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SUBJECT: Waste Management Activities

The Spokane Public Facilities District (SPFD) requested that GeoEngineers prepare recommendations for waste minimization procedures that might be used during construction of the Convention Center Expansion facility. This memorandum has been prepared through conversations with Matt Walker of the SPFD and Dave Garske of the Hoffman-Bouten Joint Venture (HBJV). The following are suggested procedures to minimize waste during construction:

- Screen a portion of the soil that is characterized as problem waste (contaminated). The on-site Owner's Representative (GeoEngineers) indicated that the earthwork contractor is having difficulties segregating basalt and other coarse debris from contaminated soil (fines). We recommend that a screen or a series of screens be used to separate inert debris such as basalt fragments and cobbles from soil. We understand that a screen with 2-inch-square openings currently is being used at the site with some success. We also understand that the earthwork contractor is charging by unit weight to process material. We recommend that GeoEngineers' and HBJV jointly assess which batches of soil should be processed through the screen to minimize unnecessary processing of material with small quantities of coarse material. We also recommend that GeoEngineers periodically observe the screened larger fraction to confirm that fines and other non-inert material are absent. Other size screens might also be used to speed up screening operations and/or to minimize the amount of undesirable material entering the larger fraction waste stream.
- Minimize utility trench depths and widths wherever practical. This will minimize the volume of problem waste material requiring off-site disposal and the amount of import soil. Such techniques might include using smaller width excavation buckets, trench boxes, co-locating utilities if possible, etc. The SPFD and HBJV might consider applying this technique to other excavations as well.
- Allow additional time for preparation and excavation of soil suspected to not be contaminated. The earthwork contractor and HBJV should be aware that soil suspected to be non-contaminated will require careful excavation to minimize cross-contamination with overlying contaminated soil. Such techniques might include first removing contaminated soil overlying soil suspected to not be contaminated, placing non-contaminated soil on plastic sheeting, decontamination of excavation equipment before excavating soil suspected to be non-contaminated, and other techniques. Identifying non-contaminated soil should limit soil disposed off-site and can reduce the amount of import material.

The earthwork contractor and HBJV might have additional waste minimization techniques that are not apparent to us. Please contact Dave Enos or Bruce Williams at (509) 363-3125 with questions.