CONSTRUCTION OF GRS-IBS
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- Materials
- Equipment
- Excavation
- Reinforced Soil Foundation
- Block placement
- Geosynthetic placement

- Fill Placement
- Top of wall details
- Placement of Superstructure
- Approach construction
- Rip Rap Installation
Geosynthetics

Geogrids

Geotextiles
Facing types
Facing Blocks
Reinforced fill materials

Open Graded Fill

Well Graded Fill
Equipment
Equipment
Equipment
Tools
Tools

- Level
- String Lines
- Shovels
- Rakes
Tools

- Rubber Mallet
- Block Tongs
Excavation
Excavation
Excavation
Excavation
Reinforced Soil Foundation
Reinforced Soil Foundation
Reinforced Soil Foundation
Block Placement
(First Row)
Block Placement
(First Row)
Wall with Leveling Pad
Block Placement
Block Placement (corners)
Geosynthetic Placement

Biaxial Geotextile

Uniaxial Geogrid
Geosynthetic Placement

No overlaps or tying of geosynthetic
Geosynthetic Placement

Trim geosynthetic at block facing

Clean finished face
Geosynthetic Placement

Roll out geosynthetic with strong direction perpendicular to abutment face.

Reinforcement should extent to connecting devices or to a minimum of 75% of block width.
Geosynthetic Placement

- Pull reinforcement taut
- Remove wrinkles

No overlaps, especially at the face
Fill Placement
Fill Placement
Fill Placement
Fill Compaction
Fill Compaction
Top of wall details

- Clear Space: The distance between the top of the wall face and the bottom of the superstructure

3” min or 2% of wall height
Top of wall details
Top of wall details
Top of wall details
Top of wall details
Placement of superstructure

- Set Back: The distance between the back of the facing block and the front of the beam seat.
Placement of superstructure
Placement of superstructure
Approach Construction
Approach Construction
Approach Construction
Rip Rap Installation
Rip Rap Installation