Soil Management Plan for Construction

Purpose: to outline procedures for the excavation, handling, segregation, stockpiling, grading, and reuse of soils during construction. These are also included within construction drawings for the project.

Soil Type & Quality: Soils are classified as poorly drained to very poorly drained. Pesticide residues (4,4-DDE and Heptachlor Epoxide) have been detected in surface soils.

Soil Excavation Scope: ~16,460 cubic yards of soils are anticipated to be excavated during construction. Grading shall be limited to what is essential. Soil disturbance shall be sequenced such that earth materials are exposed for a minimum amount of time before they are covered, seeded, or otherwise stabilized. Heavy equipment shall utilize designated access drives for travel to minimize soil disruption or compaction. No soil disturbance shall occur until proper erosion control measures are in place. No soil is expected to be transported off-site or imported to the site for this project.

Health & Safety: Procedures shall be implemented to limit worker contact with soils and for dust suppression.

Dust Control: Ensure no visible dust is generated. Mist as necessary to prevent airborne dust without creating run-off. Any run-off resulting from dust control procedures are to be properly managed/collected as necessary.

Erosion and Sediment Control: Erosion control measures shall follow federal, state, and local requirements and comply with the project's Stormwater Pollution Prevention Plan (SWPPP). Temporary sediment traps and permanent stormwater basins are to be installed in accordance with project documents. Slopes should not exceed 3:1 and erosion control blankets are to be used for drainage swale sidewalls and steep slopes. Erosion and sediment controls are to be inspected by the Contractor daily. No sediment laden runoff shall be allowed to reach the wetlands or discharge off-site. Use of anti-tracking pads and cleaning of soils from equipment is to be conducted before allowing it to leave the site. No soil disturbance will be allowed until these controls have been put into place.

Soil Stockpiling: Stockpile areas are to be located within the limits of disturbance, outside the 100-foot buffer of any wetlands, and 200-feet from any watercourse. Snow-fence, haybales, and silt fence are to be installed around soil stockpiles. Stockpiles are to be covered with polyethylene sheeting and secured to prevent precipitation entering the stockpile and runoff occurring. If soils are excessively wet, earth berms are to be created to contain drainage. Stormwater runoff is to be diverted around stockpiles and managed to minimize water-related erosion. Extended stockpiling periods are to be avoided. All excavated soils are to remaining on-site and be reused to smooth grades for the solar field. Topsoil is to be stockpiled separately, retained, and reused for final grading and re-seeding.

Inspections: CTDEEP Approved Qualified Inspector shall perform weekly inspections of erosion controls and stockpile areas as well as required inspections within 24 hours of rain exceeding 0.5 inches for up to three months or until stabilization. Any deficiencies noted by the Inspector are to be addressed within 24 hours of the inspection.

Soil Stabilization: Reseed and regrade all disturbed areas as early as possible. Site soil stabilization is to be completed within 14 days of post-grading, using hydro-seeding, sodding, or biodegradable erosion control mats. Temporary erosion and sediment controls are to be removed after site stabilization. Secure effective establishment of vegetation with suitable topsoil, adequate lime, fertilizer, mulch, and water.