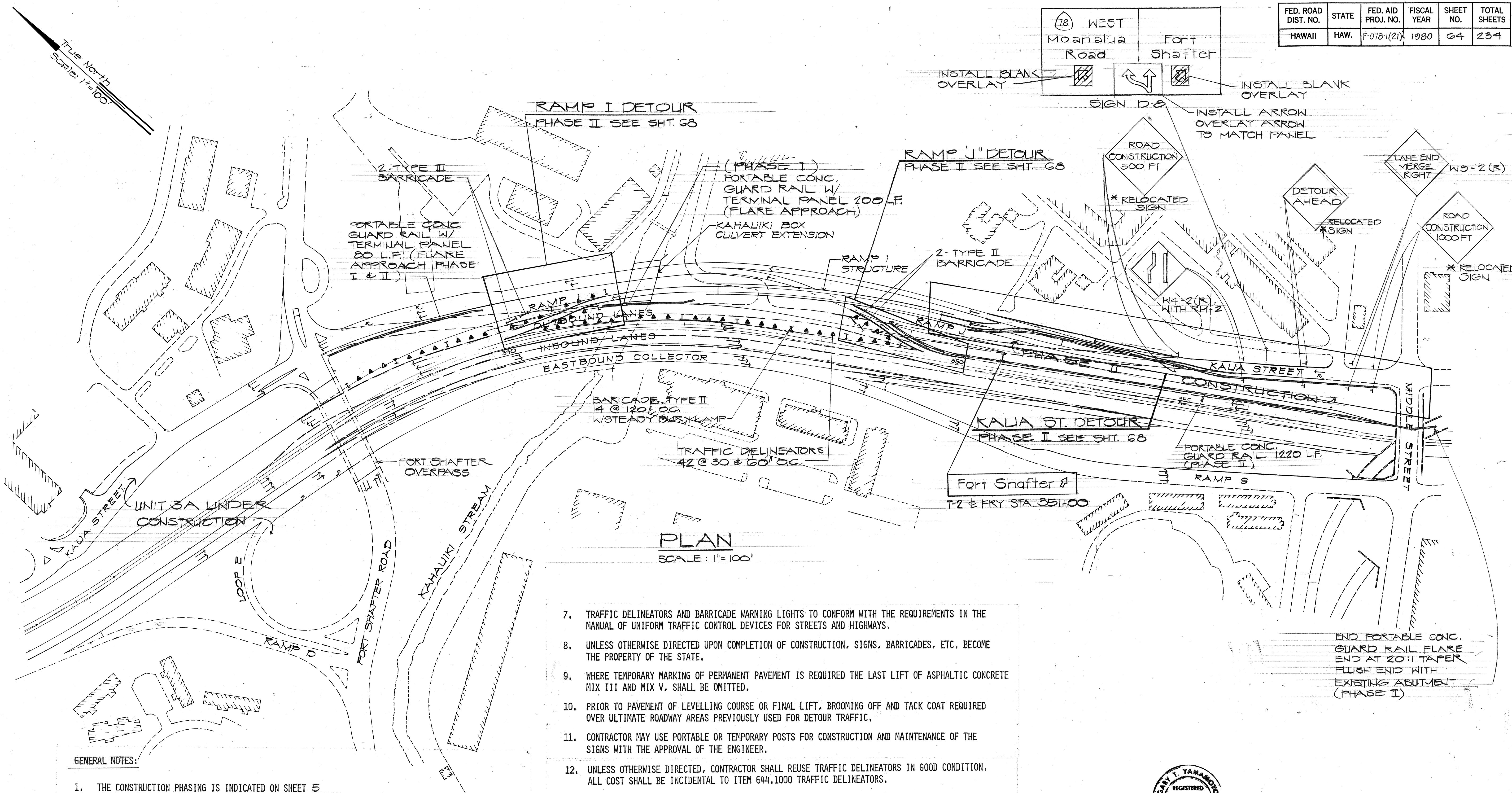


| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 64        | 234          |

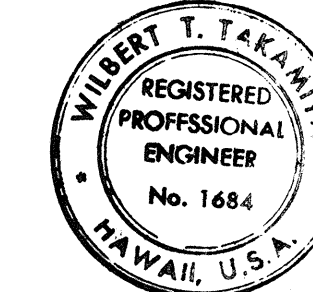
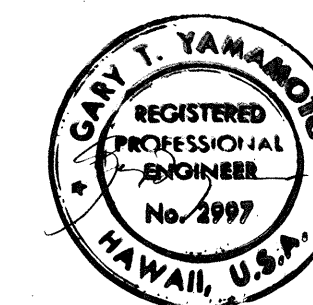


PLAN  
SCALE: 1" = 100'

- TRAFFIC DELINEATORS AND BARRICADE WARNING LIGHTS TO CONFORM WITH THE REQUIREMENTS IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- UNLESS OTHERWISE DIRECTED UPON COMPLETION OF CONSTRUCTION, SIGNS, BARRICADES, ETC. BECOME THE PROPERTY OF THE STATE.
- WHERE TEMPORARY MARKING OF PERMANENT PAVEMENT IS REQUIRED THE LAST LIFT OF ASPHALTIC CONCRETE MIX III AND MIX V, SHALL BE OMITTED.
- PRIOR TO PAVEMENT OF LEVELLING COURSE OR FINAL LIFT, BROOMING OFF AND TACK COAT REQUIRED OVER ULTIMATE ROADWAY AREAS PREVIOUSLY USED FOR DETOUR TRAFFIC.
- CONTRACTOR MAY USE PORTABLE OR TEMPORARY POSTS FOR CONSTRUCTION AND MAINTENANCE OF THE SIGNS WITH THE APPROVAL OF THE ENGINEER.
- UNLESS OTHERWISE DIRECTED, CONTRACTOR SHALL REUSE TRAFFIC DELINEATORS IN GOOD CONDITION. ALL COST SHALL BE INCIDENTAL TO ITEM 644.1000 TRAFFIC DELINEATORS.
- PAYMENT FOR FURNISHING ALL MATERIALS AND PERFORMING ALL WORK THAT DO NOT HAVE APPLICABLE CONTRACT ITEMS WILL BE ON A FORCE ACCOUNT BASIS AND WILL BE PAID UNDER ITEM NO. 104.0500 CONSTRUCTION AND MAINTENANCE OF DETOURS.
- BARRICADES, CONSTRUCTION SIGNS AND PORTABLE CONC GUARD RAILS SHOWN AS "RELOCATED" SHALL BE FURNISHED BY THE STATE. CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR INSTALLATION AND MAINTENANCE.
- SIGNS SHOWN WITH "\*" TO BE USED IN PHASE I OR AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL PERIODICALLY, AS DEEMED NECESSARY BY THE ENGINEER, WASH DOWN DETOUR SIGNS, DELINEATORS, BARRICADES ETC. THIS WORK WILL BE PAID FOR ON FORCE ACCOUNT BASIS UNDER ITEM NO. 104.0500, "CONSTRUCTION AND MAINTENANCE OF DETOURS."

GENERAL NOTES:

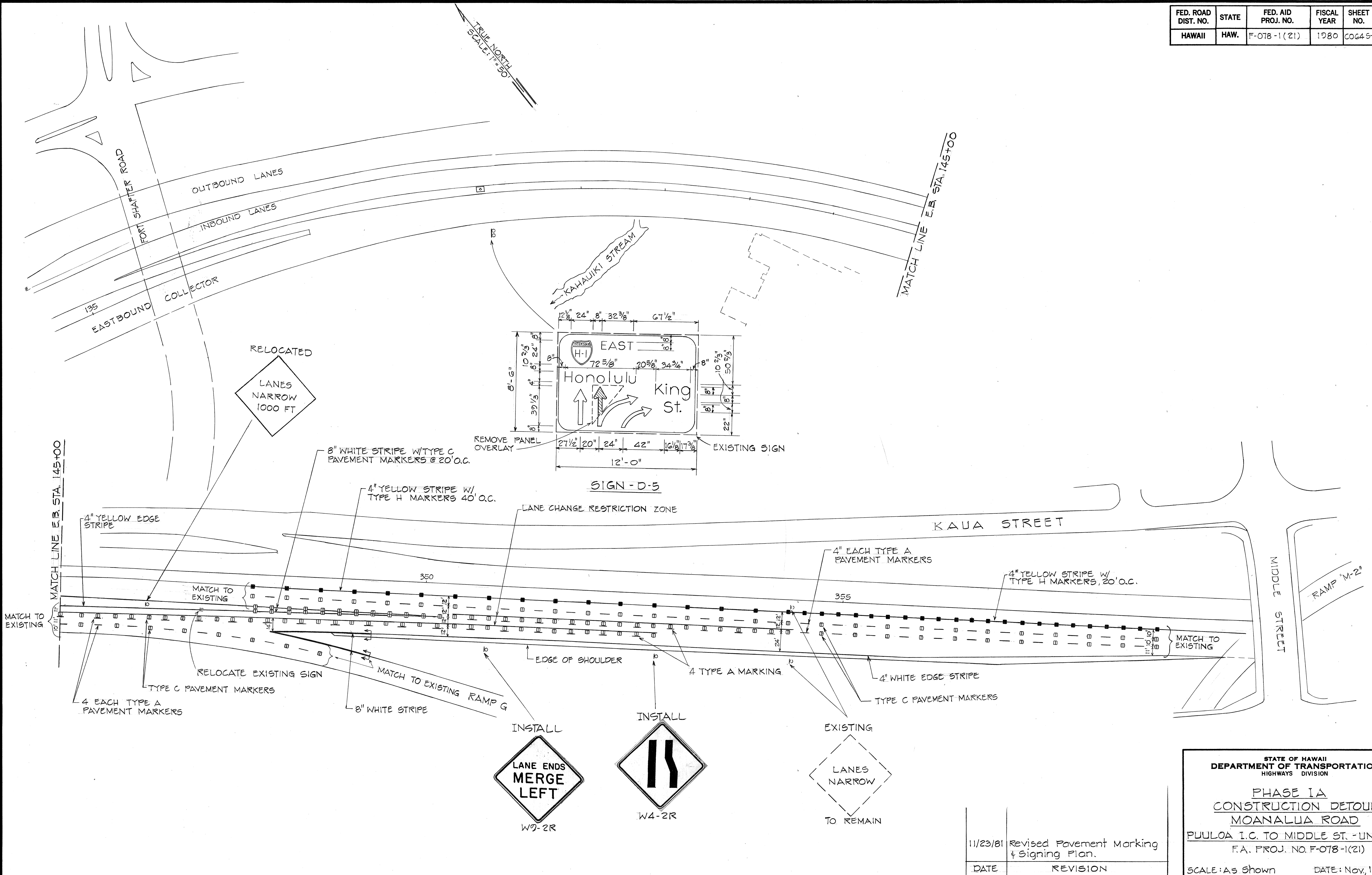
- THE CONSTRUCTION PHASING IS INDICATED ON SHEET 5
- PHASE I TRAFFIC ROUTING WILL BE PRIMARILY ON THE EXISTING ROADWAY SYSTEM.
- EXISTING SIGNS NOT COMPATIBLE WITH THE DETOUR PLANS WILL BE REMOVED WHERE NOT APPLICABLE. ULTIMATE TRAFFIC SIGNS SHALL NOT BE INSTALLED WHEN IN CONFLICT WITH DETOUR.
- WHEN APPLICABLE, DETOUR SIGNS, BARRICADES, STRIPING, ETC., SHALL REMAIN THROUGHOUT CONSTRUCTION PHASING.
- TEMPORARY TRAFFIC LANES ARE 10 FEET MINIMUM, 11 FEET LANES REQUIRED FOR RIGHT AND FOR LEFT LANES WITH ADJACENT ONCOMING TRAFFIC.
- SIGN POSTS, NUMBER OF POSTS, ETC. TO CONFORM WITH THE APPLICABLE GENERAL NOTES IN STANDARD DETAILS.



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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
PHASE I & II  
**CONSTRUCTION DETOUR**  
MOANALUA ROAD  
PUULOA I.C. TO MIDDLE ST.-UNIT 3B  
F.A. PROJ. NO. F-078-1(21)  
SCALE: AS SHOWN DATE: AUG. 1, 1979  
SHEET NO. 1 OF 10 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 60645-1   | 234          |



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

|          |                                          |
|----------|------------------------------------------|
| 11/23/81 | Revised Pavement Marking & Signing Plan. |
| DATE     | REVISION                                 |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

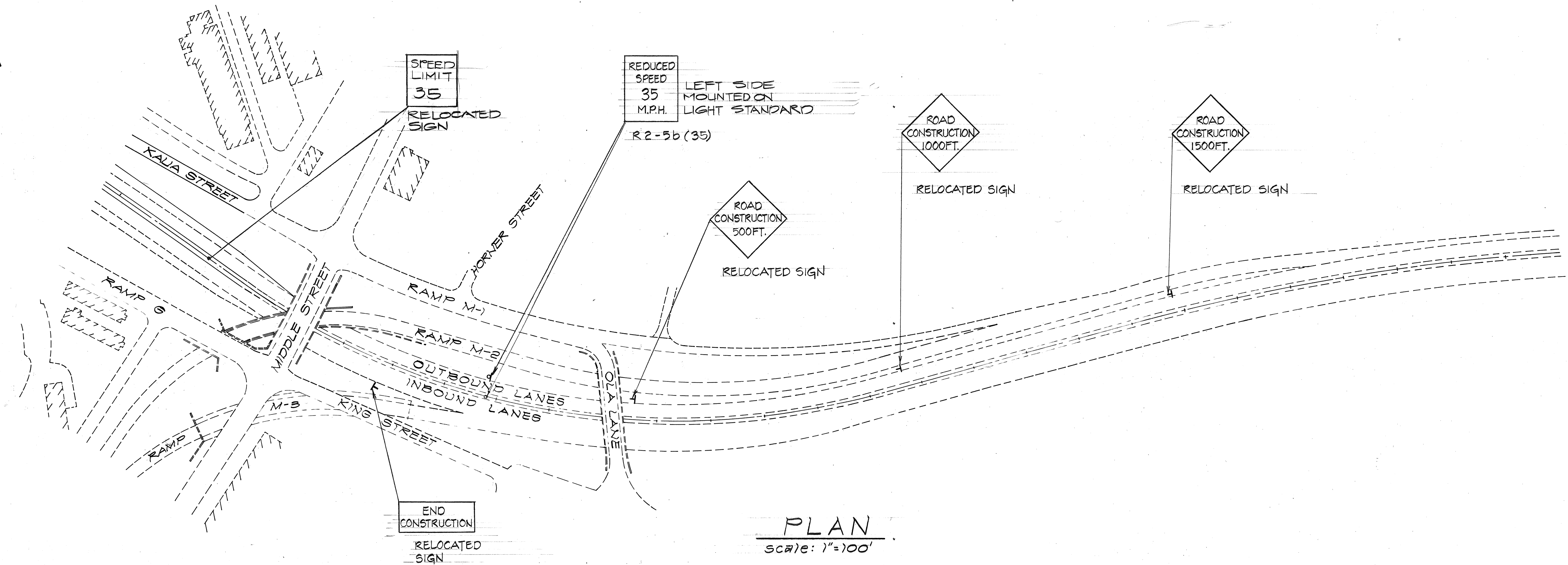
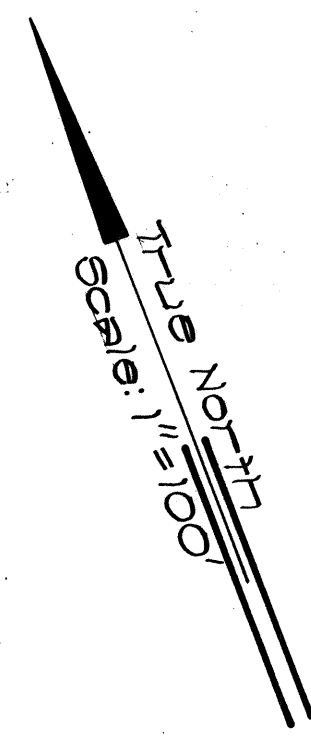
**PHASE 1A**  
**CONSTRUCTION DETOUR**  
**MOANALUA ROAD**  
**PUULOA I.C. TO MIDDLE ST. - UNIT 3B**  
F.A. PROJ. NO. F-078-1(21)

SCALE: As Shown
DATE: Nov, 1981

SHEET NO. 1 OF 1 SHEETS

C.O. 64 S-1

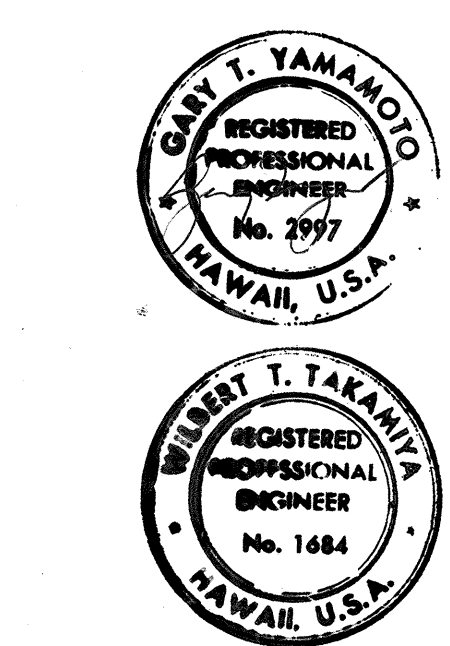
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|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 65        | 234          |



| DETOUR SIGNING SUMMARY |                                     |         |      |          |      |           |      |            |      |
|------------------------|-------------------------------------|---------|------|----------|------|-----------|------|------------|------|
| TYPE                   | DESCRIPTION                         | PHASE I |      | PHASE II |      | PHASE III |      | PHASE IIIA |      |
|                        |                                     | W/P     | WO/P | W/P      | WO/P | W/P       | WO/P | W/P        | WO/P |
| CW20-2d                | DETOUR AHEAD                        |         |      | 2        |      |           |      | 2          |      |
| W4-2                   | 11                                  |         |      | 2        |      |           |      | 2          |      |
| W3-2(R)                | LANE END                            |         |      | 2        |      |           |      | 2          |      |
| R2-5b(35)              | SPEED LIMIT 35                      |         |      | 1        | 1    |           |      | 1          | 1    |
|                        | TOTAL                               |         |      | 7        | 1    |           |      | 7          | 1    |
|                        | RELOCATED SIGNS                     | 2       |      | 4        |      | 3         |      | 9          |      |
| TYPE II                | BARRICADE                           |         |      | 14       |      | 10        |      | 33         | 66   |
| TYPE III               | BARRICADE                           |         |      | 4        |      |           |      |            | 4    |
|                        | TRAFFIC DELINEATOR                  |         |      | 42       |      | 54        |      | 90         | 135  |
|                        | PORTABLE CONC. GUARD RAIL           | 380     |      |          |      | 970       |      |            |      |
|                        | RELOCATED PORTABLE CONC. GUARD RAIL |         |      |          |      | 2570      |      |            |      |

| TEMPORARY DESTINATION SIGN SUMMARY |             |         |
|------------------------------------|-------------|---------|
| SIGN NO.                           | DESCRIPTION | SQ. FT. |
| T-2                                | FT. SHAFTER | 27      |
|                                    |             |         |
|                                    |             |         |
|                                    | TOTAL       | 27      |

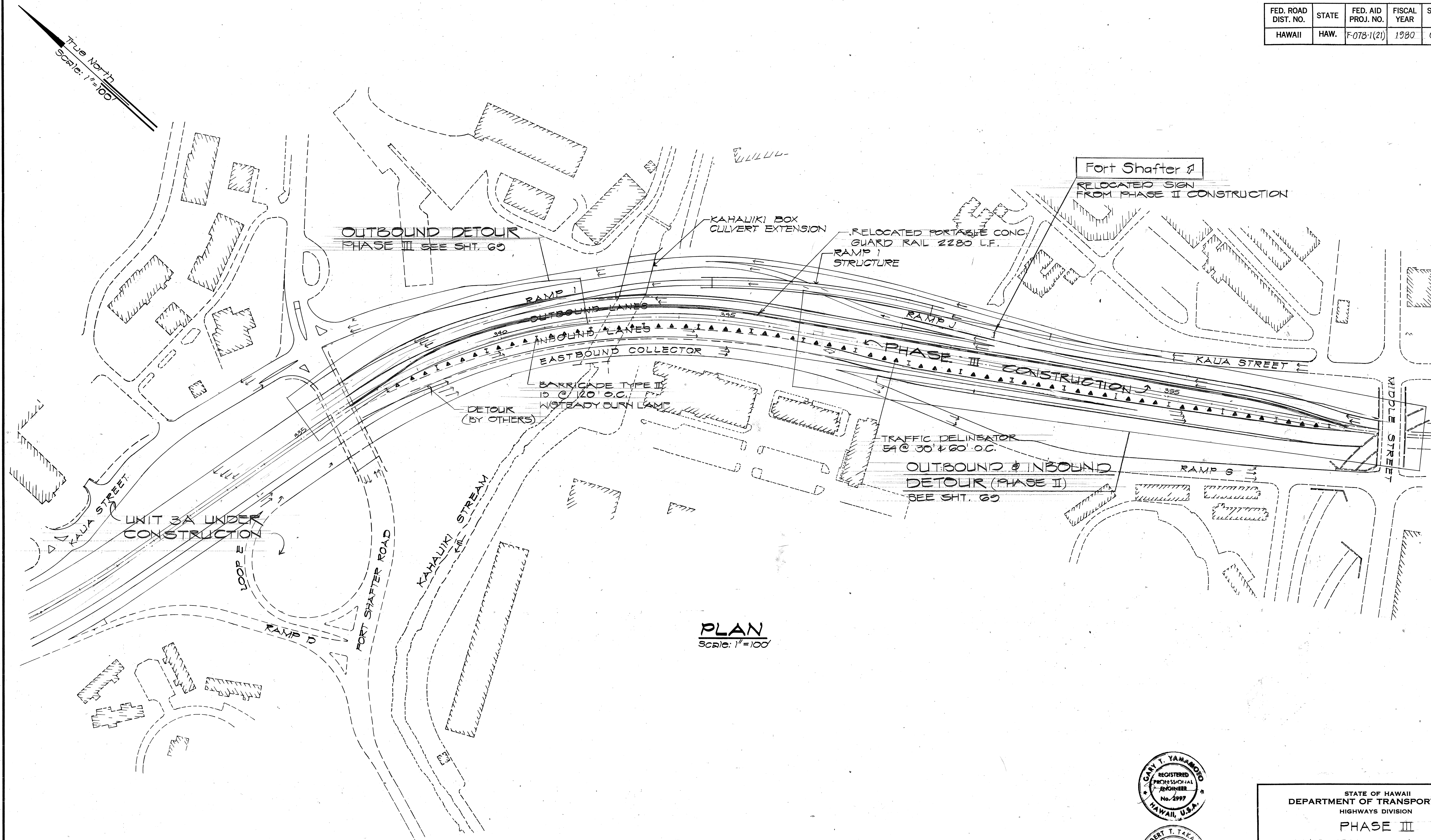
|                   |       |
|-------------------|-------|
| DATE              | _____ |
| SURVEY PLOTTED BY | _____ |
| DESIGNED BY       | _____ |
| TRACED BY         | _____ |
| NOTE BOOK         | _____ |
| QUANTITIES BY     | _____ |
| CHECKED BY        | _____ |
| ORIGINAL PLAN     | _____ |
|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



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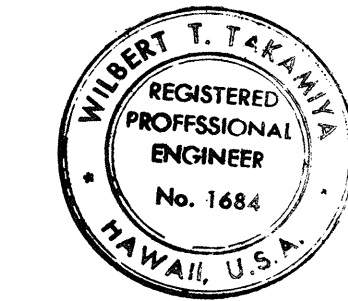
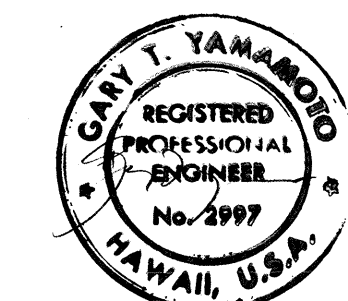
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
  
**PHASE II & III**  
**CONSTRUCTION DETOUR**  
  
MOANALUA ROAD  
PUULOA I.C. TO MIDDLE ST.-  
F.A.Proj. No. F-078-1(21)  
  
SCALE: AS SHOWN      DATE: AUG. 1979  
SHEET NO. 2 OF 10 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 66        | 234          |



**PLAN**  
Scale: 1"=100'

|               |                   |      |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK     | DRAWN BY          |      |
|               | TRACED BY         |      |
|               | CHECKED BY        |      |
|               | CHECKED BY        |      |



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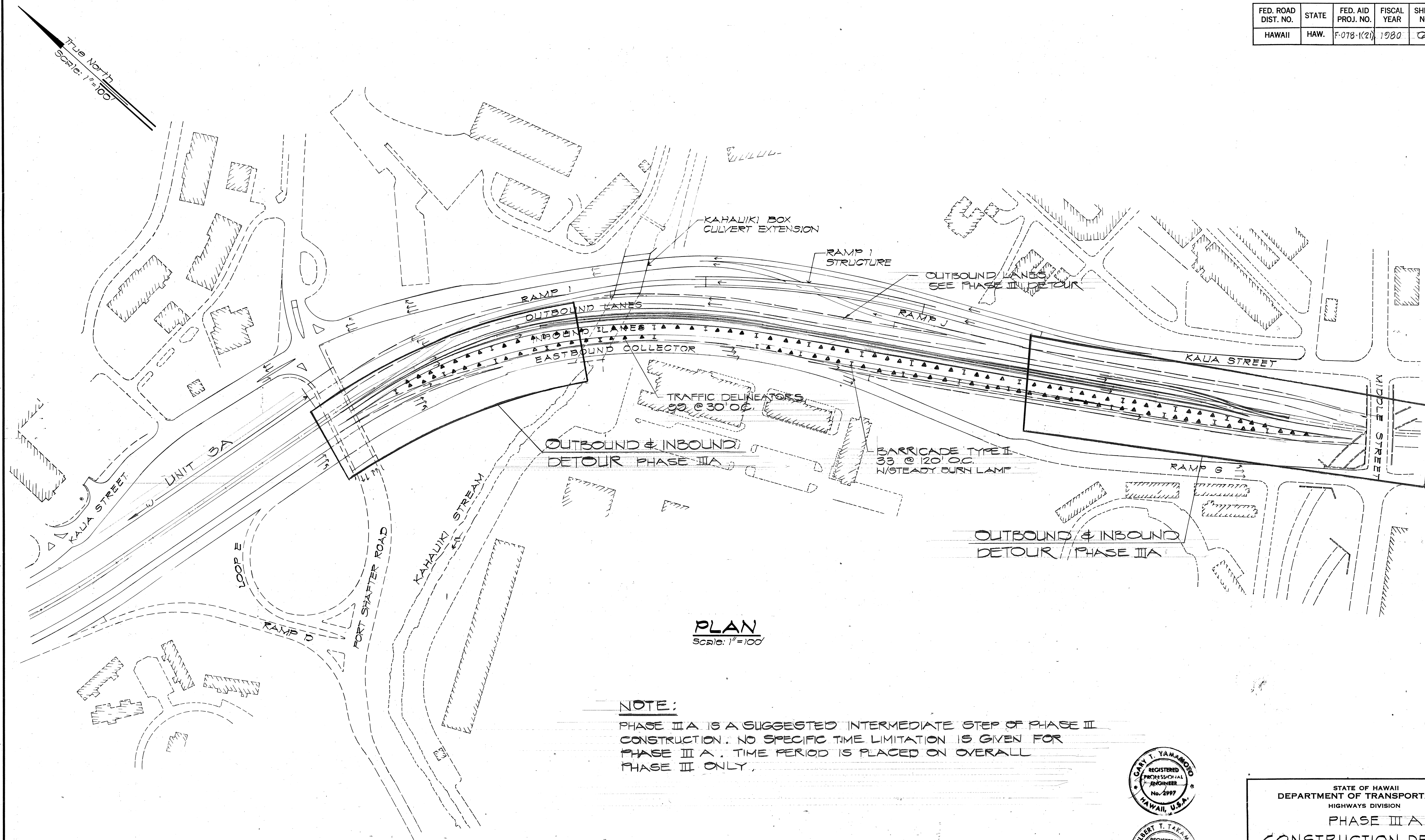
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**PHASE III  
CONSTRUCTION DETOUR**

MOANALUA ROAD  
PUULOA I.C. TO MIDDLE ST.-UNIT 3B  
F.A. PROJ. NO. F-078-1(21)  
SCALE: AS SHOWN DATE: AUG 1, 1979

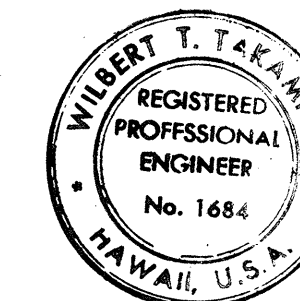
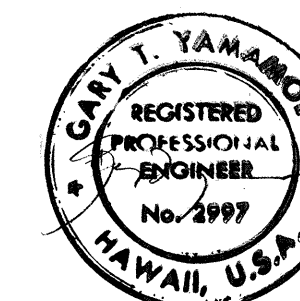
SHEET NO. 3 OF 10 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 67        | 234          |



#### NOTE:

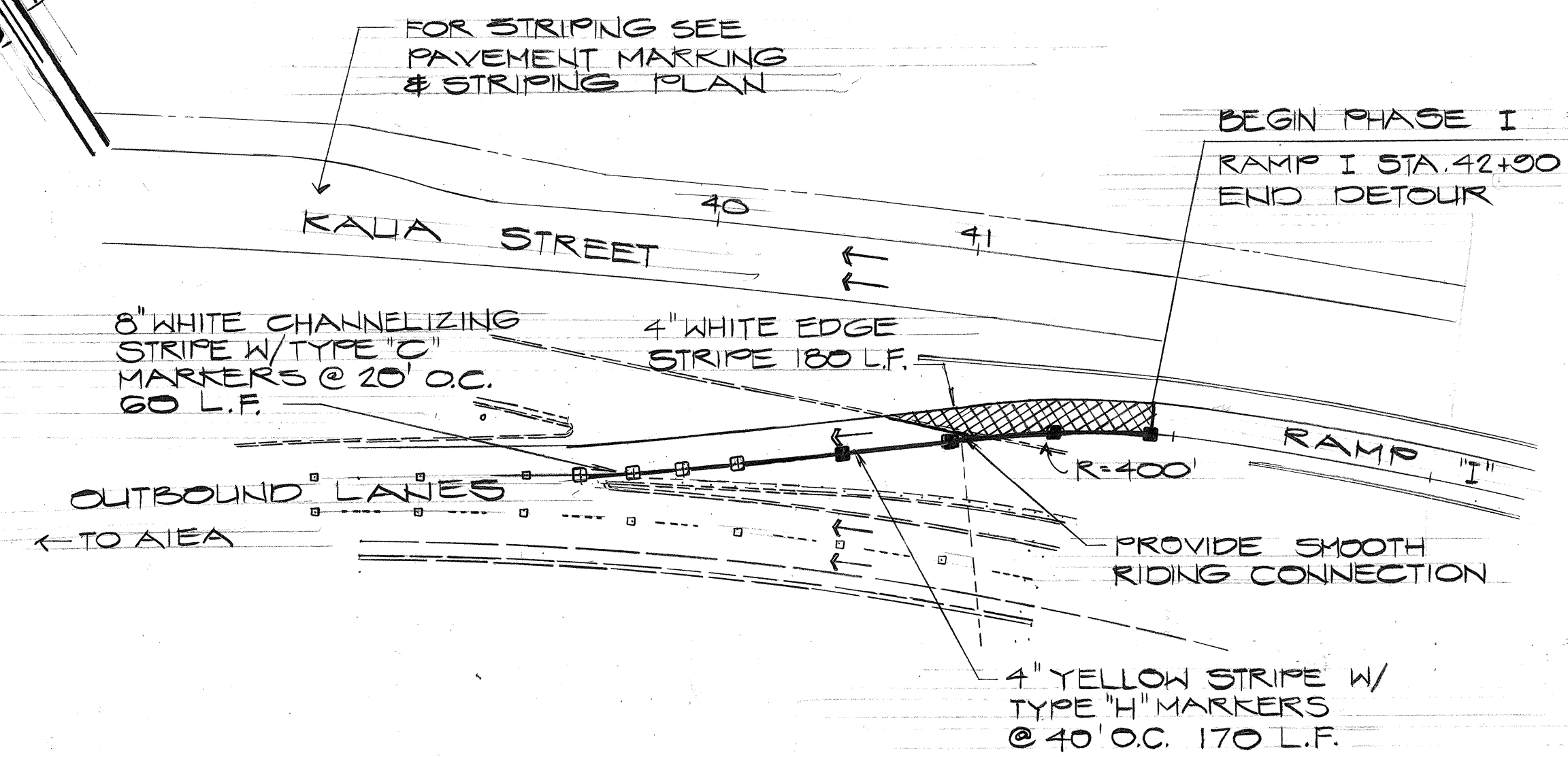
PHASE III A IS A SUGGESTED INTERMEDIATE STEP OF PHASE III CONSTRUCTION. NO SPECIFIC TIME LIMITATION IS GIVEN FOR PHASE III A. TIME PERIOD IS PLACED ON OVERALL PHASE III ONLY.



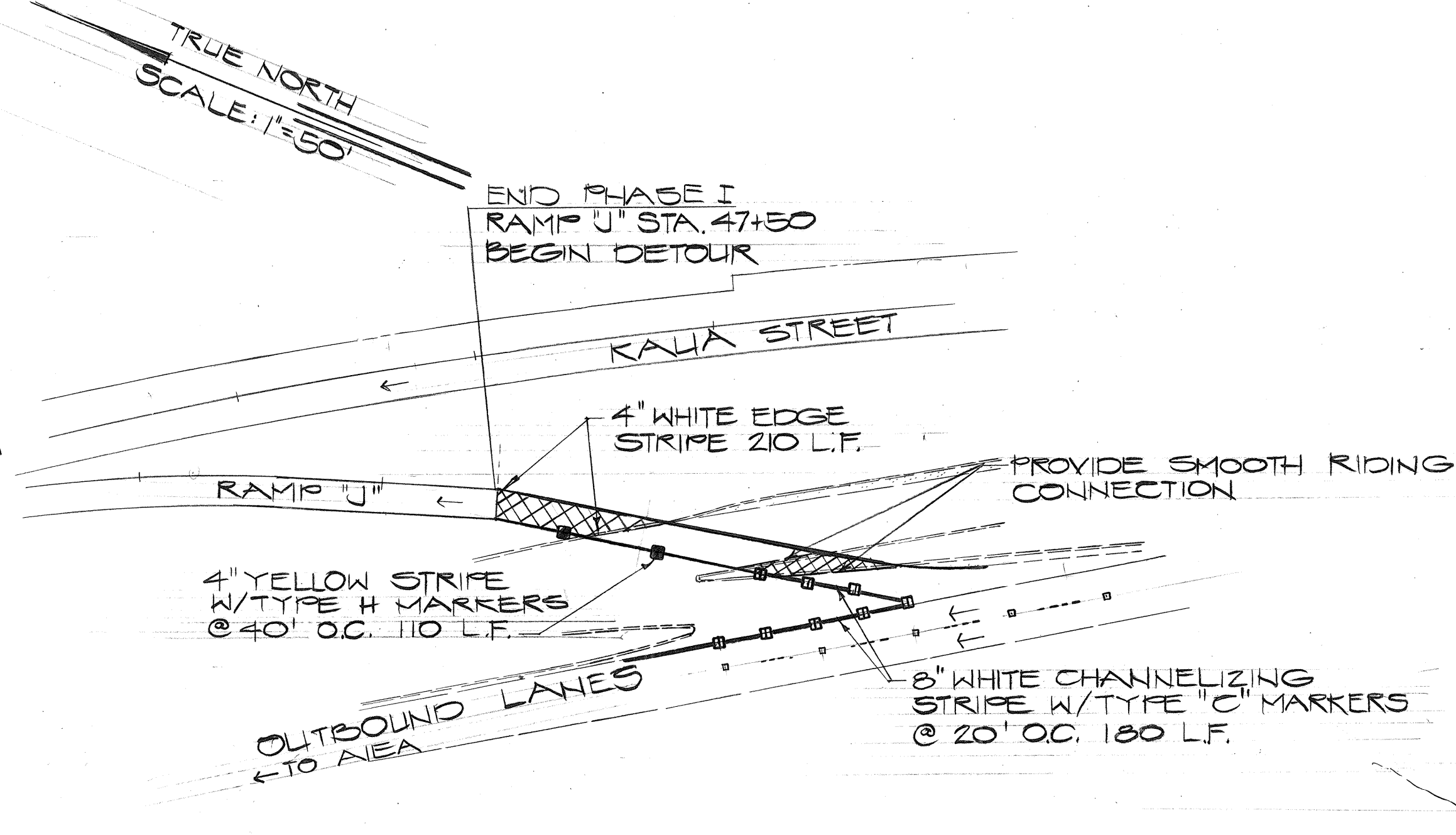
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|                                                                                  |                    |
|----------------------------------------------------------------------------------|--------------------|
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION             |                    |
| PHASE III A<br>CONSTRUCTION DETOUR                                               |                    |
| MOANALUA ROAD<br>PUULOA I.C. TO MIDDLE ST.-UNIT 3B<br>F.A. Proj. No. F-078-1(21) |                    |
| SCALE: AS SHOWN                                                                  | DATE: AUG. 1, 1979 |
| SHEET NO. 4 OF 10 SHEETS                                                         |                    |

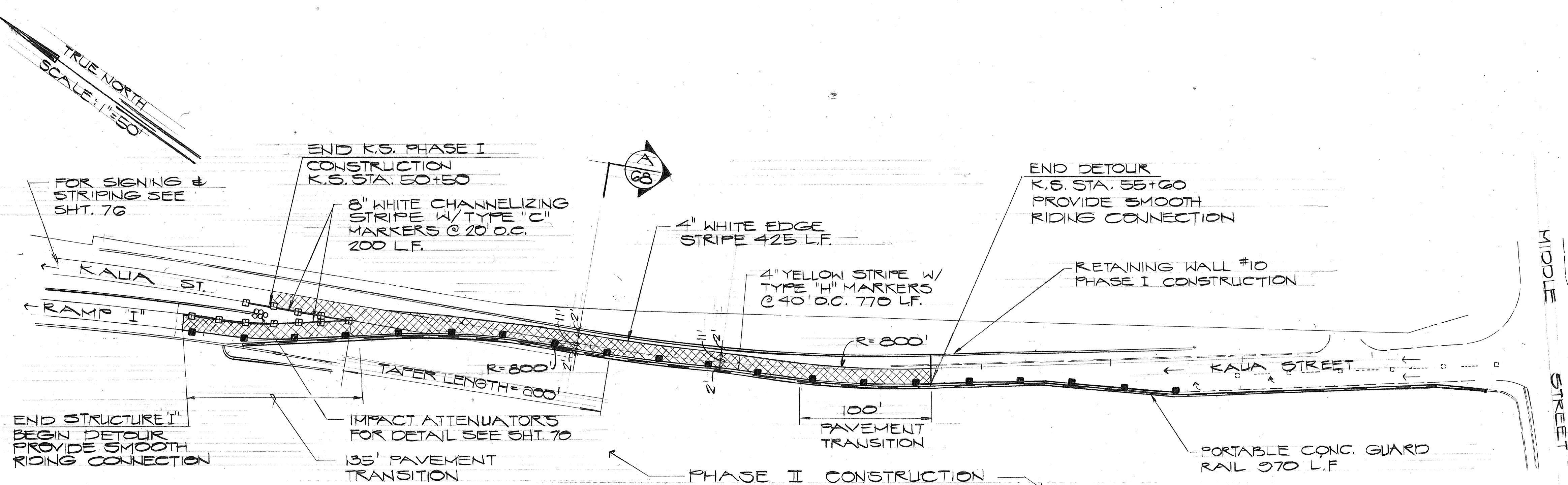
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 68        | 234          |



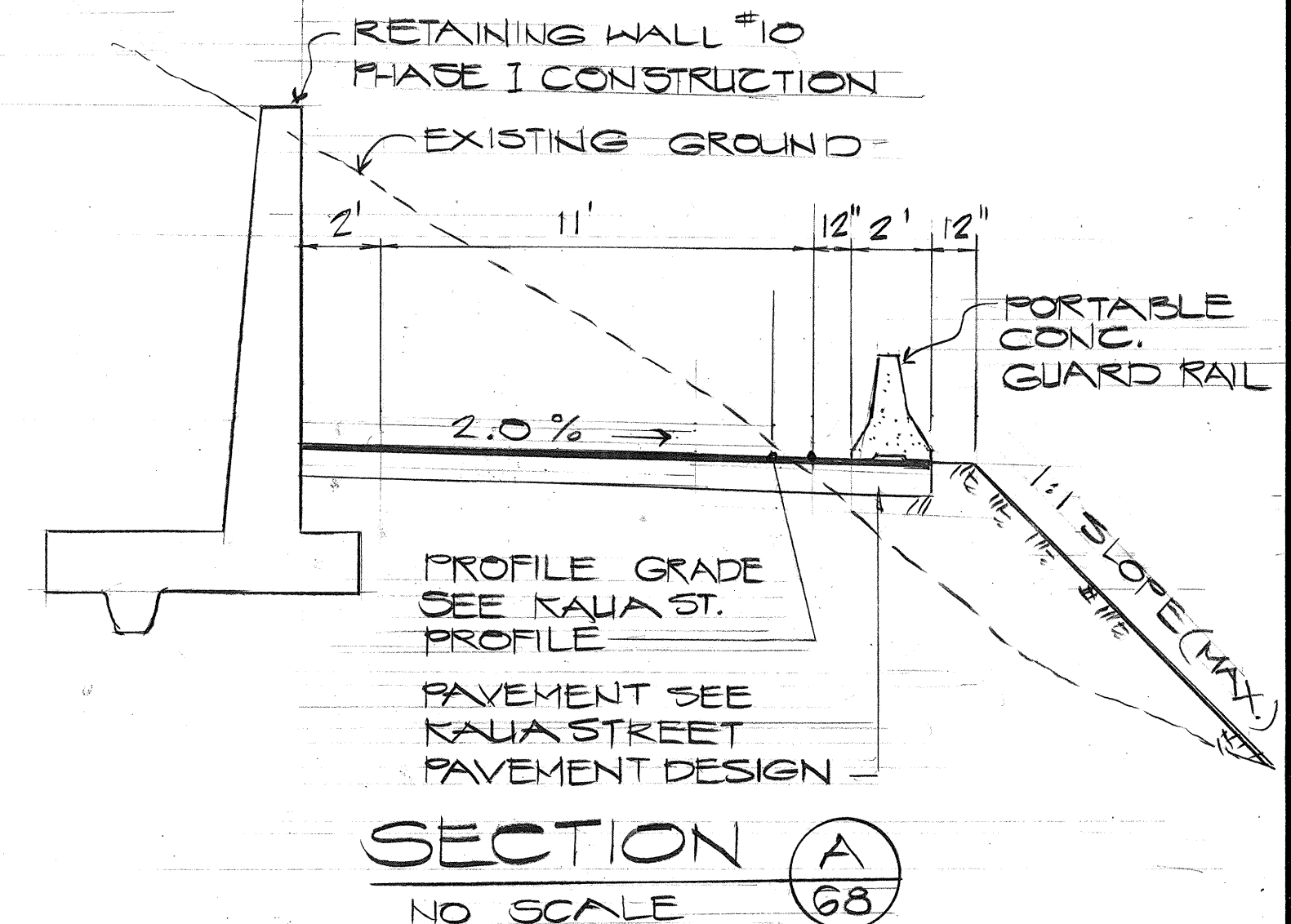
**RAMP "I" PHASE II DETOUR**  
SCALE: 1"=50'



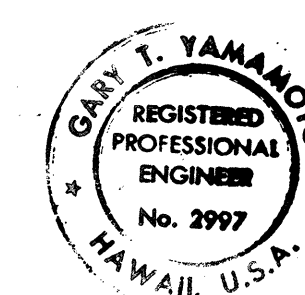
**RAMP "J" PHASE II DETOUR**  
SCALE: 1"=50'



**KAUA STREET PHASE II DETOUR**  
SCALE: 1"=50'



- NOTES:**
- CONTRACTOR SHALL PERFORM FOUNDATION CONSTRUCTION FOR STRUCTURE BY PROPER EARTH RETENTION METHODS SO THAT ONE LANE OF TRAFFIC ON KAUA ST CAN SAFELY MAINTAINED AT ALL TIMES.
  - DETOUR STRIPING ON NEW AC PAVEMENT 30 MIL MIN. THICKNESS.

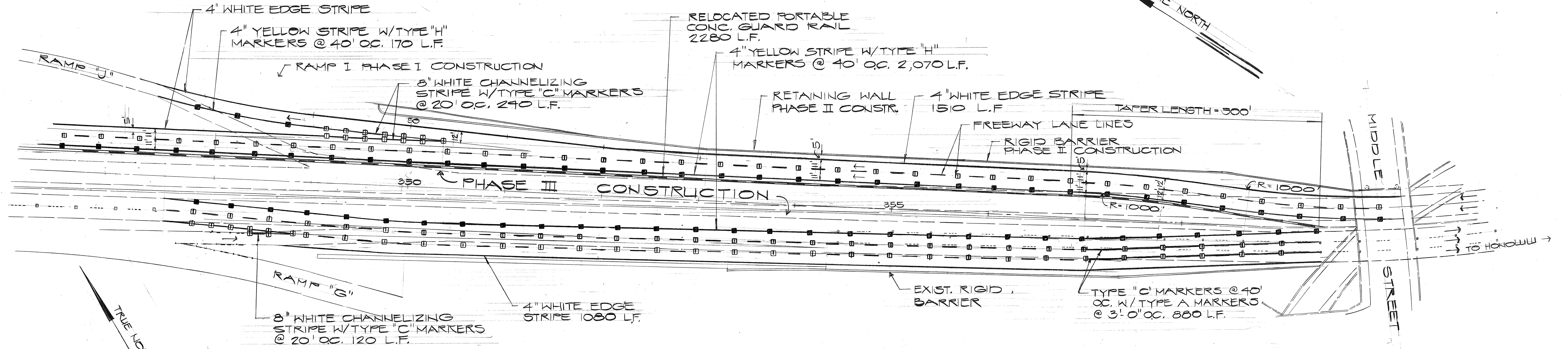


STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONSTRUCTION DETOUR  
PLAN & DETAILS**

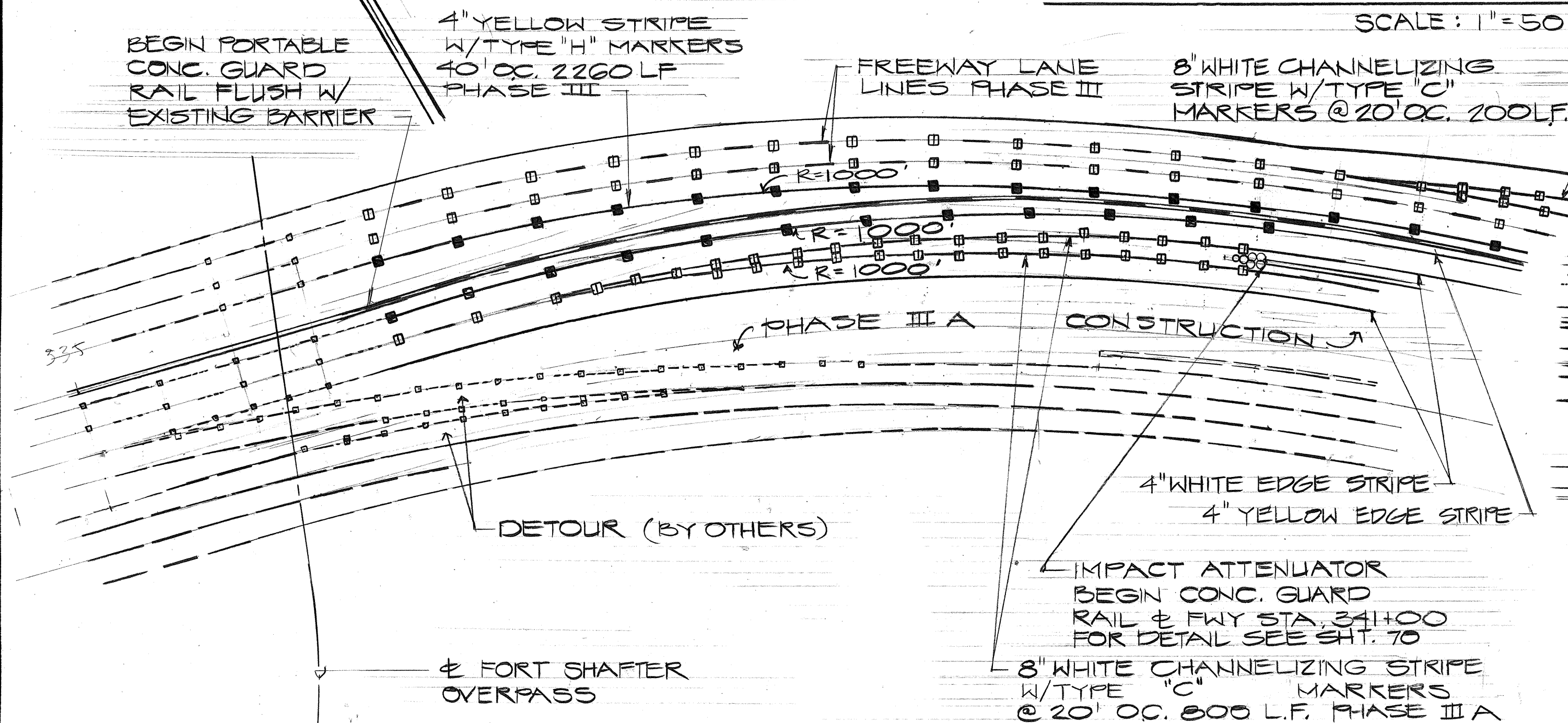
MOANALUA ROAD  
PUULOA I.C. TO MIDDLE ST. - UNIT 3B  
FA. Proj. No. F-078-1(21)  
SCALE: AS SHOWN DATE: AUG 1, 1979  
SHEET NO. 5 OF 10 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 69        | 234          |



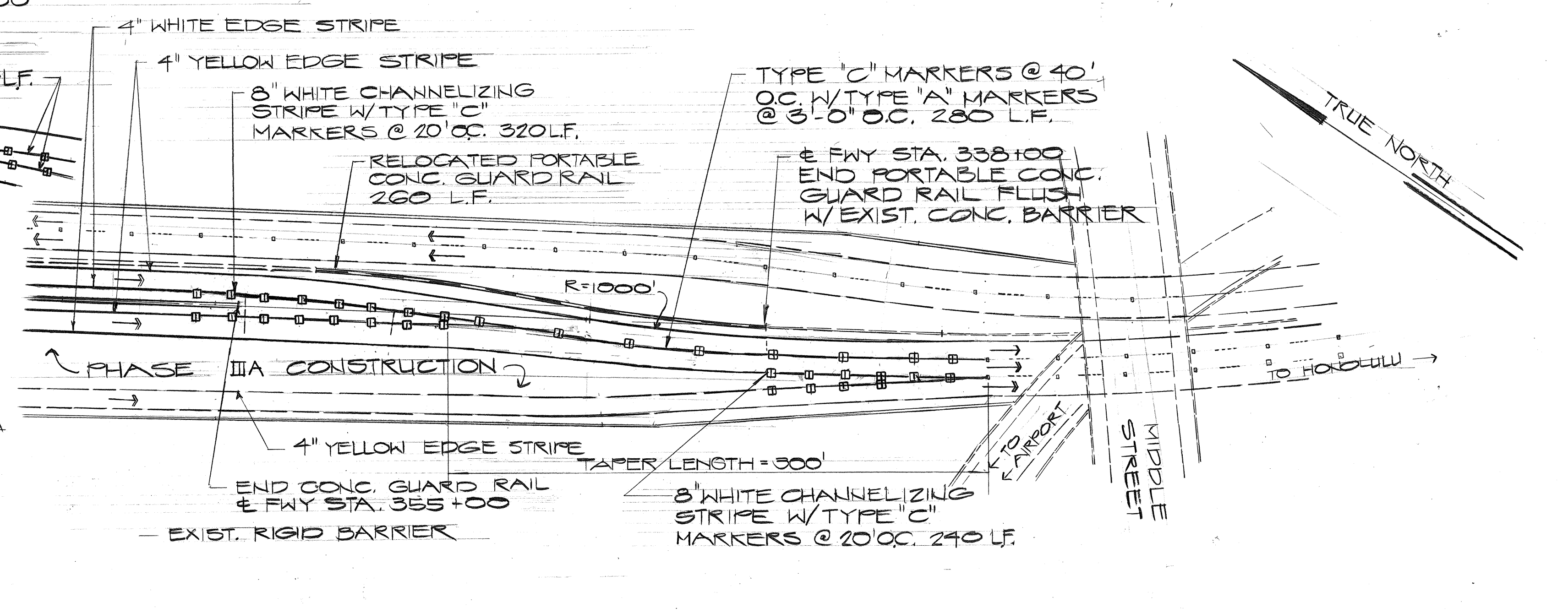
### OUTBOUND & INBOUND PHASE III DETOUR

SCALE: 1" = 50'



### OUTBOUND & INBOUND PHASE III & IIIA DETOUR

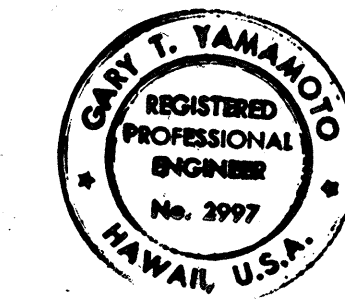
SCALE: 1" = 50'



### INBOUND PHASE IIIA DETOUR

SCALE: 1" = 50'

|               |       |
|---------------|-------|
| DATE          | _____ |
| DESIGNED BY   | _____ |
| DRAWN BY      | _____ |
| CHECKED BY    | _____ |
| NOTED BY      | _____ |
| ORIGINAL PLAN | _____ |
| NOTE BOOK     | _____ |
| No.           | _____ |



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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

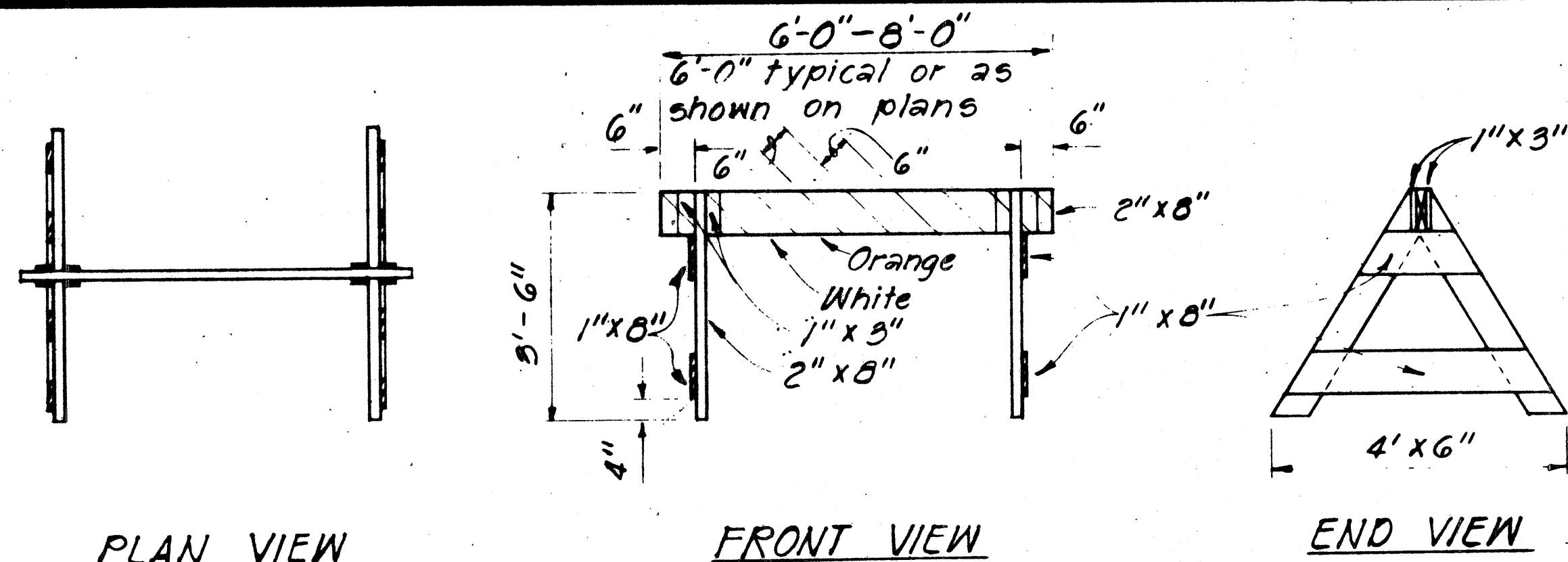
**CONSTRUCTION DETOUR  
PLAN & DETAILS**

MOANALUA ROAD  
PUULOA I.C. TO MIDDLE ST. - UNIT 3B  
F.A. Proj. No. F-078-1(21)  
SCALE: AS SHOWN DATE: AUG 1, 1979  
SHEET No. 6 OF 10 SHEETS

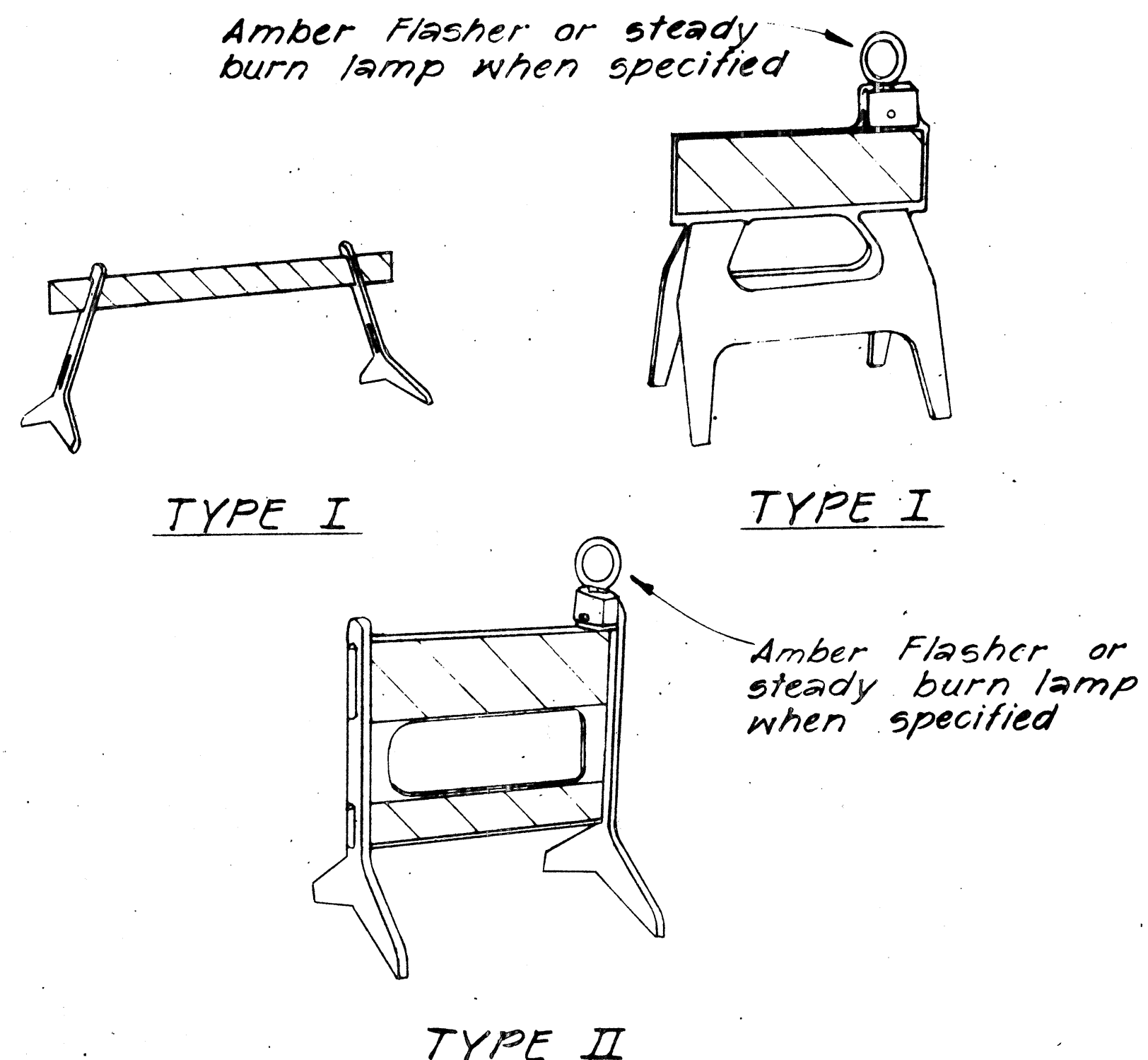




| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-078-1(21)        | 1980        | 72        | 232          |

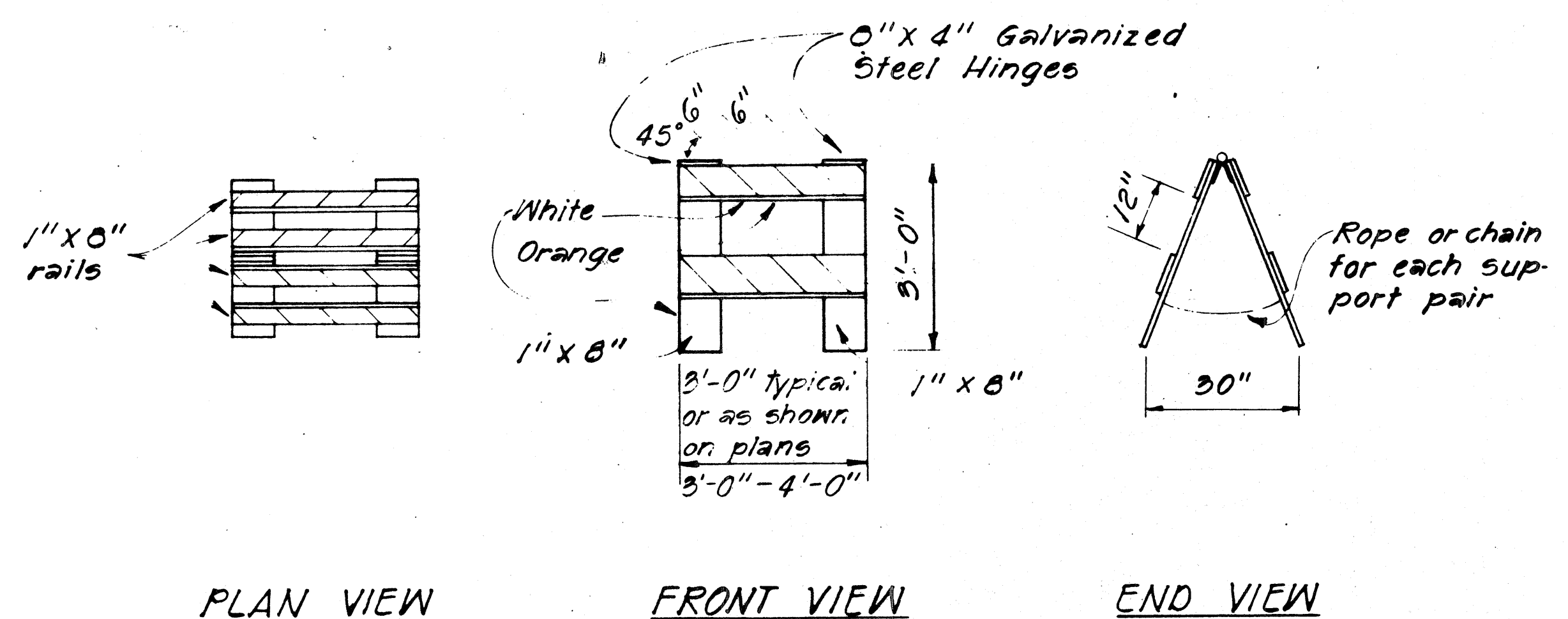


**TYPE I BARRICADE**  
Scale: 1/2" = 1'-0"



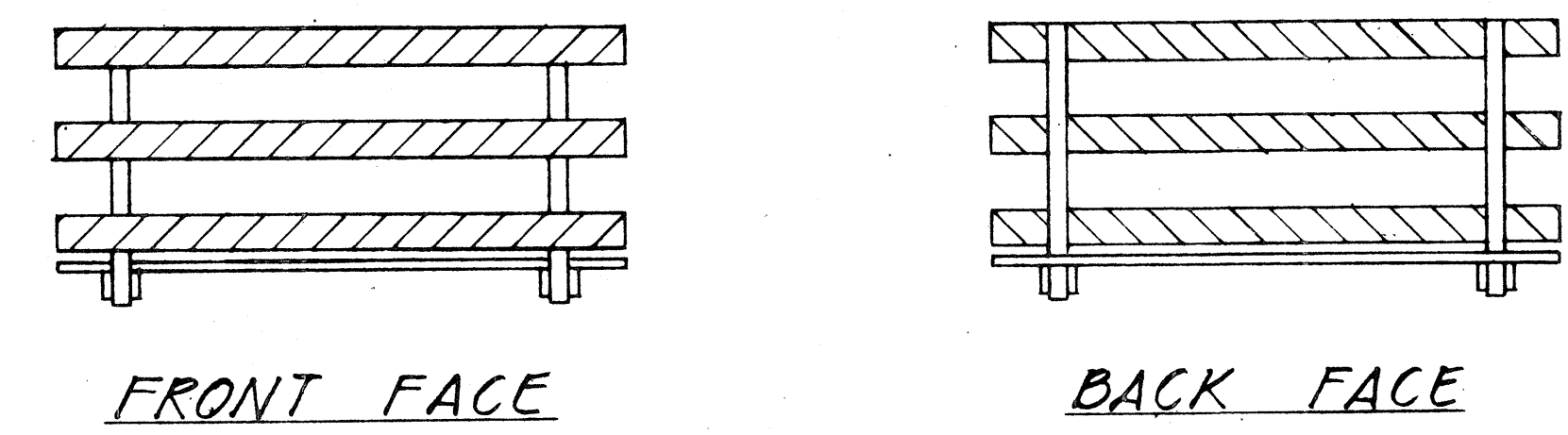
**GENERAL NOTES**

1. The Contractor shall construct, install and maintain the barricades at the locations shown on the Plans.
2. The barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property, unless otherwise specified.
3. The orange and white stripes shall slant downward toward the side on which traffic is to pass and shall be reflectorized with reflective sheeting.
4. Both faces of the barricade rails shall be striped. See Striping Detail Arrangement.
5. Contractor may submit alternate designs for approval.
6. Barricade details shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, by the Federal Highway Administration and as amended.
7. If wooden rails are used, 26 ga. galv. steel sheet shall be first tacked on to the rails and then overlayed with reflective sheeting.

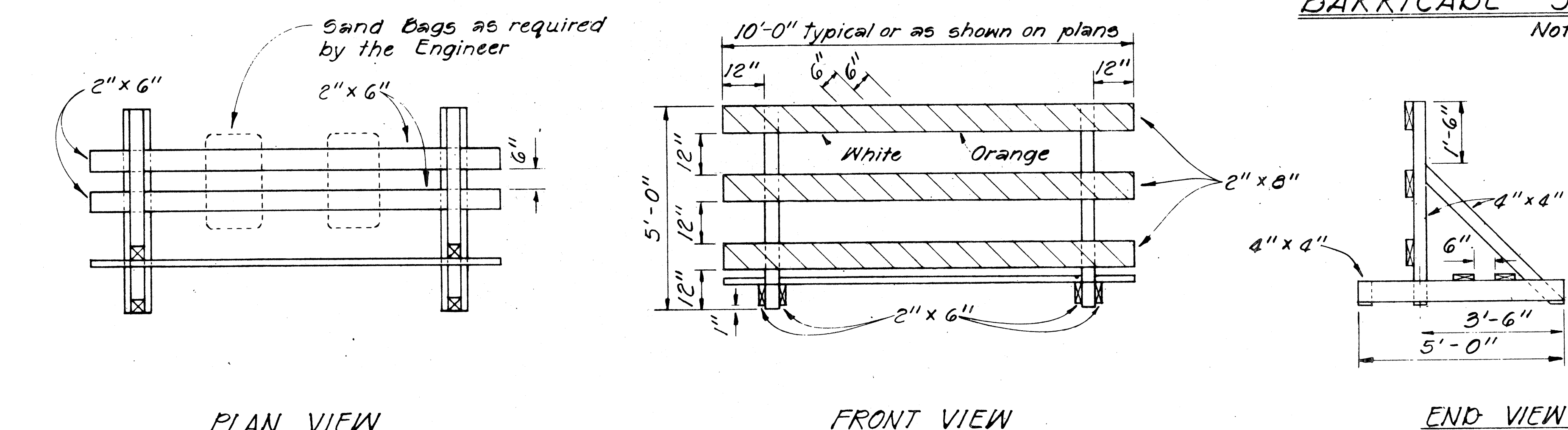


**TYPE II BARRICADE**  
Scale: 1/2" = 1'-0"

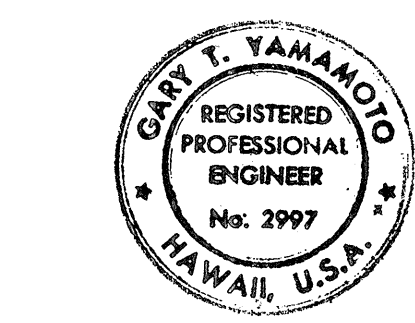
**PLASTIC MOLDED BARRICADE OPTIONS \***  
Not to Scale  
\* Shop Drawings must be submitted for approval.



**BARRICADE STRIPING DETAILS**  
Not to Scale



**TYPE III BARRICADE**  
Scale: 1/2" = 1'-0"



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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TYPICAL DETAILS**  
  
**BARRICADES**

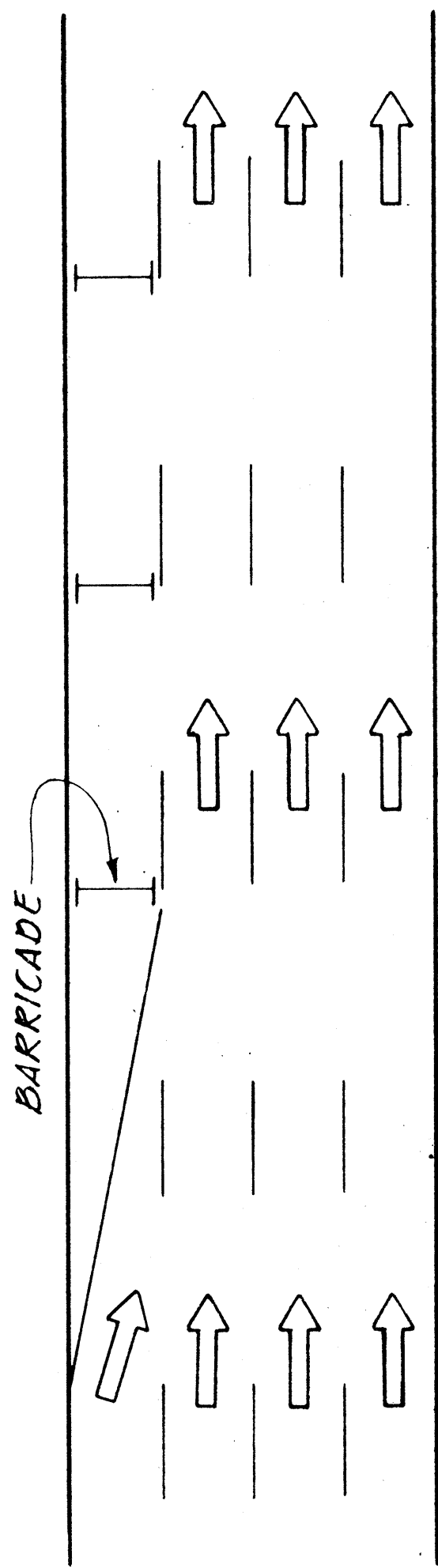
SCALE: As Shown Date: AUG. 1, 1979  
SHEET NO. 9 OF 10 SHEETS

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

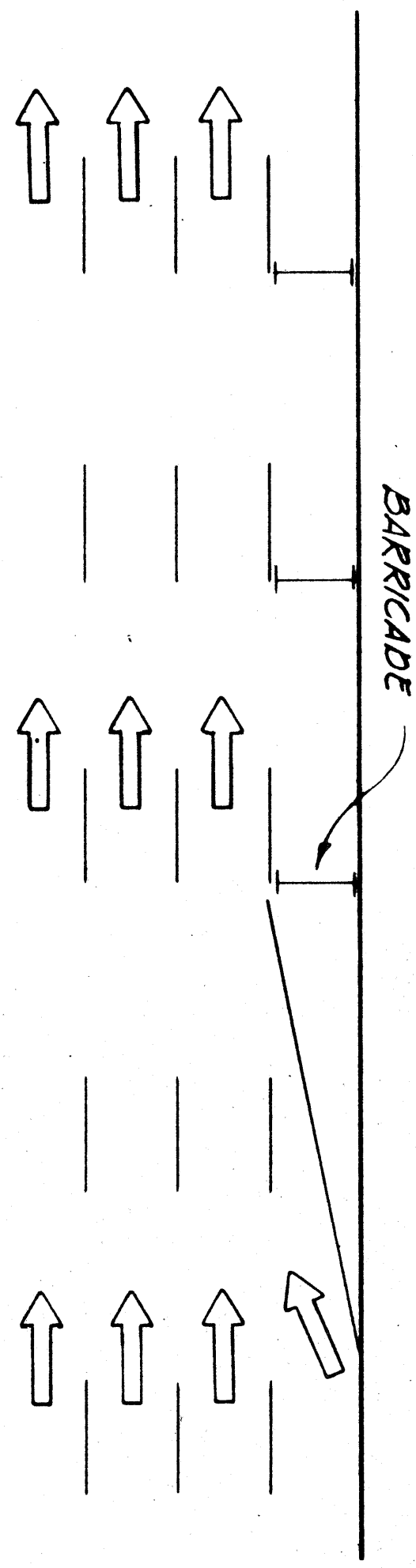
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-070-1(21)        | 1980        | 73        | 237          |

# GENERAL NOTES

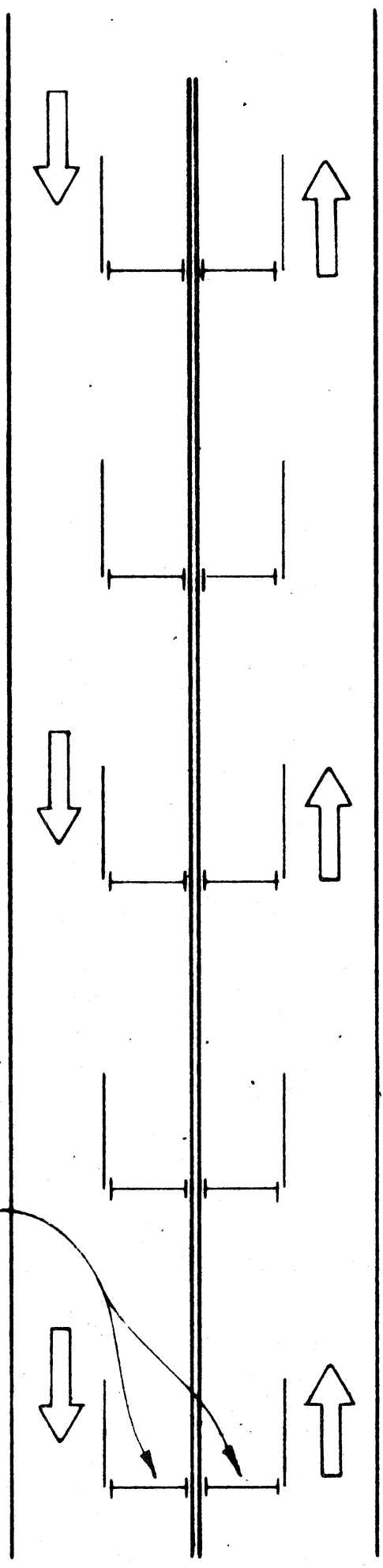
1. Barricade Type, Placement, and Arrangement shall be as shown on the Construction Plans.



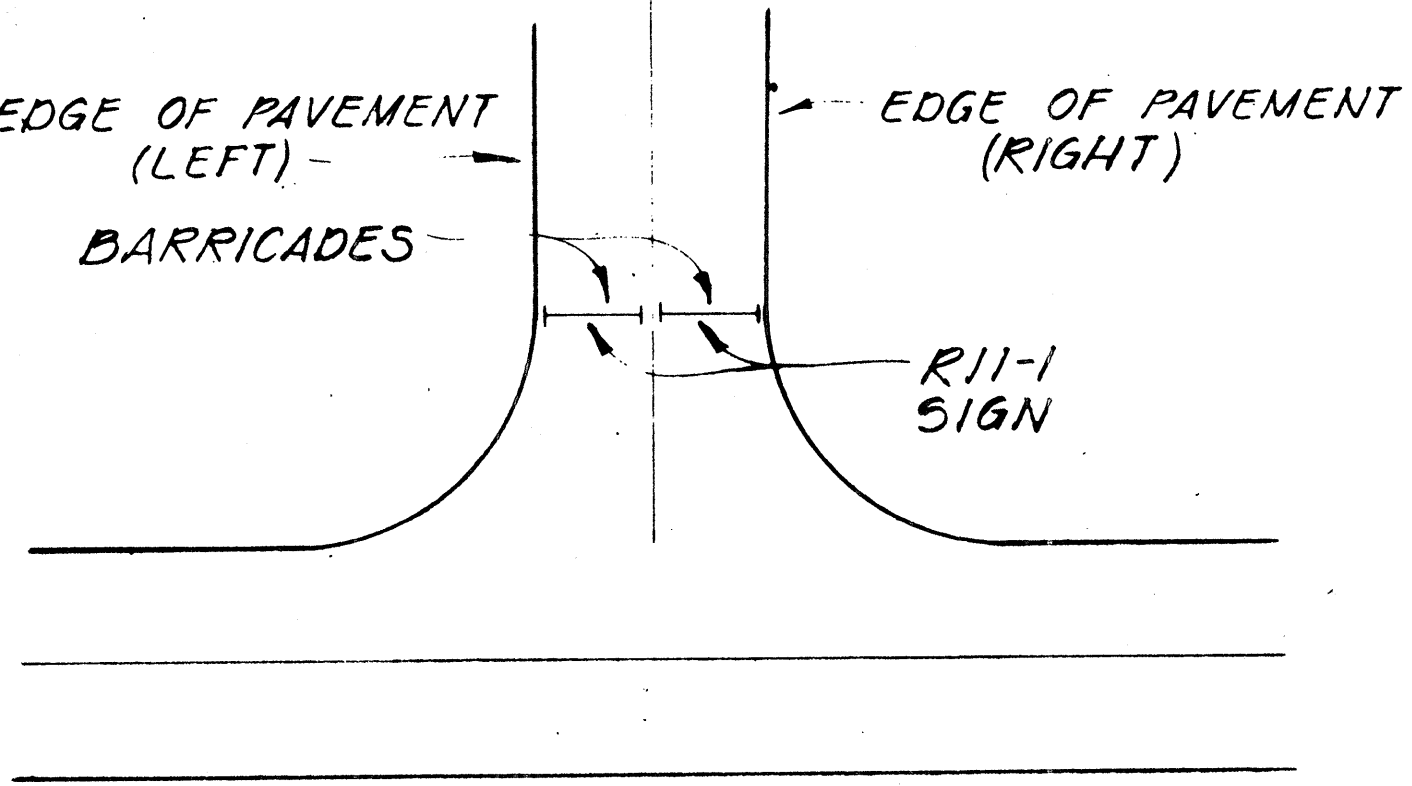
ROADWAY DELINEATION TO THE RIGHT  
NOT TO SCALE



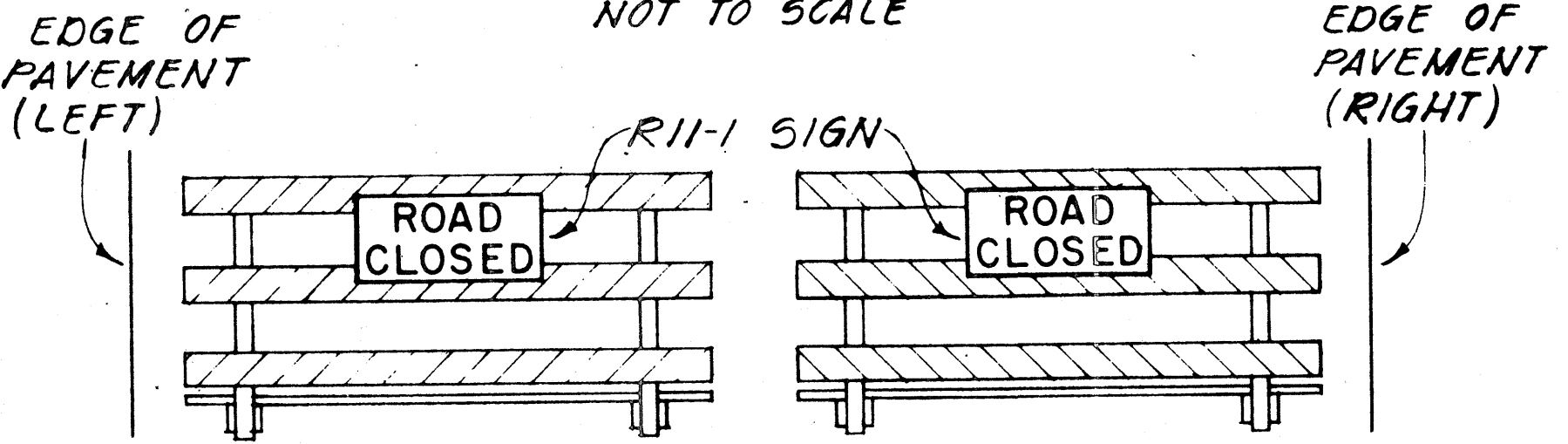
ROADWAY DELINEATION TO THE LEFT  
NOT TO SCALE



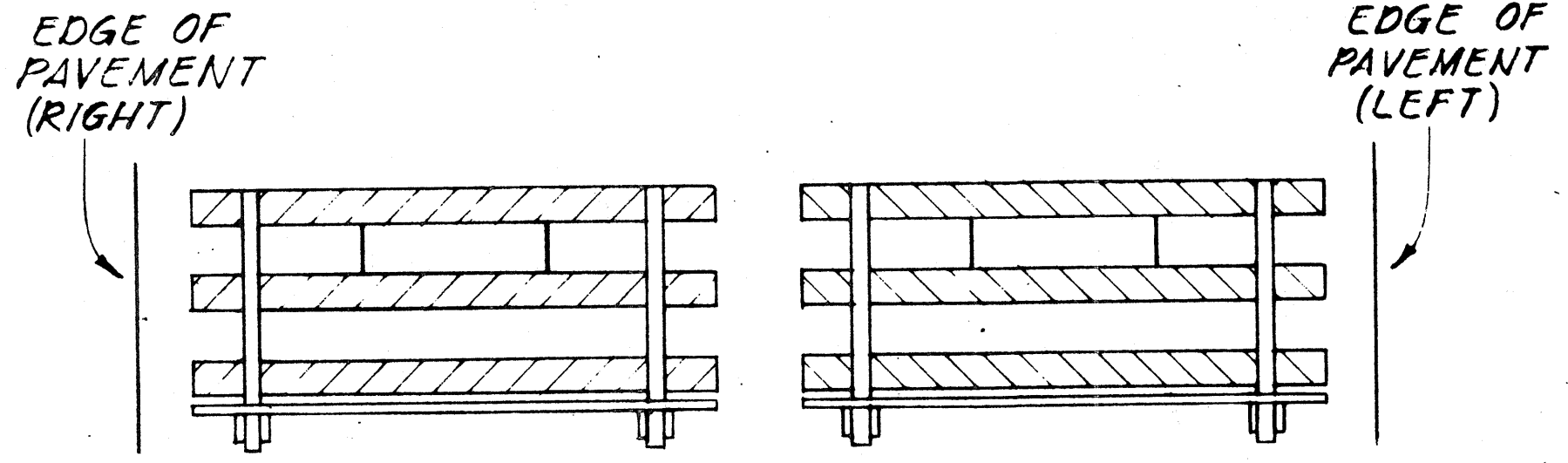
ROADWAY DELINEATION FOR 2-WAY TRAFFIC  
NOT TO SCALE



ROADWAY CLOSED  
NOT TO SCALE

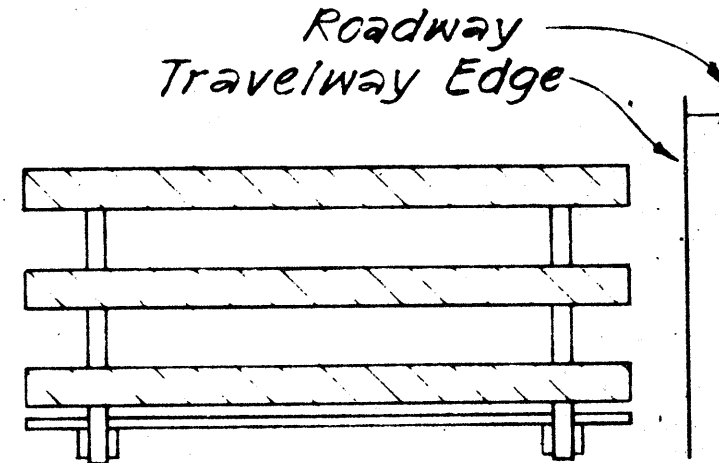


FRONT VIEW

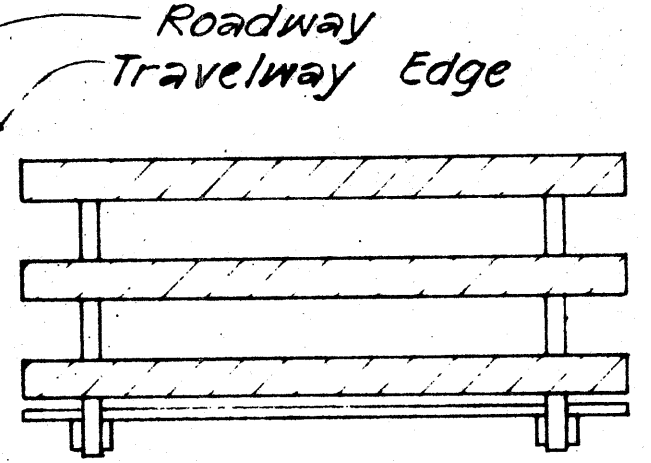


BACK VIEW

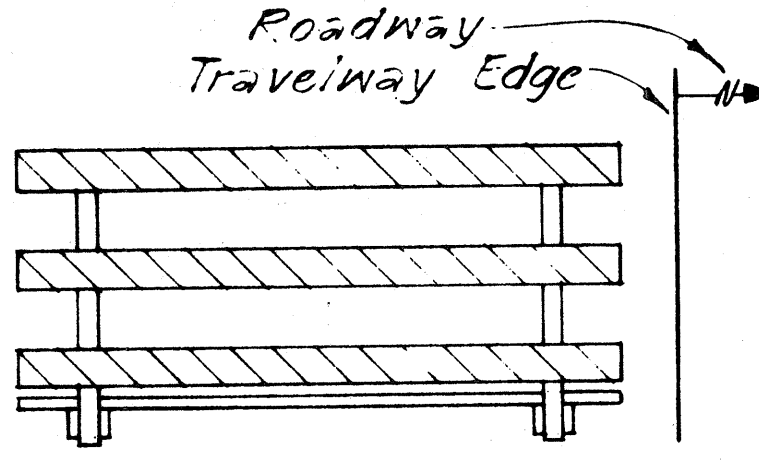
BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE



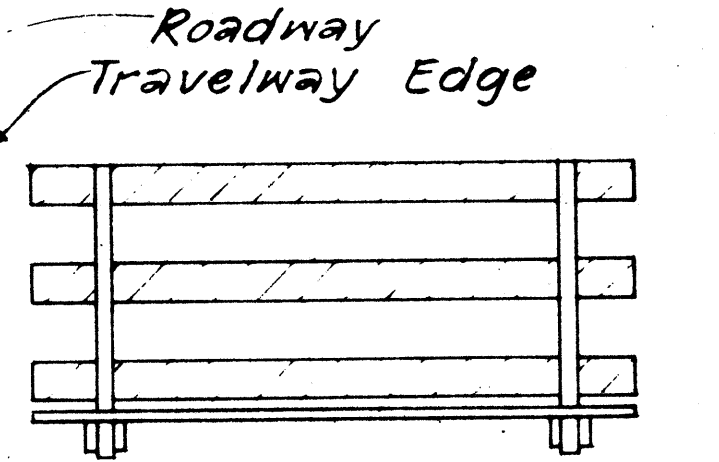
FRONT VIEW



FRONT VIEW

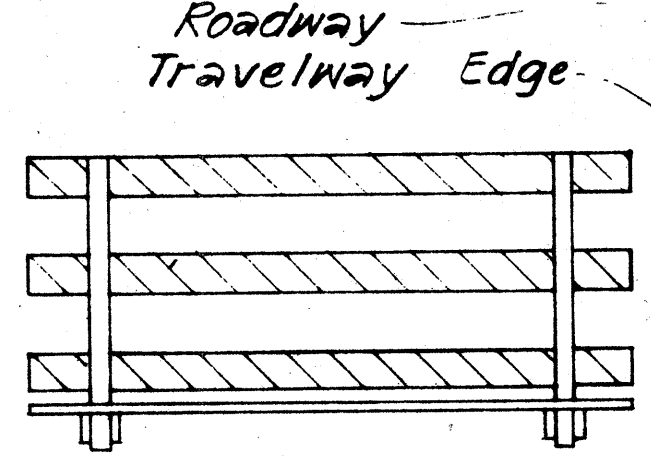


FRONT VIEW



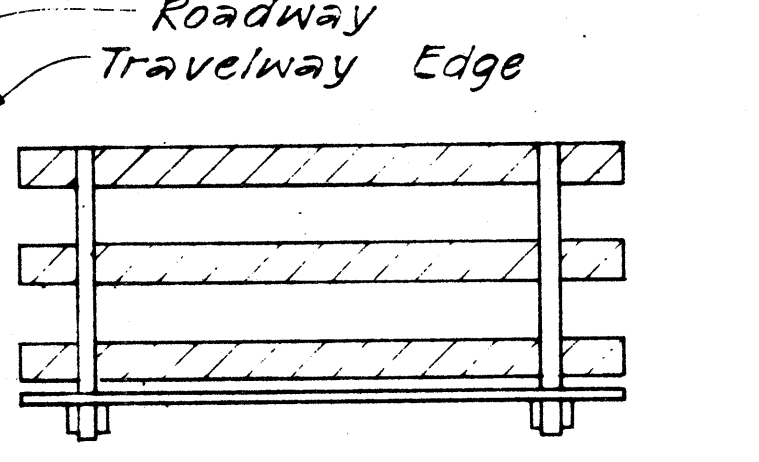
BACK VIEW

BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE



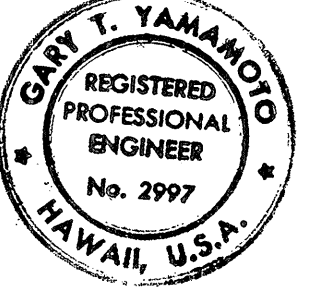
BACK VIEW

BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE



BACK VIEW

BARRICADE STRIPING ARRANGEMENT  
NOT TO SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

TYPICAL DETAILS

BARRICADE STRIPING DETAILS

SHEET NO. 73 OF 10 SHEETS

|             |  |
|-------------|--|
| DATE        |  |
| DESIGNED BY |  |
| DRAWN BY    |  |
| CHECKED BY  |  |
| IN CHARGE   |  |
| NOTE BOOK   |  |
| NO.         |  |