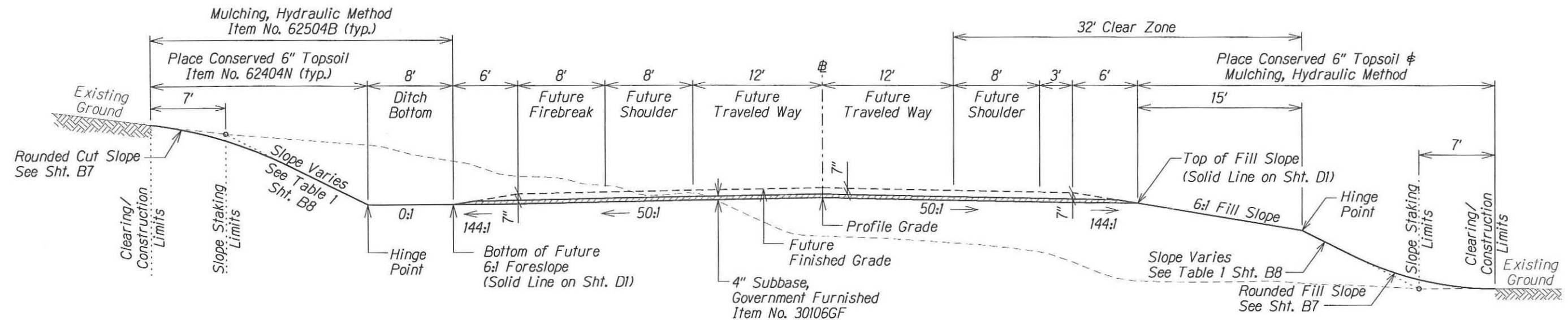
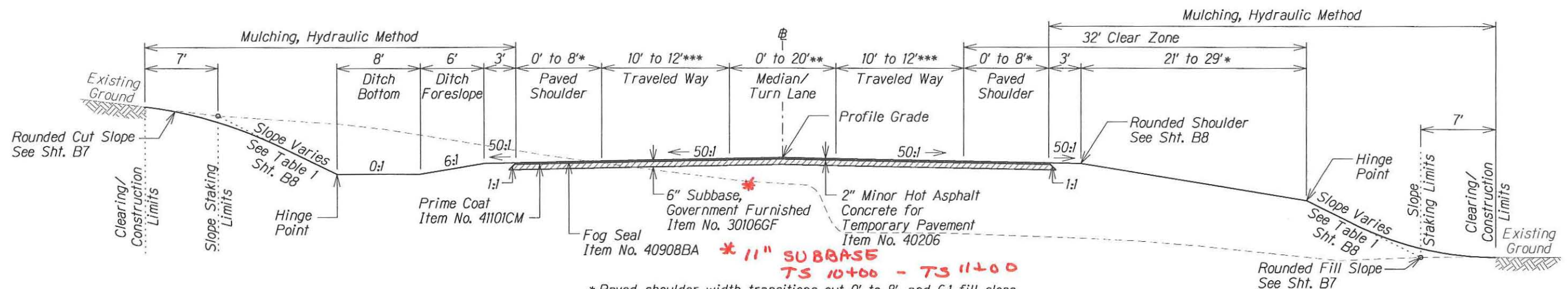


STATE	SADDLE ROAD PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD/STP 6(3) & 200(1)	B2	B18



TYPICAL SECTION
Sta 340+50 to 351+00



* Paved shoulder width transitions out 0' to 8', and 6:1 fill slope transitions in 29' to 21' from station T.S. 1+00 to T.S. 2+00.

** Median/Turn lane width is 20' from station T.S. 6+00 to 364+50; transitioning out 0' to 20' from station T.S. 2+00 to T.S. 6+00.

*** Traveled way width transitions out 10' to 12' from station T.S. 0+00 to T.S. 2+00.

TEMPORARY CONNECTION SECTION
Sta. T.S. 0+00 to T.S. 10+00

Note:
Temporary station 0+00 is a connection to existing Saddle Road
Temporary station 10+00 = station 360+00 of New Saddle Road

Pavement Section Notes:

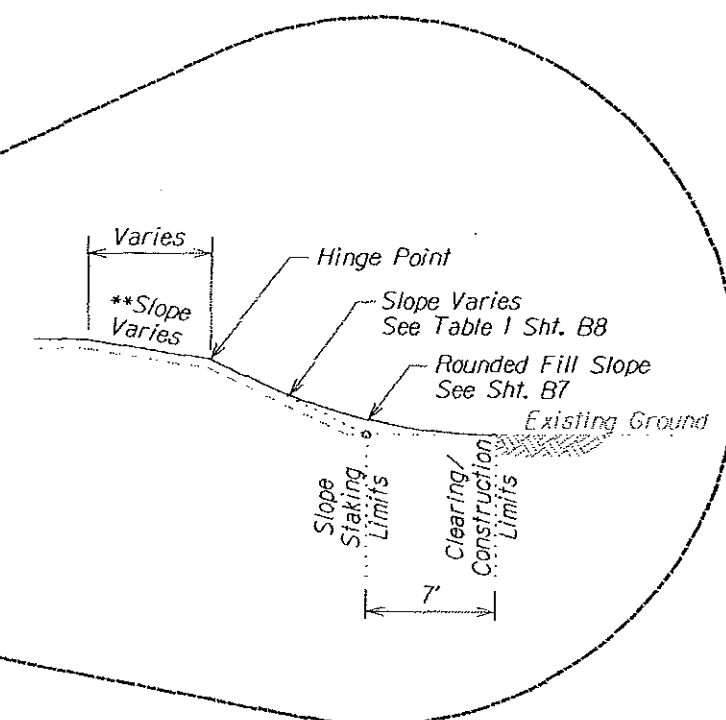
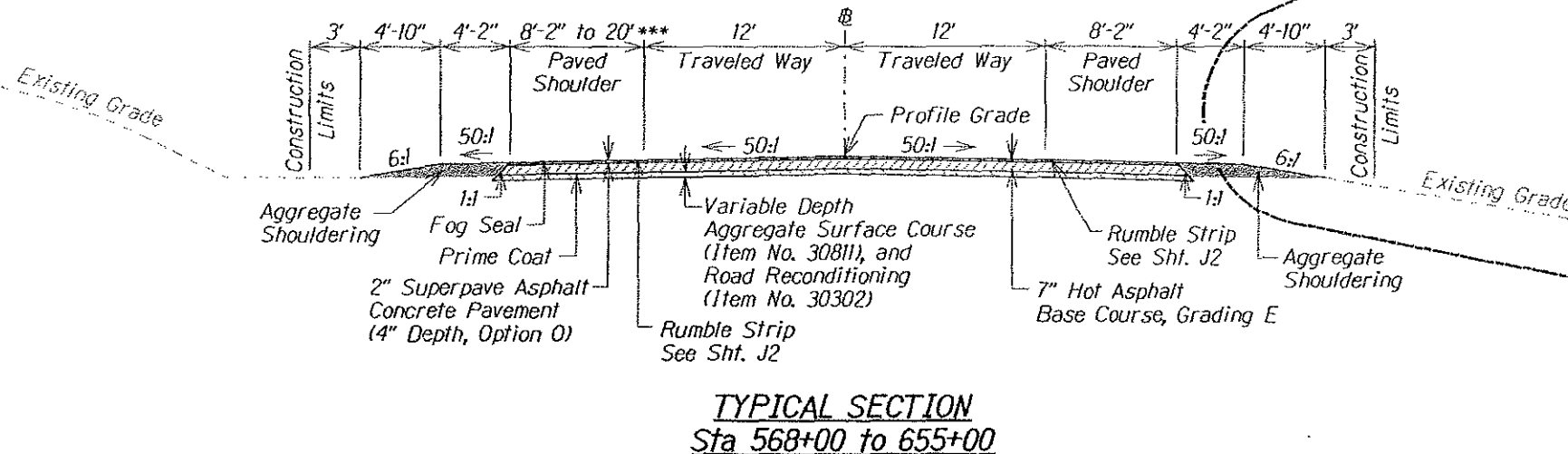
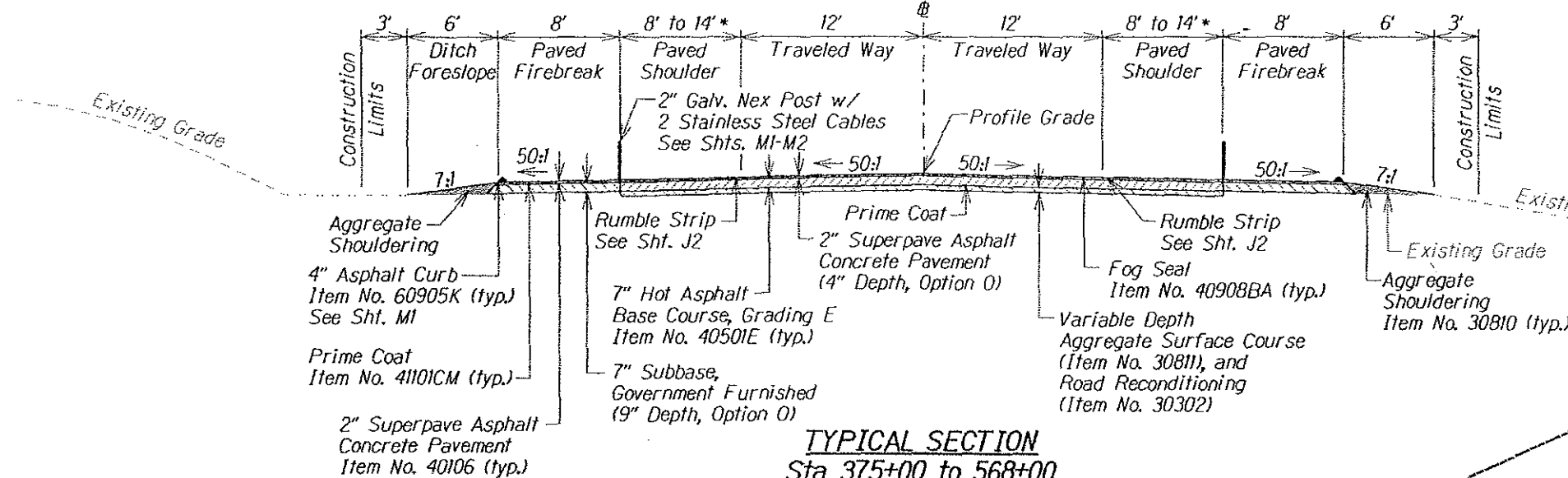
1. Apply prime coat above subbase.
2. Apply fog seal to top of minor hot asphalt concrete pavement finished surface.

	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
	SADDLE ROAD TYPICAL SECTIONS	
	Scale: N.T.S.	Date: December 5, 2005
SHEET No. 1 OF 5		

STATE	SADDLE ROAD PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD/STP 6(3) # 200(1)	B4	B18

REVISED
02/23/2006

* For emergency telephone pullout dimensions at stations 415+00 R, 482+00 L, and 542+00 R see detail sheets R1-R3.



* The fill slope section above right applies to stations 375+00 to 380+00, 474+50 to 475+50, 481+50 to 482+50, 541+50 to 542+50, and 568+00 to 573+00. These are the new locations of emergency telephone pullouts and the revised firebreak transitions previously set in DAR HI-A-AD-6(1).

** Slope may catch at the hinge point.

*** For historical pullout, paved shoulder width transitions out 8'-2" to 20' from station 601+00 to 604+00, and in 20' to 8'-2" from station 606+00 to 609+00. For emergency telephone pullout dimensions at station 605+00 L, see detail sheet R1.

Pavement Section Notes:

1. Apply prime coat above subbase.
2. 7" hot asphalt base course to be placed in two equal lifts.
3. Apply tack coat between all lifts of hot asphalt base course and superpave asphalt concrete pavement.
4. Apply fog seal to top of superpave asphalt concrete pavement finished surface.

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	SADDLE ROAD TYPICAL SECTIONS	
	Scale: N.T.S.	Date: December 5, 2005
SHEET No. 3 OF 5		

B4

STATE	SADDLE ROAD PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD/STP 6(3) & 200(1)	B5	B18

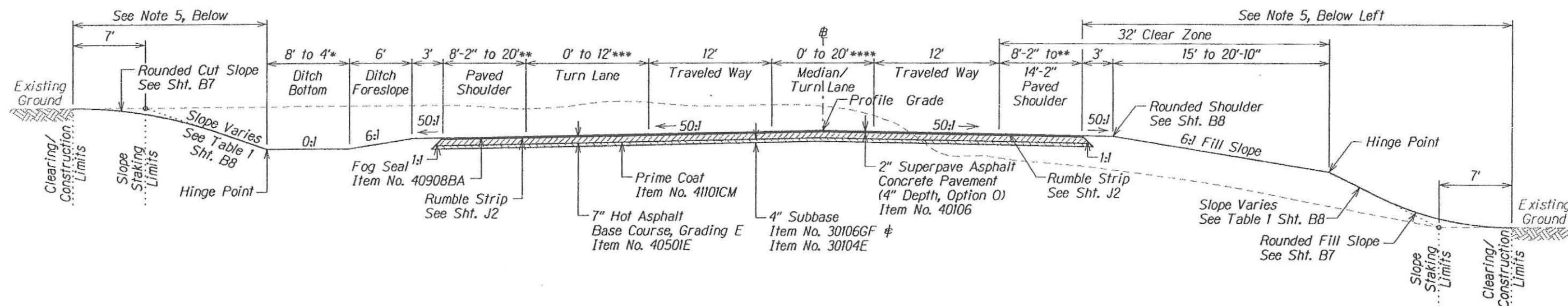
REVISED
02/23/2006

STATION	WIDTH	REMARKS
540+00-547+00	53'	full width
555+00-561+00	26'	left lane
576+00-583+00	53'	full width
590+00-596+00	24'	12' left and right shoulders
605+00-609+00	53'	full width
617+00-624+00	53'	full width

Subbase reconstruction thickness, length and width to be determined in the field by the Contracting Officer (approx. 4"). This typical section takes precedence over others in the above-designated station ranges.

DELETED

TYPICAL SECTION
SUBBASE RECONSTRUCTION*

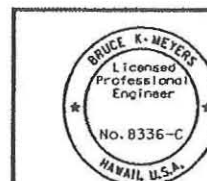


- * Ditch bottom is 8' up to Mauna Kea/Pu'u Huluhulu Access Road station 686+64± and 4' thereafter.
 ** For historical pullout, shoulder width is 20' from station 756+50 to 757+00, transitioning out from station 755+50 to 756+50, and in from 757+00 to 758+00. For emergency telephone pullout dimensions at station 670+00 R, see detail sheet R1.
 *** Turn lane width is 12' from station 687+00 to 691+00 transitioning in 12'-0' from station 691+00 to 694+00
 **** Median/Turn lane width is 20' from station 679+00 to 687+00 and 698+00 to 708+00; transitioning out 0' to 20' from station 675+00 to 679+00 and 695+00 to 698+00, and in 20' to 0' from station 687+00 to 691+00 and 708+50 to 711+50.

Pavement Section Notes:

1. Apply prime coat above subbase.
2. 7" hot asphalt base course to be placed in two equal lifts.
3. Apply tack coat between all lifts of hot asphalt base course and superpave asphalt concrete pavement.
4. Apply fog seal to top of superpave asphalt concrete pavement finished surface.
5. See section 204 of the SCR's for finished slope requirements.

TYPICAL SECTION
Sta. 655+00 to 842+50



The work was prepared by me or under my supervision and construction of this project will be under my observation.
 Signature: *[Signature]*
 Expiration Date of License: 4/08

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

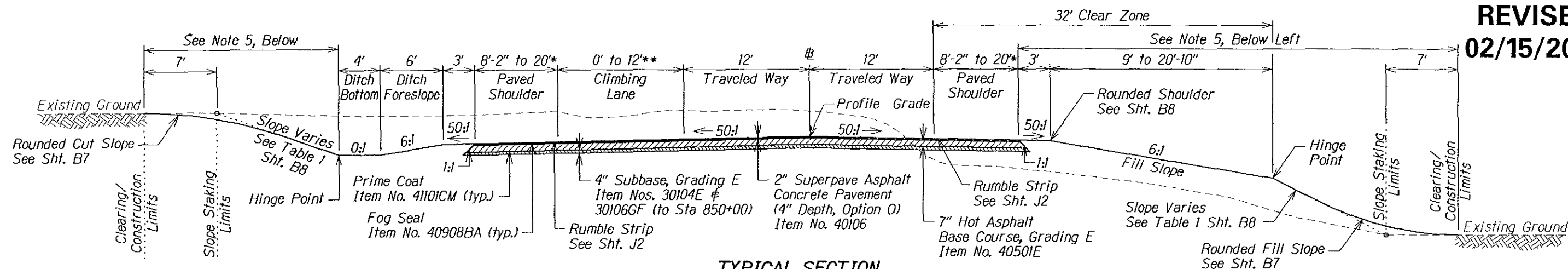
SADDLE ROAD
TYPICAL SECTIONS

Scale: N.T.S. Date: December 5, 2005

SHEET No. 4 OF 5

B5

REVISED
02/15/2006



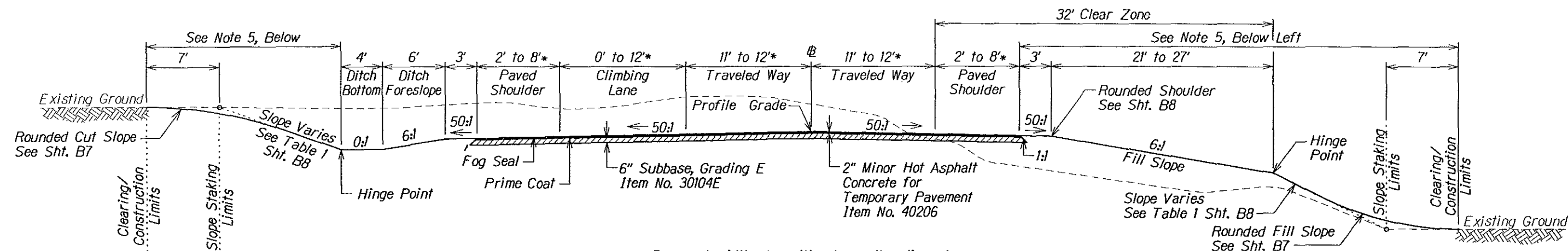
TYPICAL SECTION
Sta. 842+50 to 1160+00

*Left shoulder width is 20' from station 917+00 to 918+00, transitioning out from station 916+00 to 917+00, and in from station 918+00 to 919+00.

Left shoulder width is 20' from station 1026+50 to 1027+50, transitioning out from station 1025+50 to 1026+50, and in from station 1027+50 to 1028+50.

Right and left shoulder widths are 20' from station 1118+00 to 1119+00, transitioning out from station 1117+00 to 1118+00, and in from station 1119+00 to 1120+00.

**Climbing lane width transitions out, 0'-12' from station 842+50 to 850+00.

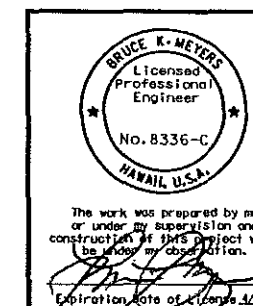


*Pavement widths transition to smaller dimension from station 1160+00 to 1165+00 to match existing pavement widths.

Pavement Section Notes:

1. Apply prime coat above subbase.
2. 7" hot asphalt base course to be placed in two equal lifts.
3. Apply tack coat between all lifts of hot asphalt base course and superpave asphalt concrete pavement.
4. Apply fog seal to top of superpave and minor hot asphalt concrete pavement finished surfaces.
5. See section 204 of the SCR's for finished slope requirements.

TEMPORARY CONNECTION SECTION
Sta. 1160+00 to 1165+00



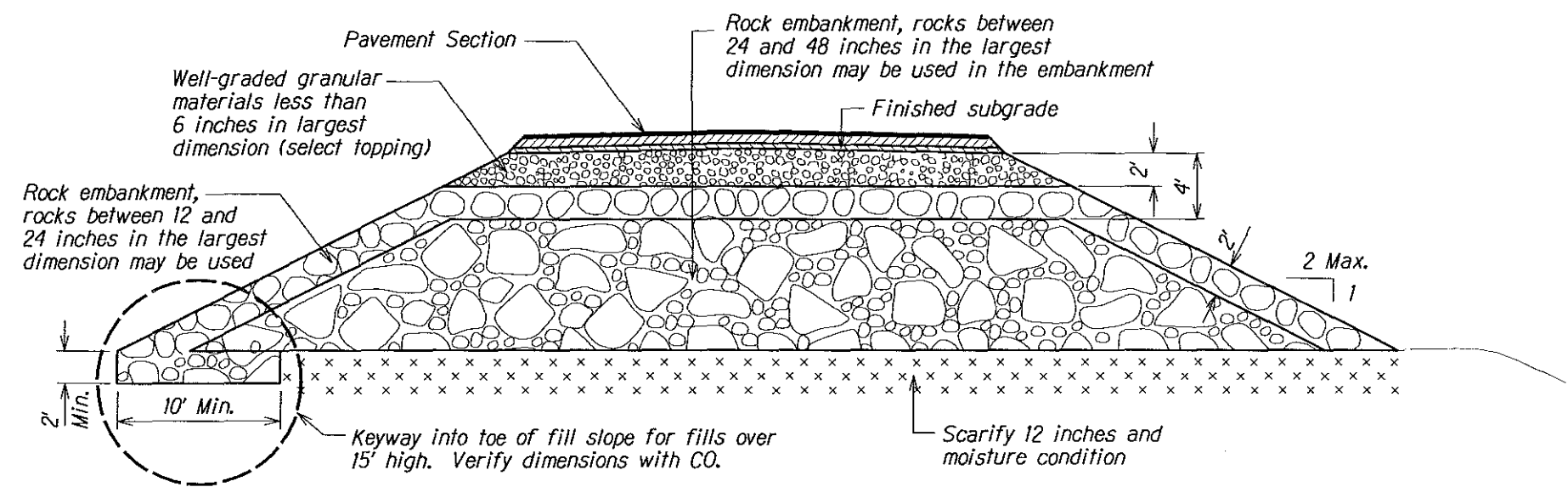
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CENTRAL FEDERAL LANDS HIGHWAY DIVISION

SADDLE ROAD
TYPICAL SECTIONS

Scale: N.T.S. Date: December 5, 2005

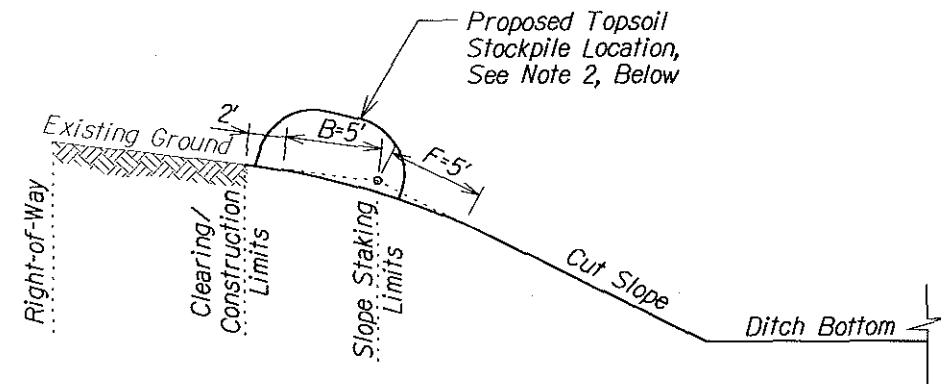
SHEET No. 5 OF 5

STATE	SADDLE ROAD PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD/STP 6(3) & 200(1)	B7	B18



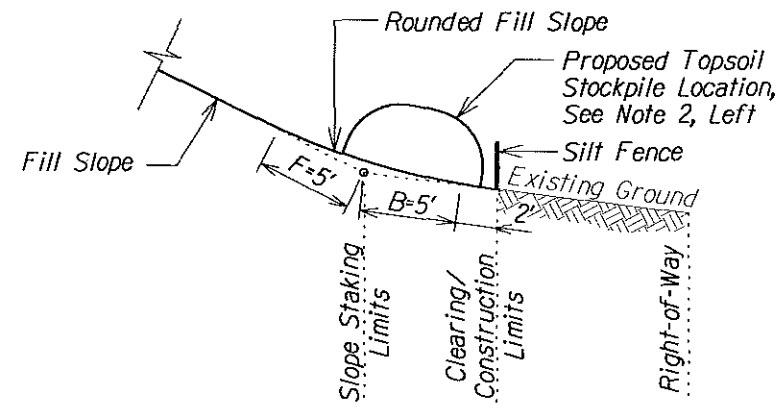
TYPICAL ROCK EMBANKMENT DETAIL

***This detail is schematic. Refer to the typical road sections on sheets B2 thru B6 for the geometric configurations of embankments.

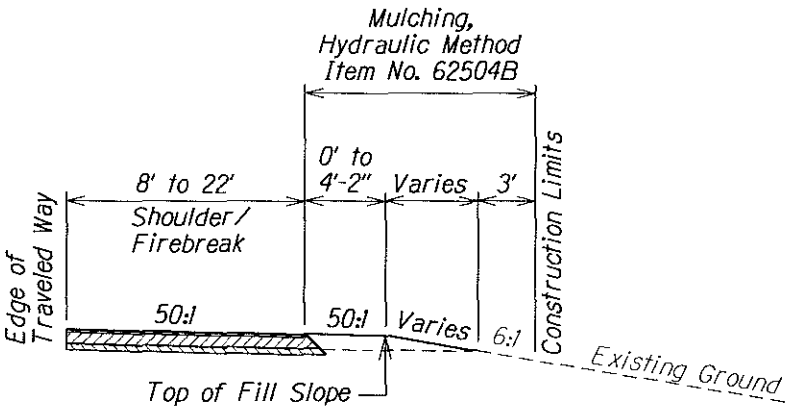


- Notes:
1. Round all earth slopes and all rippable rock slopes. Reduce B and F dimensions for cut slope distance less than 5 feet to the actual cut distance.
 2. Stations 340+50 to 351+00 & 360+00 to 366+00 approximate 6' high stripped topsoil stockpiles to be located in area between slope staking and construction limits. Submit locations to CO for approval.

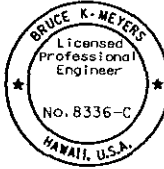
ROUNDED CUT SLOPE DETAIL

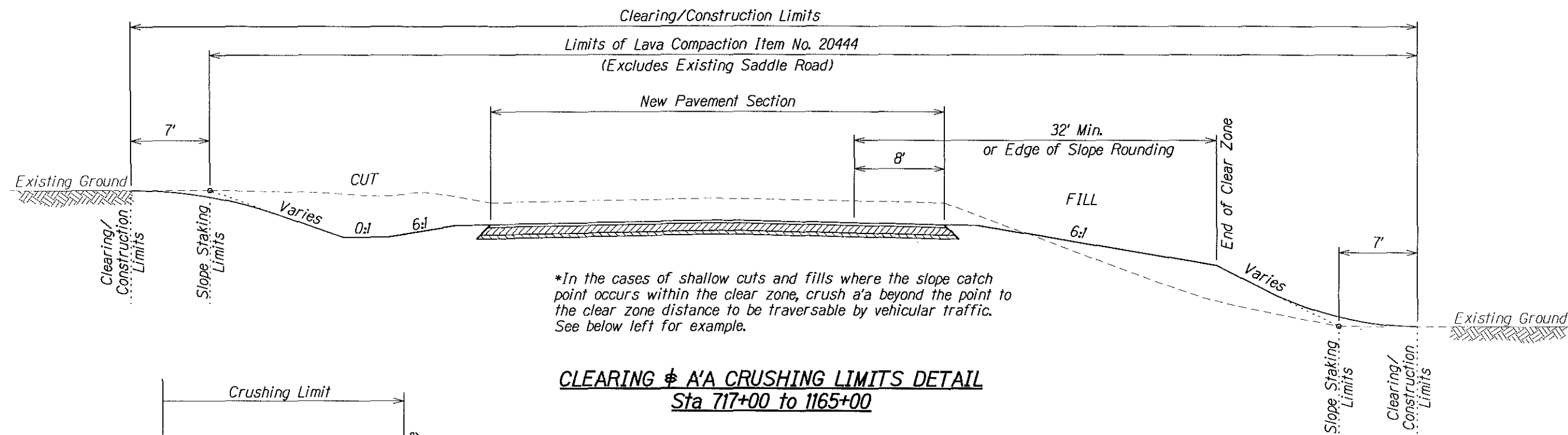


ROUNDED FILL SLOPE DETAIL

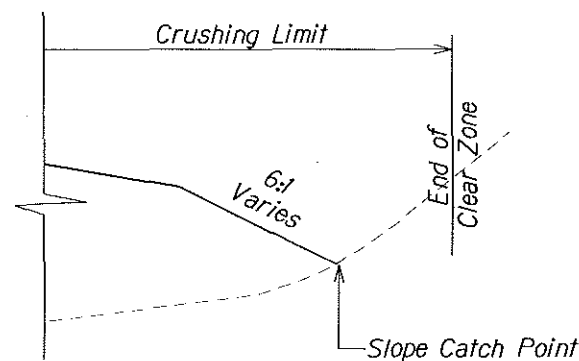


TYPICAL SLOPE EROSION CONTROL DETAIL Sta 366+00 to 630+50

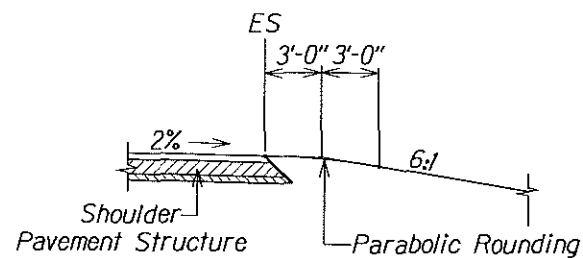
 The work was prepared by me or under my supervision and construction of this project will be under my observation. Expiration Date of License 4/206	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
	SADDLE ROAD ROADWAY DETAILS	
	Scale: N.T.S.	Date: December 5, 2005
	SHEET No. 1 OF 2	



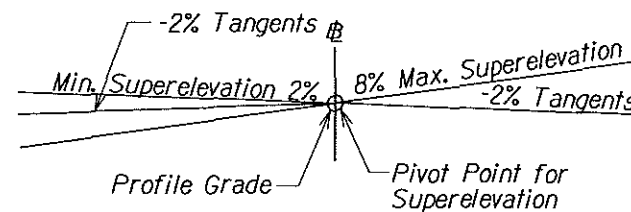
CLEARING & A'A CRUSHING LIMITS DETAIL
Sta 717+00 to 1165+00



EXAMPLE OF SHALLOW CUT/FILL



ROUNDED SHOULDER DETAIL



METHOD OF SUPERELEVATION ON CURVES

TABLE 1 - TYPICAL SLOPE RATIOS		
Slope	Cut Slope Ht.	Fill Slope Ht.
6:1	0' - 6'	0' - 2'
4:1	6' - 9'	2' - 4'
3:1	9' - 12'	4' - 8'
2:1	12' - over	8' - over

Note:
In the "barn roof" type fill, the slope beyond the 6:1 fill slope (from hinge point) typically follows table above.

BRUCE K. MEYERS Licensed Professional Engineer No. 8336-C HAWAII, U.S.A. The work was prepared by me or under my supervision and construction of this project will be under my supervision. Expiration Date of License 4/06.	U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
	SADDLE ROAD ROADWAY DETAILS	
	Scale: N.T.S.	Date: December 5, 2005
SHEET No. 2 OF 2		