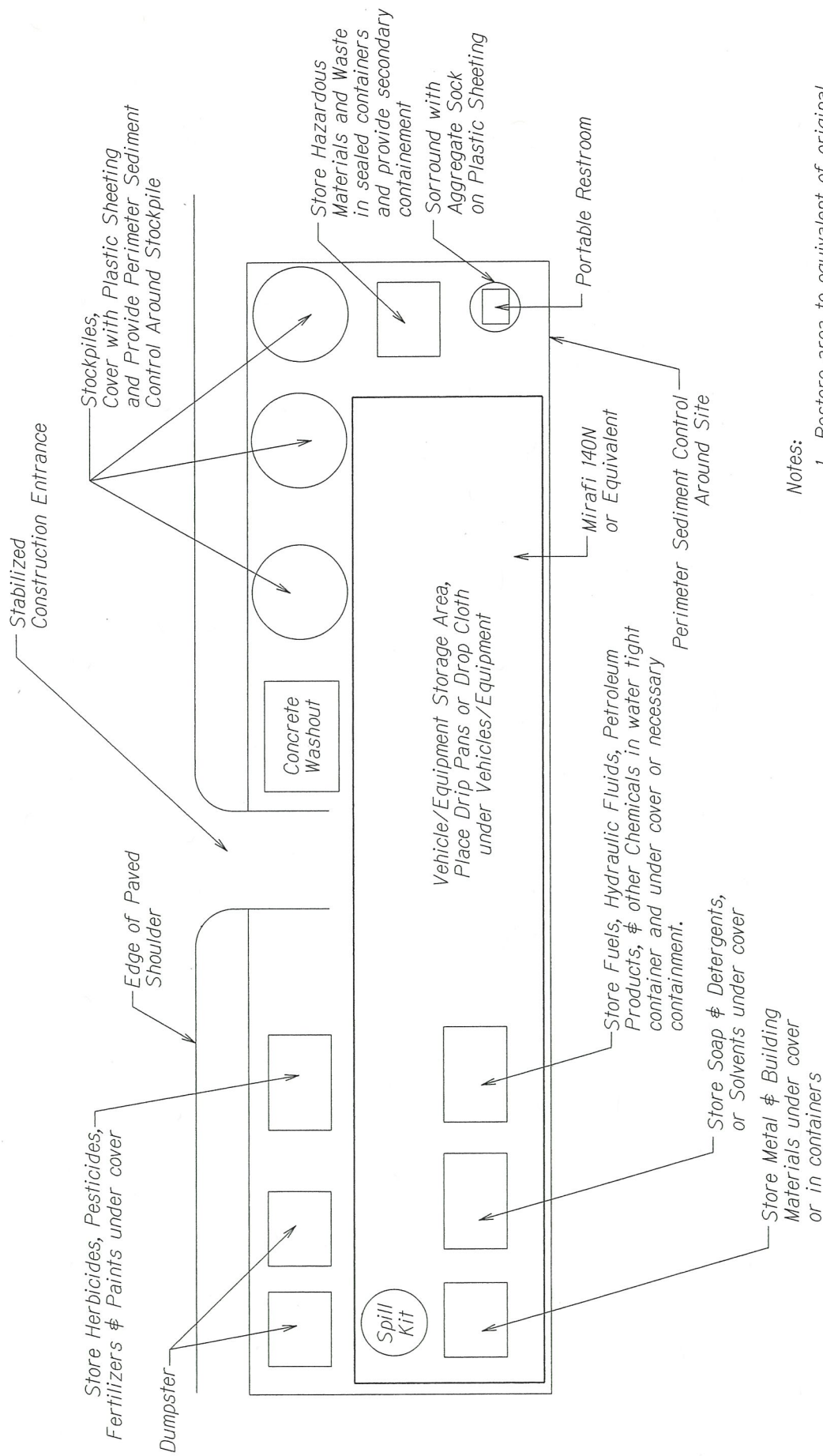


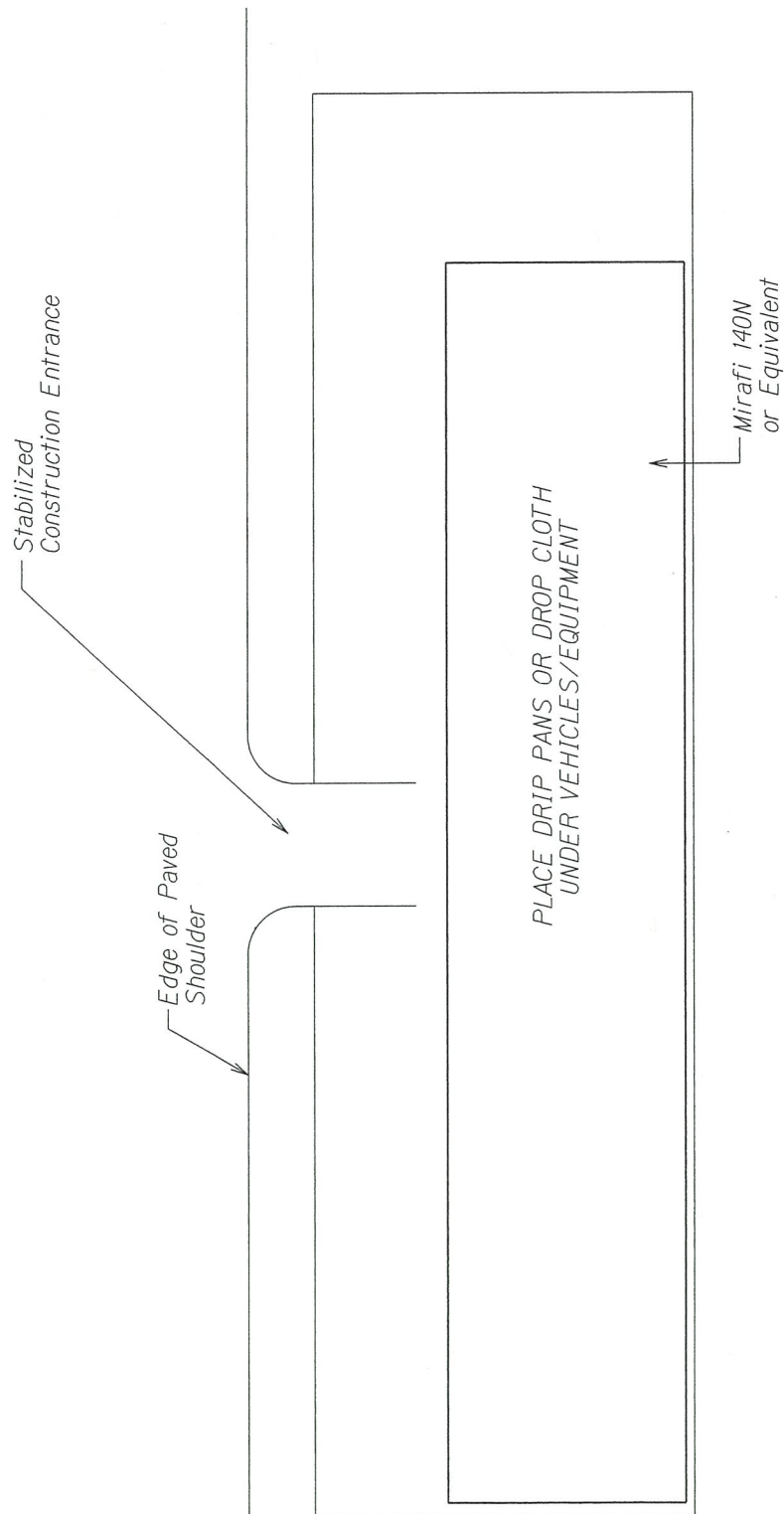
SWPPP Attacment A-1
BMP Maps



Notes:

1. Restore area to equivalent of original condition once construction is completed.
2. Contractor shall ensure proper protection for Staging/Storage Area.
3. Do not maintain or wash vehicles on-site. Provide appropriate BMP's if Contractor elects to do so.

STAGING/STORAGE AREA
Not to Scale



VEHICLE/EQUIPMENT AREA
Not to Scale

INDEX TO DRAWINGS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STANDARD PLANS SUMMARY
3	GENERAL NOTES & LEGEND
4 - 6	WATER POLLUTION AND EROSION CONTROL NOTES
7 - 9	TYPICAL SECTION
10 - 17	ROADWAY PLAN
18	PAVEMENT MARKING, NOTES, LEGEND, AND SIGN DETAILS
19	CENTERLINE MILLED RUMBLE STRIP DETAIL
20 - 27	PAVEMENT MARKING AND TRAFFIC SIGNING PLAN
28	SUPPLEMENTAL PLATE DETAIL
29	DESTINATION SIGN DETAIL
30	LOW SPEED UNDIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES & DETAILS

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

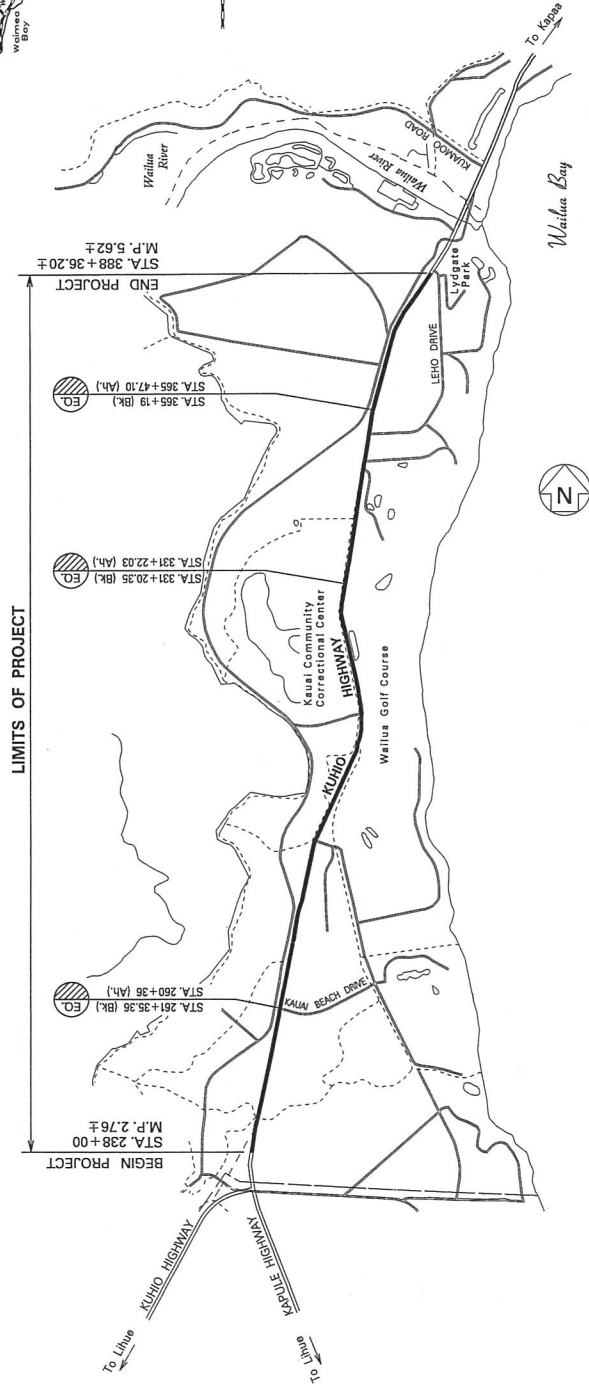
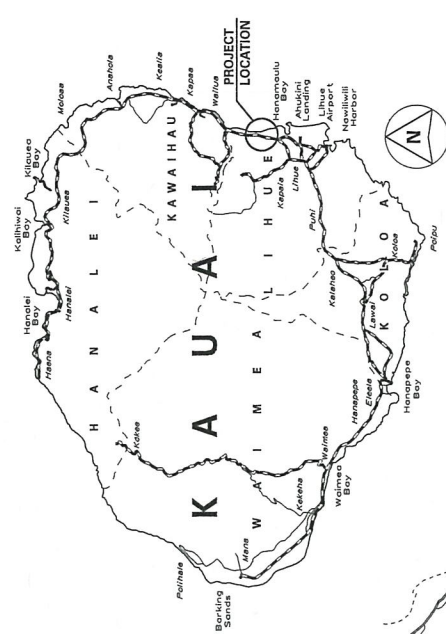
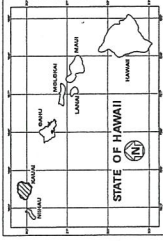
HIGHWAYS DIVISION
HONOLULU, HAWAII

PLANS FOR

KUHIO HIGHWAY RESURFACING KAPULE HIGHWAY TO NORTH LEHO DRIVE PROJECT NO. 56A-01-14M

DISTRICT OF LIHUE
ISLAND OF KAUAI

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	1	30



LAYOUT PLAN

GROSS LENGTH OF PROJECT.....2.76 MILE
NET LENGTH OF PROJECT.....2.76 MILE

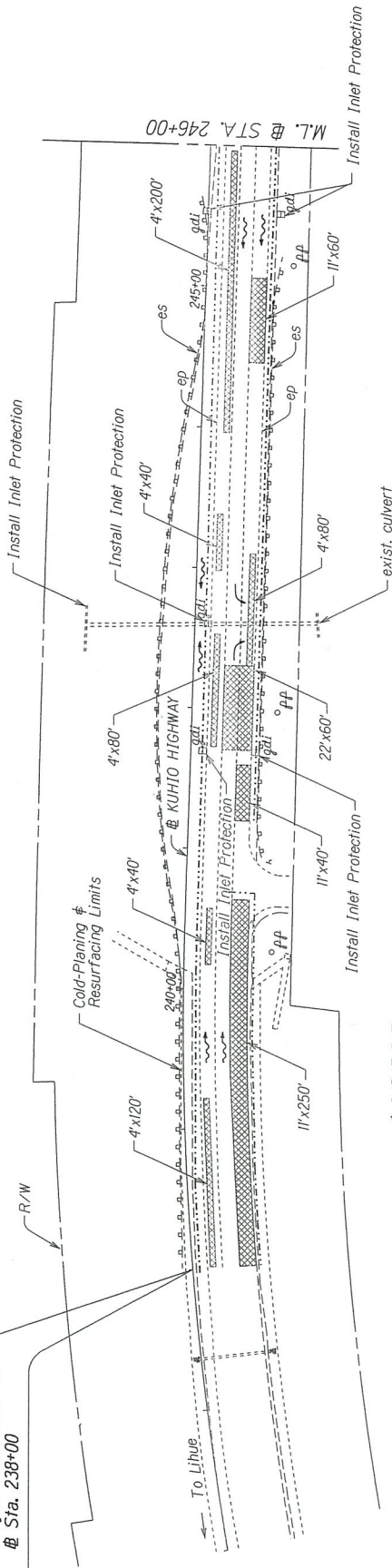
DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	
APPROVED:	DATE
DIR. OF TRANSPORTATION	

DESIGNED BY HWY-K
MANAGED BY HWY-KE
PHONE 241-3000
DATE JUNE 2017

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	10	30

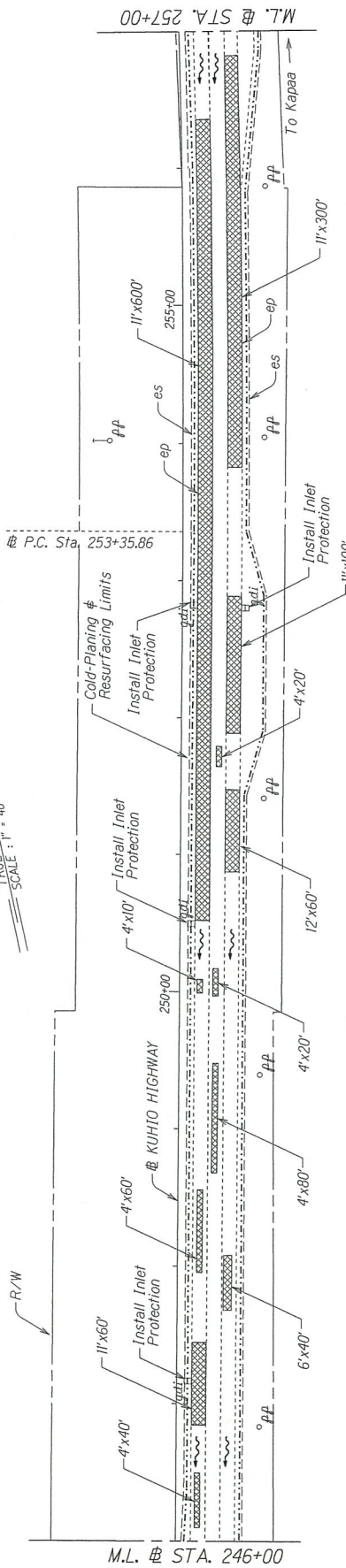
BEGIN PROJECT
Project No. 56A-01-14M
Sta. 238+00

TRUE NORTH
SCALE: 1" = 40'



Ⓔ CURVE DATA
 $\Delta = 40^\circ 02' 18''$
 $R = 2200.00$
 $T = 801.57$
 $C = 1506.27$
 $L_c = 1537.36$

TRUE NORTH
SCALE: 1" = 40'



LEGEND:

- Pavement Reconstruction (weakened pavement area)
- Sediment Control Devices

Construction Sequence:

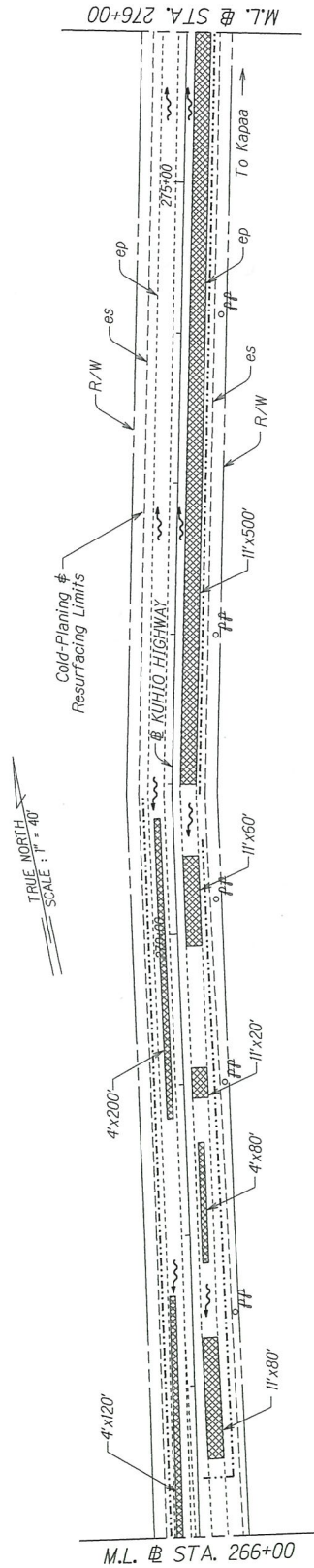
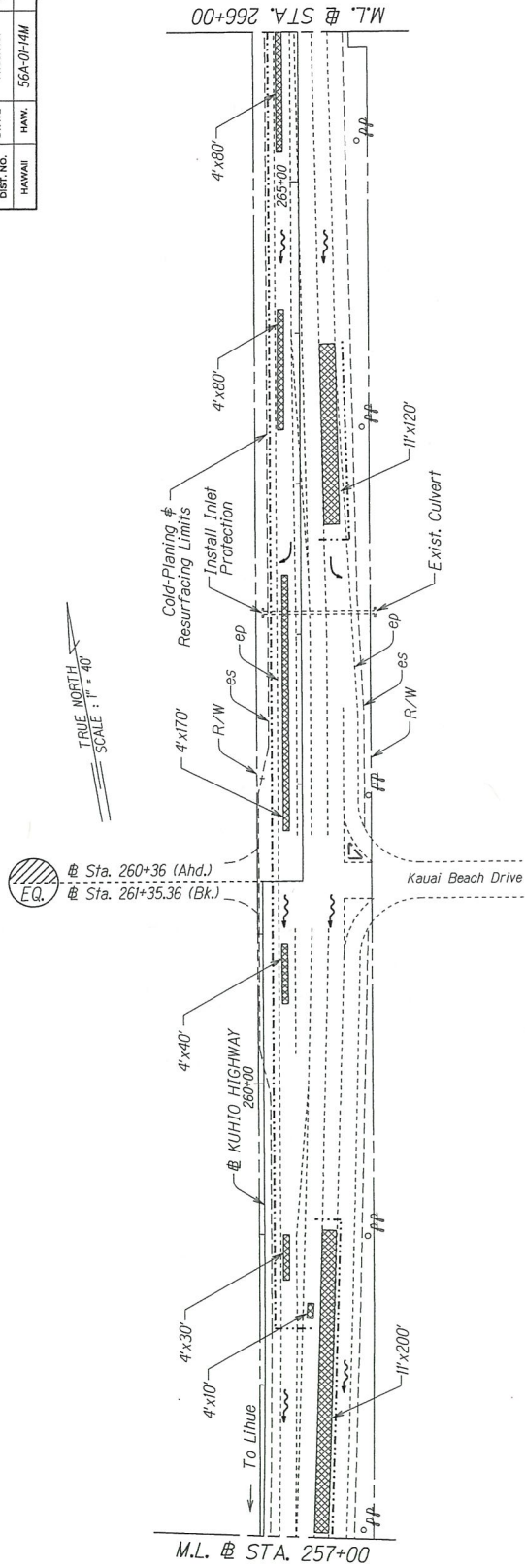
1. Install culvert protection.
2. Install perimeter sediment control.
3. Reconstruct weakened pavement areas.
4. Remove perimeter sediment control after reconstruct areas are established.
5. Remove all BMP's.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
KUHIU HIGHWAY RESURFACING
Kapule Highway to North Leho Drive
Project No. 56A-01-14M
Scale: 1" = 40' Date: Oct. 2016

DATE	BY	CHKD	APP'D
10/10/18	W. J. HARRIS	W. J. HARRIS	W. J. HARRIS
10/10/18	W. J. HARRIS	W. J. HARRIS	W. J. HARRIS
10/10/18	W. J. HARRIS	W. J. HARRIS	W. J. HARRIS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
56A-01-14M	HAW.	56A-01-14M	2018	11	30



Construction Sequence:

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

- LEGEND:
- Pavement Reconstruction (weakened pavement area)
 - Sediment Control Devices

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
Kupule Highway to North Leho Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

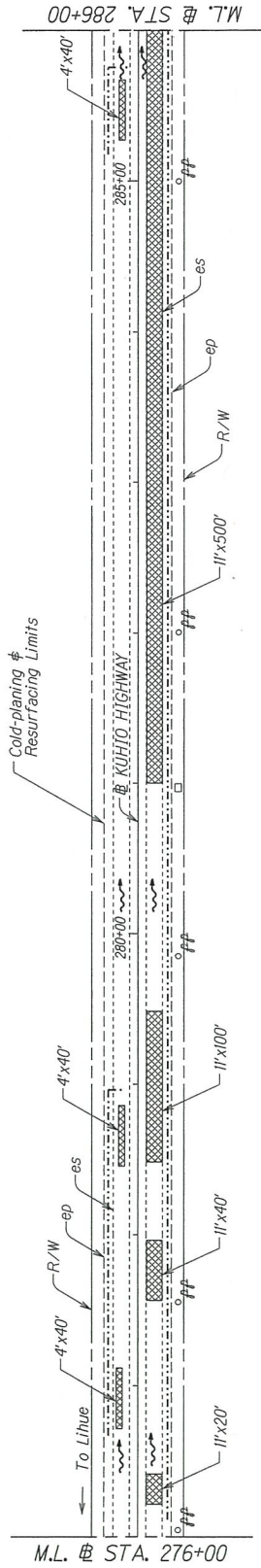
SHEET No. 2 OF 8 SHEETS

11

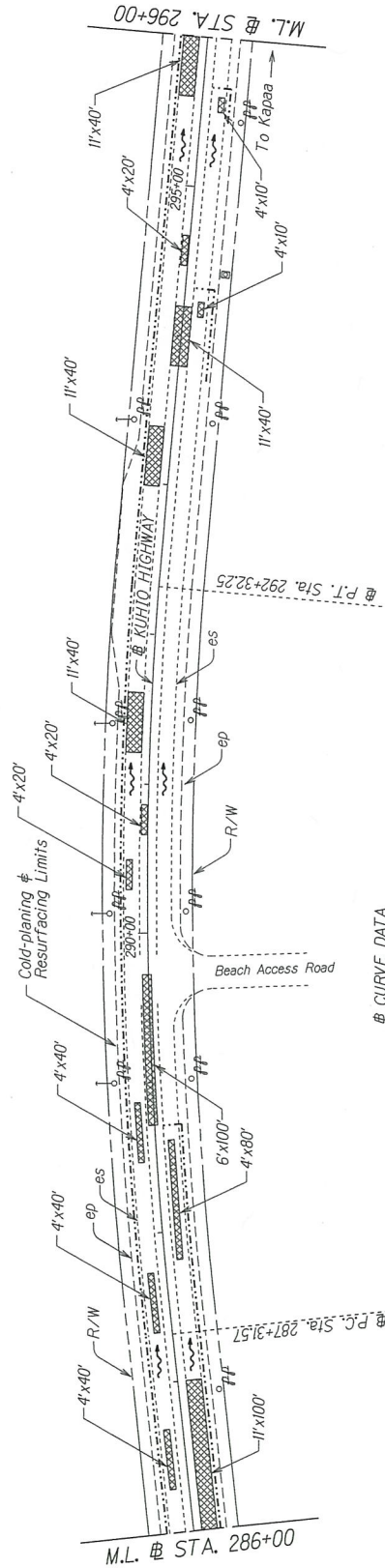
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
PLANNED BY	
REVIEWED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	12	30

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'



② CURVE DATA
 $\Delta = 14^{\circ}27'00''$
 $R = 1,500.00$
 $T = 86.16$
 $L = 288.90$

LEGEND:

- Pavement Reconstruction (weakened pavement area)
- 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 reconstruct areas are established.
 5. Remove all BMP's.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

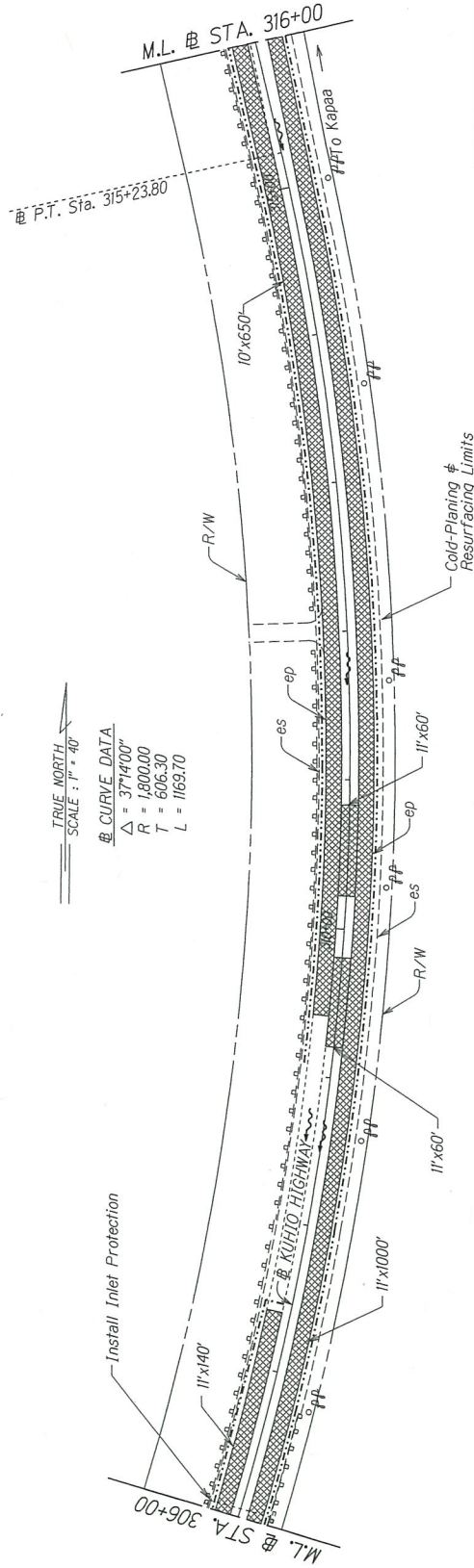
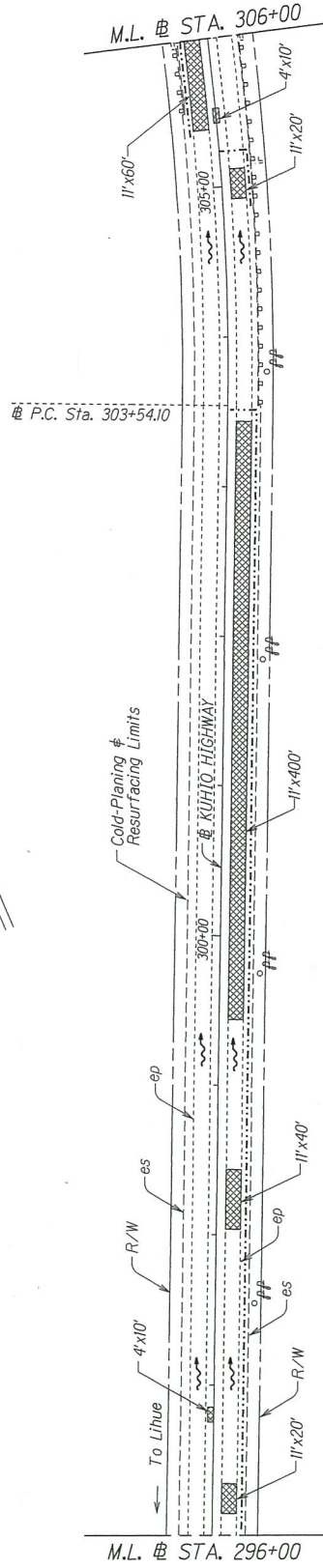
ROADWAY PLAN
KUHIU HIGHWAY RESURFACING
Kapule Highway to North Lele Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016
SHEET No. 3 OF 8 SHEETS

DESIGNED BY	DATE
CHECKED BY	
IN CHARGE	
PLANNED BY	
REVIEWED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
56A-01-14M	HAW.		2018	73	30

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'

CURVE DATA
 $\Delta = 37^\circ 14' 00''$
 $R = 1,800.00$
 $T = 606.30$
 $L = 1169.70$

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
Kapele Highway to North Lele Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

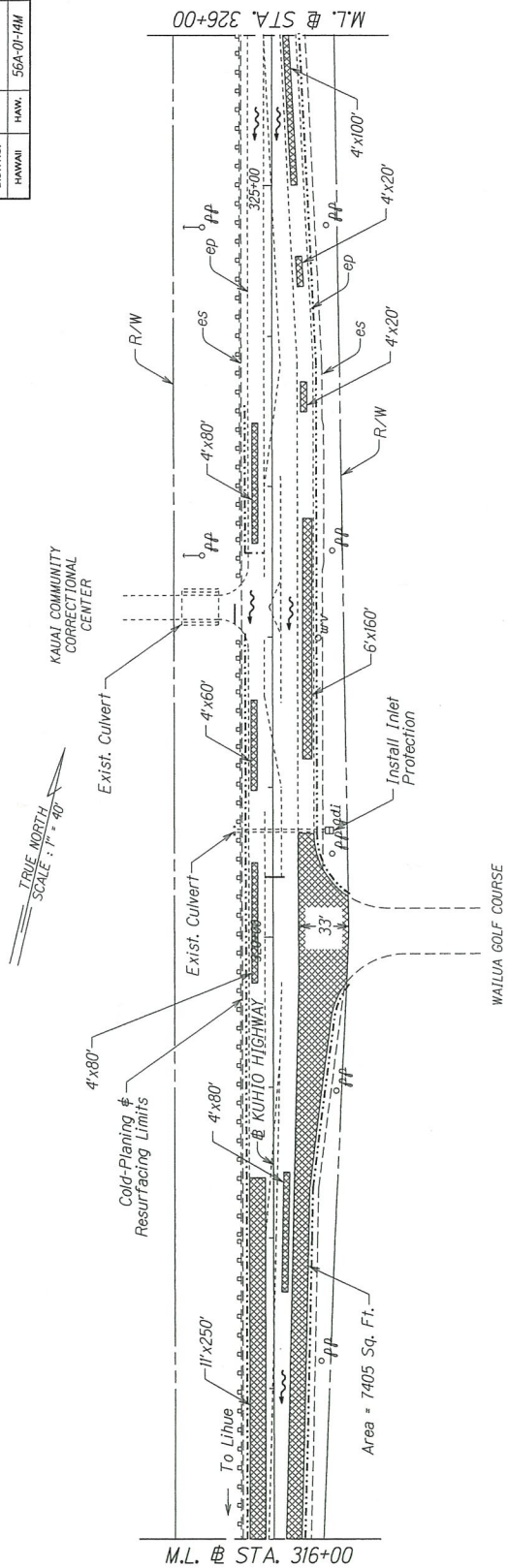
SHEET No. 4 OF 8 SHEETS

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

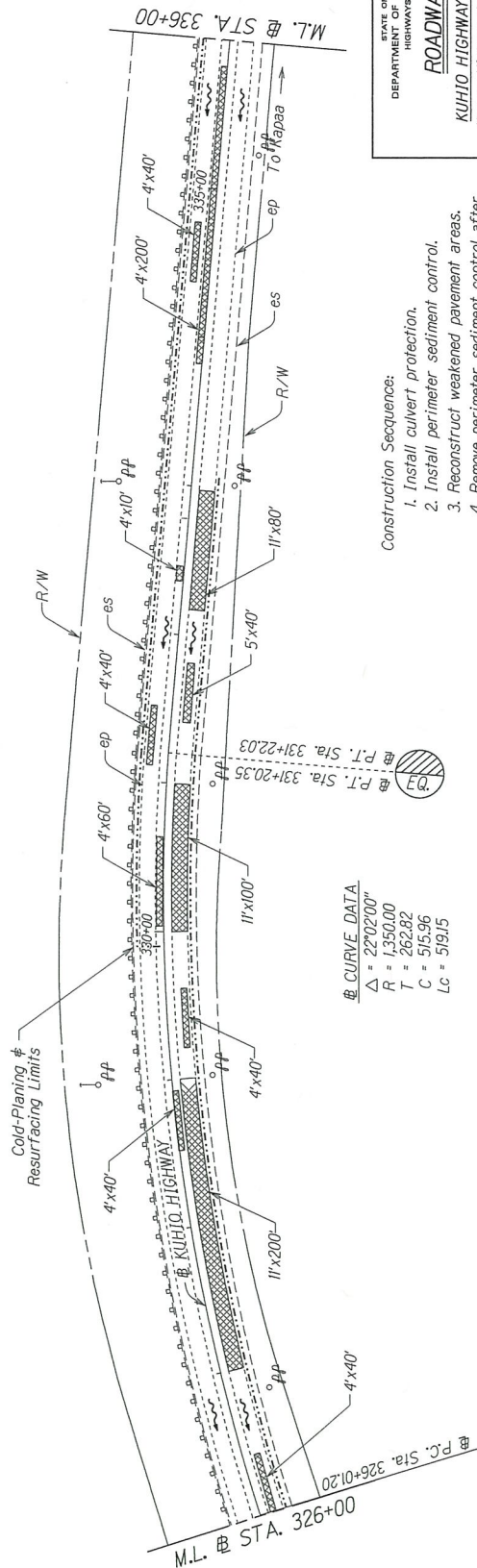
- LEGEND:
- Pavement Reconstruction (weakened pavement area)
 - Sediment Control Devices

ORIGINAL SURVEY PLOTTED BY	DATE
TRACED BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	14	30



TRUE NORTH
SCALE: 1" = 40'



CURVE DATA
 $\Delta = 22^\circ 02' 00''$
 $R = 1,350.00$
 $T = 262.82$
 $C = 515.96$
 $L_c = 519.15$

LEGEND:

- Pavement Reconstruction (weakened pavement area)
- 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 reconstruct areas are established.
 5. Remove all BMP's.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
KUHIO HIGHWAY RESURFACING
 Kapule Highway to North Lele Drive
 Project No. 56A-01-14M

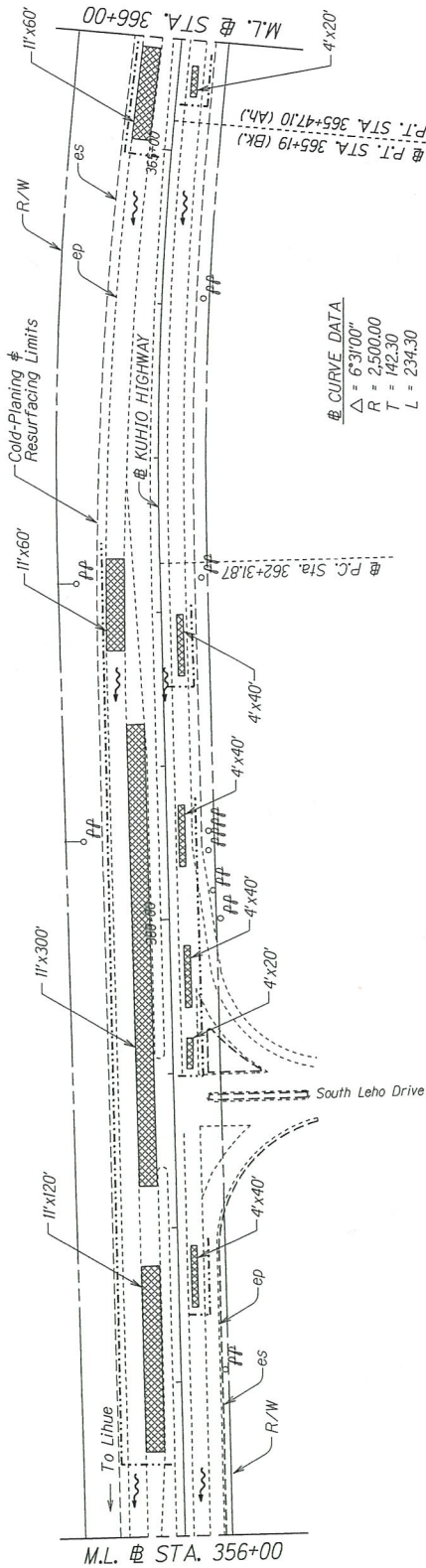
Scale: 1" = 40' Date: Oct. 2016

SHEET No. 5 OF 8 SHEETS

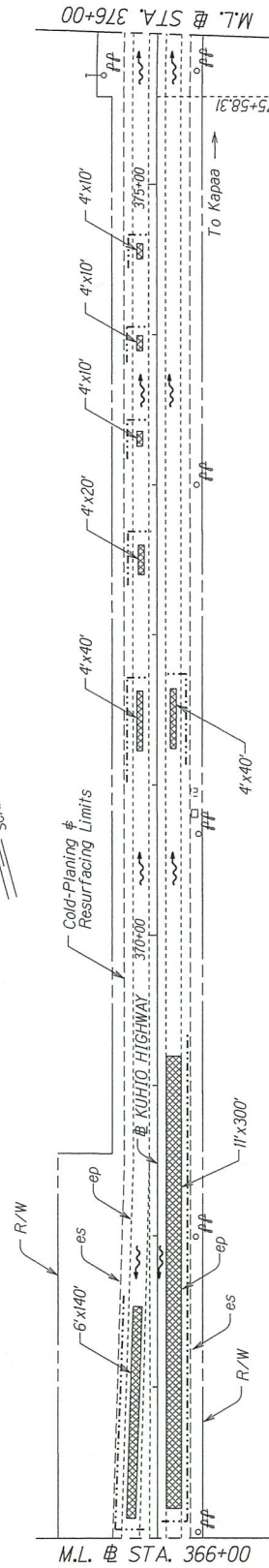
DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII		56A-01-14M	2018	16	30

TRUE NORTH
SCALE: 1" = 40'



TRUE NORTH
SCALE: 1" = 40'



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

- LEGEND:
- Pavement Reconstruction (weakened pavement area)
 - Sediment Control Devices

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

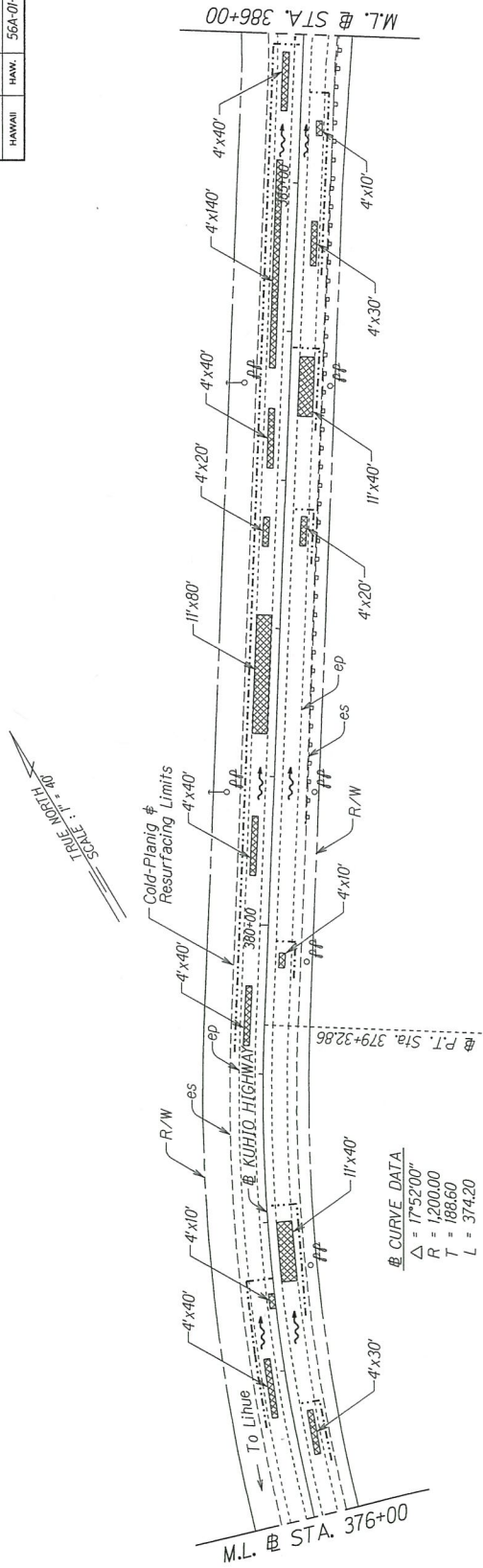
ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
 Kapule Highway to North Leho Drive
 Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

SHEET No. 7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	17	30

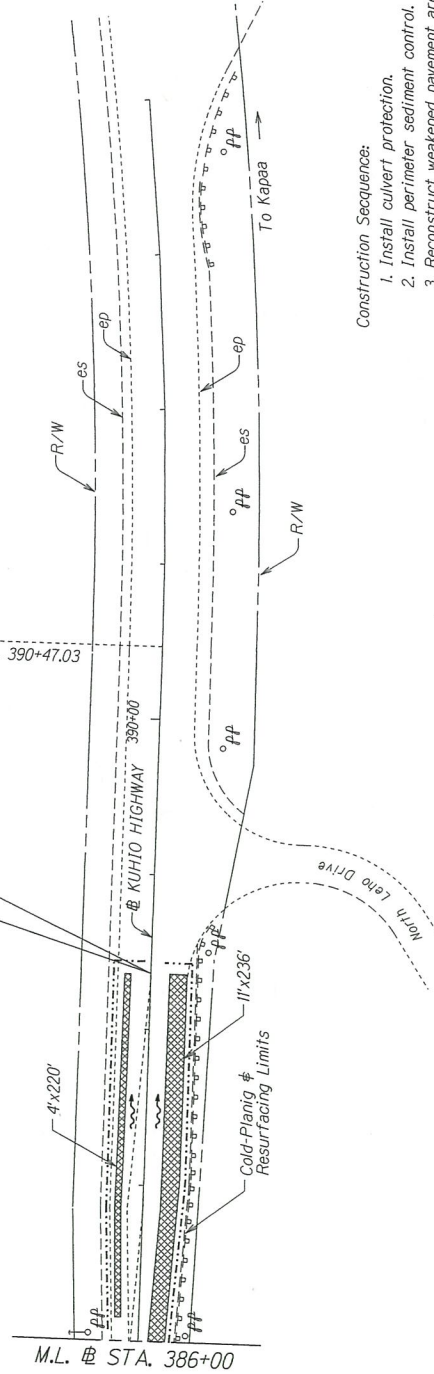


@ CURVE DATA
 $\Delta = 17^{\circ}52'00''$
 $R = 1200.00$
 $T = 188.60$
 $L = 374.20$

END PROJECT
 Project No. 56A-01-14M
 @ Sta. 388+36.20

TRUE NORTH
 SCALE: 1" = 40'

PC @ Sta. 390+47.03



LEGEND:

- Pavement Reconstruction (weakened pavement area)
- 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 reconstruct areas are established.
 5. Remove all BMP's.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

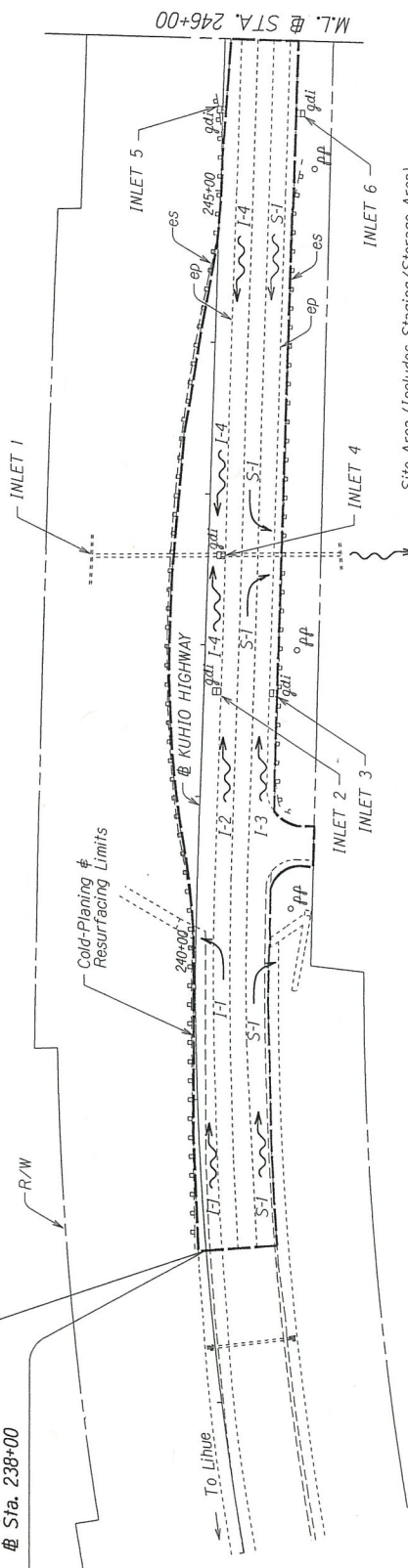
ROADWAY PLAN
 KUHIO HIGHWAY RESURFACING
 Kapule Highway to North Leho Drive
 Project No. 56A-01-14M
 Scale: 1" = 40' Date: Oct. 2016

DESIGNED BY	DATE
CHECKED BY	
IN CHARGE	
PLANNED BY	
TRACED BY	
NOTED BY	
REVIEWED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	10	30

BEGIN PROJECT
Project No. 56A-01-14M
Sta. 238+00

TRUE NORTH
SCALE: 1" = 40'



② CURVE DATA
Δ = 40°02'18"
R = 2,200.00
T = 801.57
C = 1506.27
Lc = 1537.36

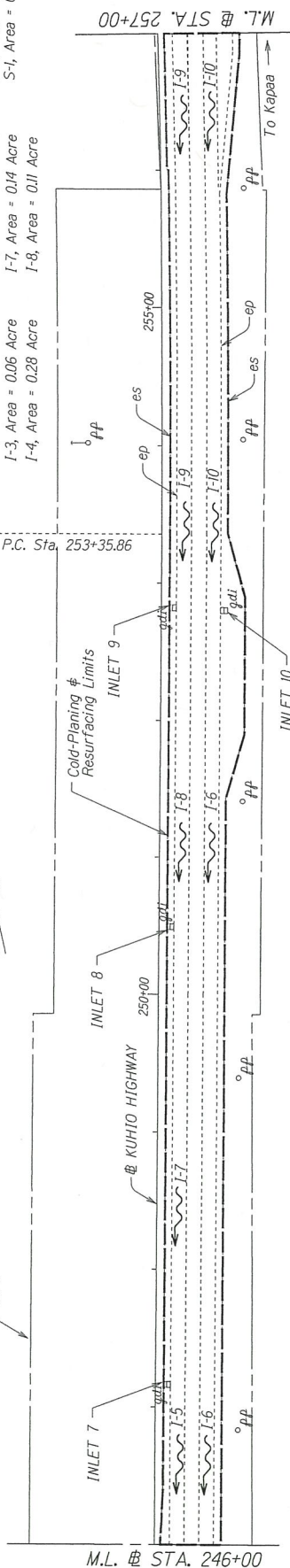
Site Area (Includes Staging/Storage Area):

I-1, Area = 1.49 Acres
I-2, Area = 0.44 Acres
I-3, Area = 0.21 Acres
I-4, Area = 0.28 Acres
I-5, Area = 0.68 Acres
I-6, Area = 0.57 Acres
I-7, Area = 0.86 Acres
I-8, Area = 0.53 Acres

Disturbed Area:

I-1, Area = 0.18 Acres
I-2, Area = 0.07 Acres
I-3, Area = 0.06 Acres
I-4, Area = 0.28 Acres
I-5, Area = 0.07 Acres
I-6, Area = 0.44 Acres
I-7, Area = 0.14 Acres
I-8, Area = 0.11 Acres

TRUE NORTH
SCALE: 1" = 40'



- Notes:
- I-1 — Surface runoff to Inlet 1 to Outfall 1 (Stream Perennial)
 - I-2 — Surface runoff to Inlet 2 to Outfall 1 (Stream Perennial)
 - I-3 — Surface runoff to Inlet 3 to Outfall 1 (Stream Perennial)
 - I-4 — Surface runoff to Inlet 4 to Outfall 1 (Stream Perennial)
 - I-5 — Surface runoff to Inlet 5 to Outfall 1 (Stream Perennial)
 - I-6 — Surface runoff to Inlet 6 to Outfall 1 (Stream Perennial)
 - I-7 — Surface runoff to Inlet 7 to Outfall 1 (Stream Perennial)
 - I-8 — Surface runoff to Inlet 8 to Outfall 1 (Stream Perennial)
 - I-9 — Surface runoff to Inlet 9 to Outfall 1 (Stream Perennial)
 - I-10 — Surface runoff to Inlet 10 to Outfall 1 (Stream Perennial)
 - S-1 — Surface runoff to Outfall 1 (Stream Perennial)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
Kapule Highway to North Lihue Drive
Project No. 56A-01-14M

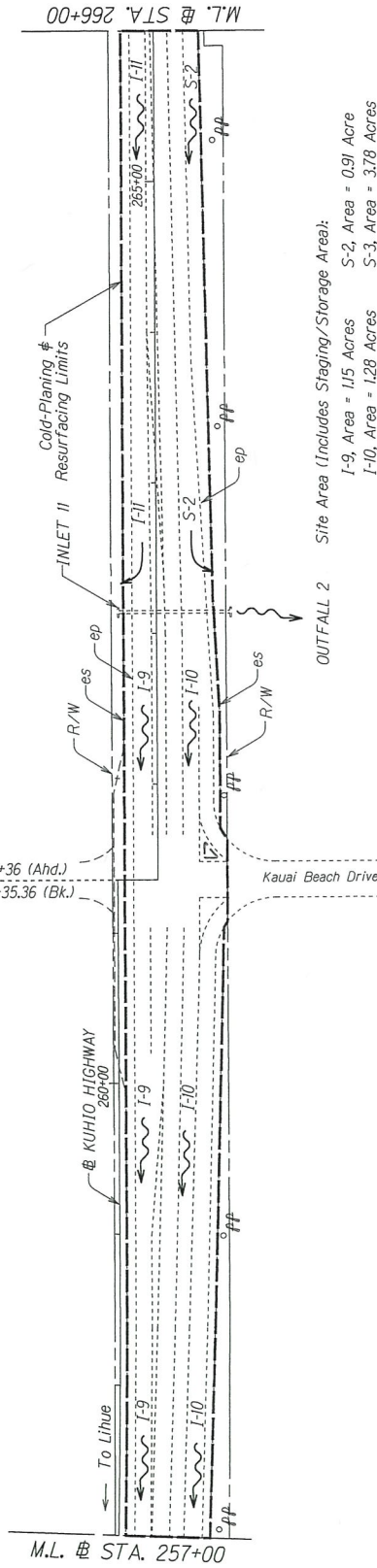
Scale: 1" = 40' Date: Oct. 2016

SHEET NO. 1 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII		56A-01-14M	2018	11	30

TRUE NORTH
SCALE: 1" = 40'

EQ. Sta. 260+36 (Ahd.)
Sta. 261+35.36 (Bk.)



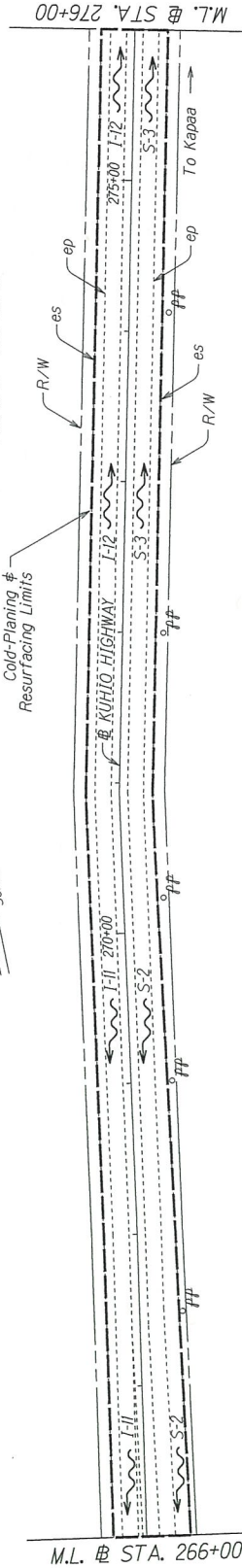
Site Area (Includes Staging/Storage Area):

I-9, Area = 1.15 Acres
I-10, Area = 1.28 Acres
I-11, Area = 0.60 Acre
I-12, Area = 8.26 Acres

Disturbed Area:

I-9, Area = 0.59 Acre
I-10, Area = 0.61 Acre
I-11, Area = 0.51 Acre
I-12, Area = 5.25 Acres

TRUE NORTH
SCALE: 1" = 40'



Notes:

- I-9 — Surface runoff to Inlet 9 to Outfall 1 (Stream Perennial)
- I-10 — Surface runoff to Inlet 10 to Outfall 1 (Stream Perennial)
- I-11 — Surface runoff to Inlet 11 to Outfall 2 (Stream Perennial)
- I-12 — Surface runoff to Inlet 12 to Outfall 3 (Stream Perennial)
- S-2 — Surface runoff to Outfall 2 (Stream Perennial)
- S-3 — Surface runoff to Outfall 3 (Stream Perennial)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

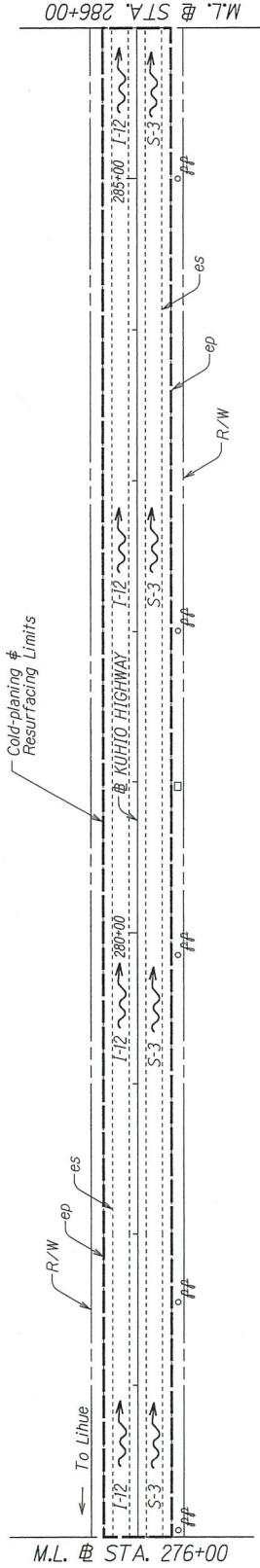
KUHIŌ HIGHWAY RESURFACING
Kapole Highway to North Lāna Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

SHEET No. 2 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	12	30

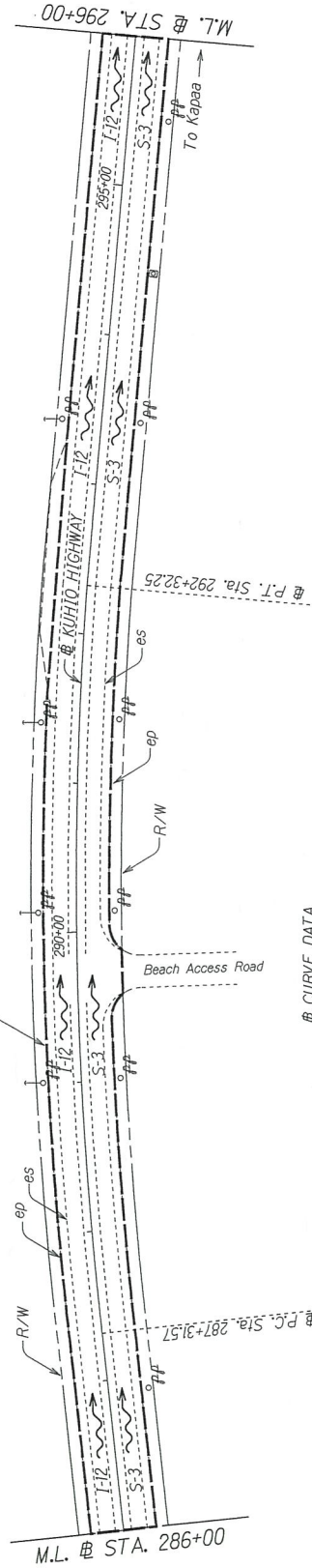
TRUE NORTH
SCALE: 1" = 40'



Site Area (Includes Staging/Storage Area):
I-12, Area = 8.26 Acres
S-3, Area = 3.78 Acres

Disturbed Area:
I-12, Area = 5.25 Acres
S-3, Area = 2.70 Acres

TRUE NORTH
SCALE: 1" = 40'



△ CURVE DATA
 $\Delta = 14^{\circ}27'00''$
 $R = 1,500.00$
 $T = 86.16$
 $L = 288.90$

Notes:
I-12 — Surface runoff to Inlet 12 to Outfall 3 (Stream Perennial)
S-3 — Surface runoff to Outfall 3 (Stream Perennial)

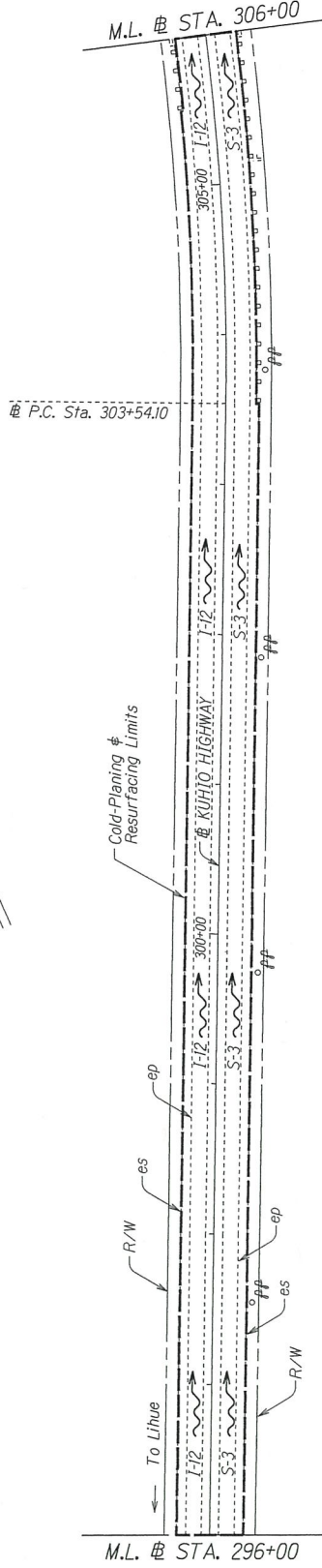
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
KUHIO HIGHWAY RESURFACING
Kapule Highway to North Lele Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016
SHEET No. 3 OF 8 SHEETS

DESIGNER	DATE
PLANNED BY	
DESIGNED BY	
CHECKED BY	
IN CHARGE	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	LEGAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	13	30

TRUE NORTH
SCALE: 1" = 40'



Site Area (Includes Staging/Storage Area):

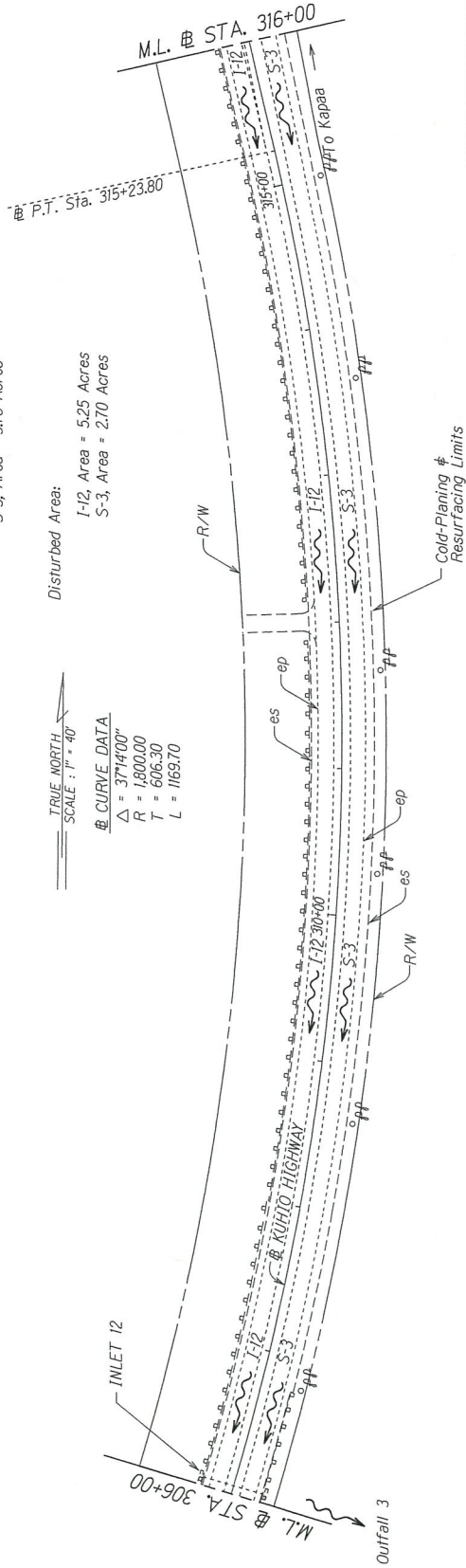
I-12, Area = 8.26 Acres
S-3, Area = 3.78 Acres

Disturbed Area:

I-12, Area = 5.25 Acres
S-3, Area = 2.70 Acres

TRUE NORTH
SCALE: 1" = 40'

CURVE DATA
 $\Delta = 37^{\circ}14'00''$
 $R = 1,800.00$
 $T = 606.30$
 $L = 1169.70$



Notes:
I-12 — Surface runoff to Inlet 12 to Outfall 3 (Stream Perennial)
S-3 — Surface runoff to Outfall 3 (Stream Perennial)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

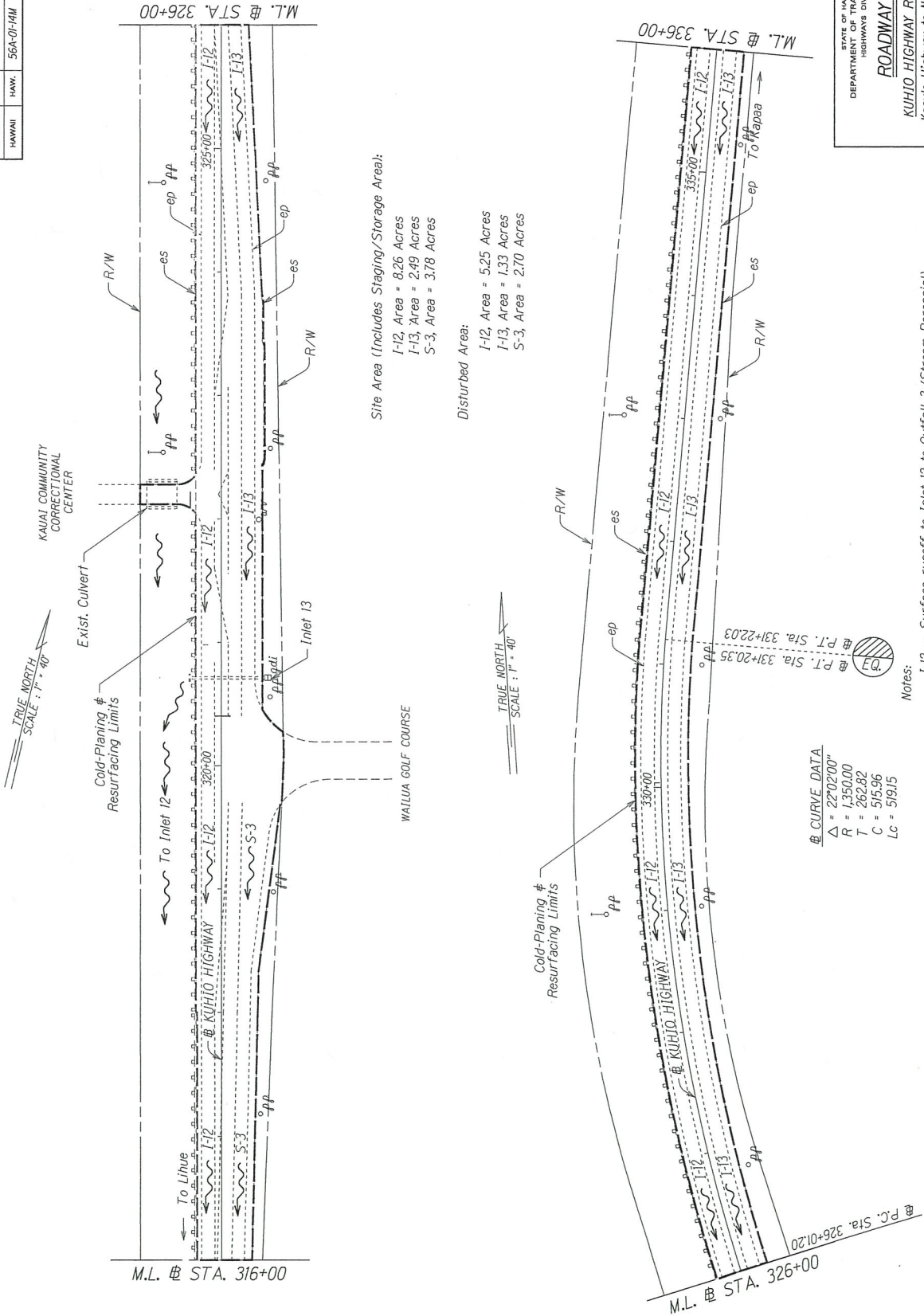
KUHIO HIGHWAY RESURFACING
Kapule Highway to North Leho Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

SHEET No. 4 OF 8 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	

DES. ROAD DIST. NO.	STATE	PROJ. NO.	RECAL. YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	14	30



Site Area (Includes Staging/Storage Area):

- I-12, Area = 8.26 Acres
- I-13, Area = 2.49 Acres
- S-3, Area = 3.78 Acres

Disturbed Area:

- I-12, Area = 5.25 Acres
- I-13, Area = 1.33 Acres
- S-3, Area = 2.70 Acres

CURVE DATA
 $\Delta = 22^{\circ}02'00''$
 $R = 1350.00$
 $T = 262.82$
 $C = 515.96$
 $Lc = 519.15$

- Notes:
- I-12 - Surface runoff to Inlet 12 to Outfall 3 (Stream Perennial)
 - I-13 - Surface runoff to Inlet 13 to Outfall 3 (Stream Perennial)
 - S-3 - Surface runoff to Outfall 3 (Stream Stream Perennial)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN

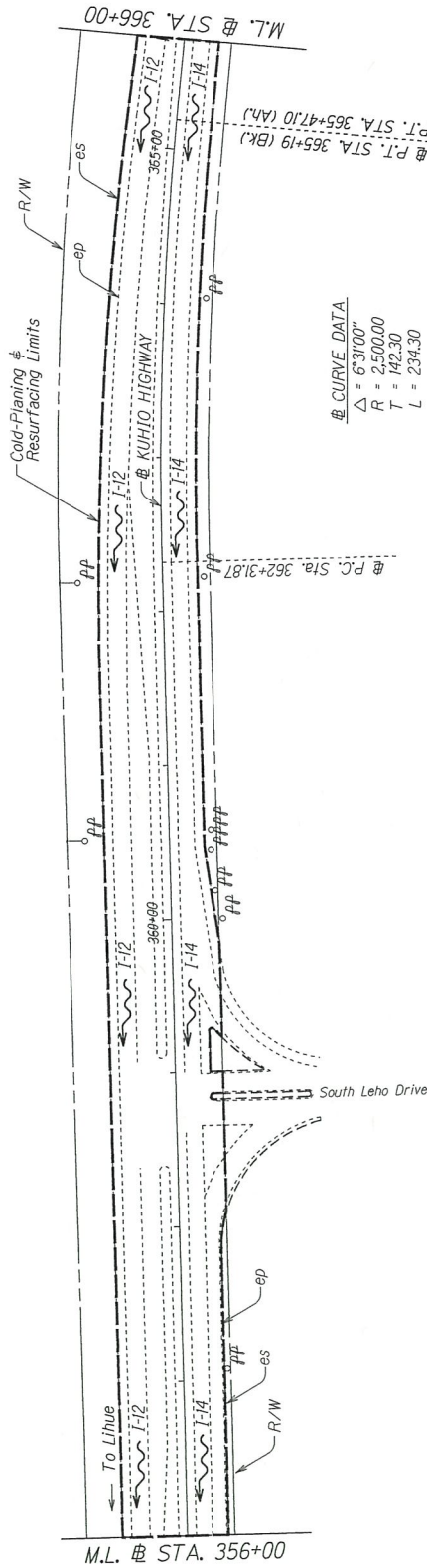
KUHIO HIGHWAY RESURFACING
 Kapule Highway to North Leho Drive
 Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

SHEET No. 5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	16	30

TRUE NORTH
SCALE: 1" = 40'



CURVE DATA
 $\Delta = 6'3100''$
 $R = 2,500.00$
 $T = 142.30$
 $L = 234.30$

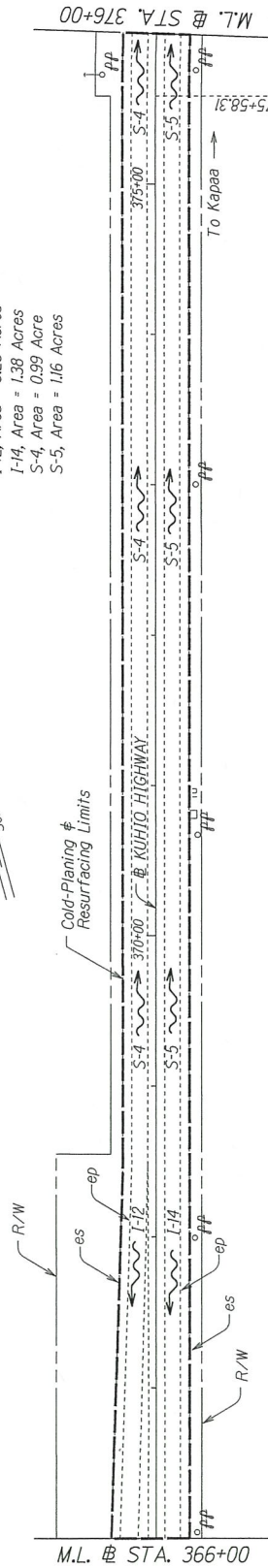
Site Area (Includes Staging/Storage Area):

- I-12, Area = 8.26 Acres
- I-14, Area = 2.20 Acres
- S-4, Area = 1.47 Acres
- S-5, Area = 1.66 Acres

Disturbed Area:

- I-12, Area = 5.25 Acres
- I-14, Area = 1.38 Acres
- S-4, Area = 0.99 Acre
- S-5, Area = 1.16 Acres

TRUE NORTH
SCALE: 1" = 40'



Notes:

- I-12 — Surface runoff to Inlet 12 to Outfall 3 (Stream Perennial)
- I-14 — Surface runoff to Inlet 14 to Inlet 12 to Outfall 3 (Stream Perennial)
- S-4 — Surface runoff to Outfall 4 (Wailua River)
- S-5 — Surface runoff to Outfall 5 (Wailua River)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

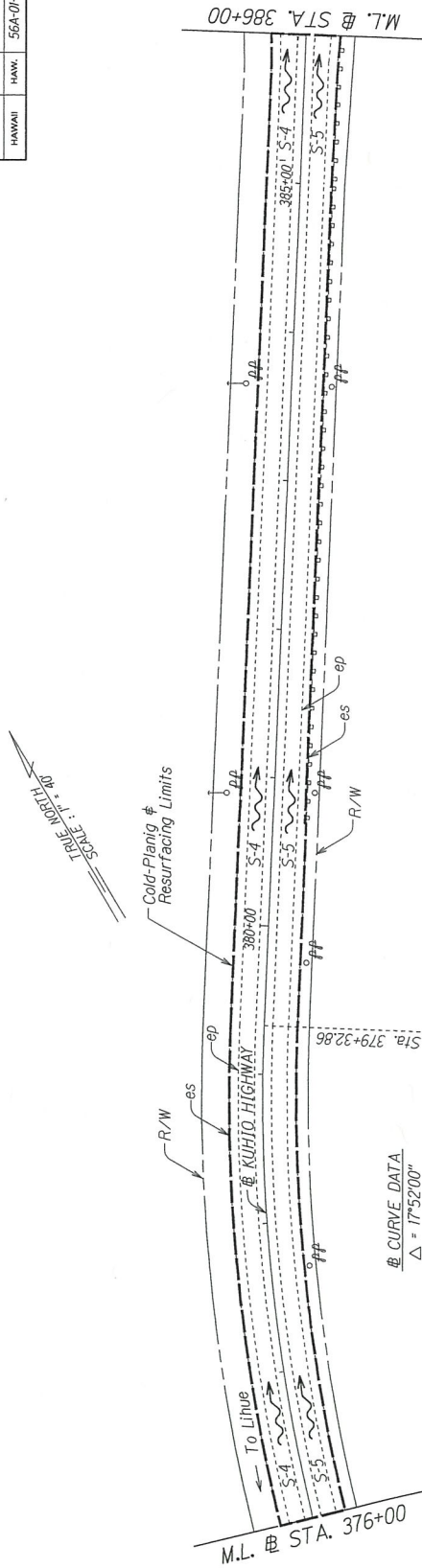
ROADWAY PLAN

KUHIO HIGHWAY RESURFACING
Kapule Highway to North Leho Drive
Project No. 56A-01-14M

Scale: 1" = 40' Date: Oct. 2016

SHEET No. 7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-01-14M	2018	17	30



CURVE DATA
 $\Delta = 17^{\circ}52'00''$
 $R = 1200.00$
 $T = 188.60$
 $L = 374.20$

Site Area (Includes Staging/Storage Area):

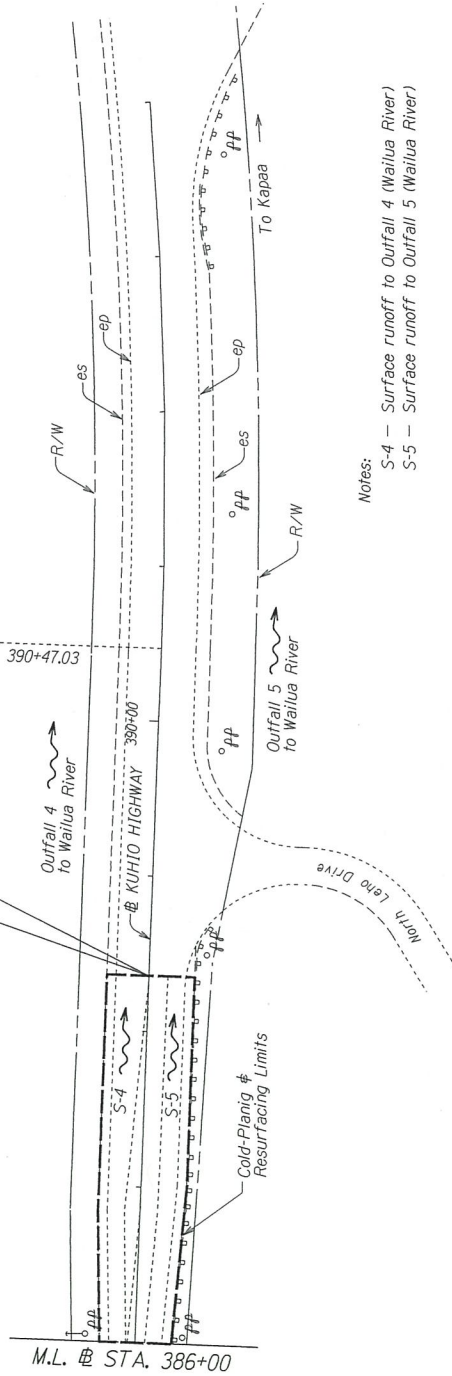
S-4, Area = 1.47 Acres
 S-5, Area = 1.66 Acres

Disturbed Area:

S-4, Area = 0.99 Acre
 S-5, Area = 1.16 Acres

END PROJECT
 Project No. 56A-01-14M
 @ Sta. 388+36.20

PC @ Sta. 390+47.03



Notes:

S-4 — Surface runoff to Outfall 4 (Wailua River)
 S-5 — Surface runoff to Outfall 5 (Wailua River)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

ROADWAY PLAN
 KUHIU HIGHWAY RESURFACING
 Kapule Highway to North Leno Drive
 Project No. 56A-01-14M

Scale: 1" = 40'
 Date: Oct. 2016

SHEET No. 8 OF 8 SHEETS

DATE	BY	CHKD	APP'D
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS
10/10/16	J. L. HARRIS	J. L. HARRIS	J. L. HARRIS