

## *Staff Report*

TO: County Council

FROM: Steve Alexander, Solid Waste Program Manager  
Ed Hale, Utilities Manager  
Jon Shannon, Public Works Director

THROUGH: Pete Rose, County Administrator

SUBJECT: Follow-up on Council Questions about SJI Transfer Station

ISSUE: The County Council has asked the County Administrator to provide some additional information regarding the siting of the replacement San Juan Island Transfer Station.

The specific questions/requests include:

1. Provide maps showing the location of current paved shoulders and designated bicycle routes.
2. Provide more specific information about the costs for the project.

FACTS & FINDINGS:

### 1. BICYCLE / PEDESTRIAN TRAVEL ROUTES Facts and Findings

Attached are 5 maps that show the county roads within a one mile radius of each alternative site. The maps show the roads where pavement width is between 26 feet and 30 feet. This width of paved surface can accommodate on road travel for bicycles and pedestrians safely. The maps also show the areas where bicycle routes have been designated in the 2004 San Juan County Non-Motorized Transportation Plan.

### Analysis

All of the proposed sites are served by primary county roads that have adequate pavement width. Daniel Lane and Egg Lake sites have secondary access from local access roads that do not have paved shoulders. Four of the five sites are located directly on a designated bicycle route. The Beaverton Valley Site is not located on a designated bicycle route. Increased pedestrian and bicycle traffic can be expected along any designated bicycle route.

## 2. ADDITIONAL COST INFORMATION

### Facts and Findings

Current cost estimates for the project are concept level estimates. The ranges of costs reflect the uncertainty of the information known at this point in the process. Staff has refined the existing cost ranges based on the level of certainty. Costs for acquisition are known with the most certainty. Costs for bid construction are known with the least certainty.

In addition to the ranges of costs previously developed for public review and included in the Supplemental Alternatives Analysis, staff has provided two additional types of cost analysis to help council understand the potential costs as they relate to the site selection process and also address the question about future costs for the Town of Friday Harbor. These are: a single cost estimate to acquire and develop the property to provide the three top priority services by site, based on a synthesis and refinement of the cost ranges; and a rate analysis that projects the potential costs to customers, including the Town of Friday Harbor, based on different rate structure scenarios. These estimates are concept level and the actual costs may vary somewhat, higher or lower, when the project finally reaches the construction phase.

It should be noted that San Juan County is currently in the most favorable competitive bid environment we have seen in a decade. From a cost standpoint, now is a very good time to be building public infrastructure.

Council will have several opportunities to review plans, specifications and cost estimates as the project proceeds. The process is currently at the site selection stage. Cost is one factor among many in the site selection process. After a site is selected and acquisition is complete the project will move to design and permitting. Refined and more cost specific information will be available after design and permitting are complete.

Time factors are also estimated. Time is of the essence for this project.

### Analysis

Table 1 shows the cost of property acquisition. This includes the estimated purchase price, closing costs, environmental investigation, and the cost of financing capital to make the purchase. The time required to complete acquisition is estimated based on recent property acquisition history.

The acquisition costs for the Beaverton Valley site are limited to the remaining debt service costs. The property was acquired with \$800,000 of bond revenues from \$950,000 of 15 year term LTGO bonds sold in 2002 by a previous BOCC. The first seven years of this debt service will already be paid by the end of the current fiscal year. The acquisition costs for this parcel have already been embedded in the tipping rate

since 2002 and no additional rate revenue is required over the current rate to pay this debt.

The first \$150,000 of the above mentioned bond revenue was used to acquire the “Sundstrom Parcel” which is part of the Sutton Road alternative site.

The acquisition of either the Daniel Lane and Sutton Road properties will require new capital outlays and require new debt and new rate revenue.

It is possible that if the Beaverton Valley property is not utilized for any future solid waste function, the solid waste portion could be sold to the Road Fund, the ER&R Fund, or the Current Expense Fund, or a combination of those funds. There are potential future uses for all three funds. Proceeds from such a sale could be used to offset the acquisition costs for one of the other sites, although such a plan would likely create a short term cash flow problem.

It is also possible that if the Sundstrom parcel is not utilized for any future sold waste function it could be sold and the proceeds utilized to offset construction and site development costs elsewhere.

**Table 1 – Acquisition Cost Estimates as of 2009**

| Acquisition Costs      | Purchase Price        | Due Diligence        | Closing Costs       | Cost of Financing      | Total Cost  | Amount To Finance | Time Required  |
|------------------------|-----------------------|----------------------|---------------------|------------------------|-------------|-------------------|----------------|
| Beaverton Valley       | Complete              | Complete             | Complete            | \$597,240              | \$597,240   | None              | None           |
| Daniel Lane            | \$1,898,100           | \$15,000             | \$28,472            | \$1,100,898            | \$3,042,470 | \$1,941,572       | 2 to 4 Months  |
| Sutton Road Sundstrom* | \$350,000<br>Complete | \$75,000<br>Complete | \$3,750<br>Complete | \$203,000<br>\$113,760 | \$745,510   | \$428,750         | 6 to 12 Months |

\*Sutton Road Site Includes Sundstrom Parcel and a Portion of Town Property

**Assumptions:**

Purchase Price: Daniel Lane - Assessed Value + 20%; Sutton Road - estimated appraised value for 7 acres not including the landfill, Sundstrom portion has already been acquired; Beaverton Valley - has already been acquired.

Due Diligence: This cost estimate includes appraisal, survey, title report and Phase 1 environmental assessment based on recent County property acquisitions. Sutton Road will require a Phase 2 environmental assessment due to the proximity to the landfill and current land filling on the acquisition portion.

Cost of Financing: This is the additional cost (interest) for financing a new acquisition over 20 years or the remainder interest due on previously acquired properties.

Closing Costs: Estimated at 1.5% of purchase price.

## Relative Costs by Category Excluding Composting and Construction Waste Services

The Supplemental Alternatives Analysis developed relative cost range estimates for construction of a facility that would immediately provide all services. At this time the precise nature of composting and construction waste services is not known. Initial construction of the facility may not include the structures (collection areas and processing pads) needed for these services.

Table 2 shows the relative cost ranges for major development factors that may have a significant cost impact in developing each candidate site based on the conceptual site layout based on the three primary services (garbage, recycling, and household hazardous waste) without the composting and construction waste services. These cost ranges are provided only for the purposes of relative comparison. The costs presented below may change based on detailed design and current costs of materials, labor, fuel, commodities, and incidentals at the time a facility is constructed. Cost elements not accounted for in these major cost categories include, and are not limited to:

- Economic factors (e.g., inflation, discount rate, etc.)
- Public process, appeals, and similar factors
- Utilities and fire flow
- Mobilization, design or construction management, or a contingency

**Table 2 – Cost Estimate to build a facility that provides garbage, recycling and HHW services only**

| Summary by Major Category                      | Beaverton Valley     | Daniel Lane          | Sutton Road          |
|--|----------------------|----------------------|----------------------|
| <b>Buildings, Roads, Scales</b>                | \$2 – 3 million      | \$2 – 3 million      | \$2 – 3 million      |
| <b>Excavation, Fill &amp; Site Preparation</b> | \$0.6 - 0.8 million  | \$0.3 – 0.4 million  | \$1.3 – 1.9 million  |
| <b>Stormwater Detention<sup>1</sup></b>        | \$0                  | \$0.3 – 0.5 million  | \$0.3 – 0.5 million  |
| <b>Design and Permitting Cost<sup>2</sup></b>  | \$0.4 to 0.8 million | \$0.4 to 0.8 million | \$0.5 to 1.4 million |
| <b>Acquisition<sup>3</sup></b>                 | \$0                  | \$1,941,572          | \$428,750            |
| <b>Total Cost Estimate</b>                     | \$3 to 4.6 million   | \$4.9 to 6.6 million | \$4.5 to 6.8 million |

Notes to Table 2:

1. Stormwater detention assumes a pond or tank and a similar control release rate for each site without benefit of design.

2. Design and Permitting costs at 15 to 20 percent of construction cost rounded to nearest 0.1 million.
3. Acquisition cost estimate from Table 2.

**Best Project Cost Estimate based on Conceptual Level design and acquisition data**

Table 3 gives the best available cost estimate to complete the transfer station replacement project for the three primary services for each of the three sites under consideration. Cost estimates are based on a best estimate from within the cost ranges. Actual project construction costs may vary, higher or lower, from these estimates.

**Table 3 - Best available concept level cost estimate to complete the transfer station replacement project for the three primary services for each of the three sites under consideration. This value represents the amount to be financed.**

| <b>Category</b>                                | <b>Beaverton Valley</b> | <b>Daniel Lane</b> | <b>Sutton Road</b> |
|--|-------------------------|--------------------|--------------------|
| <b>Buildings, Roads, Scales</b>                | \$2,800,000             | \$2,800,000        | \$2,800,000        |
| <b>Excavation, Fill &amp; Site Preparation</b> | \$600,000               | \$300,000          | \$1,615,000        |
| <b>Stormwater Detention</b>                    | \$0                     | \$375,000          | \$375,000          |
| <b>Design and Permitting Cost</b>              | \$600,000               | \$600,000          | \$1,119,000        |
| <b>Acquisition</b>                             | \$0                     | \$1,941,572        | \$428,750          |
| <b>Total Cost Estimate</b>                     | \$4,000,000             | \$6,016,572        | \$5,337,750        |

**Co-Location and project cost sharing**

The principle of co-locating or consolidating certain types of government facilities in the same physical location is driven by the efficiencies and cost savings it can create. County courthouses and city halls are good examples of co-location. In many municipalities a wide variety of departments and services are located in a single facility. This arrangement reduces many of the overhead and development costs that separate facilities create.

All of the properties being looked at for the replacement transfer station have some potential for co-locating services. The ability of a specific site to accommodate multiple facilities is measured by many factors, but the size of the property, the suitability of the site for each intended use, and the location of the site relative to the services to be provided are probably the most important.

The Sutton Road/Sundstrom site has poor potential for co-locating public works facilities. In 2000 this site was evaluated for its potential as a public works maintenance facility and road maintenance facility. The useable size of the site, the topography, and the proximity to a densely populated residential neighborhood led to rejecting the site for those purposes.

The Daniel Lane site has fair potential for co-locating public works facilities. The useable size of the site is the biggest limitation.

The Beaverton Valley site has good potential for co-location and was acquired with that possibility in mind. One of the reasons the BOCC decided to acquire the Beaverton Valley site in 2005 is the potential the site provides for cost sharing of development expenses across funds. The original plan for the site was based on the values provided by consolidating all of the Public Works Department site needs, as well as some potential for Current Expense Fund needs, at one location. Current expense fund needs identified at that time included a secure storage area for the County Sheriff for vehicle impound and evidence, a records archive area, and a general operations area for the facilities management program. The funding for the current expense fund portion was dropped at the last minute due to fiscal constraints, but the area needed to serve these needs was included in the acquisition.

Projected public works department needs included a replacement site for the equipment maintenance facility currently located at 1000 Guard Street (ER&R), the road maintenance facility currently located 1000 Guard Street (ROAD), the administration facility currently located at 915 Spring Street (ROAD), and the solid waste transfer station currently located on Sutton Road (SOLID WASTE).

Co-location of these facilities allows for shared site development costs including, but not limited to, access roads, off site road improvements, power, sewer, water, phone, fiber optic, fire suppression, design costs, financing costs, fencing and security components, signage, permitting, bidding costs, fuel storage, equipment storage, equipment maintenance, landscaping, screening, and monitoring. In addition, co-location provides for easy access to shared labor.

Building and maintaining a single facility that houses all these functions provides a very significant cost savings to the citizens of the county. It also keeps extra land from coming off the tax rolls and reduces the lifecycle costs related to maintenance of the infrastructure.

One very simple example is the difference between preparing two separate conditional use permits versus only preparing one. The costs to prepare, submit, and defend a conditional use permit can be substantial. Table 4 gives the solid waste transfer station replacement project cost estimate for the Solid Waste Fund for the Beaverton Valley Site based on cost sharing between the Road fund, ER&R Fund and Solid Waste Fund.

**Table 4 - Best available concept level cost estimate to complete the transfer station replacement project for the three primary services for each of the three sites under consideration with costs shared by Road and ER&R Fund. This value represents the amount to be financed.**

| <b>Major Category</b>                          | <b>Beaverton Valley</b> | <b>Daniel Lane</b> | <b>Sutton Road</b> |
|--|-------------------------|--------------------|--------------------|
| <b>Buildings, Roads, Scales</b>                | \$2,800,000             | \$2,800,000        | \$2,800,000        |
| <b>Excavation, Fill &amp; Site Preparation</b> | \$200,000               | \$300,000          | \$1,615,000        |
| <b>Stormwater Detention</b>                    | \$0                     | \$375,000          | \$375,000          |
| <b>Design and Permitting Cost</b>              | \$200,000               | \$600,000          | \$1,119,000        |
| <b>Acquisition</b>                             | \$0                     | \$1,941,572        | \$428,750          |
| <b>Total Cost Estimate</b> (shared costs)      | \$3,200,000             |                    |                    |
| <b>Original Estimate</b> (no shared costs)     | \$4,000,000             | \$6,016,572        | \$5,337,750        |

### **Effect on Solid Waste Rates**

The council has several options for paying off the debt that will be incurred to complete the San Juan Island transfer station replacement project. The options depend on if, and how, the council chooses to change the current rate structure. A detailed discussion of the options presented here is scheduled to take place with the council this year. The SWAC is currently evaluating these options again and will make a recommendation on rate structure to the council this year.

For the purposes of this report three options were considered: 1) No change to the current structure; 2) addition of a parcel assessment across the solid waste disposal district (It should be noted that Town is not included in the Disposal District and this assessment would apply only to unincorporated county parcels); and 3) addition of an ad valorem property tax across the solid waste disposal district. Tables 5A – 5C show how the rate would need to change for each option in order to complete the project on each of the 3 alternative sites. The rate increase reflects only the project costs in year 2010 and does not consider any changes to the rate due to changes in operations, inflation, or other factors.

Assumptions are the same for all scenarios:

- 1) 20 year debt at 5% interest
- 2) Bond amortization schedule is straight line
- 3) Capital Costs spread equally to all customers based on increase in price per ton
- 4) Factors in current debt service costs paid off in 2010
- 5) Does not factor current excise tax formula

**Table 5A – Rate Scenarios for Beaverton Valley Alternative**

| Major Category                      | Current Rate Per Ton | 1) Increase Using Current Rate Structure | %  | 2) Parcel Assessment \$/per Parcel* | 3) Property Tax Levy Rate (\$/1000 assessed value) |
|-------------------------------------|----------------------|--|----|-------------------------------------|--|
| <b>Self Haul Tipping Fee</b>        | \$294                | \$302                                    | 3% | \$6.38                              | \$.01566   |
| <b>Certificated Hauler and Town</b> | \$197                | \$205                                    | 4% |                                     |  |

\* Town is not in the Disposal District and would not pay any fee

1) Data: Annual debt service payment ≈ \$255,000  
 2010 current annual debt service paid off = \$153,000  
 Annual # of 2010 Self haul tons ≈ 5,700  
 Annual # of 2010 Certificated tons ≈ 5,600 Annual # of 2010 Town tons ≈ 2,150  
 Annual # of 2010 Total Tons ≈ 13,450  
 1) Formula: (new debt service – paid off debt service/total tons = additional cost per ton)  
 (\$255,000-\$153,000) = (\$102,000/13,450 = \$7.58 per ton)

2) Data: # of Parcels in District ≈ 16,000  
 2) Formula: (new debt service – paid off debt service/total parcels = additional cost per parcel)  
 (\$255,000-\$153,000) = (\$102,000/16,000 = \$6.38 per parcel)

3) Data: Assessed value of Disposal District ≈ \$6,513,279,057  
 3) Formula: ((new debt service – paid off debt service / (Assessed value/1000)) = levy rate  
 ((\$255,000 - \$153,000) = (\$102,000/ (\$6,513,279,057/1000)) = \$.01566

**Table 5B – Rate Scenarios for Daniel Lane Alternative**

| Major Category                      | Current Rate Per Ton | 1) Increase Using Current Rate Structure | %   | 2) Parcel Assessment \$/per Parcel | 3) Property Tax Levy Rate (\$/1000 assessed value) |
|-------------------------------------|----------------------|--|-----|------------------------------------|--|
| <b>Self Haul Tipping Fee</b>        | \$294                | \$318                                    | 8%  | \$20.44                            | \$.05021   |
| <b>Certificated Hauler and Town</b> | \$197                | \$221                                    | 12% |                                    |  |

\* Town is not in the Disposal District and would not pay any fee

1) Data: Annual debt service payment ≈ \$480,000  
 2010 current annual debt service paid off = \$153,000  
 Annual # of 2010 Self haul tons ≈ 5,700  
 Annual # of 2010 Certificated tons ≈ 5,600 Annual # of 2010 Town tons ≈ 2,150  
 Annual # of 2010 Total Tons ≈ 13,450  
 1) Formula: (new debt service – paid off debt service/total tons = additional cost per ton)  
 (\$480,000-\$153,000) = (\$327,000/13,450 = \$24.31 per ton)

2) Data: # of Parcels in District ≈ 16,000  
 2) Formula: (new debt service – paid off debt service/total parcels = additional cost per parcel)  
 (\$480,000-\$153,000) = (\$327,000/16,000 = \$20.44 per parcel)

3) Data: Assessed value of Disposal District ≈ \$6,513,279,057  
 3) Formula: ((new debt service – paid off debt service / (Assessed value/1000)) = levy rate  
 ((\$480,000 - \$153,000) = (\$327,000/ (\$6,513,279,057/1000)) = \$.05021

**Table 5C – Rate Scenarios for Sutton Road/Sundstrom Alternative**

| Major Category                      | Current Rate Per Ton | Increase Using Current Rate Structure | %   | Parcel Assessment \$/per Parcel | Property Tax Levy Rate (\$/1000 assessed value) |
|-------------------------------------|----------------------|---------------------------------------|-----|---------------------------------|---|
| <b>Self Haul Tipping Fee</b>        | \$294                | \$314                                 | 7%  | \$17.00                         | \$.04176  |
| <b>Certificated Hauler and Town</b> | \$197                | \$217                                 | 10% |                                 |   |

\* Town is not in the Disposal District and would not pay any fee

1) Data: Annual debt service payment ≈ \$425,000  
 2010 current annual debt service paid off = \$153,000  
 Annual # of 2010 Self haul tons ≈ 5,700  
 Annual # of 2010 Certificated tons ≈ 5,600 Annual # of 2010 Town tons ≈ 2,150  
 Annual # of 2010 Total Tons ≈ 13,450  
 1) Formula: (new debt service – paid off debt service/total tons = additional cost per ton)  
 (\$425,000-\$153,000) = (\$272,000/13,450 = \$20.22 per ton)

2) Data: # of Parcels in District ≈ 16,000  
 2) Formula: (new debt service – paid off debt service/total parcels = additional cost per parcel)  
 (\$425,000-\$153,000) = (\$272,000/16,000 = \$17.00 per parcel)

3) Data: Assessed value of Disposal District ≈ \$6,513,279,057  
 3) Formula: ((new debt service – paid off debt service / (Assessed value/1000)) = levy rate  
 ((\$425,000 - \$153,000) = (\$272,000/ (\$6,513,279,057/1000)) = \$.04176

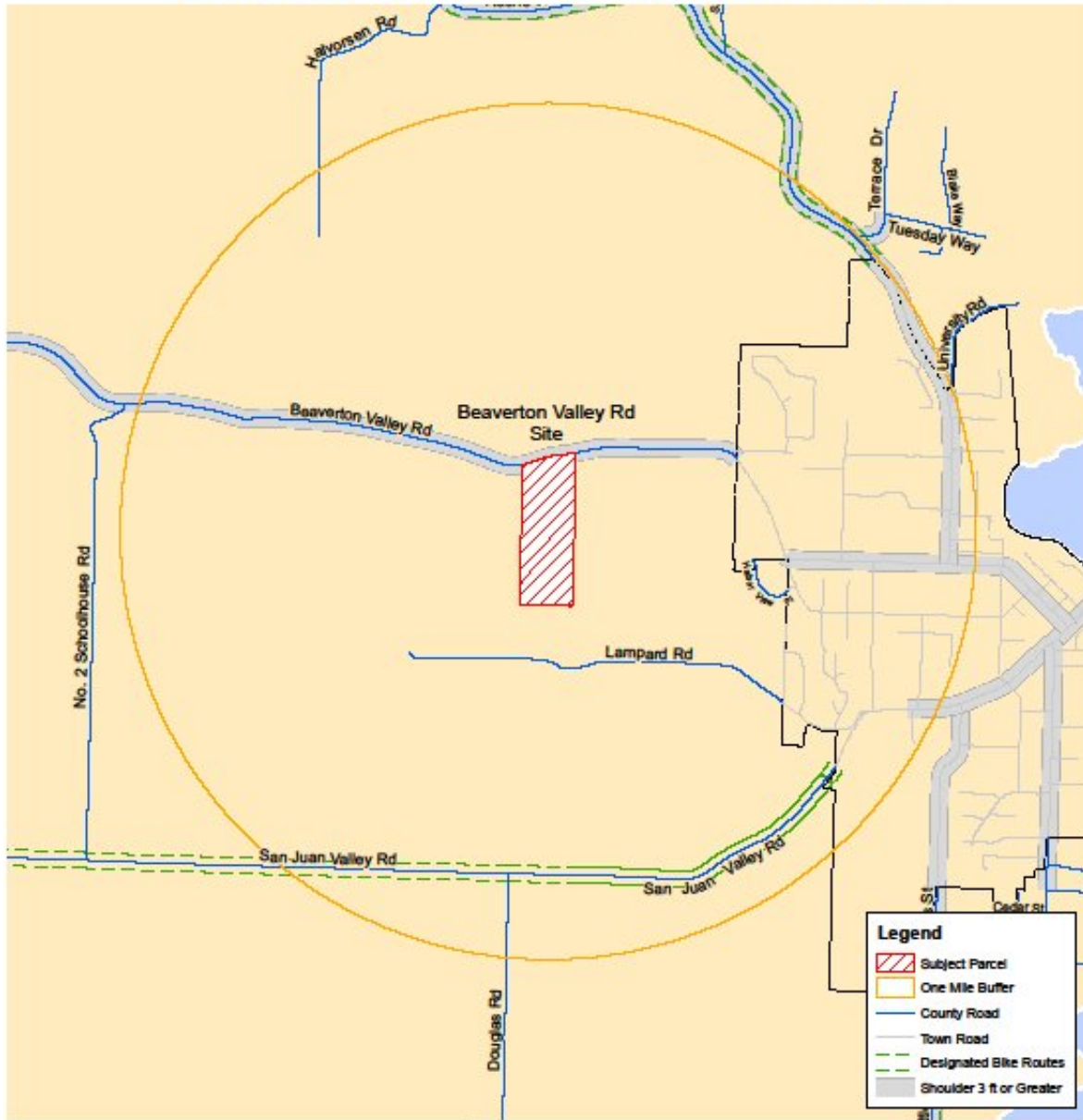
**Council Process and Decision Points**

Table 6 identifies steps in the facility development process that will need Council attention. At each step the Administration will be making a recommendation to continue the process or take an alternative action based on the information acquired in the previous step. Each step will provide a greater degree of certainty with respect to both facility design and cost. Not all the steps may be necessary, for example, property acquisition and purchase are not needed if the Beaverton Valley Road Site is chosen because the County owns this site.

**Table 6**

| Event  | Council Decision  | Cost Data Available   | Technical Data Available  |
|--|---|---|---|
| Site Selection                                       | Which site should move forward for possible development | Cost Ranges for developing all services                             | Conceptual site layouts, identification of significant environmental impacts.                                 |
| Property Acquisition                                 | Approval of property investigation                      | Estimate of acquisition costs                                       | Proposed contingencies, estimated cost to investigate site issues   |
| Property Purchase                                    | Approval of Purchase                                    | Actual Purchase price and closing costs                             | Contingencies satisfied   |
| Recommendation for initial services and future plans | Confirm initial services                                | Cost estimate for initial facility to provide initial services only | Phasing of additional services  |
| Recommendation for Co-location of Road services      | How co-location is included in the site plan            | Examples of cost reduction through co-location                      | Road services for short term and long term location on the property   |
| Site Design Approval                                 | Proceed to develop bid specifications                   | Engineers cost estimate for facility development                    | 30 % design. Actual site layout. Building construction details, subsurface geology, equipment needs and cost. |
| Release of Bids                                      | Approve advertising of bids                             | Engineers cost estimate   | 100% design. Specific details suitable for the bid process.   |
| Bid opening and contract approval                    | Approve contracts and cost                              | Precise bid from the most qualified bidder                          | Public Works evaluation of the bids and actual cost for construction.   |

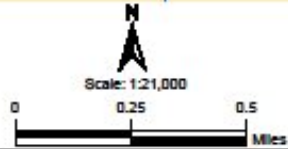
# San Juan Island Transfer Station Replacement



**Legend**

- Subject Parcel
- One Mile Buffer
- County Road
- Town Road
- Designated Bike Routes
- Shoulder 3 ft or Greater

This map is a graphic representation derived from San Juan County's Geographic Information System. It is designed and intended for reference only, and is not guaranteed to convey accuracy. Information represented in this map is subject to change without notice.

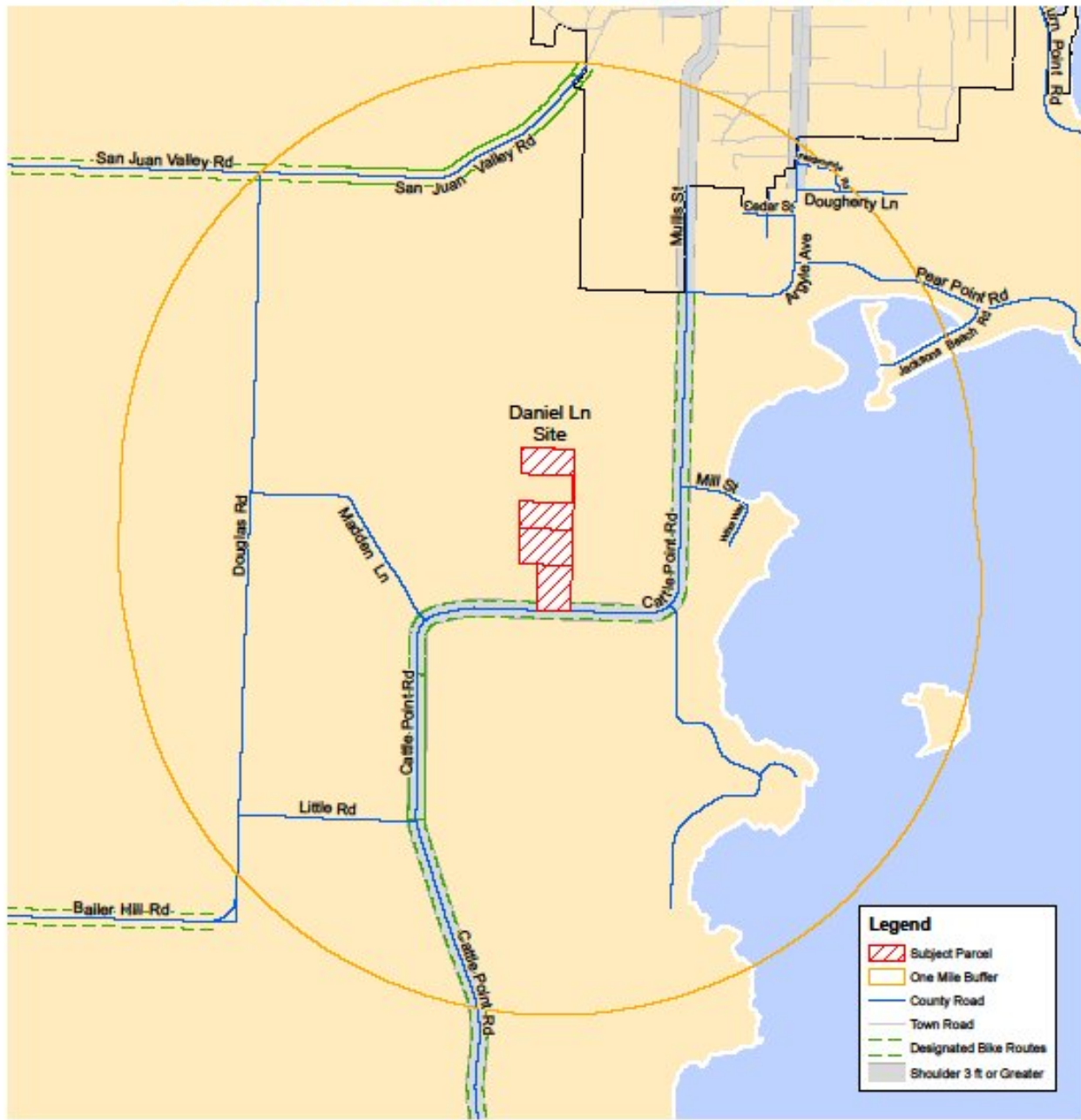


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San Juan Island  
San Juan County, Washington

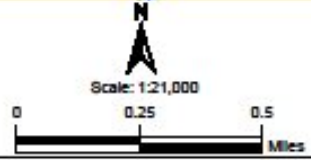
Drawn By: *lra* Date: 03/09 Revised: 03/09

Figure  
1

# San Juan Island Transfer Station Replacement



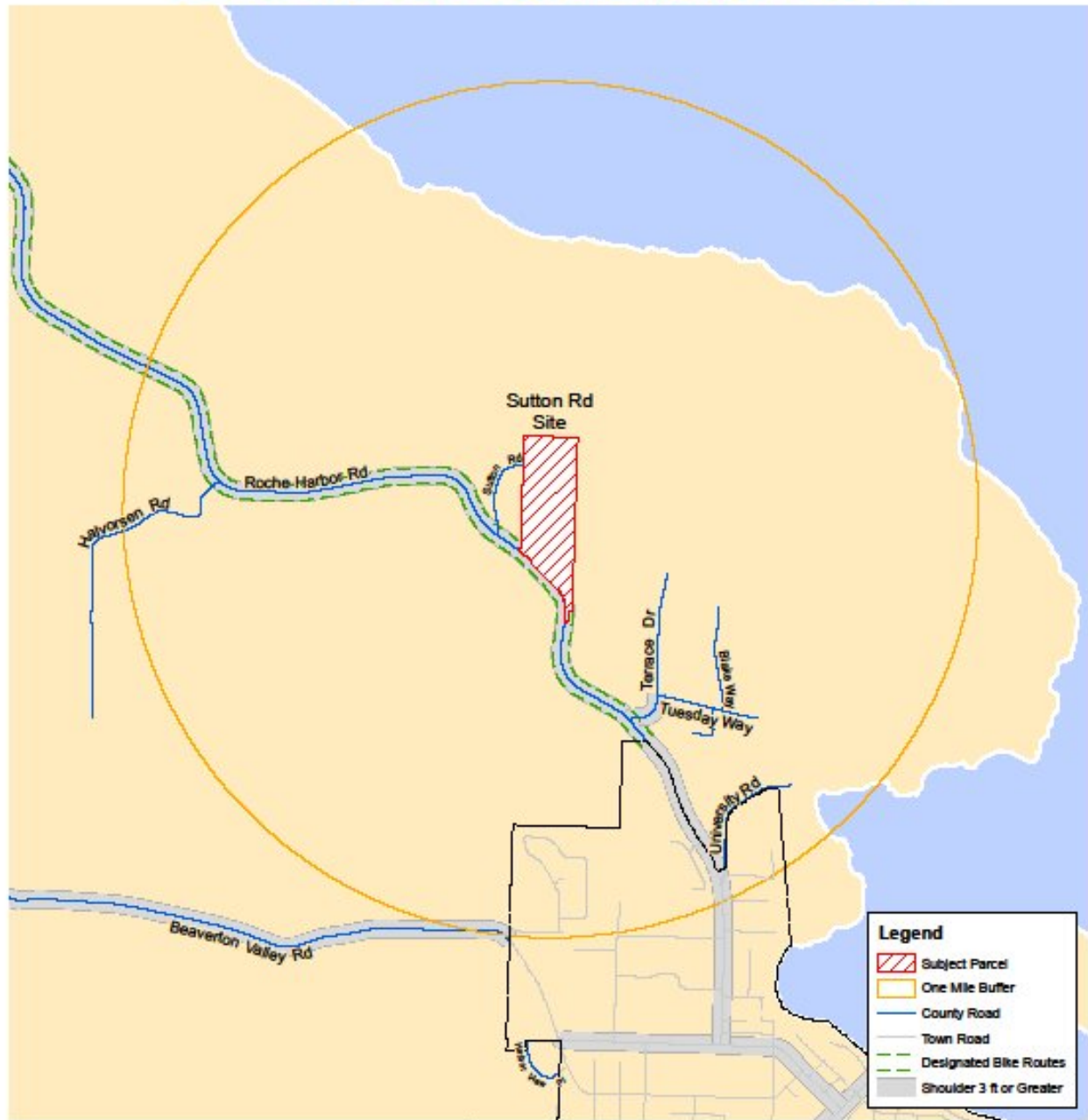
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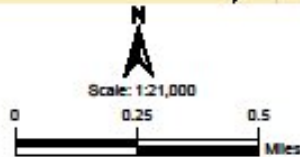
**Daniel Ln**  
San Juan Island  
San Juan County, Washington

Drawn By: [Name]  
Date: 03/09

# San Juan Island Transfer Station Replacement



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**Sutton Rd**  
San Juan Island  
San Juan County, Washington

Figure  
**3**

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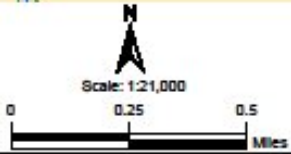
# San Juan Island Transfer Station Replacement



**Legend**

- Subject Parcel
- One Mile Buffer
- County Road
- Town Road
- Designated Bike Routes
- Shoulder 3 ft or Greater

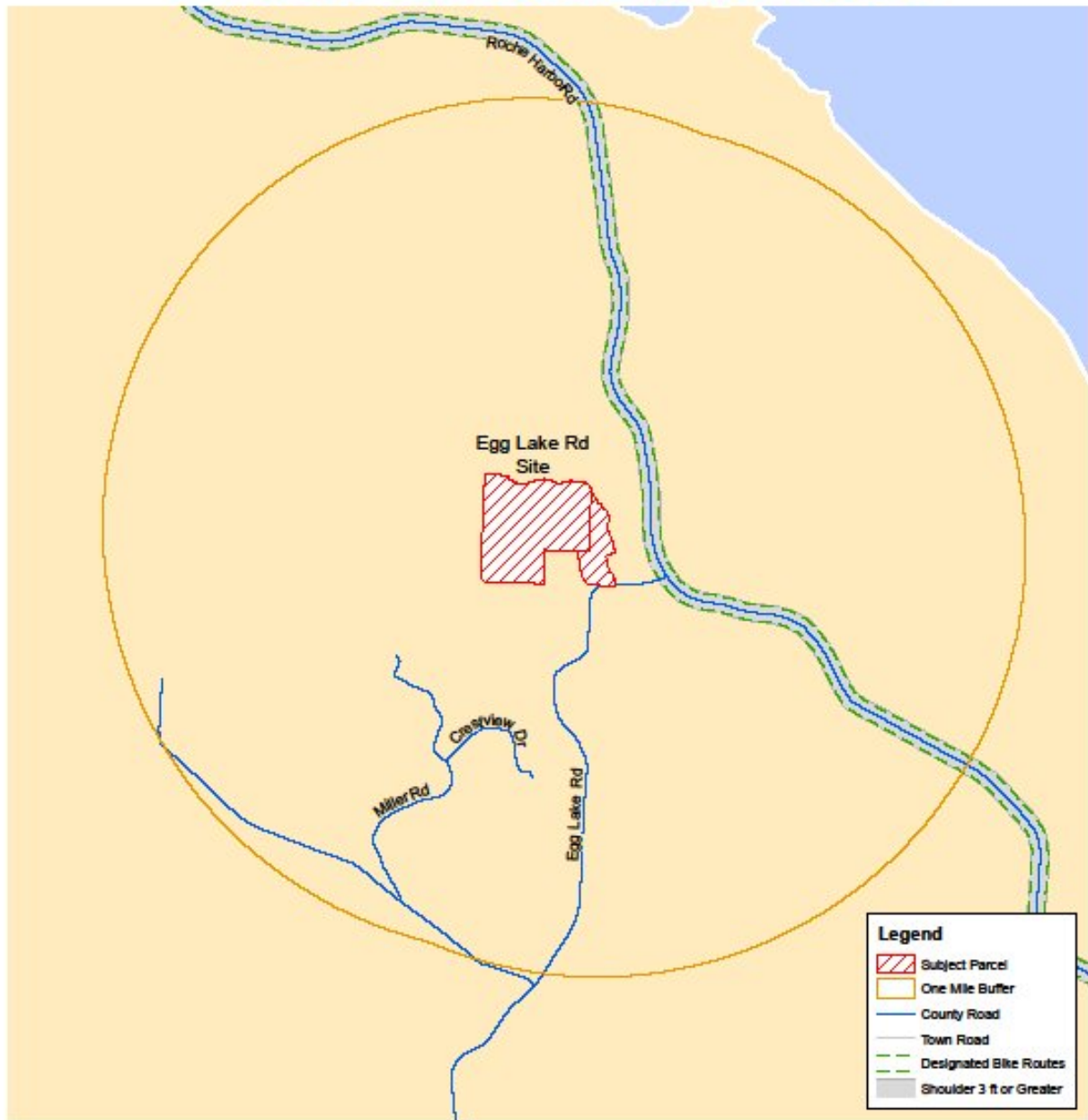
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**Golf Course Rd**  
San Juan Island  
San Juan County, Washington

Figure  
4

# San Juan Island Transfer Station Replacement



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**Egg Lake Rd**  
San Juan Island  
San Juan County, Washington

Figure  
**5**

Drawn By:  
Eve

Date:  
03/09

Revised:  
03/09