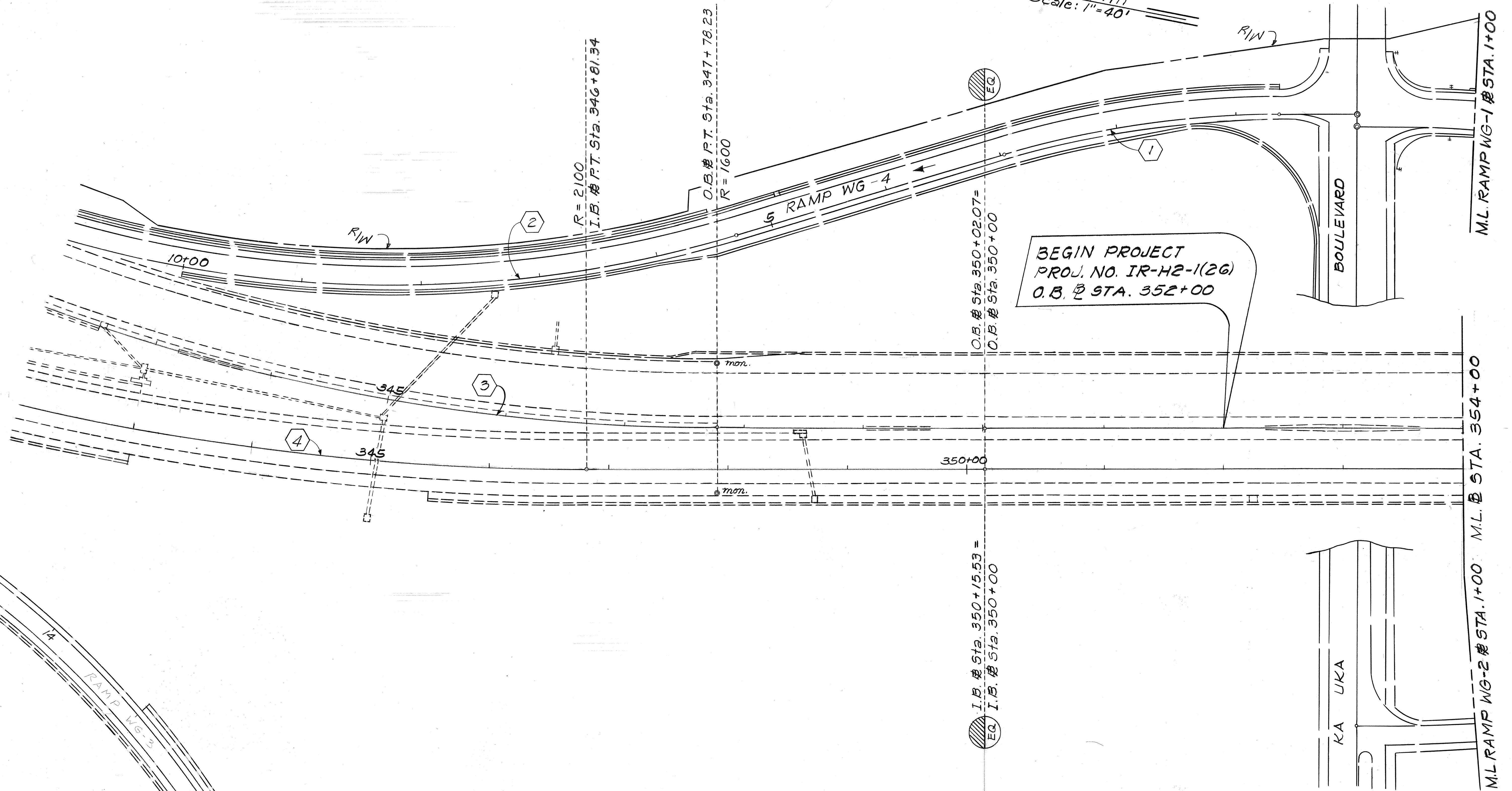


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	14	107

True North
Scale: 1"=40'



Curve No.	1	2	3	4
Δ	16°40'00"	46°10'56"	43°32'00"	38°20'00"
R	800.00'	1,000.00'	1,600.00'	2,100.00'
L	232.71'	806.03'	1,215.68'	1,404.99'
T	117.18'	426.35'	638.87'	729.93'
S.E.	2.0%	7.7%	9.8%	9.0%

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

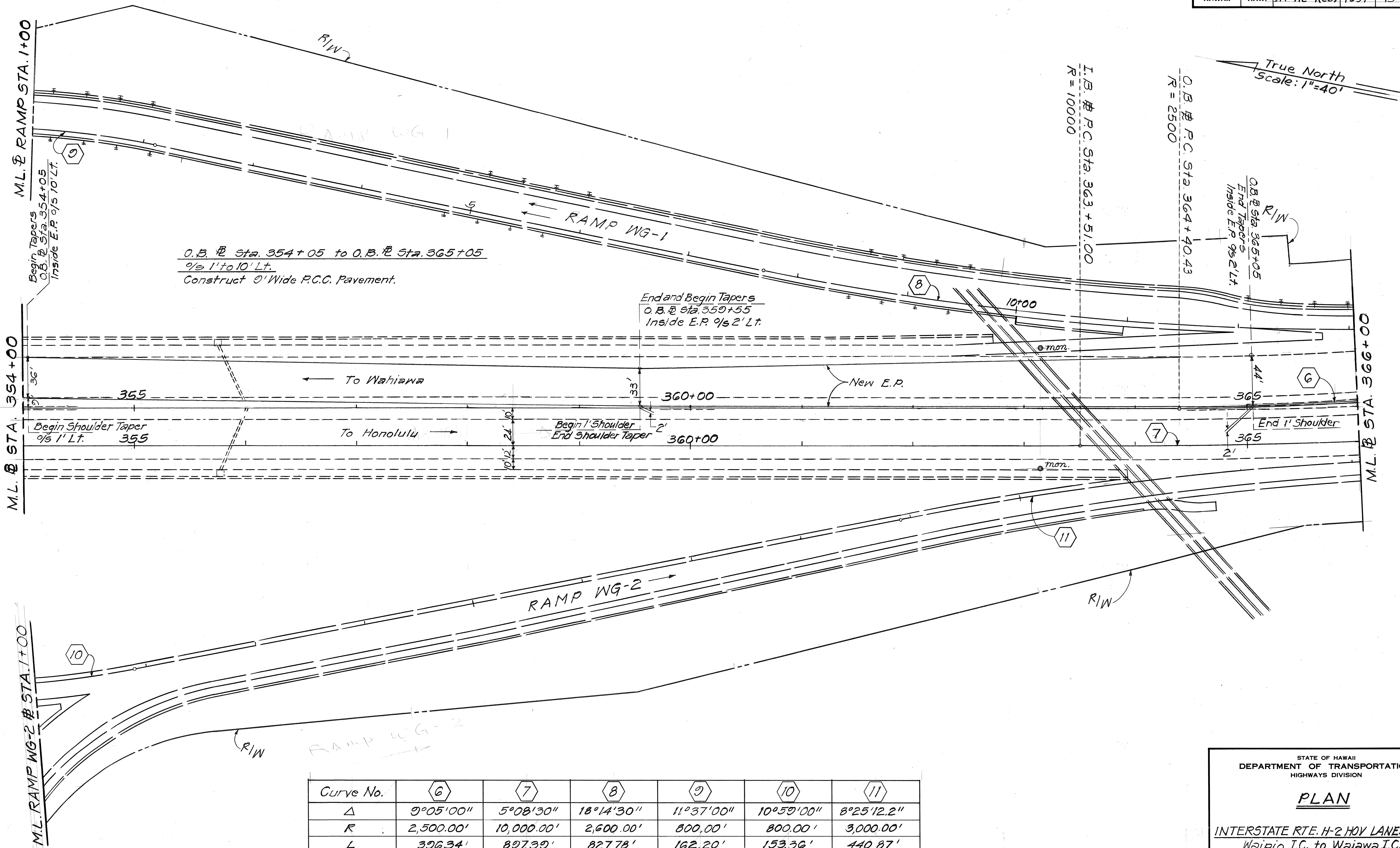
PLAN

INTERSTATE RTE. H-2 HOV LANES, PH. I
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)
Scale: 1"=40' Date: _____

SHEET NO. 1 OF 2 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO.	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	15	107



Curve No.	6	7	8	9	10	11
Δ	9°05'00"	5°08'30"	18°14'30"	11°37'00"	10°59'00"	8°25'12.2"
R	2,500.00'	10,000.00'	2,600.00'	800.00'	800.00'	3,000.00'
L	396.34'	897.39'	827.78'	162.20'	153.36'	440.87'
T	198.58'	449.00'	417.42'	81.38'	76.91'	220.83'
S.E.	8.2%	2.0%	4.2%	2.0%	2.0%	3.5%

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

INTERSTATE RTE. H-2 HOV LANES, PH. I
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)

Scale: 1"=40' Date:

SHEET NO. 2 OF 2 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	16	107

O.B. Sta. 365+05 to Sta. 368+36.77
 1/2 2' Rt. to 10' Lt.
 Construct 8' Wide P.C.C. Pavement.
 Construct 1' to 4' Wide Varying P.C.C. Shoulder.

O.B. Sta. 368+36.77 to Sta. 371+80
 1/2 6' Rt. to 10' Lt.
 Construct 8' to 12' Wide Varying P.C.C. Pavement.
 Construct 4' Wide P.C.C. Shoulder.

O.B. Sta. 371+80 to Sta. 375+35 1/2 6' Rt. to 10' Lt.
 Construct 12' to 6' Wide Varying P.C.C. Pavement.
 Construct 4' to 5' Wide Varying P.C.C. Shoulder.

O.B. Sta. 371+80 to Sta. 375+35 1/2 46' to 62' Lt.
 Construct 0' to 6' Wide Varying P.C.C. Pavement.
 Construct 10' Wide P.C.C. Shoulder.

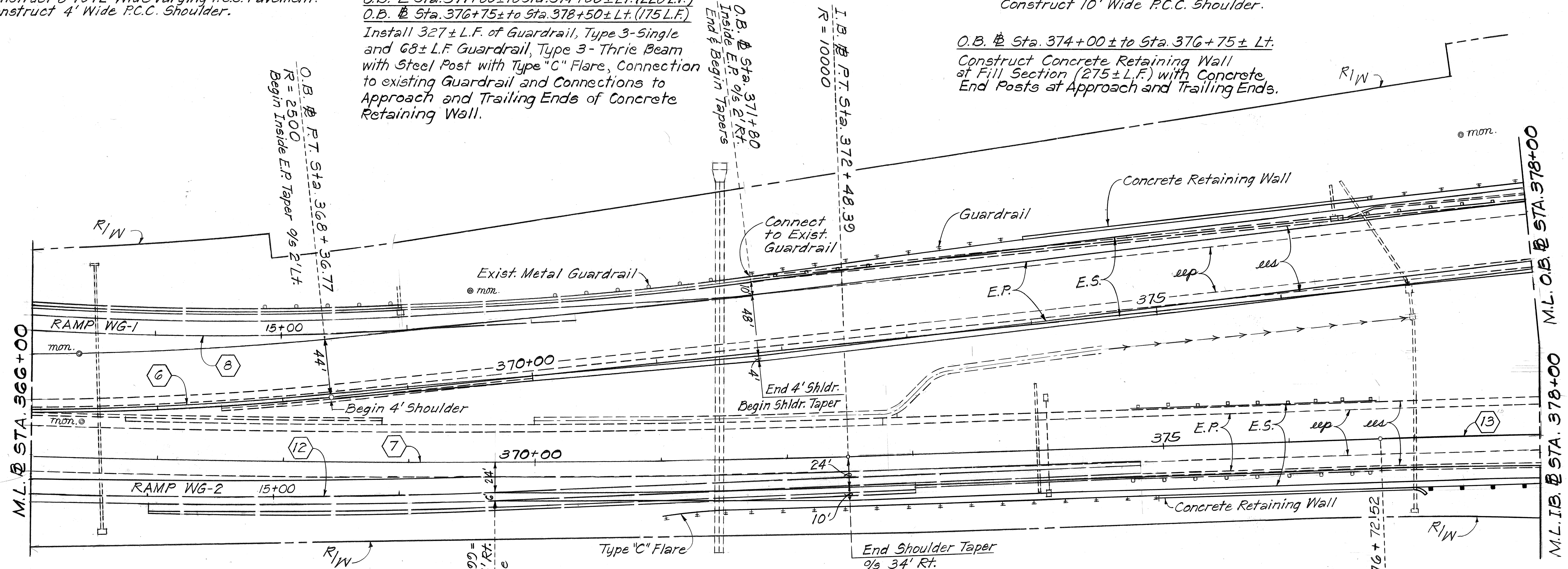
O.B. Sta. 371+80 to Sta. 374+00 Lt. (220 L.F.)
 O.B. Sta. 376+75 to Sta. 378+50 Lt. (175 L.F.)
 Install 327 ± L.F. of Guardrail, Type 3-Single and 68 ± L.F. Guardrail, Type 3-Thrie Beam with Steel Post with Type "C" Flare, Connection to existing Guardrail and Connections to Approach and Trailing Ends of Concrete Retaining Wall.

O.B. Sta. 375+35 to Sta. 378+20.50
 1/2 1' Rt. to 10' Lt.
 Construct 6' Wide P.C.C. Pavement.
 Construct 5' to 0' Wide Varying P.C.C. Shoulder.

O.B. Sta. 375+35 to Sta. 378+20.50
 1/2 46' to 68' Lt.
 Construct 6' to 12' Wide Varying P.C.C. Pavement.
 Construct 10' Wide P.C.C. Shoulder.

O.B. Sta. 374+00 to Sta. 376+75 Lt.
 Construct Concrete Retaining Wall at Fill Section (275 ± L.F.) with Concrete End Posts at Approach and Trailing Ends.

True North
 Scale: 1"=40'



Ramp WG-2 Sta. 369+69 to Sta. 371+80
 I.B. Sta. 369+69 to Sta. 371+80
 Begin New 12' Lane Shoulder Taper AC

I.B. Sta. 369+69 to Sta. 372+48.39 1/2 12' to 34' Rt.
 Construct 12' Wide P.C.C. Pavement AC.
 Construct 6' to 10' Wide Varying P.C.C. Shoulder.
 New A.C. Pavement shall consist of 2 1/2" A.C. Pav't. Mix No. I & 9 3/4" A.C.B.

I.B. Sta. 371+00 to Sta. 375+00 Rt.
 Install 366 ± L.F. of Guardrail, Type 3-Single and 34 ± L.F. of Guardrail, Type 3-Thrie Beam with Steel Post with Type "C" Flare and Connection to Approach End of Concrete Retaining Wall.

I.B. Sta. 375+00 to Sta. 377+00 Rt.
 Construct Concrete Retaining Wall @ Fill Section (200 ± L.F.) with Concrete End Post @ Approach End.

Sta. 376+27 ±
 Provide Concrete End Post at trailing end of Retaining Wall.
 Sta. 376+27 ± to Sta. 380+00 ±
 HVFM-3
 Install 269 L.F. of Guardrail Type-3 Single, & 34 ± L.F. of Guardrail w/Steel Post w/Type "F" Flares.

Curve No.	6	7	8	12	13
Δ	9°05'00"	5°08'30"	18°14'30"	1°58'36.4"	8°55'30"
R	2,500.00'	10,000.00'	2,000.00'	10,000.00'	5,000.00'
L	396.34'	897.39'	827.78'	345.01'	778.85'
T	198.58'	449.00'	417.42'	172.52'	390.22'
S.E.	8.2%	2.0%	4.2%	2.0%	4.6%

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PLAN

INTERSTATE RTE. H-2 HOV LANES, PH. I
 Waipio I.C. to Waiawa I.C.
 F.A.I. Proj. No. IR-H2-1(26)
 Scale: 1"=40' Date: _____

SHEET No. 3 OF 3 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

O.B. $\frac{B}{E}$ Sta. $364+50 \pm$ to Sta. $367+80 \pm$ Lt.
Install $330 \pm$ L.F. of Guardrail, Type 3 -
Single with Steel Post with Type "F" and
"C" Flares.

Hand-drawn engineering plan view of a highway section from station 378+00 to 390+00. The drawing shows two travel lanes with various flare types (Type "C" and Type "F"), shoulder tapers, and a concrete retaining wall. Key points include the End of Shoulder Taper at Sta. 378+90.50, the O.B. & P.T. at Sta. 384+04.16, and the station 385. The drawing also indicates Right of Way (R/W) lines, centerlines (C.L.), and various offset lines (E.P., E.S., c.e.p., c.e.s.). A note at the bottom left specifies: "Sta. 380+00± to Sta. 382 HVM-70 Delete Type "C" Flare Install 200± L.F. of Guardrail, Type 3-Single". A north arrow in the top right corner indicates "True North" with a scale of 1"=40'.

I.B. & Sta. 382+00 to Sta. 382+50 R+ (50 L.F.)
Install 16 ± L.F. of Guardrail, Type 3-Single and 34 ± L.F.
of Guardrail, Type 3-Thrie Beam with Steel Post with Type "C"
Flare and Connection to Approach End of Concrete Retaining
Wall.

I.B. & Sta. 382+50 to Sta. 403+75 R.A.
Construct Concrete Retaining Wall at
cut Section (2,125 L.F.) with Concrete
End Post at Approach End.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

INTERSTATE RTE. H-2 HOV LANES, PH. I
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)

Scale: 1"= 40' Date:

SHEET NO. 4 OF 2 SHEETS

ADD. 17

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	18	107

Curve No.	15	16
Δ	28°30'20"	20°36'00"
R	2,000.00'	2,000.00'
L	995.03'	1,033.24'
T	508.04'	528.42'
S.E.	9.2%	9.2%

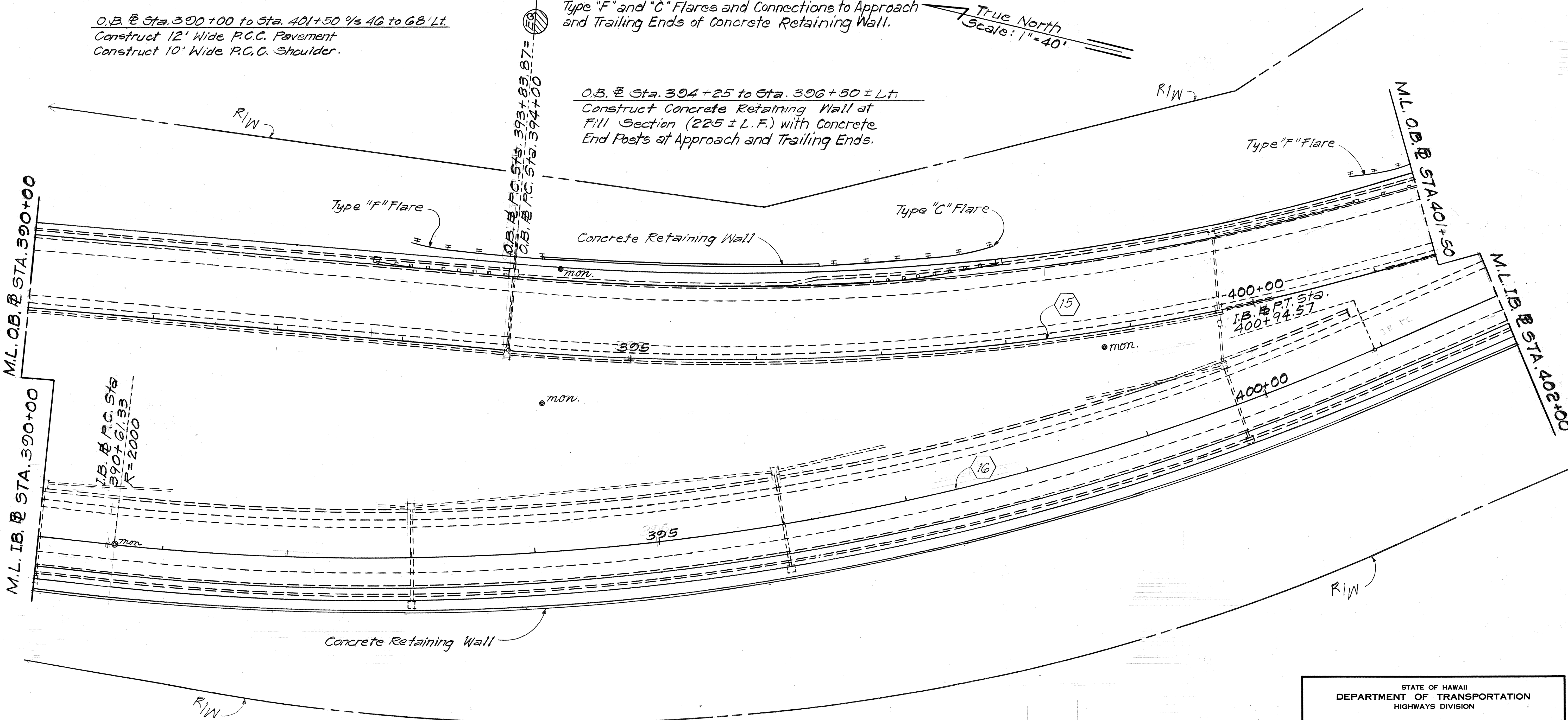
O.B. @ P.O.C. Sta. 391+75.86 o/s 298.19' Rt. (Radial)
Install Centerline and Reference Survey Monument.
Cadastral Survey Section to provide the controls for the monument.

O.B. @ P.O.C. Sta. 397+68.39 o/s 42.35' Rt. (Radial)
Install Centerline and Reference Survey Monument.
Cadastral Survey Section to provide the controls for the monument.

O.B. @ Sta. 390+00 to Sta. 401+50 %s 46 to 68' Lt.
Construct 12' Wide P.C.C. Pavement
Construct 10' Wide P.C.C. Shoulder.

O.B. @ Sta. 393+00± to Sta. 394+25± Lt. (100±L.F.)
O.B. @ Sta. 396+50± to Sta. 398+00± Lt. (150±L.F.)
Install 101±L.F. of Guardrail, Type 3-Single and 68±L.F. of Guardrail, Type 3-Thrie Beam with Steel Post with Type "F" and "C" Flares and Connections to Approach and Trailing Ends of Concrete Retaining Wall.

O.B. @ Sta. 394+25 to Sta. 396+50± Lt.
Construct Concrete Retaining Wall at Fill Section (225±L.F.) with Concrete End Posts at Approach and Trailing Ends.



I.B. @ Sta. 390+00 to Sta. 402+00 %s 12' to 34' Rt.
Construct 12' Wide P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.

6-5-91 Notes added Per ADD. No. 1:
C-3

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

INTERSTATE RTE. H-2 HOV LANES, PH. I
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)

Scale: 1"=40' Date:

SHEET NO. 5 OF 9 SHEETS

ADD. 18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	19	107

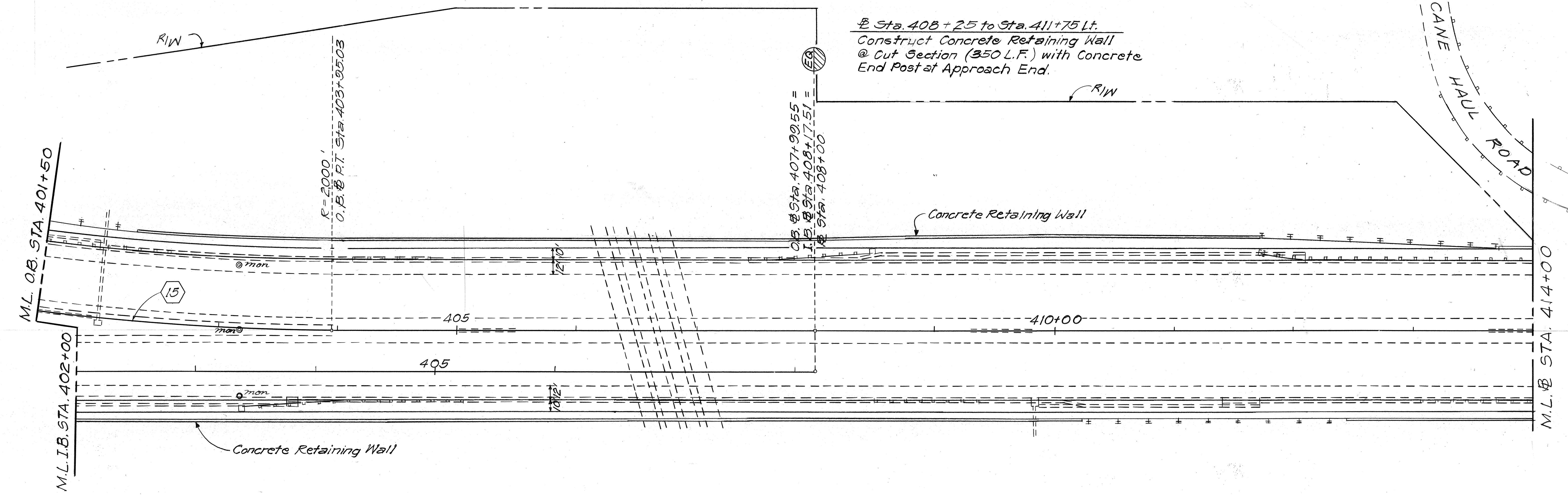
O.B. @ Sta. 401+50 to @ Sta. 414+00 % 46' to 68' Lt.
Construct 12' Wide P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.

@ Sta. 408+00 to 414+00 % 46' to 68' Rt.
Construct 12' Wide P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.

O.B. @ Sta. 401+00 ± to Sta. 402+25 ± Lt.
Install 91 ± L.F. of Guardrail, Type 3-Single and
34 ± L.F. of Guardrail, Type 3-Thrie Beam with
Steel Post with Type "F" Flare and Connection
to Trailing End of Concrete Retaining Wall.

O.B. @ Sta. 402+25 to @ Sta. 408+25 Lt.
Construct Concrete Retaining Wall
at Fill Section (600 L.F.) with Concrete
End Post at Trailing End.

@ Sta. 408+25 to Sta. 411+75 Lt.
Construct Concrete Retaining Wall
@ Cut Section (350 L.F.) with Concrete
End Post at Approach End.



I.B. @ Sta. 402+00 to Sta. 408+17.51 % 12' to 34' Rt.
@ Sta. 408+00 to Sta. 414+00 % 46' to 68' Rt.
Construct 12' Wide P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.

@ Sta. 410+25 ± to Sta. 412+50 ± Rt (225 L.F.)
@ Sta. 411+75 ± to Sta. 413+75 ± Lt. (200 L.F.)
Install 289 ± L.F. of Guardrail, Type 3-Single and
136 ± L.F. of Guardrail, Type 3-Thrie Beam with
Steel Post with Connections to Approach and Trailing
Ends of Concrete Retaining Wall.

Curve No.	(15)
Δ	28°30'20"
R	2,000.00'
L	995.03'
T	508.04'
S.E.	9.2%

I.B. @ Sta. 403+75 to @ Sta. 410+25 Rt.
Construct Concrete Retaining Wall at Fill
Section (650 L.F.) with Concrete End Post
at Trailing End.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

INTERSTATE RTE. H-2 HOV LANES, PHA
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)
Scale: 1"=40' Date: _____
SHEET NO. 6 OF 9 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	20	107

Curve No.	
Δ	34°50'00"
R	1,700.00'
L	1,033.53'
T	533.20'
S.E.	9.8%

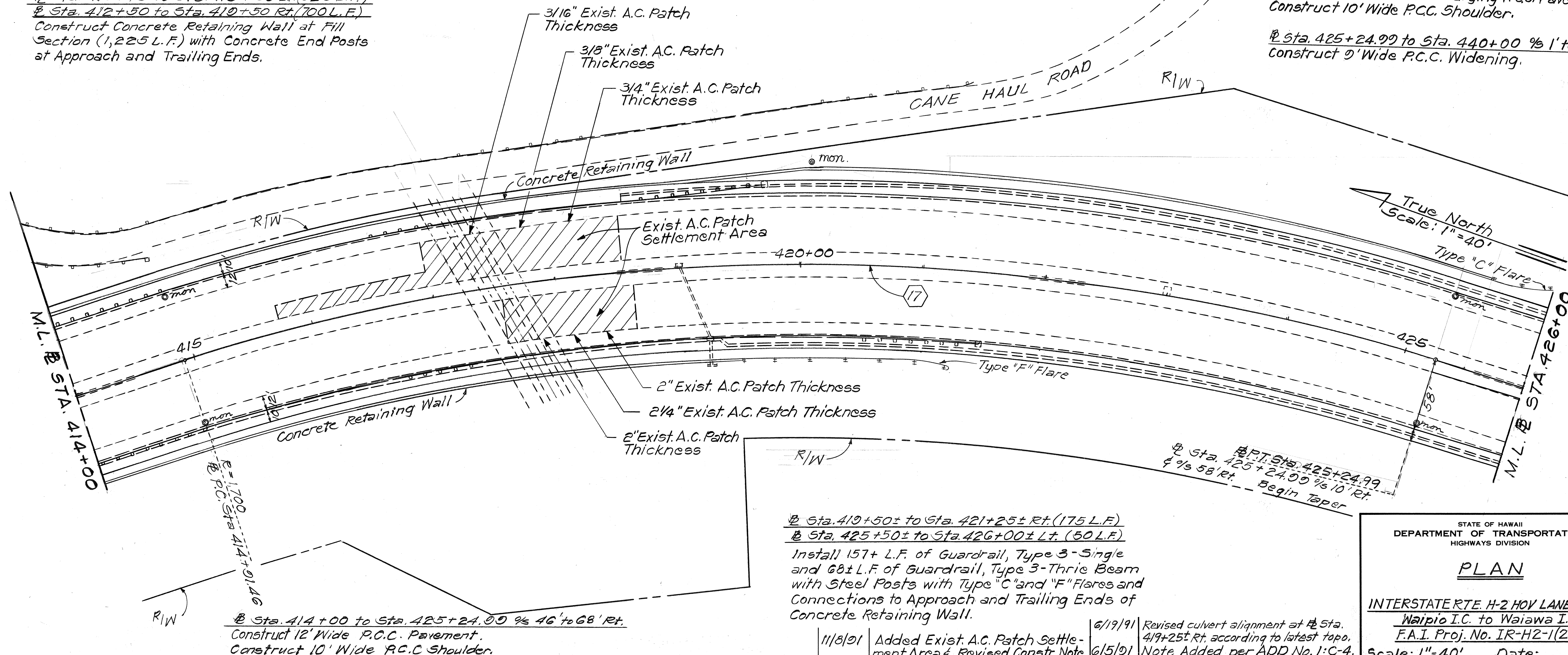
Sta. 420+08± 9/8 83'± Lt.
The Contractor shall use every precaution and exercise extreme care during his excavation work in order to preserve and maintain the existing monument in an undisturbed state. The State Cadastral Survey Section will verify the location of the monument after the Contractor has completed his work adjacent to the monument. If Cadastral determines that the monument has been disturbed, the Contrator shall install a new centerline and reference survey monument with controls established by Cadastral. The Contractor shall bear the cost of installing the new monument and the cost of Cadastral establishing the controls, which shall include all material and labor costs including administrative and overhead surcharges. J.D. Corn of the Cadastral Survey Section (548-7576) may be contacted for information concerning preservation of this monument or for information concerning controls.

Sta. 414+00 to Sta. 426+00 9/8 46' to 68' Lt.
Construct 12' Wide P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.
For P.C.C. Widening at Settlement Area, see Details on Plan Sht. No. C.O.7.
Sta. 413+75 to Sta. 419+00 Lt. (525 L.F.)
Sta. 412+50 to Sta. 419+50 Rt. (700 L.F.)
Construct Concrete Retaining Wall at Fill Section (1,225 L.F.) with Concrete End Posts at Approach and Trailing Ends.

Sta. 419+00 to Sta. 425+50 Lt.
Construct Concrete Retaining Wall at Cut Section (650 L.F.) with Concrete End Post at Approach End.

Sta. 425+24.99 to Sta. 432+20± 9/8 46' to 68' Rt.
Construct 12' to 0' Wide Varying P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.
Sta. 425+24.99 to Sta. 440+00 9/8 1' to 10' Rt.
Construct 9' Wide P.C.C. Widening.

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

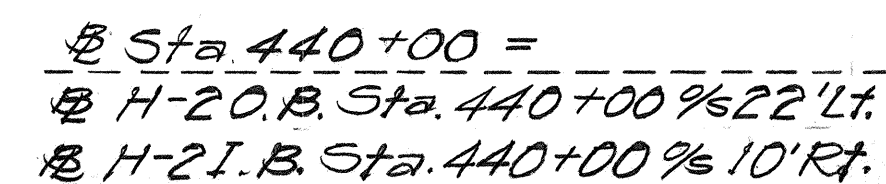


11/8/91	Added Exist. A.C. Patch Settlement Area & Revised Constr. Note.	6/19/91	Revised culvert alignment at Sta. 419+25± Rt. according to latest topo.
		6/5/91	Note Added per ADD No. 1-C-4.
DATE	REVISION	DATE	REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
PLAN
INTERSTATE RTE. H-2 HOV LANES, PH. I Waipio I.C. to Waiawa I.C. F.A.I. Proj. No. IR-H2-1(26) Scale: 1"=40' Date:
SHEET NO. 7 OF 9 SHEETS

C.O. ADD.20R

Sta. 426+00 to Sta. 442+70 @ 46' to 68' Lt.
Construct 12' wide P.C.C. Pavement.
Construct 10' wide P.C.C. Shoulder.



~~E~~ P.T. Sta. 439 + 87.42

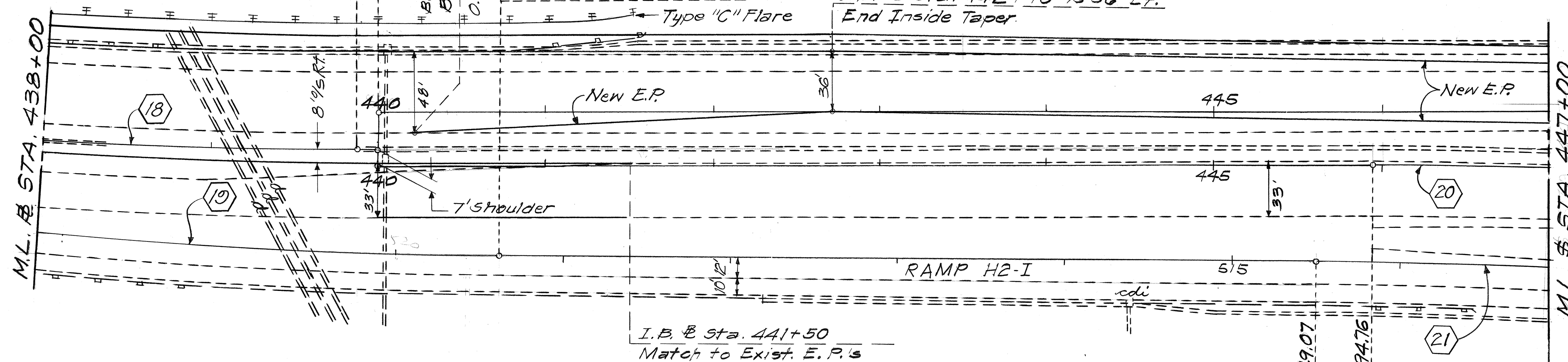
Begin HOV Lane O.B.
Begin Inside E.P. Taper
O.B. @ Sta. 440+20
%12' Rt.

§ H2-I.P.C. Sta. 510+37

— Type "C" Flare

Begin Taper
0.5. E Sta. 442 + 70 % 36' Lt.
 End Inside Taper.

O.B. Sta. 442+70 to Sta. 450+36.55 %s 24'to 46' Lt.
Construct 12'to 0' Wide Varying P.C.C. Pavement.
Construct 10' Wide P.C.C. Shoulder.



$\frac{514 + 49.07}{R = 3600}$	$\frac{445 + 94.76}{R = 2800}$
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PLAN

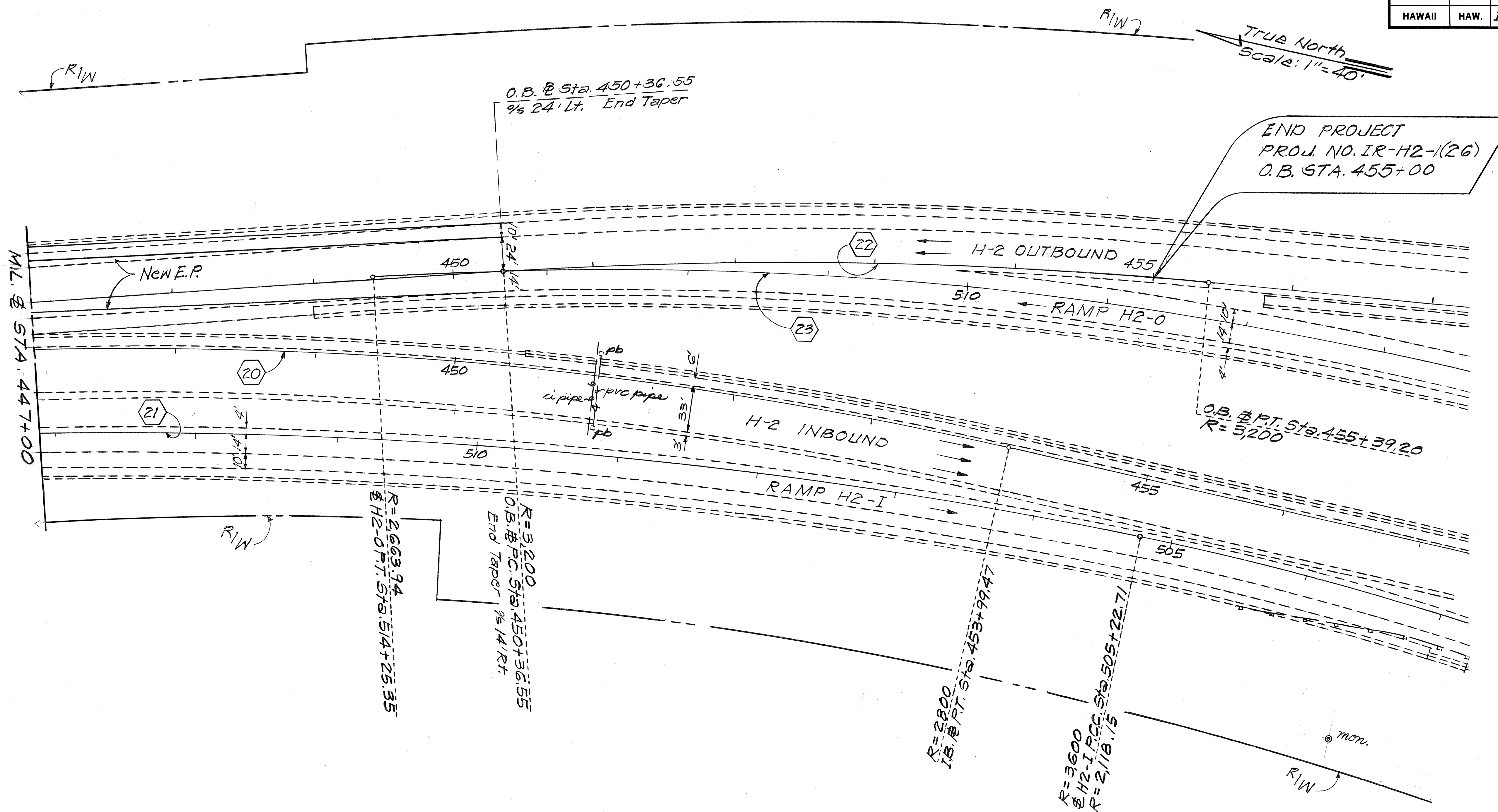
INTERSTATE RTE. H2 HOV LANES, PH. I
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)

Scale: $1'' = 40'$ Date: _____

SHEET No. 8 OF 9 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	22	107



Curve No.	20	21	22	23
Δ	16°28'00"	14°44'36"	9°00'00"	18°56'40"
R	2,800.00'	3,600.00'	3,200.00'	2,663.00'
L	804.71'	326.35'	502.66'	880.81'
T	405.15'	405.75'	251.85'	444.46'
S.E.	7.5%	7.5%	6.8%	6.8%

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN

INTERSTATE RTE H-2 HOV LANES, PH1
Waipio I.C. to Waiawa I.C.
F.A.I. Proj. No. IR-H2-1(26)
Scale: 1"=40' Date: _____
SHEET NO. 22 OF 22 SHEETS