

NOTE: For details of Park Road entrance to Moanalua Park parking lot, see Sheet 1-Temporary Connections.

# LEGEND

- DATS ————— DATS
- E ————— ELECTRIC
- T ————— TELEPHONE
- E & T ————— ELECTRIC & TELEPHONE
- F A ————— FIRE ALARM
- G ————— GAS
- S D ————— STORM DRAIN
- S S ————— SANITARY SEWER
- W ————— WATER
- UTILITY LINES TO BE ABANDONED

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | U-078-1(3)         | 1973        | 25        | 36           |

Denotes removal of existing concrete sidewalk. Removal to be incidental to other items.  
See Landscaping Plans for trees to remain.

## SEWER PROFILE

SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

END TEMPORARY CONN.

@ STA. 315+00 BK AND AHD

END PERMANENT CONST.

RAMP "C"

STA. 19+45.00

END PERMANENT CONST.

MOANALUA ROAD & RAMP "J"

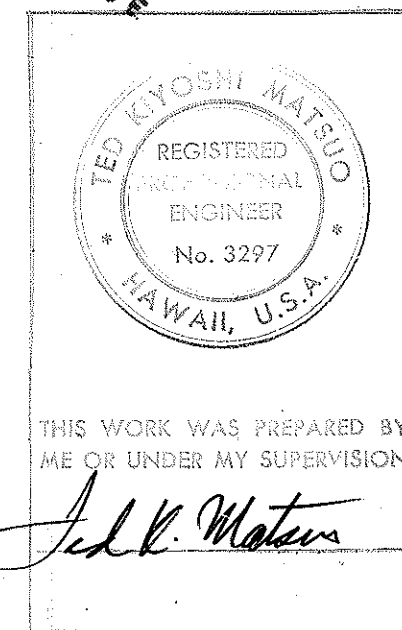
@ STA. 311+00

RAMP J STA. 21+00(8) RT. @

## SECTION A-A

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
PRELIMINARY DESIGN  
**MOANALUA ROAD**  
UTILITIES RELOCATION PLAN  
SCALE: 1" = 50'  
DATE AUG 24 1973  
SHEET NO. U-6 OF 16 SHEETS



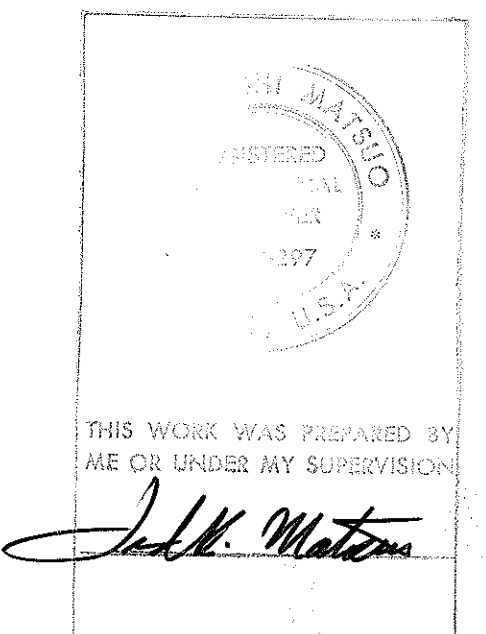
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

J. K. Waters

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | U-078-1(3)         | 1973        | 26        | 36           |

- LEGEND**
- BUILDING
  - WALL or ROCK WALL
  - UTILITY (see sheet 6)
  - FOLIAGE OUTLINE
  - HYDRANT or TRAFFIC LT SIGN
  - LIGHT or UTILITY POLE
  - GUARD RAIL
  - CURB & GUTTER
  - PAVED ROAD
  - UNPAVED ROAD
  - CONCRETE or A.C. WALK
  - DRAINAGE
  - FENCE

Compiled by photogrammetric methods from aerial photography taken **DEC. 1971** at **1500' A.M.G.L.** Broken contour lines may be substandard.  
Elevation based on Mean Sea Level Datum.  
Origin: Haw'n Plane Coord. System, Zone III  
Map Scale: 1" = 50'  
Contour Interval: 2'

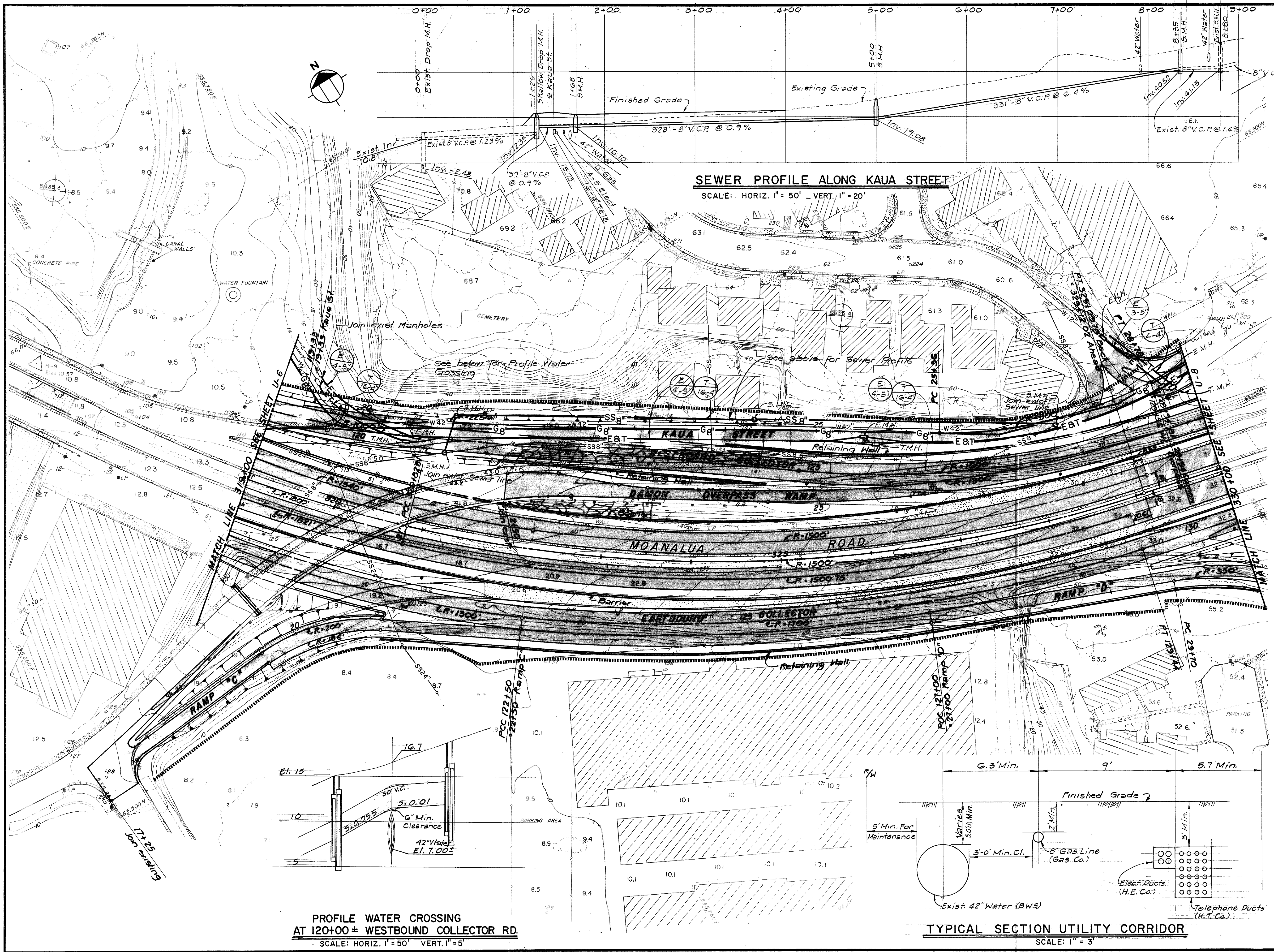


STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**PRELIMINARY DESIGN**  
**MOANALUA ROAD**

**UTILITIES RELOCATION PLAN**

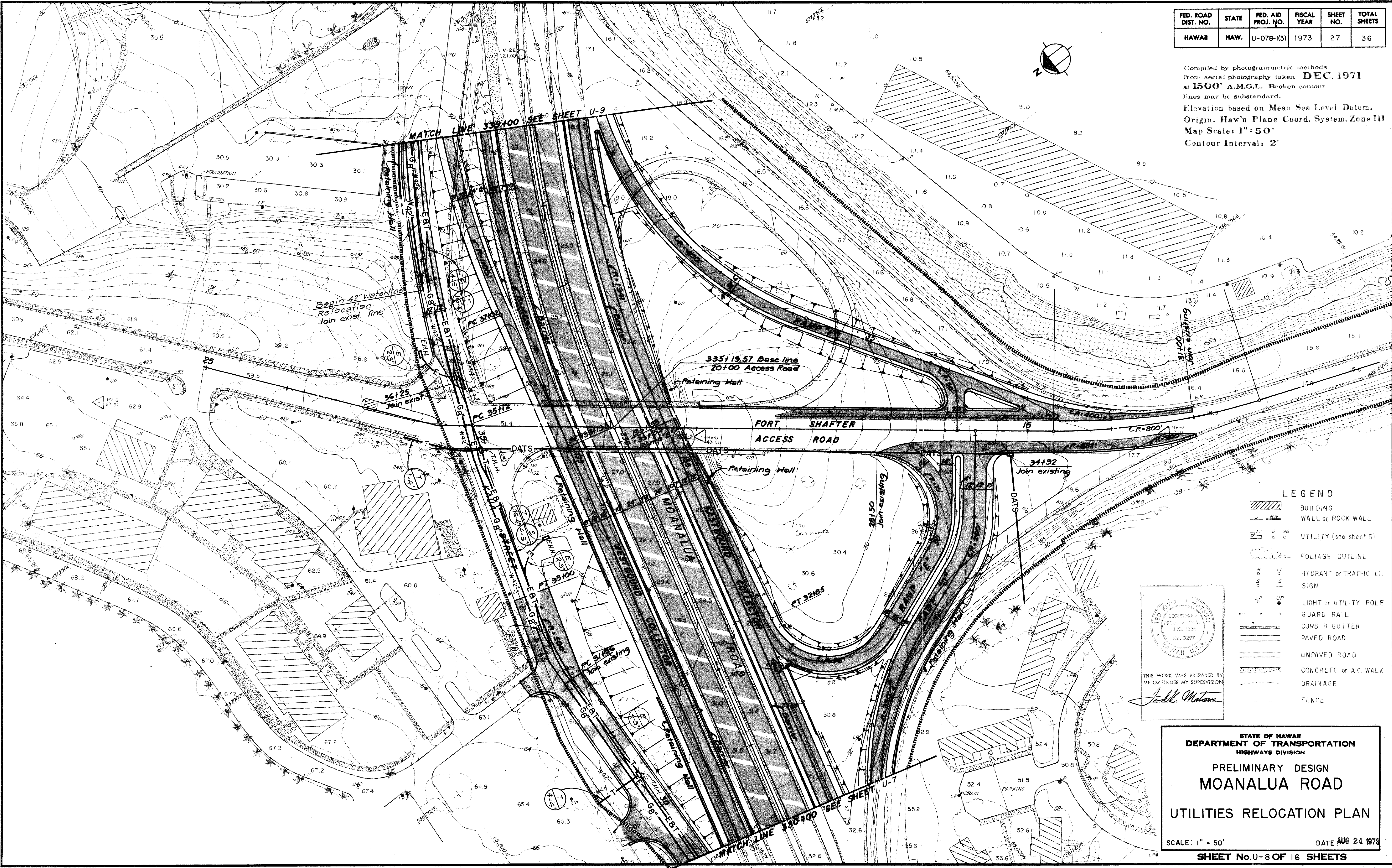
SCALE: 1" = 50' DATE: **AUG 24 1973**  
**SHEET No. U-7 OF 16 SHEETS**



|                   |       |
|-------------------|-------|
| DATE              | _____ |
| SURVEY PLATTED BY | _____ |
| TRACED BY         | _____ |
| DESIGNED BY       | _____ |
| QUANTITIES 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.  | U-078-(13)         | 1973        | 27        | 36           |

Compiled by photogrammetric methods from aerial photography taken DEC. 1971 at 1500' A.M.G.L. Broken contour lines may be substandard.  
Elevation based on Mean Sea Level Datum.  
Origin: Haw'n Plane Coord. System, Zone III  
Map Scale: 1" = 50'  
Contour Interval: 2'



- LEGEND
- BUILDING
  - WALL or ROCK WALL
  - UTILITY (see sheet 6)
  - FOLIAGE OUTLINE
  - HYDRANT or TRAFFIC LT. SIGN
  - LIGHT or UTILITY POLE
  - GUARD RAIL
  - CURB & GUTTER
  - PAVED ROAD
  - UNPAVED ROAD
  - CONCRETE or A.C. WALK
  - DRAINAGE
  - FENCE

REGISTERED PROFESSIONAL ENGINEER  
No. 3297  
HAWAII, U.S.A.  
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  
*J. M. Motomura*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
PRELIMINARY DESIGN  
MOANALUA ROAD  
UTILITIES RELOCATION PLAN

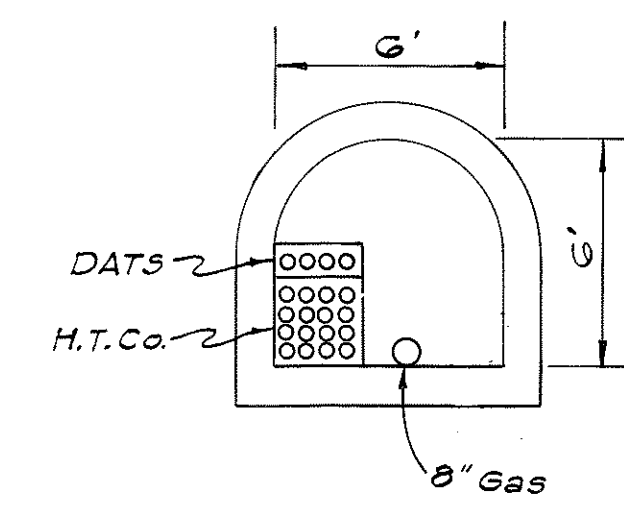
SCALE: 1" = 50' DATE AUG 24 1973  
SHEET No. U-8 OF 16 SHEETS

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

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | U-078-1(3)         | 1973        | 28        | 36           |

# LEGEND

- BUILDING
- WALL or ROCK WALL
- UTILITY (see sheet 6)
- FOLIAGE OUTLINE
- HYDRANT or TRAFFIC LT. SIGN
- LIGHT or UTILITY POLE
- GUARD RAIL
- CURB & GUTTER
- PAVED ROAD
- UNPAVED ROAD
- CONCRETE or A.C. WALK
- DRAINAGE
- FENCE

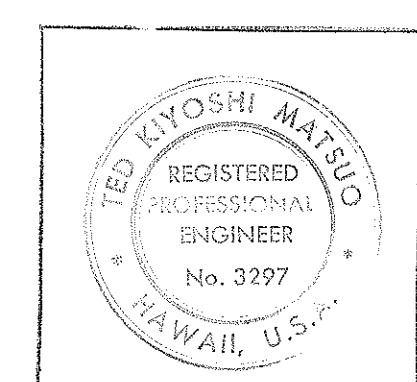


SECTION

## PROFILE FREEWAY UTILITY CROSSING TUNNEL ALTERNATE

SCALE: 1" = 5'

Compiled by photogrammetric methods from aerial photography taken DEC. 1971 at 1500' A.M.G.L. Broken contour lines may be substandard.  
Elevation based on Mean Sea Level Datum.  
Origin: Haw'n Plane Coord. System, Zone III  
Map Scale: 1" = 50'  
Contour Interval: 2'



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*J. K. Matsuo*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

## PRELIMINARY DESIGN MOANALUA ROAD

## UTILITIES RELOCATION PLAN

SCALE: 1" = 50' DATE AUG 24 1973  
SHEET No. U-9 OF 16 SHEETS

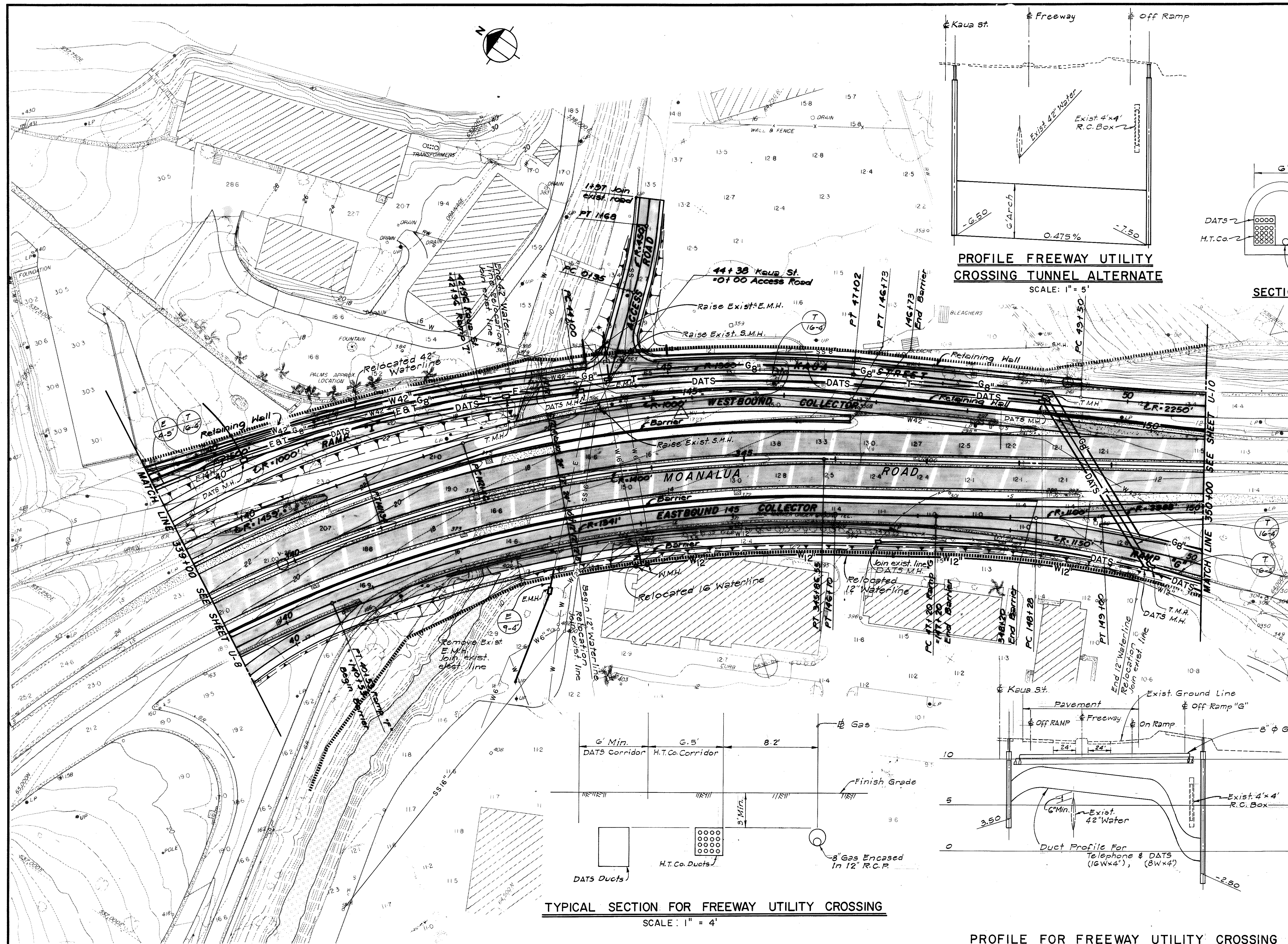
## PROFILE FOR FREEWAY UTILITY CROSSING

SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

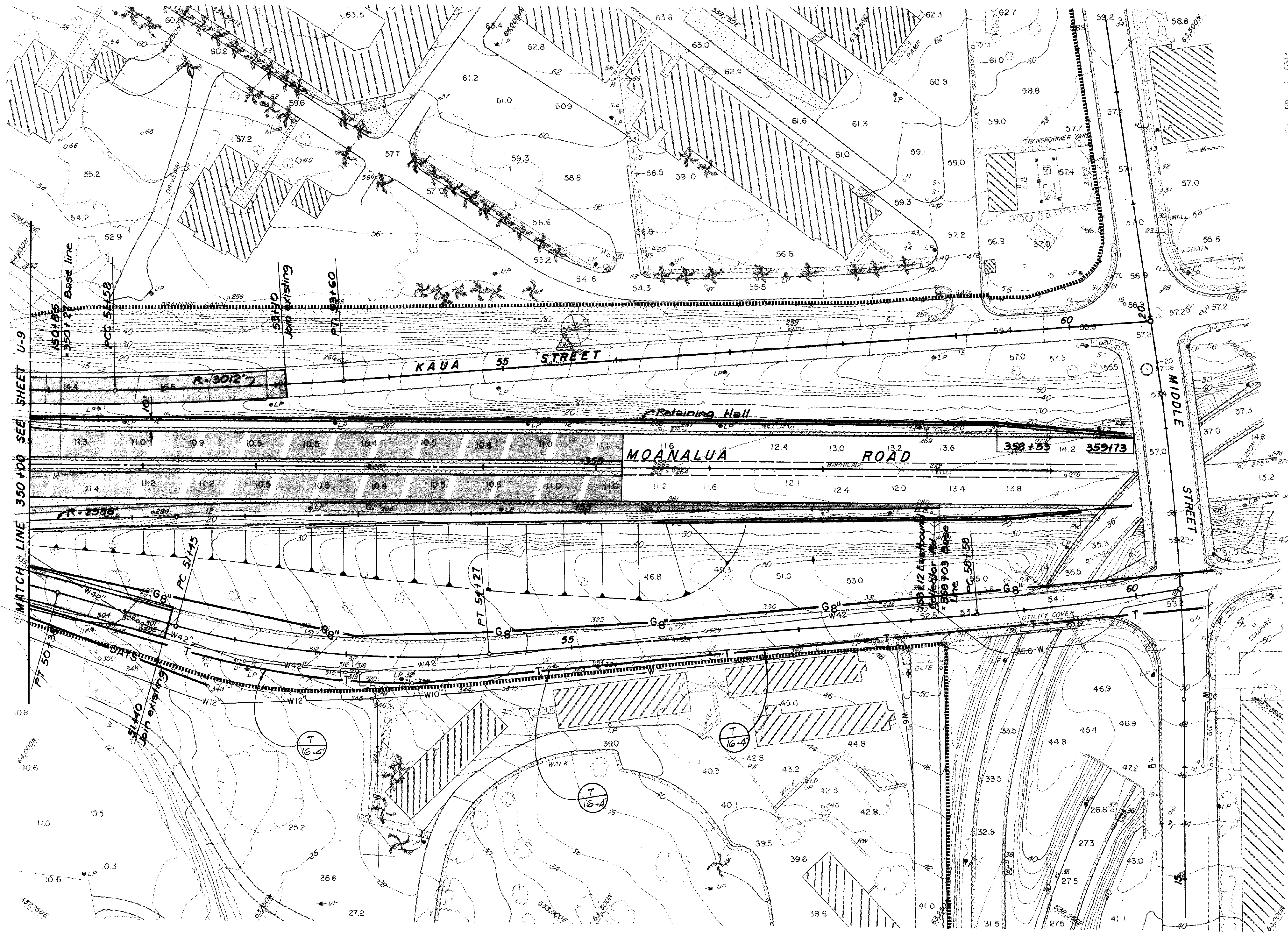
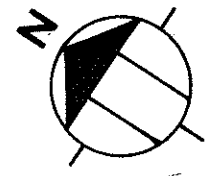
## TYPICAL SECTION FOR FREEWAY UTILITY CROSSING

SCALE: 1" = 4'

|             |               |
|-------------|---------------|
| DATE        | PLOTTED BY    |
| DESIGNED BY | CHECKED BY    |
| NOTE BOOK   | QUANTITIES BY |
| No.         |               |



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | U-078-1(3)         | 1973        | 29        | 36           |



BUILDING  
 WALL or ROCK WALL  
 UTILITY (see sheet 6)  
 FOLIAGE OUTLINE  
 HYDRANT or TRAFFIC LT.  
 SIGN  
 LIGHT or UTILITY POLE

GUARD RAIL  
 CURB & GUTTER  
 PAVED ROAD  
 UNPAVED ROAD  
 CONCRETE or A.C. WALK  
 DRAINAGE  
 FENCE

Compiled by photogrammetric methods from aerial photography taken DEC. 1971 at 1500' A.M.G.L. Broken contour lines may be substandard.  
Elevation based on Mean Sea Level Datum.  
Origin: Haw'n Plane Coord. System, Zone III  
Map Scale: 1" = 50'  
Contour Interval: 2'

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

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*Ted Matsuo*

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
PRELIMINARY DESIGN  
MOANALUA ROAD  
UTILITIES RELOCATION PLAN  
SCALE: 1" = 50'  
DATE AUG 24 1973  
SHEET No.U-10 OF 16 SHEETS