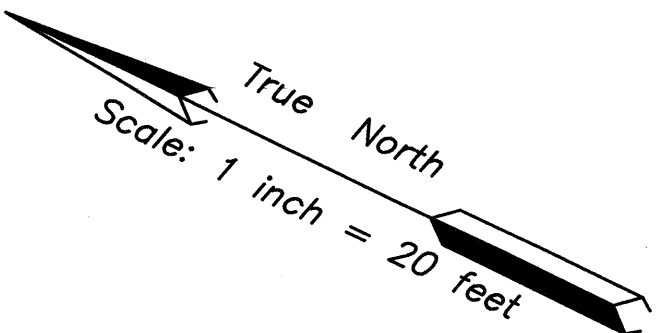
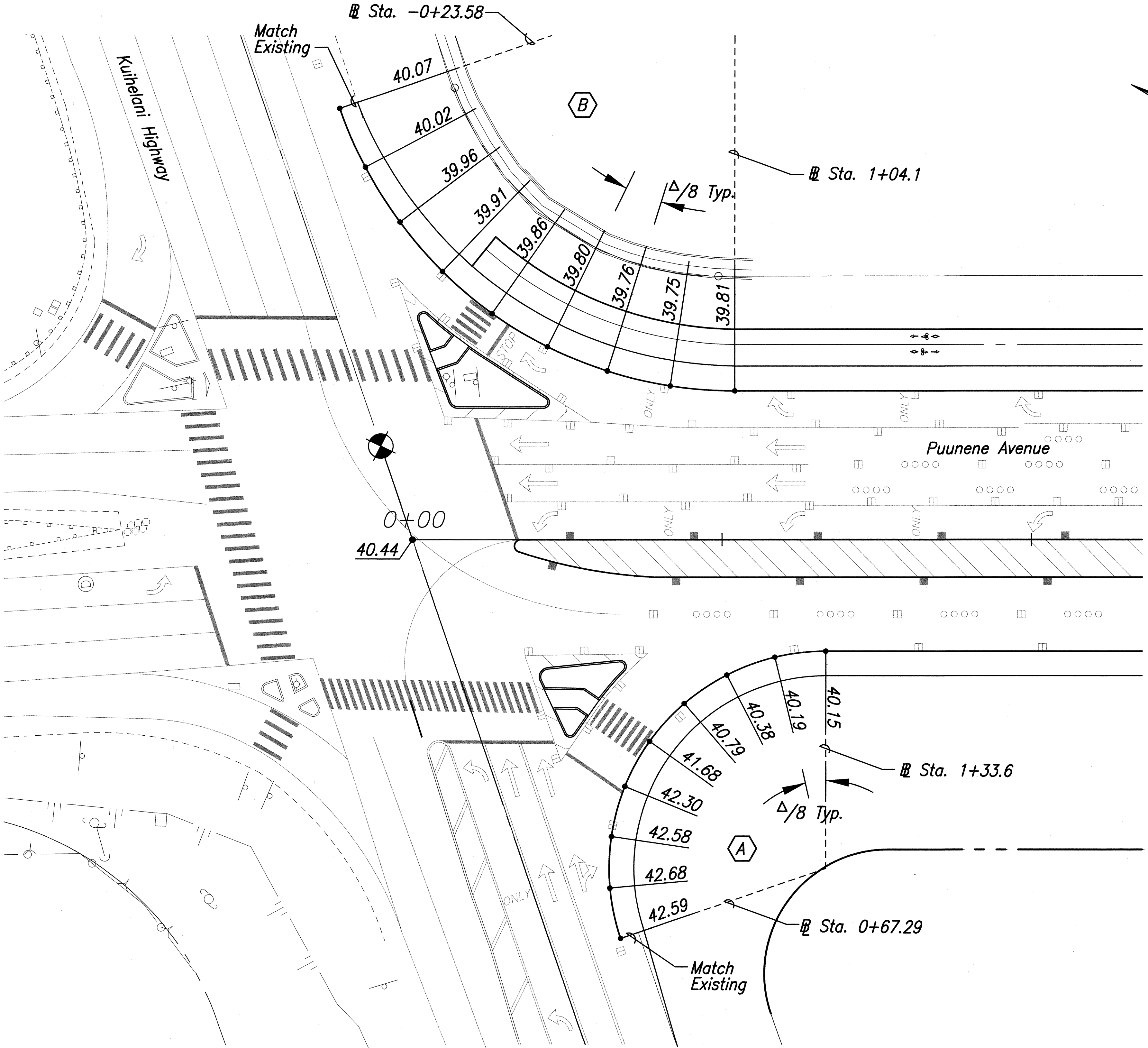


FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	69	159



CURVE RETURN DATA		
	A	B
Δ	108°46'49"	71°00'17"
$\Delta/2$	54°23'24.5"	35°30'08.5"
R	70.00	135.00
T	97.74	96.30
C	113.82	156.80
L	132.90	167.30
$\Delta/8$	13°35'51.125"	8°52'32.125"
C	16.57	20.89



KUIHELANI HWY. INTERSECTION

Scale: 1"=20'

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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
INTERSECTION PLAN
PUUNENE AVENUE WIDENING
Kuihelani Highway to Hansen Road
 And
MOKULELE HIGHWAY WIDENING
Hansen Road to Vicinity of
Cane Haul Road Crossing
 Federal - Aid Project No. NH-A311(3)
 Scale: 1"=20' Date: October 2001
 SHEET No. 1 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	70	159

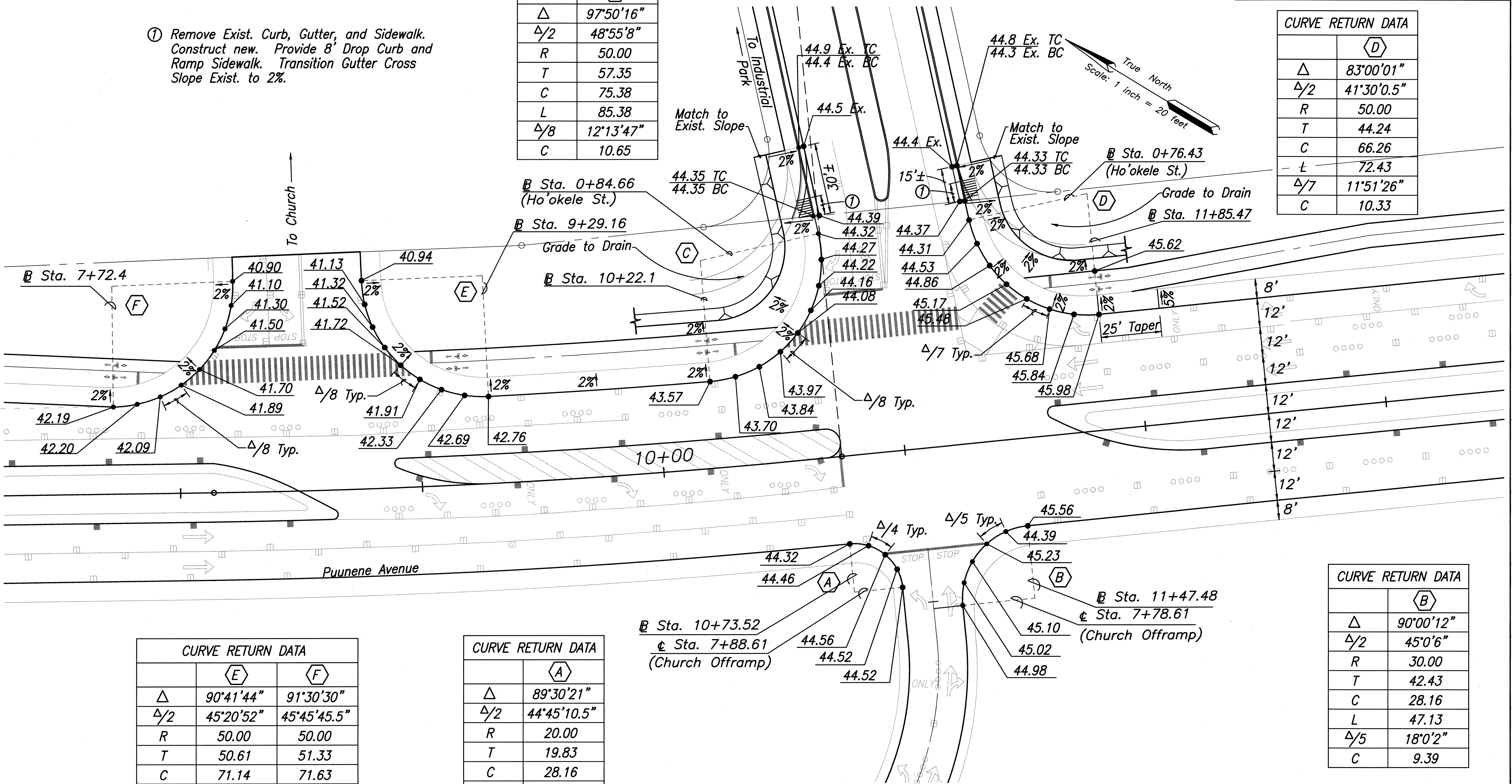
CURVE RETURN DATA

	D
Δ	83°00'01"
$\Delta/2$	41°30'0.5"
R	50.00
T	44.24
C	66.26
L	72.43
$\Delta/7$	11°51'26"
C	10.33

CURVE RETURN DATA

	C
Δ	97°50'16"
$\Delta/2$	48°55'8"
R	50.00
T	57.35
C	75.38
L	85.38
$\Delta/8$	12°13'47"
C	10.65

① Remove Exist. Curb, Gutter, and Sidewalk. Construct new. Provide 8' Drop Curb and Ramp Sidewalk. Transition Gutter Cross Slope Exist. to 2%.



CURVE RETURN DATA

	B
Δ	90°00'12"
$\Delta/2$	45°0'6"
R	30.00
T	42.43
C	28.16
L	47.13
$\Delta/5$	18°0'2"
C	9.39

CURVE RETURN DATA

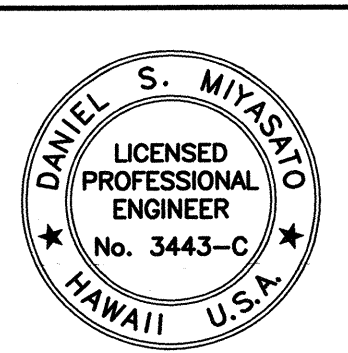
	A
Δ	89°30'21"
$\Delta/2$	44°45'10.5"
R	20.00
T	19.83
C	28.16
L	31.24
$\Delta/4$	22°22'35"
C	7.76

CURVE RETURN DATA

	E	F
Δ	90°41'44"	91°30'30"
$\Delta/2$	45°20'52"	45°45'45.5"
R	50.00	50.00
T	50.61	51.33
C	71.14	71.63
L	79.15	79.86
$\Delta/8$	11°20'13"	11°26'19"
C	9.88	9.97

CHURCH/HO'OKELE STREET INTERSECTION

Scale: 1"=20'



STATE OF HAWAII
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Hansen Road to Vicinity of
Cane Haul Road Crossing
Federal - Aid Project No. NH-A311(3)
Scale: 1"=20' Date: October 2001
SHEET No. 2 OF 6 SHEETS

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ME OR UNDER MY SUPERVISION

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

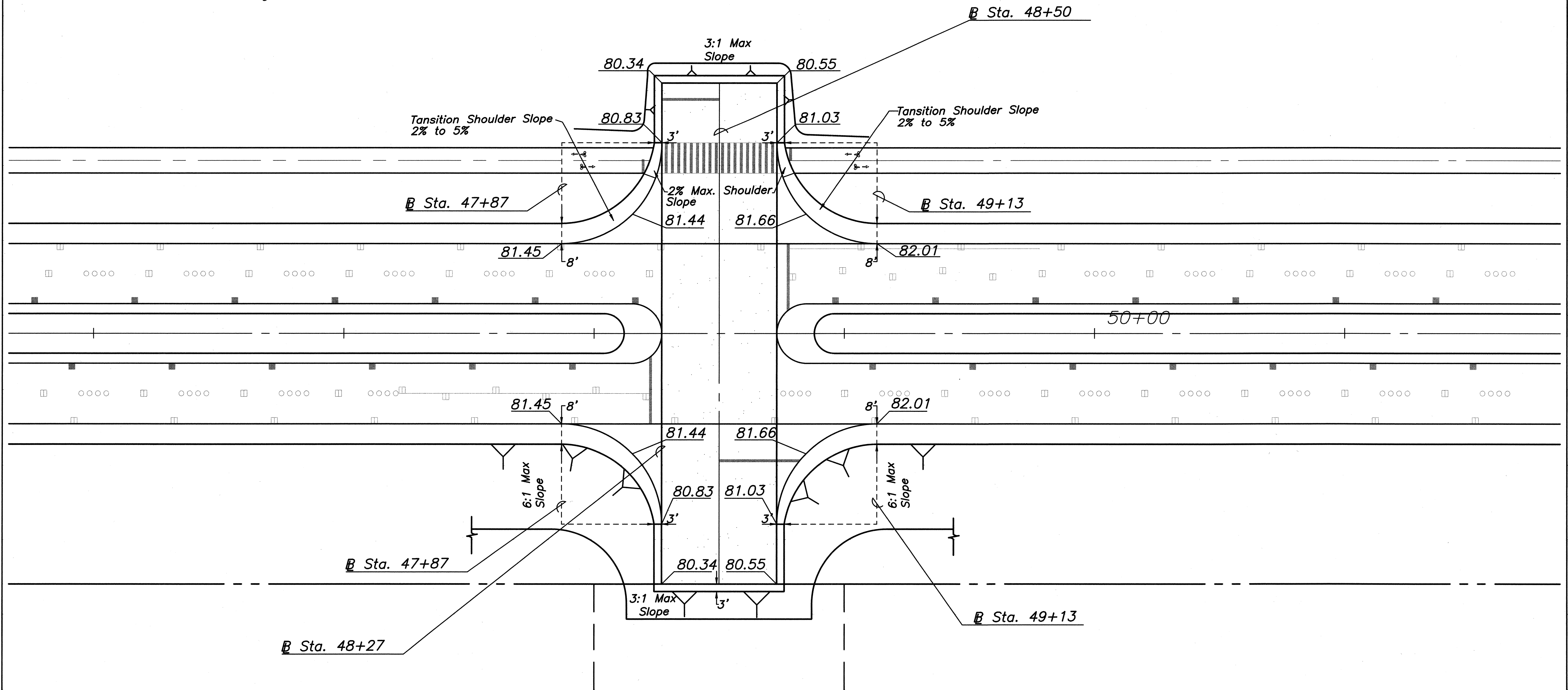
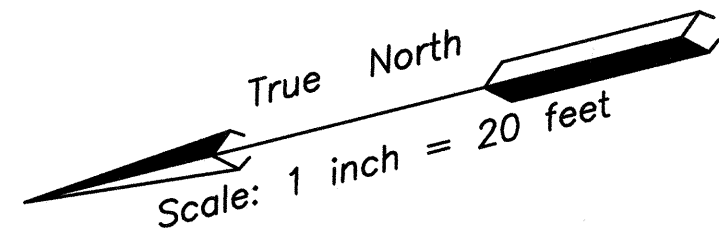
8/16/01

R:\moku-ve\inter\church.dwg

JN: M9901.00

PLOT: 1=40

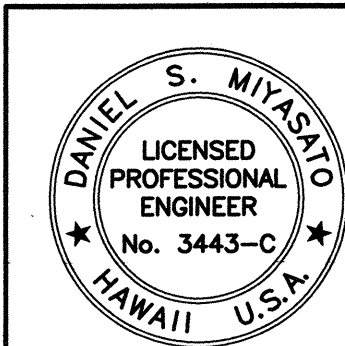
FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	72	159



CANE HAUL ROAD INTERSECTION

Scale: 1"=20'

SURVEY PLOTTED BY	DATE
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DESIGNED BY	
CHECKED BY	
NO.	



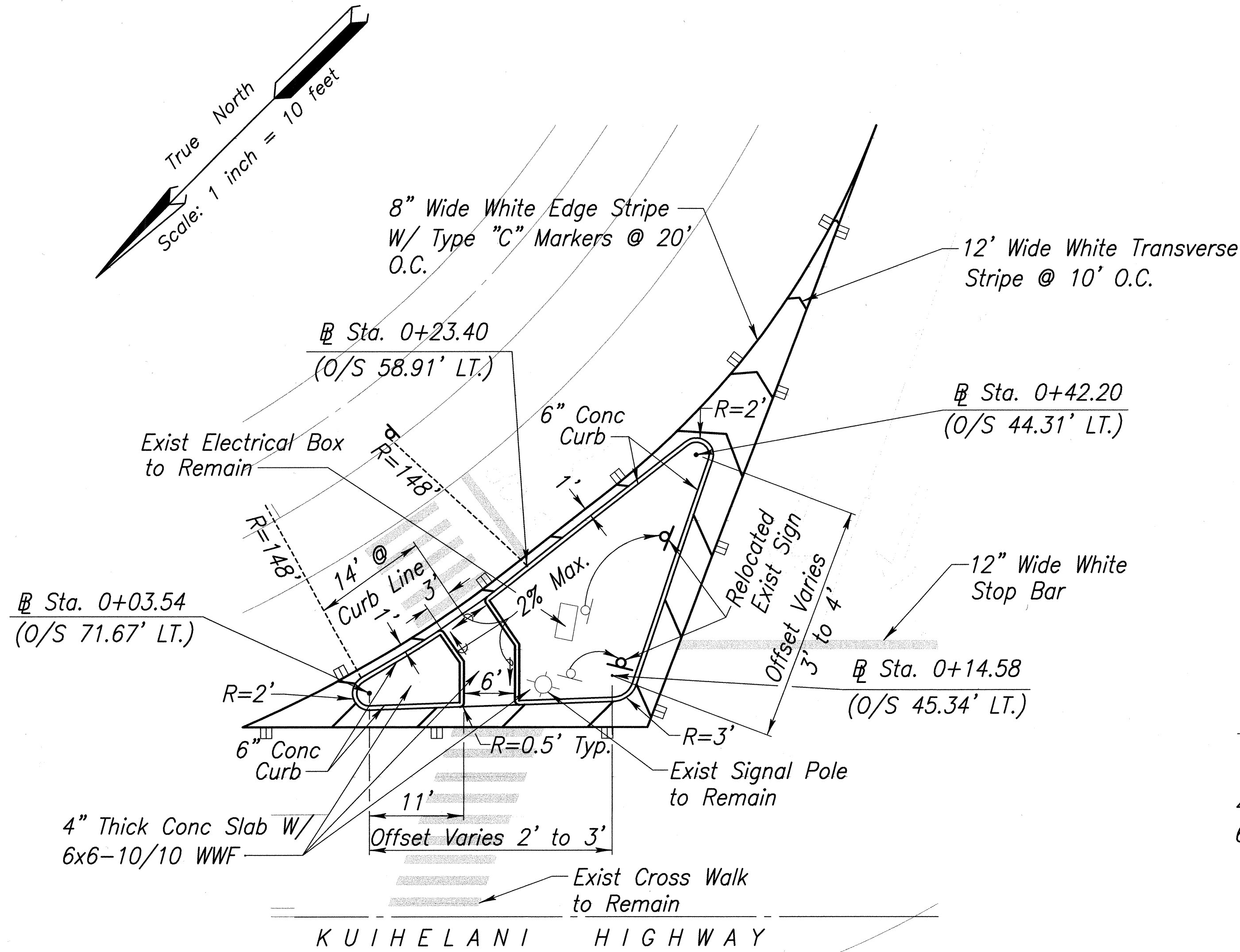
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
INTERSECTION PLAN
PUUNENE AVENUE WIDENING
Kuihelani Highway to Hansen Road
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Hansen Road to Vicinity of
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Federal - Aid Project No. NH-A311(3)
Scale: 1"=20' Date: October 2001
SHEET No. 4 OF 6 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	73	159

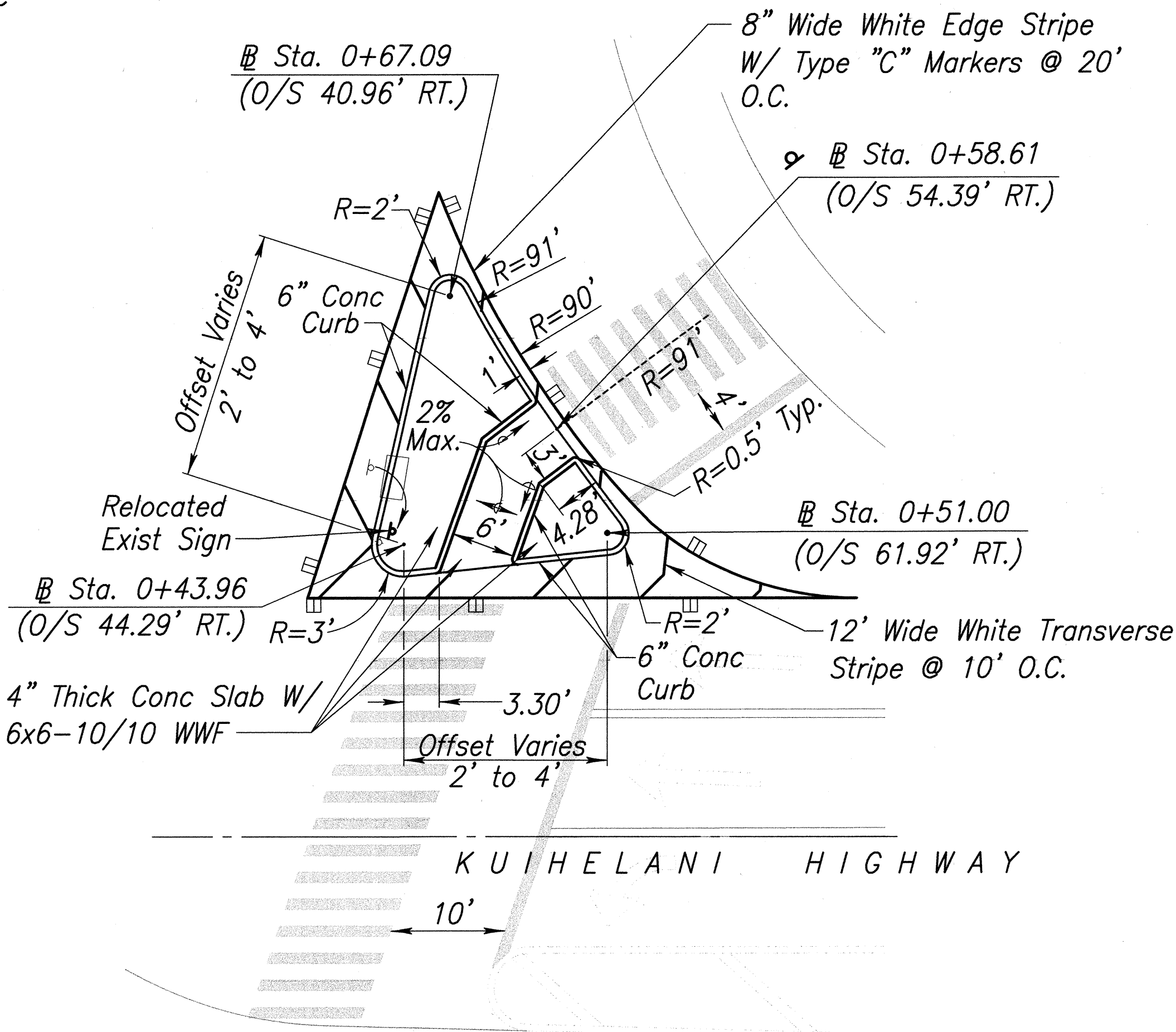
Notes:

1. All Dimensions and Radii Refer to Face of Curb.
2. Paint Top and Face of Curb White.
3. Stations and Offsets Refer to Puunene Hwy B



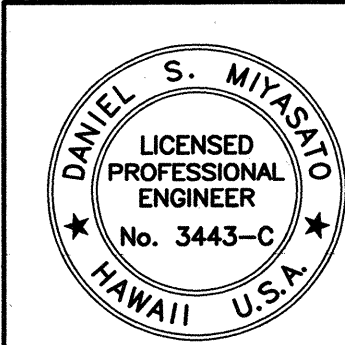
Conc Island Detail

Scale: 1"=10'



Conc Island Detail

Scale: 1"=10'



SATO & ASSOCIATES, INC.
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

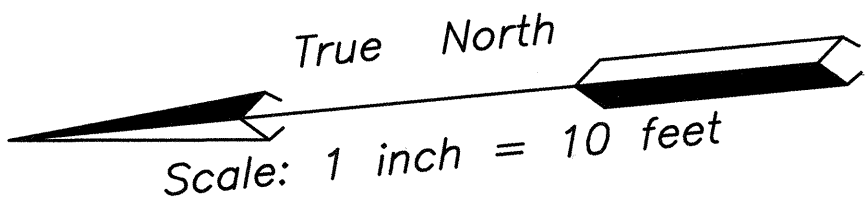
PUUNENE AVENUE WIDENING
Kuihelani Highway to Hansen Road
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MOKULELE HIGHWAY WIDENING
Hansen Road to Vicinity of
Cane Haul Road Crossing
Federal - Aid Project No. NH-A311(3)

Scale: 1"=10' Date: October 2001

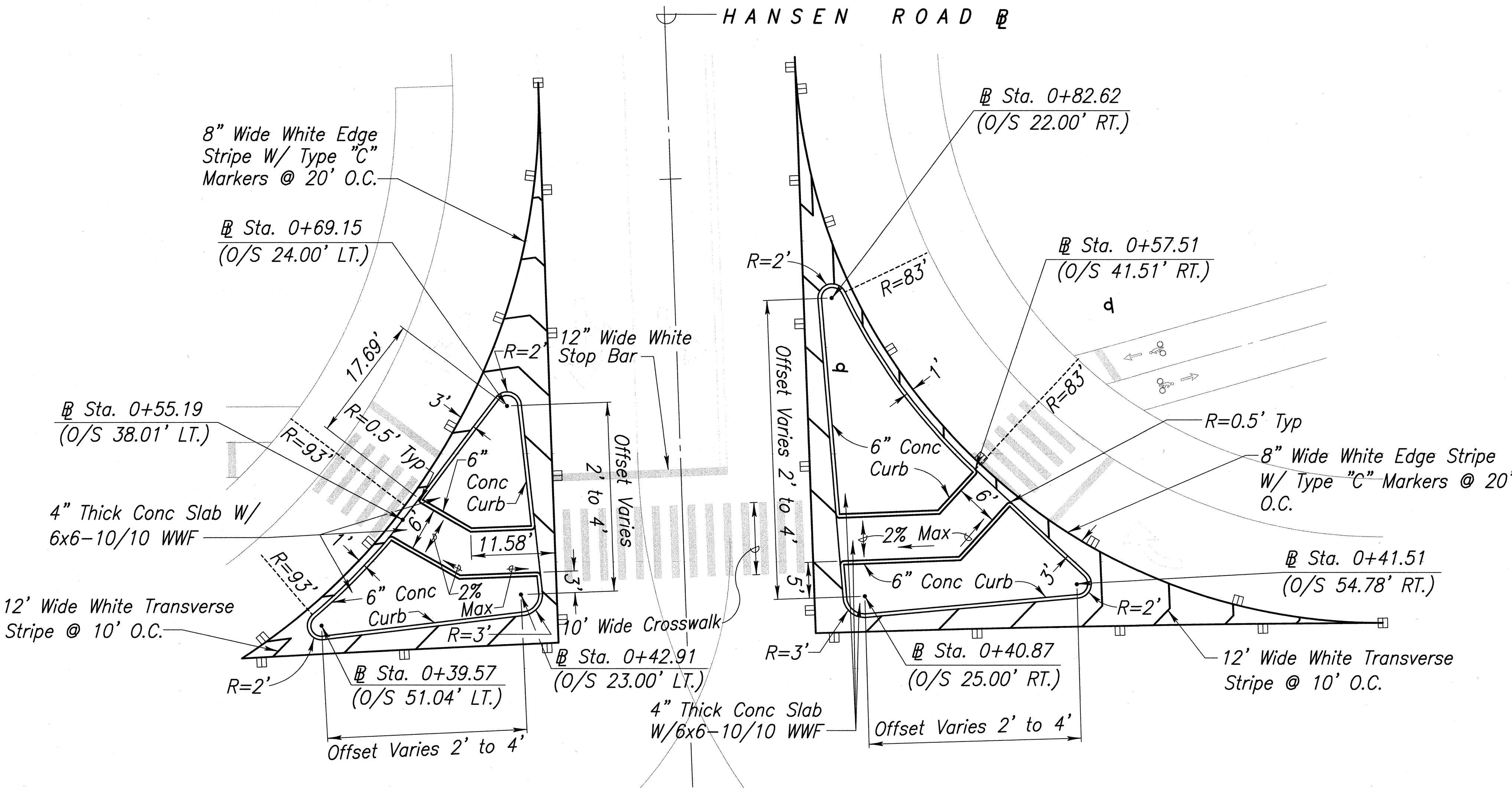
SHEET No. 5 OF 6 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	No.

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	74	159



- Notes:
1. All Dimensions and Radii Refer to Face of Curb.
 2. Paint Top and Face of Curb White.



Curb Island Detail

Scale: 1"=10'

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

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

INTERSECTION PLAN

PUUNENE AVENUE WIDENING
Kuihelani Highway to Hansen Road
And
MOKULELE HIGHWAY WIDENING
Hansen Road to Vicinity of
Cane Haul Road Crossing
Federal - Aid Project No. NH-A311(3)

Scale: 1"=10' Date: October 2001

SHEET No. 6 OF 6 SHEETS