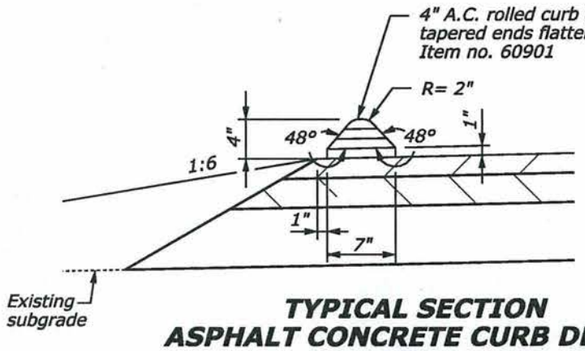
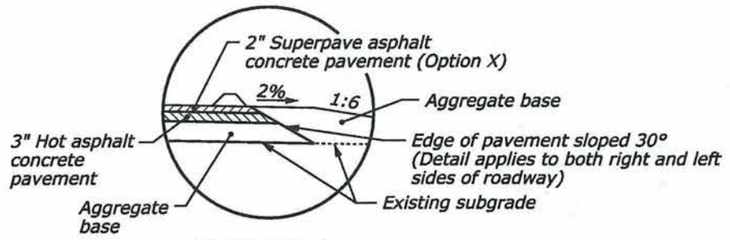
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A6	A22



TYPICAL SECTION
ASPHALT CONCRETE CURB DETAIL

Note: The finish elevation of the gutter shall be 2" lower if Option X is not awarded.

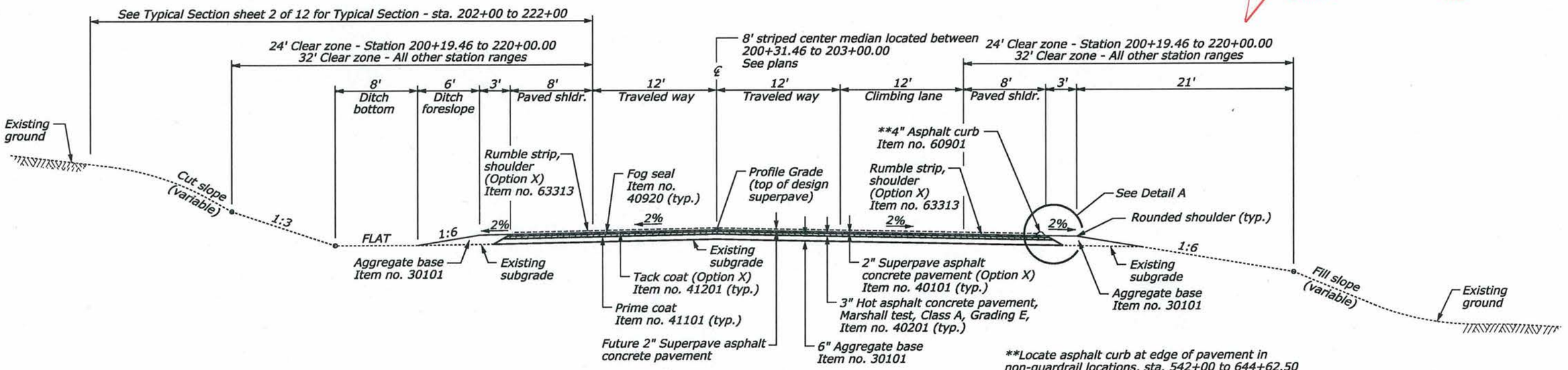


DETAIL A

NOTE:

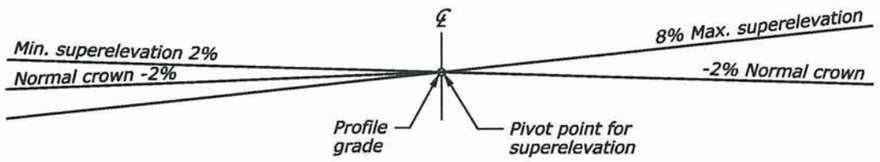
1. *Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts.~~ Place 2" Superpave asphalt concrete pavement (Option X) in one lift.*
2. *Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.*

AS-BUILT DRAWINGS/SPECIFICATIONS
This certifies that the dimensions and details shown on this sheet reflect the dimensions and details and specifications as constructed in the field.
GOODFELLOW BROS., INC.
Contractor's Name:
Signature 1/2/14 Date



**Locate asphalt curb at edge of pavement in non-guardrail locations, sta. 542+00 to 644+62.50 and sta. 655+37.50 to 666+00.
See "Asphalt Concrete Curb" Detail

TYPICAL SECTION
SADDLE ROAD
Station 200+17.72 to 645+00
Station 655+00 to 666+00



METHOD OF SUPERELEVATION ON CURVES
See plans for locations of curves and superelevations

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.00 are shown as advertised under project HI A-AD 6(6).

NO SCALE

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LENGTH OF PROJECT

Station to Station	Roadway (feet)	Roadway (miles)
Saddle Road ~~753+90~~		
200+17.72 to ~~752+73.89~~	55,256.17	10.47
Hwy 190 (Mamalahoa Hwy)		
763+62.54 to 795+11.02	3,148.48	0.60

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

TYPICAL SECTIONS

SHEET 1 of 12

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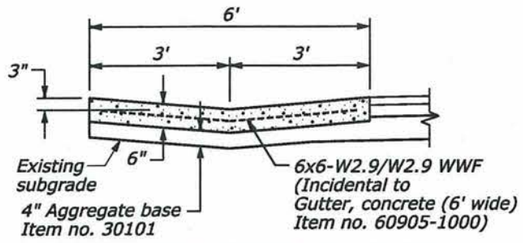
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A7	A22



GUTTER, CONCRETE (6' WIDE)

Note:
The finish elevation of the gutter shall be 2" lower if Option X is not awarded.

NOTE:

1. *Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts.~~ Place 2" Superpave asphalt concrete pavement (Option X) in one lift.*
2. *Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.*

AS-BUILT DRAWINGS/SPECIFICATIONS
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GOODFELLOW BROS., INC.
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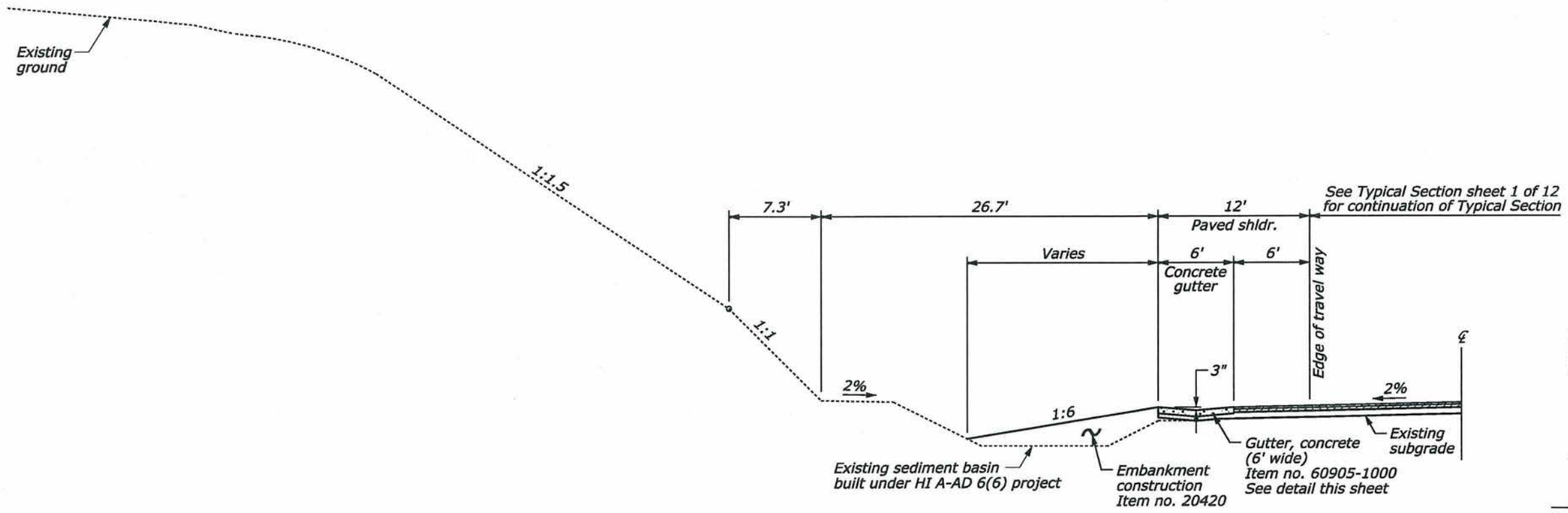
Signature 1/2/14
Date



TYPICAL SECTION
SADDLE ROAD
Station 202+00 to 222+00

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.0 are shown as advertised under project HI A-AD 6(6).

NO SCALE

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

TYPICAL SECTIONS

SHEET 2 of 12

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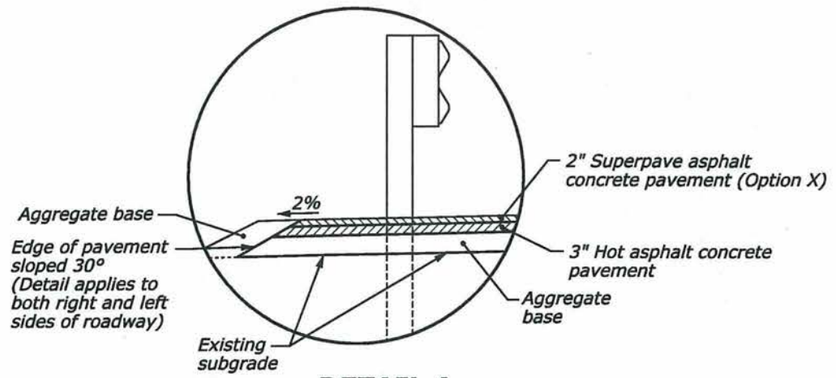
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A8	A22



DETAIL A

Note:
Post above ground shall be 33 inches tall.

NOTE:

1. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts.~~ Place 2" Superpave asphalt concrete pavement (Option X) in one lift.
2. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.

AS-BUILT DRAWINGS/SPECIFICATIONS
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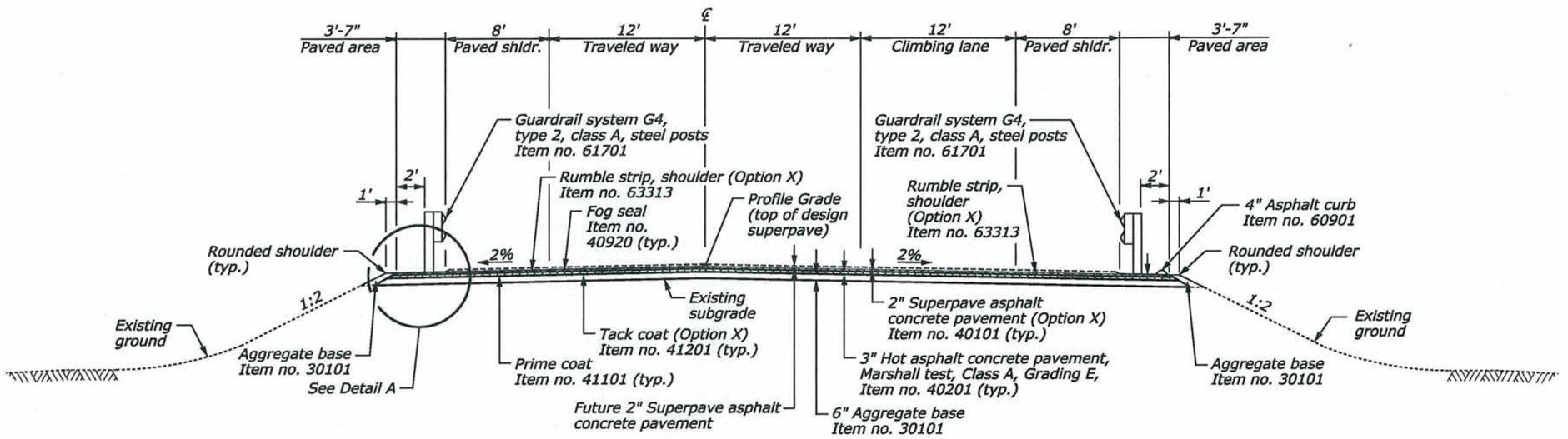
Contractor's Name:
Signature
1/2/14
Date



TYPICAL SECTION
SADDLE ROAD
Station 645+00 to 655+00

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.0 are shown as advertised under project HI A-AD 6(6).

NO SCALE

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Expiration Date of License 4/30/2014

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TYPICAL SECTIONS

SHEET 3 of 12

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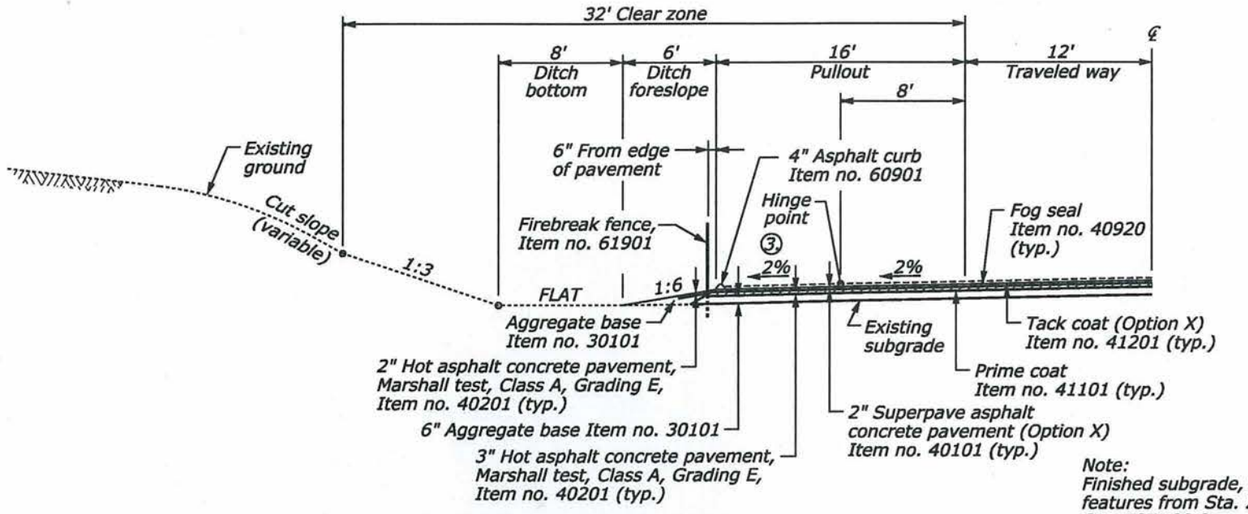
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A9	A22



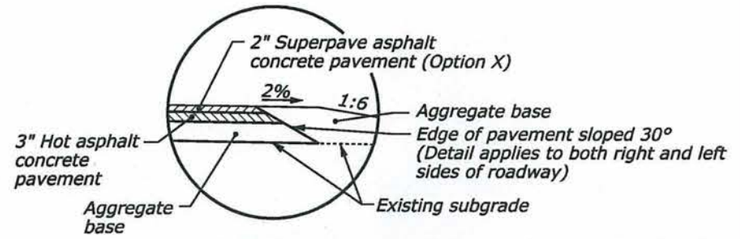
Station 687+00 to 704+33.38, Left Side Only

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.0 are shown as advertised under project HI A-AD 6(6).

NOTE:

1. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~. Place 2" Superpave asphalt concrete pavement (Option X) in one lift.
2. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.

③ Maintain 2% cross-slope of paved firebreak with superelevated roadway location.



DETAIL A

AS-BUILT DRAWINGS/SPECIFICATIONS
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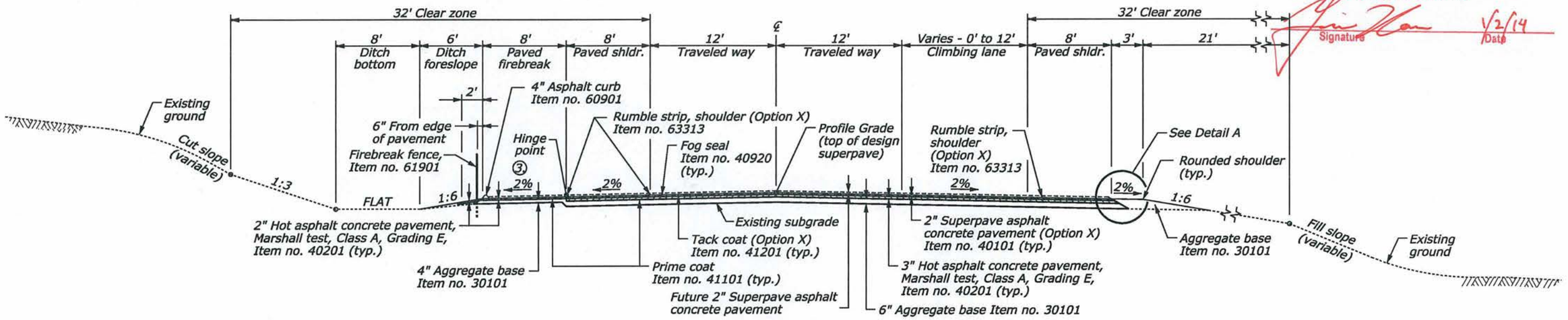
GOODFELLOW BROS., INC.
Contractor's Name:
Signature
1/2/14
Date



TYPICAL SECTION
SADDLE ROAD
Station 666+00 to 707+00

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.0 are shown as advertised under project HI A-AD 6(6).

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NO SCALE

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FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

TYPICAL SECTIONS

SHEET 4 of 12

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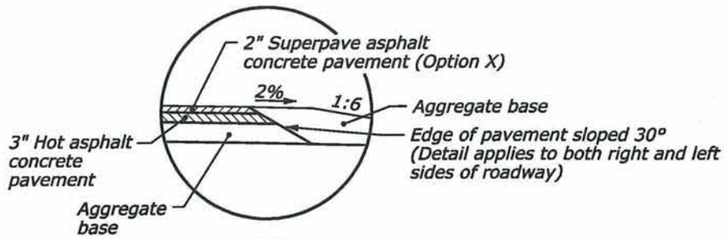
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A10	A22

SLOPE RATIO TABLE

Slope	Cut Slope Ht.	Fill Slope Ht.
1:6	0' - 2'	0' - 1'
1:4	2' - 6'	1' - 4'
1:3	6' - 12'	4' - 8'
1:2	12' - 16'	8' - Over
1:1.5	16' - Over	N/A

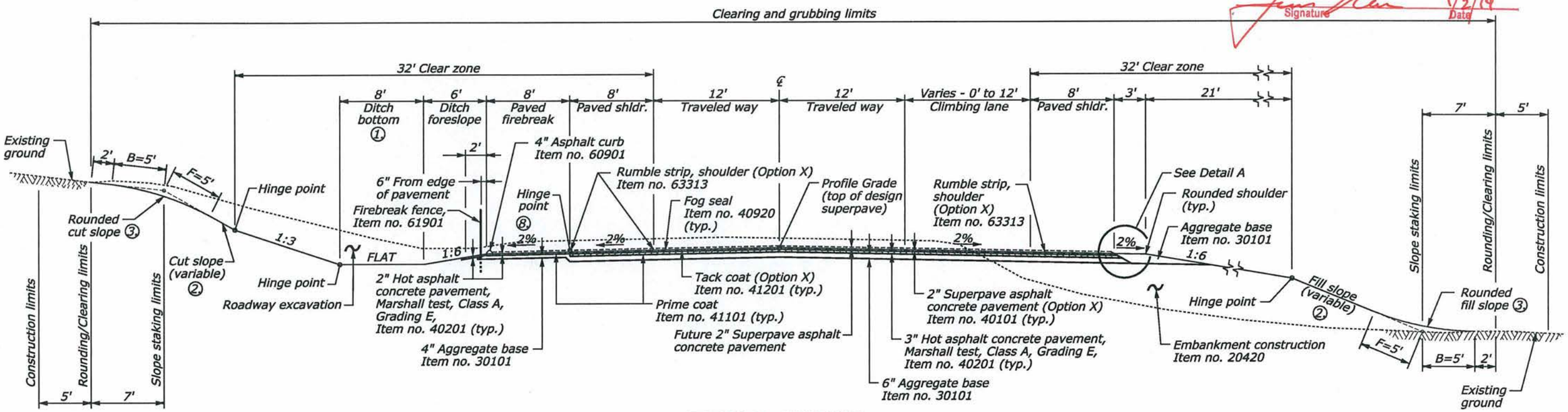


DETAIL A

NOTE:

1. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability.
2. See slope ratio table for cut and fill slope ratios.
3. Round all earth slopes and all rippable rock slopes. Reduce the B and F dimensions for cut slope distances less than 9 feet to the actual cut distance.
4. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~. Place 2" Superpave asphalt concrete pavement (Option X) in one lift.
5. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.
6. See section 204 of the SCR's for finished slope requirements.
7. See section 204 and 624 of the SCR's for the placement of topsoil.
8. Maintain 2% cross-slope of paved firebreak with superelevated roadway location.

AS BUILT DRAWINGS CERTIFICATION
This certifies that the dimensions and details shown on this sheet reflect the dimensions and details and specifications as constructed in the field.
GOODFELLOW BROS., INC.
Contractor's Name:
Signature 1/2/14 Date



TYPICAL SECTION
SADDLE ROAD
Station 707+00 to 744+89.80

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Daniel A. Liddle
Expiration Date of License 4/30/2014

NO SCALE

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FEDERAL HIGHWAY ADMINISTRATION
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TYPICAL SECTIONS

SHEET 5 of 12

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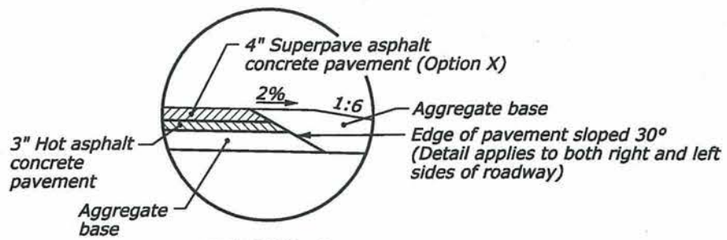
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A11	A22

SLOPE RATIO TABLE

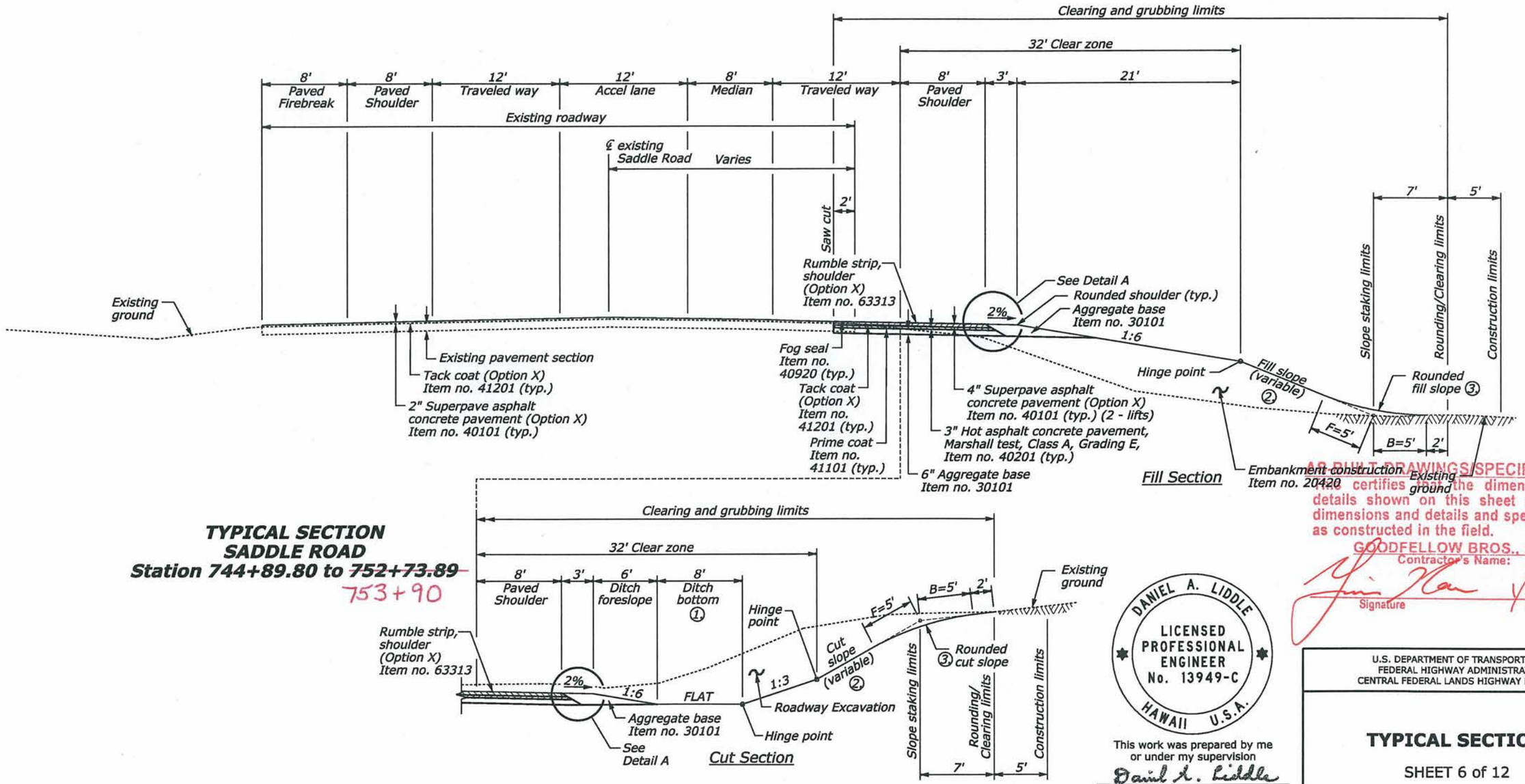
Slope	Cut Slope Ht.	Fill Slope Ht.
1:6	0' - 2'	0' - 1'
1:4	2' - 6'	1' - 4'
1:3	6' - 12'	4' - 8'
1:2	12' - 16'	8' - Over
1:1.5	16' - Over	N/A



DETAIL A

NOTE:

1. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability.
2. See slope ratio table for cut and fill slope ratios.
3. Round all earth slopes and all rippable rock slopes. Reduce the B and F dimensions for cut slope distances less than 9 feet to the actual cut distance.
4. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts.~~ Place 4" Superpave asphalt concrete pavement (Option X) in two lifts.
5. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.
6. See section 204 of the SCR's for finished slope requirements.
7. See section 204 and 624 of the SCR's for the placement of topsoil.



TYPICAL SECTION
SADDLE ROAD
Station 744+89.80 to ~~752+73.89~~ 753+90

NO SCALE

AS BUILT DRAWINGS/SPECIFICATIONS
I/We certifies that the dimensions and details shown on this sheet reflect the dimensions and details and specifications as constructed in the field.
GOODFELLOW BROS., INC.
Contractor's Name:
Signature
1/2/14
Date

DANIEL A. LIDDLE
LICENSED PROFESSIONAL ENGINEER
No. 13949-C
HAWAII U.S.A.

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Daniel A. Liddle
Expiration Date of License 4/30/2014

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

TYPICAL SECTIONS

SHEET 6 of 12

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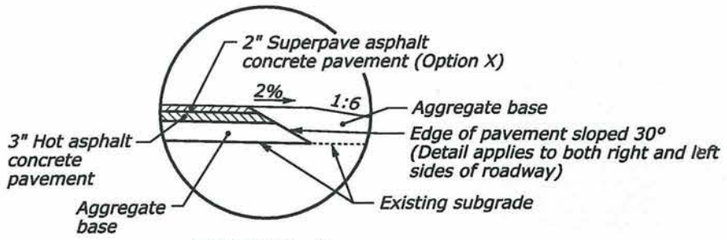
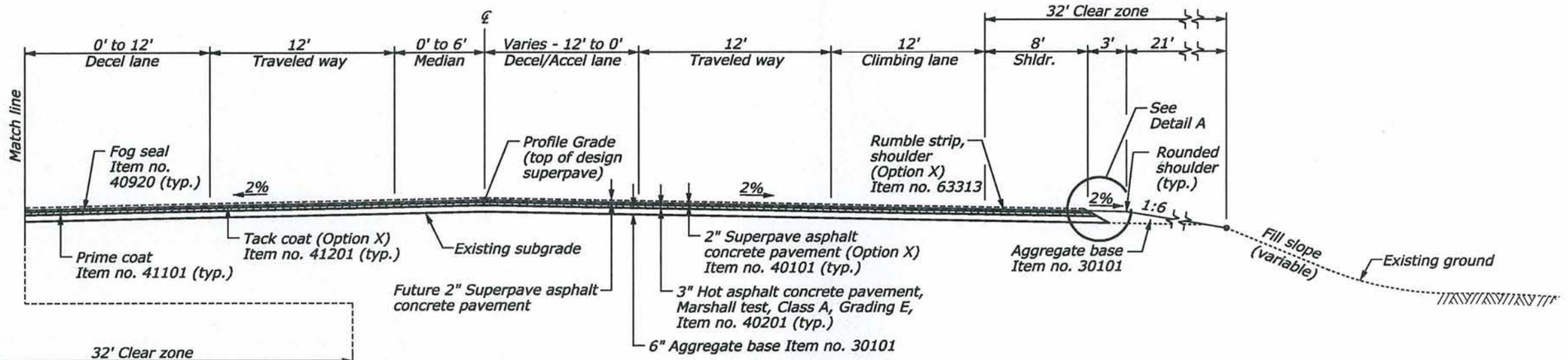
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A12	A22

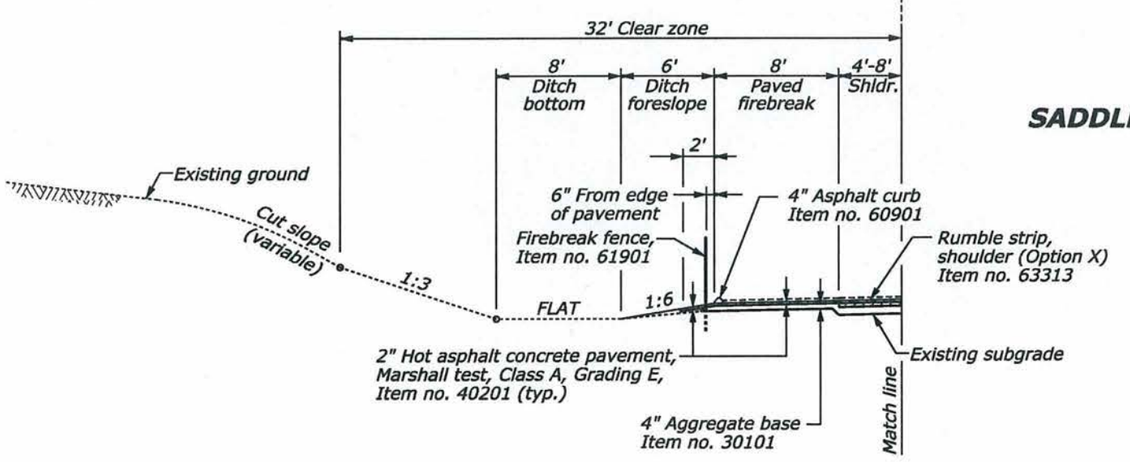
NOTE:

1. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~.
   Place 2" Superpave asphalt concrete pavement (Option X) in one lift.
2. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.



DETAIL A





TYPICAL SECTION
SADDLE ROAD / OLD SADDLE INTERSECTION
Station 702+40 to 707+00

Note:
Finished subgrade, roadway and drainage features from Sta. 200+17.72 to Sta. 707+00.0 are shown as advertised under project HI A-AD 6(6).

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GOODFELLOW BROS., INC.
Contractor's Name:
Signature 1/2/14 Date

DANIEL A. LIDDLE
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HAWAII U.S.A.

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NO SCALE

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TYPICAL SECTIONS

SHEET 7 of 12

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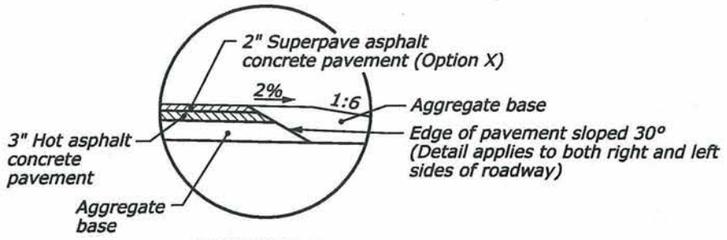
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A13	A22

SLOPE RATIO TABLE

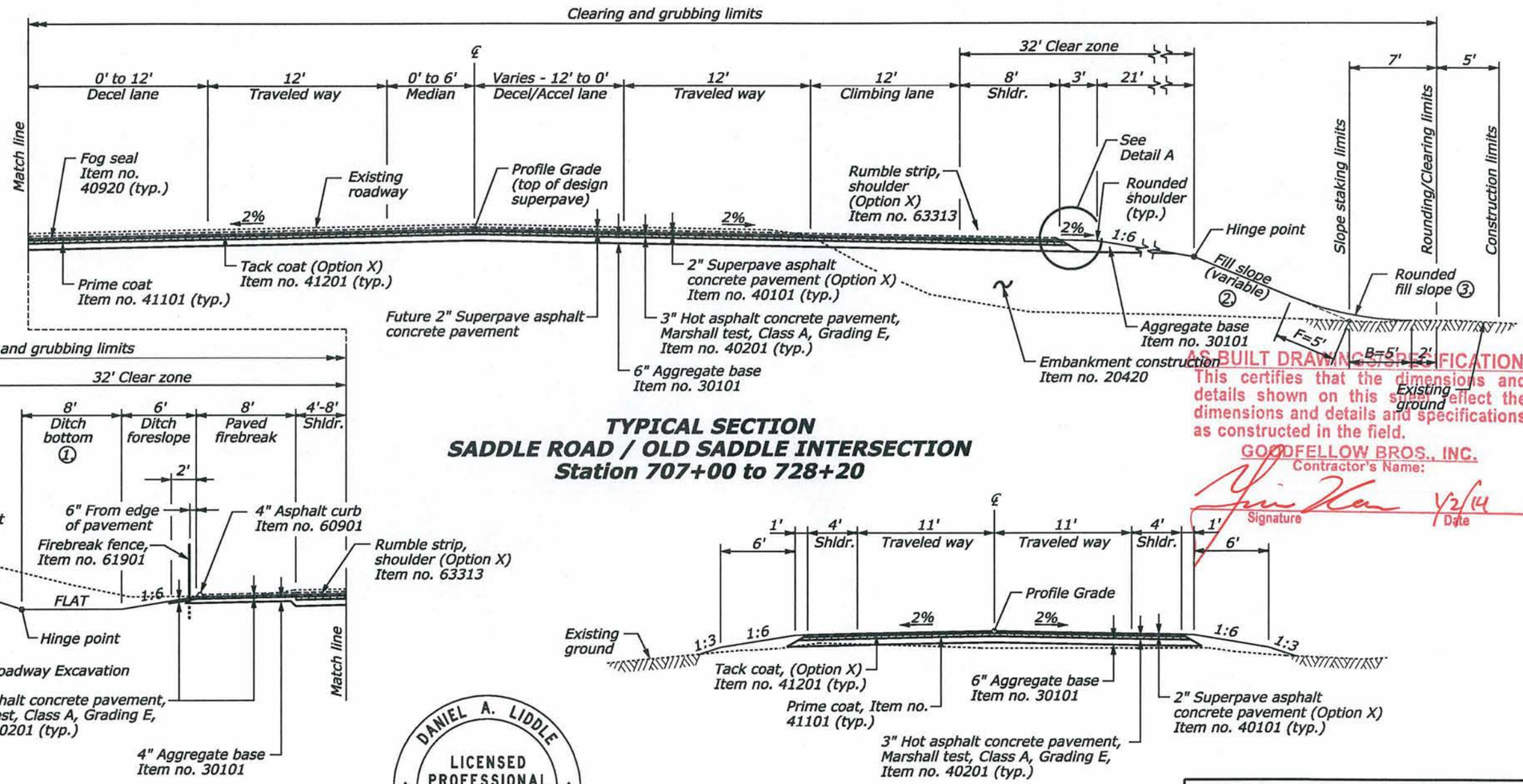
Slope	Cut Slope Ht.	Fill Slope Ht.
1:6	0' - 2'	0' - 1'
1:4	2' - 6'	1' - 4'
1:3	6' - 12'	4' - 8'
1:2	12' - 16'	8' - Over
1:1.5	16' - Over	N/A



DETAIL A

NOTE:

1. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability.
2. See slope ratio table for cut and fill slope ratios.
3. Round all earth slopes and all rippable rock slopes. Reduce the B and F dimensions for cut slope distances less than 9 feet to the actual cut distance.
4. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~. Place 2" Superpave asphalt concrete pavement (Option X) in one lift.
5. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.
6. See section 204 of the SCR's for finished slope requirements.
7. See section 204 and 624 of the SCR's for the placement of topsoil.



TYPICAL SECTION
SADDLE ROAD / OLD SADDLE INTERSECTION
Station 707+00 to 728+20

TYPICAL SECTION
OLD SADDLE ROAD
Station 160+00 to 163+00

(See X-Sections for actual cross slopes)

NO SCALE

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HAWAII U.S.A.

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AS-BUILT DRAWINGS/SPECIFICATIONS
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GOODFELLOW BROS., INC.
Contractor's Name:

Signature

Y2/14
Date

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

TYPICAL SECTIONS

SHEET 8 of 12

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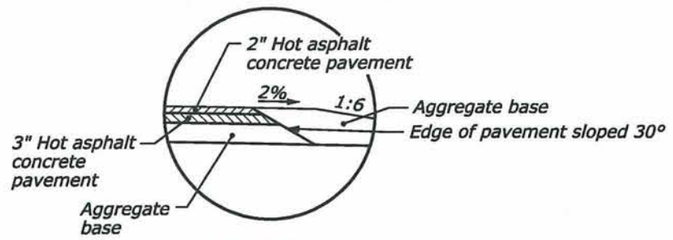
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A14	A22

SLOPE RATIO TABLE

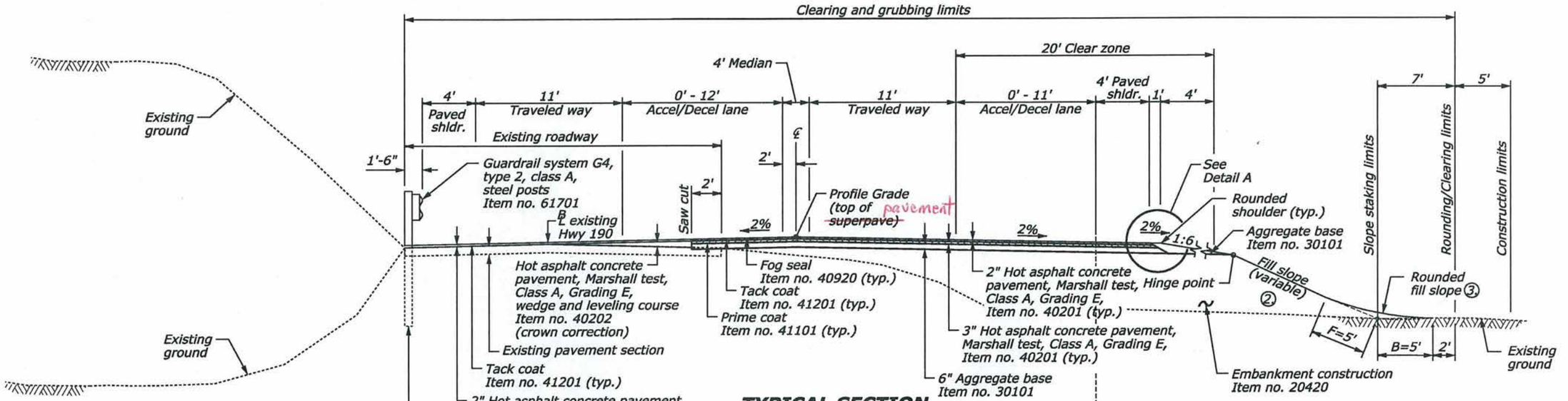
Slope	Cut Slope Ht.	Fill Slope Ht.
1:6	0' - 2'	0' - 1'
1:4	2' - 6'	1' - 4'
1:3	6' - 12'	4' - 8'
1:2	12' - 16'	8' - Over
1:1.5	16' - Over	N/A



DETAIL A

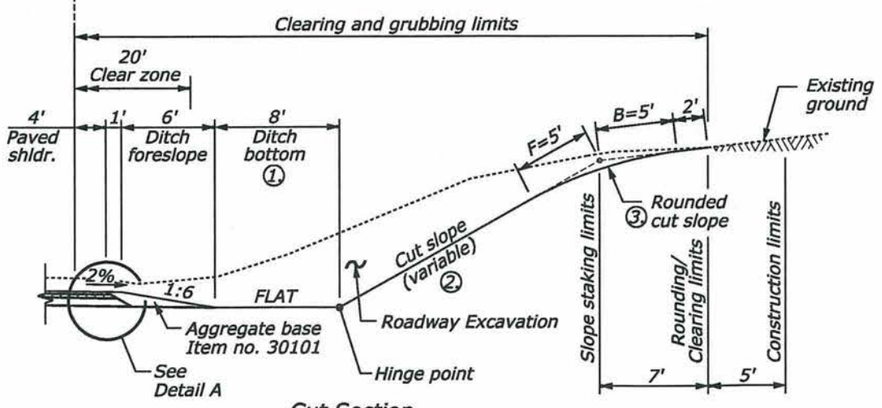
NOTE:

1. The gradient and width of roadway ditches and the excavation and embankment slope ratios may be adjusted by the CO to assure adequate drainage and stability.
2. See slope ratio table for cut and fill slope ratios.
3. Round all earth slopes and all rippable rock slopes. Reduce the B and F dimensions for cut slope distances less than 9 feet to the actual cut distance.
4. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~.
   Place 2" ~~Superpave~~ Marshall asphalt concrete pavement (Option X) in one lift.
5. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.
6. See section 204 of the SCR's for finished slope requirements.
7. See section 204 and 624 of the SCR's for the placement of topsoil.



TYPICAL SECTION
MAMALAHOA HWY (HWY 190)
Station 763+62.54 to 774+00
Station 784+00 to 795+11.02

Fill Section



Cut Section

NO SCALE

AS-BUILT DRAWINGS/SPECIFICATIONS
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GOODFELLOW BROS., INC.
Contractor's Name:
Signature
1/2/14
Date

DANIEL A. LIDDLE
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No. 13949-C
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Daniel A. Liddle
Expiration Date of License 4/30/2014

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

TYPICAL SECTIONS

SHEET 9 of 12

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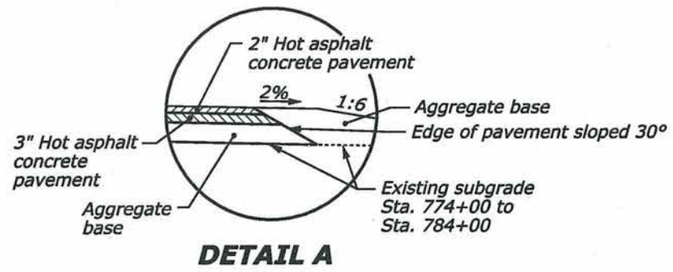
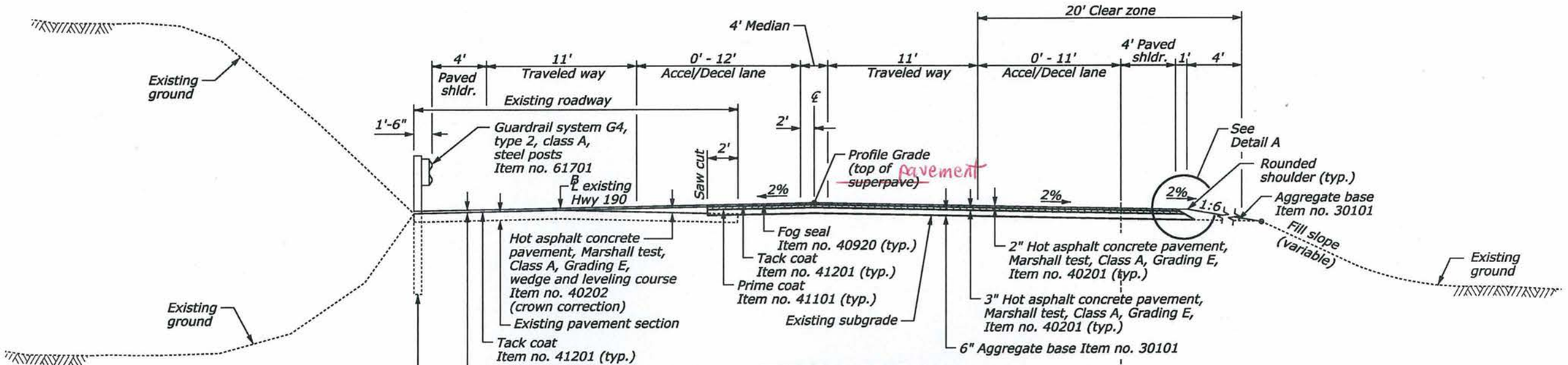
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A15	A22

NOTE:

1. Place 3" hot asphalt concrete pavement, Marshall test ~~in two lifts~~.
   Place 2" ~~Superpave~~ Marshall asphalt concrete pavement (Option X) in one lift.
2. Apply fog seal to top of superpave asphalt concrete pavement finished surface and rumble strip.



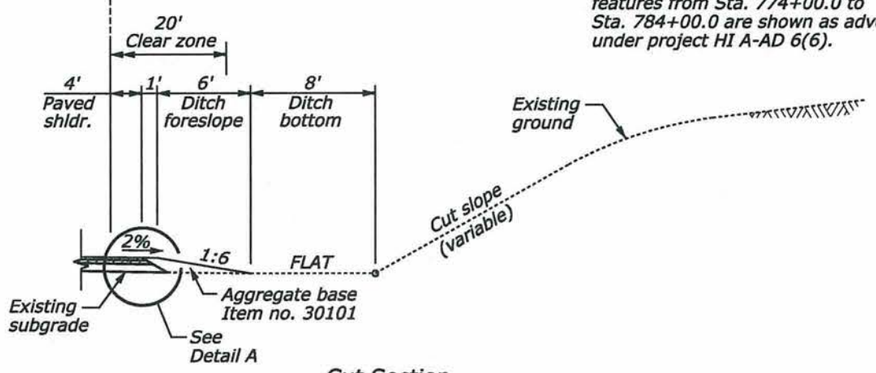
DETAIL A



TYPICAL SECTION
MAMALAHOA HWY (HWY 190)
Station 774+00 to 784+00

Fill Section

Note:
Finished subgrade, roadway and drainage features from Sta. 774+00.0 to Sta. 784+00.0 are shown as advertised under project HI A-AD 6(6).



Cut Section

AS-BUILT DRAWINGS/SPECIFICATIONS
This certifies that the dimensions and details shown on this sheet reflect the dimensions and details and specifications as constructed in the field.
GOODFELLOW BROS., INC.
Contractor's Name:
Signature
1/2/14
Date

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NO SCALE

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TYPICAL SECTIONS

SHEET 10 of 12

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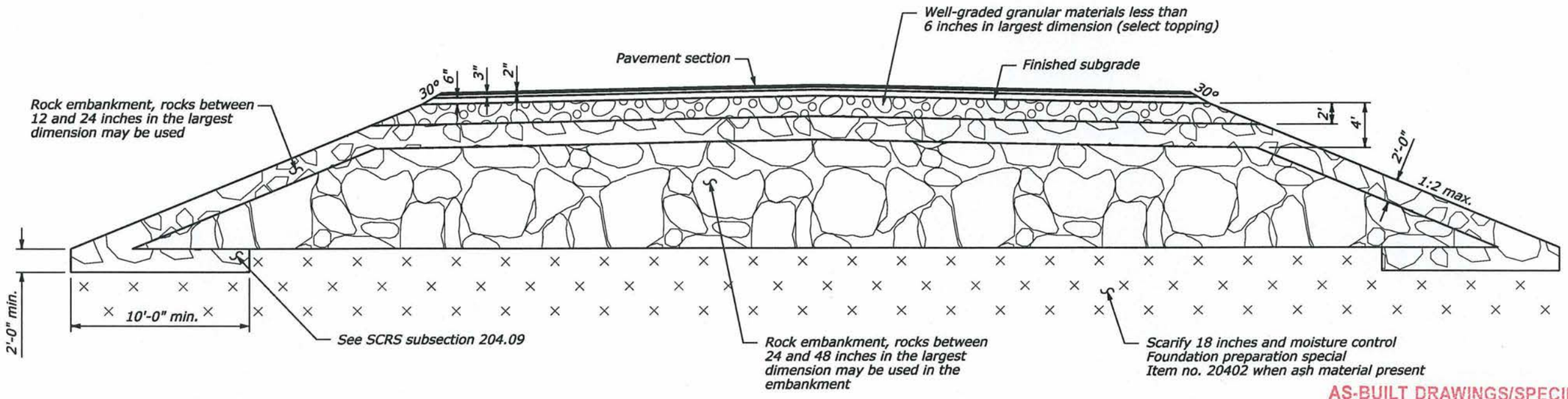
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A16	A22



TYPICAL ROCK EMBANKMENT DETAIL

This detail is schematic, refer to typical sections on sheets A6 - A11 for the geometric configurations of embankments. All rock embankment will be measured as Embankment Construction Item no. 20420

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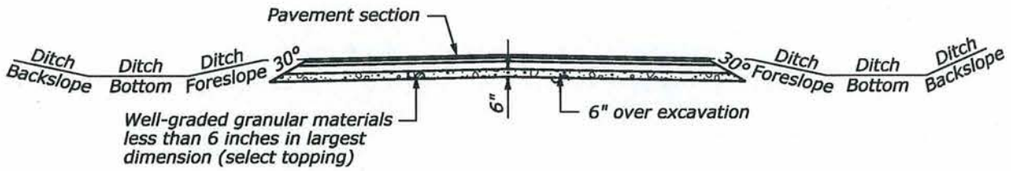
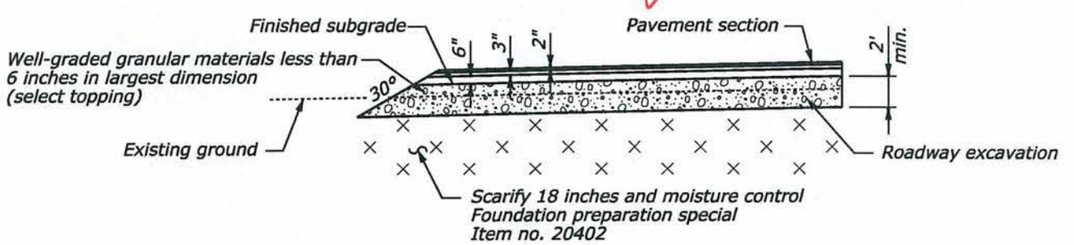


Over excavate 6" in all cut sections and backfill with well-graded granular material less than 6" in largest dimension (select topping).

TYPICAL ROCK CUT SECTION DETAIL



TYPICAL EMBANKMENT AND EXCAVATION IN ASH

In ash areas as directed by the CO excavate to 24 inches minimum depth below the finished subgrade.

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TYPICAL SECTIONS

SHEET 11 of 12

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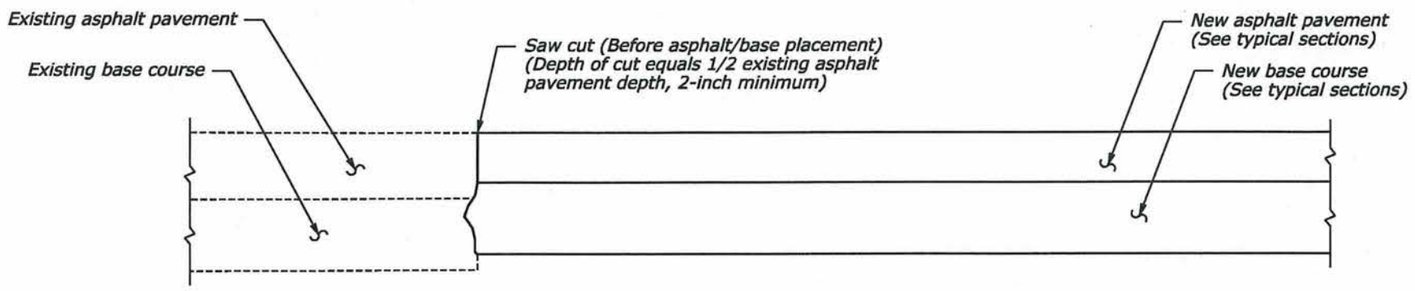
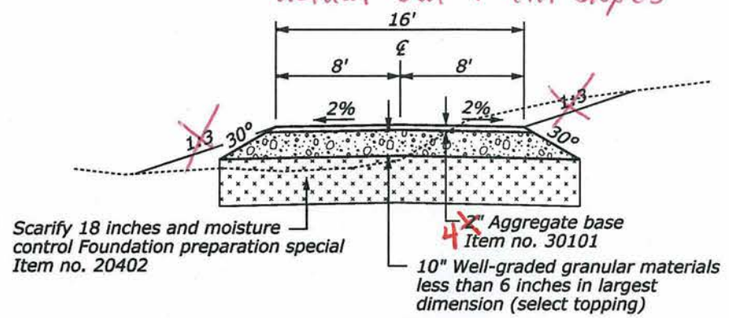
STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(7)	A17	A22



PAVEMENT TRANSITION - MATCH EXISTING

See Cross Sections for actual cut + fill slopes



TYPICAL SECTION
LIGHTNING TRAIL
Station 1000+46.70 to 1081+56.99

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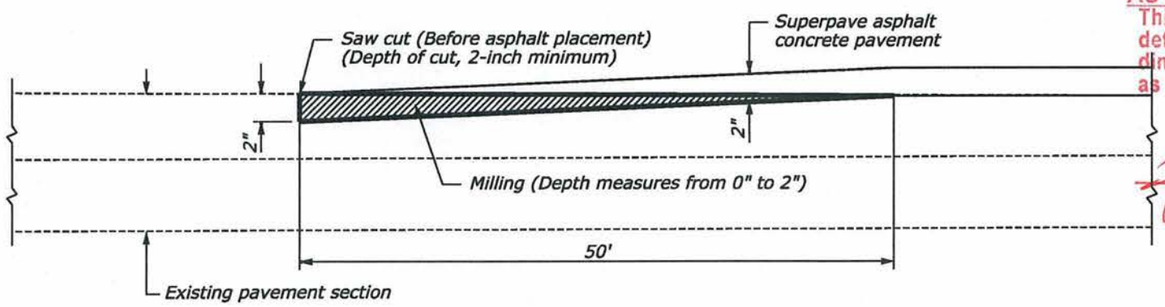
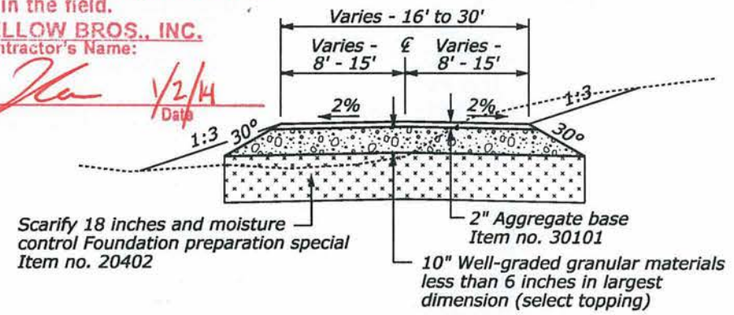
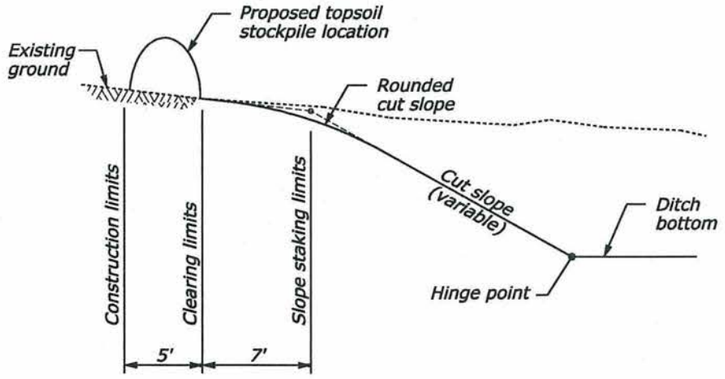


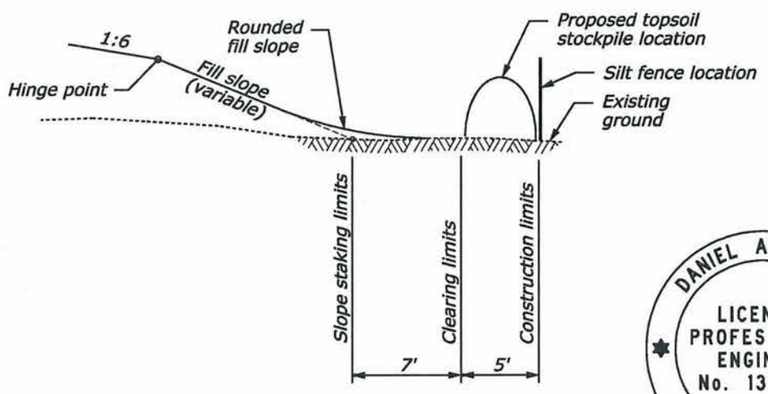
PAVEMENT (OVERLAY) TRANSITION - MATCH EXISTING



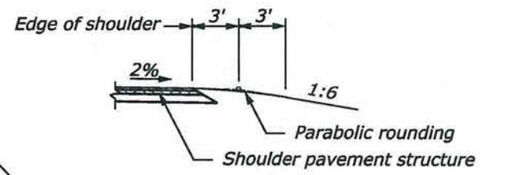
TYPICAL SECTION
MSR ROAD
Station 91+00 to 101+50



TOPSOIL STOCKPILE LOCATION IN CUT



TOPSOIL STOCKPILE LOCATION IN FILL



ROUNDED SHOULDER DETAIL

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TYPICAL SECTIONS

SHEET 12 of 12

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