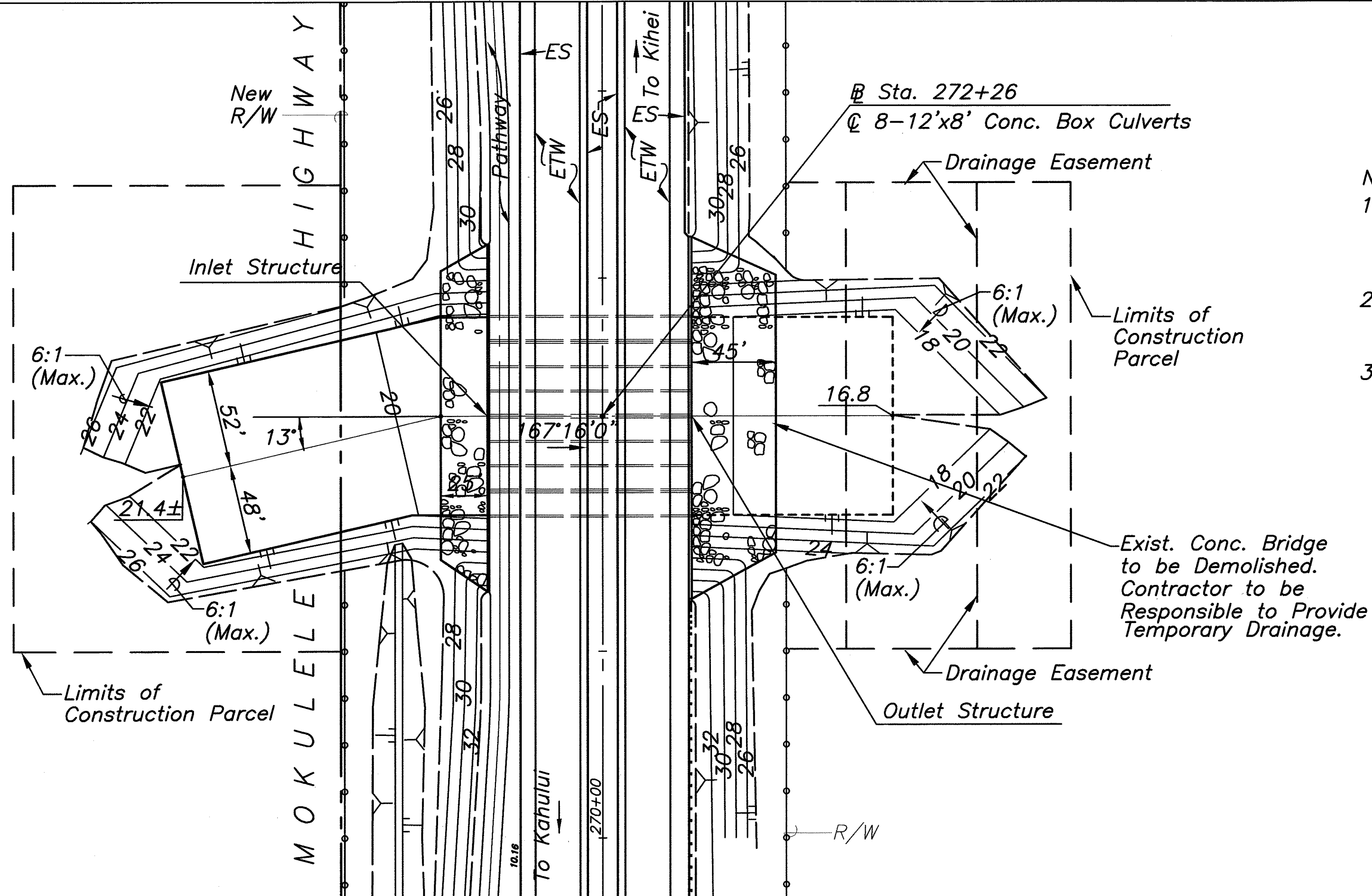


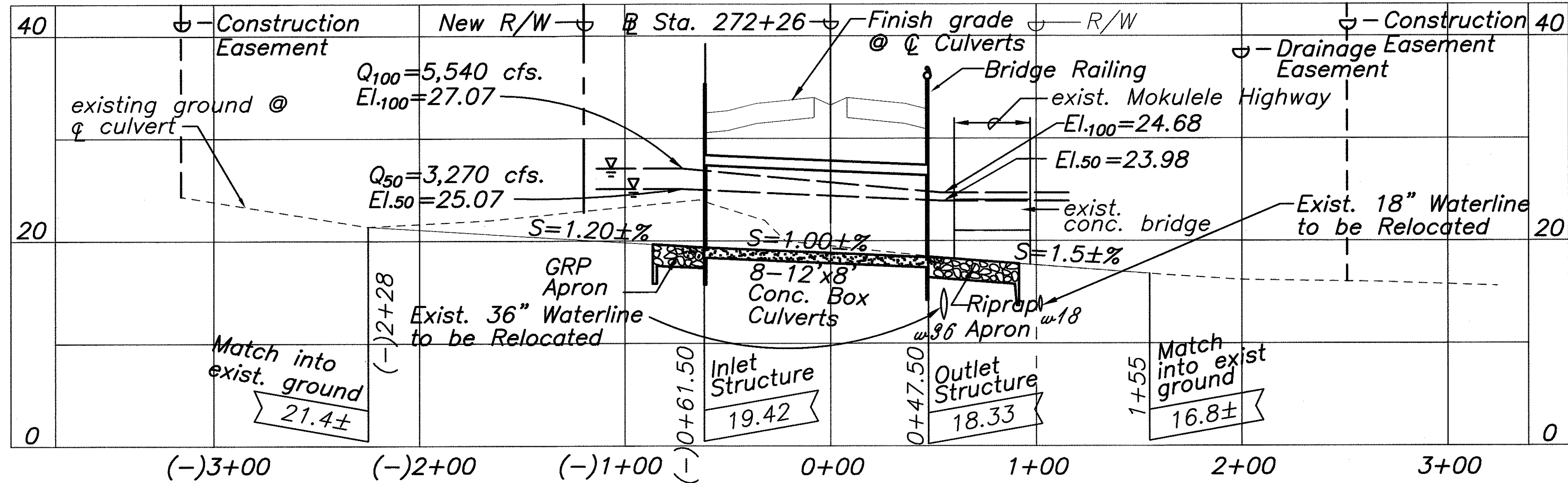
| FED. ROAD DIST. NO. | STATE | FEDERAL - AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-A311(7)              | 2004        | 61        | 138          |



- Notes:
1. For Culverts, Inlet and Outlet Structures, GRP and Hand Laid Rip-rap Details, see Structural Plans.
  2. For Relocation of Waterlines and Valve Boxes, see Utility Plans.
  3. All channel cross slopes 3:1, except as noted.

PLAN - KOLALOA GULCH CULVERTS AT STA. 272+26

Scale: 1" = 40'



PROFILE - KOLALOA GULCH CULVERTS AT STA. 272+26

Scale: Horiz. 1" = 40'  
Vert. 1" = 8'

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

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  
04/30/04  
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

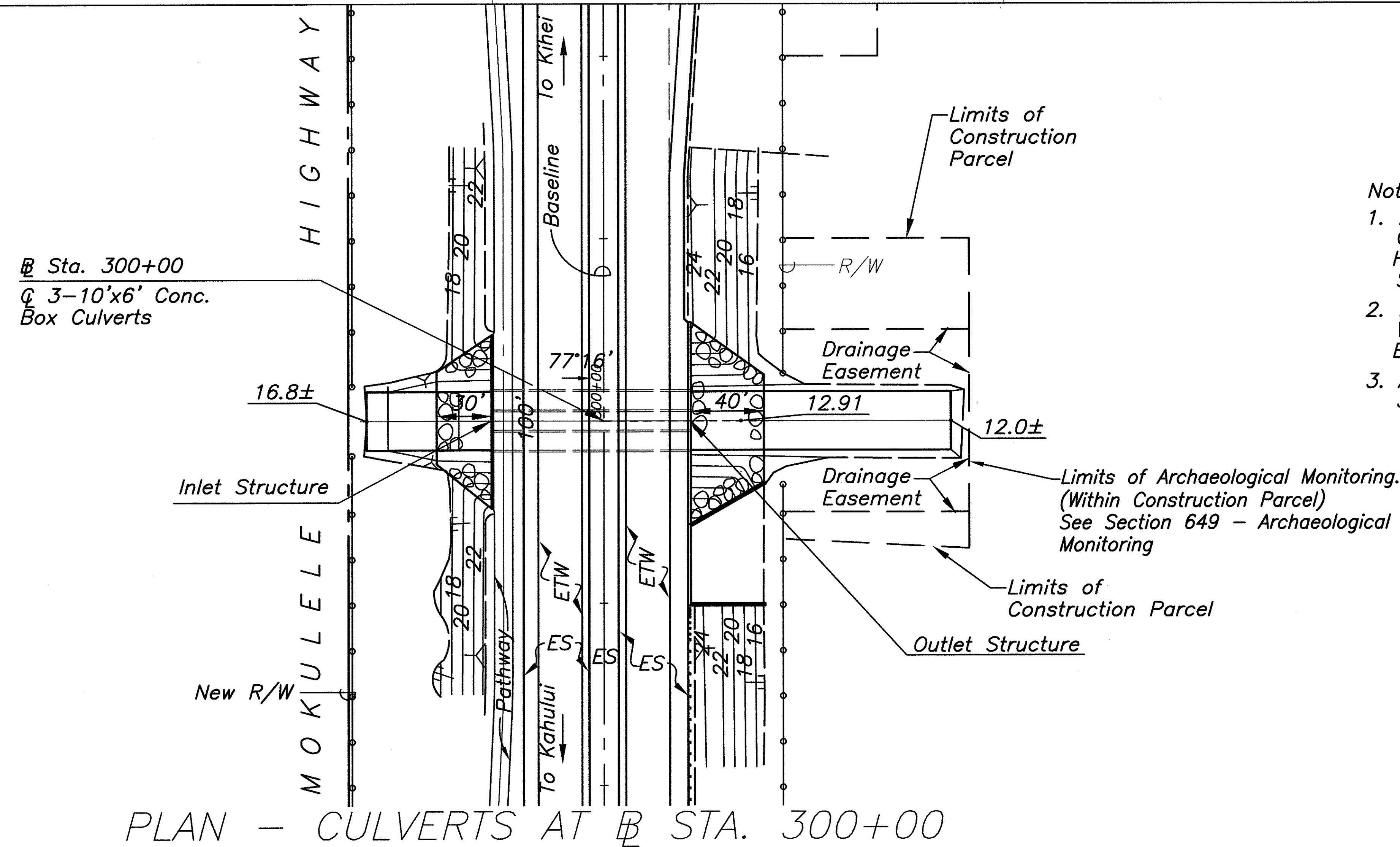
**CULVERT DETAILS**

MOKULELE HIGHWAY WIDENING  
Vicinity of Kolaloa Bridge  
To  
Vicinity of Kealia Pond Driveway  
Federal - Aid Project No. NH-A311(7)  
Scale: AS NOTED Date: August 2003

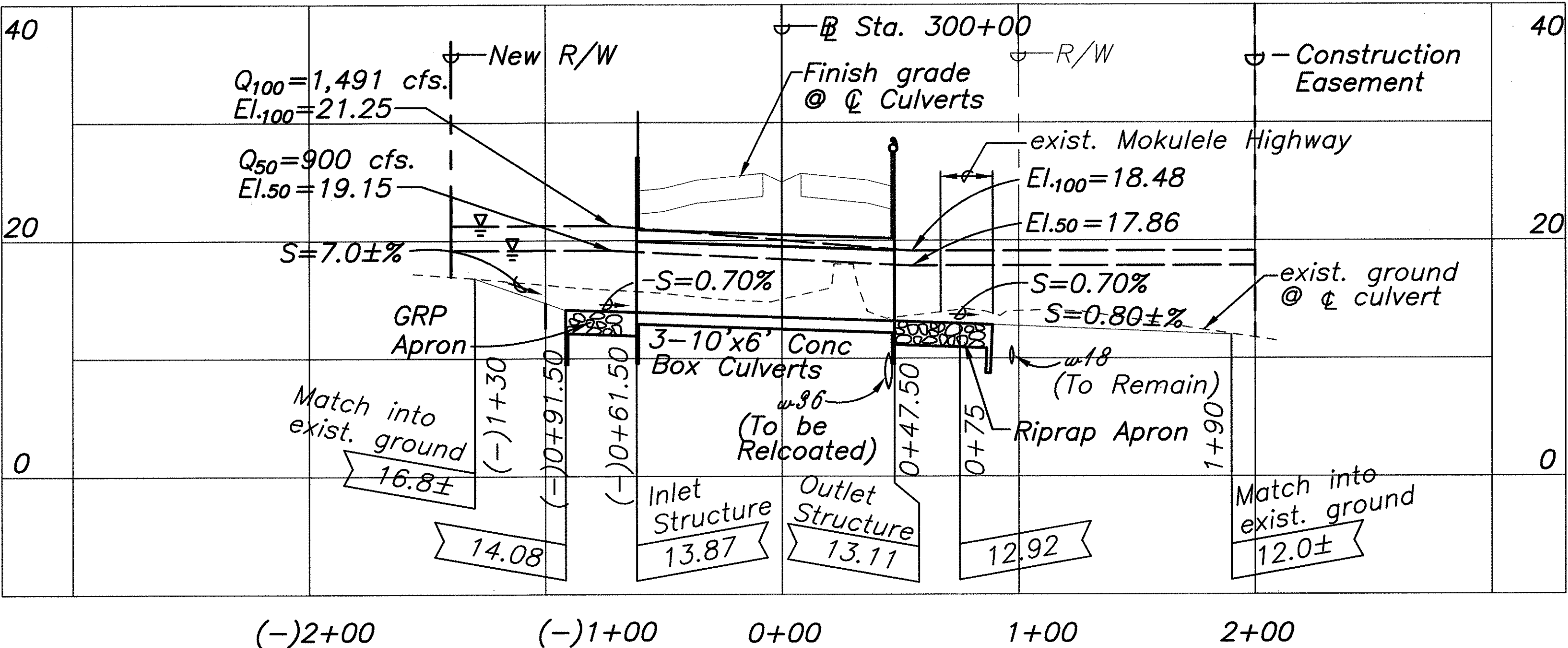
SHEET No. 1 OF 2 SHEETS

| FED. ROAD DIST. NO. | STATE | FEDERAL - AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-A311(7)              | 2004        | 62        | 138          |

- Notes:
1. For Culverts, Inlet and Outlet Structures, GRP and Hand Laid Rip-rap Details, see Structural Plans.
  2. For Relocation of Waterlines and Valve Boxes, see Utility Plans.
  3. All channel cross slopes 3:1, except as noted.

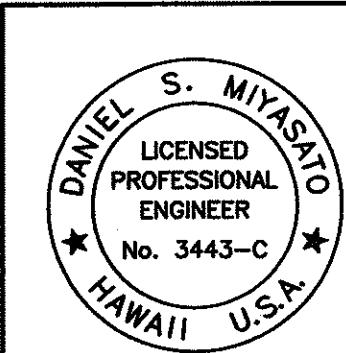


Scale: 1" = 40'



Scale: Horiz. 1" = 40'  
Vert. 1" = 8'

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



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STATE OF HAWAII  
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**CULVERT DETAILS**  
MOKULELE HIGHWAY WIDENING  
Vicinity of Kolaloa Bridge  
To  
Vicinity of Kealia Pond Driveway  
Federal - Aid Project No. NH-A311(7)  
Scale: AS NOTED Date: August 2003  
SHEET No. 2 OF 2 SHEETS