



December 3<sup>rd</sup>, 2021

**Mr. Steve McAlearney**  
Director of Engineering  
City of Key West  
1300 White Street  
Key West, FL 33040

**RE: 3.2 Acre Parcel – Phase II ESA  
Findings and Alternatives Moving Forward**

Dear Mr. McAlearney,

This letter is intended to serve as a consolidated summary of Tetra Tech's efforts and findings to date on the 3.2 Acres Parcel located near the Truman Annex in Key West, along with some alternatives. Tetra Tech understands that the City of Key West has the intention of utilizing the property for a mixed use Residential/Commercial development with low-income housing. We understand that the City intends to retain ownership of the land for that arrangement with a long-term lease to the tenant.

In support of this project and as required by law for such developments, the City has contracted Tetra Tech to perform Phase I and Phase II Environmental Site Assessment (ESA) services for the property. We have recently completed an addendum to the Phase II ESA. Those reports have revealed the presence of arsenic in the soils at levels exceeding those deemed acceptable under Soil Cleanup Target Levels (SCTLs) as regulated by the Florida Department of Environmental Protection (FDEP) for the residential land use being proposed.

For the benefit of those who may come into possession of this letter, I feel it would be pertinent to outline an abbreviated history of the property, the nature of arsenic as a contaminant in Florida, significance to the findings, and alternatives the City may wish to pursue to remedy the situation as the project moves forward.

First and foremost, the fact that arsenic is present in the soil on this particular property should come as no surprise. When the property was turned over to the City from the US Navy, it came with a series of deed restrictions and Land Use Controls (LUC) forbidding the use of groundwater and implementing engineering controls ("Do Not Disturb Soils") put in place by the Navy in 2002. This existence of arsenic has therefore been a "known" problem. What has been until recently "unknown" but revealed through our sampling is that the arsenic appears to extend beyond the area denoted in the deed restrictions.

It should be noted that we have confirmed that the arsenic extends beyond the previously identified limits shown in the deed restriction. We have not yet confirmed (nor have we been contracted to confirm) how far the contamination goes and/or where it ends.

Arsenic is commonly found in some herbicides. It may often be found in orange groves and golf courses throughout Florida. Arsenic may also be found in common household herbicides such as RoundUp. The City recently banned its own use of RoundUp possibly, in part, because of this. While rare, arsenic can be naturally occurring at levels that exceed SCTLs. However, the prevalence of arsenic throughout the state should not be misconstrued; the existence of arsenic on any property, including this one, is problematic.

I am not an attorney and therefore I am not qualified to provide you or the City with legal advice. That stated, I believe that since the City took over the property with the deed restriction in place, if the City wishes to develop this property it will be the City's legal responsibility to address this matter or require that the developer does so on the City's behalf. I also believe it is the City's responsibility to notify FDEP that the contamination extends beyond the previously identified limits. Whatever course of action is chosen will likely need to be presented to and approved by FDEP if the City wishes to obtain a closure and develop this property.

We are keenly aware that the City has a growing demand for this development and that the presence of a remediation problem is unwelcome news with potential ramifications to the construction timeline. There are, however, alternatives available to the City for addressing this matter in what we hope will be a cost-effective, timely manner. I will lay out a few that I am aware of in no particular order:

1. Soil removal via dig & haul. This could be complicated and expensive, depending on the limits of contamination.
2. Cap in place. The City could require that the developer supply a 2-foot-thick layer of clean fill atop the existing site to "cap" the contamination.
3. Other Engineering Controls – The current site plan has an abundant amount of asphalt and concrete. These can be presented to FDEP as engineering controls over the contamination and they may need to be legally assigned that designation in perpetuity to legally address the matter.
4. Soil blending – It may be possible to blend the contaminated soils with clean soils on the site to blend them together and reduce the potency of arsenic below SCTLs.

Regardless of the method ultimately chosen, the City will likely have to first delineate the extents of the problem fully. Any developer will want to know, for instance, how much soil he/she needs to haul or import. I cannot emphasize enough that the City will be required to broker the solution with the FDEP and that the schedule will be subject to FDEP's review timelines.

Tetra Tech is prepared to assist the City in navigating whatever path it chooses. As our track record shows, we remain steadfastly committed to assisting the City accomplish its objectives for this and all its initiatives.

If you have any questions or need any additional information, please contact me at (772) 781-3440 or [dave.frodsham@tetrattech.com](mailto:dave.frodsham@tetrattech.com).

Sincerely,



**Dave Frodsham, PE**  
Senior Civil Engineer