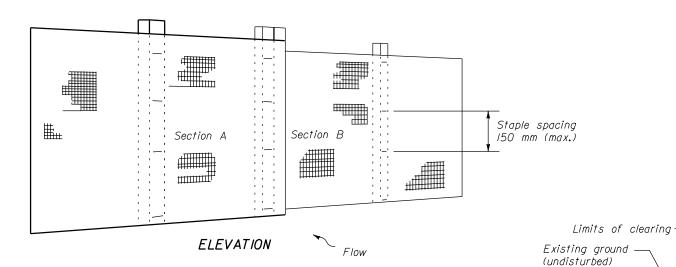
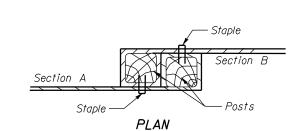
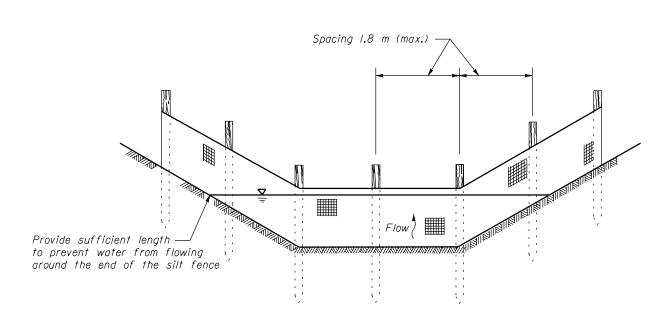


- I. Dimensions not labeled are in millimeters.
- 2. Use drainage ditch installation for low flow conditions only when specified on Erosion Control Plan.
- 3. Alternate pre-assembled silt fence options will be allowed as long as specified dimensions are satisfied. Follow manufacturer's information for installation procedures.

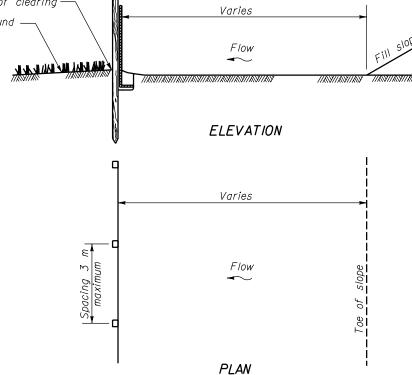




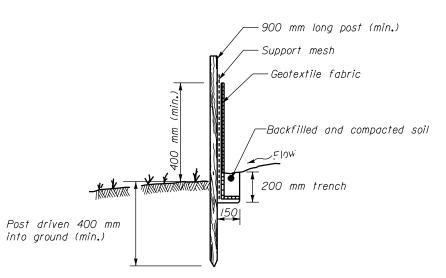
JOINING TWO ADJACENT SILT FENCE SECTIONS



SILT FENCE INSTALLATION IN A DRAINAGE DITCH
(See note 2)



SILT FENCE INSTALLATION AT TOE OF FILL

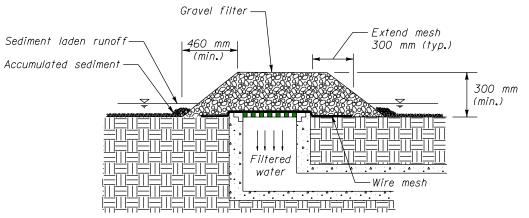


POST AND FABRIC INSTALLATION DETAIL

NO SCALE

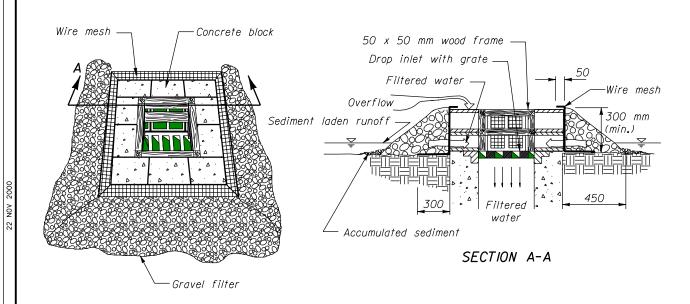
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY		
METRIC STANDARD		
SILT FENCE		
STANDARD APPROVED FOR USE 3/1996	STANDARD	
REVISED: 6/1997	M157-1	



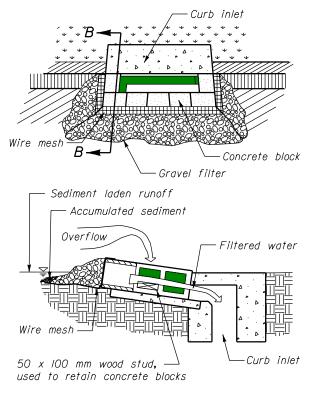


GRAVEL AND WIRE MESH
DROP INLET PROTECTION (TYPE B)

- I. Dimensions not labeled are in millimeters.
- 2. For gravel filters use 50 75 mm diameter coarse aggregate.
- 3. Use wire mesh with 12 x 12 mm openings.
- 4. Use Type A inlet protection in sump locations only.
- 5. Use Type B inlet protection only in sump locations where heavy concentrated flows are not expected. Do not use where ponding around the structure might cause inconvenience or damage.

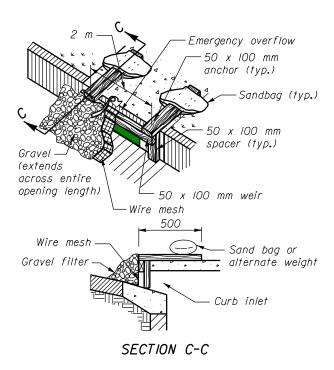


BLOCK AND GRAVEL DROP INLET PROTECTION (TYPE C)



SECTION B-B

CURB INLET PROTECTION, BLOCK AND GRAVEL (TYPE D)



CURB INLET PROTECTION, WOODEN WEIR (TYPE E)

REVISED:

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

METRIC STANDARD

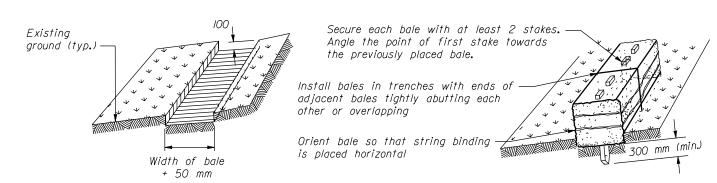
TEMPORARY
INLET PROTECTION

NO SCALE

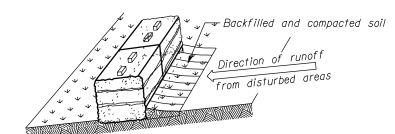
STANDARD APPROVED FOR USE 3/1996 STANDARD M157-2

Draw\Metric\ms+157

- I. Dimensions not labeled are in millimeters.
- 2. Use straw bales in drainage ditches only for low flow conditions and when specified on the Erosion Control Plans.

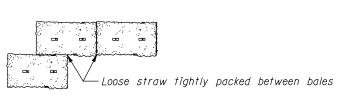


Step I: Excavate trench



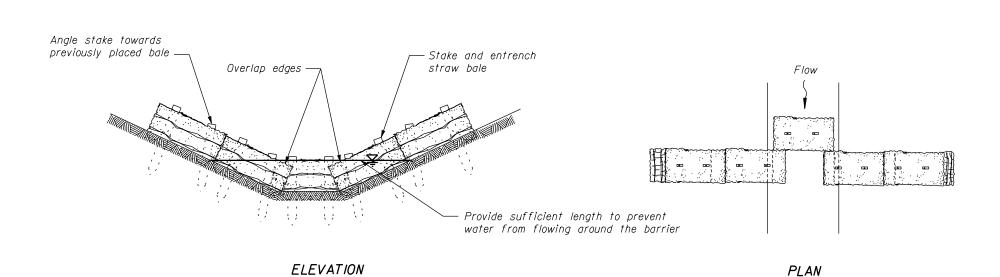
Step 2: Install bales

Step 4: Backfill soil against bales



Step 3: Tightly pack straw between bales (plan view of bales)

PROPERLY STAKED AND ENTRENCHED STRAW BALES



Varies

Direction of Runoft

ELEVATION

Varies

Runoff from disturbed areas

PLAN

INSTALLATION OF A STRAW BALE BARRIER AT TOE OF FILL

Limits of clearing

Existing ground

Butt bales together —

Secure each bale with at least 2 stakes

INSTALLATION OF A STRAW BALE BARRIER IN DITCH

(See note 2)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

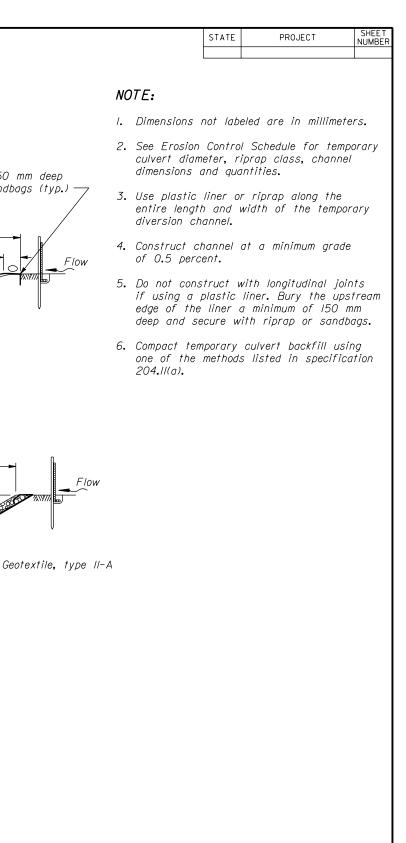
METRIC STANDARD

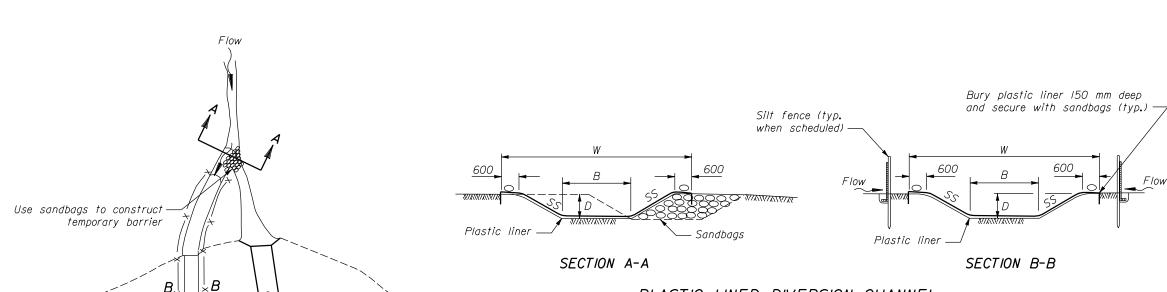
STRAW BALES

STANDARD APPROVED FOR USE 3/1996
STANDARD MI57-3

NO SCALE

standraw\metric\ms+157





SECTION A-A

-Permanent culvert

Silt fence or temporary culvert

(See Erosion Control Schedule)

Temporary diversion channel with plastic liner or riprap -

PLAN

DIVERSION CHANNEL

Roadway £

Riprap lining

Limits of earthwork

Permanent natural channel

Use sandbags to prevent

backflow into natural channel

PLASTIC LINED DIVERSION CHANNEL

Silt fence (typ. when scheduled)

Sandbags

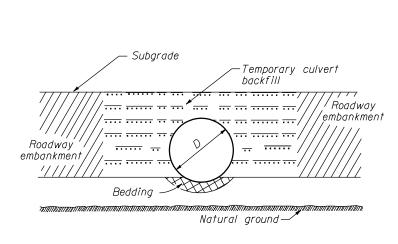
Geotextile, type II-A

Flow

Riprap lining

SECTION B-B

NO SCALE



RIPRAP LINED DIVERSION CHANNEL

SECTION B-B

TEMPORARY CULVERT

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY

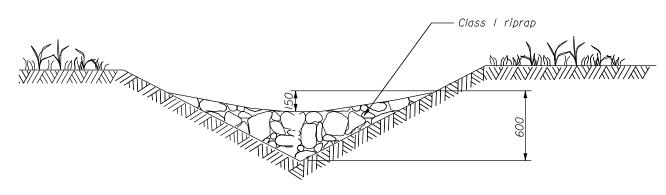
METRIC STANDARD

TEMPORARY DIVERSION CHANNELS

STANDARD APPROVED FOR USE 3/1996 STANDARD
REVISED: 12/1998 MI57-5

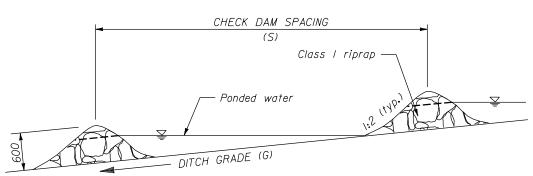
STATE	PROJECT	SHEET NUMBER

I. Dimensions not labeled are in millimeters.



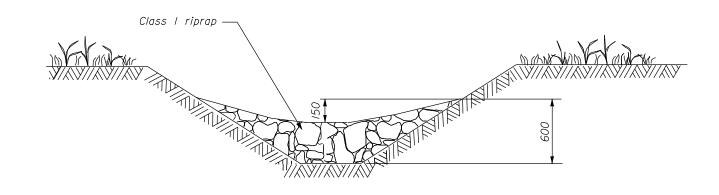
CROSS SECTION

V DITCH



PROFILE VIEW

DITCH



CROSS	SECTION	
TRAPEZOIL	DAL DITC	Ή

DITCH GRADE (G) *	CHECK DAM SPACING(S)
2%	23 m
3%	15 m
4%	12 m
5%	9 m
6%	7 . 5 m

* Do not use Check Dams below 2% or above 6% ditch grades

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY

METRIC STANDARD

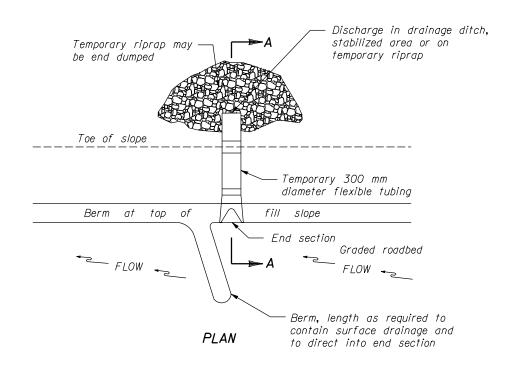
CHECK DAM

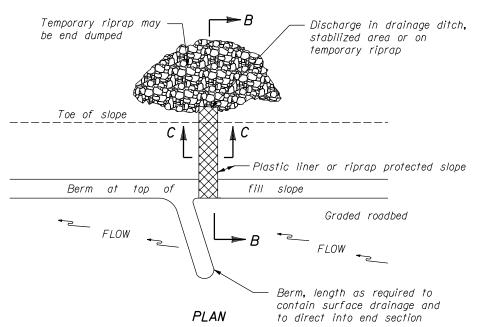
STANDARD APPROVED FOR USE 3/1996 STANDARD

REVISED: MI57-6

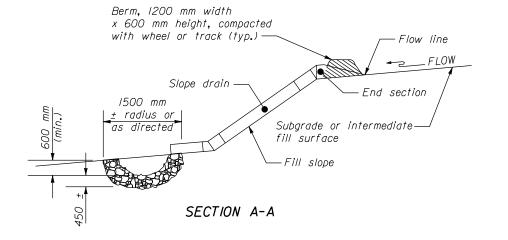
NO SCALE



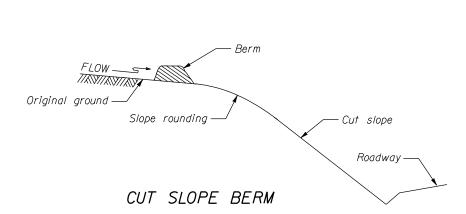


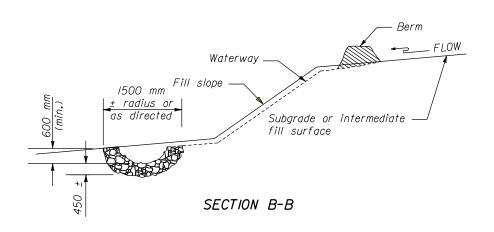


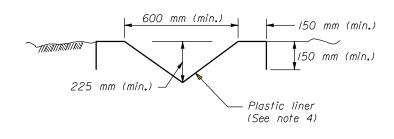
PLASTIC LINED WATERWAY



SLOPE DRAINS



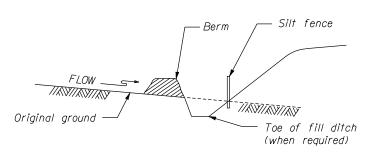




SECTION C-C

NOTE:

- I. Dimensions not labeled are in millimeters.
- 2. Use temporary slope drains (berms, drains, and riprap) as the embankment is constructed. Use spacings as shown on the Erosion Control Plans or as designated by the CO. Place all slope drains at the end of each work shift. Use slope drains until the slopes are permanently stabilized.
- 3. Construct temporary berms at the top of all erodible cut slopes as shown on the Erosion Control Plans or as designated by the CO. Use check dams to reduce the runoff velocity when existing grades are steep.
- 4. Do not use transverse or longitudinal joints in plastic liner. Plastic liner is not required for rock embankments.
- 5. Use toe-of-fill slope berms to divert offsite runoff away from disturbed areas.
- 6. Seed and mulch all cut slope berms and toe-of-fill berms immediately after berm construction.
- 7. Use Class 2 temporary riprap.



TOE-OF-FILL SLOPE BERM

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY

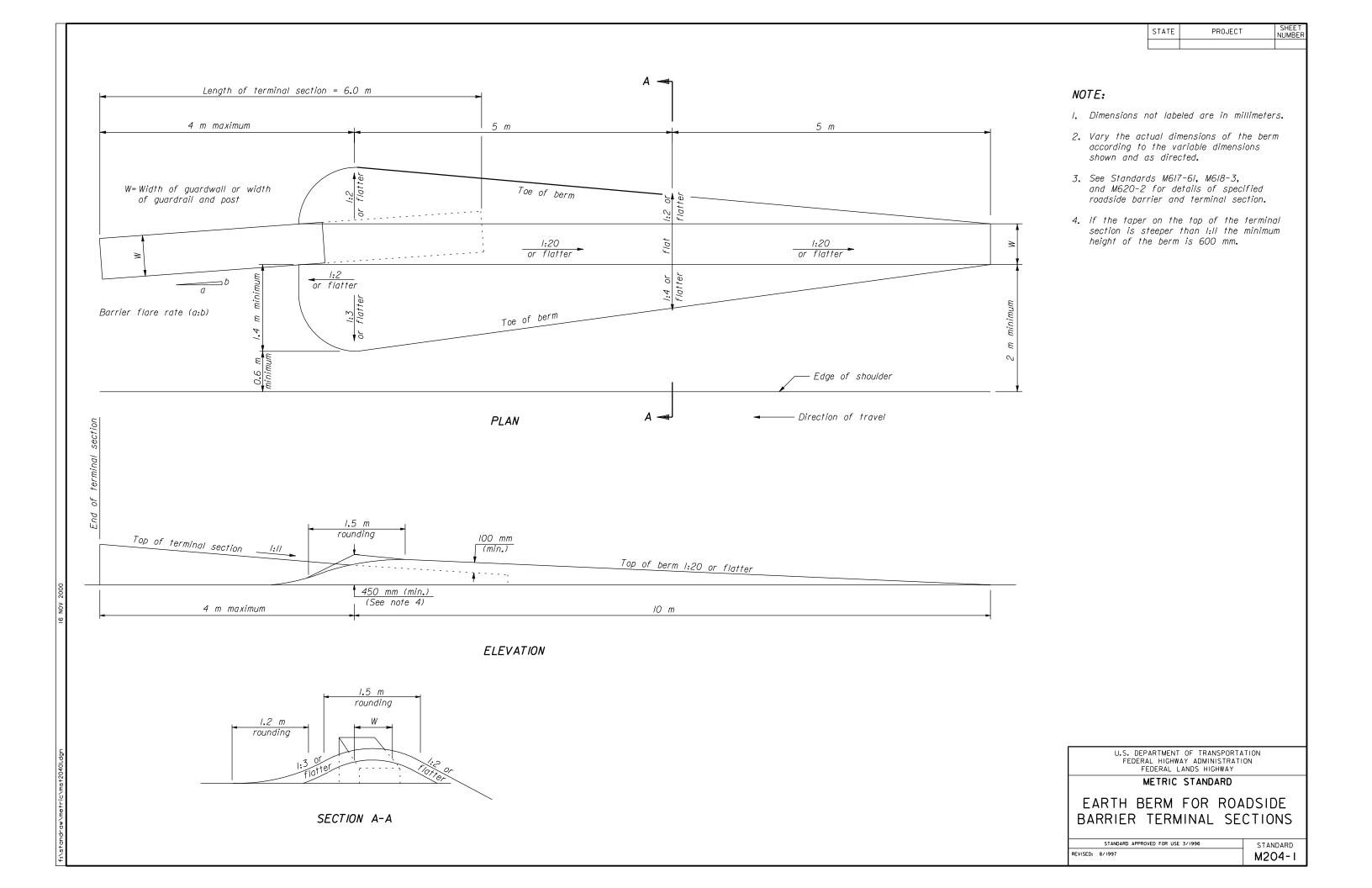
METRIC STANDARD

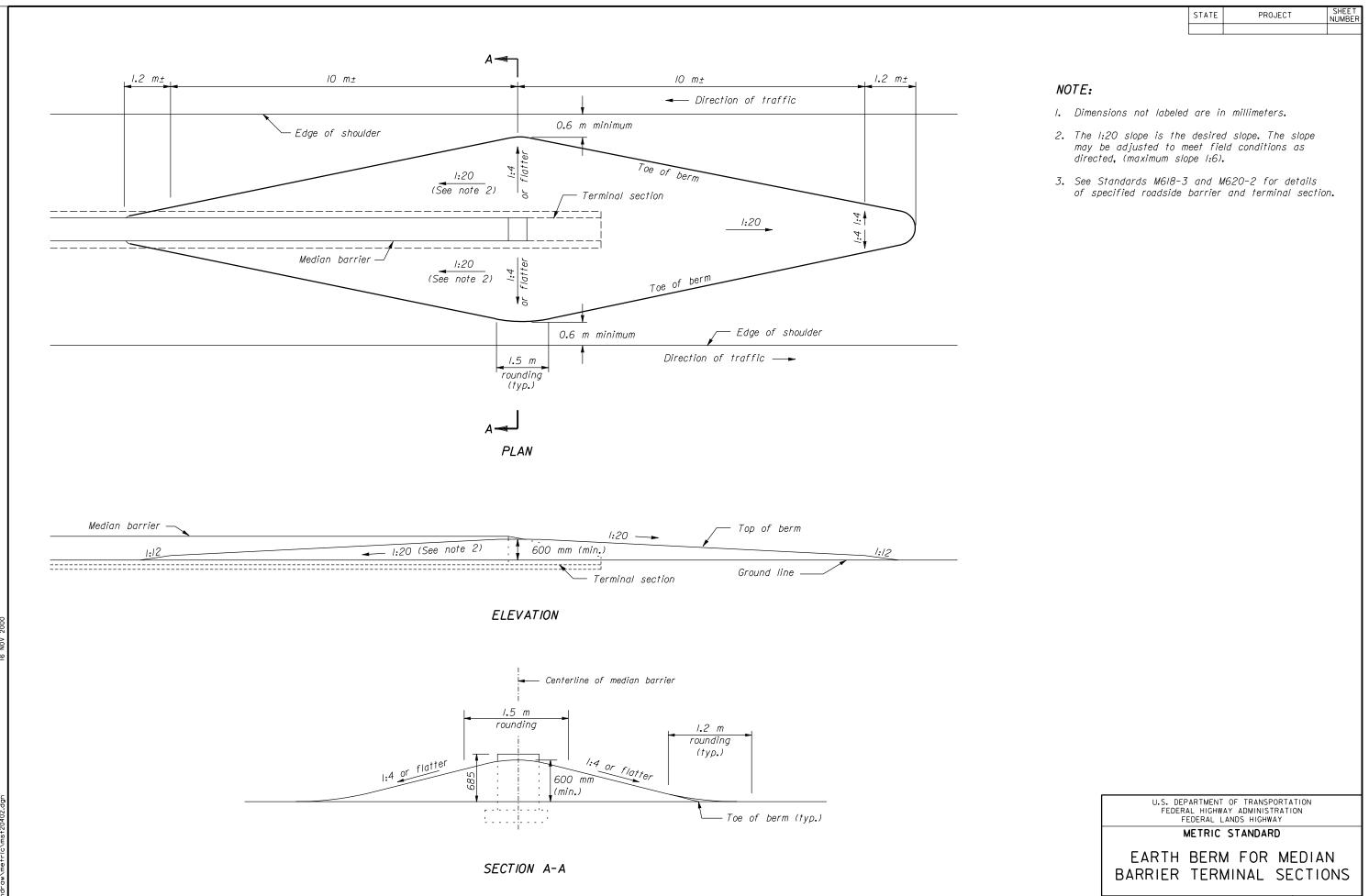
TEMPORARY EROSION CONTROL BERMS, SLOPE DRAINS AND LINED WATERWAYS

STANDARD APPROVED FOR USE 3/1996 NO SCALE

REVISED:

STANDARD M157-7





NO SCALE STANDARD APPROVED FOR USE 3/1996 STANDARD M2O4-2