Cutter Soil Mix (CSM)

The CSM (Cutter Soil Mix) wall is an innovative technology/process which mixes the in-situ soils with grout slurry (generally cement) to provide a retaining wall and/or an environmental barrier. A pair of rotating cutter wheels are driven into the ground in the presence of cementitious/bentonite slurry to form a mixture that will harden to a min.15MPa and provide a durable and stable wall.

The CSM wall is 640mm thick on average and is generally reinforced with universal beams or columns to carry building loads and cater for the bending and shear forces within the wall. Each panel is 2.8m and is installed in a sequence of primary and secondary panels. The panels overcut each other to provide a full watertight joint. The permeability of the wall is almost the same of a concrete wall.

The wall can be both anchored or strutted for temporary excavation support. The wall can be installed into stiff clays to provide a cut-off wall.
Advantages:
- Cost Effective
- High Productivity
- In-situ Soils used as Construction Material
- Very Little generation of Spoil (important in contaminated soils)
- No Vibrations during Construction
- Close to Wall Drilling (Only 100mm from an adjacent structure/wall)
Projects;

19-33 Kent Rd, Mascot

Scope: Design & Installation of 330No. CSM Panels up to 16m into stiff clay to provide a fully cut-off retaining wall. Temporarily supported by ground anchors.

16-20 Princess St, Brighton Le Sands

Scope: Design & Installation of CSM Panels up to 18m into very dense sands for a 3 level basement excavation. Temporarily supported by ground anchors and bracing/struts.