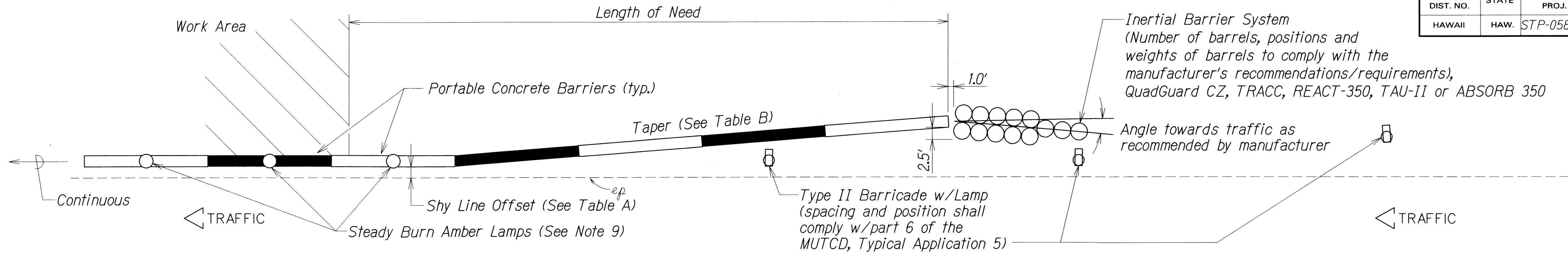




FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0583(002)	2011	18	27



TYPICAL DETAIL - PORTABLE CONCRETE BARRIER END TREATMENT

Scale: 1" = 10'-0"

METAL REINFORCEMENT TABLE				
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	Horizontal in Barrier Tied Inside V-1 Bars	#5	(6)	19'-3"
H-2	Centered Above Scuppers Long. & Transversely	#5	(6)	6'-6"
H-3	Tied Above H-1 Bars to Support H-2, Tied to V-1	#4	(2)	1'-6"
S-1	Horizontal in Top of Wing Wall & in Floor Back Wall	#4	(2)	
S-2	Horizontal Around Slots Between V-1's @ Scuppers	#4	(2)	
V-1	Vertical in Barrier (3) Each End & (2) at Each Scupper	#5	(16)	

TABLE A SHY LINE OFFSETS *	
DESIGN SPEED (mph)	SHY LINE OFFSETS
40	5.0'
35	4.5'
30	3.5'
≤ 25	2.0'

TABLE B MAXIMUM TAPERS FOR CONCRETE BARRIER		
DESIGN SPEED (mph)	TAPER	
	INSIDE SHY LINE	BEYOND SHY LINE
40	17:1	11:1
35	15:1	9:1
≤ 30	13:1	8:1

\* Note: Minimum shy line offset for tangent sections shall be 2'-0".

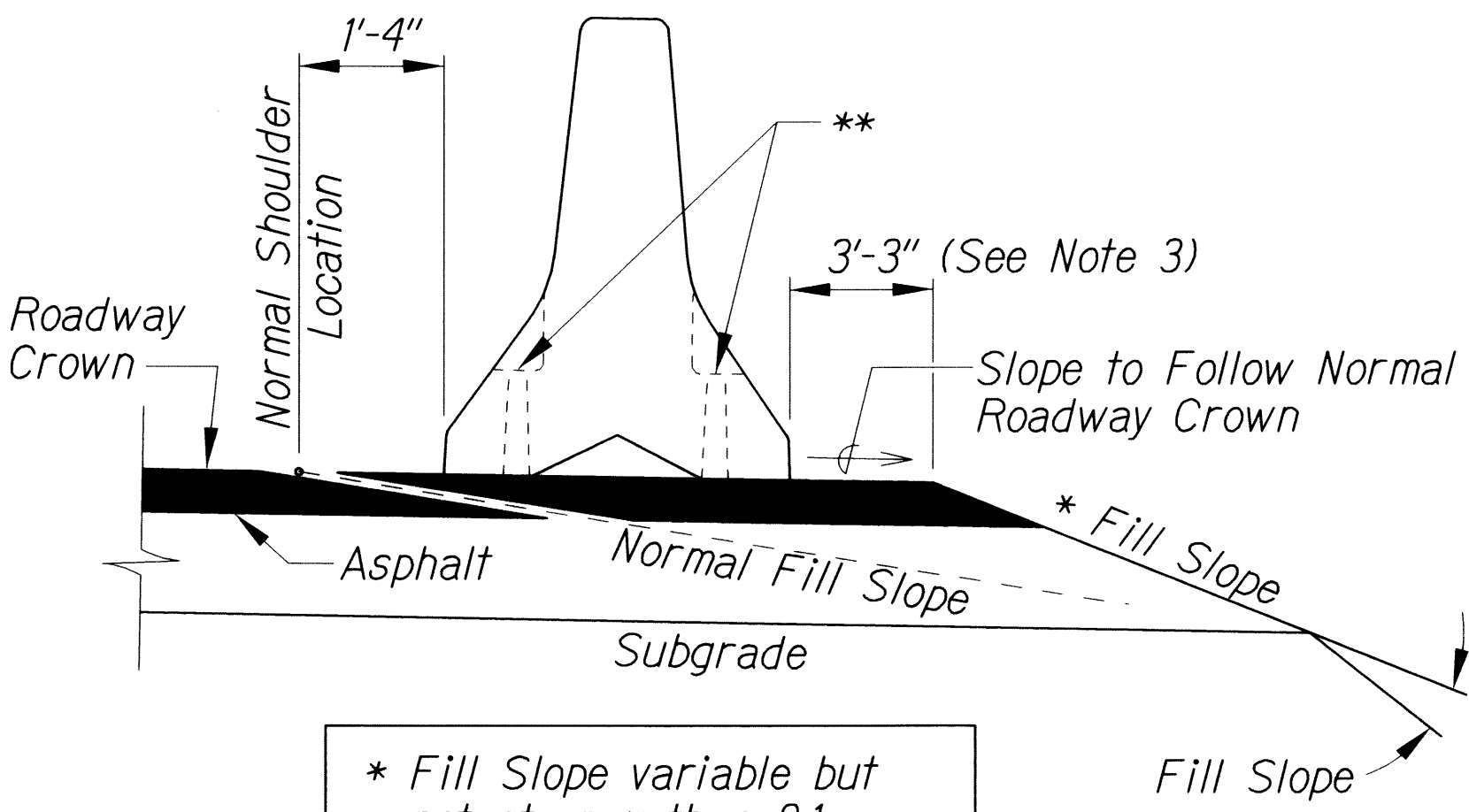
NOTES:

- For end treatment, layout, crash cushions and where needed see Project Plans or Special Provisions.
- Barriers must be pinned together and cannot exceed the Table of Maximum Tapers.
- The concrete barrier "Standard Installation" design allows for 3'-3" of outward lateral movement if the barrier is struck. Barrier installations that require less than the 3'-3" of outward lateral movement should have stabilization pins.
- ASTM A-36 steel shall be used for the connection pin, connection loops and stabilization pins. A one piece pin with a 3" rounded top may be used in place of the detailed connection pin if the one piece pin meets ASTM A-36 requirements.
- A 4" white PVC sleeve may be used to form the lifting hole and if used the sleeve is to be left in place.
- Concrete shall be Class A and reinforcing shall be Grade 60.
- Identification and date of design will be as follows:

PROPERTY  
OF HDOT  
OCT 2001

Text letters and numbers shall be shown as on Standard Plan Sht. No. B-01.

- Minimum tangent length for portable Concrete Barrier System shall be 100' (5 units). This minimum does not include the required system length of the Inertial Barrier System.
- Install steady burn amber lamps on portable concrete barriers @ 20.0' o.c. Installing, maintaining and removing each steady burn amber lamp including changing of batteries and bulbs shall be considered incidental to applicable portable concrete barrier items.
- Physical barriers shall be required whenever guardrails have been removed and will not be reinstalled at the end of each work day. See General Note No. 14 on Plan Sht. No. 4.
- Physical barriers shall be portable concrete barriers.
- Providing, transporting, placing, maintaining, relocating and removing portable concrete barriers shall be considered incidental to Item No. 694.0100 - Contractor Furnished Portable Concrete Barrier.
- Furnishing and installing reflector markers (RM-3) over the portable concrete barriers shall be considered incidental to Item No. 694.0100 - Contractor-Furnished Portable Concrete Barrier.



\* Fill Slope variable but not steeper than 2:1  
\*\* No Stabilization Pins (See Note Nos. 3 & 4)

STANDARD INSTALLATION  
(See Note No. 1)

- Ends of portable concrete barriers shall be protected with Inertial Barriers as shown hereon. The lead (first) inertial barrier shall have a retroreflective object marker attached to it. Furnishing, transporting, maintaining, relocating, installing and removing Inertial Barriers including retroreflective object marker shall be considered incidental to Item No. 694.0200 - Inertial Barrier Module.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PORTABLE CONCRETE BARRIER

MAALO ROAD

GUARDRAIL AND SHOULDER IMPROVEMENTS

Mile Post 0.0 to Mile Post 2.95

Fed-Aid Project No. STP-0583(002)

Scale: Not to scale Date: Dec. 2011

SHEET No. 2 OF 2 SHEETS