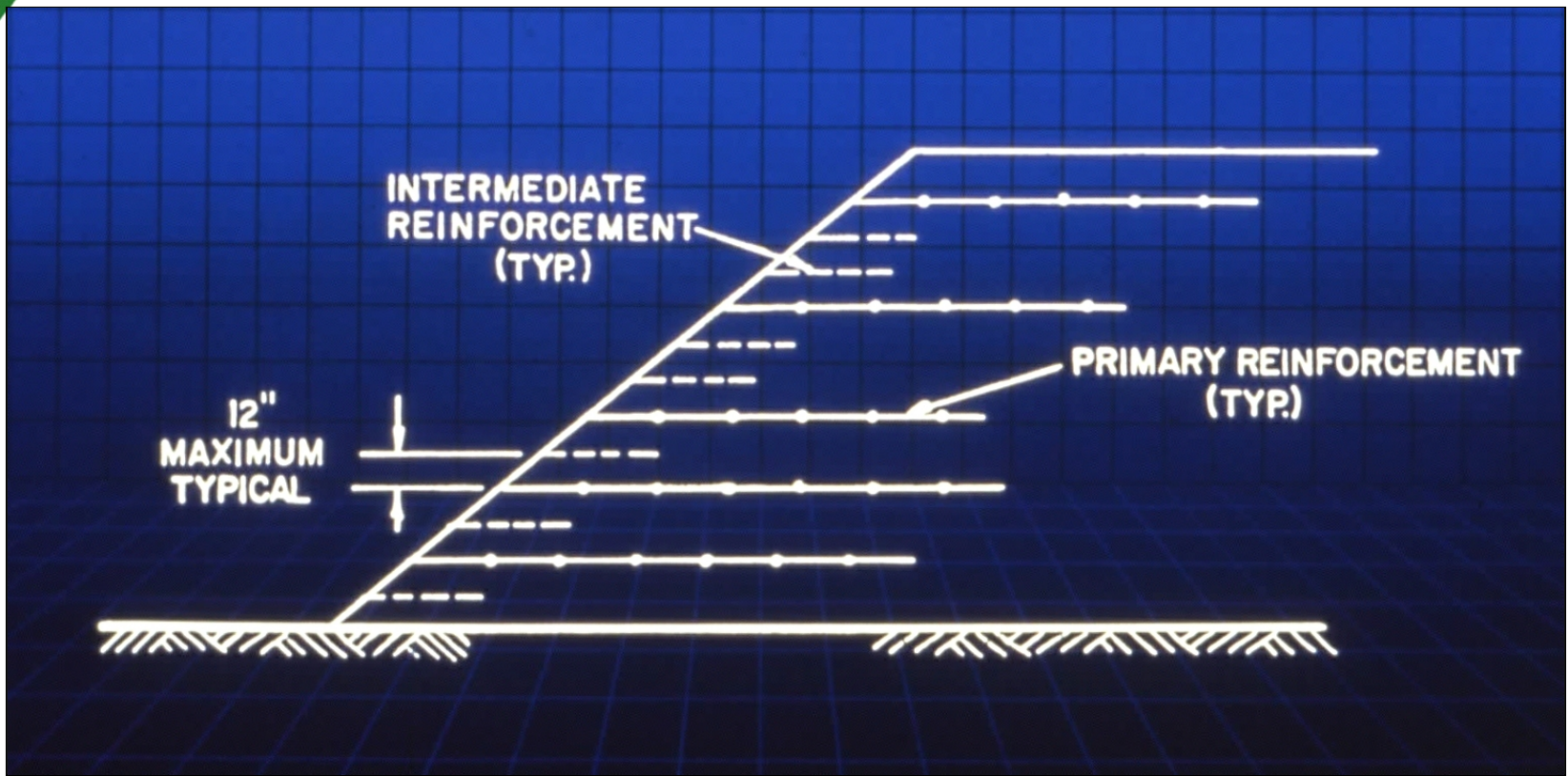


Part 4

MECHANICALLY STABILIZED EMBANKMENTS (MSE's)

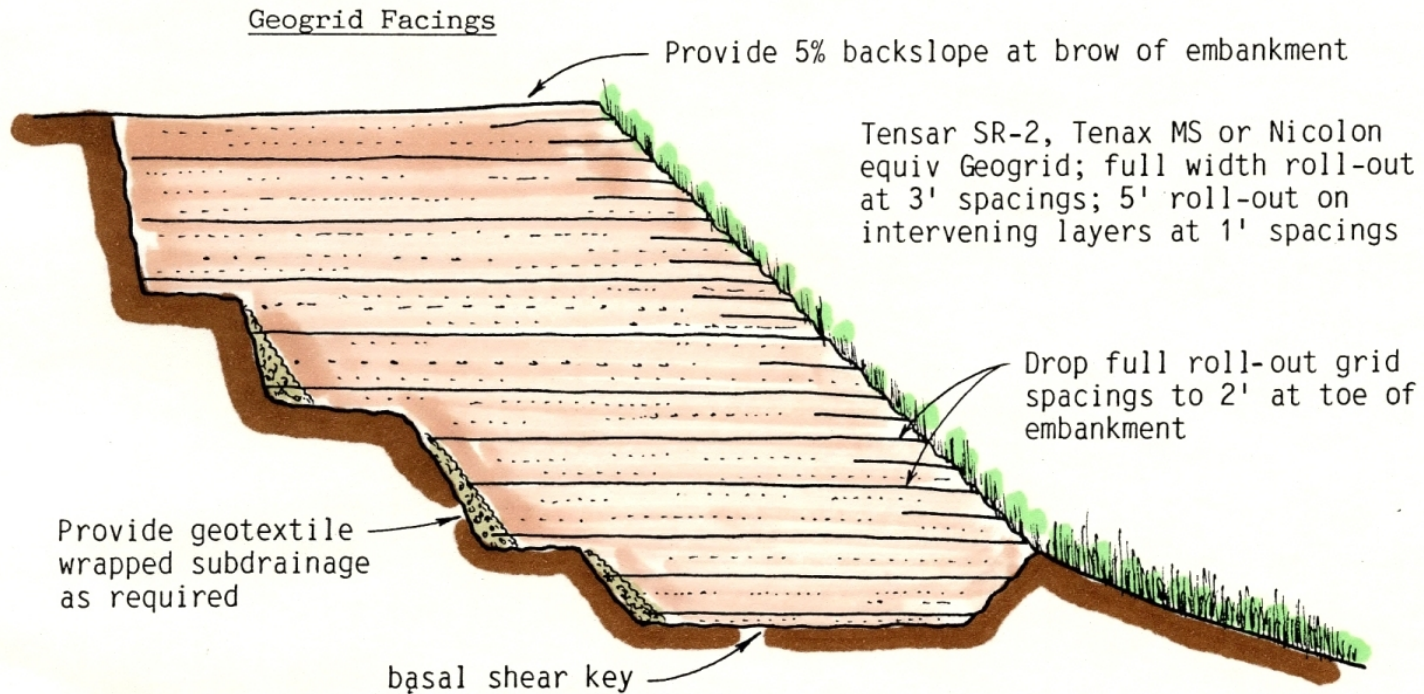


- Geogrid-wrapped hay bales can be used as temporary facing elements for **mechanically-stabilized embankments**. These materials do not corrode, so are perceived to be more “**environmentally friendly.**”

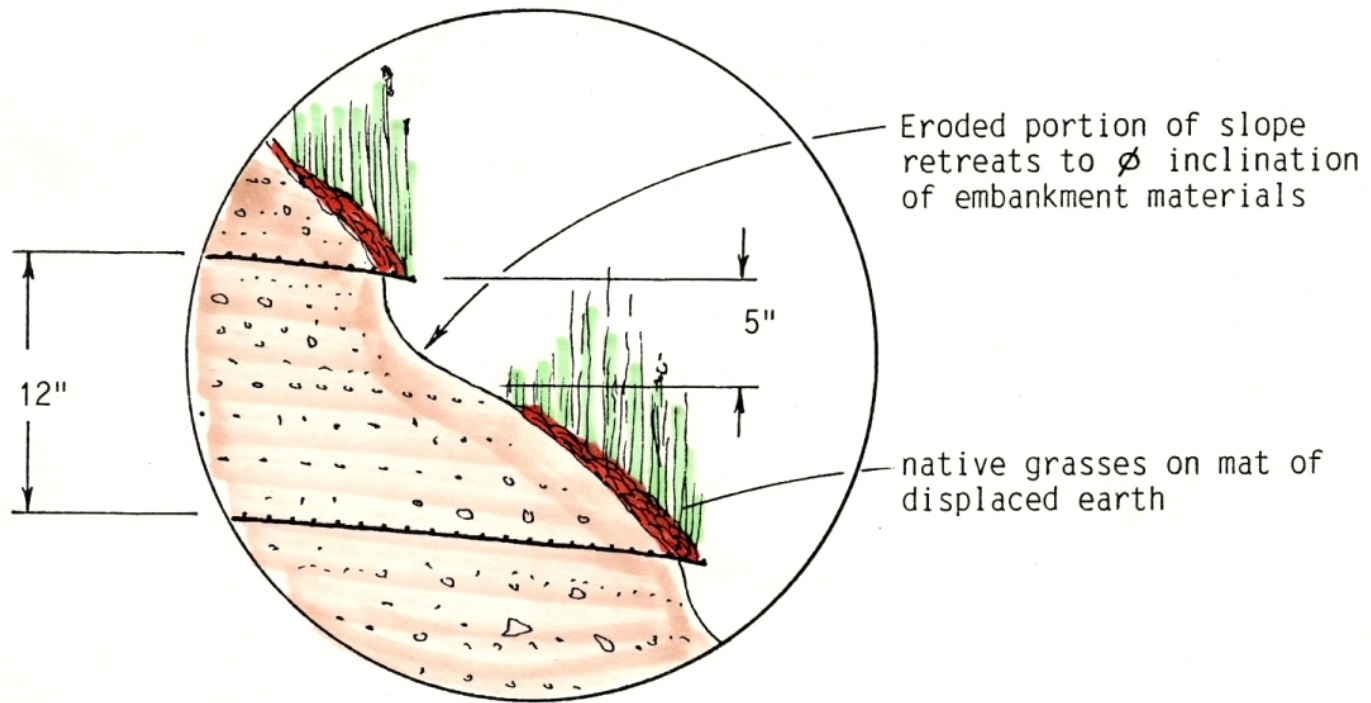


- Short strips, or “**false layers**” of geotextiles can be incorporated between reinforcement layers of mechanically stabilized embankments (MSE) to restrict slope raveling and erosion.

Erosion Control with Geosynthetics



- Section through a **MSE embankment** with a 1:1 (45 degree) finish face inclination. The embankment utilized false layers every 12 inches, extending just 5 feet into the slope.



Detail view of the erosion which can be expected to occur between Geogrid layers. The effective slope height is reduced to 12" by embedment of the Geogrid.

- Detail of geotextile “**false layers**”, placed every 12 inches to retard rill erosion.



- **Construction of 45 degree sidehill embankment for a road in steep terrain. Both false and full-depth geotextile mats were incorporated into the embankment, spaced every 12 inches.**



- **Same slope after hydroseeding and sprouting with a mix of wild mustard and other grasses.**



- **Example of a 45 degree fill face supporting a parking lot adjacent to a line of mature trees. The embankment was constructed using false layers of geotextiles spaced 12 inches apart.**



- **Same 45 degree fill slope after hydroseeding and sprouting of fescue grass mix, 5 weeks after completion. All runoff from above was directed away from the slope face**