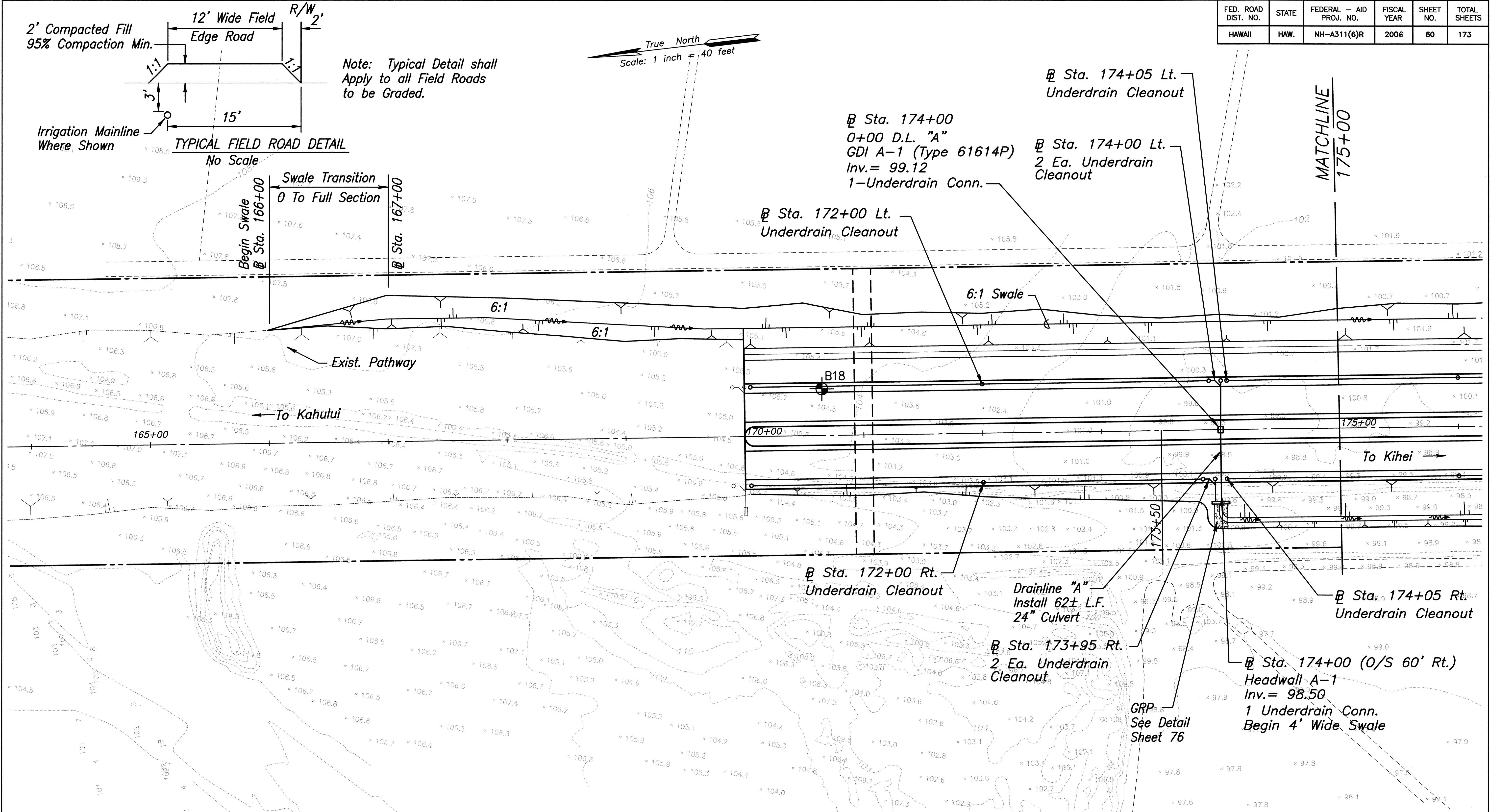


FED. ROAD DIST. NO.	STATE	FEDERAL — AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	60	173



- NOTES:
1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
 2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
 3. For Drainage Profiles, See Sht. 71 & 72.
 4. For Culvert Trench Section and Headwall Details, See Sht. 76.

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

CLIFFORD M. ARAKAWA
LICENSED PROFESSIONAL ENGINEER
No. 1864-C
HAWAII, U.S.A.

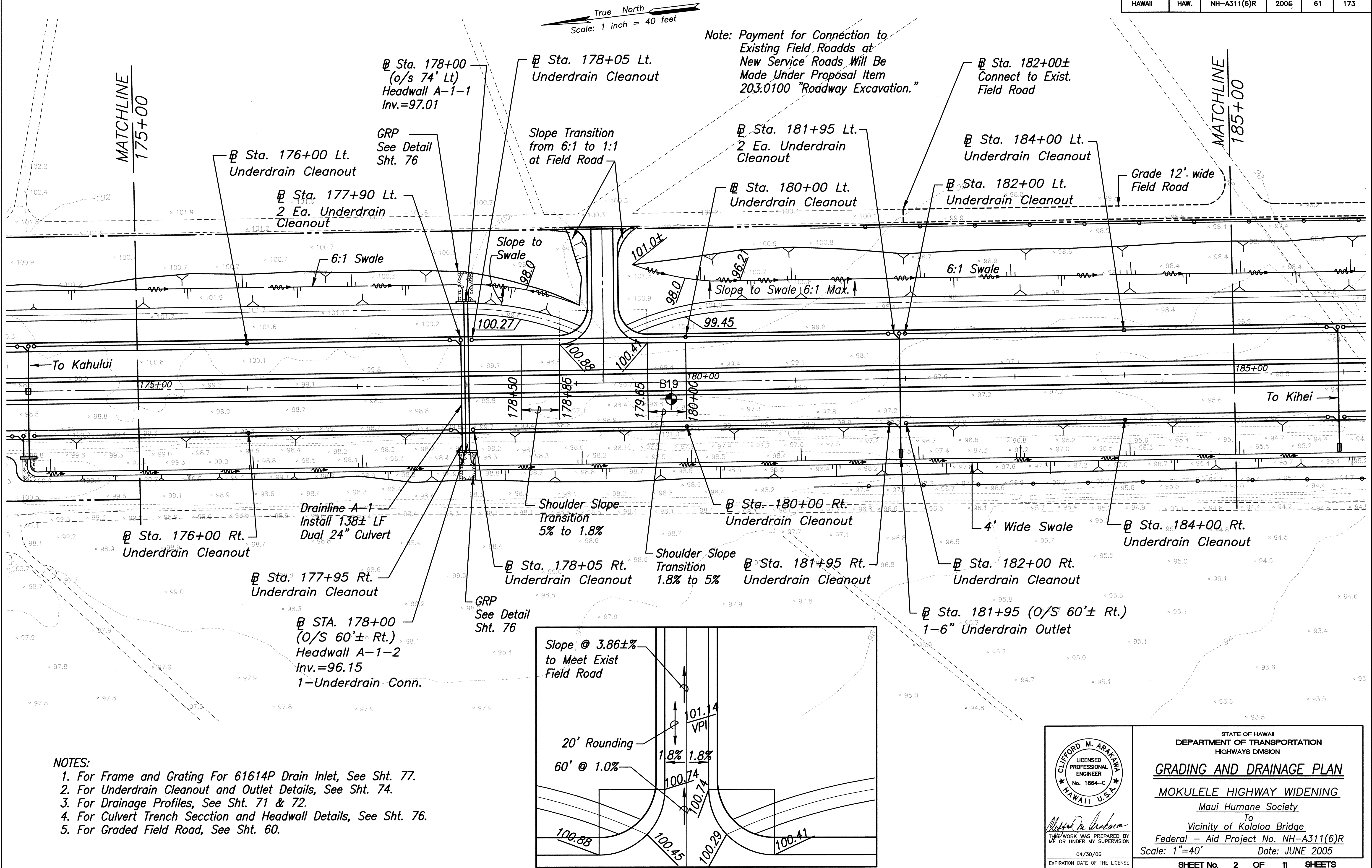
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING
Maui Humane Society
To
Vicinity of Kolaloa Bridge
Federal — Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

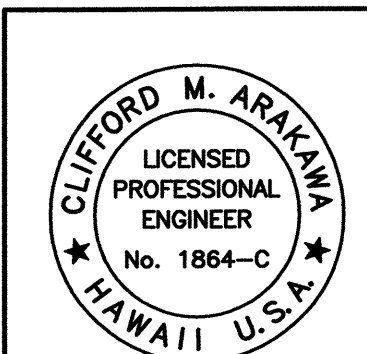
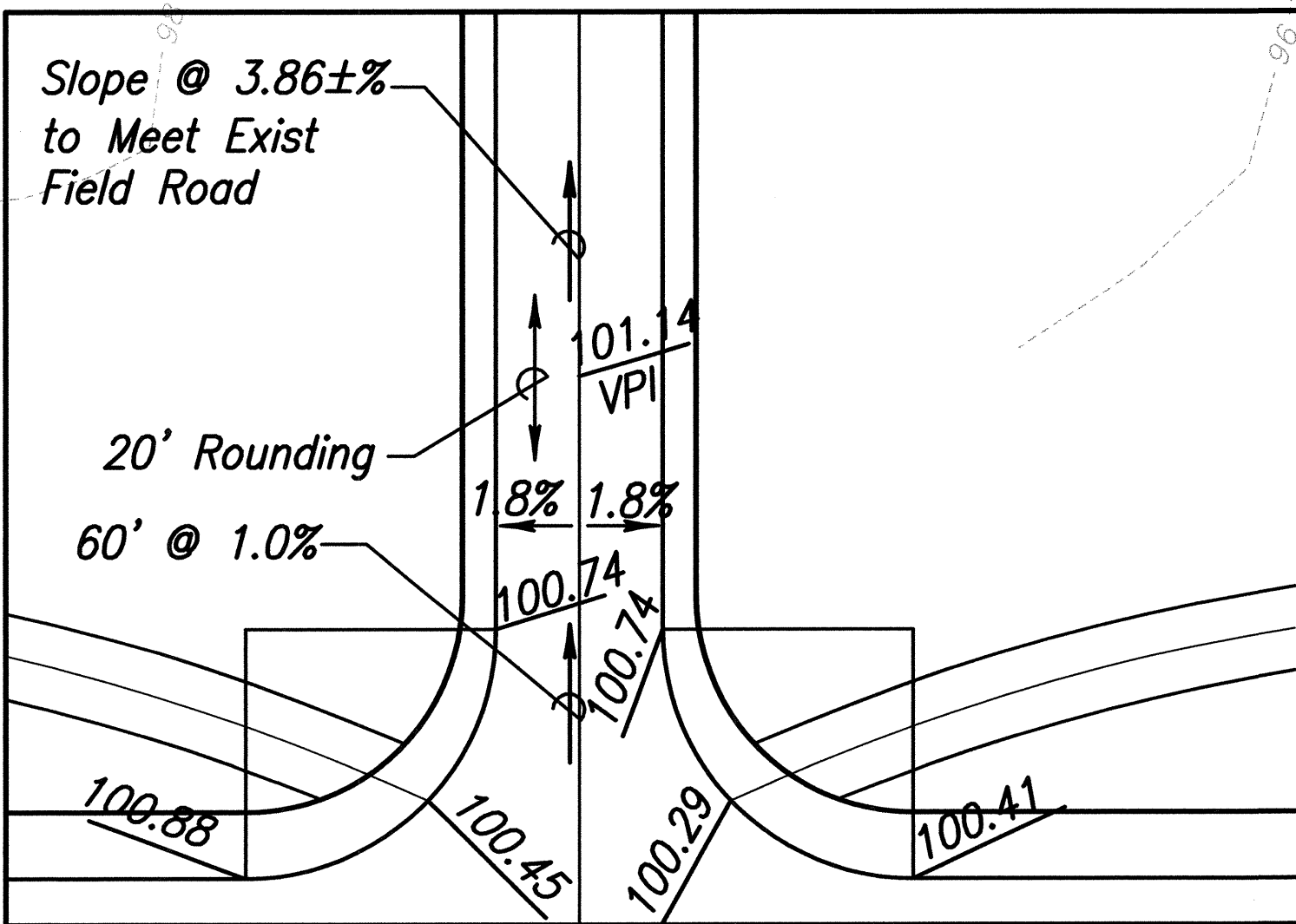
SHEET No. 1 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	61	173



NOTES:

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2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
3. For Drainage Profiles, See Sht. 71 & 72.
4. For Culvert Trench Section and Headwall Details, See Sht. 76.
5. For Graded Field Road, See Sht. 60.



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04/30/06
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

Maui Humane Society

To
Vicinity of Koolaloa Bridge

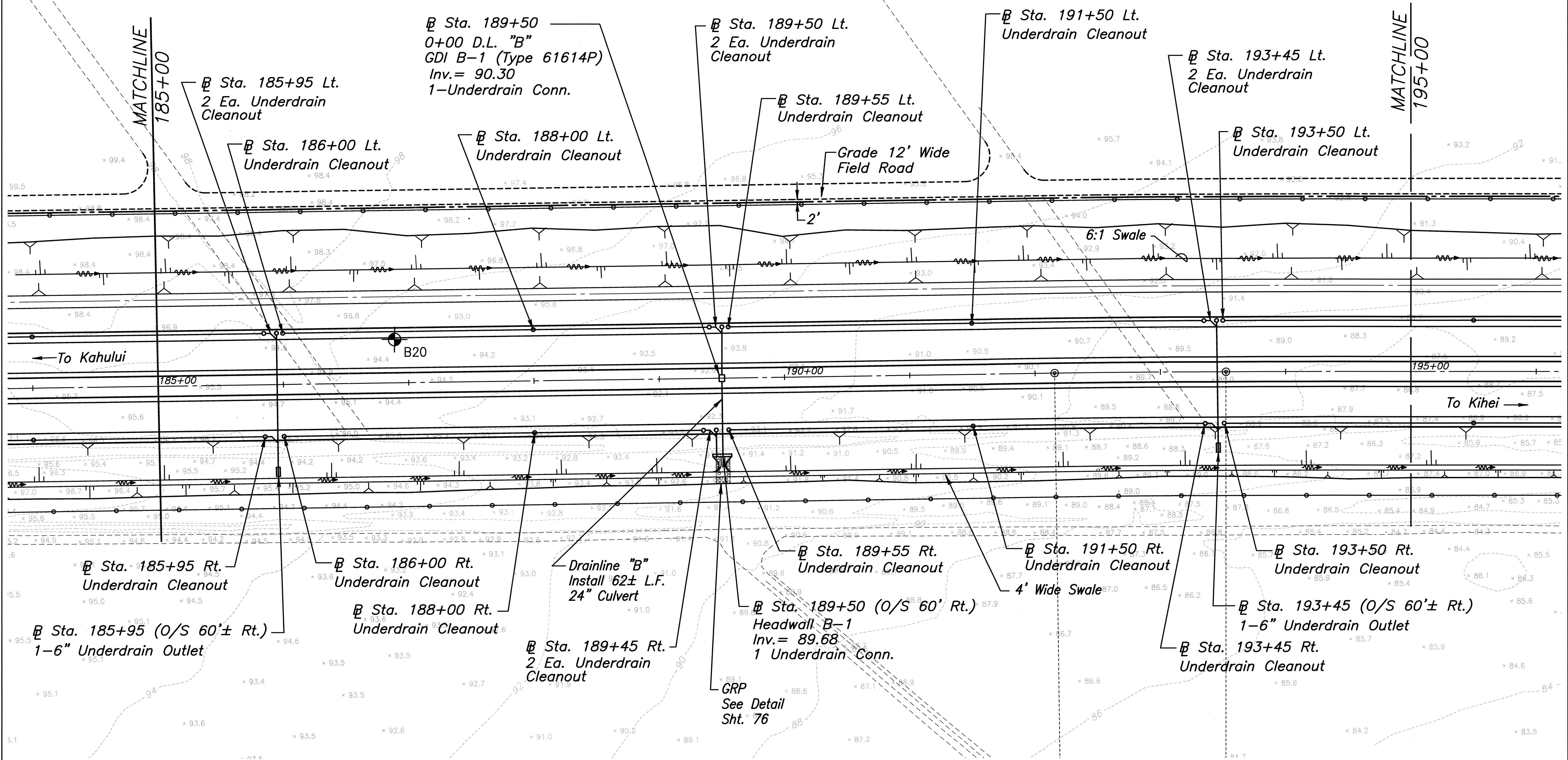
Federal - Aid Project No. NH-A311(6)R

Scale: 1"=40' Date: JUNE 2005

SHEET No. 2 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	62	173

True North
Scale: 1 inch = 40 feet



- NOTES:
1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
 2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
 3. For Drainage Profiles, See Sht. 71 & 72.
 4. For Culvert Trench Section and Headwall Details, See Sht. 76.
 5. For Graded Field Road, See Sht. 60.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
No.	_____

CLIFFORD M. ARAKAWA
LICENSED PROFESSIONAL ENGINEER
No. 1864-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

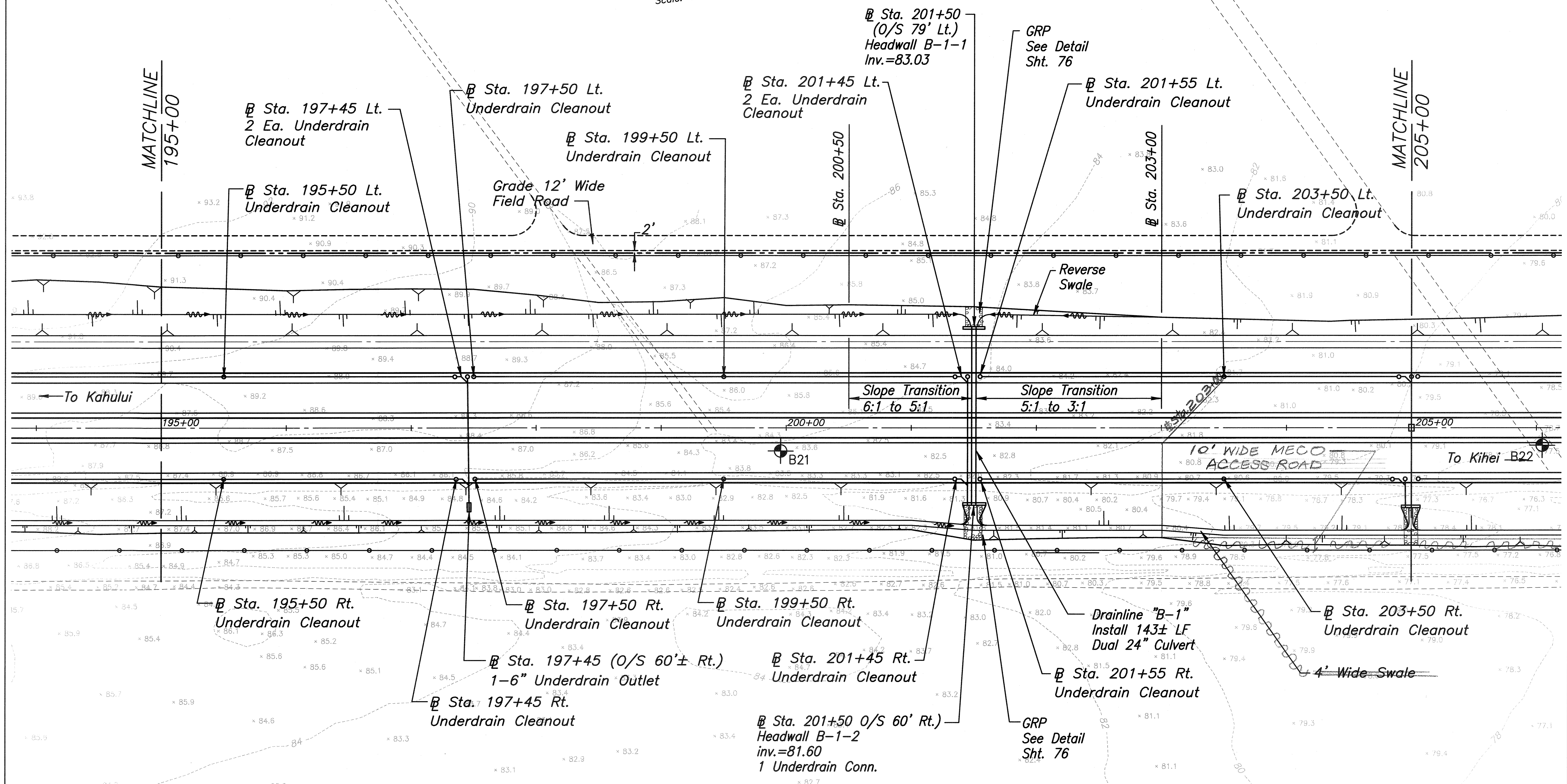
MOKULELE HIGHWAY WIDENING

Maui Humane Society
To
Vicinity of Kolaloa Bridge
Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 3 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	63	173

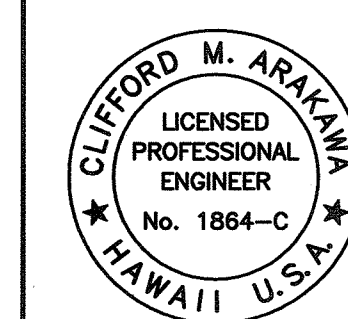
True North
Scale: 1 inch = 40 feet



NOTES:

1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
3. For Drainage Profiles, See Sht. 71 & 72.
4. For Culvert Trench Section and Headwall Details, See Sht. 76.
5. For Graded Field Road, See Sht. 60.

DATE	_____
SURVEY PLOTTED BY	_____
TRACED BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____



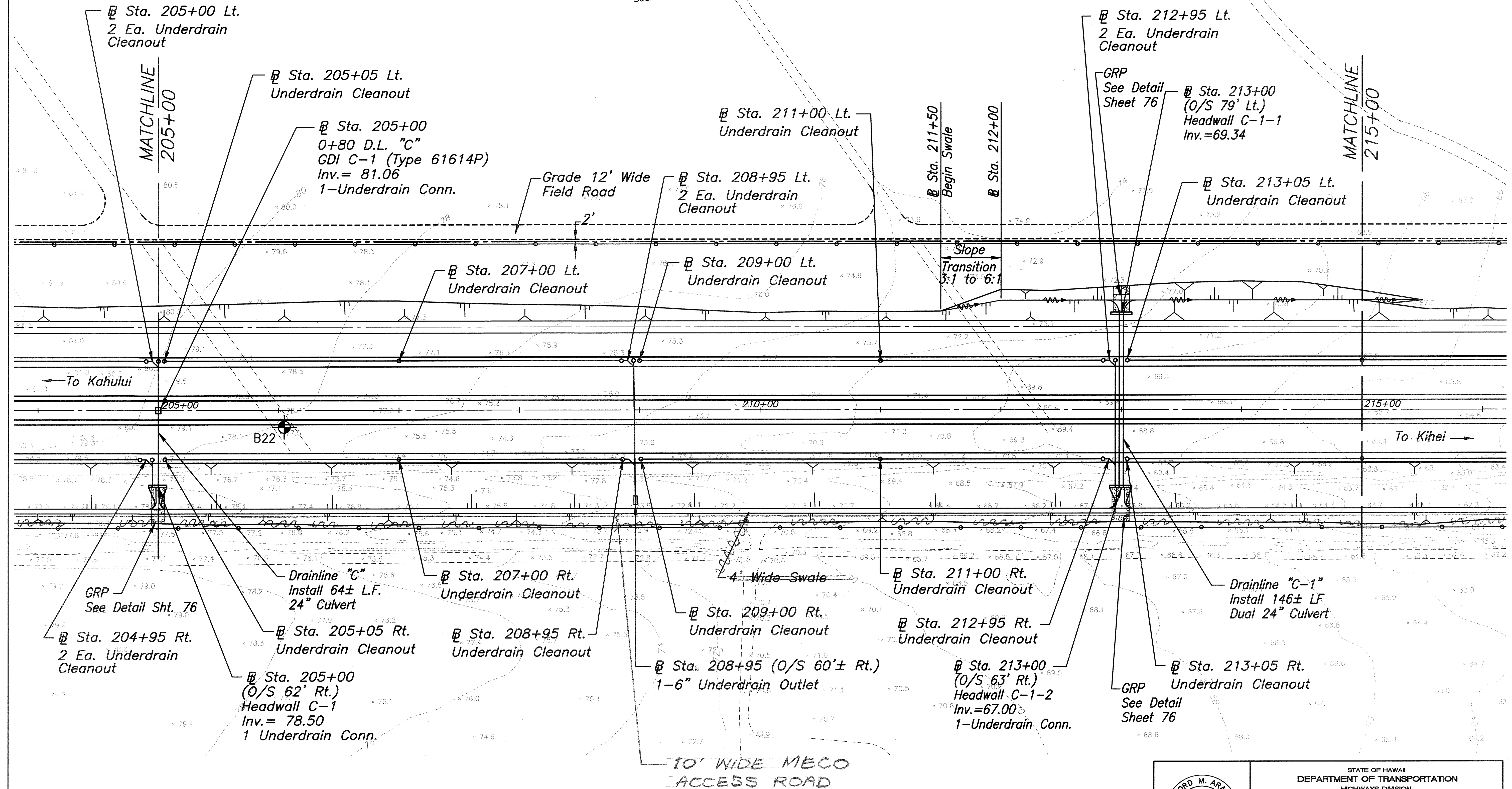
WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
04/30/06
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GRADING AND DRAINAGE PLAN
MOKULELE HIGHWAY WIDENING
Maui Humane Society
To
Vicinity of Kolaloa Bridge
Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005
SHEET No. 4 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	64	173

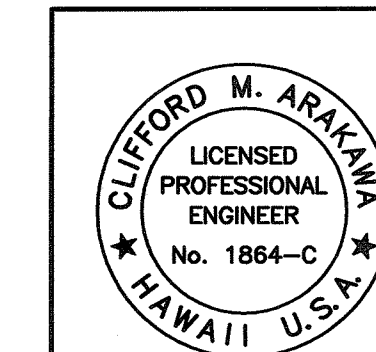
True North
Scale: 1 inch = 40 feet



NOTES:

1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
3. For Drainage Profiles, See Sht. 71 & 72.
4. For Culvert Trench Section and Headwall Details, See Sht. 76.
5. For Graded Field Road, See Sht. 60.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____



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EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

Maui Humane Society

To
Vicinity of Kolaloa Bridge

Federal - Aid Project No. NH-A311(6)R

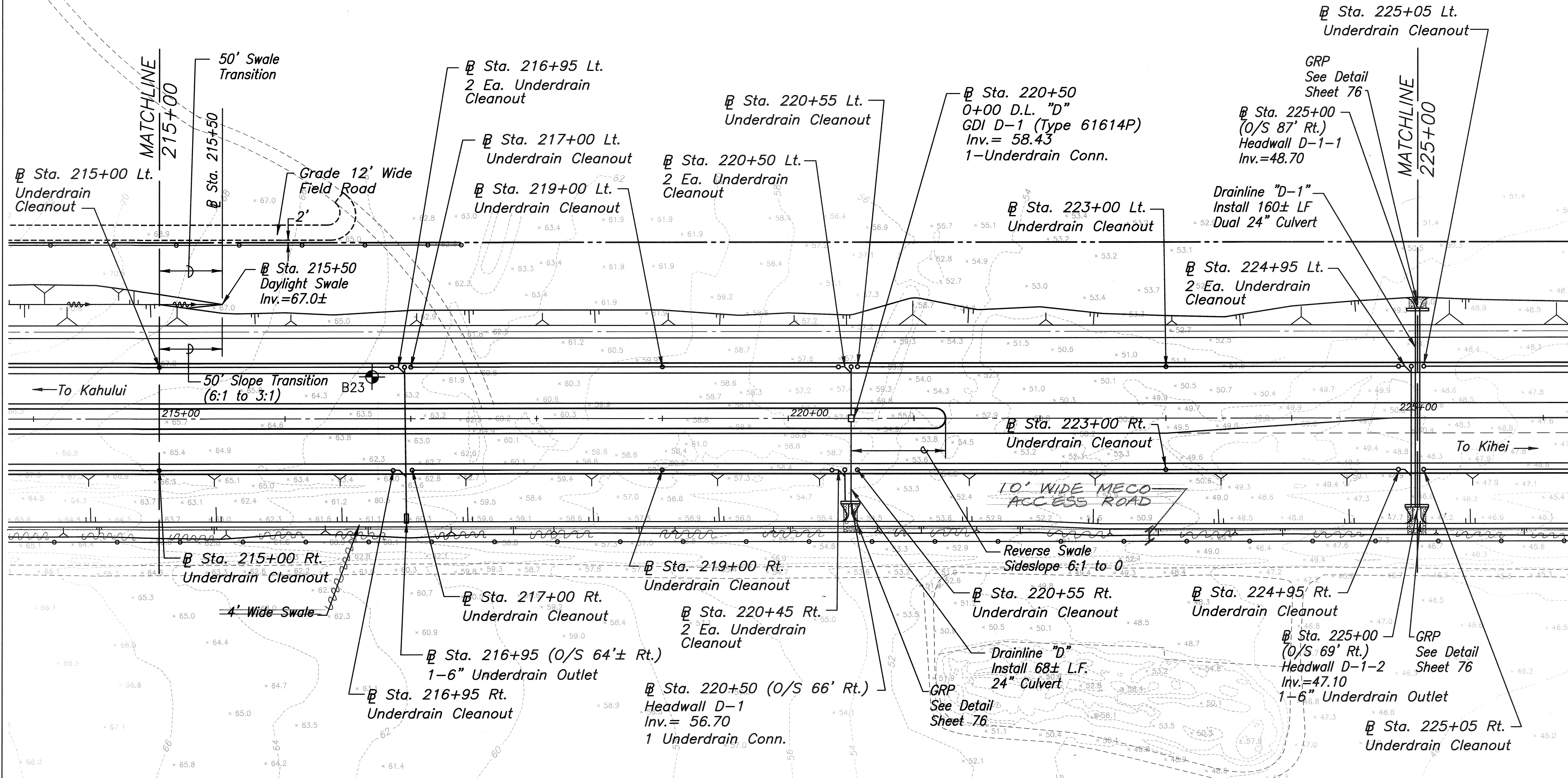
Scale: 1"=40' Date: JUNE 2005

SHEET No. 5 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	65	173

True North
Scale: 1 inch = 40 feet



- NOTES:
1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
 2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
 3. For Drainage Profiles, See Sht. 71 & 72.
 4. For Culvert Trench Section and Headwall Details, See Sht. 76.
 5. For Graded Field Road, See Sht. 60.

DATE	7/18/02
SURVEY PLOTTED BY	CLIFFORD M. ARAKAWA
DRIVEN BY	CLIFFORD M. ARAKAWA
TRACED BY	CLIFFORD M. ARAKAWA
QUANTITIES BY	CLIFFORD M. ARAKAWA
CHECKED BY	CLIFFORD M. ARAKAWA
NO.	

CLIFFORD M. ARAKAWA
LICENSED PROFESSIONAL ENGINEER
No. 1864-C
HAWAII U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

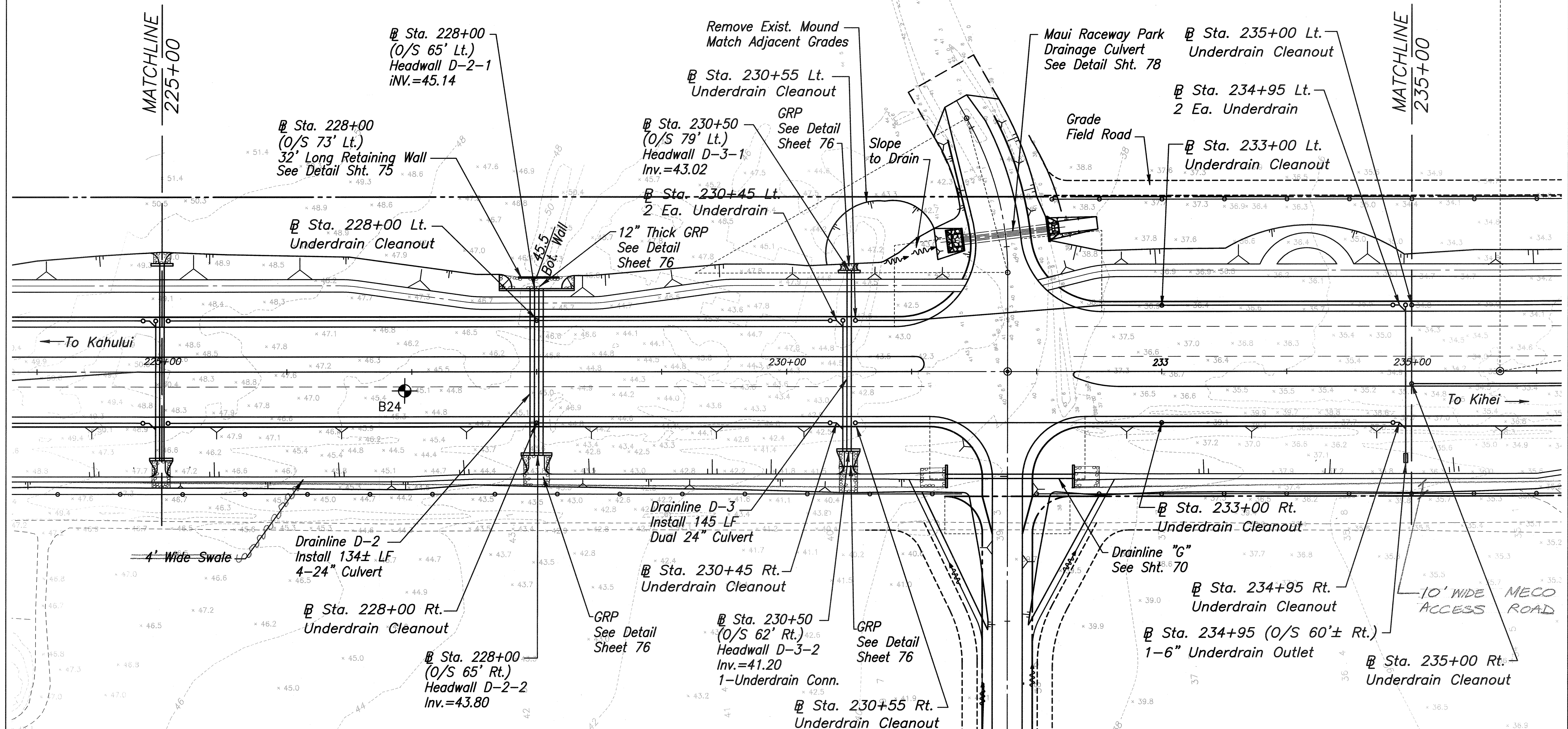
Maui Humane Society
To
Vicinity of Kolaloa Bridge
Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 6 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	66	173

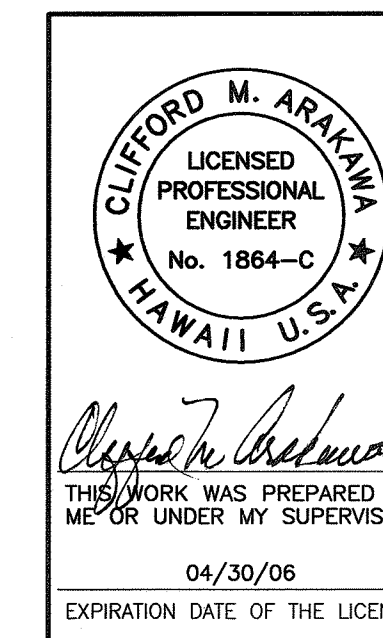
True North
Scale: 1 inch = 40 feet



NOTES:

1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
2. For Underdrain Cleanout and Outlet Details, See Sht. 74.
3. For Drainage Profiles, See Sht. 71 & 72.
4. For Culvert Trench Section and Headwall Details, See Sht. 76.
5. For Graded Field Road, See Sht. 60.

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

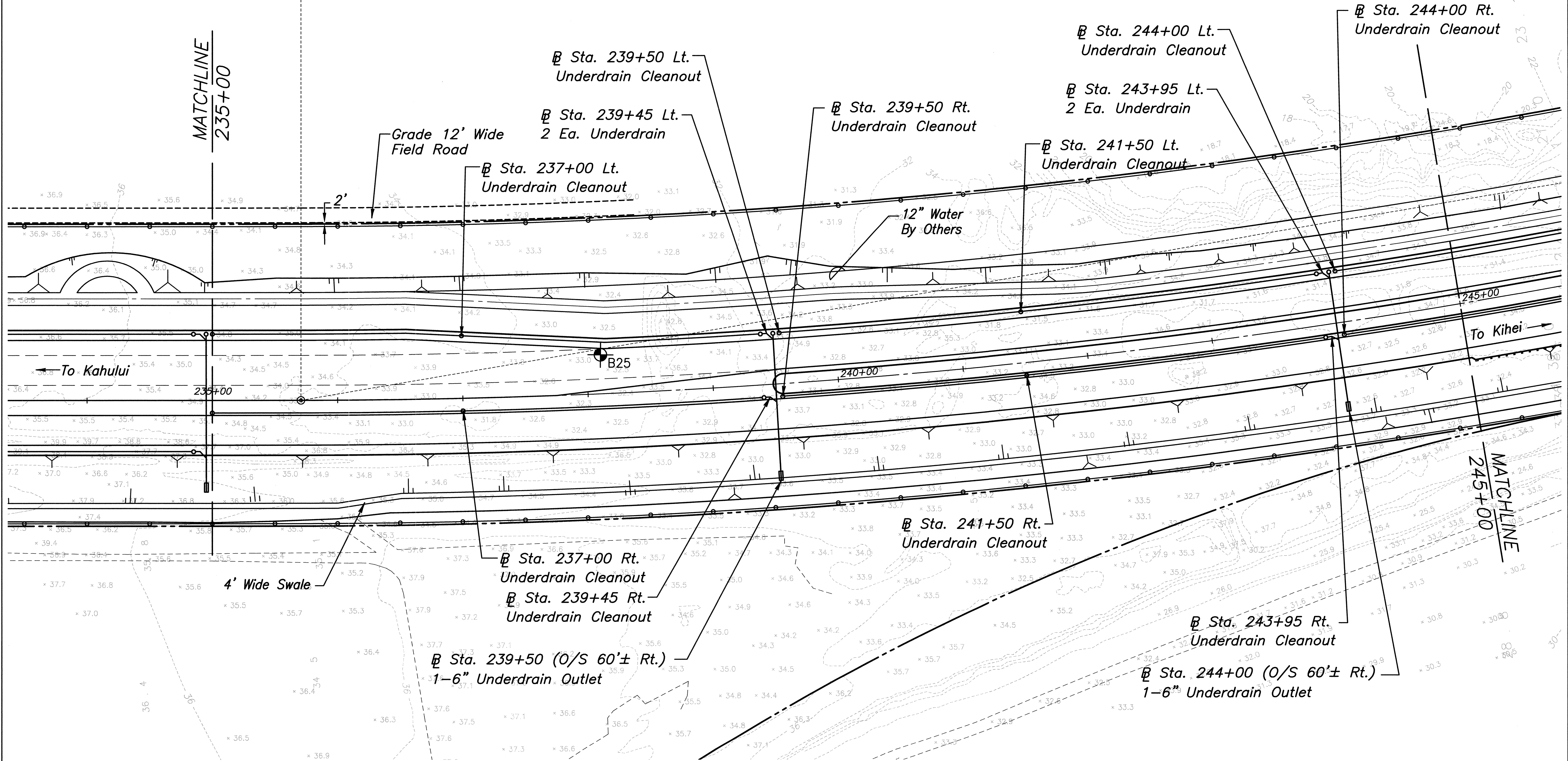
Maui Humane Society
To
Vicinity of Kolaloa Bridge
Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 7 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	67	173

True North
Scale: 1 inch = 40 feet



NOTES:

1. For Frame and Grating For 61614P Drain Inlet, See Sht. 77.
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3. For Drainage Profiles, See Sht. 71 & 72.
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5. For Graded Field Road, See Sht. 60.

DATE	SURVEY PLOTTED BY
7/18/02	CLIFFORD M. ARAKAWA
	LICENSED PROFESSIONAL ENGINEER
	No. 1884-C
	HAWAII U.S.A.
	THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
	04/30/06
	EXPIRATION DATE OF THE LICENSE

CLIFFORD M. ARAKAWA
LICENSED PROFESSIONAL ENGINEER
No. 1884-C
HAWAII U.S.A.

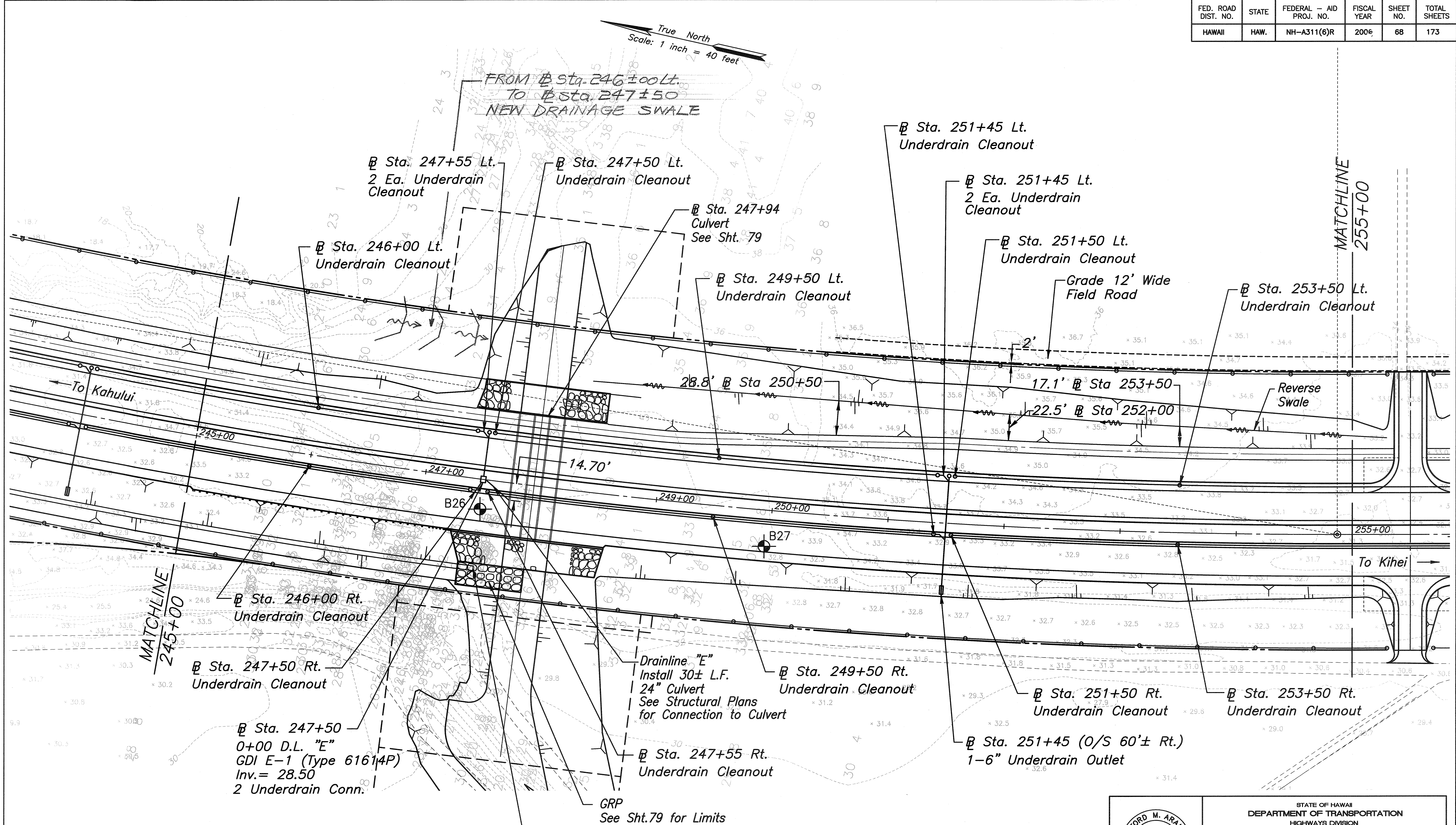
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

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To
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Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 8 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	68	173



- NOTES:
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 4. For Culvert Trench Section and Headwall Details, See Sht. 76.
 5. For Graded Field Road, See Sht. 60.

End 4' Wide Swale
@ Sta. 247+58±
Inv.=26.5±

GRP
See Sht.79 for Limits

Drainline "E"
Install 30± L.F.
24" Culvert
See Structural Plans
for Connection to Culvert

DATE	7/18/02
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
NOTES BY	
CHECKED BY	
NO.	

CLIFFORD M. ARAKAWA
LICENSED PROFESSIONAL ENGINEER
No. 1864-C
HAWAII U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

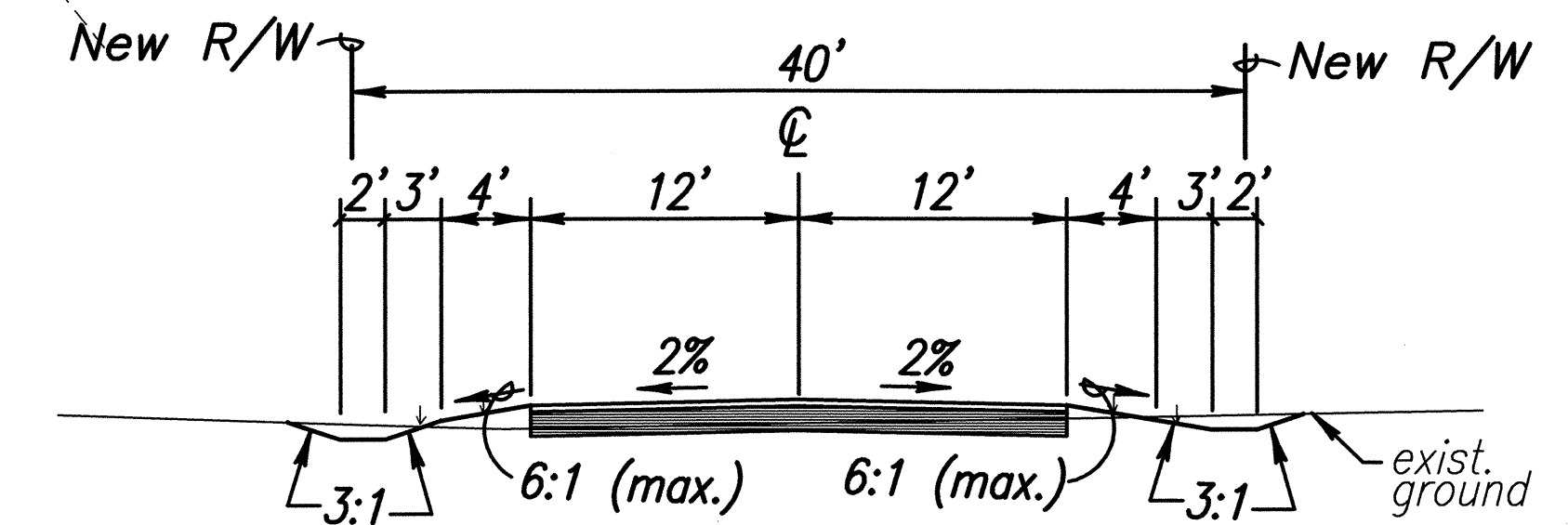
Maui Humane Society
To
Vicinity of Kolaloa Bridge

Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 9 OF 11 SHEETS

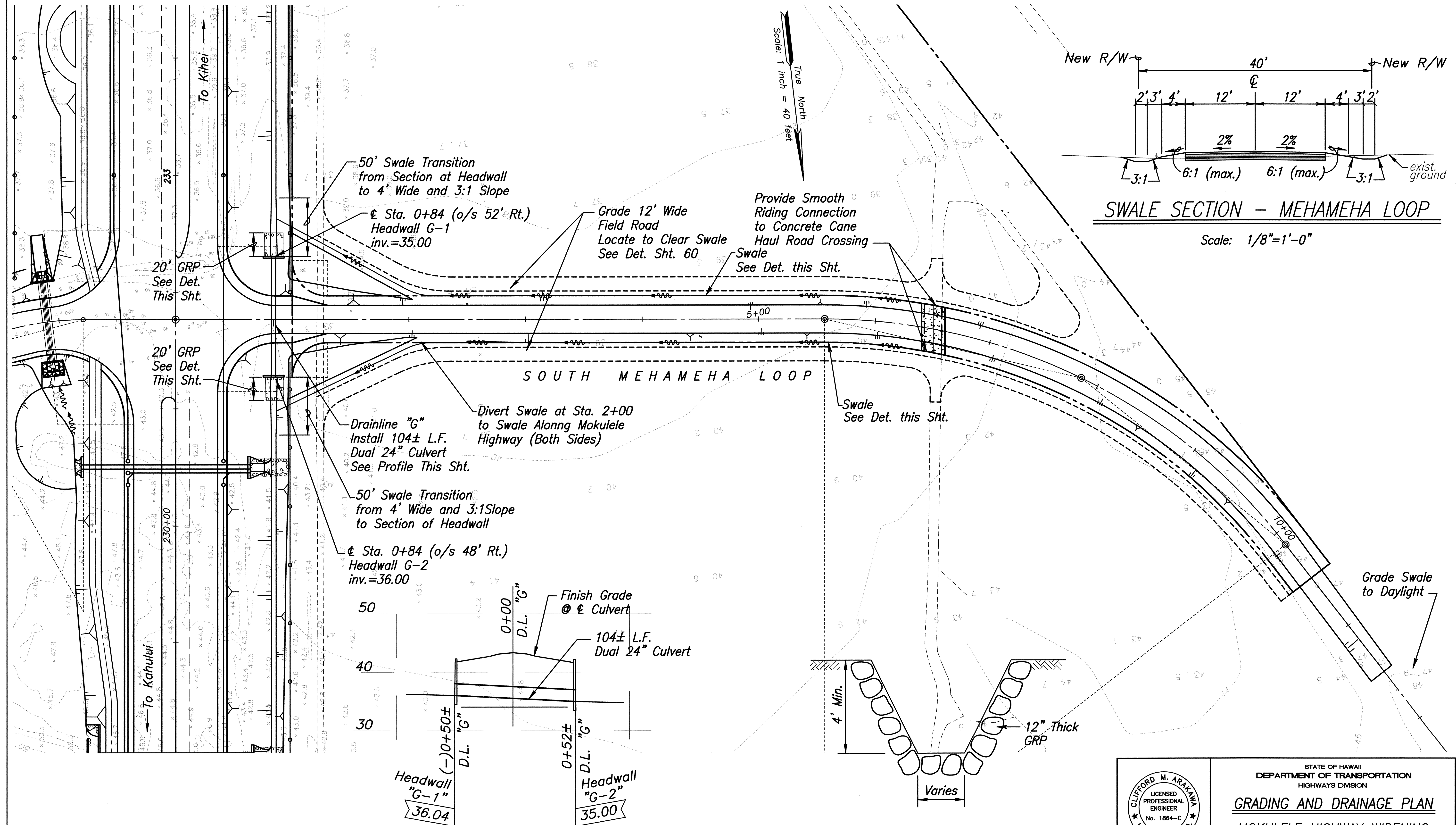
"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(6)R	2006	70	173



SWALE SECTION – MEHAMEHA LOOP

Scale: $1/8"=1'-0"$

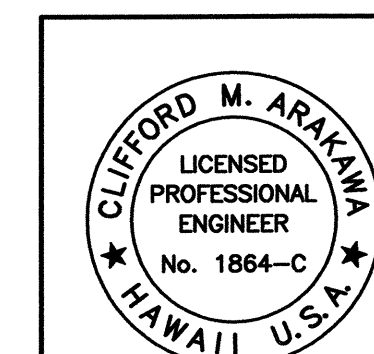


PROFILE-DRAINLINE "G"

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

GRP DETAIL

Scale: Horiz. $1/2'' = 1'$



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GRADING AND DRAINAGE PLAN

MOKULELE HIGHWAY WIDENING

Maui Humane Society
To

Vicinity of Kolaloa Bridge

Federal - Aid Project No. NH-A311(6)R
Scale: 1"=40' Date: JUNE 2005

SHEET No. 11 OF 11 SHEETS