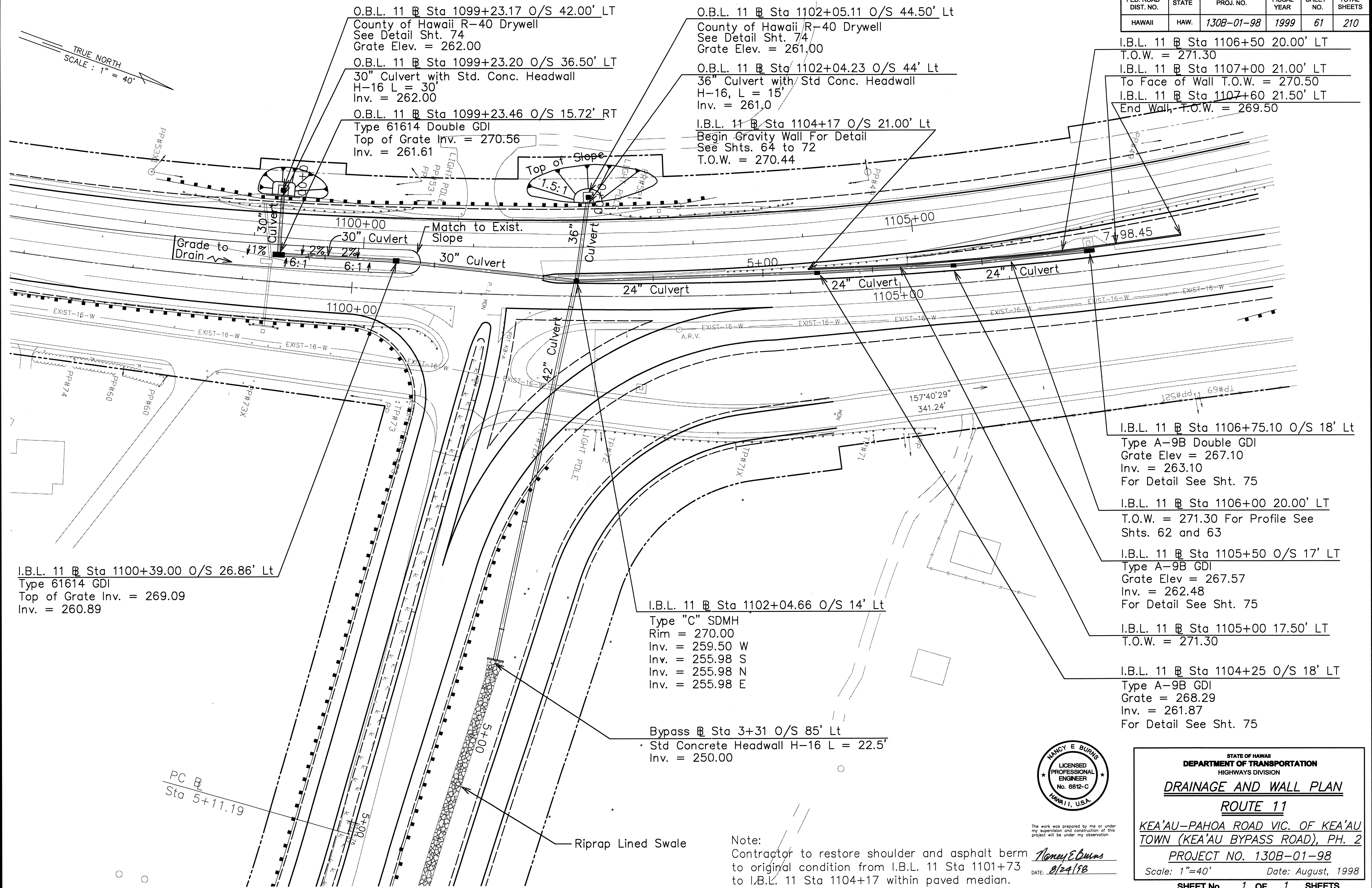
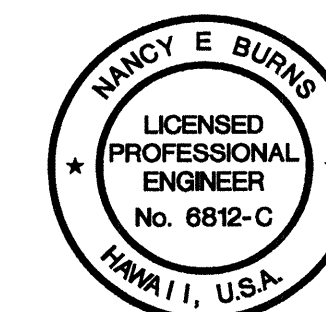


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	61	210



DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No. HW1-PL	_____



The work was prepared by me or under
my supervision and construction of this
project will be under my observation.
Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE AND WALL PLAN
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU
TOWN (KEA'AU BYPASS ROAD), PH. 2
PROJECT NO. 130B-01-98
Scale: 1"=40' Date: August, 1998
SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	62	210

O.B.L. 11 @ Sta 1099+23.17
o/s 42.00' Lt =
Sta 0+04.50
County of Hawaii R-40
Drywell
Inv. = 262.00

I.B.L. 11 @ Sta 1100+39.00
o/s 26.86' Lt =
Sta 1+64.81
Type 61614 GDI
Inv. = 260.89

ROUTE 11

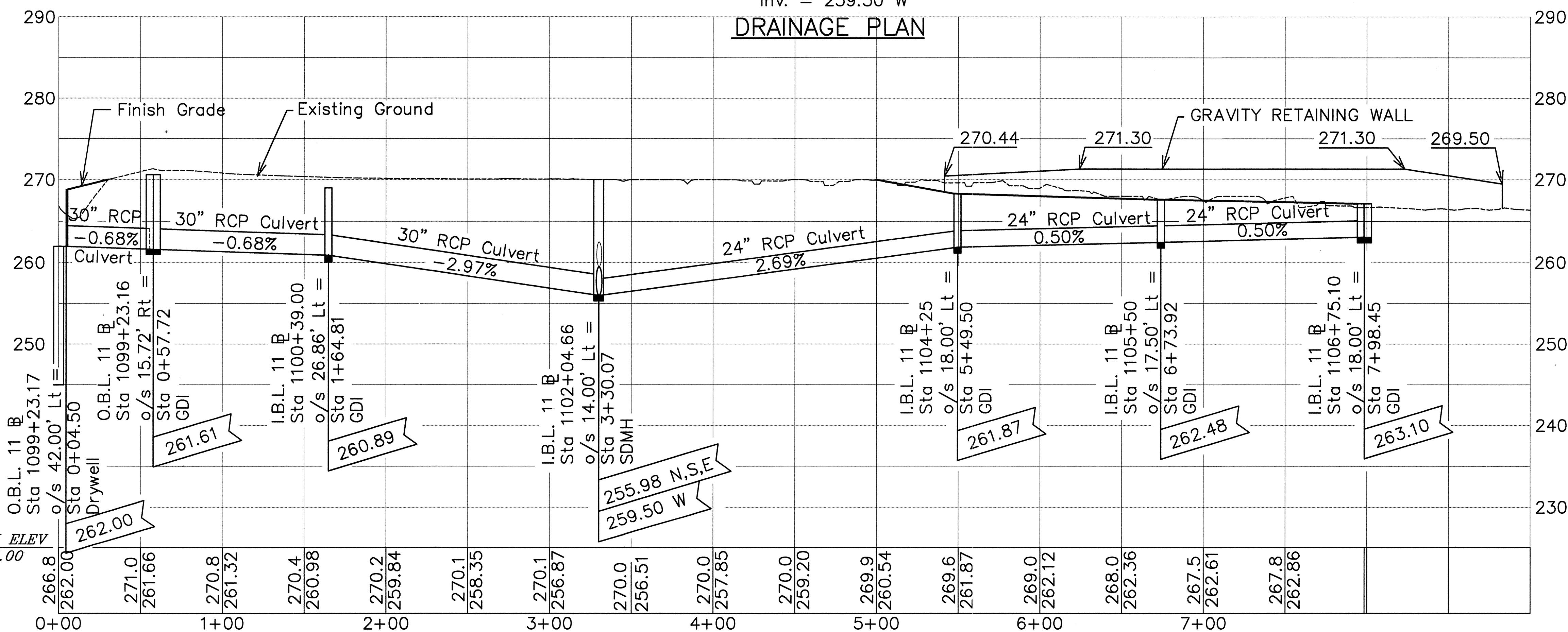
O.B.L. 11 @ Sta 1099+23.46
o/s 15.72' Rt =
Sta 0+57.72
Type 61614 Double GDI
Inv. = 261.61

I.B.L. 11 @ Sta 1102+04.66
o/s 14.00' Lt =
Sta 3+30.07
Type "C" SDMH
Inv. = 255.98 N,S,E
Inv. = 259.50 W

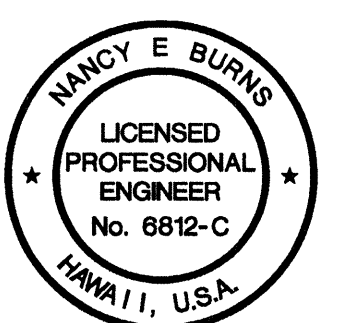
I.B.L. 11 @ Sta 1104+25
o/s 18.00' Lt =
Sta 5+49.50
Type A-9B GDI
Inv. = 261.87

I.B.L. 11 @ Sta 1105+50
o/s 17.50' Lt =
Sta 6+73.92
Type A-9B GDI
Inv. = 262.48

I.B.L. 11 @ Sta 1106+75.10
o/s 18.00' Lt =
Sta 7+98.45
Type A-9B Double GDI
Inv. = 263.10



Note For Gravity Retaining Wall
Details See Sheets 64 to 72



The work was prepared by me or under my supervision and construction of this project will be under my observation.

Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN AND PROFILE

ROUTE 11

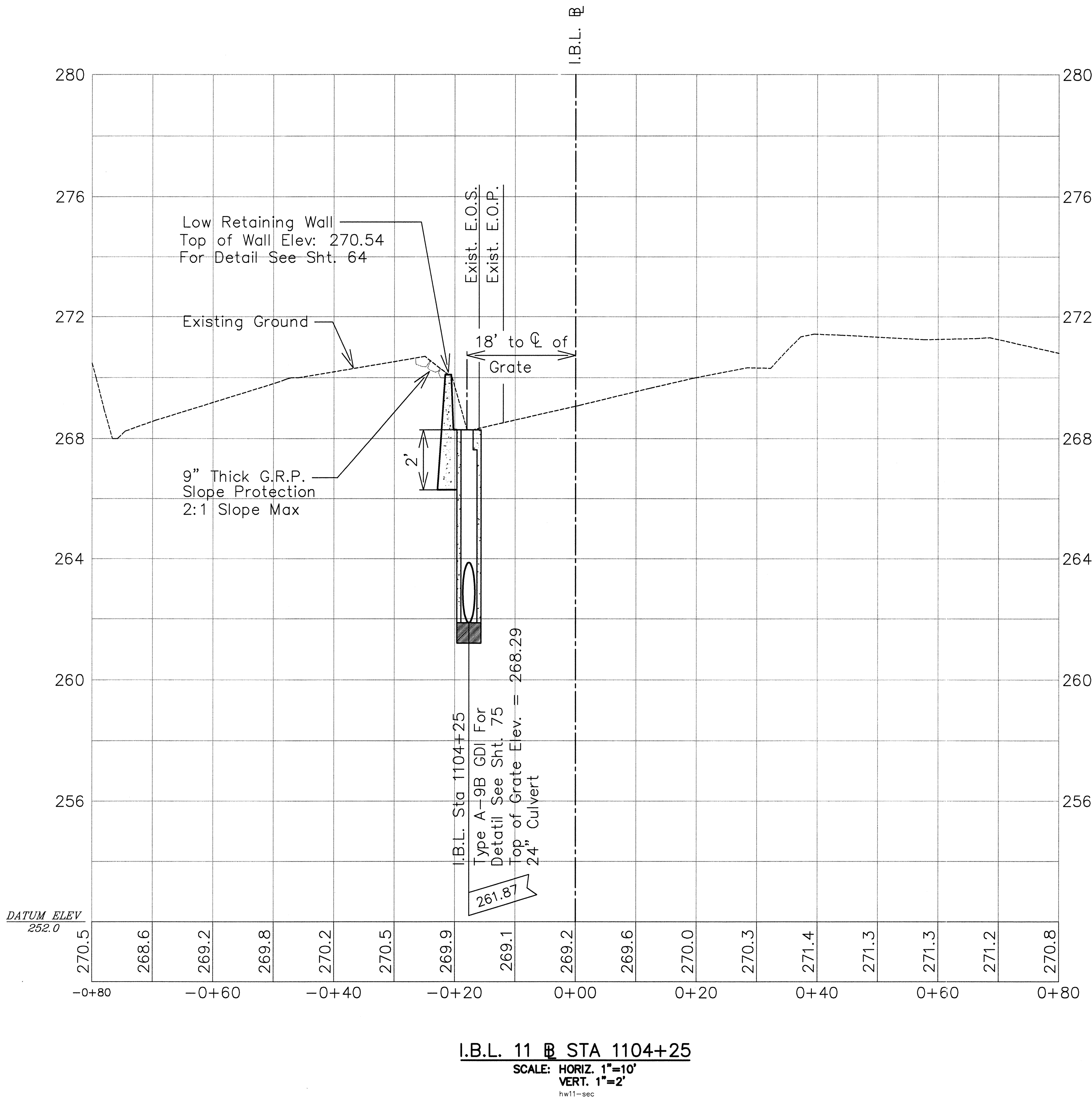
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH. 2

PROJECT NO. 130B-01-98

Scale: 1"=40' Date: August, 1998

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	65	210



Note Use Concrete as Backfill
Between Gravity Retaining Wall
and all Type A-9B GDI



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project will be under my observation

Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WALL SECTION AT INLET

ROUTE 11

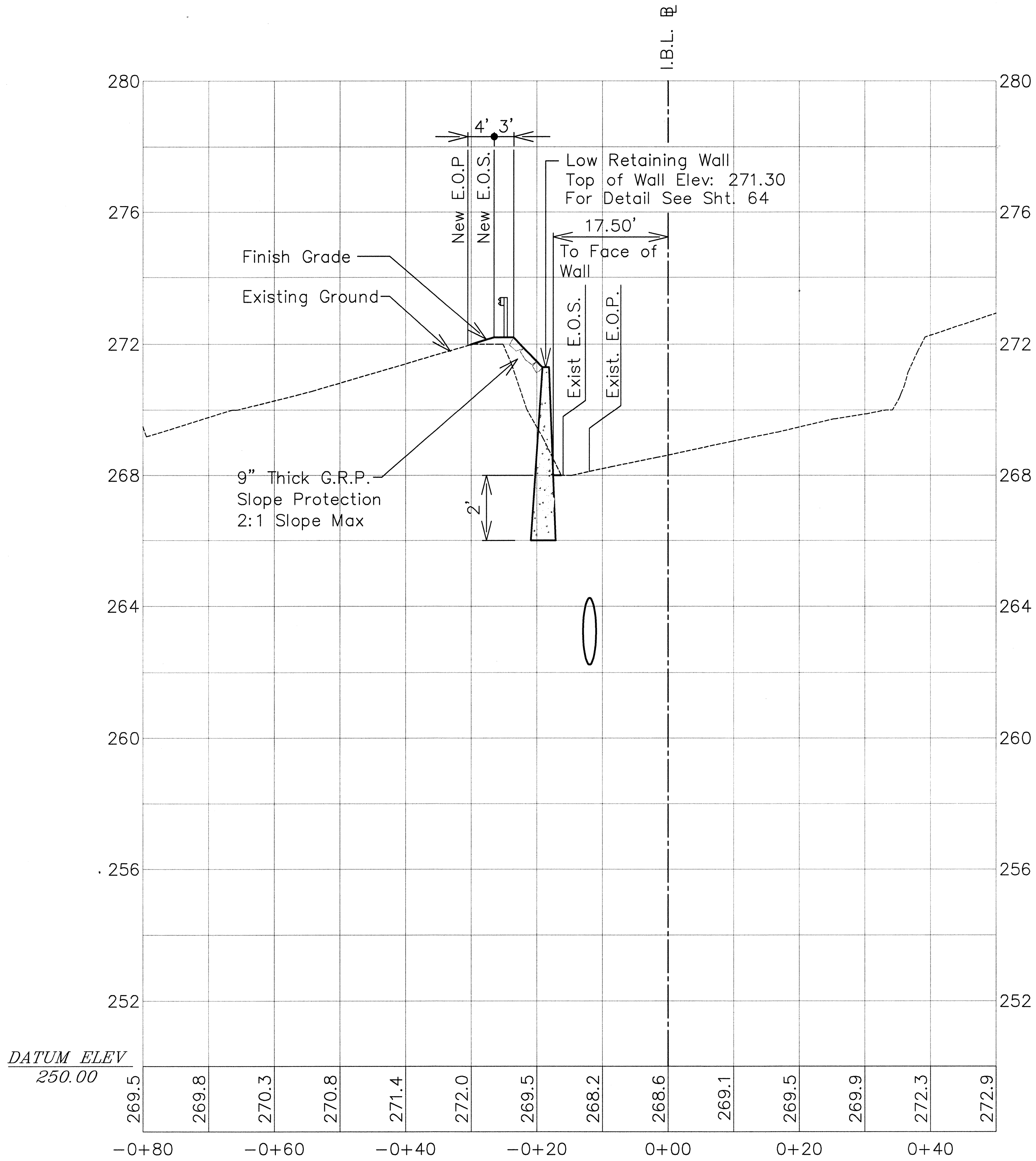
KEA'AU-PAHOA ROAD VIC. OF KEA'AU
TOWN (KEA'AU BYPASS ROAD), PH 2

PROJECT NO. 130B-01-98

Scale: 1"=10' Date: August, 1998

SHEET No. 2 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	66	210



I.B.L. 11 B STA 1105+00

SCALE: HORIZ. 1"=10'
VERT. 1"=2'

hw11-sec

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No. hw11-sec.dwg	

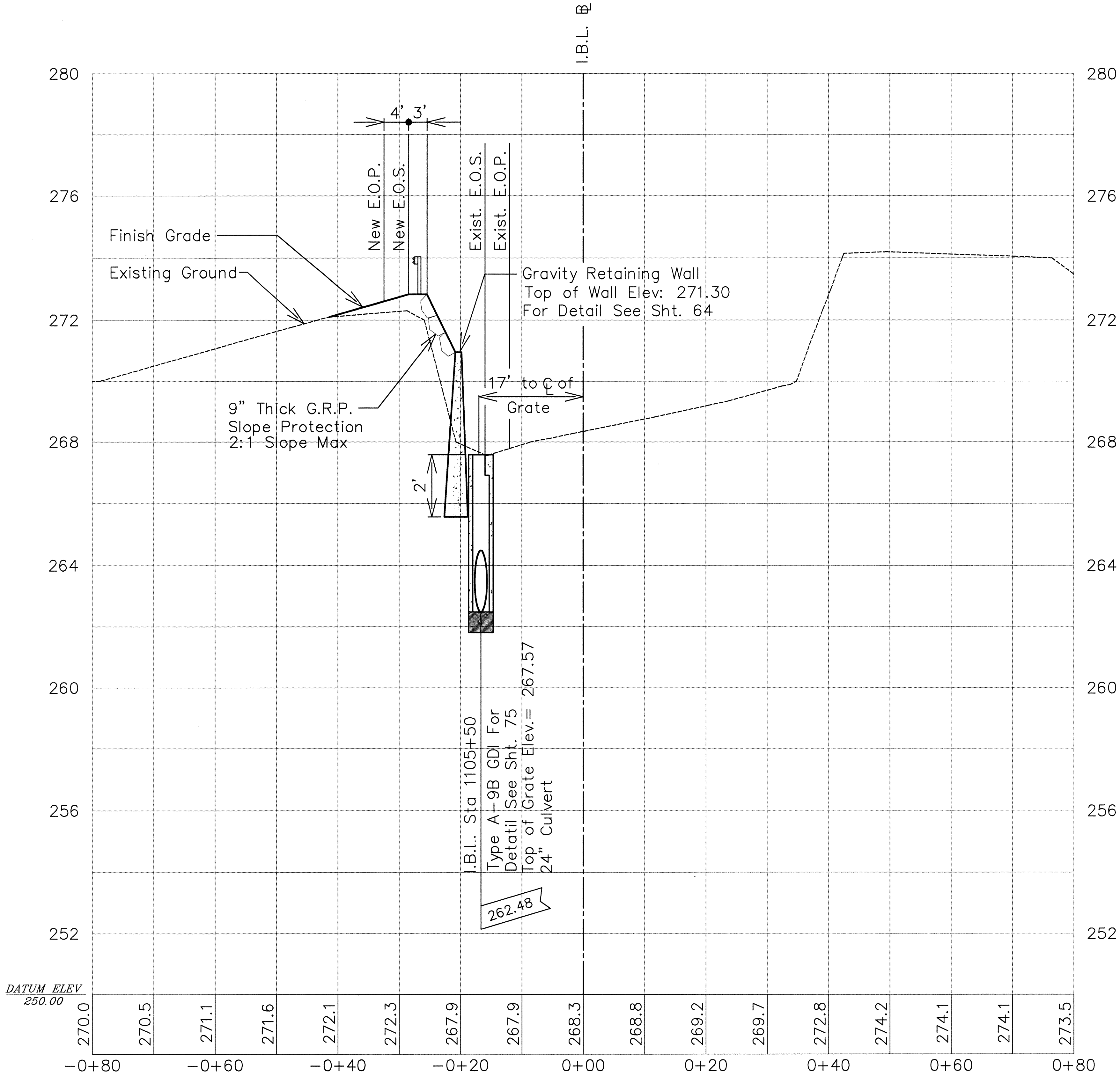


The work was prepared by me or under my supervision and construction of this project will be under my observation

Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WALL SECTION
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU
TOWN (KEA'AU BYPASS ROAD), PH 2
PROJECT NO. 130B-01-98
Scale: 1"=10' Date: August, 1998
SHEET No. 3 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	67	210



I.B.L. 11 B STA 1105+50
 SCALE: HORIZ. 1"=10'
 VERT. 1"=2'
 hw11-sec

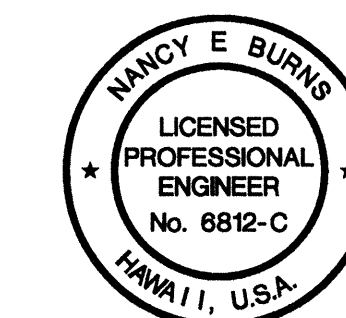
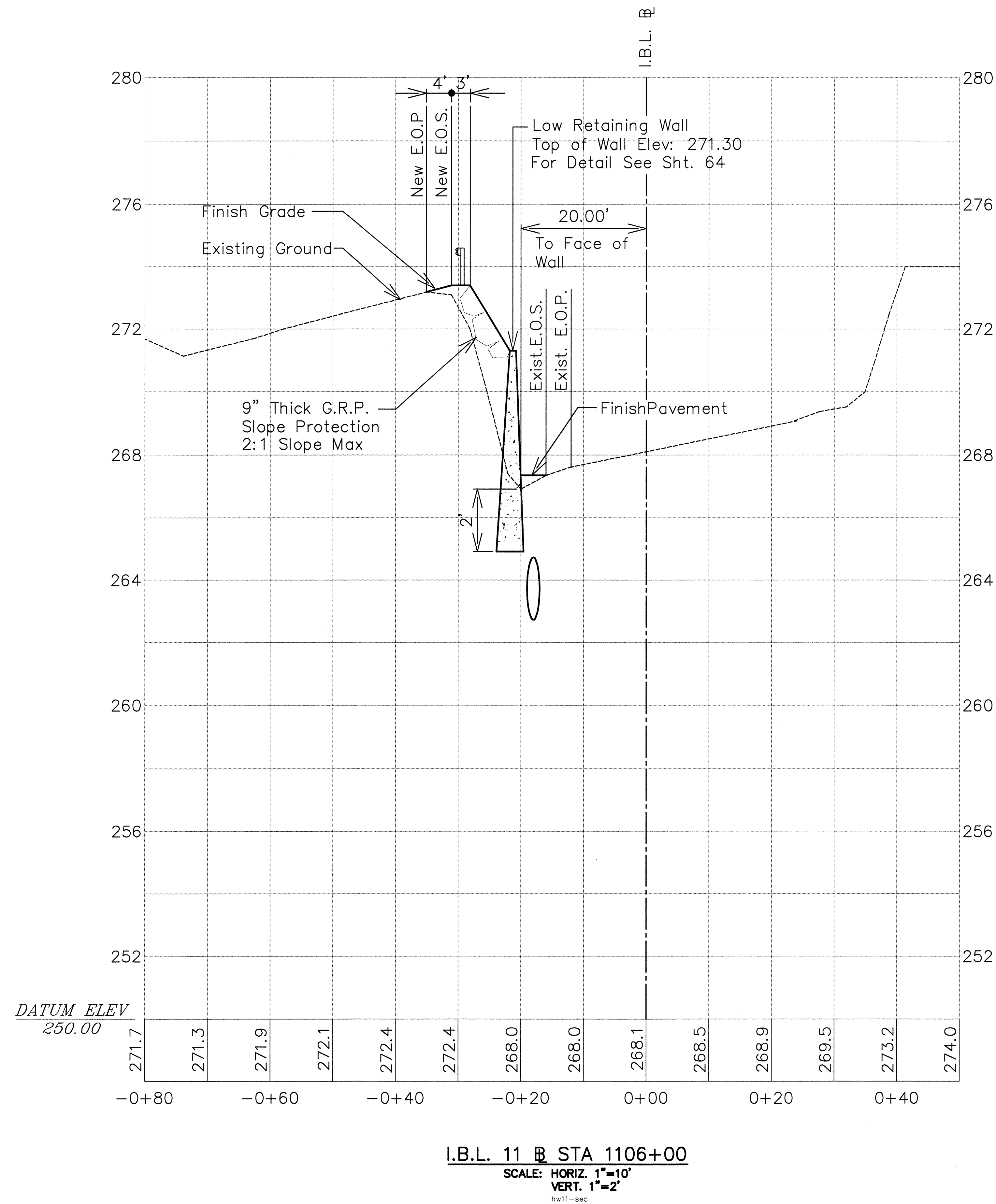


The work was prepared by me or under my supervision and construction of this project will be under my observation.
Nancy E. Burns
 DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WALL SECTION AT INLET
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2
PROJECT NO. 130B-01-98
Scale: 1"=10'
Date: August, 1998
SHEET No. 4 OF 9 SHEETS

67

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	68	210



The work was prepared by me or under my supervision and construction of this project will be under my observation.

Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WALL SECTION
ROUTE 11

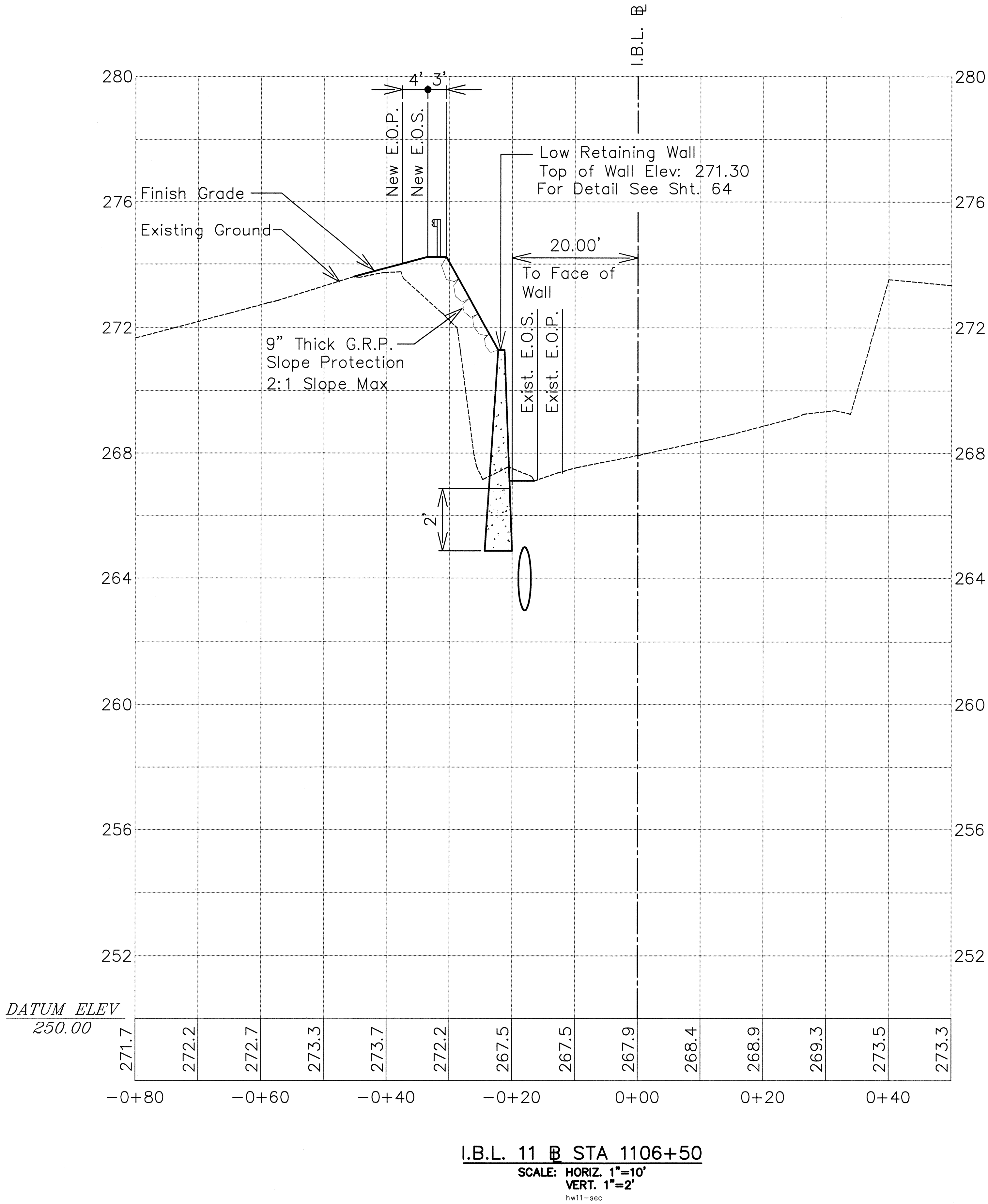
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2

PROJECT NO. 130B-01-98

Scale: 1"=10' Date: August, 1998

SHEET No. 5 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	69	210



The work was prepared by me or under my supervision and construction of this project will be under my observation

Nancy E. Burns

DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WALL SECTION

ROUTE 11

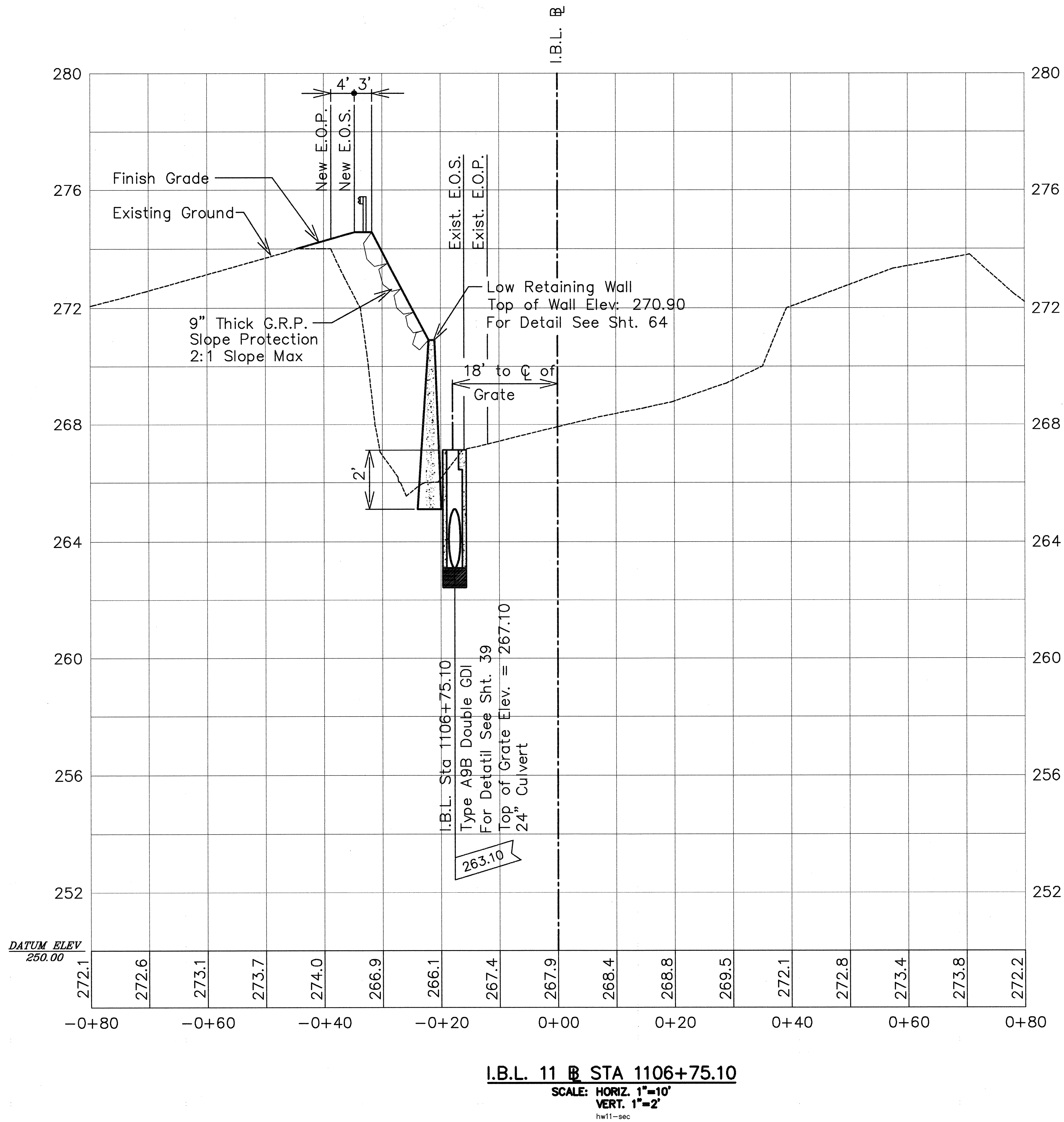
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2

PROJECT NO. 130B-01-98

Scale: 1"=10' Date: August, 1998

SHEET No. 6 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	70	210



The work was prepared by me or under my supervision and construction of this project will be under my observation.

Nancy E. Burns

DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WALL SECTION AT INLET

ROUTE 11

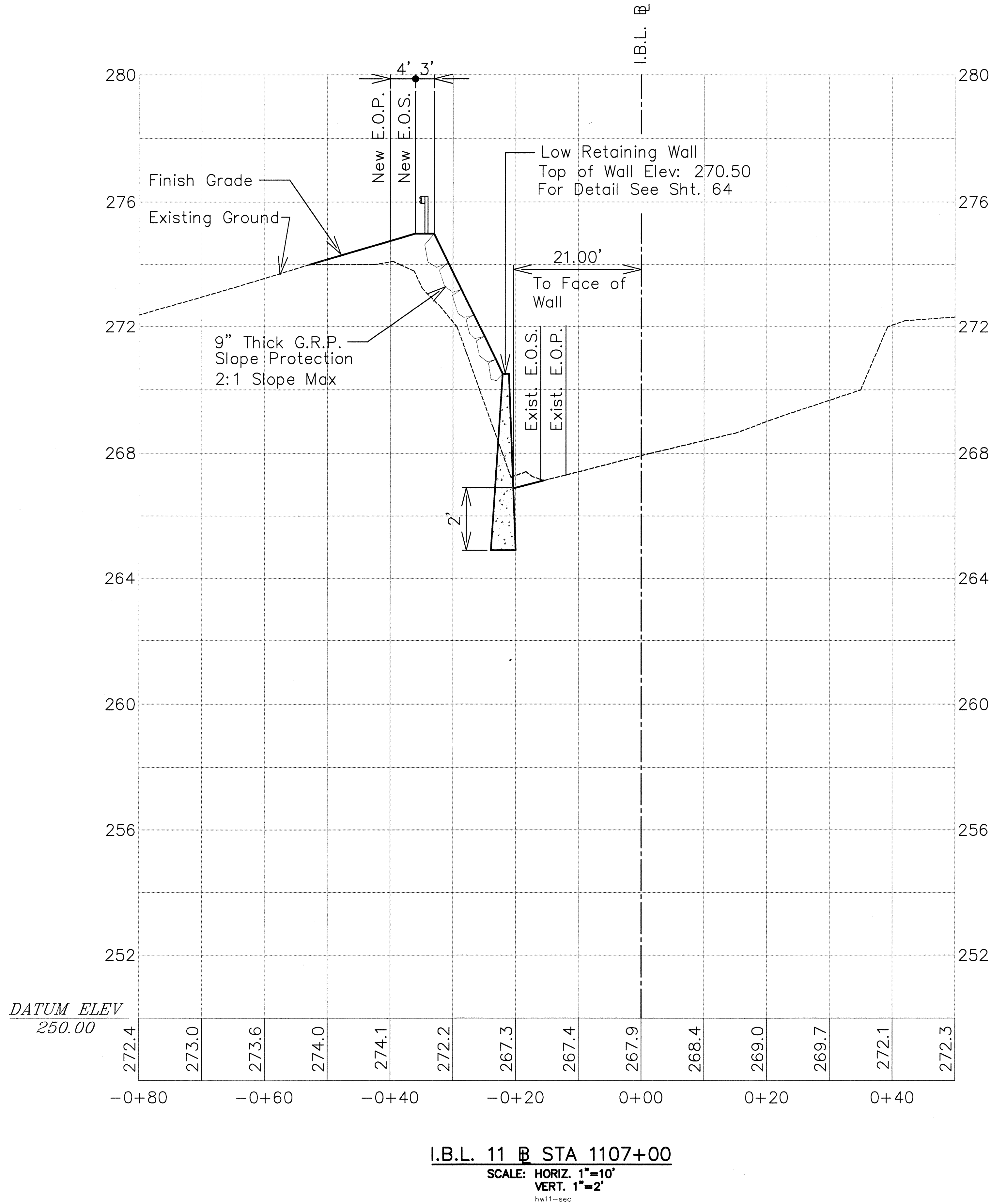
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2

PROJECT NO. 130B-01-98

Scale: 1"=10' Date: August, 1998

SHEET No. 7 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	71	210



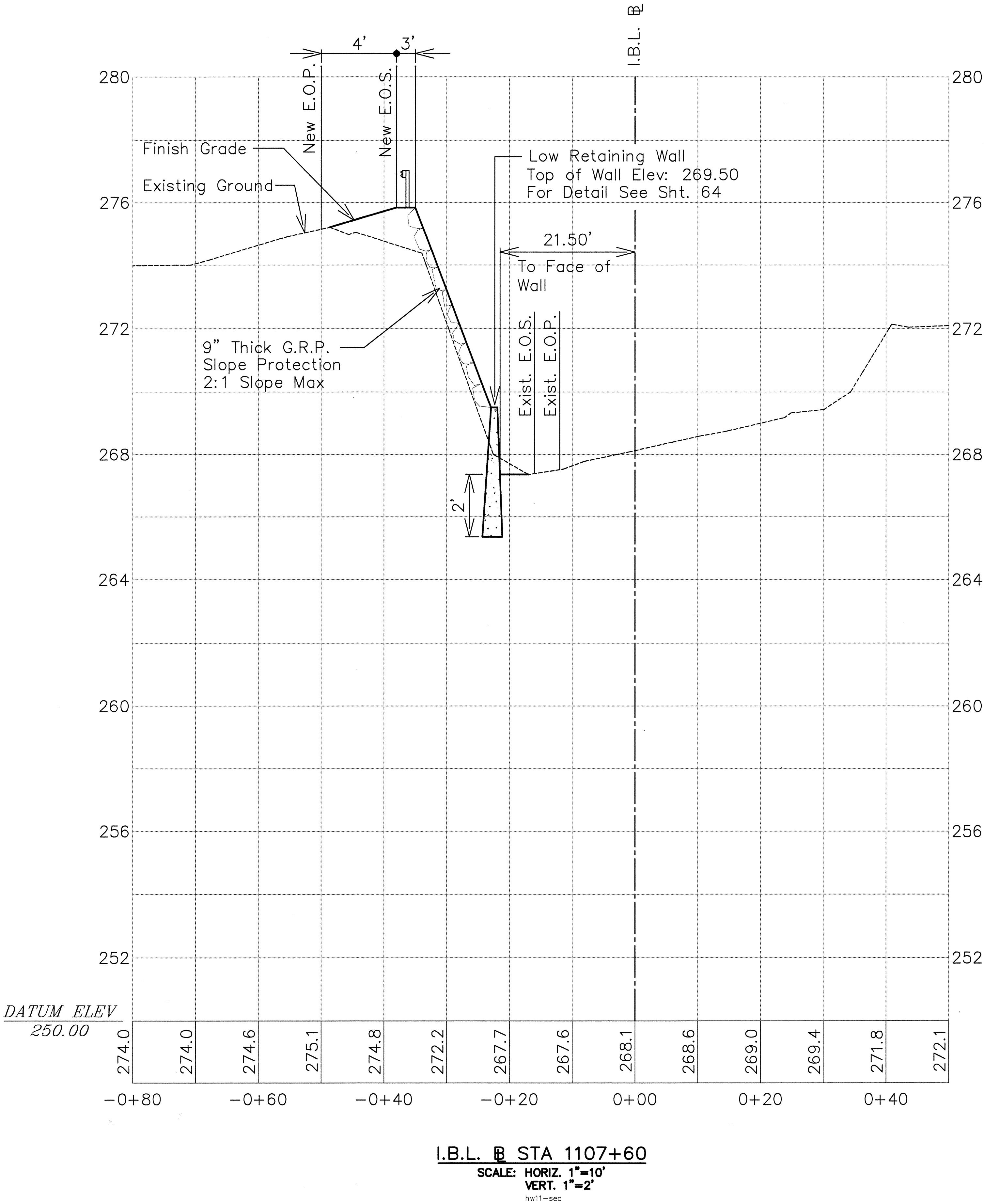
The work was prepared by me or under my supervision and construction of this project will be under my observation

Nancy E Burns

DATE: 8/29/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WALL SECTION
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2
PROJECT NO. 130B-01-98
Scale: 1"=10' Date: August, 1998
SHEET No. 8 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	72	210

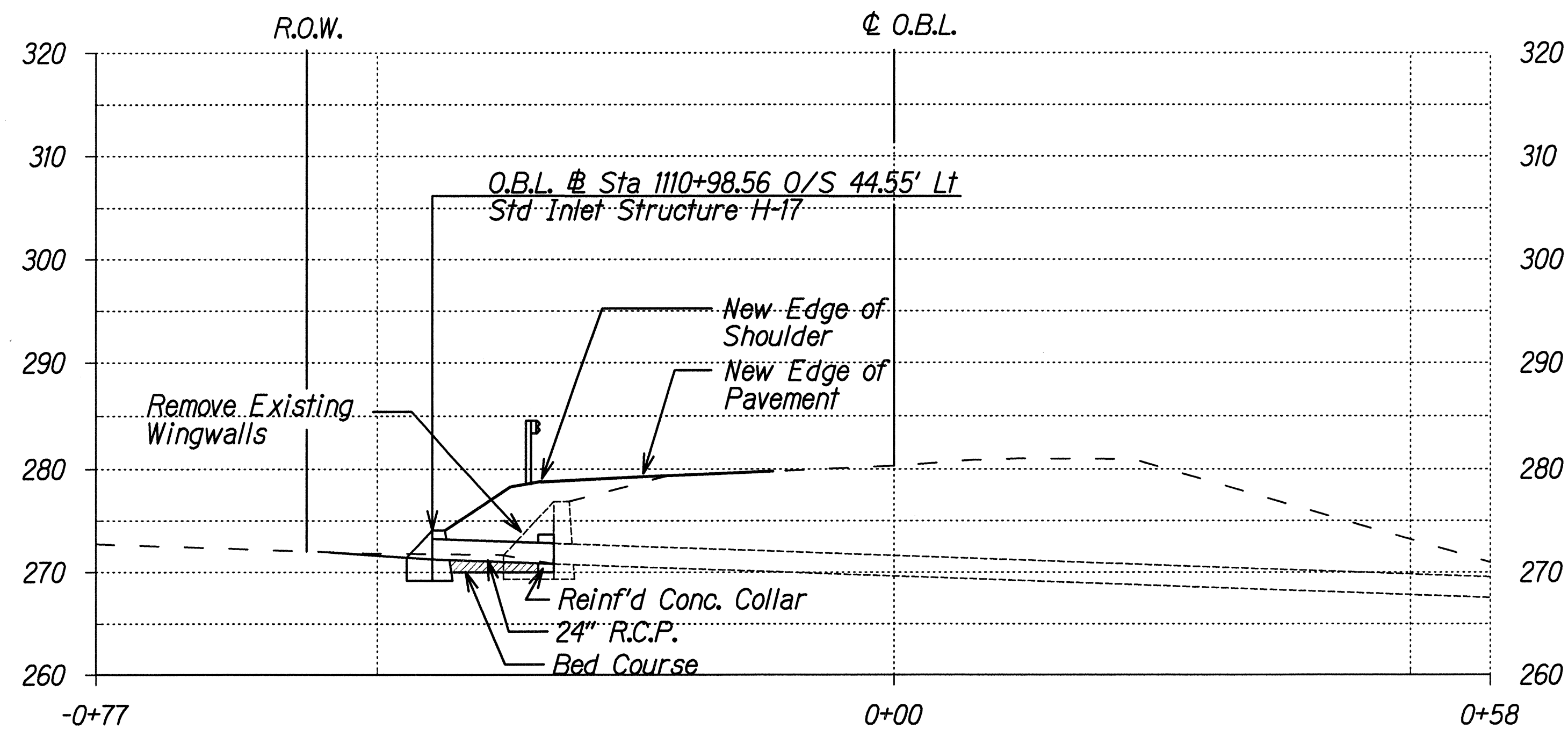


The work was prepared by me or under my supervision and construction of this project will be under my observation.

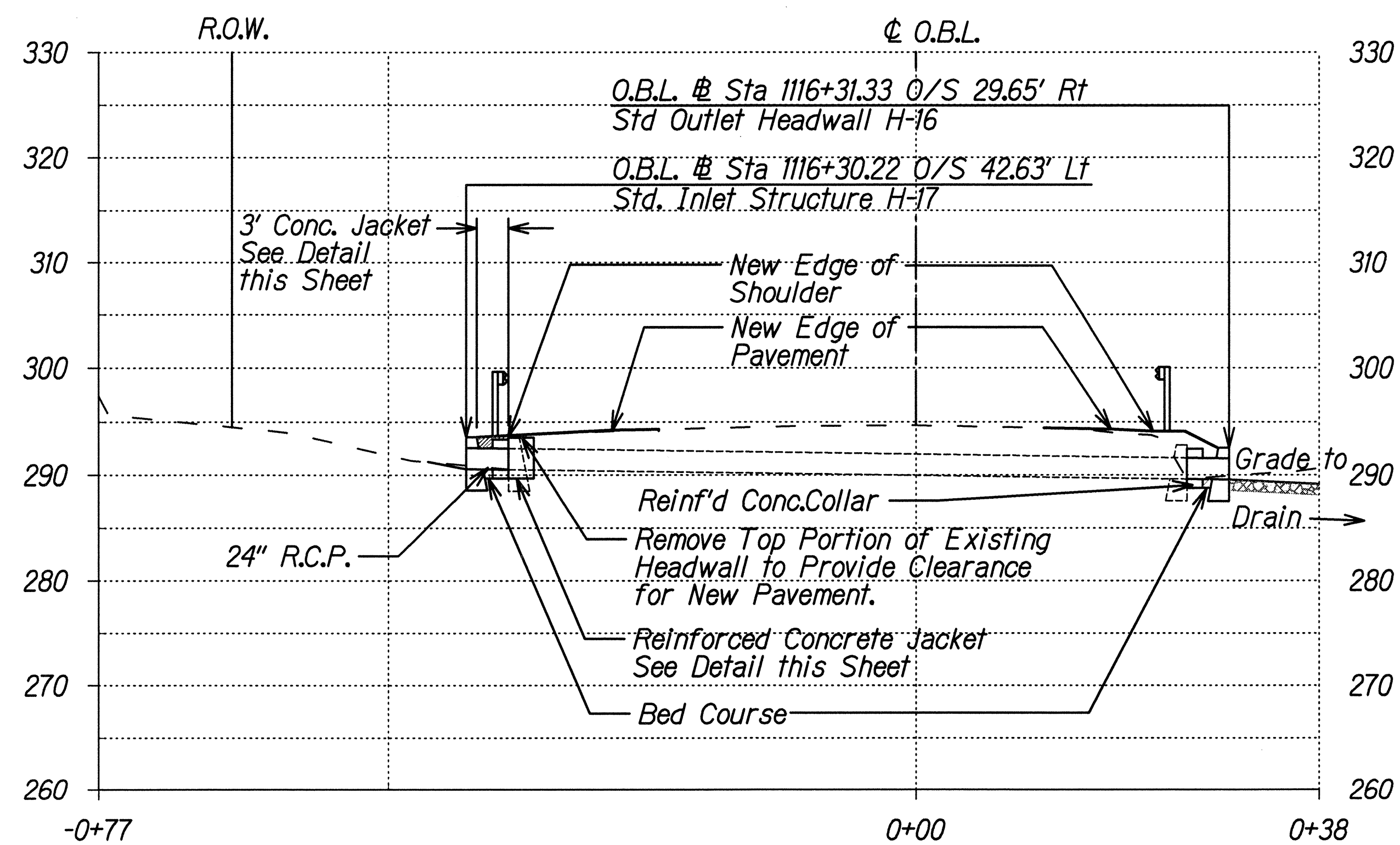
Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
WALL SECTION
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU TOWN (KEA'AU BYPASS ROAD), PH 2
PROJECT NO. 130B-01-98
Scale: 1"=10' Date: August, 1998
SHEET No. 9 OF 9 SHEETS

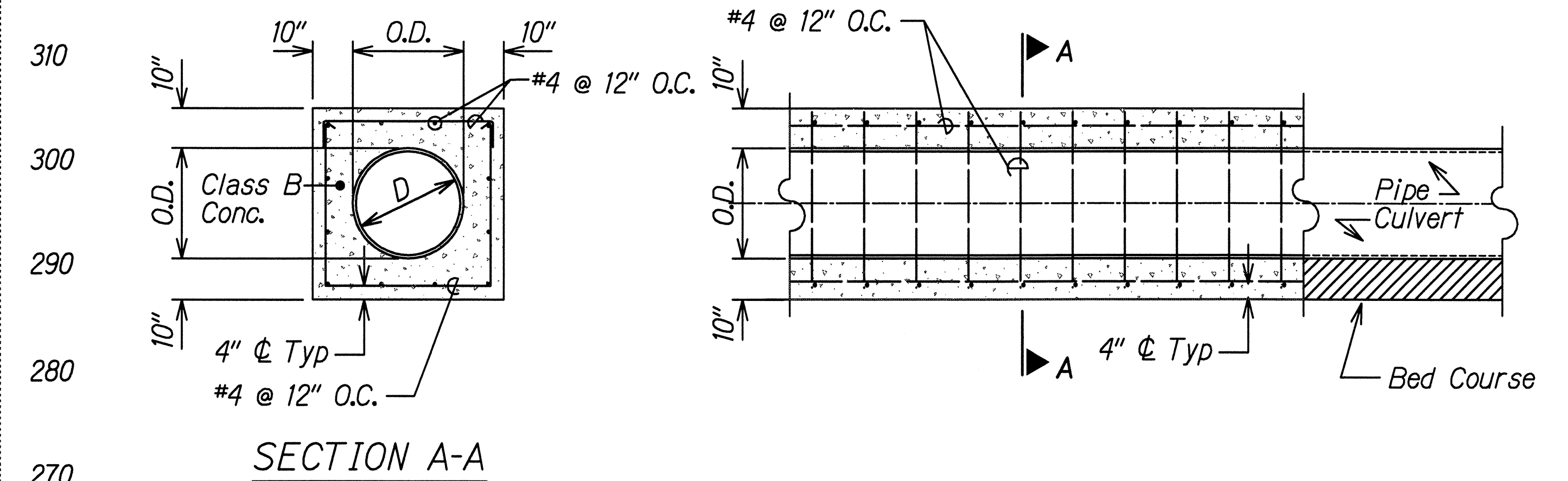
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	130B-01-98	1999	73	210



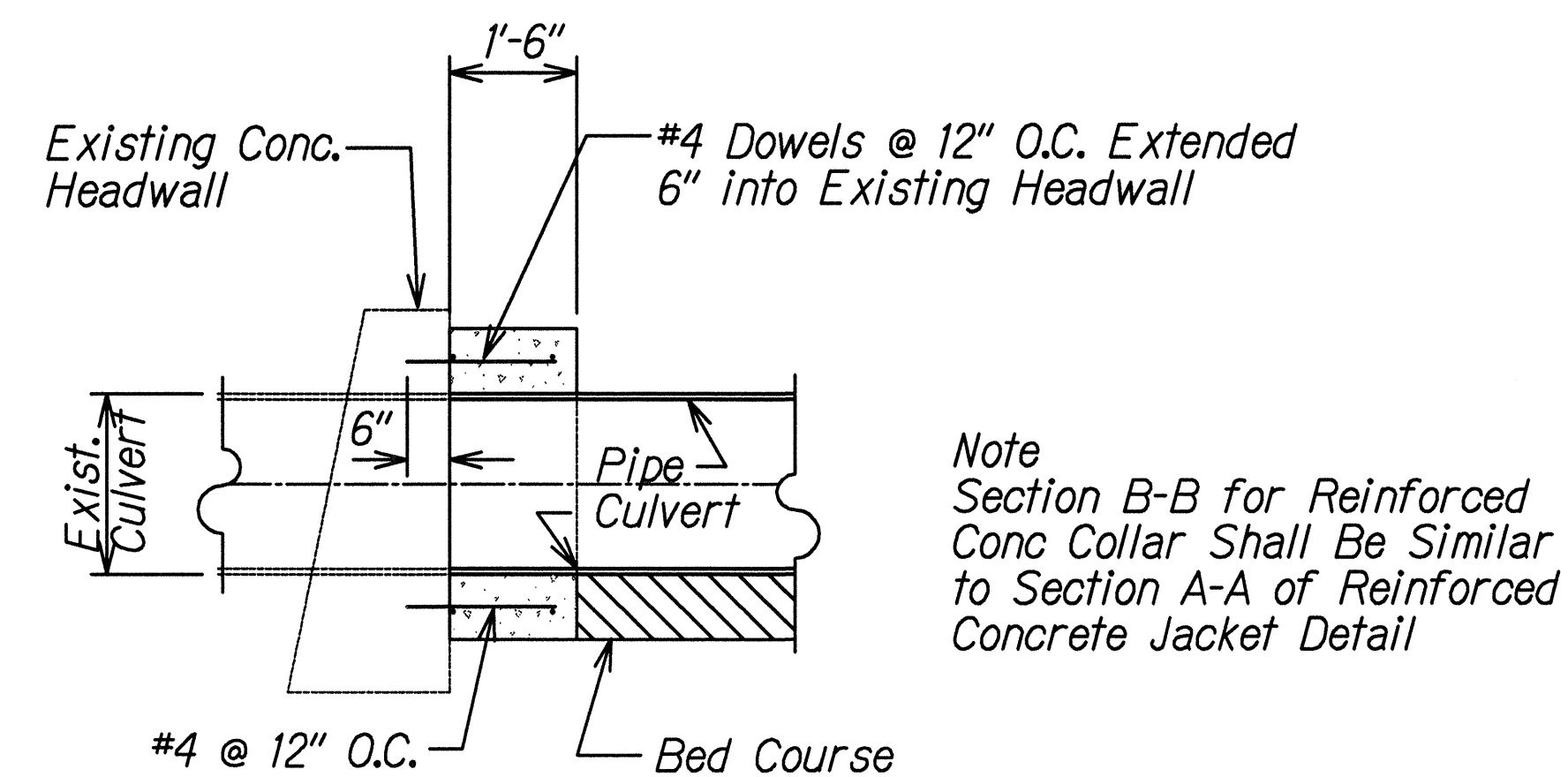
O.B.L. 11 @ Sta 1110+96.61
Scale: Horiz. 1"=10'
Vert. 1"=10'



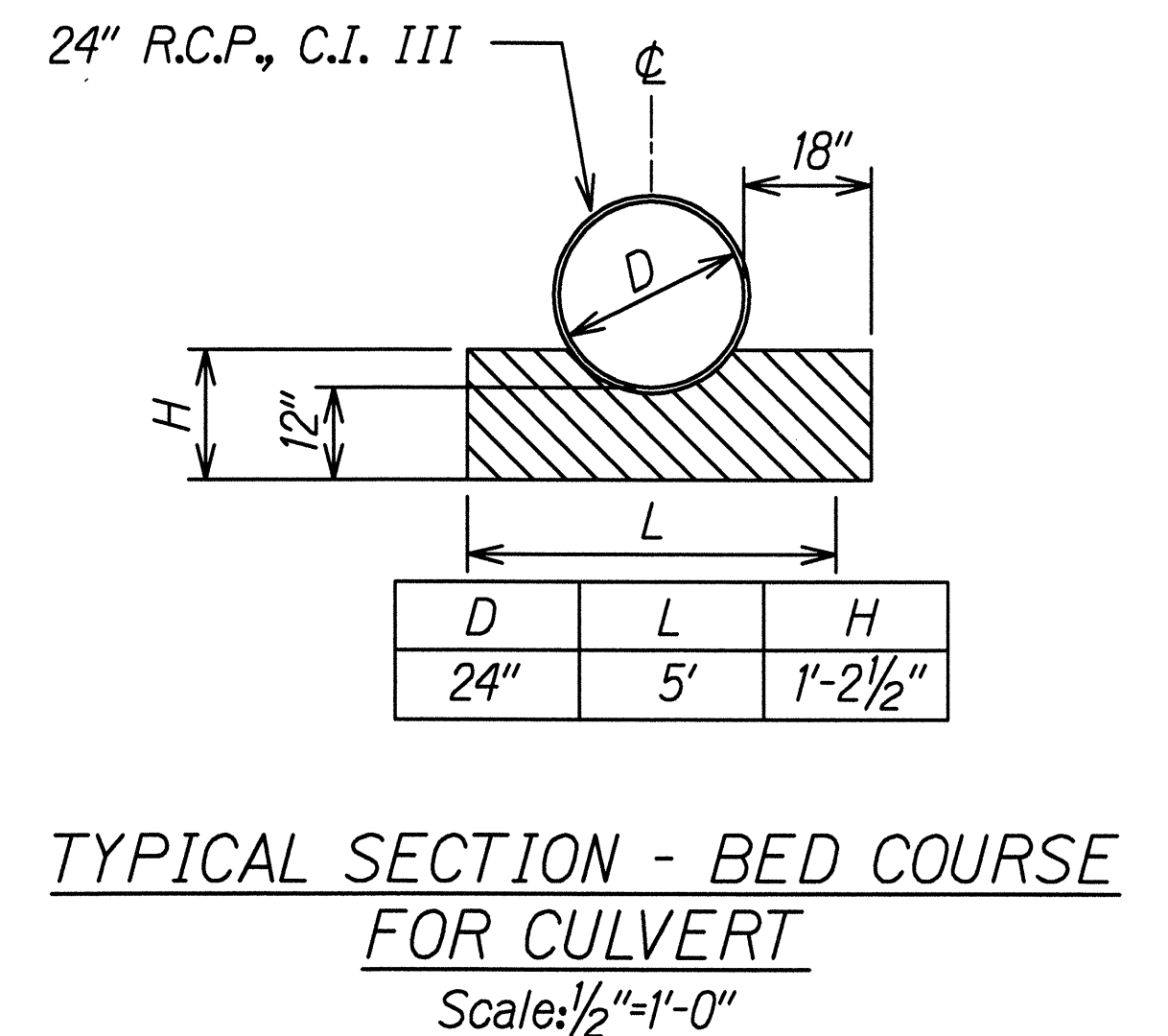
O.B.L. 11 @ Sta 1116+29.30
Scale: Horiz. 1"=10'
Vert. 1"=10'



REINFORCED CONCRETE JACKET DETAIL
Scale: 1/2"=1'-0"



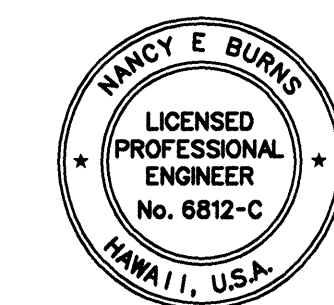
REINFORCED CONCRETE COLLAR DETAIL
Scale: 1/2"=1'-0"



DRAINAGE NOTES:

- Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools, and incidentals necessary to accomplish maintenance of flow, the cost of which shall be incidental to the various contract items.
- Contractor shall verify the locations of all culverts in the field. Any culvert damaged during construction shall be repaired or replaced by the contractor at his expense.
- Concrete shall be Class A unless otherwise noted.
- Class B concrete and reinforcing steel for reinforced concrete collar and reinforced concrete jacket will not be measured and paid for separately but shall be considered incidental to the 24" RCP, CL. III.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DATE	
CHECKED BY	DATE	
DATE		



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Nancy E. Burns
DATE: 8/24/98

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE DETAILS
ROUTE 11
KEA'AU-PAHOA ROAD VIC. OF KEA'AU
TOWN (KEA'AU BYPASS ROAD), PH. 2
PROJECT NO. 130B-01-98
Scale: As Noted Date: August, 1998
SHEET No. 1 OF 1 SHEETS