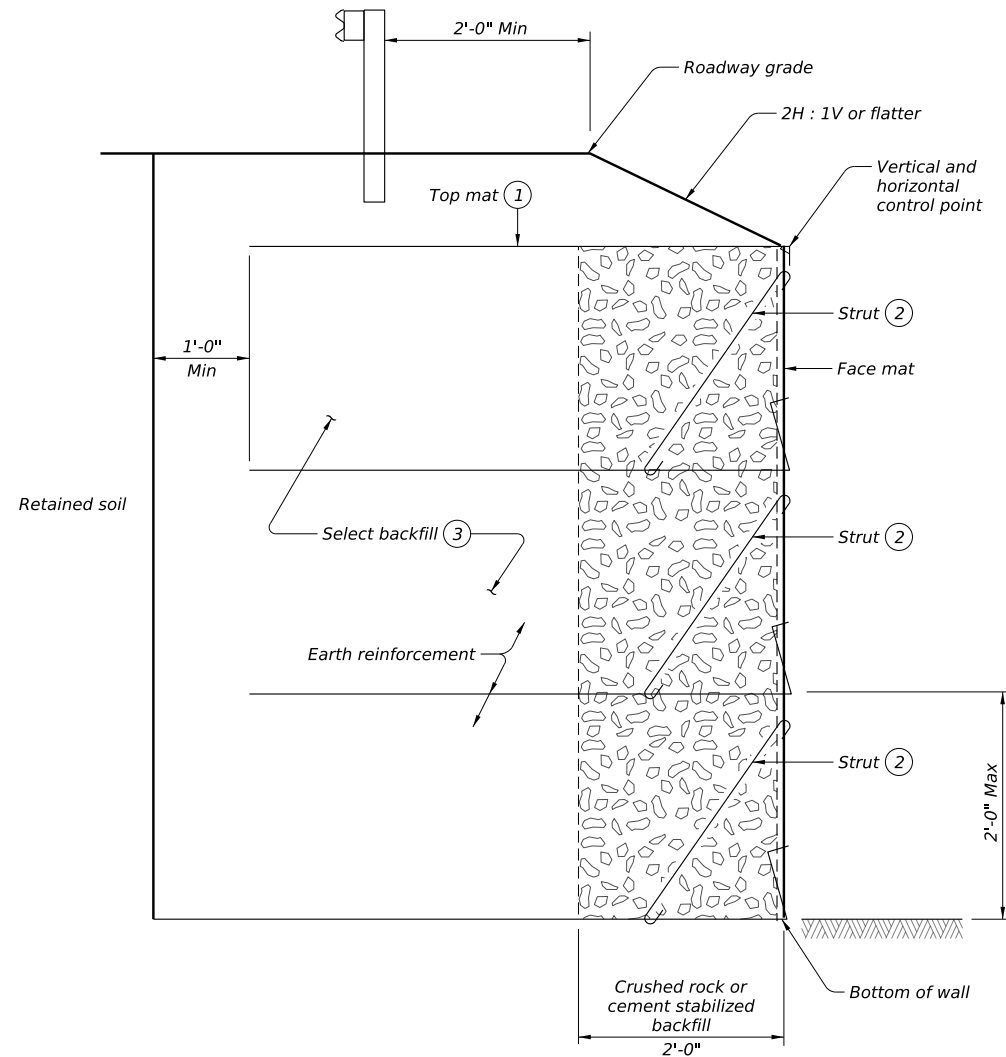
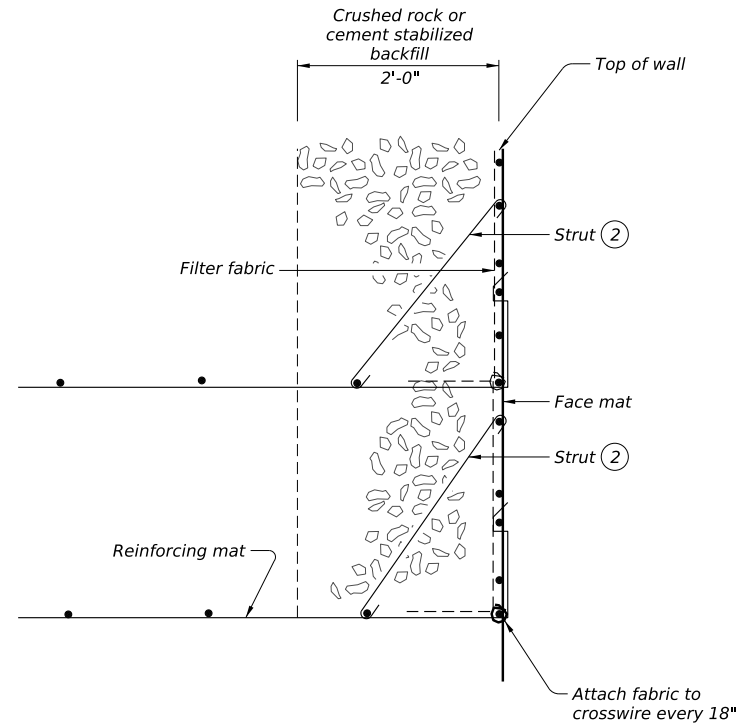


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TYPICAL SECTION

(Showing top mat option.)



DETAIL OF WALL FACE

(Showing strut option.)

- ① Provide top mat to stabilize top of wall. Contractor may submit alternate method to stabilize top of wall for review.
- ② Provide intermediate struts to stabilize face. Wall supplier may submit alternate methods of face stabilization for review.
- ③ Shop drawings must include drainage provisions and details for backfill composed of:
Cement stabilized sand,
Crushed concrete, or
Type CS fill with a fines content greater than 15%.
- ④ Base soil design parameters on long term soil strength. List design parameters on the RW(TEW)DD standard sheet.

SPECIAL NOTE - FACE CONSTRUCTION

When constructing wire faced walls, it is critical that the area immediately behind the face mat be completely filled. Failure to fill and compact this area will result in bulging of the face mats and settlement of the top of wall. The filter fabric shall closely follow the contours of the face unit, with particular attention paid to the lower corner of the basket. Pull the fabric into the corner and attach to the basket with hog rings or tie wire. Extend the coarse rock or cement stabilized backfill in the 2-foot zone behind the face completely to the top of the face mat. Take particular care not to leave a gap or void below the next layer of earth reinforcement.

DESIGN CRITERIA NOTES:

Design Soil Parameters:
Base design of retaining walls on the following design parameters unless stated elsewhere in the plans:

Random Backfill (Embankment or Existing Soils)	Unit Weight = 120 pcf $\phi = 4$ C = 0 psf
Select Backfill	Unit Weight = 120 pcf $\phi = 4$ C = 0 psf

Load Parameters:
Base design of retaining walls on the following load combinations and load factors in accordance with AASHTO LRFD Bridge Design Specifications. All required checks should be complete as per the Strength Limit State.

LOAD TYPE	SYMBOL	STRENGTH I	
		MAX	MIN
Vertical Earth Load (EV)	Y_{EV}	1.35	1.00
Active Horizontal Earth Pressure (EH)	Y_{EH}	1.50	0.90
Earth Surcharge (ES)	Y_{ES}	1.50	0.75
Live Load Surcharge (LS)	Y_{LS}	1.75	

Limit factored stresses and pullout of earth reinforcement in accordance with AASHTO LRFD Bridge Design Specifications.

Stability Criteria:
Base design on the following resistance factors:

STABILITY MODE	RESITANCE FACTOR	
Sliding	1.00	
Bearing	0.65	
Pullout Resistance (Steel reinforcement)	0.90	
Tensile Resistance (Steel grid reinforcement)	0.65	
Pullout Resistance (Geosynthetic reinforcement)	0.70	
Tensile Resistance (Geosynthetic reinforcement)	0.80	

Design the wall such that the base pressure resultant falls within the middle half of the retaining wall.

EARTH REINFORCEMENT:

Space vertical earth reinforcement at 24 inch maximum.
Provide earth reinforcement lengths adhering to the following:
6-foot minimum for walls 6 feet and shorter
8-foot minimum for walls over 6 feet tall,
or as shown elsewhere in the plans.
Utilize a minimum W4.5 wire size for welded wire earth reinforcement. Space on longitudinal wire at maximum of 12 inches and transverse wire at a maximum of 24 inches.
Geogrid earth reinforcement is permissible. If geogrid is to be used, provide a detail showing the connection between the welded wire face basket and the geogrid earth reinforcement.
Provide non-metallic or galvanized reinforcement for any temporary earth wall reinforcement that will be placed in the reinforced volume of a permanent MSE wall.

WALL FACE:

Provide welded wire in facing with a minimum W4.5 wire size. Space wire at 6 inches maximum in both the horizontal and vertical directions. Design the facing to maintain a vertical position during wall backfilling. Utilize wire struts, external bracing, or other means which provide acceptable performance. Stop construction if the face does not remain vertical during wall backfilling until the system is modified to meet this requirement.
Provide angled struts or a top mat to stabilize the top basket face. Space struts at 24 inch maximum.

GENERAL NOTES:

Sections shown are for informational purposes only. Determine specific geometry based on wall layouts and other plan information.
Extend the select backfill specified for use within the temporary earth wall select volume a minimum of 1 foot horizontally beyond the end of the earth reinforcement from the back of the 2-foot backfill zone.
Provide additional filter fabric to act as soil separation wrap between layers of select backfill where design flood water elevation is above the bottom on the walls.



TEMPORARY EARTH RETAINING WALL

RW(TEW)

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