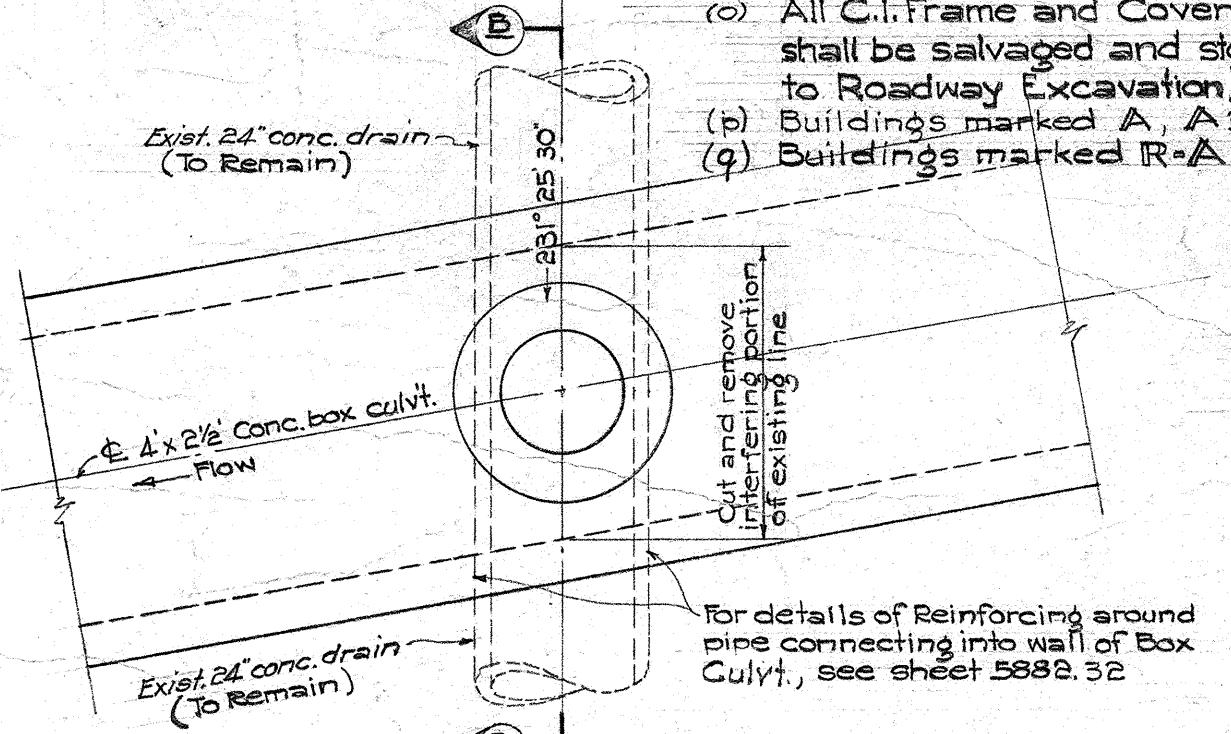


# GENERAL NOTES

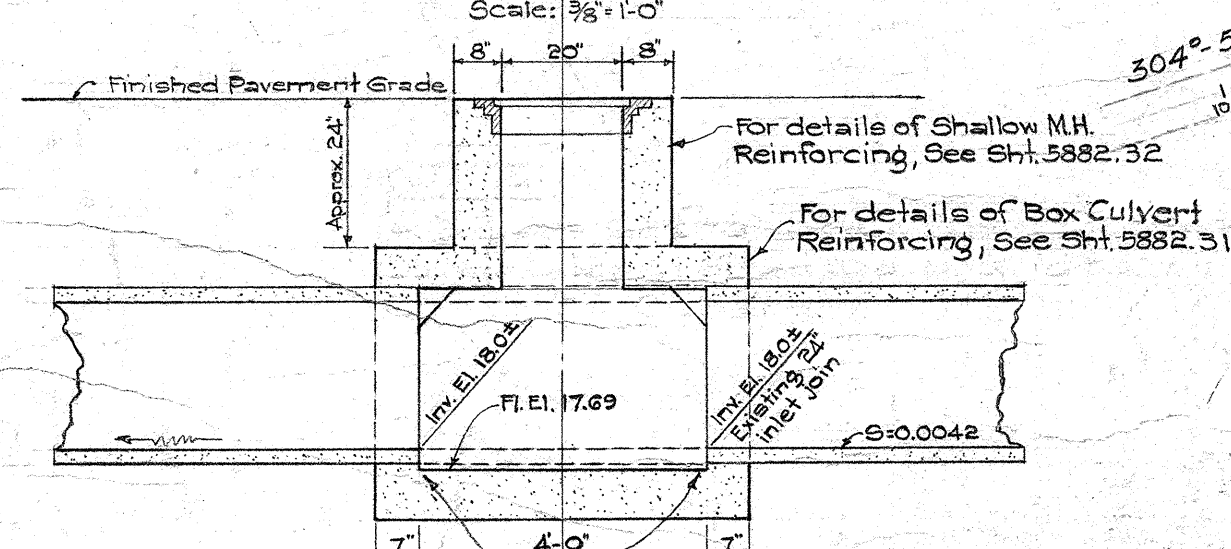
- All manholes in the roadway prism shall be adjusted to new grades as directed by the Engineer.
- All existing lava rock curbs and precast concrete curbs which are to be removed shall be salvaged and stockpiled as directed by the Engineer, or reconstructed as shown on the plans.
- Where reconstructed curbs are to be connected to existing or new curbs, the curbs shall be installed to produce neatly matched joints.
- Where new concrete curbs change from one type to another type, the heights and faces of concrete curbs shall have transition of not less than 20'-0" unless otherwise shown.
- Where new concrete curbs of various types are to be connected to reconstructed curbs or to existing curbs, the new curbs shall have transition of not less than 10'-0" to match the curb faces and height.
- Top slab of drainage structures shall be in line with the adjacent curbs and shall be sloped to the finished grade of sidewalk, shoulder, or median strip as the case may be.
- Where catch basins are to be constructed, the face of all curb openings shall match the face of the adjacent curb.
- Location of existing underground structures such as culverts, pipe lines, conduits, cables, etc., shown on the plans are approximate. Only the Contractor shall check and verify the location of same.
- Electric and Telephone poles in way of construction operation shall be moved by respective utility owners.
- Wherever Type 'A' Conc. Curb is shown, this curb shall be as shown on the Standard Details, except that recesses shall be omitted.
- All ends of abandoned drainage culverts shall be sealed with Class A-1 Concrete, thickness to be at least 1/3 the inside diameter of culverts.
- Removal of existing sidewalks, curbs, and gutters shall be incidental to Roadway Excavation.
- All existing pavements which are under proposed planting areas shall be scarified to a depth of at least 12 inches. All asphaltic material shall be completely removed. This work shall be paid for under the item of "Roadway Excavation."
- All Extra Strength Reinforced Concrete Culvert Pipe shall be provided with concrete collars.

- All C.I. Frame and Cover from demolished Manholes and Catch Basins shall be salvaged and stockpiled as directed by the Engineer (Incidental to Roadway Excavation).
- Buildings marked A, A-1, etc. to be demolished. See Special Provisions.
- Buildings marked R-A, R-B, etc. to be rehabilitated.

**NOTE:**  
Provide 15 ft opening in A.C. Roll at the places indicated by the Engineer for drainage purpose.



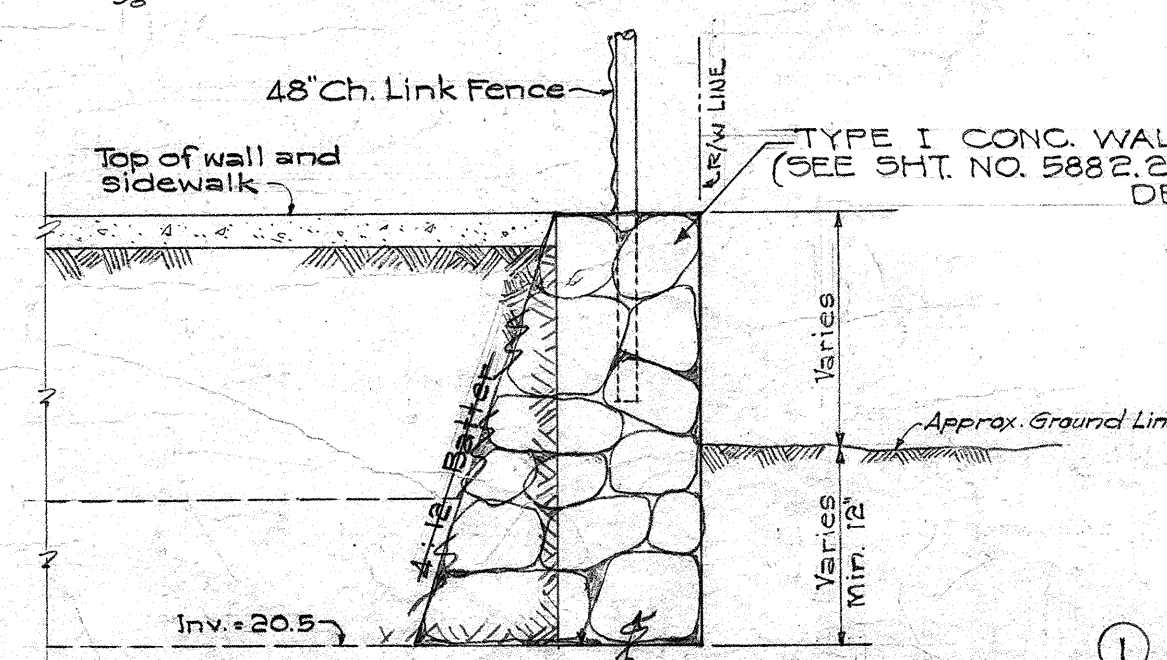
PLAN VIEW OF SDMH #1-A



SECTION B-B

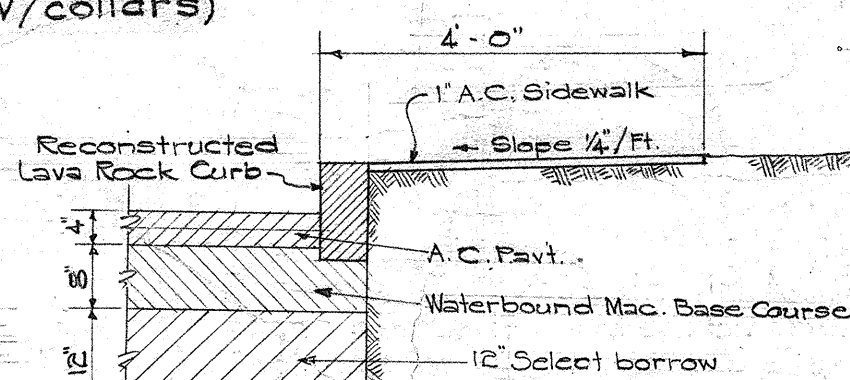
## LEGEND

- SSRCCP Standard Strength Reinforced Concrete Culvert Pipe
- XSRCCP Extra Strength Reinforced Concrete Culvert Pipe (w/collars)
- Exist Gas Lines (Size Indicated)
- Exist Drain Pipes (1/2")
- Exist Water Lines (Size Indicated)
- Exist Sewer Lines (Size Indicated)



SECTION A-A

PALAMA ST. STA. 1+08.71



DETAIL OF A.C. SIDEWALK

**NOTE:**  
1" Thick A.C. (Mix No. II) over subgrade treated with non-emergent weed killer. Non-emergent killer shall be 'Foybor' chlorate or equal. Chlorate shall be mixed with water at the rate of three gallons of water per one pound of the chlorate.

## CURVE DATA

| ①                            | ②                            | ③                            | ④                            | ⑤                            | ⑥                            | ⑦ & ⑧                        |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| $\Delta = 86^{\circ}33'30''$ | $\Delta = 30^{\circ}07'00''$ | $\Delta = 58^{\circ}25'30''$ | $\Delta = 96^{\circ}24'00''$ | $\Delta = 86^{\circ}33'30''$ | $\Delta = 96^{\circ}24'00''$ | $\Delta = 09^{\circ}08'52''$ |
| R = 50.00'                   | R = 50.00'                   | R = 30.00'                   | R = 50.00'                   | R = 30.00'                   | R = 50.00'                   | R = 471.75'                  |
| T = 47.08'                   | T = 15.45'                   | T = 16.78'                   | T = 55.92'                   | T = 47.08'                   | T = 55.92'                   | T = 37.78'                   |
| C = 68.56'                   | C = 25.98'                   | C = 29.28'                   | C = 74.55'                   | C = 68.56'                   | C = 74.55'                   | C = 75.12'                   |
| L = 75.54'                   | L = 26.28'                   | L = 30.50'                   | L = 84.12'                   | L = 75.54'                   | L = 84.12'                   | L = 75.20'                   |

## Storm Drain CURVE DATA

|                              |
|------------------------------|
| $\Delta = 20^{\circ}00'00''$ |
| R = 393.93'                  |
| T = 69.46'                   |
| L = 137.51'                  |

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
DETAIL PLAN OF ROADWAY  
VINEYARD THOROUGHFARE  
PALAMA ST. TO FORT ST.  
PROJECT NO. DF-098-1(5)

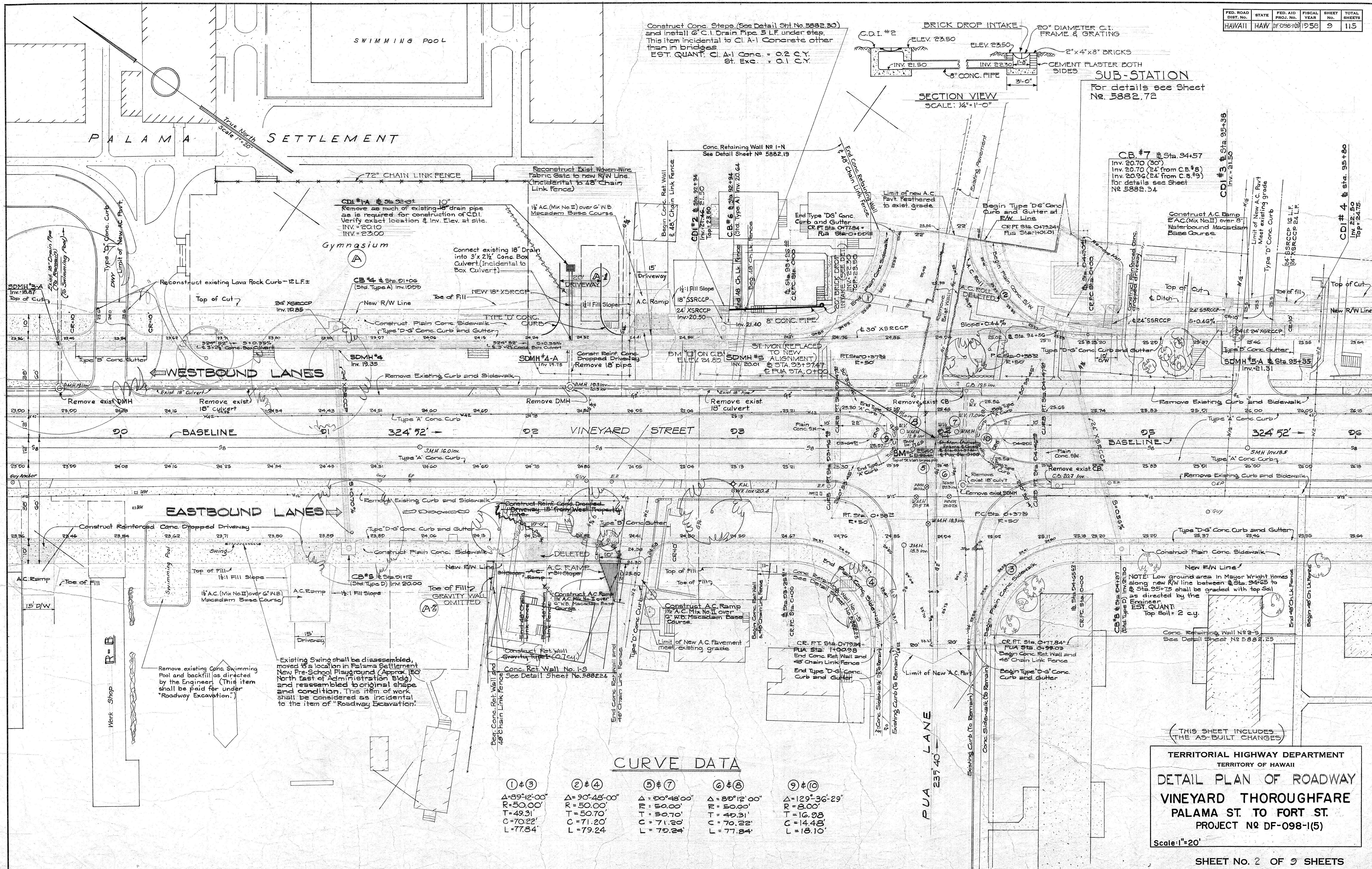
Scale: 1"=20'

SHEET NO. 1 OF 9 SHEETS

5882.08

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW   | DF-098-1(5)        | 1958        | 8         | 115          |





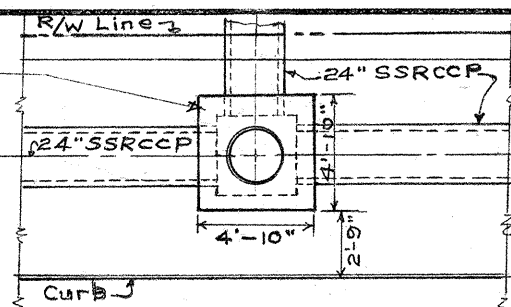


| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW   | DF-098-1(5)        | 1983        | 10        | 115          |

# § CURVE DATA

Δ = 1°-02'  
R = 0°-31'  
T = 50.00  
L = 45.03  
Ch = 90.17  
Lc = 90.18

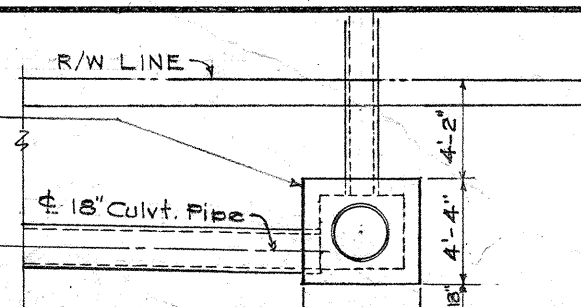
Note: For Details See Sht. 5882.31



PLAN OF SDMH #5-A  
Sta. 95+35  
Scale: 1/8"=1'-0"

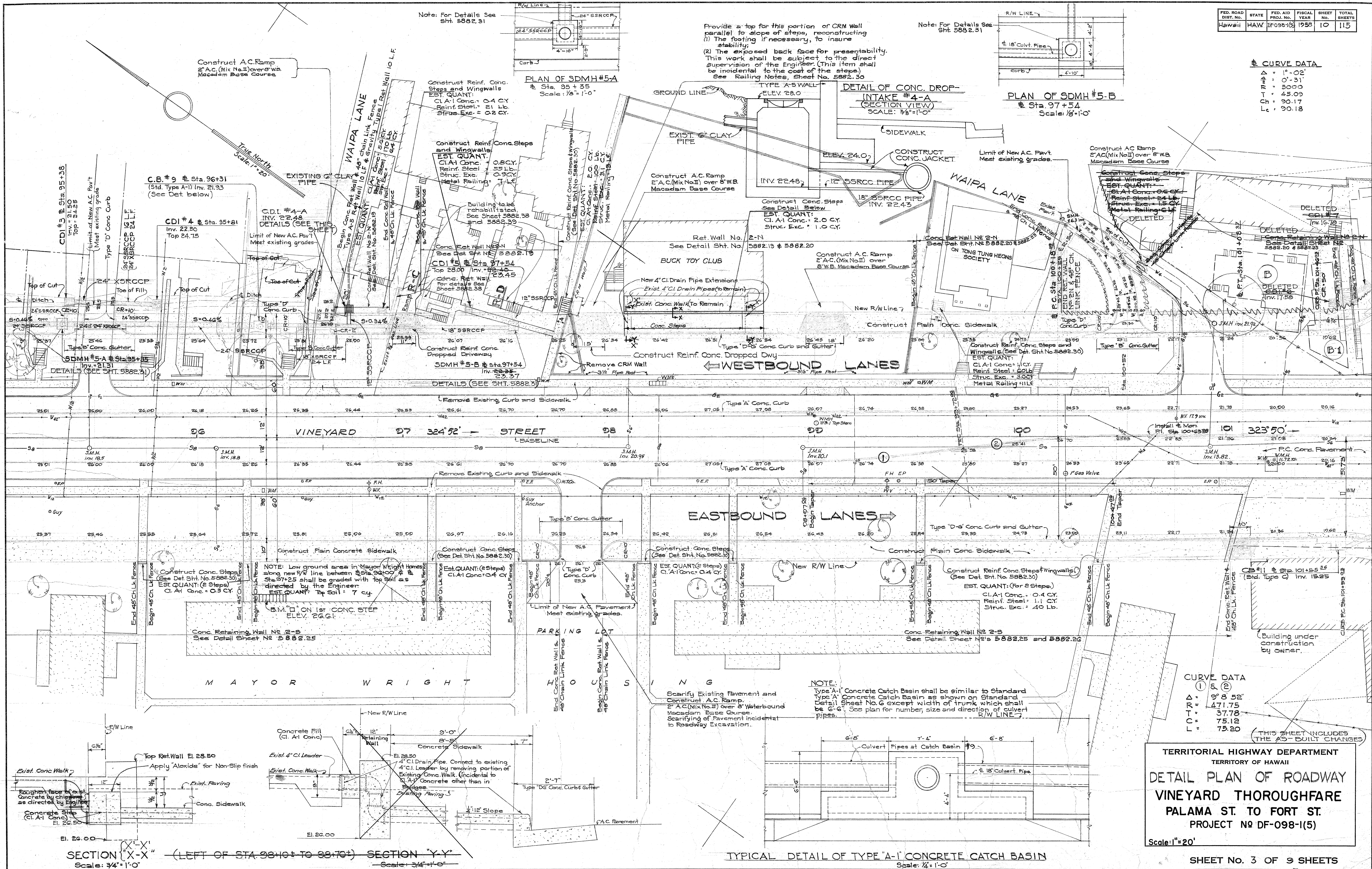
Provide a top for this portion of CRM Wall parallel to slope of steps, reconstructing (1) The footing if necessary, to insure stability.  
(2) The exposed back face for presentability. This work shall be subject to the direct supervision of the Engineer. (This item shall be incidental to the cost of the steps).  
See Railing Notes, Sheet No. 5882.30

Note: For Details See Sht. 5882.31



PLAN OF SDMH #5-B  
Sta. 97+54  
Scale: 1/8"=1'-0"

DETAIL OF CONC. DROP-INTAKE #4-A  
(SECTION VIEW)  
SCALE: 3/8"=1'-0"



CURVE DATA  
① & ②  
Δ = 9°-8'52"  
R = 471.75  
T = 37.78  
L = 75.12  
Lc = 75.20

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
DETAIL PLAN OF ROADWAY  
VINEYARD THOROUGHFARE  
PALAMA ST. TO FORT ST.  
PROJECT NO. DF-098-1(5)

Scale: 1"=20'

SHEET No. 3 OF 9 SHEETS

5882.10

|                       |      |
|-----------------------|------|
| SURVEY PLOTTED BY     | DATE |
| DESIGNED BY           |      |
| DRAWN BY              |      |
| CHECKED BY            |      |
| NOTED BY              |      |
| QUANTITIES CHECKED BY |      |
| NO.                   |      |

SECTION "X-X" (LEFT OF STA. 98+00 TO 98+70) SECTION "Y-Y"  
Scale: 3/4"=1'-0"

TYPICAL DETAIL OF TYPE 'A-1' CONCRETE CATCH BASIN  
Scale: 1/4"=1'-0"



NOTE: Conc. Retaining Wall, Conc. Steps, Chain Link Fence, Concrete Drop Intakes and Culverts between this area shall not be constructed until ordered by the Engineer. The above items may be eliminated if adjacent property ground line is lowered.

NOTE: Work involved in connecting culvert pipes to existing manhole or conc. box culvert shall be considered as incidental to the items of respective culvert pipes connected.

NOTE: Type 'A-1' Conc. Catch Basin shall be similar to Type 'A' standard Concrete Catch Basin as shown on Standard Detail Sheet, except front wall to be curved as indicated.

R. CURVE DATA  
 $\Delta = 10^\circ 12'$   
 $R = 100.00'$   
 $T = 24.76'$   
 $C = 44.58'$   
 $L = 104.72'$

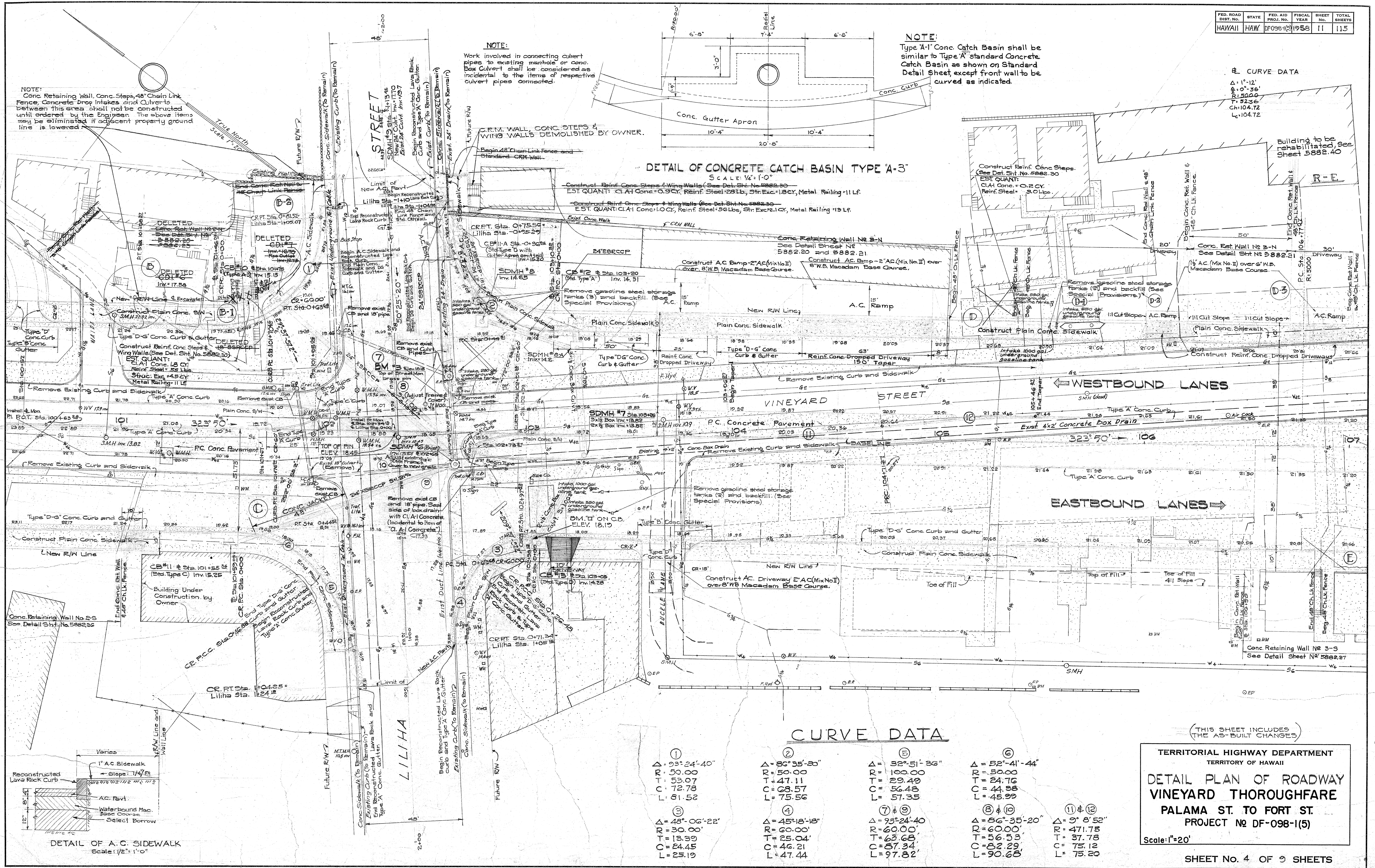
### DETAIL OF CONCRETE CATCH BASIN TYPE 'A-3'

SCALE: 1/4" = 1'-0"

EST. QUANT: CLAI Conc. = 0.9 CY, Reinf. Steel = 28 Lb, Str. Exc. = 1.8 CY, Metal Railing = 11 Lf.  
 EST. QUANT: CLAI Conc. = 1.0 CY, Reinf. Steel = 36 Lb, Str. Exc. = 2.1 CY, Metal Railing = 13 Lf.

Construct Reinf. Conc. Steps.  
 (See Det. Sht. No. 5882.30)  
 EST. QUANT: CLAI Conc. = 0.2 CY, Reinf. Steel = 3.0 Lb.

Building to be rehabilitated, See Sheet 5882.40



### CURVE DATA

|                                                                                       |                                                                                       |                                                                                           |                                                                                           |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| ①<br>$\Delta = 93^\circ 24' 40''$<br>R = 50.00<br>T = 53.07<br>C = 72.78<br>L = 81.52 | ②<br>$\Delta = 86^\circ 35' 20''$<br>R = 50.00<br>T = 47.11<br>C = 68.57<br>L = 75.56 | ⑤<br>$\Delta = 32^\circ 51' 36''$<br>R = 100.00<br>T = 29.49<br>C = 56.48<br>L = 57.35    | ⑥<br>$\Delta = 52^\circ 41' 44''$<br>R = 50.00<br>T = 24.76<br>C = 44.58<br>L = 45.99     |
| ③<br>$\Delta = 48^\circ 06' 22''$<br>R = 30.00<br>T = 13.39<br>C = 24.45<br>L = 25.19 | ④<br>$\Delta = 45^\circ 18' 18''$<br>R = 60.00<br>T = 25.04<br>C = 46.21<br>L = 47.44 | ⑦ & ⑧<br>$\Delta = 93^\circ 24' 40''$<br>R = 60.00<br>T = 63.68<br>C = 87.34<br>L = 97.82 | ⑧ & ⑩<br>$\Delta = 86^\circ 35' 20''$<br>R = 60.00<br>T = 56.53<br>C = 82.29<br>L = 90.68 |
|                                                                                       |                                                                                       |                                                                                           | ⑪ & ⑫<br>$\Delta = 9^\circ 8' 52''$<br>R = 471.75<br>T = 37.78<br>C = 75.12<br>L = 75.20  |

(THIS SHEET INCLUDES THE AS-BUILT CHANGES)

TERRITORIAL HIGHWAY DEPARTMENT  
 TERRITORY OF HAWAII

DETAIL PLAN OF ROADWAY  
 VINEYARD THOROUGHFARE  
 PALAMA ST. TO FORT ST.  
 PROJECT NO. DF-098-1(5)

Scale: 1" = 20'

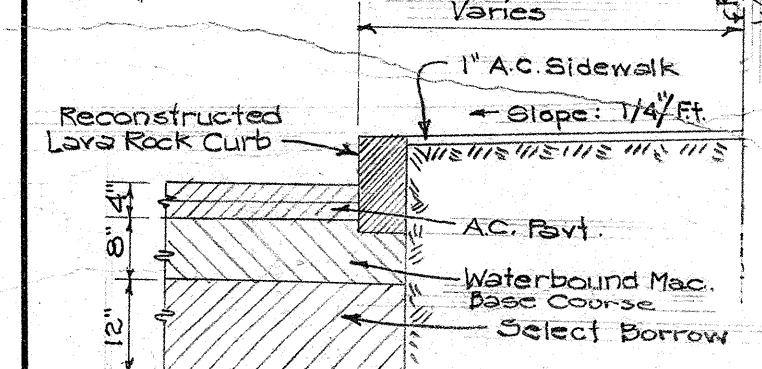
SHEET NO. 4 OF 9 SHEETS

5882.11

DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_

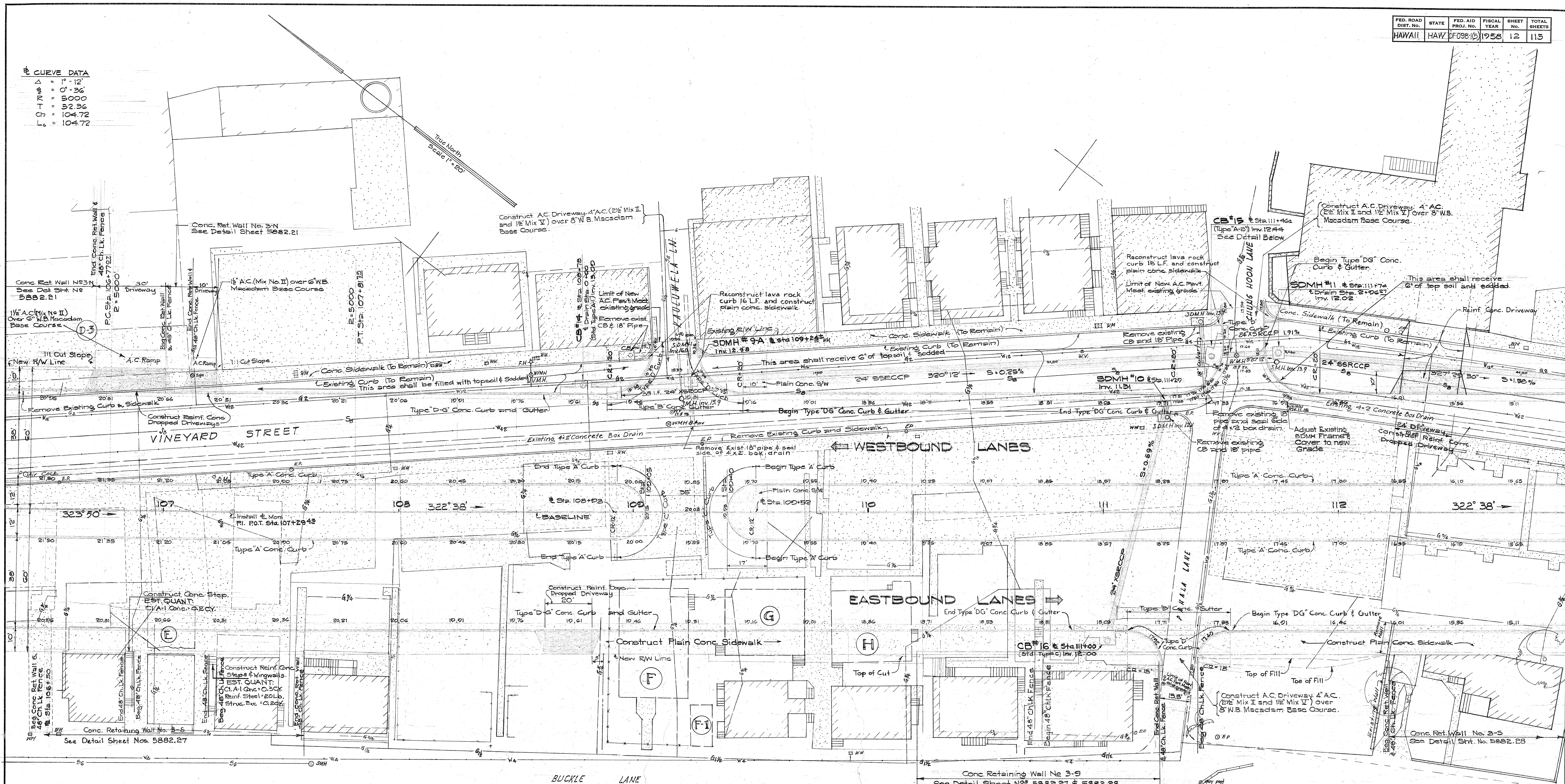
### DETAIL OF A.C. SIDEWALK

Scale: 1/2" = 1'-0"

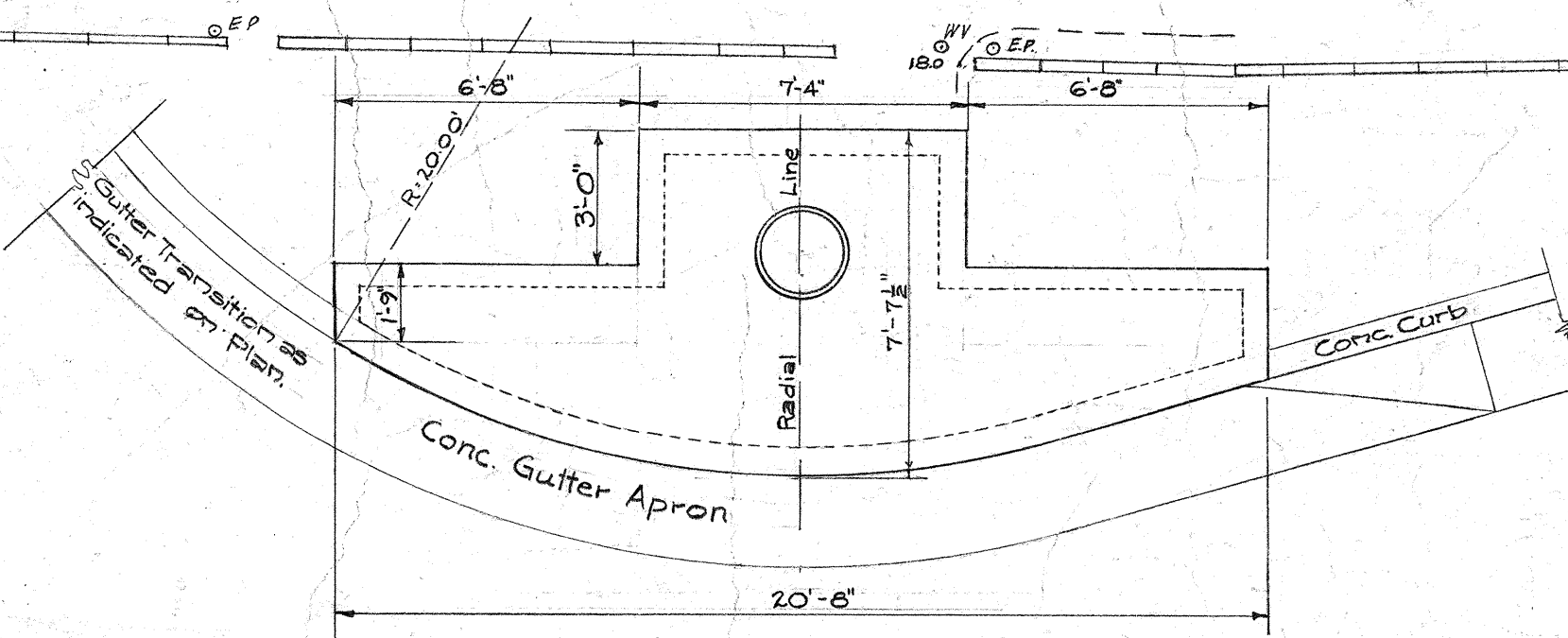




**CURVE DATA**  
 $\Delta = 1^\circ 12'$   
 $R = 5000$   
 $PT = 52.36$   
 $CH = 104.72$   
 $LC = 104.72$



BUCKLE LANE



**DETAIL OF CONCRETE CATCH BASIN TYPE "A-2"**  
 SCALE: 1/4" = 1'-0"

**NOTE:**  
 Type "A-2" Conc. Catch Basin shall be similar to Type A Concrete Catch Basin as shown on Standard Detail Sheet, except front wall to be curved as indicated.

(SUPERSEDED BY REVISED SHEET NO. 5882.12A, DATED DEC. 10, 1958.)

**TERRITORIAL HIGHWAY DEPARTMENT**  
 TERRITORY OF HAWAII  
**DETAIL PLAN OF ROADWAY**  
**VINEYARD THOROUGHFARE**  
 PALAMA ST. TO FORT ST.  
 PROJECT NO. DF-098-1(5)

Scale: 1" = 20'

SHEET NO. 5 OF 9 SHEETS

**5882.12**

SUPERSEDED

12



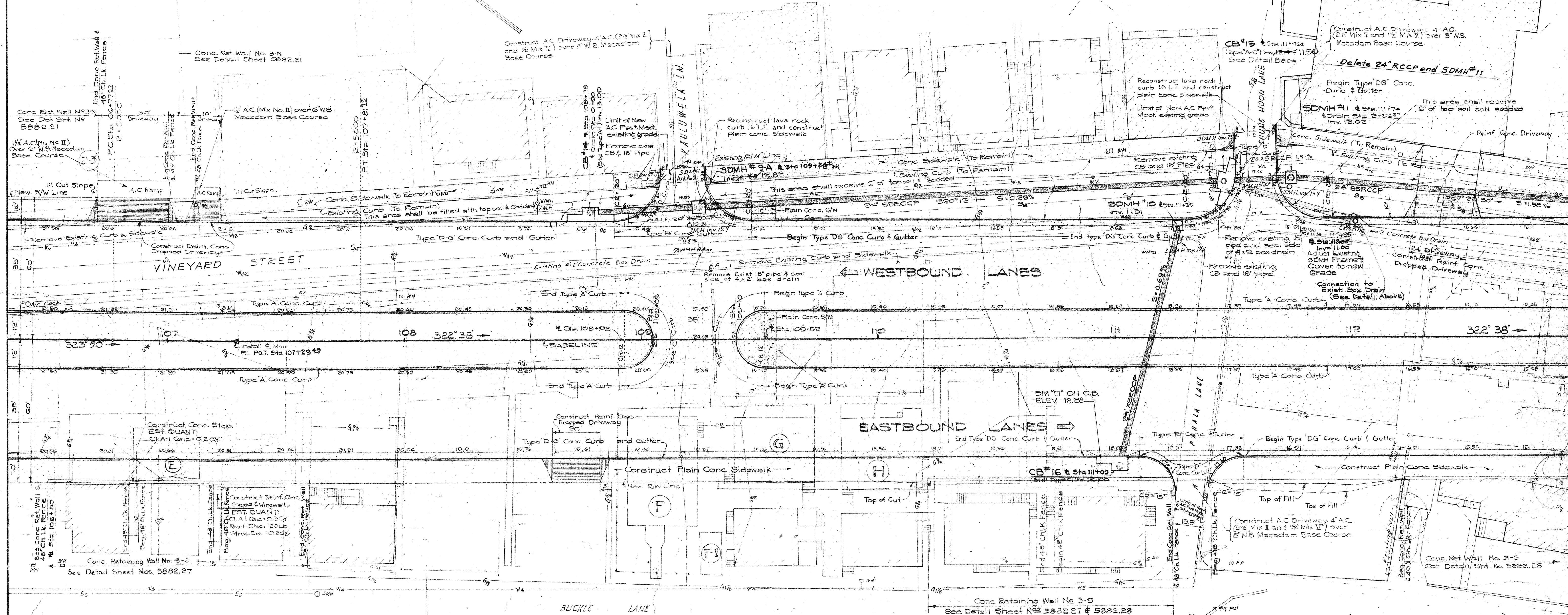
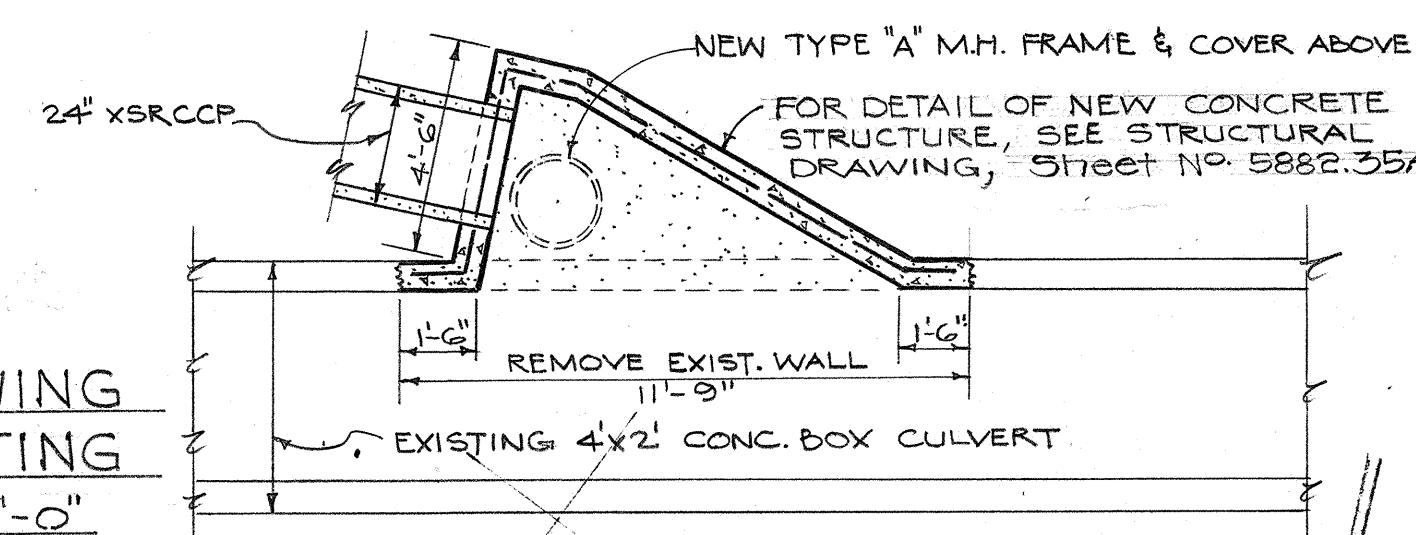
| FED. ROAD<br>DIST. No. | STATE | FED. AID<br>PROJ. No. | FISCAL<br>YEAR | SHEET<br>No. | TO<br>SH |
|------------------------|-------|-----------------------|----------------|--------------|----------|
| HAWAII                 | HAW   | DF-098-15             | 1958           | 12A          | 11       |

REVISER 12-10-5

CURVE DATA

|          |   |          |
|----------|---|----------|
| $\Delta$ | = | 1° - 12' |
| $\phi$   | = | 0° - 36' |
| R        | = | 5000     |
| T        | = | 52.36    |
| Ch       | = | 104.72   |
| L        | = | 104.72   |

DETAIL PLAN SHOWING  
CONNECTION TO EXISTING  
BOX DRAIN      SCALE:  $\frac{1}{4}" = 1' - 0"$



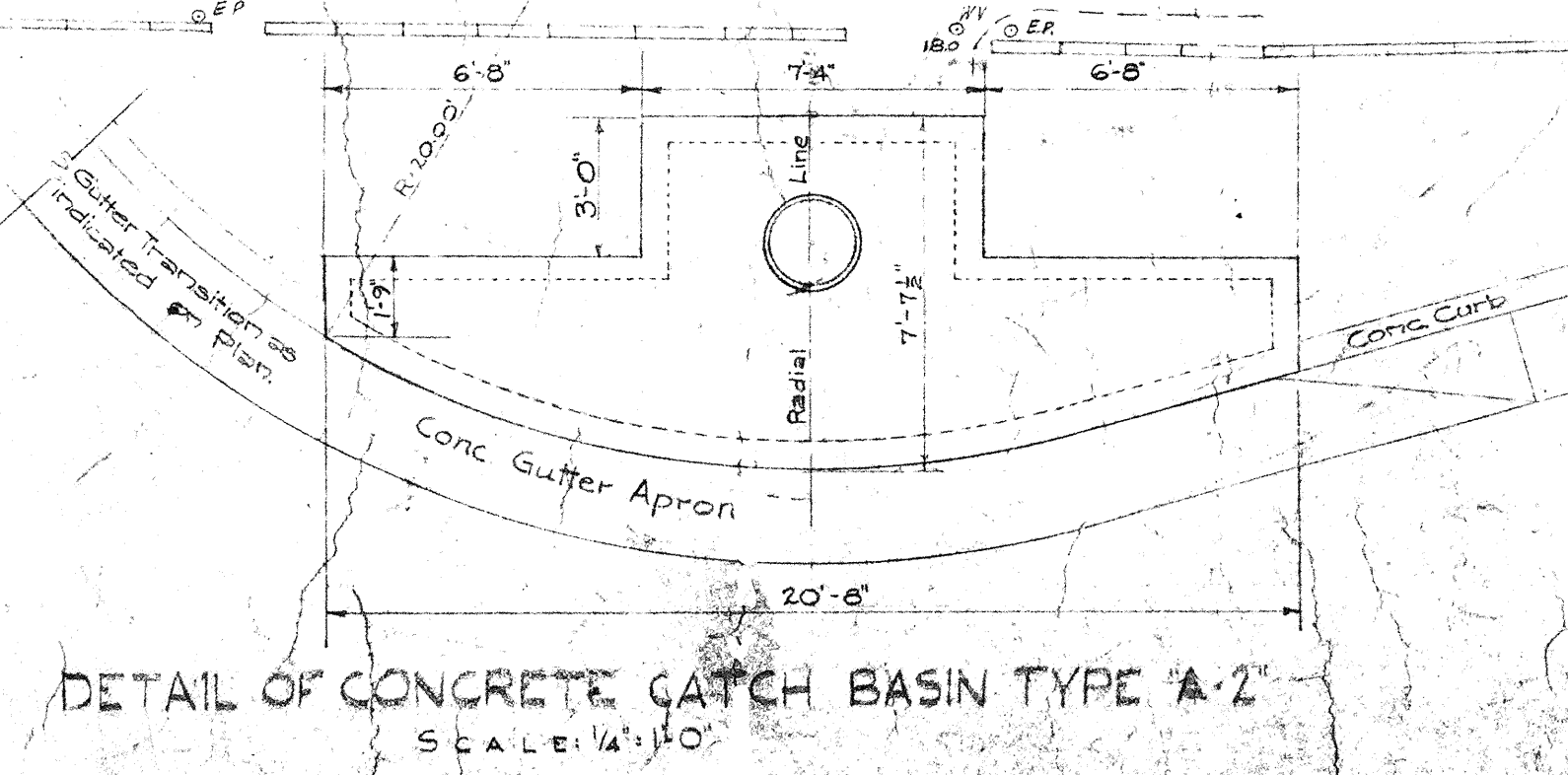
(THIS SHEET WAS REVISED AND  
INCLUDES THE AS-BUILT CHANGES)  
(REVISED)  
12-10-58

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
DETAIL PLAN OF ROADWAY  
VINEYARD THOROUGHFARE  
PALAMA ST. TO FORT ST.  
PROJECT NO DF-098-1(5)  
Scale: 1" = 20'

SHEET NO. 5 OF 9 SHEETS

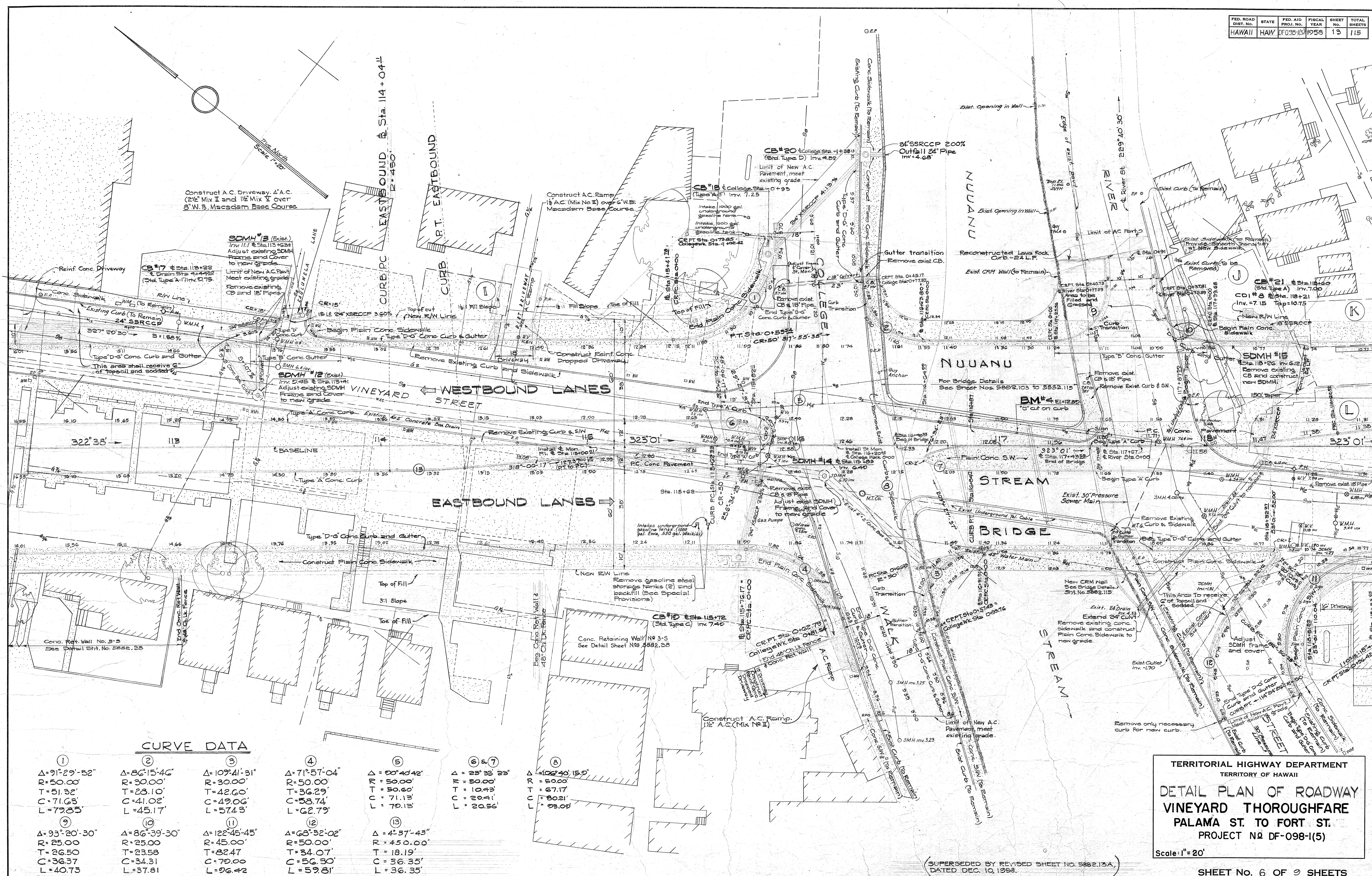
**5882.12A**

**NOTE:**  
Type A-2 Conc. Catch Basin shall be similar to Type A Concrete Catch Basin as shown on Standard Detail Sheet, except front wall to be curved as indicated.



|                        |                             |            |
|------------------------|-----------------------------|------------|
| ORIGINAL<br>PLAN       | SURVEY PLOTTED BY _____     | DATE _____ |
|                        | DESIGNED BY _____           | " _____    |
|                        | DRAWN BY _____              | " _____    |
|                        | TRACED BY _____             | " _____    |
|                        | QUANTITIES BY _____         | " _____    |
|                        | QUANTITIES CHECKED BY _____ | " _____    |
|                        | CHECKED BY _____            | " _____    |
| NOTE BOOK<br>No. _____ |                             |            |





TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
DETAIL PLAN OF ROADWAY  
VINEYARD THOROUGHFARE  
PALAMA ST. TO FORT ST.  
PROJECT NO. DF-098-1(5)

Scale: 1" = 20'

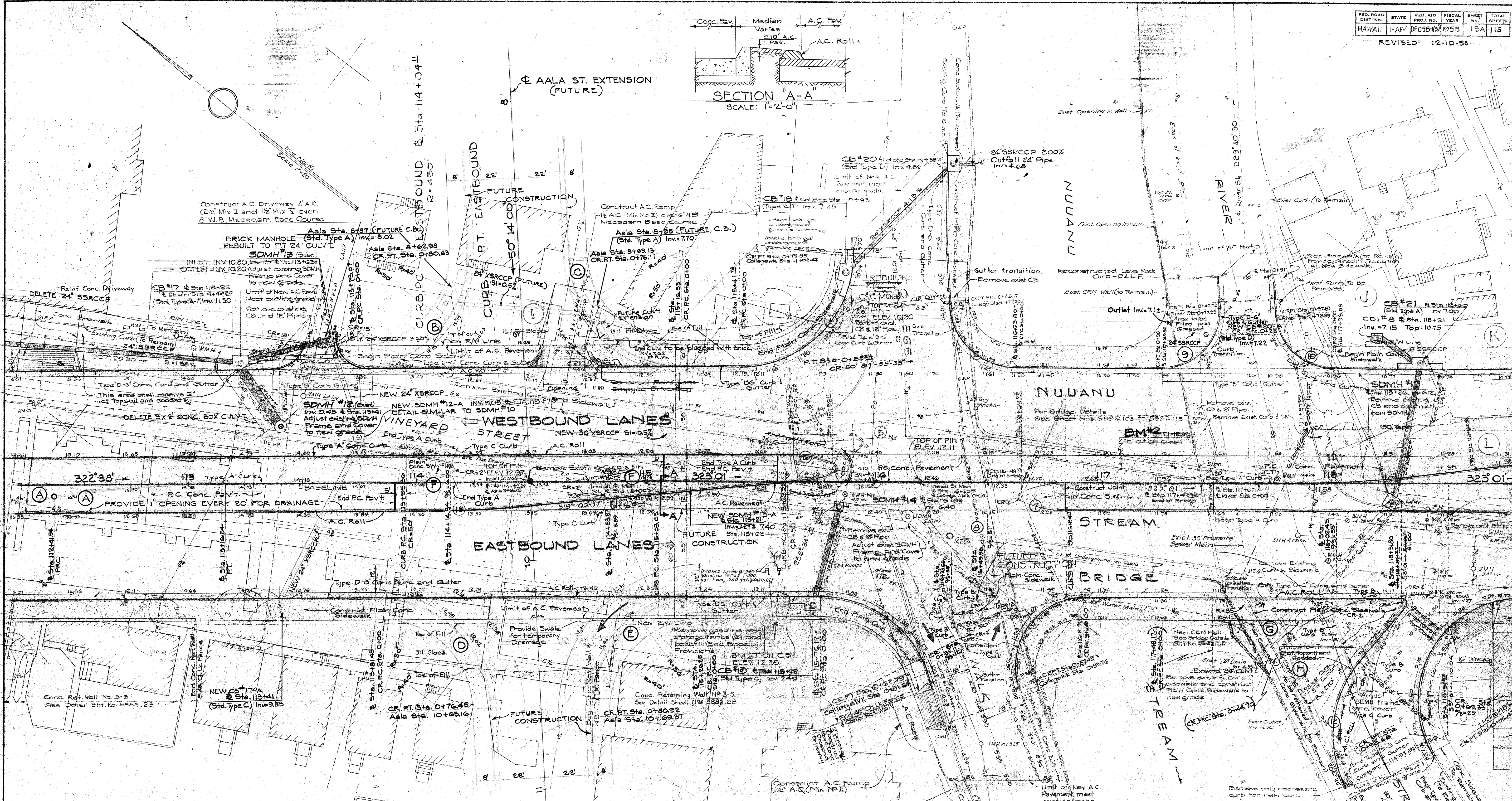
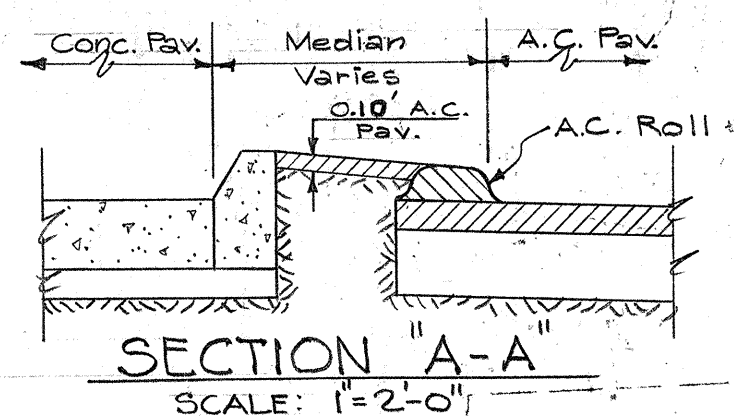
SHEET No. 6 OF 9 SHEETS

5882.13

(SUPERSEDED BY REVISED SHEET NO. 5882.13A,  
DATED DEC. 10, 1958.)

SUPERSEDED





### CURVE DATA

|                                                              |                                                              |                                                               |                                                              |                                                                |                                                                 |                                                                 |                                                              |                                                              |                                                               |
|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|
| ①<br>Δ=91°29'52"<br>R=50.00<br>T=51.32<br>C=71.63<br>L=72.83 | ②<br>Δ=86°15'46"<br>R=30.00<br>T=28.10<br>C=41.02<br>L=45.17 | ③<br>Δ=109°41'31"<br>R=30.00<br>T=42.60<br>C=49.06<br>L=57.43 | ④<br>Δ=71°57'04"<br>R=50.00<br>T=36.29<br>C=53.74<br>L=62.79 | ⑤<br>Δ=20°40'42"<br>R=50.00<br>T=50.60<br>C=71.13<br>L=79.13   | ⑥, ⑦<br>Δ=23°33'23"<br>R=50.00<br>T=10.43<br>C=20.41<br>L=20.56 | ⑧<br>Δ=106°40'15.2"<br>R=50.00<br>T=67.17<br>C=78.01<br>L=93.09 | ⑨<br>Δ=9°15'55"<br>R=50.00<br>T=46.75<br>C=37.74<br>L=75.32  | ⑩<br>Δ=92°24'00"<br>R=50.00<br>T=50.00<br>C=52.14<br>L=72.18 | ⑪<br>Δ=87°12'00"<br>R=50.00<br>T=47.63<br>C=68.54<br>L=76.11  |
| ⑫<br>Δ=93°20'30"<br>R=25.00<br>T=26.50<br>C=36.37<br>L=40.73 | ⑬<br>Δ=86°39'30"<br>R=25.00<br>T=23.58<br>C=34.31<br>L=37.81 | ⑭<br>Δ=122°45'45"<br>R=45.00<br>T=82.47<br>C=79.00<br>L=96.42 | ⑮<br>Δ=68°32'02"<br>R=50.00<br>T=34.07<br>C=56.30<br>L=59.51 | ⑯<br>Δ=4°37'43.3"<br>R=450.00<br>T=18.19<br>C=36.35<br>L=36.35 | ⑰<br>Δ=87°36'00"<br>R=50.00<br>T=47.95<br>C=69.21<br>L=76.45    | ⑱<br>Δ=92°47'00"<br>R=50.00<br>T=52.49<br>C=72.41<br>L=80.92    | ⑲<br>Δ=23°33'23"<br>R=50.00<br>T=10.43<br>C=20.41<br>L=20.56 | ⑳<br>Δ=73°10'50"<br>R=35.00<br>T=25.98<br>C=41.73<br>L=44.70 | ㉑<br>Δ=10°23'20"<br>R=270.00<br>T=24.55<br>C=48.89<br>L=48.96 |

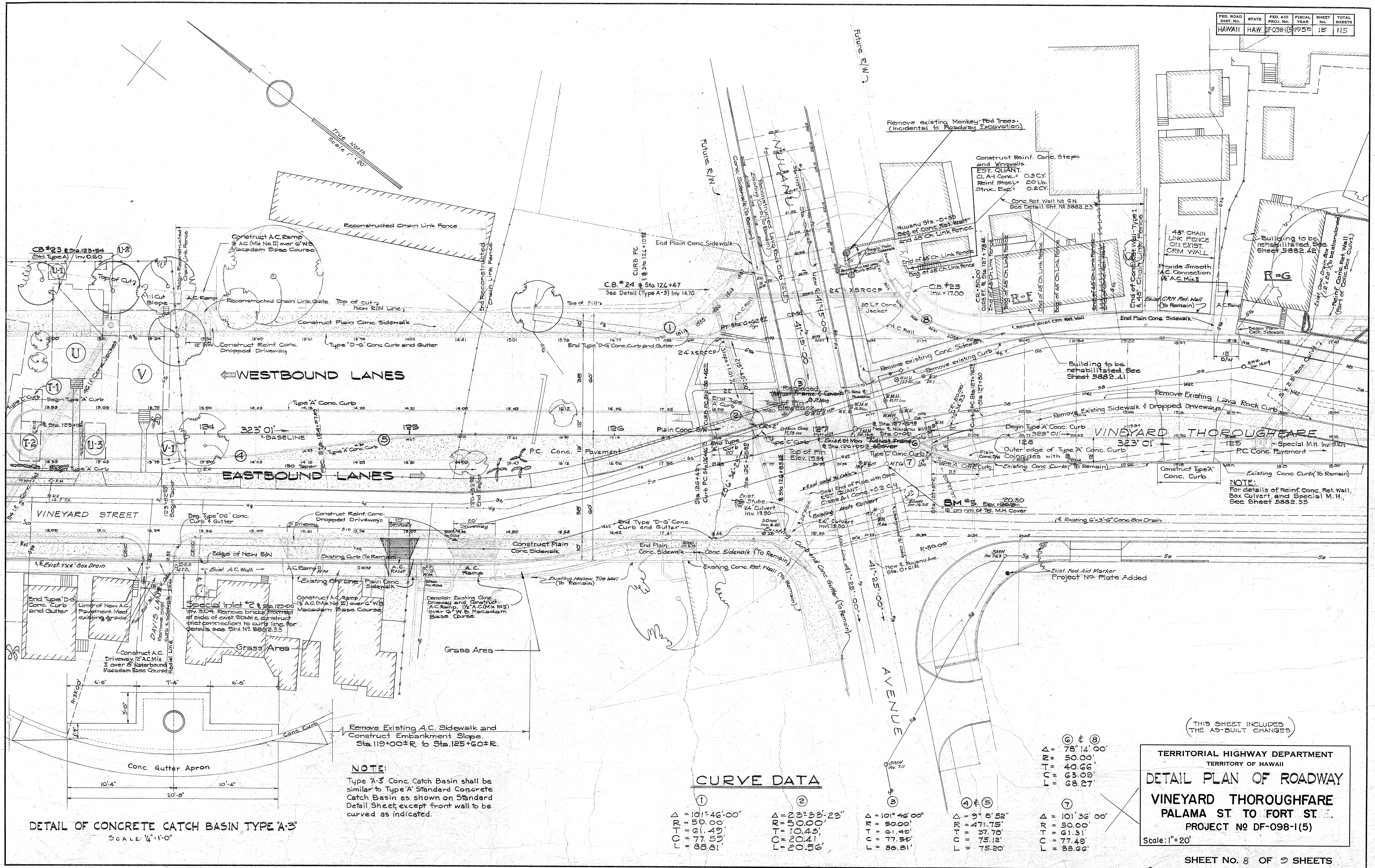
(REVISED)  
12-10-58

TERRITORIAL HIGHWAY DEPARTMENT  
TERRITORY OF HAWAII  
DETAIL PLAN OF ROADWAY  
VINEYARD THOROUGHFARE  
PALAMA ST. TO FORT ST.  
PROJECT NO DF-098-1(5)  
Scale: 1"=20'









### CURVE DATA

| ①                | ②               | ③                | ④ & ⑤         | ⑦                |
|------------------|-----------------|------------------|---------------|------------------|
| Δ = 101° 46' 00" | Δ = 23° 23' 23" | Δ = 101° 46' 00" | Δ = 9° 5' 52" | Δ = 101° 36' 00" |
| R = 50.00'       | R = 50.00'      | R = 50.00'       | R = 471.75'   | R = 50.00'       |
| T = 61.49'       | T = 10.43'      | T = 61.49'       | T = 37.78'    | T = 61.31'       |
| C = 77.59'       | C = 20.41'      | C = 77.59'       | C = 75.12'    | C = 77.49'       |
| L = 88.81'       | L = 20.56'      | L = 88.81'       | L = 75.20'    | L = 88.66'       |

(THIS SHEET INCLUDES THE AS-BUILT CHANGES)

**TERRITORIAL HIGHWAY DEPARTMENT**  
TERRITORY OF HAWAII

**DETAIL PLAN OF ROADWAY**  
**VINEYARD THOROUGHFARE**  
**PALAMA ST. TO FORT ST.**  
PROJECT NO. DF-098-1(5)

Scale: 1" = 20'

TKG 7/57

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



