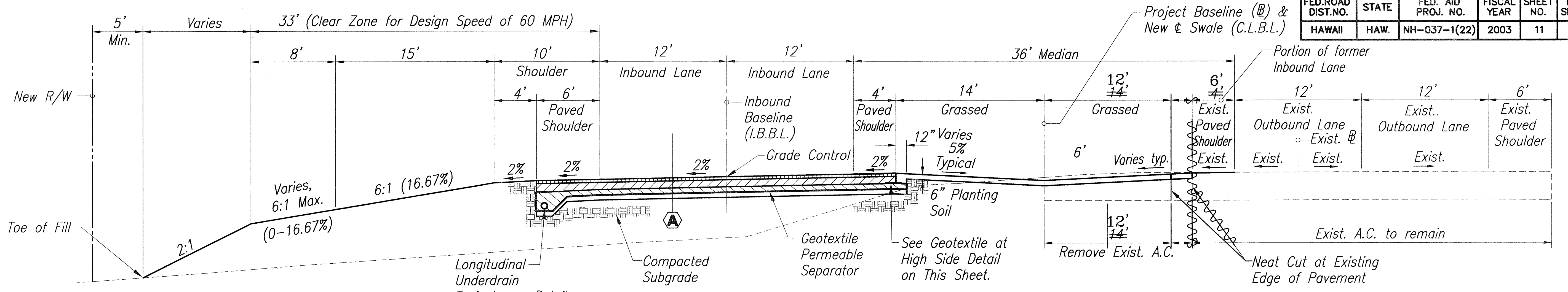
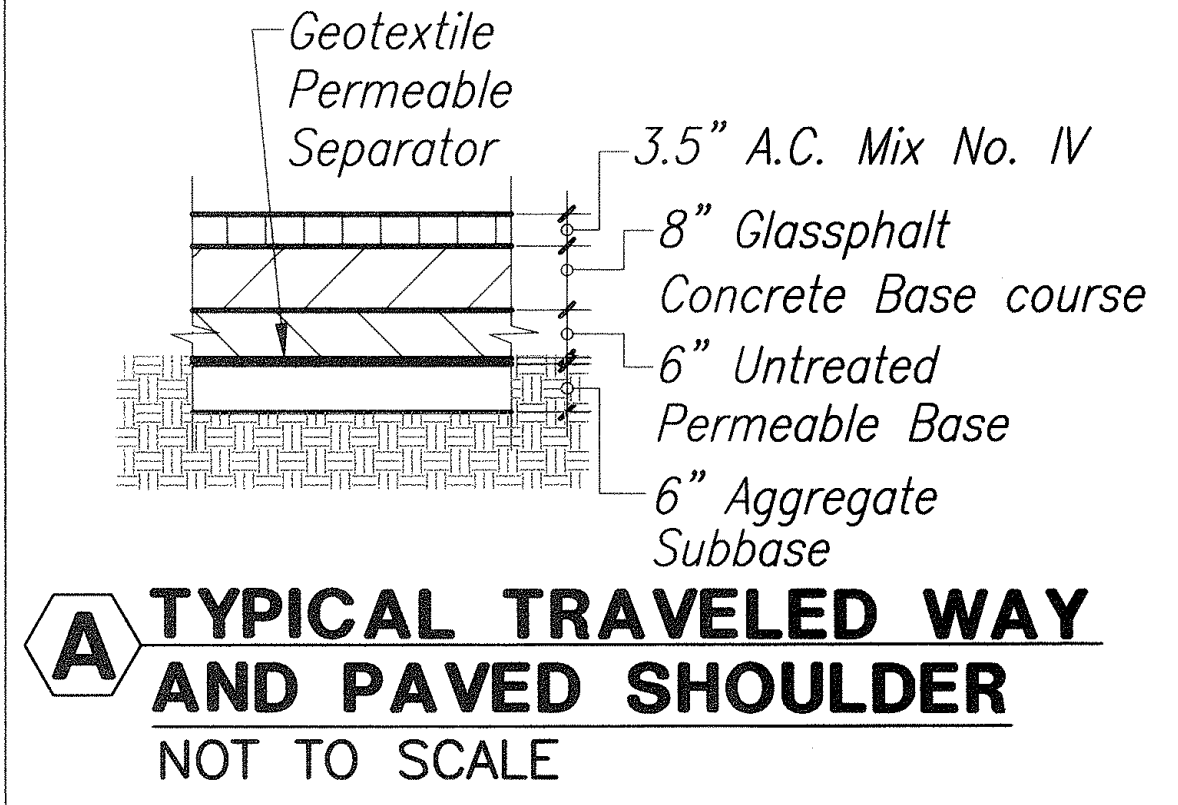


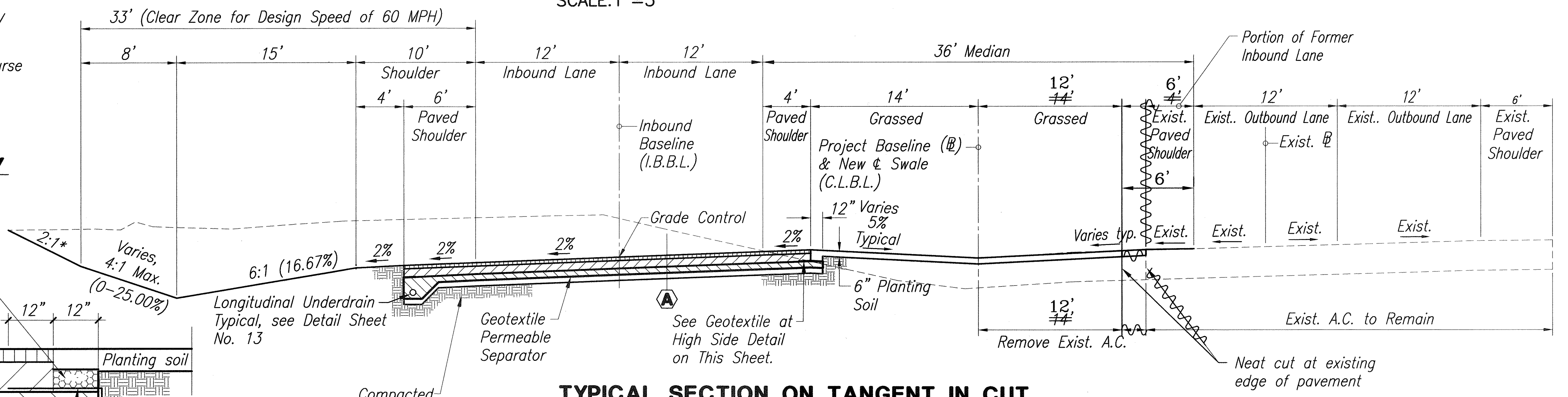
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	11	72



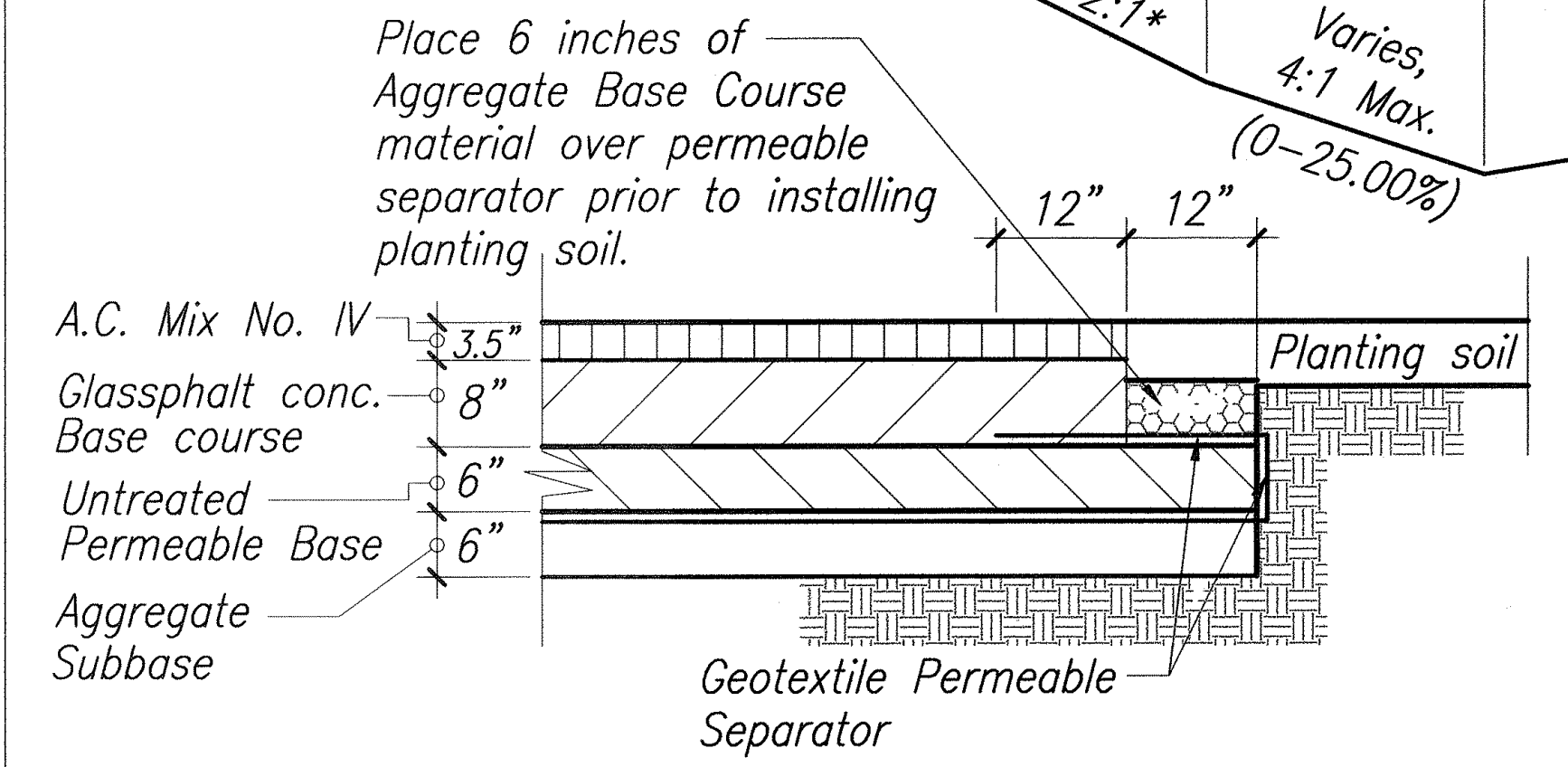
TYPICAL SECTION ON TANGENT IN FILL
SCALE: 1"=5'



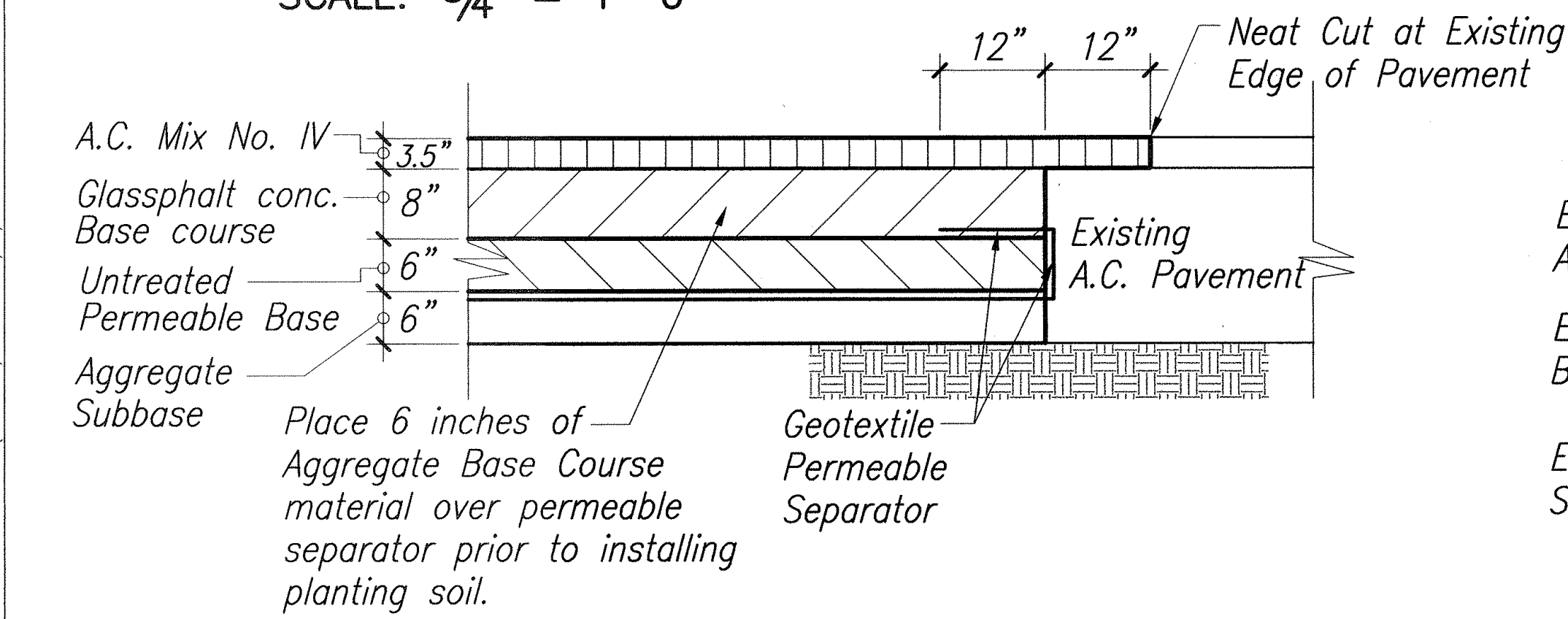
TYPICAL TRAVELED WAY AND PAVED SHOULDER
NOT TO SCALE



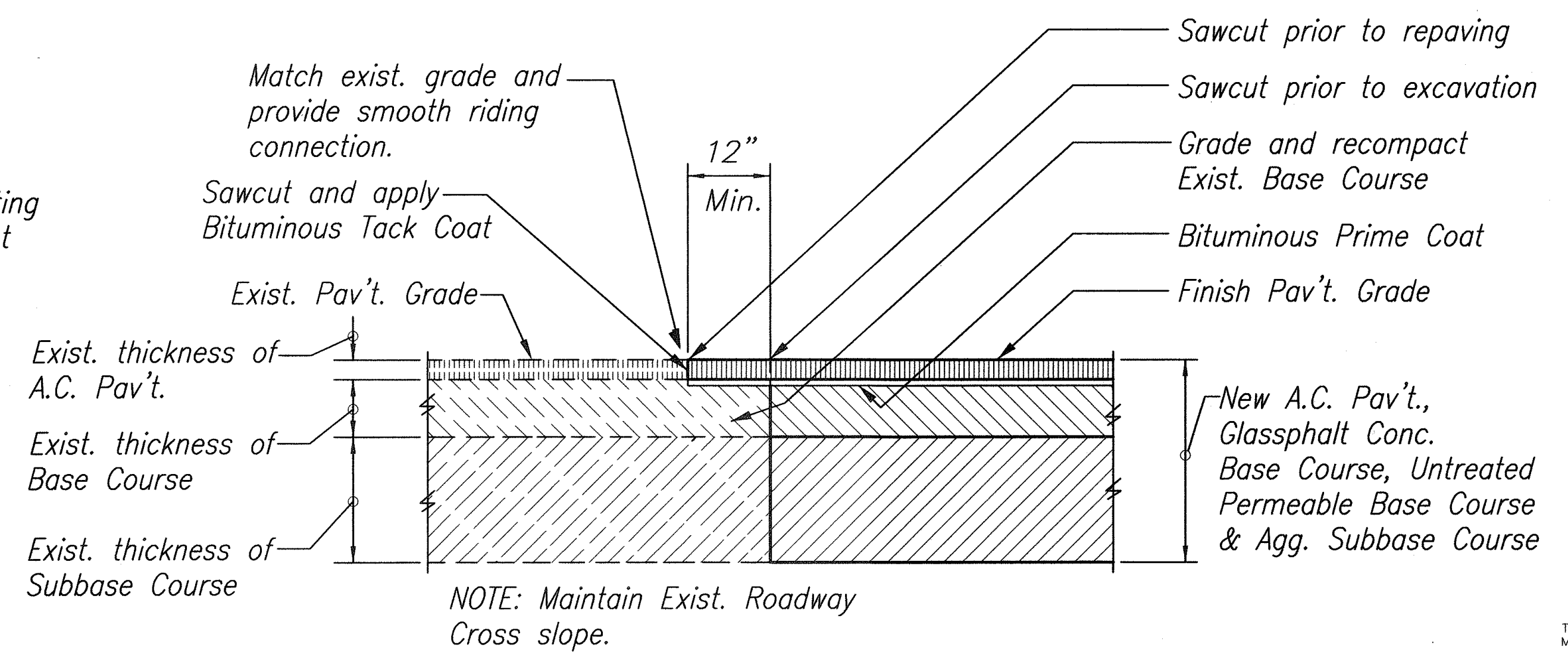
TYPICAL SECTION ON TANGENT IN CUT
SCALE: 1"=5'



GEOTEXTILE AT HIGH SIDE DETAIL
SCALE: 3/4" = 1'-0"



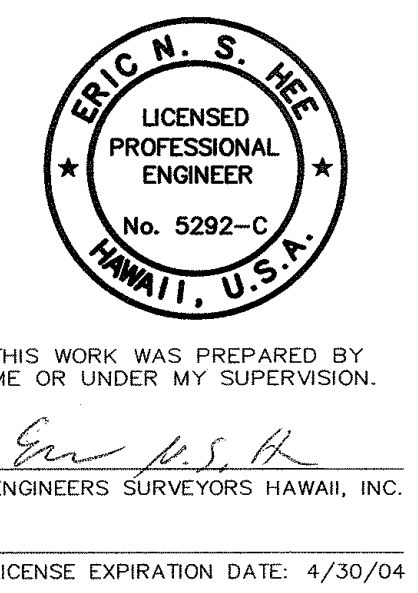
GEOTEXTILE AT TRANSITION TO EXISTING AC DETAIL
SCALE: 3/4" = 1'-0"



SAWCUT & CONNECTION TO EXIST. PAVEMENT
Not to Scale

- General Notes**
- Contractor shall clear, grub, grade and grass between the new pavement and right-of way line.
 - *Cut slope to daylight up to 1:1 may be allowed if hard stable balsalt is encountered in the field and upon the Engineer's review and approval.

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

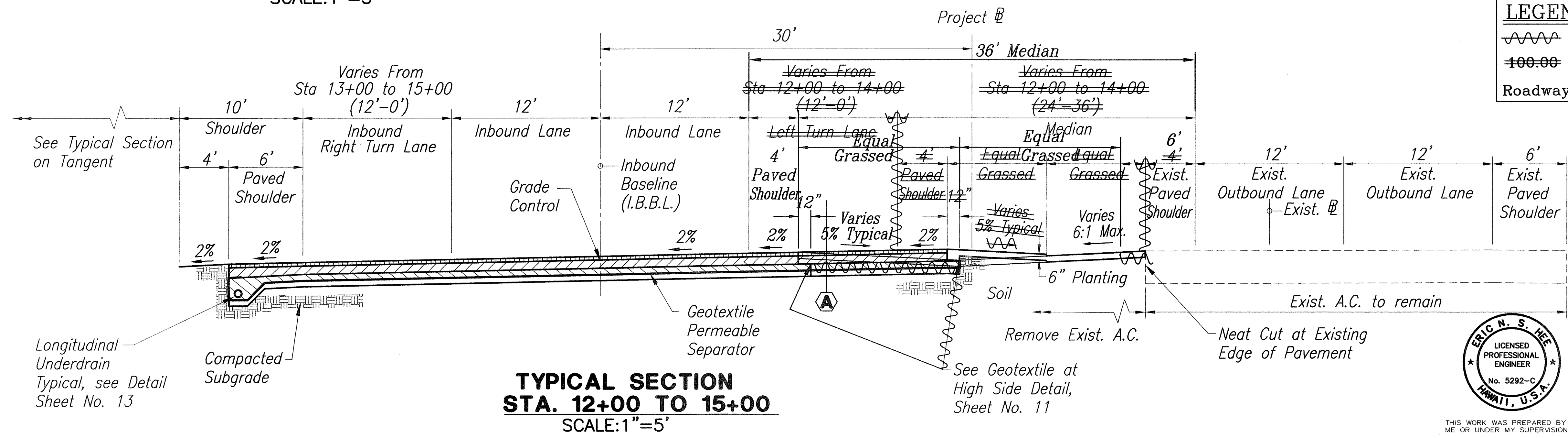
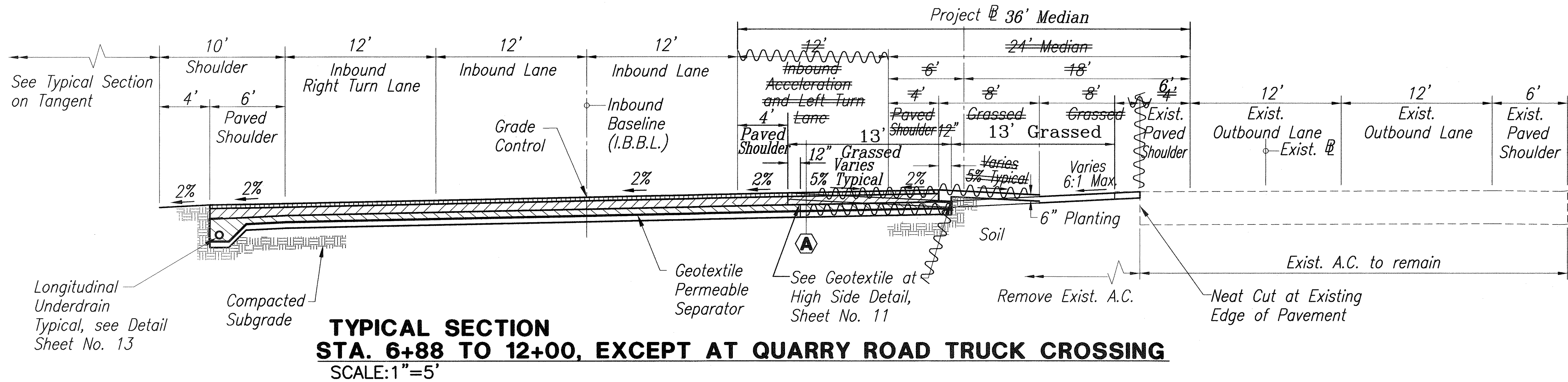
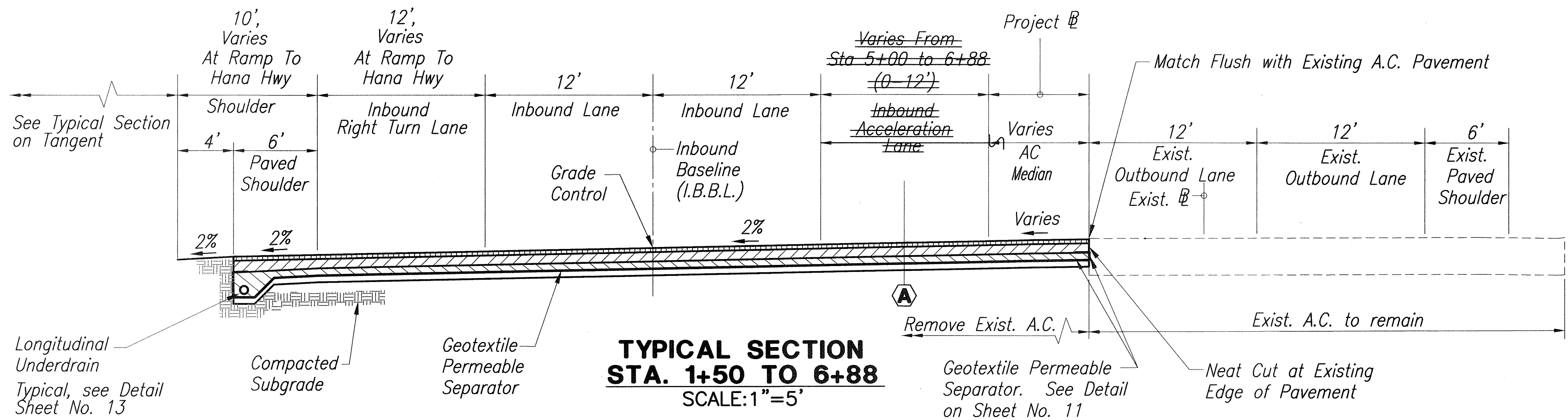


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

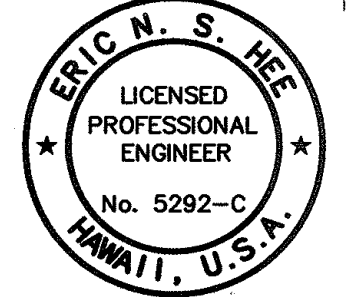
TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)
SCALE: AS NOTED DATE: NOV., 2002

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2002	12	72



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



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ENGINEERS SURVEYORS HAWAII, INC.
LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)
SCALE: AS NOTED DATE: NOV., 2002

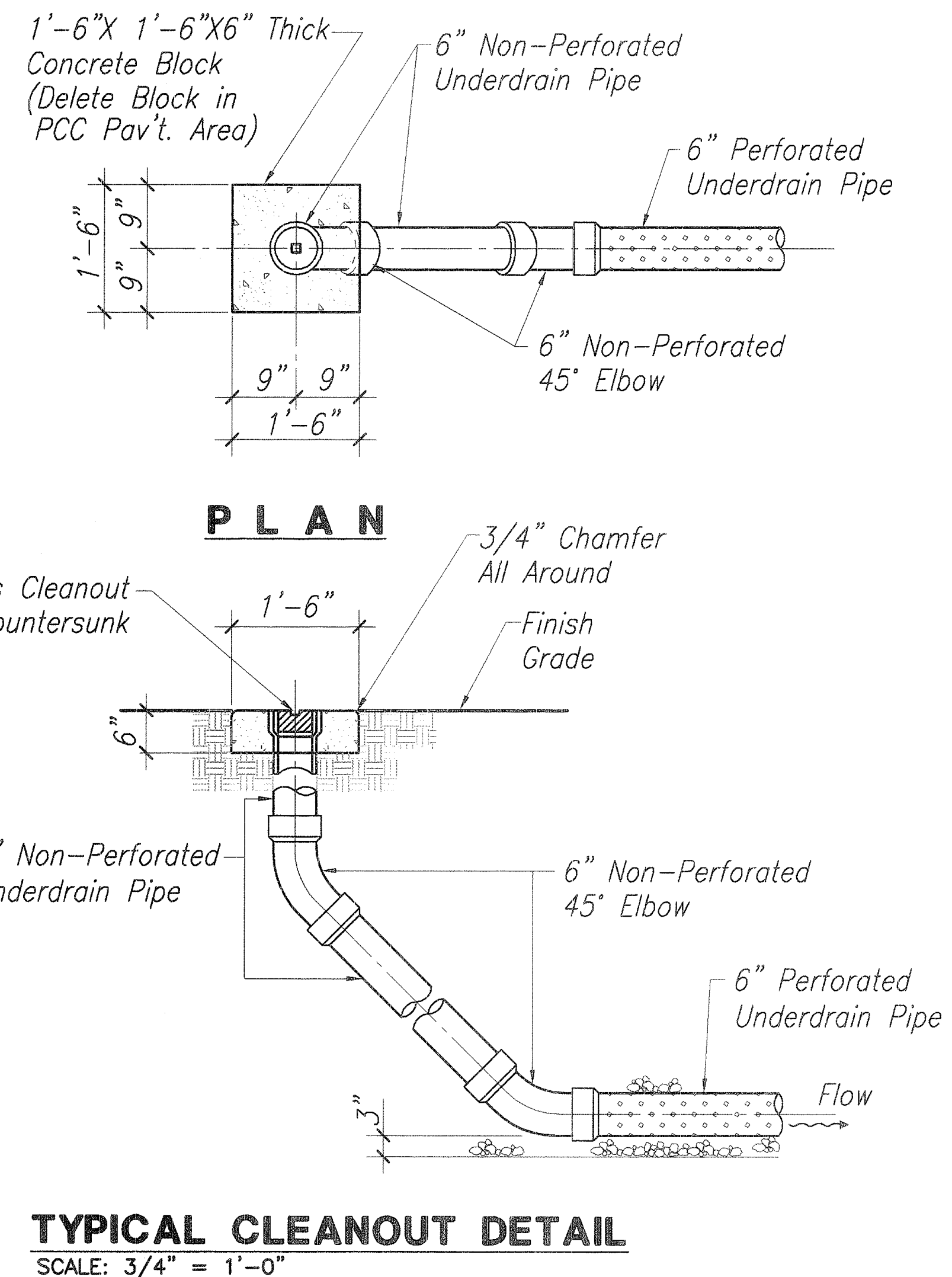
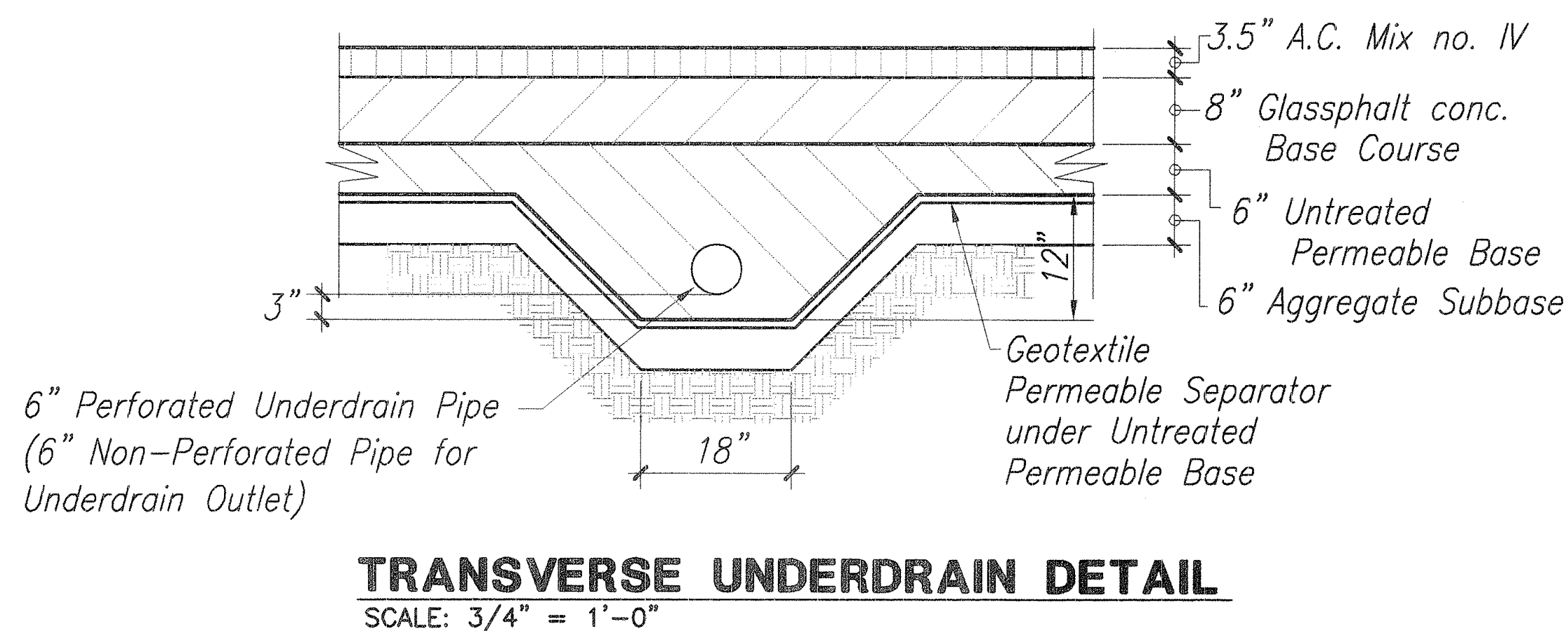
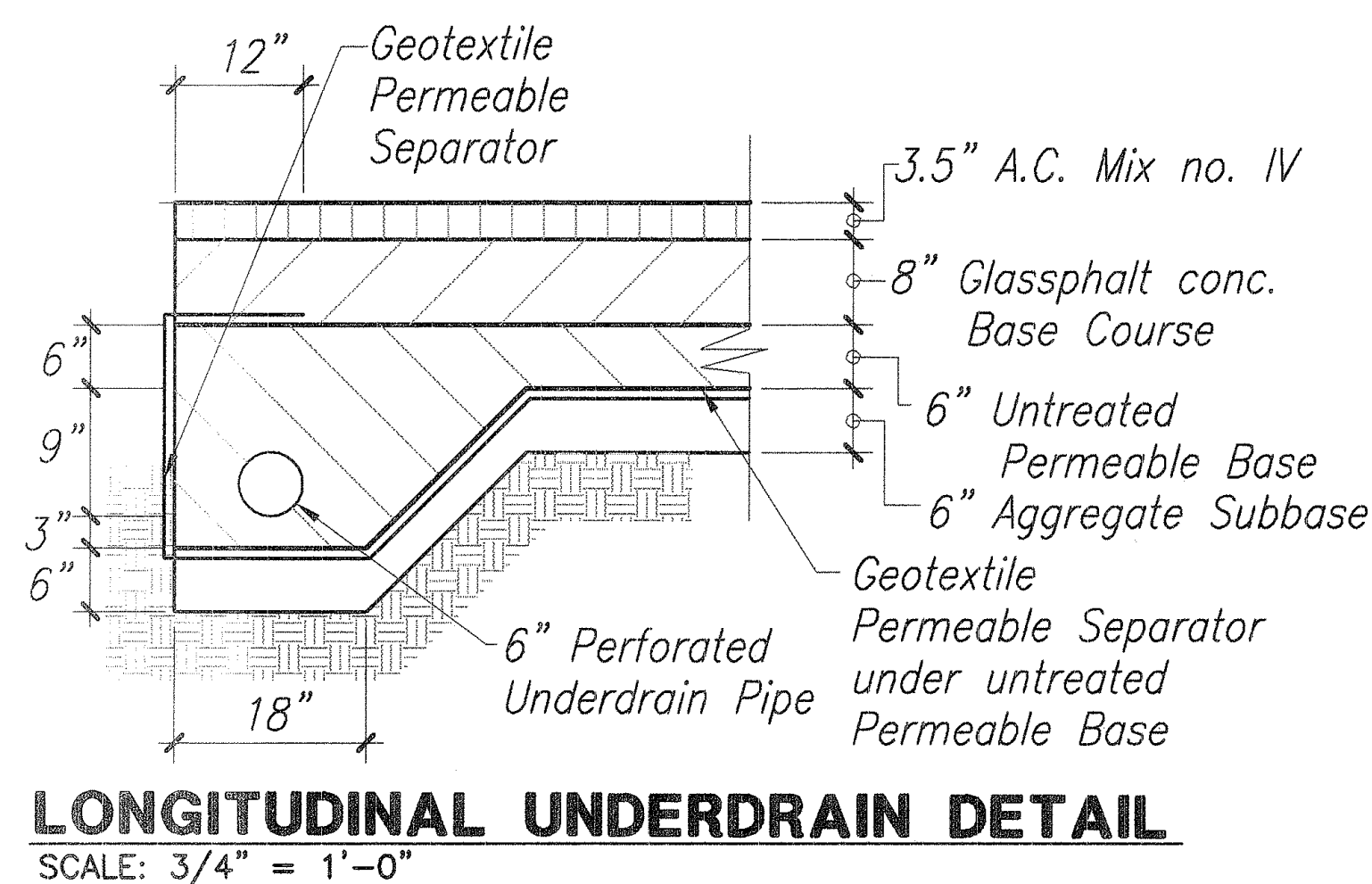
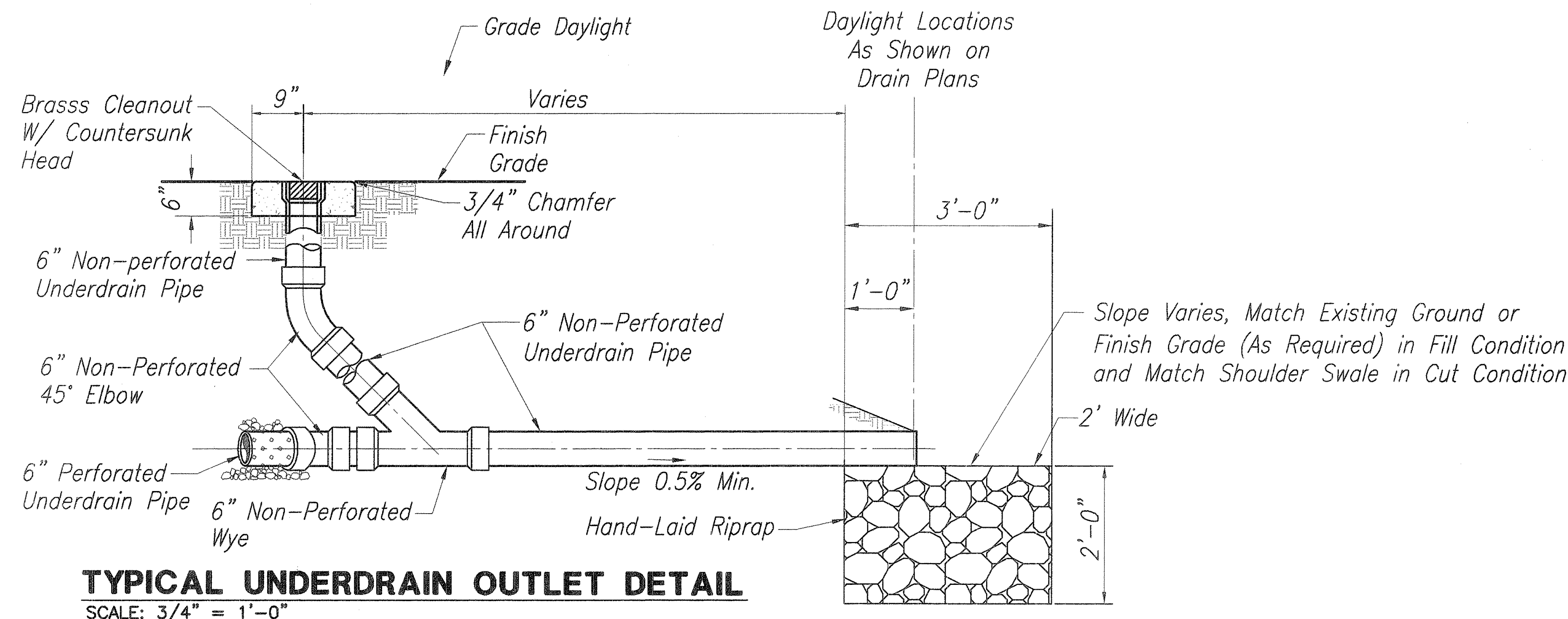
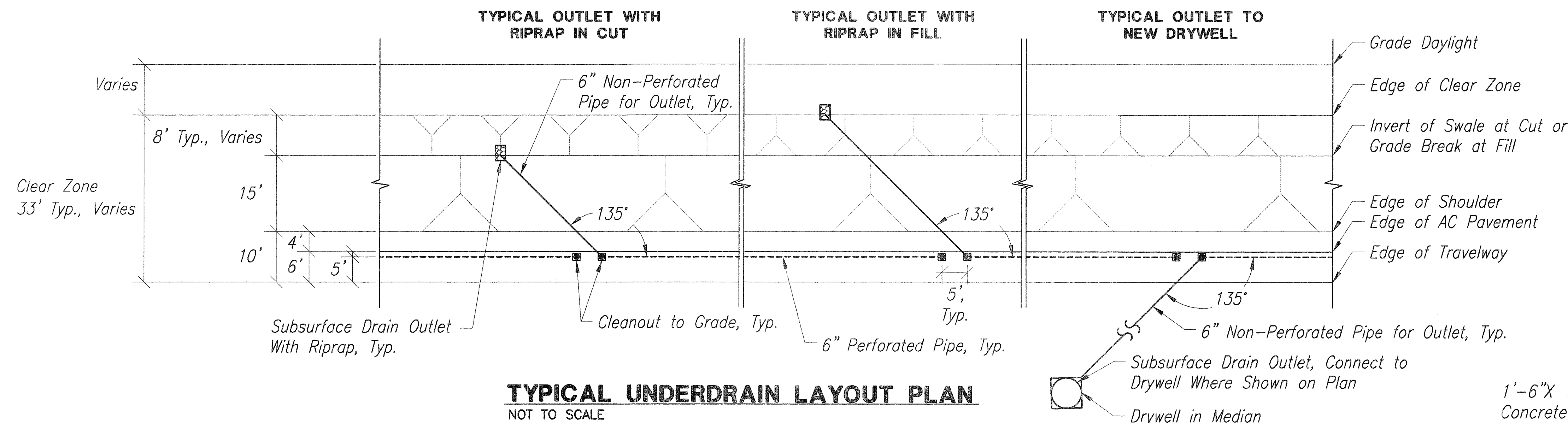
AS-BUILT

\\Esh-1\ESH\Engineering\Projects\1994\04-056 Haleakala Hwy\PHASE I\FINAL\AS-BUILT\TSPH1-T-SECT-MISC.dwg, Model, 3/28/2008 11:11:33 AM, 13

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

U94-56 F:PH1-T-SECT-MISC D:(ESH-1) 1=5 09/8/06 AMR

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	13	72



ERIC N. S. HEE

LICENSED PROFESSIONAL ENGINEER

No. 5292-C

HAWAII, U.S.A.

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Eric N. S. Hee

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LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I

HANA HIGHWAY TO PUKALANI BYPASS

FED. AID PROJ. NO. NH-037-1(22)

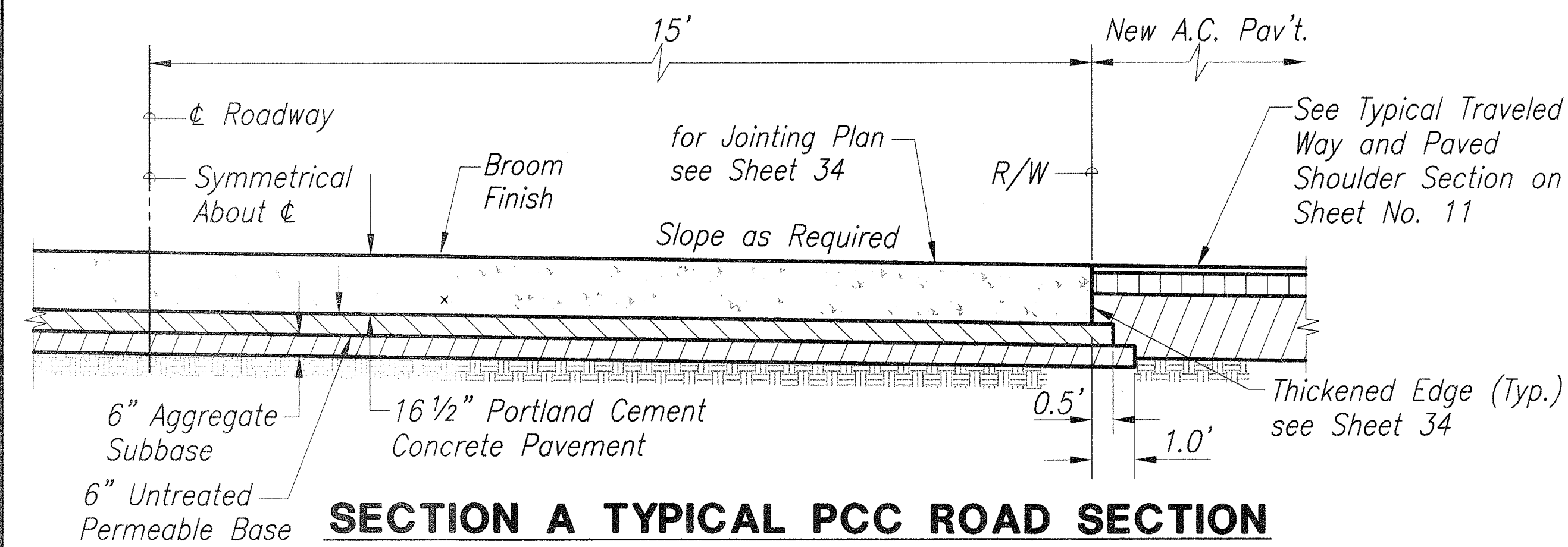
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DATE: NOV, 2002

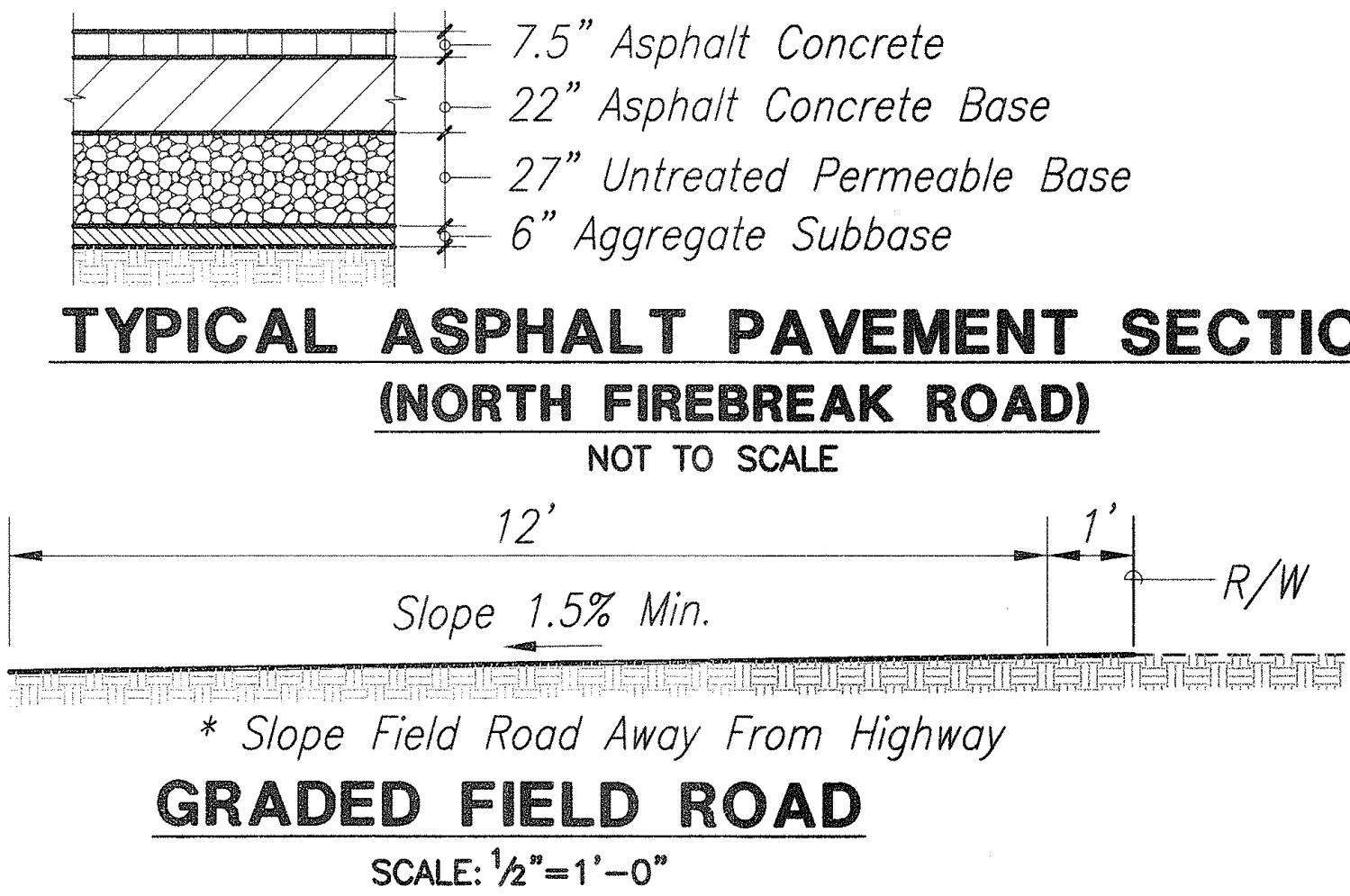
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	QUANTITIES BY	

94-56.2 FPH-URBAN DNG D(ESH-1) 1=1.333 11/21/02 IM

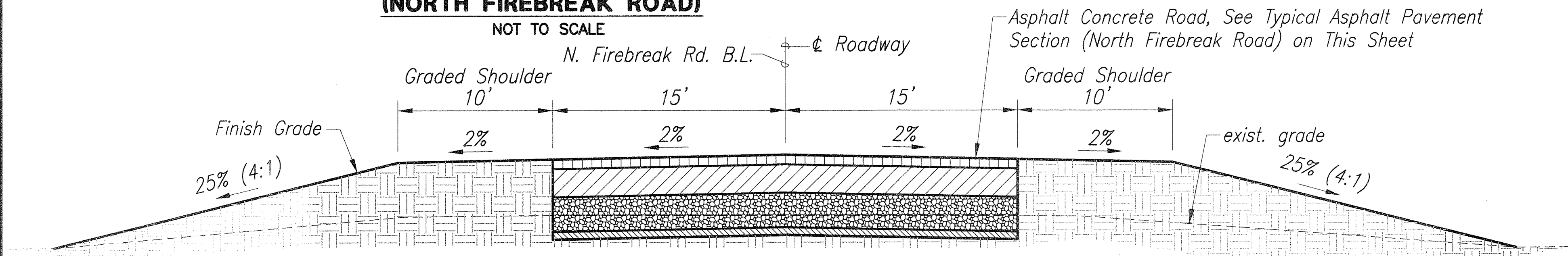
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	14	72



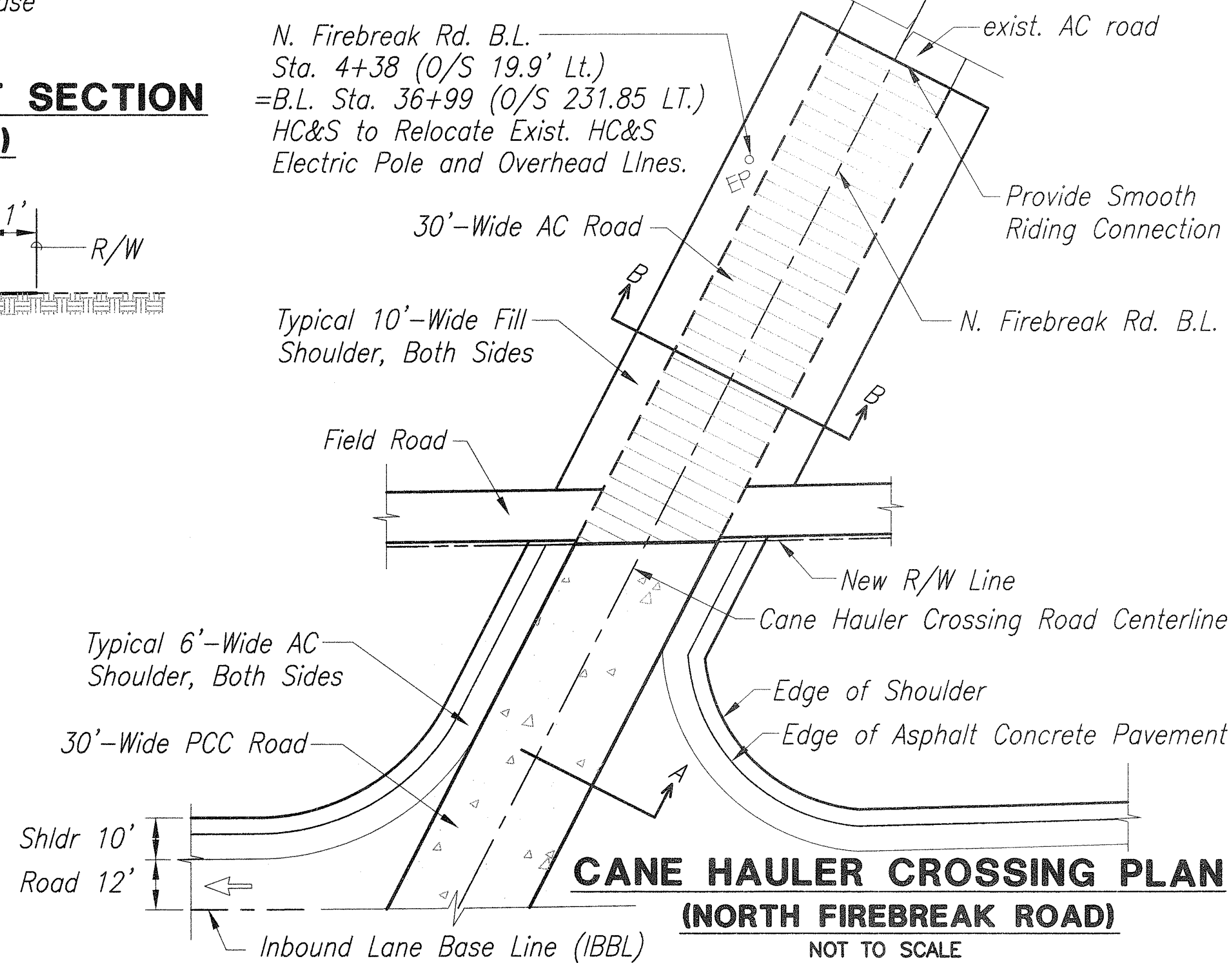
**SECTION A TYPICAL PCC ROAD SECTION
CANE HAULER CROSSING
(NORTH FIREBREAK ROAD)**
NOT TO SCALE



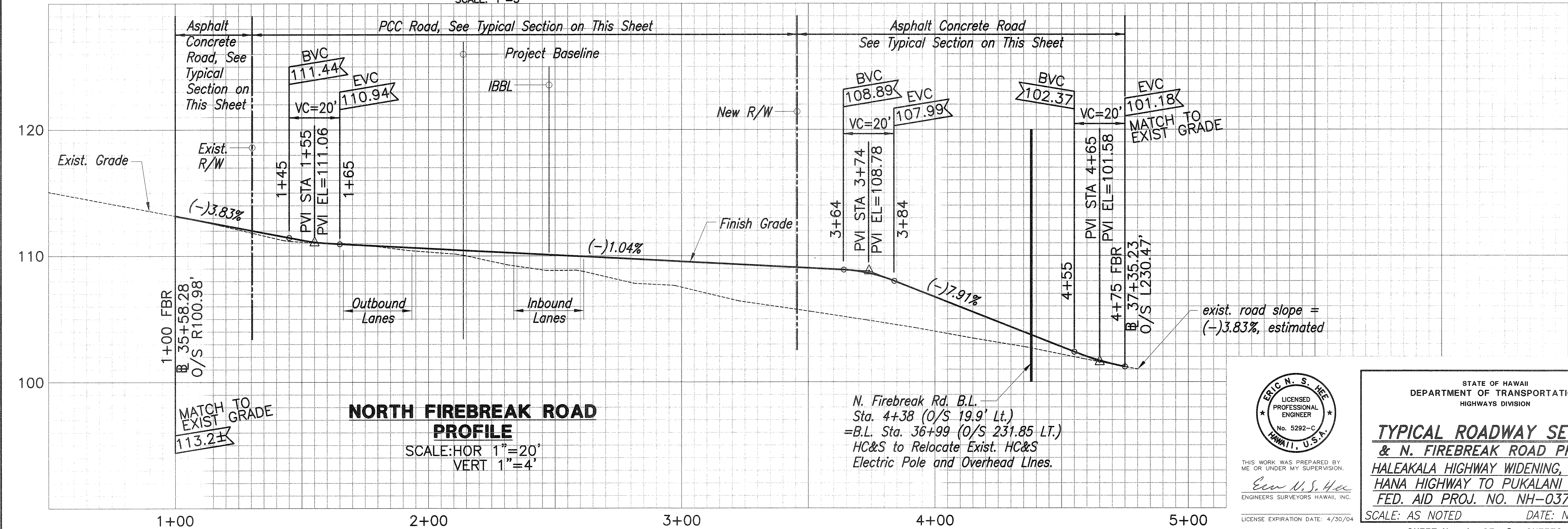
**TYPICAL ASPHALT PAVEMENT SECTION
(NORTH FIREBREAK ROAD)**
NOT TO SCALE
* Slope Field Road Away From Highway
GRADED FIELD ROAD
SCALE: 1/2"=1'-0"



**SECTION B-B TYPICAL ASPHALT CONCRETE ROAD SECTION
CANE HAULER CROSSING
(NORTH FIREBREAK ROAD)**
SCALE: 1"=5'

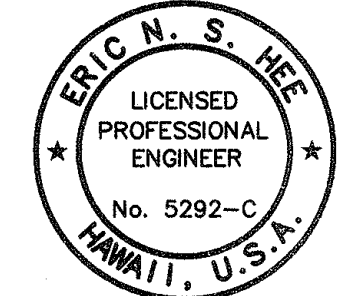


**CANE HAULER CROSSING PLAN
(NORTH FIREBREAK ROAD)**
NOT TO SCALE



**NORTH FIREBREAK ROAD
PROFILE**
SCALE: HOR 1"=20'
VERT 1"=4'

N. Firebreak Rd. B.L.
Sta. 4+38 (O/S 19.9' Lt.)
=B.L. Sta. 36+99 (O/S 231.85 LT.)
HC&S to Relocate Exist. HC&S
Electric Pole and Overhead Lines.

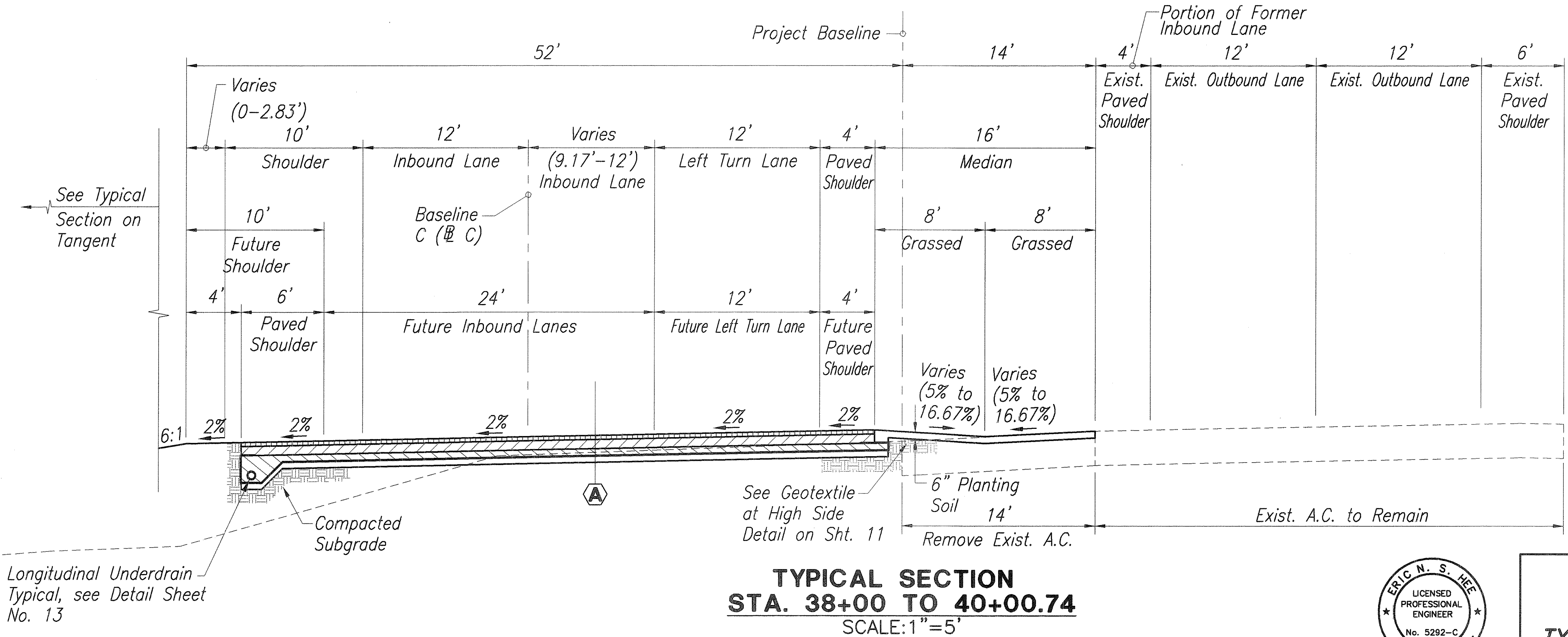
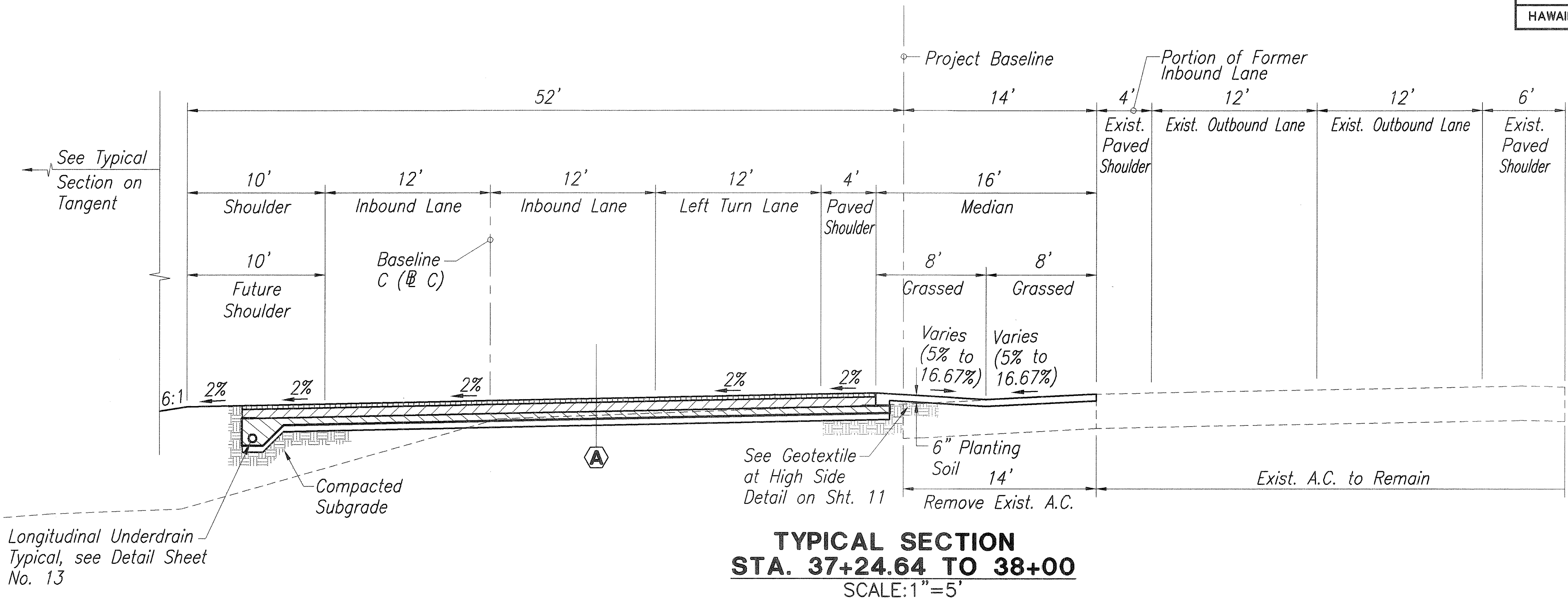


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LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

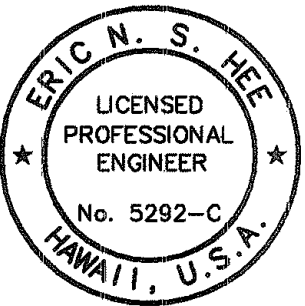
**TYPICAL ROADWAY SECTION
& N. FIREBREAK ROAD PROFILE**
HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)
SCALE: AS NOTED
DATE: NOV., 2002

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	15	72



SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

J-94-56 FPH1-I-1-SECT-2 DESH-1) 1=5 11/20/02 AMR



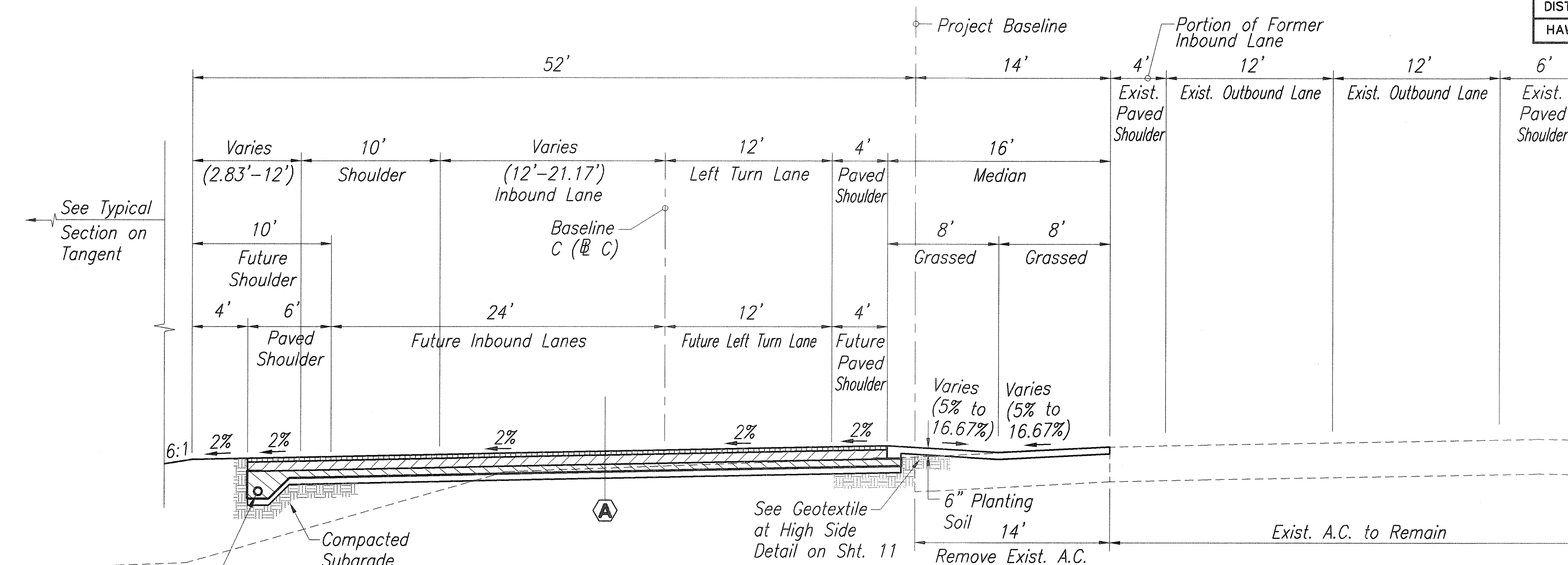
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ENGINEERS SURVEYORS HAWAII, INC.
LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

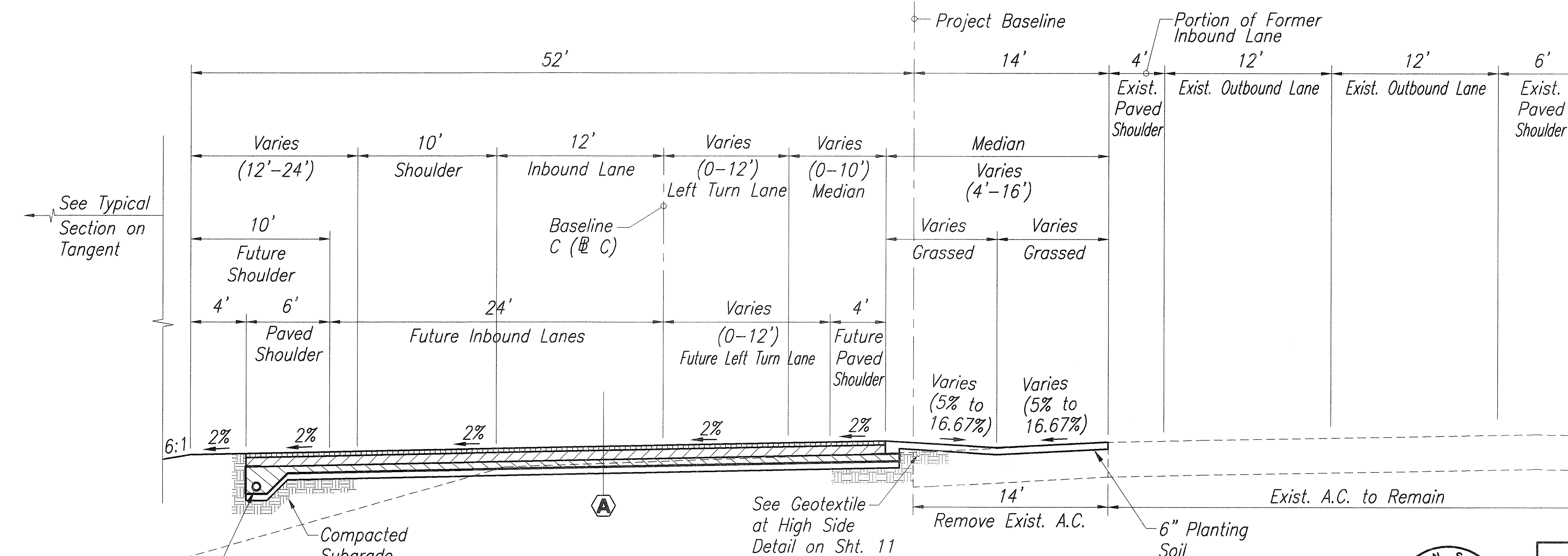
TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)
SCALE: AS NOTED DATE: NOV., 2002

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	16	72



TYPICAL SECTION
STA. 40+00.74 TO 42+20.79
 SCALE: 1"=5'



TYPICAL SECTION
STA. 42+20.79 TO 43+97.71
 SCALE: 1"=5'

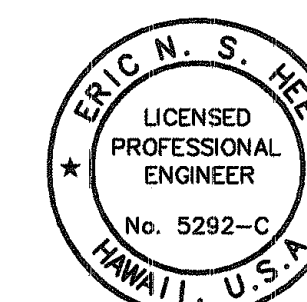
Longitudinal Underdrain
 Typical, see Detail Sheet
 No. 13

See Typical
 Section on
 Tangent

See Typical
 Section on
 Tangent

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

J:94-56 F:PH1-T-SECT-3 D:(ESH-1) 1=5 11/20/02 AMR



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 ENGINEERS SURVEYORS HAWAII, INC.
 LICENSE EXPIRATION DATE: 4/30/04

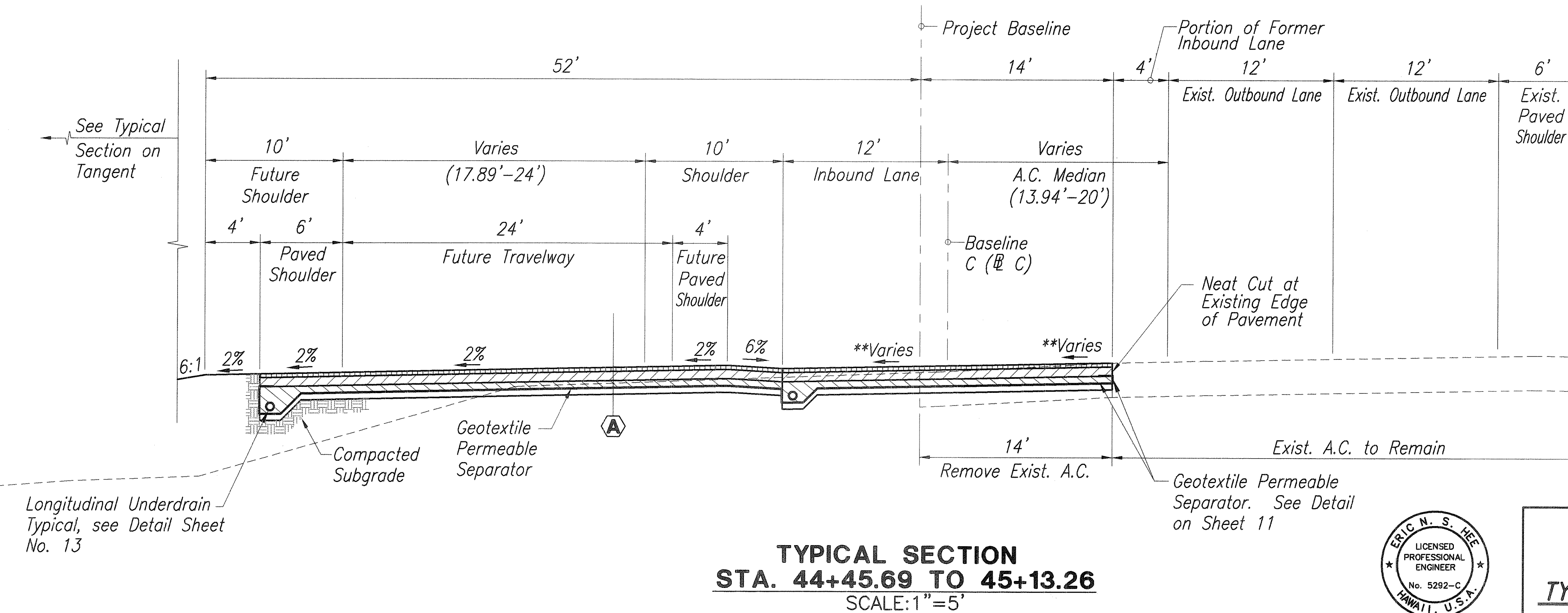
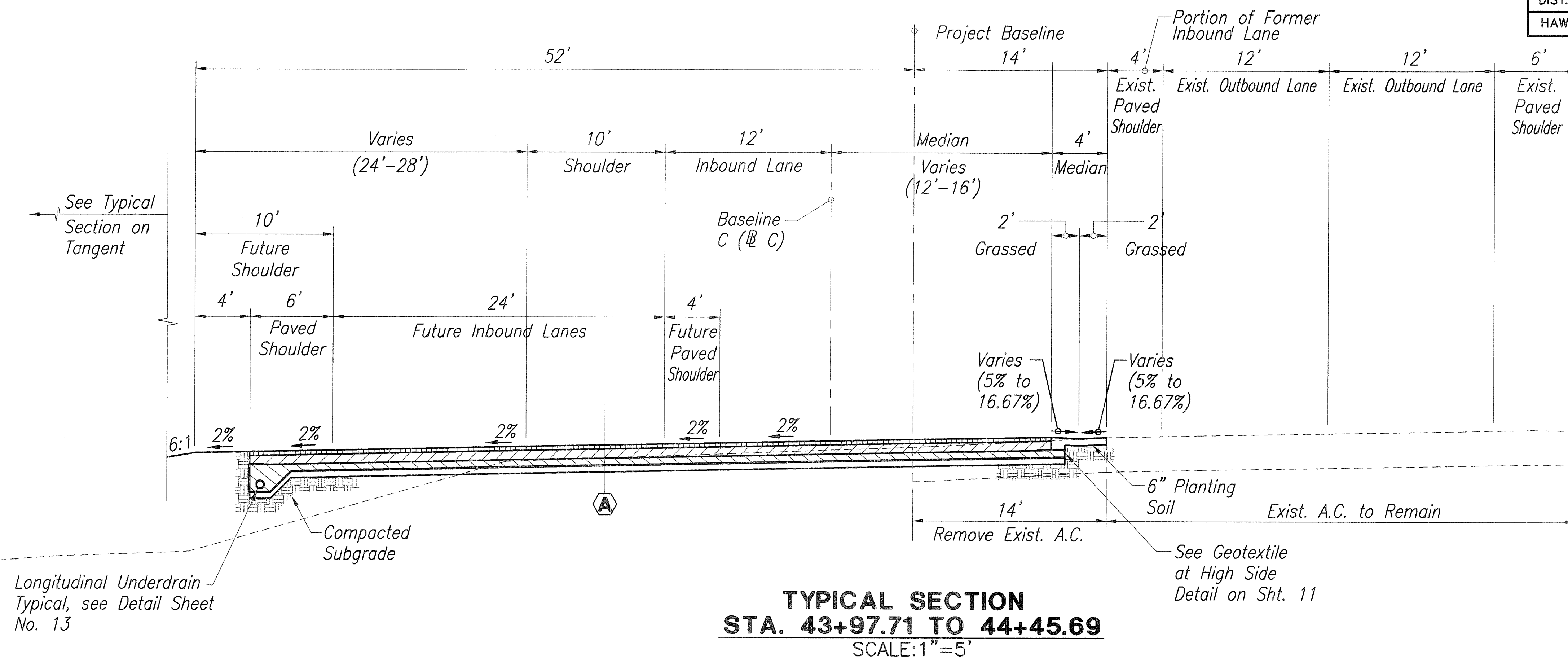
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I
 HANA HIGHWAY TO PUKALANI BYPASS
 FED. AID PROJ. NO. NH-037-1(22)
 SCALE: AS NOTED DATE: NOV., 2002

SHEET No. 6 OF 8 SHEETS

FED.ROAD DIST.NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	17	72



ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTE BOOK	DRAWN BY _____
	TRACED BY _____
	DESIGNED BY _____
	QUANTITIES BY _____
	CHECKED BY _____

1.94~58 F:PH1-T-SECT=3 D:(FSH-1) 1=5 11/20/02 AMR



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LICENSE EXPIRATION DATE: 4/30/06

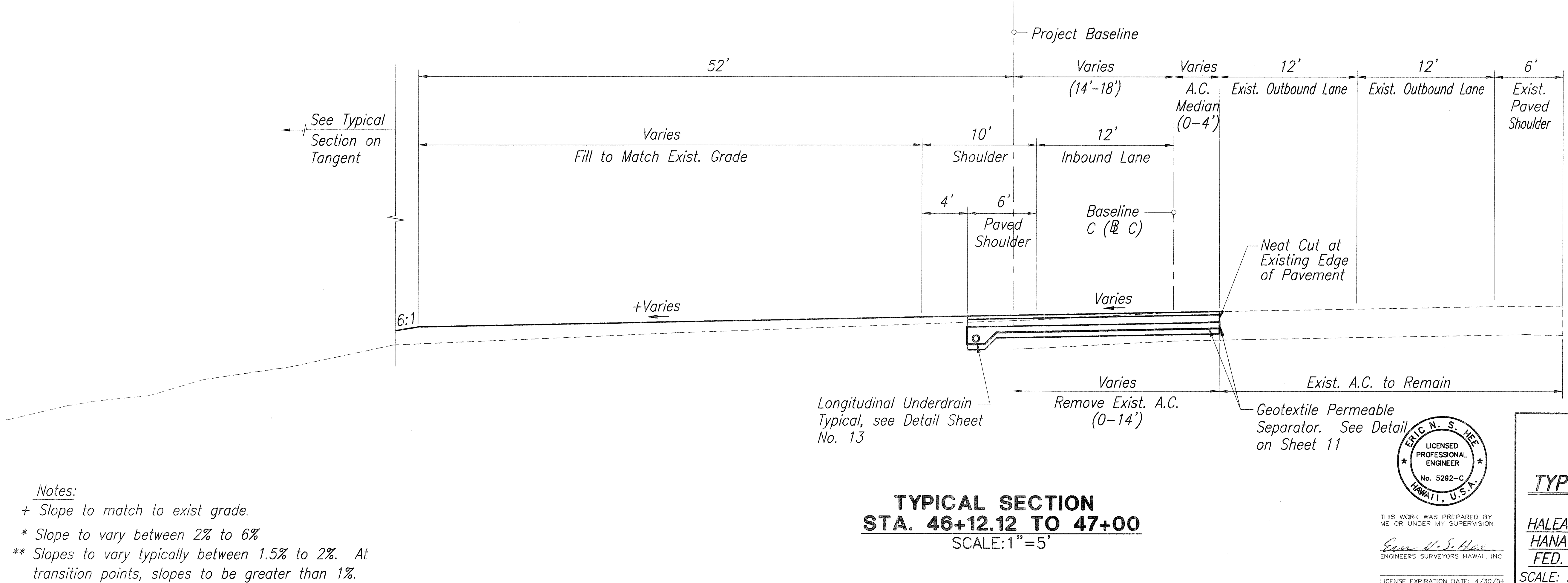
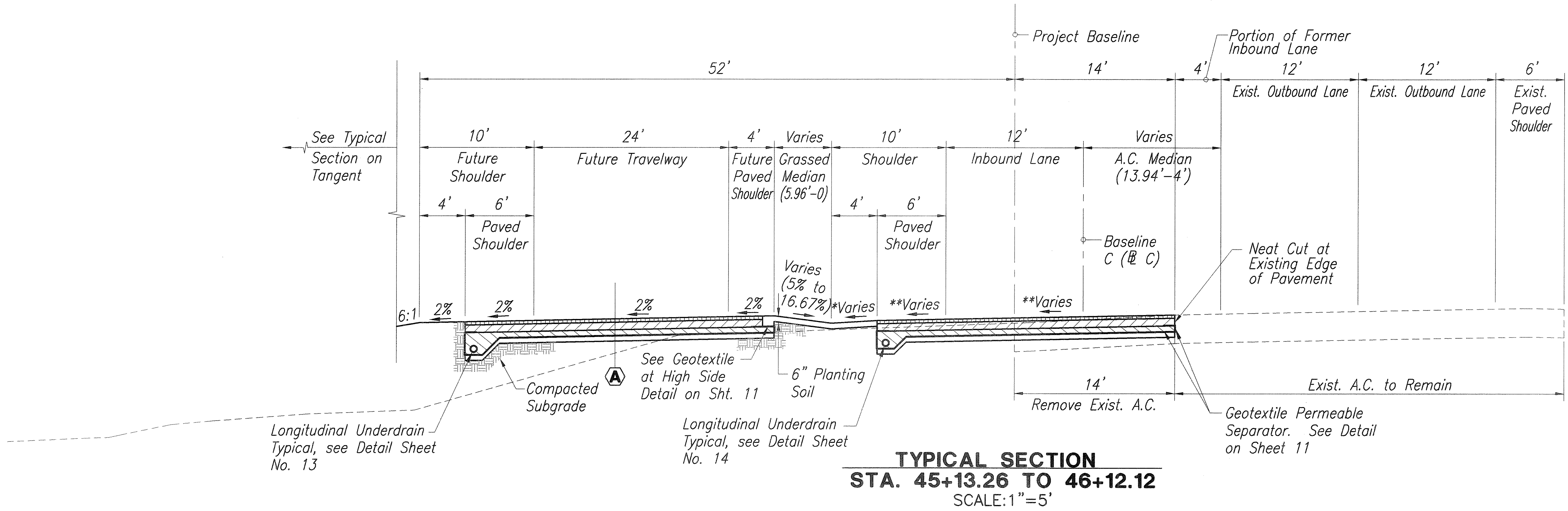
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL ROADWAY SECTION

HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)

SCALE: AS NOTED DATE: NOV., 2002

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(22)	2003	18	72



Notes:
 + Slope to match to exist grade.
 * Slope to vary between 2% to 6%
 ** Slopes to vary typically between 1.5% to 2%. At transition points, slopes to be greater than 1%.

DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

J-94-56 F-PH1-T-SECT-3 D.(ESH-1) 1-5 11/20/02 AMR

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 ENGINEERS SURVEYORS HAWAII, INC.
 LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL ROADWAY SECTION
HALEAKALA HIGHWAY WIDENING, PHASE I
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(22)
SCALE: AS NOTED **DATE: NOV., 2002**