

Design Advisory Group Meeting 4
King County Solid Waste Division

Zoom Virtual Meeting
Thursday, May 28, 2020
10:00 a.m. – 12:00 p.m.

Attendees

Design Advisory Group:		
Marc Davis	Leanne Guier	Joan Nelson
Tina Scoccolo	Diana Soliday	Rob Van Orsow
King County Solid Waste Division and Design Team:		
Tricia Barbachan	Janine Blaeloch	Doug Chin
Karen Herndon	Sid Lyons	Polly Young
Nigel Baummer	Mary Shanks	Laila McClinton

Introductions

- Doug thanked everyone for their attendance, and introduced attendees.

Project Description - Doug

- Doug reminded everyone of the services to be provided at South County Recycling and Transfer Station (SCRTS). Doug said the new transfer station will accept the following materials:
 - Recycling - cardboard, wood, glass, etc.
 - Green Waste
 - Moderate Risk Waste (MRW) – oil, antifreeze, etc.
 - Traditional garbage
- Additional elements of the project were noted to include the following:
 - Stream relocation to the north
 - West Valley Highway improvements – revision of the jog near the site to improve sightlines and satisfy modern transportation standards
 - Stormwater runoff from roofs will be captured in cisterns and reused for non-potable water onsite, mainly anticipated to be washdown.
 - A green building sustainability goal of International Living Future Institute (ILFI) Living Building Challenge (LBC) Petal Certification. He noted this sustainability goal is one of the strictest in existence.
 - Public art will be integrated in the facility and will managed through 4Culture.

Project Updates - Doug

- Doug said employee and public engagement and sustainability have been continued throughout design.

- A Value Engineering (VE) Study was conducted in fall 2019 on the Draft 30% Design, and recommendations from the VE Study are being incorporated into the Final 30% Design.
- Traffic queuing and visualization models for the Draft 30% Design have been submitted by the design team.
- The design team has completed draft reports on wetland and stream delineations, noise, geotechnical analysis, tree assessment, and biological assessment. The design team has continued work on critical areas mitigation.
- Call for artists closed on April 30, with a kickoff meeting on May 14.

Community Engagement – Doug

- Traffic, odor, and wetland and streams were noted as the top concerns for the SCRTS project by community members who participated in the online open house and who completed paper surveys at community festivals in 2019. Additional concerns included pests, noise, wildlife, slope stability, property values, and visual impacts. Doug noted many people also said they have “no concerns.” The Online Open House was open February to early June 2019.
- Polly added that Solid Waste Division (SWD) staffed booths at Algona Days, the Police Department’s Open House at Pacific, and at Flavor of Federal Way last summer. SWD wanted to provide additional opportunities to engage community members and for them to provide feedback. During these events people were asked for ideas and desires for SCRTS. Polly said people requested services for Styrofoam recycling, and that metal recycling will be coordinated with private business to the south of SCRTS location as they offer a similar service.
- Polly said at the request of Bill McCauley tours of the King County Factoria Recycling and Transfer Station (FRTS) were offered to community members. Six times were provided – including weekdays and weekends – and only one family attended a tour. The family provided positive feedback. Doug said they went to the site with low expectations, but were impressed by the odor control as they could not smell waste outside the building.
- Polly said several members of the Muckleshoot Tribe also toured FRTS.

Sustainability and Equity and Social Justice (ESJ)

- The project ILFI LBC Petal Certification requires the Project to pursue multiple Petals. SCRTS is focused on Place, Energy, and Beauty Petals.
- SWD is pursuing several activities that align with the County’s ESJ goals, sustainability goals, and community input. These include job training, apprenticeships, and habitat restoration. Other activities include enhancements to the Interurban Trail. Doug explained King County Parks is working on re-paving, while the SWD will be working on providing interpretive and wayfinding signs. Environmental education will be included at SCRTS, likely incorporated into the multipurpose room. Tours will be provided as part of educational opportunities.
- SWD will partner with King County’s Agriculture Programs to provide equipment to enhance immigrant/refugee community farming opportunities in communities served by SCRTS.

Draft 30% Design Layout (pre-VE Study) – Doug

- Doug reviewed the Draft 30% Design layout and noted the following:
 - Buildings are aligned with West Valley Highway.
 - Administration building is to the south of the transfer building, with the MRW facility adjacent to the east.
 - 14 self-haul stalls are included at the self-haul disposal area.

Visualization Model – Mary

- The visualization model was developed using the Draft 30% Design layout, and does not reflect changes being made following the VE Study. Mary explained key features of the model:
 - Cisterns shown at the east side of the site are for rainwater containment, which will be used for non-potable water at the site.
 - A fueling facility is included with a 2,500 gallon tank.
 - The retaining wall along West Valley Highway will be shortened in the Final 30% Design.
 - The design is further along now than shown at this model, so disregard the lack of color shown in the model.
 - A retaining wall at the entrance is still included. Mary explained the Algona Transfer Station (ATS) has an existing road to the SCRTS property. This will be used as the staging area to construct the soldier pile wall.
 - The visualization model will be updated following the Final 30% Design Drawings submittal.
 - To reach sustainability goals, solar panels are planned to be maximized on site. This includes the roof as well as the south facing walls of the transfer and administration buildings.
 - Self-haul and commercial disposal of solid waste is provided in separate locations. Waste is pushed to the north end of the receiving floor and loaded out to preload compactors.
 - A yard waste loadout location has been revised for the Final 30% Design. Garbage could be stored in this open top trailer in an emergency situation in which the compactors are inoperable because the emergency generator is not designed to supply enough power for those.
- Diana asked if the transfer building looks different in the Final 30% Design. Mary said a SketchUp 3D rendering is shown in the final slide of the presentation which will be a repeat from what Diana has previously seen at the artist meeting. Mary added a blue and gray pallet has been proposed by the design team to contrast with the green hillside and to blend with the dark gray solar panels used at the administration building south-facing wall. She noted that colors proposed are at 30% and could certainly change further in design.
- Tina asked if the retaining wall at the north end of the site is still included. Mary said yes. Nigel said the maximum height of the wall at 20.6 feet, adding that a retaining wall slide is included later in the presentation.
- Tina asked if a culvert is included at the north Site driveway. Mary said yes, a fish passable culvert is included at the north entrance, with an additional fish passable culvert under West Valley Highway. Tina asked if the culverts were VE

recommendations. Mary said no, they were coordinated with the United States Army Corps of Engineers (USACE) and Washington Department of Fish and Wildlife (WDFW).

- Tina asked if a bike path is included on West Valley Highway. Mary said no, just a shoulder, adding that the City of Algona (COA) requested a new sidewalk be added as part of frontage improvements. Tina noted the road and shoulder do not look to scale and Mary agreed they were not.
- Tina asked if a turn lane is included for the site entrance to Iowa Drive. Mary said no and added the design team is not opposed to one, but a turn lane is not currently included.
- Rob asked if no turn lane is included at the north, would that make it challenging for transfer trailer drivers to exit and turn north. Mary said drivers could also turn to the south. Rob said he is not recommending a turn lane be added, just asking. He said that if drivers are okay with turning to the south that is great. Doug added a yellow blinking signs will be included at the intersection of Iowa Drive and West Valley Highway to indicate to drivers of trucks entering West Valley Highway from Iowa Drive.

VE Recommendations – Doug

- A new rotated site was developed that aligns better with the hillside and the overall site.
- A Pre-engineered Metal Building (PEMB) was selected for the transfer building rather than conventional structure to save costs in construction and decrease time of construction. Doug said with proper design and specifications that the PEMB should adequately meet needs of SWD.
- SWD will now purchase equipment to avoid Contractor markups.
- Doug said the new layout will improve customer experience and traffic flow at WVH.

Site Layout for Final 30% Design – Doug

- The transfer building has been elongated, provides 18 self-haul stalls, an increase from 14.
- MRW facility has been relocated to the north end of the site to help with queueing and traffic flow.
- A baler with loading dock has been added to the free recycling area to decrease the distance material needs to be moved for loadout.
- Mary explained that in 2043, 400 feet of queueing space is required for self-haulers before the scalehouse, and that this new layout provides adequate length on-site to avoid backup onto West Valley Highway.
- Rob said the layout makes sense but is confusing. Mary said future iterations will call out the buildings, and indicated where the various site facilities are located, including MRW staff parking, trailer yard stairs, and traffic routes through the site can be added.
- The fueling facility has been moved to the transfer building level for fueling of the loader and other SWD vehicles.

- Cisterns are still aboveground, but now in trailer yard and are not as visible from West Valley Highway.
- Marc asked about access for commercial haul customers. Mary explained commercial haulers will enter the site, use the easternmost scale for weigh-in, and continue to the southeast door to the receiving floor. Following disposal they will exit parallel to a door west of the entrance, turn to the west at the south end of the administration parking, and leave SCRTS via the westernmost scale.
- Marc said commercial haul routes require some traffic crisscrossing. He said ATS que extends onto West Valley Highway. Nigel said 400 feet is provided from scale to West Valley Highway, or roughly 20 self-haul vehicles. Mary added the entrance lane splits into two once customers turn north into the site, providing additional queue space beyond the 400 feet mentioned above. Marc said the site looks good, and is happy about the revised sightlines on West Valley Highway.
- A baler area includes loadout for two trailers. One is figured for baled materials, while the other is programmed for bulky item storage.
- The recycling area shows space for a variety of commodities, though the specific items have not yet been determined. Recycling services to be offered will be consistent with other SWD stations
- Doug asked that the potential location for art was noted. Mary said the landscaping area north of the scalehouse has been considered by the design team as a potential art location. The design team is not promoting this particular location but it helps the team to keep in mind that art will be incorporated into the layout. Diana asked if art will be visible from West Valley Highway if located near the scalehouse. Mary said probably not, unless the art is very tall, due to the slope on the east side of the site, along West Valley Highway that will be planted with trees.

Geotechnical Analysis and Recommendations – Mary

- Peat was discovered in the geotechnical analysis, though mostly not under SCRTS buildings. Where foundations will be located, peat will be over-excavated and aggregate piers will be used to support foundations in potentially poor soils to support buildings.
- Most of the Site has great foundation soils, so building foundations will be shallow spread footings constructed out of concrete and rebar. We anticipate not needing piles.
- A soldier pile wall will be used at the Site entrance, while other retaining walls will either be cast-in-place (CIP) or modular block walls. Drain pipes will be used to capture and route groundwater around walls.
- Discrete locations were found on the west slope where groundwater seeps out. The design team is developing methods to capture the seep water route in constructed channels to mitigate erosion. The Geotechnical Analysis indicates there is a low risk of the overall hillside sliding.
- The Project is filling against the slope, which additionally fortifies the hillside.

- Tina said water seeping at the west needs to be captured and rerouted at the base of the retaining wall, otherwise issue, so she is glad the design accounted for it. She added she is less concern about seeps above the wall.

Retaining Walls – Mary

- The north end of the trailer yard will have a CIP wall. The design is limited to the stream relocation, which is limited to a 3% slope. The tallest portion of the wall at the north end of the trailer yard is approximately 20 feet, and tapers down to the east. This wall will include waterproofing on the north side, and water captured will be daylighted to the stream.
- Additional CIP walls are included at the following areas:
 - Operations support area – underground full trailer parking below the MRW facility
 - Transfer building tipping floor at the yard waste and waste compactor loadouts.
 - Ramp to trailer yard from the south, noting this is used for SWD access across the Site, or for customers with hot loads.
 - Short walls at the loading docks and self-haul disposal area south exit to the west.
- Modular blocks will be used where possible along WVH. It is likely this changes to CIP where needed due to height. Waterproofing is not included, but 12-inch drainage pipes are shown at this wall.
- Entrance to the site will be a soldier pile wall. It will need to be built from the existing roadway to avoid safety issues during construction due to the steep slope. Mary explained steel I-beams will be installed in drilled holes, then large timber blocks will be dropped between them. A concrete fascia will be included for the face of the wall. Drainage pipes are included. This wall will be overbuilt 42 inches for fall protection and to stop any items that may slide down the hill.
- Polly asked if art can be included on the retaining walls, noting good visibility for customers. Mary said yes, noting the fascia at FRTS was thickened to support artwork and to avoid hitting structural rebar. Mary said the site entrance wall could be used, but the other walls do not have good visibility for art. Rob asked for the height of the soldier pile wall. Mary said its maximum height is 36 feet.

Traffic Study – Mary

- The traffic study shows a traffic light will not be needed at the site entrance when the site opens in 2023. The study was run to assume the current ATS property is redeveloped as commercial retail businesses, and that SCRTS is receiving its 95% traffic count. The study shows a traffic light would be required before the design year of 2043. The traffic study indicates that if the ATS property is developed to the maximum retail area possible, the traffic light will be needed when those businesses open.
- Tina said traffic is already gridlocked by 2:30 PM. Mary said the SCRTS peak is predicted for afternoon hours on the weekends, which aligns with non-peak traffic for West Valley Highway. She said that traffic specialist opinion is that West

Valley Highway or WA-167 need additional lanes for future traffic counts, but that is not part of this project.

Noise Study – Mary

- At the time of the previous DAG meeting, the design team was collecting data. That data has now been reviewed and analyzed:
 - In general, noise in the vicinity of SCRTS is dominated by traffic on WA-167.
 - Data included noise from compactors, baler, yard goats, commercial collection vehicles, self-haul vehicles, shredder, and recycling activities.
 - Findings shows that the Site is non-compliant to the north and northwest. Mary said the design will include acoustical treatment below canopies and in the transfer building to achieve compliance. Modeling done with acoustical treatments in place at the undersides of canopies and inside the transfer building indicates sound levels will be within codes at property boundaries.

Biological Assessment – Mary

- Onsite wetlands are lower quality on Ecology’s ranking scale. The Project has been determined to have no effect on critical habitat.
- If fish do gain access to rerouted stream, the project includes provisions to improve the habitat into which they would travel.
- During construction the design team will include efforts to minimize sediment transport into the waterway to avoid impacting downstream salmon.

Wetland Update – Mary

- The initial HDR biologists’ assessment and work done as part of Environmental Impact Statement determined what we called the “wet area” is not a wetland, due to it being comprised of gravel and manmade material. When the USACE reviewed the area they determined the wet area should be classified as a wetland due to it smelling like soils found in wetlands. We are now referring to this area as Wetland D.
- Due to recent policy changes, USACE does not have jurisdiction over Wetland D because it does not connect to other waterways, though the project will still need to mitigate.
- Regulatory Agencies require 1.61 acres of creation/reestablishment, 3.23 acres of rehabilitation, or 6.46 acres of enhancement. King County has decided to use their In-Lieu Fee program for mitigation. Mary explained this is similar to a mitigation bank.
- Tina asked if relocating and improving the stream decreases mitigation needs from the wetlands. Doug and Mary said they do not have the buffer area associated with the stream available for this meeting but do not anticipate it decreasing mitigation requirements for wetlands. Doug discussed that the stream is being considered as part of the overall improvement to ecological services onsite.

Stream Relocation – Mary

- The stream relocation increases amount of water daylighted to the Algona Creek Tributary. Design includes pools to decrease sediment transport. The design is for a 100-year storm for sizing pools, rocks, and the flow channel.
- The stream is relocated such that the high water mark is at least 50 feet from site features, such as retaining walls.
- Doug said the relocated stream meets both regulatory and sustainability goals.
- Tina asked for the monitoring period of the stream. Doug said he does not know the monitoring length, though he thinks reestablishment will take 3-5 years. Tina said the USACE will determine monitoring periods in their permit.

Schedule – Mary

- Design is proceeding towards Final 30% Design. The Conditional Use Permit and cost estimate will follow, in July. The Draft 60% Design is planned for fall 2020, during which another DAG update will be scheduled.
- Polly said an online open house will be conducted summer 2020, though the date is to be determined. She said the Open House will share the revised facility layout, SCRTS features, and potentially proposed visuals.

Action Items

- Provide DAG members with copy of presentation and the revised site layout – SWD and design team