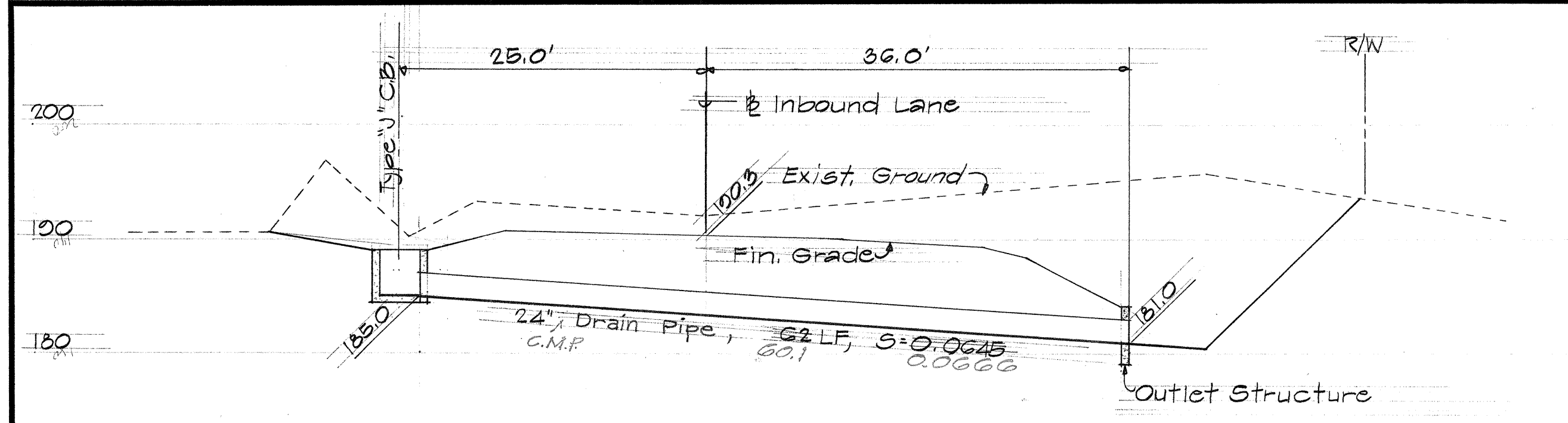
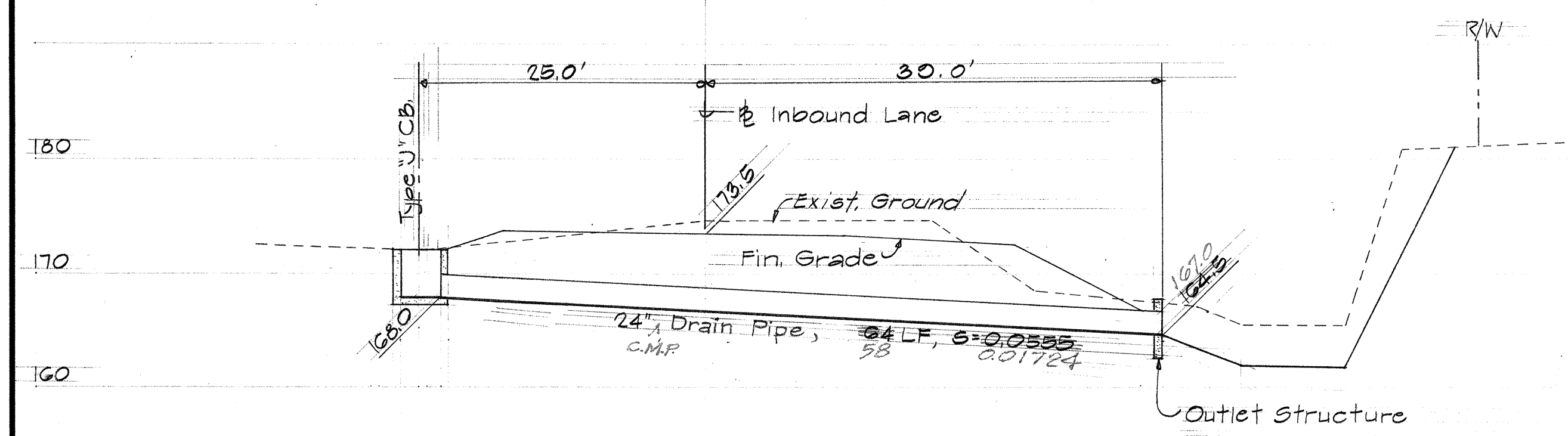


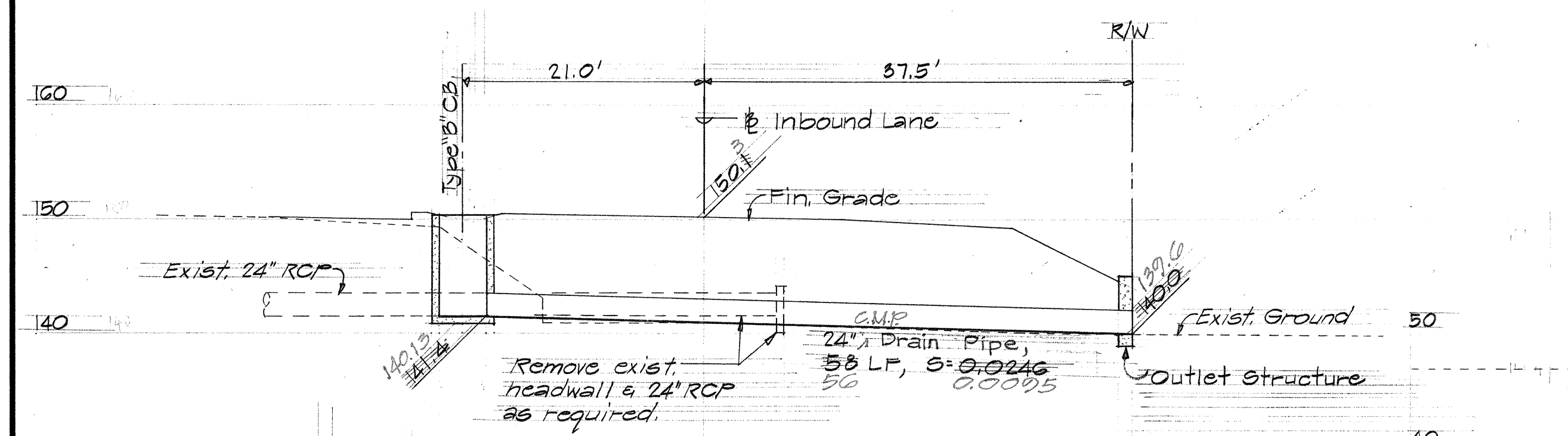
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | F-RF-011-2(13)     | 1975        | 21        | 126          |



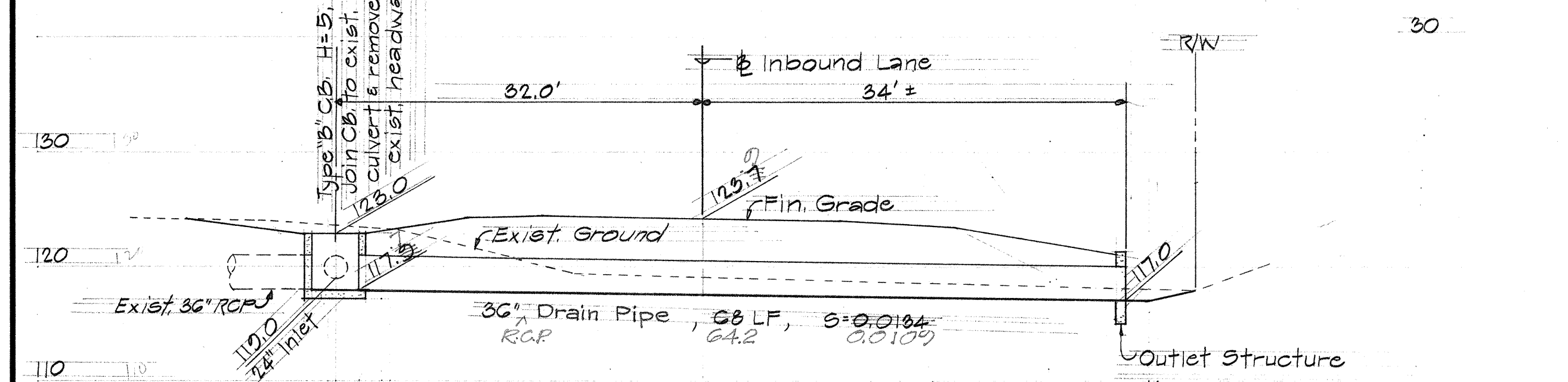
STA. 1277+50



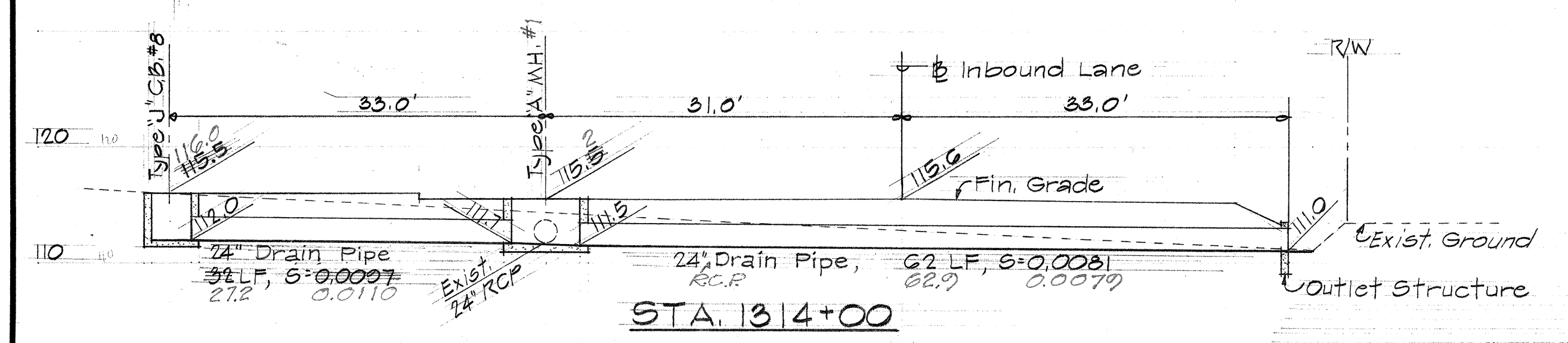
STA. 1285+00



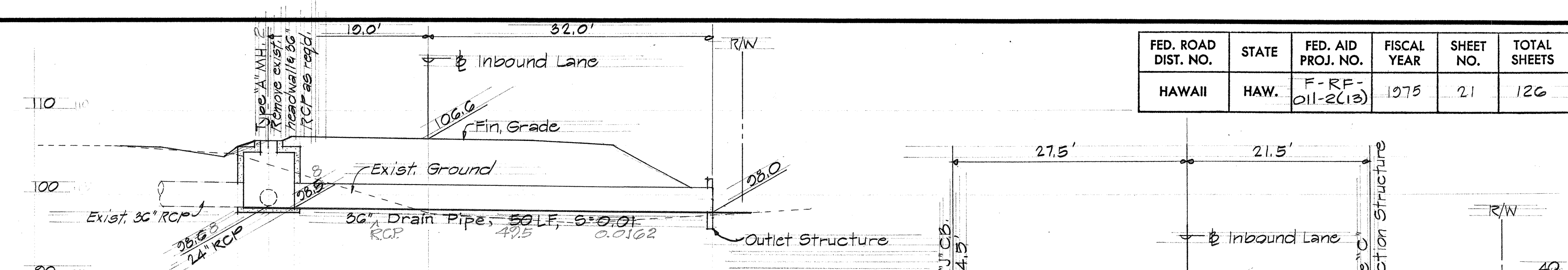
STA. 1298+50



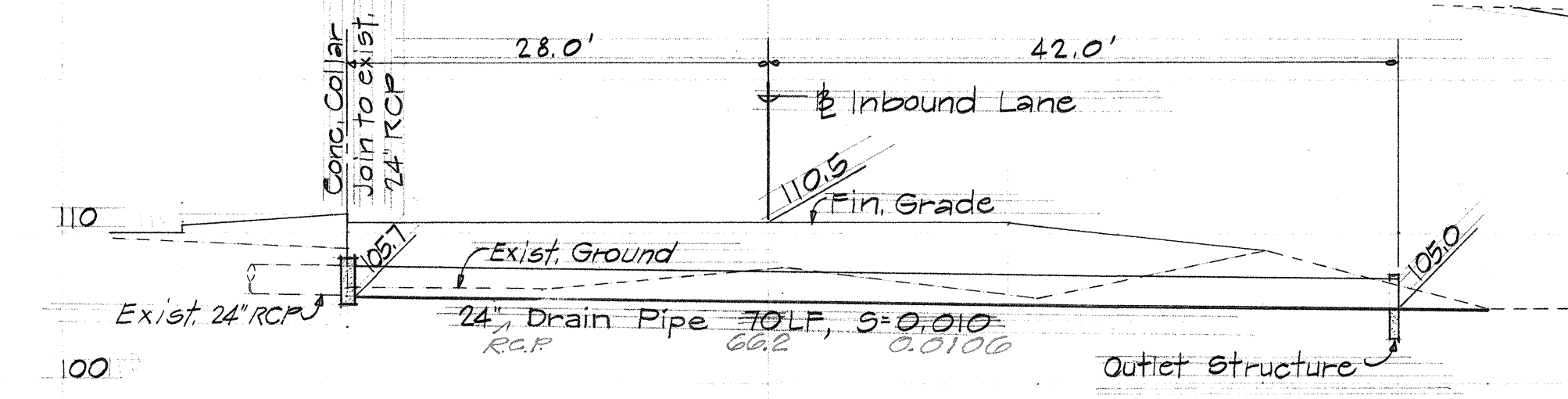
STA. 1310+65



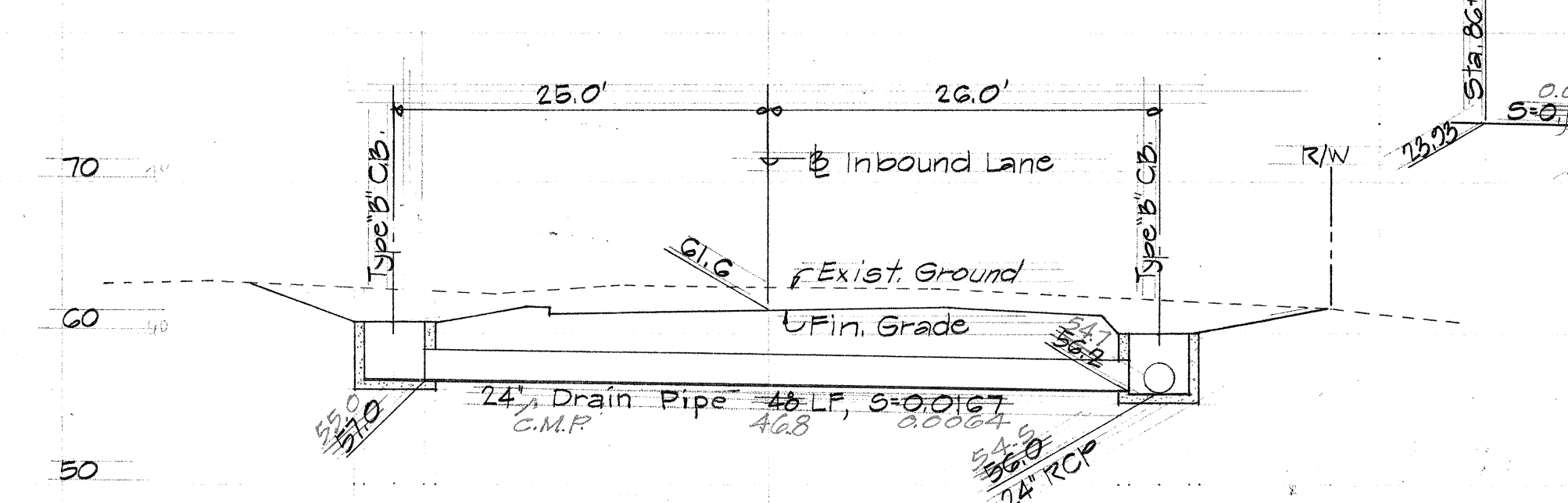
STA. 1314+00



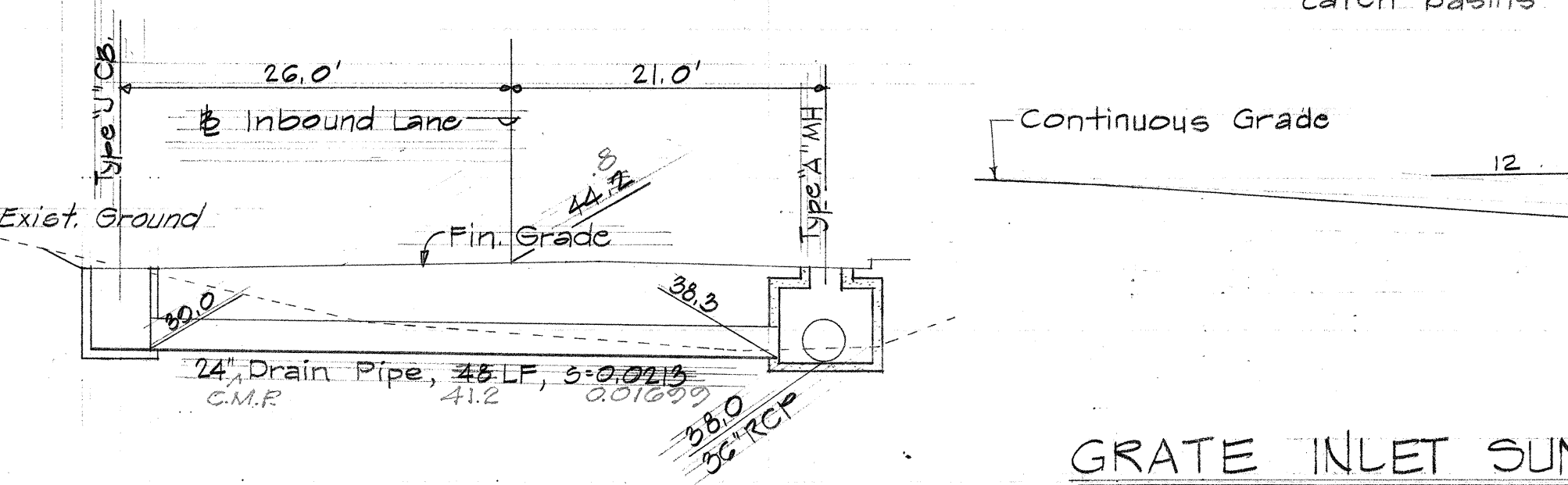
STA. 1319+60



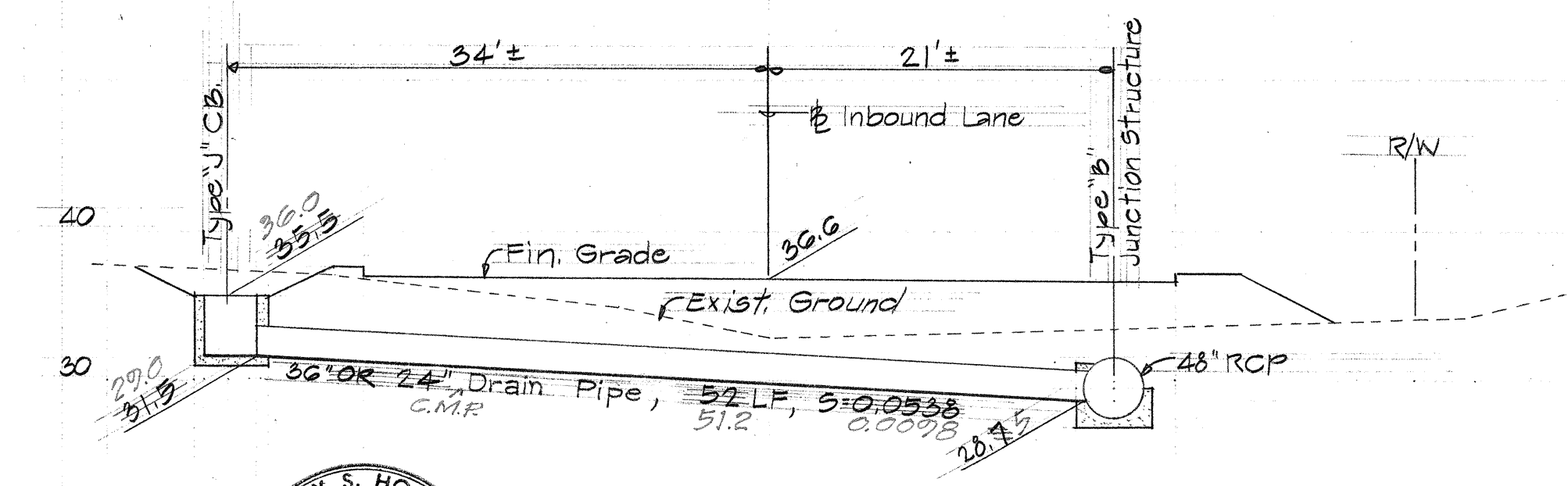
STA. 1332+62



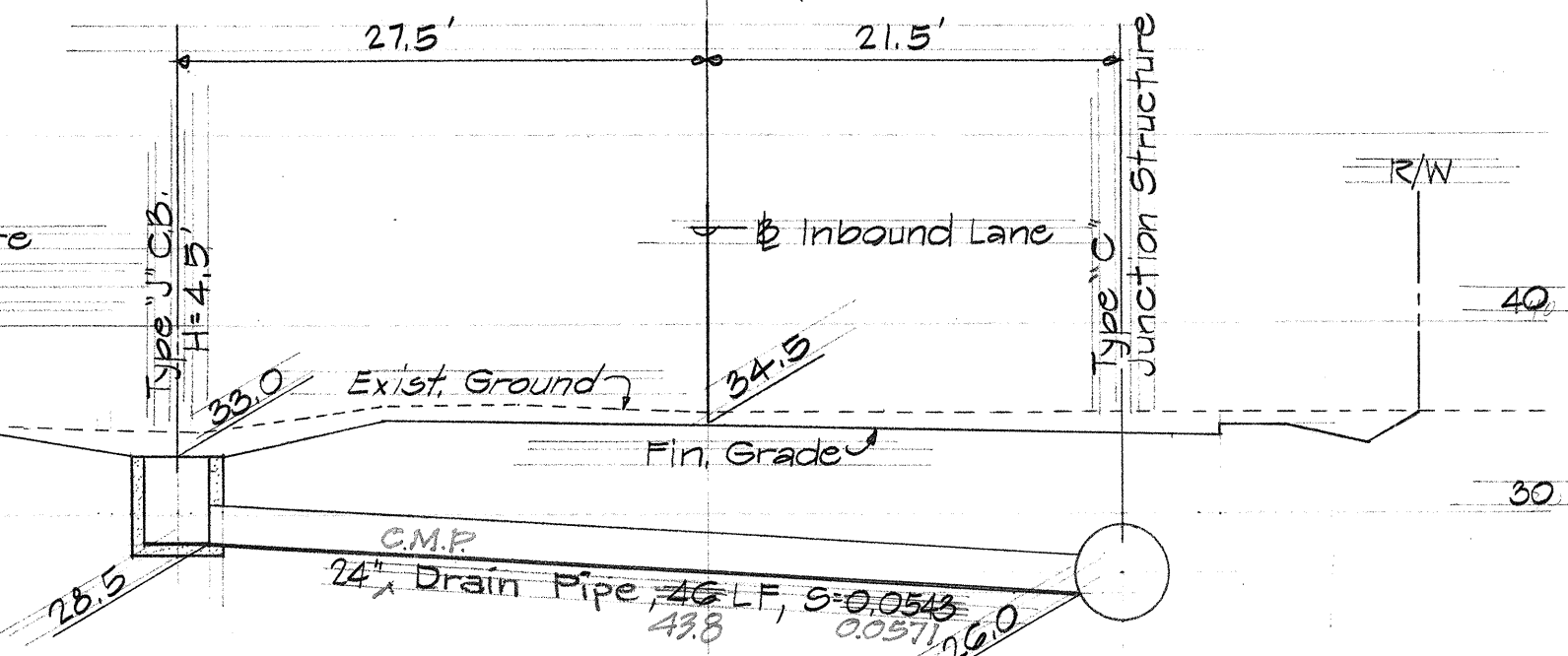
STA. 36+50



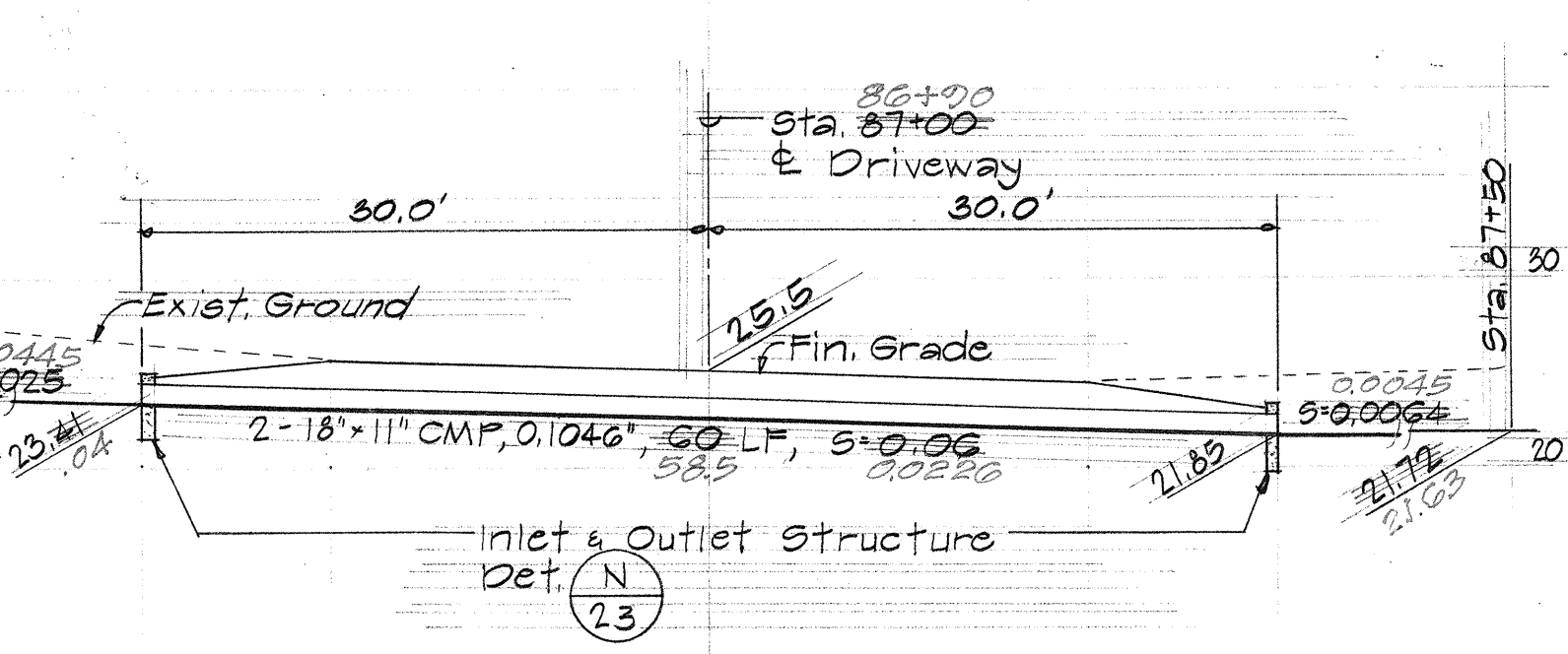
STA. 42+00



STA. 47+70

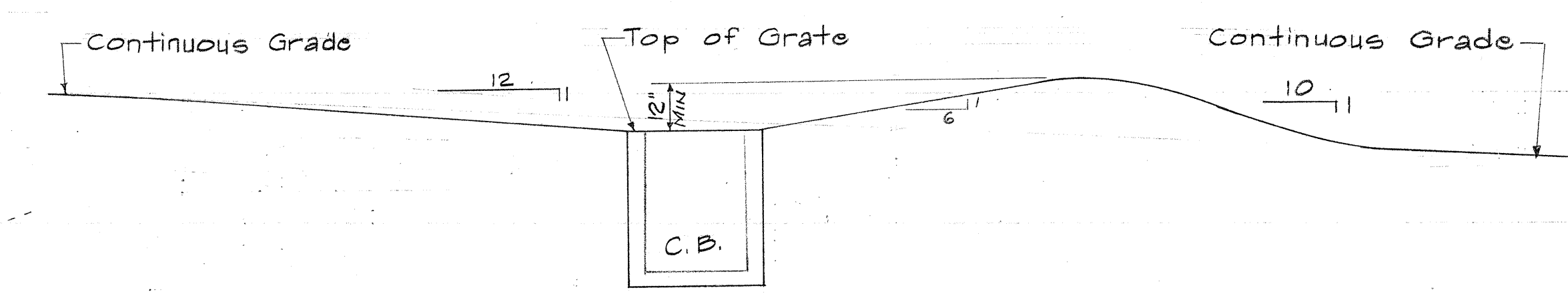


STA. 52+00

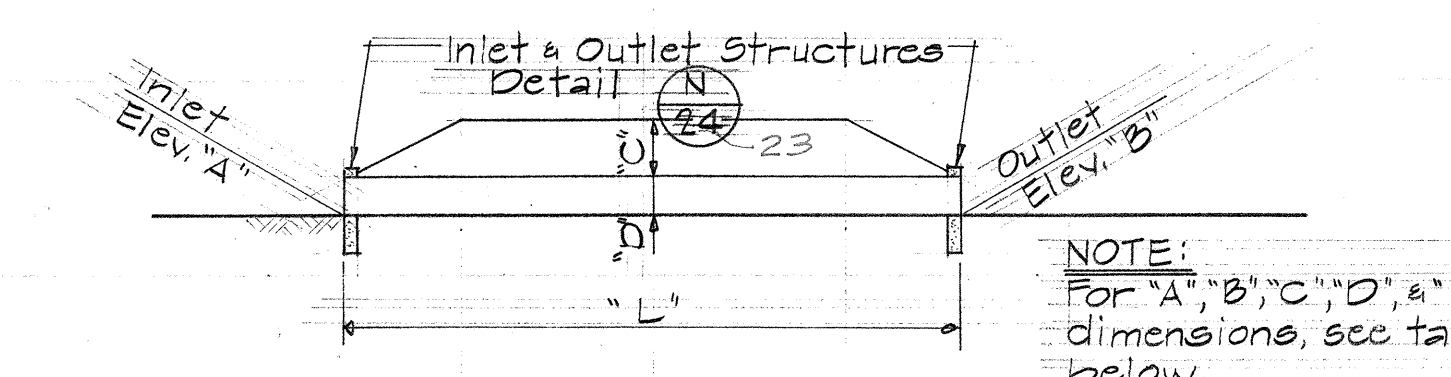


CULVERT & DRIVEWAY - STA. 87+00 AIRPORT SERVICE RD

Note: Slope inverts of all catch basins to drain.



GRATE INLET SUMP ON CONTINUOUS GRADES  
NOT TO SCALE



CULVERT SCHEDULE AT DRIVEWAY CROSSINGS

\*Use Standard Inlet and Outlet, and CMP, 0.1046"

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.  
Signature: Henry S. Hoshide  
REGISTERED PROFESSIONAL ENGINEER  
No. 2448  
HAWAII, U.S.A.

CULVERT PROFILES  
Scale: 1"=10'

| Station | Inlet Elev. "A" | Outlet Elev. "B" | Cover & Dia. "C" | Dia. "D"  | Length "L" |
|---------|-----------------|------------------|------------------|-----------|------------|
| *44+00  | 38.8            | 37.3             | 24"              | 24"       | 75'        |
| 63+50   | 27.8            | 27.3             | 18"              | 18"       | 24'        |
| 73+71   | 28.92           | 28.82            | 12"              | 2-18"x11" | 18'        |
| 74+07   | 29.15           | 29.10            | 12"              | 2-18"x11" | 17'        |
| 75+34   | 29.84           | 29.77            | 12"              | 2-18"x11" | 17'        |
| 76+83   | 30.04           | 29.97            | 12"              | 2-18"x11" | 17'        |
| 77+21   | 29.87           | 29.77            | 12"              | 2-18"x11" | 28'        |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
  
CULVERT PROFILES  
GRATE INLET SUMP ON  
CONTINUOUS GRADE DETAIL  
  
KAOUELEHUA AVE.  
MAKALIIKA ST. TO KAMEHAMEHA AVE  
Federal Aid Project No. F-RF-011-2(13)  
Scale: As Shown  
SHEET No. 1 OF 1 SHEETS

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
PLAN CHECKED BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
NOTE BOOK: \_\_\_\_\_  
QUANTITIES BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_