

October 3, 2011

Cushman & Wakefield of Florida, Inc.

One Tampa City Center, Suite 3600 Tampa, Florida 33602

Attention:Mr. Bruce K. Erhardt, ALCExecutive Director, Land Brokerage

Subject: **Proposal for Environmental Consulting Services (Remediation)** Countryside Executive Golf Course 2506 Countryside Boulevard Clearwater, Florida *HSA Project Number 601-5982*

Dear Mr. Erhardt:

HSA Engineers & Scientists (**HSA**) appreciates the opportunity to submit the following proposed approach to managing known environmental concerns at the above referenced site. This information is being provided as a follow up to our recent discussion regarding the subject site. Included below is a brief site background along with our recommended approach, cost, and schedule for managing arsenic impacted soil and groundwater during site redevelopment.

BACKGROUND

As we recently discussed, the subject site has been the subject of environmental assessment activities for the past several years. Currently, shallow soil arsenic impacts are known to exist throughout the subject site. Additionally, shallow groundwater arsenic impacts are also present at several locations throughout the former golf course.

At this time, the Site Assessment has been approved by the Florida Department of Environmental Protection (FDEP) and a Remedial Action Plan (RAP) has been submitted to the FDEP. The FDEP recently issued comments regarding the RAP that will be addressed in the coming weeks.

<u>APPROACH</u>

It is our understanding that redevelopment of the subject site is currently being contemplated. As discussed, the overall remedial approach for this site includes management of arsenic-impacted soils

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by relocating this material below impervious surfaces during site redevelopment. At this time, HSA envisions relocating all soil that is currently present in the top 6-inches to areas below roadways, buildings, and/or parking areas. In addition, a portion of the soils located below 6-inches may also require relocation to covered areas. The remainder of the soil arsenic impacts are expected to be managed through on-site soil blending. Blending slightly contaminated soils with clean soils is expected to result in soil that does not contain arsenic above applicable SCTLs per Chapter 62-777, FAC.

In addition to soil management, HSA expects that a comprehensive groundwater monitoring plan will be required. Groundwater monitoring will be required during and after soil relocation activities. At this time, several wells located throughout the subject site contain elevated levels of arsenic. Once soil is relocated, arsenic groundwater impacts are expected to stabilize and or attenuate over time. Groundwater monitoring will likely be required for one to two years following soil relocation.

<u>SCHEDULE</u>

A response to recent FDEP comments will be submitted within the next two weeks. If plans for redevelopment are considered in the near future, the current RAP will need to be modified to accommodate the overall development plan. It is anticipated that a revised RAP can be prepared within 60 days of authorization and a response from FDEP will likely be issued within 60 to 90 days.

COST ESTIMATE

Although there is uncertainty associated with the actual amount of soil that will require relocation and/or blending as well as the term for groundwater monitoring, HSA has developed a preliminary cost estimate range. The cost estimate assumes unrestricted access and schedule to conduct soil relocation and remedial activities.

Task 1	Clearing and grubbing		\$80,000-\$120,000
Task 2	Cell Excavation		\$80,000-\$100,000
Task 3	6" Soil Stripping		\$150,000-\$180,000
Task 4	Blending		\$30,000-\$50,000
Task 5	Clean soil replacement		\$80,000-\$120,000
Task 6	Liner Installation (if necessary)		\$150,000-\$250,000
Task 7	Water Truck		\$10,000-\$20,000
Task 8	Silt Fencing and Erosion Control		\$5,000-\$10,000
Task 9	Project Management		\$30,000-\$60,000
Task 10	Soil/GW Monitoring and Reporting		\$30,000-\$80,000
		Total	\$645,000-\$990,000



It should be noted that the above referenced costs are estimates based on our experience at similar sites. The cost estimates assume that the arsenic-impacted soils will be suitable for use under buildings and asphalt covered areas. In addition, HSA assumes that all of the impacted soil can be utilized on-site and no off-site disposal will be required.

Should you have any questions regarding the approach and/or estimates, please feel free to contact me at 813-971-3882.

Sincerely, HSA Engineers & Scientists

in Plane

Brian Moore, P.E. Environmental Program Manager