

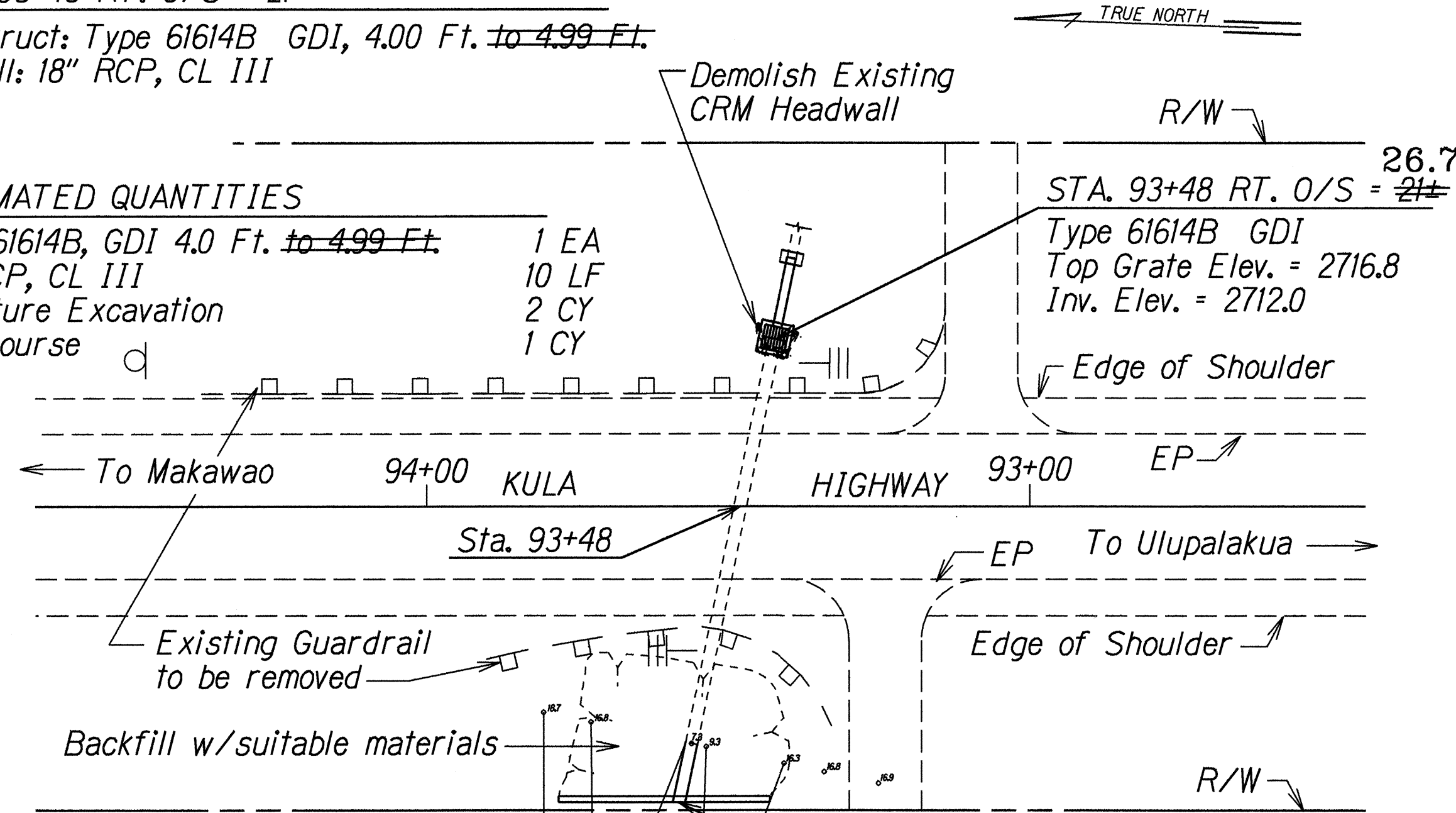
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(21)	1998	6	40

STA. 93+48 RT. O/S = 21±

Construct: Type 61614B GDI, 4.00 Ft. to 4.99 Ft.
Install: 18" RCP, CL III

ESTIMATED QUANTITIES

Type 61614B, GDI 4.0 Ft. to 4.99 Ft. 1 EA
18" RCP, CL III 10 LF
Structure Excavation 2 CY
Bed Course 1 CY



STA. 93+48 LT.

Construct: CRM Retaining Headwall
(For Typical See Sheet No. 5)
Install: 24" CSP, t = 0.109 inches

ESTIMATED QUANTITIES

24" CSP, t = 0.109 inch 10 LF
CRM 40 CY
Structure Excavation 20 CY
Bed Course 1 CY

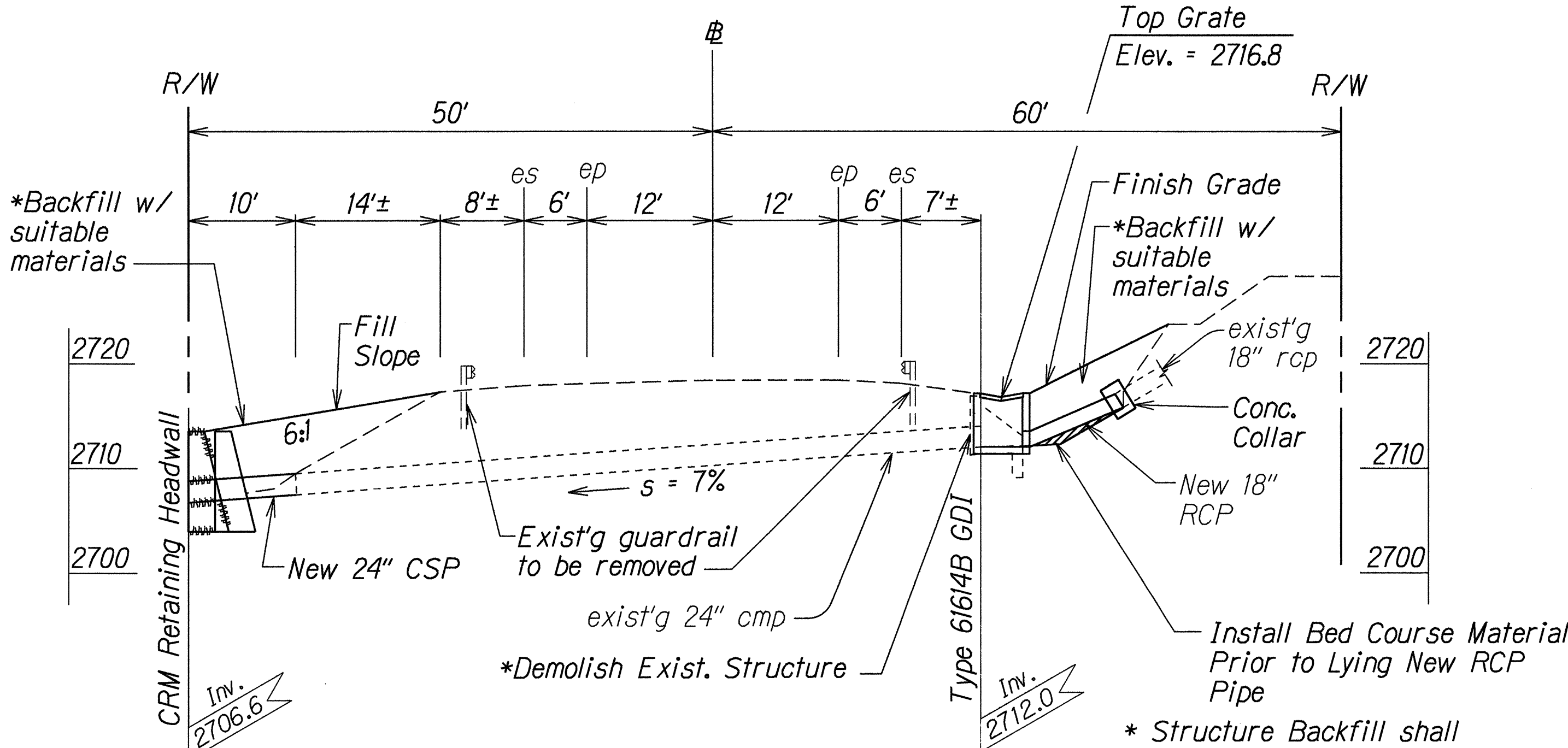
STA. 93+48 RT. O/S = 26.7±
Type 61614B GDI
Top Grate Elev. = 2716.8
Inv. Elev. = 2712.0

STA. 93+48, 50± O/S LT.
Extend 24" CSP
CRM Retaining Headwall
Inv. = 2706.6

NOTE:
Prior to extending new pipe, remove or clear, silt deposits inside existing pipe this work shall be incidental to item No. 603.2084.

PLAN

Scale: 1" = 20'-0"



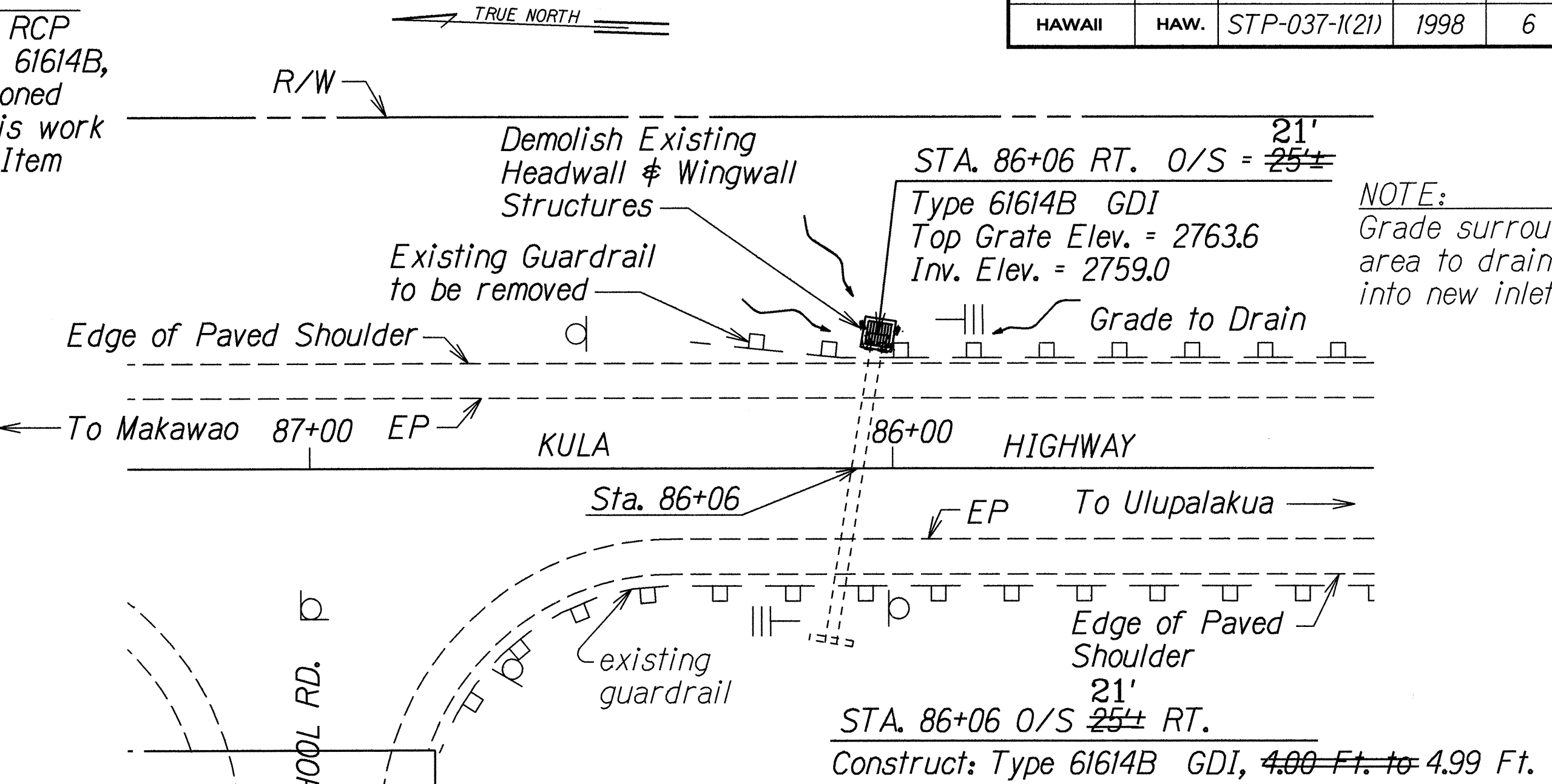
PROFILE-24" CMP @ STA. 93+48

Scale: 1" = 10'-0"

* Structure Backfill shall be considered incidental to Item No. 206.1000
* Demolition of Existing Structure shall be considered incidental to Grated Drop Inlet pay items

NOTE:

Prior to installing 18" RCP and constructing Type 61614B, remove existing abandoned 3" pipe water line. This work shall be incidental to Item No. 604.1000.



STA. 86+06 RT. O/S = 21±
Type 61614B GDI
Top Grate Elev. = 2763.6
Inv. Elev. = 2759.0

STA. 86+06 O/S = 25± RT.

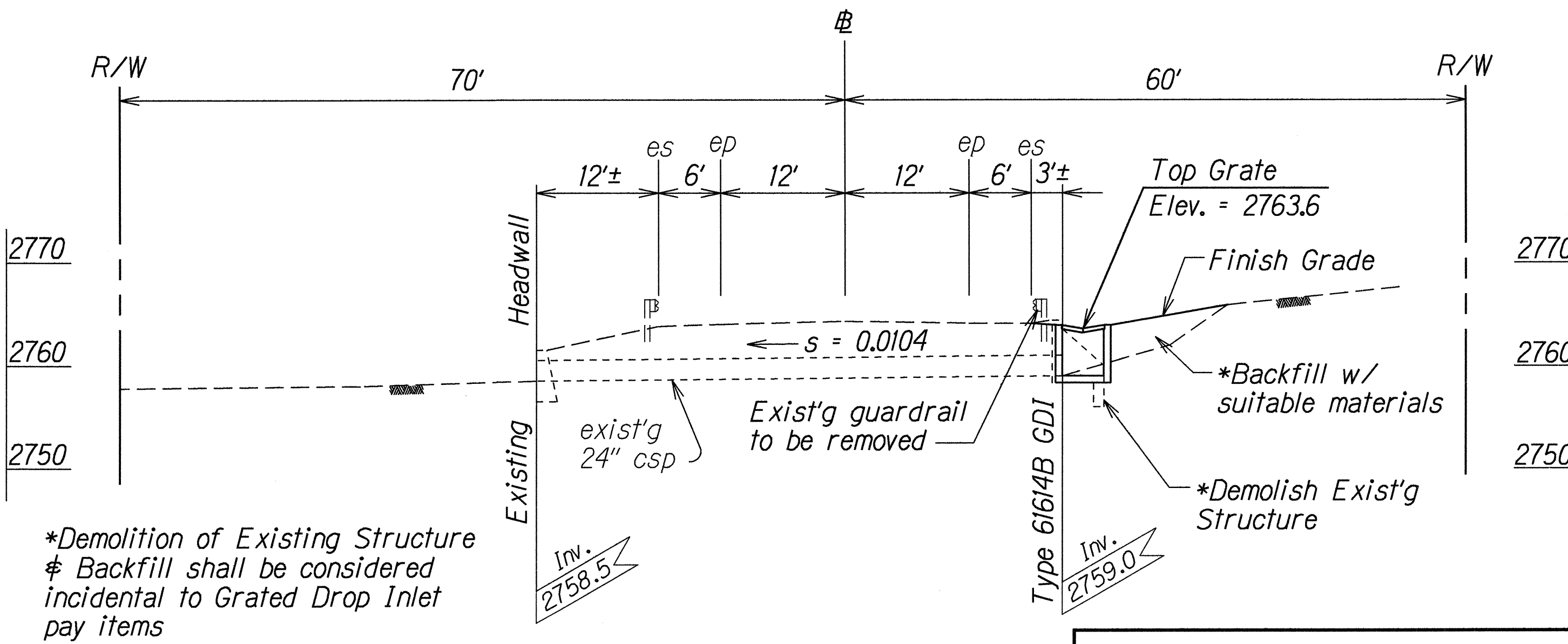
Construct: Type 61614B GDI, 4.00 Ft. to 4.99 Ft.

ESTIMATED QUANTITIES

Type 61614B, GDI 4.0 Ft. to 4.99 Ft. 1 EA
Structure Excavation 5 CY

PLAN

Scale: 1" = 20'-0"



PROFILE-24" CMP @ INLET STA. 86+06 RT.

Scale: 1" = 10'-0"

LEGEND FOR AS-BUILT POSTINGS

~~~~~ Squiggly line for as-built deletion  
===== Double line for as-built deletion  
Roadway Text for as-built posting

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DRAINAGE PLAN**

KULA HIGHWAY RESURFACING  
Kekaulike Avenue to Lower Kula Road  
Fed. Aid Proj. No. STP-037-1(21)

Scale: As Shown Date: March, 1998  
SHEET No. 1 OF 2 SHEETS

"AS-BUILT"

TRUE NORTH

STA. 23+46 0/S  $\frac{43'}{44' \pm}$  RT.  
 Extend 2-72" CSP  
 Standard Inlet Structure  
 Inv. = 2970.27'

R/W

STA. 23+46 0/S  $\frac{43'}{44' \pm}$  RT.  
 Construct: Standard Concrete Headwall,  
 Wingwall and Apron  
 Install: 2-72" CSP,  $t = 0.138$  inches

Edge of Paved Shoulder

To Makawao

24+00 KULA

23+00 HIGHWAY

Sta. 23+46

To Ulupalakua

EP

Edge of Paved Shoulder

existing guardrail

existing 2-72" csp

R/W

Fill w/Suitable Materials  
 Demolish Exist. CRM Headwall & Wingwall  
 New Toe Embankment  
 Top of Exist. Embankment

EXIST. GUARDRAIL TO BE REMOVED

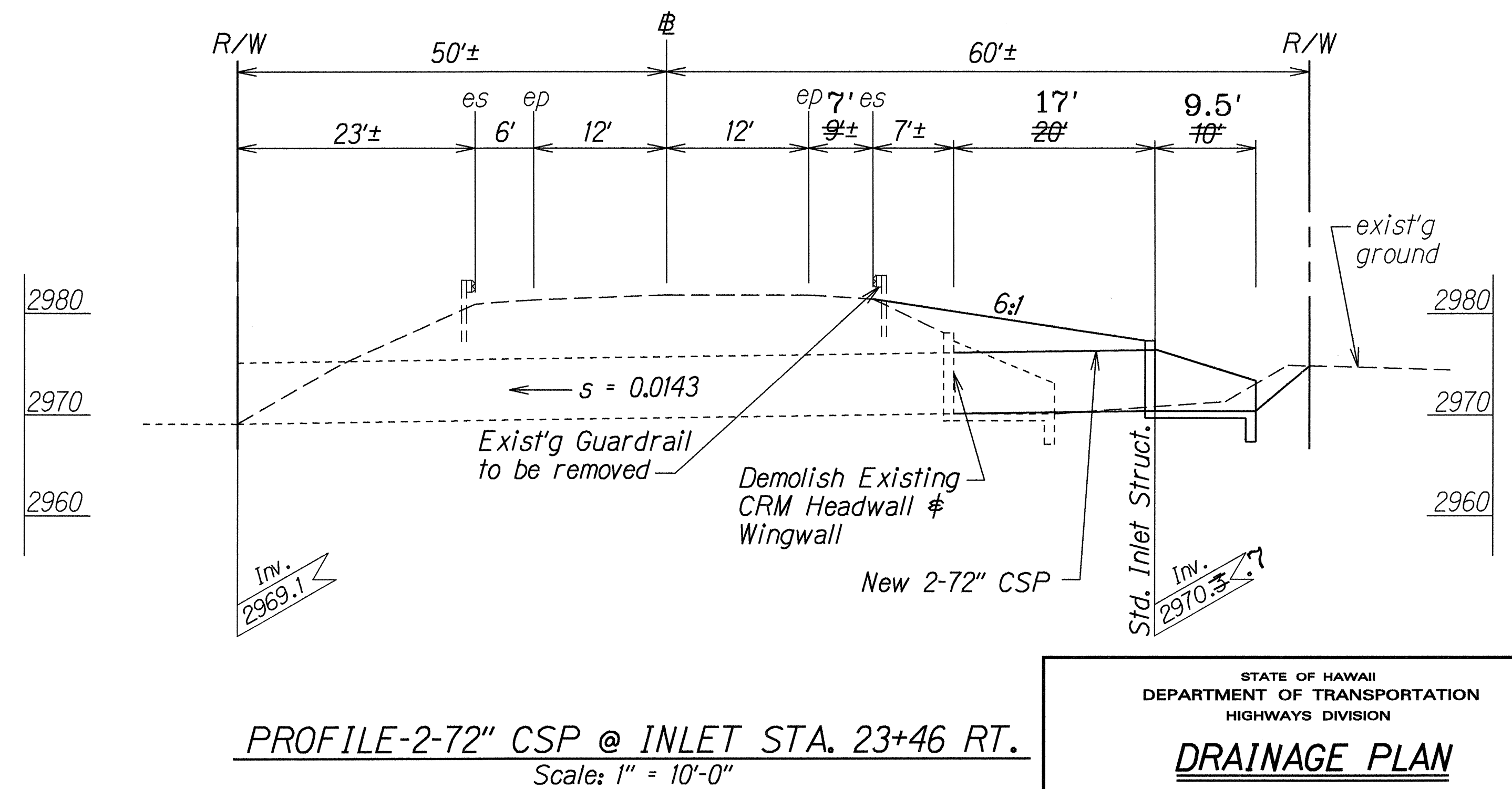
EP

| DIST. NO. | STATE | PROJ. NO.     | YEAR | NO. | SHEETS |
|-----------|-------|---------------|------|-----|--------|
| HAWAII    | HAW.  | STP-037-I(21) | 1998 | 7   | 40     |

**ESTIMATED QUANTITIES**

|                             |       |
|-----------------------------|-------|
| 72" CSP, $t = 0.138$ inches | 40 LF |
| Class "A" Conc.             | 20 CY |
| Class "A" Conc. Lining      | 10 CY |
| Structure Excavation        | 10 CY |
| Bed Course                  | 10 CY |

**PLAN**  
 Scale: 1" = 20'-0"



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**DRAINAGE PLAN**

**KULA HIGHWAY RESURFACING**  
**Kekaulike Avenue to Lower Kula Road**  
**Fed. Aid Proj. No. STP-037-K(21)**

Scale: As Shown                      Date: March, 1998

**SHEET No. 2 OF 2 SHEETS**