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September 7, 2006

053-7621

Department of Environmental Protection
7825 Baymeadows Way, Suite B200
Jacksonville, FL 32256-7590

Attention: Mr. Jim Maher

RE: MODIFIED CONCEPTUAL CLOSURE PLAN
MSW/C&D LANDFILL
GAINESVILLE, ALACHUA COUNTY, FLORIDA

Dear Mr. Durden:

Golder Associates Inc. (Golder), on behalf of the City of Gainesville, is pleased to provide this modified conceptual closure plan for the Municipal Solid Waste (MSW)/Construction and Demolition (C&D) landfill north of the Gainesville Regional Airport. Discussions with the City of Gainesville Solid Waste Division (SWD) indicate that the landfill began receiving waste in the 1940s and ceased operations in 1971. This landfill is unlined and covers nearly 50 acres. The concerns associated with this landfill include wetland impacts and destabilization due to stormwater erosion. The purpose of this letter is to document the available information about the nature of the waste and the conditions of the landfill and to present our recommendations for a closure plan for the landfill.

BACKGROUND INFORMATION

During a site visit on December 20, 2005, personnel from the Florida Department of Environmental Protection (FDEP) observed that the landfill had several areas with exposed solid waste generally present in large piles including household wastes such as cans, bottles, glass, etc.; demolition debris such as concrete culverts and roofing materials; ceramic tiles; and automobile tires. During the site visit, the edge of the landfill was observed to have encroached into approximately 1 to 2 acres of jurisdictional wetlands of Little Hatchet and Hatchett Creeks. Additionally, evidence of erosion of the upland portions of the landfill surface was most noticeable on the steeper slopes adjacent to the creek, with some deep scarps of the landfill surface being present.

Subsequent to the FDEP site visit, the SWD personnel mapped the approximate locations, aerial extents, and types of exposed waste observed at the landfill, which are shown on the attached Figure 1. Figure 1 also shows a wetland boundary that was flagged in the field by a Golder ecologist and surveyed by the City of Gainesville using a hand-held GPS. The floodplain shown on Figure 1 is the 100-year floodplain that was obtained from FEMA. The landfill and, in particular, the sloped areas adjacent to the creek consist predominantly of household waste and scattered tires with concrete demolition debris along the west side of the landfill slope. The upland side of the landfill is heavily vegetated consisting primarily of exotic species including red mulberry (*Morus rubra*) and sugarberry (*Celtis laevigata*), which are not of ecological value. The central portion of the landfill adjacent to the creek (between Sections 5 and 7 as indicated on Figure 1) encroaches into the floodplain of Little Hatchet Creek.

On August 16, 2006, Jim Maher and Mike Eaton of FDEP visited the site with SWD and Golder. The field observations documented in a memorandum by the FDEP personnel indicated that the sloped portions of the landfill adjacent to the creek had several deep scarps where stormwater runoffs resulted in erosion of the landfill and transport of sediments and, potentially, waste into the creek. The memorandum also indicated that the impacted wetlands were judged to be of poor quality and that backfilling of erosion gullies and cleaning waste out of the wetlands should result in an improvement to the wetlands. The FDEP requested a UMAM analysis to verify that no additional mitigation will be needed. During the site visit, some areas within the landfill were observed to have little or no exposed waste, and these areas do not need to be disturbed. Also, the large hardwood trees present throughout the uplands provide a stabilizing root lattice, and removal of these trees should be minimized.

CONCEPTUAL CLOSURE PLAN

Based on the discussions during the August 16, 2006, field visit, Golder has developed the following conceptual closure plan that incorporates the intent of providing proper landfill closure while minimizing the impacts to wetland. The conceptual plan described below refers to the attached Figure 1. The figure shows the proposed "Work Limits" where the majority of the site disturbance will occur.

1. Conduct a tree survey to determine the location of the larger (12-inch diameter and up) hardwood trees. Establish criteria for determining selective clearing to preserve as many large trees as practical within the Work Limits.
2. Create a staging area for stockpiling and/or shredding tires removed from the Work Limits and for stockpiling backfill/cover material. The staging area may be planned to be located on the east side of the site, near the power-line corridor. The area of residential waste along Section 2 is a suitable location. This area could be cleared of waste and graded to be used as the staging area.
3. The area within the Work Limits (see Figure 1) will be cleared as necessary to access waste and re-grade the existing slopes. Tree removal should include cutting the trees as close to grade as possible to avoid the disturbance of buried waste and to leave the root system intact. Note that some trees will be identified in the tree survey to be left intact.
4. Tires located at or near the surface throughout the Work Limits will be collected and stockpiled at the staging area for shredding. An evaluation will be made as to whether the shredded tire can be used as initial cover material or if it will be disposed of as waste.
5. Waste outside the Work Limits, in the wetland and upland areas, will be removed and placed within the Work Limits. Construction debris outside the Work Limits, primarily consisting of concrete and RCP culverts, will be left in place and not be covered.
6. The Work Limits will be graded to flatten the slopes and incorporate 2 feet of cover material. If a mixture of soil and mulch is to be used for cover material, it must be at least 50-percent soil by volume and be placed at a minimum of 30 inches thick.

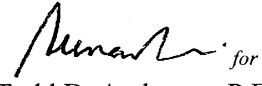
7. A surface water system will be constructed to collect surface water from the top of the landfill and control runoff to prevent erosion.
8. After the slopes are graded and the surface water system is constructed, as necessary, the slopes will be reinforced using heavy-duty turf reinforcement mat (TRM), geoweb cells, or other materials that will allow natural vegetation to re-establish itself. A combination of grass seeding and sod may also be used.

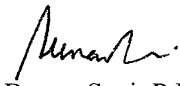
Erosion control procedures will be implemented from the start of the project and be maintained until the project is complete. The erosion control measures will be located up-slope of the wetland delineation line even though some waste removal and backfilling of erosion gullies will take place within the wetlands.

We understand that the FDEP will authorize the work in a consent order with no penalties. The work should be scheduled to be completed during the dry season to minimize erosion risks. Once the conceptual closure plan described here is accepted, a design for site grading and stormwater management must be performed.

Sincerely,

GOLDER ASSOCIATES INC.

 for
Todd D. Anderson, P.E.
Senior Engineer


Benny Susi, P.E.
Associate, Project Manager

TDA/BS/nav

Enclosures

cc: Mr. Paul Alcantar, City of Gainesville
Mr. Brian Durden, FDEP
Mr. Michael Eaton, FDEP

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