Arid Lands Project Profile: Business 83 in Mercedes, TX

**Issues**
- Poor soil fertility and quality, less than 0.8% organic content
- No supplemental watering scheduled
- High visibility and erosion potential made revegetation imperative on the site
- Sandy Soil

existing topsoil from the site was used on the slope, but quality was poor with less than 0.8% organic matter. Installation June 2016

**Problem**
A side slope from a roadway ended at the fence line of private property on this project; so long term vegetation to prevent possible erosion was a necessity. Climatic conditions in the area are exceeding hot and dry: with summer temperatures reaching triple digits and average rainfall slight. In this region adequate densities of vegetation are regularly difficult to achieve.

**Solution**
Due to low fertility and quality of the available topsoil, Innovative Soil Solutions recommended Biotic Earth, a Biotic Soil Amendment, to achieve vegetation long term on the site at acceptable densities and without the need for constant supplemental watering and fertilizer applications. Soiltech, Inc. applied Biotic Earth, Earthbound 200 tackifier, and seed hydraulically in late summer of 2016. Straw erosion control blankets were applied in the following days to provide temporary erosion control on the site.

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[Image of a green road side]
Quality vegetation and a minimization of soil loss due to erosion were achieved in the months following application. Vegetation densities continue to improve, even with the site being seeded in the hottest and most difficult season for installation. The client is pleased by the results achieved so quickly and is excited to see sustained vegetation in successive seasons.

**Details**

- Biotic Earth: applied at 3,500 lbs./AC
- Earthbound 2000 tackifier: applied at 35 lbs./AC
- TXDOT Seed Mix: District 21, Permanent, Urban Clay Soils Seed Mix (PLS)
  - Green Sprangletop - 0.3 lbs./AC
  - Sideoats Grama (Haskell) - 3.6 lbs./AC
  - Buffalograss (Texoka) - 1.6 lbs./AC
  - Bermudagrass - 1.8 lbs./AC