

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	C.O.34	60

Waialae Outbound Frontage Road Sta. 0+05±, Lt to Waialae Inbound Frontage Road Sta. 3+74±, Lt.
Remove Existing A.C. Sidewalk and Construct New 4" Concrete Sidewalk. For Details, See Plan Sheet No. 5 and 6.

Waialae Inbound Frontage Road Sta. 0+50± to Sta. 5+00±, Rt.
Remove 470.0± L.F. Existing Conc. Curb and Gutter. And Install 437.0± L.F. New Type 2D Concrete Curb.

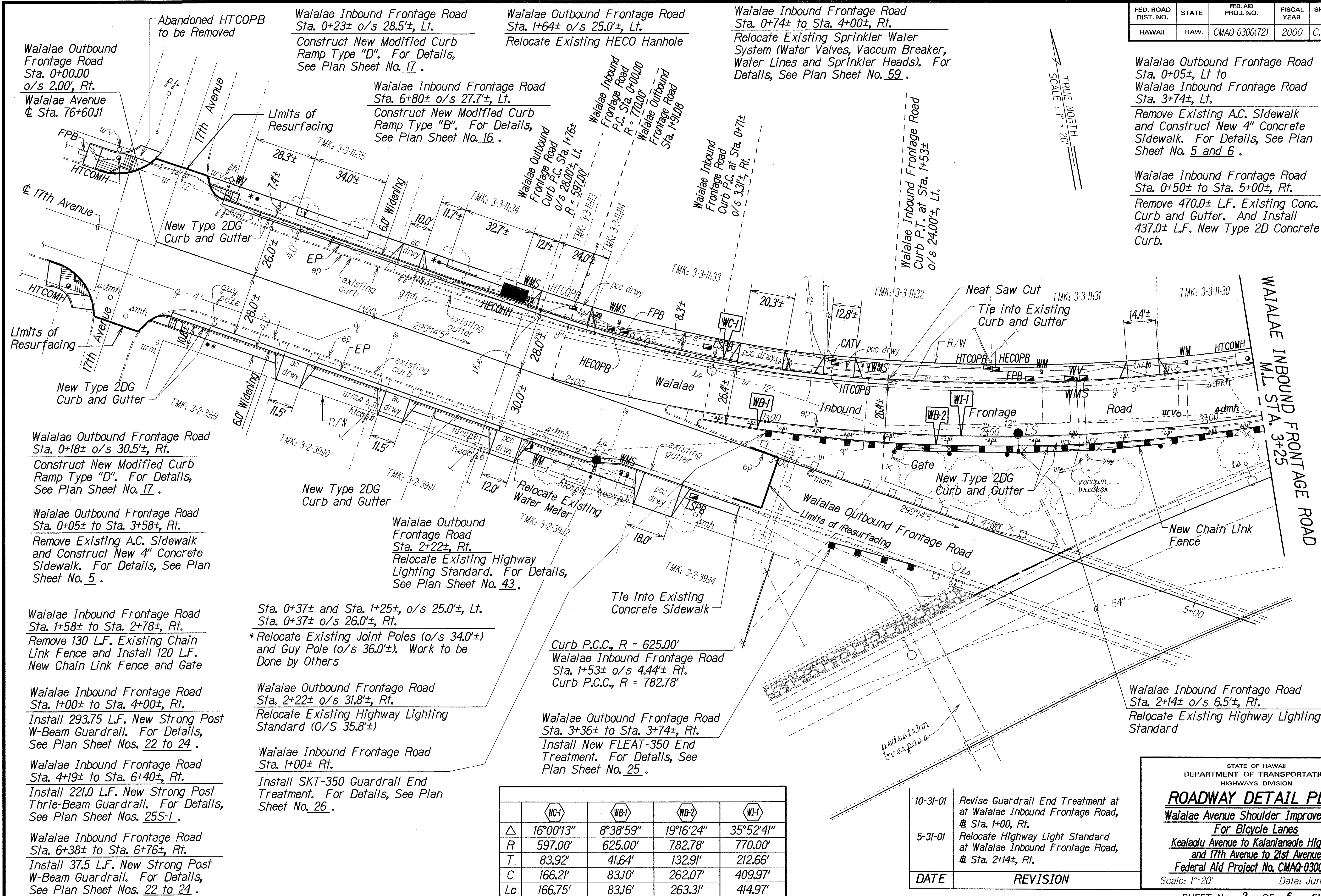
Waialae Inbound Frontage Road Sta. 0+74± to Sta. 4+00±, Rt.
Relocate Existing Sprinkler Water System (Water Valves, Vacuum Breaker, Water Lines and Sprinkler Heads). For Details, See Plan Sheet No. 59.

Waialae Inbound Frontage Road Sta. 2+14± o/s 6.5±, Rt.
Relocate Existing Highway Lighting Standard

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY DETAIL PLAN
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealahou Avenue to Kalanianaʻola Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(72)
Scale: 1"=20' Date: June, 2000

DATE	REVISION
10-31-01	Revise Guardrail End Treatment at at Waialae Inbound Frontage Road, Sta. 1+00, Rt.
5-31-01	Relocate Highway Light Standard at Waialae Inbound Frontage Road, Sta. 2+14±, Rt.

	WC-1	WB-1	WB-2	WI-1
△	16°00'13"	8°38'59"	19°16'24"	35°52'41"
R	597.00'	625.00'	782.78'	770.00'
T	83.92'	41.64'	132.91'	212.66'
C	166.21'	83.10'	262.07'	409.97'
Lc	166.75'	83.16'	263.31'	414.97'



DESIGNED BY	DATE
TRACED BY	12/28/99
NOTED BY	
QUANTITIES BY	
CHECKED BY	

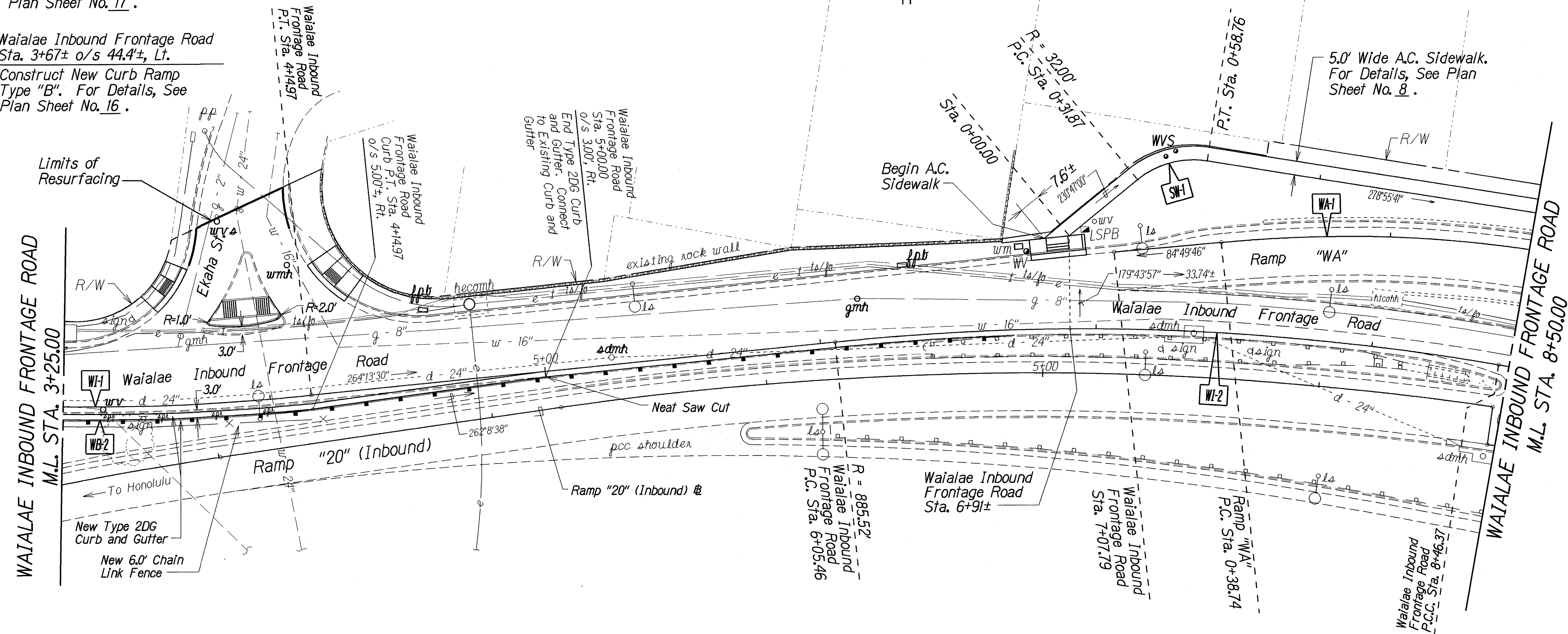
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	C.O.35	60

Waialae Inbound Frontage Road
Sta. 4+23± o/s 42.8'±, Lt.
Construct New Modified Curb
Ramp Type "B". For Details,
See Plan Sheet No. 16.

Waialae Inbound Frontage Road
Sta. 3+83± o/s 34.9'±, Lt.
Construct New Curb Ramp
Type "C". For Details, See
Plan Sheet No. 17.

Waialae Inbound Frontage Road
Sta. 3+67± o/s 44.4'±, Lt.
Construct New Curb Ramp
Type "B". For Details, See
Plan Sheet No. 16.

Waialae Inbound Frontage Road
Sta. 6+83± o/s 28.0'±, Lt.
Construct New Modified Curb
Ramp Type "B". For Details,
See Plan Sheet No. 16.



Waialae Inbound Frontage Road
Sta. 1+00± to Sta. 4+00±, Rt.
Install 293.75 L.F. New Strong Post
W-Beam Guardrail. For Details,
See Plan Sheet Nos. 22 to 24.

Waialae Inbound Frontage Road
Sta. 4+19± to Sta. 6+40±, Rt.
Install 221.0 L.F. New Strong Post
Thrie-Beam Guardrail. For Details,
See Plan Sheet Nos. 25S-1.

Waialae Inbound Frontage Road
Sta. 6+38± to Sta. 6+76±, Rt.
Install 37.5 L.F. New Strong Post
W-Beam Guardrail. For Details,
See Plan Sheet Nos. 22 to 24.

CURVE DATA					
	WI-1	WI-2	WB-2	WA-1	SW-1
Δ	35°52'41"	15°35'18"	18°45'45"	31°23'2"	48°8'41"
R	770.00'	885.52'	782.78'	454.75'	32.00'
T	212.66'	121.21'	129.33'	127.76'	14.30'
C	166.21'	409.97'	255.19'	245.99'	26.11'
Lc	166.75'	414.97'	256.33'	249.09'	26.89'

10-31-01	Revise Guardrail at Waialae Frontage Road, Sta. 1+00± to Sta. 6+76±, Rt.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

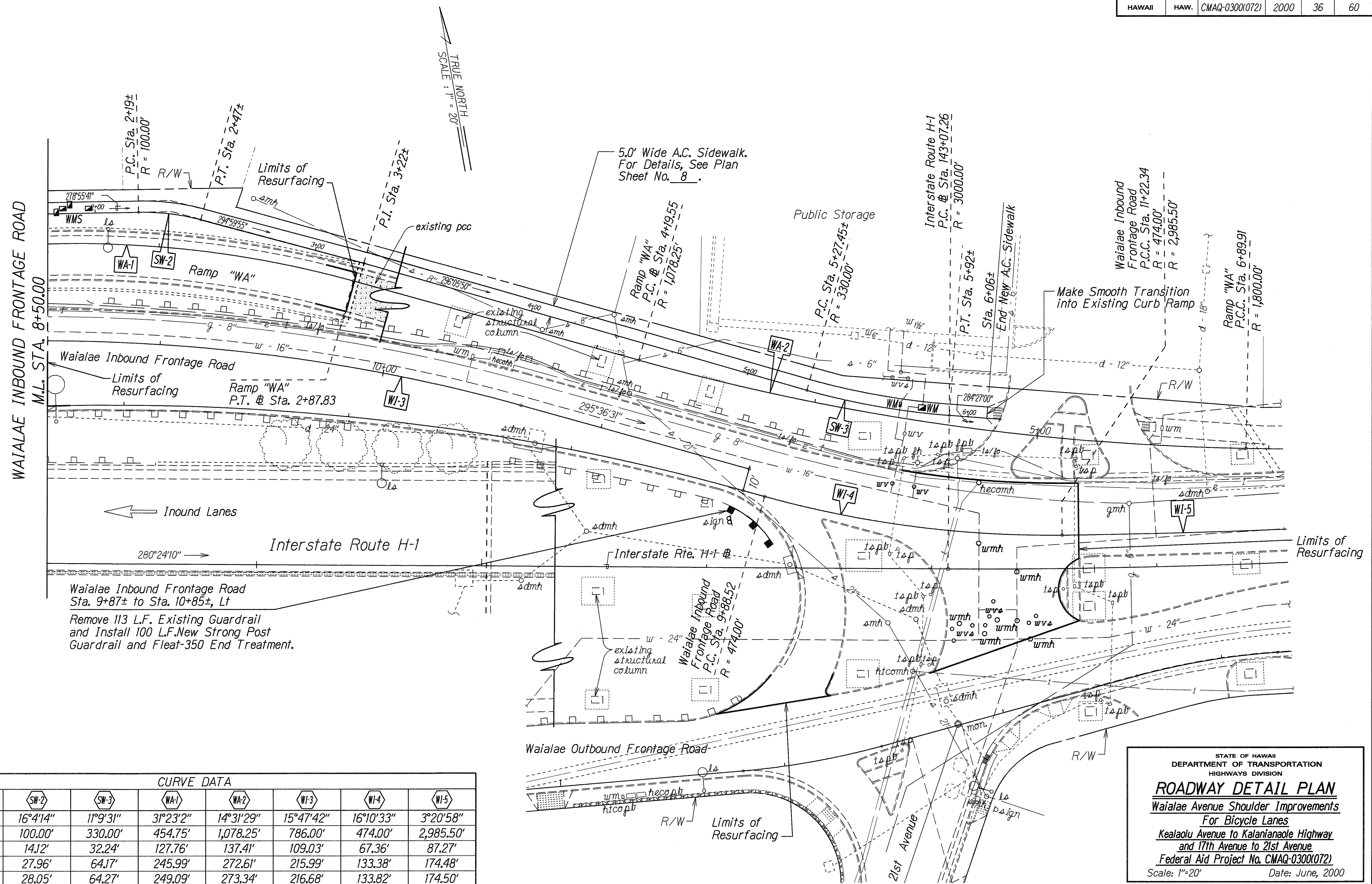
ROADWAY DETAIL PLAN
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(72)

Scale: 1"=20'
Date: June, 2000

SHEET No. 3 OF 6 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	10/31/01
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
QUANTITIES BY	
REVISIONS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	36	60



CURVE DATA							
	SW-2	SW-3	WA-1	WA-2	WI-3	WI-4	WI-5
Δ	16°4'14"	1°9'31"	31°23'2"	14°31'29"	15°47'42"	16°10'33"	3°20'58"
R	100.00'	330.00'	454.75'	1,078.25'	786.00'	474.00'	2,985.50'
T	14.12'	32.24'	127.76'	137.41'	109.03'	67.36'	87.27'
C	27.96'	64.17'	245.99'	272.61'	215.99'	133.38'	174.48'
Lc	28.05'	64.27'	249.09'	273.34'	216.68'	133.82'	174.50'

STATE OF HAWAII
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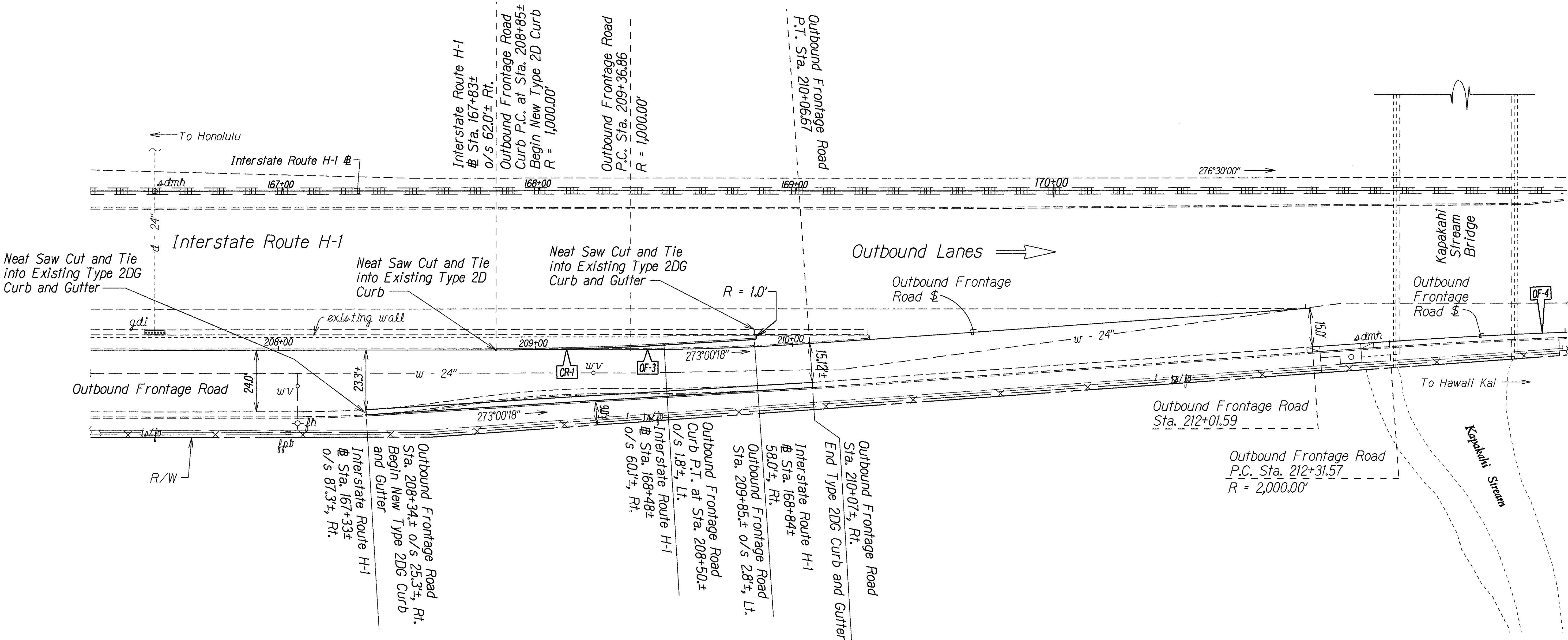
ROADWAY DETAIL PLAN
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealahou Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)

Scale: 1"=20' Date: June, 2000

SHEET No. 4 OF 6 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	11/28/99
DESIGNED BY		
CHECKED BY		

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	38	60



Outbound Frontage Road
Sta. 208+85± to Sta. 210+30±, Lt.
Remove 190.6± L.F. Existing Curb
and Gutter. And Install 103.6±
L.F. New Type 2D Curb

Outbound Frontage Road
Sta. 208+34± to Sta. 210+06±, Rt.
Remove 174.3± L.F. Existing Curb
and Gutter. And Install 174.0±
L.F. New Type 2DG Curb and
Gutter

CURVE DATA		
OF-3	OF-4	CR-1
4°00'00"	4°00'00"	3°29'42"
1,000.00'	2,000.00'	1,000.00'
34.92'	69.84'	30.51'
69.80'	139.60'	69.99'
69.81'	139.63'	70.00'

ORIGINAL PLAN	DATE
DESIGNED BY	11/28/99
TRACED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY DETAIL PLAN
Waialae Avenue Shoulder Improvements
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SHEET No. 6 OF 6 SHEETS