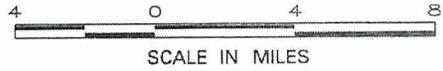
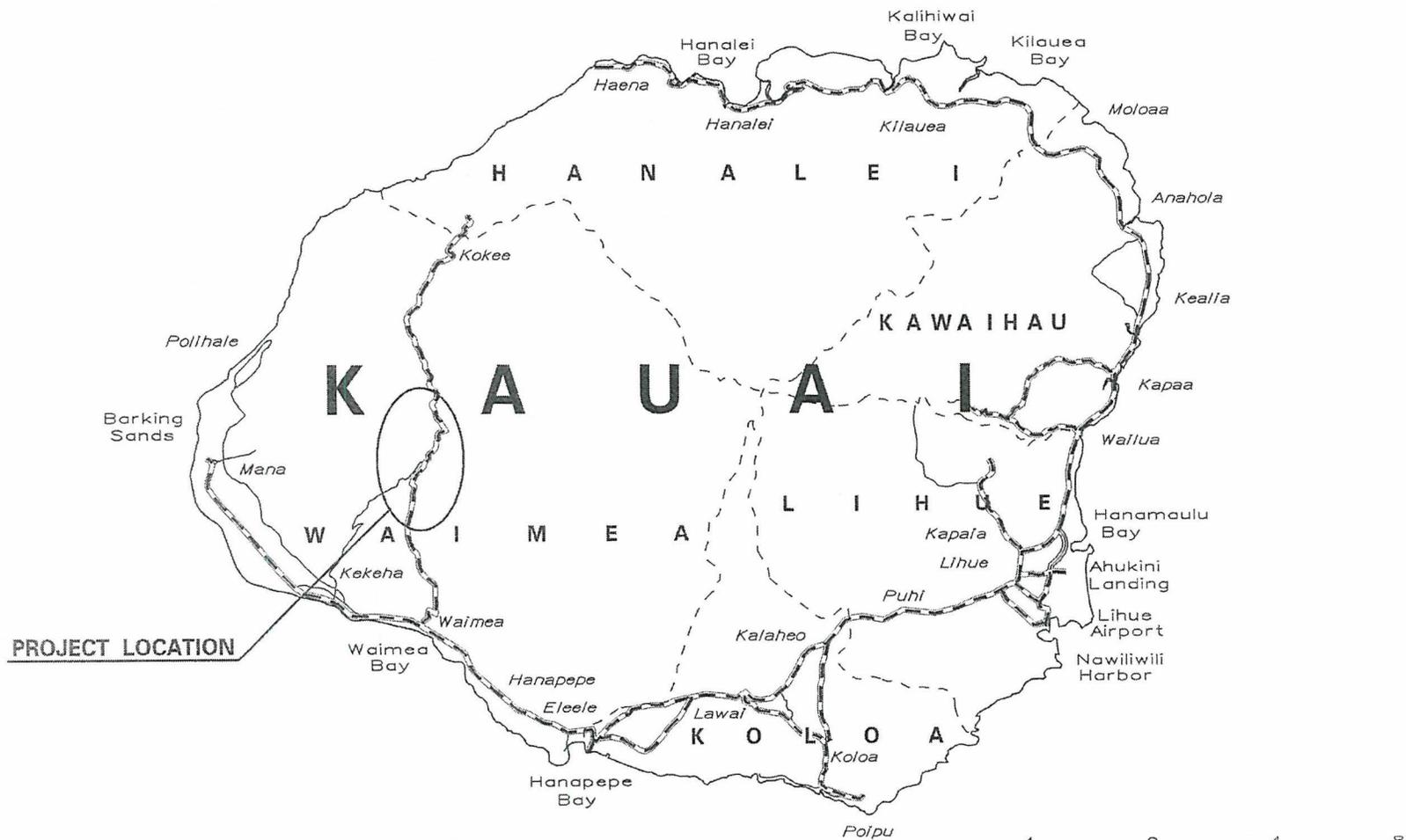


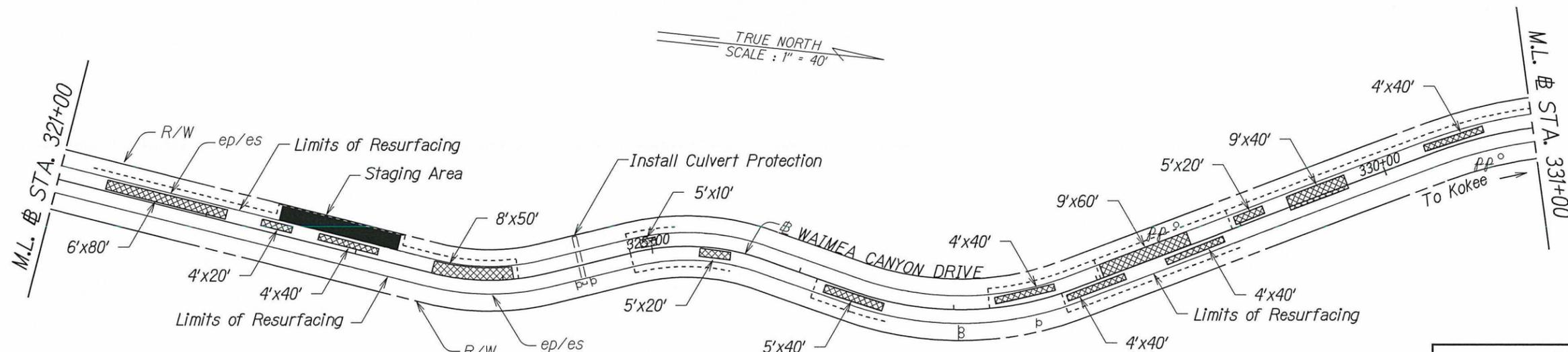
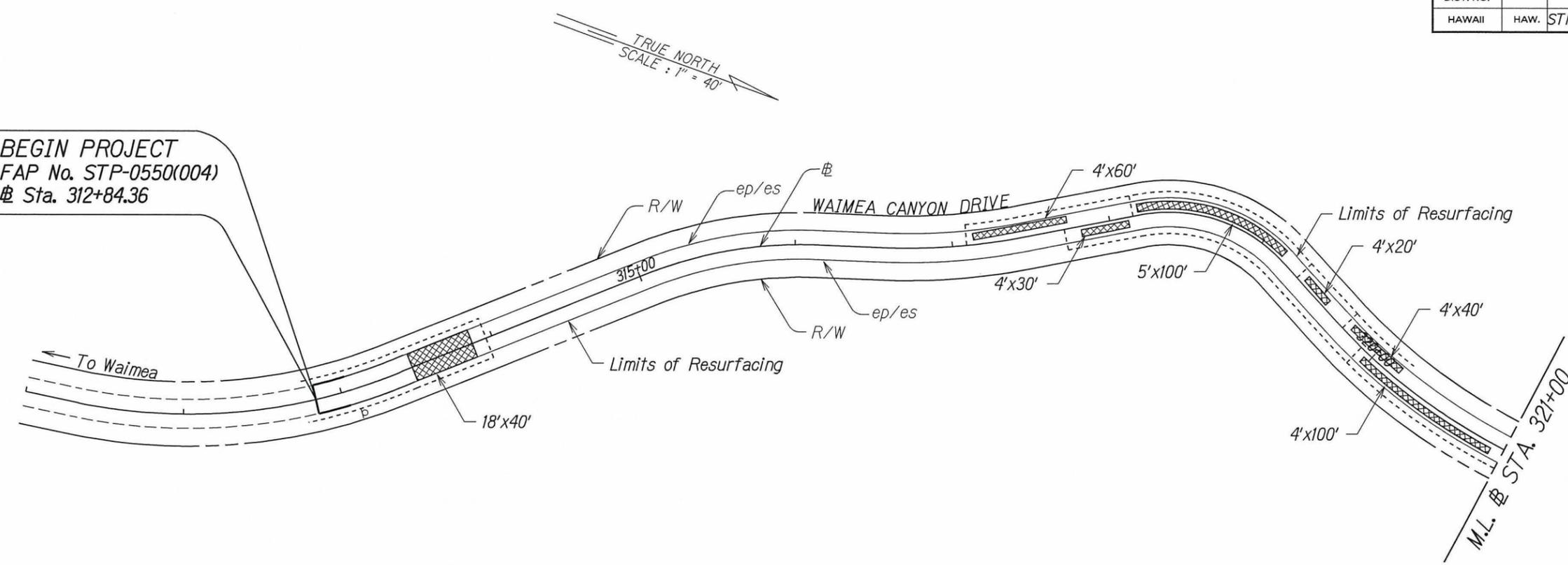
Attachment A-1
Location, Outfall and BMP Maps



VICINITY MAP

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	1	7

BEGIN PROJECT
FAP No. STP-0550(004)
@ Sta. 312+84.36



LEGEND:

- Pavement Reconstruction —
- Sediment Control Devices —

Construction Sequence:

1. Install culvert protection
2. Install perimeter sediment control
3. Reconstruct weakened pavement areas
4. Remove perimeter sediment control after reconstructed areas are established
5. Remove all BMP's

SURVEY PLOTTED BY	DATE
DRAWN BY	10/2/11
NOTED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
FILE/FOLDER	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

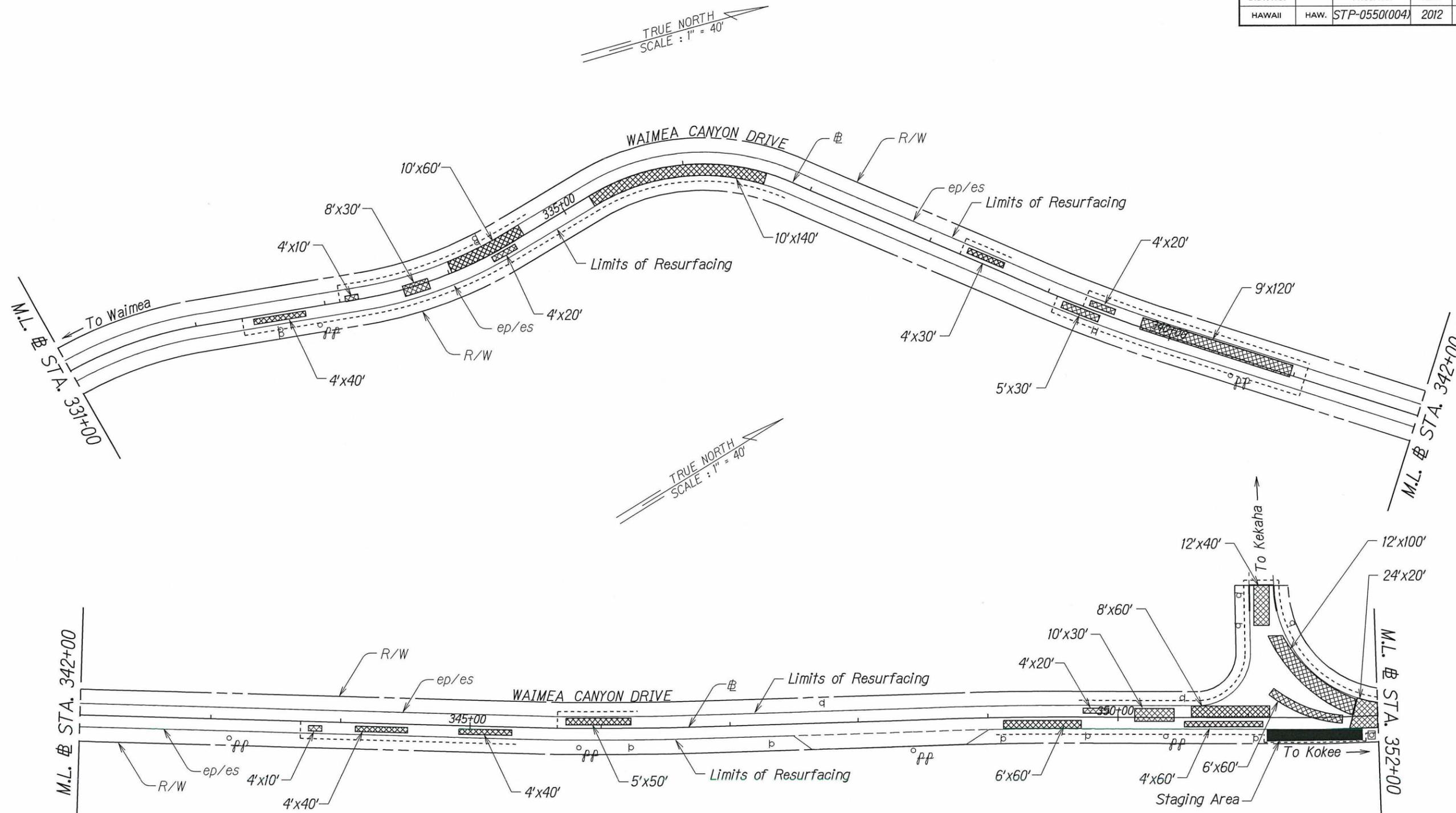
WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING

Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	2	7



ORIGINAL PLAN	DATE
DESIGNED BY	02/11
TRACED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

LEGEND:
 Pavement Reconstruction — [hatched pattern]
 Sediment Control Devices — [dashed line]

- Construction Sequence:**
1. Install culvert protection
 2. Install perimeter sediment control
 3. Reconstruct weakened pavement areas
 4. Remove perimeter sediment control after reconstructed areas are established
 5. Remove all BMP's

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

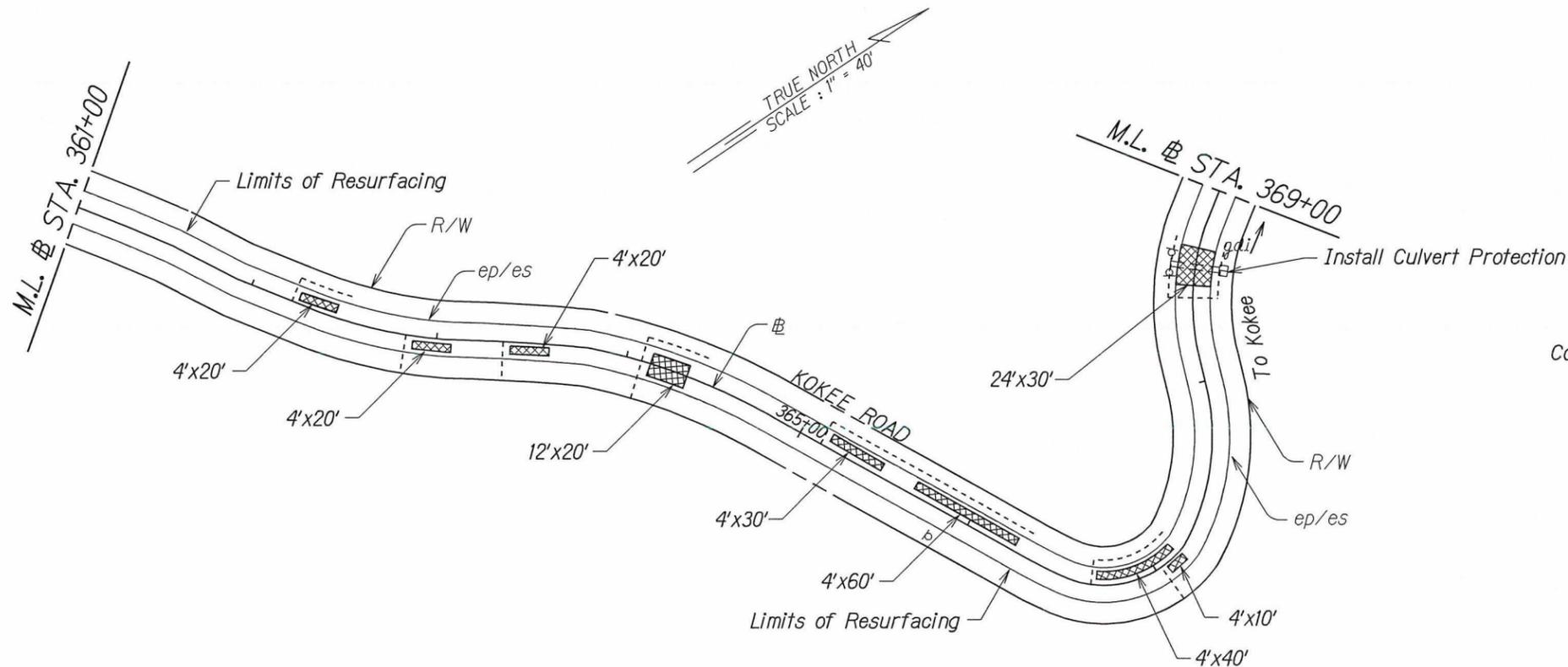
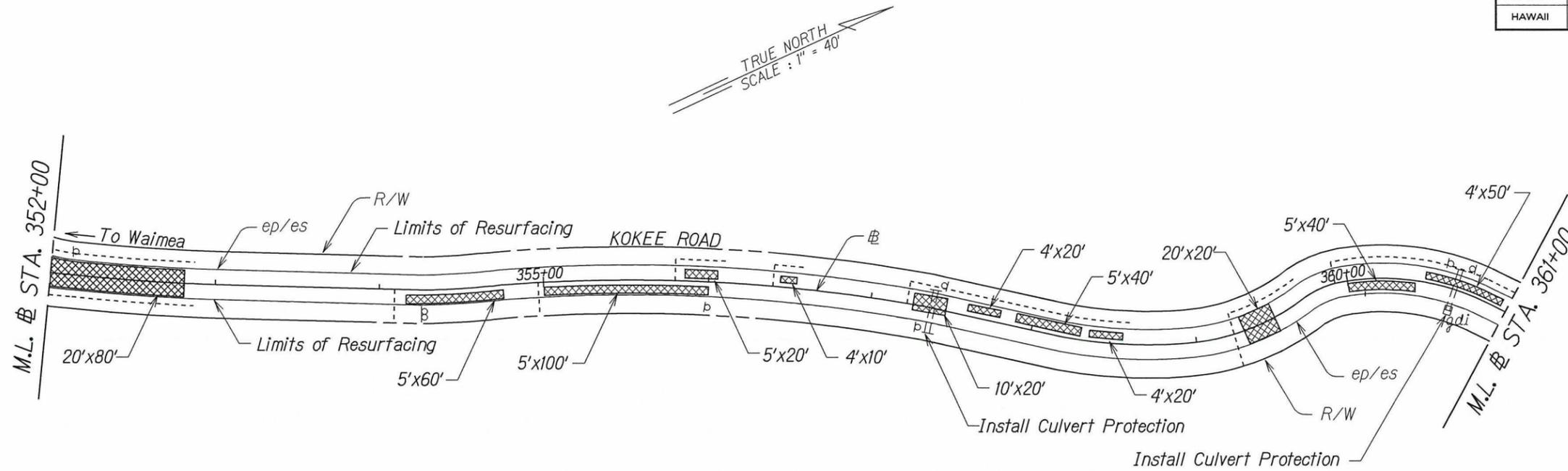
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
 Mile Post 6.0 to Mile Post 8.5
 Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 2 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	3	7



Construction Sequence:

1. Install culvert protection
2. Install perimeter sediment control
3. Reconstruct weakened pavement areas
4. Remove perimeter sediment control after reconstructed areas are established
5. Remove all BMP's

LEGEND:

- Pavement Reconstruction —
- Sediment Control Devices —

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	10/2/11
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

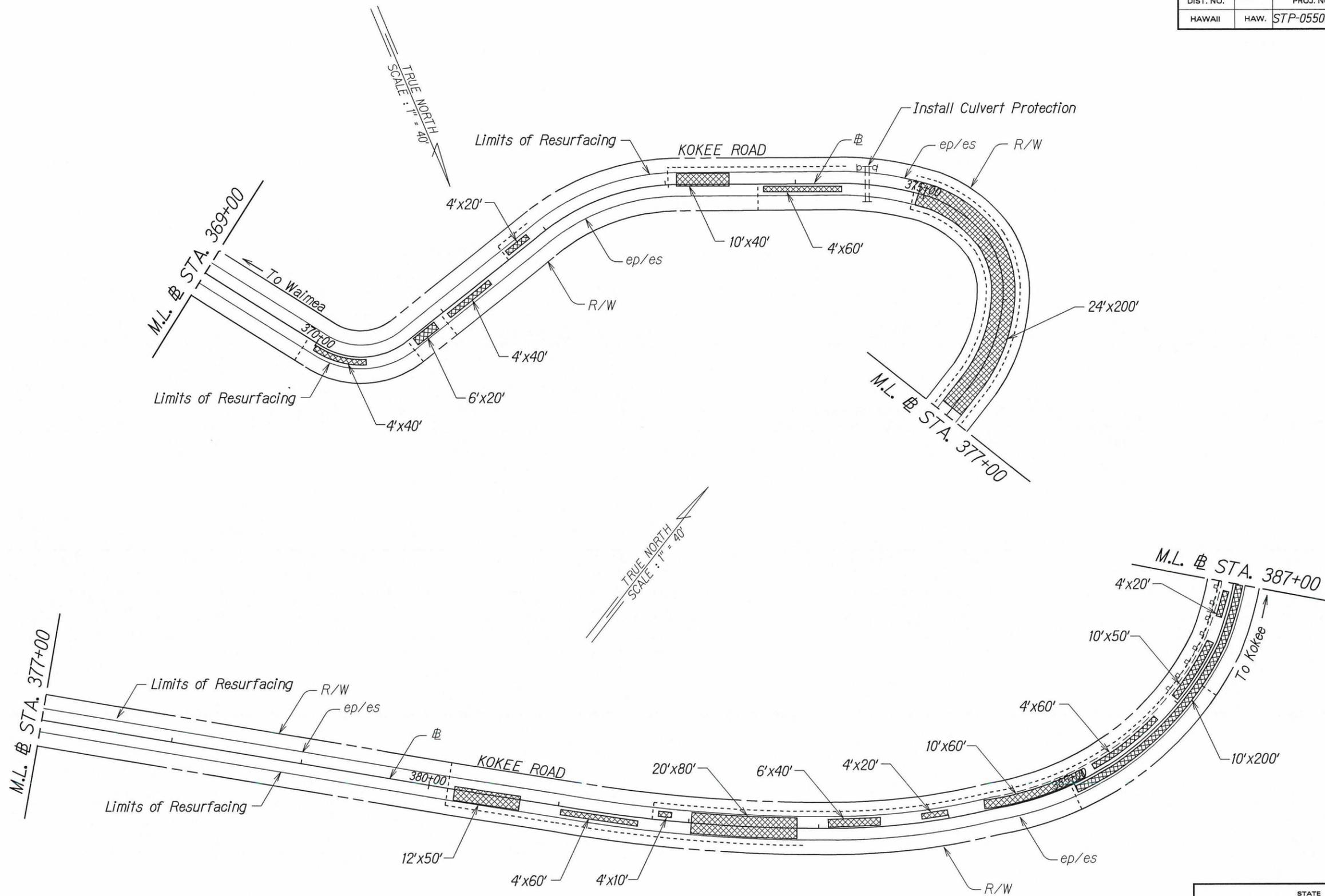
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	4	7



DATE	09/11
REVISIONS	
DESIGNED BY	
CHECKED BY	
DATE	
DESIGNED BY	
CHECKED BY	
DATE	
DESIGNED BY	
CHECKED BY	

LEGEND:
 Pavement Reconstruction — [hatched pattern]
 Sediment Control Devices — [dashed line]

- Construction Sequence:**
1. Install culvert protection
 2. Install perimeter sediment control
 3. Reconstruct weakened pavement areas
 4. Remove perimeter sediment control after reconstructed areas are established
 5. Remove all BMP's

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

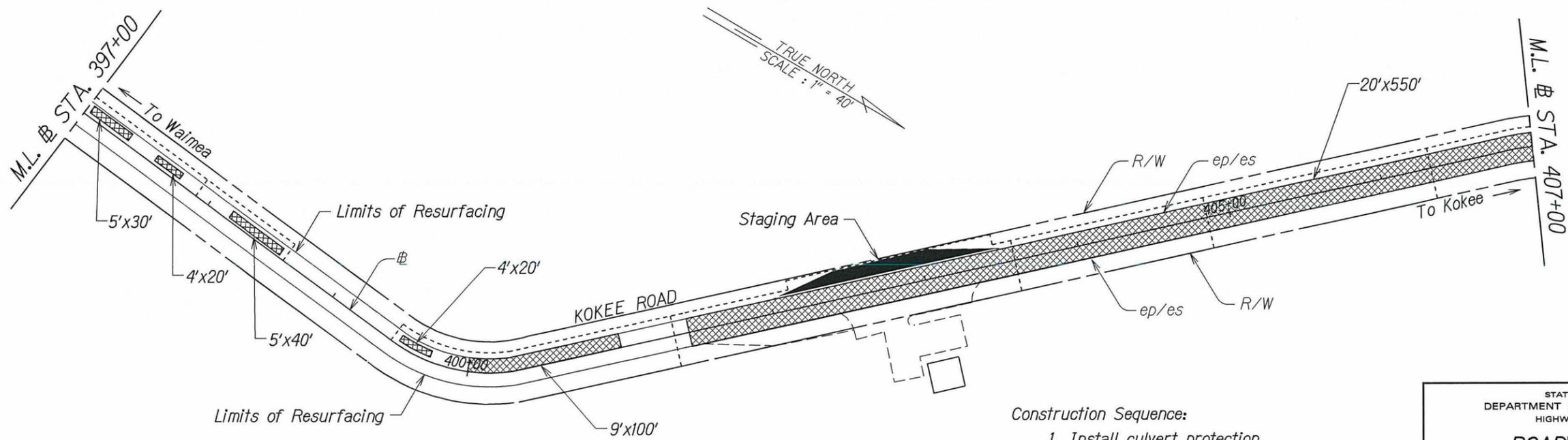
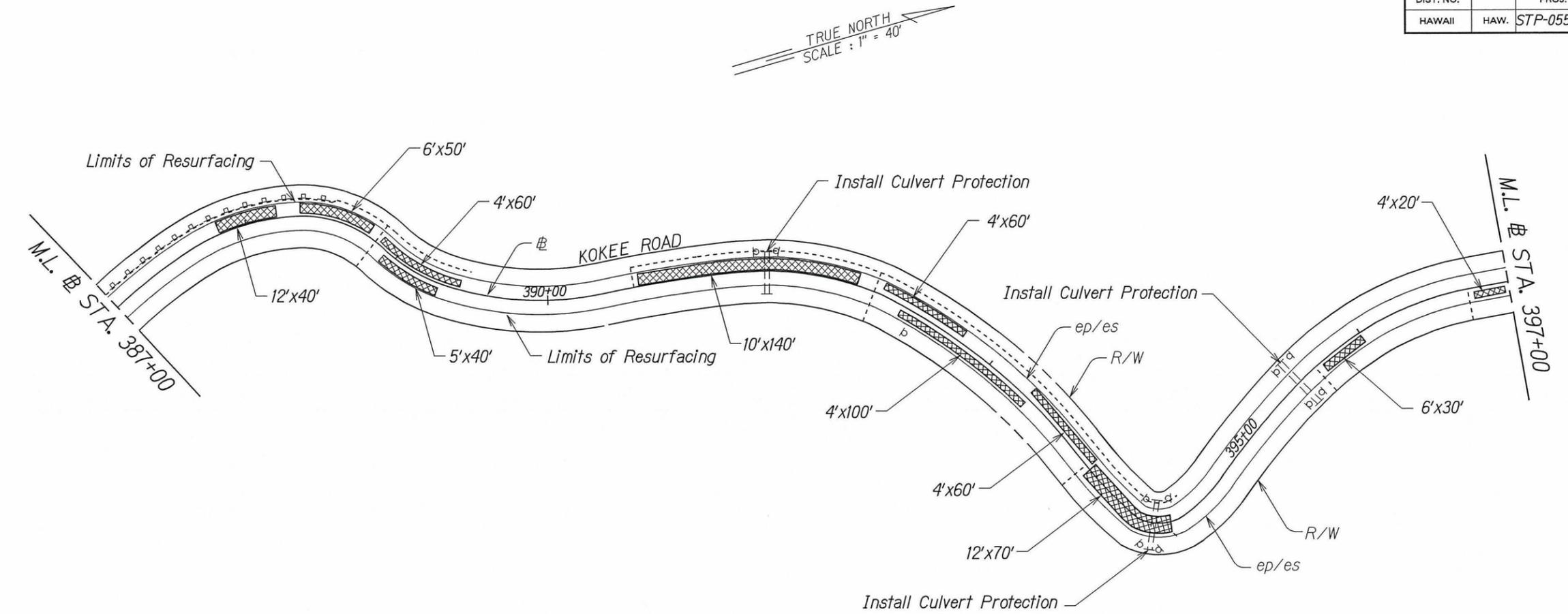
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
 Mile Post 6.0 to Mile Post 8.5
 Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

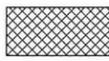
SHEET No. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	5	7



SURVEY PLOTTED BY	DATE
DRAWN BY	09/11
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO. 20100501	

LEGEND:

Pavement Reconstruction — 

Sediment Control Devices — 

- Construction Sequence:
1. Install culvert protection
 2. Install perimeter sediment control
 3. Reconstruct weakened pavement areas
 4. Remove perimeter sediment control after reconstructed areas are established
 5. Remove all BMP's

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

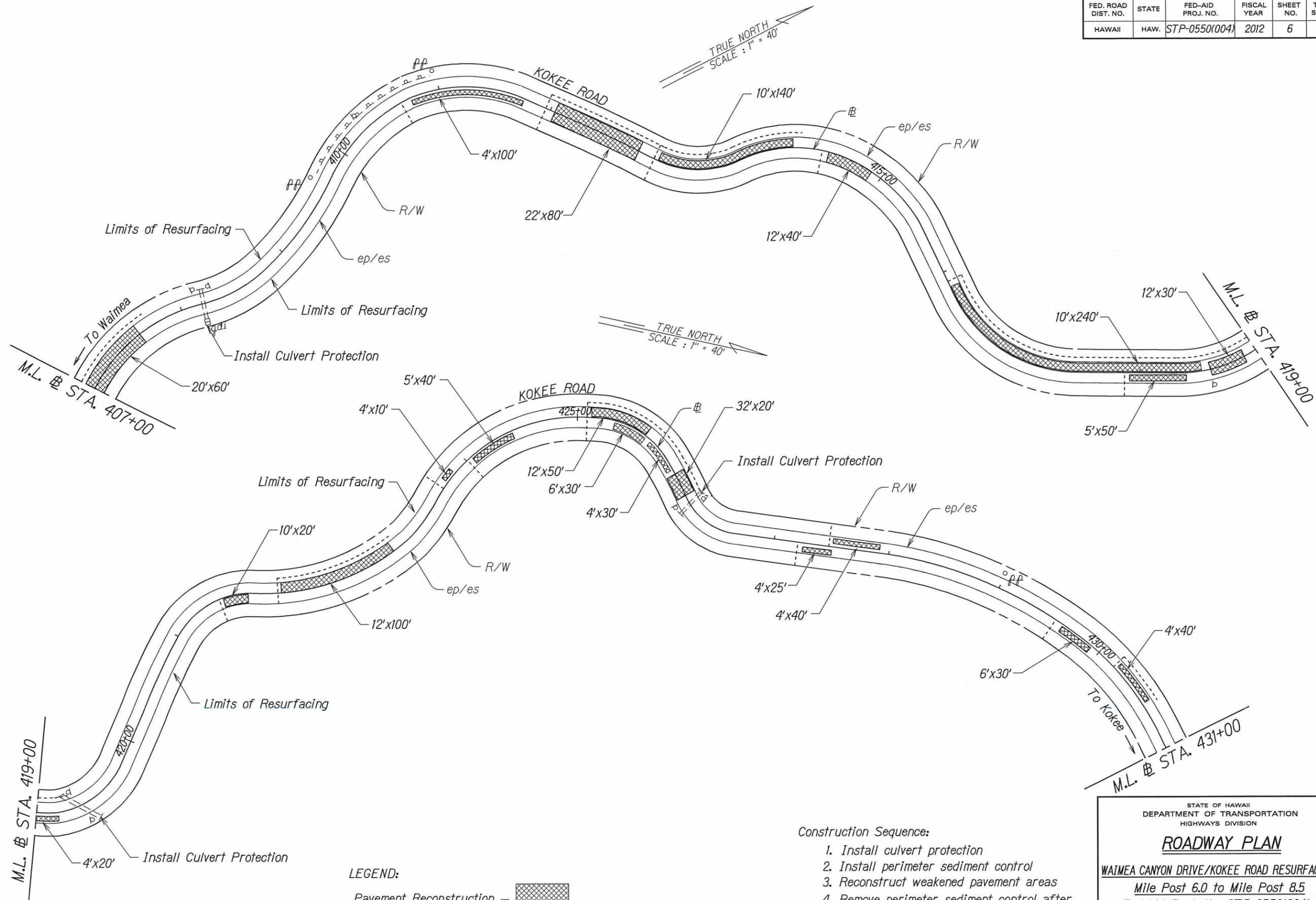
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	6	7



SURVEY PLOTTED BY	DATE
DRAWN BY	02/11
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

LEGEND:
 Pavement Reconstruction — [Cross-hatched pattern]
 Sediment Control Devices — [Dashed line]

- Construction Sequence:**
1. Install culvert protection
 2. Install perimeter sediment control
 3. Reconstruct weakened pavement areas
 4. Remove perimeter sediment control after reconstructed areas are established
 5. Remove all BMP's

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

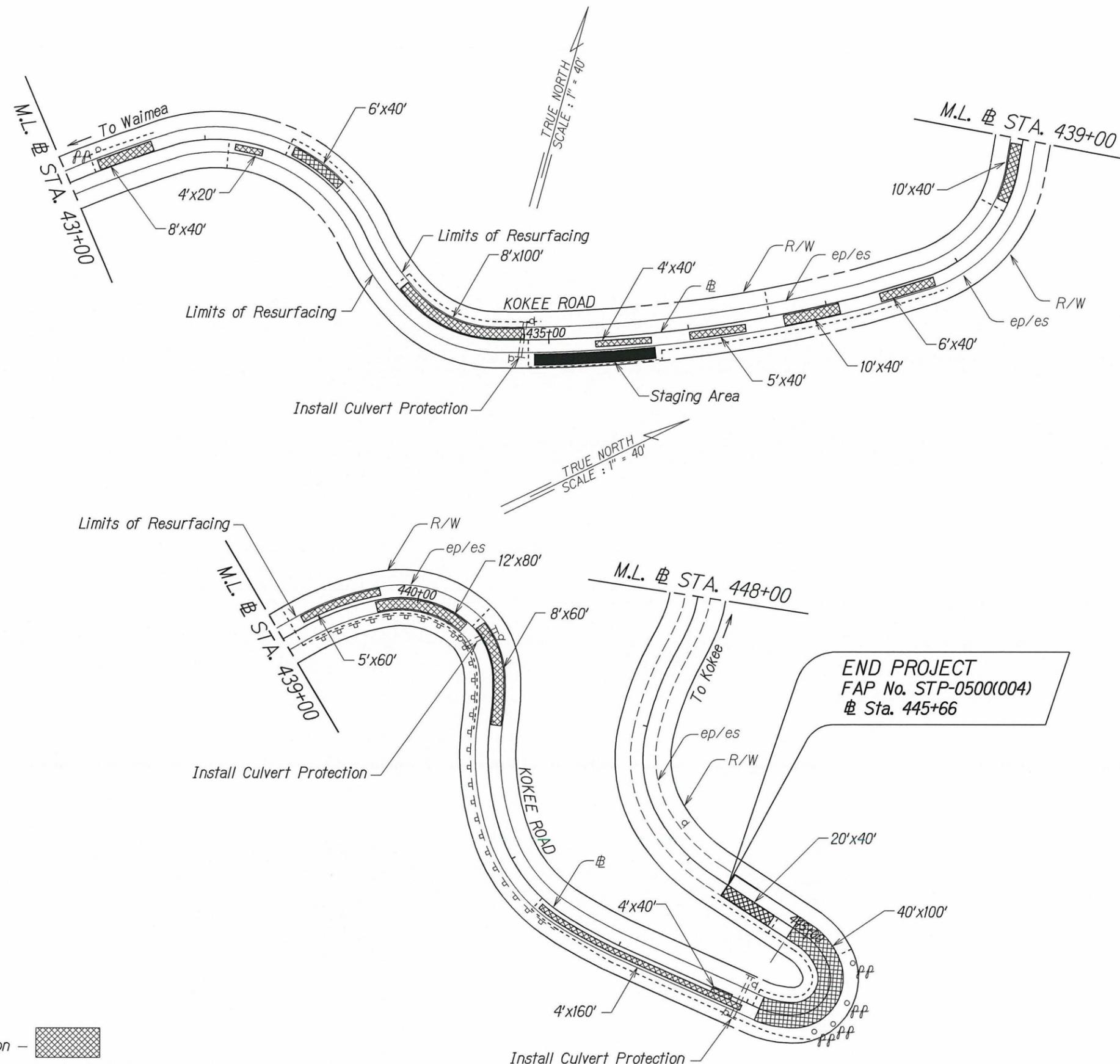
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
 Mile Post 6.0 to Mile Post 8.5
 Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	7	7



LEGEND:

Pavement Reconstruction — 

Sediment Control Devices — 

- Construction Sequence:
1. Install culvert protection
 2. Install perimeter sediment control
 3. Reconstruct weakened pavement areas
 4. Remove perimeter sediment control after reconstructed areas are established
 5. Remove all BMP's

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

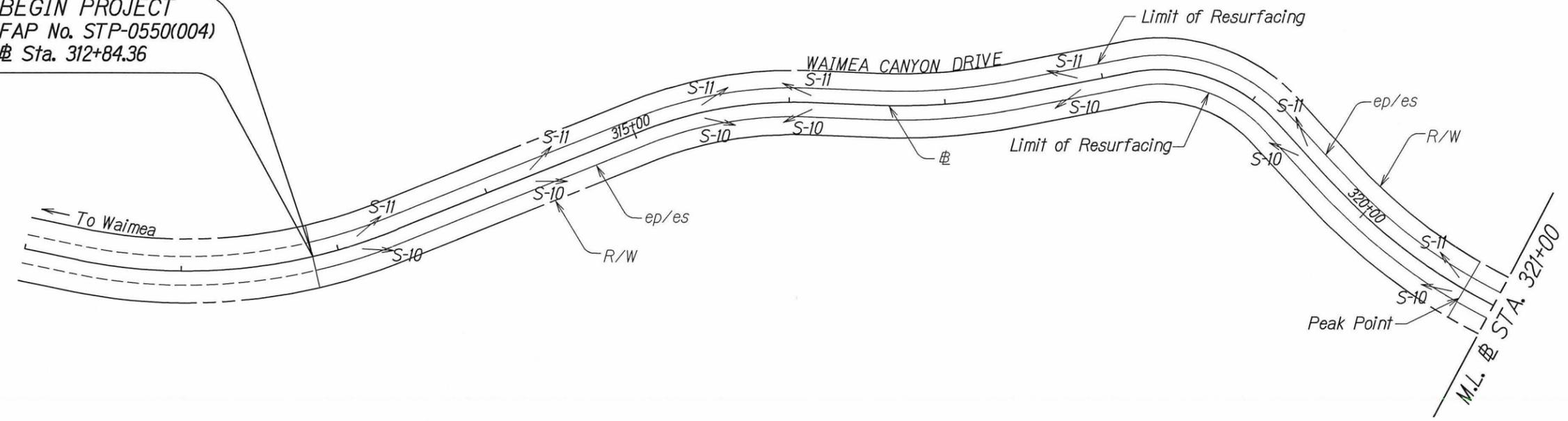
SHEET No. 7 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	1	7

BEGIN PROJECT
FAP No. STP-0550(004)
Sta. 312+84.36

TRUE NORTH
SCALE: 1" = 40'

S-11: A = 0.31 Acre
Q = 1.49 cfs

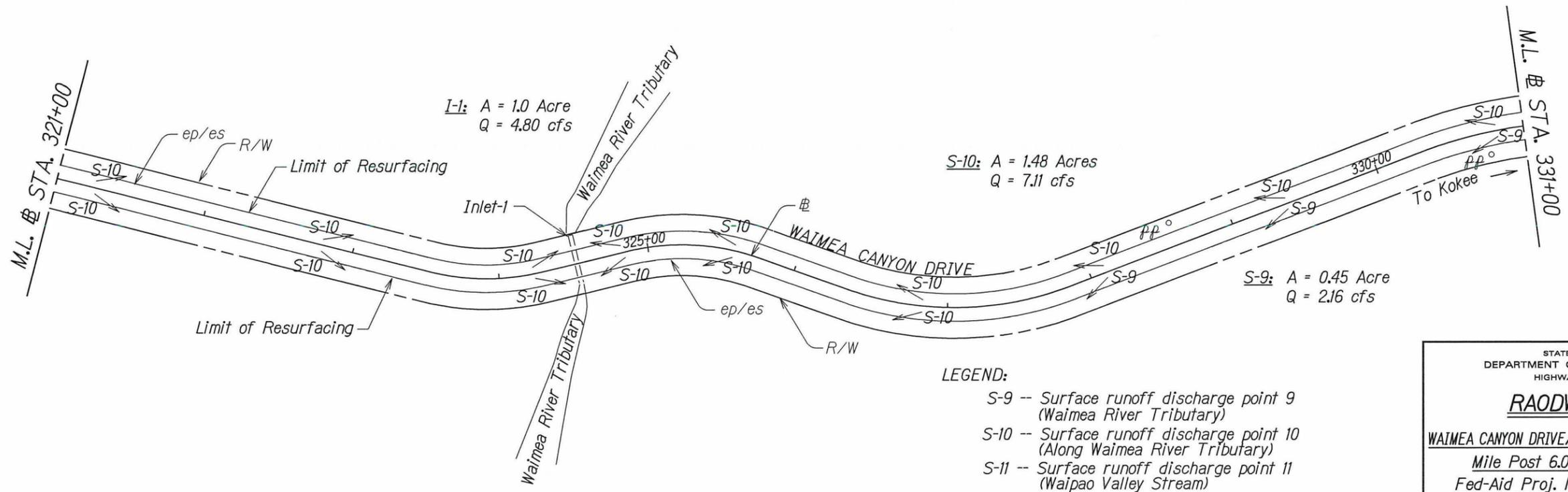


TRUE NORTH
SCALE: 1" = 40'

I-1: A = 1.0 Acre
Q = 4.80 cfs

S-10: A = 1.48 Acres
Q = 7.11 cfs

S-9: A = 0.45 Acre
Q = 2.16 cfs



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	02/11
DRAWN BY	
TRACED BY	
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

- LEGEND:
- S-9 -- Surface runoff discharge point 9 (Waimea River Tributary)
 - S-10 -- Surface runoff discharge point 10 (Along Waimea River Tributary)
 - S-11 -- Surface runoff discharge point 11 (Waipao Valley Stream)
 - I-1 -- Surface runoff to Inlet-1 discharge to Waimea River Tributary

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

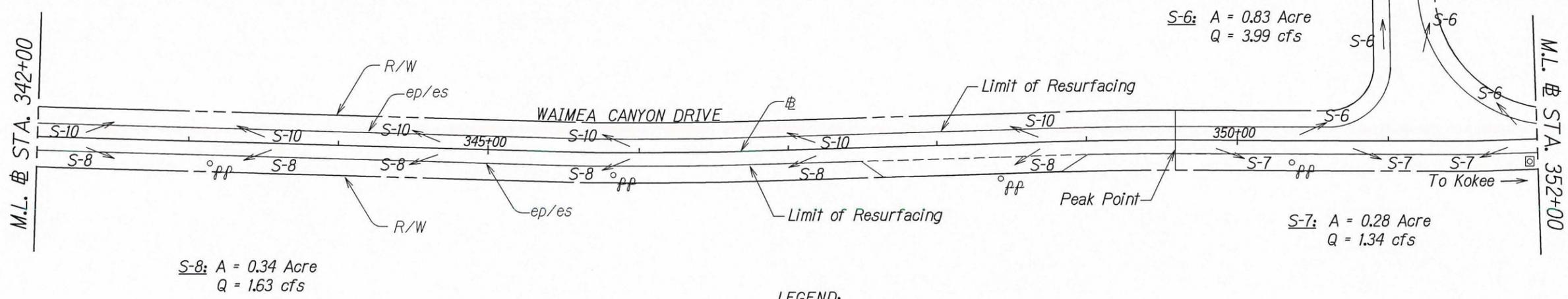
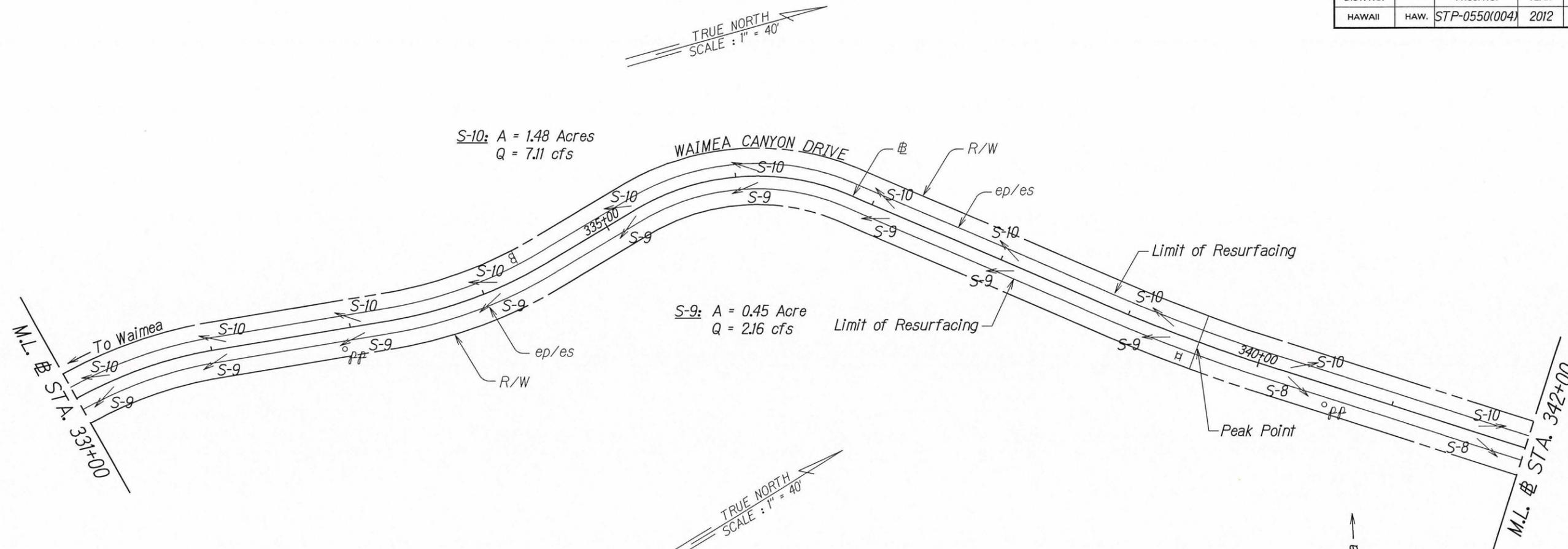
RAODWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 1 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	2	7



S-10: A = 1.48 Acres
Q = 7.11 cfs

S-9: A = 0.45 Acre
Q = 2.16 cfs

S-6: A = 0.83 Acre
Q = 3.99 cfs

S-8: A = 0.34 Acre
Q = 1.63 cfs

S-7: A = 0.28 Acre
Q = 1.34 cfs

LEGEND:

- S-6 -- Surface Runoff to discharge point # 6 (Along Kaohe Valley Stream)
- S-7 -- Surface Runoff to discharge point # 7 (Waimea River Tributary)
- S-8 -- Surface Runoff to discharge point # 8 (Waimea River Tributary)
- S-9 -- Surface Runoff to discharge point # 9 (Waimea River Tributary)
- S-10 -- Surface Runoff to discharge point # 10 (Along Waimea River Tributary)

SURVEY PLOTTED BY	DATE
DRAWN BY	02/11
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

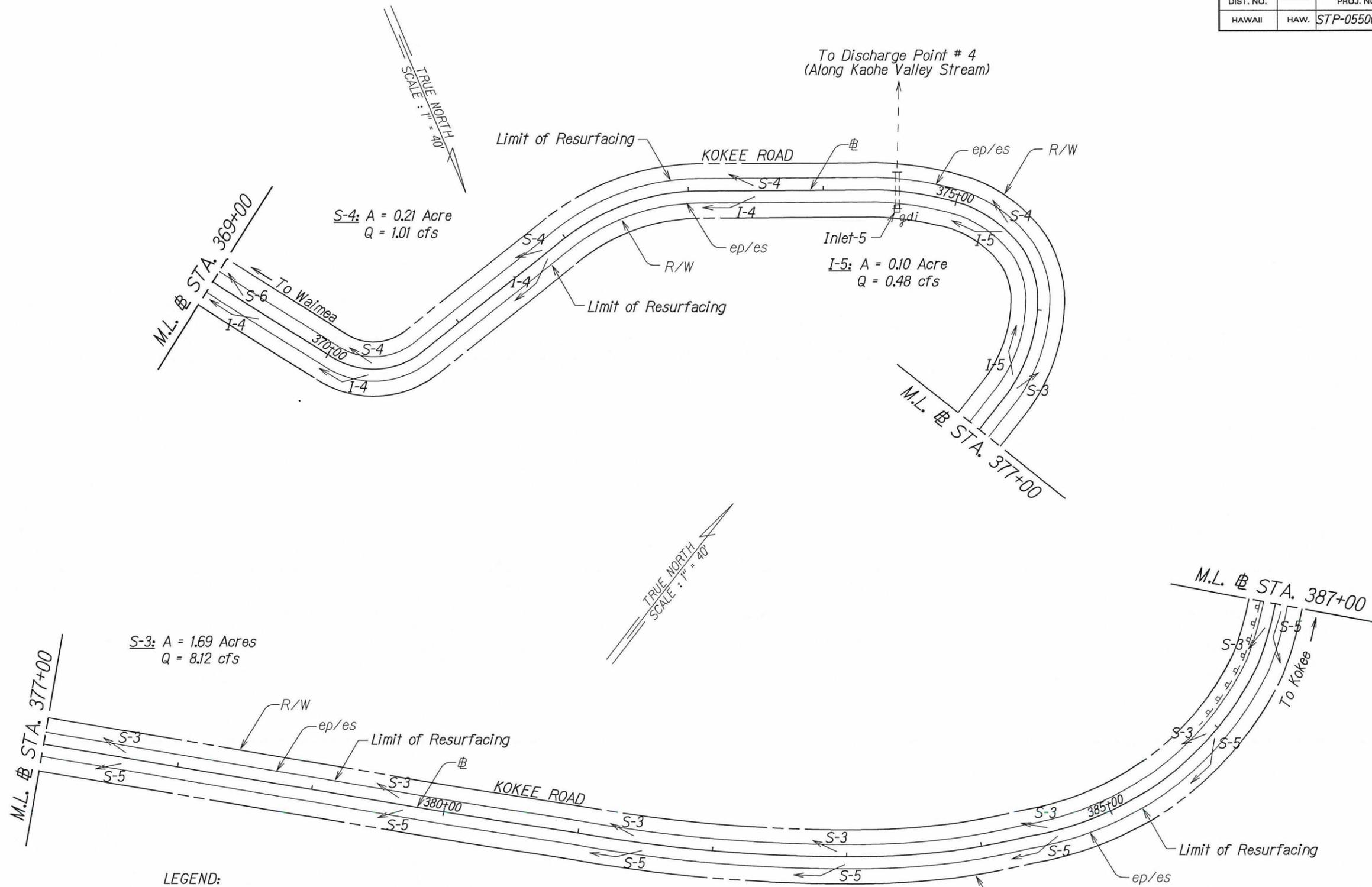
WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING

Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 2 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	4	7



LEGEND:

- S-3 -- Surface Runoff to discharge point # 3 (Along Kapue Valley Stream)
- S-4 -- Surface Runoff to discharge point # 4 (Along Kaohae Valley Stream)
- S-5 -- Surface Runoff to discharge point # 5 (Waimea River Tributary)
- S-6 -- Surface Runoff to discharge point # 6 (Along Kaohae Valley Stream)
- I-4 -- Surface runoff to Inlet-4 discharge to Kaohae Valley Stream
- I-5 -- Surface runoff to Inlet-5 discharge to Kaohae Valley Stream

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	02/11
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

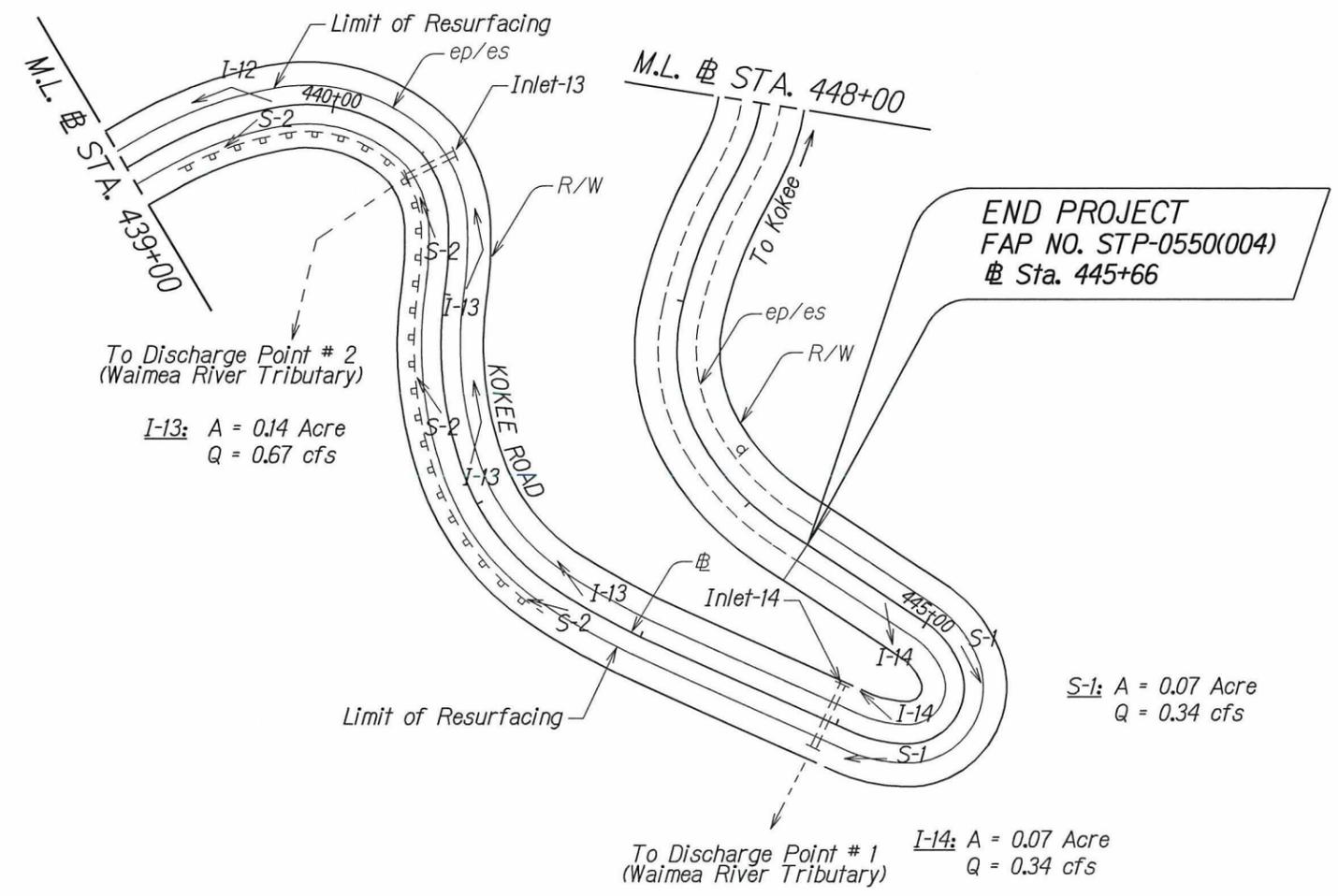
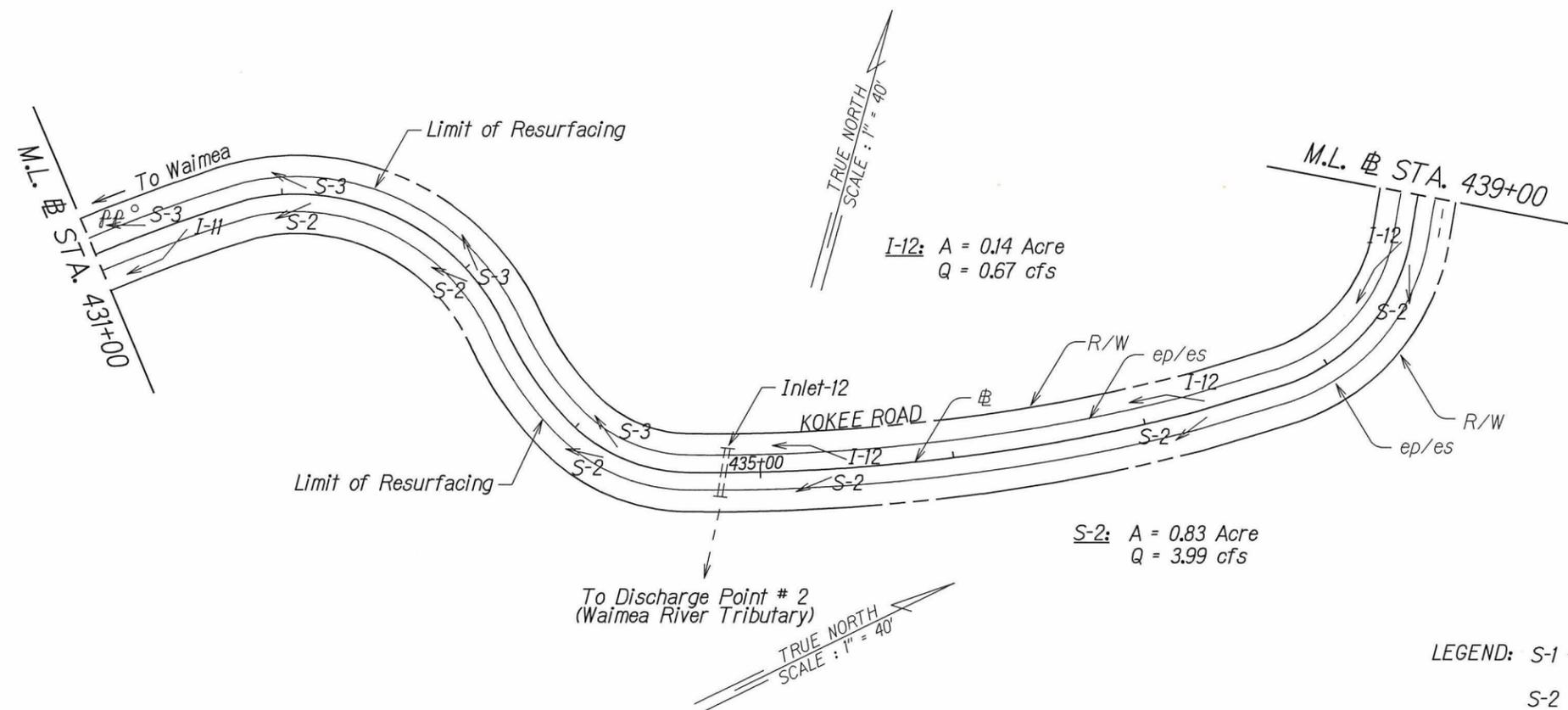
ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING
Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0550(004)	2012	7	7



- LEGEND:**
- S-1 -- Surface runoff to discharge point # 1 (Waimea River Tributary)
 - S-2 -- Surface runoff to discharge point # 2 (Waimea River Tributary)
 - S-3 -- Surface runoff to discharge point # 3 (Along Kapue Valley Stream)
 - I-11 -- Surface runoff to Inlet-11 discharge to Kapue Valley Stream
 - I-12 -- Surface runoff to Inlet-12 discharge to Waimea River Tributary
 - I-13 -- Surface runoff to Inlet-13 discharge to Waimea River Tributary
 - I-14 -- Surface runoff to Inlet-14 discharge to Waimea River Tributary

SURVEY PLOTTED BY	DATE
DRAWN BY	02/11
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

WAIMEA CANYON DRIVE/KOKEE ROAD RESURFACING

Mile Post 6.0 to Mile Post 8.5
Fed-Aid Proj. No. STP-0550(004)

Scale: 1" = 40' Date: June 2012

SHEET No. 7 OF 7 SHEETS