Jamshedpur Utility Services Limited



Method Statement – Use of StrataWeb<sup>®</sup> Geocells for Retaining Wall

PROJECT	Method Statement - StrataWeb <sup>®</sup> Geocells for Retaining Wall
LOCATION	Jamshedpur, Jharkhand
CLIENT	Jamshedpur Utility Services Limited
GEOTECHNICAL AGENCY	-
PROPOSAL	Method Statement
DOCUMENT NO.	_
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REVISION	PO
REMARKS	For Preliminary Approval
PREPARED BY	PVG
CHECKED BY	YRP
APPROVED	SPB



# Method Statement - StrataWeb® Geocells for Retaining Wall

### Site Preparation

- 1. Stone, debris, dead wood, vegetation, etc. shall be removed from the site.
- 2. The proposed site shall be ready for installation with sufficient man-power, raw material supplies and available space.
- 3. The subgrade soil shall be excavated and well compacted prior to the construction of the retaining wall base.
- 4. Presence of any weak or compressible soils shall be replaced with suitable compacted fill (Refer Fig. 1).

#### Installation of StrataWeb® sections

- After the proper compaction of subgrade soil the StrataWeb<sup>®</sup> geocell of specific width as per the design shall be laid on the subgrade soil.
- 2. The expanded StrataWeb<sup>®</sup> sections shall be held in position using temporary anchor stakes in the peripheral cells of the expanded StrataWeb<sup>®</sup> sections (Refer Fig. 2).
- 3. The adjacent StrataWeb<sup>®</sup> panels shall be connected with cable ties.

## Infilling of StrataWeb® sections

- 1. Once the StrataWeb<sup>®</sup> sections are held in position the geocells shall be filled with the specified infill material.
- 2. Once the cells are infilled the temporary stakes in the peripheral cells shall be removed.



Figure 1: Site Preparation



Figure 2: Installation of StrataWeb® Geocell Sections



Figure 3: Infilling of StrataWeb® geocell



3. Overfill the StrataWeb<sup>®</sup> geocell sections with infill material approximately 50 to 100 mm above the cell walls. (Refer Fig. 3)

## Compaction of infill material

- 1. Infill material shall be compacted using plate vibrator or by any conventional equipment.
- 2. The infill material shall be compacted to 95% Standard Proctor.
- 3. After the compaction of each StrataWeb<sup>®</sup> geocell layer, scrape off the excess material to expose the top of the cell walls (Refer Fig. 4).



Figure 4: Compaction of infill material

#### Installation of subsequent StrataWeb® layers

- 1. The subsequent StrataWeb<sup>®</sup> geocell layers shall be laid with an offset of minimum 50 mm or as specified in the drawing.
- 2. Care shall be taken that the alignment of subsequent layers is maintained vertically.
- 3. Weld to weld placement and the cell to cell placement of subsequent StrataWeb<sup>®</sup> geocell layers shall be consistent.



Figure 5: Gravity wall using StrataWeb® geocell