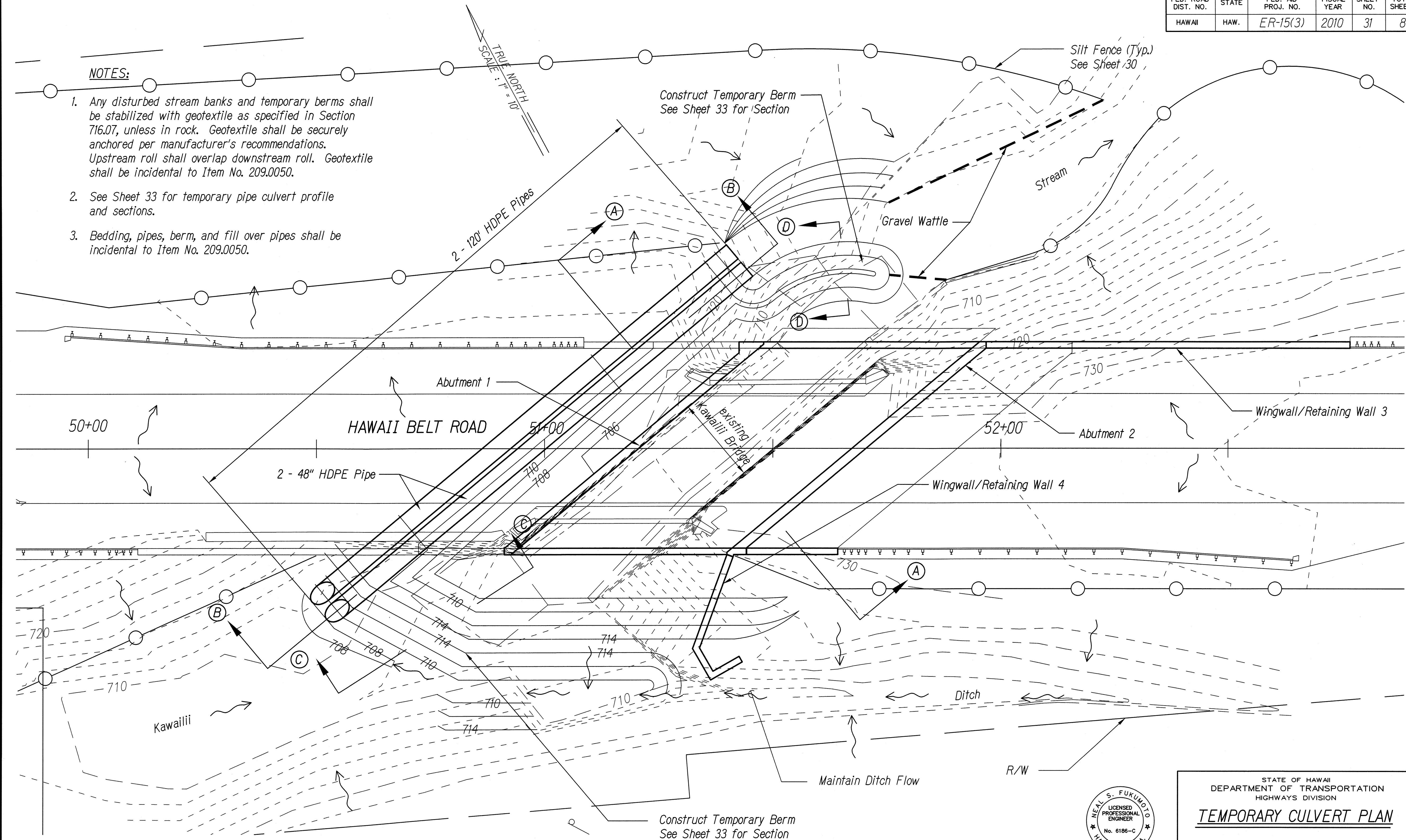


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-15(3)	2010	31	80

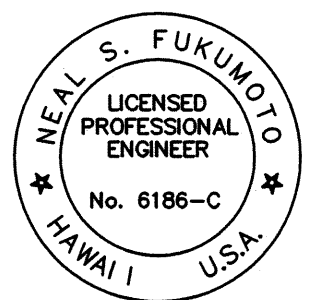
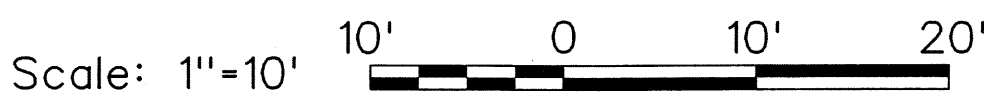
NOTES:

- Any disturbed stream banks and temporary berms shall be stabilized with geotextile as specified in Section 716.07, unless in rock. Geotextile shall be securely anchored per manufacturer's recommendations. Upstream roll shall overlap downstream roll. Geotextile shall be incidental to Item No. 209.0050.
- See Sheet 33 for temporary pipe culvert profile and sections.
- Bedding, pipes, berm, and fill over pipes shall be incidental to Item No. 209.0050.



TEMPORARY CULVERT PLAN - PHASE 1
SCALE: 1"=10'

GRAPHIC SCALE



This work was prepared by me or under my supervision.
Exp. 04-30-10
Neal S. Fukumoto
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TEMPORARY CULVERT PLAN

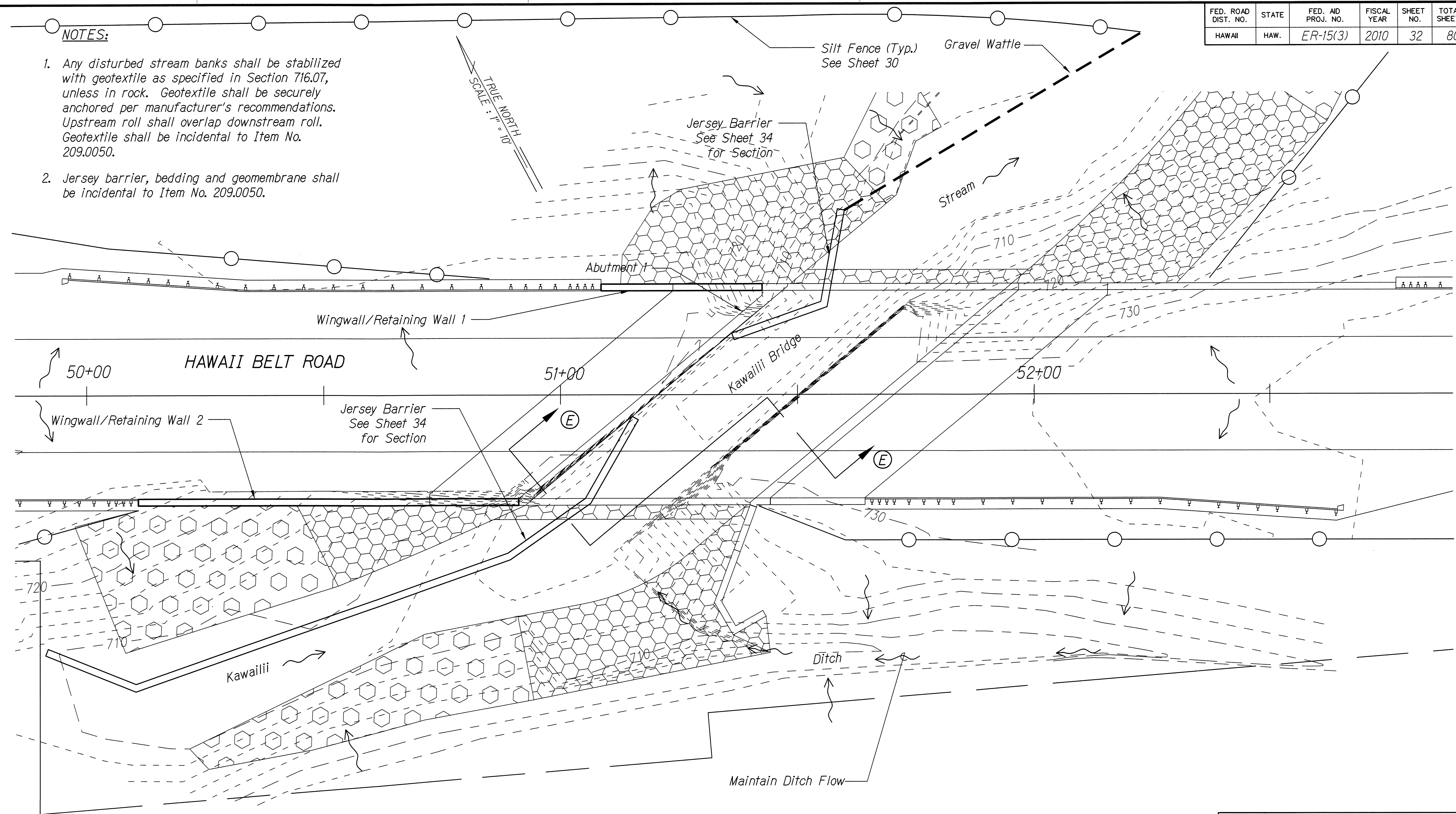
HAWAII BELT ROAD
KAWAILII STREAM BRIDGE REPLACEMENT
Federal Aid Project No. ER-15(3)
Scale: 1"=10' Date: October 2009
SHEET No. 1 OF 2 SHEETS

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-15(3)	2010	32	80

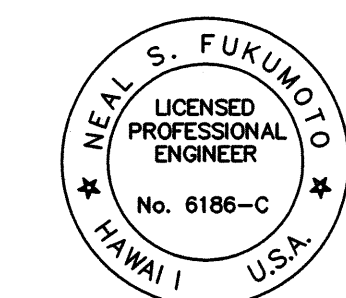
NOTES:

- Any disturbed stream banks shall be stabilized with geotextile as specified in Section 716.07, unless in rock. Geotextile shall be securely anchored per manufacturer's recommendations. Upstream roll shall overlap downstream roll. Geotextile shall be incidental to Item No. 209.0050.
- Jersey barrier, bedding and geomembrane shall be incidental to Item No. 209.0050.



TEMPORARY CULVERT PLAN - PHASE 2
Scale: 1"=10'

GRAPHIC SCALE



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Neal S. Fukumoto
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

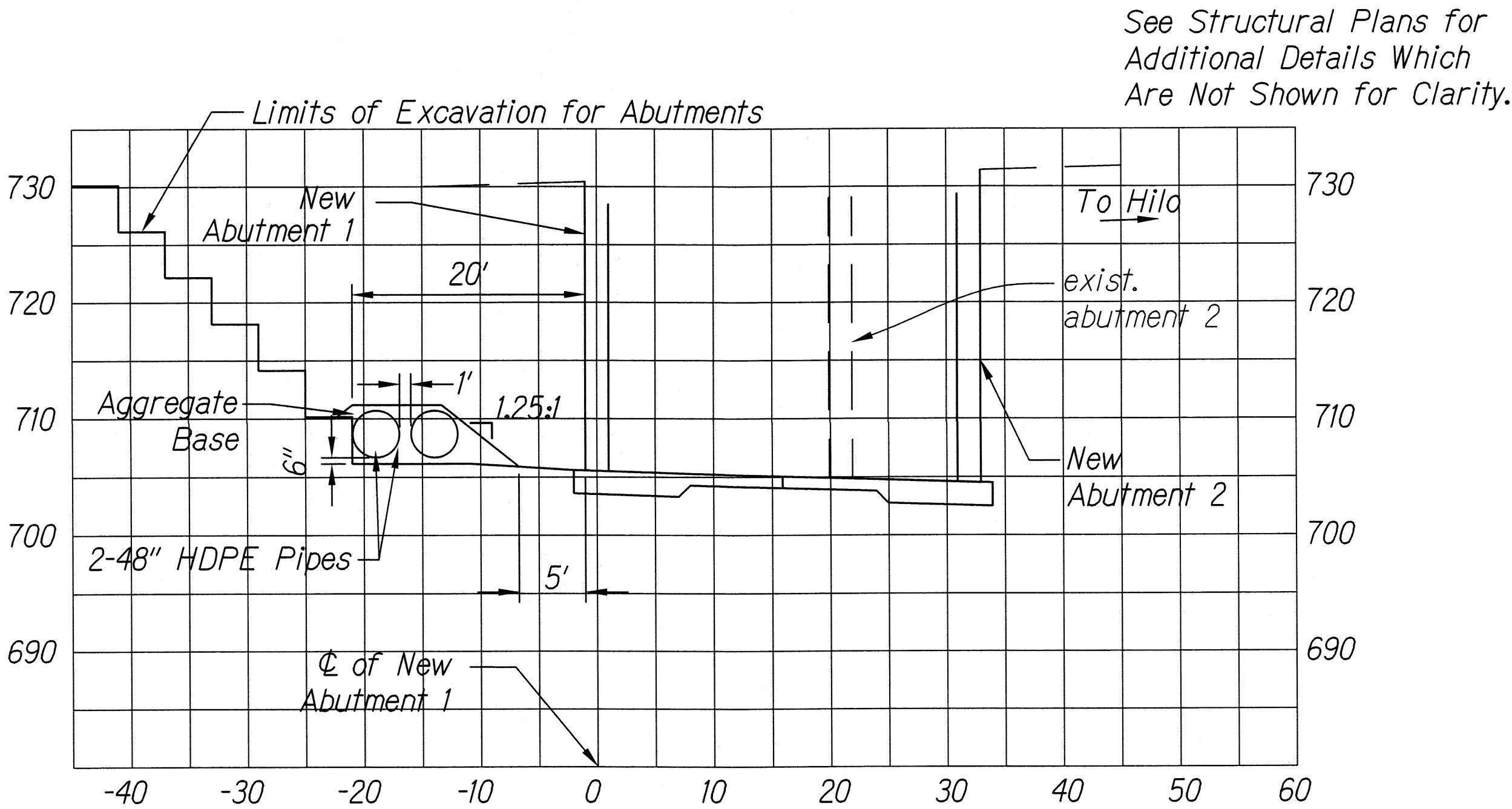
TEMPORARY CULVERT PLAN

HAWAII BELT ROAD
KAWAILII STREAM BRIDGE REPLACEMENT
Federal Aid Project No. ER-15(3)
Scale: 1"=10' Date: October 2009

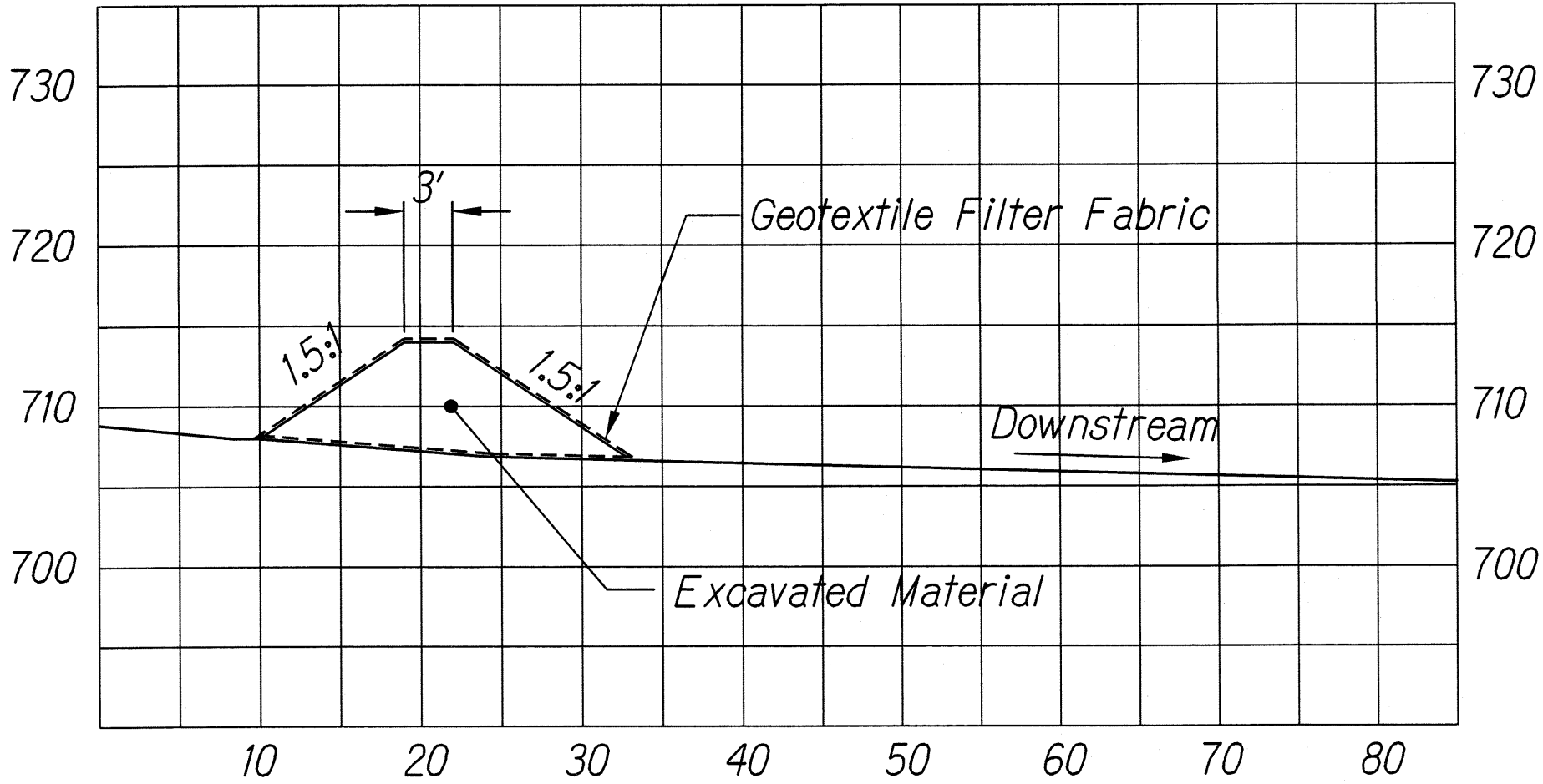
SHEET No. 2 OF 2 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

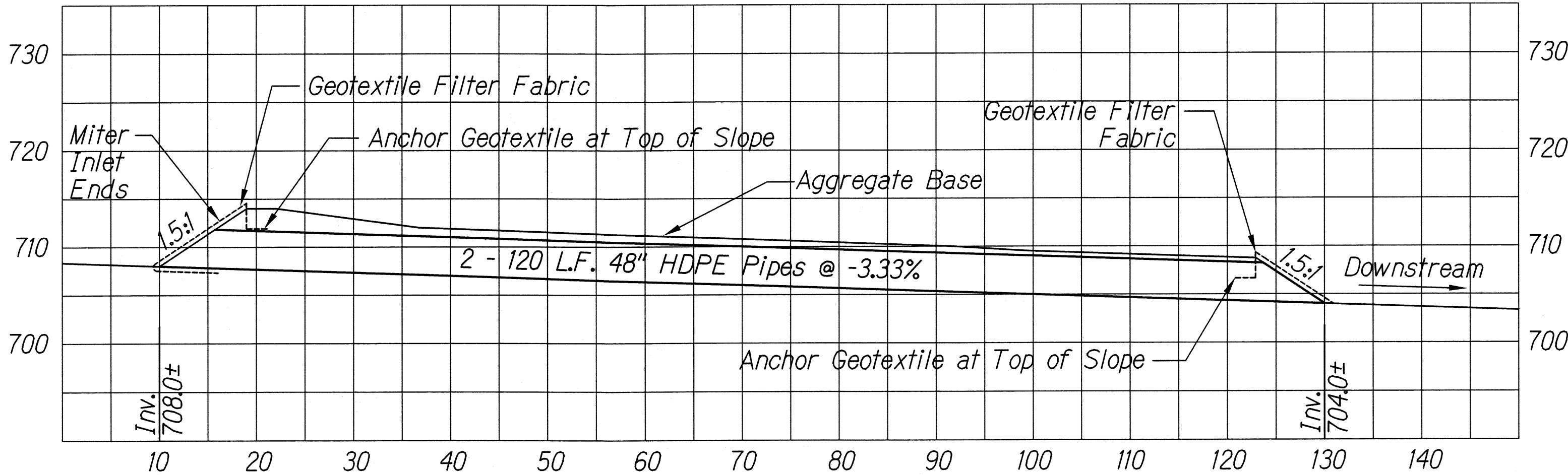
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-15(3)	2010	33	80



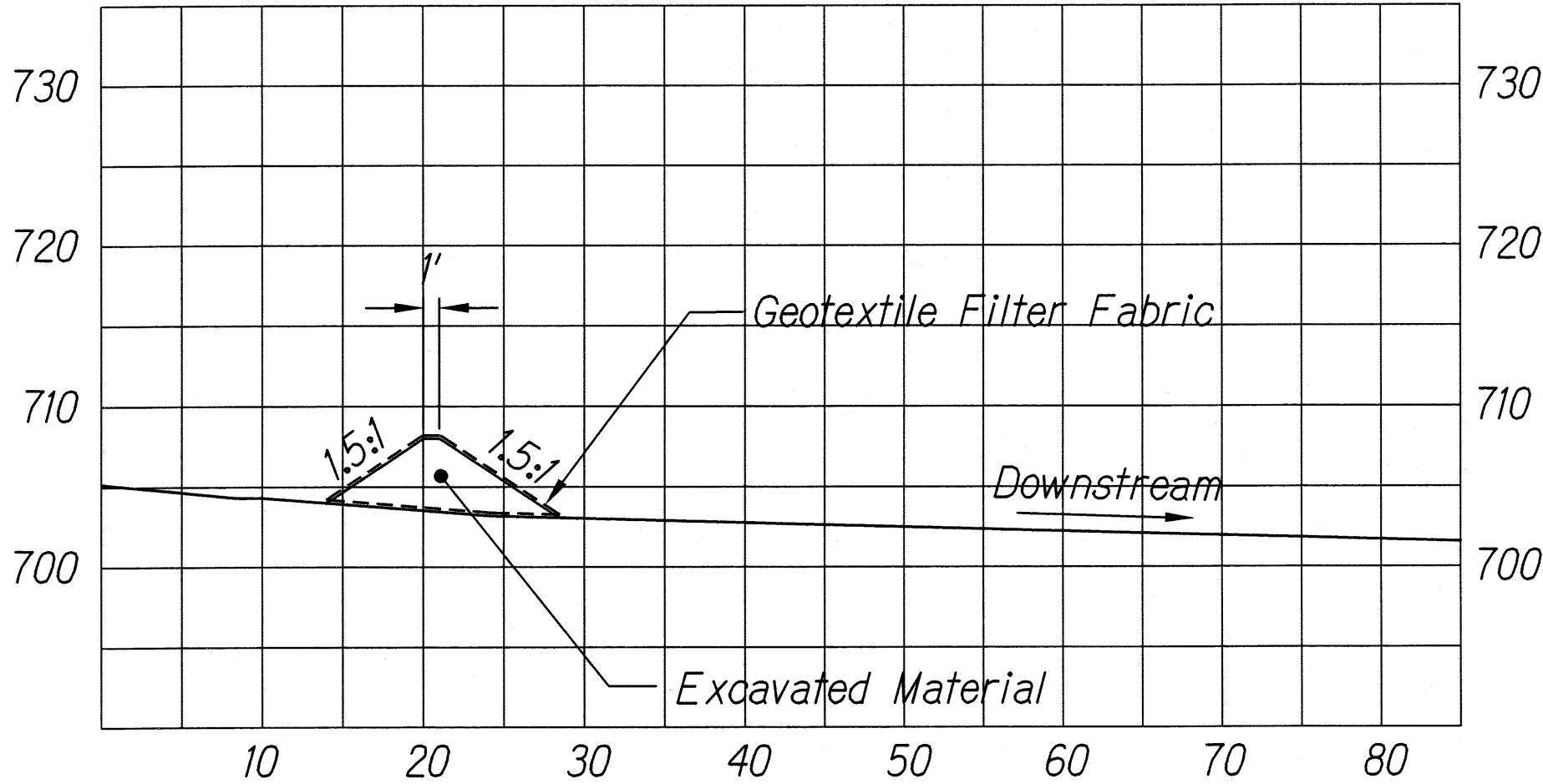
SECTION A-A - 2-48" HDPE PIPE CULVERT
 SCALE: 1" = 10'



SECTION C-C - BERM
 SCALE: 1" = 10'

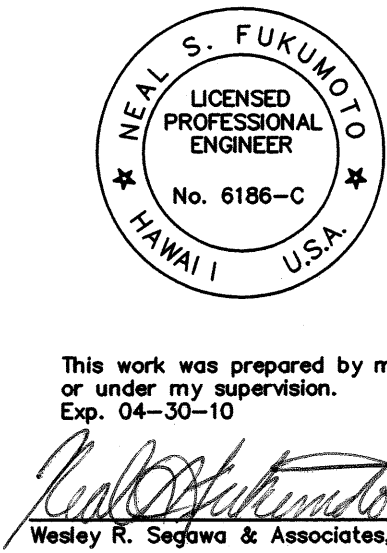
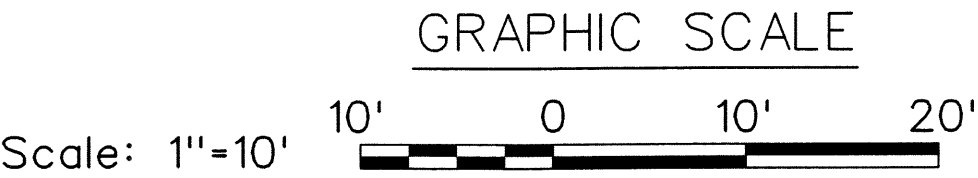


PROFILE B-B - 2-48" HDPE PIPE CULVERT
 SCALE: 1" = 10'



SECTION D-D - BERM
 SCALE: 1" = 10'

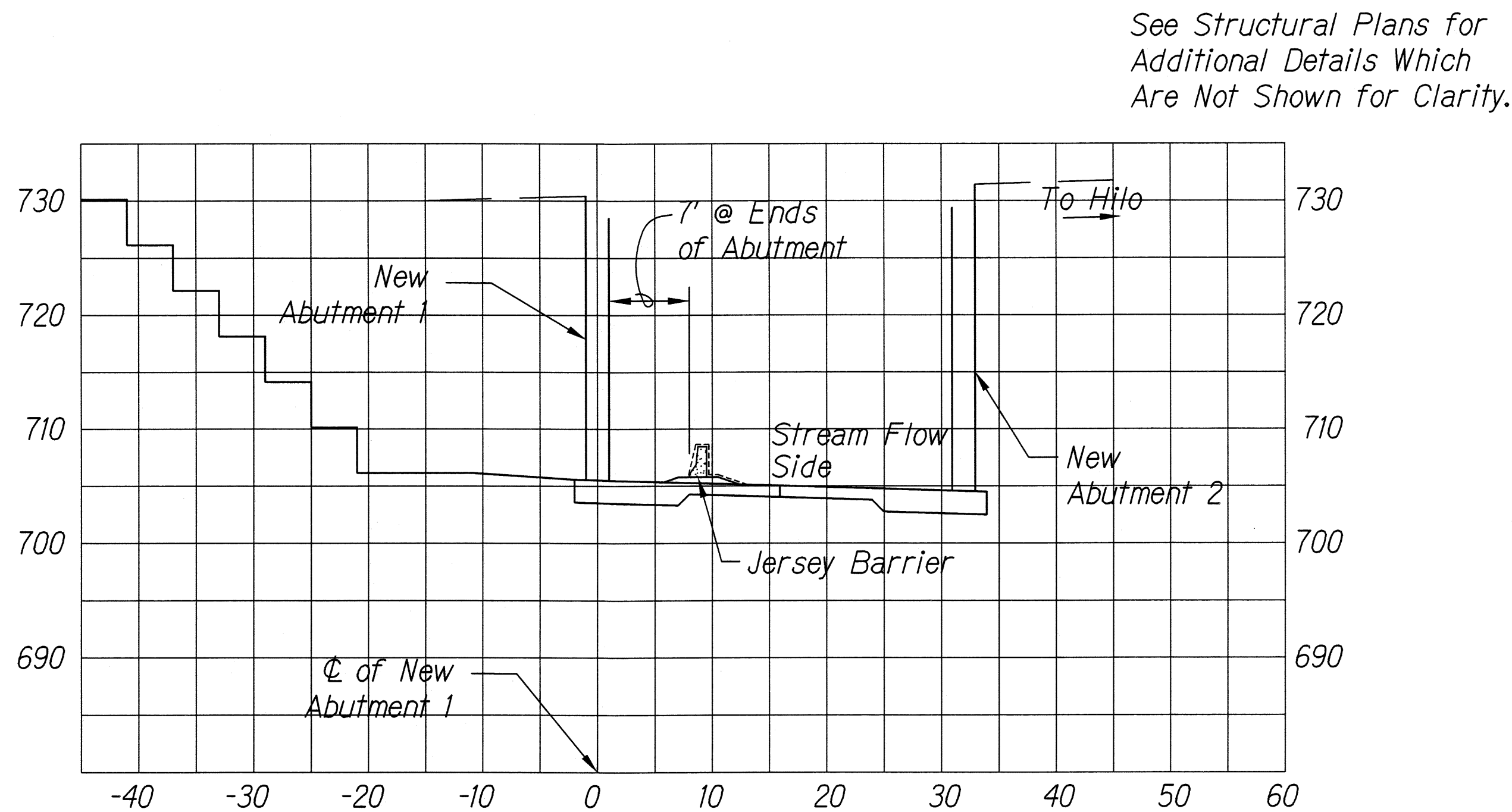
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
SCALE	



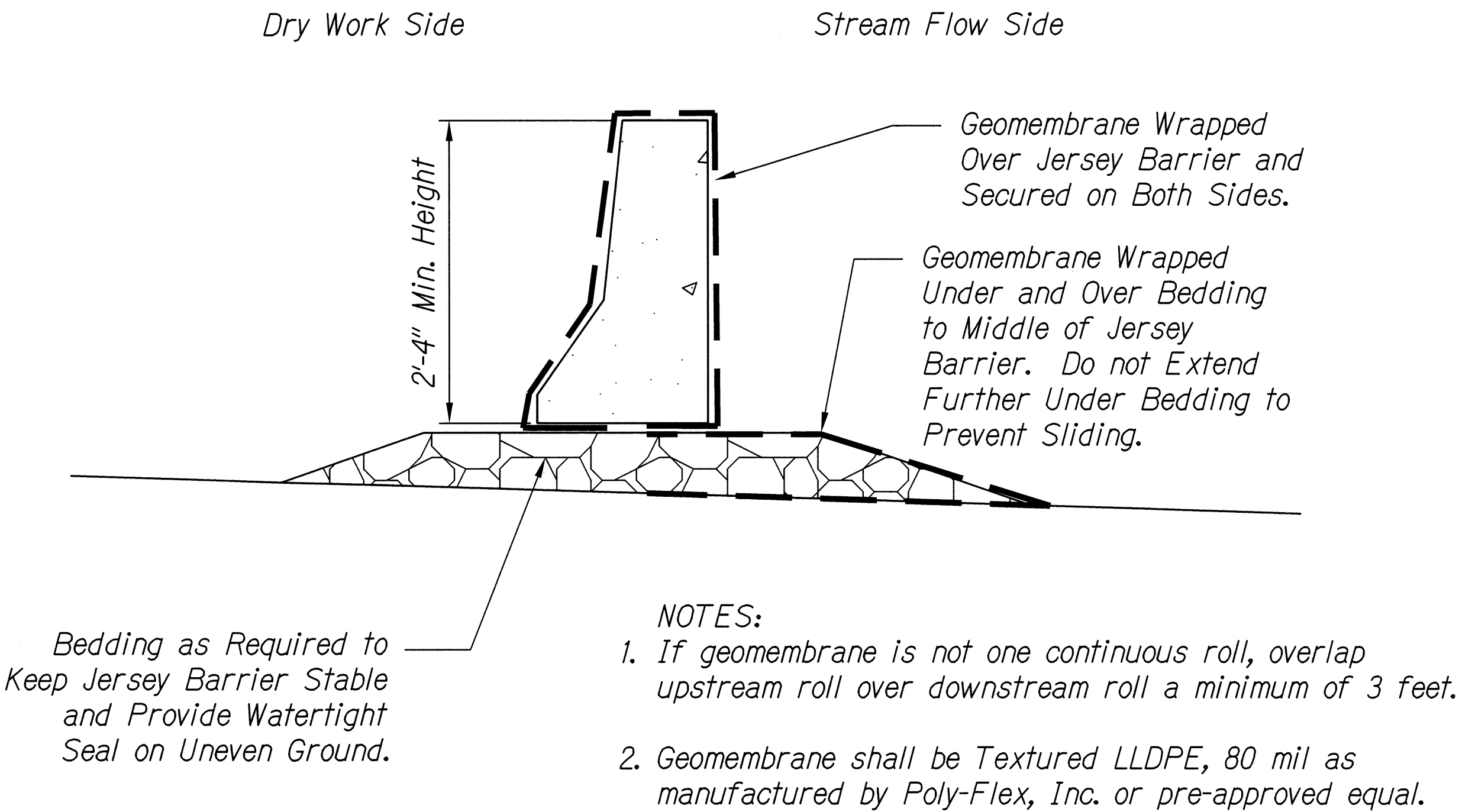
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TEMPORARY CULVERTS
PROFILE AND SECTION
 HAWAII BELT ROAD
 KAWAIIII STREAM BRIDGE REPLACEMENT
 Federal Aid Project No. ER-15(3)
 Scale: 1"=10'

Date: October 2009
 SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-15(3)	2010	34	80



SECTION E-E - JERSEY BARRIER IN STREAM BED
 SCALE: 1" = 10'



JERSEY BARRIER CONTAINMENT DETAIL
 SCALE: NTS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
NOTE BOOK	CHECKED BY	
	DATE	

NEAL S. FUKUNAGA
 LICENSED PROFESSIONAL ENGINEER
 No. 6186-C
 HAWAII U.S.A.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**TEMPORARY CULVERTS
 PROFILE AND SECTION**

HAWAII BELT ROAD
KAWAILII STREAM BRIDGE REPLACEMENT
Federal Aid Project No. ER-15(3)

Scale: As Shown Date: October 2009

SHEET No. 2 OF 2 SHEETS

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 Exp. 04-30-10

Wesley R. Segawa
 Wesley R. Segawa & Associates, Inc.