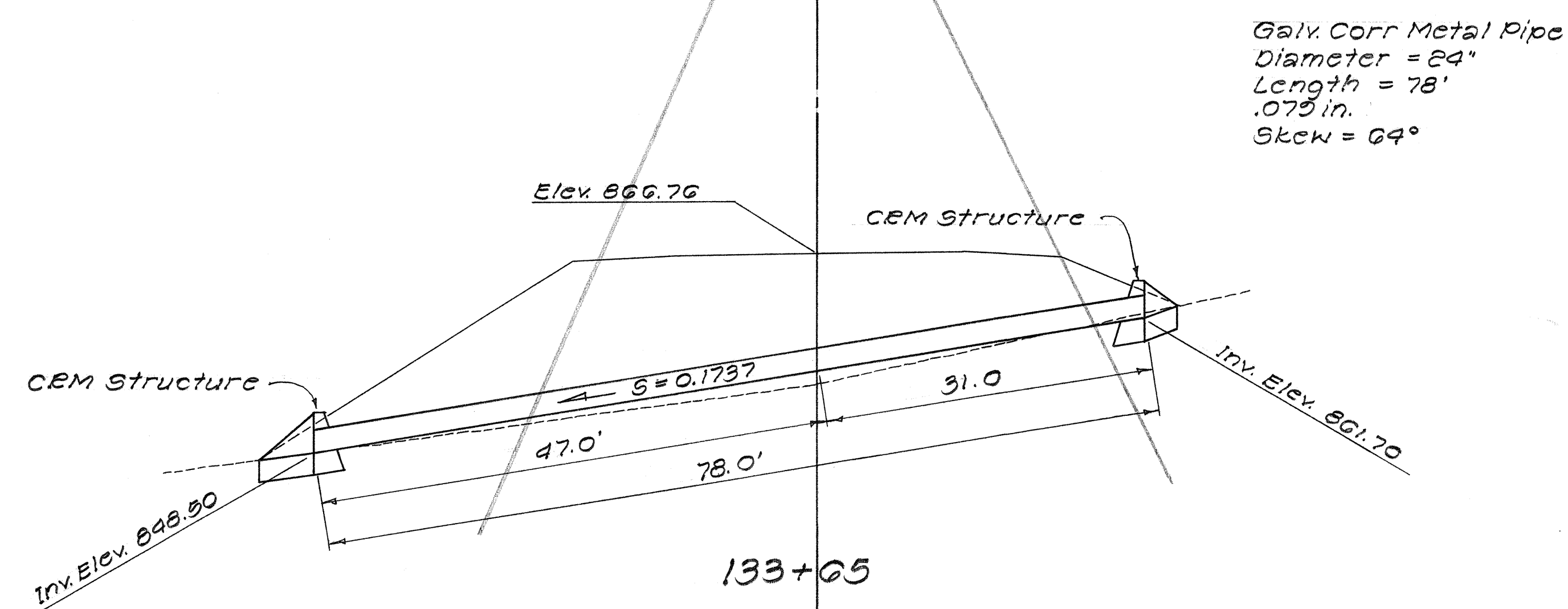
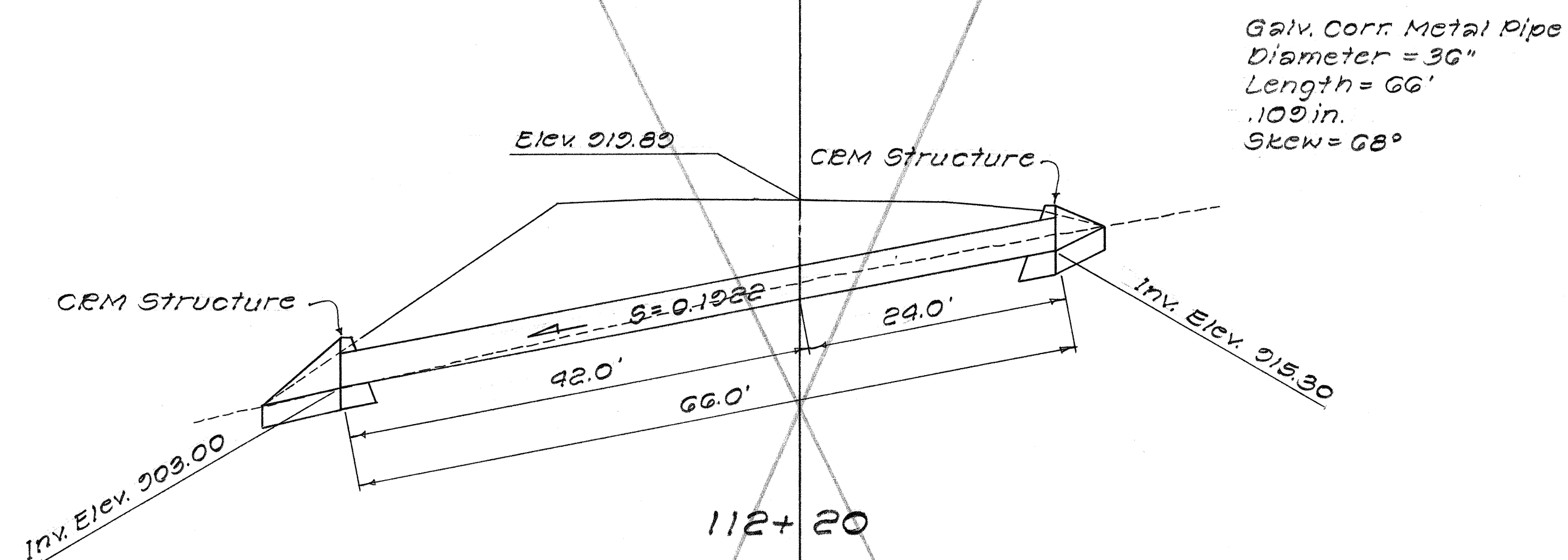
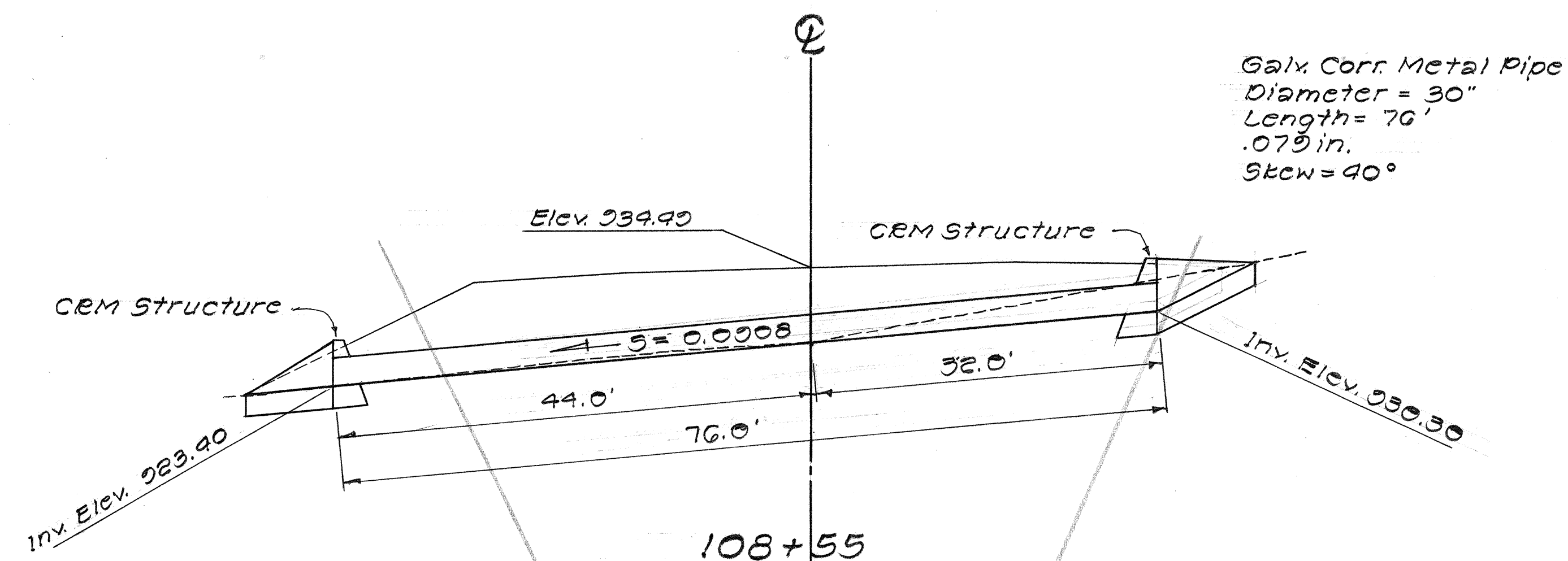
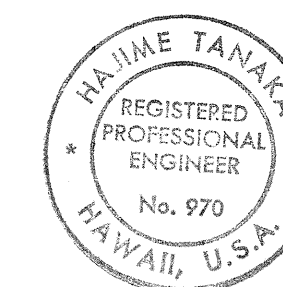
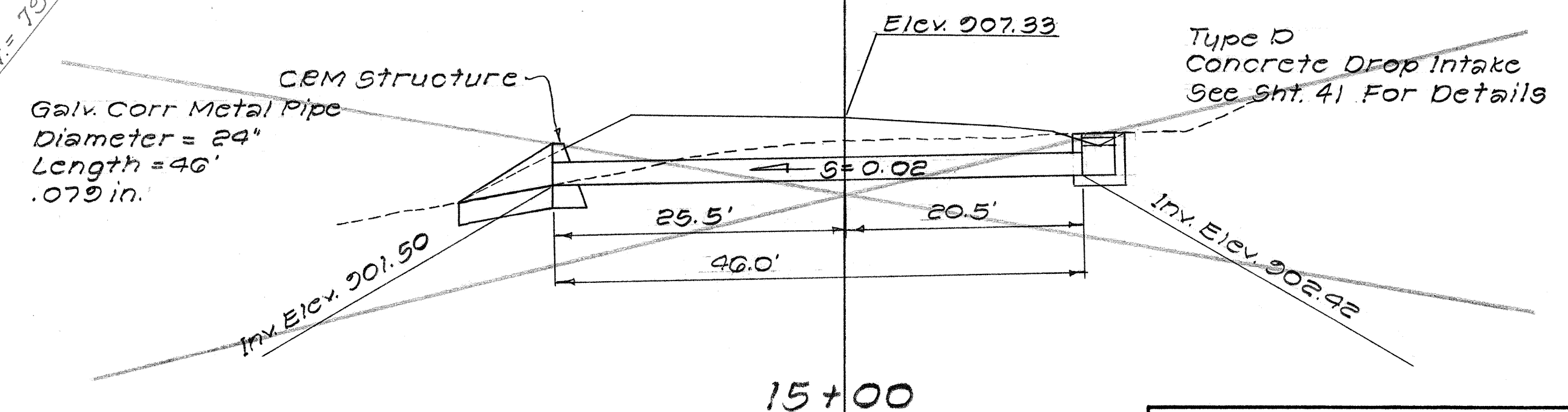
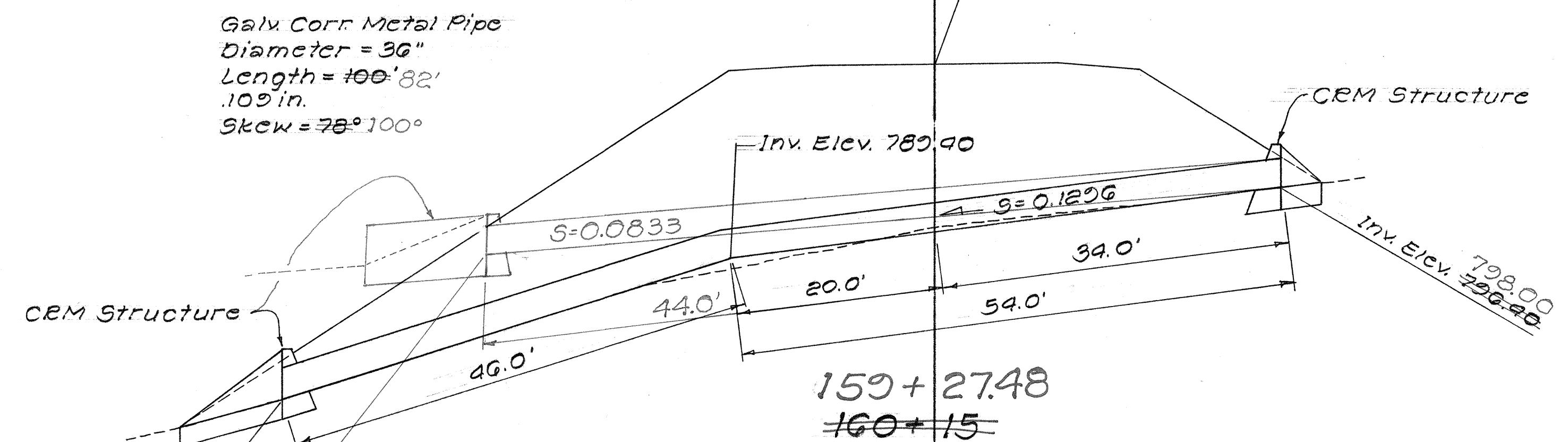
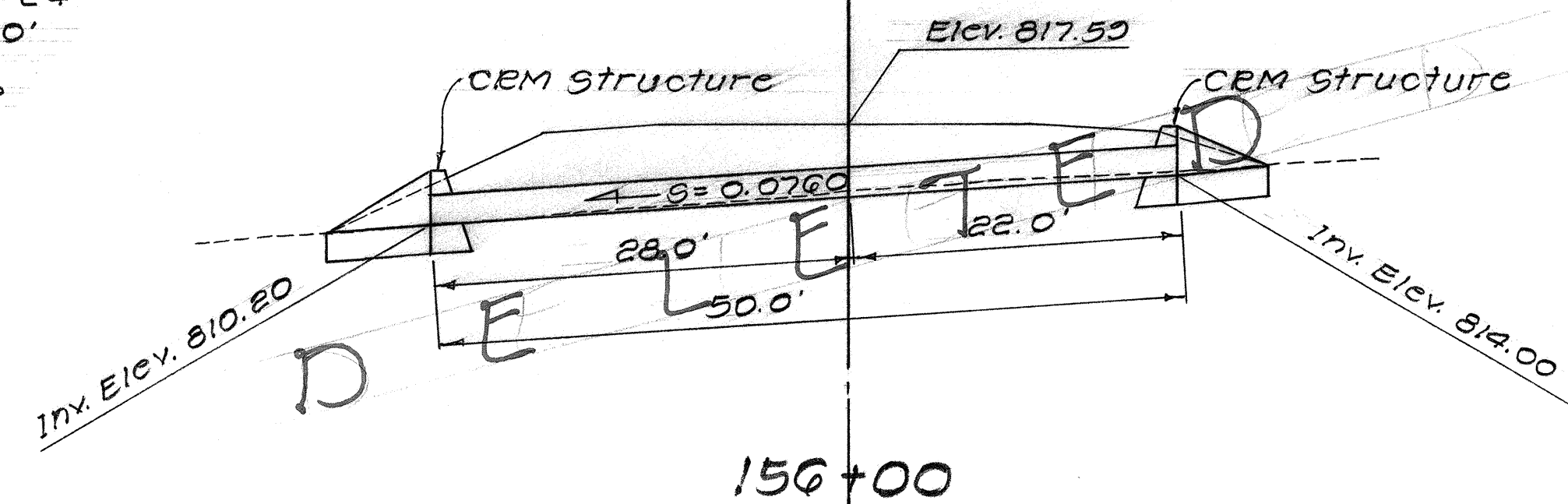


| FED. ROAD DIST. NO. | STATE | PROJ. NO.            | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 240A-01-71<br>UNIT 1 | 1977        | 8         | 55           |



Galv. Corr. Metal Pipe  
Diameter = 24"  
Length = 50'  
.075 in.  
Skew = 76°



THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION

*H. Tanaka*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DRAINAGE CULVERTS**  
AT STA. 108+55, 112+20  
133+65, 156+00, 160+15  
and 15+00 159+27.48

HONOLULU WAIPIIO RD. PROJ. NO. 240A-01-71  
Unit 1

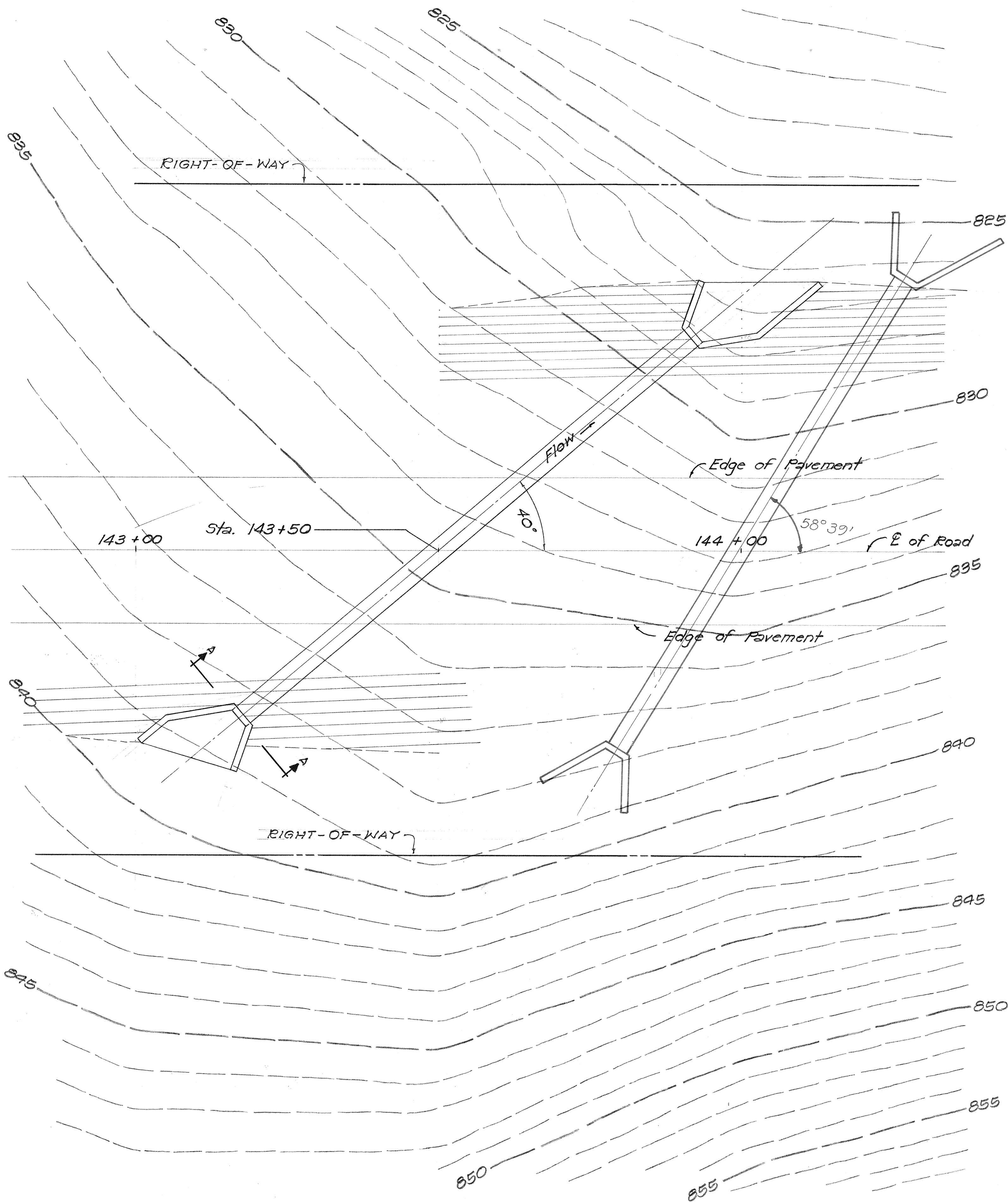
**SHEET No. 1 OF 5 SHEETS**

Scales: Horiz.: 1" = 10'  
Vert.: 1" = 10'

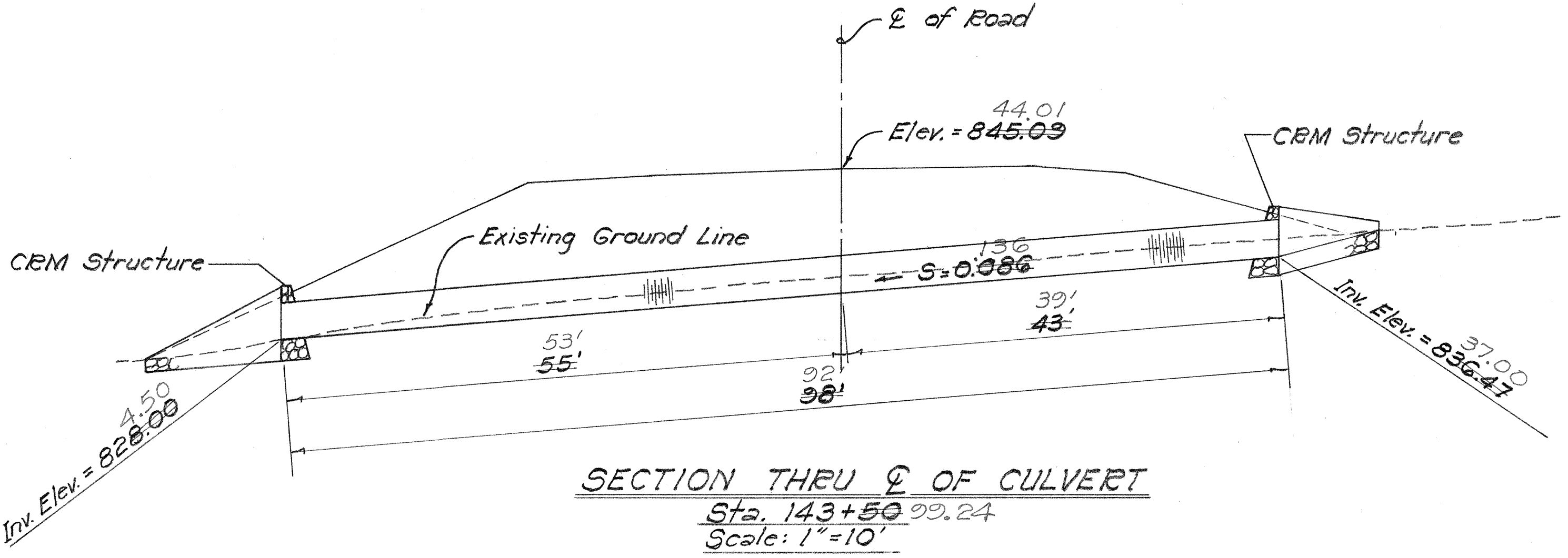


| FED. ROAD DIST. NO. | STATE | PROJ. NO.            | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 240A-01-71<br>UNIT 1 | 1977        | 2         | 55           |

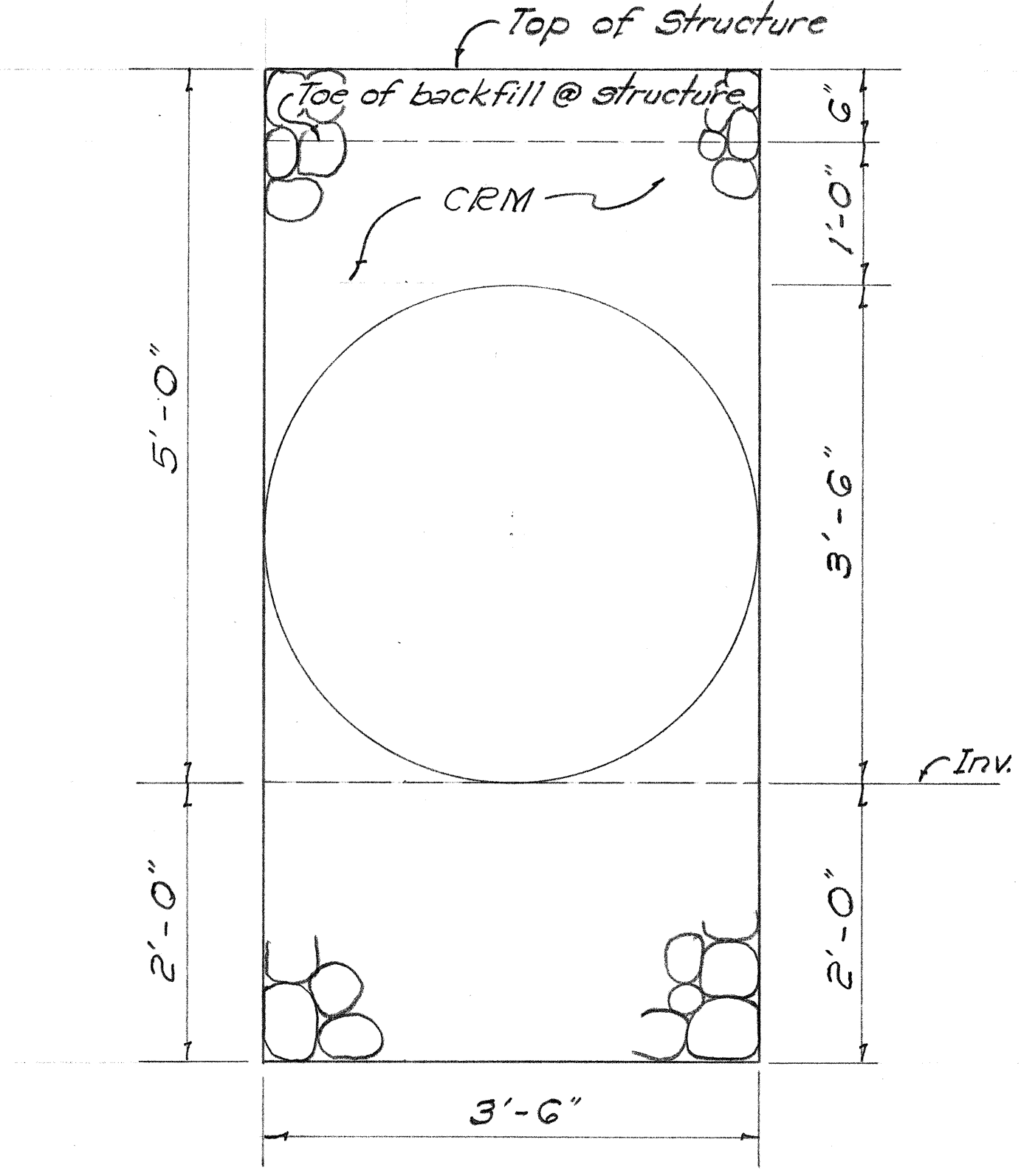
Galv. Corr. Metal Pipe  
Diameter = 42"  
Length = 98' 92"  
100 in.



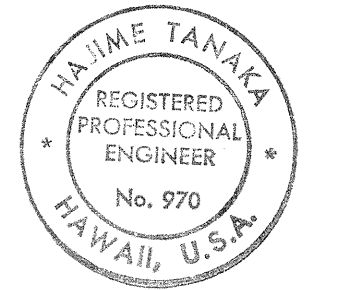
**PLAN**  
Scale: 1 in = 10 Ft.



**SECTION THRU C OF CULVERT**  
Sta. 143+50.99.24  
Scale: 1"=10'



**SECTION "A-A"**  
Scale: 1"=1'-0"



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*H. Tanaka*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

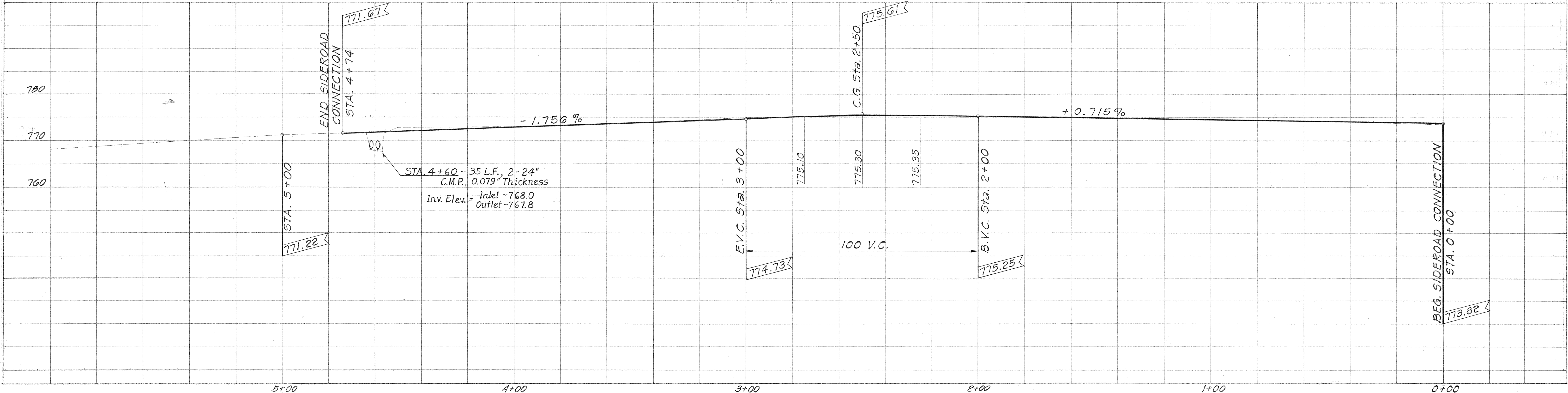
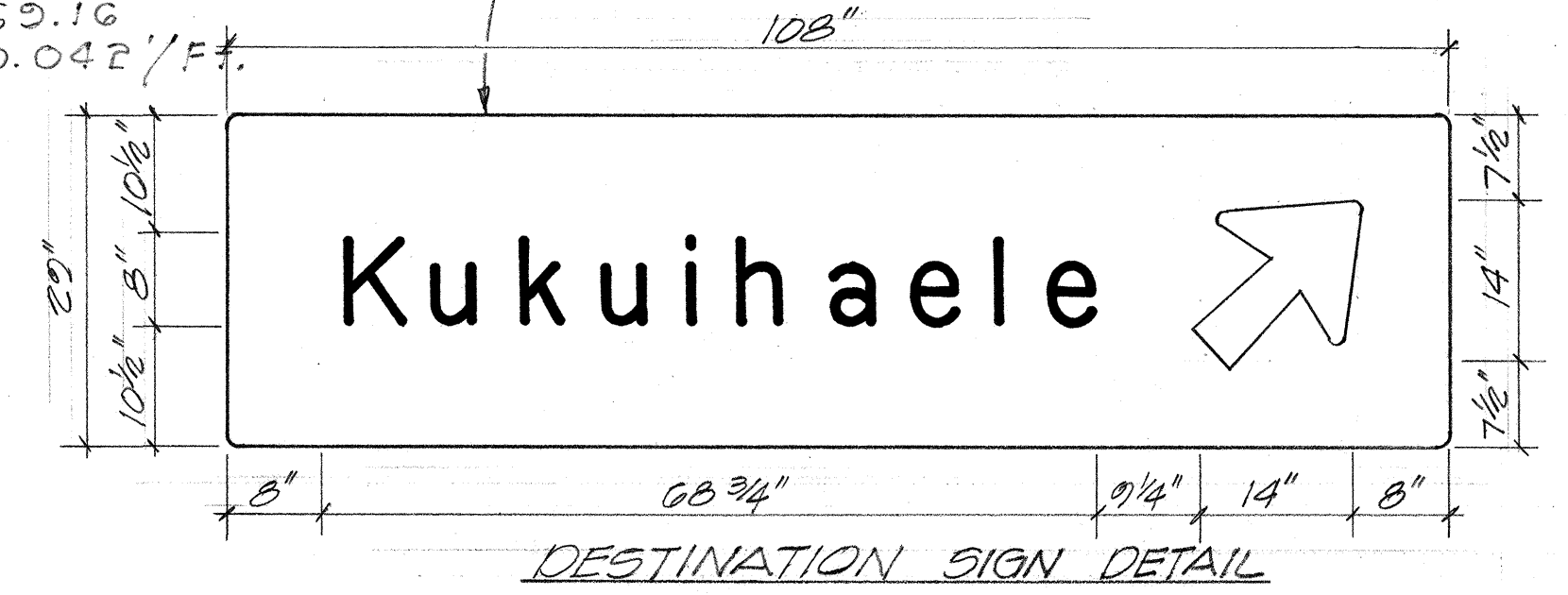
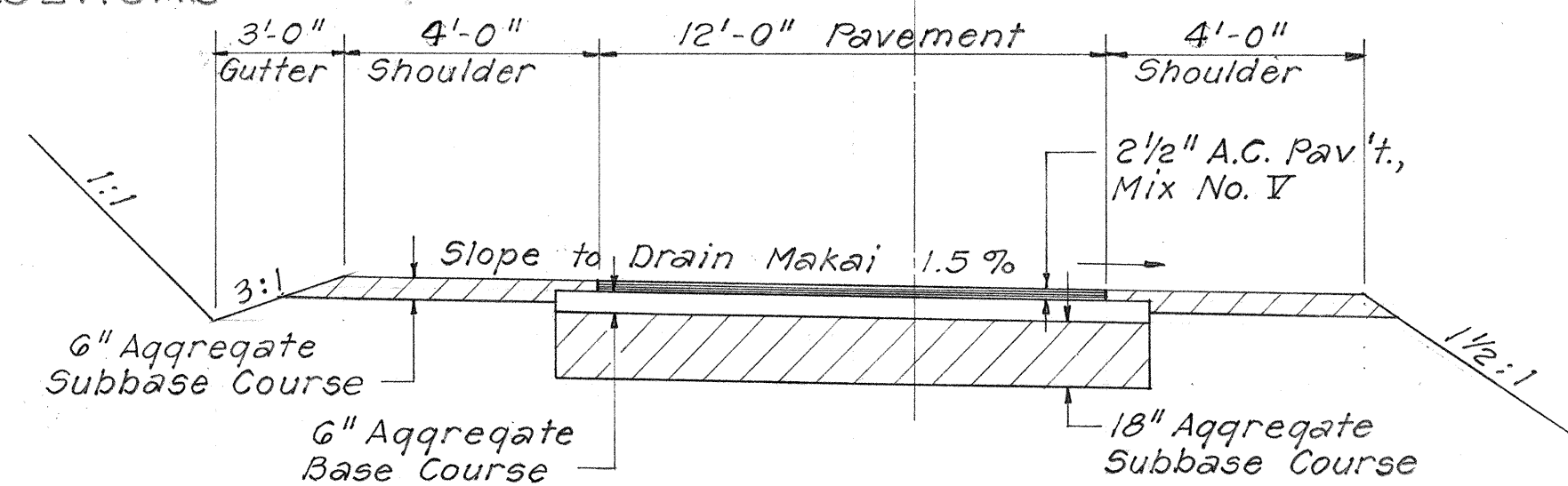
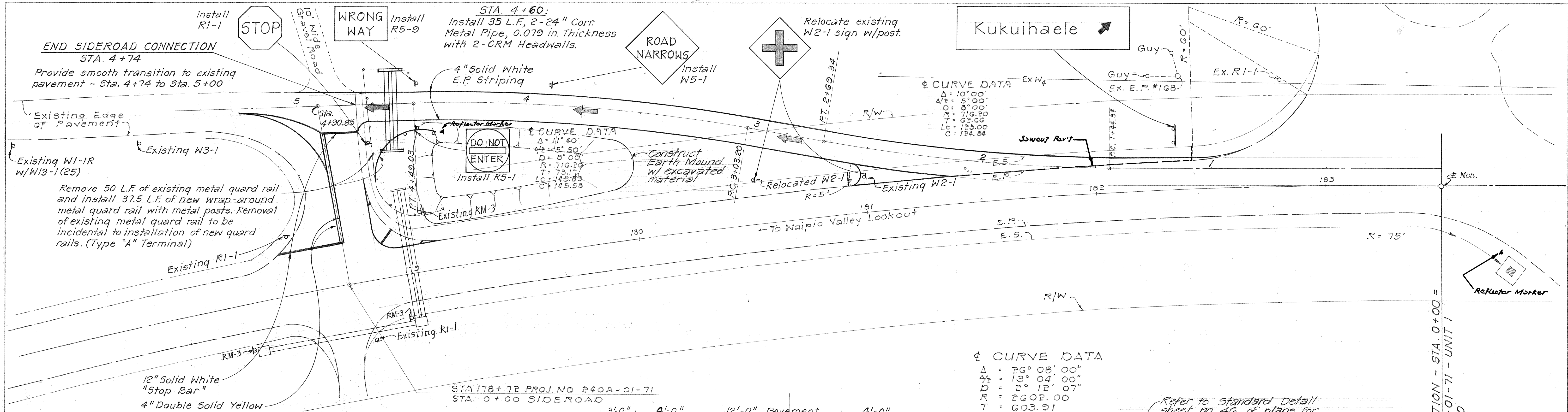
**DRAINAGE CULVERT**  
**AT STA. 143+50.99.24**

HONOKAA-WAIPIO RD. PROJ. NO. 240A-01-71  
Unit 1

**SHEET No. 2 OF 5 SHEETS**

|               |      |
|---------------|------|
| ORIGINAL PLAN | DATE |
| DRAWN BY      |      |
| DESIGNED BY   |      |
| NOTED BY      |      |
| CHECKED BY    |      |
| BY            |      |

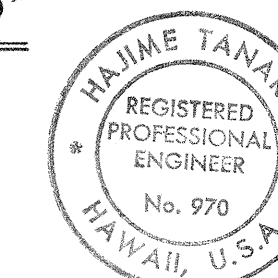
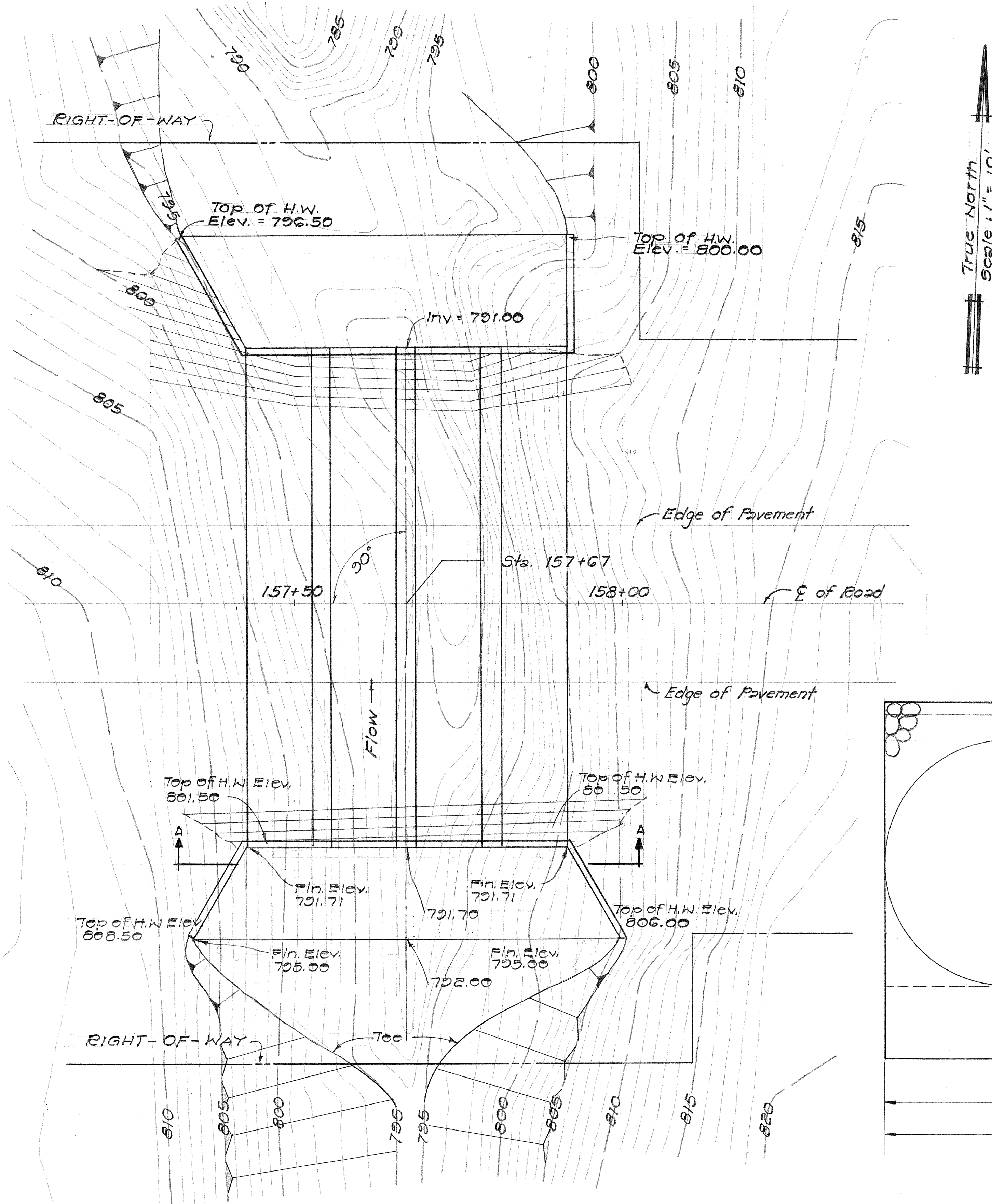
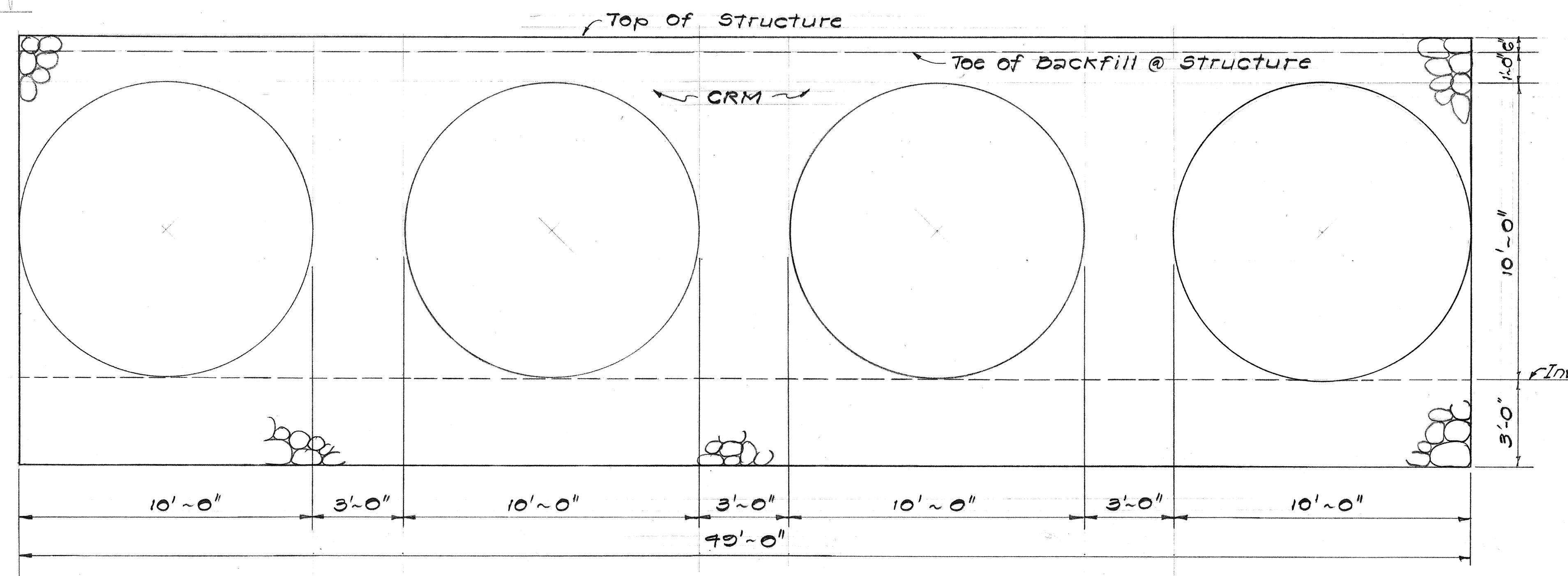
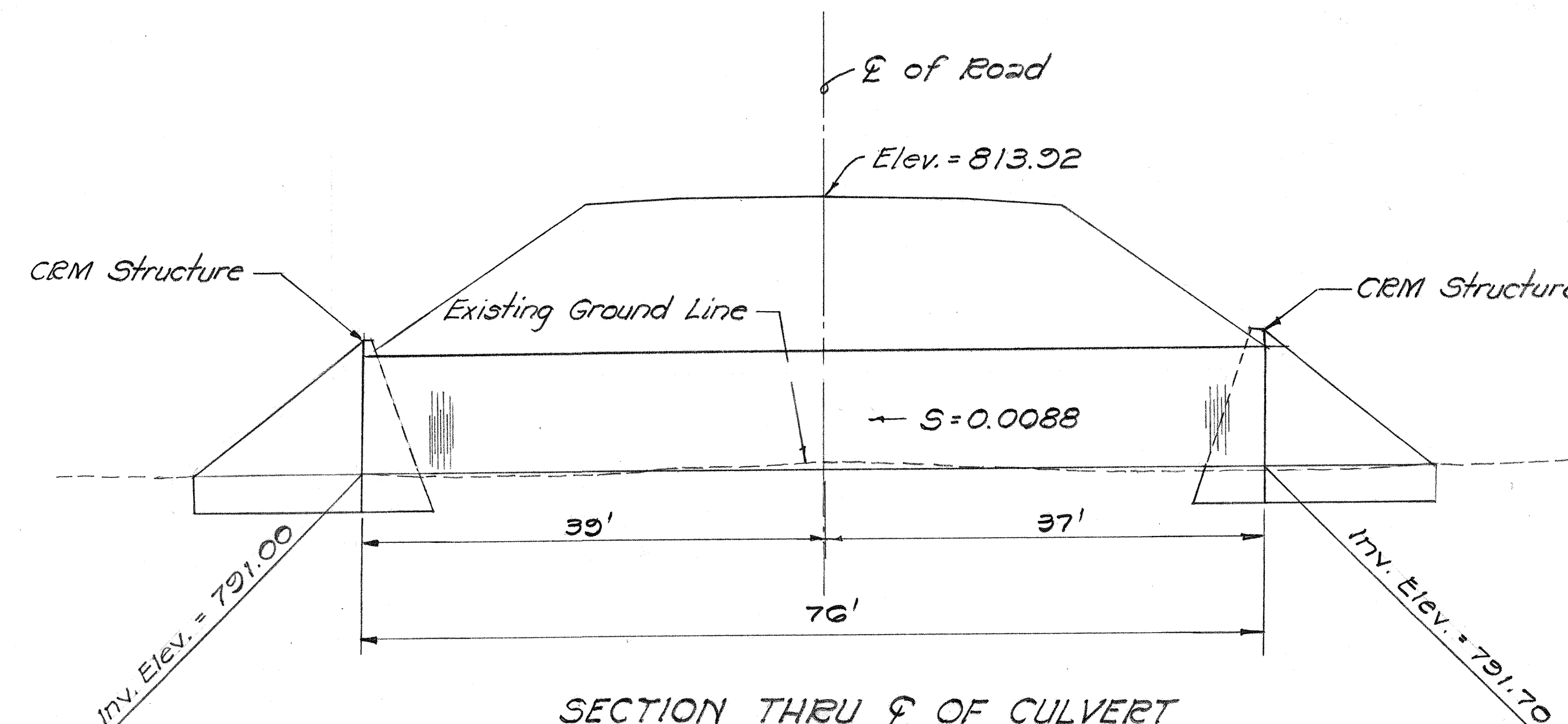






| FED. ROAD DIST. NO. | STATE | PROJ. NO.            | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 240A-01-71<br>UNIT 1 | 1977        | 10        | 55           |

Diameter = 4 - 120"  
Length = 76'  
4 - 120" Structural Plate Pipes.  
No. 10 Gage, Vertical Elongation 5%



THIS WORK WAS PREPARED BY  
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*H. Tanaka*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

DRAINAGE CULVERT  
AT STA. 157+67

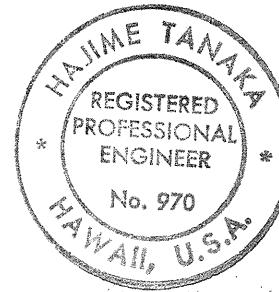
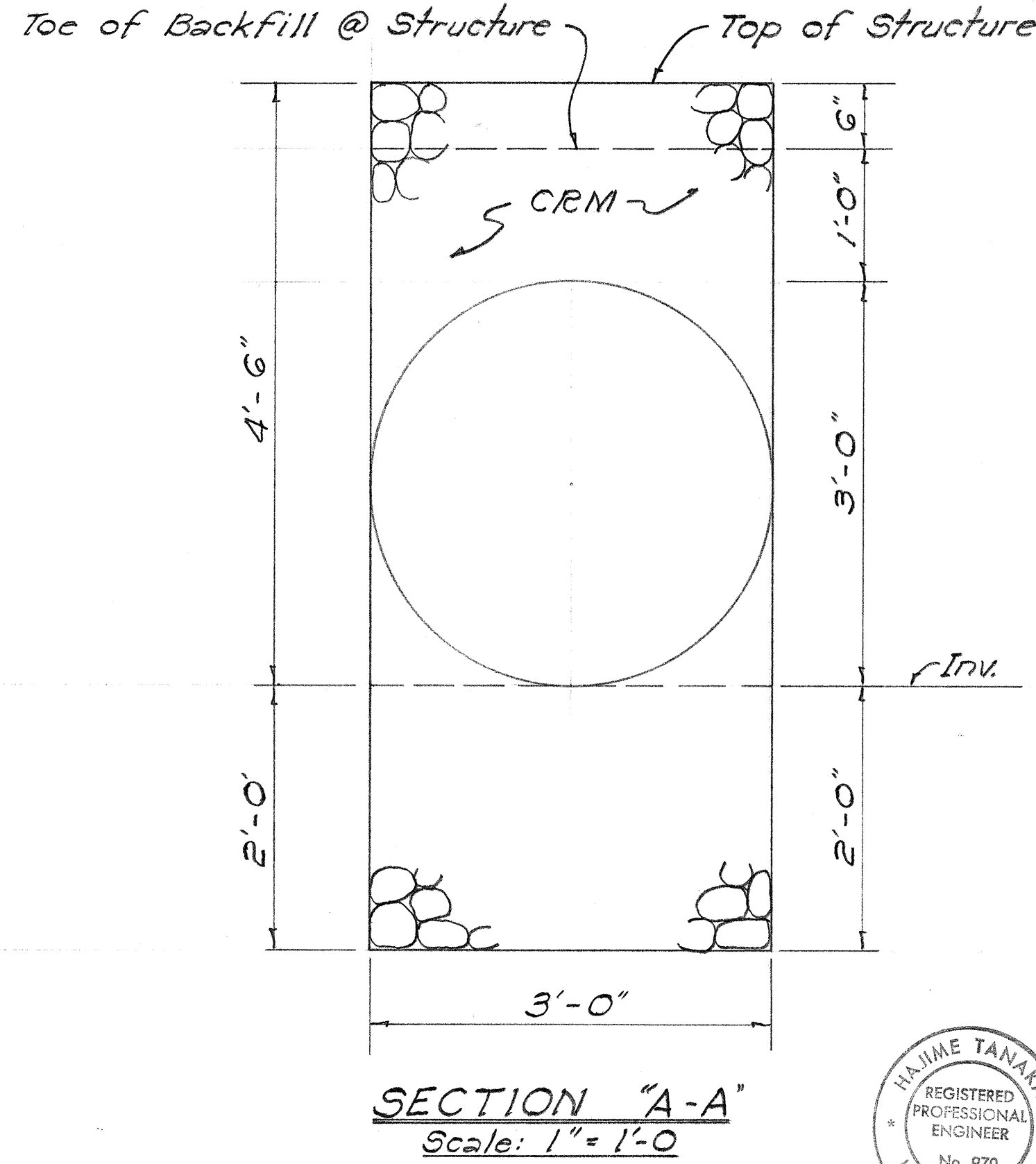
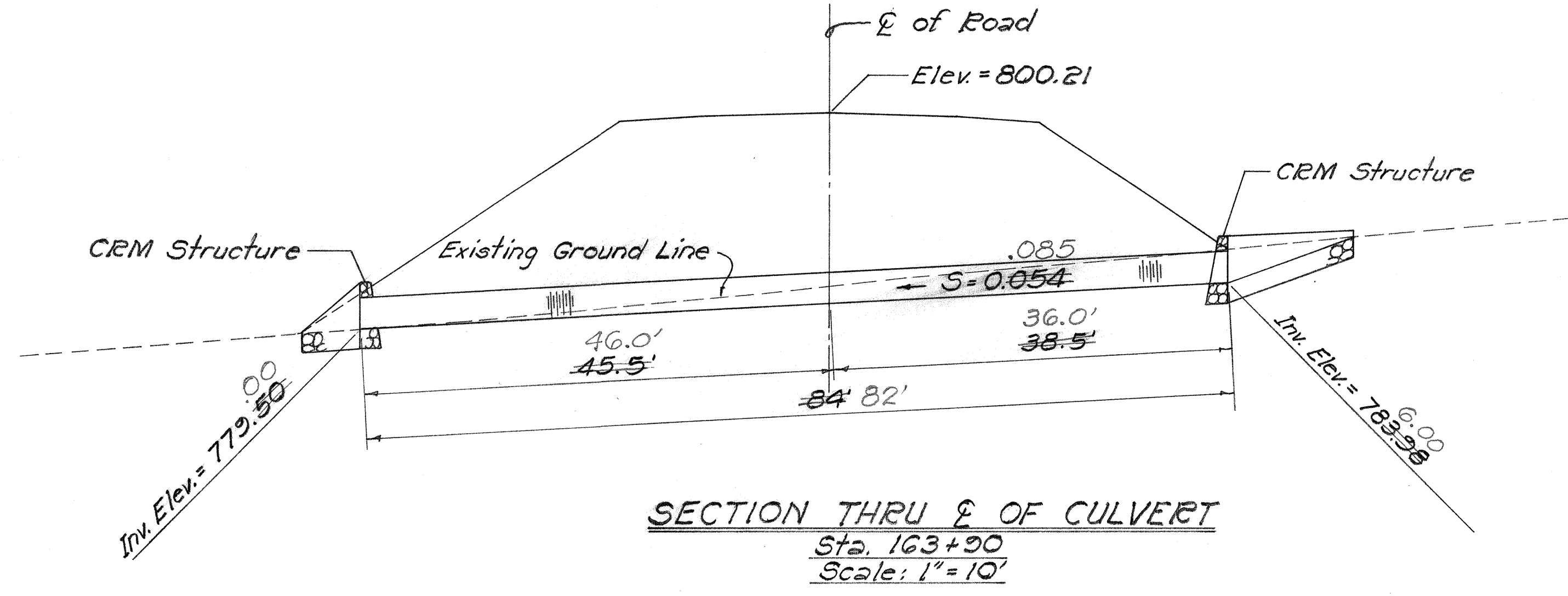
HONOLULU-WAIPIO RD. PROJ. NO. 240A-01-71  
Unit 1

SHEET No. 3 OF 5 SHEETS



| FED. ROAD DIST. NO. | STATE | PROJ. NO.            | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 240A-01-71<br>UNIT 1 | 1977        | 11        | 55           |

Galv. Corr. Metal Pipe  
Diameter = 36"  
Length = 84' 82"  
.109 in.



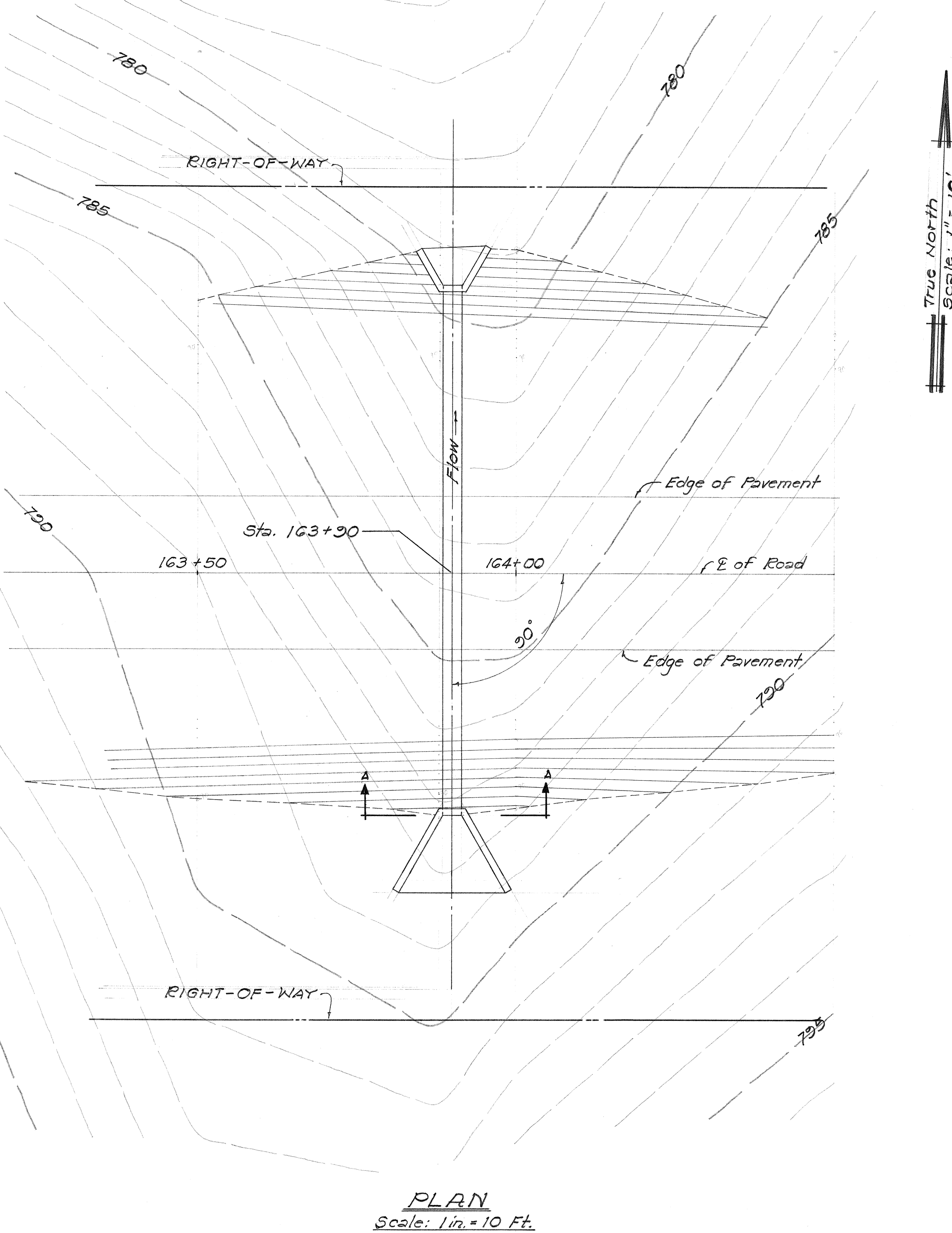
THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION  
*J. Chua*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DRAINAGE CULVERT**  
AT STA. 163+00

HONOKAA-WAIPIO RD. PROJ. NO. 240A-01-71  
Unit 1

**SHEET No. 4 OF 5 SHEETS**



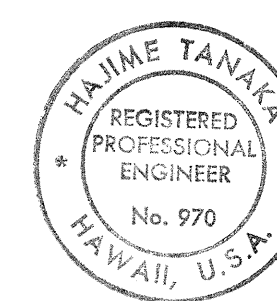
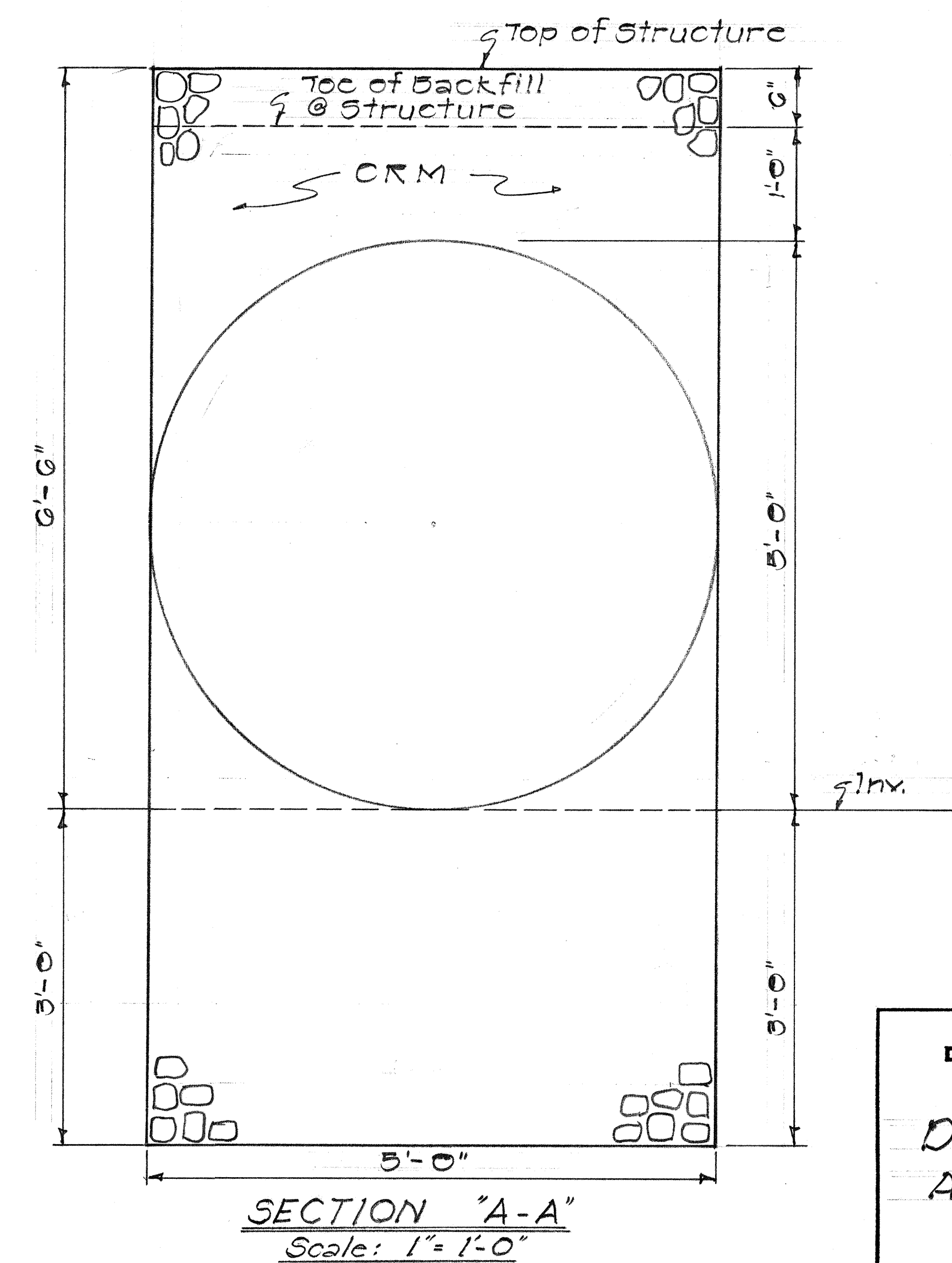
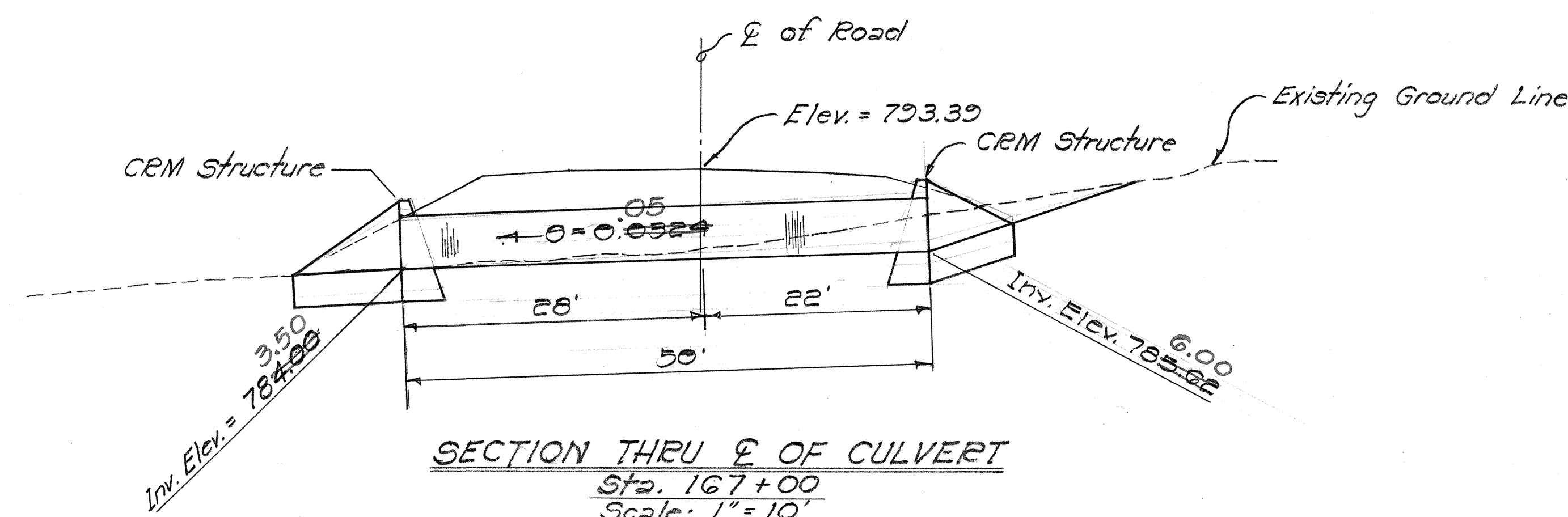
True North  
Scale: 1" = 10'

|               |      |
|---------------|------|
| ORIGINAL      | DATE |
| PLAN          |      |
| NOTE BOOK     |      |
| QUANTITIES BY |      |
| CHECKED BY    |      |



| FED. ROAD DIST. NO. | STATE | PROJ. NO.            | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|----------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 240A-01-71<br>UNIT 1 | 1977        | 12        | 55           |

Galv. Corr. Metal Pipe  
Diameter = 60"  
Length = 50'  
138 in.



THIS WORK WAS PREPARED BY  
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*H. Tanaka*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DRAINAGE CULVERT**  
**AT STA. 167+00**

HONOKAA-WAIPIO RD. PROJ. NO. 240A-01-71  
Unit 1

**SHEET No. 5 OF 5 SHEETS**

|                   |       |
|-------------------|-------|
| DATE              | ..... |
| SURVEY PLOTTED BY | ..... |
| DRAWN BY          | ..... |
| DESIGNED BY       | ..... |
| CHECKED BY        | ..... |
| NOTE BOOK         | ..... |
| No.               | ..... |

**PLAN**  
Scale: 1 in. = 10 Ft.

