

Landfill Closure Program

Roles of cover systems components



Vegetative Cover – reduces infiltration, wind erosion, and improves slope stability.

Filter Layer – Prevents sifting of cover soil into drainage layer.

Drainage Layer – provides conduit for water to exist cover system.

Barrier Layer – minimizes infiltration through cover, barrier for vectors, and odour control.

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Clay cover systems

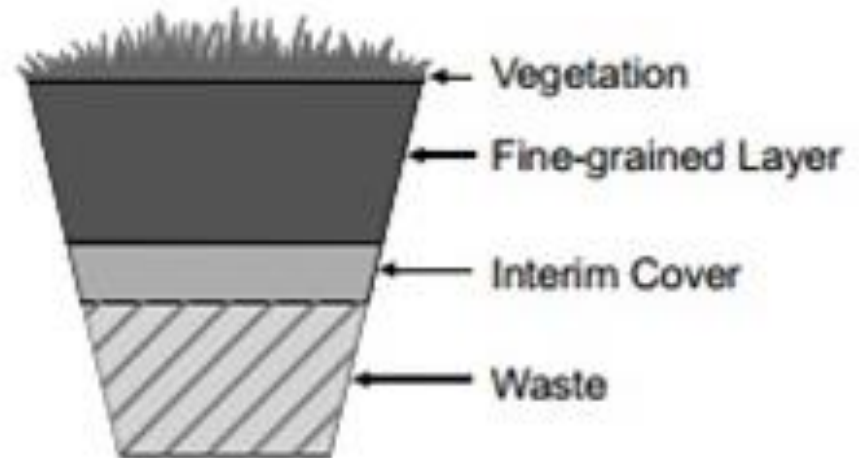
- Readily constructible.
- Low capital cost (if suitable material available)
- Approvals well defined.
- Susceptible to shrinkage cracking and/or freeze/thaw cycles.
- May have higher permeability than base liner.
- May be susceptible to differential settlement.



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Evapotranspiration covers

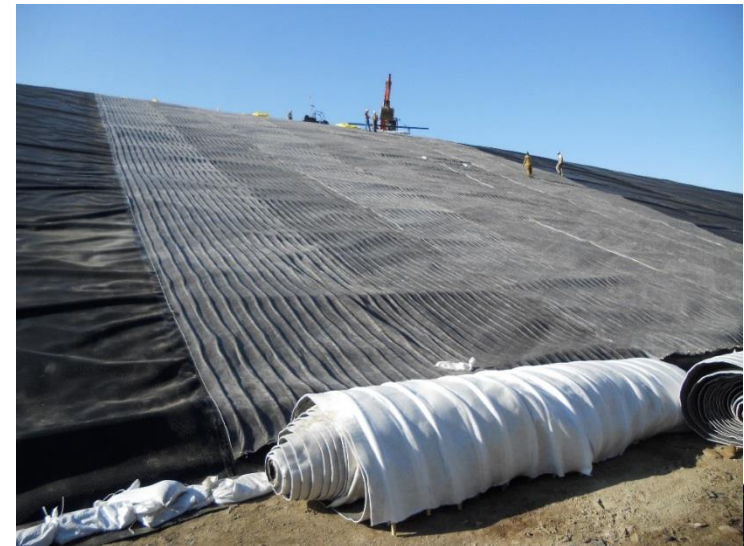
- Climatic specific. Suitable for semi-arid environments only.
- Not significantly impacted by drying or freeze/thaw cycles.
- May be more effective than compacted clay covers.
- Design and regulatory approvals more intensive.
- Suitable soils required.



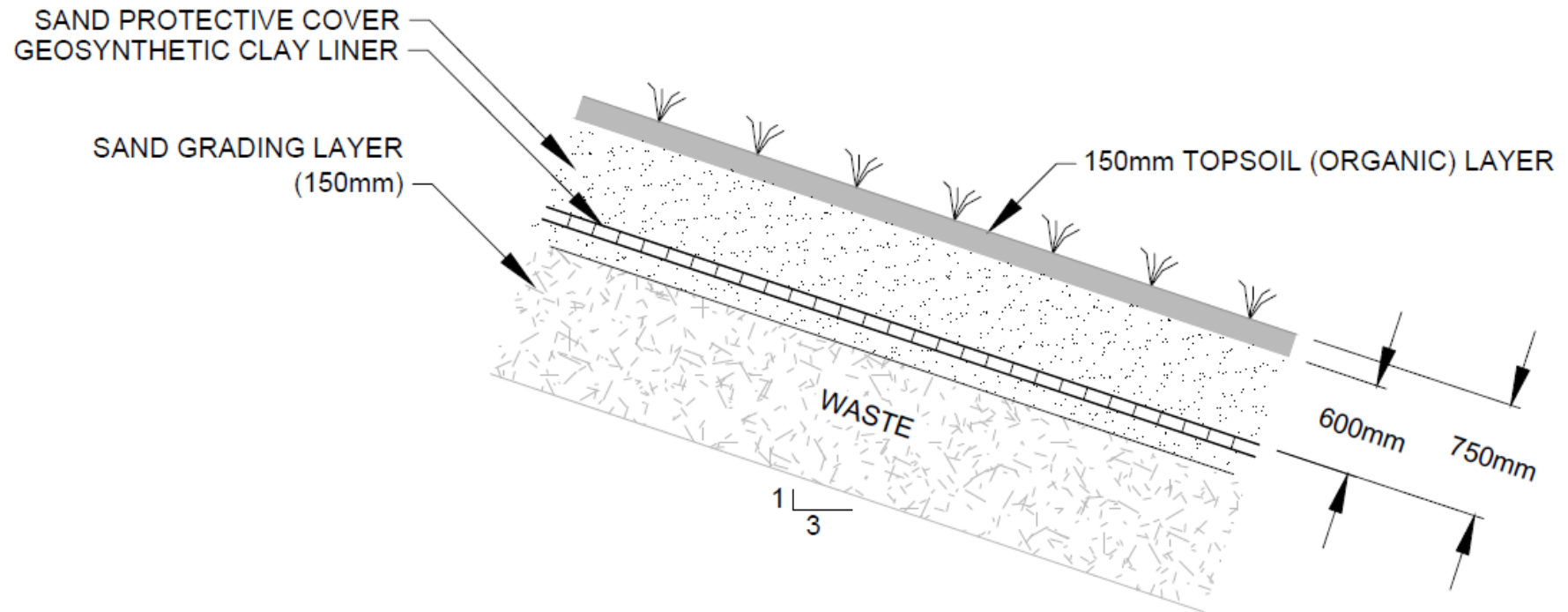
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Composite cover systems

- Excellent performance with very low infiltration rates possible.
- Suitable for high sensitivity.
- Not affected by freeze/thaw or drying.
- Decreased profile depth.
- May have higher capital costs relative to clay.
- Design and regulatory approvals may be more intensive.
- Require specialized installation and QA/QC.



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DETAIL

1:50

1

C-05

FINAL COVER SYSTEM

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Stormwater management

- Manage, at a minimum the 1:25 year event. May be required to manage the 1:100 year event depending on site conditions and receptors.
- Ongoing maintenance and inspection.



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Legend

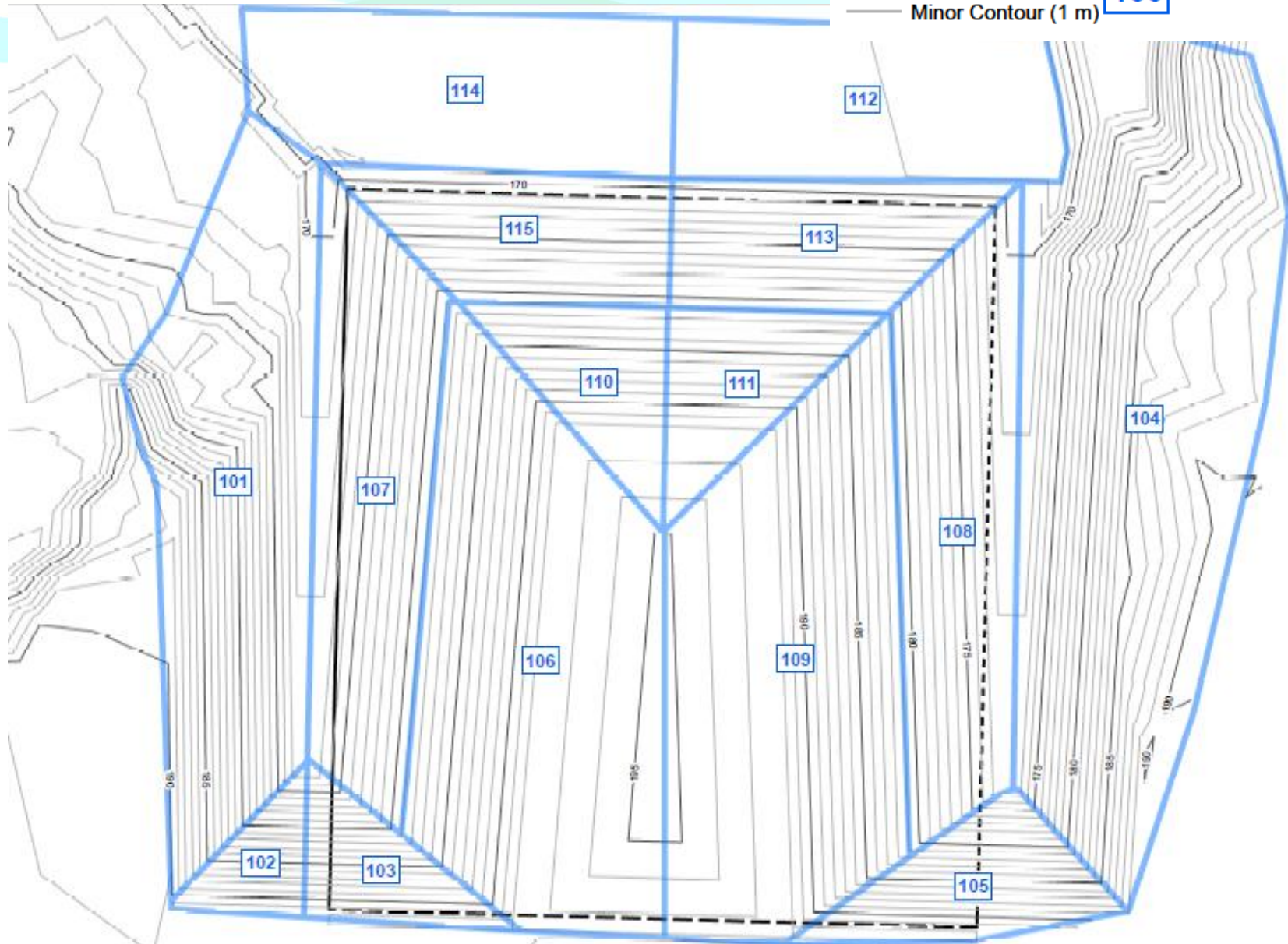
— ■ Limit of Waste

— Major Contour (5 m)

— Minor Contour (1 m)

Subcatchment Boundary

100 Subcatchment Number



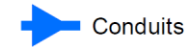
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Legend

— Limit of Waste

— Major Contour (5 m)

— Minor Contour (1 m)

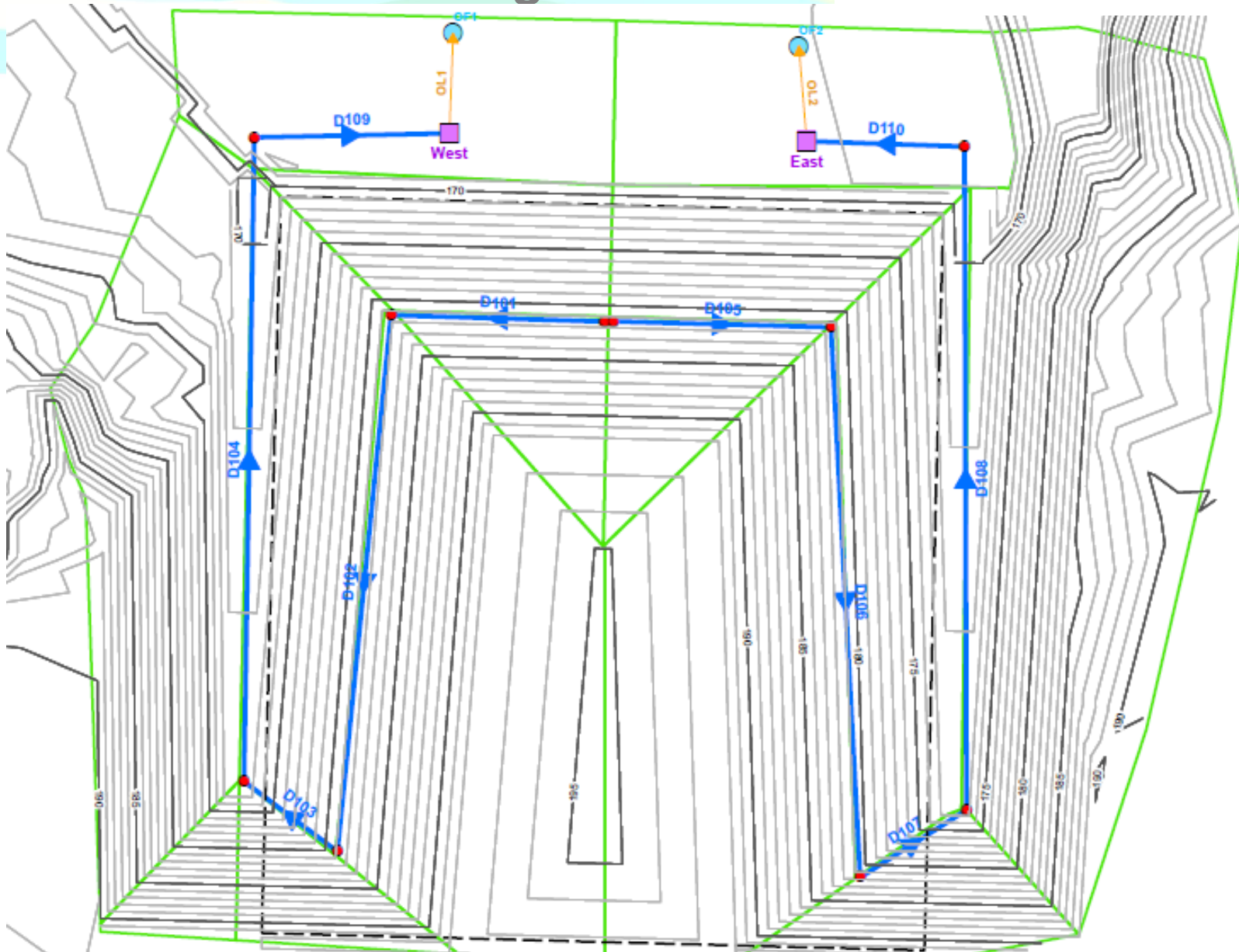


— Outlets

■ Sediment Forebay

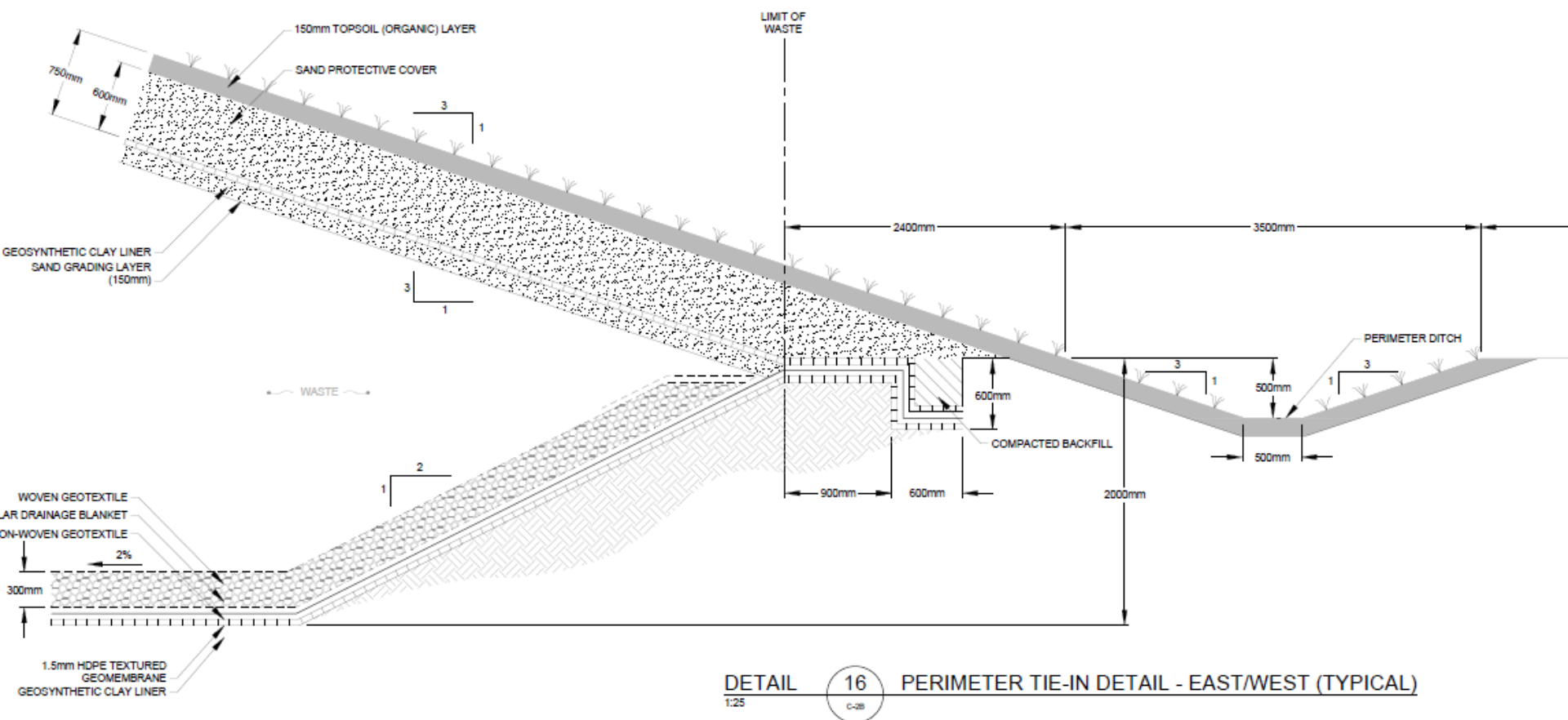
● Junctions

○ Infiltration Area





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