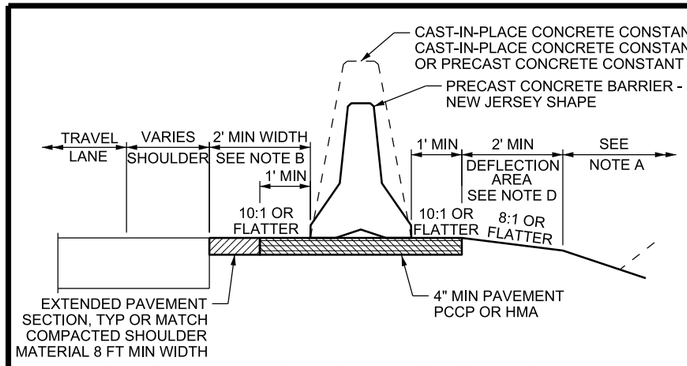
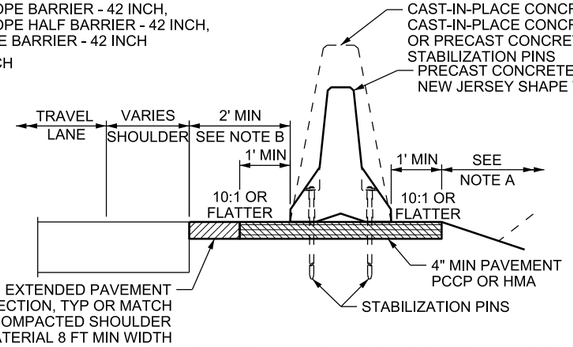
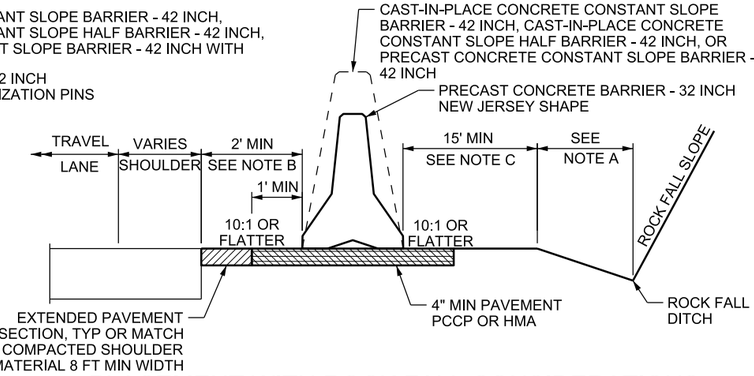


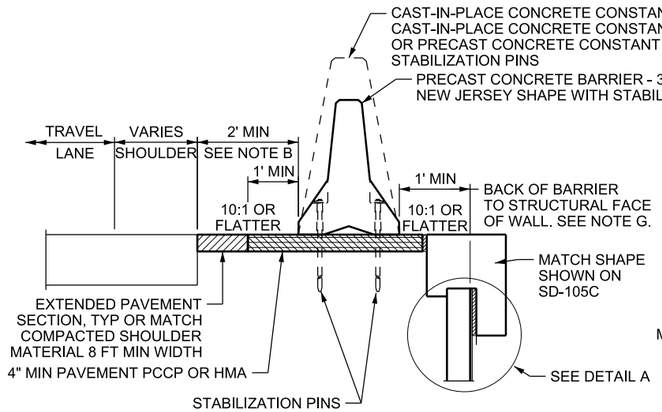
PLACEMENT WITH DEFLECTION AREA



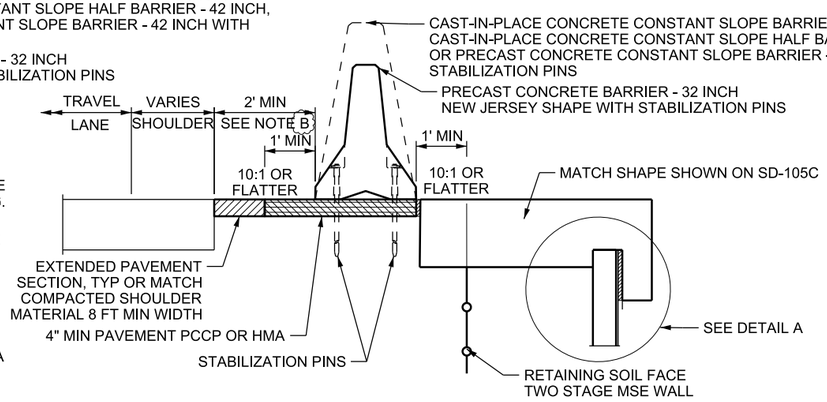
PLACEMENT WITHOUT DEFLECTION AREA



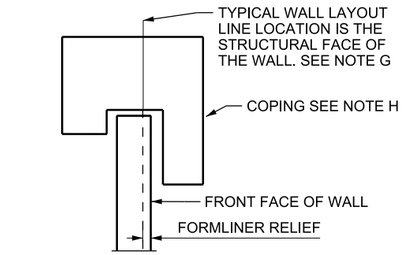
PLACEMENT WITH ROCK FALL CONSIDERATIONS



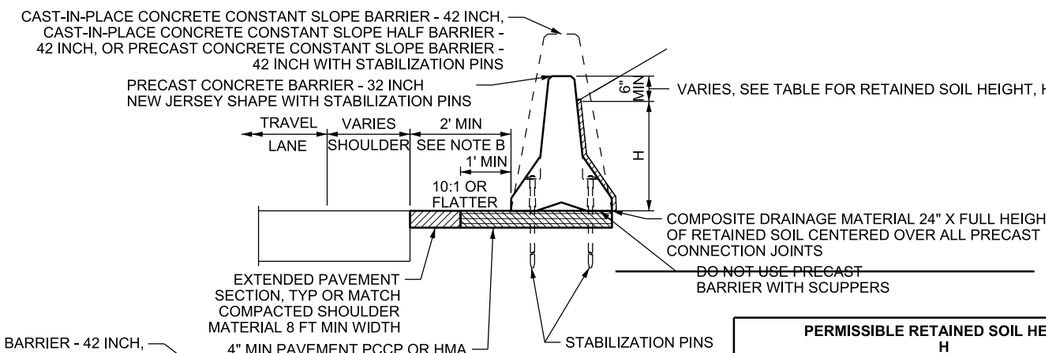
PLACEMENT WITH SINGLE STAGE MSE OR RETAINING WALL



PLACEMENT WITH TWO STAGE MSE WALL

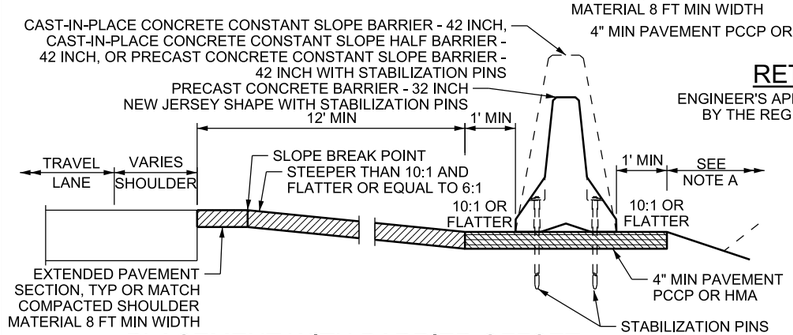


DETAIL A



RETAINING BARRIER

ENGINEER'S APPROVAL REQUIRED WITH VERIFICATION BY THE REGION PRECONSTRUCTION ENGINEER



PLACEMENT WITH BARRIER OFFSET

PERMISSIBLE RETAINED SOIL HEIGHT H		
BARRIER TYPE	BACKSLOPE 2:1 OR FLATTER	BACKSLOPE LEVEL WITH LL SURCHARGE *
PRECAST CONCRETE BARRIER - 32 INCH NEW JERSEY SHAPE	26"	13"
CAST-IN-PLACE CONCRETE CONSTANT SLOPE BARRIER - 42 INCH OR PRECAST CONCRETE CONSTANT SLOPE BARRIER - 42 INCH	35"	19"
CAST-IN-PLACE CONCRETE CONSTANT SLOPE HALF BARRIER - 42 INCH	29"	15"

*ACCOUNTS FOR 2 FT OF EQUIVALENT SOIL FOR LIVE LOAD SURCHARGE.

DESIGN-ONLY NOTES:

A. SEE THE UDOT ROADWAY DESIGN MANUAL FOR REQUIREMENTS.
B. THE 2 FT MIN BARRIER OFFSET IS OPTIONAL WHEN ROADWAY DESIGN REQUIRES A 12 FT OR WIDER EFFECTIVE SHOULDER.
C. ESTABLISH A 15 FT MAINTENANCE AREA 10:1 OR FLATTER ABOVE ROCK FALL DITCH.
D. DEFLECTION AREA NOT REQUIRED FOR CAST-IN-PLACE BARRIER.
E. CAST-IN-PLACE CONCRETE CONSTANT SLOPE BARRIER - 42 INCH, APPROACH END SECTION, 54 INCH APPROACH END, OR PRECAST CONCRETE CONSTANT SLOPE BARRIER 42 INCH 32 INCH NEW JERSEY SHAPE TRANSITION REQUIRED ON 42 INCH BARRIER IF USING A CRASH CUSHION OR GUARDRAIL TRANSITION.
F. SELECT THE APPROPRIATE END TREATMENT OR CRASH CUSHION FROM THE GUIDELINES FOR CRASH CUSHION AND BARRIER END TREATMENTS. USE AN END TREATMENT WHEN TRAFFIC HAS LESS THAN THE MAXIMUM REQUIRED AASHTO CLEAR ZONE.
G. STRUCTURAL FACE OF WALL IS THE FRONT FACE MINUS THE FORMLINER RELIEF. THE STRUCTURAL FACE OF THE SOIL NAIL WALL IS THE FRONT FACE INTEGRAL WITH THE SOIL NAIL WALL ANCHORS MINUS ANY FORMLINER RELIEF. WHEN SOIL NAIL WALLS ARE FACED WITH PRECAST PANELS THE STRUCTURAL FACE IS THE PRECAST PANEL SIDE OF THE SOIL RETAINING ELEMENTS INTEGRAL WITH THE SOIL NAILS.
H. COPING IS NOT REQUIRED ON CAST-IN-PLACE WALLS OR CAST-IN-PLACE WALL FACING

NOTES

1. PIN ALL PRECAST BARRIER SECTIONS TOGETHER AT CONNECTION LOOPS. PULL BARRIER TIGHT AFTER INSTALLING CONNECTION PIN.
2. P1 BARS IN CAST-IN-PLACE CONCRETE BARRIER ARE REQUIRED IN ALL APPLICATIONS. SEE APPLICABLE CAST-IN-PLACE CONCRETE BARRIER DRAWINGS FOR REINFORCING STEEL REQUIREMENTS.
3. TEMPORARY WORK ZONE APPLICATIONS:
   - 3A. STABILIZATION PINS ARE NOT REQUIRED WHEN 1 FT OR MORE IS PROVIDED BEYOND THE BARRIER.
   - 3B. STABILIZATION PINS ARE REQUIRED WHEN SLOPE BEHIND THE 1 FT DISTANCE BEYOND THE BARRIER IS STEEPER THAN 2:1.
   - 3C. APPROVAL FROM THE REGION TRAFFIC ENGINEER IS REQUIRED TO USE STABILIZATION PINS IN LIEU OF THE 1 FT DISTANCE BEHIND THE BARRIER.
   - 3D. DO NOT PLACE STABILIZATION PINS IN NEW ROADWAY SURFACE FOR TEMPORARY BARRIER.
   - 3E. INSTALL APPROVED CRASH CUSHION OR END TREATMENT ON APPROACH ENDS. SEE GUIDELINES FOR CRASH CUSHION AND END TREATMENTS, WORK ZONE DEVICES.

SUPPLEMENTAL DRAWING

REVISIONS

NO.	DATE	APPR.	REMARKS

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL — AUG 30, 2018 — DATE
CHAIRMAN STANDARDS COMMITTEE APPROVED — AUG 30, 2018 — DATE
DEPUTY DIRECTOR

CONCRETE BARRIER SHOULDER INSTALLATION

STANDARD DRAWING TITLE

STD. DWG. NO.

BA 1C