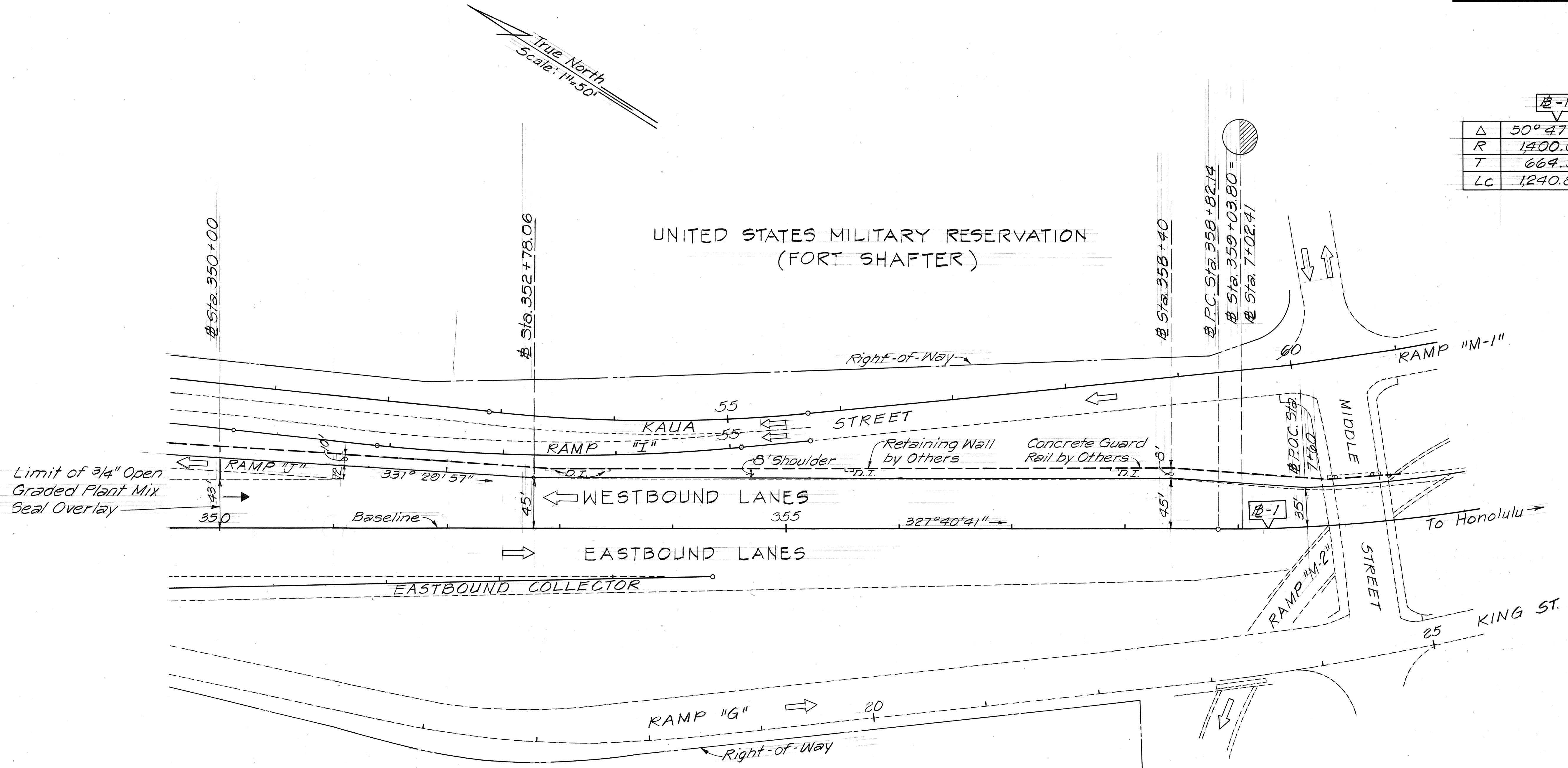


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	5	197

Δ	50° 47' 01"
R	1400.00
T	664.52
Lc	1240.88



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN
INTERSTATE ROUTE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJ. NO. I-HI-1 (187)
Scale: 1" = 50' Date: _____
SHEET No. 1 OF 1 SHEETS

CURVE DATA

M-2D	
Δ	2° 51' 45"
R	400.25
T	10.00
Lc	20.00

CURVE DATA

B-1	B-1A	M-2G	M-1
Δ	50° 47' 01"	5° 31' 30"	16° 02' 19"
R	1,400.00	717.29	681.69
T	664.52	34.61	96.04
Lc	1,240.88	69.17	190.82

KALIHI
CHILD
CARE
PRE-SCHOOL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	6	197

HORNER
STREET

KAUA STREET

MIDDLE
ST.

RAMP "M-1"

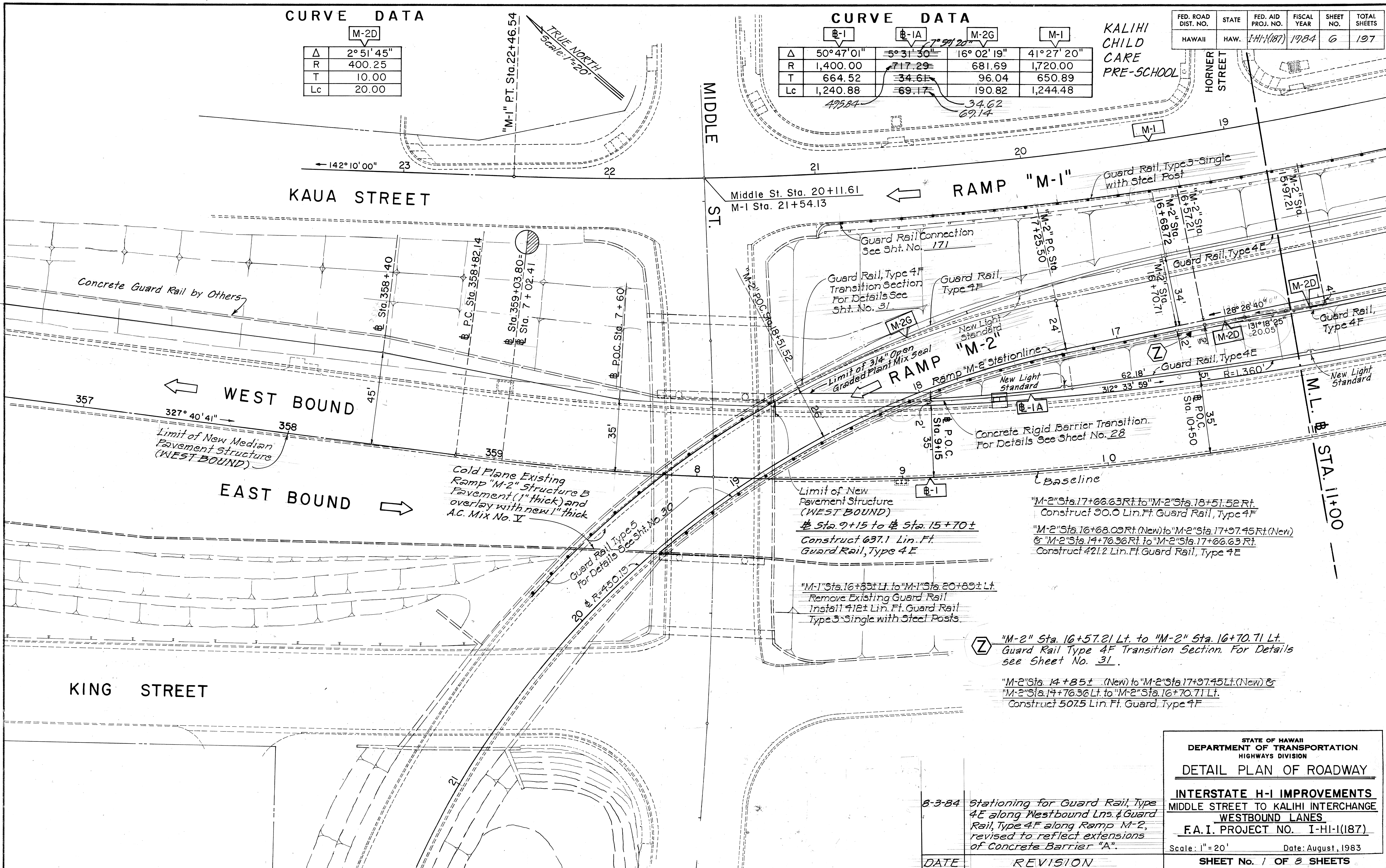
WEST BOUND

EAST BOUND

KING STREET

M.L. STA. 11+00

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



8-3-84 Stationing for Guard Rail, Type 4E along Westbound Lns. & Guard Rail, Type 4F along Ramp M-2, revised to reflect extensions of Concrete Barrier "A".

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DETAIL PLAN OF ROADWAY
INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-HI-1(187)
Scale: 1" = 20' Date: August, 1983
SHEET No. 1 OF 8 SHEETS

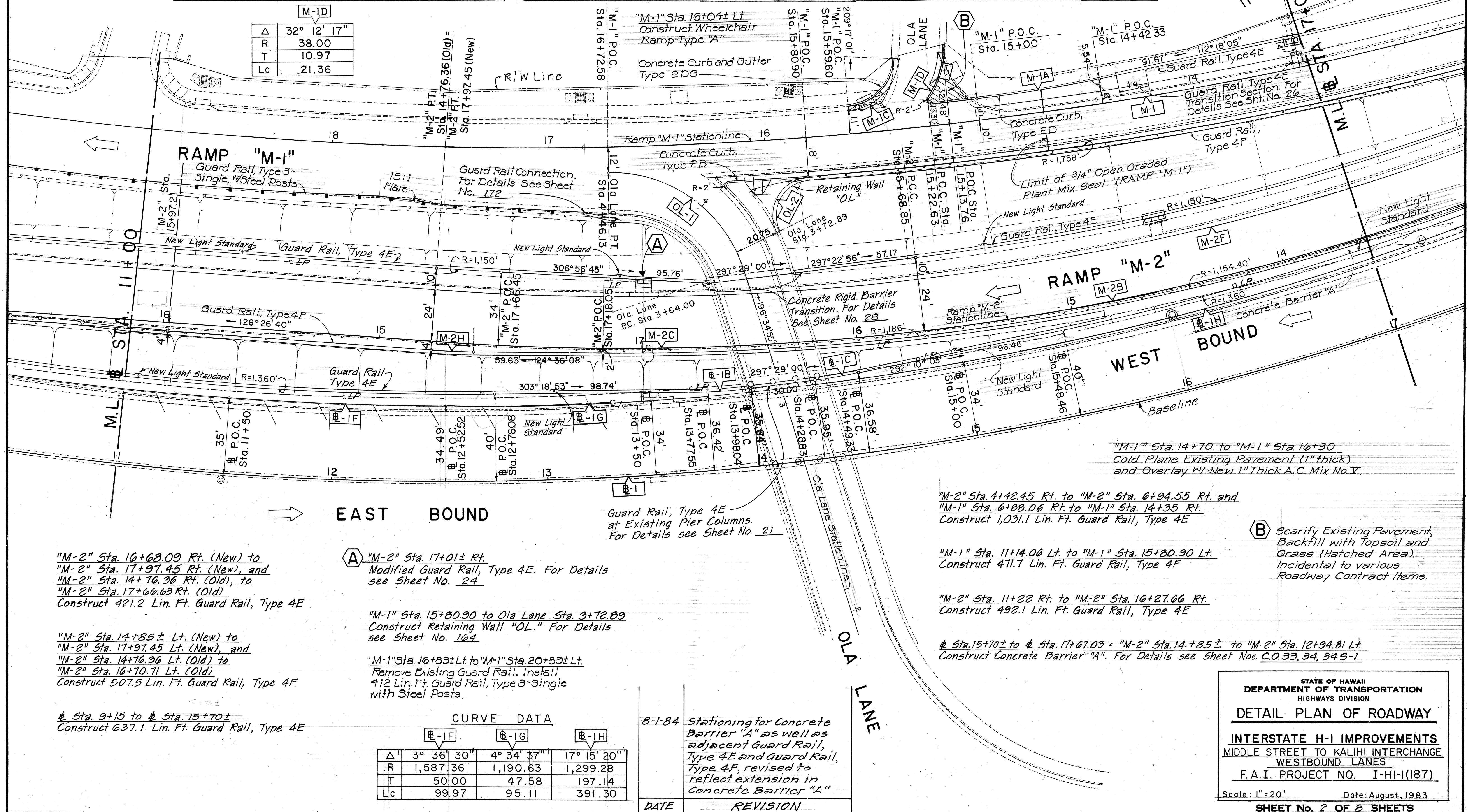
C.O. 6

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	7	197

	Δ	R	T	Lc
Δ	$5^{\circ} 49' 53''$	$5^{\circ} 18' 57''$	$4^{\circ} 59' 48''$	$82^{\circ} 58' 49'$
R	196.34	215.41	657.55	25.00
T	10.00	10.00	28.69	22.11
Lc	19.98	19.99	57.34	36.21

	B-1	M-1	M-2B	M-2C	M-2F	OL-1	OL-2	M-2H
Δ	50° 47' 01"	41° 27' 20"	20° 29' 15"	11° 03' 45"	31° 33' 00"	73° 31' 38"	111° 22' 30"	3° 50' 32"
R	1,400.00	1,720.00	1,152.40	1,184.00	1,160.00	64.00	18.00	298.14
T	664.52	650.89	208.26	114.66	327.70	47.82	26.37	10.00
Lc	1,240.88	1,244.48	412.07	228.60	638.76	82.13	34.99	19.99

	M-ID
Δ	32° 12' 17"
R	38.00
T	10.97
Lc	21.36



CURVE DATA			
	B-I-F	B-I-G	B-I-H
Δ	3° 36' 30"	4° 34' 37"	17° 15' 20"
R	1,587.36	1,190.63	1,299.28
T	50.00	47.58	197.14
Lc	99.97	95.11	391.30

8-1-84 Stationing for Concrete Barrier "A" as well as adjacent Guard Rail, Type 4E and Guard Rail, Type 4F, revised to reflect extension in Concrete Barrier "A"

DATE	REVISION
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-HI-1(187)

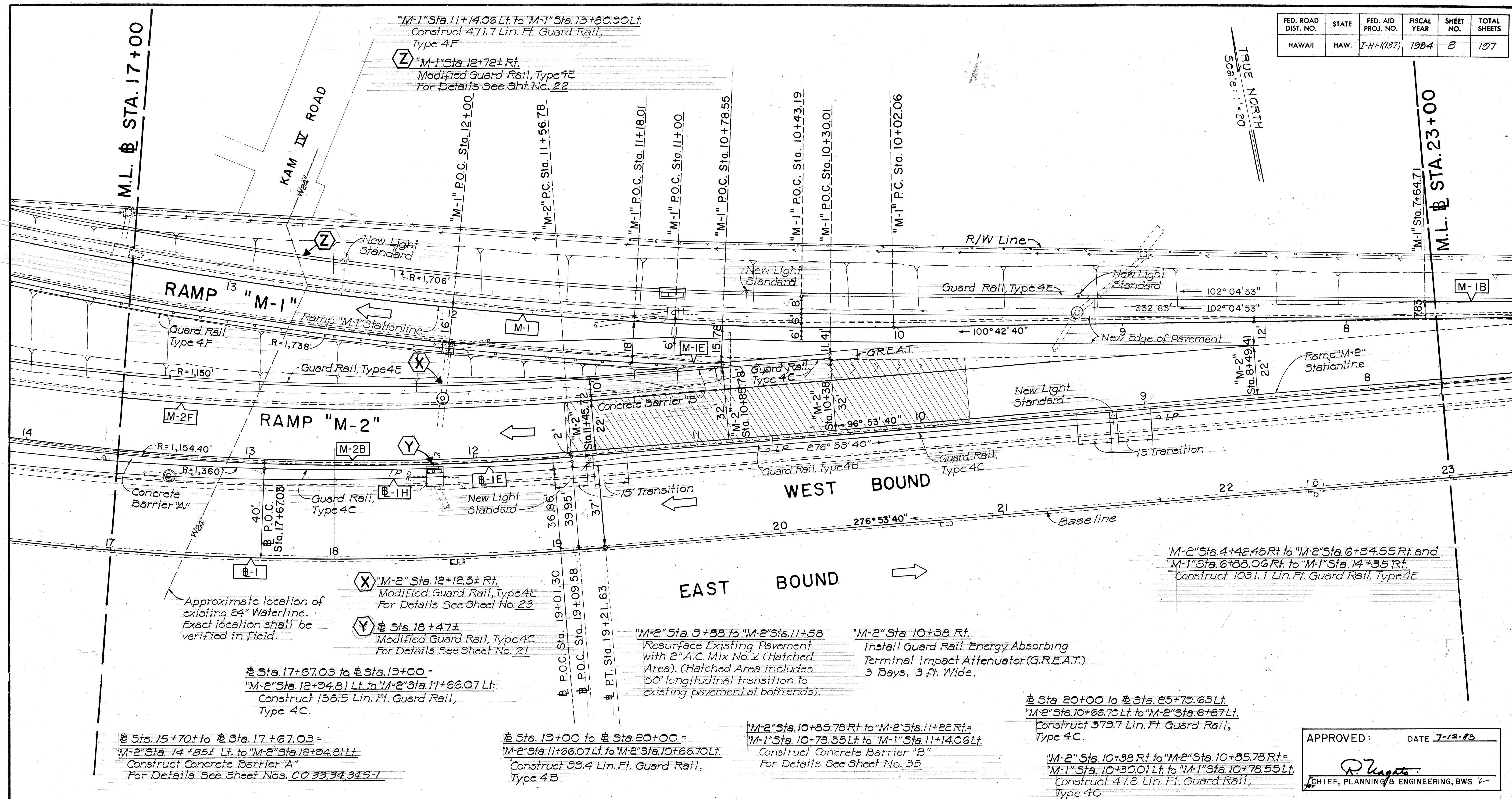
Scale: 1" = 20' Date: August, 1983

SHEET No. 2 OF 8 SHEETS

C.O. 7

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(187)	1984	8	197

TRUE NORTH
Scale: 1"=20'



DATE	BY
8-3-84	STATIONING FOR CONCRETE BARRIER 'A' REVISED TO REFLECT EXTENSION.

DATE	REVISION
8-3-84	STATIONING FOR CONCRETE BARRIER 'A' REVISED TO REFLECT EXTENSION.

	M-2F	B-1H	B-1	M-1	M-2B	M-1E	M-1B	B-1E
Δ	31° 33' 00"	17° 15' 20"	50° 47' 01"	41° 27' 20"	20° 29' 15"	7° 40' 44"	5° 11' 13"	6° 51' 43"
R	1,160.00	1,299.28	1,400.00	1,720.00	1,152.40	309.09	1,202.33	1,156.40
T	327.70	197.14	664.52	650.89	208.26	20.00	54.46	69.33
Lc	638.76	391.30	1,240.88	1,244.48	412.07	39.94	108.85	138.49

APPROVED: DATE 7-12-83

R. Nagata
CHIEF, PLANNING & ENGINEERING, BWS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DETAIL PLAN OF ROADWAY
INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-H-1(187)
Scale: 1"=20' Date: August, 1983
SHEET No. 8 OF 8 SHEETS

C.O.8

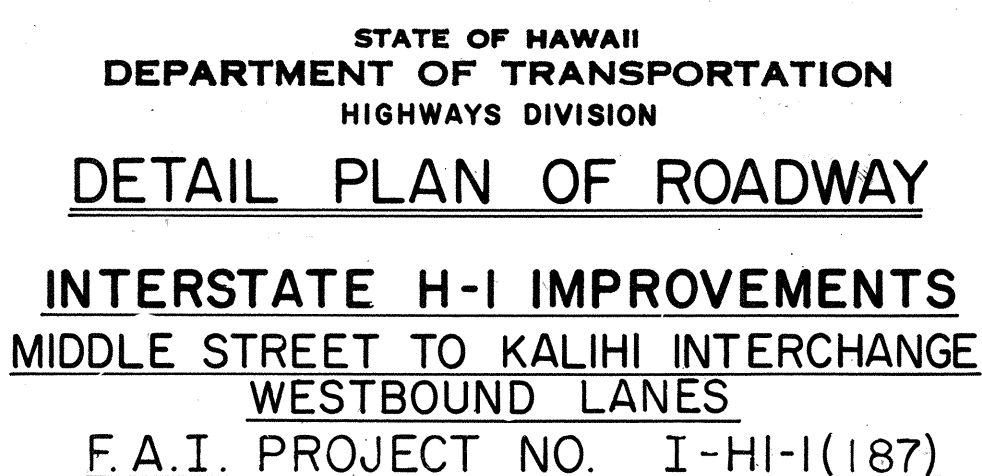
CURVE DATA

"M-2" Sta. 1+92± to "M-2" Sta. 3+46±
Reconstruct 155 Lin. Ft. Chain Link
Fence and Remove upon completion
of permanent Chain Link Fence

TRUE NORTH
Scale: 1" = 20'

"M-2" Sta. 3+16± to "M-2" Sta. 3+46±
Construct 30 Lin. Ft. - 6 Feet Chain
Link Fence with Top Rail and
Concrete Footings.

"M-2" Sta. 1+92± to "M-2" Sta. 2+21.91
Construct 30 Lin. Ft. - 6 Feet Chain
Link Fence with Top Rail and
Concrete Footings.



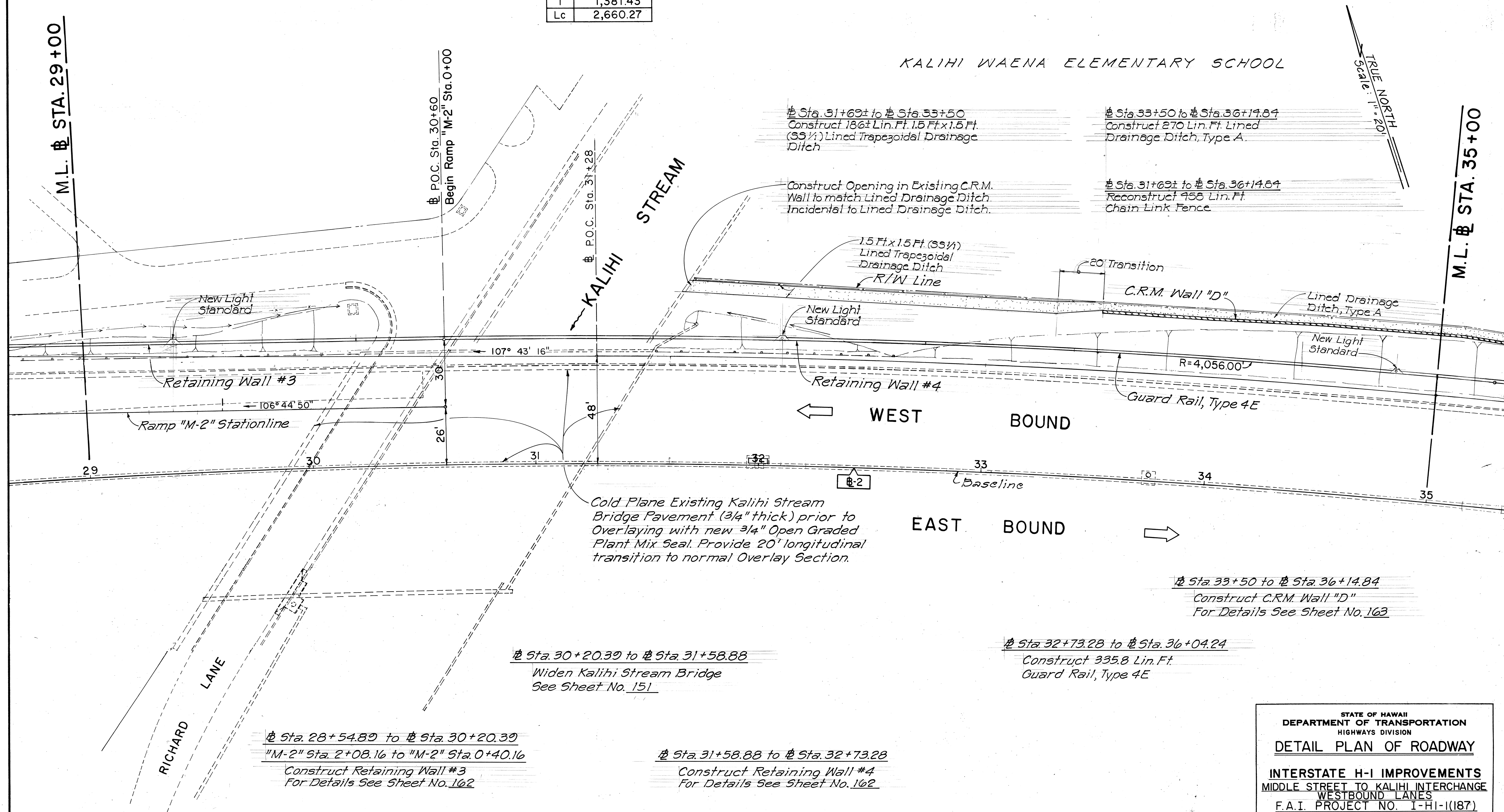
Scale: 1" = 20' Date: August, 1983

SHEET No. 4 OF 8 SHEETS

CURVE DATA

Δ	38° 06' 20"
R	4,000.00
T	1,381.43
Lc	2,660.27

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	10	107



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-HI-1(187)

Scale: 1" = 20' Date: August, 1983

SHEET No. 5 OF 8 SHEETS

CURVE DATA

	Δ-2	Δ-2F	Δ-2G	Δ-2H	Δ-2I
Δ	38°06'20"	5°47'29"	4°36'47"	1°17'36"	4°11'51"
R	4,000.00	197.70	248.27	885.97	272.88
T	1,381.43	10.00	10.00	10.00	10.00
Lc	2,660.27	19.98	19.99	20.00	19.99

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	11	197

TRUE NORTH
Scale: 1" = 20'

Sta. 31+69± to Sta. 36+14.84
Reconstruct 458 Lin. Ft.
Chain Link Fence

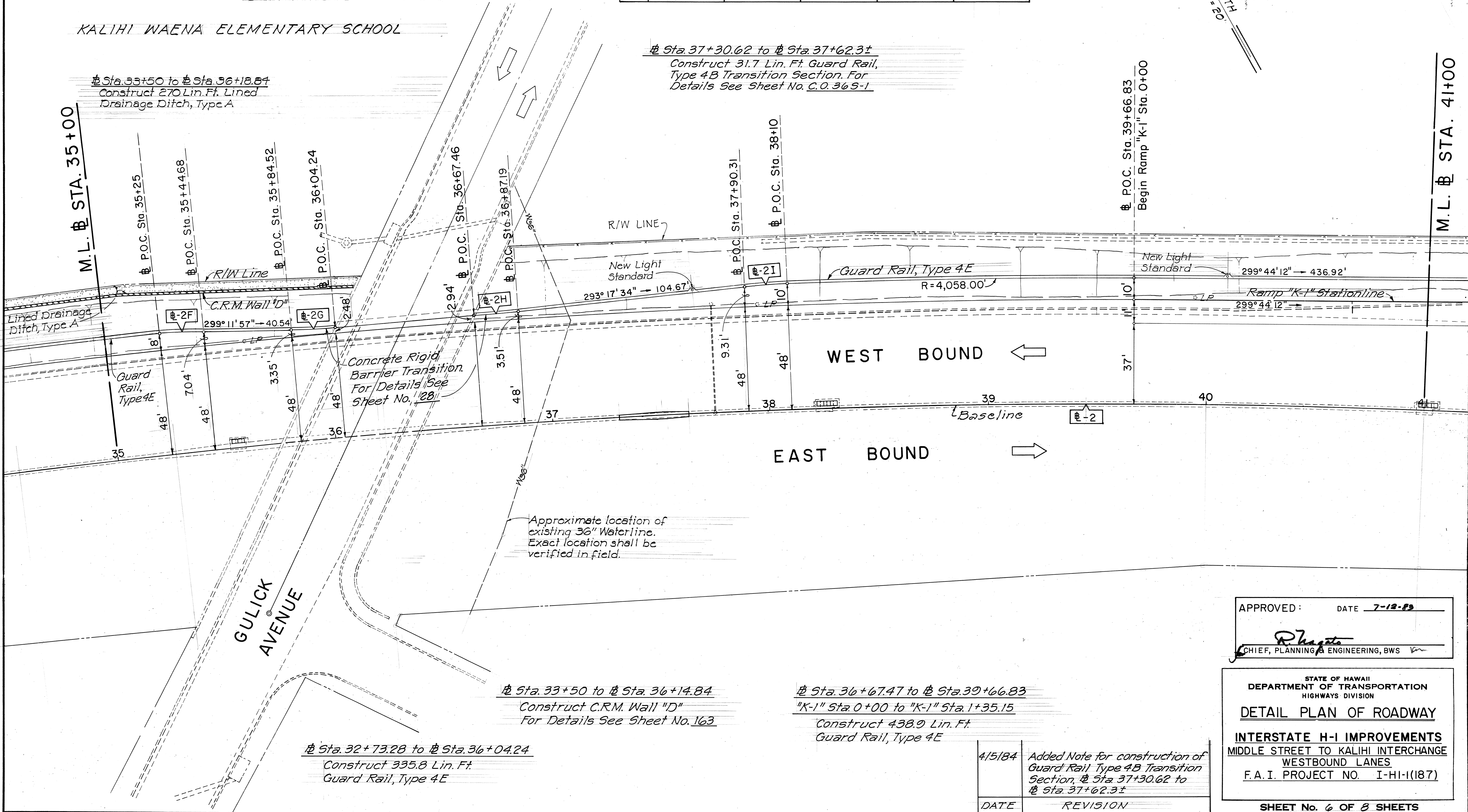
KALIHI WAENA ELEMENTARY SCHOOL

Sta. 33+50 to Sta. 36+18.84
Construct 270 Lin. Ft. Lined
Drainage Ditch, Type A

Sta. 37+30.62 to Sta. 37+62.3±
Construct 31.7 Lin. Ft. Guard Rail,
Type 4B Transition Section. For
Details See Sheet No. C.O. 365-1

P.O.C. Sta. 39+66.83
Begin Ramp "K-1" Sta. 0+00

M.L. STA. 41+00



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

APPROVED: DATE 7-12-83

CHIEF, PLANNING & ENGINEERING, BWS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-HI-1(187)

SHEET No. 6 OF 8 SHEETS

C.O. 11

Sta. 33+50 to Sta. 36+14.84
Construct C.R.M. Wall "D"
For Details See Sheet No. 163

Sta. 32+73.28 to Sta. 36+04.24
Construct 335.8 Lin. Ft.
Guard Rail, Type 4E

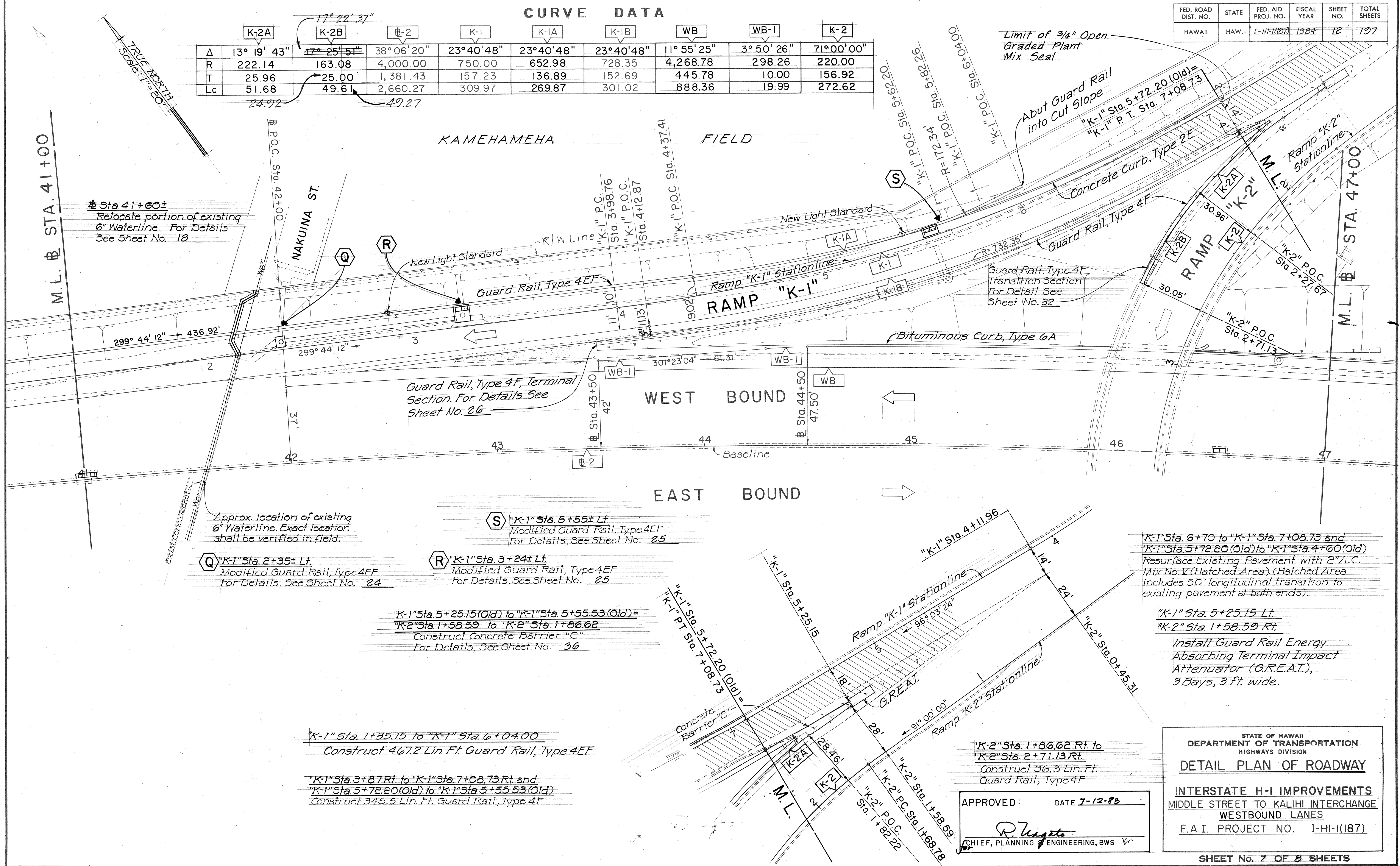
Sta. 36+67.47 to Sta. 39+66.83
"K-1" Sta. 0+00 to "K-1" Sta. 1+35.15
Construct 438.9 Lin. Ft.
Guard Rail, Type 4E

4/5/84	Added Note for construction of Guard Rail Type 4B Transition Section, Sta. 37+30.62 to Sta. 37+62.3±
DATE	REVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	12	127

CURVE DATA

	K-2A	K-2B	B-2	K-1	K-1A	K-1B	WB	WB-1	K-2
Δ	13° 19' 43"	17° 25' 51"	38° 06' 20"	23° 40' 48"	23° 40' 48"	23° 40' 48"	11° 55' 25"	3° 50' 26"	71° 00' 00"
R	222.14	163.08	4,000.00	750.00	652.98	728.35	4,268.78	298.26	220.00
T	25.96	25.00	1,381.43	157.23	136.89	152.69	445.78	10.00	156.92
Lc	51.68	49.61	2,660.27	309.97	269.87	301.02	888.36	19.99	272.62



DATE	
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	

"K-1" Sta. 5+25.15 (Old) to "K-1" Sta. 5+55.53 (Old) =
 "K-2" Sta. 1+58.59 to "K-2" Sta. 1+86.62
 Construct Concrete Barrier "C"
 For Details, See Sheet No. 36

"K-1" Sta. 1+35.15 to "K-1" Sta. 6+04.00
 Construct 467.2 Lin. Ft. Guard Rail, Type 4EF

"K-1" Sta. 3+87 Rt. to "K-1" Sta. 7+08.73 Rt. and
 "K-1" Sta. 5+72.20 (Old) to "K-1" Sta. 5+55.53 (Old)
 Construct 345.5 Lin. Ft. Guard Rail, Type 4F

"K-1" Sta. 6+70 to "K-1" Sta. 7+08.73 and
 "K-1" Sta. 5+72.20 (Old) to "K-1" Sta. 4+60 (Old)
 Resurface Existing Pavement with 2" A.C.
 Mix No. V (Hatched Area). (Hatched Area
 includes 50' longitudinal transition to
 existing pavement at both ends).

"K-1" Sta. 5+25.15 Lt.
 "K-2" Sta. 1+58.59 Rt.
 Install Guard Rail Energy
 Absorbing Terminal Impact
 Attenuator (G.E.A.T.),
 3 Bays, 3 ft. wide.

"K-2" Sta. 1+86.62 Rt. to
 "K-2" Sta. 2+71.13 Rt.
 Construct 36.3 Lin. Ft.
 Guard Rail, Type 4F

APPROVED: DATE 7-12-83
 R. Uyeta
 CHIEF, PLANNING & ENGINEERING, BWS

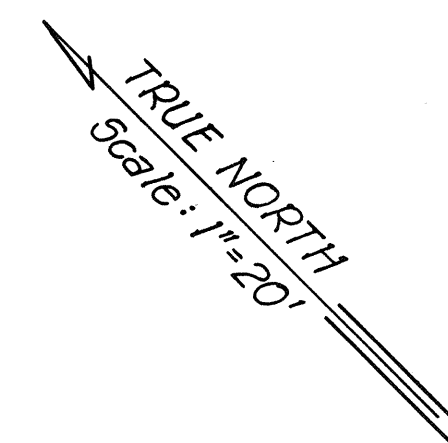
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
DETAIL PLAN OF ROADWAY
INTERSTATE H-1 IMPROVEMENTS
 MIDDLE STREET TO KALIHI INTERCHANGE
 WESTBOUND LANES
 F.A.I. PROJECT NO. I-HI-1(187)

CURVE DATA

Δ	38° 06' 20"
R	4,000.00
T	1,381.43
Lc	2,660.27

WB	11° 55' 25"
	4,268.78
	445.78
	888.36

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-11(187)	1984	13	197



KALIHI STREET

Sta. 50+80.31

P.O.C. Sta. 49+00

P.T. Sta. 50+32.42

M.L. Sta. 47+00

Bituminous Curb, Type 6A

WB

Baseline

Limit of 3/4" Open Graded Plant Mix Seal Overlay and Median Paving

WEST BOUND

EAST BOUND

RAMP "K-4"

RAMP "K-2"

RAMP "K-6"

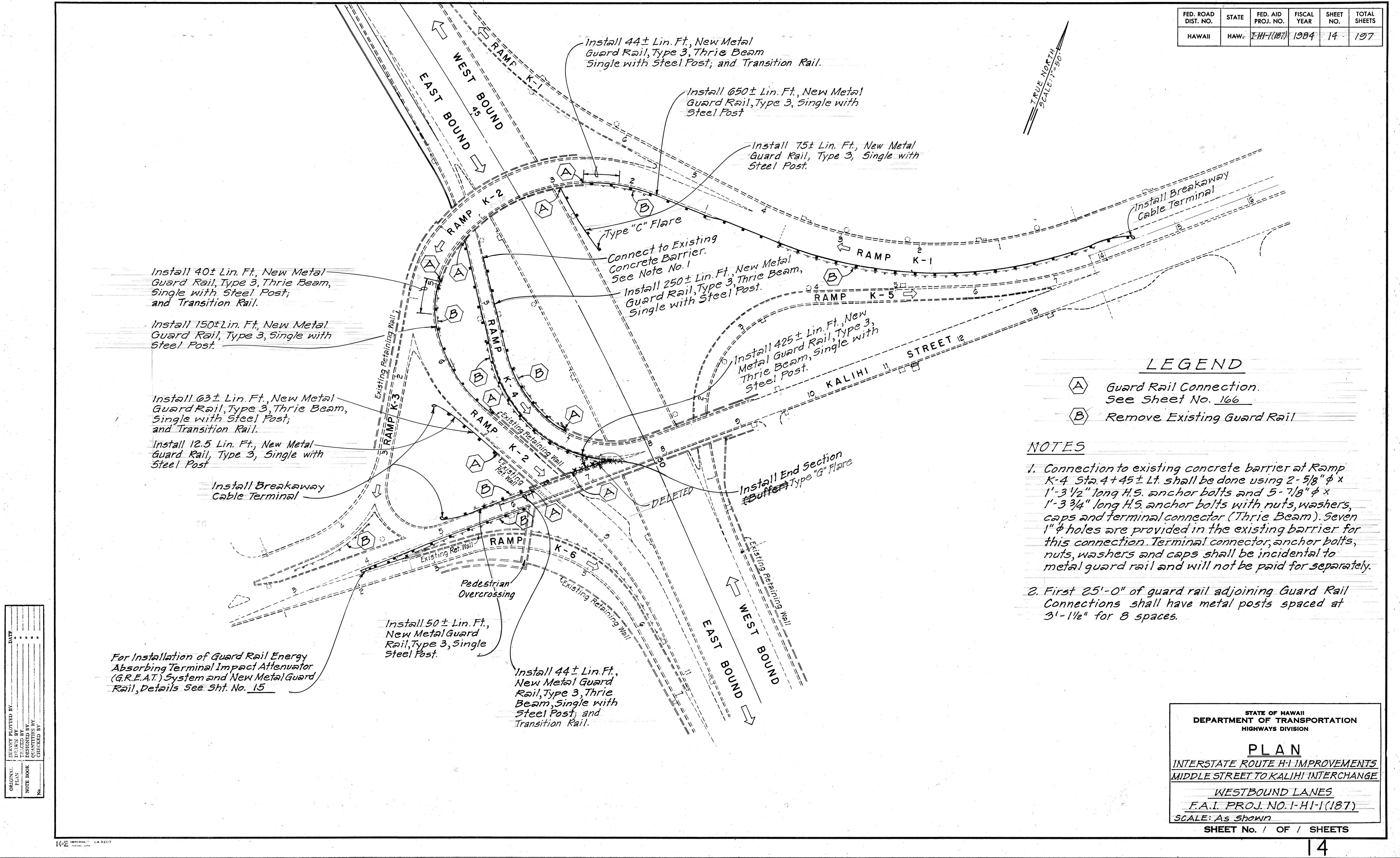
RAMP "K-5"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DETAIL PLAN OF ROADWAY
INTERSTATE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJECT NO. I-HI-11(187)

SHEET No. 8 OF 8 SHEETS

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(187)	1984	14	197



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

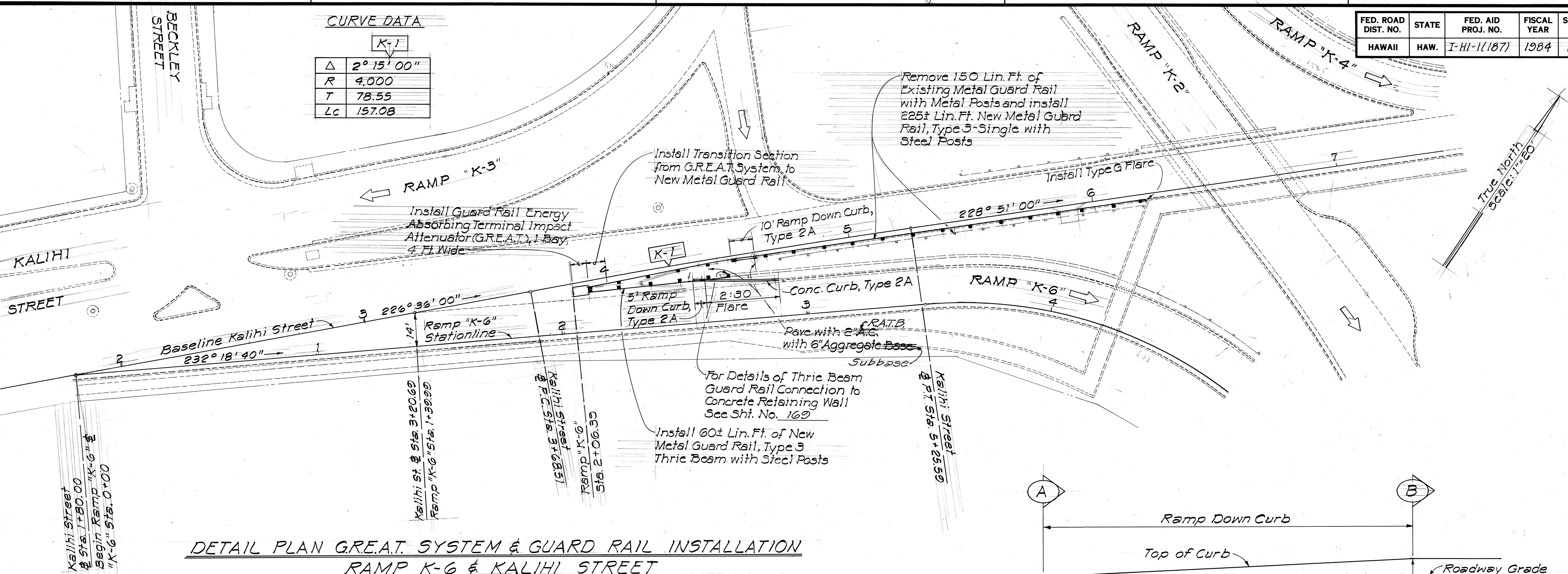
PLAN
INTERSTATE ROUTE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJ. NO. 1-HI-1(187)
SCALE: As Shown
SHEET No. 1 OF 1 SHEETS

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

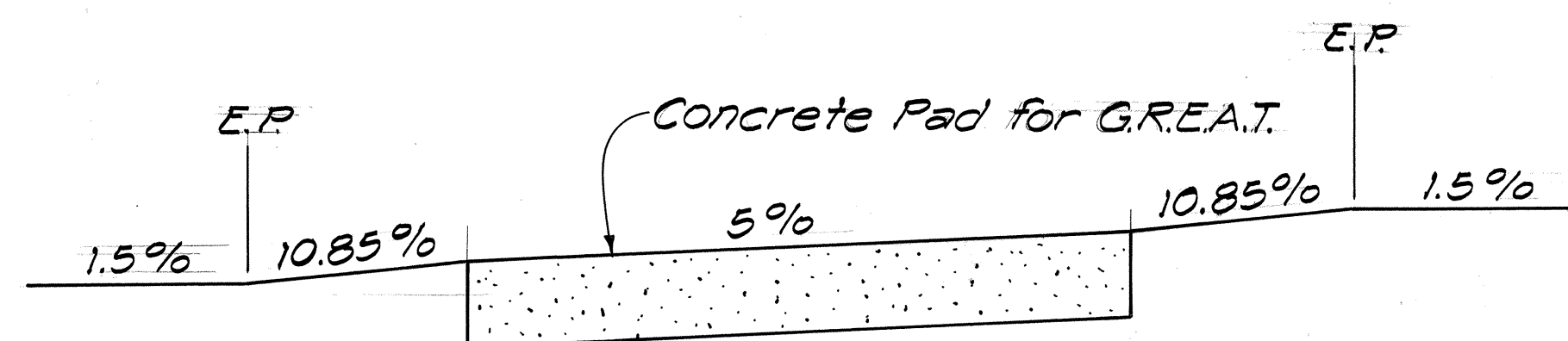
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(187)	1984	15	197

CURVE DATA

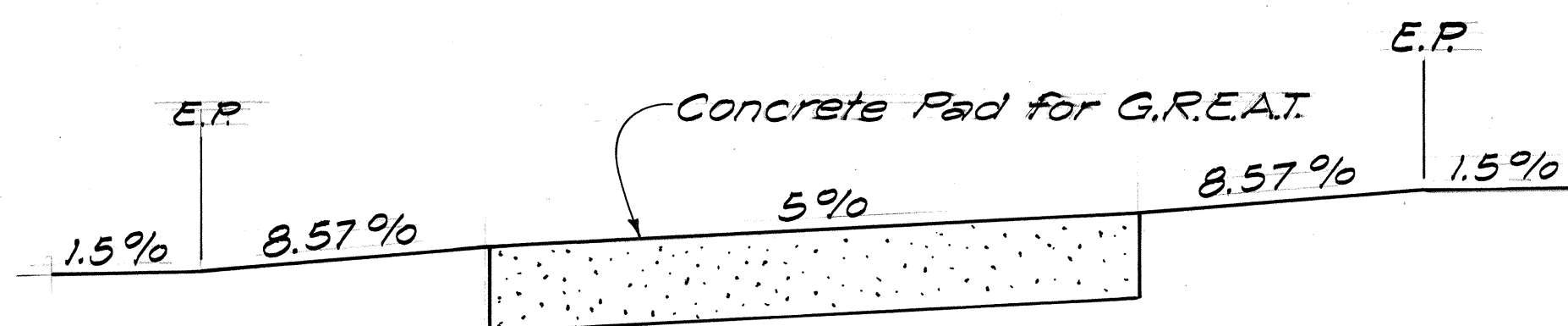
Δ	2° 15' 00"
R	4,000
T	78.35
Lc	157.08



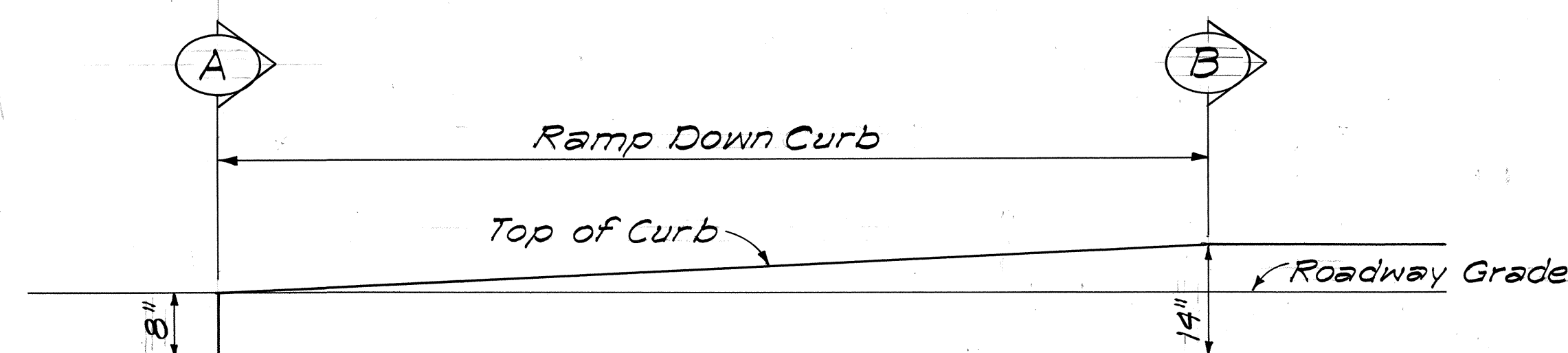
DETAIL PLAN GREAT SYSTEM & GUARD RAIL INSTALLATION RAMP K-6 & KALIHI STREET



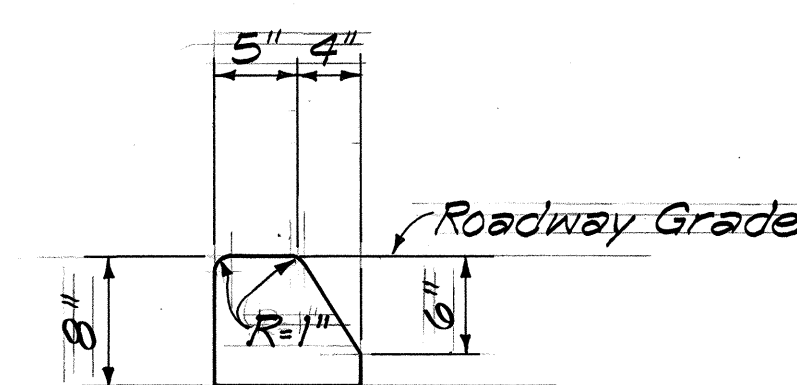
SECTION AT NOSE OF G.R.E.A.T.
Scale: 1" = 1'-0"



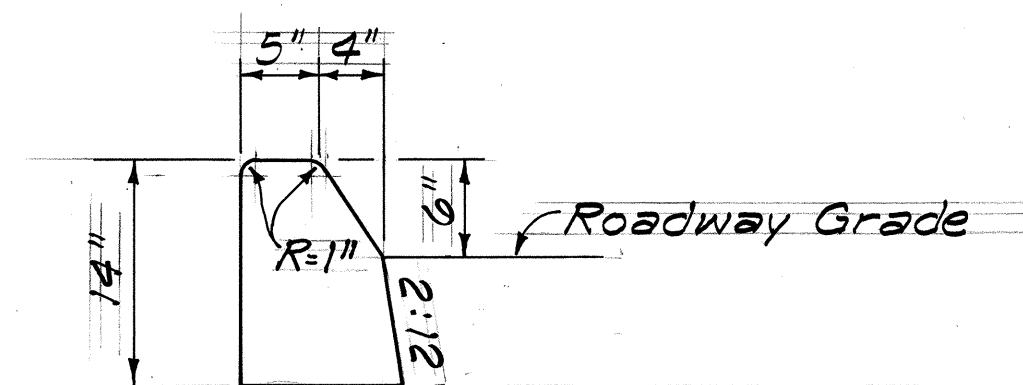
SECTION AT BACK OF G.R.E.A.T.
Scale: 1" = 1'-0"



ELEVATION - RAMP DOWN CURB
N.T.S.



SECTION A
N.T.S.



SECTION B
N.T.S.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN

INTERSTATE ROUTE H-1 IMPROVEMENTS
MIDDLE STREET TO KALIHI INTERCHANGE
WESTBOUND LANES
F.A.I. PROJ. No. I-HI-1(187)
Scale: As Shown

SHEET No. 1 OF 1 SHEETS