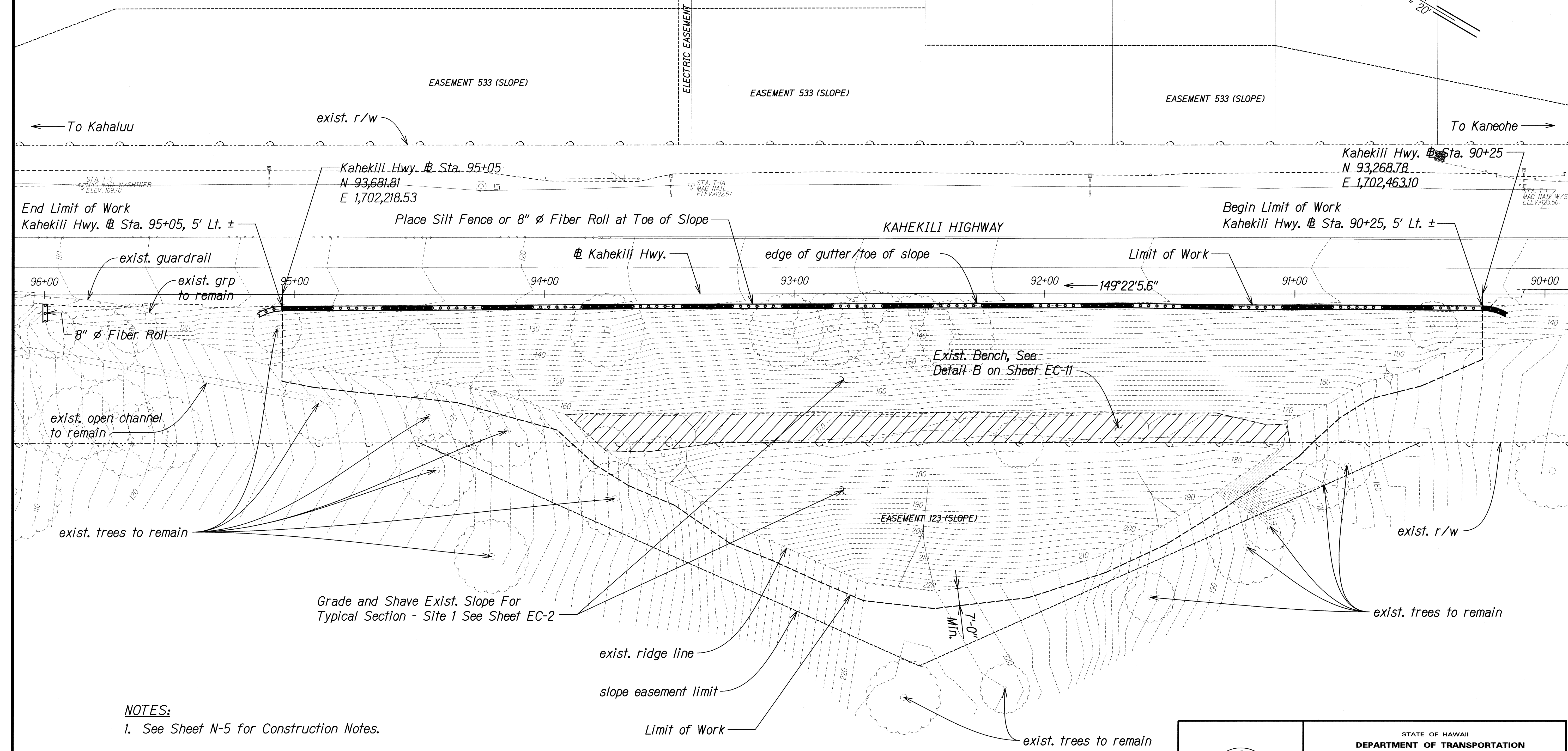
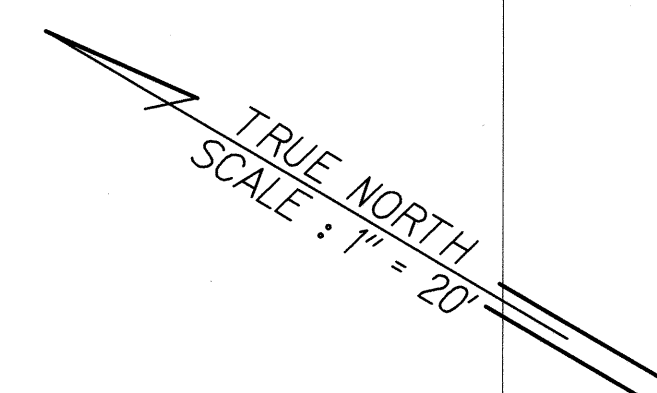


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	11	65



- NOTES:**
1. See Sheet N-5 for Construction Notes.
 2. Remove all vegetation within limit of work unless otherwise indicated.

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

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	

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SIGNATURE: *Jaime M. Saavedra* EXPIRATION DATE: 04/30/10 OF THE LICENSE

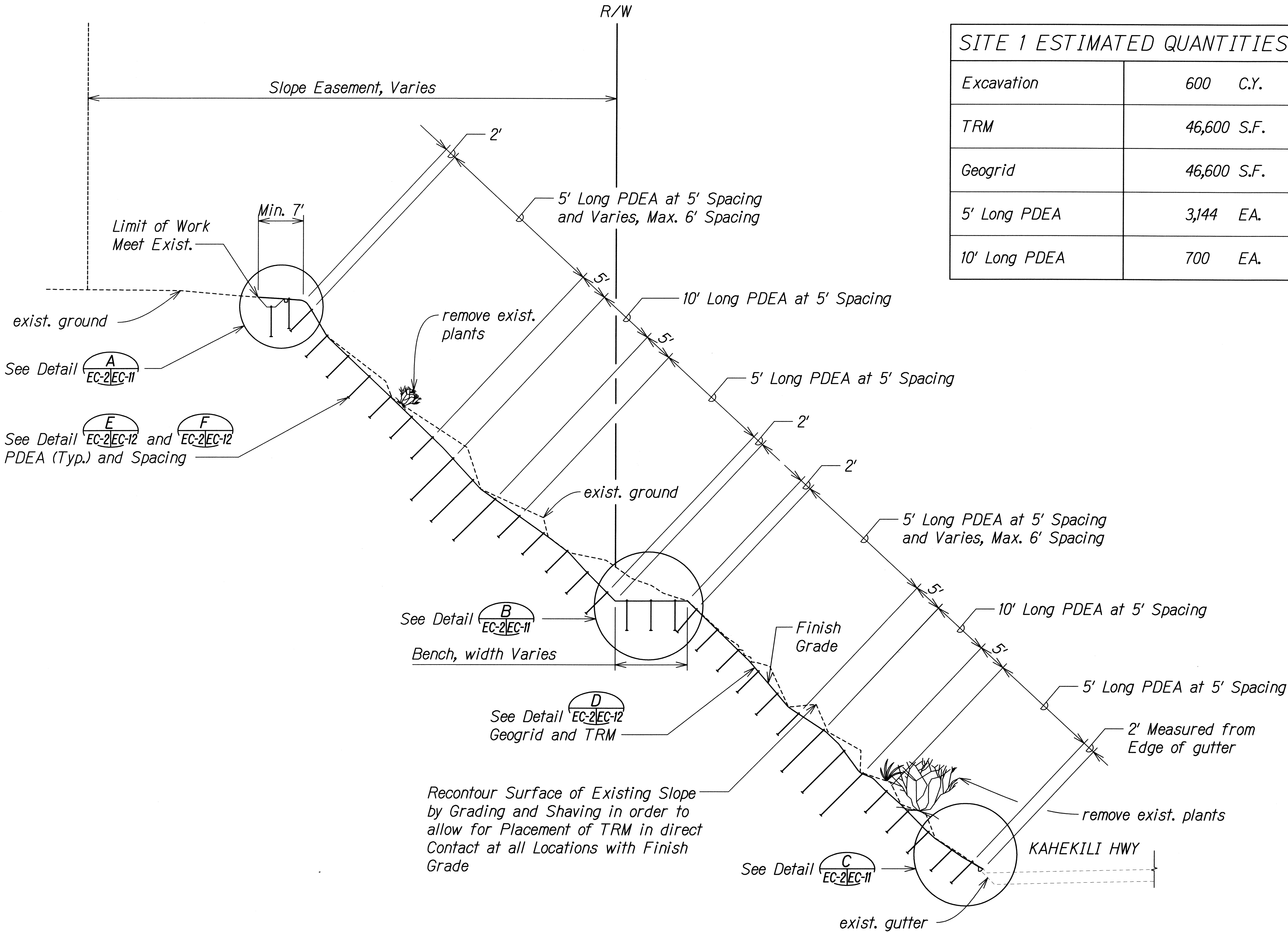
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
KAHEKILI HIGHWAY - SITE 1
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: 1"=20' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	12	65

SITE 1 ESTIMATED QUANTITIES	
Excavation	600 C.Y.
TRM	46,600 S.F.
Geogrid	46,600 S.F.
5' Long PDEA	3,144 EA.
10' Long PDEA	700 EA.

- NOTES:**
- Rills are small channels on slope face up to 12" in depth. Gullies on slope face are channels greater than 12" in depth.
 - Quantity of excavation shown in the Site 1 Estimated Quantities table may not correspond with the actual quantity of work and is shown for the comparison of bids only. There will be no increase in contract price or contract time if the actual quantity of excavation exceeds the estimated quantity shown in the Site 1 Estimated Quantities table up to a maximum of 200 cubic yards.
 - Dimensions shown on Typical Section - Site 1 are measured parallel to slope face.
 - Estimated quantities for TRM and Geogrid do not include overlap as required by manufacturer guidelines.
 - All PDEAs shall be installed at 45° to horizontal plane except at terminus at top limit of work as shown on Detail A on Sht. EC-11 and at bench as shown on Detail B on Sht. EC-11.
 - See Detail A on Sht. EC-11, Detail B on Sht. EC-11, Detail C on Sht. EC-11, for typical configuration of Geogrid and TRM at terminus.
 - See Detail D on Sht. EC-12 for typical Geogrid and TRM layout.
 - See Detail E on Sht. EC-12 for 5' and 10' PDEA details.
 - See Detail F on Sht. EC-12 for typical PDEA spacing.
 - See Detail G on Sht. EC-13 and Detail H on Sht. EC-13 for typical longitudinal view of rills and gullies, and slope face.



TYPICAL SECTION - SITE 1
Scale: 1"=10'

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NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
FILE	

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TYPICAL SECTION
SITE 1**

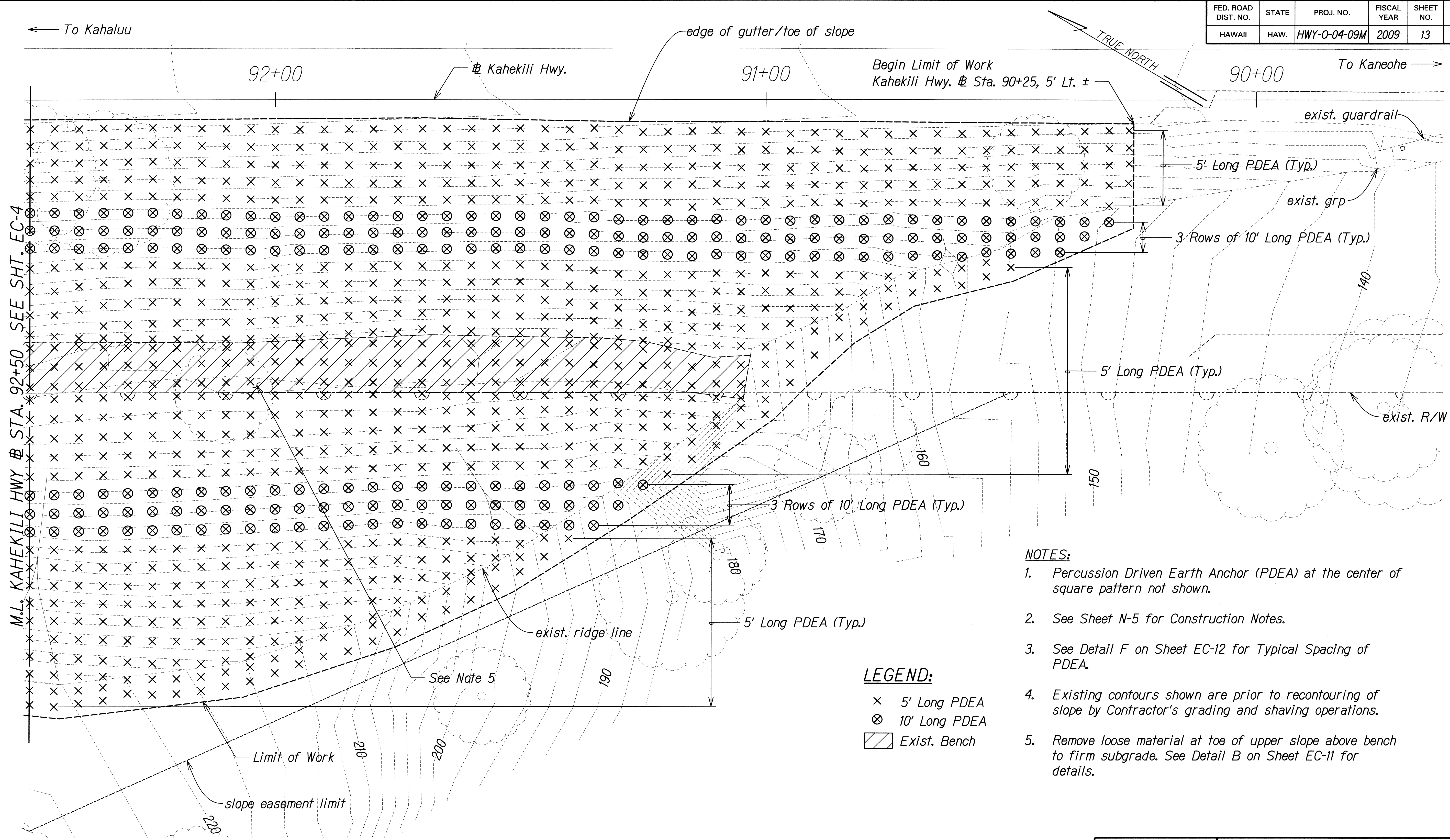
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M

Scale: 1"=10' Date: April 2009

SHEET No. EC-2 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	13	65



- NOTES:**
1. Percussion Driven Earth Anchor (PDEA) at the center of square pattern not shown.
 2. See Sheet N-5 for Construction Notes.
 3. See Detail F on Sheet EC-12 for Typical Spacing of PDEA.
 4. Existing contours shown are prior to recontouring of slope by Contractor's grading and shaving operations.
 5. Remove loose material at toe of upper slope above bench to firm subgrade. See Detail B on Sheet EC-11 for details.

- LEGEND:**
- × 5' Long PDEA
 - ⊗ 10' Long PDEA
 - ▨ Exist. Bench

PLAN - SITE 1 PDEA LAYOUT
Scale: 1"=10'-0"

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

JAIME M. SAAVEDRA
LICENSED PROFESSIONAL ENGINEER
No. 7309-C
HAWAII, U.S.A.

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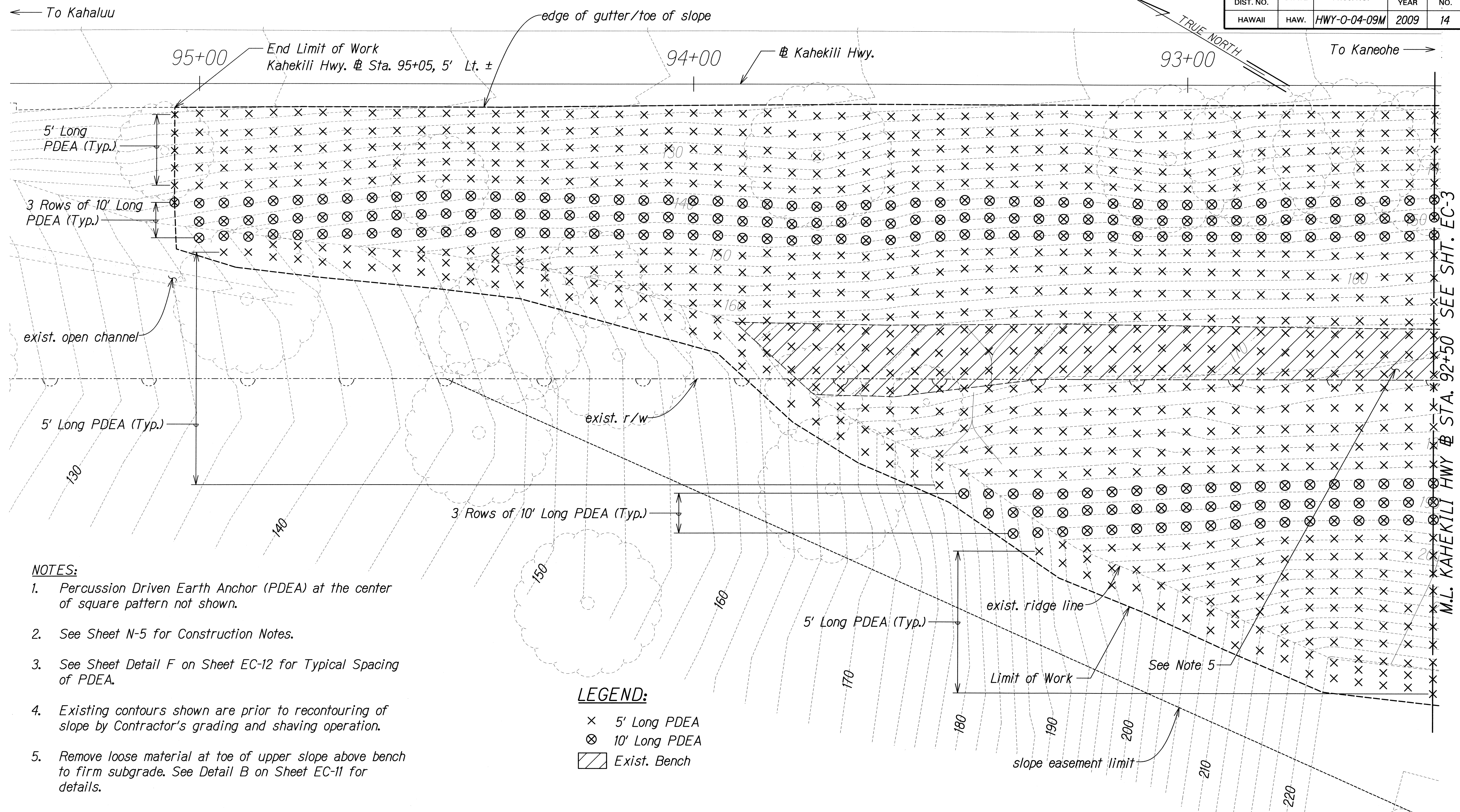
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ANCHOR LAYOUT PLAN - SITE 1

SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: 1"=10' Date: April 2009

SHEET No. EC-3 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-09M	2009	14	65



NOTES:

1. Percussion Driven Earth Anchor (PDEA) at the center of square pattern not shown.
2. See Sheet N-5 for Construction Notes.
3. See Sheet Detail F on Sheet EC-12 for Typical Spacing of PDEA.
4. Existing contours shown are prior to recontouring of slope by Contractor's grading and shaving operation.
5. Remove loose material at toe of upper slope above bench to firm subgrade. See Detail B on Sheet EC-11 for details.

LEGEND:

- × 5' Long PDEA
- ⊗ 10' Long PDEA
- ▨ Exist. Bench

PLAN - SITE 1 PDEA LAYOUT

Scale: 1"=10'-0"

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

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Jaime M. Saavedra

04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ANCHOR LAYOUT PLAN - SITE 1

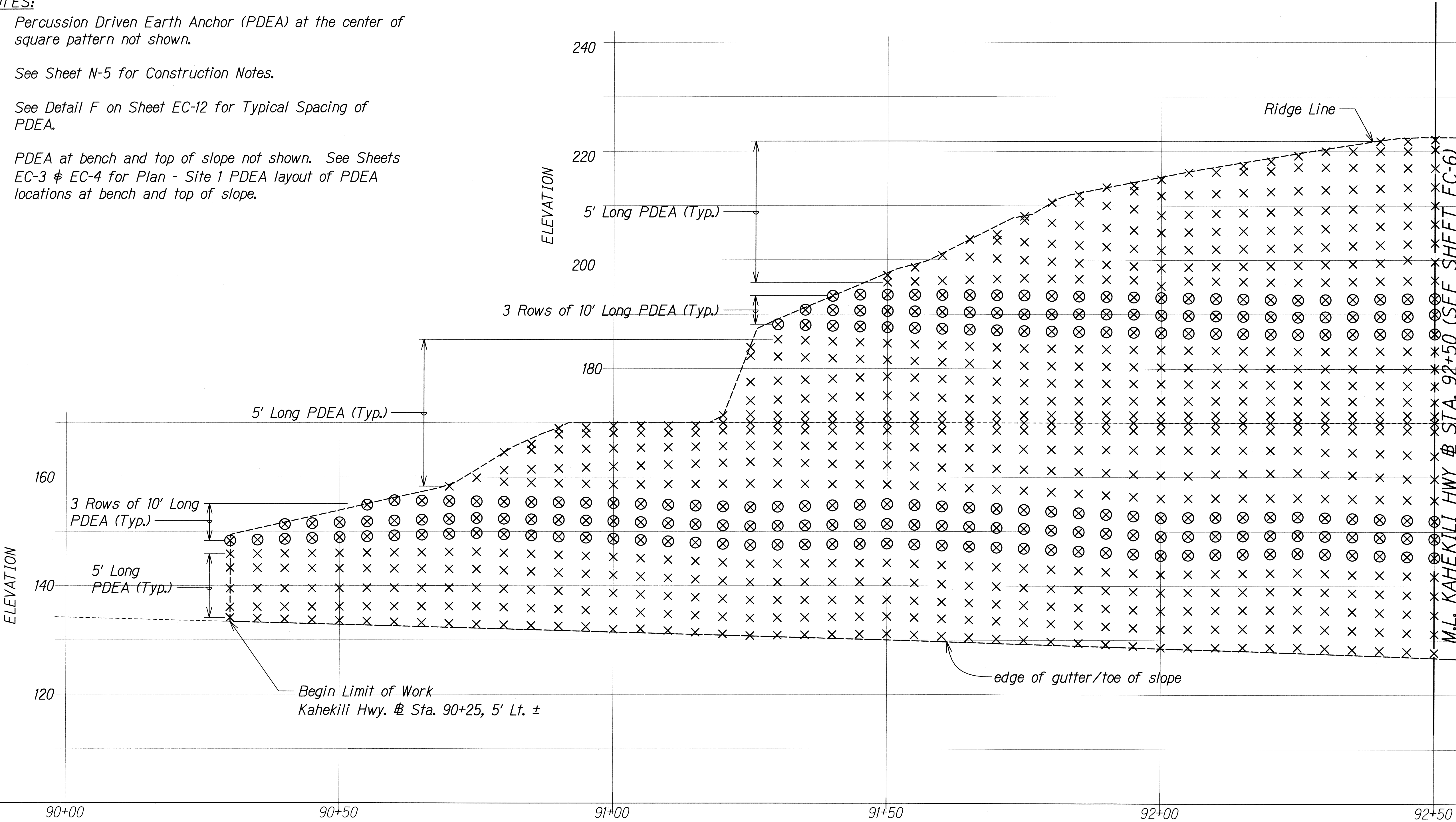
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-O-04-09M

Scale: 1"=10' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	15	65

- NOTES:**
- Percussion Driven Earth Anchor (PDEA) at the center of square pattern not shown.
 - See Sheet N-5 for Construction Notes.
 - See Detail F on Sheet EC-12 for Typical Spacing of PDEA.
 - PDEA at bench and top of slope not shown. See Sheets EC-3 & EC-4 for Plan - Site 1 PDEA layout of PDEA locations at bench and top of slope.



- LEGEND:**
- x 5' Long PDEA
 - o 10' Long PDEA

ELEVATION - SITE 1 PDEA LAYOUT
Scale: 1"=10'-0"

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SIGNATURE: *Jaime M. Saavedra* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ANCHOR LAYOUT
ELEVATION - SITE 1**

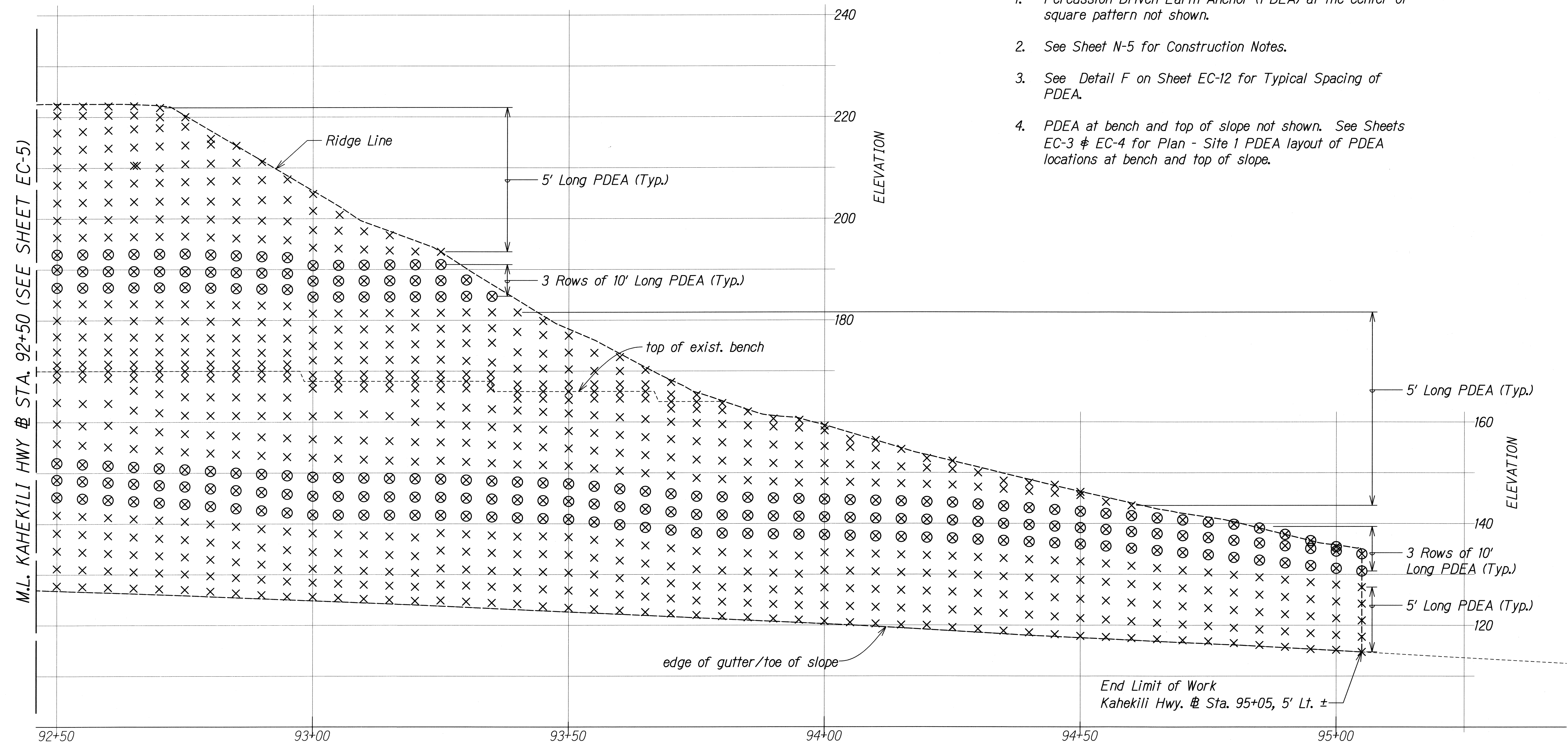
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
Date: April 2009

Scale: 1"=10'

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	16	65

- NOTES:**
1. Percussion Driven Earth Anchor (PDEA) at the center of square pattern not shown.
 2. See Sheet N-5 for Construction Notes.
 3. See Detail F on Sheet EC-12 for Typical Spacing of PDEA.
 4. PDEA at bench and top of slope not shown. See Sheets EC-3 & EC-4 for Plan - Site 1 PDEA layout of PDEA locations at bench and top of slope.



LEGEND:

× 5' Long PDEA

⊗ 10' Long PDEA

ELEVATION - SITE 1 PDEA LAYOUT

Scale: 1"=10'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	CHECKED BY	
	QUANTITY BY	
	CHECKED BY	

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Signature: *Jaime* 04/30/10

EXPIRATION DATE OF THE LICENSE

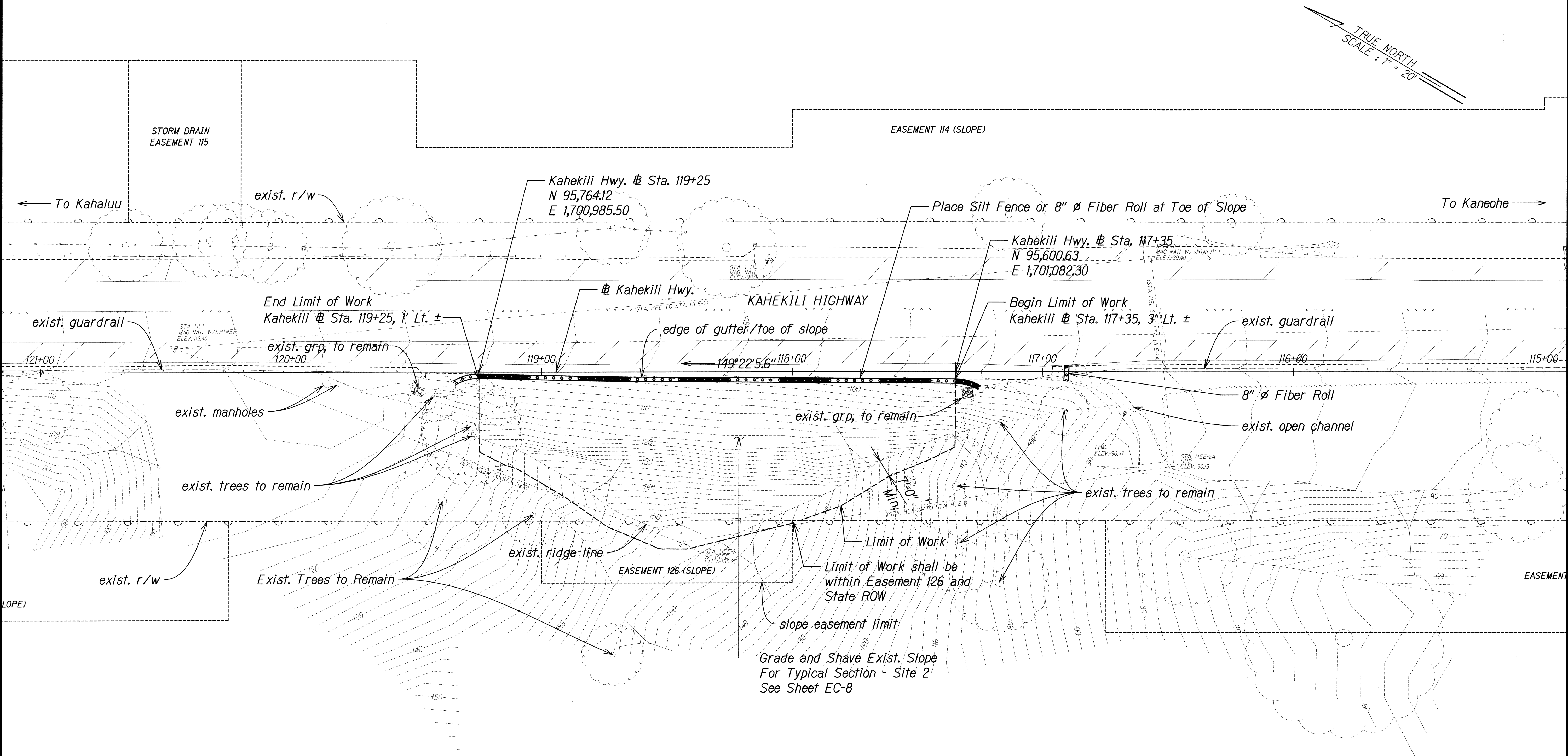
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ANCHOR LAYOUT
ELEVATION - SITE 1**

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
Scale: 1"=10' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	17	65



- NOTES:**
- See Sheet N-5 for Construction Notes.
 - Remove all vegetation within limit of work.

PLAN - SITE 2
Scale: 1" = 20'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

JAIME M. SAAVEDRA
LICENSED PROFESSIONAL ENGINEER
No. 7309-C
HAWAII, U.S.A.

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SIGNATURE: *Jaime M. Saavedra* EXPIRATION DATE: 04/30/10 OF THE LICENSE

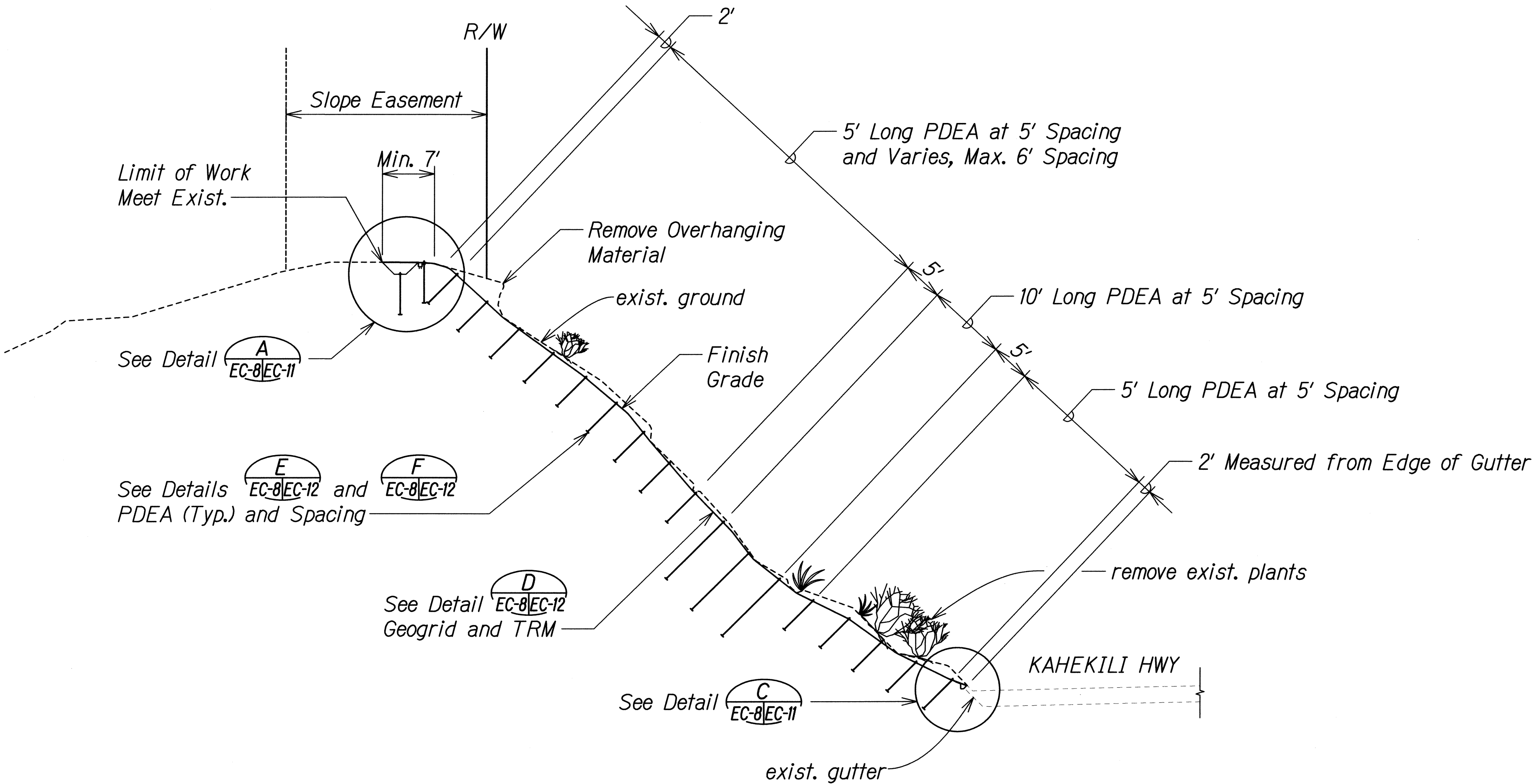
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING PLAN
KAHEKILI HIGHWAY - SITE 2
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: 1"=20' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	18	65

SITE 2 ESTIMATED QUANTITIES		
Excavation	200	C.Y.
TRM	12,400	S.F.
Geogrid	12,400	S.F.
5' LONG PDEA	842	EA.
10' Long PDEA	188	EA.

- NOTES:**
- Rills are small channels on slope face up to 12" in depth. Gullies on slope face are channels greater than 12" in depth.
 - Quantity of excavation shown in the Site 2 Estimated Quantities table may not correspond with the actual quantity of work and is shown for the comparison of bids only. There will be no increase in contract price or contract time if the actual quantity of excavation exceeds the estimated quantity shown in the Site 2 Estimated Quantities table up to a maximum of 75 cubic yards.
 - Dimensions shown on Typical Section - Site 2 are measured parallel to slope face.
 - Estimated quantities for TRM and Geogrid do not include overlap as required by manufacturer guidelines.
 - All PDEAs shall be installed at 45° to horizontal plane except at terminus at top limit of work as shown on Detail A on Sht. EC-11.
 - See Detail A on Sht. EC-11 and Detail C on Sht. EC-11, for typical configuration of Geogrid and TRM at terminus.
 - See Detail D on Sht. EC-12 for typical Geogrid and TRM layout.
 - See Detail E on Sht. EC-12 for 5' and 10' PDEA details.
 - See Detail F on Sht. EC-12 for typical PDEA spacing.
 - See Detail G on Sht. EC-13 and Detail H on Sht. EC-13 for typical longitudinal view of rills and gullies, and slope face.



TYPICAL SECTION - SITE 2
Scale: 1"=10'

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NO. 1	

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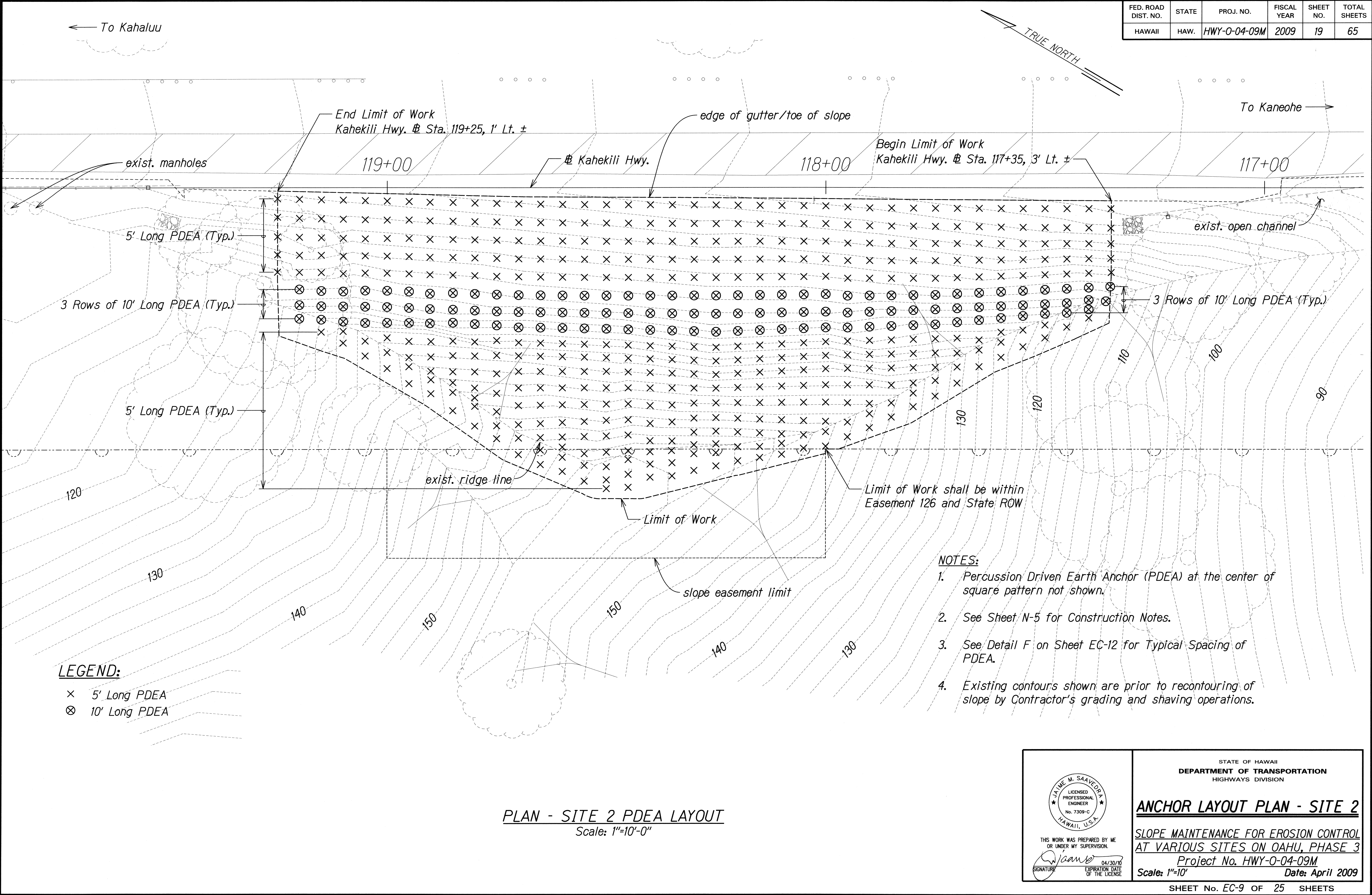
SIGNATURE: *Jaime M. Saavedra* EXPIRATION DATE OF THE LICENSE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TYPICAL SECTION
SITE 2**

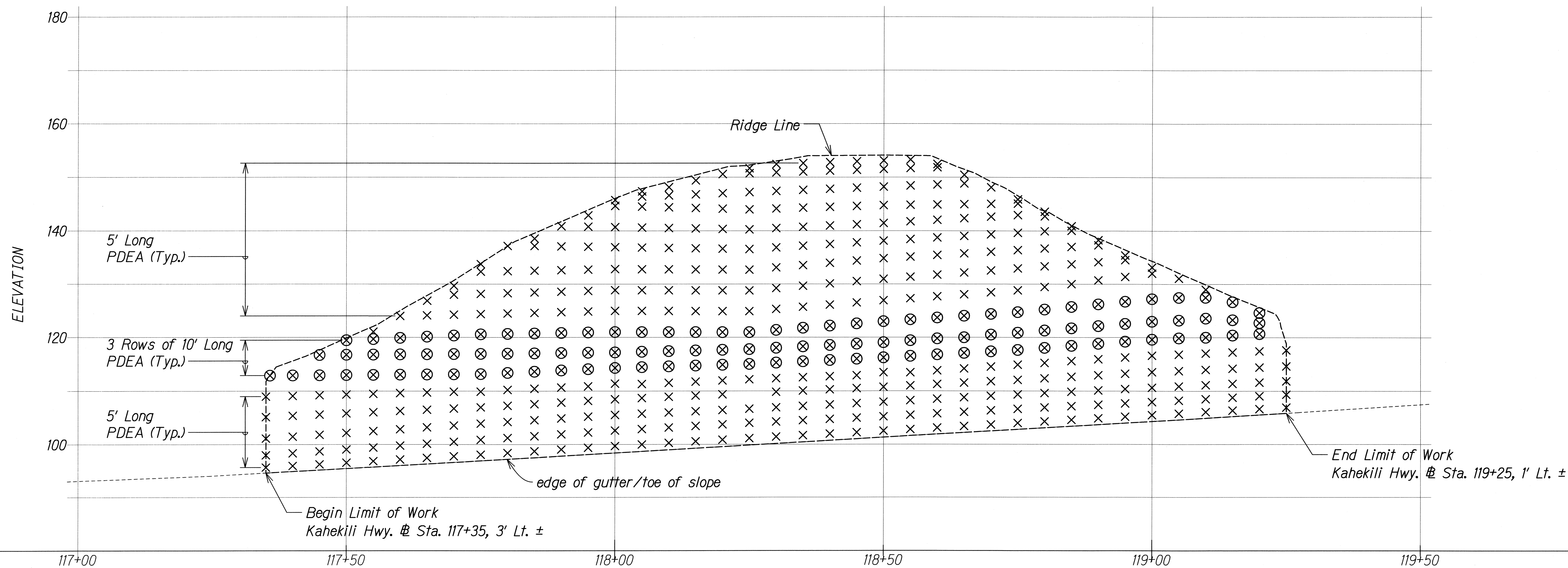
SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: 1"=10' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	19	65



SURVEY PLOTTED BY	DATE
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DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	20	65



- NOTES:**
1. Percussion Driven Earth Anchor (PDEA) at the center of square pattern not shown.
 2. See Sheet N-5 for Construction Notes.
 3. See Detail F on Sheet EC-12 for Typical Spacing of PDEA.
 4. PDEA at top of slope not shown. See Sheet EC-9 for Plan - Site 1 PDEA Layout of PDEA locations at top of slope.

- LEGEND:**
- × 5' Long PDEA
 - ⊗ 10' Long PDEA

ELEVATION - SITE 2 PDEA LAYOUT
Scale: 1"=10'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
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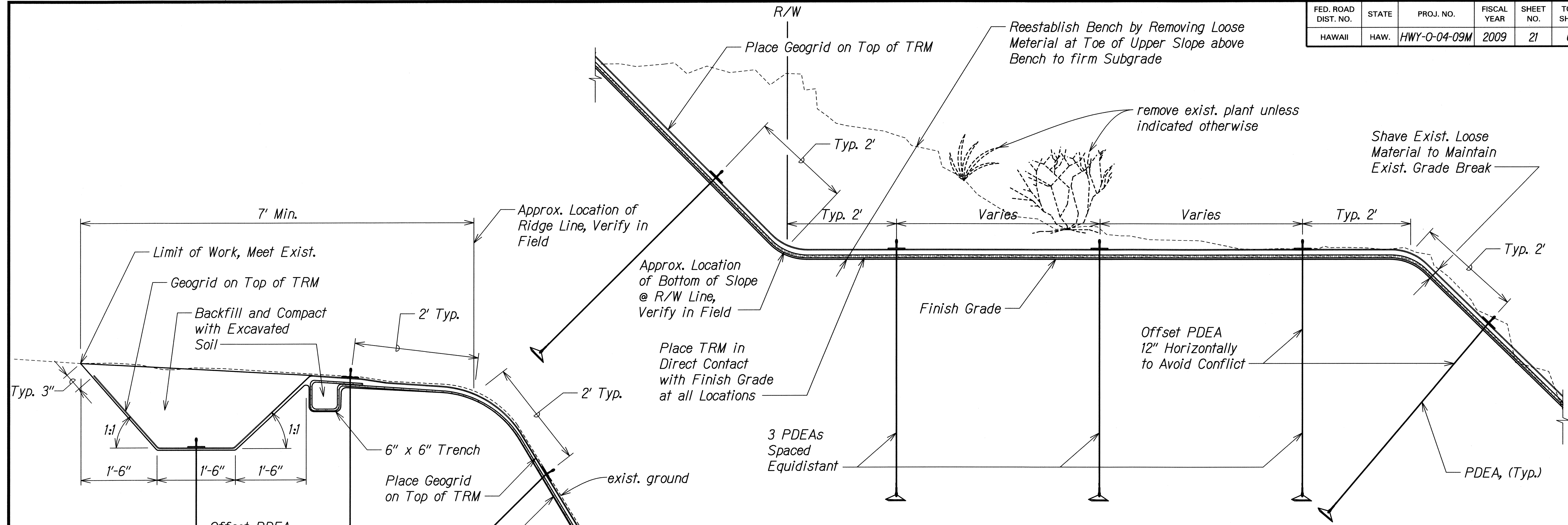
SIGNATURE: *Jaime* EXPIRATION DATE: 04/30/10 OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**ANCHOR LAYOUT
ELEVATION - SITE 2**

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: 1"=10' Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	21	65

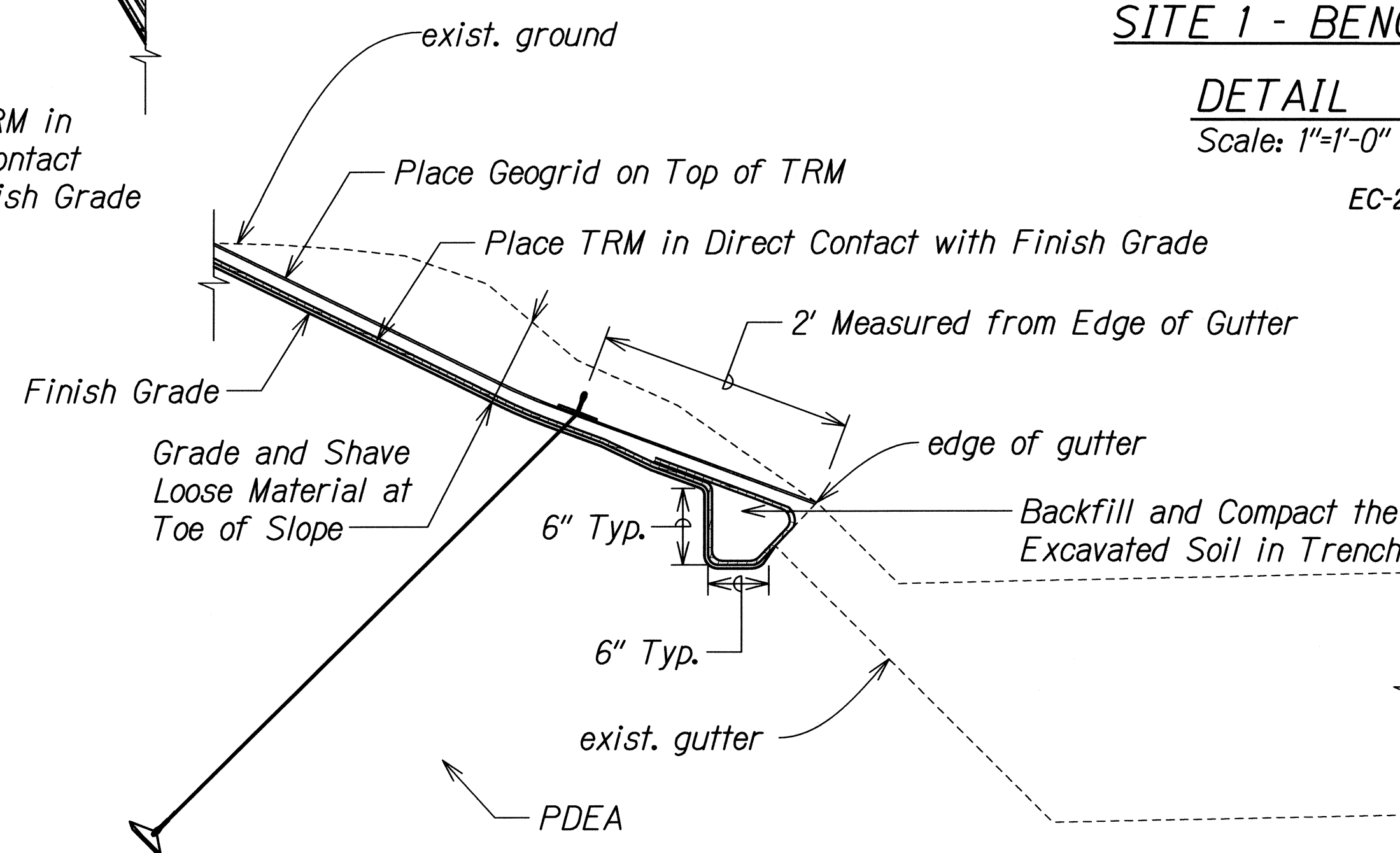


SITE 1 - BENCH DETAIL

DETAIL
Scale: 1"=1'-0"
EC-2 EC-11

TERMINUS AT TOP LIMIT OF WORK

DETAIL
Scale: 1"=1'-0"
EC-2, EC-8 EC-11



TERMINUS AT BOTTOM LIMIT OF WORK

DETAIL
Scale: 1"=1'-0"
EC-2, EC-8 EC-11

NOTE:
Install Geogrid and TRM at terminus per manufacturer's recommendation.

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Signature: *Jaime M. Saavedra*
EXPIRATION DATE OF THE LICENSE: 04/30/10

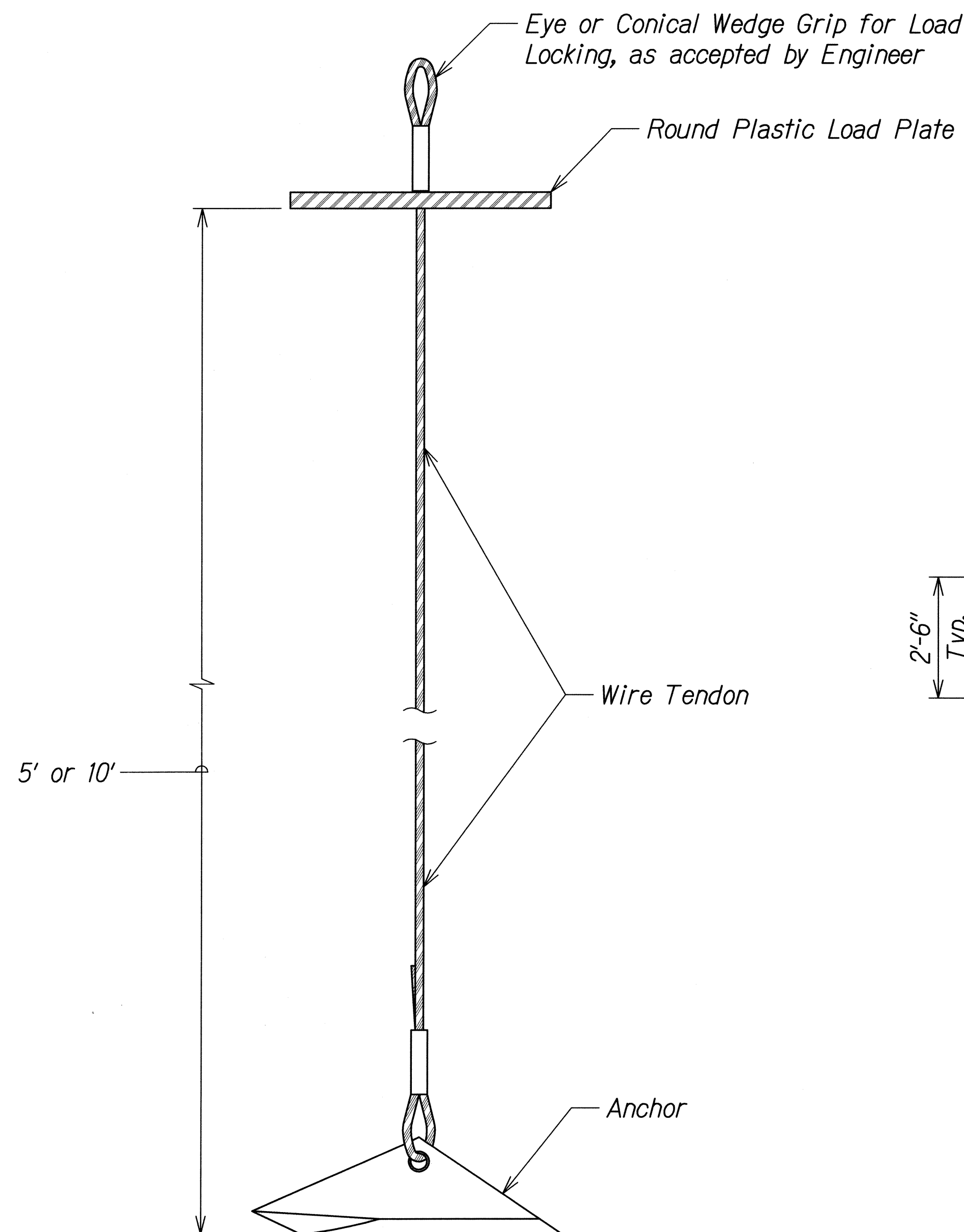
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL DETAILS

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3
Project No. HWY-0-04-09M
Scale: None Date: April 2009

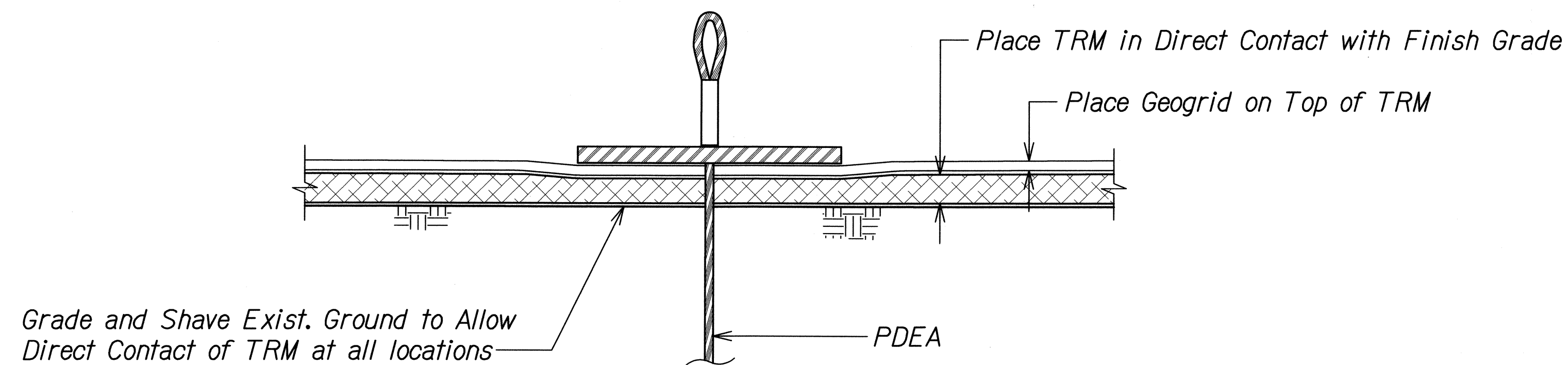
SHEET No. EC-11 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	22	65



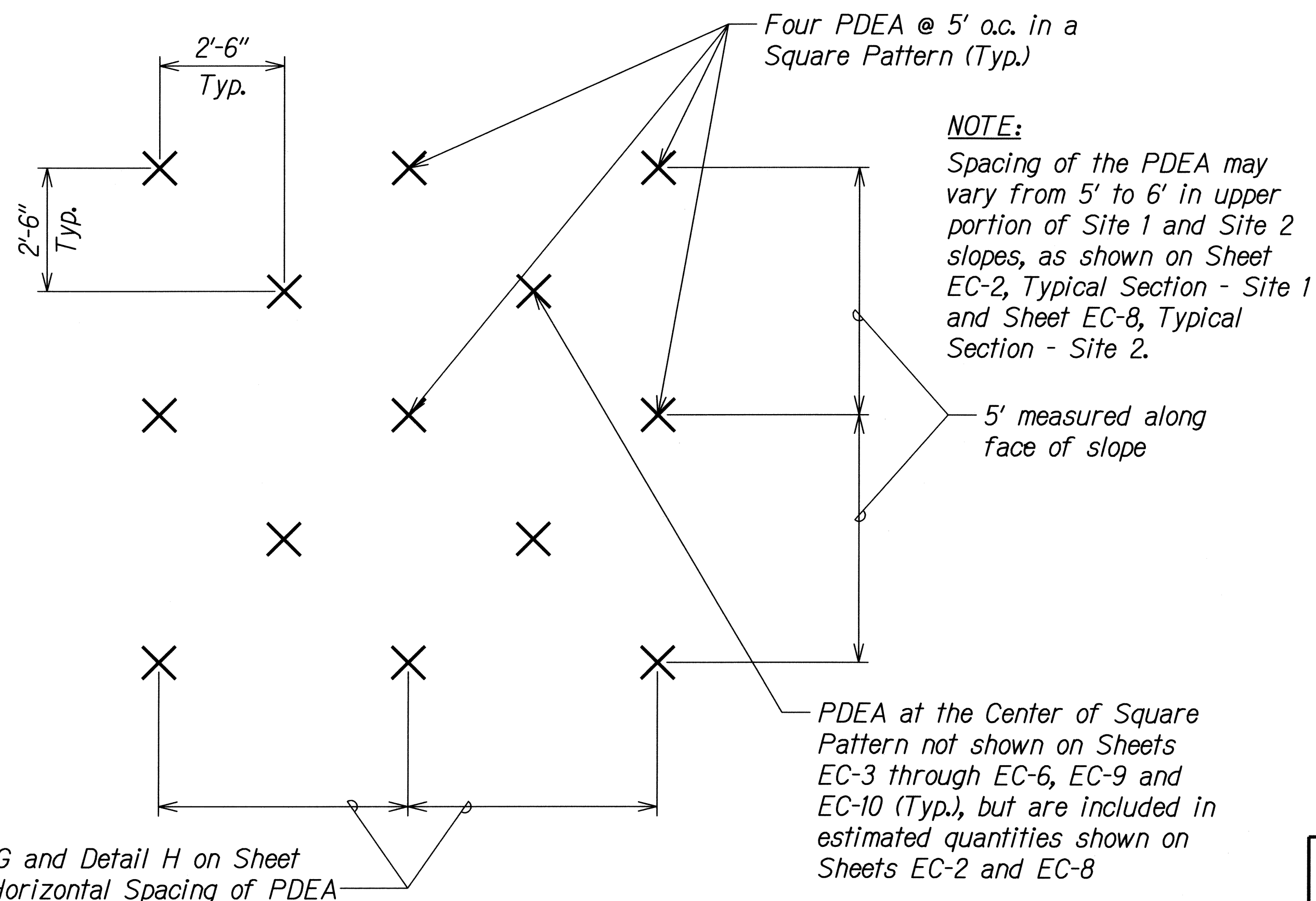
NOTE:
For PDEA material and requirements, see Specifications Section 672.

PDEA
DETAIL
NTS
EC-2, EC-8 EC-12



TYPICAL GEOGRID AND TRM LAYOUT ON SLOPE

DETAIL
NTS
EC-2, EC-8 EC-12



See Detail G and Detail H on Sheet EC-13 for Horizontal Spacing of PDEA

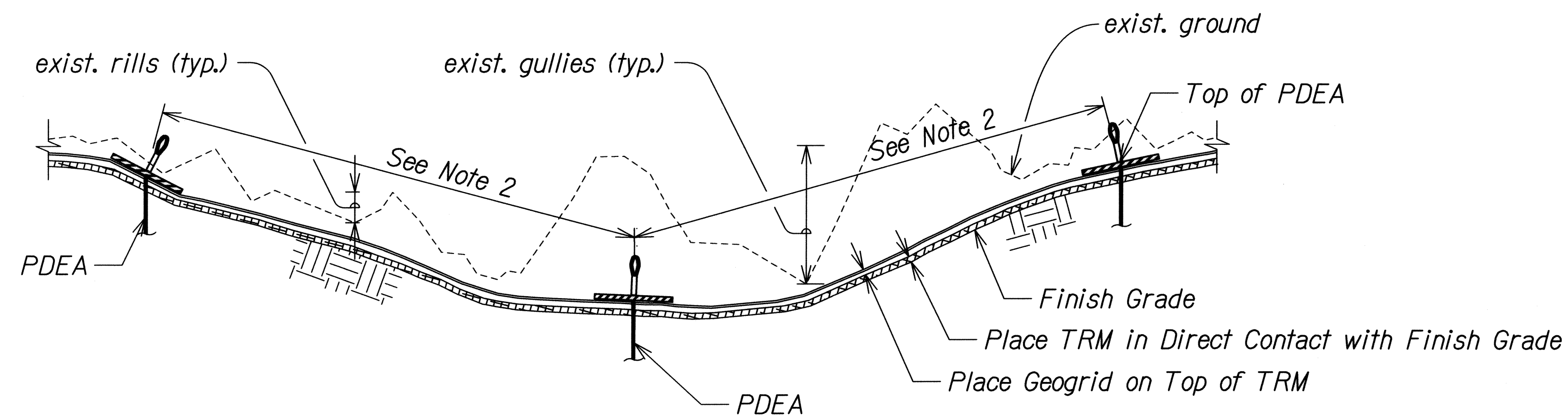
TYPICAL SPACING OF PDEA
DETAIL
Scale: 1/2"=1'-0"
EC-2, EC-8 EC-12

	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
	EROSION CONTROL DETAILS	
	SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3 Project No. HWY-0-04-09M	
	Scale: None	Date: April 2009

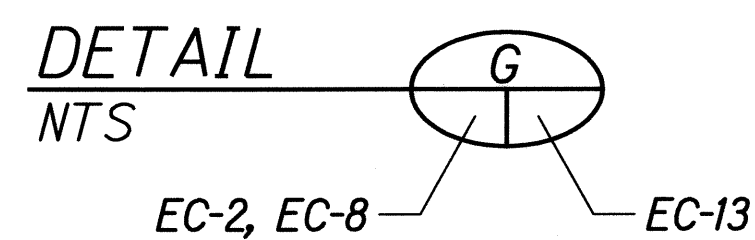
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SHEET No. EC-12 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	23	65

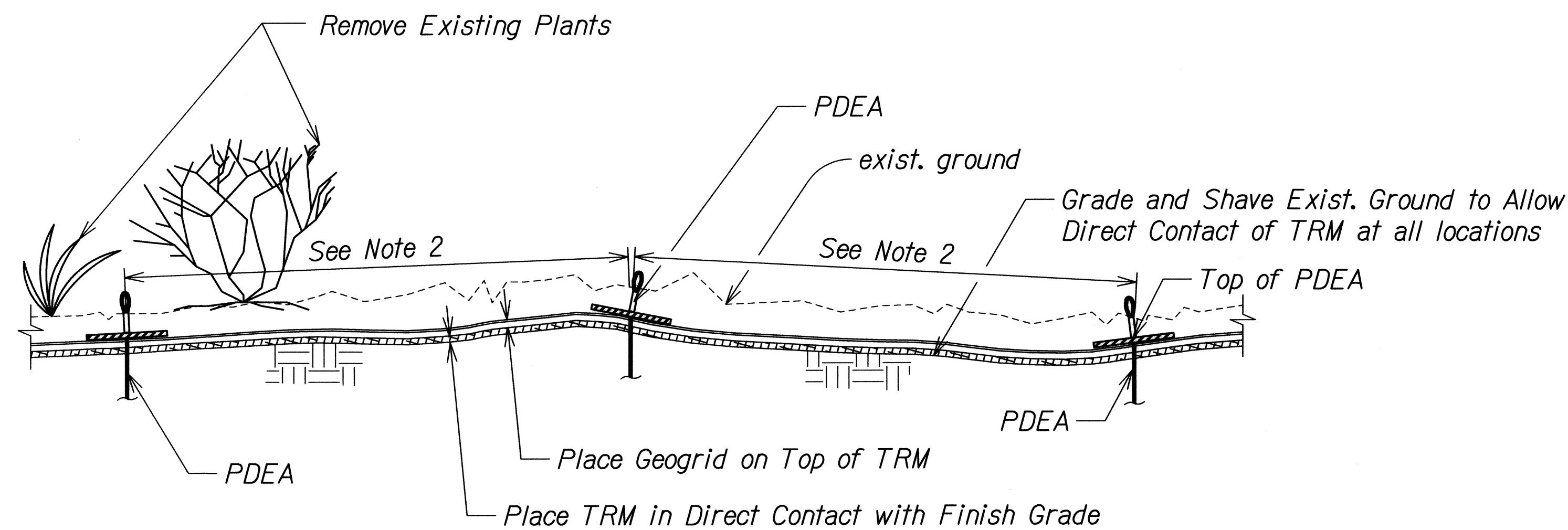


TYPICAL LONGITUDINAL VIEW OF RILLS AND GULLIES

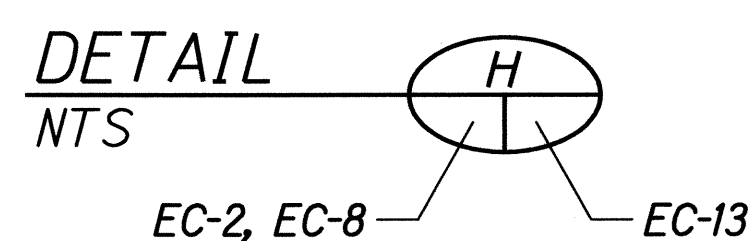


NOTES:

1. Remove rills, gullies, plants and loose materials. Finish grade must be smooth enough to allow TRM in direct contact at all place.
2. 5' on center measured between top of PDEAs.



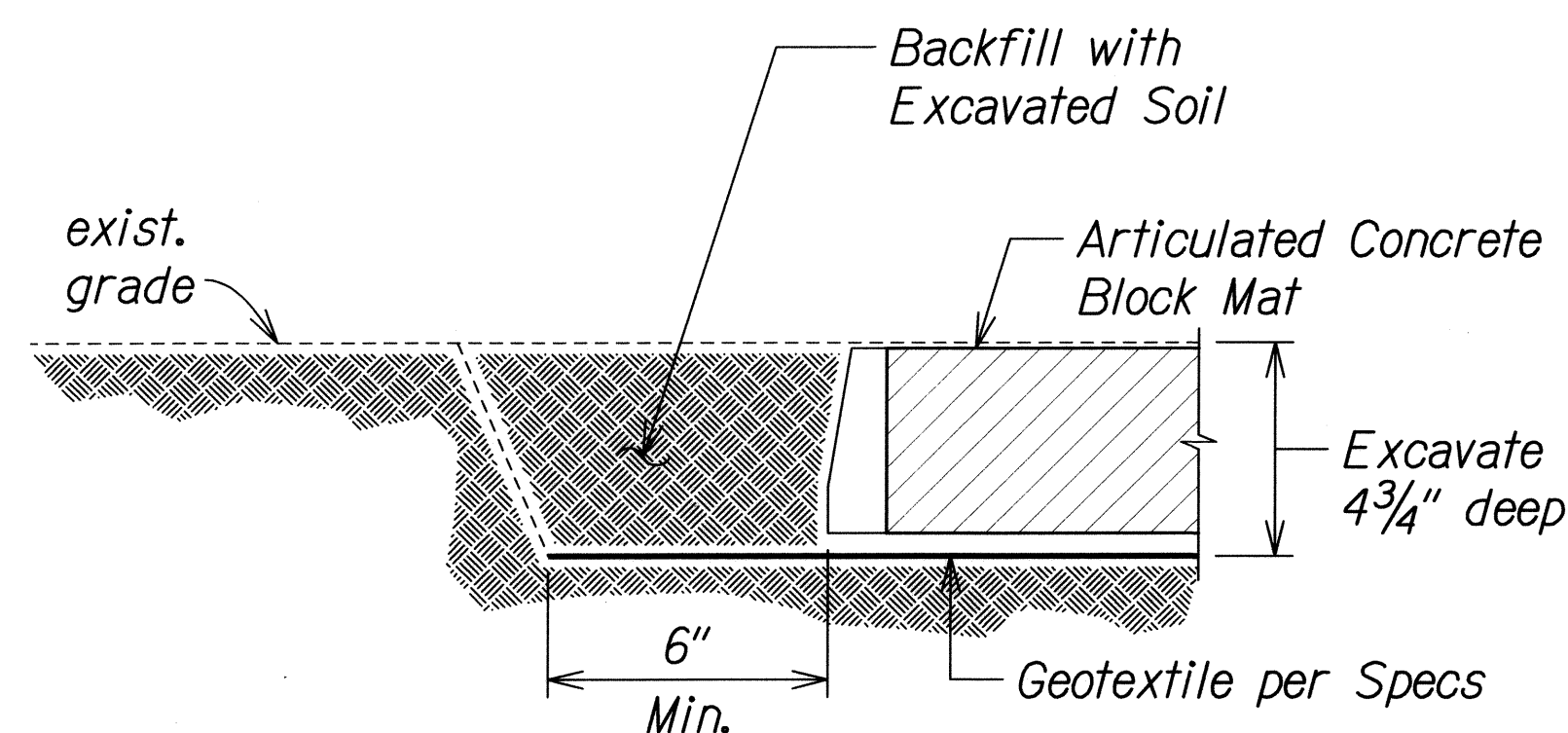
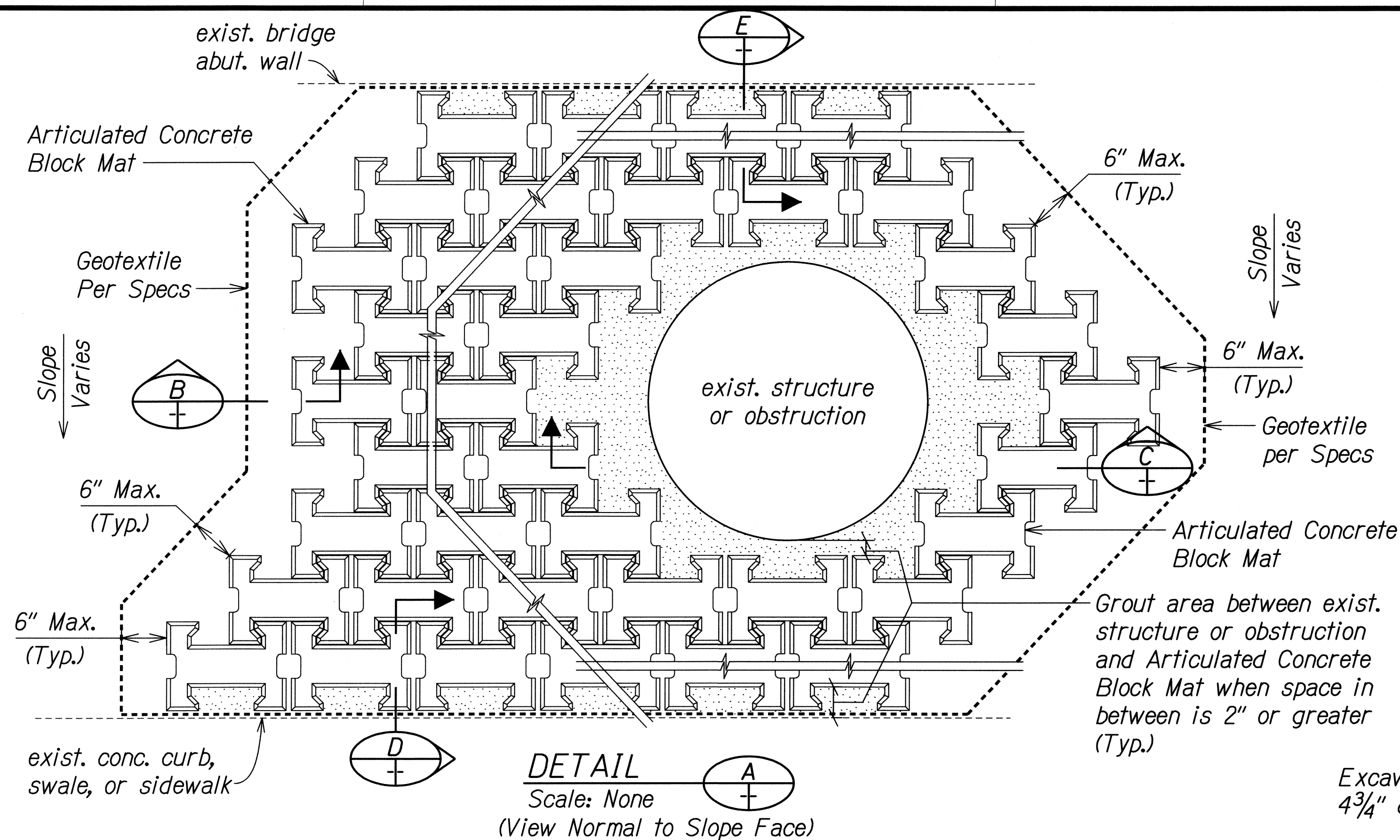
TYPICAL LONGITUDINAL VIEW OF SLOPE FACE



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	SHEET No. EC-13 OF 25 SHEETS
	23
	23

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

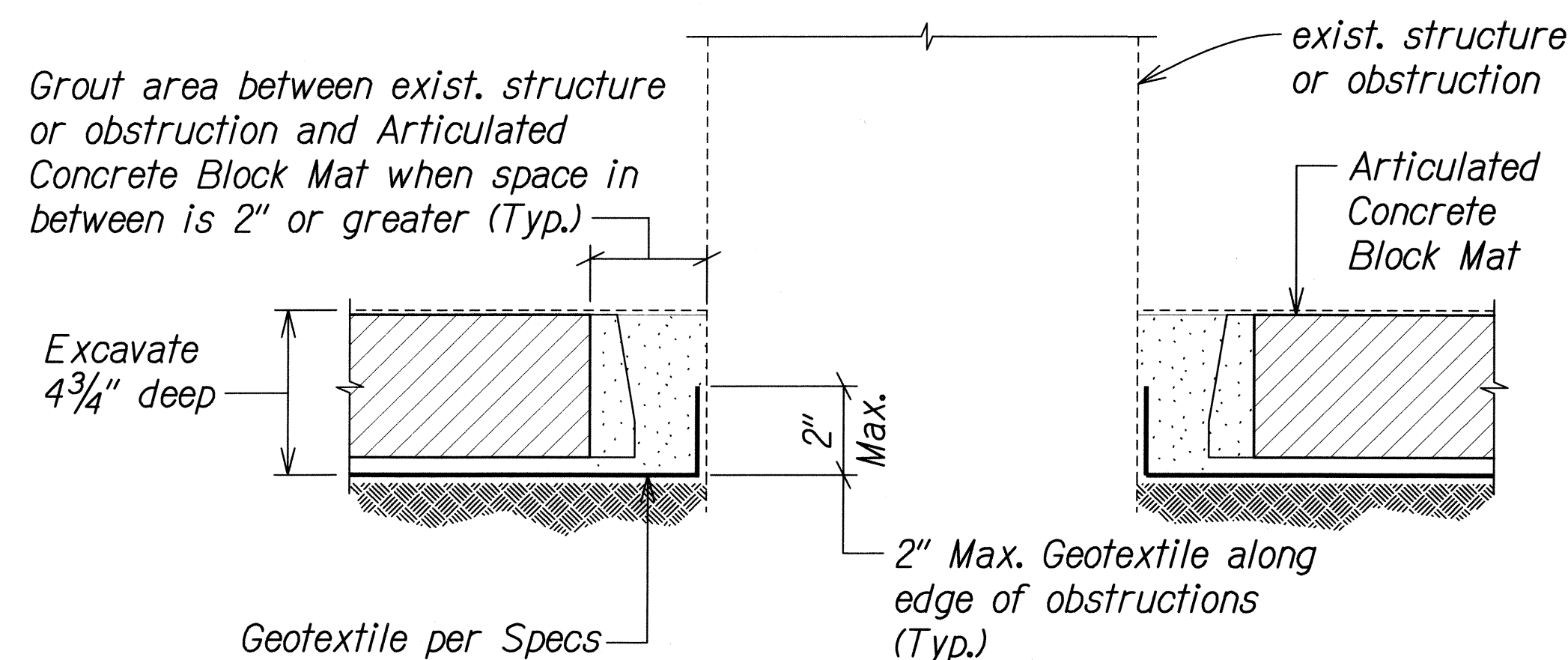
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-09M	2009	24	65



SECTION TO MEET EXISTING GRADE

Scale: None

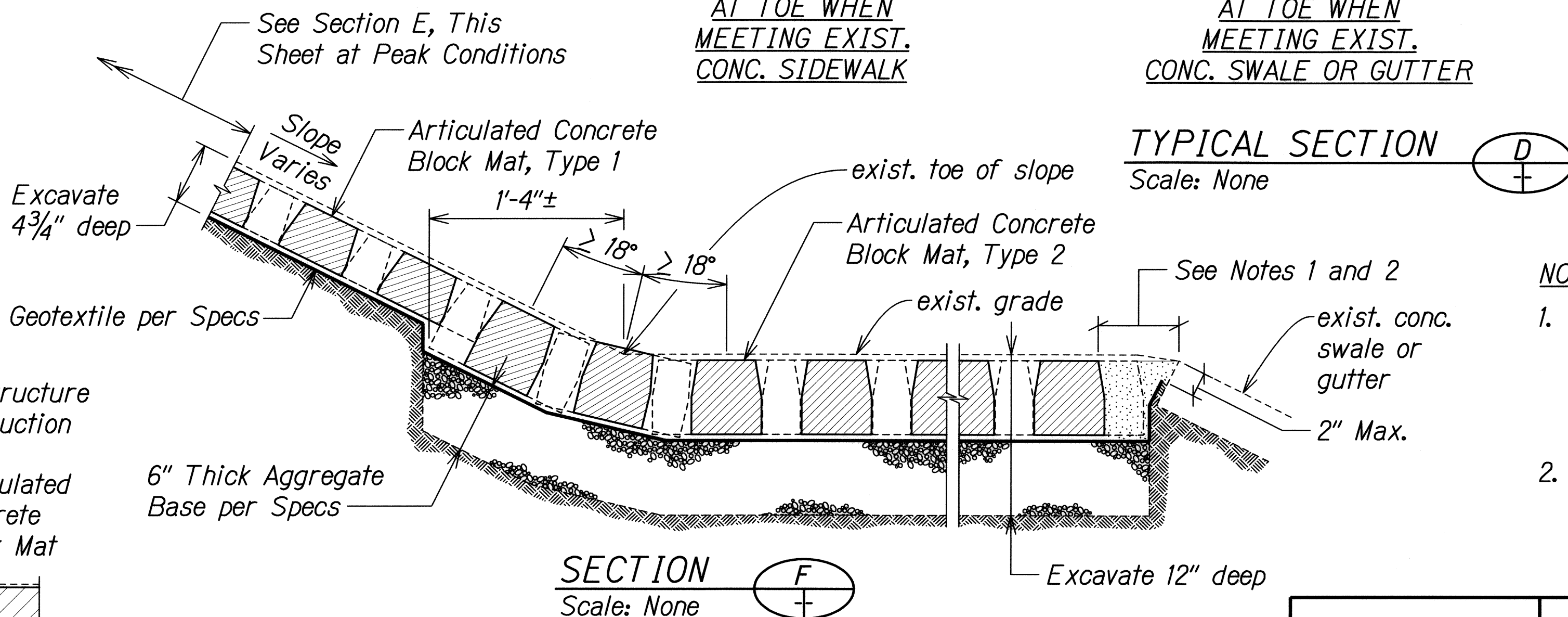
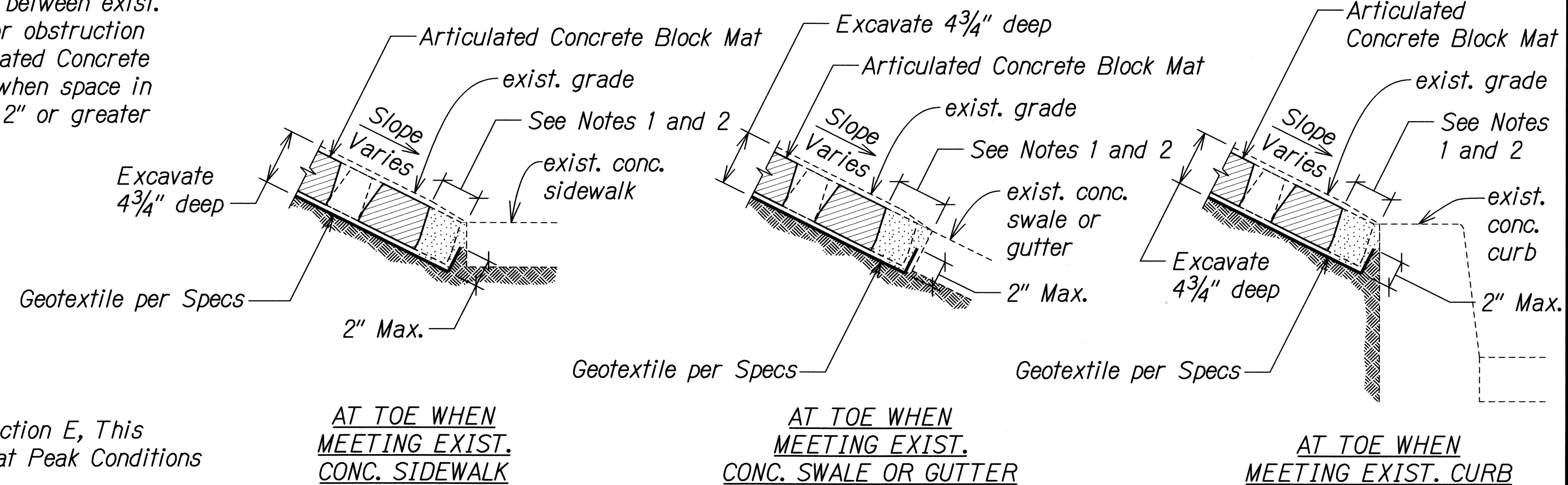
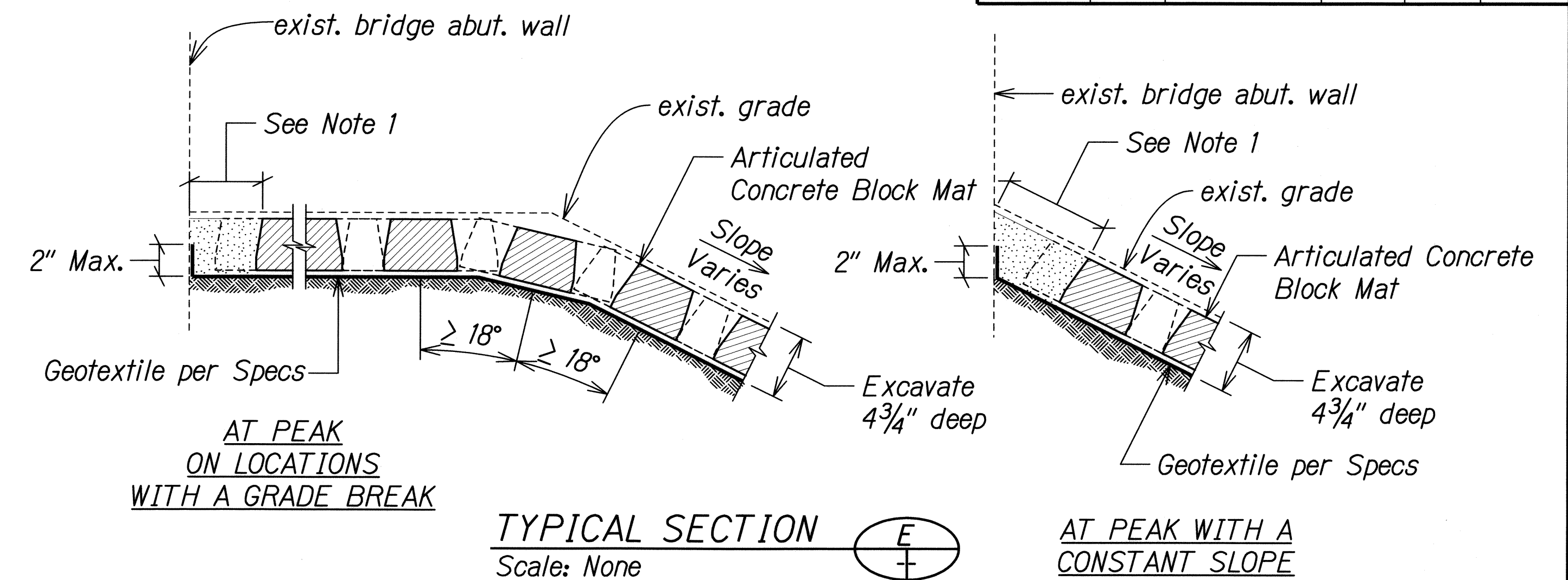
(B)



SECTION AT OBSTRUCTIONS

Scale: None

(C)



- NOTES:**
1. Grout area between exist. structure or obstruction and Articulated Concrete Block Mat when space in between is 2" or greater (Typ.)
 2. Grout all gaps at toe of ACBM.

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	
CHECKED BY	
DATE	

GERALD D. ANDRADE
LICENSED PROFESSIONAL ENGINEER
No. 10377-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* 04/30/10
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ARTICULATED CONCRETE BLOCK MAT DETAILS

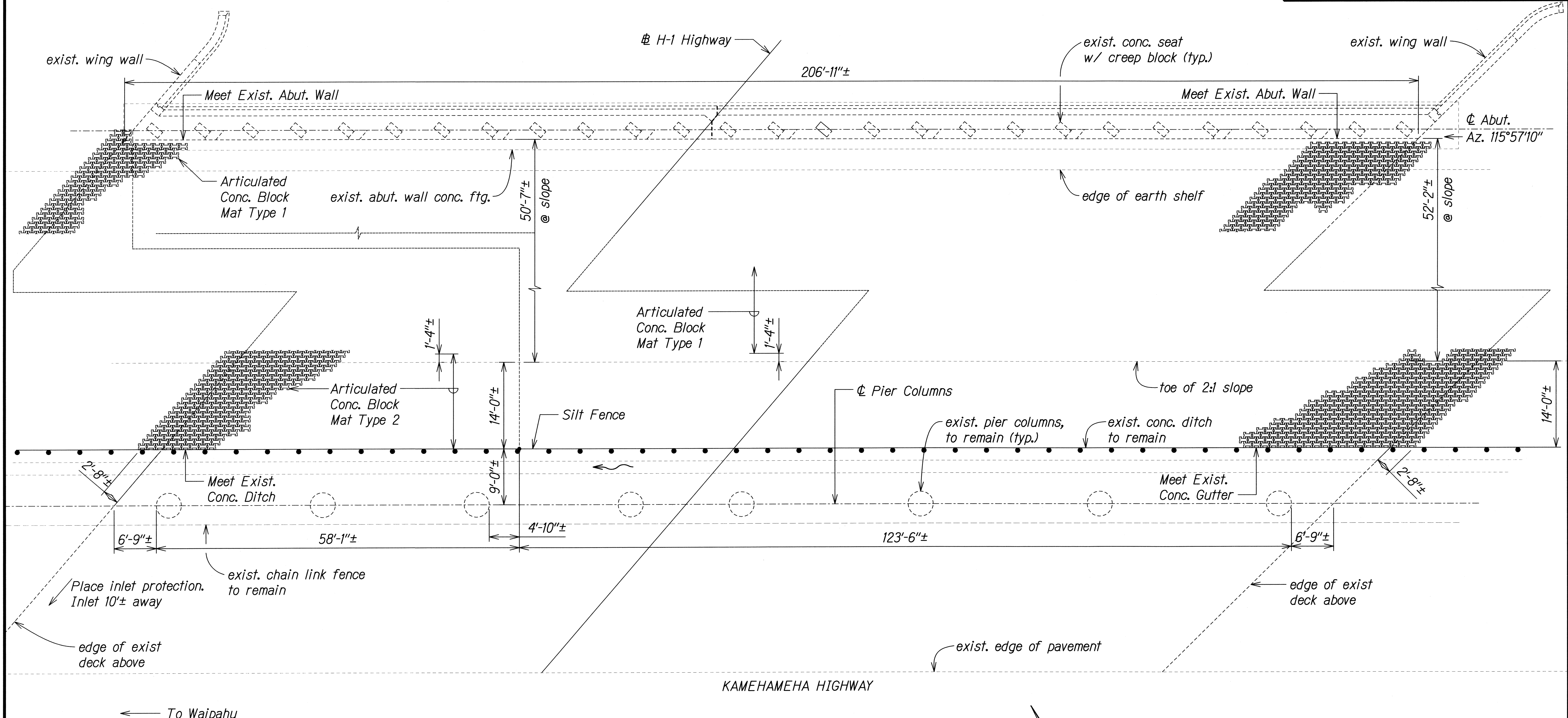
SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-O-04-09M

Scale: None Date: April 2009

SHEET No. EC-14 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	25	65



Note: For Traffic Control Plans
See Sheet TC-11

**EROSION CONTROL PLAN SITE 3 -
INTERSTATE ROUTE H-1, PEARL CITY VIADUCT ABUTMENT NO. 2**
Scale: 1/8" = 1'-0"

Estimated Area of Articulated Concrete Block Mat Type 1 measured along slope face: 11,544 SQ. FT.
Estimated Area of Articulated Concrete Block Mat Type 2: 3,124 SQ. FT.



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Signature: *Gerald D. Andrade* EXPIRATION DATE: 04/30/10
OF THE LICENSE

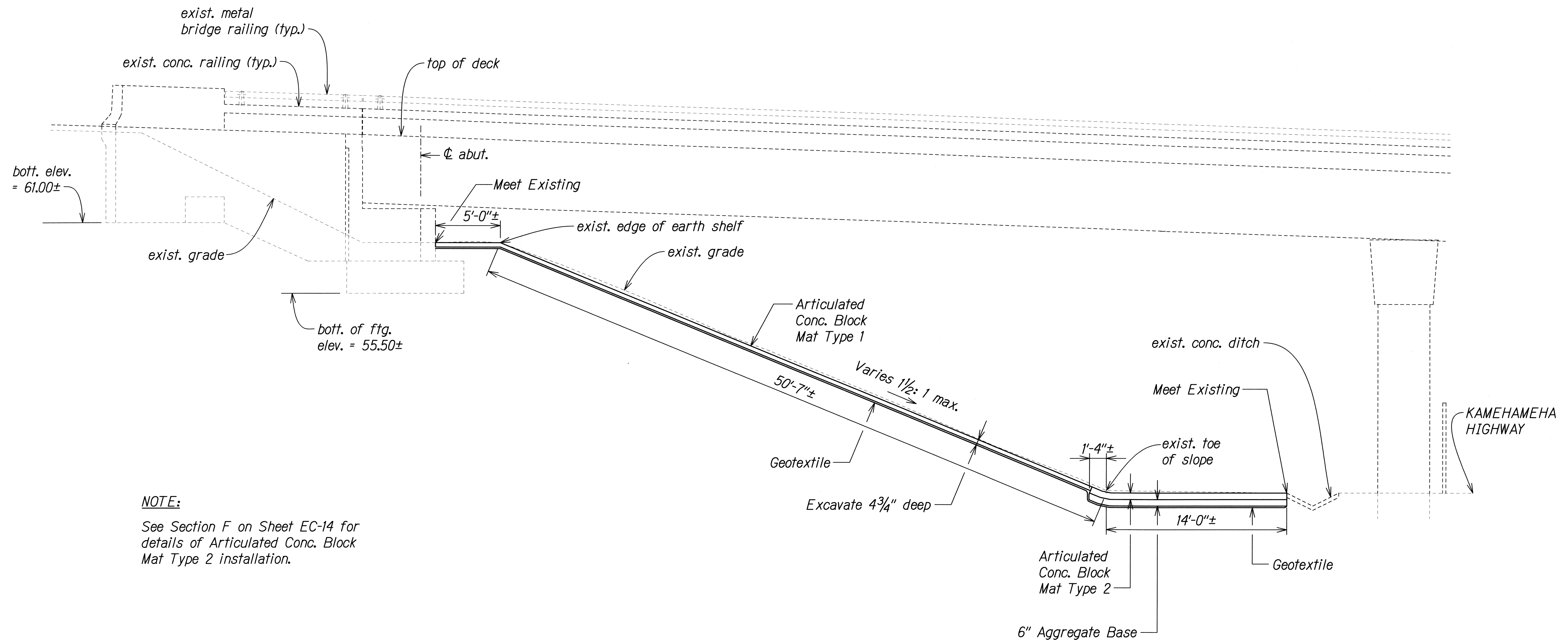
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL PLAN
SITE 3

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
Scale: As Shown Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	26	65



NOTE:
See Section F on Sheet EC-14 for details of Articulated Conc. Block Mat Type 2 installation.

LEFT ELEVATION - SITE 3
Scale: 1/4" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
DATE	

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 SIGNATURE EXPIRATION DATE OF THE LICENSE

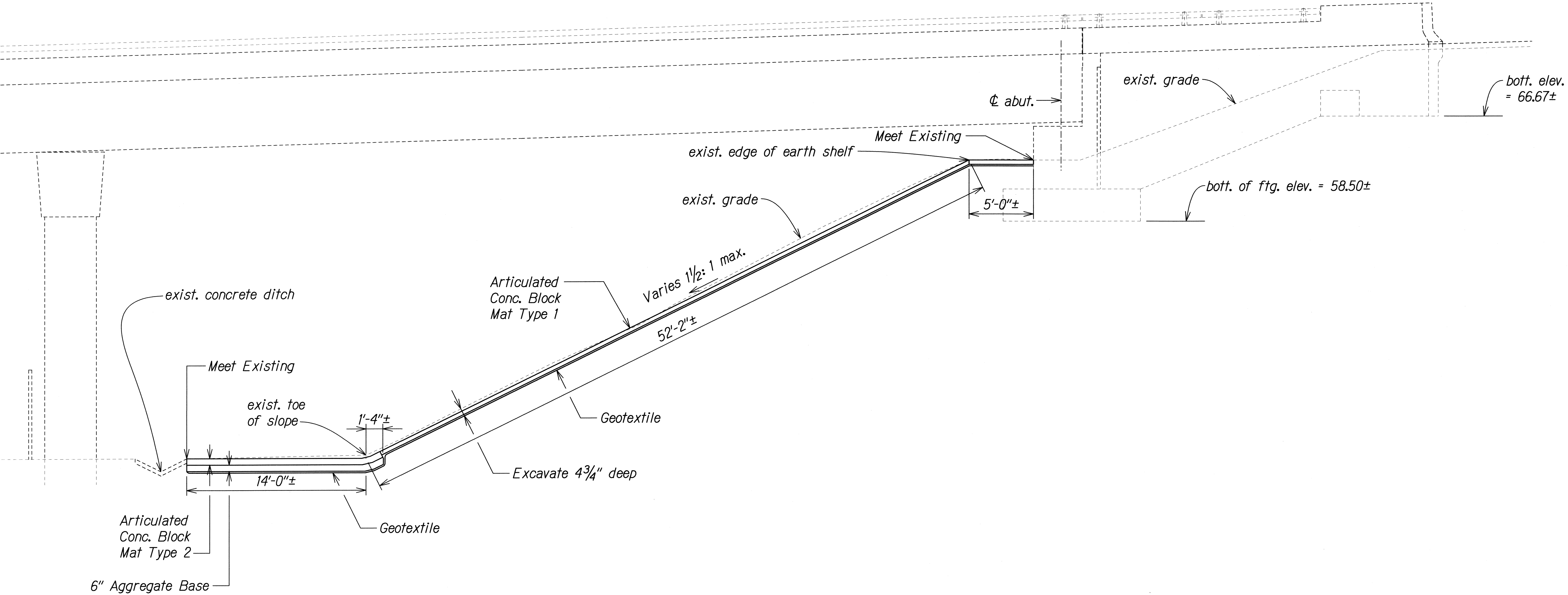
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**EROSION CONTROL
 ELEVATION - SITE 3**

SLOPE MAINTENANCE FOR EROSION CONTROL
 AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
 Scale: As Shown Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	27	65



RIGHT ELEVATION - SITE 3
Scale: 1/4" = 1'-0"

NOTE:
See Section F on Sheet EC-14 for details of Articulated Conc. Block Mat Type 2 installation.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK		
NO.		

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 EXPIRATION DATE OF THE LICENSE

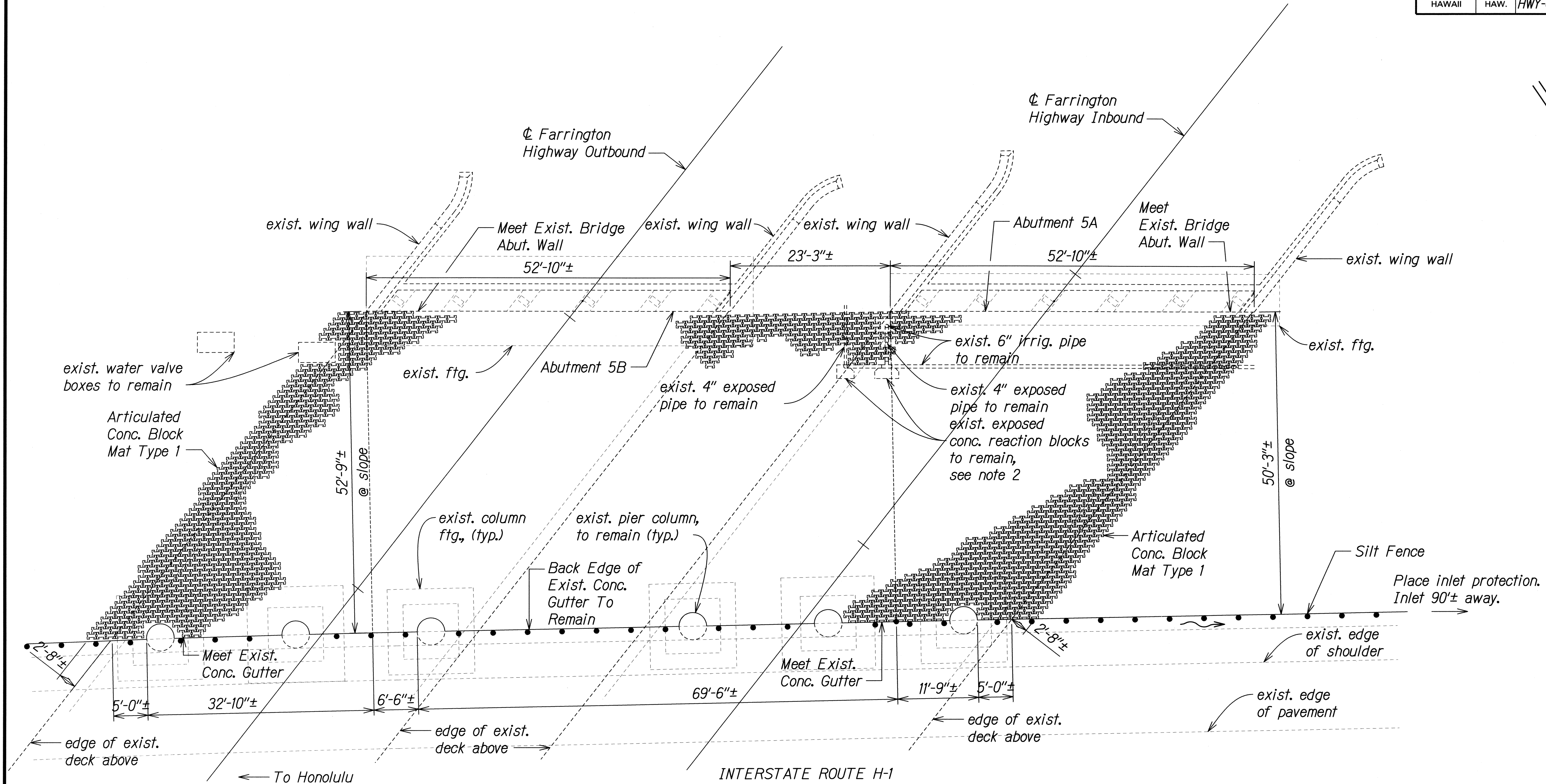
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**EROSION CONTROL
 ELEVATION - SITE 3**

SLOPE MAINTENANCE FOR EROSION CONTROL
 AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
 Scale: As Shown Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-09M	2009	28	65



NOTE:

- For Traffic Control Plans
See Sheets TC-12 to TC-14.
- Restore Grade to Match Existing
Surrounding Areas Prior to Mat
Installation.

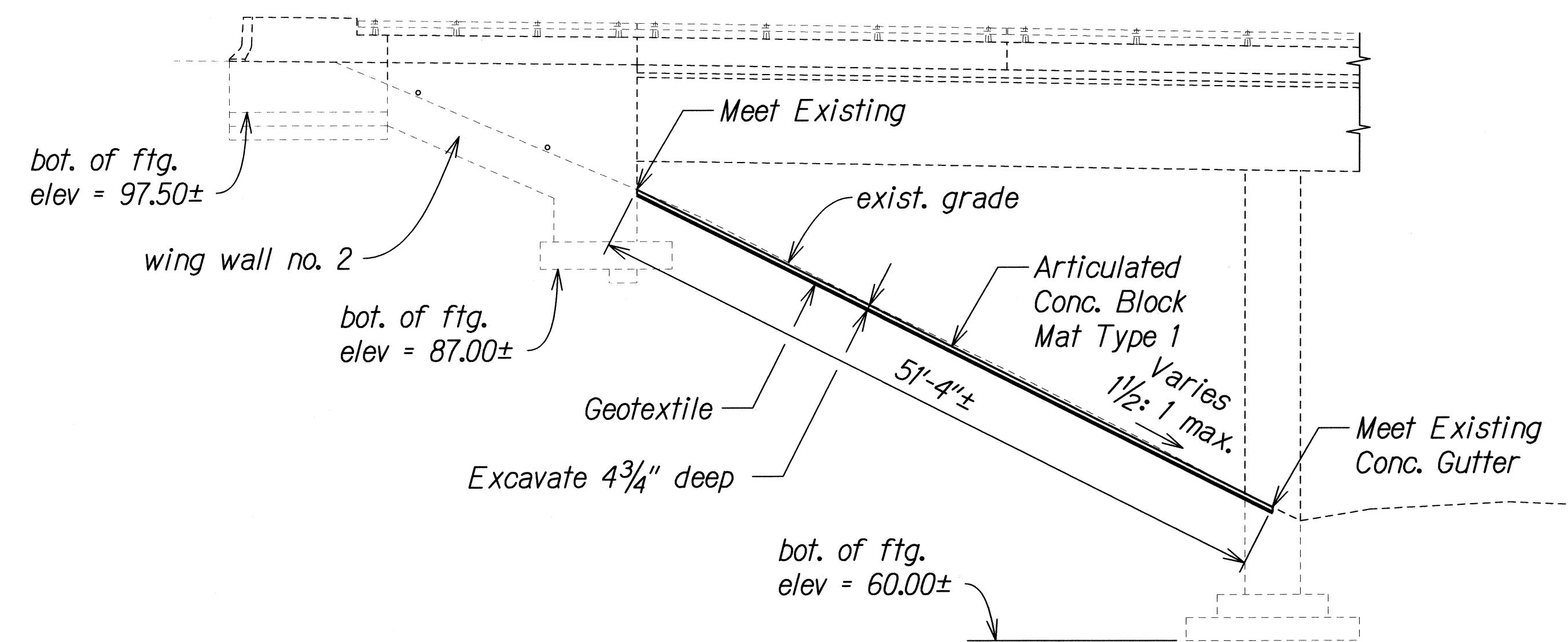
**EROSION CONTROL PLAN SITE 4 -
FARRINGTON HIGHWAY OVERPASS AT H-1, WEST ABUTMENTS**
Scale: 1/8" = 1'-0"

Estimated Area of Articulated Concrete Block Mat Type 1 measured along slope face: 9,730 SQ. FT.

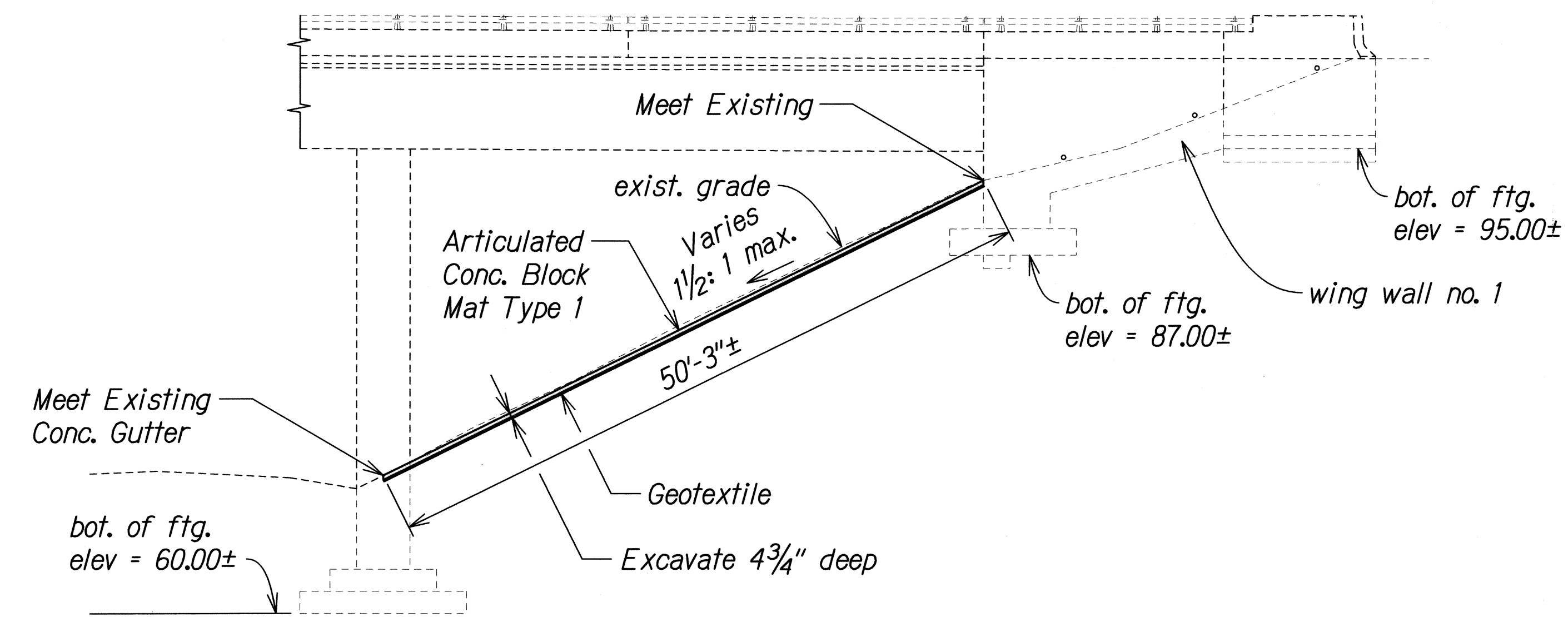
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BY	DRAWN BY	
CHECKED BY	DESIGNED BY	
	REVIEWED BY	

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. Signature: <i>Gerald D. Andrade</i> 04/30/10 EXPIRATION DATE OF THE LICENSE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION EROSION CONTROL PLAN SITE 4 SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3 Project No. HWY-O-04-09M Scale: As Shown Date: April 2009 SHEET No. EC-18 OF 25 SHEETS
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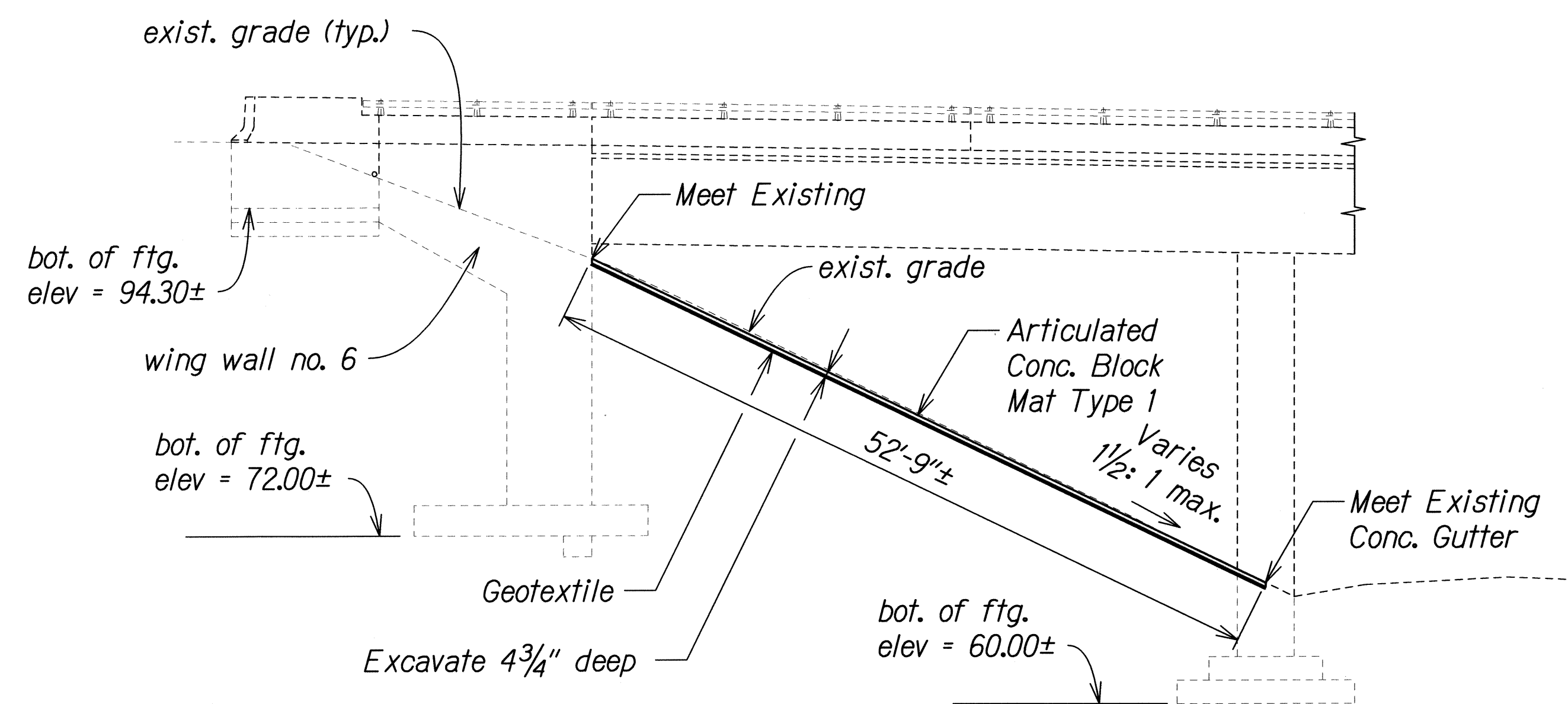
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	29	65



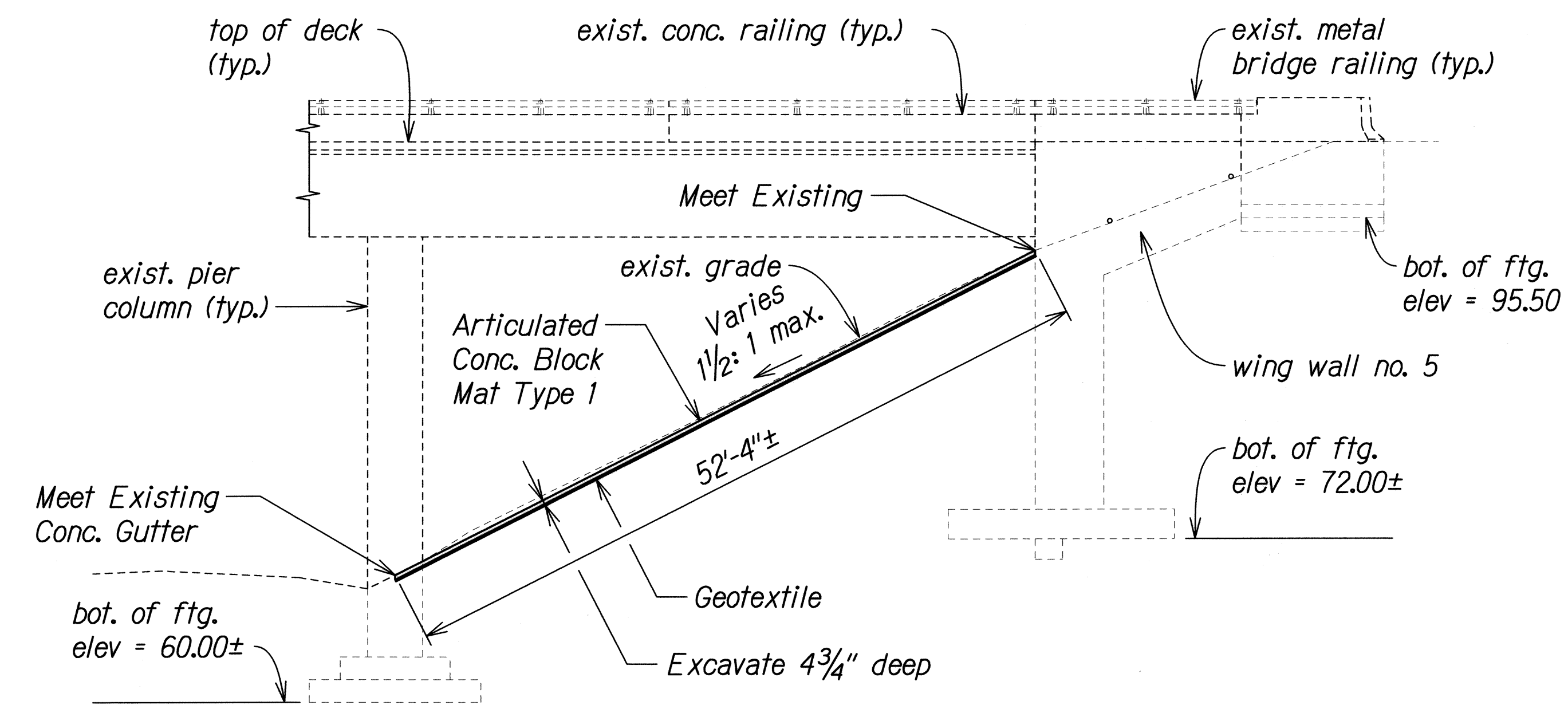
LEFT ELEVATION - SITE 4 ABUTMENT 5A
Scale: 1/8" = 1'-0"



RIGHT ELEVATION SITE - 4 ABUTMENT 5A
Scale: 1/8" = 1'-0"



LEFT ELEVATION - SITE 4 ABUTMENT 5B
Scale: 1/8" = 1'-0"



RIGHT ELEVATION - SITE 4 ABUTMENT 5B
Scale: 1/8" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

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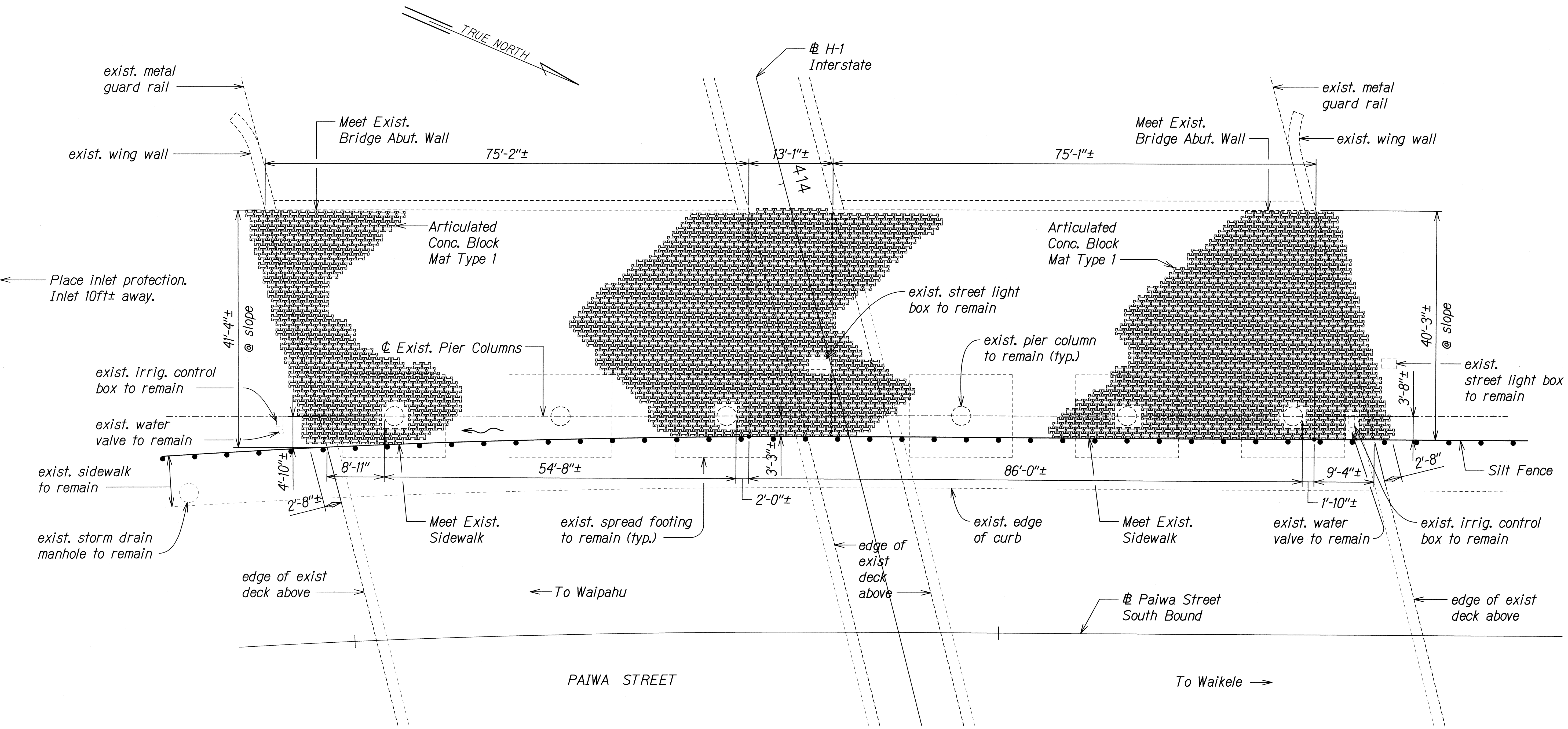
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**EROSION CONTROL
 ELEVATIONS - SITE 4**

SLOPE MAINTENANCE FOR EROSION CONTROL
 AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
 Scale: As Shown Date: April 2009

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	30	65



Note: For Traffic Control Plans
See Sheets TC-15 to TC-17

EROSION CONTROL PLAN SITE 5 -
WEST ABUTMENT, INTERSTATE ROUTE H-1/PAIWA STREET OVERPASS
Scale: 1/8" = 1'-0"

Estimated Area of Articulated Concrete Block Mat Type 1 measured along slope face: 9,240 SQ. FT.

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

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Signature: *Gerald D. Andrade* Date: 04/30/10

EXPIRATION DATE OF LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL PLAN
SITE 5

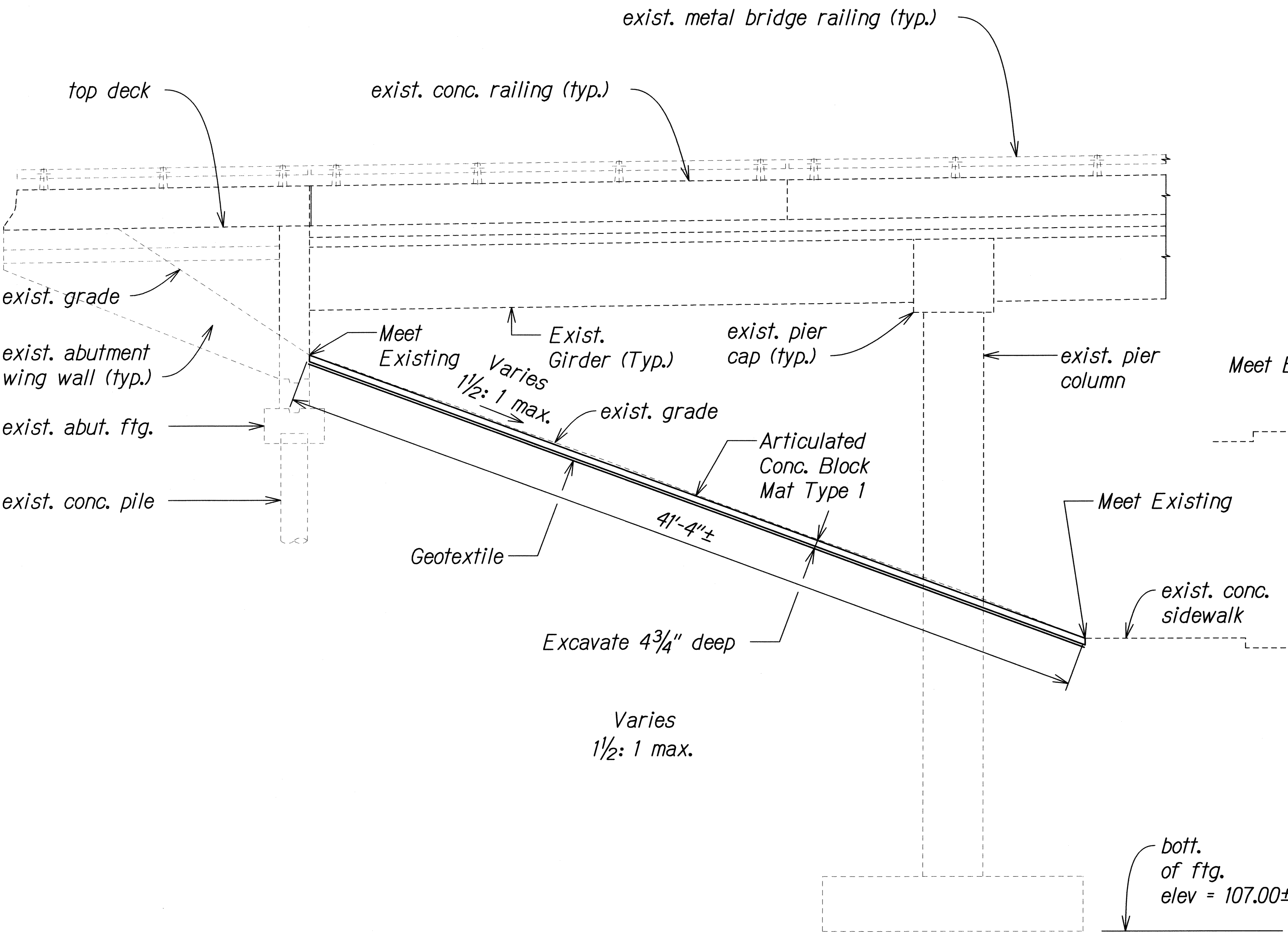
SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M

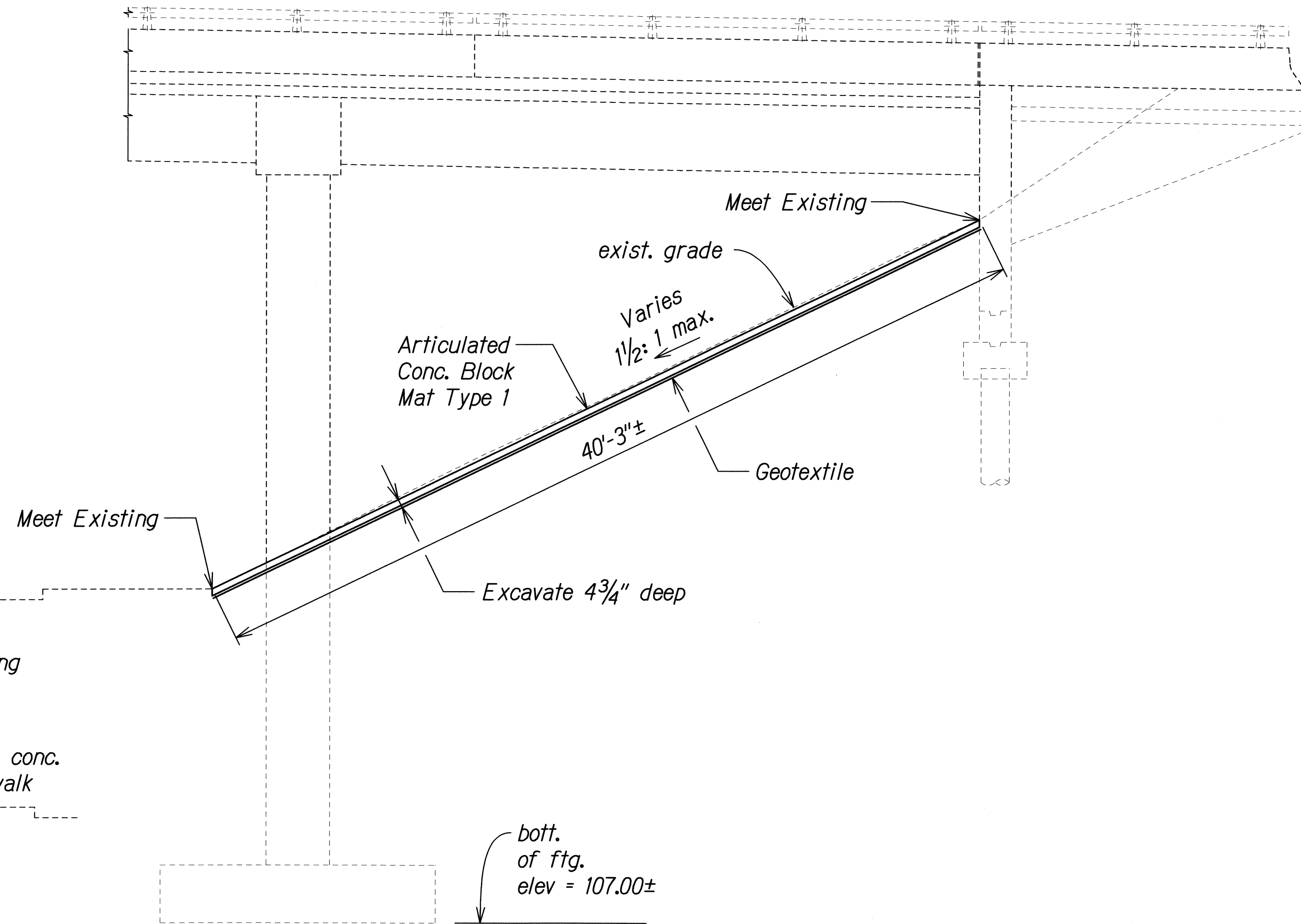
Scale: As Shown Date: April 2009

SHEET No. EC-20 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	31	65



LEFT ELEVATION - SITE 5
Scale: 1/4" = 1'-0"



RIGHT ELEVATION - SITE 5
Scale: 1/4" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
IN.	

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SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

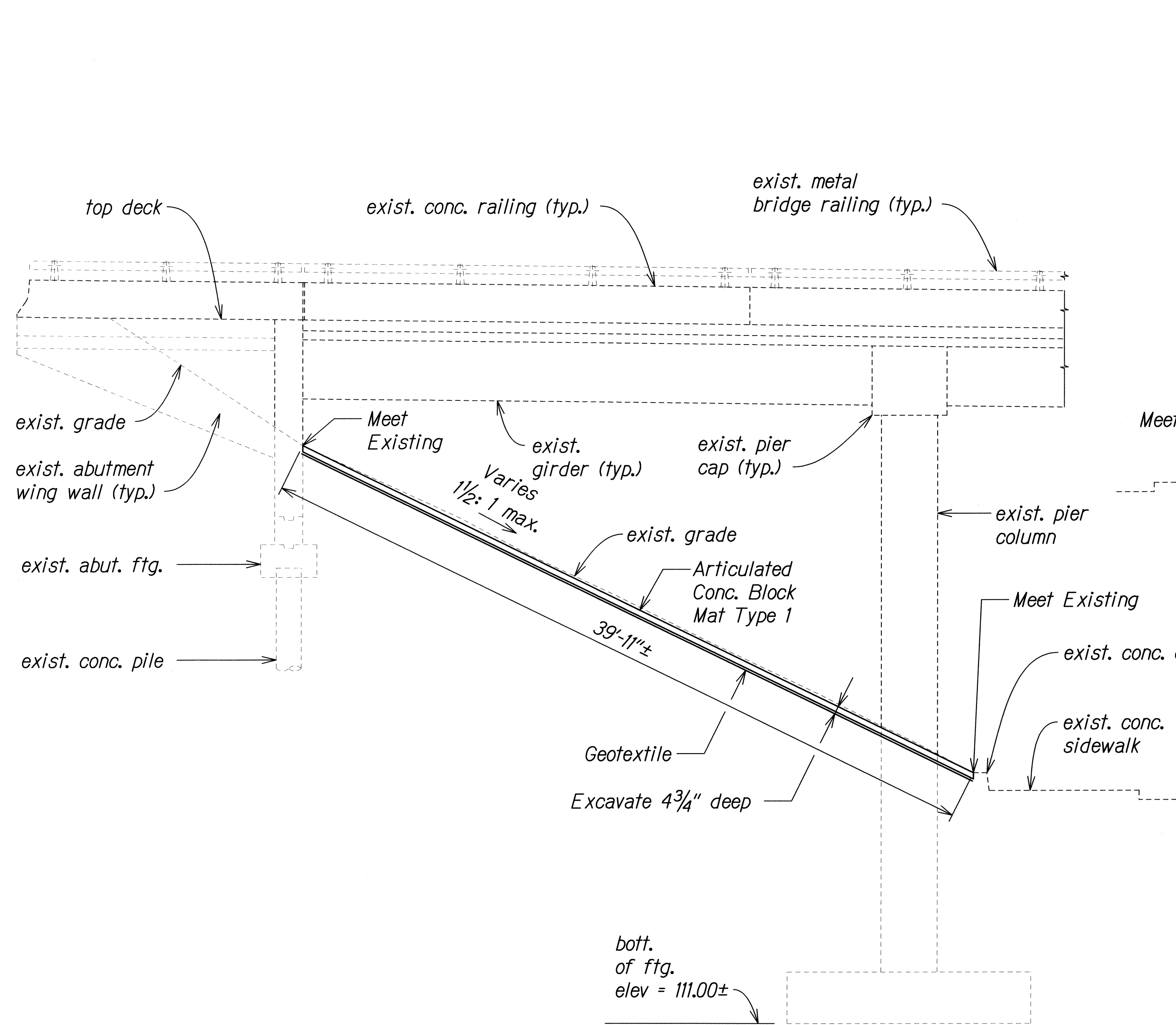
**EROSION CONTROL
ELEVATIONS - SITE 5**

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

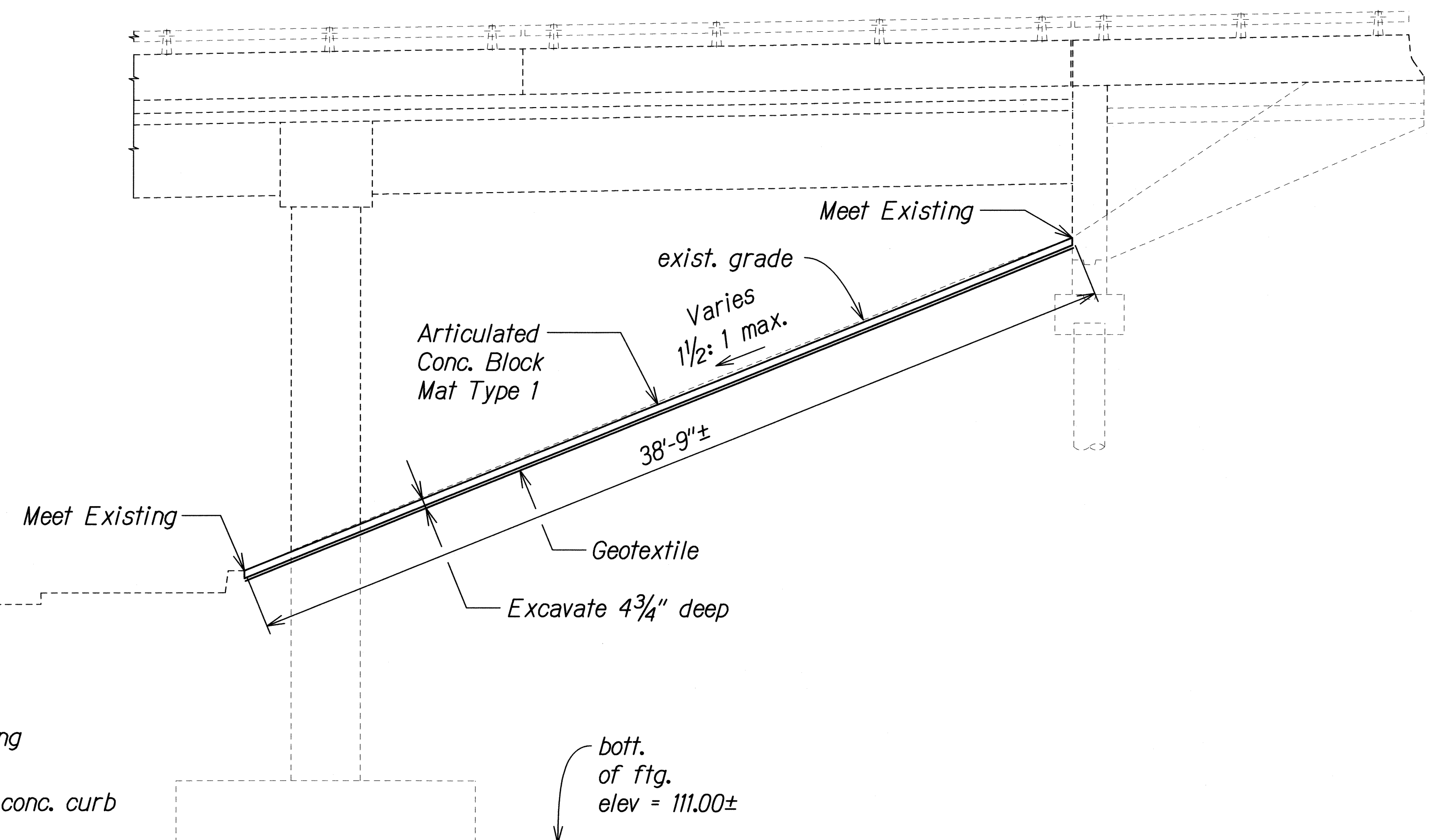
Project No. HWY-0-04-09M
Scale: As Shown Date: April 2009

SHEET No. EC-21 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	33	65



LEFT ELEVATION ABUTMENT - SITE 6
Scale: 1/4" = 1'-0"



RIGHT ELEVATION ABUTMENT - SITE 6
Scale: 1/4" = 1'-0"

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

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Signature: *Gerald D. Andrade* EXPIRATION DATE: 04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL ELEVATIONS - SITE 6

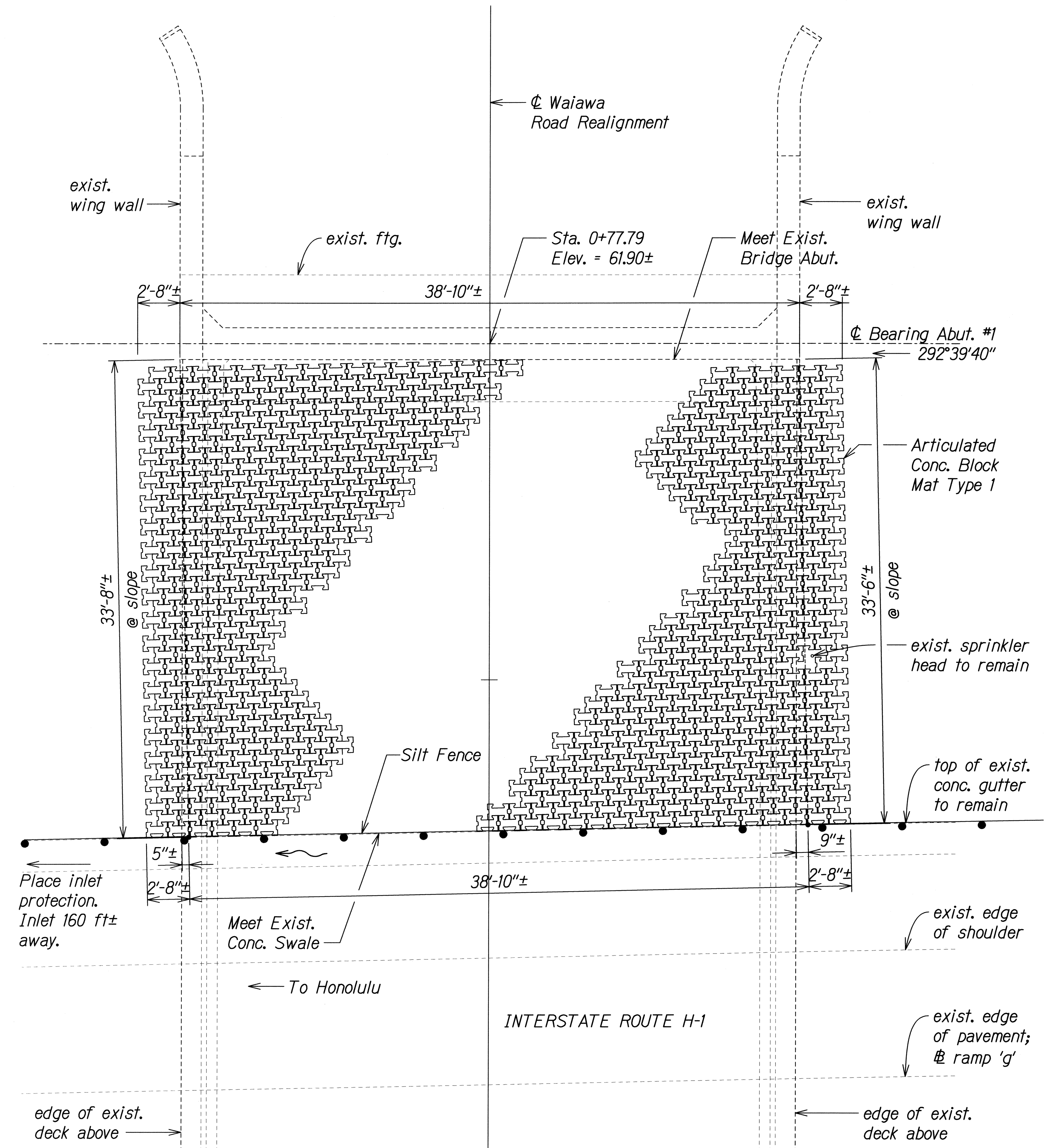
SLOPE MAINTENANCE FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M

Scale: As Shown Date: April 2009

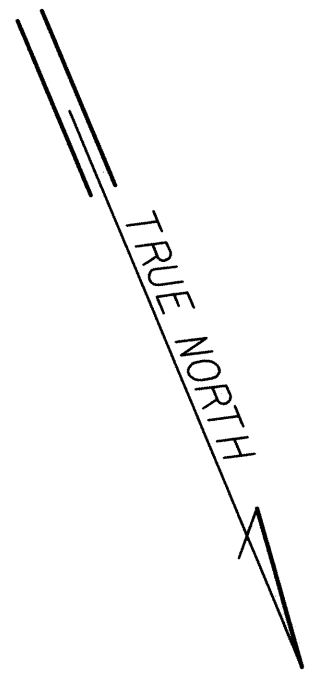
SHEET No. EC-23 OF 25 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-04-09M	2009	34	65



Note: For Traffic Control Plans
See Sheets TC-19 to TC-24

Estimated Area of Articulated Concrete Block
Mat Type 1 measured along slope face: 1,480 SQ. FT.



SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
DATE	

**EROSION CONTROL PLAN SITE 7 -
WAIAWA ROAD OVERPASS, SOUTH ABUTMENT**
Scale: 1/4" = 1'-0"

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL PLAN
SITE 7

SLOPE MAINTENANCE FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 3

Project No. HWY-0-04-09M
Scale: As Shown Date: April 2009

SHEET No. EC-24 OF 25 SHEETS

