



Solid Waste Transfer Station Planning Program

October 18, 2012

KPG

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City of Oak Harbor - Solid Waste Planning Program - October 18, 2012

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Executive Summary

KPG Inc. (Consultant) has been selected to prepare a Solid Waste Transfer Station Planning Program for the City of Oak Harbor. The following documentation includes proposed facility size, potential capital costs, loan opportunities, grant opportunities, and permits associated with a new transfer station within the City limits. This document does not include *Site Selection and Conceptual Site Planning*.

The Consultant has prepared the following Planning Program document using user/staff questionnaires and a work session with City staff August 23, 2012. The work session has defined the programming criteria to determine facility user needs, develop adjacencies, and define approximate square footage requirements for the transfer station. The information collected was used to generate the cost analysis.

The Consultant has performed the following activities included within this Planning Program: conceptual transfer station design, identified potential equipment needs, identified applicable permits, ordinances, regulations, and approvals needed for a new solid waste transfer station within the City of Oak Harbor, preliminary transfer station capital cost estimate, preliminary anticipated construction duration, and environmental stewardship recommendations.

The Consultant has provided identification of financing options and help identify grant or loan opportunities.

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Limitations of this Document

Purpose

The City has asked the KPG to evaluate existing operations and facilities and provide a new Transfer Station Solid Waste Planning Program to evaluate the capital costs associated with the construction of a new facility within the City of Oak Harbor at a site that has not yet been determined.

Limitations

- The Planning Program documentation does not include: site selection, site studies, site planning alternatives, or site development services for the new transfer station.
- One conceptual transfer station configuration has been evaluated: (1) a flat floor push to dump using a top-load trailer, tamped by knuckleboom crane, without compactor.
- The City will conduct the project business case.
- Equipment listed within this document is for reference purposes only. The Consultant anticipates the City will procure equipment using a vendor selection process.
- The scope and budget for this Planning Program excludes preparation of grant/loan applications and professional design.

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About the City of Oak Harbor

The City of Oak Harbor is located at the north side of Whidbey Island, in Washington. Access to the Island is primarily from the north by Highway 20 using the Deception Pass bridge, by State Ferries at the Southern portion of the Island, and thirdly by small airfields. The City shares its northern border with the United States Naval Air Station Whidbey Island.

Historically, slow-growing, the City had 19,905 residents in the year 2000. By 2010 the City had grown to 22,075 residents. This information reflects a population increase of 10% in 10-years. The City's current growth rate is 1% per year. Future projections for the city indicate a similar growth pattern of approximately 1% each year. *Note: Census Data Provided by The United States Census Bureau, <http://www.census.gov> and the Washington State Office of Financial Management.*

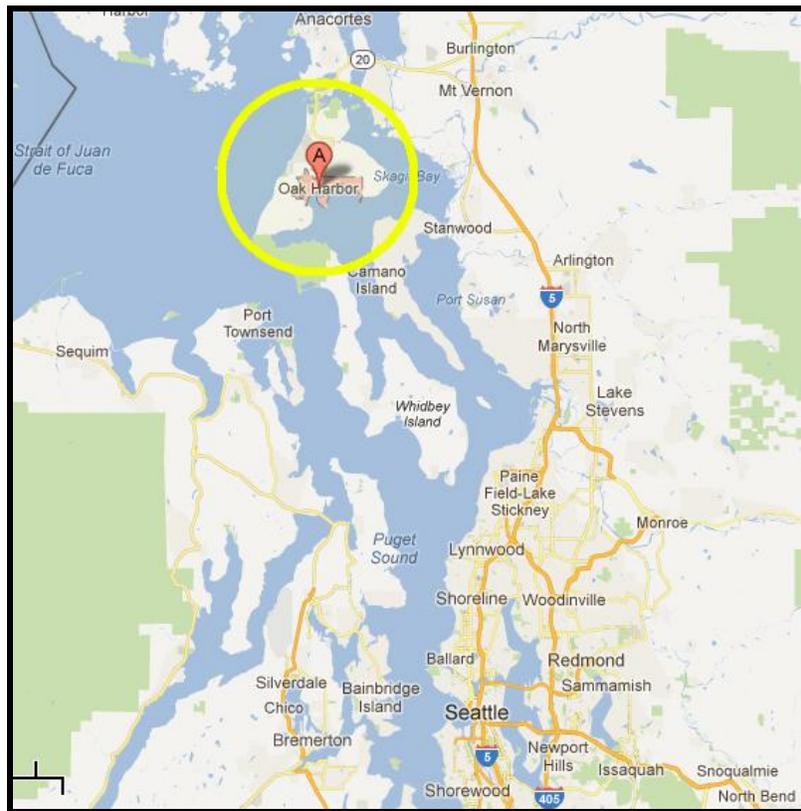


Figure 1 Vicinity Map

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Part 1 - Current Solid Waste Operation

Information provided by the City of Oak Harbor, City Operations Manager and Solid Waste Handling Drivers

The City of Oak Harbor currently provides curbside garbage collection, curbside mixed recyclables and commercial dumpster collection service for the residents of Oak Harbor. The City runs 5 days per week, 52 weeks per year. Collection days are Monday through Friday with no residential collection occurring on federal holidays or snow days. The City owns, operates, and maintains the hauling equipment used for commercial dumpsters, curbside garbage and curbside mixed recyclables collection. *At the time of this Planning Program, the City does not own or operate a Solid Waste Transfer Station.*

Collection drivers travel five (5) round trips daily including both garbage and recyclables, to the Island County Coupeville Transfer Station & Recycle Park. The distance from the City Public Works Facility south to the Coupeville Transfer Station is 27 miles round trip. According to the City's Operations Manager, the travel takes approximately 40 minutes per trip, including tipping time.

Once delivered to Coupeville, garbage from the City is added to garbage from other municipalities on Whidbey Island. The garbage is processed into tamped containers by Island County Solid Waste. When the containers are full, the containers are removed by a private hauler contracted with Island County Solid Waste and taken north, through the City of Oak Harbor on Highway 20 at a travel distance of 14 miles across the Deception Pass bridge. Once removed from the Island, the waste arrives at an intermodal yard where it is transitioned into rail containers and transported to a privately owned and operated landfill.

Mixed recyclables are delivered by the City to Island Disposal at a facility adjacent to the Coupeville Transfer Station & Recycle Park who bales up the recyclables for transport to a private recycler.

Currently, the City does not maintain a solid waste removal or recyclables removal contract with a private entity. The City historically has only contracted with Island County Solid Waste for the use of their Transfer Station for solid waste removal.

The City has asked the planning team to evaluate existing operations and facilities and provide a new Transfer Station planning program that would centrally locate the solid waste operation for the City by providing a tipping location for collected curbside garbage and mixed recyclables.

Potential benefits of locating a Transfer Station within the City of Oak Harbor include:

- Preserving worker time currently spent in transit to/from the Coupeville facility
- Reducing fuel consumption from round-trips with collection vehicles
- Minimizing City collection vehicle mileage (less wear and tear on collection trucks)
- Possibly extending life of collection vehicles
- Reduced tipping fees
- Reduction of collection vehicles and transport vehicles on roadways going to/from Coupeville



Figure 2: Transit mileage between the City of Oak Harbor (generic location) and the **Island County Coupeville Transfer Station & Recycle Park**, 20018 SR 20, Coupeville, WA and the City of Oak Harbor (generic location) and the Deception Pass Bridge. *Mileage has been provided by Google Maps. (<http://maps.google.com>)*

1.1 Current Solid Waste Program Collection & Tipping

For additional information See Appendix A2 Solid Waste Tipping Costs

Garbage Collection Data (2011)

- Annual Tons: 7,578.62
- Monthly Average Tonnage: 631.55
- Annual Cost: \$826,209.04
- Trips Per Day: 3

Recycling Data (2011)

- Annual Tons: 1,174.89
- Monthly Average Tonnage: 97.91
- Annual Cost: \$52,346.70
- Trips Per Day: 2

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Part 2 – Facility Program

Elements within this section identify the results of the design team's data collection efforts, site visit, and interviews conducted with City of Oak Harbor Public Works Staff during the months of August and September of 2012. Interviews included operations managers, the solid waste collection supervisor, and solid waste operations vehicle drivers. Primary data below was provided by the City's Operations Manager. *See Appendix A2.*

The new facility should operate with a 30-year lifespan, and provide the City with a flexible solution for expansion in the future should the City identify a need to increase operations capability.

Operation Hours

The City plans to run the solid waste collection service using the days and hours currently in operation: 5 days per week, 52 weeks per year, excluding Christmas. The collection services following the Christmas holiday receive the highest tonnage of garbage at any one time during the year. The City does not plan to operate during alternative hours or provide alternate hours access. The facility will operate and be open at the same hours as the maintenance facility: **Monday through Friday 7:00am-3:30pm.**

2.1 New Facility Anticipated Performance Requirements/Goals

Tonnage/Volume

- Garbage: 5 loads per day. (1 truck = 8 tons capacity)
- Recycling: 3 trips per day. (1 truck = 4-5 tons capacity)
- Household Hazardous Waste (HHW): There will be no HHW tipped at the new transfer station.
- Yard Waste: There will be no yard waste tipped at the new transfer station however a scale should accommodate weighing of yard waste collected by the City
- Queuing: 2-Collection Vehicles per hour

2.2 Garbage & Recyclables Removal from Site

On-Site Storage (Prior to removal by Intermodal Agency)

- **Goal:** Short term storage of both garbage and recyclables with removal of full containers expected to occur within 36 hours
- Provide space for two (2) empty top-load trailers with intermodal agency drop off access
- Provide space for four (4) full top-load trailers with intermodal agency collection access one (1) Recyclables & three (3) Garbage

Items Collected

- Garbage (Landfill): No more than two (2) fully loaded long-haul containers on site at any time.
- Recycling (Co-mingled): The City would like full trailers to be removed from site when full
- To be baled: mixed paper, plastic, metals, and cardboard
- Not baled: Glass, Oak Harbor does not currently accept co-mingled recyclables containing glass
- Oversize, non-compactable oversize loose items (couches etc) occasionally

Items NOT Accepted at Curbside Collection

- Construction waste, wood waste
- Glass
- Household Hazardous Waste (HHW)
- Yard Waste/Compostables

2.3 Potential Agencies or Existing Contracts for Removal

The current City contract for disposal services is with Island County, the contract will be expiring at the end of 2012. A 5-year contract is expected beyond 2012. Historically, the contracts have been longer than 5-years. One scenario would be for Island County to remove all waste from the new transfer station with the exception of recyclables. Recyclables removal would be contracted by the City separately with a private recycling company.

2.4 Site Security

The following considerations should be taken for building and site security to prevent vandalism and theft of recyclables:

- Buildings and trailer yards should be secured with keycard access
- The trailer yard and recyclables loading dock will be accessed by contracted agency for waste removal
- Private haul customers will not be allowed at the facility
- Provide security cameras for remote viewing of the site by City staff

2.5 Vehicle Scaling

The City would prefer bi-directional keycard or RFID access scale. The scale length should be sized to accommodate the longest truck & trailer combination currently in use by Island County's contracted Intermodal Agency. Current trailer sizes are 48-feet long plus truck cab. The scale could utilize Transfer Facility and Server-Room for Data Collection within buildings on-site to house scale server equipment and data collection devices. Access: An un-staffed, bi-directional, RFID or keycard access scale system is preferred.

A 40-foot scale could be used if cab and trailer were weighed separately, however a more accurate measurement would include the cab as a weighed component by using a 60-foot scale.

The following vehicles will use the scale facility:

- Garbage Trucks
- Recycling Trucks
- Yard Waste Truck
- Long Haul Trailer and Truck
- Other vehicle such as a Vactor Truck
- City Dump Trucks
- Septic trucks

2.5 Continued...

There are two potential scale arrangement alternatives:

Alternative A: Two Scales. Scale #1: a 40-foot scale deck & load cells or axle scales beneath a trailer in the topload area of the Transfer Station for active weight measurement. Digital readouts in the trailer area and above at the tipping floor are preferred. Scale #2: A 40-foot bi-directional scale located within the vehicle maintenance yard at the City's public works facility for non-transfer station vehicles.

Alternative B: One multi-use bi-directional 60-Foot scale located at the City's maintenance facility. This alternative depends upon the transfer station's selected site.

2.6 Emergency Storage Procedures

Critical Use Building: The facility, including on site trailer storage should be able to handle one (1) week of waste in the event of a problem with waste removal from the City Property. **See 2.1 new Facility Performance Requirements**

- Tons/Volume Storage: 1 week (5-days)
- Garbage: 40 tons per day (design) x 5 days = 200 tons
- Recycling: 10 tons per day (design) x 5 days = 50 tons
- Re-Routing procedures if services at the transfer station are temporarily disabled

If garbage collection or use of Transfer Station is disabled the waste will be taken to the Island County Transfer Station in Coupeville. The distance to the transfer station in Coupeville is approximately 27 miles round trip. Each trip takes approximately 40 minutes, including time to discharge loads.

- Electrical/Mechanical Outage secondary uses: The City has a mobile power generator that could be used at the site in the event of power outage.
- Demolition & Woody Debris: The City does not plan on stockpiling any woody-debris or construction materials in the event of natural disaster. Large limbs, tree-trunks and construction debris are currently sent to a private chipping facility located within the City limits.

2.7 Transfer Station Operations (TSO) Staffing

Supervisors

The City currently has one (1) full-time solid waste Supervisor. The position will transition to the new facility. The City does not anticipate the need for a second position due to the moderate tonnages, and hours of operation.

Transfer Station Operators

Transfer Station Operators (TSO) would be performing the duties listed below as part of the new Transfer Station planning effort.

Collection Drivers including Garbage Truck Drivers & Recycling Drivers

Currently the City employs five (5) full-time and one (1) part time temporary summer driver. The drivers are currently employed to operate garbage, recycling, and roll-off container vehicles. The City is currently in the process of adding one (1) full time driver.

Loader Operators

Currently one (1) collection driver listed above is also loader certified. The City would like to certify all collection drivers for loader operation as part of the new transfer station operations plan.

Forklift Operators

Currently one (1) collection driver listed above is also forklift certified. The City would like to certify all collection drivers for forklift operation as part of the new transfer station operations plan.

Mules /Yard Goat Drivers

Currently the City does not own any mules/yard goats. The City would like to certify all collection drivers for mule/yard goat operation as part of the new transfer station operations plan.

Knuckle-Boom Crane Operators (Tamping)

Currently the City does not own any knuckle-boom cranes or tamping equipment. The City would like to certify all transfer station operators for tamping operation as part of a new transfer station operations plan. *(An operations plan is not part of this programming document)*

Baler Operators

Currently the City does not own any baling equipment. The City would like all transfer station operators to be capable of performing baling operations.

Maintenance Personnel

The City maintains a staff of vehicle maintenance personnel capable of maintaining garbage collection vehicles, loaders, and forklifts. The maintenance staff is currently located at the Public Works Property. New equipment such as a knuckleboom crane and bailer could require additional training for maintenance staff.

Cleaning Personnel

Routine transfer building cleaning, end of day cleaning, break room cleaning, restroom cleaning, and general building maintenance shall be performed by Transfer Station Operations staff.

Scale Facility Staff

No full time scale booth staff is anticipated. The new transfer station will not be accepting public or private haul carrier garbage or recycling at the facility. The City would prefer to have all Transfer Station Operators capable of operating vehicle scales.

2.8 Vector Elements

The following rodents, birds, animals and insects contribute to potential concerns for the transfer station. The design of the new Transfer Station should take into account straightforward measures to help the City reduce the amount of waste consumed and removed from the building by the following vectors:

- Bees
- Deer & Elk
- Crows/Seagulls/Owls/Small nesting birds
- Rats & mice. *Currently drivers are finding rats nesting inside of collection vehicles*
- Raccoons

2.9 Modern Transfer Station Elements

Modern enclosed transfer stations are essential community assets providing a consolidated way to export solid waste from communities. Historically, solid waste transfer stations have been noise generators, provided vectors with food, produced odor and visible dust. The modern transfer station addresses each of these elements in a careful way and helps to mitigate impacts upon neighboring properties. *The graphic below compares the previous open air canopy transfer stations with modern enclosed transfer stations.* When care is taken to consider both the generator and receptor elements, a transfer station improves the community in which it serves.

Enclosed Building

By enclosing the primary transfer station tipping area, windblown debris is minimized, sound produced within the transfer station is less audible to neighbors, and nocturnal vectors have less opportunity to enter the building after business hours.

Dust & Odor Control

Use an overhead high pressure water misting system with organic odor neutralizer additive at dusty areas, notably over topload containers where dust plumes are the greatest. If high levels of dust are anticipated, the use of an overhead mechanical dust filtration system will also pre-filter air that would otherwise be released into the environment. Other elements promoting dust control include the use of a daily washdown procedure to clean floors prior to the end of business day.

Smooth Structure

By using less open trusses and more smooth elements there are minimal areas for birds to nest within transfer buildings. Combined with correct coatings, the steel elements could be washed down within the building.

Quiet Back-up Beepers

Installing quieter safety backup beepers in movable equipment helps to minimize the sound exiting the building and reaching neighbor properties. This also minimizes the noise produced within enclosed buildings.

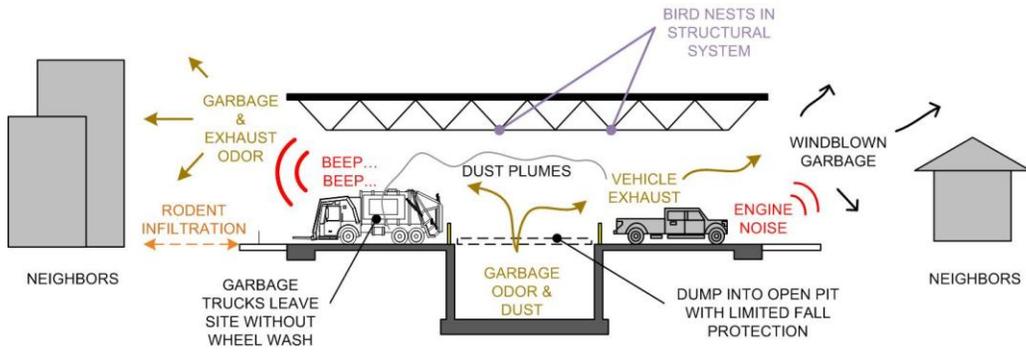
Vector Controls

Using active vector controls such as bird-wiring at roofs to prevent perching on the structure, ultrasonic deterrents or air cannons, baiting rodents, using rigid insulation within walls instead of batt to prevent nesting, and by closing the building at the end of each day, the modern transfer station is less attractive to wildlife. It is unlikely that all vectors will be deterred and the City will need to test different deterrent methods through a period of trial and error. However, by enclosing the transfer building, tarping parked transfer trailers, following a regular full top-load trailer collection schedule, and by acting at the start of vector intrusion (bees, birds) before colony nesting, the vector intrusion can be minimized.

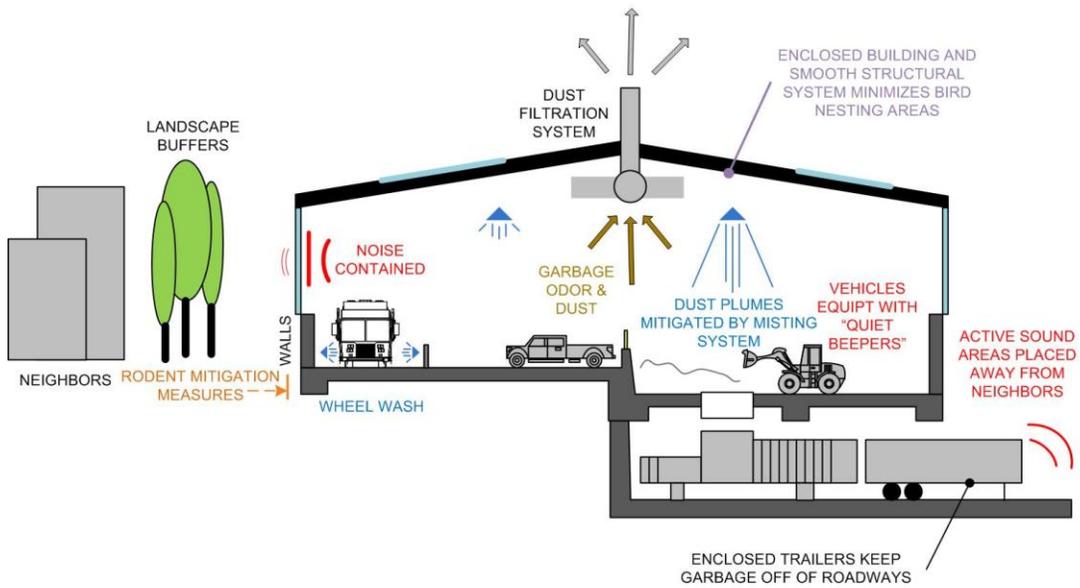
Site Development

Improving the building orientation, where large access doors do not open onto neighboring properties, depressing high-activity areas to prevent noise infiltration, and built-up landscaping berms can all help to reduce operations noise within the neighborhood.

Open Air vs. Modern Transfer Station Comparison



OPEN SIDED CANOPY TRANSFER STATIONS
CIRCA 1960-1990



MODERN, ENCLOSED TRANSFER STATIONS
CURRENT

KPG

2.10 Educational Elements

The project does have a public education component, the City currently maintains an existing educational program entitled “*Puget Sound Starts Here*” including sustainable educational components and materials. This program implements a *Reduce, Reuse, Recycle* and contains FAQ portion on the City of Oak Harbor website. The City has an Environmental Educator and this person is and will continue to promote recycling.

2.11 New Vehicles and Equipment Needed for the Transfer Station

- **Wheeled Loader:** The City would like a new wheeled loader configured for solid waste handling, specifically for the transfer station operations.
- **Baler:** The City would like a new co-mingled recyclables baler
- **Forklift:** A forklift to organize and store baled materials
- **Yard goat/mule:** A single yard goat for maneuvering full and empty containers
- **Tamping equipment:** A single, knuckle-boom type of unit with clawed material tamper attachment
- **Load Containers:** The City will contract for the removal of solid waste and recycling from the site. Container trailers will be provided by the contracted entity. Design flexibility will be needed to allow trailers from 30-feet in length to 48-feet in length to be maneuvered on site.
- **Vehicle Scale(s)**

2.12 Transfer Station Operator Facility

The following elements should be provided within the Transfer Station Operator Facility:

Supervisor Office: A closed door office for one (1) full-time supervisor

Break Area (Kitchenette): Provide a kitchenette with a hot-plate, coffee maker, and microwave. Provide purified water, cabinets and countertops. Movable tables and chairs for seating. Break area to serve as a multi-purpose meeting space with TSO lockers, and laundry deliver/storage space.

Mudroom: Provide a walk-through mudroom with coat hooks and boot warmers. A sink for washing hands and a location for a washer/dryer combination unit.

Unisex Restroom/Changing Room: A changing area will be accommodated within the single unisex restroom configuration. Lockers for workers will be provided in the breakroom area.

Custodial: Provide one combined custodial/general storage room for cleaning within conditioned spaces.



2.13 Facility Phasing

A location for the new Transfer Station has not yet been selected by the city. During construction and after the facility has opened, the City would like to limit the off-site improvements affecting roadways or traffic outside of the existing facility property lines. Being a new facility, the entire transfer station could be constructed in one phase.

Part 3 – Building Schematic Design

The design of a heavy-use industrial transfer station for the City of Oak Harbor should include the following key considerations. The building and finishes should be designed for a municipal 30-year service life; the structure should utilize high strength wear resistant materials; be coated with industrial strength anti-corrosive media; consider vehicle movements and access to prevent building damage and be considerate of the environment.

As an industrial building type, Solid Waste Transfer Stations need particular care and attention to detail pertaining to the nature of the waste discharged onto surfaces, the vehicles driving over surfaces, and the collection of LEACHATE wet media that can accumulate in floor drains. Sewer collection and water quality are additional considerations.

3.1 Site Program Areas

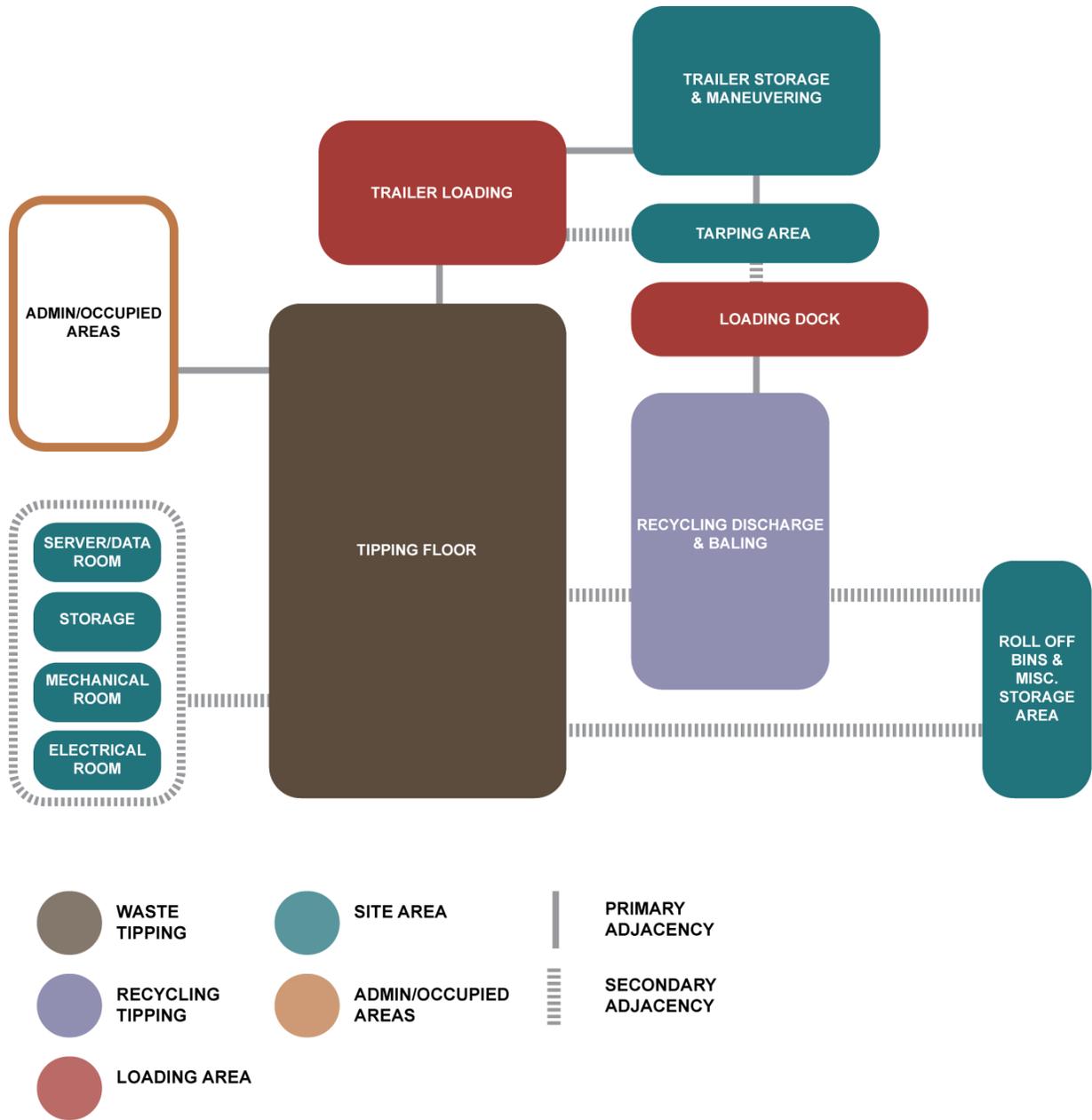
Site areas shown below are approximate and do not reflect the overall maneuvering area needed for access to and from each area.

City of Oak Harbor Transfer Station - Site				
Element	Function	Dimensions (Feet)	Associated Spaces	Special Considerations
Scale, Transfer Station	Weighing tamped topload containers	10 x 60	Trailer Storage Yard, Tipping Floor	Mount & dismount clearances needed
Roll off bin/misc. storage area	Storage for (4) roll-off bins	48 x 22	Trailer Storage Yard	Four spaces at 12-feet wide x 20 feet long
HHW Storage	Enclosed bin outside of area	10 x 20	Tipping Floor	Outside of building, self contained roll off cabinet.
TSO and Visitor Parking	(8) Spaces, (1) ADA Accessible	80 x 18, ADA 14 x 18	Transfer Station Operations	Located near primary building entry
Collection Vehicle Parking	(6) Collection Trucks, (2) Overhead Collection Trucks, (1) Roll-off Box Truck	108 x 25	Transfer Station Operations	Provide basic maneuvering back-in access for parking areas
Trailer Storage Yard	(2) Empty Trailers and (4) Full Trailers	72 x 50	Trailer Loading	Provide basic maneuvering back-in access for parking areas

3.2 Building Program Spaces

Building areas shown below are approximate starting dimensions to begin building conceptual plans. Actual configurations on plans shown within this document may vary slightly.

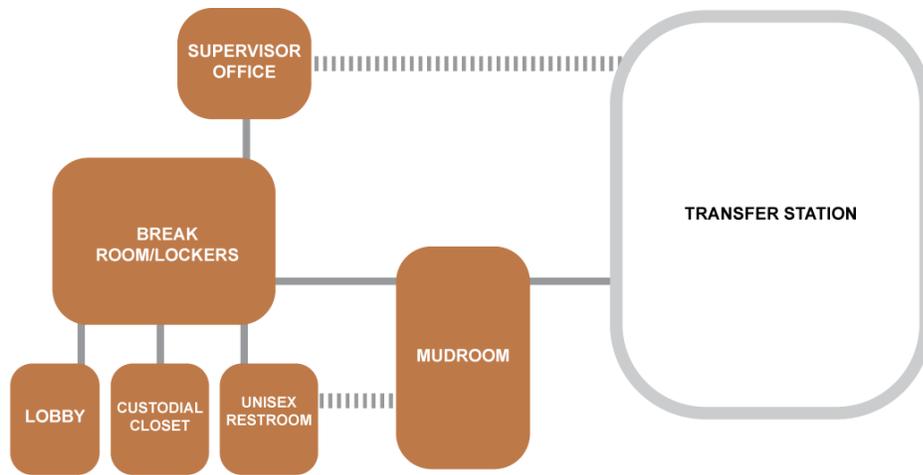
City of Oak Harbor Transfer Station - Tipping Spaces, Enclosed					
Space	Function	Generic Dimensions	Associated Spaces	Special Considerations	
Tipping Floor	Garbage Discharge Area	100 x 60 x 30 High	Baler & Recycling	Clearance needed for tipping vehicle 29-foot tall, Two Tipping Stalls	
Trailer Loading	Depressed Top-Load Trailer Area	50 x 30 x 30 High	Tipping Floor	Maneuverability for trailer loading.	
Recycling	Discharge and Baling of Co-mingled Recyclables	30 x 80 x 25 High	No Adjacency	Separate area for recyclables discharge, stockpile and access to baler.	
Loading Dock	Loading Baled Recyclables	15 x 60 x 15 High	Baler & Recycling	Accommodate a 45' long haul vehicle	
Electrical Room	Building Electrical Systems, including TSO areas	10 x 12 x 10 High	Transfer building or TSO building	Exterior Access	
Mechanical Room	Building mechanical systems & sprinkler riser room, including TSO areas	12 x 15 x 10 High	Transfer building or TSO building	HVAC equipment for building ventilation and TSO areas	
Storage	General Building Storage	17 x 15 x 10 High	Tipping Floor	Heavy duty movable metal shelving, exterior access roll-up door. Stores shovels, cones, signs, hoses, brooms, roll-off container maintenance parts	
Transfer Station Operations (TSO) - Enclosed, Conditioned					
Space	Function	Dimensions (Feet)	Associated Spaces	Special Considerations	
Supervisor Office	Operations Supervisor	10 x 12 x 9 High	Break Room	Desk, chair, computer, small table, bookshelves, tackboard, printer, file cabinets, marker board, route map area	
Break Room/Lockers/Clean Uniforms	Meetings & Break Room - 6 Operators, 1 Supervisor, 1 Misc	15 x 20 x 9 High	Locker Rooms, Toilet Rooms	Large Refrigerator, Microwave, Sink, Tackboard, Markerboard, Collection Area Map, Television, Desk with computer, Coffee maker, Purified water, Uniform hangers, Double-Wide Lockers	
Toilet Room - Unisex	Occupants: 6 Operators, 1 Supervisor, 1 Misc, TOTAL: 8. Number of Urinals: 1, Number of Water Closets: 1, Number of Sinks: 1, Number of Showers: 0 (owner prefers no shower)	8 x 10 x 9 High	Locker Room - Men, ADA Accessible	ADA Accessible, bench, uniform hooks for changing	
Custodial Closet	Toiletries, kitchen cleaning, mops, mop sink	8 x 8 x 9 High	Break Room, Toilet Rooms	Movable metal shelving, mop sink, floor drain	
Server Room	Small server rack	8 x 6 x 9 High	Supervisor Office		
Mudroom	Coat Hooks, uniform storage, safety vests, hard hats, soiled uniform bin, boot warmers, boot sink, handwash sink, walkoff mats, washing machine & dryer unit	12x 20 x 9 High	Break Room, Tipping Floor	Coat hooks, movable metal shelving, movable benches, boot warmers, walkoff mats	



CITY OF OAK HARBOR
Solid Waste Planning Program

Transfer Station Building
Adjacencies





CITY OF OAK HARBOR
Solid Waste Planning Program

Transfer Station Operations Building
Adjacencies



3.5 Schematic Floor Plan – Transfer Station

The Schematic Floor Plan depicted is meant to provide an optimized plan for cost estimating purposes utilizing the project program information found in Part 2 and this section of the Solid Waste Planning Program document. The facility operates with two (2) separated collection areas. This relieves concerns about having recyclables mixing with solid waste and becoming contaminated. This also allows for expansion of both garbage functions and recycling functions independently in the future. The design provides toplevel access by both garbage and recyclables in the event the recyclables baler is not needed. Recoverable materials from the Transfer Garbage Operation can be carried by loader outside of the building to the Recyclables area, placed into bins on the tipping floor and carted to the Recyclables area or they can be lifted over the toplevel chute using the knuckleboom crane with pincher attachment.

Transfer Garbage Operation

The schematic floor plan below depicts a flat floor transfer station with a push-to-dump toplevel trailer configuration. The toplevel trailer is located in a recessed floor area and materials are pushed into the toplevel container by a loader. A knuckleboom crane operating on a central pivoting axis at the middle of the toplevel opening sorts and tamps the waste material. The size of the tipping floor depicted allows up to four (4) collection vehicle discharges (approximately 32 tons) before the floor needs to be cleared into the load container. A 48-foot toplevel container will accommodate up to three (3) tamped haul vehicle discharges.

Recyclables Operation

The recyclables configuration below allows for a maximum of two (2) mixed materials discharges on the floor prior to lifting into the hopper of a baler. A loading dock is adjacent to the recyclables area allowing for the loading of bales into an empty container rather than stockpiling baled recyclables within the building. This approach preserves building floor space. Additionally, if needed, a recycling toplevel container could be parked in the toplevel bay instead of a garbage long haul trailer to allow for dump over a short pushwall into the toplevel container.

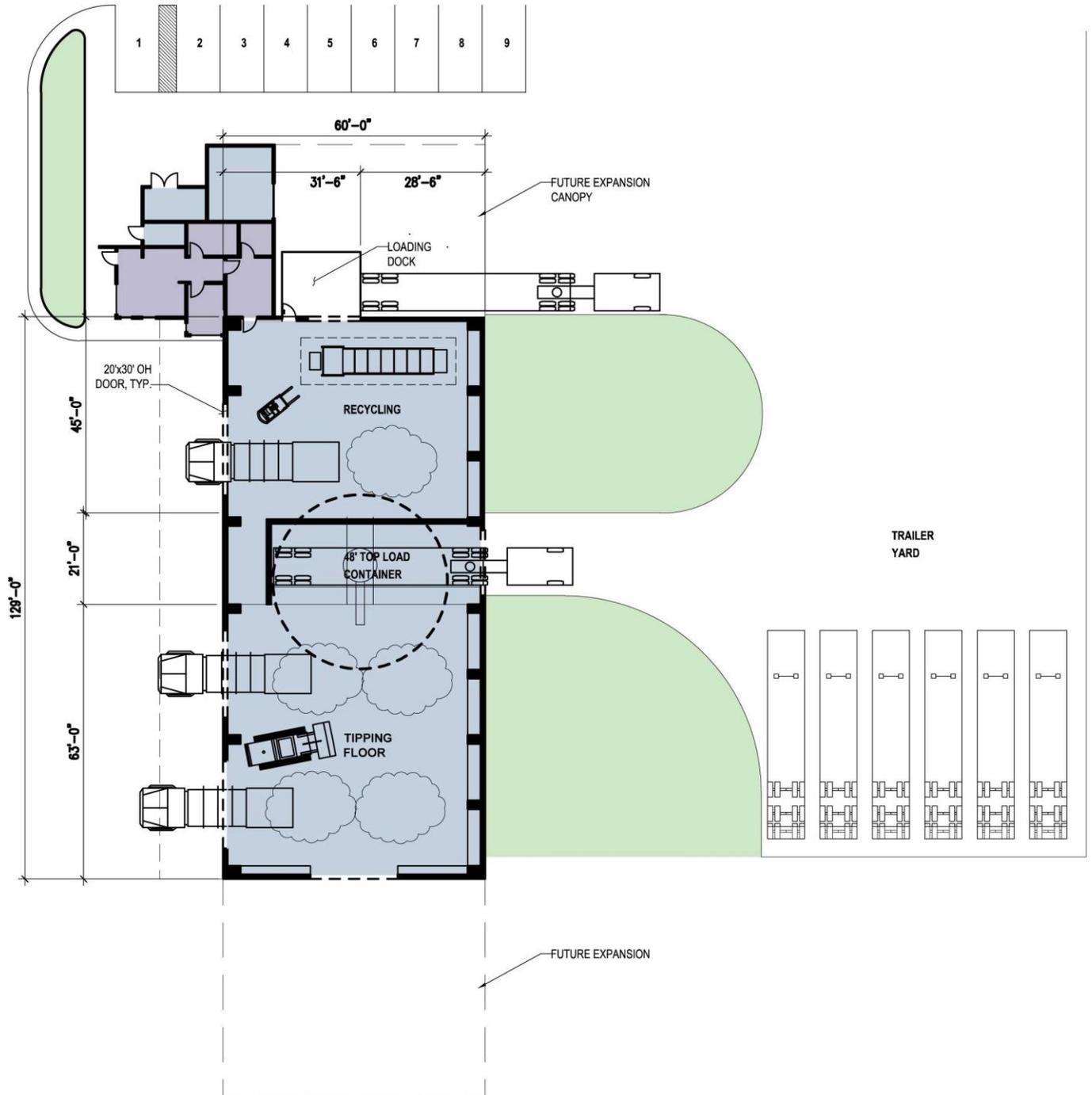
Future Expansion

Future expansion of the structural framing is accommodated in the long building direction. In the shown configuration both recycling and garbage areas can be expanded to allow for more floor discharge area.

Safety

Hot-load area with oil-water separator outside of the tipping floor, emergency eye washes at garbage, recycling, and toplevel areas. Provide fire extinguishing equipment. High pressure washdown hoses will also help keep the floors clear of debris.

3.5 Schematic Floor Plan – Transfer Station, Continued

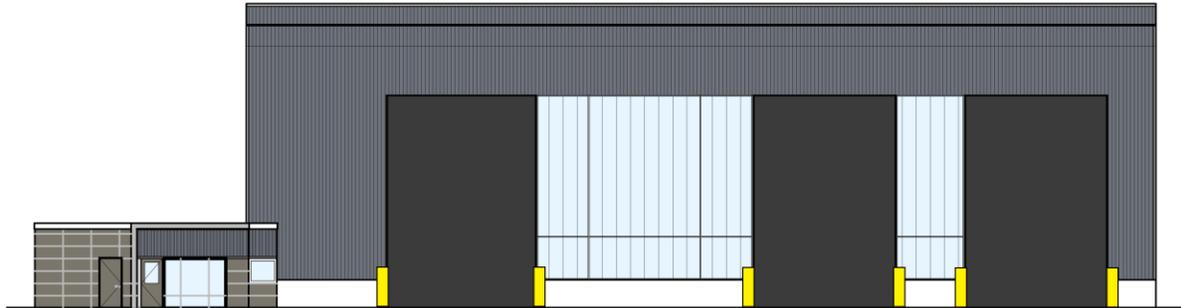


3.6 Schematic Floor Plan – Transfer Station Operations Building (TSO)

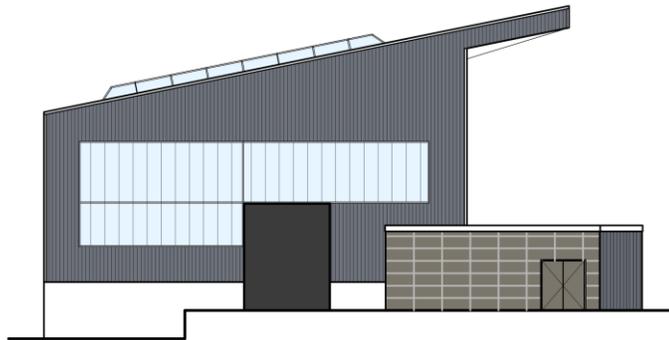
The graphic below depicts a compact and useful TSO building with elements from the building program listed in Part 2 of this Solid Waste Planning Program. Design features include: a combined break room with a small kitchenette, refrigerator and lockers, a unisex toilet room/changing room with changing bench, a mudroom with coat hooks, bench and boot warmers, and a supervisor office with view of operations areas. The electrical room, mechanical room, and storage areas serve functions for both the Transfer Station and Transfer Station Operations Building.



3.7 Schematic Building Elevations

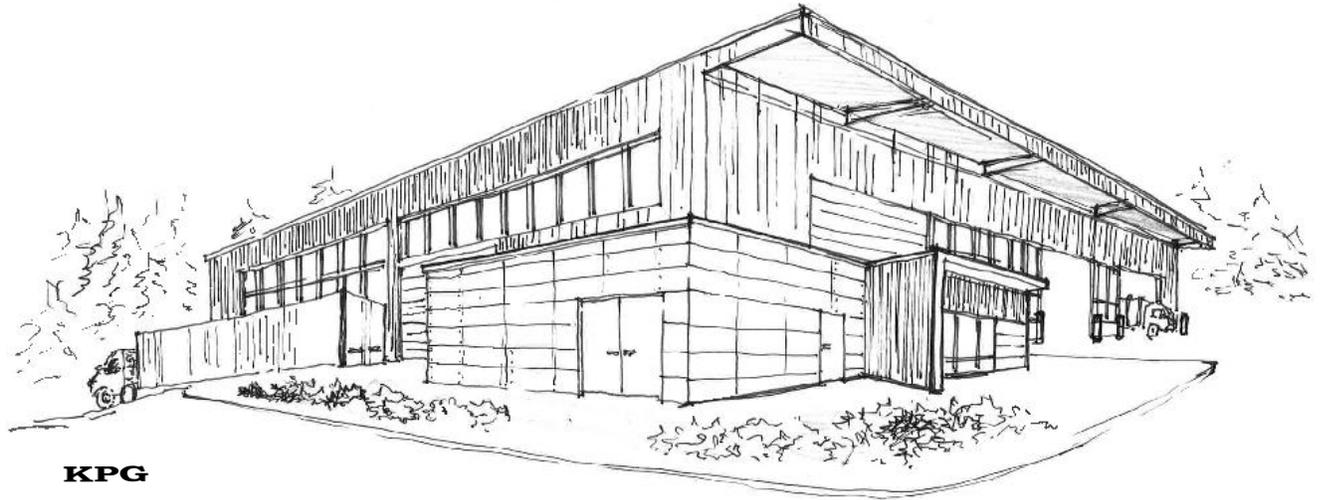


Above: Building elevation with 30-foot high overhead doors allowing vehicles to tip while partially outside of the building, minimizing building footprint. Materials depicted include: standing seam metal siding panels, semi-translucent daylight panels, breakaway overhead doors, and concrete.



Above: Building elevation depicting loading dock area.

3.9 Artists Concept Rendering



Above: Artist conceptual rendering of schematic building design

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Part 4 – Material Considerations

This section describes the material considerations needed when designing solid waste transfer stations to meet the needs of the City for 30-years . Primary considerations when designing transfer stations include the balance of durable long lasting materials with cost. Transfer stations as an industrial building type need to be constructed of materials that resist vehicular damage in high wear areas, resists damage from garbage that contains highly acidic, dusty, and wet elements, resists damage from the garbage itself, and is washable on a daily basis with water. Occupied spaces for a supervisor and break areas should be constructed using durable materials resistant to damage and moisture.

4.1 Transfer Station Building Materials, Unconditioned Spaces

- Pre-Engineered steel frames with high-durability industrial coatings
- High strength concrete flooring, depth of 12” for wear resistance
- High strength concrete pushwalls, thickness of 12”
- Metal siding & roofing
- Condensate insulation at roof, no insulation at walls
- Semi-translucent daylighting panels at walls and roof
- Protective finishes such as wearable emery topping at very high-wear floor areas (top load area) or embedded rails
- Overhead doors, breakaway type using rubber or composite materials
- Oversize door protection elements (48” height, large diameter bollards)
- Metal personnel entry/exit doors

4.2 Transfer Station Operations Materials, Conditioned Spaces (TSO Operations Spaces)

Rain-screen building envelope designed for the pacific northwest climate allowing a vapor barrier to be placed such as to avoid condensation within interior wall cavities

- Rigid insulation (minimizes vector nesting)
- Light gauge metal framing
- Gypsum wallboard
- Concrete flooring
- Metal siding
- Membrane roofing
- Storefront entry

4.3 Site Elements

- Stormwater collection/detention
- Sewage collection
- Hot-load areas
- Trailer maneuvering areas
- Trailer parking areas
- Haul-vehicle discharge areas: asphalt paving surfaces draining to leachate containment at building perimeter and storm drains at parking areas.
- Stairways using concrete at exterior spaces
- Lighting for security, with cutoff fixtures preventing night-sky pollution

Part 5 – Equipment

The City currently wholly owns and operates all of the curbside garbage, roll-off container, and recycling collection vehicles that will be discharging within the Transfer Building. The vehicles are maintained as part of the City’s fleet and serviced at the Public Works Facility property. Vehicles are cleaned in the existing truck-wash booth daily and parked. The City constantly evaluates the condition of vehicles and plans to purchase a new vehicle to replace the most damaged inventory approximately every 7 to 10 years.

The City does not currently own any Solid Waste vehicles other than garbage, roll-off, and recycling collection trucks that will be used for the transfer station. The tables within this section list each piece of equipment that is anticipated at the new transfer station, including existing equipment, along with basic parameters for maneuvering. The equipment not listed as Existing would be procured under separate City vendor contracts. Actual performance requirements are yet to be determined by the City.

5.1 Existing Wheeled Hauling Equipment

The following matrix is a list of vehicles currently owned, operated and maintained by the City of Oak Harbor as part of their curbside solid waste collection services.



Pictured above is the solid waste vehicle parking area at the City’s Public Works Facility

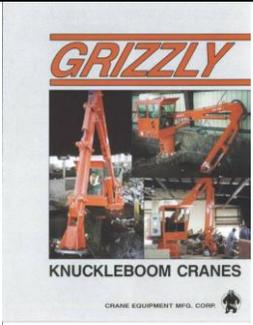
Existing Wheeled Hauling Equipment List

Vehicle Type	Operation	Quantity	Overhead Clearance Needed	Turning Radius
	Collection Truck	Forward Overhead Lift	3	25-Feet when tipping 50-Feet Interior
	Collection Truck	Rear Discharge	6	25-Feet when tipping 50-Feet Interior
	Roll-Off Box Truck	Lift gate, rear load/unload	1	25-Feet when tipping 50-Feet Interior
	Parks Truck	Six yard capacity truck	1	20-Feet 40-Feet Interior

5.2 New Vehicles and Equipment Needed for the Transfer Station

- Wheeled Loader: The City would like a new wheeled loader configured for solid waste handling, specifically for the transfer station operations.
- Baler: The City would like a new co-mingled recyclables baler.
- Forklift: A forklift to organize and store baled materials.
- Yard goat/mule: A single yard goat for maneuvering full and empty containers.
- Tamping equipment: A single, knuckle-boom type of unit with clawed material tamper attachment.
- Load Containers: The City will contract for the removal of solid waste and recycling from the site. Container trailers will be provided by the contracted entity. Design flexibility will be needed to allow trailers from 30-feet in length to 48-feet in length to be maneuvered on site.

The new equipment listed below and depicted in images is meant for reference use when describing elements within the project program. Use of proprietary equipment names does not reflect an endorsement by the Consultant for one particular product over another. Actual equipment selection is not provided within this document.

New Vehicles Needed						
Vehicle Type		Operation				
Wheeled Loader, Solid Waste Package		Garbage tipping & maneuvering				
Wheeled Loader, Solid Waste Package		Recycling material dump to baler				
Forklift		Sorting and stacking of baled recyclables				
Yard Goat/Mule		Maneuvering of empty and full haul trailers				
Tracked Backhoe with pincher attachment		Sorting and loading of recyclables into hopper				
New Compaction & Sorting Equipment Needed						
Equipment Type		Operation	Quantity	Overhead Clearance Needed	Turning Radius	
		Knuckle-boom crane	Hydraulic tamping mechanism bridged over trailers.	1	20-Feet	20-Feet
		Baler	Mixed recyclables baler, hydraulic operation, single-bale capacity, hopper load	1	20-Feet	None, needs access clearance at hopper and discharge
		Vehicle Scale	40-Foot Weighing Garbage Trucks & Full Trailers	1	15-Feet	NA

Part 6 – Environmental Stewardship

6.1 Sustainability

The City of Oak Harbor does not currently have a United States Green Building Council (USGBC) LEED requirement for public projects. The transfer station project is encouraged to take water and energy conservation measures where appropriate. Elements such as natural ventilation, daylighting, energy efficient light fixtures and low-flow water fixtures are basic, straightforward strategies to improve overall building performance. Amenities such as stormwater collection and infiltration minimizing underground infrastructure could be utilized if the site geotechnical analysis allows.

6.2 Strategies

There are numerous strategies and approaches to sustainable design and environmental stewardship. In the case of a new Transfer Station for the City, the following steps can be implemented through drawings, specifications, and construction providing a positive impact on the overall performance of the transfer station with direct improvements to long-term operations and maintenance costs. The strategies below have been tailored by the consultant team specifically relating to the Oak Harbor Transfer Station. The majority of elements listed have the ability to significantly lower operating costs, however, the greatest operating cost savings is contributed by energy consumption. To achieve the maximum energy conservation, a baseline energy budget model would need to be evaluated against the final project design.

Glazing

Using low-energy, insulated glazing will reduce energy loss through windows at conditioned spaces.

Heating & Cooling

At occupied conditioned spaces a concrete-radiant hydronic pump heating & cooling system is recommended. The use of a hydronic system can save 15%-25% of energy consumed over a traditional air-duct HVAC system.



Above: Example of a transfer station with semi-translucent panels achieving daylighting levels of 60-footcandles at the floor and zoned, light sensors. Notice very few lights need to be turned on.

Daylighting, Transfer Station

Provide daylighting at the Tipping Floor, Recycling, and Trailer loading areas through the use of semi-translucent, low glare panels. The combination of semi-translucent panels to solid area should be 10% minimum and up to 20% in roof areas, and up to 50% of wall areas. The goal is to provide an even light distribution at work areas with few shadows or dark zones. Light levels can range from 30-footcandles to 60-footcandles as a minimum range. Connect overhead electrical lighting to sensors preventing lights from turning on when daylighting levels are adequate. *The use of daylighting also minimizes the experience of unsafe black-out vision experienced by vehicle drivers when entering a building with significantly lower light levels than the outside.*

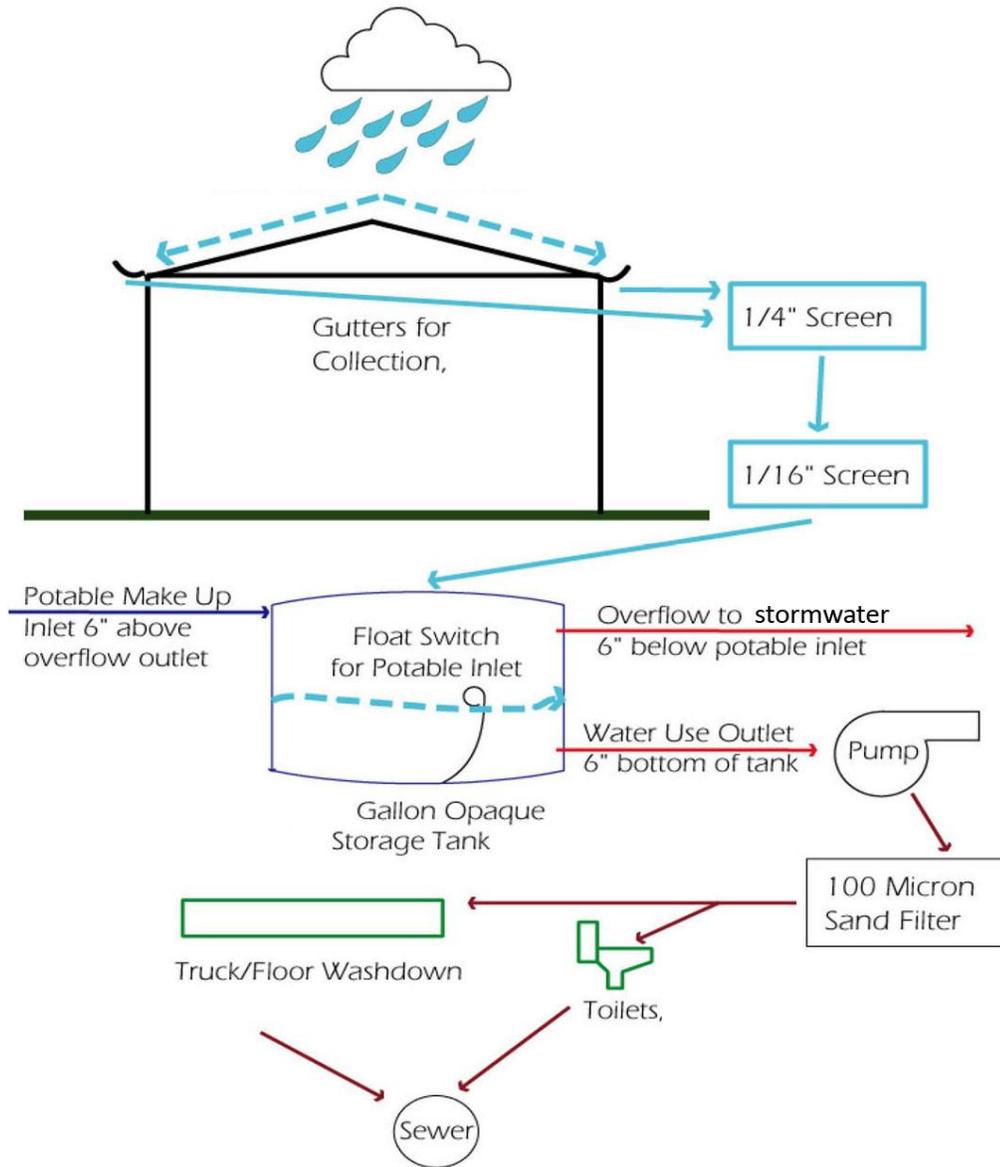
Daylighting, Office Areas

Provide adequate daylighting to the equivalent of 60-footcandles at workspaces and break areas, include lighting sensors to only turn on when light levels are low.

Water Collection & Consumption for Transfer Station

Collecting rainwater from roof surfaces in a cistern for use with washdown hoses and flushing toilets minimizes the stormwater processing needs of the overall site. Although the rainwater collected at a small scale facility may seem minimal, the water savings do contribute to the overall reduction in potable water use and ultimately contribute to reduced facility operations costs.

Sample Rainwater Distribution Diagram



Example Rainwater Practical Use Application

Transfer Station with an 8,000-square foot roof, located within the City of Oak Harbor (*Rainfall Data below provided by <http://www.weather.com>*)

Daily washdown cleaning procedure includes use of two (2) pressurized 30-gallon per minute (GPM) hoses run for ten (10) minutes at the end of each workday: $(30 \times 2) \times 10 \text{ minutes} = \mathbf{600 \text{ gallons of water needed to clean daily}}$.

Oak Harbor Rainfall by Month (provided by weather.com)



October to March Rainfall Total Average: 13.78 inches (1.15ft)

$$(1.15\text{ft}) \times 8,000 \text{ sf} = 9,200 \text{ cf}$$

$$9,200\text{cf} \times 7.48 \text{ gallons/cf} = 68,820 \text{ gallons}$$

$$68,820 \text{ gallons} / 130 \text{ working days} = 529 \text{ gallons per day, available average}$$

April to September Rainfall Total Average: 7.73 inches (.644ft)

$$(.644\text{ft}) \times 8,000 \text{ sf} = 5,152 \text{ cf}$$

$$5,152 \text{ cf} \times 7.48 \text{ gallons/cf} = 38,539 \text{ gallons}$$

$$38,539 \text{ gallons} / 130 \text{ working days} = 297 \text{ gallons per day, available average}$$

Conclusion, Using Rainwater

Wet months average: **88% savings in potable water consumption**

Dry months average: **49% savings in potable water consumption**

Annual potable water savings: 68%

Water Conservation, Office Areas

Provide low-flow, 1.0 gallon per flush toilet and .5 gallon per flush urinal fixtures and aerated sinks with auto-on/off sensors. Annual savings of 30% potable water consumption within occupied spaces can be achieved by using low-flow fixtures.

Construction Waste Management

Implement a Construction Waste Management plan to be used during the construction of the transfer station. An estimated 75%-95% of construction waste can be diverted from landfill during the construction of a transfer station.

Stormwater Retention & Infiltration

Reduce impacts on stormwater drainage by providing on-site retention or infiltration facilities. The large impervious surfaces needed to operate heavy equipment at a transfer station limit site infiltration. If possible, provide opportunities for stormwater infiltration to alleviate the impacts on stormwater infrastructure at the transfer station.

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Part 7 – Cost Estimate

The following information represents a Capitol Cost calculation for the Transfer Station programmatic spaces included within this document. This calculation utilizes a comparative cost from **Appendix A1.1 Case Study #1 – Skagit County Transfer and Recycling Station**. The Case Study cost estimate methodology is used because of the close proximity of buildings, direct similarities between building type, construction methods, traditional procurement method, and recent completion of the project.

7.1 Special Considerations - Cost Estimate

New Transfer Building Construction Timeframe

Estimated at twelve (12) Months, beginning in 2014. Following a Design phase of ten (10) months, procuring funds, and bid documentation development.

Annual Inflation Cost Increase Multiplier

The following inflation increases are expected: 2013 x 1.029 (2.9% increase) & 2014 x 1.03 (3% increase)

Note: Annual Inflation Increase Multiplier generated from Engineering News Record Data as of September 11, 2012 using Cost Index History Tables

Site Selection

At the time of this document production the City has not yet selected a project site. For the purposes of this cost estimate, a variable Allowance was used to calculate site development costs based upon the recently constructed Skagit County Transfer & Recycling Station. The Oak Harbor Transfer Station programmed within this document is approximately 30% of the square footage as the Skagit Facility. A range taking into account the known cost of the Skagit facility was used to develop the site allowance. However, site development is the least predictable element as part of this cost estimate. Therefore utilities costs, earthwork costs, drainage costs, and roadways are the largest variable items within this estimate.

Contingency

A contingency of 20% has been used to account for changes in square footage, program alterations, design alteration, bid climate, and material changes unforeseen at the time of this estimate.

Disclaimer

The Cost Estimate included within this document is for reference purposes and is not intended to provide accurate bid-climate data. The actual bid-climate conditions and square footage assumptions are likely to change during the course of building design.

The Program Cost Estimate Excludes:

- *Land Purchase*
- *Project Management*
- *Design & Engineering*
- *Permitting*
- *Bid Phase Elements*
- *Construction Management*
- *Equipment (See list under 7.3 Excluded Equipment)*
- *Movable Furniture*
- *Movable appliances*

7.2 Cost Estimate (Program)

Site		
	Site Allowance	Square Feet
	Site Development Area, Construction Boundary, Approximate.	Under 3-Acres
Total Sitework Allowance - Cost does not include land purchase. Cost allowance range accounts for unknown variables including but not limited to: site location, infrastructure improvements, utilities, geology, soils, excavation, grubbing and clearing.		\$400,000-\$700,000
Transfer Station – Enclosed, Ventilated, Unheated		
	Tipping Floor	3780-sf
	Top Load	1260-sf
	Recycling	2700-sf
	Electrical Room/Server Room	120-sf
	Mechanical Room	80-sf
	Storage	262-sf
Subtotal SF		8,202-sf
Cost Per SF (2014)		\$ 90
Total Estimate		\$738,180
Transfer Station Operations (TSO) - Enclosed, Conditioned		
	Supervisor Office	108-sf
	Break Room/Lockers/Clean Uniforms	256-sf
	Toilet Room - Unisex	96-sf
	Custodial Closet	64-sf
	Mudroom	168-sf
	Hallway	54-sf
Subtotal		746-sf

Cost Per SF (2014):	\$240
Total Estimate:	\$179,040
Building Program Totals, Construction	
Total Site Allowance	\$400,000-\$700,000
Total Transfer Station – Enclosed, Ventilated, Unheated	\$738,180
Total Transfer Station Operations – Enclosed, Conditioned	\$179,040
Subtotal	\$1,317,220- \$1,617,220
Contingency Multiplier	20%
Total Capital Cost Estimate (Range)	\$1,580,664 - \$1,940,664

7.3 Excluded Equipment

The following is a list of equipment considered during the programming effort when programming the facility dimension. The equipment would be necessary to the function of the transfer station. See also information under Part 5- Equipment.

- Medium Wheeled Loader with Solid Waste package, Garbage Operations
- Small Wheeled Loader with Solid Waste package, Recycling Operations
- Forklift
- Baler
- Yard Goat/Mule
- Top-load trailers 40'-feet to 55'-feet in length (provided by contracted waste removal agency)
- Knuckleboom Crane
- Scale(s)

Part 8 – Applicable Codes, Guidelines, & Permits

8.1 Permitting

In this Section, the statutory and regulatory requirements pertaining specifically to this project are summarized. The specific permits required will vary to some degree depending on the specific site selected.

- Statutory and regulatory requirements may be grouped into the following general categories:
- Solid Waste Handling Regulations and Approvals
- Environmental Regulations and Approvals
- Land Use Codes
- Building and Construction Standards
- Worker Safety Requirements
- Accessibility Standards

8.2 Solid Waste Handling Regulations and Approvals

Although the Washington State Department of Ecology (DOE) establishes minimum standards for solid waste handling, local jurisdictional health departments issue permits for solid waste facilities and enforce standards that meet or exceed the “minimum” DOE standards.

The local jurisdictional health department with permitting authority for this project is Island County Public Health (ICPH) which administers the Island County Code (ICC) Chapter 8.08A Solid Waste Regulations. A permit will be required from ICPH for operation of the new transfer station. DOE will review the application and make a recommendation to ICPH, which will make the final determination on issuance of the permit. In addition to evaluating the proposal for conformance with the requirements of ICC Chapter 8.08A, ICPH will also consider whether the proposal is in accord with the Island County Comprehensive Solid Waste Management Plan.

8.3 Environmental Regulations and Approvals

Environmental regulatory and approval requirements are triggered by two general factors:

- Site-related factors, such as the presence of wetlands, location of the site in a protected watershed or proximity to a protected shoreline.
- Project-related factors, such as traffic and noise generation.

State Environmental Protection Act (SEPA)

Comprehensive environmental review of the project will take place under provisions of the Washington State Environmental Policy Act (SEPA). The lead agency for the review has not yet been determined. An Environmental Impact Statement is not anticipated at this time – the review will most likely be conducted by means of an expanded SEPA Checklist.

Critical Area Review

Island County has adopted ICC Chapter 17.02, the Island County Critical Areas Ordinance (CAO) in compliance with the Washington State Growth Management Act. The CAO is designed to protect environmentally sensitive areas such as:

- Wetlands
- Fish & Wildlife Habitat Conservation Areas
- Geologically Hazardous Areas
- Frequently Flooded Areas
- Critical Aquifer Recharge Areas
- Agricultural Areas

Development activities proposed within a critical area or critical area buffer are reviewed for:

- Consistency with the purpose and standards of the CAO.
- Identification and implementation of mitigating measures to protect critical area function, as well as to safeguard public health, safety and welfare.

If a proposed site for the new transfer facility is within or proximate to a critical area, a Critical Area Review will be conducted by Island County Planning and Community Development.

Surface Water Quality Regulations

Design of the project site surface water system will be required to meet the requirements and be permitted under provision of the City of Oak Harbor Stormwater Management Program.

8.4 Land Use Codes

The transfer station project will be required to comply with at least the following land use regulations enforced by the City of Oak Harbor:

Zoning Ordinance (Title 19)

The City's Zoning Ordinance is contained in Title 19 of the Oak Harbor Municipal Code. This ordinance contains three types of regulations:

Zoning

A description of each zone and the allowed, prohibited and conditional uses within the zone.

Development Regulations

Development requirements for non-conforming uses, parking, landscaping, signs, and essential public facilities.

Administrative Provisions

Requirements for processing planned residential developments, home occupations, temporary use permits, site plan review, variances, conditional uses, zoning map amendments, and zoning text amendments.

Shoreline Master Program (SMP)

If the proposed transfer station site falls within an area 200 feet landward of the ordinary high water mark (OHM) of a protected shoreline, it will be required to comply with the provisions of the City of Oak Harbor Shoreline Master Program (SMP). This program places limits on uses, establishes development standards and outlines a permit process for the purpose of protecting the environment, preserving public access and promoting economic development within the shoreline area.

Design Regulations and Guidelines (DRGs)

The City of Oak Harbor Design Regulations and Guidelines are standards which apply to development of all commercial, industrial, public facility or multi-family residential uses. The intent of the DRGs is to direct the look and function by regulating the aesthetic aspects of such elements as the building façade and materials, landscaping areas, parking areas and utilities.

8.5 Building and Construction Standards

The City of Oak Harbor Building Division currently utilizes the following National Codes, Washington State Building Code Amendments, Oak Harbor Municipal Codes – Building and Construction, additional Oak Harbor Regulations and NFPA Standards.

National Codes:

- 2009 International Building Code
- 2009 International Residential Code
- 2009 International Fire Code
- 2009 International Mechanical Code
- 2009 International Fuel Gas Code
- 2009 Uniform Plumbing Code and Plumbing Standards
- 2006 International Property Maintenance Code
- 2008 National Electrical Code
- Accessible and Usable Buildings and Facilities (ICC/ANSI 117.1)
- 2009 International Existing Building Code

Washington State Amendments:

- WAC 51-50 2006 IBC Amendments
- WAC 51-51 2006 IRC Amendments
- WAC 51-52 2006 IMC, IFGC & NFGC Amendments
- WAC 51-54 2006 IFC Amendments
- WAC 51-56 & WAC 51-57 2006 UPC Amendments
- WAC 51-11 2006 Washington State Energy Code

National Fire Protection Association (NFPA) Standards:

- 1999 NFPA 13 Standard for the Installation of Sprinkler System
- 1999 NFPA 20 Standard for the Installation of Stationary Fire Pumps for Fire Protection
- 1999 NFPA 72 National Fire Alarm Code

- 2000 NFPA 101 Life Safety Code
- 2002 NFPA 110 Standard for Emergency and Standby Power Systems

The next scheduled code revision is anticipated on July 1st, 2013, when the 2012 edition of the International Building Code and associated model codes will be adopted. The Washington State Energy Code is also expected to be revised at this time.

The City of Oak Harbor Building Division will review construction plans and issue a building permit for new structures or the alteration of existing structures on the project site. The Oak Harbor Fire Marshal's office will also conduct a concurrent review the of construction plans.

8.6 Worker Safety Requirements

In Washington State, the worker safety regulations prescribed by the Federal Occupational Safety and Health Administration are superceded by the Washington Industrial Safety and Health Act (WISHA), Chapter 49.17 RCW, and associated rules promulgated by the Department of Labor & Industries (L&I) in Chapter 296 WAC.

The Washington State Department of Labor & Industries (L&I) administers and enforces the state workplace safety and health program. Although L&I will not review the construction plans, the applicable provisions of WISHA must be taken into account during the design process and development of the operations plan.

8.7 Accessibility Standards

Design and construction standards for facilitating accessibility to buildings and facilities by individuals with disabilities derive from two sources: codes and civil rights legislation. Code-mandated standards are incorporated into building and construction codes. Civil rights-mandated standards are derived from the Federal Americans with Disabilities Act (ADA) of 1990, and promulgated through published guidelines. Code-mandated requirements are subject to review and approval during the building permit process; accessibility measures taken in response to ADA guidelines are not subject to permit review and approval, but failure to comply with the guidelines may subject a building owner to legal liability.

Standards Agencies

United States Access Board

The United States Access Board publishes the 'ADA Accessibility Guidelines for Buildings and Facilities' (ADAAG) which sets forth recommendations for protecting the accessibility rights for individuals with disabilities under the Federal Americans with Disabilities Act (ADA) of 1990.

American National Standards Institute (ANSI)

In 1959, the President's Committee on Employment of the Physically Handicapped and the National Society for Crippled Children co-sponsored the development of ANSI A117.1 – Standard on Accessible and Usable Buildings and Facilities, the first national standard for accessibility.

While ANSI A117.1 is a voluntary standard, it has been adopted as an enforceable code by many State and local agencies that regulate the design and construction of built facilities. The technical requirements in ANSI A117.1 are also referenced in the 'ADA Accessibility Guidelines for Buildings and Facilities' (ADAAG) and in the International Building Code as amended and adopted by the State of Washington.

Permit-Granting Authorities

City of Oak Harbor Building Division

As part of the overall building permit review process, The Building Division will review the proposed accessibility provisions intended to comply with the accessibility provisions incorporated into the International Building Code (IBC) and associated codes.

Part 9 – Grant and Funding Opportunities

As a subconsultant to KPG, Inc., SAIC Energy Environment & Infrastructure, LLC (“SAIC”) has identified the following potential sources of funding for a City-constructed and City-financed Solid Waste Transfer Station.

For the purposes of this Draft Status Report, the following assumptions are made:

- Construction cost estimate: \$1.5 million to \$1.8 million
- Engineering and construction management cost estimate: placeholder estimate by SAIC of 20 – 25 percent of construction cost
- Pre-construction schedule: beginning January 2013 and lasting 12 months
- Construction schedule: beginning January 2014 and lasting 12 months

9.1 Funding Assistance in Washington

For cities in Washington, there are multiple funding agencies that are available to provide funding assistance for public works projects. One of the best ways to access these agencies is through the Infrastructure Assistance Coordinating Council (“IACC”). The IACC website (<http://www.infracfunding.wa.gov/about.html>) contains the following description:

The Infrastructure Assistance Coordinating Council (IACC) is a nonprofit organization dedicated to helping Washington communities identify and obtain resources they need to develop, improve, and maintain infrastructure. It consists of staff from state and federal agencies, local government associations, and nonprofit technical assistance organizations.

In conversations with IACC staff¹, (*Specifically, SAIC talked to Cathi Read, 360.725.3016, on September 17, 2012*) SAIC identified the following as potential sources of grant and/or loan funding. These funding sources must be considered potential at this point, because: (1) applications have not been submitted and funding hasn’t been approved, and (2) the project is not yet sufficiently defined to prepare a competitive application.

For the potential alternatives listed below, additional detail regarding application deadlines, eligibility requirements, and contact information is attached as appendix A3.

- Public Works Trust Fund Construction Loan
- Public Works Trust Fund Pre-Construction Loan
- Community Development Block Grant – General Purpose Grant
- Department of Ecology – Coordinated Prevention Grant Program

9.2 In addition, the City may choose to investigate the following:

Program	Eligible Projects	How to Apply
Community Economic Revitalization Board (“CERB”) Planning and Feasibility Grants	Project-specific feasibility and pre-development studies that advance community economic development goals for industrial sector business development. If a credible case can be made that this project advances industrial sector business development, then the City should confirm with CERB staff that a solid waste facility is eligible.	Year-round application cycle. Contact: Janea Eddy, 360.725.3151 Up to \$50,000 in grant funding is available, requires 25 percent matching funds
CERB – Construction Program	Similar eligibility considerations as the CERB Planning and Feasibility Grants. City should confirm that solid waste facilities are eligible. “Public facility projects required by private sector expansion and job creation”	Year-round application cycle. Contact: Janea Eddy, 360.725.3151 Loans, up to \$1 million per project; 3% interest rate for non-distressed and 2.5% for dis-tressed counties. 20-year term maximum, 10% match required
Community Development Block Grant (CDBG) – Planning Only Grant Program	Includes feasibility studies. The City may choose to confirm with CDBG staff whether this is a potential source of funding for a business case evaluation or other aspects of planning. Project must principally benefit low- to moderate-income people.	Current application cycle is from May 2012 through April 2013. Contact: Phyllis Cole, 360.725.4001 Up to \$24,000 grant for a single jurisdiction.

<p>Rural Community Assistance Corporation ("RCAC") Feasibility and Pre-Development Loans</p>	<p>City appears to be eligible provided City's MHI is less than the greater of Island County's or the State's MHI.</p>	<p>Contact: Josh Griff 720.898.9463.</p> <p>Short-term loans (1-2 years) to fund development of studies/application materials for construction funding. Often used to fund development of USDA Rural Development funding applications (City is not eligible for this) and this short-term loan is incorporated into USDA Rural Development funding amounts.</p>
<p>Rural Community Assistance Corporation ("RCAC") Construction Loans</p>	<p>City appears to be eligible provided City's MHI is less than the greater of Island County's or the State's MHI.</p>	<p>Contact: Josh Griff 720.898.9463.</p> <p>Short-term loans (1-3 years). Maximum \$2 million with commitment letter for permanent financing. Provides bridge funding.</p>

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Part 10 – Next Steps

This document provides programming for a new Solid Waste Transfer Station within the City of Oak Harbor as outlined in the City's Scope of Work with KPG. The following is a list of next steps needed to further the project and ultimately have a new, fully functional transfer station.

- Procure Finances
- Site Selection
- Geotechnical & Survey Reports for Selected Site
- Design
- Construction Documentation
- Permitting
- Bidding
- Construction
- Procure Equipment & Furniture

10.1 Construction Contract Considerations

- CM Involvement
- Design/Bid/Build: The City is currently anticipating a traditional Design, Bid, Build contract for this project
- GMMAC
- Design/Build: Not yet considered by the City

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Appendix: A1 – Case Studies

As part of the planning study, KPG has developed two case studies. The first case study compares a building of similar building type, recently completed, located nearby, (within 25 miles) to identify current construction cost trends related specifically to Transfer Stations in the region. The second case study examines a Solid Waste Transfer Station of similar size and operations complexity as the proposed Oak Harbor Recycling Transfer Station.

A1.1 Case Study #1: Skagit County Transfer and Recycling Station

Location: Mount Vernon, Skagit County, Washington. Owned and operated by Skagit County Department of Public Works, Solid Waste Division.

In order to develop a capitol cost estimate for the Oak Harbor Transfer Station and consider current construction trends regarding Transfer Stations located within the Northwest Washington region, KPG has selected the newly completed (August 2012) **Skagit County Transfer and Recycling Station (SCTRS)** as a case study. The SCTRS facility address is 14104 Ovenell Road, Mount Vernon, Washington 98273. SCTRS is located 23 miles from the City of Oak Harbor's Public Works Facility and is the most recently constructed Transfer Station in the region.

The SCTRS project utilized a traditional Design/Bid/Build contract and was facilitated by Skagit County. Construction was overseen by both County Project Managers and a Construction Management firm. The project was constructed in less than 18 months. Operations include a county provided hauling operation, self-haul customers, recyclables, and Household Hazardous Waste (HHW) collection. Waste is exported from the site by Allied Waste Corporation.

SCTRS Key Elements

- Multiple-phased project located at an existing transfer station site. Phases included 1) Site Improvements, 2) New Building Construction and 3) Z-Wall recyclables tipping areas with new Scale Facility.
- Super-structure was built using a pre-manufactured metal building package.
- Project construction duration less than 18 months
- Tipping floor: 23,000-square feet
- Facility designed to meet 20-year growth projections
- Compactor, 2-Bale, SSI (*Compactor will not be used as comparison with the Oak Harbor Transfer Station*)
- Equipment for the facility was procured by the County under a separate contract

Skagit County Transfer & Recycling Station	Name & Location	Date Completed	Size	Overall Cost of Transfer Building
	Skagit County Transfer and Recycling Station, 14104 Ovenell Road, Mount Vernon, Washington	2012	Transfer Building: 23,000-SF Operations Building: 6,576-SF	\$4.5-Million (Excluding Compactor)
<i>*Cost excludes project management, design, construction, construction management, & equipment. Cost Excludes scale facility and Z-Wall improvements.</i>				

CASE STUDY #1
Skagit County Transfer & Recycling Station Construction Cost Breakdown

Transfer Building = 23,800 sq ft

Staff/Service Building = 6,576 sq ft

Items	Staff/Service Bldg	Transfer Bldg	Site Work
Concrete	\$108,000.00	\$460,129.00	
Concrete (Retaining Walls)	\$28,234.00	\$120,366.00	
Rebar	\$29,203.00	\$124,497.00	
Insulation	\$2,391.00	\$10,193.00	
Steel Bldg	\$363,076.00	\$727,320.00	
Decking/Joists	\$26,000.00		
Interior Carpentry	\$30,801.00		
Siding	\$20,197.00	\$86,103.00	
Roofing	\$24,434.00	\$104,166.00	
Bldg Insulation	\$1,900.00	\$8,100.00	

Doors	\$29,970.00	\$89,880.00	
Louvers	\$7,561.00		
Windows & Accessories	\$27,633.00		
Stud/GWB	\$63,200.00		
Finishes	\$77,800.00		
Toilet Accessories	\$8,956.00		
Appliances	\$961.00		
HVAC	\$156,138.82	\$39,034.70	
Plumbing	\$142,192.42	\$35,548.10	
Electrical	\$237,468.00	\$59,367.00	
Lights	\$20,000.00	\$64,715.00	\$60,000.00
Fire Alarm	\$38,524.00	\$64,631.00	
Telephone/Computer	\$81,040.00		
Electrical Equipment	\$18,524.00	\$4,631.00	
Waterproofing	\$10,564.00	\$45,036.00	
Vaults			\$26,500.00
Stormwater Vault			\$142,500.00
Piping			\$67,784.00
Striping			\$2,500.00
Asphalt			\$111,528.00
Curbing			\$20,910.00
Survey			\$16,200.00
Signage			\$4,346.00
Landscape			\$6,000.00
Fencing			\$54,500.00
Clearing/Site Excavate/Site Piping			\$349,815.00

Demo			\$37,788.00
Total	\$1,554,768.24	\$2,043,716.80	\$900,371.00
Price per sq ft	\$236.43	\$85.87	
	Staff/Service Building	Transfer Building	Site Work
Skagit County Transfer & Recycling Station			\$4.5 Million
Total Construction Cost of Transfer Building <i>Cost Excludes Project Management, Design, Construction Management, Scale House, Scales, Wheeled Equipment, and Compactors</i>			

Cost breakdown for Skagit County Transfer & Recycling Station prepared by KPG, Inc.

A1.2 Case Study #2: Klamath Falls Transfer Station

Location: Klamath Falls Transfer Station, Klamath Falls, Oregon

Rabanco Regional Disposal Company (Republic Services) constructed a new transfer station and intermodal facility to replace their existing landfill facilities. The facility is designed to accept commercial and self-haul municipal solid waste, construction waste, and contaminated soils which are loaded into containers for rail shipment. Design responsibilities also included a new rail spur to connect to the BNSF yard and a bermed landscape perimeter to conceal transfer station operations from public view

Klamath County Key Components:

- 13,000-sf enclosed transfer station with drive-on commercial tipping floor and a grade-separated self-haul tipping area.
- Open-top container, compacted with a knuckle boom crane
- The scalehouse uses one (1) 40-ft and one (1) 80-ft platform scale
- The intermodal yard allows for the transfer of containers from truck chassis to rail car

Owned and Operated by Republic Services (formerly Rabanco)

Project Image	Name & Location	Date Completed	Size	Overall Cost
	Klamath Falls Transfer Station, Rabanco (Allied Waste)	2004	Transfer Building: 11,835-SF Employee Warming & Restroom: 455-SF	\$2.3-Million
*Cost includes project management, design, construction, construction management, & equipment				

CASE STUDY #2
Klamath Falls Transfer Station
Construction Cost Breakdown

Transfer Building = 11,835 sq ft

Staff/Service Building = 455 sq ft

Site Development Area = Under 4 Acres, includes work at remote scale facility

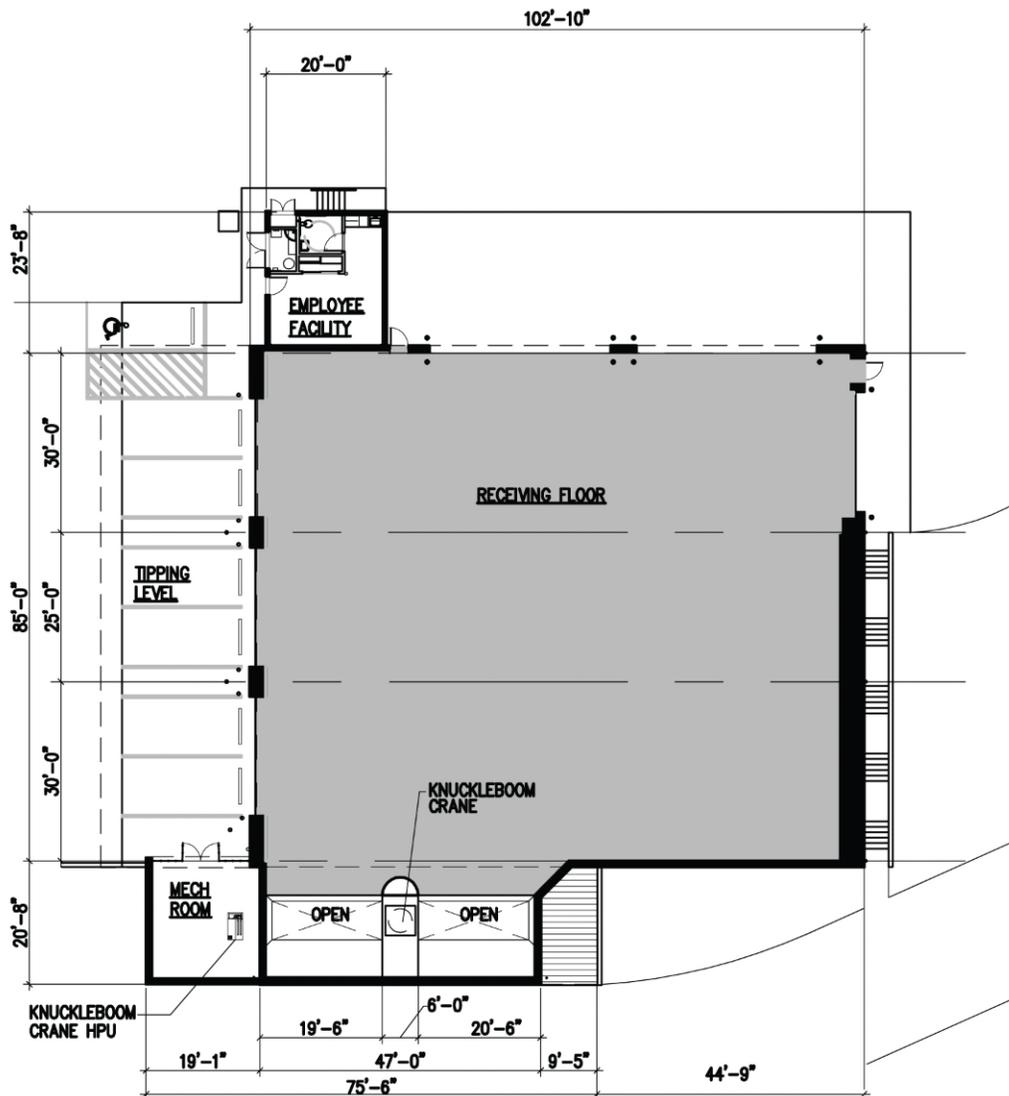
Items	Staff/Service Bldg	Transfer Bldg	Site Work
Utilities			\$128,860.00
Earthwork			\$115,300.00
Asphalt			\$412,800.00
Concrete			\$38,600.00
Gravel			\$181,040.00
Landscape Hydroseed			\$1500.00
Building Structures	100,100.00	1,088,600.00	
Total	\$100,100.00	\$1,088,600.00	\$900,371.00
Price per sq ft	\$220.00	\$91.98	
	Staff/Service Building	Transfer Building	Site Work
Klamath County Transfer Station, Rabanco (now Republic) Total Construction Cost in 2004 <i>Cost Excludes Project Management, Design, Construction Management, Scale House, Scales, Wheeled Equipment, and Compactors</i>			\$2,224,500.00
Multiplier for Inflation (Bureau of Labor Statistics http://data.bls.gov/timeseries/PCU236221236221) to 2012 CPI Inflation Calculator			\$2,697,945.20

Cost breakdown for Klamath County Transfer Station Station prepared by KPG, Inc.

Klamath Falls Transfer Station Floor Plans & Elevations

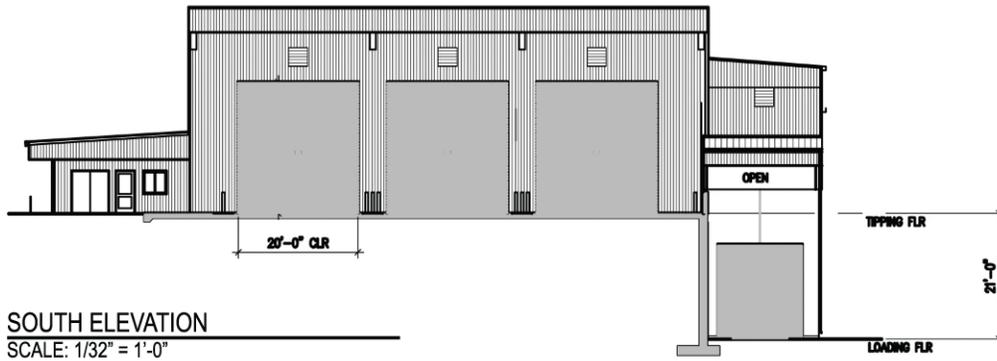
The following plans and elevations provide visual examples of a flat tipping floor configuration with waste being pushed into a top-load container located at a lower building level.

Example 1: Tipping & Receiving Floor Plan

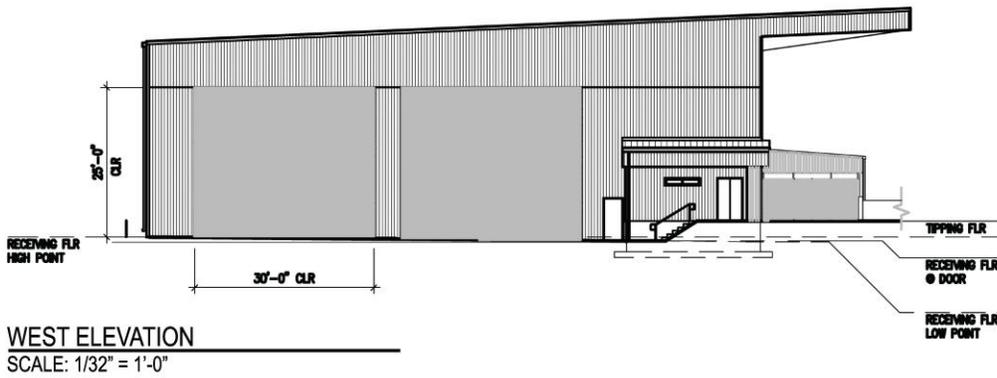


TRANSFER STATION TIPPING & RECEIVING LEVEL FLOOR PLAN
 SCALE: 1/32" = 1'-0"

Example 2: South Elevation



Example 3: West Elevation



Appendix: A2 – Solid Waste Tipping Costs

A2.1 – Costs of Travel to Coupeville

Information below provided by the City on October 2, 2012

COSTS TO GO TO COUPEVILLE
26.92 MILES ROUND TRIP X 5 TRIPS PER DAY=134.60 MILES
/ 3.19 MILES PER GALLON
X 3.80 PRICE PER GALLON= \$160.00 PER DAY

TPD= TRIPS PER DAY

PPG= PRICE PER GALLON

MPG=MILES PER GALLON

PD=PER DAY

FUEL PER DAY \$154.00 X 260 WORK DAYS PER YEAR= \$41,600.00

2011 Island County tipping fees were \$826,069.58 at \$109 ton

A conservative new rate would be \$92.00 ton in 2011 would have been \$697,233.04 a savings of \$128,836.54

Recycling last year cost us (City) \$52,346.70 at \$45.00 ton

Rock-Tenn in Seattle has offered us (City) \$10.00 ton and we would have earned =\$11,748.90

Total savings of \$222,783.24



Appendix A2

Solid Waste Tipping Costs

Solid Waste Tipping Costs

DATE	COM	RES	TOTAL TONS	TOTAL TIPPING FEES	OTHER (appliances)	RECYCLING TONS	RECYCLING COSTS
2011							
JANUARY	356.37	240.19	596.56	\$65,164.50	\$140.00	105.85	\$4,763.25
FEBRUARY	333.80	224.18	557.98	\$60,819.82	\$0.00	86.25	\$3,675.15
MARCH	399.30	248.10	647.40	\$70,566.60	\$0.00	99.12	\$4,460.40
APRIL	366.65	259.86	626.51	\$68,289.05	\$0.00	93.26	\$3,857.85
MAY	409.45	285.19	694.64	\$75,715.22	\$0.00	104.41	\$4,622.85
JUNE	389.88	281.82	671.70	\$73,214.76	\$0.00	97.31	\$4,475.70
JULY	358.85	273.68	632.53	\$68,945.23	\$0.00	92.19	\$4,148.55
AUGUST	391.33	284.60	675.93	\$73,676.37	\$0.00	103.98	\$4,679.10
SEPTEMBER	374.68	276.58	651.26	\$70,986.80	\$0.00	98.67	\$4,440.15
OCTOBER	348.65	230.03	578.68	\$63,076.12	\$0.00	85.14	\$3,831.30
NOVEMBER	370.40	267.97	638.37	\$69,582.33	\$0.00	88.61	\$3,987.45
DECEMBER	352.87	254.22	607.09	\$66,172.27	\$0.00	120.11	\$5,404.95
ANNUAL TOTAL	4452.23	3126.39	7578.62	\$826,209.04	\$140.00	1174.89	\$52,346.70
<i>avg</i>	371.02	260.53	631.55	\$68,850.75		97.91	\$4,362.23
<i>est 2011 end</i>	4452.23	3126.39	7578.62	\$826,209.04	\$140.00	1174.89	\$52,346.70
			RESIDENTIAL TONNAGE + RECYCLING TONNAGE	RESIDENTIAL RECYCLING PERCENTAGE			
			4301.28	27.31%			

Appendix A2

Solid Waste Tipping Costs

Solid Waste Tipping Costs

DATE	COM	RES	TOTAL TONS	TOTAL TIPPING FEES	OTHER (appliances)	RECYCLING TONS	RECYCLING COSTS
2012							
JANUARY	324.95	247.34	572.29	\$62,379.61	\$0.00	95.58	\$4,301.10
FEBRUARY	346.50	231.41	577.91	\$62,992.19	\$0.00	87.86	\$3,953.70
MARCH	358.17	242.79	600.96	\$65,504.10	\$0.00	99.41	\$4,473.45
APRIL	361.70	247.81	609.51	\$66,436.59	\$0.00	92.30	\$4,153.50
MAY	418.25	284.45	702.70	\$76,594.30	\$0.00	97.63	\$4,393.35
JUNE	383.27	257.40	640.67	\$69,833.03	\$0.00	94.43	\$4,249.35
JULY	361.58	269.96	631.54	\$68,837.86	\$0.00	99.41	\$4,473.45
AUGUST			0.00	\$0.00	\$0.00		
SEPTEMBER			0.00	\$0.00	\$0.00		
OCTOBER			0.00	\$0.00	\$0.00		
NOVEMBER			0.00	\$0.00	\$0.00		
DECEMBER			0.00	\$0.00	\$0.00		
ANNUAL TOTAL	2554.42	1781.16	4335.58	\$472,577.68	\$0.00	666.62	\$29,997.90
<i>avg</i>	364.92	254.45	361.30	\$39,381.47		95.23	\$4,285.41
<i>est 2011 end</i>	4379.01	3053.41	4335.58	\$472,577.68	\$0.00	1142.78	\$51,424.97
			RESIDENTIAL TONNAGE + RECYCLING TONNAGE	RESIDENTIAL RECYCLING PERCENTAGE			
			2447.78	27.23%			

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Appendix A3 – Grant and Funding Potential Sources

City of Oak Harbor: Potential Funding Sources for Transfer Station																												
Program Name	Program Eligibility and Information	Funding Amounts & Terms	Application Process	Additional Information																								
<p>Public Works Board (PWB)</p> <p>Public Works Trust Fund</p> <p>Construction Loan</p> <p><i>Owner Applies</i></p>	<p>The PWB provides construction loans to local governments to finance critical public infrastructure systems. Local governments may use the funding to upgrade infrastructure, improve public health and safety, respond to environmental issues, promote economic development, or upgrade the performance of their systems. The PWB has developed a new process for applying and being selected for financial assistance.</p>	<ul style="list-style-type: none"> ▪ LOCAL MATCH: No local match required ▪ LOAN LIMIT: Maximum of \$15 million per jurisdiction (with the possibility of additional funds being awarded on a per project basis at the Board's discretion) <p>INTEREST RATES/TERMS:</p> <ul style="list-style-type: none"> • Interest rates range from 0.5% to 2.0% and are linked to the repayment period – the longer the repayment period, the higher the interest rate. Repayment terms range from 10-30 years (the loan term cannot exceed the life of the asset). <table border="0"> <tr> <td>▪ Repayment Term</td> <td>Interest Rate</td> </tr> <tr> <td>10 yr</td> <td>0.5%</td> </tr> <tr> <td>15 yr</td> <td>0.75%</td> </tr> <tr> <td>20 yr</td> <td>1.0%</td> </tr> <tr> <td>25 yr</td> <td>1.5%</td> </tr> <tr> <td>30 yr</td> <td>2.0%</td> </tr> </table> <p>INTEREST RATES REDUCTION OPTIONS: Financially distressed borrower options:</p> <p>A: Rate-based systems with an Affordability Index (AI) of 2.01%, or more, have the option of reducing interest rates as shown below.</p> <table border="0"> <tr> <td>AI</td> <td>Interest Rate Reduction</td> </tr> <tr> <td>2.01% - 2.5%</td> <td>(0.25%)</td> </tr> <tr> <td>2.51% - or more</td> <td>(0.5%)</td> </tr> </table> <p>B. Non-rate based systems with a Debt Service Capacity Ratio (DSCR) of 1.25% or less, have the option of decreasing the interest rates:</p> <table border="0"> <tr> <td>DSCR</td> <td>Interest Rate Reduction</td> </tr> <tr> <td>1.00% - 1.25%</td> <td>(0.25%)</td> </tr> <tr> <td>1.00% or Less</td> <td>(0.5%)</td> </tr> </table> <p>Interest Reduction Criteria website: http://pwb.wa.gov/FinanceTools/2014%20PWTF%20Interest%20Rate%20Reduction%20Criteria.pdf</p>	▪ Repayment Term	Interest Rate	10 yr	0.5%	15 yr	0.75%	20 yr	1.0%	25 yr	1.5%	30 yr	2.0%	AI	Interest Rate Reduction	2.01% - 2.5%	(0.25%)	2.51% - or more	(0.5%)	DSCR	Interest Rate Reduction	1.00% - 1.25%	(0.25%)	1.00% or Less	(0.5%)	<p>Key Dates:</p> <p>March 15: Project request for assistance website opens</p> <p>May 31: Project request for assistance website closes</p> <p>March 15–July 27: Staff reviews:</p> <ul style="list-style-type: none"> • Project Review (consult with resource agencies) • Managerial Review • Financial Review • Team Review & Development of Special Conditions • Board Sub-Committee and Oversight Group Review • Contract Negotiation <p>August 3: Board Review and Selection</p> <p>August 4–November 1: Legislative reporting and process</p>	<p>Phone Numbers Main Line: (360) 725-3164</p> <p>POC: Terry Dale: 360-725-3125 Terry.Dale@commerce.wa.gov</p> <p>Mailing Address: PO Box 42525 1011 Plum Street SE Olympia WA. 98504-2525</p> <p>Website: http://pwb.wa.gov/howto1.aspx?ActiveView=4</p>
▪ Repayment Term	Interest Rate																											
10 yr	0.5%																											
15 yr	0.75%																											
20 yr	1.0%																											
25 yr	1.5%																											
30 yr	2.0%																											
AI	Interest Rate Reduction																											
2.01% - 2.5%	(0.25%)																											
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1.00% - 1.25%	(0.25%)																											
1.00% or Less	(0.5%)																											

Appendix A3 – Grant and Funding Potential Sources

City of Oak Harbor: Potential Funding Sources for Transfer Station				
Program Name	Program Eligibility and Information	Funding Amounts & Terms	Application Process	Additional Information
<p>Public Works Board (PWB)</p> <p>Public Works Trust Fund</p> <p>Pre-Construction Loan</p> <p><i>Owner Applies</i></p>	<p>Eligible Jurisdictions:</p> <ul style="list-style-type: none"> Local Governments Special Purpose Districts <p>Low interest loans to fund pre-construction activities for domestic water, sewer, solid waste, stormwater, roads and bridges.</p> <p>Eligible activities include, but are not limited to:</p> <ul style="list-style-type: none"> pre-design final design feasibility studies purchase of land/right-of-way/easements environmental, cultural resources review permits bid documents <p>Project Selection: Project is for one of the Board's priorities:</p> <ul style="list-style-type: none"> Health and Safety Environmental System Performance Economic Development <p>Other factors:</p> <ul style="list-style-type: none"> Readiness to proceed Financial/managerial capacity to repay the loan Other balancing factors 	<p>Loan Terms:</p> <ul style="list-style-type: none"> \$300,000 maximum loan amount (no match required) Two year window to complete project 1% interest rate, five year repayment period* <p>*revised up to 20 years if construction funding is secured during pre-construction loan term</p>	<p>Website does not provide application deadlines.</p>	<p>Phone Numbers Main Line: (360) 725-3164</p> <p>POC: Terry Dale: 360-725-3125 Terry.Dale@commerce.wa.gov</p> <p>Mailing Address: PO Box 42525 1011 Plum Street SE Olympia WA. 98504-2525</p> <p>Website: pwb.wa.gov http://pwb.wa.gov/howto1.aspx?ActiveView=2</p>

Appendix A3 – Grant and Funding Potential Sources

City of Oak Harbor: Potential Funding Sources for Transfer Station				
Program Name	Program Eligibility and Information	Funding Amounts & Terms	Application Process	Additional Information
<p>State of Washington Department of Commerce</p> <p>Community Development Block Grant (CDBG): General Purpose Grant</p> <p><i>Owner applies</i></p>	<p>The General Purpose Grants are made available annually through a competitive application process to assist Washington State small cities, towns and counties in carrying out significant community and economic development projects that principally benefit low- and moderate-income persons.</p> <p>The Washington State CDBG Program is funded by the U.S. Department of Housing and Urban Development (HUD). The purpose of the state CDBG Program is to improve the economic, social and physical environment of eligible, non-entitlement cities and counties to enhance the quality of life for low- and moderate-income residents, and as a result, benefit the entire community.</p> <p>To be eligible, 51% of the population must be considered low or medium income (LMI). CDBG staff indicated that in the City of Oak Harbor, 63% of the population is considered LMI.</p> <p>Low to moderate income is defined as 80% of the county's median income.</p> <p>From conversation with CDBG staff, it appears that a solid waste transfer station is eligible. City should confirm. If the facility's service area is not the same as the city limits, an income survey might be required</p>	<p>Approximately \$9,750,000 is expected to be available for General Purpose Grants in 2013.</p> <p>Annual competitive application cycle with maximum grant of \$500,000 or \$750,000 if higher funding criteria are met.</p>	<ol style="list-style-type: none"> 1. Application handbooks will be available November. 2. Application workshops are scheduled for November 15th in Olympia, and November 17th in Moses Lake. 3. Applications will be due March 1, 2012 with awards announced in June 2012. 4. Applications are rated by a review committee, given a numerical score and funded by highest score first until all available funds have been awarded. 	<p>Address:</p> <p>POC: Kaaren Roe Email: kaaren.roe@commerce.wa.gov Phone: 360-725-3018</p> <p>Website: http://www.commerce.wa.gov/cdbg</p>

Appendix A3 – Grant and Funding Potential Sources

City of Oak Harbor: Potential Funding Sources for Transfer Station				
Program Name	Program Eligibility and Information	Funding Amounts & Terms	Application Process	Additional Information
Department of Ecology (Ecology) Coordinated Prevention Grant Program (CPG)	<p>The Coordinated Prevention Grant (CPG) Program helps local governments to develop hazardous and solid waste management plans, and to implement some programs identified in those plans. These grants usually operate on a two year calendar cycle starting in January of even years. When funds are available, Ecology operates a competitive offset cycle starting in January of odd years. The CPG Program protects human health and the environment by reducing human exposure to toxins; reducing waste; ensuring proper management of solid and household hazardous waste; and promoting energy and resource conservation.</p> <p>Per Peter Christianson (see Additional Information), Ecology does not fund solid waste facilities. <i>A household hazardous waste facility could possibly be funded as part of the transfer station project, the applicant would be Island County. Island County would presumably distribute funds to the City.</i></p> <p>Ecology does not have other grant programs that would assist the City in a solid waste transfer station project.</p>	<p>For the 2011-2013 biennium, CPG's budget request is for \$28.6 million dollars.</p> <ul style="list-style-type: none"> For 2012-13, Island County was allocated \$236,202 for Planning and Implementation (P&I) For P&I, each county receives a fixed base of \$100,000 plus a per capita (\$1.6794 for 2012-13) amount based on county population (81,100). <p>Local match requirements</p> <ul style="list-style-type: none"> Ecology funds CPG grants, consistent with WAC 173-312-090, at a level of 75 percent of maximum eligible costs (MEC). The recipient must provide a local match of at least 25 percent but may provide more. 	<ol style="list-style-type: none"> Meet with grant officer for a pre-application conference. Planning authority: Coordinate with other eligible recipients in your county. Determine if any jurisdiction in your county wants CPG funds. Read CPG Program Guidelines and note deadlines and any questions you might have. Review the eligibility criteria in Chapter 2 and in the "Yellow Book" Fill out the grant application form and submit to your grant officer by (typically) Aug 30. Application reviewed by grant officer and tasks reviewed CPG coordinator. Grant officer contact applicant to let them know if their proposed tasks are CPG fundable as is or if modifications are needed. Grant negotiations occur. Draft agreement finalized. Formal offer to applicant by (typically) Nov 1st. Signed offer returned to Ecology by (typically) Dec 15. Effective date of agreement is (typically) Jan 1st. 	<p>Point of Contact: Peter Christianson, DOE NW Section Manager Phone: 425-649-7076</p> <p>CPG Staff: Diana Wadley, NW Office serving Island County 425-649-7056 Diana.wadley@ecy.wa.gov</p> <p>Website: http://www.ecy.wa.gov/programs/swfa/grants/cpg.html</p> <p>CPG Guidelines: https://fortress.wa.gov/ecy/publications/publications/1107008.pdf</p> <p>"Yellow Book": https://fortress.wa.gov/ecy/publications/summarypages/9118.html</p>

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Thank You

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