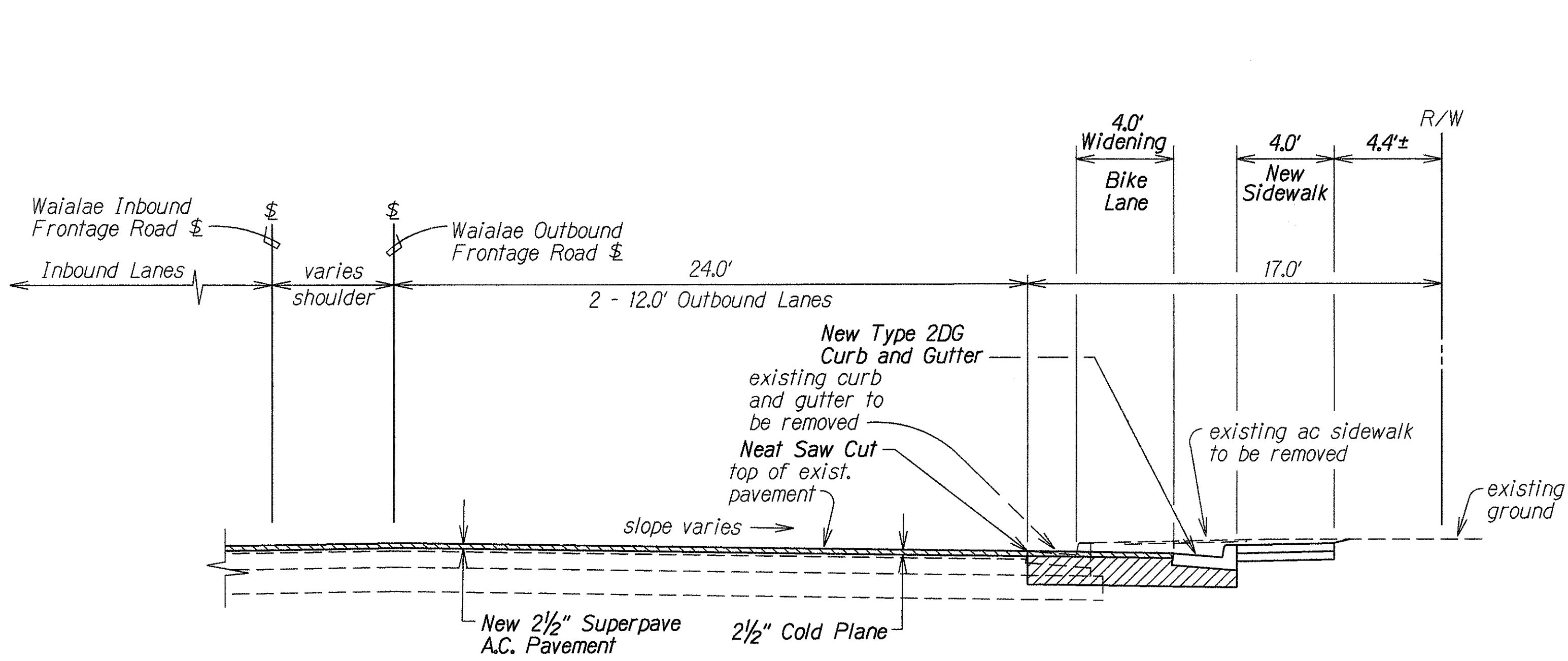
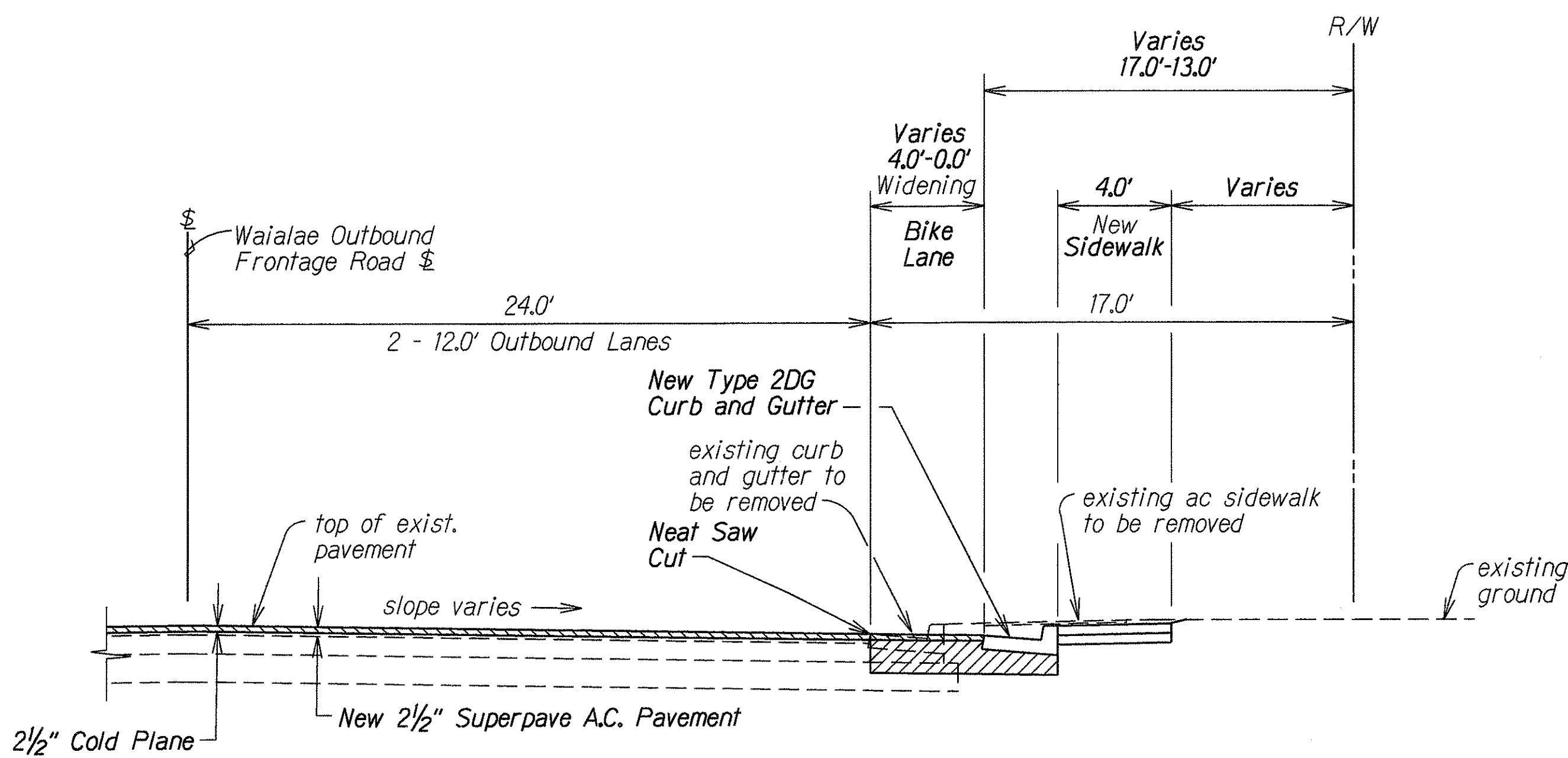


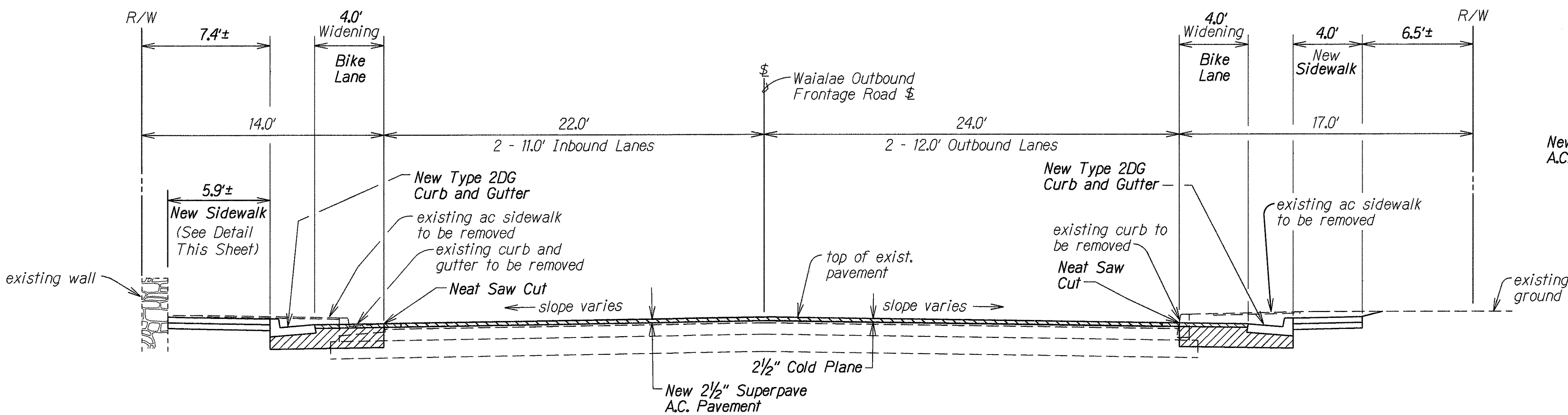
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	5	60



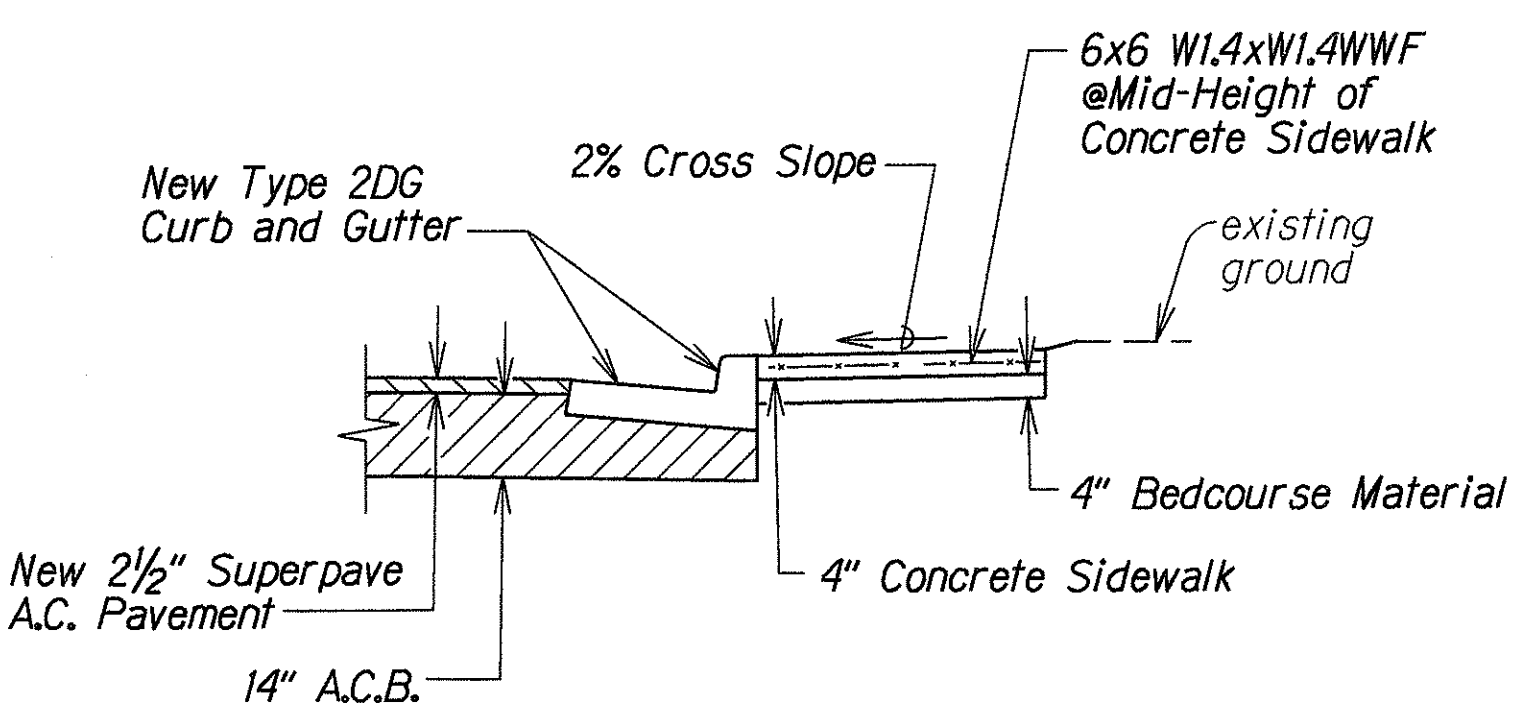
TYPICAL SECTION - WAIALAE OUTBOUND FRONTAGE ROAD
STA. 1+60± TO STA. 2+45±
Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE OUTBOUND FRONTAGE ROAD
STA. 2+45± TO STA. 2+67±, RT.
Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE OUTBOUND FRONTAGE ROAD
STA. 0+00± TO STA. 1+60±
Scale: 1/4"=1'-0"



TYPICAL DETAIL
Not to Scale

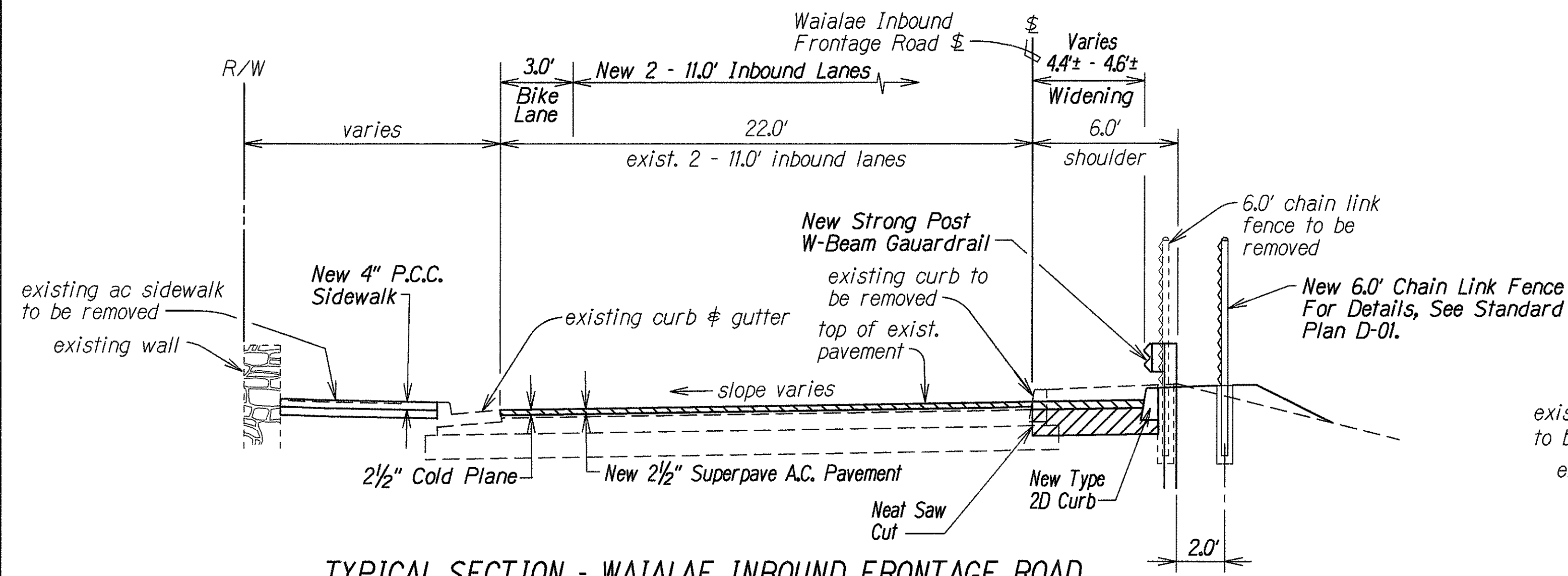
SURVEY PLOTTED BY	DATE
DRAWN BY	9-3-99
DESIGNED BY	
CHECKED BY	
NOTED BY	
REVISIONS	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

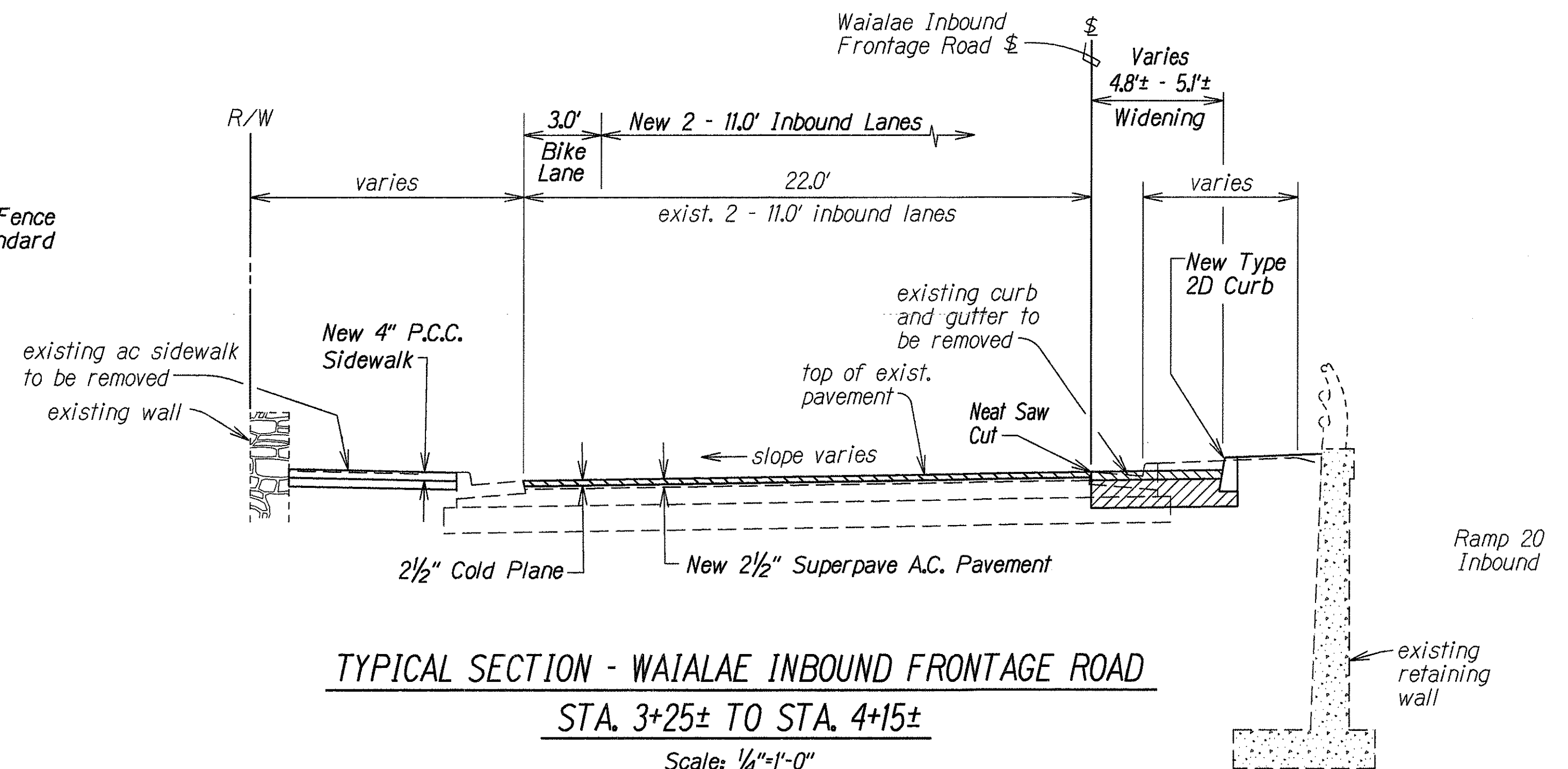
TYPICAL SECTIONS
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(72)
Scale: As Shown Date: June, 2000

SHEET No. 1 OF 10 SHEETS

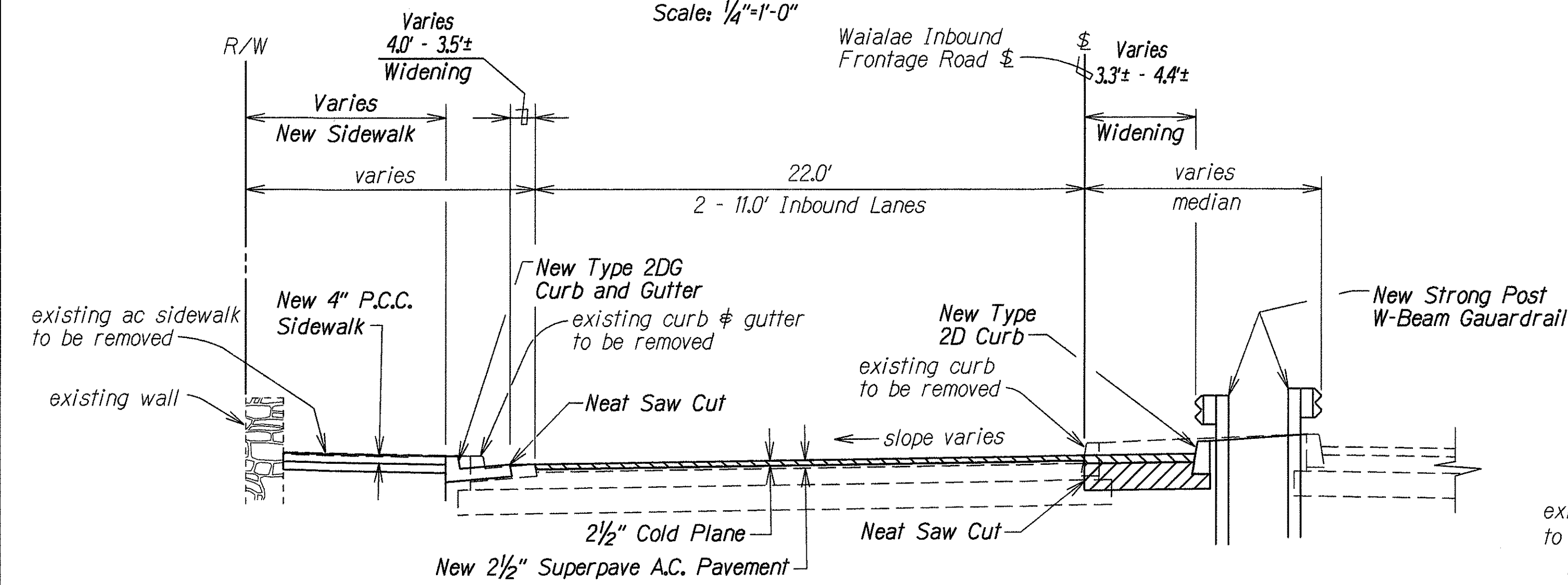
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	6	60



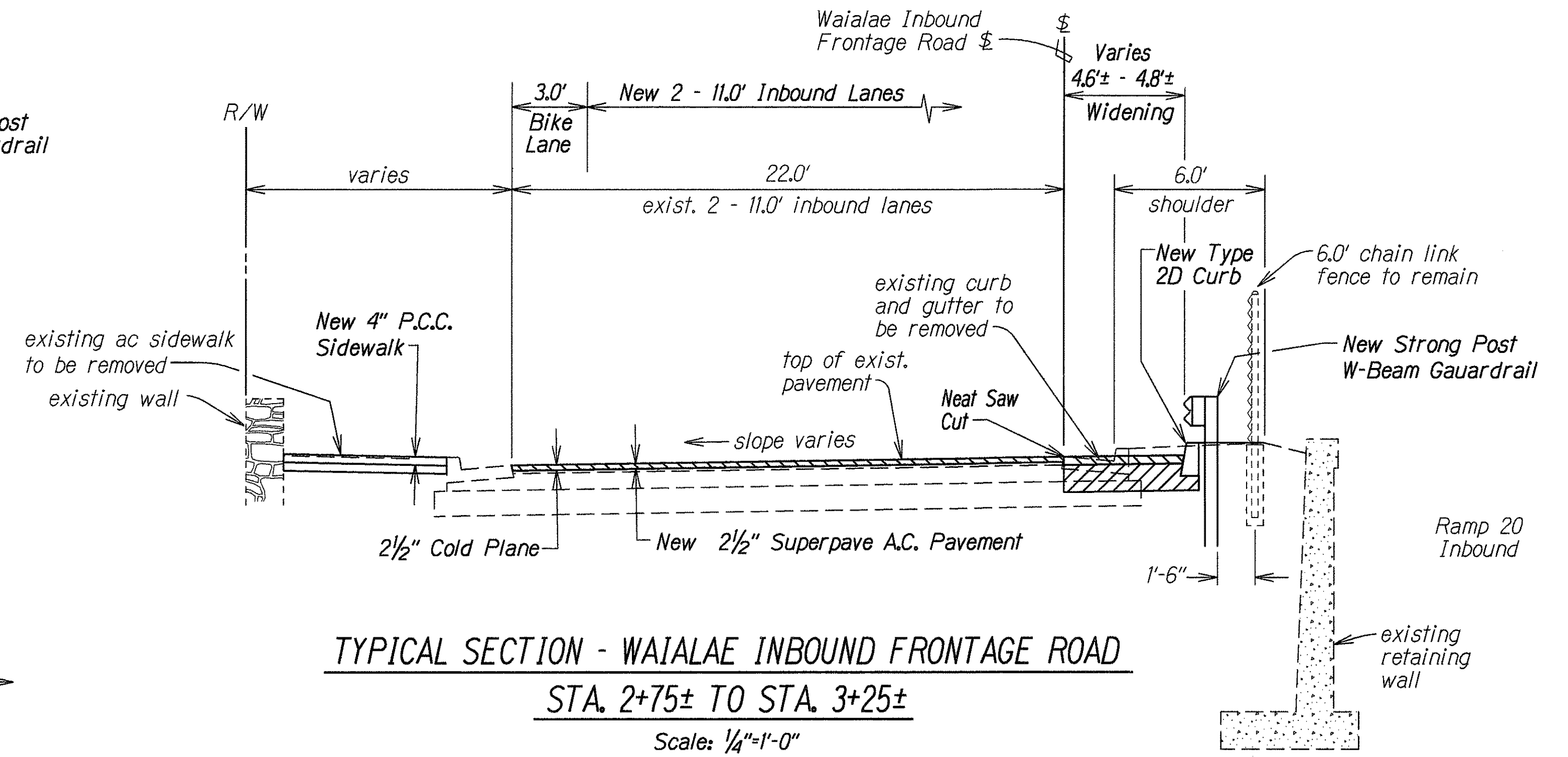
TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 1+53± TO STA. 2+75±
Scale: 1/4"=1'-0"



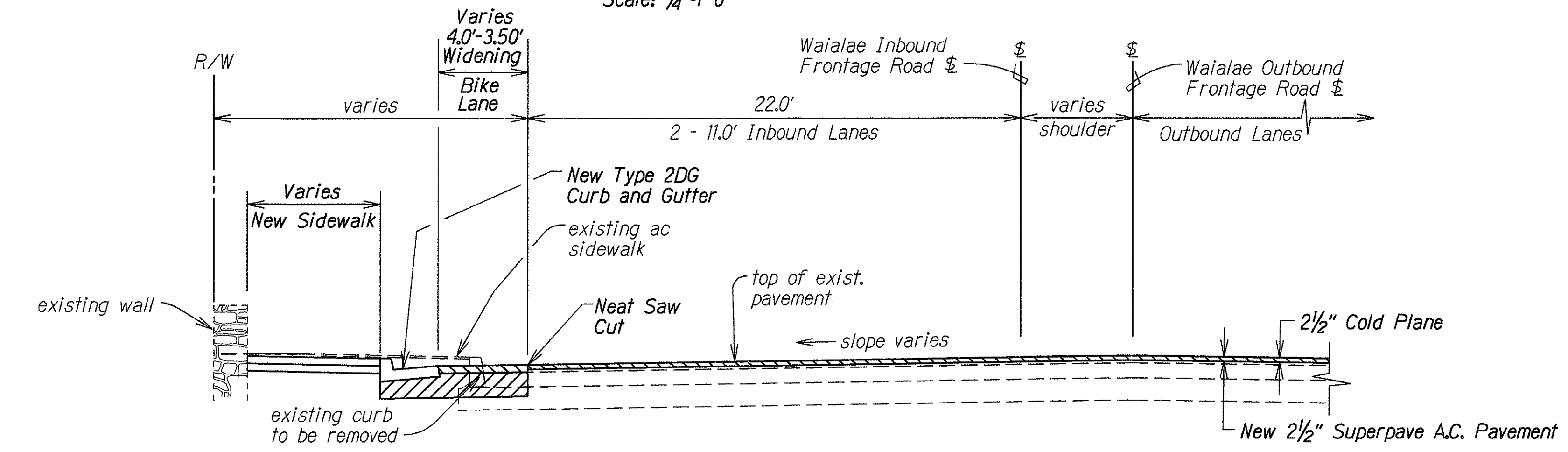
TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 3+25± TO STA. 4+15±
Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 0+55± TO STA. 1+53±
Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 2+75± TO STA. 3+25±
Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 0+00± TO STA. 0+55±
Scale: 1/4"=1'-0"

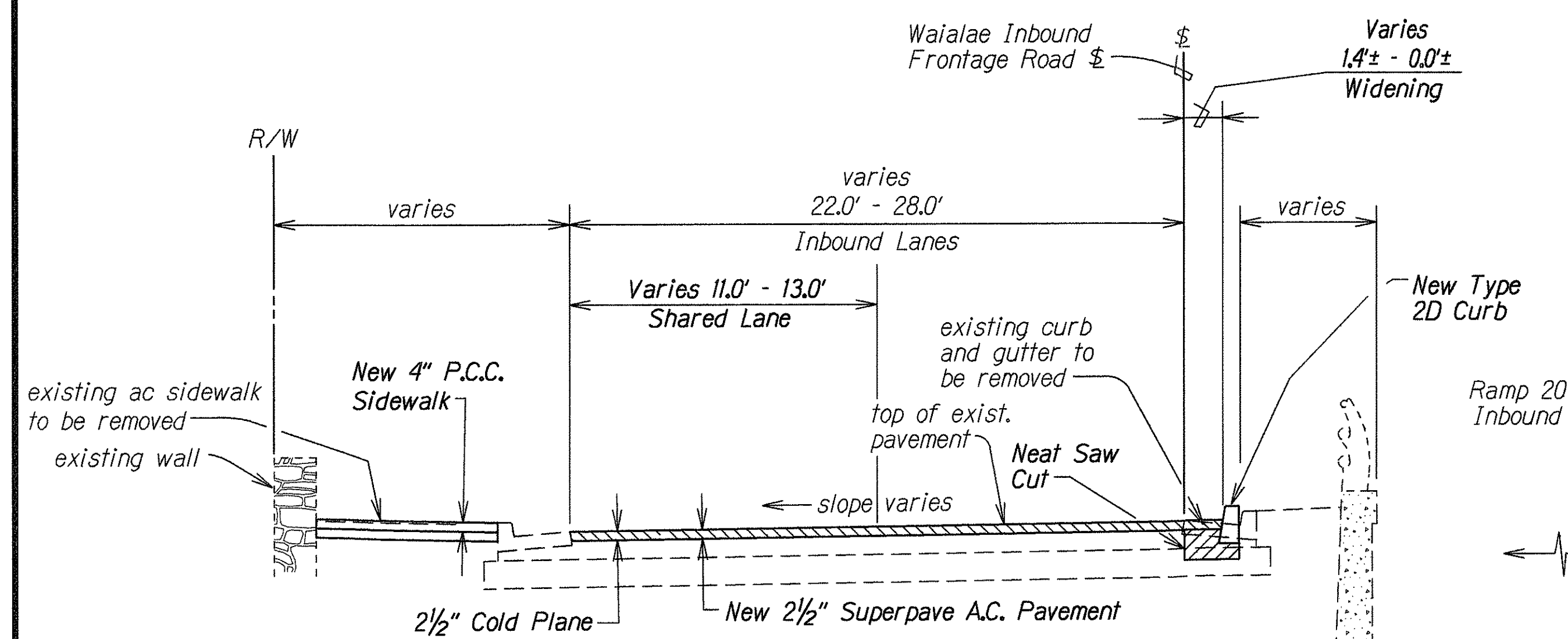
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

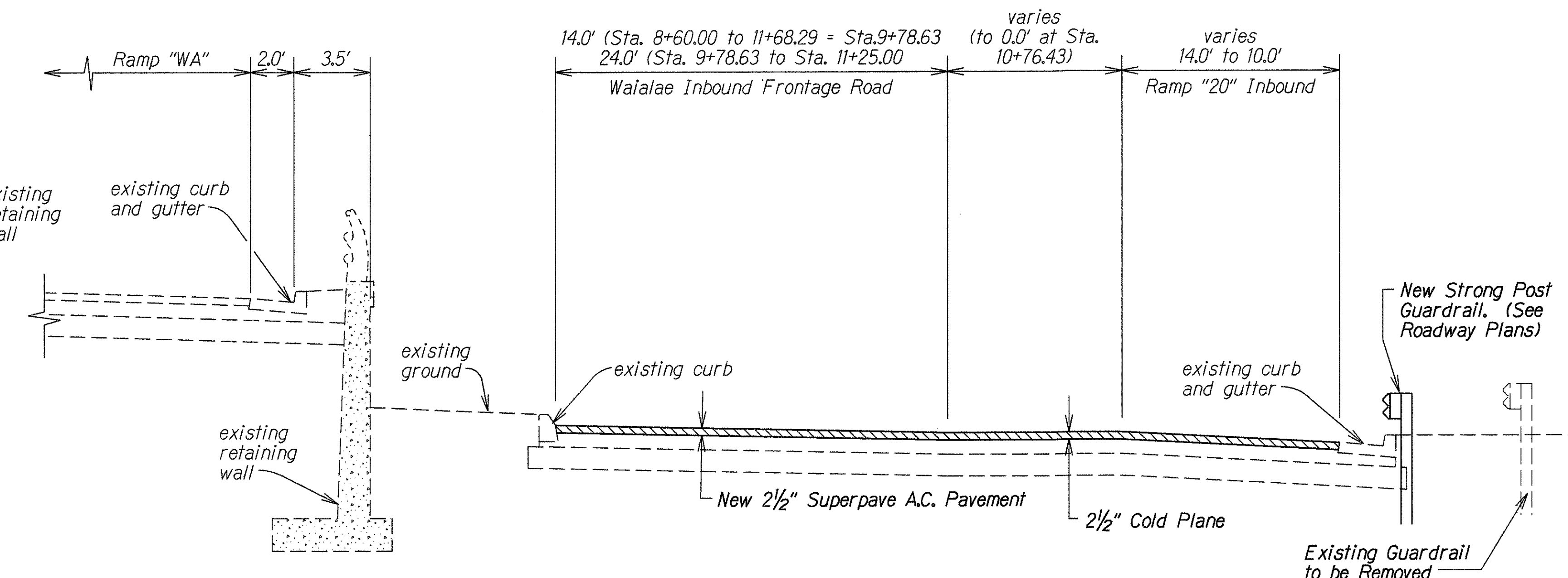
TYPICAL SECTIONS
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealahou Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)
Scale: As Shown Date: June, 2000

SHEET No. 2 OF 10 SHEETS

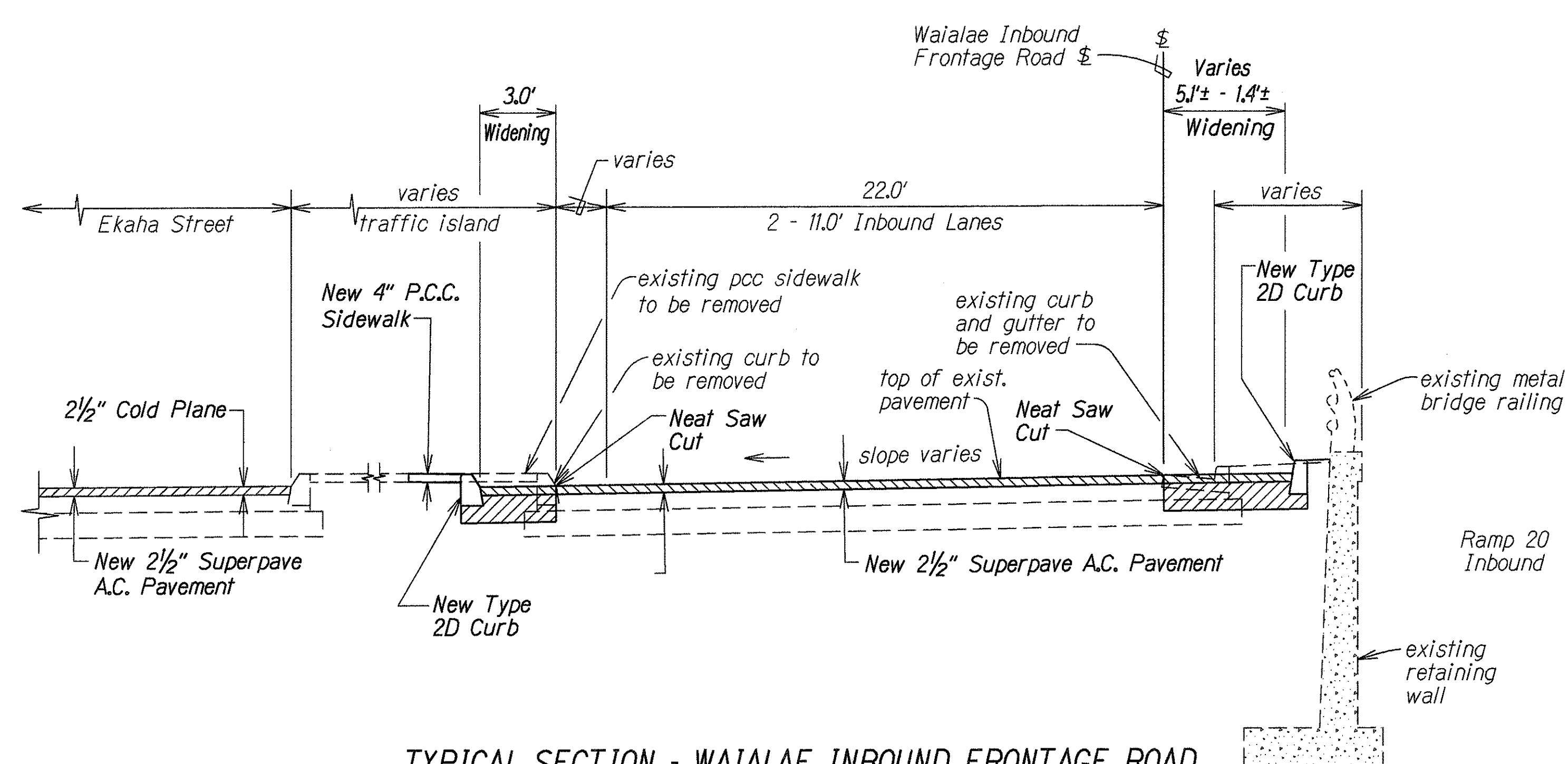
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	7	60



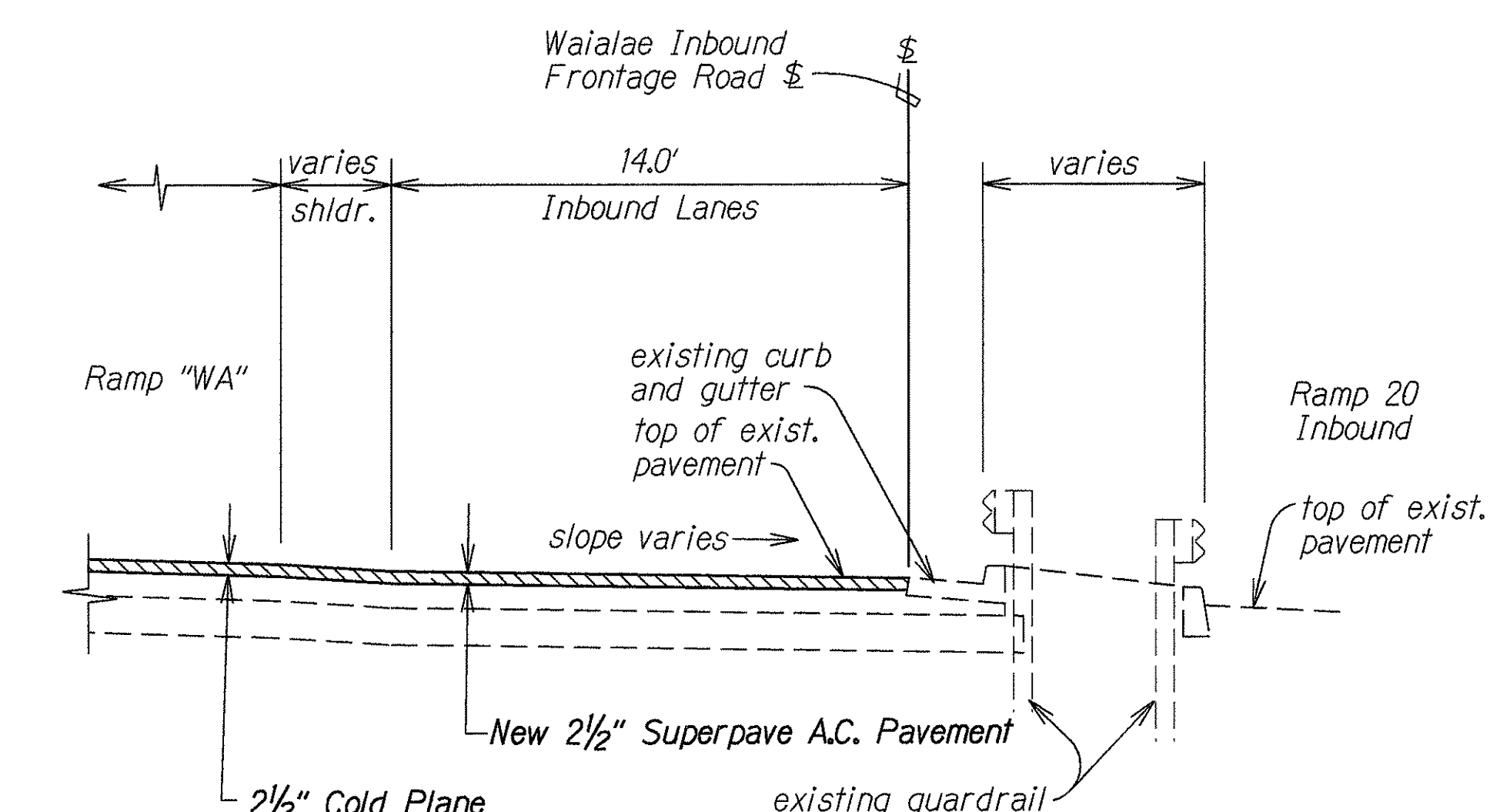
TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 4+62± TO STA. 7+08±
 Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 8+60± TO STA. 11+25±
 Scale: 1/4"=1'-0"



TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 4+15± TO STA. 4+62±
 Scale: 1/4"=1'-0"



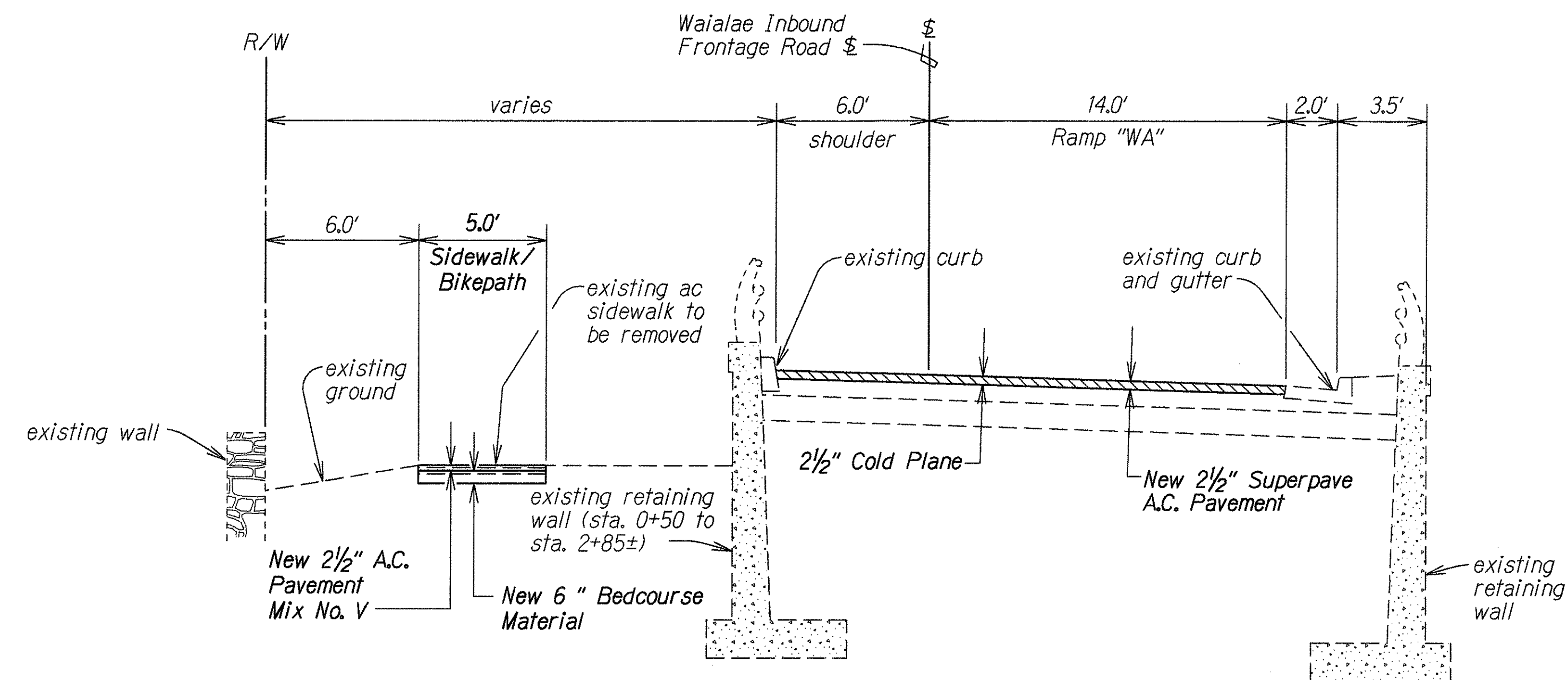
TYPICAL SECTION - WAIALAE INBOUND FRONTAGE ROAD
STA. 7+08± TO STA. 8+46±
 Scale: 1/4"=1'-0"

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
APPROVED BY	

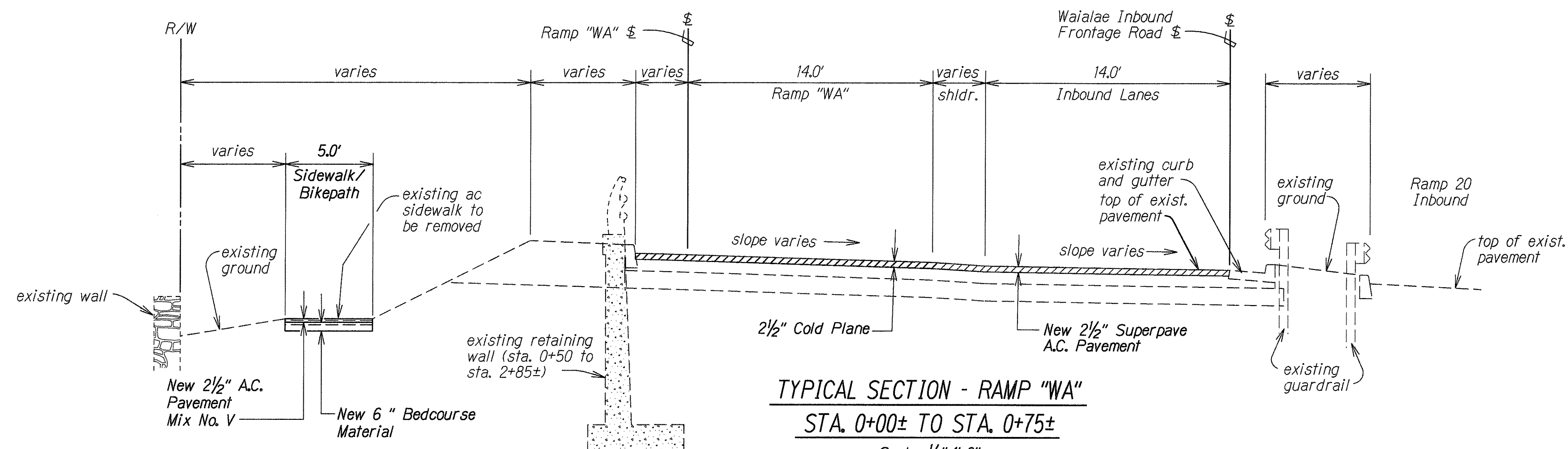
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTIONS
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
 Kealaolu Avenue to Kalanianaʻahele Highway
 and 17th Avenue to 21st Avenue
 Federal Aid Project No. CMAQ-0300(072)
 Scale: As Shown Date: June, 2000
 SHEET No. 3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	8	60



TYPICAL SECTION - RAMP "WA"
STA. 0+75± TO STA. 2+87±
 Scale: 1/4"=1'-0"



TYPICAL SECTION - RAMP "WA"
STA. 0+00± TO STA. 0+75±
 Scale: 1/4"=1'-0"

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

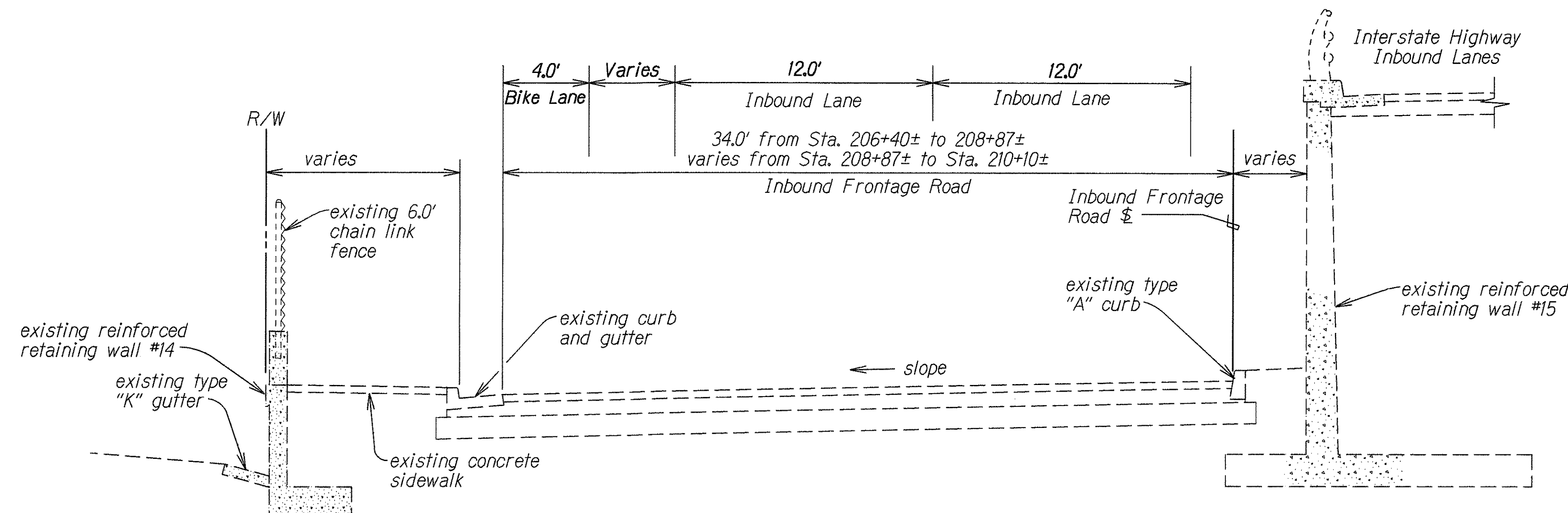
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTIONS
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)

Scale: As Shown Date: June, 2000

SHEET No. 4 OF 10 SHEETS

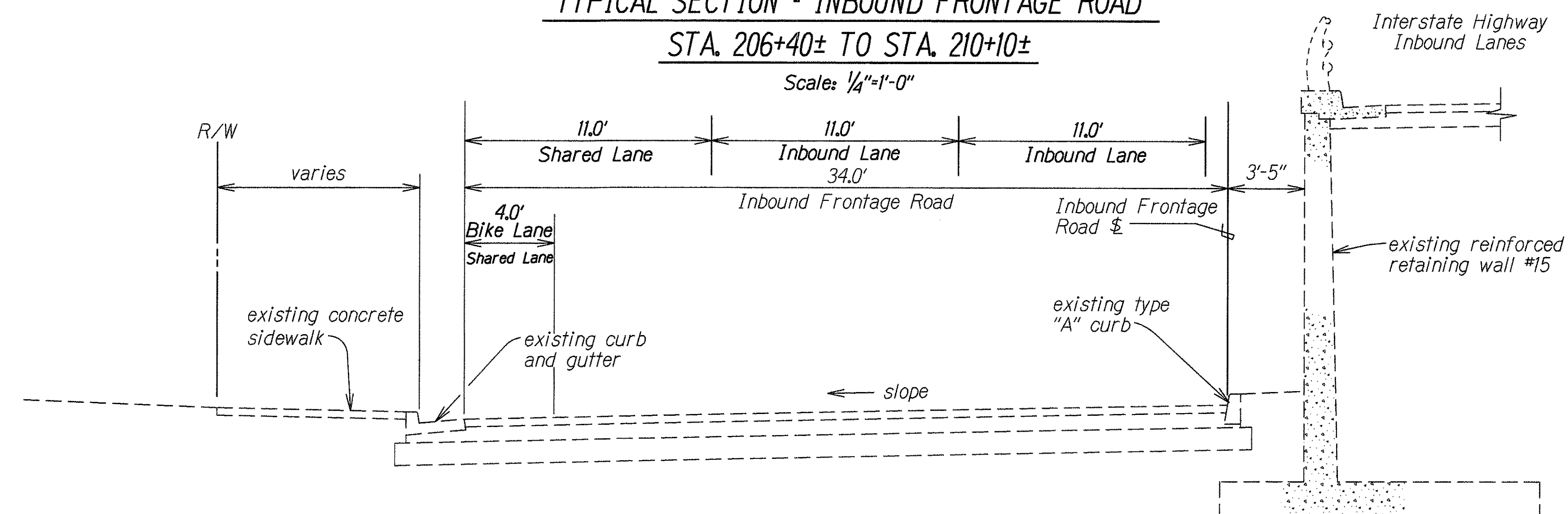
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	9	60



TYPICAL SECTION - INBOUND FRONTAGE ROAD

STA. 206+40± TO STA. 210+10±

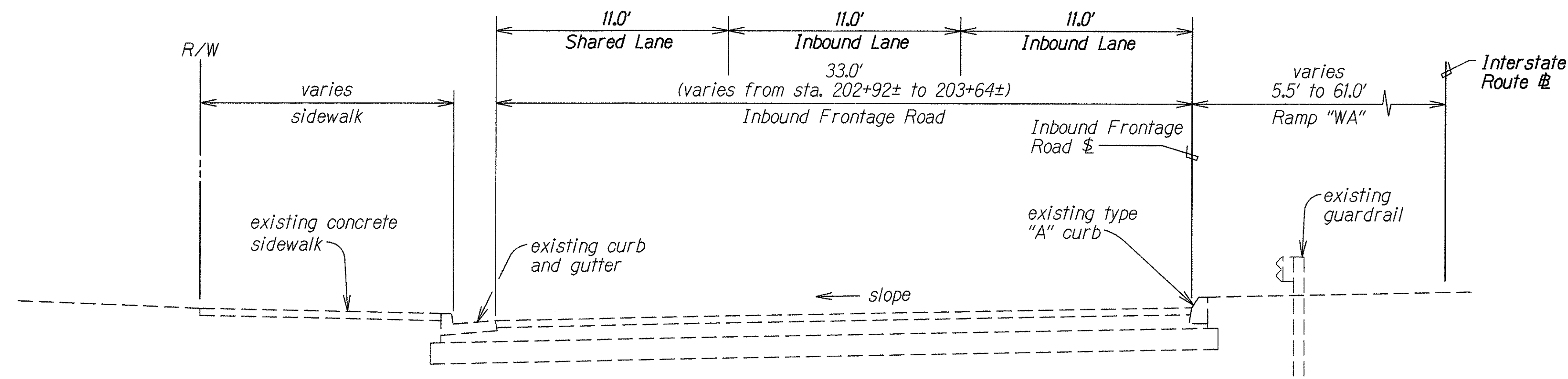
Scale: 1/4"=1'-0"



TYPICAL SECTION - INBOUND FRONTAGE ROAD

STA. 203+69± TO STA. 206+40±

Scale: 1/4"=1'-0"



TYPICAL SECTION - INBOUND FRONTAGE ROAD

STA. 200+00 TO STA. 203+69±

Scale: 1/4"=1'-0"

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

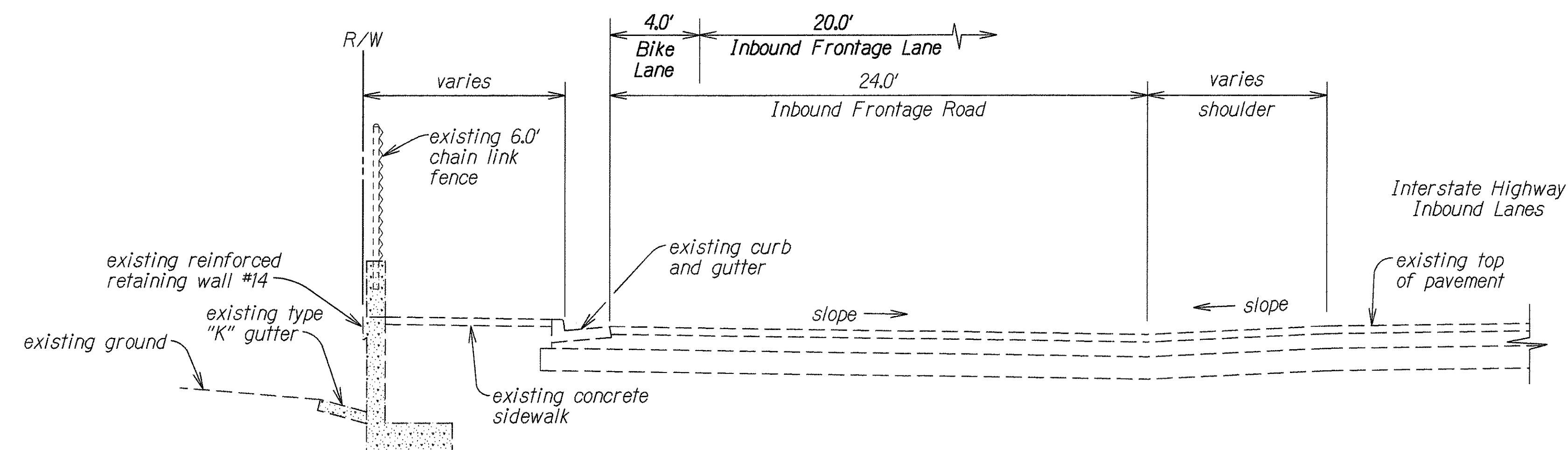
TYPICAL SECTIONS

Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)

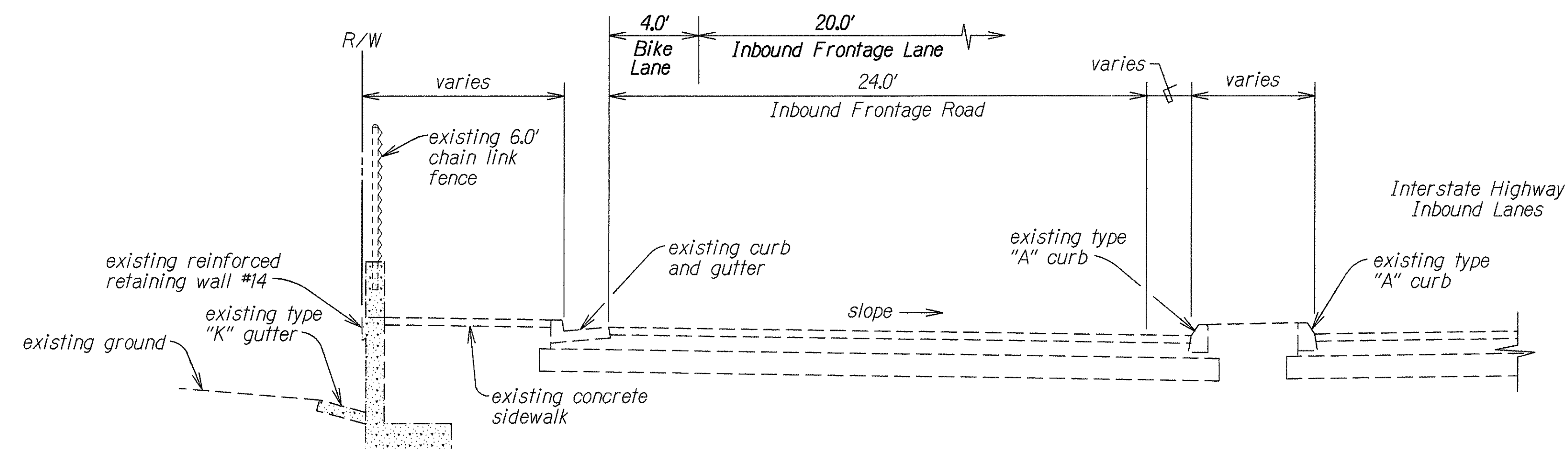
Scale: As Shown Date: June, 2000

SHEET No. 5 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	10	60



TYPICAL SECTION - INBOUND FRONTAGE ROAD
STA. 210+44± TO STA. 212+15±
 Scale: 1/4"=1'-0"



TYPICAL SECTION - INBOUND FRONTAGE ROAD
STA. 210+10± TO STA. 210+44±
 Scale: 1/4"=1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

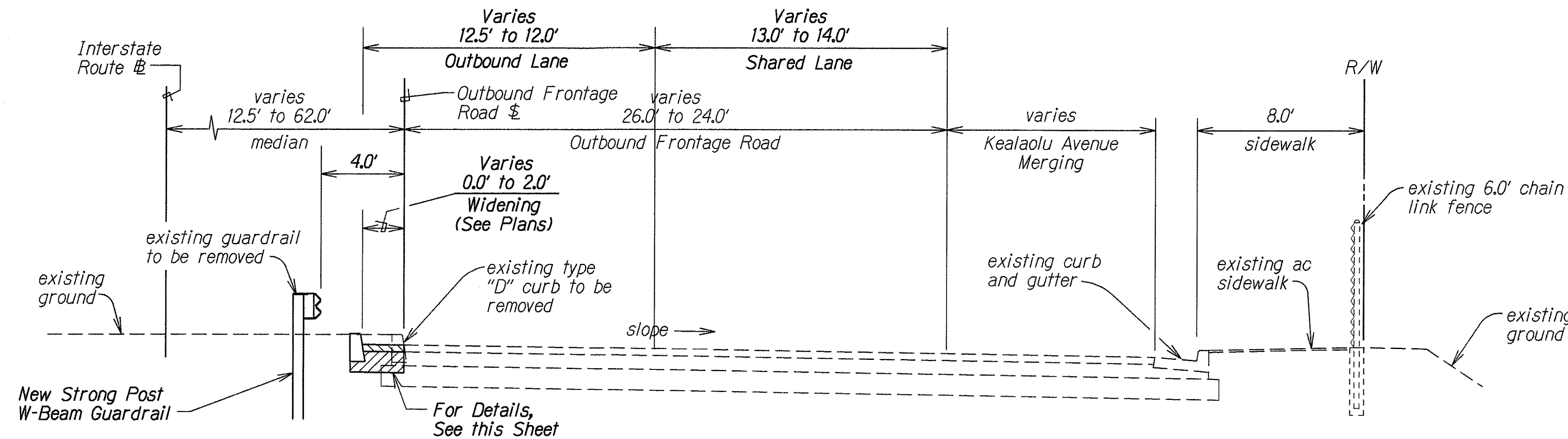
TYPICAL SECTIONS

*Waialae Avenue Shoulder Improvements
 For Bicycle Lanes
 Kealaolu Avenue to Kalanianaʻole Highway
 and 17th Avenue to 21st Avenue
 Federal Aid Project No. CMAQ-0300(072)*

Scale: As Shown Date: June, 2000

SHEET No. 6 OF 10 SHEETS

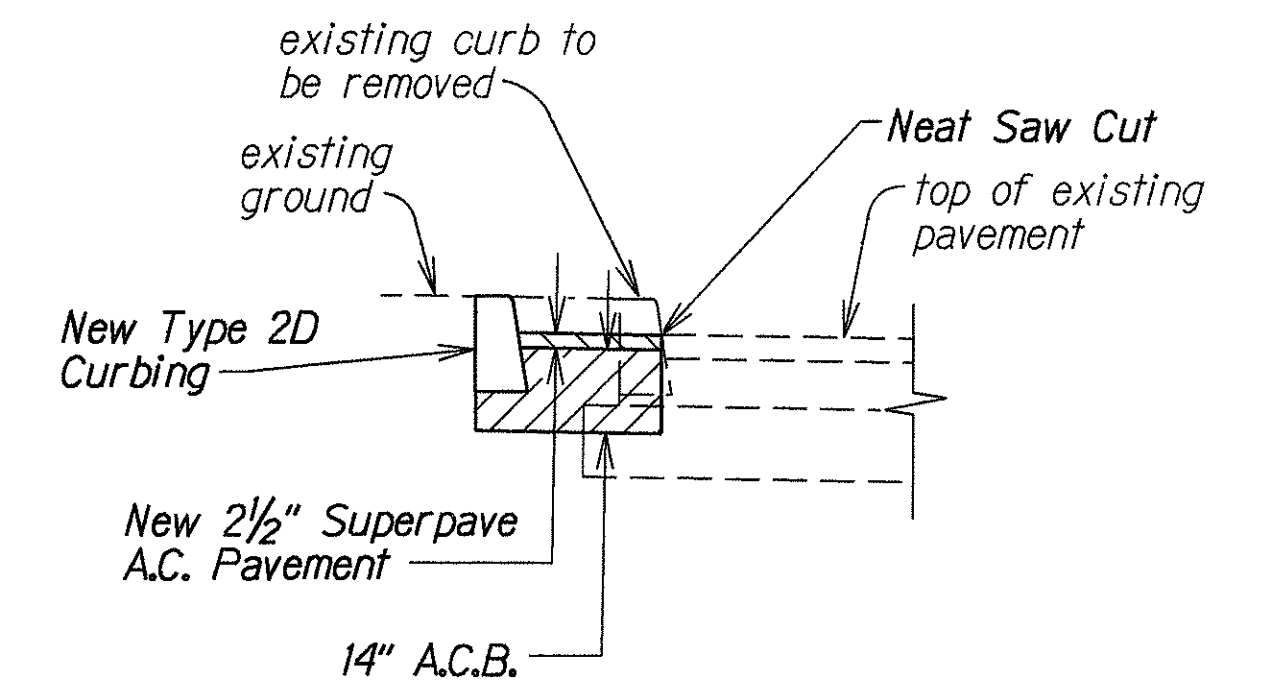
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	11	60



TYPICAL SECTION - OUTBOUND FRONTAGE ROAD

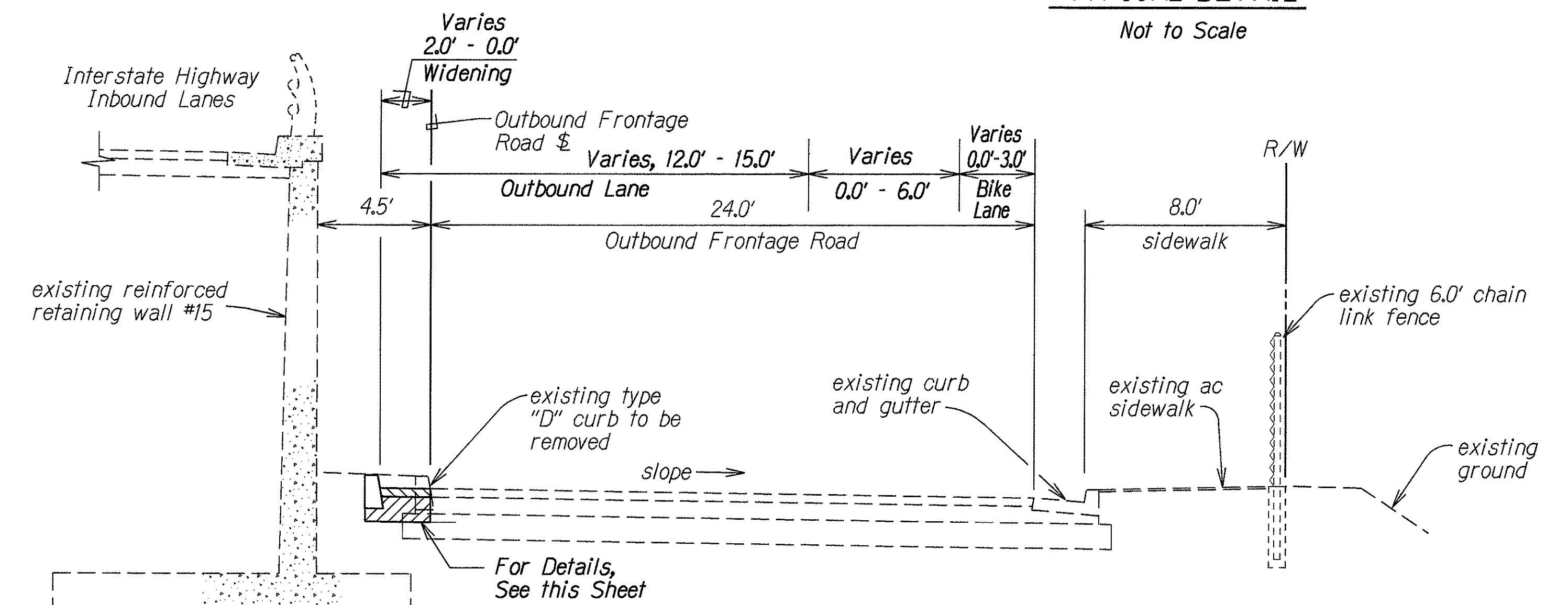
STA. 202+90± TO STA. 203+73±

Scale: 1/4"=1'-0"



TYPICAL DETAIL

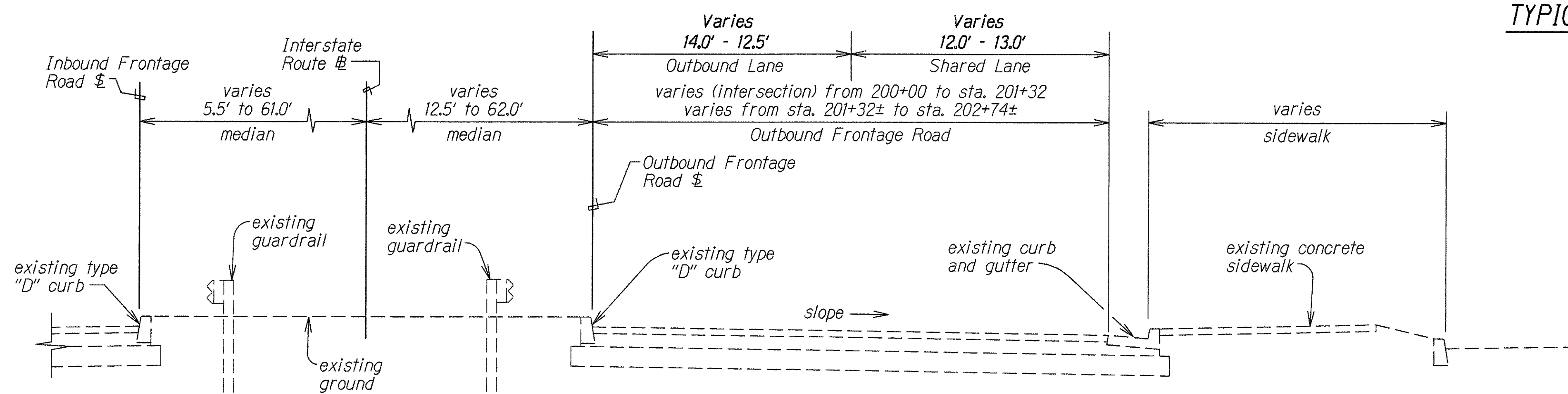
Not to Scale



TYPICAL SECTION - OUTBOUND FRONTAGE ROAD

STA. 203+73± TO STA. 208+10±

Scale: 1/4"=1'-0"



TYPICAL SECTION - OUTBOUND FRONTAGE ROAD

STA. 200+00 TO STA. 202+90±

Scale: 1/4"=1'-0"

DATE	11/1/00
DESIGNED BY	W. J. B. / 11/1/00
CHECKED BY	W. J. B. / 11/1/00
NOTED BY	W. J. B. / 11/1/00
ORIGINAL PLAN	11/1/00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

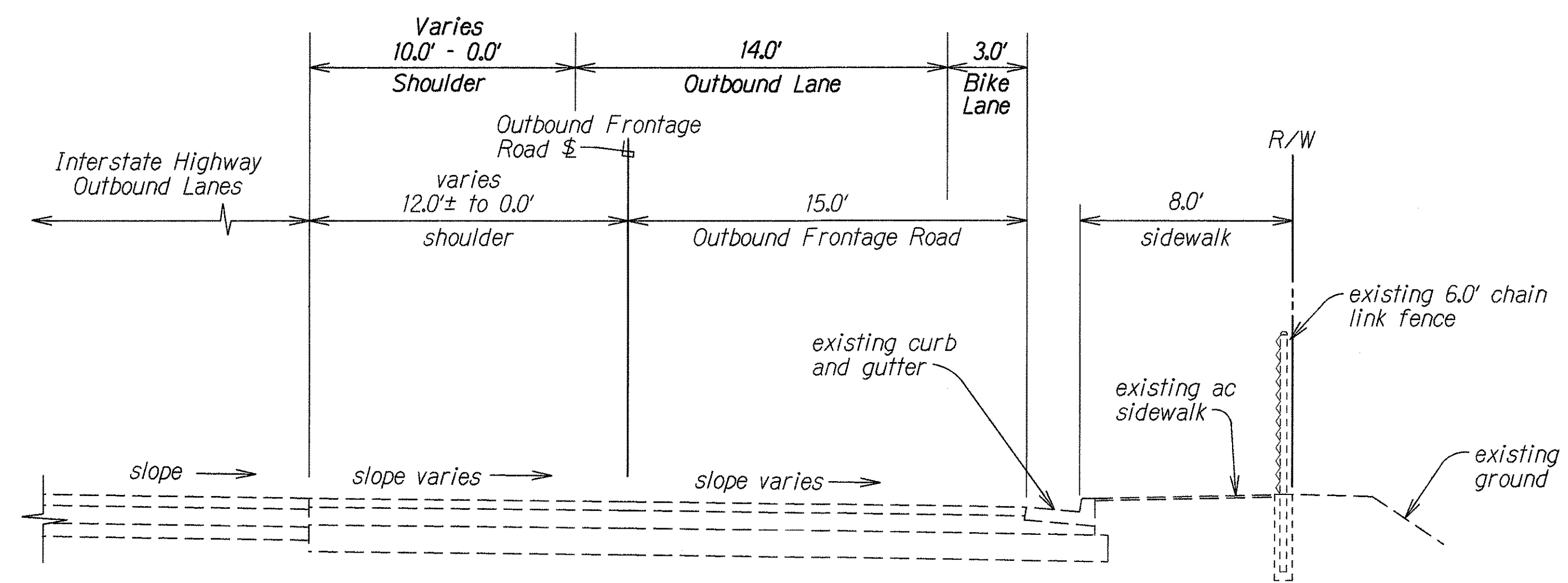
TYPICAL SECTIONS

Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)

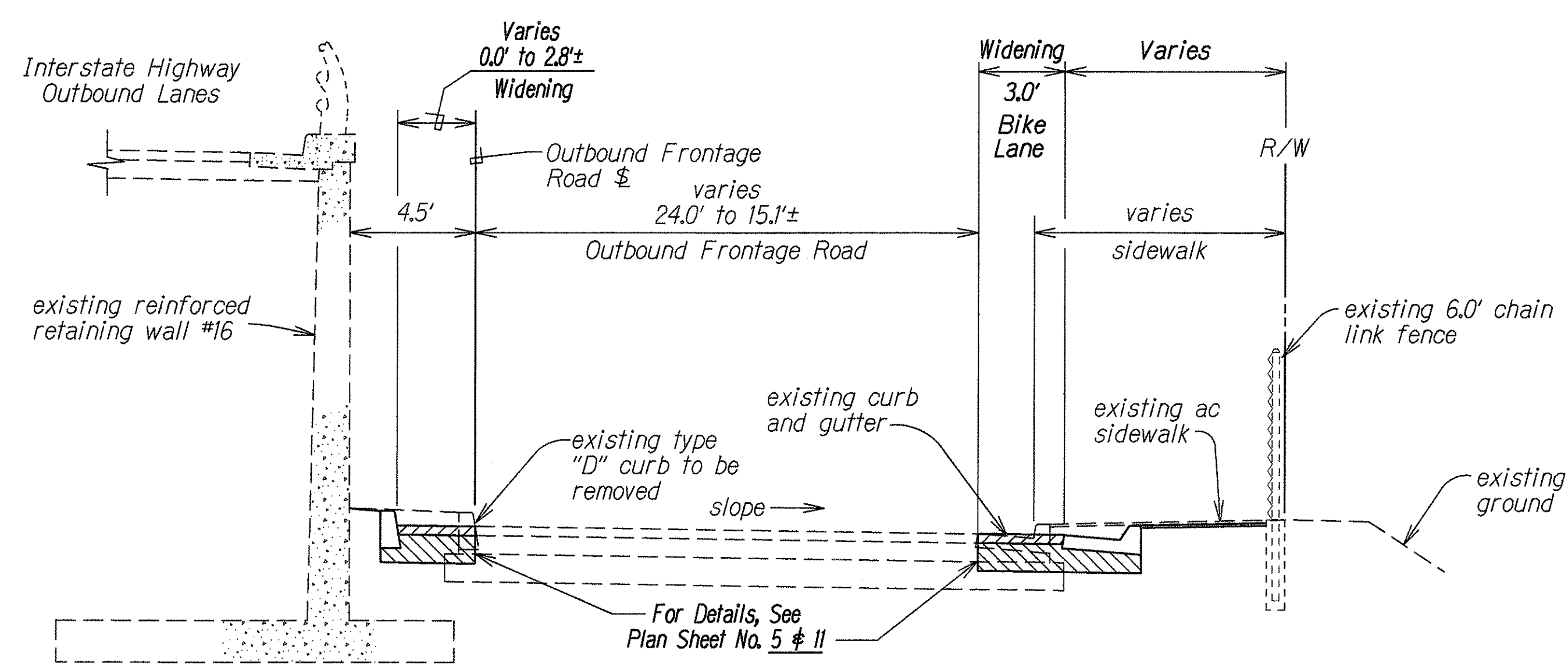
Scale: As Shown Date: June, 2000

SHEET No. 7 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(072)	2000	12	60



TYPICAL SECTION - OUTBOUND FRONTAGE ROAD
STA. 210+30± TO STA. 212+02±
 Scale: 1/4"=1'-0"



TYPICAL SECTION - OUTBOUND FRONTAGE ROAD
STA. 208+10± TO STA. 210+30±
 Scale: 1/4"=1'-0"

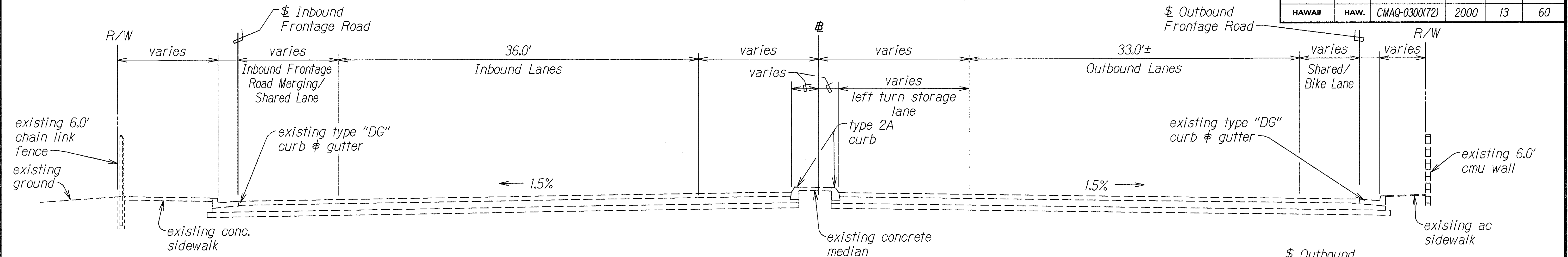
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	
CHECKED BY	DESIGNED BY	
	REVIEWED BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

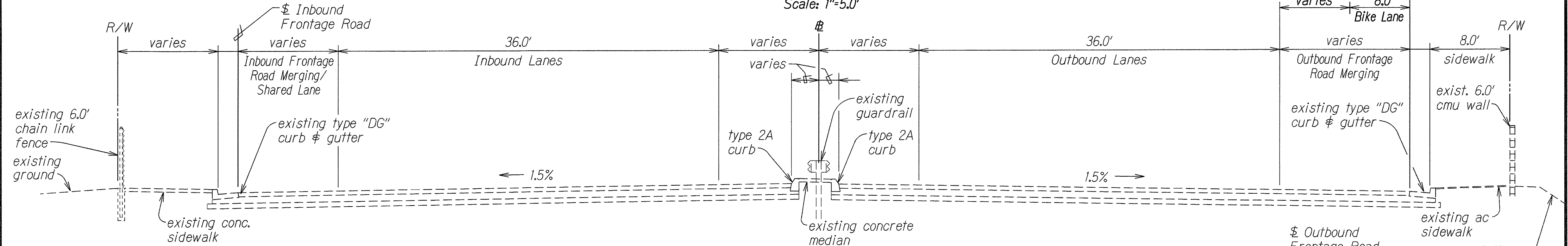
TYPICAL SECTIONS
Waialae Avenue Shoulder Improvements
For Bicycle Lanes
Kealaolu Avenue to Kalanianaʻole Highway
and 17th Avenue to 21st Avenue
Federal Aid Project No. CMAQ-0300(072)
Scale: As Shown Date: June, 2000

SHEET No. 8 OF 10 SHEETS

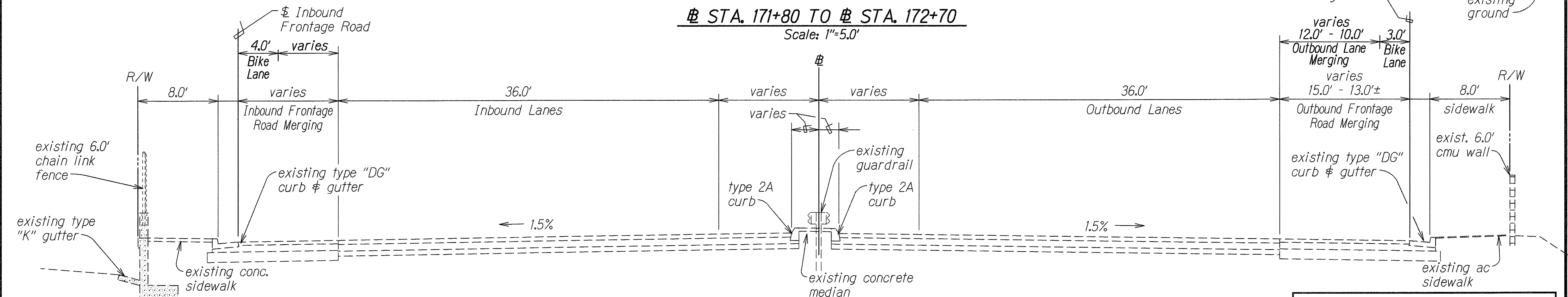
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	13	60



STA. 172+70 TO STA. 175+13
Scale: 1"=5.0'



STA. 171+80 TO STA. 172+70
Scale: 1"=5.0'



STA. 171+07± TO STA. 171+80
Scale: 1"=5.0'

DATE	10-7-99
SURVEY PLOTTED BY	
DRAWN BY	A. Kawahara
DESIGNED BY	M. Arita
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	002
DATE	10-7-99
BY	MS/MS/MS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS

**Wai'alea Avenue Shoulder Improvements
For Bicycle Lanes**

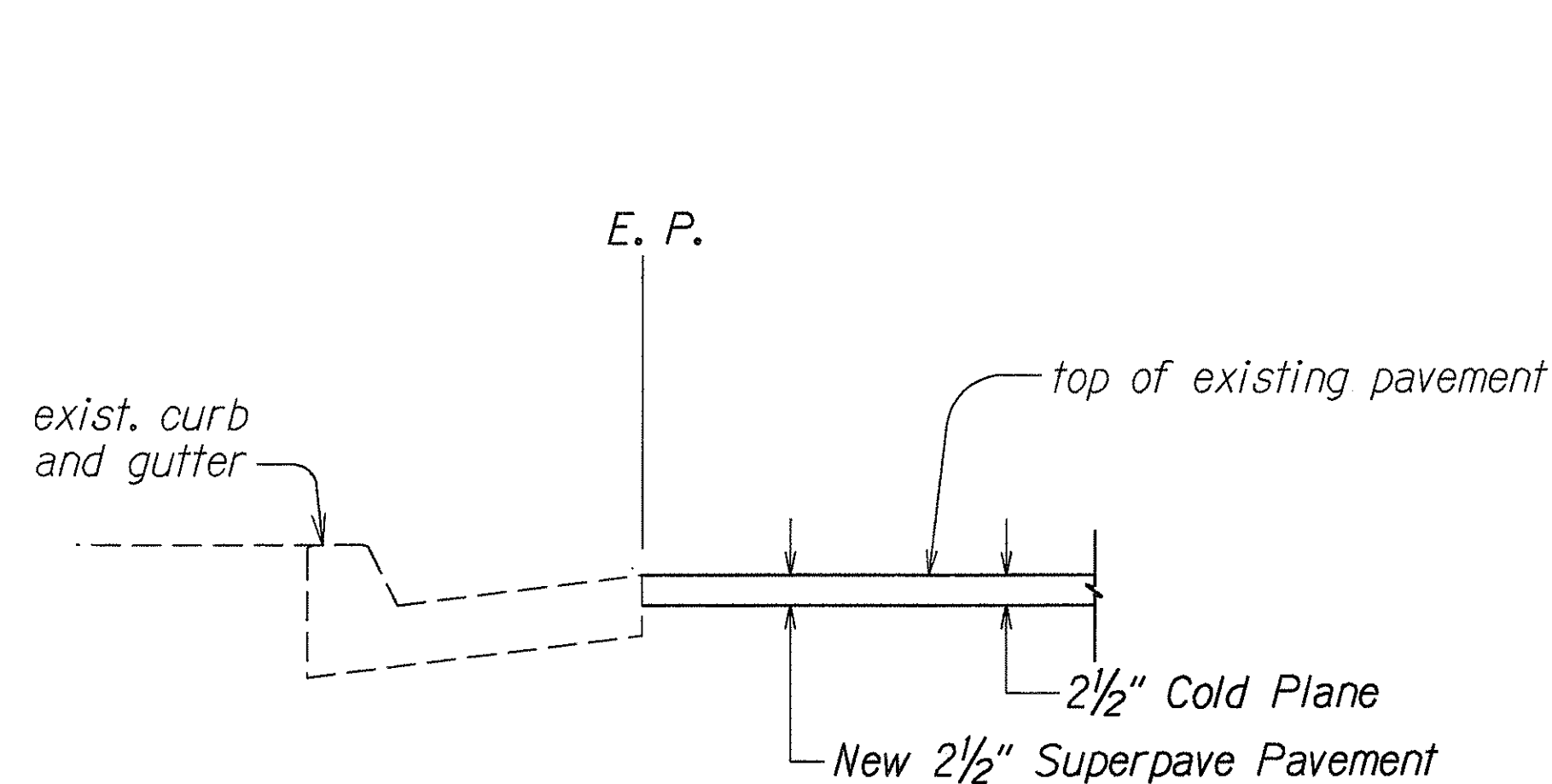
**Kealahou Avenue to Kalaniana'ole Highway
and 17th Avenue to 21st Avenue**

Federal Aid Project No. CMAQ-0300(72)

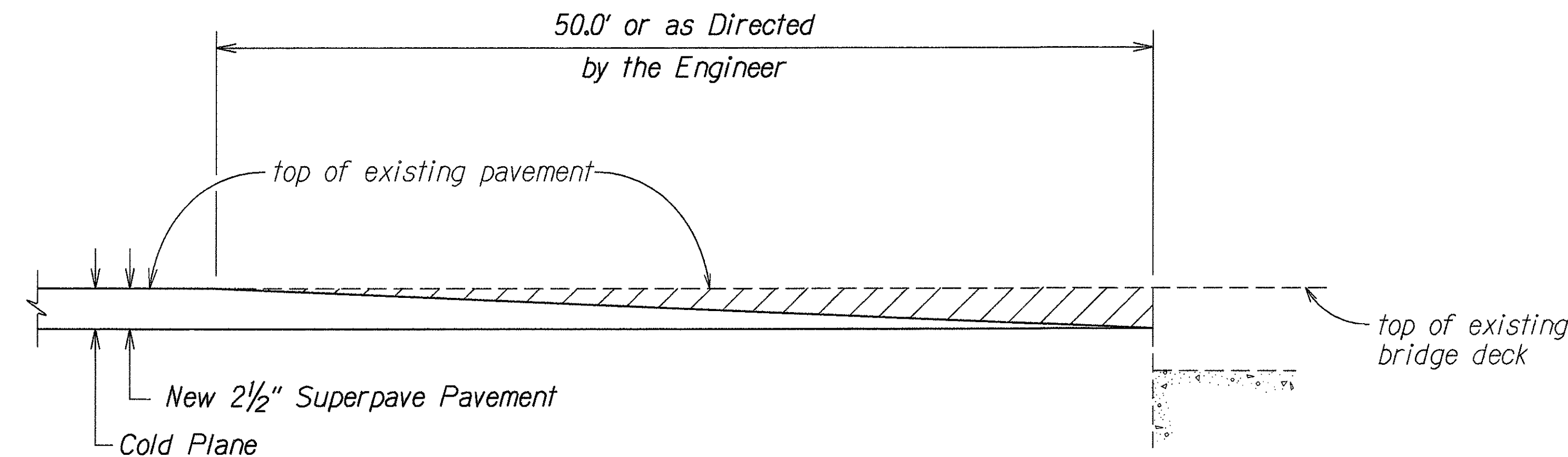
Scale: As Shown Date: June, 2000

SHEET No. 9 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-0300(72)	2000	14	60

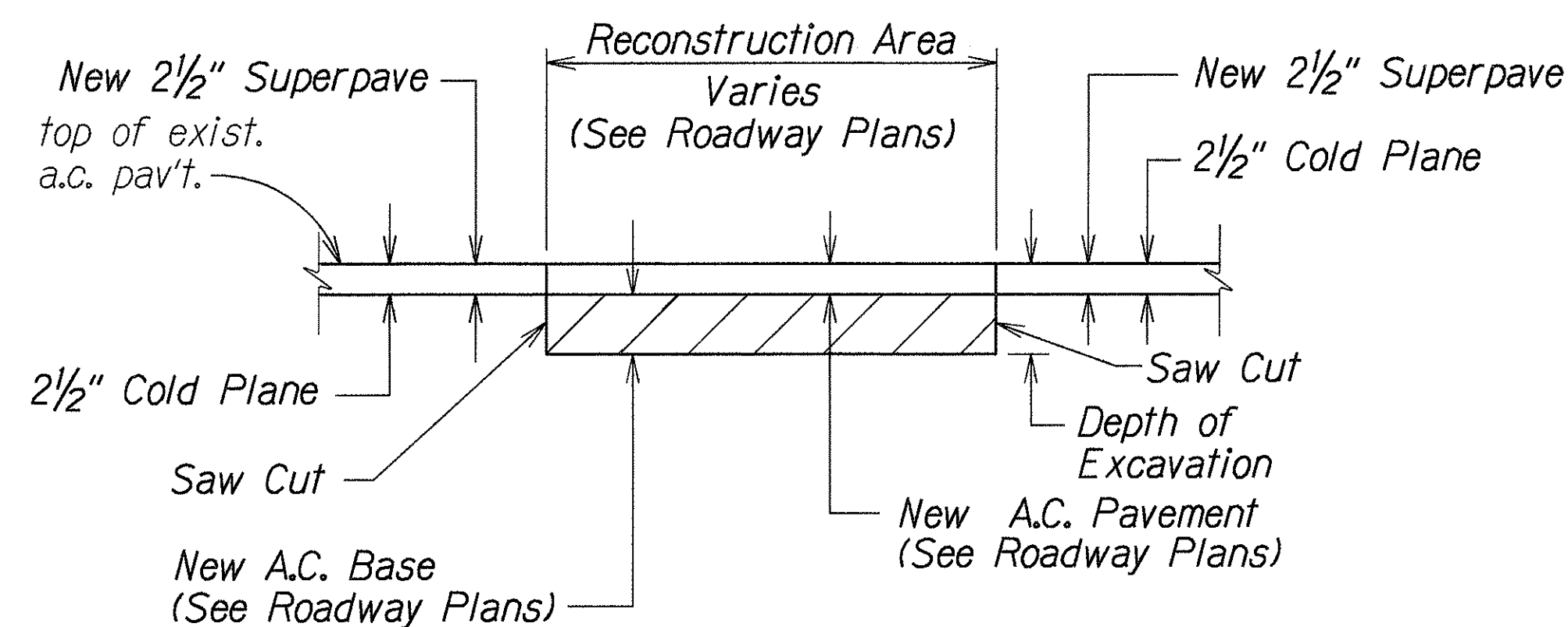


RESURFACING AT CURB AND GUTTER
WITH TAPER ENDING AT EDGE OF GUTTER
Not To Scale

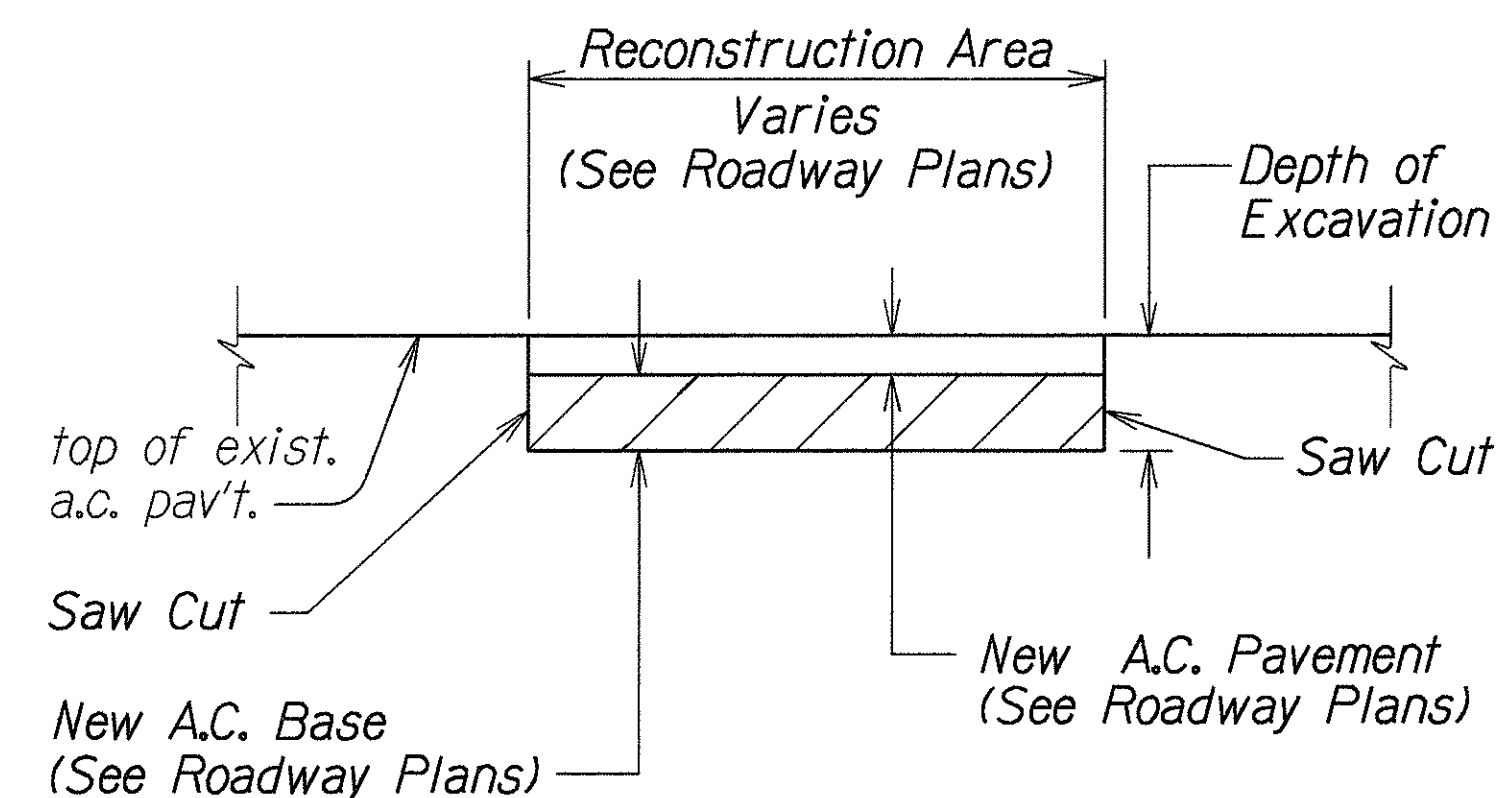


Note: In cold planing the pavement over the structure, the Contractor shall exercise care not to damage any portion of the structure, especially the slab, joints, drainage pipes or reinforcement. Any damage to the structure during the cold planing operations shall be repaired by the Contractor at his expense. Repair work shall be directed by the Engineer. The Contractor shall verify the thickness of the pavement by taking several measurements throughout the structure.

COLD PLANED TRANSITION AND RESURFACING
AT EXISTING STRUCTURE
Not to Scale



A.C. PAVEMENT RECONSTRUCTION DETAIL
Waialae Avenue @ Sta. 74+92± to
Interstate Route H-1, @ Sta. 143+50±
Not To Scale



A.C. PAVEMENT RECONSTRUCTION DETAIL
Interstate Route H - 1
@ Sta. 159+05± to @ Sta. 175+62±
Not To Scale

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NOTED BY	
REVISIONS	
DATE	
BY	
DESCRIPTION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS
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: None Date: June, 2000