



**NOTICE OF A VINEYARD REDEVELOPMENT
AGENCY BOARD MEETING
January 12, 2022 at 6:00 PM**

Public Notice is hereby given that the Vineyard Redevelopment Agency Board will hold a meeting on Wednesday, January 12, 2022, starting at 6:00 PM or as soon thereafter as possible, following the City Council Meeting, in the City Council Chambers at 125 South Main Street, Vineyard, Utah. This meeting can also be viewed on our [live stream page](#).

AGENDA

1. CALL TO ORDER

2. CONSENT ITEMS

2.1 Approval of the October 13, 2021 RDA Meeting Minutes

2.2 Approval of Water Tank surcharge removal and site grading phase

3. BUSINESS ITEMS

3.1 DISCUSSION AND ACTION – North Storm Drain Improvement Project (5 minutes)

City Engineer Naseem Ghandour is requesting that the North Regional Storm Drain Improvement project be added as an unfunded Capital Improvement Project for FY22. Once the cost is determined, a separate funding request will be submitted to the RDA for approval. The RDA Board will take appropriate action.

3.2 DISCUSSION AND ACTION – Center Street Overpass Landscape Design (5 minutes)

City Engineer Naseem Ghandour is requesting the use of RDA funds to hire a firm to create a landscape design for the Center Street overpass. The RDA Board will take appropriate action.

3.3 DISCUSSION AND ACTION – Main Street and 400 North Traffic Signal (5 minutes)

City Engineer Naseem Ghandour is requesting the use of RDA funds to pay for the completed traffic signal warrant study and for the design of a traffic signal at the intersection of Main Street and 400 North. He is also requesting that the construction of the signal be added to the Capital Improvements Project in the FY23 Budget as an unfunded project. The RDA Board will take appropriate action.

4. ADJOURNMENT

RDA meetings are scheduled as necessary.

The Public is invited to participate in all Vineyard Redevelopment Agency meetings. In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the Deputy Recorder at least 24 hours before the meeting by calling (801) 226-1929.

I the undersigned duly appointed City Recorder for Vineyard, Utah, hereby certify that the foregoing notice and agenda was emailed to the Salt Lake Tribune, posted at the Vineyard City offices, the Vineyard City website, the Utah Public Notice website, delivered electronically to city staff and to each member of the Governing Body.

AGENDA NOTICING COMPLETED ON: January 11, 2022

CERTIFIED (NOTICED) BY: /s/Pamela Spencer
PAMELA SPENCER, CITY RECORDER



**MINUTES OF A VINEYARD
REDEVELOPMENT AGENCY BOARD MEETING**

City Council Chambers
125 South Main Street, Vineyard, Utah
October 13, 2021 – 7:57 PM

Present

Chair Julie Fullmer
Boardmember Tyce Flake
Boardmember Chris Judd

Absent

Boardmember John Earnest
Boardmember Cristy Welsh

Staff Present: Interim City Manager George Reid, City Attorney Jayme Blakesley, City Engineer Naseem Ghandour, Public Works Director Chris Wilson, Sergeant Holden Rockwell with the Utah County Sheriff's Office, Community Development Director Morgan Brim, City Planner Briam Amaya Perez, Finance Director David Mortensen, Water Manager Sullivan Love, Deputy Recorder Kelly Kloefer

1. CALL TO ORDER

Chair Fullmer called the meeting to order at 7:57 PM.

2. CONSENT AGENDA

2.1 Approval of the September 8, 2021 RDA Meeting Minutes

Chair Fullmer called for a motion.

 **Motion:** BOARDMEMBER FLAKE MOVED TO APPROVE THE CONSENT AGENDA AS NOTED. BOARDMEMBER JUDD SECONDED THE MOTION. CHAIR FULLMER, BOARDMEMBERS FLAKE AND JUDD VOTED AYE. BOARDMEMBERS EARNEST AND WELSH WERE ABSENT. THE MOTION CARRIED WITH TWO ABSENT.

3. BUSINESS ITEMS

3.1 DISCUSSION AND ACTION – Redevelopment Agency Director Contract

Interim City Manager George Reid will present a contract for a Redevelopment Agency Director and a recommendation to appoint Jacob McHargue as the director. The RDA Board will take appropriate action.

Mr. Reid explained that during the transition to the new finance director, it was important to have consistency and continuity with the RDA. Finance Director David Mortensen would be prepared to serve as the RDA director, but during the transition, he felt it was best to retain Mr. McHargue.

Chair Fullmer commented that the contract provided stability, as well as flexibility for the incoming boardmembers, and was valid through June 2022 which gave enough time for a full transition.

 **Motion:** BOARDMEMBER JUDD MOVED TO APPROVE THE APPOINTMENT OF JACOB MCHARGUE AS THE VINEYARD RDA DIRECTOR AND ALLOW THE RDA CHAIR TO SIGN THE CONSULTANCY AGREEMENT AS PRESENTED. BOARDMEMBER FLAKE SECONDED THE MOTION. CHAIR FULLMER, BOARDMEMBERS FLAKE AND JUDD VOTED AYE. BOARDMEMBERS EARNEST AND WELSH WERE ABSENT. THE MOTION CARRIED WITH TWO ABSENT.

3.2 DISCUSSION AND ACTION – Traffic Signal on Vineyard Connector and Main Street

City Engineer Naseem Ghandour is requesting RDA funds to install a traffic signal on the Vineyard Connector and Main Street. The RDA Board will take appropriate action.

Chair Fullmer turned the time over to City Engineer Naseem Ghandour.

Mr. Ghandour reiterated what was presented in the City Council meeting earlier that evening and a brief discussion ensued regarding the budget for the project.

 **Motion:** BOARDMEMBER JUDD MOVED TO APPROVE MADAM CHAIR FULLMER TO SIGN THE INTERLOCAL AGREEMENT BETWEEN UDOT AND THE CITY FOR THE INSTALLATION OF A FOUR-WAY TRAFFIC SIGNAL AT VINEYARD CONNECTOR ROAD AND MAIN STREET AND APPROVE AND FUND THE PROPOSED BUDGET ASSOCIATED WITH IT. BOARDMEMBER FLAKE SECONDED THE MOTION. CHAIR FULLMER, BOARDMEMBERS FLAKE AND JUDD VOTED AYE. BOARDMEMBERS EARNEST AND WELSH WERE ABSENT. THE MOTION CARRIED WITH TWO ABSENT.

4. ADJOURNMENT

Chair Fullmer called for a motion.

 BOARDMEMBER FLAKE MOVED TO ADJOURN THE MEETING AT 8:01 PM. BOARDMEMBER JUDD SECONDED THE MOTION. CHAIR FULLMER, BOARDMEMBERS FLAKE AND JUDD VOTED AYE. BOARDMEMBERS EARNEST AND WELSH WERE ABSENT. THE MOTION CARRIED WITH TWO ABSENT.

MINUTES APPROVED ON: _____

CERTIFIED CORRECT BY: /s/ Kelly Kloepfer
KELLY KLOEPFER, DEPUTY RECORDER



VINEYARD RDA STAFF REPORT

Meeting Date: 1-12-2022

Agenda Item: 2.2 Water Tank Surcharge and Grading phase

Department: Public Works

Presenter: Chris Wilson

Background/Discussion:

Staff is working with Hansen, Alan & Luce Engineers on the design of the city water tank and pipeline improvements. We have completed our geotechnical study for the tank site, placed surcharge, and completed settlement period. We are now ready to remove the surcharge material and grade the site. Due to quantity of materials, we will need to relocate materials. The excess materials will be moved to the Downtown area to be repurposed for the Vineyard Connector pedestrian overpass and or the UTA Frontrunner temporary parking pad. Ten bids were received on January 10th by 10am to complete this work. Staff proposes to award this project to the low bidder, Sunroc Corporation.

Fiscal Impact:

Sunroc Bid	\$ 198,695.50
Contingency	<u>\$ 50,000.00</u>
Total	\$ 248,695.50

Recommendation:

Motion to Approve

Sample Motion:

I move to approve the Vineyard Tank Surcharge Removal and Site Grading phase of the water tank project and allow staff to contract with Sunroc Corporation to complete the work as proposed.

Attachments:

Contractor Bid Summary
Sunroc Bid
Project Packet

**VINEYARD CITY WATER TANK SURCHARGE REMOVAL AND SITE GRADING
DECEMBER 2022**

BIDS RECEIVED BY: 10:00 AM, WEDNESDAY JANUARY 5, 2022

125 South Main Street
Vineyard, UT 84058

BIDS:

COMPANY	AMOUNT	Start Date	Constr. Days	Final Completion
1. Armour Construction	\$327,299.90	1/10/2022	30	2/25/2022
2. Bennett Paving & Construction	\$370,091.40	1/10/2022	80	4/11/2022
3. Dry Creek Structures	\$413,563.50	1/10/2022	21	2/5/2022
4. Geneva Rock	\$275,260.40	1/10/2022	42	3/8/2022
5. Hall's HammerTime Construction	\$698,384.96	2/14/2022	45	5/6/2022
6. M&T Construction	\$361,558.70	1/12/2022	15	1/31/2022
7. RCX	\$320,345.85	1/10/2022	35	2/18/2022
8. S&L	\$365,600.00	1/17/2022	35	3/9/2022
9. Silver Spur	\$279,150.00	1/17/2022	30	3/1/2022
10. Sunroc	\$198,695.50	1/10/2022	20	2/11/2022

**VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT**

BID FORM

(Use this form to complete your Bid. All fields must be filled in for a complete bid.)

Item #	Description	Unit	Quantity	Unit Price	Amount
1	Mobilization	LS	1	11,000.00	11,000.00
2	Temporary Environmental Controls	LS	1	15,000.00	15,000.00
3	Clearing and Grubbing	LS	1	7,000.00	7,000.00
4	Remove Surcharge Materials and Grade Site Per Grading Plan (Plan Quantity)	CY	7,065	4.50	31,792.50
5	Remove, Load, and Haul Surcharge Materials to Specified location within City (Plan Quantity)	CY	27,746	4.50	124,857.00
6	Raise Fire Hydrant to Grade	EA	1	1,375.00	1,375.00
7	Raise Valve Box to Grade	EA	3	425.00	1,275.00
8	Furnish, Place, Shape and Compact Road Base Access Road	CY	164	39.00	6396.00
Total					198,695.50

ONE HUNDRED NINETY EIGHT THOUSAND
Total estimated price for the bid: SIX HUNDRED NINETY FIVE DOLLARS AND 50/100

Complete the following items and timeline information for additional evaluation of this Bid

1. Earliest day construction can begin: 1/10/22
2. Number of anticipated construction days: 20
3. Anticipated Substantial Completion date: 2/4/22
4. Anticipated Final Completion date: 2/11/22

* Assumes using Rock Trucks to Haul Across Vineyard Rd and through Anderson-Geneva Property. No Asphalt Repair is included/anticipated.

BID SUBMITTAL

This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: Sunroc Corporation (SEAL)

State of Incorporation: Utah

Type (General Business, Professional, Service, Limited Liability): General Business

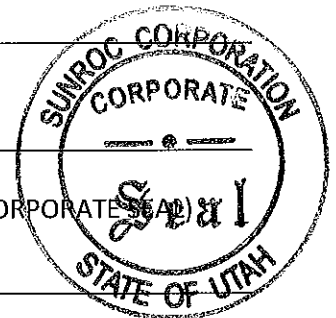
By: Rhett Housley
(Signature -- attach evidence of authority to sign)

Name (typed or printed): Rhett Housley

Title: Senior Estimator (CORPORATE SEAL)

Attest Matt Zepher

Date of Authorization to do business in the State of Utah is 08 / 19 / 96



A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____ 482 W. 800 N.

Orem, UT 84057

Phone No. 801-722-2100 Fax No. _____

SUBMITTED on January 5, 2022.

State Contractor License No. 326045-5501.

VINEYARD CITY

WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

BID PACKAGE & CONSTRUCTION DOCUMENTS



VINEYARD

DECEMBER 2021

VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

TABLE OF CONTENTS

PART 1: LEGAL AND PROCEDURAL DOCUMENTS

Advertisement for Bids
Bid Form
Agreement
Performance Bond
Payment Bond

PART 2: TECHNICAL SPECIFICATIONS – VINEYARD STANDARD SPECIFICATIONS (Chapter 4 of Public Works Standard Specifications and Drawings)

See Vineyard's web site for documents:
<http://www.vineyard.utah.gov/DocumentCenter/Index/31>

PART 3: TECHNICAL SPECIFICATIONS – MEASUREMENT AND PAYMENT

Technical Specifications	Pages 1 of 1
Measurement and Payment	Pages 4 of 4

PART 4: CONSTRUCTION DRAWINGS

Site and Grading Plan	Sheets 4 of 4
-----------------------	---------------

VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

ADVERTISEMENT FOR BIDS

Vineyard City
125 South Main Street
Vineyard, Utah 84058

Separate sealed Bids for the construction of the **Water Tank Surcharge Removal and Site Grading Project** will be received by Vineyard City at 125 South Main Street, Vineyard, UT 84059, until **10:00 a.m. (local time), Wednesday, January 5, 2022**, and then privately opened at said office. No public bid opening will be held.

The project is generally described as follows:

- Grub vegetated areas and invasive trees, remove approximately 28,000 cubic yards of surcharge materials, grade and compact approximately 7,000 cubic yards of the material on site per grading plan, and haul and stockpile the remainder of the materials to a site within Vineyard approximately one mile away.

The start of this work is contingent upon obtaining desired settlement results of the existing surcharge materials. It is anticipated for this to be achieved before the end of year 2021 and this project to be completed before the end of January 2022. Once a notice to proceed is given, the work will need to be completed in a timely manner to allow for the next phase of the project to start.

The Bid package will be available December 27, 2021 and may be requested from and technical questions may be directed to the Project Manager on or before Tuesday January 4, 2022 at 3:00 p.m. Bids shall be submitted electronically or hard copy and directed to:

Chris Wilson, Public Works Director (Project Manager)
125 South Main Street
Vineyard, Utah 84059
Phone: (385) 338-5382
Email: chrisw@vineyardutah.org

The Bid Package may also be found on U3P/Scquest (<https://bids.scquest.com>) on or after December 27, 2021

No bid bond required.

Vineyard City reserves the right to reject any and/or all bids and to waive any and all informalities found in any bid.

VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

BID FORM

(Use this form to complete your Bid. All fields must be filled in for a complete bid.)

Item #	Description	Unit	Quantity	Unit Price	Amount
1	Mobilization	LS	1		
2	Temporary Environmental Controls	LS	1		
3	Clearing and Grubbing	LS	1		
4	Remove Surcharge Materials and Grade Site Per Grading Plan (Plan Quantity)	CY	7,065		
5	Remove, Load, and Haul Surcharge Materials to Specified location within City (Plan Quantity)	CY	27,746		
6	Raise Fire Hydrant to Grade	EA	1		
7	Raise Valve Box to Grade	EA	3		
8	Furnish, Place, Shape and Compact Road Base Access Road	CY	164		
Total					

Total estimated price for the bid: _____

Complete the following items and timeline information for additional evaluation of this Bid

1. Earliest day construction can begin: _____
2. Number of anticipated construction days: _____
3. Anticipated Substantial Completion date: _____
4. Anticipated Final Completion date: _____

BID SUBMITTAL

This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____ (CORPORATE SEAL)

Attest _____

Date of Authorization to do business in the State of Utah is ____/____/____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of first joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of second joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business Address _____

Phone No. _____ Fax No. _____

SUBMITTED on _____, 20_____.

State Contractor License No. _____.

VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

AGREEMENT FOR CONSTRUCTION/LABOR SERVICES

THIS AGREEMENT dated this ____ day of _____ 20____ FOR CONSTRUCTION/LABOR SERVICES ("Agreement") by and between Vineyard City, a Utah municipal corporation ("City") and _____ ("Contractor").

1. SERVICES BY CONTRACTOR

Contractor shall perform all services described in the Vineyard City water tank surcharge removal and site grading Project Bid Package ("Services"), in a manner consistent with the accepted practices for other similar services, performed to the City's satisfaction, within the time period prescribed by the City and pursuant to the direction of the City Mayor or his/her designee. The Services are generally described as follows:

- Grub vegetated areas and invasive trees, remove approximately 28,000 cubic yards of surcharge materials, grade and compact approximately 7,000 cubic yards of the material on site per grading plan, and haul and stockpile the remainder of the materials to a site within Vineyard approximately one mile away.

2. PAYMENT

- 2.1 City shall pay Contractor the amount for the Services as set forth in the Project Bid Package.
- 2.2 The Contractor shall submit monthly invoices to the City and all invoices shall be paid by the City within 30 days of receipt of a proper invoice.
- 2.3 If the Services do not meet the requirements of the Agreement, Contractor will correct or modify the work to comply with the Agreement. City may withhold payment for such Services until the work meets the requirements of the Agreement.

3. DISCRIMINATION AND COMPLIANCE WITH LAWS

- 3.1 Contractor agrees not to discriminate against any employee or applicant for employment or any other person in the performance of this Agreement because of race, creed, color, national origin, marital status, sex, age, disability, or other circumstance prohibited by federal, state or local law or ordinance, except for a bona fide occupational qualification. Contractor agrees that consistent with Utah State law it will verify the immigration status of each of its employees through the use of a system such as Everify.
- 3.2 Contractor shall comply with and perform the Services in compliance with all federal, state and local laws and ordinances, as now existing or hereafter adopted or amended.
- 3.3 Violation of this Paragraph 3 shall be a material breach of this Agreement and may result in

ineligibility for further work for the City.

4. TERM AND TERMINATION OF AGREEMENT

- 4.1 This Agreement shall commence on the effective date of this Agreement and shall continue until the completion of the Services. This Agreement may be extended for additional periods of time upon the mutual written agreement of the City and the Contractor. Completion of Services shall be as follows:

Substantial Completion Date: _____

Final Completion Date: _____

- 4.2 The Contractor and City recognize that the contractor will be responsible for and shall pay the City Liquidated Damages of **\$500.00** for each day that expires after the times specified in Paragraph 4.1 for completion of work.
- 4.3 This Agreement may be terminated immediately by the City with or without cause. The Contractor may terminate this Agreement upon thirty (30) days written notice. Contractor shall be entitled to just and equitable compensation at the rate set forth in Paragraph 2 for any satisfactory work completed prior to the date of termination.

5. GENERAL ADMINISTRATION AND MANAGEMENT

The Mayor, or the City's designee shall be City's representative and shall oversee and approve all Services to be performed, coordinate all communications, and review and approve all invoices, under this Agreement. Contractor is to consider that City property is open to the public at all times, and the maintenance and associated work shall be conducted in such a way that the daily operation shall not be affected without prior approval by the City.

6. WARRANTY

- 6.1 Requisite Skill. The Contractor warrants that it has the requisite training, skill and experience necessary to provide the Services and is appropriately accredited and licensed by all applicable agencies and governmental entities, including but not limited to being registered to do business in the Vineyard City.
- 6.2 Defective Services. The Contractor shall, at its sole cost and expense, correct all Services performed which the City deems to have defects in workmanship and material discovered within one (1) year after the City's final acceptance of the Services

7. HOLD HARMLESS

- 7.1 Contractor shall protect, indemnify and save harmless the City, its officers, elected officials, agents, volunteers and employees from any and all costs, claims, judgments or awards of damages (including costs and all attorney fees), arising out of or in any way resulting from the negligent acts, errors or omissions of Contractor, its officers, employees or agents in performing this Agreement.
- 7.2 City shall protect, defend, indemnify and save harmless Contractor, its officers, employees and agents from any and all costs, claims, judgments or awards of damages, (including costs and all

attorney fees) arising solely out of the negligent acts or omissions of City, its officers, employees or agents in performing this Agreement.

The provisions of this Section shall survive the expiration or termination of this Agreement.

8. INSURANCE

Contractor agrees to carry as a minimum the following insurance, in such form and with such carriers who have a current AM Best rating that is satisfactory to the City:

8.1 Workers' compensation and employer's liability insurance in amounts sufficient pursuant to the laws of the State of Utah;

8.2 Commercial general liability insurance covering liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Contractor's Commercial General Liability insurance policy with respect to the work performed for the City. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.

8.3 Automobile liability insurance covering all owned, non-owned, hired and leased vehicles.

Contractor shall furnish the City with original certificates and a copy of the amendatory endorsements, including without limitation the additional insured endorsement evidencing the insurance requirement of the Contractor before commencement of the Services. Contractor's failure to maintain such insurance policies shall be grounds for the City's immediate termination of this Agreement.

9. SAFETY

Contractor shall take all necessary precautions for the safety of employees on the work site and shall comply with all applicable provisions of federal, state and municipal safety and health laws and codes, including without limitation, all OSHA/UOSHA requirements. Contractor shall erect and properly maintain, at all times, all necessary guards, barricades, signals and other safeguards at all unsafe places at or near the site for the protection of its employees and the public, safe passageways at all road crossings, crosswalks, street intersections, post danger signs warning against known or unusual hazards and do all other things necessary to prevent accident or loss of any kind. Contractor shall protect from damage all water, sewer, gas, steam or other pipes or conduits, and all hydrants and all other property that is likely to become displaced or damaged by the performance of the Services. The Contractor shall, at its own expense, secure and maintain a safe storage place for its materials and equipment and is solely responsible for the same.

10. CLEANUP

At any time ordered by the City and immediately after completion of the Services, the Contractor, shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Services. In the event the Contractor fails to perform the necessary clean up, the City may, but in no event is it obligated to, perform the necessary clean up and the costs thereof shall be immediately paid by the Contractor to the City and/or the City may deduct its costs from any remaining payments due to the Contractor.

11. SUBLETTING OR ASSIGNING CONTRACT

Neither City nor Contractor shall assign, transfer, or encumber any rights, duties or interests accruing from this Agreement without the express prior written consent of the other party.

12. INDEPENDENT CONTRACTOR

Contractor is and shall be at all times during the term of this Agreement an Independent Contractor and the City shall be neither liable nor obligated to pay Contractor sick leave, vacation pay, or any other benefit of employment nor to pay any social security or other tax which may arise as an incident of employment. The Contractor shall pay all income and other taxes as due.

13. NON-APPROPRIATION OF FUNDS

If sufficient funds are not appropriated or allocated for payment under this Agreement for any future fiscal period, the City will not be obligated to make payments for Services or amounts after the end of the current fiscal periods, and this Agreement will terminate upon the completion of all remaining Services for which funds are allocated. No penalty or expense shall accrue to the City in the event this provision applies.

14. GENERAL PROVISIONS

This Agreement contains all of the agreements of the Parties with respect to any matter covered or mentioned in this Agreement. No provision of the Agreement may be amended or modified except by written agreement signed by the Parties. This Agreement shall be binding upon and inure to the benefit of the Parties' successors in interest, heirs and assigns. Any provision of this Agreement which is declared invalid or illegal shall in no way affect or invalidate any other provision. In the event either of the Parties defaults on the performance of any terms of this Agreement or either Party places the enforcement of this Agreement in the hands of an attorney, or files a lawsuit, each Party shall pay all its own attorney fees, costs and expenses. The venue for any dispute related to this Agreement shall be Garfield County, Utah. Failure of the City to declare any breach or default immediately upon the occurrence thereof, or delay in taking any action in connection with, shall not waive such breach or default. Time is of the essence of this Agreement and each and all of its provisions in which performance is a factor. In the event of a conflict between the terms and condition of this Agreement and the terms and conditions of Exhibit 'A' Scope of Services, this Agreement shall control.

IN WITNESS WHEREOF, the parties have executed this Agreement on this _____ day of __, 20____

Contractor:

Vineyard City

By its:

By its:

Attest:

Clerk

PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

Attest: _____

Signature and Title

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By: _____

Signature and Title

(Attach Power of Attorney)

Attest: _____

Signature and Title:

EJCDC No. C-610 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

2. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 3.1.

3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:

3.1. Owner has notified Contractor and Surety, at the addresses described in Paragraph 10 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and

3.2. Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 3.1; and

3.3. Owner has agreed to pay the Balance of the Contract Price to:

1. Surety in accordance with the terms of the Contract;
2. Another contractor selected pursuant to Paragraph 4.3 to perform the Contract.

4. When Owner has satisfied the conditions of Paragraph 3, Surety shall promptly and at Surety's expense take one of the following actions:

4.1. Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and Contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
2. Deny liability in whole or in part and notify Owner citing reasons therefor.

5. If Surety does not proceed as provided in Paragraph 4 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 4.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

6. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To a limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

6.1. The responsibilities of Contractor for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions or failure to act of Surety under Paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

7. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

8. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted here from and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.

12.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

12.3. Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone
Surety Agency or Broker
Owner's Representative (engineer or other party)

PAYMENT BOND

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

CONTRACT

Date:

Amount:

Description (Name and Location):

BOND

Bond Number:

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title

CONTRACTOR AS PRINCIPAL

Company:

Signature: _____ (Seal)

Name and Title:

SURETY

(Seal)

Surety's Name and Corporate Seal

By:

Signature and Title

(Attach Power of Attorney)

Attest:

Signature and Title:

(Space is provided below for signatures of additional parties, if required.)

EJCDC No. C-615 (2002 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with Contractor:

1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted here from and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY – Name, Address and Telephone

Surety Agency or Broker:

Owner's Representative (engineer or other party):

VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT

TECHNICAL SPECIFICATIONS

1.01 SITE EROSION CONTROL:

Contractor shall comply with all erosion control standards in the drawings and specifications in this construction packet and all state and local SWPPP and erosion control standards including but not limited to the following:

- a.** At all times during construction, the contractor shall be responsible for preventing and controlling erosion due to wind and runoff. The contractor shall also be responsible for maintaining the erosion control facilities shown on the plan.
- b.** Contractor shall be responsible for cleaning drainage and erosion control facilities as required. Streets shall be kept clean of debris from traffic from the site.
- c.** Contractor shall use vehicle tracking control at all locations where vehicles will enter or exit the site. Control facilities will be maintained while construction is in progress, moved when necessary, and removed when the site is paved.
- d.** Inlet protection devices shall be installed to affected areas prior to and throughout construction activities.
- e.** All wash water (concrete trucks, vehicle cleaning, etc.) Shall be disposed in a manner that prevents contact with storm water discharges from the site.
- f.** Fugitive dust areas shall be controlled by spraying water on the dry areas of the site.
- g.** No rubbish, trash, garbage or other such materials shall be discharged into drainage ditches or waters of the state.
- h.** All materials spilled, dropped, washed or tracked from vehicles onto roadways or into storm drains must be removed immediately.
- i.** The contractor shall be responsible for adjusting the erosion control measures (silt fences, straw bales, etc.) Due to grade changes or other unforeseen conditions during construction activities.
- j.** The contractor shall provided any additional best practice details not included with the construction packet for the work and methods to be used to complete the project.

**VINEYARD CITY
WATER TANK SURCHARGE REMOVAL AND SITE GRADING PROJECT**

MEASUREMENT AND PAYMENT

1.02 GENERAL:

- a. Measurement and payment to furnish and install or construct a particular Bid Item will be considered as payment in full for furnishing all labor, equipment, materials, supplies, tools and miscellaneous apparatus necessary for a complete item, and the aggregate payment of all Bid Items will constitute full compensation to construct a complete and workable Project as specified.
- b. Payment for all items shall be at the unit price listed in the bid schedule. Payment will be withheld for any material or work not completed in accordance with these specifications and/or not passing required tests.
- c. No measurement and payment will be made for any incidental work that is not specifically identified in this Division but is necessary for a complete and workable Project as specified. This includes, but is not limited to, dewatering, submittals, certifications, and materials testing.
- d. In the event that additional survey is provided as described in Division 1M, payment will be deducted from the following pay request in an amount equal to the cost of providing the survey, including related administrative costs.

1.03 BID ITEM 1, MOBILIZATION:

- a. Measurement shall be for the job, complete.
- b. Payment shall be as outlined below:

PAY FACTORS FOR MOBILIZATION AND TEMPORARY FACILITIES	
Percent of Original Contract Amount Earned Not Including Materials Purchased	Percentage of Amount Bid for Mobilization to be Paid
5	40
15	20
40	30
50	10

Payment covers cost of mobilization, installation of all temporary facilities and bringing all necessary construction equipment to the site. Upon completion of the Work any unpaid amount of the original contract amount for the separate item of mobilization and temporary facilities will be paid.

1.04 BID ITEM 2, TEMPORARY ENVIRONMENTAL CONTROLS

- a. Measurement: Lump Sum.
- b. Partial payment will be made based on the percentage of the contract amount earned. However, if performance does not comply with the requirements of the contract, partial or full payment (in an amount deemed appropriate in the judgment of the Owner) during any pay period may be forfeited. Payment shall be full compensation for all labor, materials and equipment required for the following:
 - i. Complying with the requirements of the Specifications in regards to controlling environmental conditions as outlined in the Drawings and Specifications.
 - ii. Complying with the submitted and approved storm water pollution prevention plan and Vineyard City's UPDES Permit from the State of Utah.
 - iii. Implementing all best practices not included in other pay items that are required to control storm water runoff and reduce pollutants in air and storm water runoff during construction, as directed by the Vineyard City's Stormwater Inspector or City Engineer.

1.05 BID ITEM 3, CLEARING AND GRUBBING

- a. Measurement: Lump Sum
- b. Payment: Includes providing all Labor, Materials and Equipment to conduct the clearing and grubbing operations. This item shall also include any and all transportation and dumping and/or disposal fees necessary for material removed from the construction site and deposited elsewhere. Includes haul off of excavated material unsuitable for use as "final backfill". Payment also includes all final finish grading of all disturbed areas.

1.06 BID ITEM 4, REMOVE SURCHARGE MATERIALS AND GRADE SITE PER GRADING PLAN (PLAN QUANTITY)

- a. Measurement: Cubic Yards of surcharge material
- b. Payment: Full compensation for all equipment, labor and materials for the removal, relocating, and placing of existing site and surcharge materials on site, unclassified excavation, on-site relocating, spreading, grading, and compacting per Vineyard City Standard Specifications of the excavated material per grading drawings. No classification of excavated materials shall be made. Excavation shall include the removal and subsequent handling of all water, earth, shale, loose or cemented gravel, loose rock, solid rock and other materials of any nature excavated or otherwise removed in performance of the contract work. No payment shall be made for overexcavation that is not authorized in advance by the Project Manager. Oversized materials too large to grade out shall be stockpiled on site per Project Manager. Surveyed benchmarks will be provided by owner. Contractor shall provide any addition survey required to complete grading per drawings.

1.07 BID ITEM 5, REMOVE, LOAD, AND HAUL SURCHARGE MATERIALS TO SPECIFIED LOCATION WITHIN CITY (PLAN QUANTITY)

- a. Measurement: Cubic Yards of surcharge material
- b. Payment: Full compensation for all equipment, labor and materials for the removal, loading, and relocating of existing surcharge materials on site, unclassified excavation, off-site relocating, hauling, and stockpiling. Stockpile shall be constructed in a reasonable footprint such to minimize impact of property. No classification of excavated materials shall be made. Excavation and removal of material shall include the removal and subsequent handling of all water, earth, shale, loose or cemented gravel, loose rock, solid rock and other materials of any nature excavated or otherwise removed in performance of the contract work. No payment shall be made for overexcavation that is not authorized in advance by the Project Manager. Off-site location shown on drawings and contractor shall coordinate with Project Manager.

1.08 BID ITEMS 6, FURNISH AND INSTALL FIRE HYDRANT RISER ASSEMBLY

- a. Measurement: By the unit for Each assembly installed. A fire hydrant riser assembly is everything required to raise existing fire hydrant to finish grade.
- b. Full compensation for labor, equipment, and materials for furnishing and installing the riser kit on the existing fire hydrant and all necessary parts for a complete assembly to raise the existing fire hydrant to finish grade. It includes unclassified excavation, native bedding, native backfill, furnishing and installing the caution tape and locator wire, gravel under hydrant, bolts, grease, polyethylene wrap, valve box and lid, backfilling, compacting, cleanup, flushing, pressure testing, disinfecting, and placing the hydrant into service. No classification of excavated materials shall be made. Excavation shall include the removal and subsequent handling of all water, earth, shale, loose or cemented gravel, loose rock, solid rock and other materials of whatsoever nature excavated or otherwise removed in the performance of contract work.

1.09 BID ITEMS 7, FURNISH AND INSTALL VALVE BOX RISER ASSEMBLY

- a. Measurement: By the unit for Each riser assembly installed.
- b. Full compensation for all labor, equipment, and materials for furnishing and installing of specified valve box riser. It includes unclassified excavation, native bedding, native backfill, furnishing and installing or extending locator wire. No classification of excavated materials shall be made. Excavation shall include the removal and subsequent handling of all water, earth, shale, loose or cemented gravel, loose rock, solid rock and other materials of whatsoever nature excavated or otherwise removed in the performance of contract work.

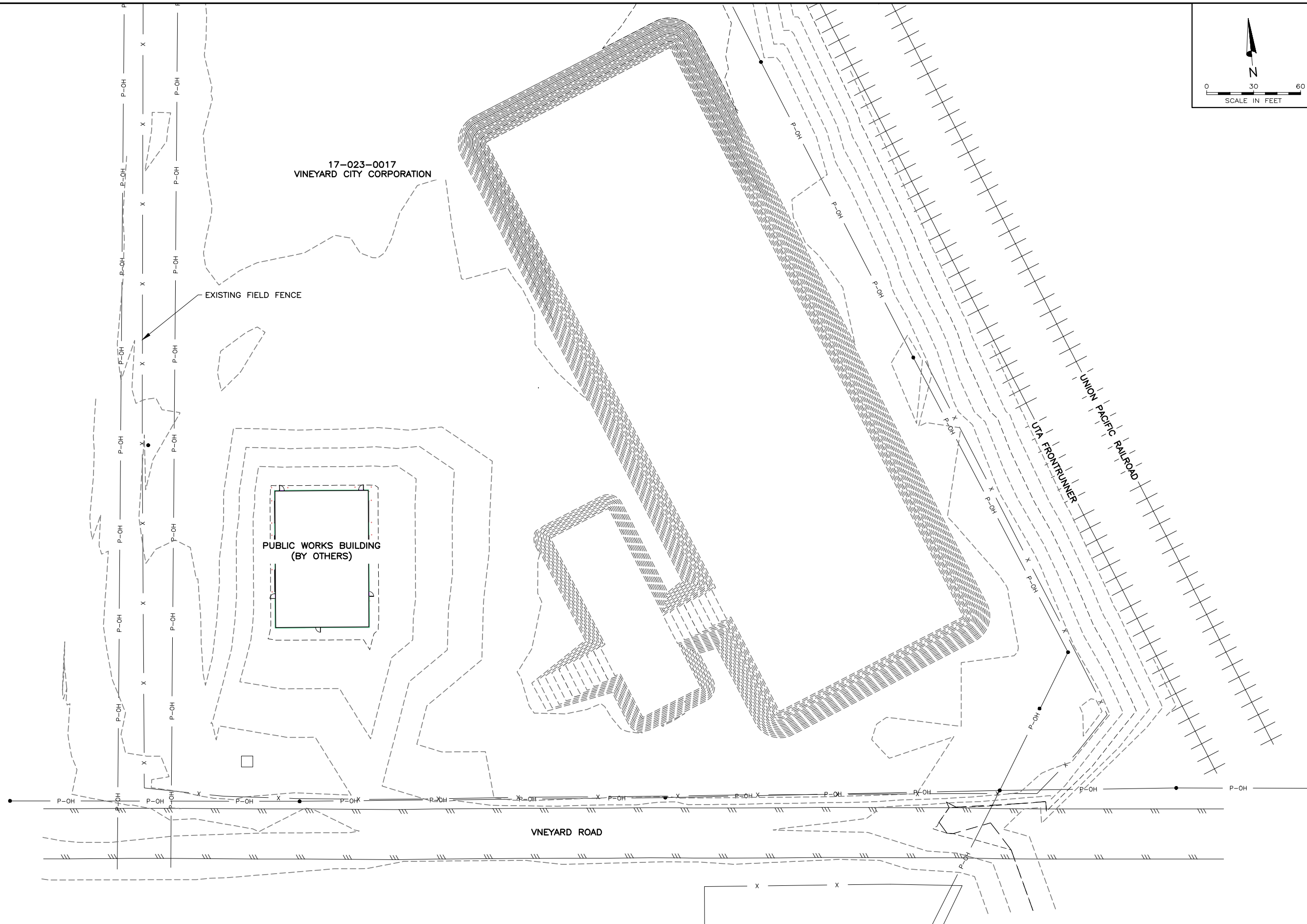
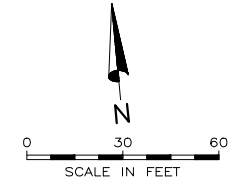
1.10 BID ITEMS 8, FURNISH, PLACE, SHAPE, AND COMPACT UNTREATED BASE COURSE

- a. Measurement: By the Tons of material delivered to the site and incorporated into the work, as documented by weigh tickets.
- b. Full compensation for all labor, materials and equipment for furnishing, hauling, placing, shaping, and compacting per Vineyard City Standard Specifications of the

specified material. Surveyed benchmarks will be provided by owner. Contractor shall provide any addition survey required to complete grading per drawings.

FILE NAME: PROJECTS\319_VINEYARD\05.200 PUMP STATION DESIGN\CAD\C-1 SURCHARGE.DWG
FILE DATE: 12.17.2021 17:00:47 (JRB)

7/04



DESIGNED	TGA	3
DRAFTED	JRB	2
CHECKED	MEA	1
DATE	DECEMBER 2021	NO.

NO.	DATE	REVISIONS	BY	APVD.

SCALE
AS
SHOWN

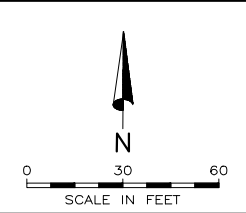


VINEYARD CITY

6MG TANK AND BOOSTER PUMP STATION
CIVIL
EXISTING GRADE

SHEET
C-1
319.05.200

NOTES:
TOTAL VOLUMES
CUT VOLUME = 34,357.56 CY
FILL VOLUME = 6,611.45 CY
SURCHARGE TO BE REMOVED = 33,904 CY
EXCESS VOLUME = 27,746.11 CY



GRADE AT 2:1 SLOPE
TO MATCH EXISTING

ACCESS ROAD AREA TO BE
TOPPED WITH 6" ROAD BASE,
APPROXIMATELY 164 CY

GRADE AT 2:1 SLOPE
TO MATCH EXISTING

AREA TO BE CLEARED & GRUBBED
RUSSIAN OLIVE TREES ARE TO BE
REMOVED. NON-INVASIVE TREES TO
BE PRESERVED. COORDINATE WITH
CITY REGARDING EXISTING
VEGETATION

PUBLIC WORKS BUILDING
(BY OTHERS)

REMAINING
EXISTING
SURCHARGE

TANK EXCAVATION
EL 4506.25

VINEYARD ROAD

EXISTING CONSTRUCTION ENTRANCE.
CONTRACTOR TO MAINTAIN ENTRANCE TO
STANDARD

UNION PACIFIC RAILROAD
UTA FRONTRUNNER

FILE NAME: PROJECTS\319 - VINEYARD\05.200 PUMP STATION DESIGN\CAD\C-2 POST SURCHARGE.DWG
FILE DATE: 12.17.2021 17:01:46 (JRB)



DESIGNED TGA
DRAFTED JRB
CHECKED MEA
DATE DECEMBER 2021

NO.	DATE	REVISIONS	BY	APVD.
3				
2				
1				
NO.	DATE	REVISIONS	BY	APVD.

SCALE
AS
SHOWN



VINEYARD CITY

6MG TANK AND BOOSTER PUMP STATION
CIVIL
SURCHARGE REMOVAL

SHEET
C-2
319.05.200

FILE NAME: PROJECTS\319 - VINEYARD\05.200 PUMP STATION DESIGN\CAD\C-3 SURCHARGE COORDINATE TABLE.DWG
FILE DATE: 12.17.2021 16:56:02 (JRB)

GRADING COORDINATES				
PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	7,287,956.62	1,567,655.66	4506.25	SUBBASE
2	7,288,025.02	1,567,788.40	4506.25	SUBBASE
3	7,287,765.15	1,567,922.30	4506.25	SUBBASE
4	7,287,696.75	1,567,789.55	4506.25	SUBBASE
5	7,287,822.22	1,567,690.67	4508.26	GRADE BREAK
6	7,287,802.22	1,567,651.85	4508.53	GRADE BREAK
7	7,287,707.90	1,567,754.08	4507.90	GRADE BREAK
8	7,287,686.07	1,567,711.70	4507.91	GRADE BREAK
9	7,287,646.37	1,567,386.46	4508.56	MATCH EXISTING
10	7,287,651.27	1,567,591.53	4507.39	MATCH EXISTING
11	7,287,646.89	1,567,712.28	4507.93	MATCH EXISTING
12	7,287,649.86	1,567,799.83	4507.44	MATCH EXISTING
13	7,287,651.12	1,567,959.24	4509.30	MATCH EXISTING
14	7,287,704.62	1,567,963.24	4509.22	MATCH EXISTING
15	7,287,734.59	1,567,965.48	4509.04	MATCH EXISTING
16	7,287,707.92	1,567,908.19	4507.70	GRADE BREAK
17	7,287,688.57	1,567,815.35	4507.22	GRADE BREAK
18	7,287,686.06	1,567,783.30	4507.06	GRADE BREAK
19	7,287,681.47	1,567,712.55	4507.81	GRADE BREAK
20	7,287,686.44	1,567,591.53	4506.34	GRADE BREAK
21	7,287,683.77	1,567,387.47	4507.43	MATCH EXISTING
22	7,287,726.35	1,567,387.22	4507.18	MATCH EXISTING
23	7,287,752.35	1,567,392.96	4507.90	GRADE BREAK
24	7,287,726.86	1,567,471.37	4508.94	GRADE BREAK
25	7,287,752.85	1,567,471.22	4509.46	GRADE BREAK
26	7,287,727.34	1,567,552.01	4508.54	GRADE BREAK
27	7,287,753.25	1,567,536.63	4509.46	GRADE BREAK
28	7,287,804.09	1,567,591.53	4507.33	GRADE BREAK
29	7,287,849.11	1,567,591.53	4507.10	GRADE BREAK
30	7,287,846.59	1,567,698.47	4507.92	GRADE BREAK
31	7,287,784.12	1,567,730.65	4508.27	GRADE BREAK
32	7,287,741.91	1,567,752.40	4508.04	GRADE BREAK
33	7,287,715.24	1,567,766.14	4507.44	GRADE BREAK
34	7,287,701.91	1,567,773.01	4507.29	GRADE BREAK
35	7,287,729.75	1,567,919.46	4507.83	GRADE BREAK
36	7,287,752.64	1,567,921.39	4507.94	GRADE BREAK
37	7,287,767.84	1,567,925.27	4508.19	GRADE BREAK
38	7,287,786.99	1,567,938.48	4508.59	GRADE BREAK
39	7,287,764.57	1,567,950.03	4508.68	MATCH EXISTING
40	7,288,025.23	1,567,815.01	4509.98	GRADE BREAK
41	7,288,032.86	1,567,789.84	4510.00	MATCH EXISTING
42	7,287,932.67	1,567,621.72	4507.77	GRADE BREAK
43	7,288,070.85	1,567,769.32	4510.89	GRADE BREAK
44	7,288,070.85	1,567,791.50	4511.00	GRADE BREAK
45	7,288,053.63	1,567,763.16	4524.75	GRADE BREAK
46	7,287,993.78	1,567,647.00	4524.75	GRADE BREAK
47	7,287,954.25	1,567,648.62	4507.58	GRADE BREAK
48	7,287,851.49	1,567,705.76	4508.06	GRADE BREAK
49	7,287,787.74	1,567,737.67	4508.47	GRADE BREAK
50	7,287,745.73	1,567,759.82	4508.25	GRADE BREAK

GRADING COORDINATES				
PT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
51	7,287,719.58	1,567,774.57	4507.68	GRADE BREAK
52	7,287,706.39	1,567,781.69	4507.54	GRADE BREAK
53	7,287,695.57	1,567,787.65	4507.37	GRADE BREAK
54	7,287,700.03	1,567,801.45	4507.52	GRADE BREAK
55	7,287,758.10	1,567,916.64	4508.09	GRADE BREAK
56	7,287,777.65	1,567,920.21	4508.18	GRADE BREAK
57	7,288,017.45	1,567,799.92	4509.63	GRADE BREAK
58	7,287,849.13	1,567,392.84	4508.19	GRADE BREAK
59	7,287,849.59	1,567,470.60	4509.75	GRADE BREAK
60	7,287,960.25	1,567,392.70	4506.23	GRADE BREAK
61	7,287,960.25	1,567,470.60	4507.79	GRADE BREAK
62	7,287,960.25	1,567,559.44	4506.69	GRADE BREAK
63	7,288,070.84	1,567,392.56	4508.44	GRADE BREAK
64	7,288,070.85	1,567,470.60	4510.00	GRADE BREAK
65	7,288,070.85	1,567,592.80	4510.17	GRADE BREAK
66	7,287,849.95	1,567,530.94	4509.75	GRADE BREAK

OFF-SITE STOCKPILE LOCATIONS

SURCHARGE MATERIAL OFF-SITE STOCKPILE LOCATIONS (CONTRACTOR TO COORDINATE WITH PROJECT MANAGER FOR ADDITIONAL DIRECTION)



DESIGNED TGA
DRAFTED JRB
CHECKED MEA
DATE DECEMBER 2021

3
2
1

NO. DATE

REVISIONS

BY APVD.

SCALE
AS SHOWN

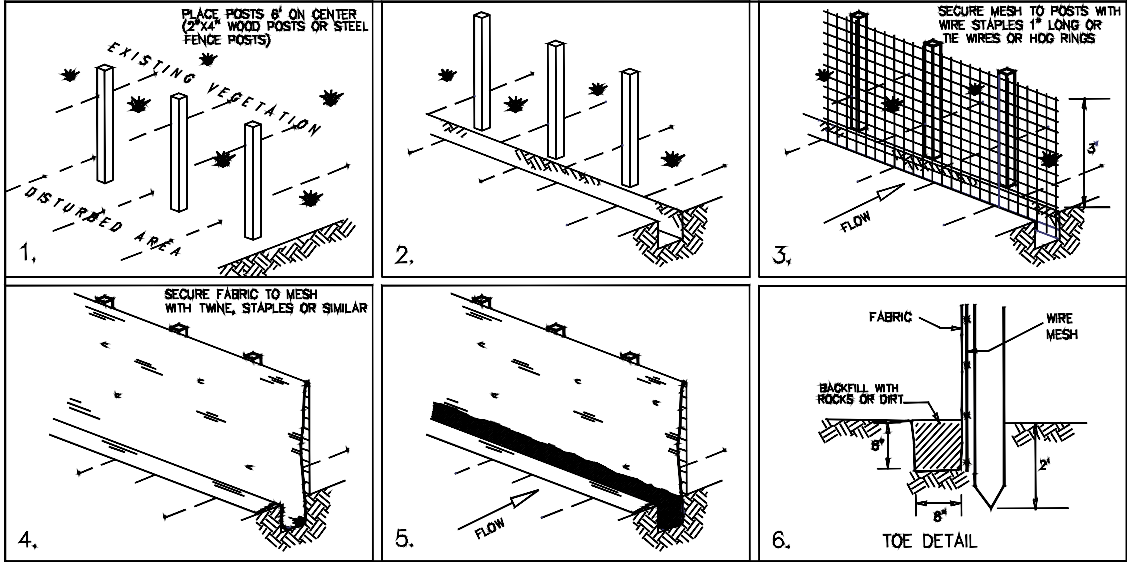


VINEYARD CITY

6MG TANK AND BOOSTER PUMP STATION
CIVIL
COORDINATE TABLE

SHEET
C-3
319.05.200

FILE NAME: PROJECTS\319 - VINEYARD\05.200 PUMP STATION DESIGN\CAD\C-4 SWPPP DETAILS.DWG
FILE DATE: 12.17.2021 16:57:45 (JRB)



SILT FENCE A
C-2

DESCRIPTION:

A temporary sediment barrier consisting of entrenched filter fabric stretched across and secured to supporting posts.

APPLICATION:

Perimeter control: place barrier at down gradient limits of disturbance
Sediment barrier: place barrier at toe of slope or soil stockpile
Protection of existing waterways: place barrier at top of stream bank
Inlet protection: place fence surrounding catch basins

INSTALLATION/APPLICATION CRITERIA:

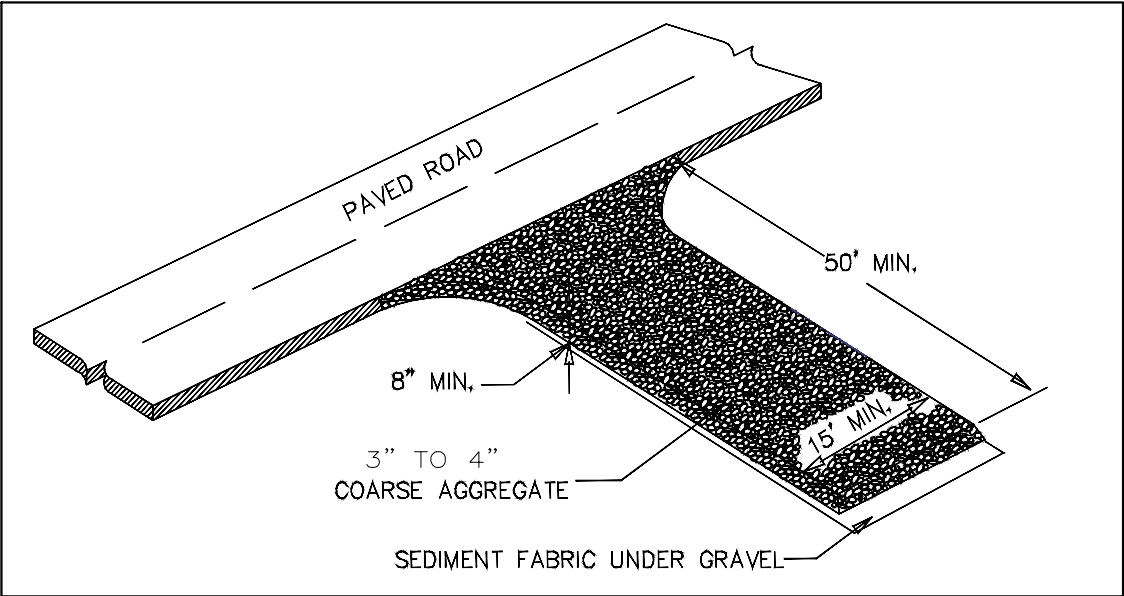
Place posts 6 feet apart on center along contour (or use preassembled unit) and drive 2 feet minimum into ground. Excavate an anchor trench immediately upgradient of posts.
Secure wire mesh (14 gage min. With 6 inch openings) to upslope side of posts. Attach with heavy duty 1 inch long wire staples, tie wires or hog rings.
Cut fabric to required width, unroll along length of barrier and drape over barrier. Secure fabric to mesh with twine, staples, or similar, with trailing edge extending into anchor trench.
Backfill trench over filter fabric to anchor.

LIMITATIONS:

Recommended maximum drainage area of 0.5 acre per 100 feet of fence
Recommended maximum upgradient slope length of 150 feet
Recommended maximum uphill grade of 2:1 (50%)
Recommended maximum flow rate of 0.5 cfs
Ponding should not be allowed behind fence.

MAINTENANCE:

Inspect immediately after any rainfall and at least daily during prolonged rainfall.
Look for runoff bypassing ends of barriers or undercutting barriers.
Repair or replace damaged areas of the barrier and remove accumulated sediment.
Reanchor fence as necessary to prevent shortcutting.
Remove accumulated sediment when it reaches 1/2 the height of the fence.



STABILIZED CONSTRUCTION ENTRANCE B
C-2

DESCRIPTION:

A stabilized pad of crushed stone located where construction traffic enters or leaves the site from or to paved surface.

APPLICATIONS:

At any point of ingress or egress at a construction site where adjacent traveled way is paved. Generally applies to sites over 2 acres unless special conditions exist.

INSTALLATION/APPLICATION CRITERIA:

Clear and grub area and grade to provide maximum slope of 2%.
Compact subgrade and place filter fabric if desired (recommended for entrances to remain for more than 3 months).
Place coarse aggregate, 3 to 4 inches in size, to a minimum depth of 8 inches.

LIMITATIONS:

Requires periodic top dressing with additional stones.
Should be used in conjunction with street sweeping on adjacent public right-of-way

MAINTENANCE:

Inspect daily for loss of gravel or sediment buildup.
Inspect adjacent roadway for sediment deposit and clean by sweeping or shoveling.
Repair entrance and replace gravel as required to maintain control in good working condition.
Expand stabilized area as required to accommodate traffic and prevent erosion at driveways.



DESIGNED TGA
DRAFTED JRB
CHECKED MEA
DATE DECEMBER 2021

3
2
1

NO.

DATE

REVISIONS

BY

APVD.

SCALE

AS SHOWN

VINEYARD

VINEYARD CITY

6MG TANK AND BOOSTER PUMP STATION

CIVIL

SWPPP DETAILS

SHEET

C-4

319.05.200



VINEYARD RDA STAFF REPORT

Meeting Date: 1-12-2022

Agenda Item: 3.1 Approval for FY22 Capital Project of North Regional Storm Drain Improvement

Department: Engineering Department

Presenter: Naseem Ghandour, P.E.

Background/Discussion:

The drain pipeline will replace the current open ditch which serves as the primary storm drainage for property. The project will run from the Vineyard Connector (800 North) to approximately 1600 North where a 72-inch culvert currently runs underneath the Union Pacific (UP) mainline and the Frontrunner tracks (*Attachment A*)

All property from the Vineyard Connector north to 1600 North, and east from the Union Pacific Mainline to Geneva Road will need to have a storm drain system that will gravity flow from east to west. Thus a large regional storm drain pipeline is needed to service this property.

As the northern portion of this system will need to be installed in conjunction with the UP rail spur-line reroute. For this improvement to proceed as part of the UP Rail Spur Realignment project, the Regional North Storm Drain Improvement project should be part of the RDA Capital Improvement Project (CIP) plan.

Additionally, due to ongoing environmental remediation the need for the ditch improvement will involve remedial measures per the Utah Department of Environmental Quality (DEQ). DEQ requires that prior to authorizing remedial measures, that this North Regional Storm Drain improvement be placed on the Vineyard RDA's Capital Improvement Project list.

City Staff is requesting that the North Regional Storm Drain Improvement project be added as an unfunded Capital Improvement Project for FY22. Once the cost is determined a separate request for funding will be submitted to the RDA for approval.

Fiscal Impact:

None (unfunded)

Recommendation:

Staff Recommends Approval



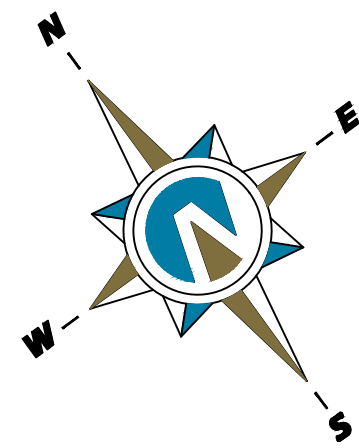
VINEYARD RDA STAFF REPORT

Sample Motion:

I move to approve the adding an unfunded Capital Improvement Project for “Regional North Storm Drain Improvement” in FY22 Budget with a cost to be presented during the FY23 budget.

Attachments:

- A. Plan View of North Regional Storm Drain



(24"x36")
SCALE 1" = 200'
(11"x17")
SCALE 1" = 400'

THESE DRAWINGS, OR ANY PORTION THEREOF, SHALL NOT BE USED ON ANY PROJECT OR EXTENSIONS OF THIS PROJECT EXCEPT BY AGREEMENT IN WRITING WITH NORTHERN ENGINEERING, INC.

5			DESIGNED BY:	DATE:
4			DRAWN BY:	DATE:
3			CHECKED BY:	DATE:
2			APPROVED:	DATE:
1			COGO FILE:	DATE:
NO.	REVISIONS	BY	DATE	REV. COGO FILE:

K:\3-07-045-00 EAST LAKE\Drawings\DITCH-2022\DITCH EXHIBIT-01-05-22.dwg



Northern
ENGINEERING INC
ENGINEERING—LAND PLANNING
CONSTRUCTION MANAGEMENT

1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

NORTH REGIONAL STORM DRAIN PIPELINE

NORTH STORM DRAIN PIPELINE

VINEYARD, UTAH

JOB NO.
3-07-045

SHEET NO.
1



VINEYARD RDA STAFF REPORT

Meeting Date: 1-12-2022

Agenda Item: 3.2 Funding for Design of Center Street Overpass Landscaping Improvement, & Approval for FY23 Capital Project of Construction of Center Street Overpass Landscaping Improvement.

Department: Engineering Department

Presenter: Naseem Ghandour, P.E.

Background/Discussion:

The Center Street Overpass project was constructed from 2019 and completed in 2021, which provided transportation connectivity between Main Street and Mill Road. The project continues to be improved with concrete barriers along the southern edge of pavement, providing for bicycle and vehicle safety. The overpass embankments were designed for a standard 2% slope, allowable by Utah Department of Transportation (UDOT) standards for embankment slopes and stabilized with grass seed (*Attachment A*). During the course of the Center Street Overpass operation, the embankment slopes have undergone erosion as well as difficulty for maintenance by City Staff with the use of specialized equipment to address overgrowth of grass and weeds along the embankment.

City Staff requests for approval of a Landscaping Improvement project to provide for an aesthetic landscaping which would provide ease of maintenance and would follow the city's low water standards and use low impact development (LID). City Staff is requesting that the RDA council approves funding of \$10,000 for design for center street landscaping improvement and a FY23 Capital Improvement Project for "Improve Center Street Overpass Landscaping". Funding of this capital project will be presented and approved during the budget year approval. City Staff estimates that this capital project will cost approximately \$600,000 based on an industry average of \$4 per square foot due to the embankment slope.

Fiscal Impact:

\$10,000 for Center Street Overpass Landscape Design

\$600,000 (Unfunded) for FY23 Capital Project "Improve Center Street Overpass Landscaping"

Recommendation:

Staff Recommends Approval



VINEYARD RDA STAFF REPORT

Sample Motion:

I move to approve the RDA funding for a design of a Center Street Overpass Landscaping, AND approval of adding an unfunded Capital Improvement Project for “Improve Center Street Overpass Landscaping” in FY23 with a cost to be presented during the FY23 budget.

Attachments:

- A. Aerial of Center Street Overpass Showing the Proposed Landscaping Improvement Areas

November 1, 2021

Vineyard City
c/o Naseem Ghandour, Engineering Director
125 South Main Street
Vineyard, UT 84058

RE: Center Street Overpass Landscape and Roadway Design

Dear Naseem;

Project Engineering Consultants, Ltd. (PEC) is pleased to submit a scope and fee for a conceptual layout and engineers estimate to improve the Center Street Overpass in Vineyard, UT. The landscape concept will include a 10' multi-purpose trail and slope stabilization options for consideration. Survey hours are included in the proposal to capture enough data to make design decisions at the concept level.

This proposal does not include construction documents, geotechnical analysis, boundary survey or utility relocations.

SCOPE OF WORK

1. Landscape Concept Design

\$9,050.00

PEC will provide a conceptual landscape design of the 4 quadrants of the Overpass so the City can clearly determine which design option is best for the City. Cost estimating will be included and sufficient survey to identify right of way and existing utilities with slope for design decisions.

Cost Summary

Vineyard Overpass Landscape Design			
Hours Breakdown			
Position	Hours	Rate	Total
Project Manager	6	\$ 225.00	\$ 1,350.00
QC/QA	2	\$ 150.00	\$ 300.00
Senior Landscape Architect	12	\$ 120.00	\$ 1,440.00
Designer	40	\$ 85.00	\$ 3,400.00
Survey/ROW	8	\$ 110.00	\$ 880.00
Drainage Designer	8	\$ 120.00	\$ 960.00
Cost Estimating	6	\$120.00	\$720.00
Total Concept Design Cost:			\$ 9,050.00

Estimate of Project Costs			
Northwest 1/4	45,632	\$4.00/sf	\$182,528
Northeast 1/4	19,814	\$4.00/sf	\$79,256
Southwest 1/4	56,220	\$4.00/sf	\$224,880
Southeast 1/4	17,940	\$4.00/sf	\$71,760
			\$558,424
Concept plus Final Design Fee			\$39,000
Total Project Costs			\$597,424

Expected Schedule	
Date	Milestone
11-Nov-21	NTP
29-Nov-21	Submit Landscape Concept and Roadway Safety Recommendations
12-Dec-21	City Review Comments
5-Jan-21	Final Submittal

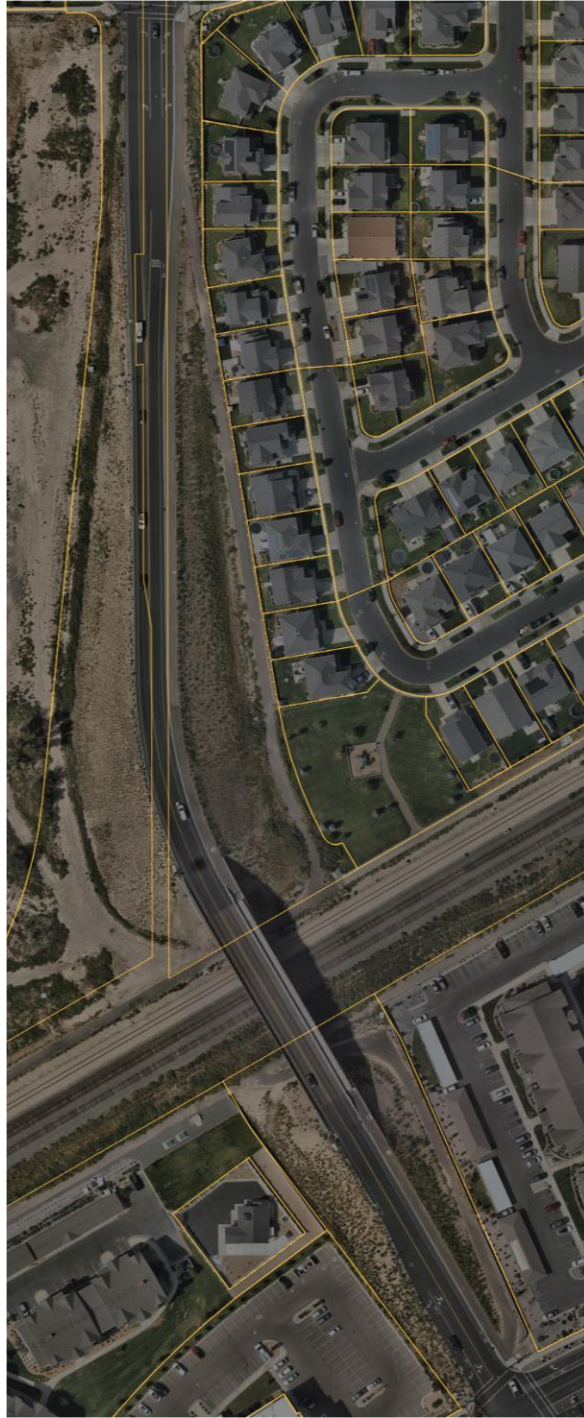
PEC will provide Vineyard City with a landscape concept that identifies several options in the concept including a potential multi-use trail, slope stabilization, landscape improvements, and recommendations for safety measures. The total for this Task Order will be **\$9,050.00**

The concept report will be completed by January 5, 2022.

Respectfully,
Project Engineering Consultants, Ltd.



Lars Anderson, PLA
COO





VINEYARD RDA STAFF REPORT

Meeting Date: 1-12-2022

Agenda Item: 3.3 Main Street & 400 North Traffic improvement, Funding of completed Traffic Signal Warrant Study, Approval for Funding for Design of Traffic Signal, & Approval for FY23 Capital Project of Construction of Traffic Signal

Department: Engineering Department

Presenter: Naseem Ghandour, P.E.

Background/Discussion:

During September 2021 City Council Meeting, City Council directed City Staff to conduct studies to determine potential traffic and pedestrian improvements. City Staff revisited the Main Street & 400 North intersection, which currently has a HAWK (High-Intensity Activated crosswalk) beacon for the northern leg (*Attachment A*). The prior Traffic Warrant Studies, 2018 and 2019, had determined that the intersection did not warrant a signal. However, a 2019 pedestrian study concluded that the intersection warranted a signalized pedestrian system. After review of the prior studies, it was determined to be in the best public interest to conduct another warrant study per the Utah Manual for Uniform Traffic Control Devices (Utah MUTCD) which includes future development due to the continuing growth of the RDA's Main Street corridor.

A Traffic Study was completed in November 2021 via an engineering consultant which determined that a Traffic Signal was warranted at the Main Street and 400 North intersection (*Attachment B*). The cost for the traffic warranty study, to include a traffic flow modeling was \$6,700. Funding for the traffic study was allocated from the City's General Fund and should be paid for from the RDA fund due to the location of the intersection within the RDA.

Upon the findings of the recent Traffic Warrant Study, City Staff desires to complete a design of a 4-way traffic signal with pedestrian crossings at Main Street and 400 North intersection. This signal design will address traffic flow and safety concerns, as well as provide signalized pedestrian crossing at all 4 of the intersection legs (*Attachment C*). The design will investigate the feasibility of utilizing the existing HAWK mast, to reduce construction costs. Additionally, the design will incorporate connecting the traffic signal to Utah Department of Transportation (UDOT) Traffic Operation Control (TOC) system, which will allow for flow optimization between City and State roadways. City Staff estimates the design will cost approximately \$25,000. Funding for the traffic signal design is requested to be paid for from the RDA funds due to the location of the intersection within the RDA.

Finally, upon completion of a design for a traffic signal for Main Street and 400 North intersection, City Staff intends to implement a Capital Improvement Project (CIP) within



VINEYARD RDA STAFF REPORT

FY23 to construct the 4-way traffic signal at Main Street & 400 North. City Staff is requesting that the RDA council approves a FY23 Capital Improvement Project for “Construct Traffic Signal at Main Street and 400 North”. Funding of this capital project will be presented and approved during the budget year approval. City Staff estimates that this capital project will cost approximately \$500,000.

Fiscal Impact:

\$6,700 for Traffic Signal Warrant Study

\$25,000 for Traffic Signal Design

\$500,000 (Unfunded) for FY23 Capital Project Construct Traffic Signal & Pedestrian Crossings

Recommendation:

Staff Recommends Approval

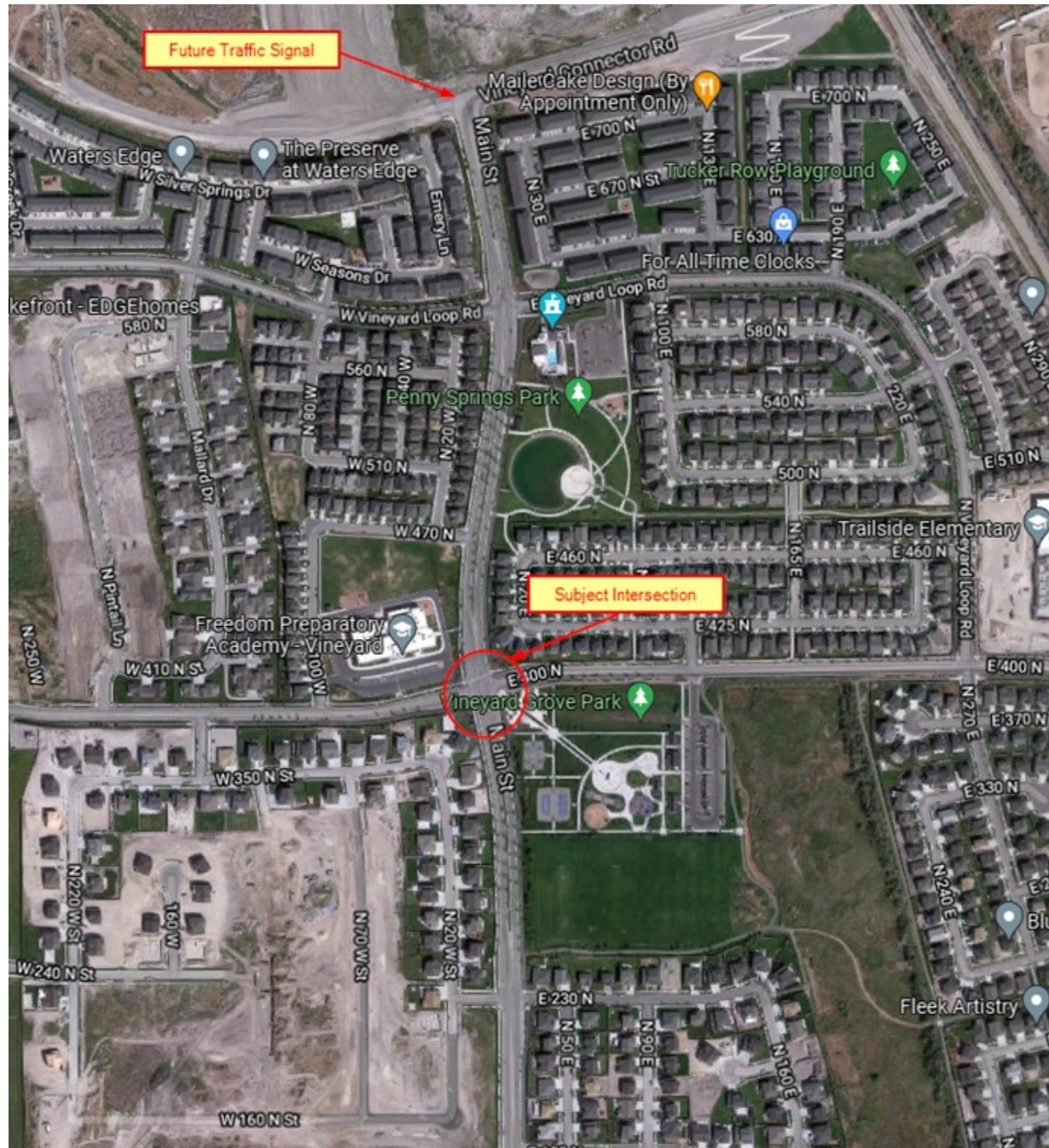
Sample Motion:

I move to approve the RDA funds to pay for the November 2021 Traffic Signal Warrant Study at Main Street & 400 North, the funding for a design of a Traffic Signal at Main Street & 400 North, AND approval of adding an unfunded Capital Improvement Project for “Construct Traffic Signal at Main Street & 400 North” in FY23 with a cost to be presented during the FY23 budget.

Attachments:

- A. Aerial of Main Street and 400 North
- B. November 2021 Traffic Signal Warrant Study of Main Street and 400N
- C. Example Photo of 4-way Traffic Signal with Pedestrian Crossings

Aerial of Main Street and 400 North



MEMORANDUM

December 6, 2021

TO: Naseem Ghandour P.E.
Engineer Director, Vineyard City

FROM: Kevin Croshaw, P.E.
Horrocks Engineers

SUBJECT: Traffic Signal Study for 400 N & Main Street, Vineyard, Utah

Study Summary

Horrocks has performed data collection, traffic simulation, and traffic signal warrant analysis for the intersection of 400 North and Main Street in Vineyard, Utah to determine if a traffic signal is warranted. The study location is shown in Figure 1. Based on the signal warrant criteria outlined in the Utah Manual on Uniform Traffic Control Devices, **a traffic signal is warranted.**



Figure 1. Study Location

Intersection Characteristics

The study location is the intersection of 400 North and Main Street in Vineyard, Utah. Main Street is a four-lane road with dedicated pocket turn lanes for left and right turns with a speed limit of 35 MPH. The thru traffic lanes for the northbound and southbound directions is designed for shared vehicle and bike traffic. 400 North is a three-lane road with dedicated pocket turn lanes for left and right turns with a speed limit of 35 MPH.

School Crossing

This intersection includes a school crosswalk on the north side of the intersection that is used by over 200 people during the AM, Midday, and PM peak hours combined. This has high usage during the school year and in good weather. There are also two crosswalks on the east and west sides of the intersection, with no crosswalk on the south of the intersection.

Per our conversation with City Staff, a prior School Crossing study was completed and determined that a signalized pedestrian crossings was warranted. The City of Vineyard has installed a HAWK along the northern segment. Due to this prior pedestrian study determining that a pedestrian crossing signal was needed and installed, this study did not evaluate the pedestrian crossing signal or school crossing warrant. The traffic signal will continue to provide safety for pedestrians crossing during school hours.

Simulation Analysis

Horrocks collected traffic and pedestrian data and used these counts in Synchro 10, a traffic simulation and analysis program. The data was used for three scenarios, the AM, Midday, and PM peak hours. The volume of vehicles and pedestrians collected allowed us to calculate the delay for the intersection, which allowed us to calculate the Level of Service (LOS) and perform our Signal Warrant Analysis.

Level of Service

Horrocks modeled the traffic that was counted at the intersection of 400 North and Main Street in Vineyard during the AM, Midday, and PM peak hours. The intersection performed at an acceptable Level of Service during the AM and PM peak hours. The intersection does not perform at an acceptable LOS during the Midday peak hour when the school day ends. The worst movement was the Eastbound left-turn with LOS E during the Midday peak hours, and LOS C during the AM and PM peak hours. The Westbound left turn generated a Level of Service C during the Midday and PM peak hours. The highest delay was the Eastbound left turn lanes with a delay of 35.2 seconds/vehicle during the Midday peak hour, which in this case is from 2:15 to 3:15 PM

when the school day has ended. The majority of the pedestrian traffic is from 2:15 to 2:45 during the same time period as the highest volume of vehicles. The intersection can become backed up due to the volume of vehicles entering the school and waiting to pick up children. This will not be resolved with the addition of a traffic signal as the delay is caused by vehicle traffic at the school, not the intersection control type.

Future Traffic Volumes

Vineyard City provided us with plans for housing developments currently under construction and future construction surrounding the intersection. Approximately 285 residential units are planned, and they will potentially increase daily traffic volumes by approximately 10%, or 2,500 vehicles throughout the day. There will also be approximately 275 new vehicle trips generated from the downtown area by itself, per the Downtown Vineyard Traffic Study by the year 2025, which will also increase traffic at the intersection. It is projected that the peak hour traffic will increase at this intersection by over 400 vehicles, which is a 50% increase to the current peak hour traffic and would further increase the delay at the intersection.

Signal Warrant Analysis

An analysis was performed using the procedure outlined in the Utah MUTCD Chapter 4C to determine if a traffic signal is warranted at the study location. Traffic turning-movement count data were collected on 19 November from 7:00 AM to 7:00 PM. See the appendix for detailed traffic count data.

Since the speed limit 35 MPH on Main Street is not greater than 40 mph, the 70 percent values for the warrants were not used in the analysis.

Vehicular Volume (Warrants 1 through 3)

Traffic volumes at the intersection were analyzed to verify warrants for a signal. The volume of vehicles was not sufficient to warrant a signal for 8-hour or 4-hour signal warrants. The current volume of traffic is sufficient to warrant a signal based upon warrant 3A peak hour delay. This warrant is based upon overall delay of the intersection and was met with current vehicle and pedestrian traffic.

The volume-based warrants were also analyzed using the option to evaluate the major street left-turns versus the opposing major street traffic. Traffic volumes were not high enough to meet the warrants for a traffic signal using this option. Signal warrants 1 and 2 were not met, however Warrant 3 is met.

Conclusions

Horrocks has studied the intersection of 400 North and Main Street in Vineyard, Utah to determine if a traffic signal is warranted. Based on the warrants criteria outlined in Chapter 4C of the MUTCD, **a traffic signal is warranted at 400 North and Main Street.**

*Supporting electronic data available on request

APPENDIX

<u>#</u>	<u>Appendix Item</u>
1	Traffic Counts
2	Signal Warrants Report

14:00	20	15	11	0	17	20	33	5	10	4	4	2	1	5	5	5	145	0	787	0		
14:15	29	30	13	0	12	38	34	96	12	9	26	45	16	11	22	27	252	0	801	1		
14:30	14	26	6	0	24	48	22	20	24	17	39	21	9	6	13	17	248	0	682	0		
14:45	8	31	4	0	13	30	9	3	10	5	10	0	6	4	12	4	142	0	585	0		
15:00	11	33	2	0	17	41	7	11	14	3	10	4	1	6	14	5	159	0	607	0		
15:15	4	34	3	0	18	32	7	4	11	4	2	0	2	5	11	1	133	0	586	0		
15:30	7	28	2	0	17	43	6	0	11	8	3	1	1	7	18	1	151	0	581	0		
15:45	5	40	3	0	17	36	7	3	17	8	9	2	2	5	15	2	164	0	587	0		
16:00	5	26	3	0	13	42	5	2	15	3	6	1	2	3	15	2	138	0	0	571	0	0
16:15	4	24	6	4	14	39	9	3	7	5	5	0	3	6	6	4	128	0	0	624	0	0
16:30	8	35	3	0	20	33	7	1	15	1	7	0	6	6	16	3	157	0	0	671	0	0
16:45	2	34	3	0	19	39	4	3	20	4	10	0	0	2	11	3	148	0	0	719	0	0
17:00	6	34	3	0	30	58	11	0	19	5	6	2	2	5	12	2	191	0	0	740	0	1
17:15	10	39	5	0	24	42	10	1	7	6	4	3	4	3	21	2	175	0	0	703	0	0
17:30	12	50	3	0	24	56	15	1	14	5	7	0	4	4	11	0	205	0	1	669	0	0
17:45	9	32	5	0	23	46	9	0	9	6	4	1	1	3	22	0	169	0	0	599	0	0
18:00	7	22	3	0	22	44	5	2	15	4	7	0	5	1	19	0	154	0		553	0	
18:15	5	33	2	0	20	48	7	0	2	0	4	0	3	1	16	1	141	0		428	0	
18:30	3	37	4	0	14	40	5	0	8	2	1	0	0	7	14	0	135	0		287	0	
18:45	2	29	0	0	13	35	13	0	8	3	2	0	2	5	11	0	123	0		152	0	
																		0		0	0	

Horrocks Engineers

Traffic Signal Warrant

Study Name : **Main St & 400 N Warrant**
Study Date : **12/01/21**

Signal Warrants - Summary

Major Street Approaches

Northbound: Main St

Number of Lanes: **2**
85% Speed < 40 MPH.
Total Approach Volume: **1,990**

Southbound: Main St

Number of Lanes: **2**
85% Speed < 40 MPH.
Total Approach Volume: **2,717**

Minor Street Approaches

Eastbound: 400 N

Number of Lanes: **1**

Total Approach Volume: **1,112**

Westbound: 400 N

Number of Lanes: **1**

Total Approach Volume: **942**

Warrant Summary (Urban values apply.)

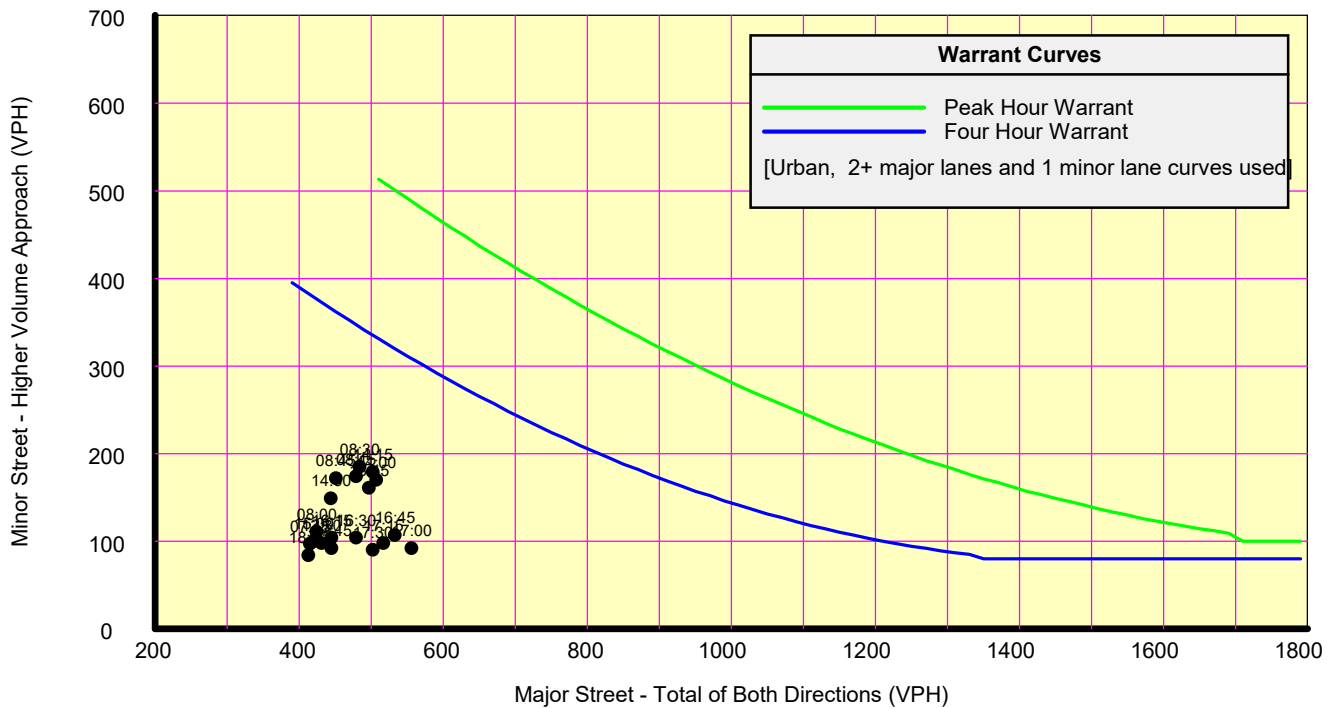
Warrant 1 - Eight Hour Vehicular Volumes	Not Satisfied
Warrant 1A - Minimum Vehicular Volume Not Satisfied Required volumes reached for 0 hours, 8 are needed	
Warrant 1B - Interruption of Continuous Traffic Not Satisfied Required volumes reached for 0 hours, 8 are needed	
Warrant 1C - Combination of Warrants Not Satisfied Required 1A volumes reached for 1 hours, 8 are needed Required 1B volumes reached for 0 hours, 8 are needed	
Warrant 2 - Four Hour Volumes	Not Satisfied
Number of hours (0) volumes exceed minimum < minimum required (4).	
Warrant 3 - Peak Hour	Satisfied
Warrant 3A - Peak Hour Delay Satisfied Number of hours (1) volumes exceed minimum >= required (1). Delay data not evaluated.	
Warrant 3B - Peak Hour Volumes Not Satisfied Volumes do not exceed minimums for any hour.	
Warrant 4 - Pedestrian Volumes	Not Satisfied
Required 4 Hr pedestrian volume reached for 0 hour(s) and the single hour volume for 0 hour(s)	
Warrant 5 - School Crossing	Not Evaluated
Warrant 6 - Coordinated Signal System	Not Evaluated
Warrant 7 - Crash Experience	Not Satisfied
Number of accidents (5) meet minimum (5) but volumes do not.	
Warrant 8 - Roadway Network	Not Evaluated
Warrant 9 - Intersection Near a Grade Crossing	Not Evaluated

Horrocks Engineers

Traffic Signal Warrant

Study Name : Main St & 400 N Warrant
Study Date : 12/01/21

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

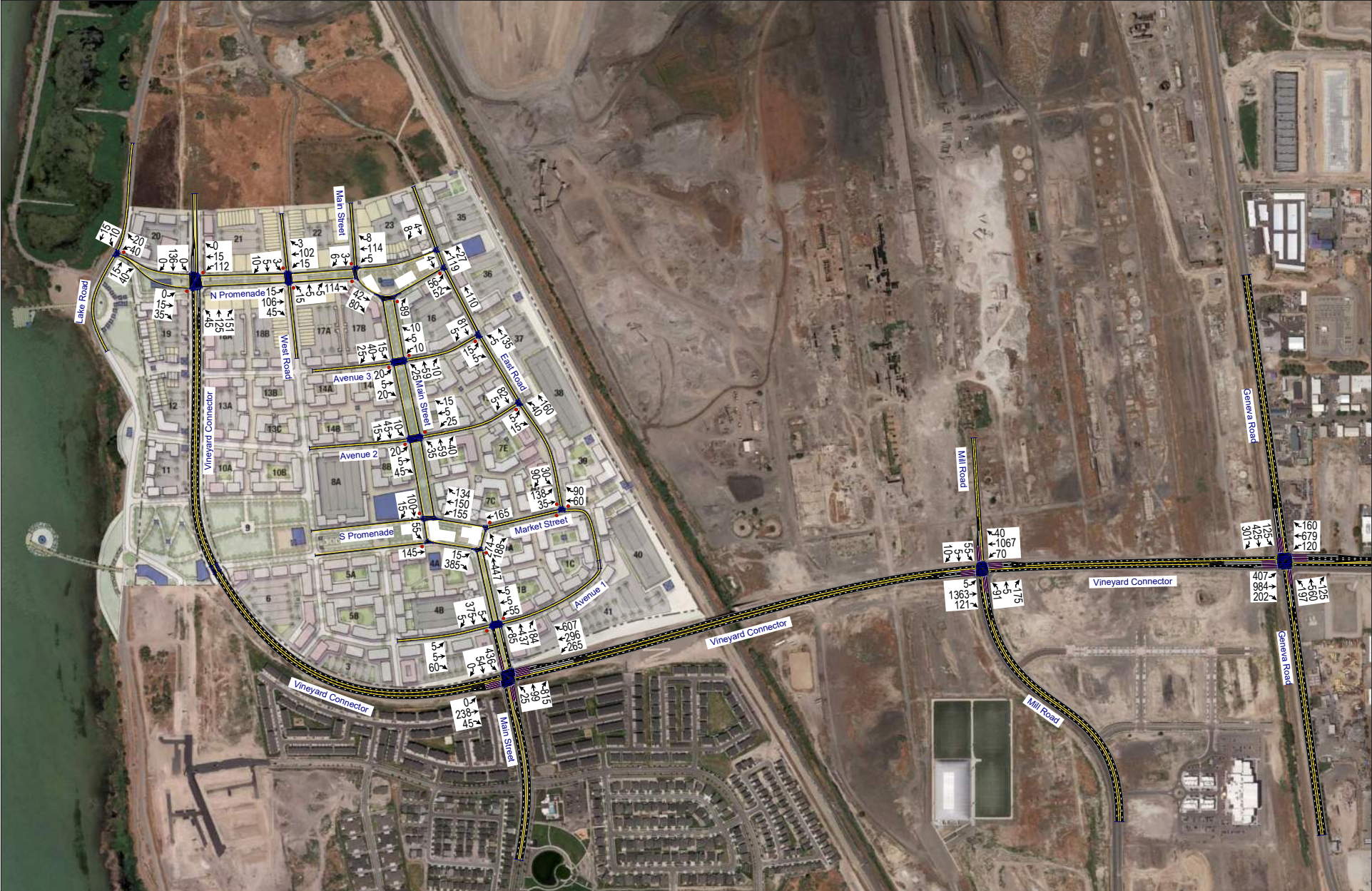
War 1B-Interruption of Traffic

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol Dir	Maj 600	Min 150	Hour Begin	Major Total	Minor Vol Dir	Maj 900	Min 75	Hour Begin	Major Total	Minor Vol Dir	1A Met	1B Met
17:00	556	92 W	No	No	17:00	556	92 W	No	Yes	13:45	497	161 EB	Yes	No
16:45	533	107 EB	No	No	16:45	533	107 EB	No	Yes	08:30	484	185 EB	Yes	No
17:15	517	98 W	No	No	17:15	517	98 W	No	Yes	17:00	556	92 W	No	No
14:00	507	170 EB	No	Yes	14:00	507	170 EB	No	Yes	16:45	533	107 EB	No	No
17:30	502	90 W	No	No	17:30	502	90 W	No	Yes	17:15	517	98 W	No	No
14:15	502	179 EB	No	Yes	14:15	502	179 EB	No	Yes	14:00	507	170 EB	-	No
13:45	497	161 EB	No	Yes	13:45	497	161 EB	No	Yes	17:30	502	90 W	No	No
08:30	484	185 EB	No	Yes	08:30	484	185 EB	No	Yes	14:15	502	179 EB	-	No
16:30	479	104 EB	No	No	16:30	479	104 EB	No	Yes	16:30	479	104 EB	No	No
08:15	479	174 EB	No	Yes	08:15	479	174 EB	No	Yes	08:15	479	174 EB	No	No
08:45	451	172 EB	No	Yes	08:45	451	172 EB	No	Yes	08:45	451	172 EB	-	No
17:45	445	92 W	No	No	17:45	445	92 W	No	Yes	17:45	445	92 W	No	No
16:15	445	104 EB	No	No	16:15	445	104 EB	No	Yes	16:15	445	104 EB	No	No
14:30	444	149 EB	No	No	14:30	444	149 EB	No	Yes	14:30	444	149 EB	-	No
13:30	431	98 EB	No	No	13:30	431	98 EB	No	Yes	13:30	431	98 EB	No	No
08:00	424	111 EB	No	No	08:00	424	111 EB	No	Yes	08:00	424	111 EB	No	No
15:00	420	100 EB	No	No	15:00	420	100 EB	No	Yes	15:00	420	100 EB	No	No
07:45	415	97 W	No	No	07:45	415	97 W	No	Yes	07:45	415	97 W	No	No
18:00	413	84 W	No	No	18:00	413	84 W	No	Yes	18:00	413	84 W	No	No
07:30	408	97 W	No	No	07:30	408	97 W	No	Yes	07:30	408	97 W	No	No
14:45	407	91 EB	No	No	14:45	407	91 EB	No	Yes	14:45	407	91 EB	No	No
15:45	404	98 EB	No	No	15:45	404	98 EB	No	Yes	15:45	404	98 EB	No	No
15:15	403	97 EB	No	No	15:15	403	97 EB	No	Yes	15:15	403	97 EB	No	No
07:15	403	94 W	No	No	07:15	403	94 W	No	Yes	07:15	403	94 W	No	No

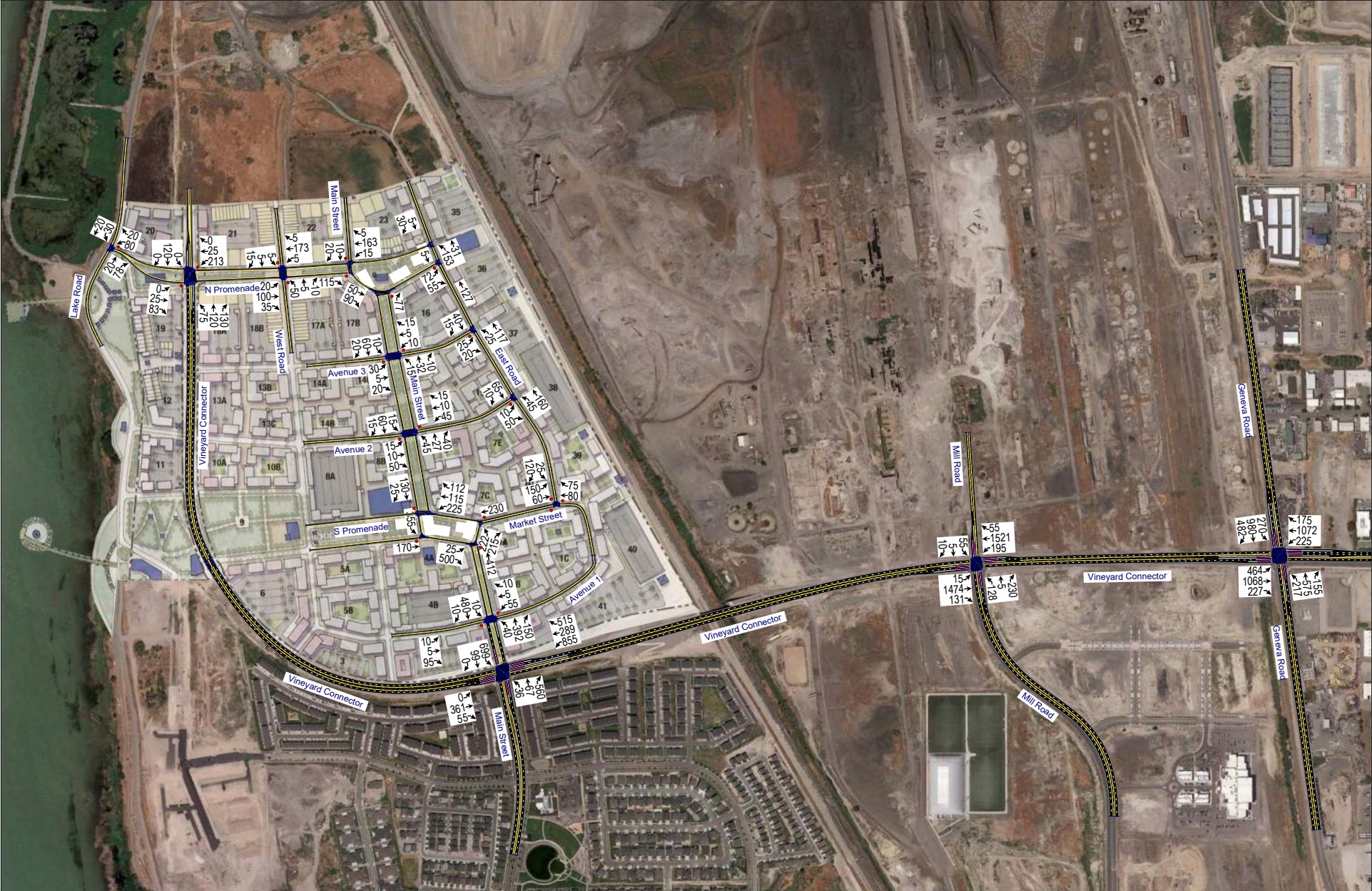
Vineyard - Downtown Vineyard TIS
Future (2025) Plus Project

Morning Peak Hour
Figure 7a



Vineyard - Downtown Vineyard TIS
Future (2025) Plus Project

Evening Peak Hour
Figure 7b



Vineyard Residential Buildout Audit as of 09/30/2021
Area west of railroad

Subdivision	RDA	PUD	Phase	Construction Type	Platted lots	CO Issued	Units in Constr.	Units in Review	Remaining Buildout
Ashley Acres	N/A	N/A		SFD	19	19			0
Bridgeport	Phase 3	Waters Edge	6B	SFD	104	104			0
Cascade	Phase 3	Waters Edge	5A	SFD	109	109			0
Cottonwood	N/A	Homestead	6	SFD	167	113	42	1	43
Elms	N/A	Homestead	10 & 11	SFD	41	41			38
Garden	N/A	Homestead	3	SFD	117	117			0
Hampton	Phase 3	Waters Edge	3	SFD	136	120	24		104
Holdaway Cove		N/A		SFD	6	6			0
Holdaway Farms		N/A		SFD	6	1	1		6
James Bay	Phase 3	Waters Edge	9	SFD	28	2	8	2	16
Lakefront at Vineyard	Phase 5	Town Center		Multi-Family	250	290	130		0
Lakefront at Vineyard	Phase 5	Town Center		Townhome	107	174	58		38
Lakefront at Vineyard	Phase 5	Town Center		SFD	0				15
Lakes at Sleepy Ridge	N/A	N/A		SFD	162	161	1		0
Le Cheminant	Phase 2	N/A	A	SFD	31	30			1
Le Cheminant	Phase 2	N/A	B	SFD	40	39			1
Le Cheminant	Phase 2	N/A	C	SFD	31	31			0
Le Cheminant	Phase 2	N/A	D	SFD	26	25			1
Lochs	Phase 3	Waters Edge	7D	Townhome	220	220			0
Maples	N/A	Homestead	4	SFD	73	73			95
Meadows	N/A	Homestead	8 & 9	SFD	68	68			0
Orchards	Phase 4	Homestead	1	Townhome	47				288
Parkside	Phase 3	Waters Edge	2	SFD	71	71			0
Preserve	Phase 3	Waters Edge	8A/8B	Multi-Family	200	200			0
Preserve	Phase 3	Waters Edge	8A/8B	Townhome	133	133			0
Providence	Phase 3	Waters Edge	5B/5C	SFD	87	87			0
Shores	N/A	N/A		SFD	60	57			3
Solstice	Phase 3	Waters Edge	7B	SFD	76	76			0
Springs	Phase 3	Waters Edge	4A	SFD	119	119			0
Sycamore	N/A	Homestead	7	SFD	61	59	7	1	77
Tucker Row	Phase 3	Waters Edge	7C	Townhome	134	134			0
Unnamed	N/A	Homestead	2	SFD					56
Villas	Phase 3	Waters Edge	4	SFD	155	98	40		17
Vineyard Park Place	N/A	N/A		SFD	6	6			0
Westbrook	Phase 3	Waters Edge	1B	SFD	116	116			0
Willows	Phase 3	Waters Edge	1A	SFD	112	112			0
Windsor	Phase 3	Waters Edge	6A	SFD	90	90			0
TOTALS					3208	3101	311	4	799

Example of 4-way Intersection with Pedestrian Crossing

Signalized Intersections Informational Guide Second Edition



FHWA Safety Program