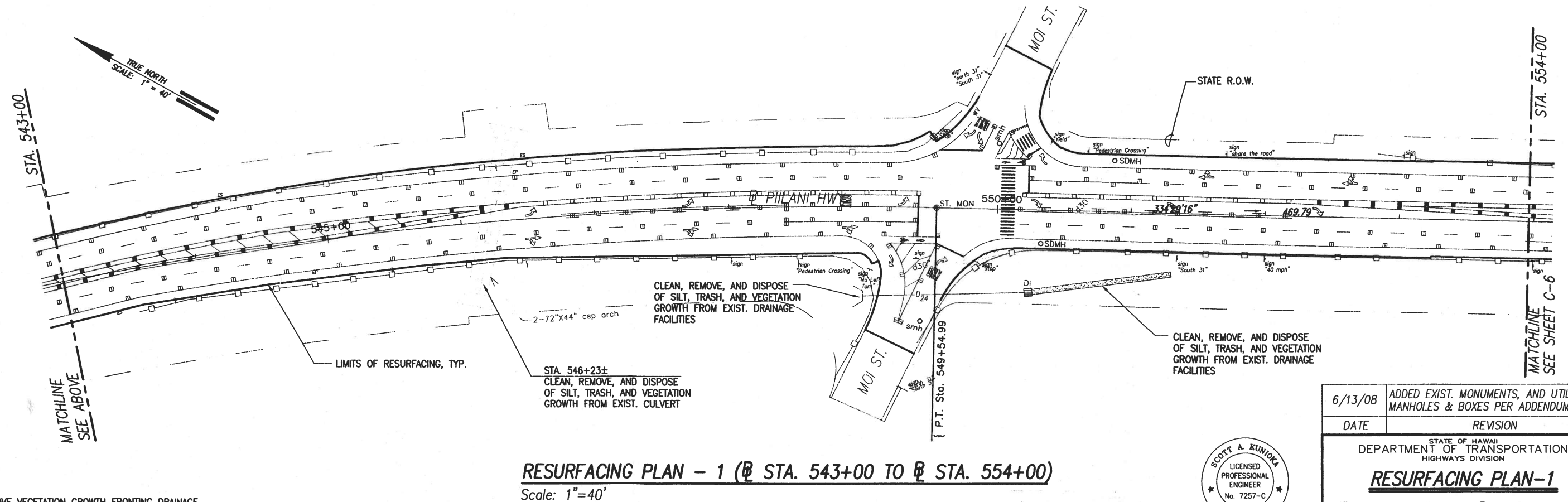
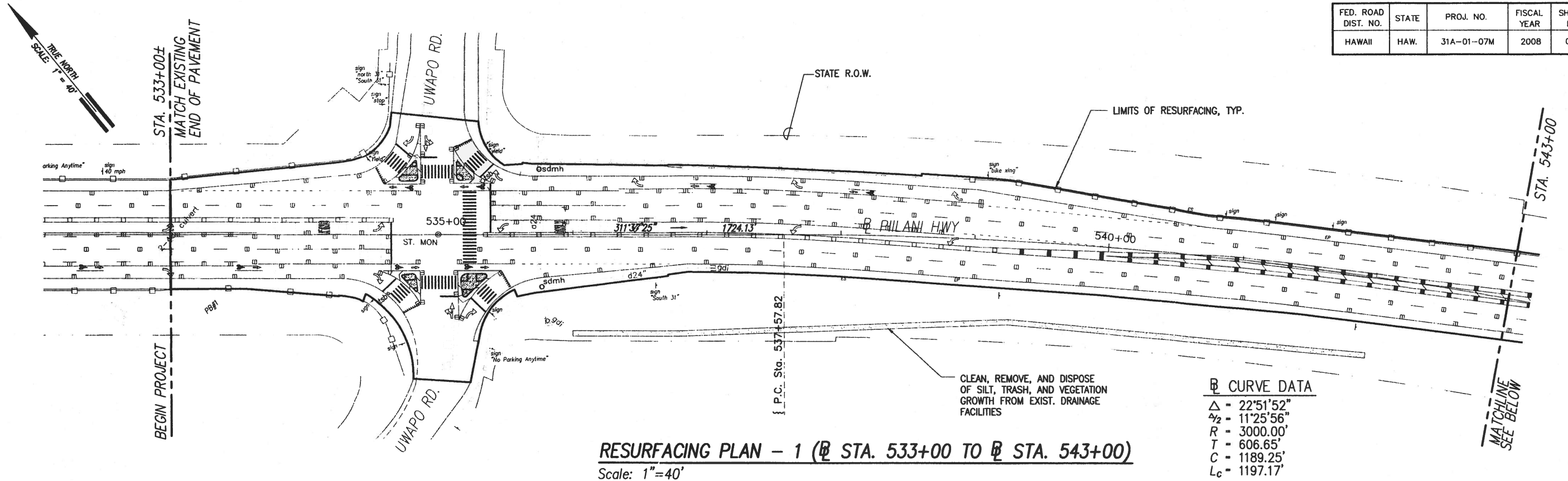
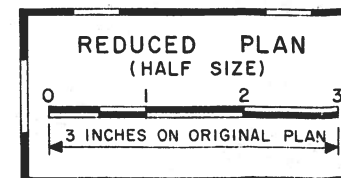
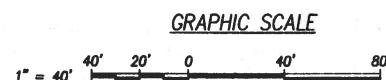


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	07	26



NOTES:

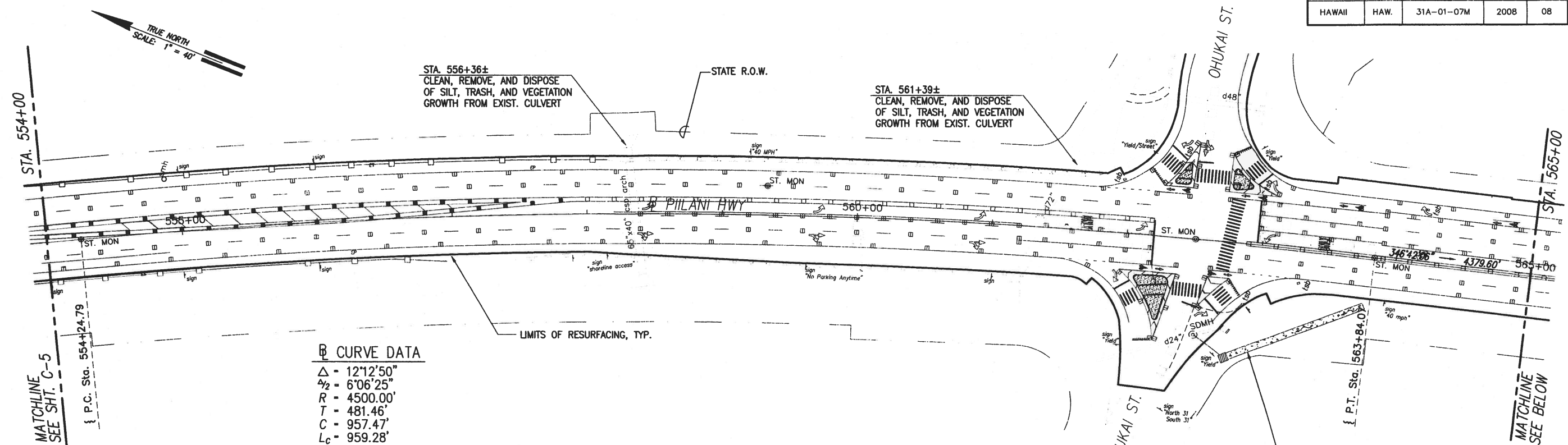
1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.



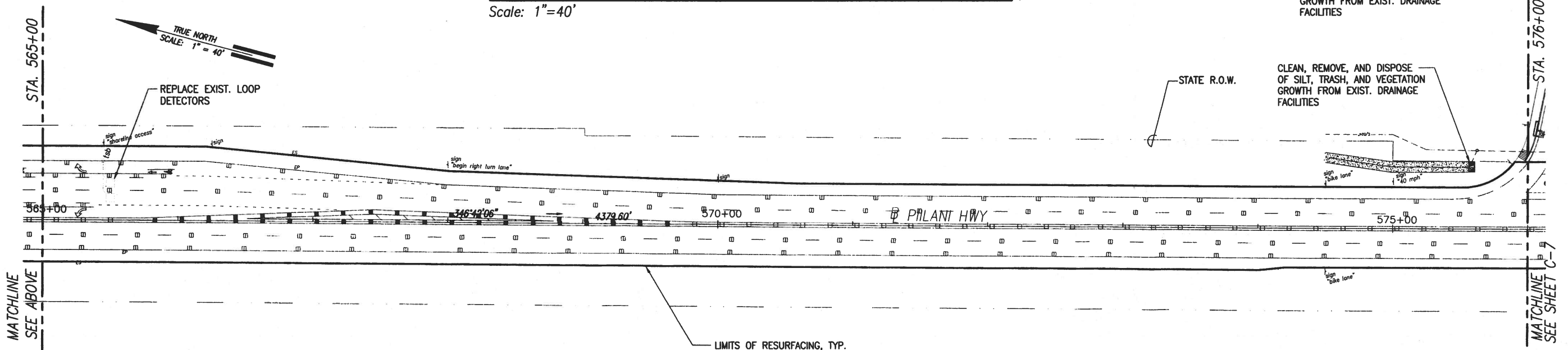
LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Scott A. Kunioka
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH AVENUE
HONOLULU, HAWAII 96816

6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
RESURFACING PLAN-1	
(Sta. 533+00 TO Sta. 554+00)	
PHILANI HIGHWAY RESURFACING	
PAVEMENT PREVENTIVE MAINTENANCE	
Project No. 31A-01-07M	
Scale: 1" = 40'	Date: JUNE 13, 2008
SHEET No. C-5 OF 26 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	08	26



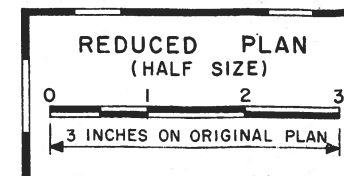
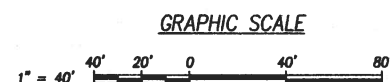
RESURFACING PLAN - 2 (@ STA. 554+00 TO @ STA. 565+00)
Scale: 1"=40'



RESURFACING PLAN - 2 (@ STA. 565+00 TO @ STA. 576+00)
Scale: 1"=40'

NOTES:

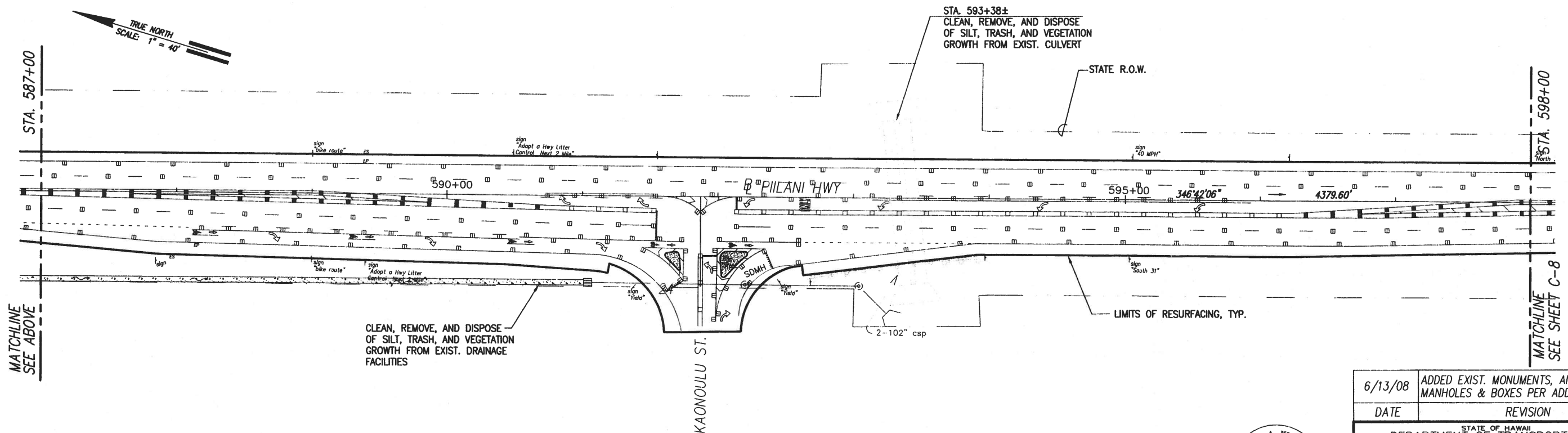
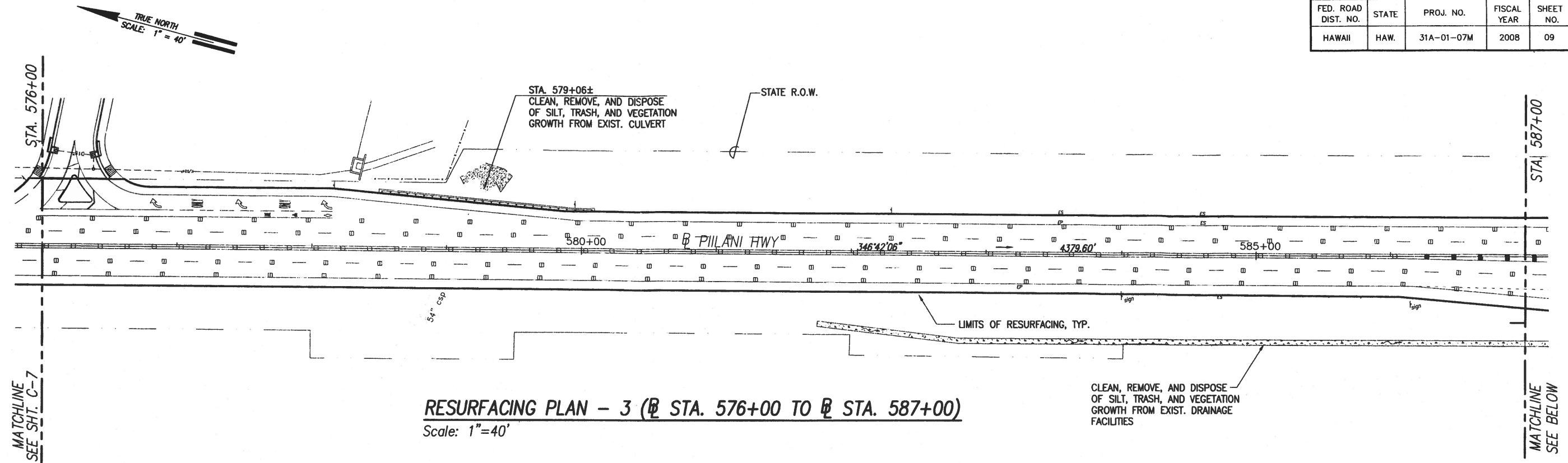
1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Scott A. Kunio
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH Avenue
Honolulu, Hawaii 96816

6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
RESURFACING PLAN-2 (@ STA. 554+00 TO @ STA. 576+00)	
PILANI HIGHWAY RESURFACING PAVEMENT PREVENTIVE MAINTENANCE	
Project No. 31A-01-07M	
Scale: 1" = 40'	Date: JUNE 13, 2008
SHEET No. C-6 OF 26 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	09	26

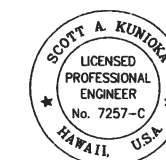
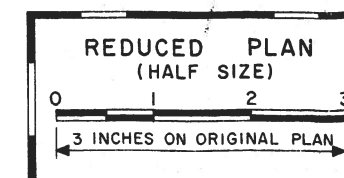
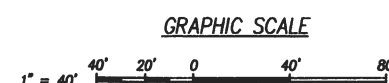


NOTES:

1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.

RESURFACING PLAN - 3 (℄ STA. 587+00 TO ℄ STA. 598+00)

Scale: 1"=40'



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Scott A. Kennell
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH Avenue
Honolulu, Hawaii 96816

6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

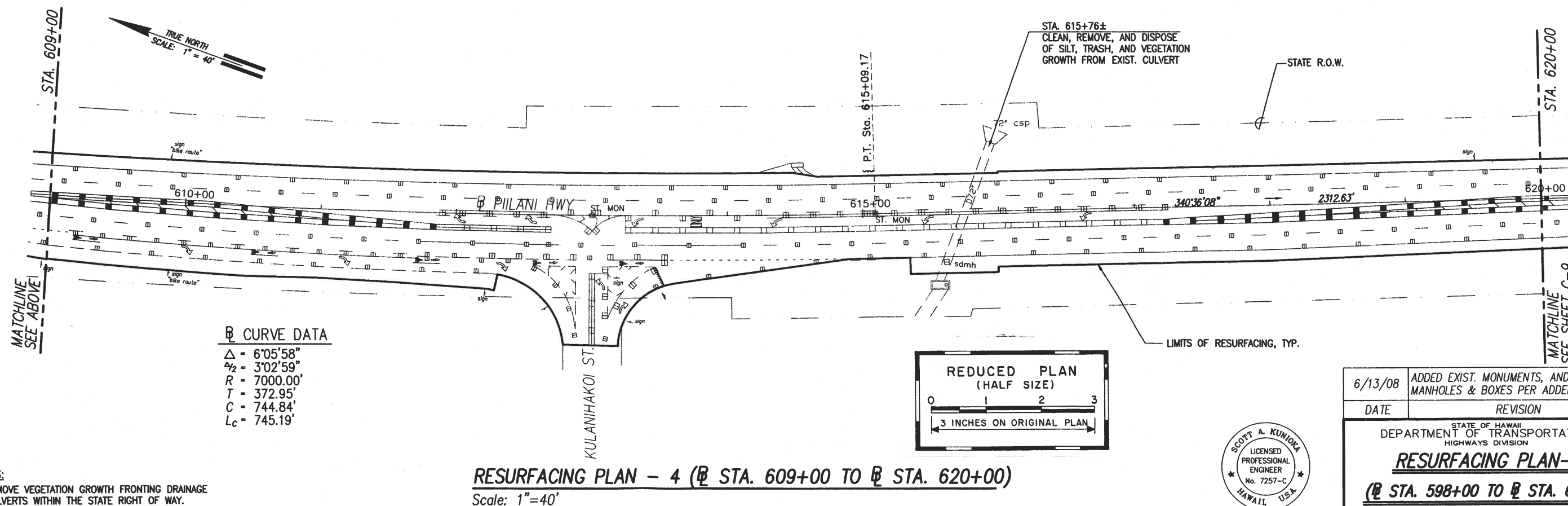
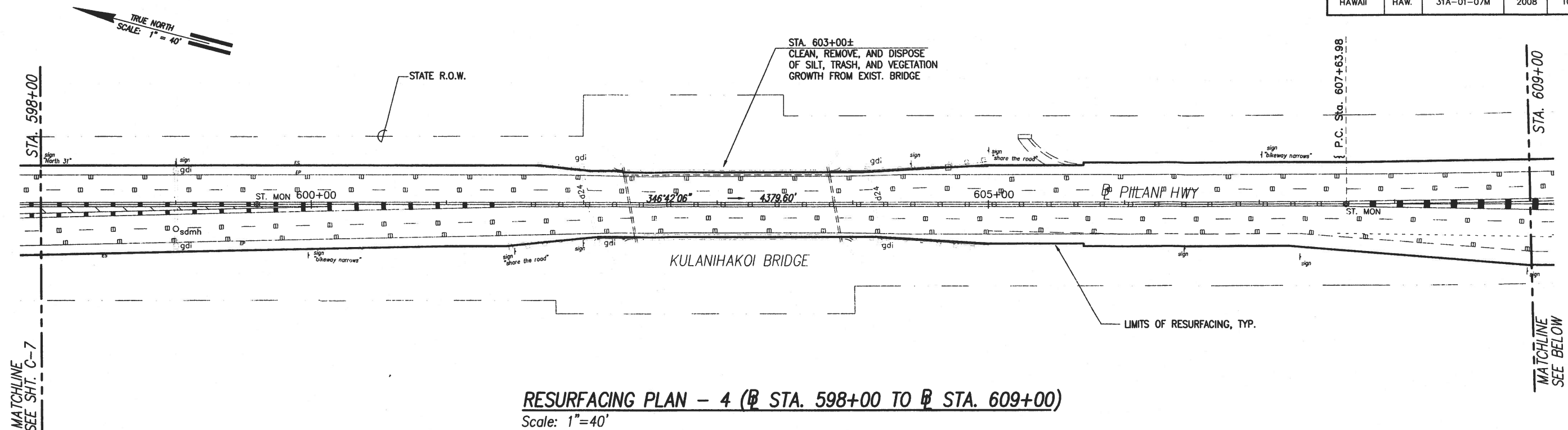
RESURFACING PLAN-3
(@ STA. 576+00 TO @ STA. 598+00)

PIILANI HIGHWAY RESURFACING
PAVEMENT PREVENTIVE MAINTENANCE

Project No. 31A-01-07M
Scale: 1" = 40' Date: JUNE 13, 2008

SHEET No. C-7 OF 26 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	10	26



NOTES:

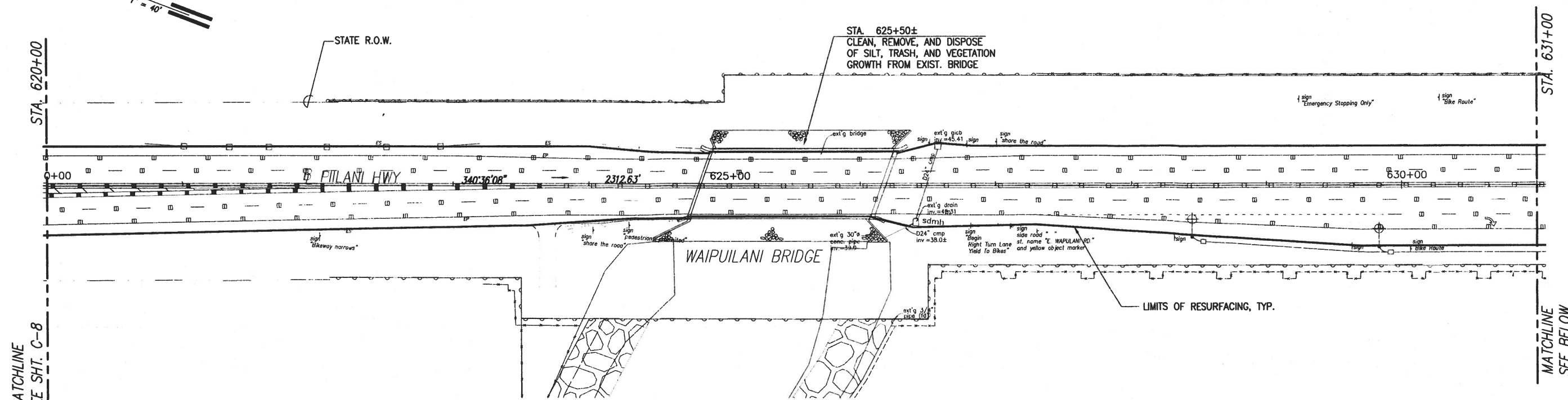
1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Scott A. Kunio
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH Avenue
Honolulu, Hawaii 96816

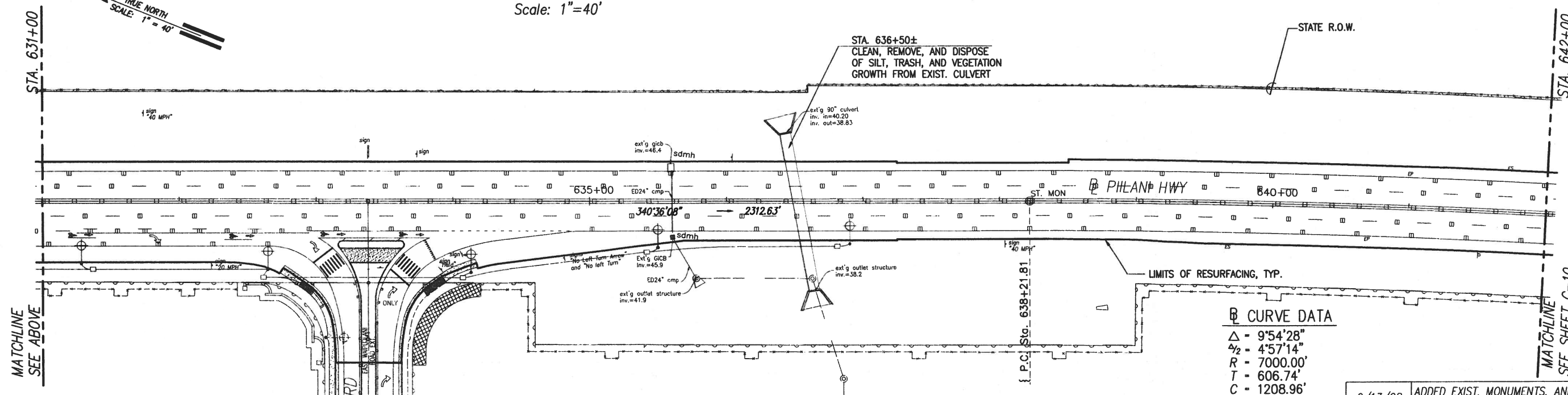
6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
RESURFACING PLAN-4	
(Sta. 598+00 TO Sta. 620+00)	
PILANI HIGHWAY RESURFACING	
PAVEMENT PREVENTIVE MAINTENANCE	
Project No. 31A-01-07M	
Scale: 1" = 40'	Date: JUNE 13, 2008
SHEET No. C-8 OF 26 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	11	26



RESURFACING PLAN - 5 (Sta. 620+00 TO Sta. 631+00)

Scale: 1"=40'



RESURFACING PLAN - 5 (Sta. 631+00 TO Sta. 642+00)

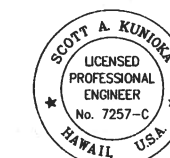
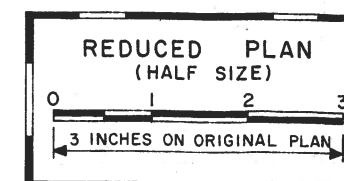
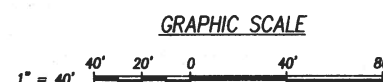
Scale: 1"=40'

Curve Data

Δ	9°54'28"
$\Delta/2$	4°57'14"
R	7000.00'
T	606.74'
C	1208.96'
L_c	1210.46'

NOTES:

1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.
3. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Scott A. Kunioka
SHIMABUKURO, ENDO & YOSHIKAWA, INC.
1126 12TH AVENUE
HONOLULU, HAWAII 96816

6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RESURFACING PLAN-5
(Sta. 620+00 TO Sta. 642+00)

PIILANI HIGHWAY RESURFACING
PAVEMENT PREVENTIVE MAINTENANCE
Project No. 31A-01-07M

Scale: 1" = 40' Date: JUNE 13, 2008

SHEET No. C-9 OF 26 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	12	26

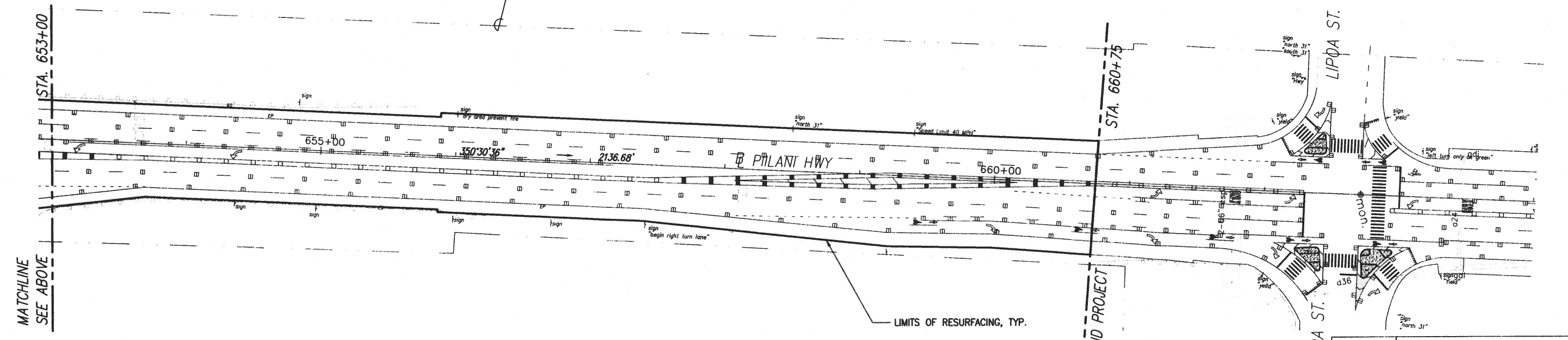
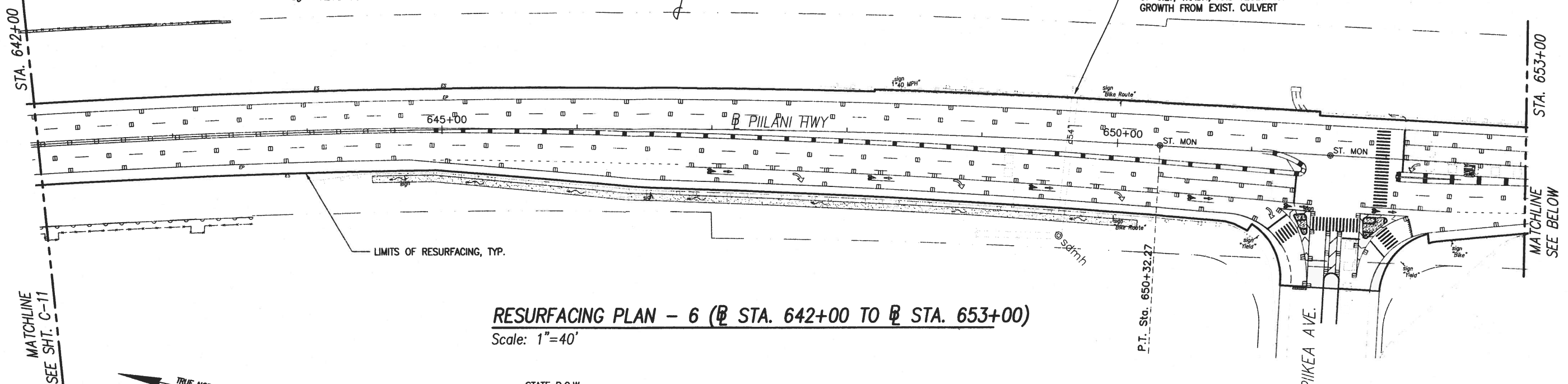
Ⓢ CURVE DATA

$\Delta = 9^{\circ}54'28''$
 $\Delta/2 = 4^{\circ}57'14''$
 $R = 7000.00'$
 $T = 606.74'$
 $C = 1208.96'$
 $L_c = 1210.46'$

TRUE NORTH
SCALE: 1" = 40'

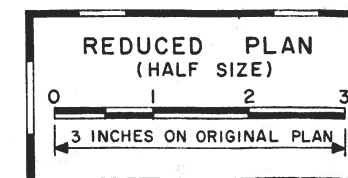
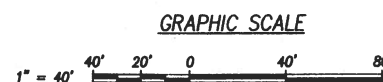
STATE R.O.W.

STA. - 649+65±
CLEAN, REMOVE, AND DISPOSE
OF SILT, TRASH, AND VEGETATION
GROWTH FROM EXIST. CULVERT



NOTES:

1. REMOVE VEGETATION GROWTH FRONTING DRAINAGE CULVERTS WITHIN THE STATE RIGHT OF WAY.
2. THE CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SILT, TRASH, AND VEGETATION GROWTH FROM EXISTING DRAINAGE FACILITIES WITHIN THE PROJECT LIMITS OF THE STATE RIGHT OF WAY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY DAMAGED TRAFFIC CONTROL LOOPS.



LICENSE EXPIRATION DATE: 4/30/10
 THIS WORK WAS PREPARED BY ME
 OR UNDER MY SUPERVISION
 SHIMABUKURO, ENDO & YOSHIKAWA, INC.
 1126 12TH Avenue
 Honolulu, Hawaii 96816

6/13/08	ADDED EXIST. MONUMENTS, AND UTILITY MANHOLES & BOXES PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
RESURFACING PLAN-6	
(Ⓢ STA. 642+00 TO Ⓢ STA. 660+75)	
PIILANI HIGHWAY RESURFACING	
PAVEMENT PREVENTIVE MAINTENANCE	
Project No. 31A-01-07M	
Scale: 1" = 40'	Date: JUNE 13, 2008
SHEET No. C-10 OF 26 SHEETS	

ADD. 12

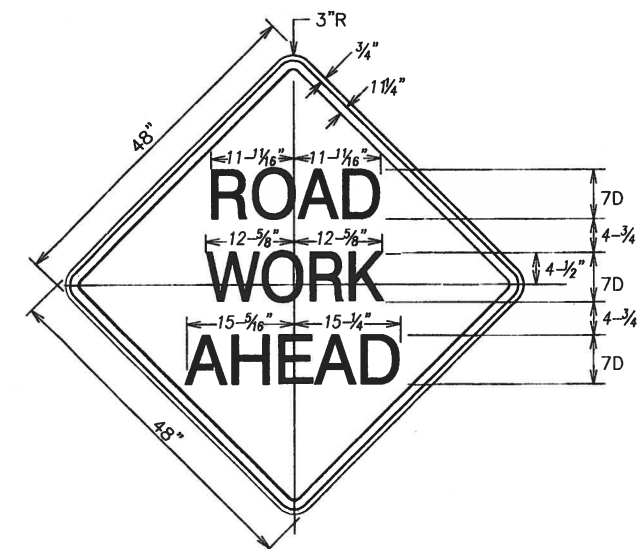
LEGEND

- 4 EACH TYPE A RAISED PAVEMENT MARKERS
TYPE C RAISED PAVEMENT MARKERS @ 40'-0" O.C.
- 4 EACH TYPE J RAISED PAVEMENT MARKERS
TYPE D RAISED PAVEMENT MARKERS @ 40'-0" O.C.
- 8" WHITE STRIPE WITH TYPE C RAISED PAVEMENT MARKERS @ 20'-0" O.C. (TAPE, TYPE I OR Thermoplastic Extrusion)
- 4" DOUBLE SOLID YELLOW WITH TYPE D RAISED PAVEMENT MARKERS @ 20'-0" O.C. (TAPE, TYPE I OR THERMOPLASTIC EXTRUSION))
- 4" DOUBLE SOLID YELLOW STRIPES WITH TYPE H RAISED PAVEMENT MARKERS @ 20'-0" O.C. (TAPE, TYPE II OR THERMOPLASTIC EXTRUSION))
- 4" YELLOW EDGE STRIPE WITH TYPE H RAISED PAVEMENT MARKERS @ 40'-0" O.C. (TAPE, TYPE II OR THERMOPLASTIC EXTRUSION))
- 4" DOUBLE SOLID WHITE STRIPES WITH TYPE C RAISED PAVEMENT MARKERS @ 20'-0" O.C. (TAPE, TYPE I OR THERMOPLASTIC EXTRUSION)
- LANE CHANGE RESTRICTION MARKING
4 EACH TYPE A RAISED PAVEMENT MARKERS
TYPE C RAISED PAVEMENT MARKERS @ 20'-0" O.C.
4" WHITE STRIPE (TAPE, TYPE I OR THERMOPLASTIC Extrusion)
- 4" OR 8" WHITE EDGE STRIPE WITH TYPE C RAISED PAVEMENT MARKERS @ 40'-0" O.C. (TAPE, TYPE II OR Thermoplastic Extrusion)
- 4" WHITE GUIDE LINES (TAPE, TYPE III OR THERMOPLASTIC EXTRUSION EXCEPT FOR BUS BAYS)
- TRANSVERSE MEDIAN MARKING (TAPE, TYPE II OR Thermoplastic Extrusion)
- TRANSVERSE SHOULDER MARKING (TAPE, TYPE II OR Thermoplastic Extrusion)
- CHANNELIZING ISLAND OR DECELERATION LANE GORE (TAPE, TYPE II OR THERMOPLASTIC EXTRUSION)
- CROSSWALK AND STOP LINE. ALL STOP LINES SHALL BE 10'-0" FROM CROSSWALK UNLESS OTHERWISE NOTED. THE CIRCLED NUMBER INDICATES THE NUMBER OF LANES FOR PAYMENT (TAPE, TYPE III OR THERMOPLASTIC EXTRUSION)
- PAVEMENT ARROW OR SYMBOL (TAPE, TYPE III OR Thermoplastic Extrusion)
- STOP
- PAVEMENT WORD (TAPE, TYPE III OR THERMOPLASTIC Extrusion)
- 4 EACH TYPE J RAISED PAVEMENT MARKERS
TYPE D RAISED PAVEMENT MARKERS @ 40'-0" O.C.
TYPE H RAISED PAVEMENT MARKERS (REFLECTIVE SURFACE FACING NO-PASSING DIRECTION)
4" SINGLE SOLID YELLOW STRIPE (TAPE, TYPE I OR THERMOPLASTIC EXTRUSION)
- EXTENSION OF EDGE LINE, 4" WIDE X 2'-0" LONG WHITE STRIPE @ 10'-0" O.C. W/TYPE C MARKERS @ 40'-0" O.C. (TAPE, TYPE III OR THERMOPLASTIC EXTRUSION)

NOTES

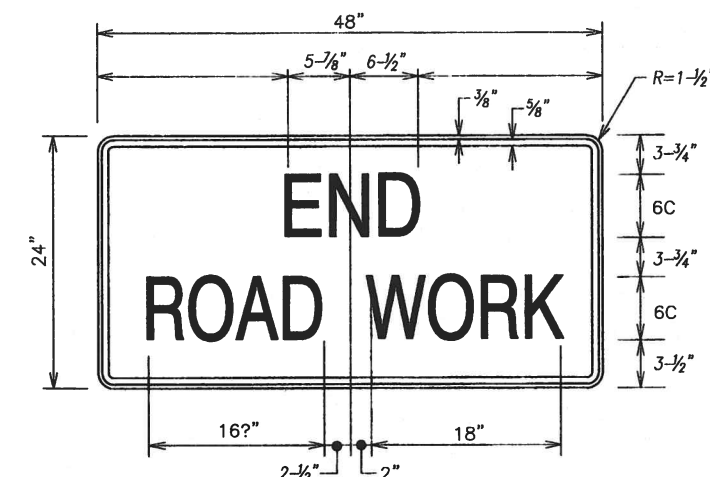
- LAYOUT OF PAVEMENT MARKINGS AND STRIPING SHALL BE DONE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO ANY INSTALLATION WORK.
- EXISTING PAVEMENT MARKINGS NOT INCORPORATED IN THE FINAL TRAFFIC PATTERN SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. COSTS SHALL BE INCIDENTAL TO THE VARIOUS PAVEMENT MARKING ITEMS.
- FINAL LOCATIONS OF ALL SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY INSTALLATION WORK.
- EXISTING SIGNS NOT SHOWN ON THESE PLANS SHALL REMAIN AS POSTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REMOVAL AND DISPOSAL OF EXISTING SIGNS AND/OR POSTS AS DESIGNATED ON THESE PLANS SHALL BE INCIDENTAL TO THE VARIOUS SIGNING ITEMS.
- FINAL LOCATIONS OF ALL STOP LINES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- ALL PAVEMENT STRIPING SHALL BE AS NOTED ON THE LEGEND OR PLANS.
- TYPE II OBJECT MARKERS SHALL BE INSTALLED ON ALL SIGN POSTS EXCEPT BEHIND GUARDRAILS.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	25	26



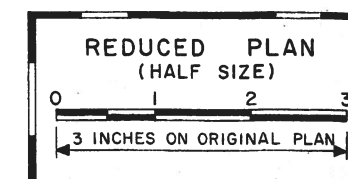
CW20-1Ad
Scale: 1" = 1'-0"

Colors:
Legend: Black (Non Refl)
Background: Orange



CG20-2A
Scale: 1- 1/2" = 1'-0"

Colors:
Legend: Black (Non Refl)
Background: Orange (Relf)



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH Avenue
Honolulu, Hawaii 96816

6/13/08	ADDED SHEET FOR TRAFFIC CONTROL PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PAVEMENT MARKING LEDGEN,	
DETAILS, & NOTES	
PIILANI HIGHWAY RESURFACING	
PAVEMENT PREVENTIVE MAINTENANCE	
Project No. 31A-01-07M	
Scale: NONE	Date: JUNE 13, 2008
SHEET No. C-23 OF 26 SHEETS	

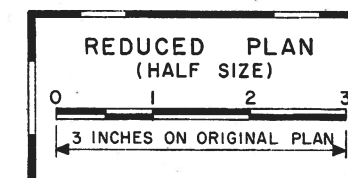
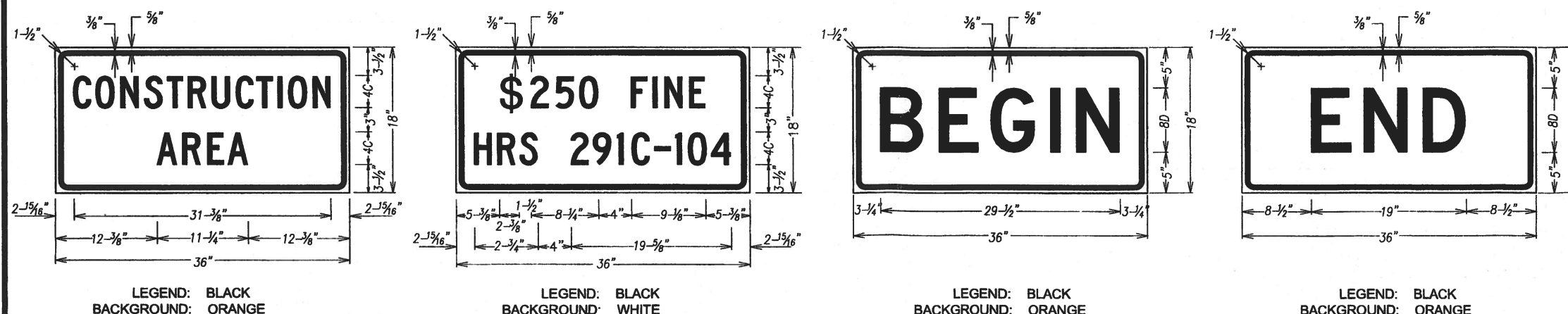
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-01-07M	2008	26	26

Work Zone Note:

1. THIS WORK ZONE SIGN PLAN IS INTENDED FOR USE ON LONG-TERM STATIONARY WORK ZONES/CONSTRUCTION PHASES (3 DAYS OR MORE). ALL WORK ZONES OR CONSTRUCTION PHASES LESS THAN 3 DAYS DURATION WILL USE TRAFFIC CONTROL PLANS SHOWN IN SECTION 645 OF THE SPECIAL PROVISIONS.
2. ALL EXISTING REGULATORY SPEED LIMIT SIGNS WITH POSTS WITHIN THE WORK ZONE/PROJECT LIMITS SHALL BE REMOVED AND REPLACED WITH WORK ZONE SPEED LIMIT SIGN ASSEMBLIES (R2-1(30) AND W3-5(30) WITH "CONSTRUCTION AREA" AND "\$250 FINE HRS 291C-104" SUPPLEMENTAL SIGNS).
3. CONSTRUCTION SIGN ASSEMBLIES SHALL BE INSTALLED ON BOTH THE APPROACHING AND TRAILING ENDS OF EACH WORK ZONE AS SHOWN ON THIS PLAN.
4. EACH CONSTRUCTION WARNING SIGN AND WORK ZONE SPEED LIMIT ASSEMBLY SHALL HAVE A MINIMUM OF TWO (2) TYPE II OM. INSTALLATION OF EACH TYPE II OM SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 645.1000, TRAFFIC CONTROL.
5. UPON THE COMPLETION OF ALL PHYSICAL WORK OR AS DIRECTED BY THE ENGINEER, ALL CONSTRUCTION SIGNS AND WORK ZONE SPEED LIMIT ASSEMBLIES SHALL BE REMOVED. ALL SPEED LIMIT SIGNS AND POSTS THAT WERE EXISTING AT THE START OF THE PROJECT WITHIN THE WORK ZONE/PROJECT LIMITS SHALL BE RESTORED BACK TO THEIR ORIGINAL LOCATIONS AND CONFIGURATIONS.
6. PLACEMENT OF CONSTRUCTION SIGNS SHALL NOT OBSTRUCT THE PATH OF PEDESTRIANS AND BICYCLISTS.
7. THE REMOVAL AND RESTORATION OF EXISTING REGULATORY SPEED LIMIT SIGNS WITH NEW POSTS ALONG WITH THE INSTALLATION, MAINTENANCE AND REMOVAL OF WORK ZONE SPEED LIMIT SIGN ASSEMBLIES SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 645.1000, TRAFFIC CONTROL.

TABLE I GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN R2-5b(XX)-A, CONSTRUCTION AREA SPEED LIMIT		
EXISTING POSTED SPEED LIMIT (MPH)	XX-NEW CONSTRUCTION AREA SPEED LIMIT (MPH)	D-REDUCED SPEED LIMIT SIGN SPACING TO FIRST CONSTRUCTION AREA SPEED LIMIT SIGN (FEET)
40	30	200

TYPICAL DETAIL FOR CONSTRUCTION SIGNS
ON TWO LANE OR MULTILANE UNDIVIDED HIGH SPEED HIGHWAY



LICENSE EXPIRATION DATE: 4/30/10
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Scott A. Kunioka
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12TH AVENUE
HONOLULU, HAWAII 96816

6/13/08	ADDED SHEET FOR TRAFFIC CONTROL PER ADDENDUM NO. 1
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
HIGH SPEED UNDIVIDED HIGHWAY	
WORK ZONE SIGNING PLAN, NOTES & DETAILS	
PIILANI HIGHWAY RESURFACING PAVEMENT PREVENTIVE MAINTENANCE Project No. 31A-01-07M	
Scale: NONE	Date: JUNE 13, 2008
SHEET No. C-24 OF 26 SHEETS	