unauthorized Opening of Meter Box	\$250 + \$300 for a min. of 2 hours of staff time
Water Main Flushing	Per commercial rate at 3X pipe volume per occurrence & \$150 per hour per utility tech