

SPENT POT LINING (SPL) STORAGE BUILDING - EMAL

Abu Dhabi



SPENT POT LINING (SPL) STORAGE BUILDING - EMAL

TYPE OF PROJECT

Construction Over Soft Soils

YEAR OF CONSTRUCTION

2016

CLIENT

Emirates Global Aluminium (EGA)

CONTRACTOR

Amana Contracting & Steel Buildings - UAE

DESIGNER

Tebodin Middle East

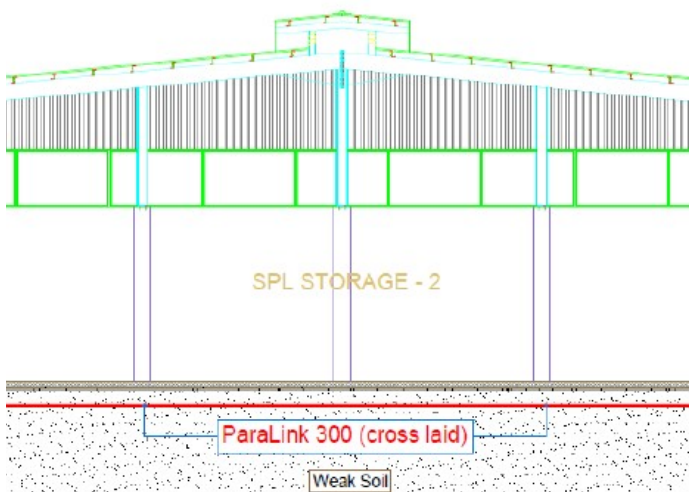
PROD. RELATED

MonoAxial GeoGrids (1,000 M2)

Challenge

The proposed warehouse building (175m x 45m), is a combined RCC-Steel structure aimed at storing the SPL materials. The foundation soil had bearing capacity and settlement issues due to the presence of a 2m thick loose soil deposits characterized by a very low SPT N-value (<4). The calculated settlement was 70mm, the acceptable value being 50mm. For this reason, the soil consultant recommended ground improvement with

stone columns for the entire footprint area of the building. However the recommended solution was not feasible for the main contractor (M/s. Amana) due to financial & construction time reasons. In the tender, the main contractor budgeted with 'slab on grade' and the periphery footings on piles. consideration of stone columns for the floor location exceeds the budget and construction time (8 months in total).



Section



During Construction

Solution

Maccaferri was invited by the client & consultant to give an alternative solution of ground improvement. Upon review of the available geotechnical reports, an analytical ground profile was created by our geotechnical engineers. Various options of ground

stabilization were checked by our technical team and finally a ground stabilization by high strength geogrids (PARALINK®300) was Maccaferri's recommendation. Maccaferri saved cost and time and energy on the project.



During Construction



After Construction



OPEN GOOGLE MAPS



OPEN GOOGLE EARTH