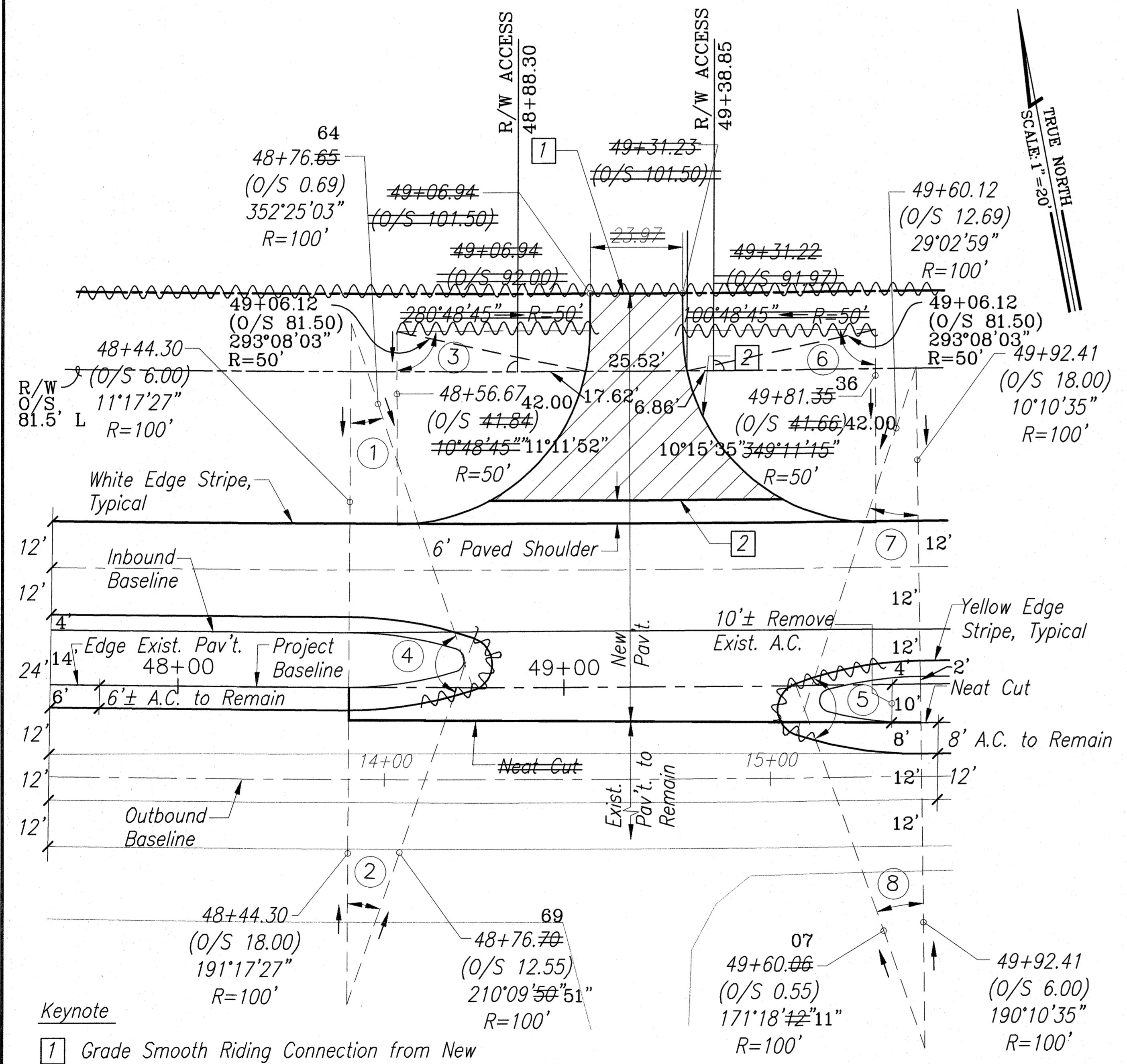


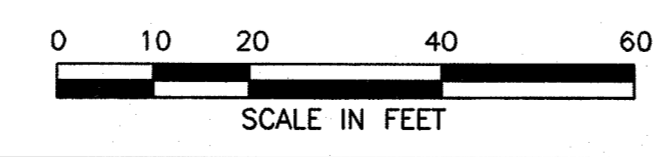
CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	18°52'24"	18°52'24"	90°00'00"	142°15'13"	142°15'13"	90°00'00"	18°52'24"	18°52'24"
R	100.00	100.00	50.00	7.00	7.00	50.00	100.00	100.00
T	25.07	25.07	50.00	13.08	13.08	50.00	25.07	25.07
C	48.64	48.64	70.71	12.34	12.34	70.71	48.64	48.64
L	49.13	49.13	78.54	15.12	15.12	78.54	49.13	49.13

Refer to Sheet ADD. 25 S-1 for Curve Data and CC Coordinates.



- Keynote**
- Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
  - Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.

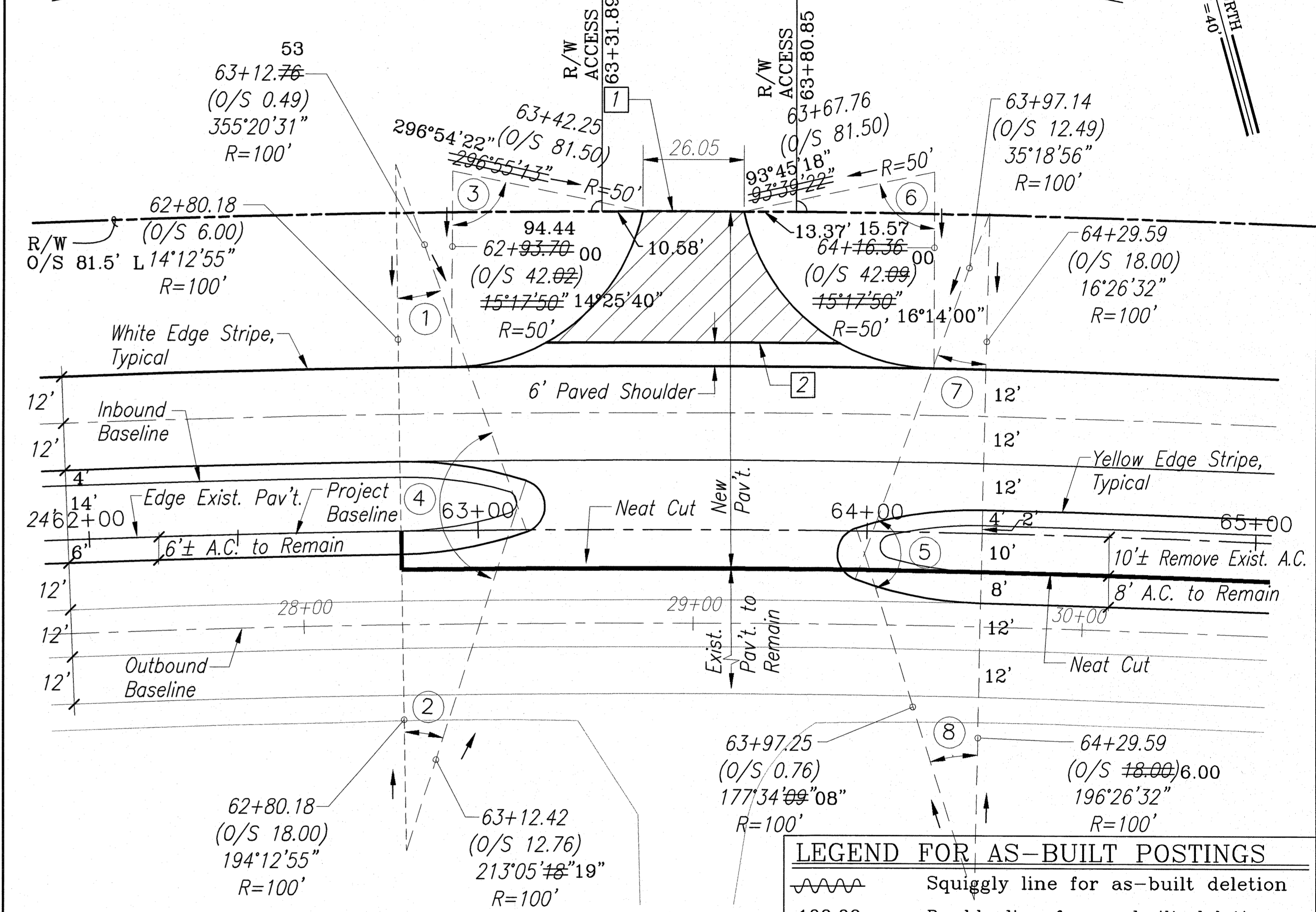
Left turn pocket & truck crossing deleted.  
**GEOMETRIC LAYOUT NO.4**  
**HALEAKALA BASELINE STA. 49+20**  
 SCALE: 1" = 20'



Refer to Sheet ADD. 25 S-1 for Curve Data and CC Coordinates.

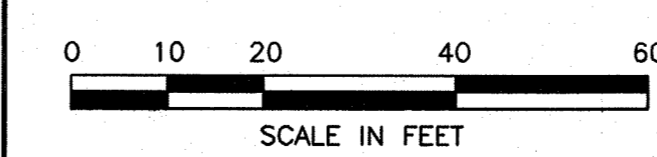
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	25	288

CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	18°52'24"	18°52'24"	78°22'37"	142°15'13"	142°15'13"	78°21'32"	18°52'24"	18°52'24"
R	100.00	100.00	50.00	7.00	7.00	50.00	100.00	100.00
T	25.07	25.07	40.76	13.08	13.08	40.75	25.07	25.07
C	48.64	48.64	63.19	12.34	12.34	63.18	48.64	48.64
L	49.13	49.13	68.40	15.12	15.12	68.38	49.13	49.13



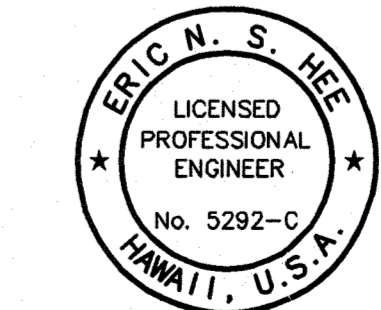
- Keynote**
- Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
  - Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.

**GEOMETRIC LAYOUT NO.5**  
**HALEAKALA BASELINE STA. 63+50**  
 SCALE: 1" = 20'



**LEGEND FOR AS-BUILT POSTINGS**

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 ENGINEERS SURVEYORS HAWAII, INC.  
 LICENSE EXPIRATION DATE: 4/30/08

11/25/05	CLARIFIED NEW PAVEMENT LIMITS
DATE	REVISION

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
 HANA HIGHWAY TO PUKALANI BYPASS  
 FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 1 OF 6 SHEETS



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	25 S-2	288

CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	84°15'39"	18°52'24"	18°52'24"	142°15'13"	142°15'13"	84°15'39"	18°52'24"	18°52'24"
R	50.00	100.00	100.00	7.00	7.00	50.00	100.00	100.00
T	45.23	16.62	16.62	20.45	20.48	45.23	16.62	16.62
C	67.08	32.79	32.79	13.25	13.25	67.08	32.79	32.79
L	73.53	32.94	32.94	17.38	17.38	73.53	32.94	32.94

CC COORDINATES					
CC #1	10919.84346 S 4300.21322 E	CC #4	11006.27999 S 4285.34628 E	CC #7	10979.39763 S 4424.32932 E
CC #2	10913.348775 S 4288.92358 E	CC #5	11049.69078 S 4364.61086 E	CC #8	11142.62201 S 4361.03357 E
CC #3	11077.57315 S 4225.62783 E	CC #6	10964.43819 S 4415.91676 E		

REFER TO SHEET ADD. 27 - GEOMETRIC LAYOUT NO. 9 HALEAKALA BASELINE STA. 161+17±

CURVE DATA										
CURVE	1	2	3	4	5	6	7	8	9	10
Δ	28°08'58"	123°42'04"	28°08'58"	84°15'45"	84°15'45"	28°08'58"	123°42'04"	28°08'58"	97°25'20"	82°34'40"
R	100.00	7.00	100.00	50.00	50.00	100.00	7.00	100.00	30.00	30.00
T	25.07	13.08	25.07	45.23	45.23	25.07	13.08	25.07	34.16	26.35
C	48.64	12.34	48.27	67.08	67.08	48.64	12.34	48.64	45.08	39.59
L	49.13	15.11	49.13	73.53	73.53	49.13	15.11	49.13	51.01	43.24

CC COORDINATES					
CC #1	11342.8375 S 5369.889 E	CC #4	11342.842 S 5397.708 E	CC #7	11463.086 S 5453.872 E
CC #2	11435.128 S 5381.333 E	CC #5	11393.134 S 5528.192 E	CC #8	11555.377 S 5465.317 E
CC #3	11495.865 S 5310.908 E	CC #6	11402.350 S 5524.297 E	CC #9	11500.749 S 5334.704 E
				CC #10	11537.018 S 5428.806 E

REFER TO SHEET ADD. 28 - GEOMETRIC LAYOUT NO. 10 HALEAKALA BASELINE STA. 173+00±

CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	89°48'20"	89°48'19"	18°52'24"	18°52'24"	142°15'13"	28°08'58"	28°08'58"	123°42'04"
R	30.00	30.00	100.00	100.00	7.00	100.00	100.00	7.00
T	29.90	29.90	16.62	16.62	13.08	25.07	25.07	13.08
C	42.35	42.35	32.79	32.79	12.34	48.64	48.64	12.34
L	47.02	47.02	32.94	32.49	15.12	49.13	49.13	15.11

CC COORDINATES					
CC #1	12627.77907 S 7927.84428 E	CC #4	12731.34787 S 7804.47636 E	CC #7	12828.27191 S 7952.35480 E
CC #2	12676.82550 S 7998.09801 E	CC #5	12673.70944 S 7877.46143 E	CC #8	12735.70116 S 7961.28014 E
CC #3	12583.45393 S 7899.88800 E	CC #6	12691.76265 S 8043.24607 E		

REFER TO SHEET ADD. 29 - GEOMETRIC LAYOUT NO. 11 HALEAKALA BASELINE STA. 201+00

CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	18°52'24"	18°52'24"	90°00'00"	142°15'12"	142°15'12"	90°00'00"	18°52'24"	18°52'24"
R	100.00	100.00	50.00	7.00	7.00	50.00	100.00	100.00
T	16.62	16.62	50.00	20.48	20.48	50.00	16.62	16.62
C	32.79	32.79	70.71	13.25	13.25	70.71	32.79	32.79
L	32.94	32.94	78.54	17.38	17.38	78.54	32.94	32.94

CC COORDINATES					
CC #1	13583.46793 S 9241.63438 E	CC #4	13669.93220 S 9207.38619 E	CC #7	13689.91757 S 9347.86753 E
CC #2	13717.33595 S 9127.37435 E	CC #5	13737.32132 S 9267.85569 E	CC #8	13823.78559 S 9233.60750 E
CC #3	13593.34442 S 9250.12507 E	CC #6	13673.84580 S 9344.44117 E		

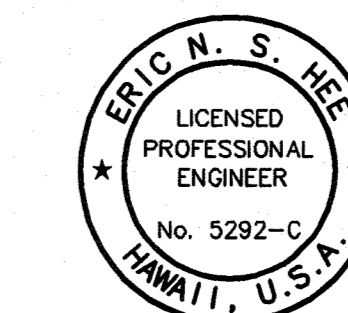
REFER TO SHEET ADD. 29 - GEOMETRIC LAYOUT NO. 12 HALEAKALA BASELINE STA. 217+48±

CURVE DATA							
CURVE	1	2	3	4	5	6	7
Δ	63°09'53"	26°50'07"	26°50'07"	90°00'00"	126°19'46"	103°21'02"	90°00'00"
R	70.00	70.00	70.00	60.00	5.00	7.00	72.00
T	43.04	16.70	16.70	60.00	9.88	8.86	72.00
C	73.32	32.49	32.49	84.85	8.92	10.98	101.82
L	77.17	32.79	32.79	94.25	11.02	12.63	113.10

CURVE DATA							
CURVE	8	9	10	11	12	13	14
Δ	57°41'36"	44°20'34"	32°18'24"	90°00'00"	67°06'55"	90°00'00"	53°45'03"
R	70.00	50.00	70.00	40.00	52.00	50.00	62.00
T	38.56	20.38	20.28	40.00	34.49	50.00	31.42
C	67.55	37.74	38.95	56.57	57.49	70.71	56.05
L	70.49	38.70	39.47	62.83	60.91	78.54	58.16

CC COORDINATES					
CC #1	11519.03866 S 11747.22485 E	CC #5	15583.37081 S 11737.93122 E	CC #9	15675.95647 S 11803.72535 E
CC #2	11519.03866 S 11747.22485 E	CC #6	15633.52483 S 11796.78951 E	CC #10	15609.27366 S 11854.93578 E
CC #3	15613.99574 S 11680.59787 E	CC #7	15611.71592 S 11841.00612 E	CC #11	15498.00069 S 11769.31585 E
CC #4	15549.68391 S 11752.59781 E	CC #8	15609.27366 S 11854.93578 E	CC #12	15498.00069 S 11769.31585 E
				CC #13	15558.83735 S 11880.55176 E
				CC #14	15558.83735 S 11880.55176 E

REFER TO SHEET ADD. 29 - GEOMETRIC LAYOUT NO. 13 HALEAKALA BASELINE STA. 249+20± AT HAILIMAILE ROAD



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 Eric N. S. Hee  
 ENGINEERS SURVEYORS HAWAII, INC.  
 LICENSE EXPIRATION DATE: 4/30/08

NOTE: This tracing prepared during "As-Built" posting.

DATE	REVISION

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
 HANA HIGHWAY TO PUKALANI BYPASS  
 FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 1A OF 6 SHEETS

AS-BUILT

ADD.25 S-2

ORIGINAL PLAN  
 NOTE BOOK  
 CHECKED BY  
 No.

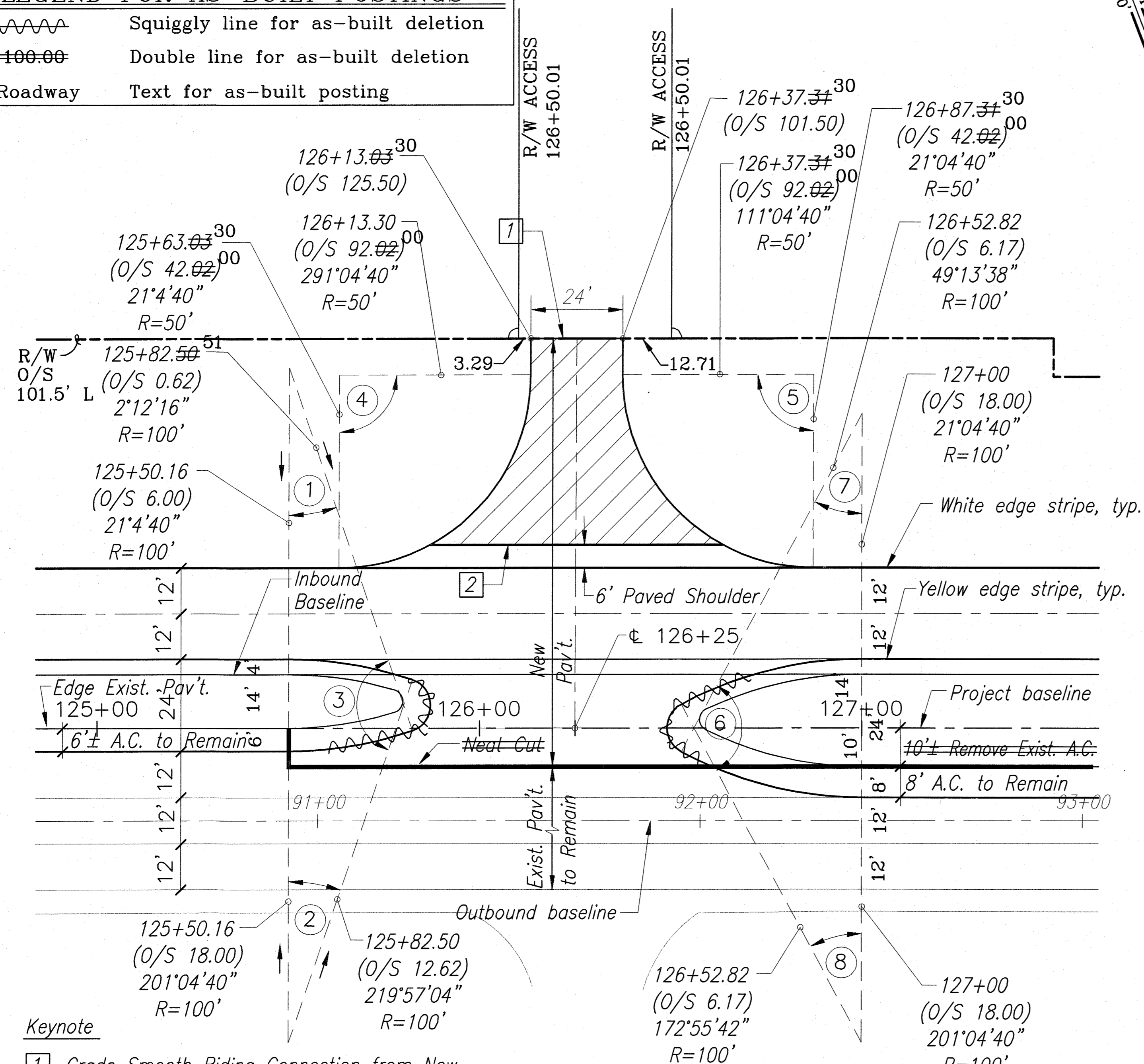
SURVEY PLOTTED BY DATE  
 DRAWN BY  
 DESIGNED BY  
 QUANTITIES BY  
 CHECKED BY  
 No.



CURVE DATA								
CURVE	1	2	3	4	5	6	7	8
Δ	18°52'24"	18°52'24"	142°15'13"	90°00'00"	90°00'00"	123°42'04"	28°08'58"	28°08'58"
R	100.00	100.00	7.00	50.00	50.00	7.00	100.00	100.00
T	25.07	25.07	13.08	50.00	50.00	13.08	25.07	25.07
C	48.64	48.64	12.34	70.71	70.71	12.34	48.64	48.64
L	49.13	49.13	15.12	78.54	78.54	15.11	49.13	49.13

Refer to Sheet ADD. 25 S-1 for Curve Data and CC Coordinates.

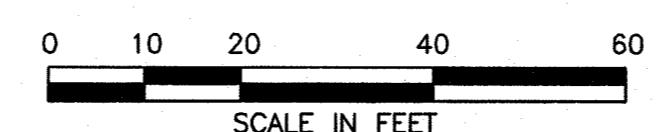
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



- Keynote**
- Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
  - Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.

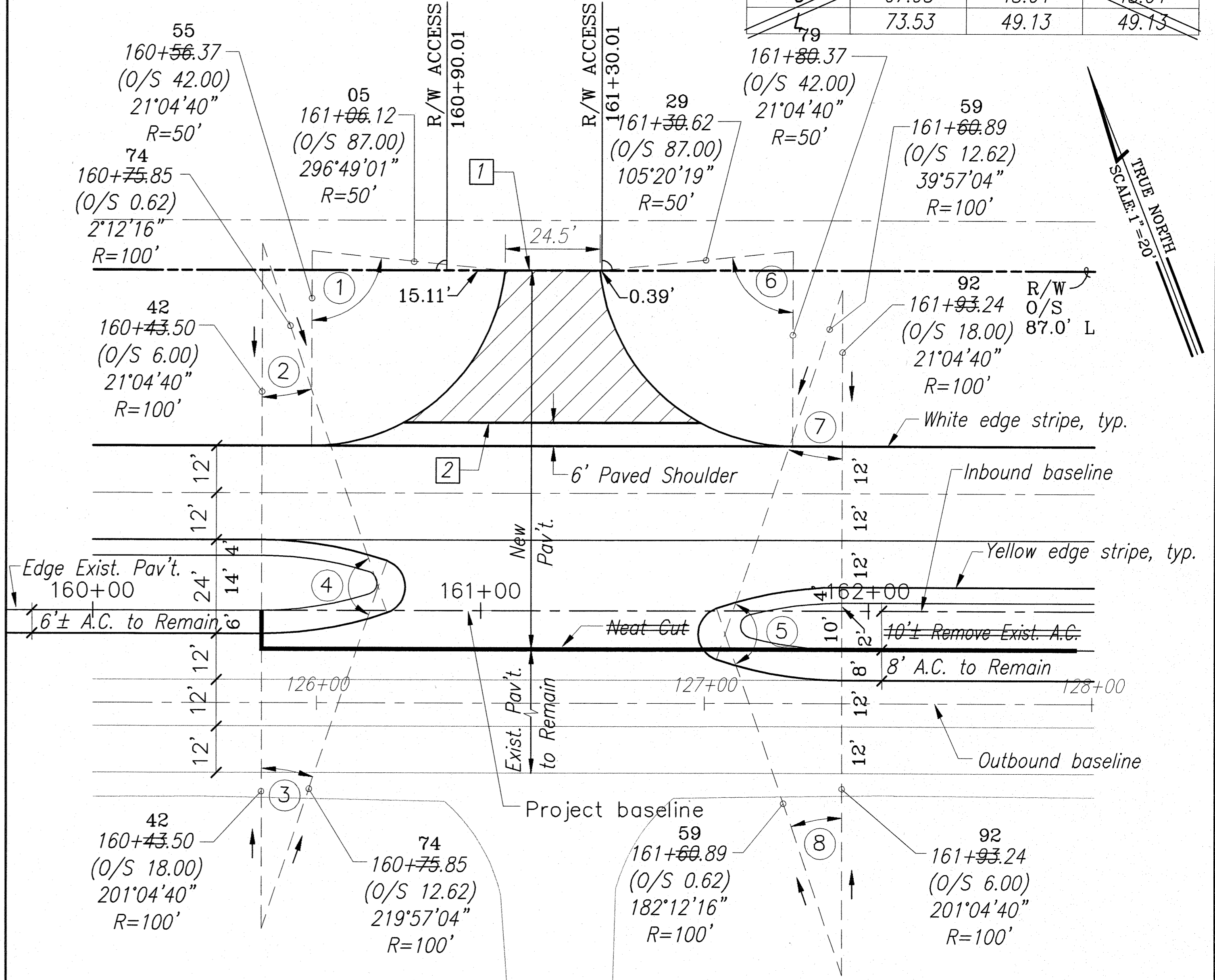
**GEOMETRIC LAYOUT No. 8  
HALEAKALA BASELINE STA. 126+25±**

SCALE: 1"=20'



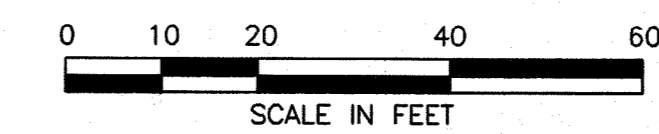
CURVE DATA					
CURVE	1	2	3	4	5
Δ	84°15'39"	18°52'24"	18°52'24"	142°15'13"	142°15'13"
R	50.00	100.00	100.00	7.00	7.00
T	45.23	25.07	25.07	13.08	13.08
C	67.08	48.64	48.64	12.34	12.34
L	73.53	49.13	49.13	15.12	15.12

Refer to Sheet ADD. 25 S-2 for Curve Data and CC Coordinates.

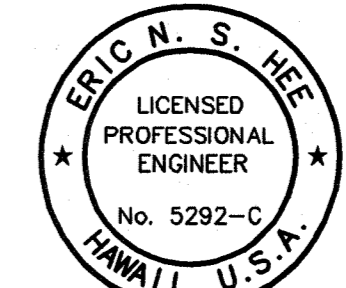


**GEOMETRIC LAYOUT No. 9  
HALEAKALA BASELINE STA. 161+20±**

SCALE: 1"=20'



- Keynote**
- Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
  - Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
ENGINEER'S SURVEYORS HAWAII, INC.  
LICENSE EXPIRATION DATE: 4/30/06

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	27	288

CURVE DATA			
CURVE	6	7	8
Δ	84°15'39"	18°52'24"	18°52'24"
R	50.00	100.00	100.00
T	45.23	25.07	25.07
C	67.08	48.64	48.64
L	73.53	49.13	49.13

11/25/05	CLARIFIED NEW PAVEMENT LIMITS
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
HANA HIGHWAY TO PUKALANI BYPASS  
FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 3 OF 6 SHEETS

AS-BUILT

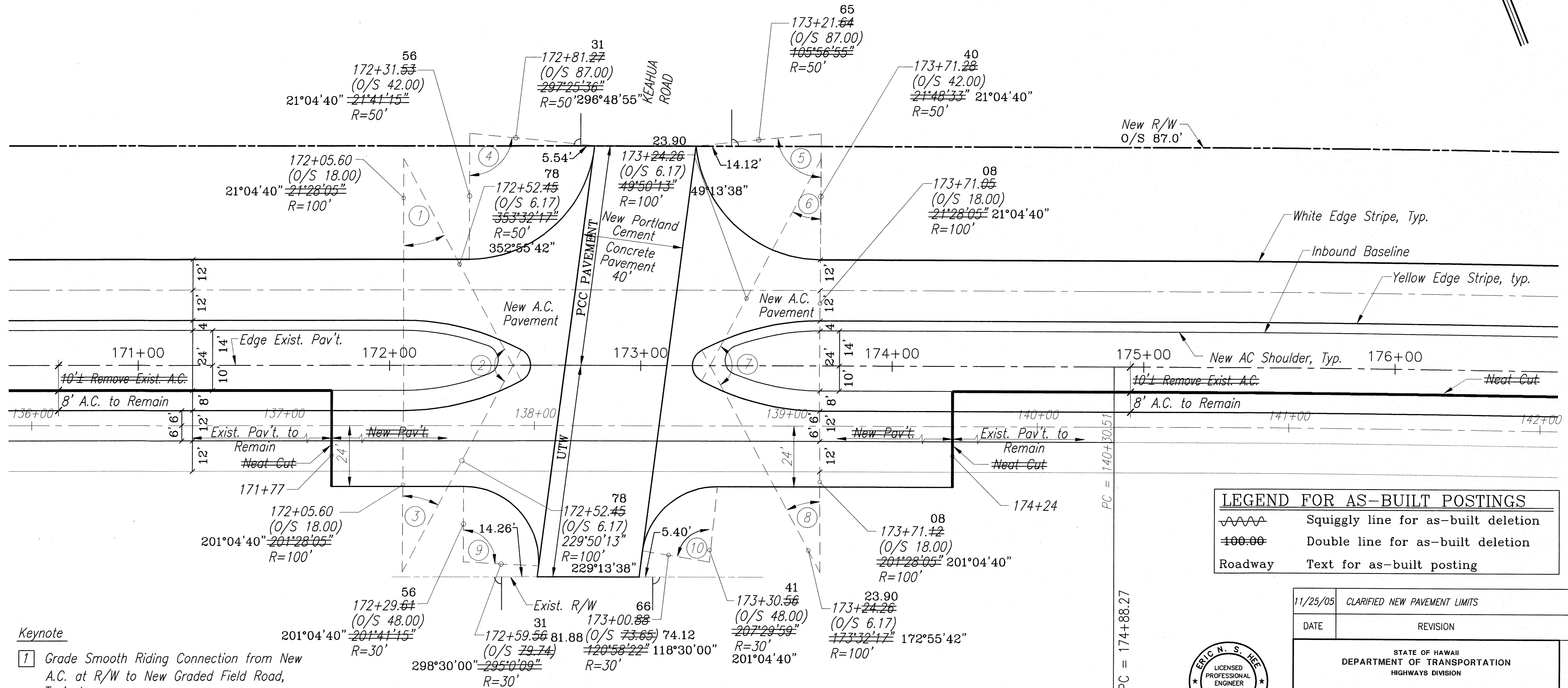
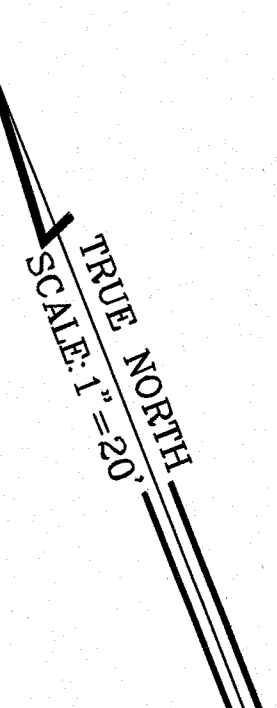
ADD. 27

SURVEY PLOTTED BY: DATE: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_  
 PROJECT: 194-205 Haleakala Hwy Phase 2 - ASBUILT (P) (R) 27

CURVE DATA										
CURVE	1	2	3	4	5	6	7	8	9	10
$\Delta$	27°55'48"	123°42'04"	27°55'48"	84°15'39"	84°08'22"	27°55'48"	123°42'04"	27°55'48"	93°18'54"	86°31'37"
R	100.00	7.00	100.00	50.00	50.00	100.00	7.00	100.00	30.00	30.00
T	24.55	13.40	24.55	45.23	45.13	24.55	13.40	24.55	31.79	28.23
C	48.27	12.34	48.27	67.08	67	48.27	12.34	48.27	43.64	41.12
L	48.75	15.78	48.75	73.53	73.43	48.75	15.78	48.75	48.86	45.31

Refer to Sheet ADD. 25 S-2 for Curve Data and CC Coordinates.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	28	288



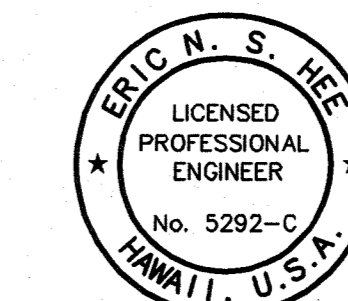
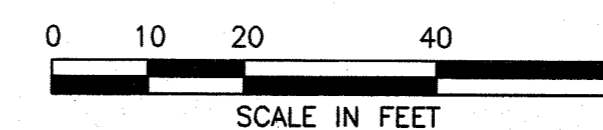
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

**Keynote**

- Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.

**GEOMETRIC LAYOUT NO. 10  
HALEAKALA BASELINE STA. 173+00+  
AT KEAHUA ROAD**

SCALE: 1"=20'



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
Eric N. S. Hee  
ENGINEERS SURVEYORS HAWAII, INC.  
LICENSE EXPIRATION DATE: 4/30/06

11/25/05	CLARIFIED NEW PAVEMENT LIMITS
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>GEOMETRIC LAYOUTS</b>	
HALEAKALA HIGHWAY WIDENING, PHASE 2 HANA HIGHWAY TO PUKALANI BYPASS FED. AID PROJ. NO. NH-037-1(24)	
SCALE: AS NOTED	DATE: MAY, 2005
SHEET No. 4 OF 6 SHEETS	

AS-BUILT

ADD. 28

SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

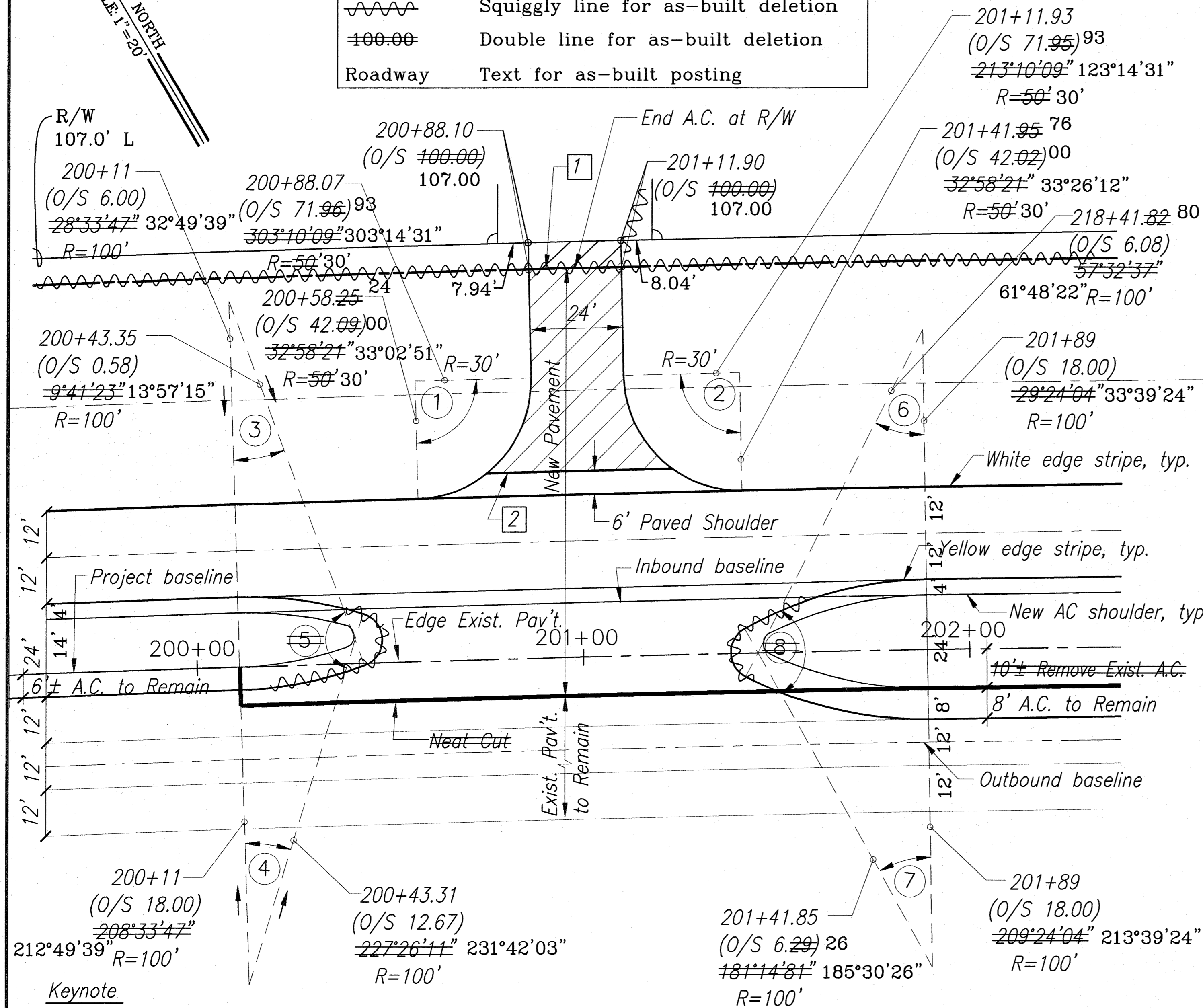
11/25/05 11:58 AM Engineering Projects 11/25/05 11:58 AM Phase 2 - AS-BUILT (V) 28 add-200501.dwg Tue, Nov 24, 2005 - 6:15pm

**CURVE DATA**

CURVE	1	2	3	4	5	6	7	8
Δ	89°48'13"	89°48'10"	18°52'24"	18°52'24"	142°15'13"	28°08'56"	28°08'58"	123°42'04"
R	30.00	30.00	100.00	100.00	7.00	100.00	100.00	7.00
T	29.90	29.90	25.07	25.07	13.08	25.07	25.07	13.08
C	42.35	42.35	48.64	48.64	12.34	48.64	48.64	12.34
L	47.02	47.02	49.13	49.13	15.12	49.13	49.13	15.11

Refer to Sheet ADD. 25 S-2 for Curve Data and CC Coordinates.

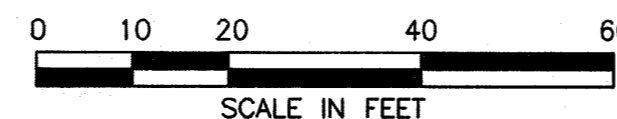
LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



**Keynote**

- 1 Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- 2 Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.

**GEOMETRIC LAYOUT NO. 11**  
**HALEAKALA BASELINE STA. 201+00**  
 SCALE: 1"=20'



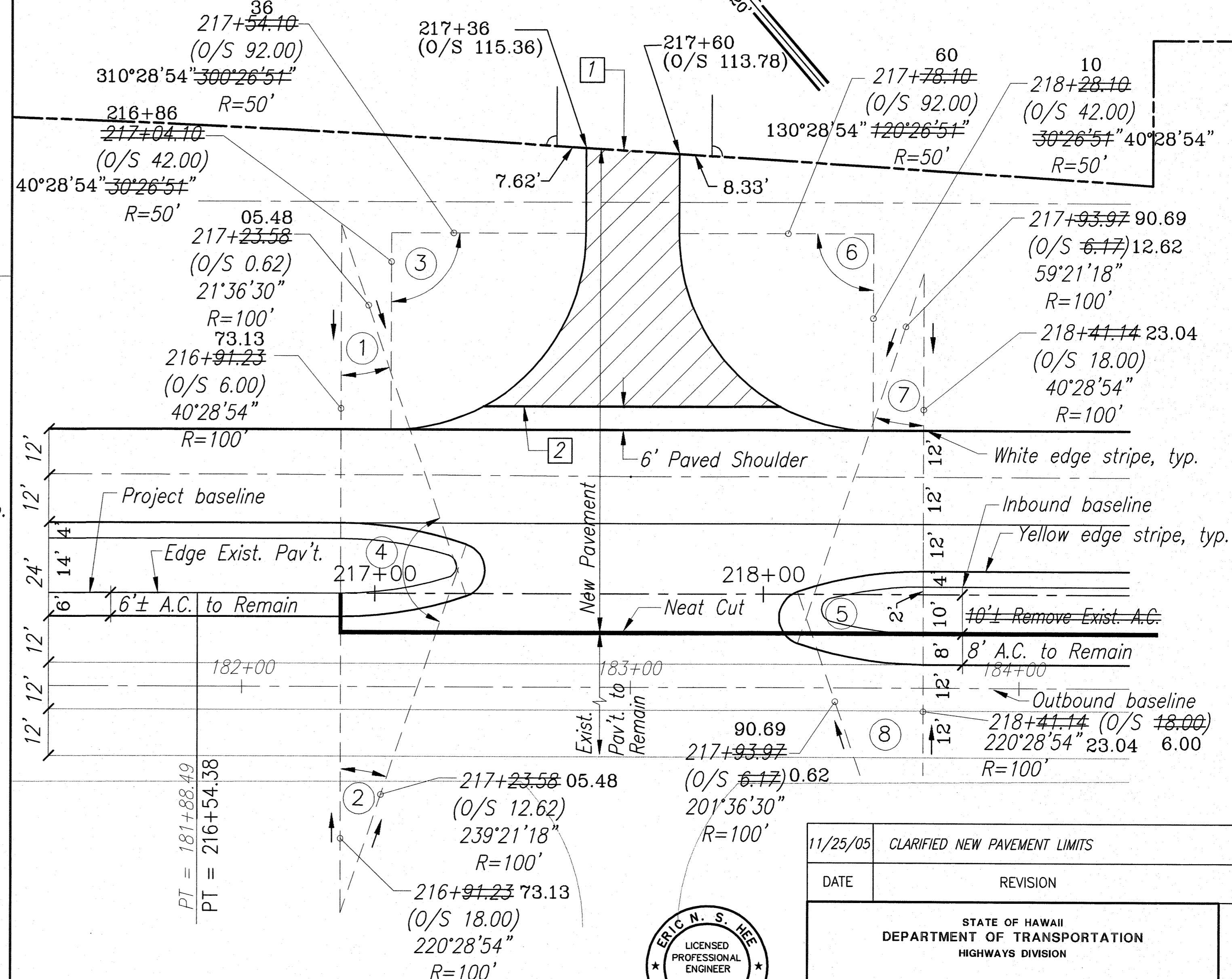
**CURVE DATA**

CURVE	1	2	3	4
Δ	18°52'24"	18°52'24"	90°00'00"	142°15'13"
R	100.00	100.00	50.00	7.00
T	25.07	25.07	50.00	13.08
C	48.64	48.64	70.71	12.34
L	49.13	49.13	78.54	15.12

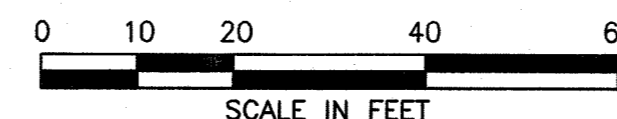
**CURVE DATA**

CURVE	5	6	7	8
Δ	142°15'13"	90°00'00"	18°52'24"	18°52'24"
R	7.00	50.00	100.00	100.00
T	13.08	50.00	25.07	25.07
C	12.34	70.71	48.64	48.64
L	15.12	78.54	49.13	49.13

Refer to Sheet ADD. 25 S-2 for Curve Data and CC Coordinates.



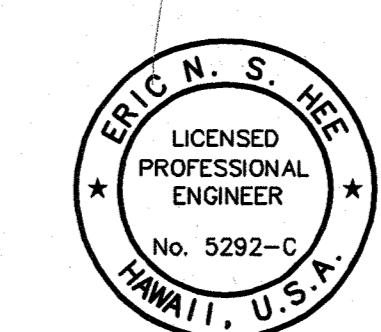
**GEOMETRIC LAYOUT NO. 12**  
**HALEAKALA BASELINE STA. 217+65**  
 SCALE: 1"=20'



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	29	288

**Keynote**

- 1 Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- 2 Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 E.N.S.H.  
 ENGINEERS SURVEYORS HAWAII, INC.  
 LICENSE EXPIRATION DATE: 4/30/06

DATE	REVISION
11/25/05	CLARIFIED NEW PAVEMENT LIMITS

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
 HANA HIGHWAY TO PUKALANI BYPASS  
 FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 5 OF 6 SHEETS

AS-BUILT

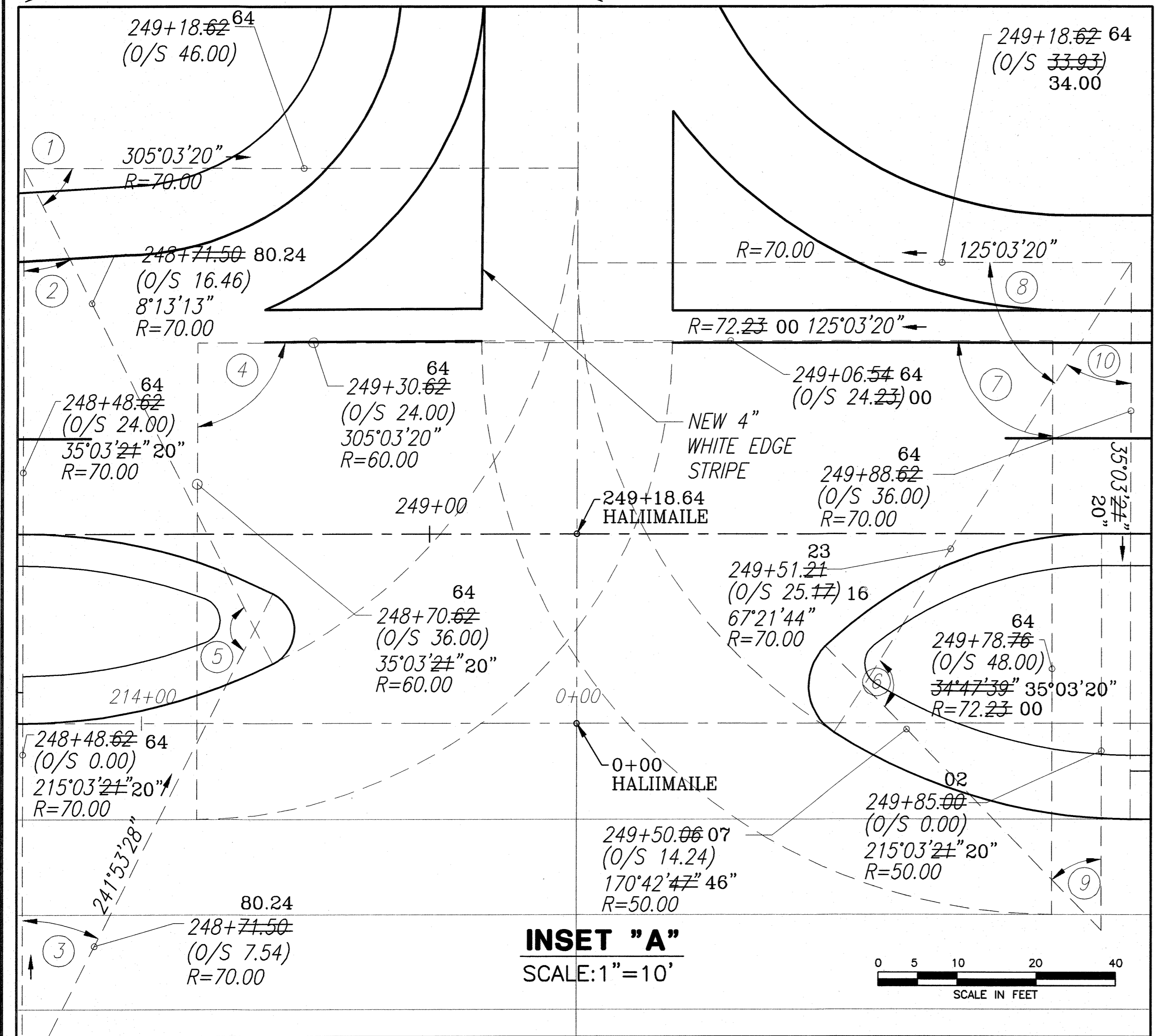
ADD. 29

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	30	288

CURVE DATA										
CURVE	1	2	3	4	5	6	7	8	9	10
$\Delta$	63°09'53"	26°50'07"	26°50'07"	90°00'00"	126°19'46"	103°21'02"	90°00'00"	57°38'00"	44°20'34"	32°18'24"
R	70.00	70.00	70.00	60.00	5.00	6.84	72.23	70.00	50.00	70.00
T	43.04	16.70	16.70	60.00	9.89	8.86	72.23	38.51	20.24	20.28
C	73.32	32.49	32.49	84.86	8.93	10.99	102.14	67.48	37.74	38.95
L	77.17	32.79	32.79	94.25	11.03	12.63	113.45	109.88	38.70	39.47

CURVE DATA				
CURVE	11	12	13	14
$\Delta$	90°00'00"	67°06'55"	90°00'00"	42°37'20"
R	40.00	52.00	50.00	50.00
T	40.00	34.49	50.00	25.94
C	56.71	57.49	70.71	45.45
L	62.83	60.91	78.54	47.18

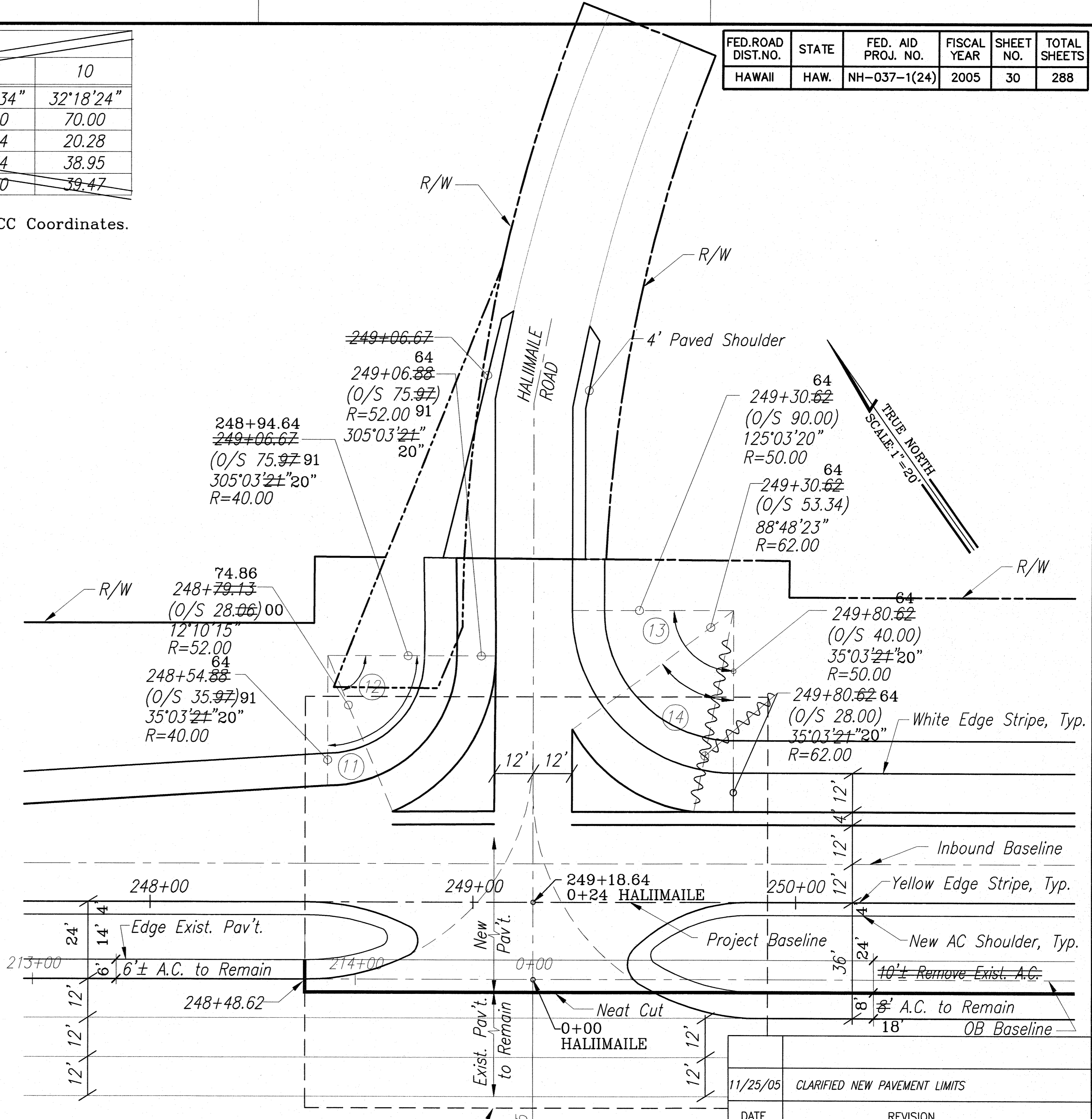
Refer to Sheet ADD. 25 S-2 for Curve Data and CC Coordinates.



**INSET "A"**  
SCALE: 1" = 10'

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

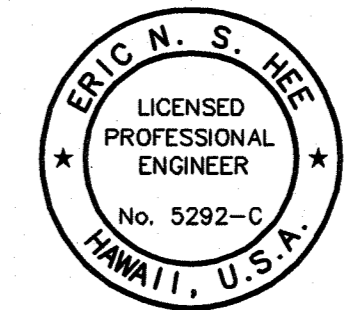
**GEOMETRIC LAYOUT NO. 13**  
**HALEAKALA BASELINE STA. 249+20'**  
**AT HAILIMAILE ROAD**  
SCALE: 1" = 20'



SCALE IN FEET

SURVEY PLOTTED BY: DATE: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 No. \_\_\_\_\_

1: (Rev. 1) (enr) Engineering Projects 1194 194-057 Hialeakala Hwy Phase 2 - AS-BUILT PLAN (REV. 20) and 258011.dwg, Nov. 24, 2009 - 6:17pm



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
 Eric N. S. Hee  
 ENGINEERS SURVEYORS HAWAII, INC.  
 LICENSE EXPIRATION DATE: 4/30/08

11/25/05	CLARIFIED NEW PAVEMENT LIMITS
DATE	REVISION

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

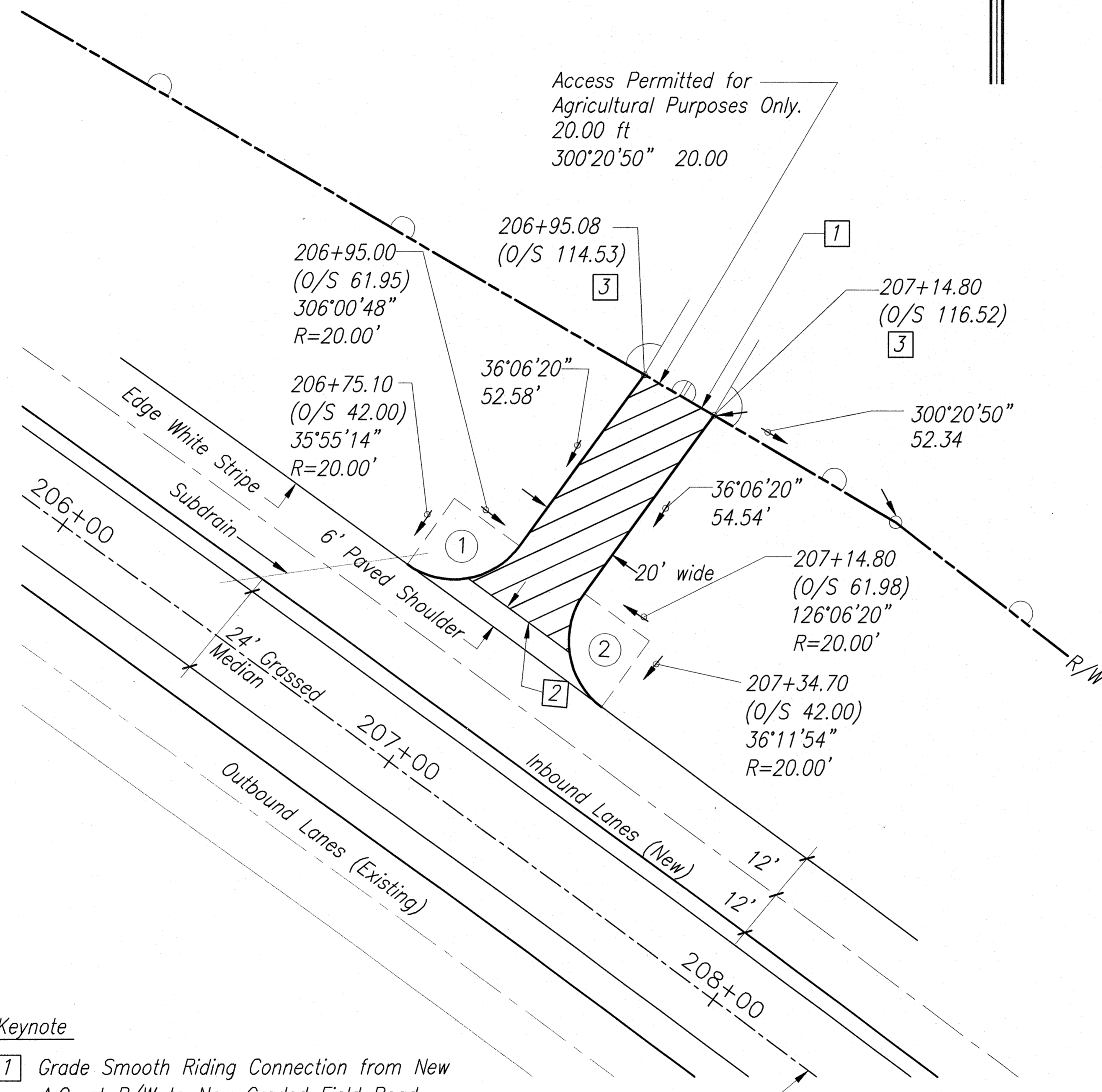
HALEAKALA HIGHWAY WIDENING, PHASE 2  
 HANA HIGHWAY TO PUKALANI BYPASS  
 FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 6 OF 6 SHEETS

CURVE DATA			
CURVE	1	2	
$\Delta$	89°48'54"	89°54'26"	
R	20.00	20.00	
T	19.94	19.97	
C	28.24	28.26	
L	31.35	31.38	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	30A	288



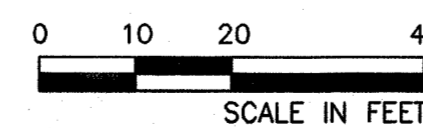
TRUE NORTH

**Keynote**

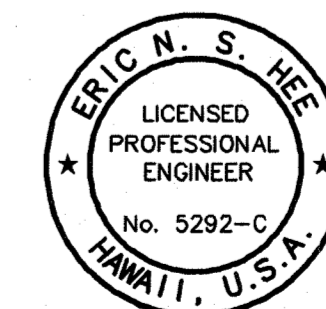
- 1 Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- 2 Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.
- 3 Adjust Road to fit within 20 ft access permitted.

**GEOMETRIC LAYOUT  
HALEAKALA BASELINE STA. 207+00**

SCALE: 1"=20'



Note: This tracing prepared during "As-Built" posting.



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Eric N. S. Hee  
ENGINEERS SURVEYORS HAWAII, INC.  
LICENSE EXPIRATION DATE: 4/30/08

10/30/07	ADDED SHEET FOR GEOMETRIC LAYOUT FOR ACCESS ROAD AT STA 207+00
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
HANA HIGHWAY TO PUKALANI BYPASS  
FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED      DATE: OCT. 2007

SHEET No. 1 OF 5 SHEETS

AS-BUILT

C.O. 30A

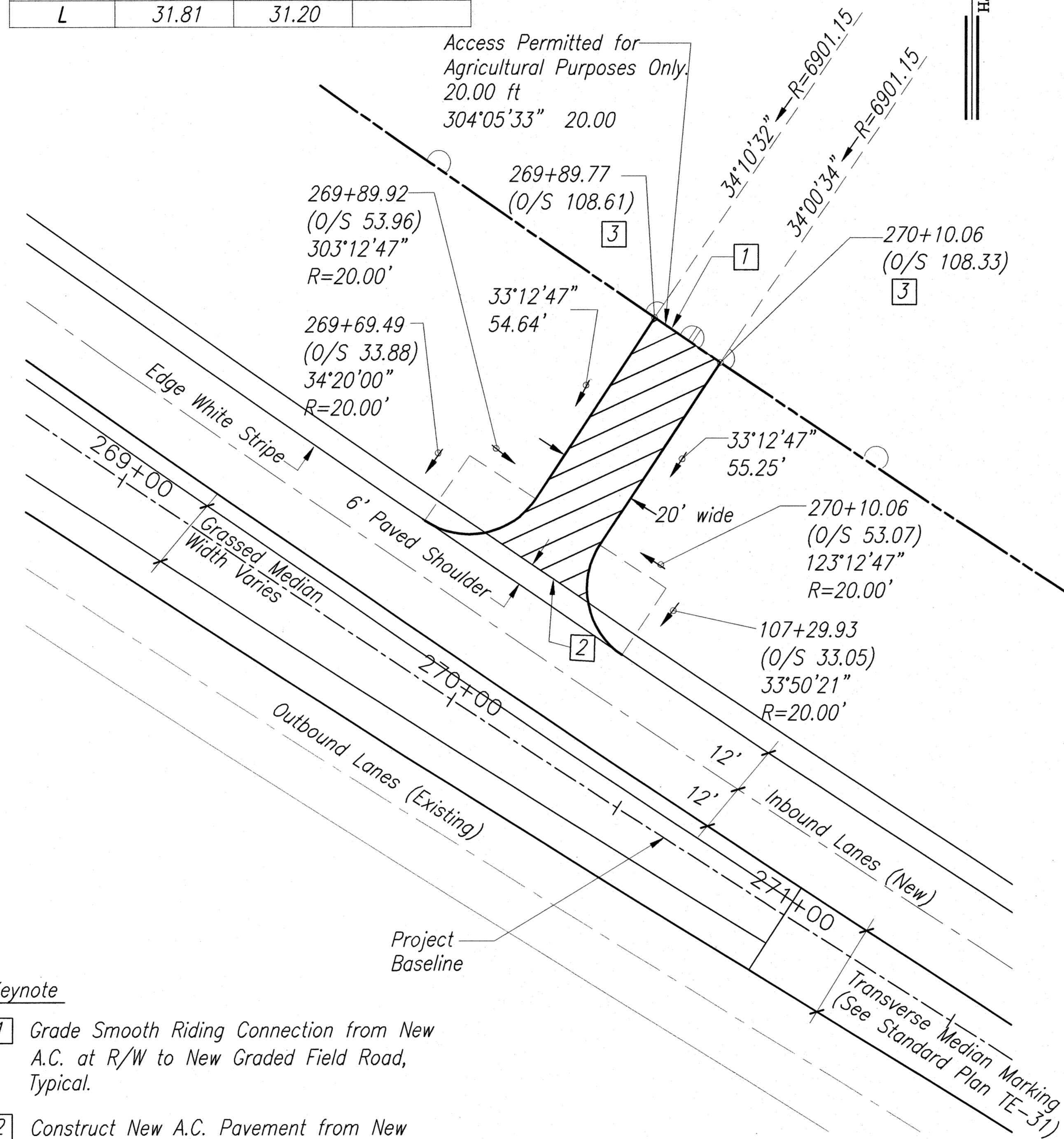
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NOTE BOOK	
No.	

\\Ers-1\erh\Engineering\Projects\1994-1995\Haleakala Hwy\Phase 2 - ASBUILT\PAV\SHF\_30A.asbuilt.dwg Tue, Nov 24 2009 - 6:18pm



CURVE DATA			
CURVE	1	2	
$\Delta$	91°07'13"	89°22'26"	
R	20.00	20.00	
T	20.40	19.78	
C	28.56	28.13	
L	31.81	31.20	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	30C	288

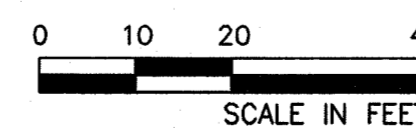


Keynote

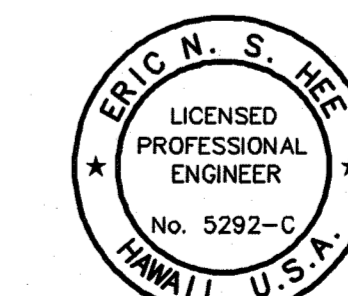
- 1 Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- 2 Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.
- 3 Adjust Road to fit within 20 ft access permitted.

**GEOMETRIC LAYOUT  
HALEAKALA BASELINE STA. 270+00**

SCALE: 1"=20'



Note: This tracing prepared during "As-Built" posting.



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Eric N. S. Hee  
ENGINEERS SURVEYORS HAWAII, INC.  
LICENSE EXPIRATION DATE: 4/30/08

10/30/07	ADDED SHEET FOR GEOMETRIC LAYOUT FOR ACCESS ROAD AT STA 270+00
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>GEOMETRIC LAYOUTS</b>	
HALEAKALA HIGHWAY WIDENING, PHASE 2 HANA HIGHWAY TO PUKALANI BYPASS FED. AID PROJ. NO. NH-037-1(24)	
SCALE: AS NOTED	DATE: OCT. 2007
SHEET No. 3 OF 5 SHEETS	

AS-BUILT

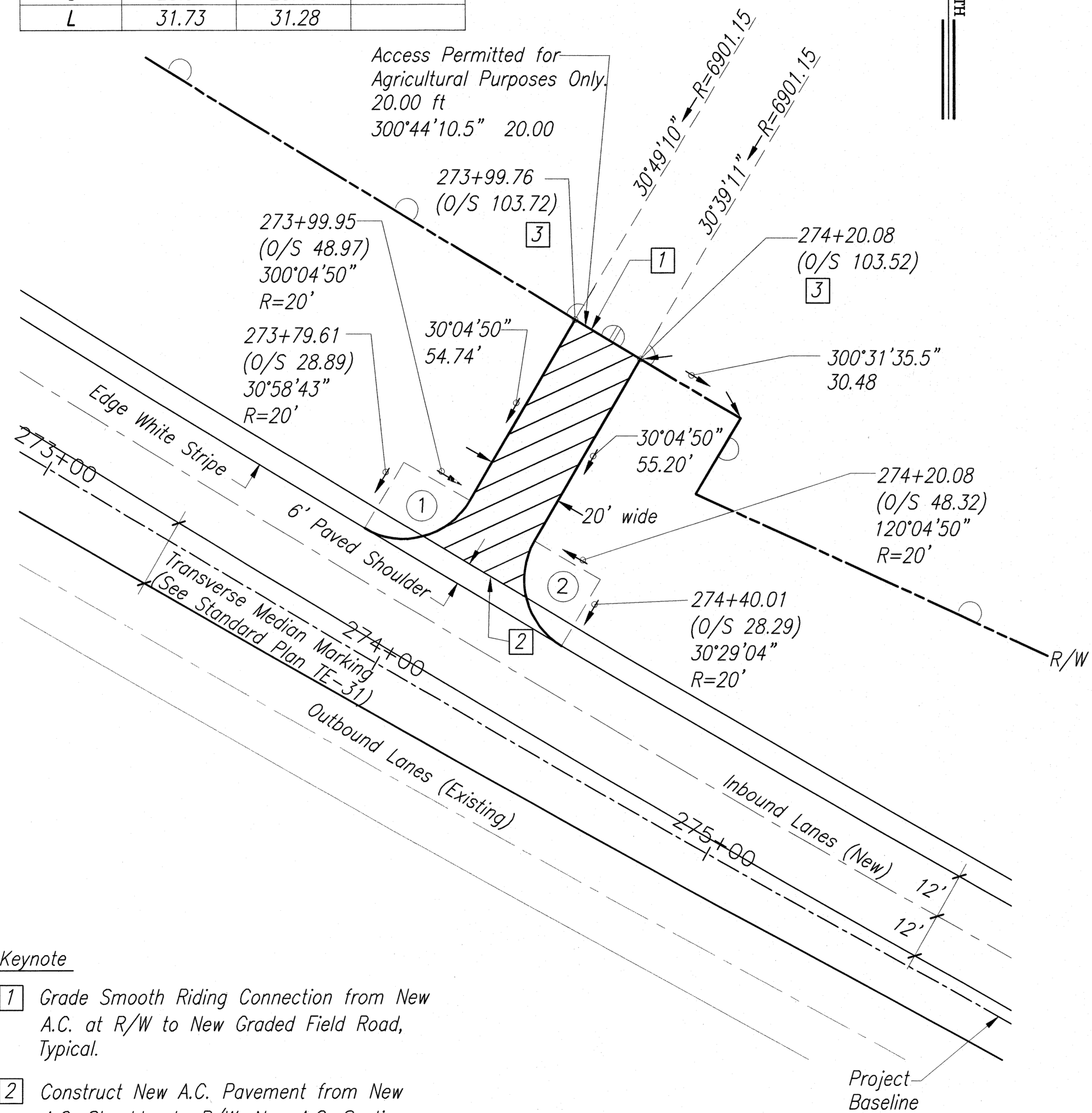
C.O. 30C

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

I:\enr-1\enr\Engineering\Projects\1994\194-056\Haleakala Hwy\Phase 2 - ASBUILT\PA0\SHF 30C.cw-ASBUILT.dwg Tue, Nov 24 2009 - 6:20pm  
 10/30/07

CURVE DATA			
CURVE	1	2	
$\Delta$	90°53'53"	89°35'46"	
R	20.00	20.00	
T	20.32	19.86	
C	28.51	28.18	
L	31.73	31.28	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	30D	288

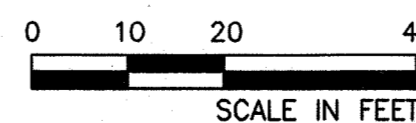


**Keynote**

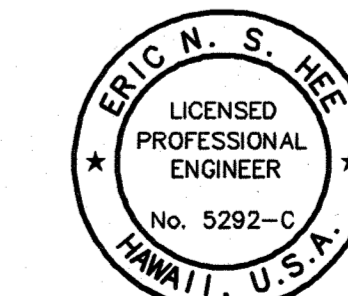
- 1 Grade Smooth Riding Connection from New A.C. at R/W to New Graded Field Road, Typical.
- 2 Construct New A.C. Pavement from New A.C. Shoulder to R/W. New A.C. Section shall be 4" A.C. Mix IV, over 8" Aggregate Base Course, over 12" Aggregate Subbase.
- 3 Adjust Road to fit within 20 ft access permitted.

**GEOMETRIC LAYOUT  
HALEAKALA BASELINE STA. 274+00**

SCALE: 1"=20'



Note: This tracing prepared during "As-Built" posting.



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Eric N. S. Hee  
ENGINEERS SURVEYORS HAWAII, INC.  
LICENSE EXPIRATION DATE: 4/30/08

DATE	REVISION
10/30/07	ADDED SHEET FOR GEOMETRIC LAYOUT FOR ACCESS ROAD AT STA 274+00

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GEOMETRIC LAYOUTS**

HALEAKALA HIGHWAY WIDENING, PHASE 2  
HANA HIGHWAY TO PUKALANI BYPASS  
FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED      DATE: OCT. 2007

SHEET No. 4 OF 5 SHEETS

AS-BUILT

C.O. 30D

SURVEY PLOTTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_  
 ORIGINAL PLAN \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 PROJECT: 1994-94-205C, HALEAKALA HWY, PHASE 2 - ASBUILT (PAU) SH/ 30D, CO-ASBUILT, Eng. Inc. Nov. 24, 2009 - 6:26pm

