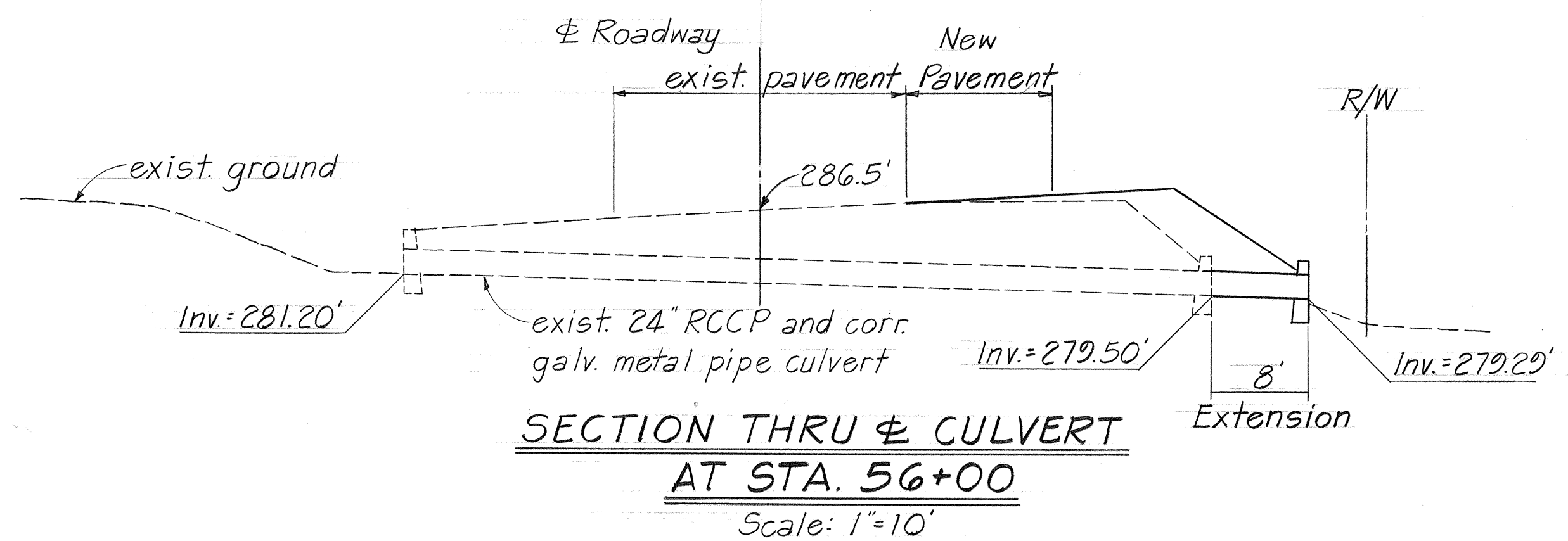
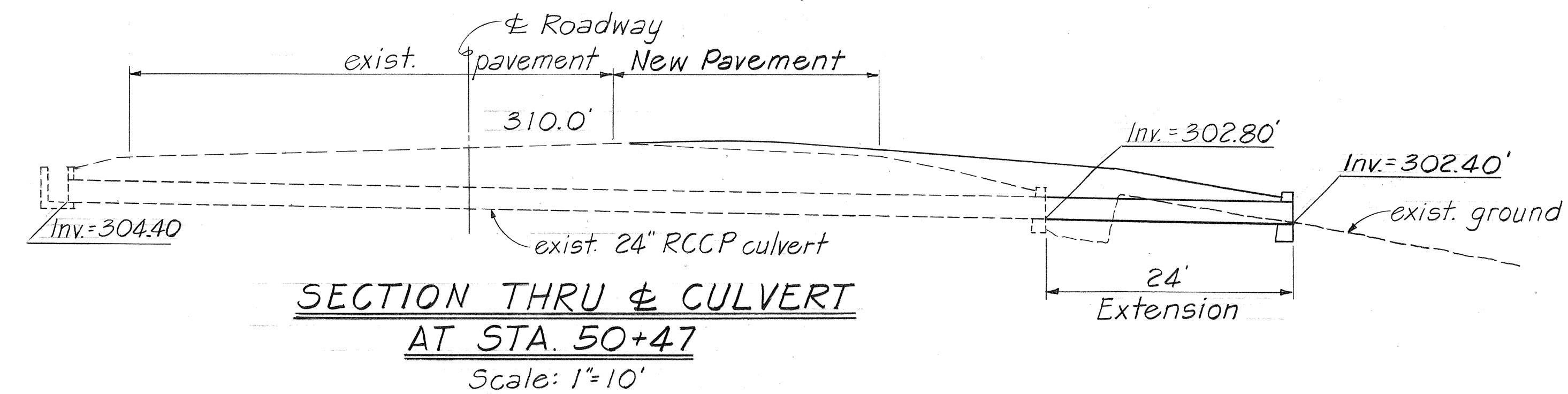
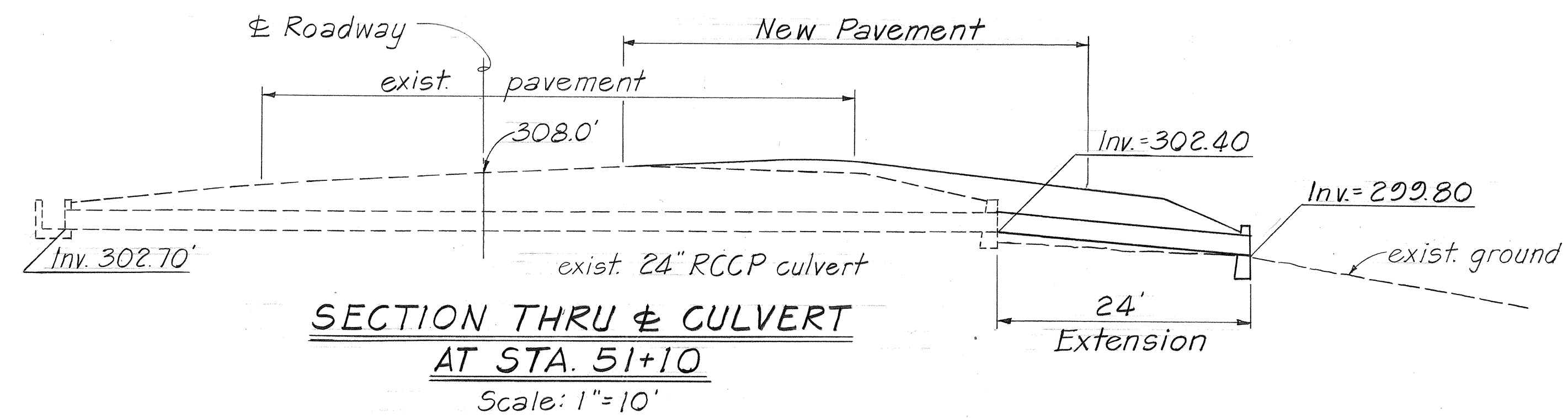
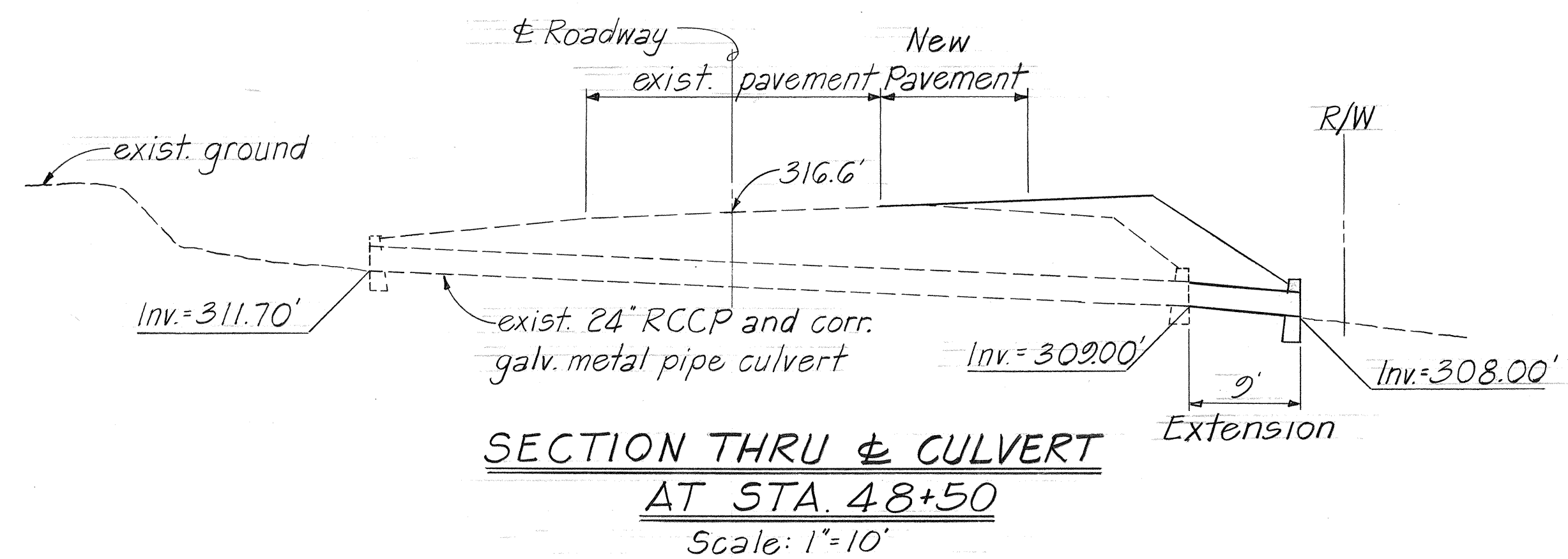
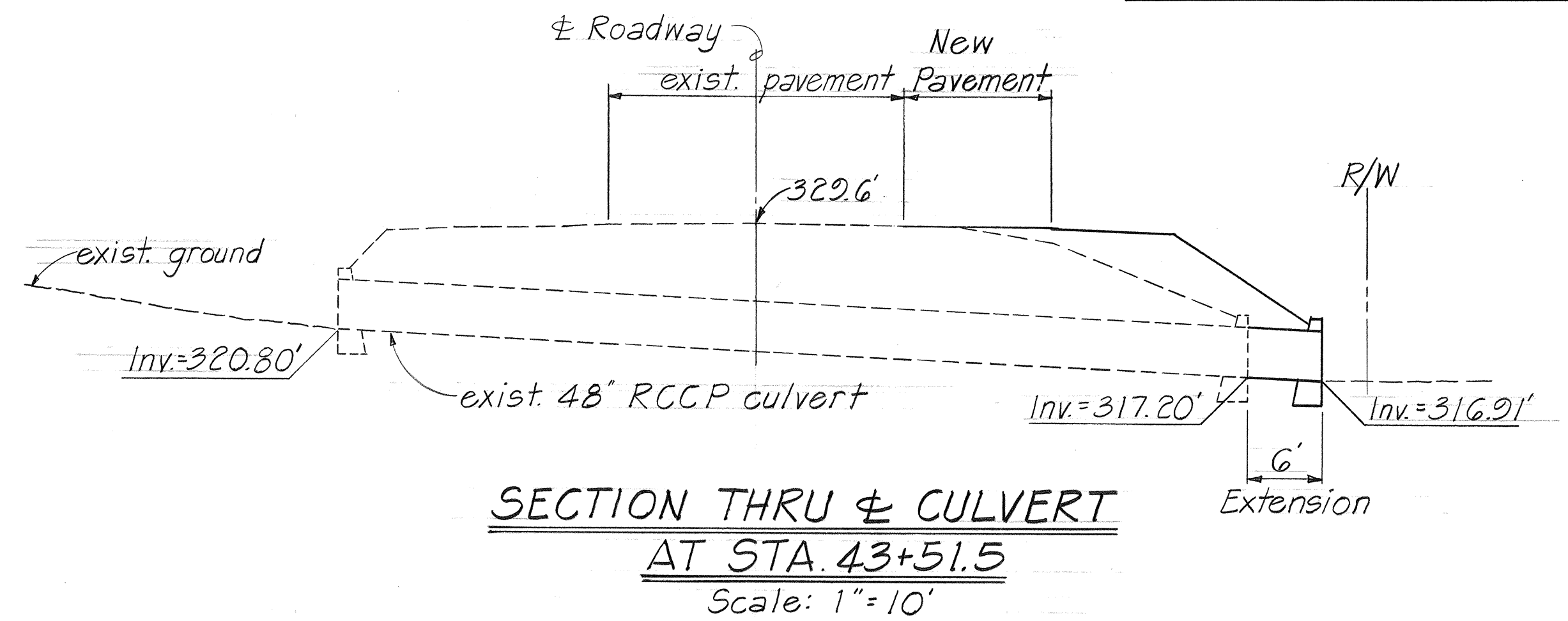
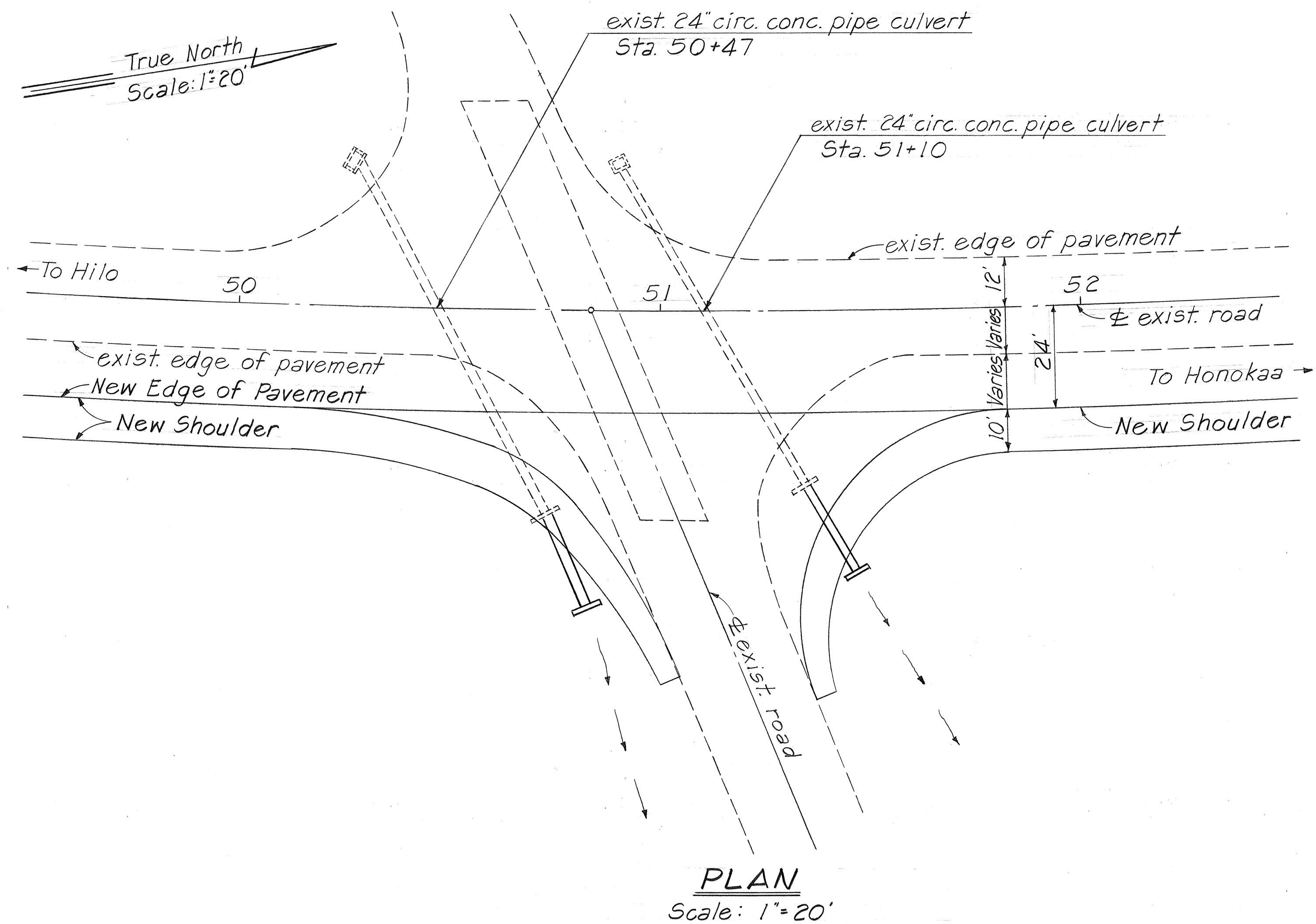


| FED. ROAD DIST. NO. | STATE | PROJ. NO.    | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 19J-02-75 II | 1982        | 6         | 36           |



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**PIPE CULVERT  
EXTENSION DETAILS**

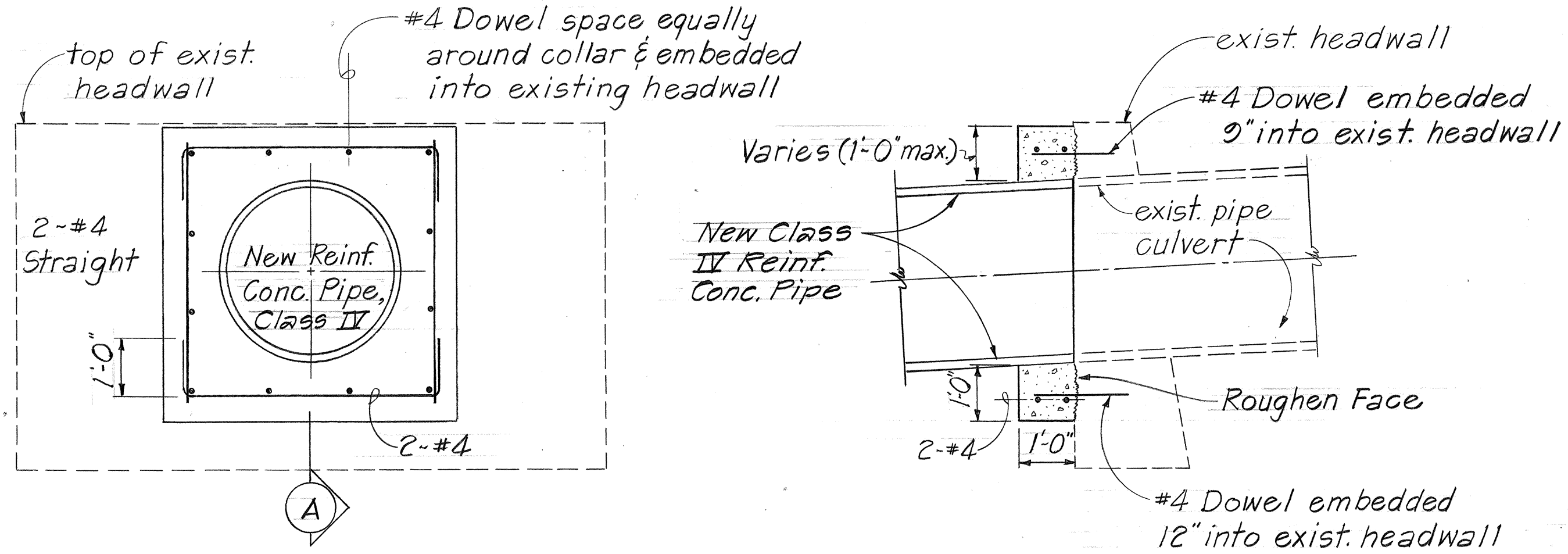
HAWAII BELT ROAD  
Truck Climbing Lane at Pepeekeo  
Proj No. 19J-02-75

Unit II

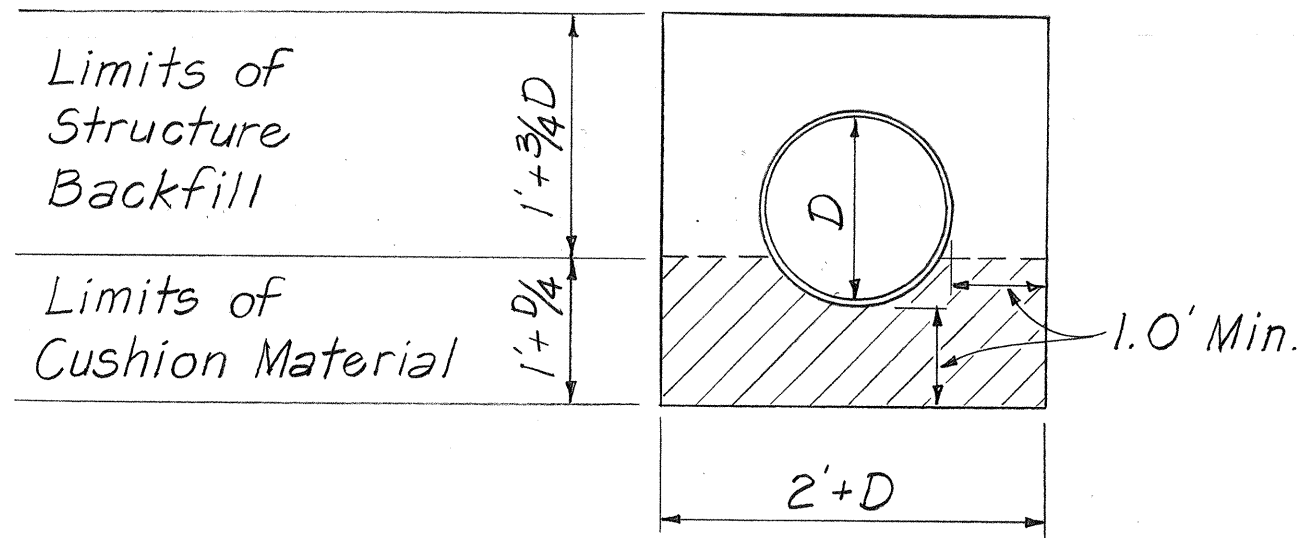
Scale: As Noted Date: Dec. 1981

SHEET No. 1 OF 2 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO.         | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 19J-02-75 Unit II | 1982        | 7         | 36           |



ELEVATION  
SECTION (A)  
REINFORCED CONCRETE COLLAR DETAIL  
Scale: 1/2" = 1'-0"



TYPICAL SECTION OF  
CULVERT CUSHION MATERIAL  
Scale: 1/2" = 1'-0"

Note:

Provide reinforced concrete collar tie  
into existing concrete headwall.  
(Incidental to all other drainage items)

ESTIMATED QUANTITIES - CULVERT EXTENSION

| Description                       | Length | Class A Concrete | Rebar | Bed Course Material | Structure Excavation | Structure Backfill |
|-----------------------------------|--------|------------------|-------|---------------------|----------------------|--------------------|
| STATION                           | L.F.   | C.Y.             | LB.   | C.Y.                | C.Y.                 | C.Y.               |
| 43+51.50 "A"<br>48" RCP, Class IV | 6      | 6.6              | 116   | 2.1                 | 22                   | 7.1                |
| 48+50 "B"<br>24" RCP, Class IV    | 9      | 2.1              | 69    | 1.8                 | 10                   | 3.4                |
| 50+47 "C"<br>24" RCP, Class IV    | 24     | 2.1              | 69    | 4.8                 | 18                   | 7.6                |
| 51+10 "D"<br>24" RCP, Class IV    | 24     | 2.1              | 69    | 4.8                 | 19                   | 7.6                |
| 56+00 "E"<br>24" RCP, Class IV    | 8      | 2.1              | 69    | 1.6                 | 9                    | 3.1                |

|               |      |          |
|---------------|------|----------|
| ORIGINAL PLAN | DATE | 12/16/81 |
| DESIGNED BY   | DATE | 1/14     |
| CHECKED BY    | DATE |          |
| NOTED BY      | DATE |          |
| QUANTITIES BY | DATE |          |
| NO.           | DATE |          |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

PIPE CULVERT  
EXTENSION DETAILS  
HAWAII BELT ROAD  
Truck Climbing Lane at Pepeekeo  
Proj No 19J-02-75  
Unit II  
Scale: As Noted Date: Dec. 1981

SHEET NO. 2 OF 2 SHEETS