LORTON LANDFILL



Furnace Associates Inc. 10001 Furnace Road Lorton, VA 22079 (703) 690-1525

August 31, 2020

Director of the Zoning Evaluation Division Department of Planning and Development 12055 Government Center Parkway, Suite 801 Fairfax, Virginia 22035

Attn: Tracy Strunk

Via: Electronic Submission

Re: Lorton Landfill SEA 80-L/V-061; Overlook Ridge Special Exception Zoning Interpretation Request

Dear Ms. Strunk:

Based on conversations with Fairfax County staff and pursuant to SEA 80-L/V-061 (the "SEA"), Furnace Associates, Inc dba Lorton Landfill ("Landfill") is submitting several items for interpretation contained in the SEA.

The subject site's address is 10001 Furnace Road, Lorton, VA, 22079. It is identified as Tax Map #113-1-((1)), Parcels 7, 8 and part of Parcel 5 and Tax Map #113-3-((1)), Parcels 1,2 and 4. The site is located in the Mount Vernon Magisterial District and the Lower Potomac Planning District of Area IV of the Comprehensive Plan. The site area is 249.98 acres. The SEA was approved to amend a previously approved Special Exception to allow a construction debris landfill in the R-1 zoning district. The SEA permitted an increase in the maximum height of the landfill from 290 feet above sea level to 412 feet above sea level and permitted a quasi-public park on the closed portions of the landfill. Lorton Landfill would ultimately become "Overlook Ridge", a public park.

We hereby request an interpretation to the requirements of Development Conditions 52 and 55, approved with Special Exception Amendment SEA 80-L/V-061 (SEA) and as shown on Overlook Ridge Site Plan (1883-SP-002), Drawings 5 thru 16. The interpretation requests range from removal of features due to safety concerns to construction of materials to proposed locations. Interpretation requests are outlined below with a description to include Site Plan Drawing number and SEA permit condition, explanation of basis for the proposed change, photos and figures outlining the changes are included as attachments. The approved Site Plan drawings are not included, however, a set of drawings summarizing the changes has been included. The approved Site Plan drawings can be provided if necessary.

<u>Removal of the BMX trails and trail bridges to include stormwater management system</u> <u>crossings.</u>

The BMX trails shown on drawings 8, 9, 11, 12, 13, 14, and 15 are a safety hazard as they are located on steep slopes of the landfill that have the potential to settle unevenly. The trails cross the landfill's stormwater management system downchutes (stormwater conveyance channels) and drainage benches (flat earthen shelves on the side slopes of the landfill). The downchutes are constructed of concrete and or concrete rip rap and falling into them could cause serious injury. Along with the personal injury risk, crossing of the benches has the potential to change the slope of the drainage bench interfering with drainage of the landfill, which would conflict with the facility's regulatory requirements. Additionally, in some cases the trail would interfere with existing trees that were planted in accordance with the approved landscape plans and in consultation with the Urban Forest Management Division. For reference, sheet 141 of 184 dated April 2007 is included to provide context regarding safety concerns with the Alpine Hiking trail as noted by Fairfax County. The intended use of the park will not be affected by the removal of the trails and bridges and accessibility to all park features is maintained. See attached photo log for examples crossings.

<u>Removal of the crossings/trail connections shown on sheet 6, 7, 8, 12, and 15 and referenced</u> in permit condition #55.

The trail connections shown on sheets 6, 7, and 8 were referenced in the agreement and stated Lorton Valley HOA was not in favor of providing an easement to the property for access. The trail connection shown on sheet 6 would be on a steep slope and crossing a stormwater outfall, along with an un-named tributary of Giles Run. The trail connection shown on sheet 7 would cross the gas line easement owned by others. The trail connection shown on sheet 8 would tie into Furnace Road across from the entrance to the Covanta facility. Furnace Associates, Inc, contacted Randy Kline, Property Manager for Lorton Valley on May 12, 2020 via email to discuss Lorton Valley's continued lack of interest in trail connections and future desires of the trail connections and associated easements. To date, a response or comments have not been received. For reference, sheet 143 of 184 dated April 2007 is included to provide context regarding Lorton Valley connections. The intended use of the park will not be affected by the removal of the trail crossings and connections and accessibility to all park features is maintained.

The lower crossings shown on sheet 12 are over a large stormwater management channel and a concrete rip rap downchute that conveys stormwater for the facility. The crossing would be a 53-foot-long equestrian bridge which would require substantial design to withstand the potential loads and depending on the foundation needed would interfere the stormwater drainage and ultimately the facility's regulatory requirements.

The upper crossing shown on sheet 12 would cross the stormwater management system and an armored stormwater ditch. This would be a safety concern based on the slope of the proposed path along the landfill slope due to differential settlement.

The crossing shown on sheet 15 is adjacent to one of the facilities gas management flare compounds. This area has high voltage electrical and temperatures in excess of 1,000 degrees Fahrenheit. Crossing near this area would expose the public to these hazards.

See attached photo log for items outlined above.

<u>Relocation of the following amenities to avoid conflicts with facility infrastructure and</u> <u>stormwater management. Sheet 9 recreation/exercise area; Sheet 10 parking area; Sheet 12</u> <u>pavilion, amphitheater, sculpture garden, parking, restrooms and referenced in permit</u> <u>condition #52.</u>

Recreation/Exercise area location adjusted due to landfill slopes and stormwater management system. Amenity would remain in this location, just shifted slightly and also adjust the parking spaces for parallel parking along the roadway.

Parking area near front entrance location adjusted slightly due to stormwater management system. Amenity would remain in this location, just shifted slightly to the east.

Pavilion and Pavilion Parking would remain in this location, shifted slightly to accommodate stormwater flow.

Amphitheater would relocate from a location on the side slope to the south area adjacent to the pavilion. The amphitheater performance area would face northerly and provide a view of the Potomac River for the seating area. This relocation also moves the amphitheater closer to parking and the pavilion. If the amphitheater remained in the previous sloped location it would potentially cause drainage issues along with the potential for erosion issues due the foundation needed and its location in the drainage bench.

Sculpture garden, parking area, and waterless restrooms would shift slightly to the north. This adjustment would put the amenities on a flat area that would move them closer to the Overlook area. This adjustment would alleviate stormwater drainage concerns and provide better accessibility to more amenities.

The intended use of the park will not be affected by the relocation of these amenities and accessibility to all park features is maintained. Minimum setback dimensions approved with the site plan would be maintained.

See attached photo log for items outlined above.

Adjustment of the location of the parking area shown on sheet 8.

The area appears to not accommodate trailer parking as it is understood the intended use is for horse trailer parking adjacent to the equestrian trail. Adjusting this area to accommodate trailer parking would likely reduce the number of parking spaces; however, some typical parking can be provided for the Exercise Station. The parking area would need to be adjusted slightly to the east to accommodate for existing landfill infrastructure. See attached photo log for item outlined above.

<u>Request change to materials of construction of amenities shown on sheets 10, 12, 14, and</u> <u>referenced in permit condition #52.</u>

The change to materials of construction would potentially prevent damage to the parking areas, Overlook area, and Amphitheater specifically from differential settlement of the landfill's soil cap. The change would not alter the intended use of the park and the accessibility to all park features is maintained.

The proposed changes consider that the footing design needs to be sufficiently well-braced to withstand wind loads on top of a landfill prone to heavy winds. In addition, the differential settlements of the footing elements, the magnitude of the settlement, and the rate of the settlement need to be accounted for in the design. Any footing design that extends below the landfill cap will need to prevent infiltration into the landfill materials. These can be challenging design goals to balance and potentially violate regulatory requirements.

Based on the information provided we believe the accessibility to all park features is maintained even in the absence of the trail/stormwater channel crossings, etc. We also believe the proposed changes meet and are in substantial conformance with the approved plan. As previously mentioned, the proposed changes would not change the intended use of the park or the accessibility to all park features and would help to reduce the risk of personal injury. These changes would also help to reduce long term maintenance and operational costs.

Furnace Associates, Inc requests an interpretation on the above items from DPD that recognizes a link between acceptable total and differential settlement and aesthetics of the planned structures, along with the conformance of use.

Waste Management is committed to conducting operations in a manner that protects the environment and our employees, neighbors and customers. We proactively work to implement programs to prevent pollution, while complying with legal requirements and ensuring compliance. If you have any questions or need additional information, please do not hesitate to contact John Dottellis at (410) 808-3039 or via e-mail at jdottell@wm.com.

Sincerely,

John Dottellis Area Engineering Manager Lorton Landfill

w/Attachments

Photo Log Sheet 143 of 184 – Lorton Valley HOA Sheet 143 of 184 – Correspondence Interpretation Exhibit Drawings

From everyday collection to environmental protection, Think Green®. Think Waste Management.