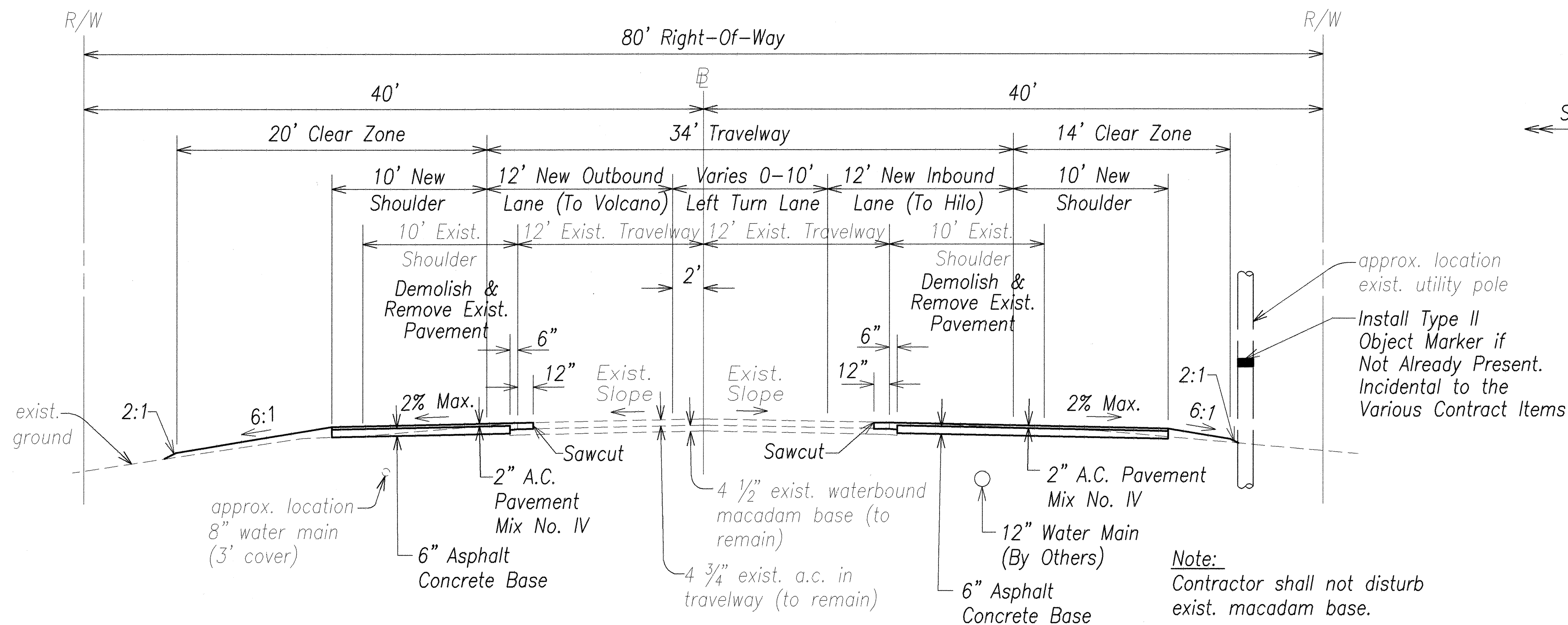
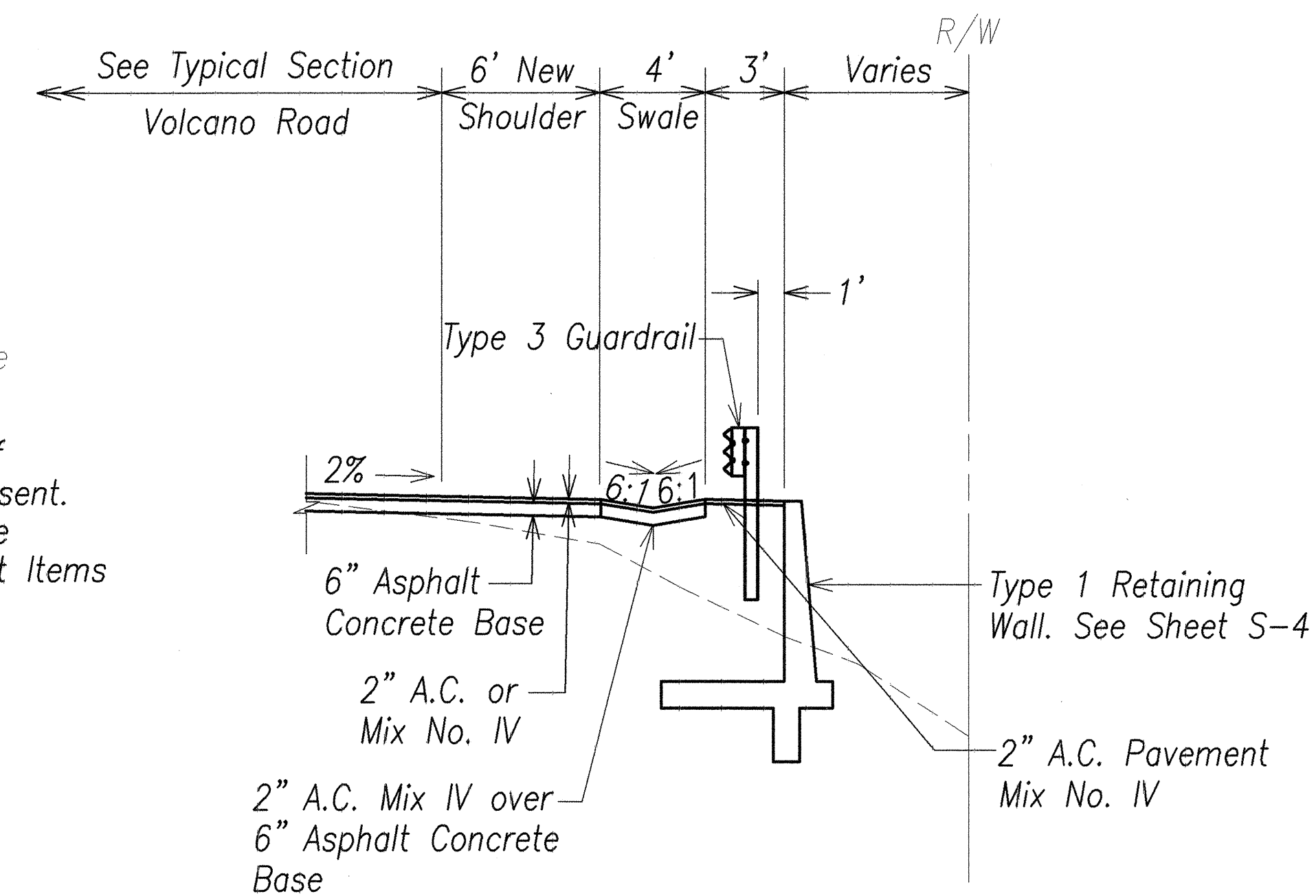


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11M-01-00	2002	8	65



TYPICAL SECTION - VOLCANO ROAD

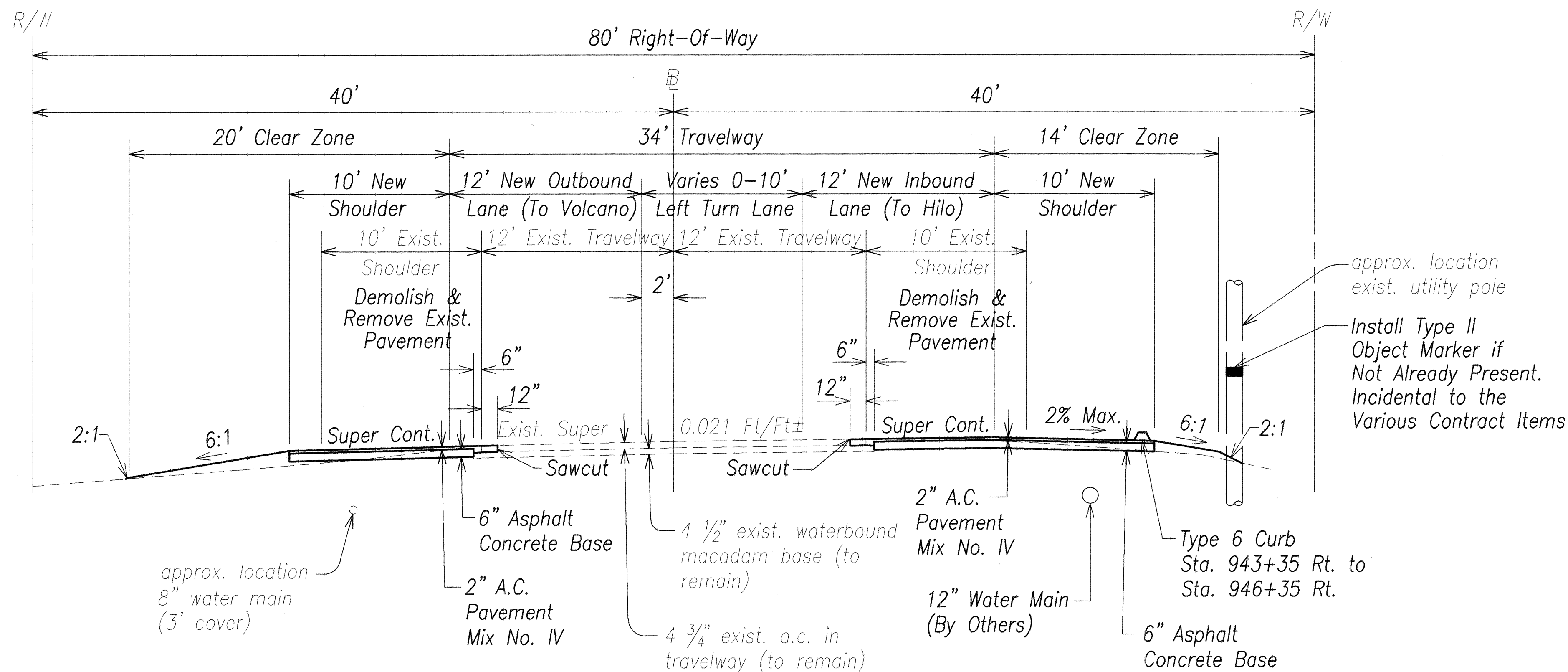
Scale: 1"=5'



SECTION - GRADE ADJUSTMENT WALL

STA. 936+00 TO STA. 939+00

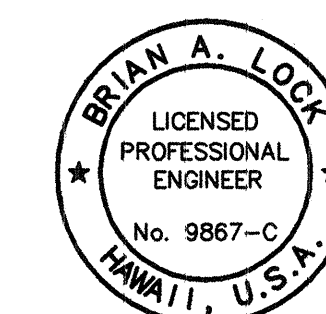
Scale: 1"=5'



TYPICAL SUPERELEVATION SECTION - VOLCANO ROAD

STA. 945+00 TO STA. 947+50

Scale: 1"=5'



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ENGINEERS SURVEYORS HAWAII, INC.

STATE OF HAWAII
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HIGHWAYS DIVISION

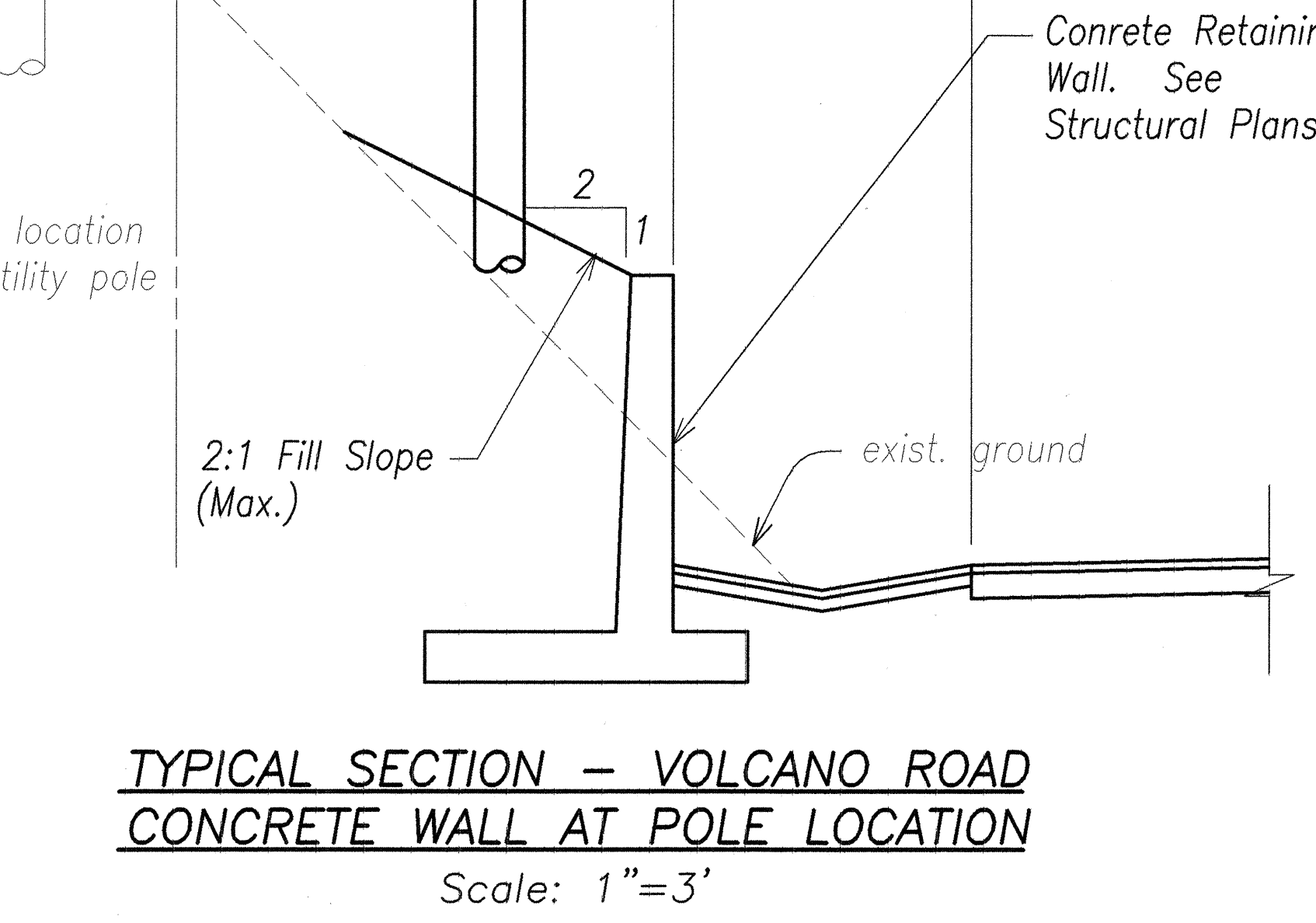
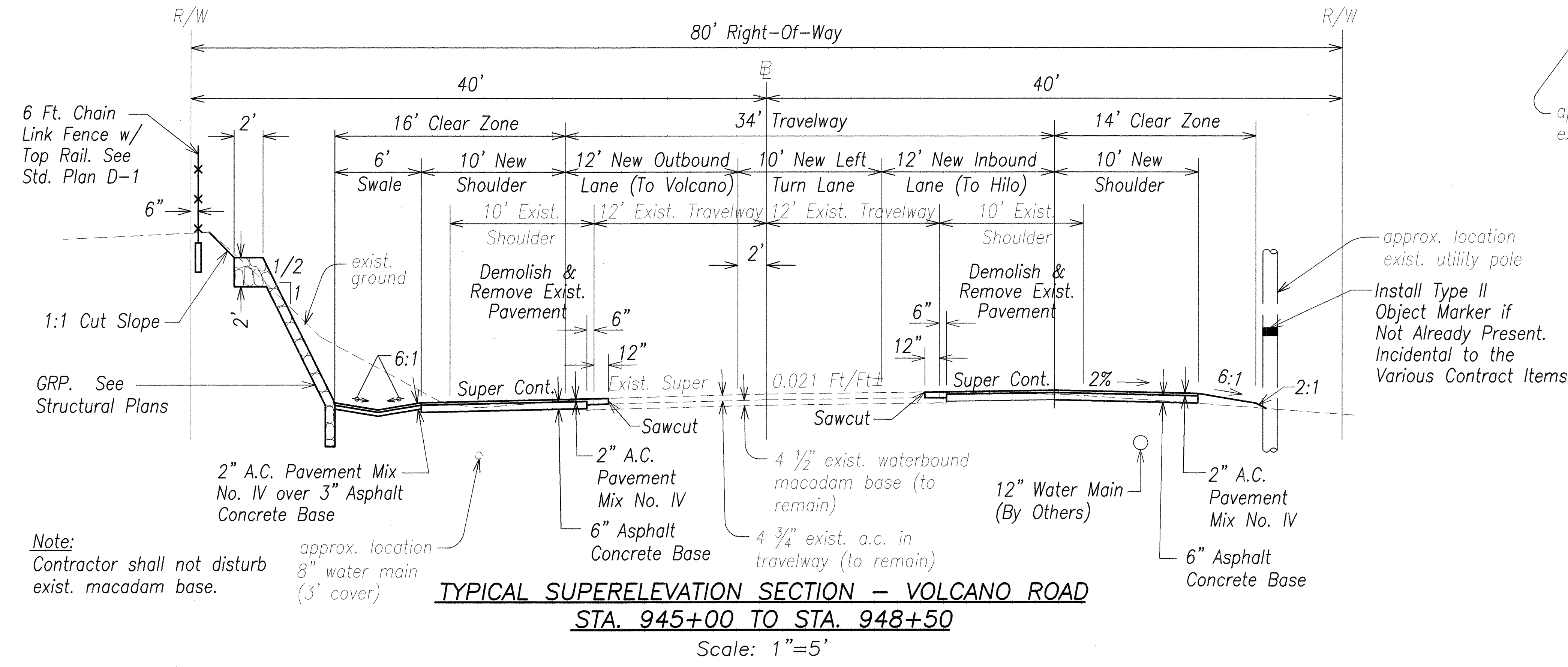
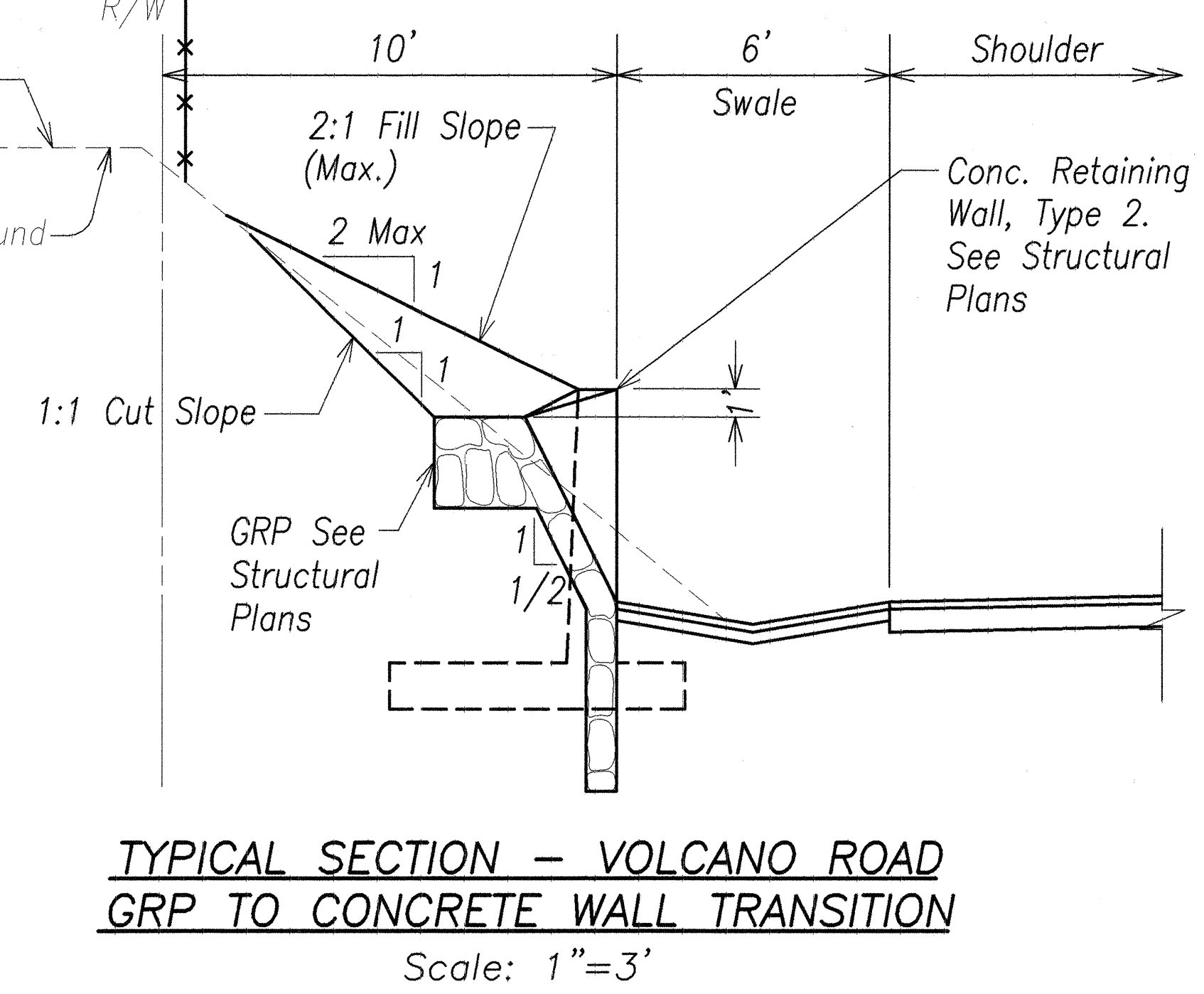
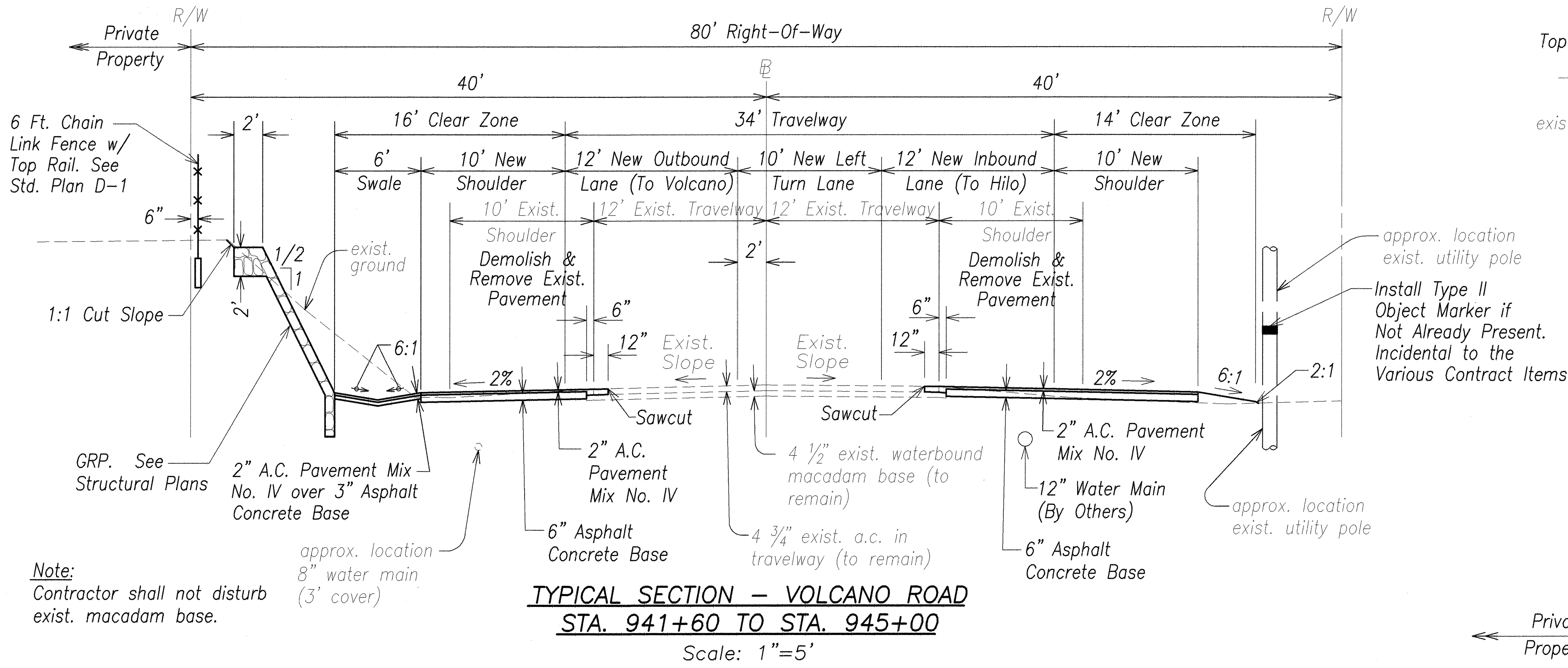
TYPICAL SECTIONS

VOLCANO ROAD INTERSECTION
IMPROVEMENTS AT HUINA ROAD
State Project No. 11M-01-00

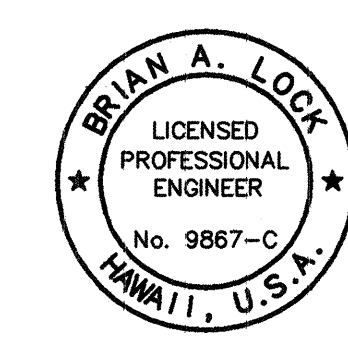
Scale: 1" = 5' Date: November 2001

SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11M-01-00	2002	9	65



ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
REVISIONS	
NO.	



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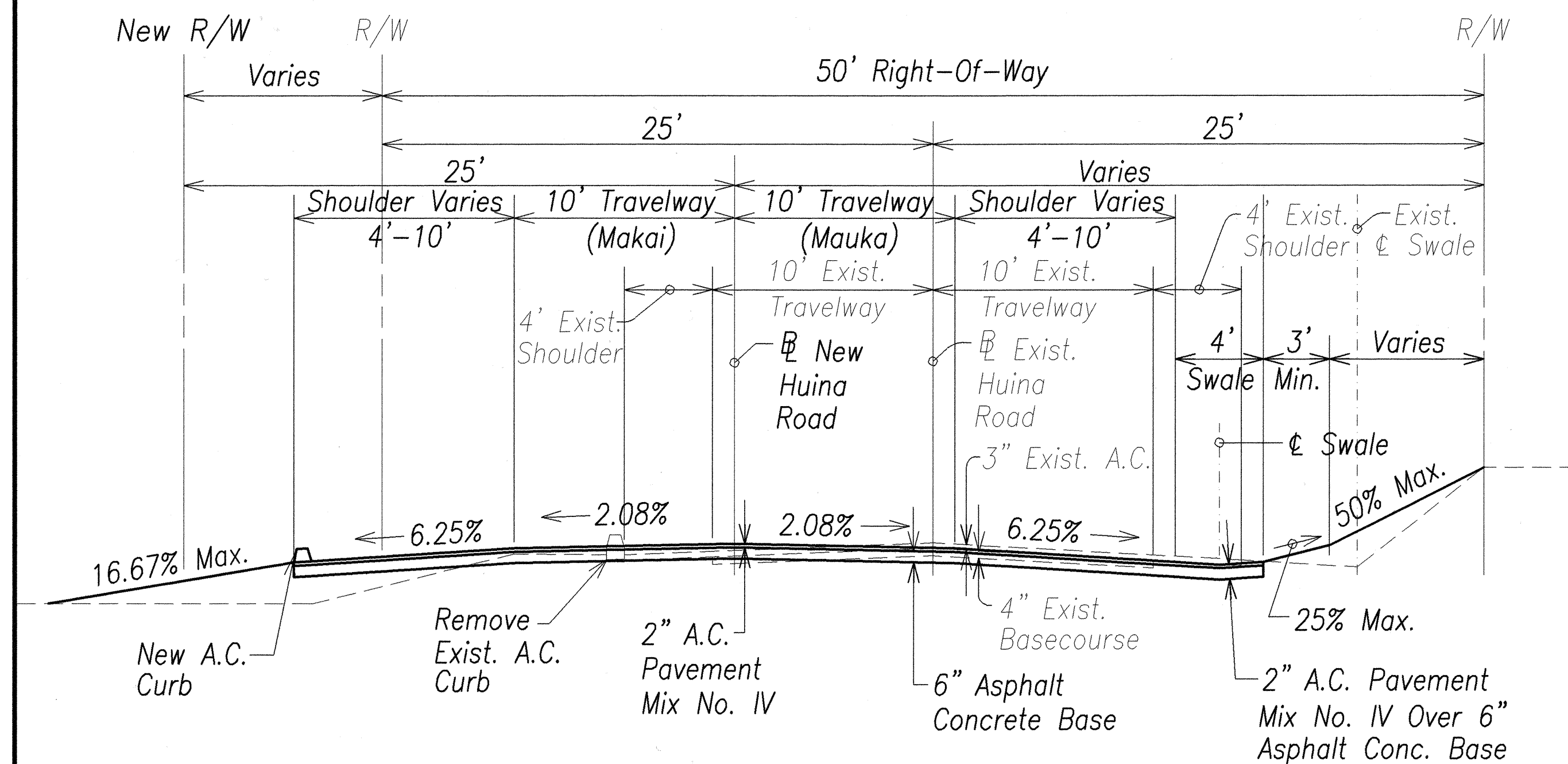
[Signature]

ENGINEERS-SURVEYORS HAWAII, INC.

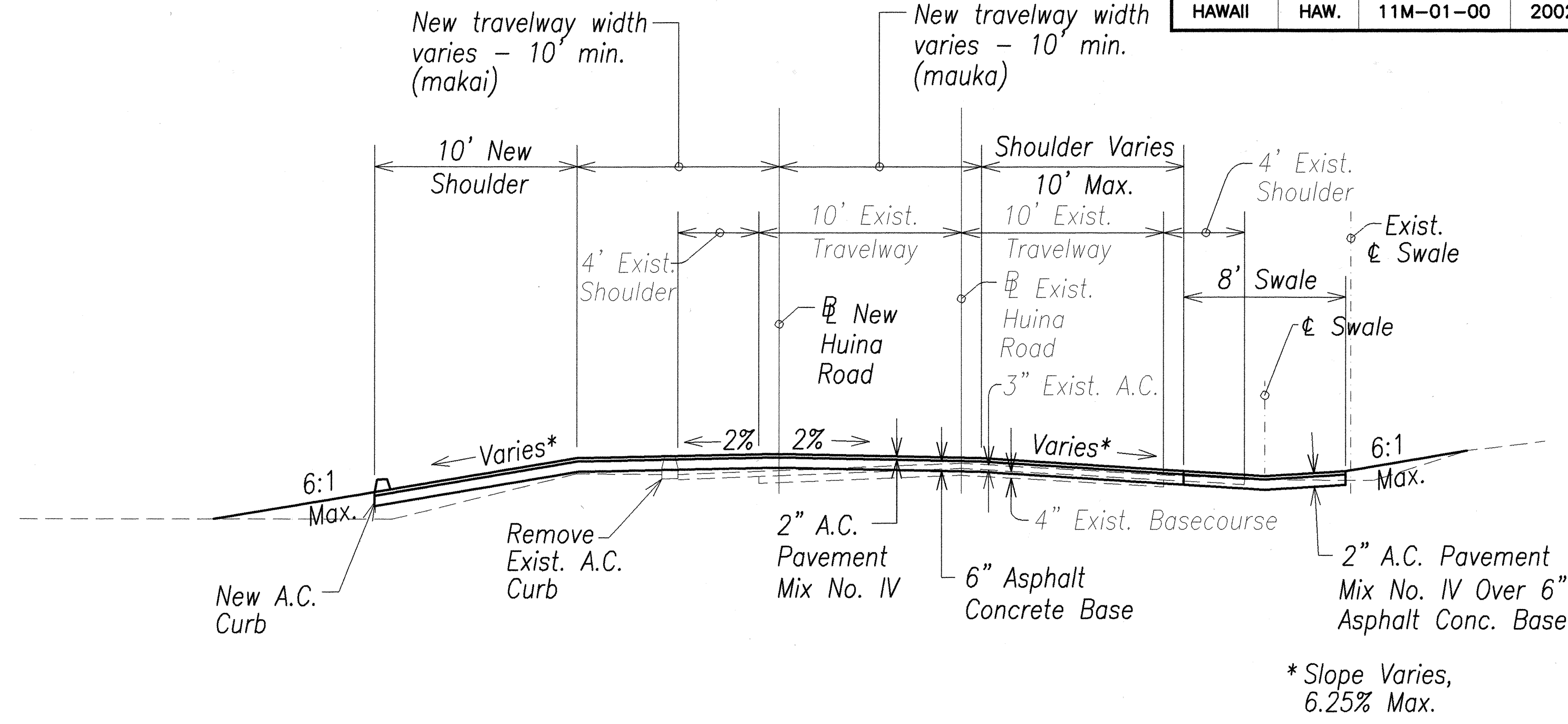
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTIONS
VOLCANO ROAD INTERSECTION
IMPROVEMENTS AT HUINA ROAD
State Project No. 11M-01-00
Scale: 1" = 5' Date: November 2001
SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11M-01-00	2002	ADD.10	65

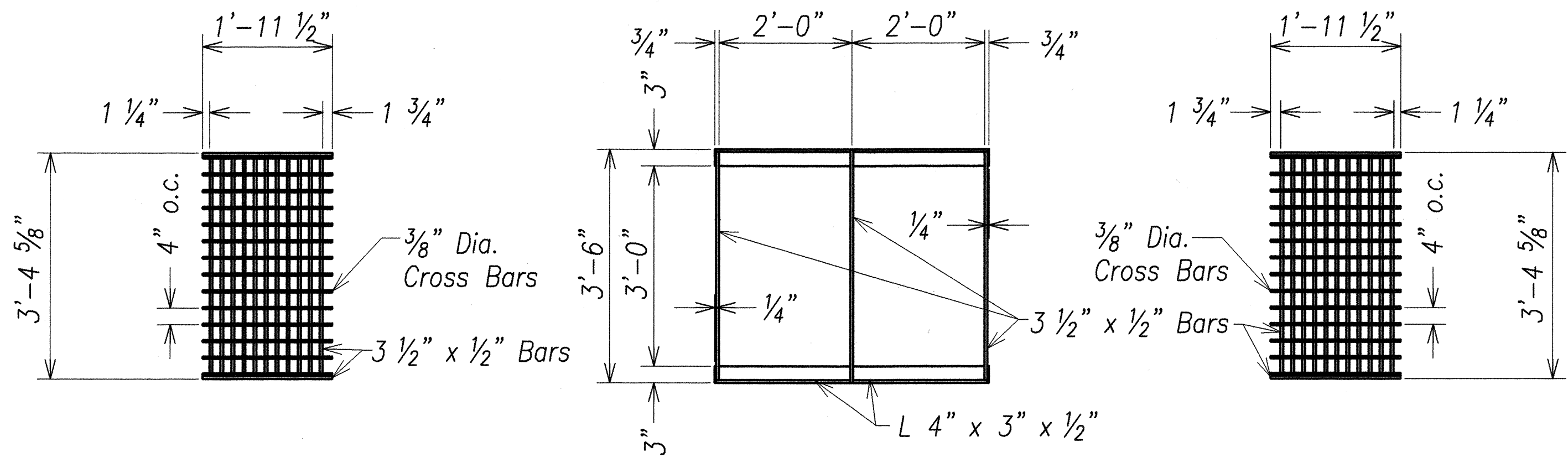


TYPICAL SECTION - HUINA ROAD
STA. 0+75 TO STA. 2+00
 Scale: 1"=5'



TYPICAL SECTION - HUINA ROAD
STA. 0+12 TO STA. 0+75
 Scale: 1"=5'

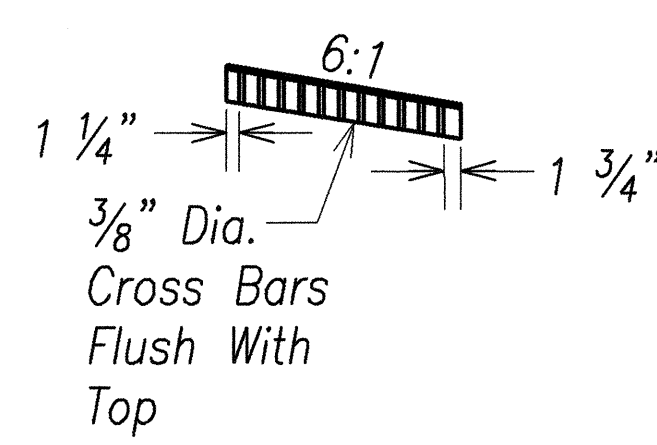
- Notes:**
1. As manufactured by Gratemaster, Inc. or approved equal. (1-800-397-2053)
 2. Grates and frames to be A36 mild steel.
 3. Finish: ASTM A123 hot dip galvanized.
 4. All Welds to be 5/16".



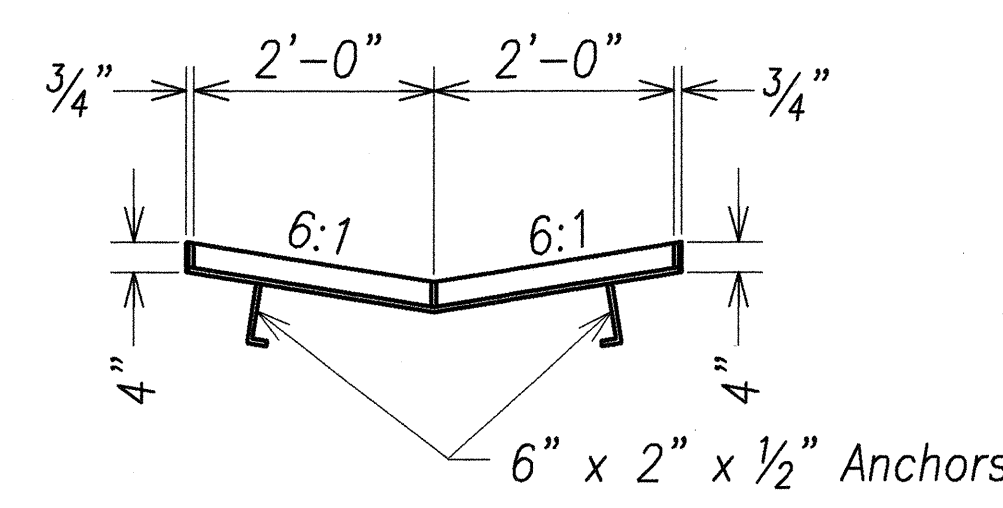
GRATE PLAN

FRAME PLAN

GRATE PLAN

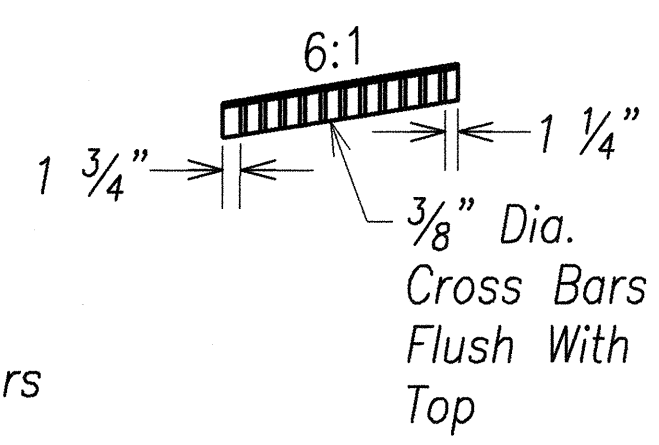


SECTION



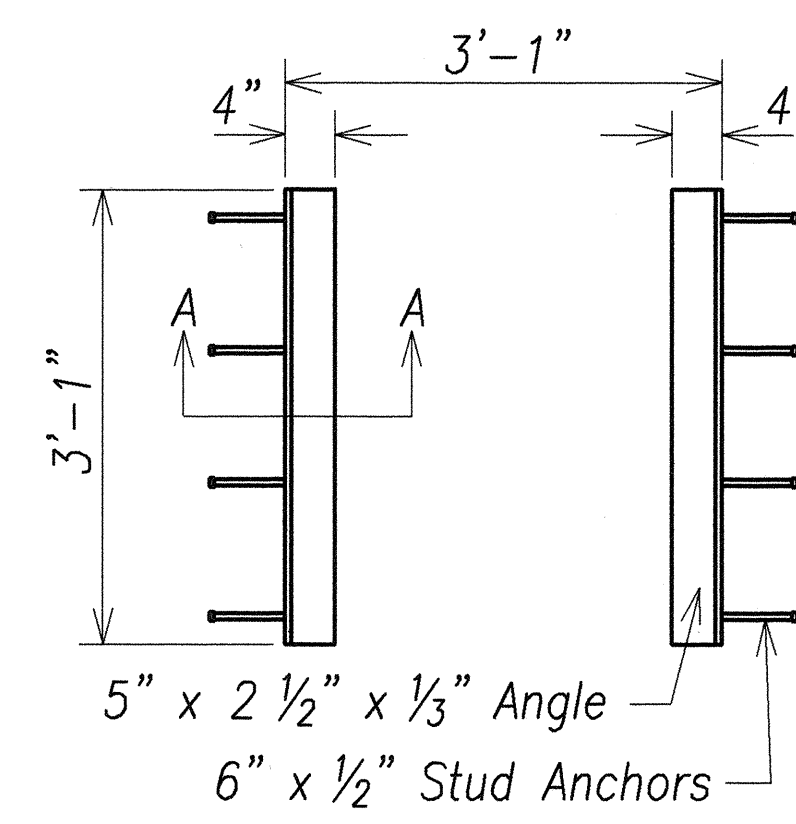
SECTION

MODIFIED TYPE 61614
FRAME AND GRATE
 Not to Scale

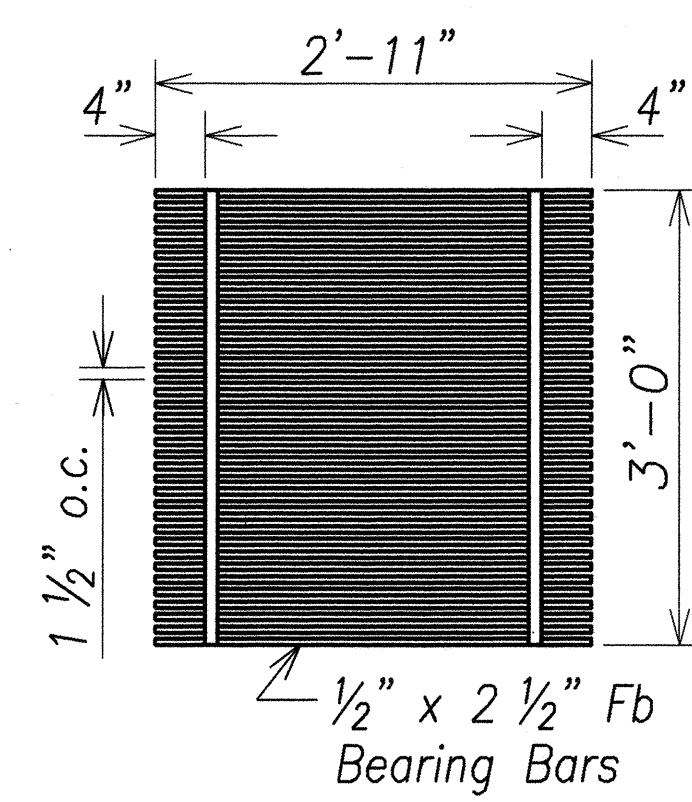


SECTION

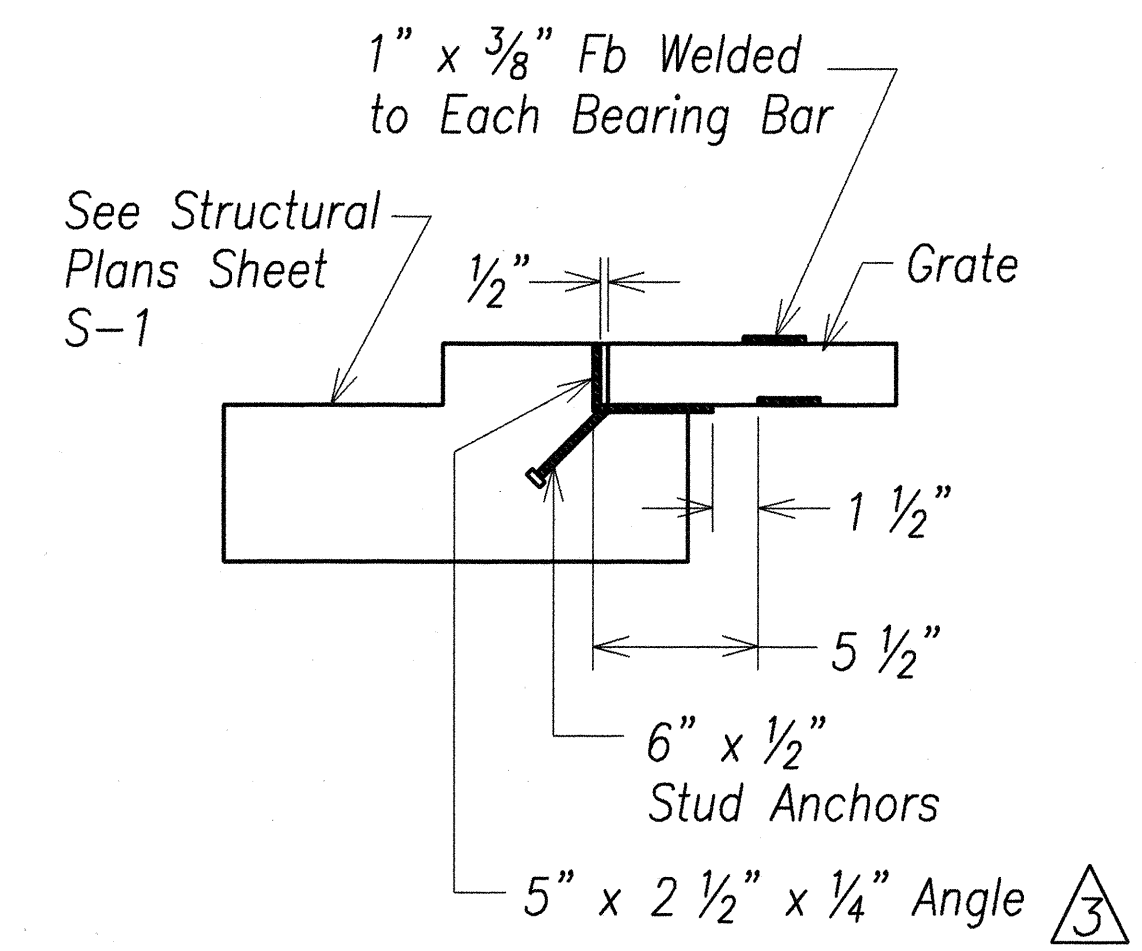
- Notes:**
1. Grates and frames to be A36 mild steel.
 2. Finish: ASTM A123 hot dip galvanized.
 3. All Welds to be 3/16".



STANDARD FRAME

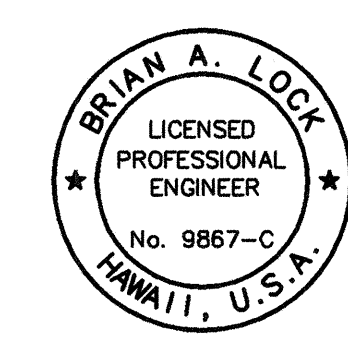


WELDED GRATE



DETAIL A-A

TYPE R-40 FRAME & GRATE FOR DRYWELL COVER
 Not to Scale



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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTIONS

VOLCANO ROAD INTERSECTION
IMPROVEMENTS AT HUINA ROAD
 Project No. 11M-01-00

Scale: 1" = 5' Date: April 2001
 SHEET No. 3 OF 3 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
CHECKED BY	
DATE	

04/29/02 Revised callout for R-40 Grate Frame Angle.