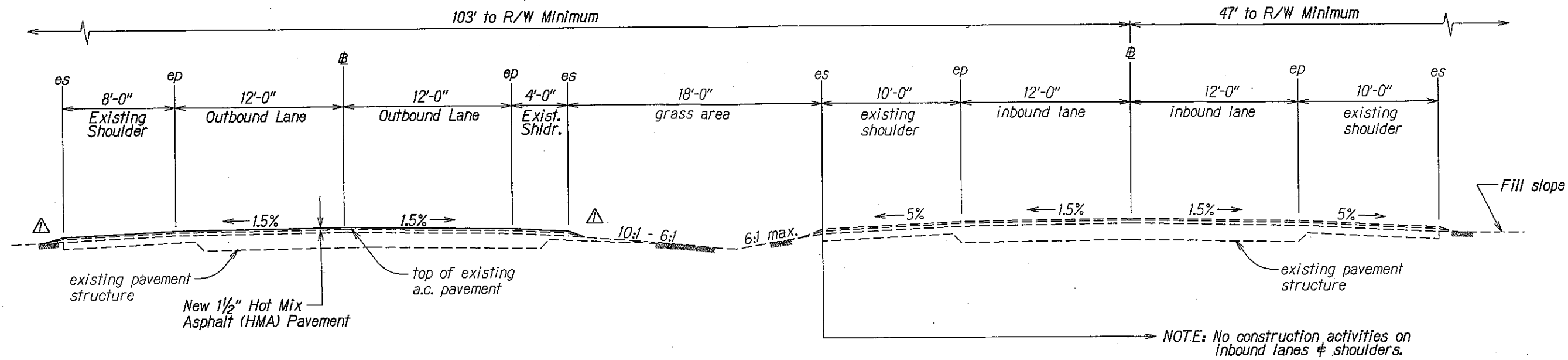
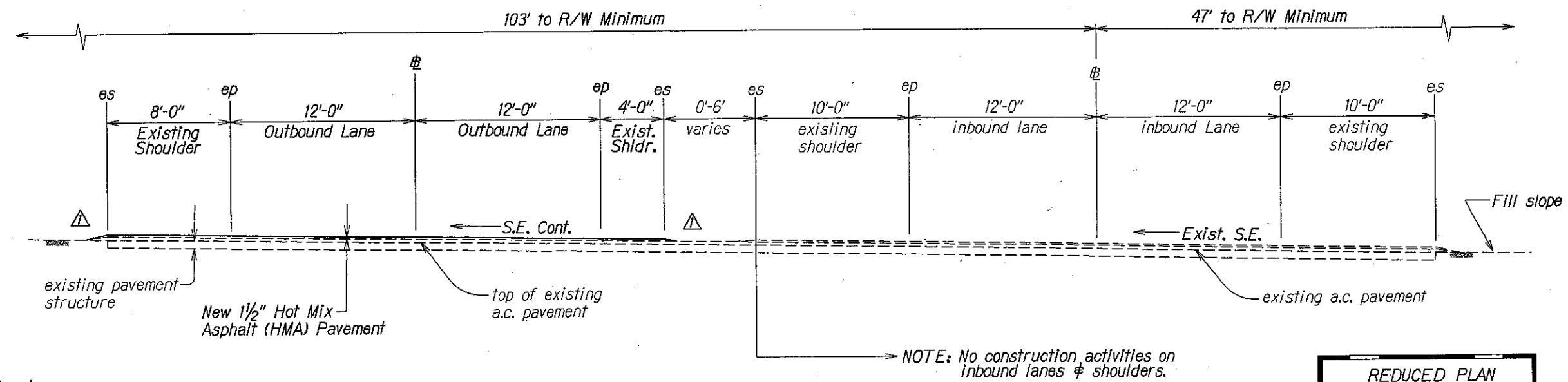
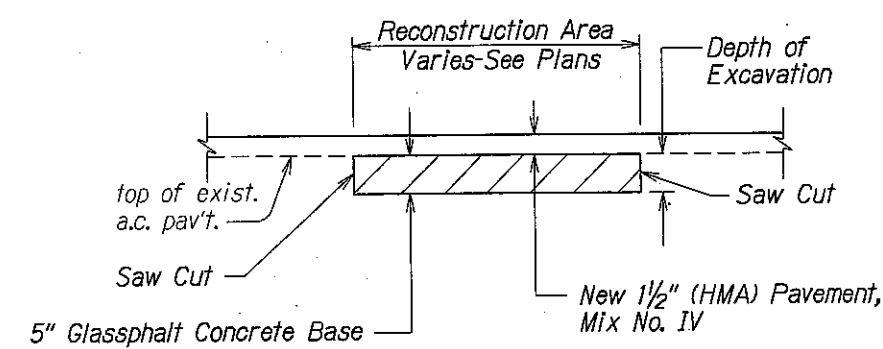




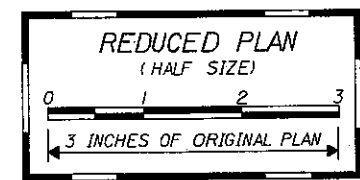
TYPICAL SECTION ON TANGENT: DIVIDED HIGHWAY
(KUIHELANI HIGHWAY)
Scale: 1/4" = 1'-0"



TYPICAL SECTION ON SUPERELEVATED SECTION: DIVIDED HIGHWAY
(KUIHELANI HIGHWAY)
Scale: 1/4" = 1'-0"



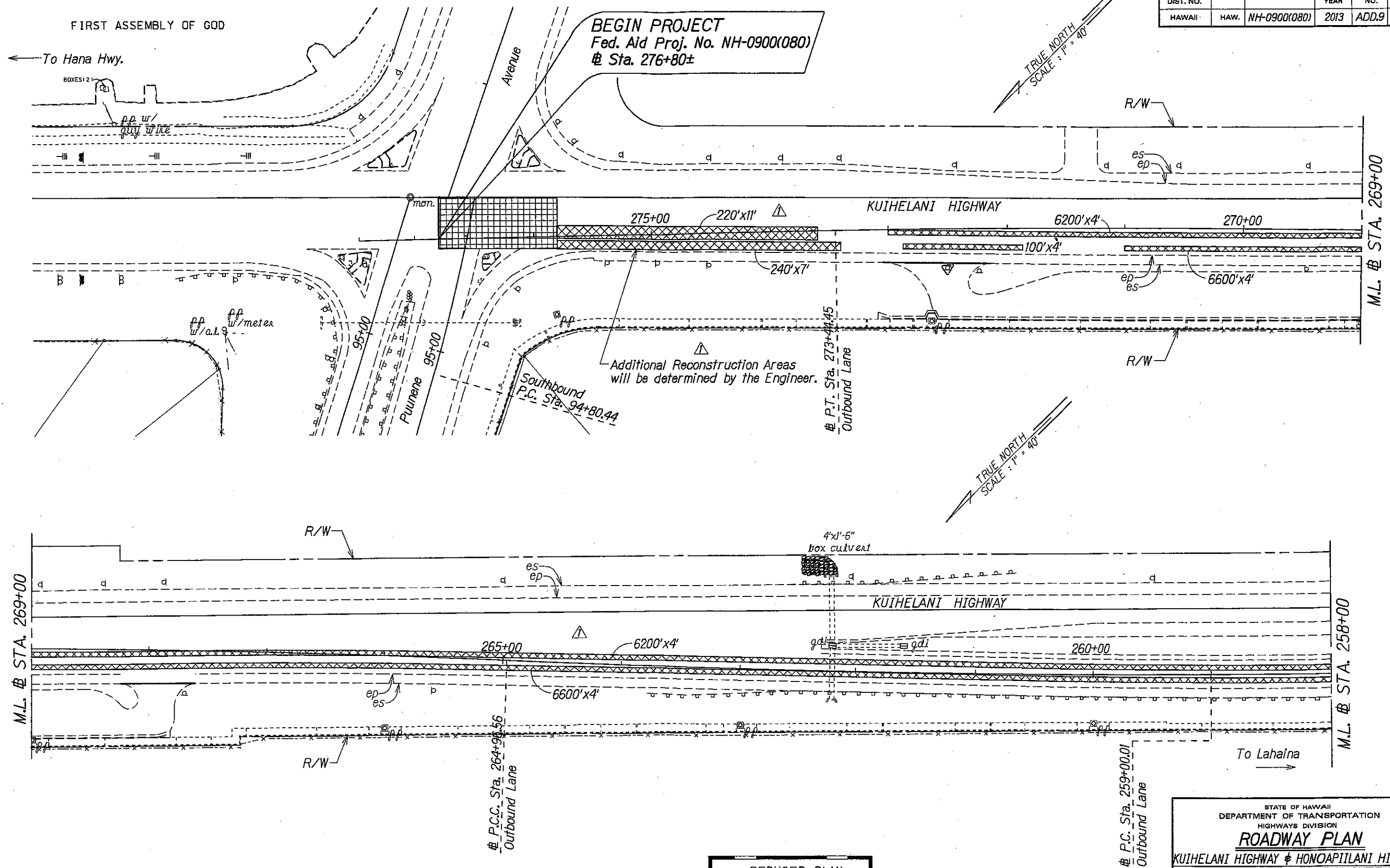
△ A.C. PAVEMENT RECONSTRUCTION DETAIL
Not To Scale



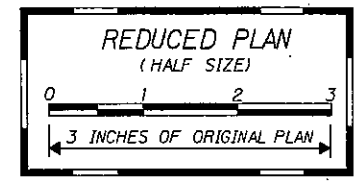
△	2-20-13	Revise taper edge to begin at the edge of shoulder.
△	2-20-13	Added Reconstruction Detail.
DATE	REVISION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL SECTIONS & DETAILS
KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY
PAVEMENT PREVENTIVE MAINTENANCE
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: As Shown
Date: May, 2012
SHEET No. 1 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0900(080)	2013	ADD.9	47



SURVEY PLOTTED BY	DATE
DRAWN BY	7/12
DESIGNED BY	
NOTED BY	
CHECKED BY	



2-22-13	Added Reconstruction Areas and notes.
DATE	REVISION

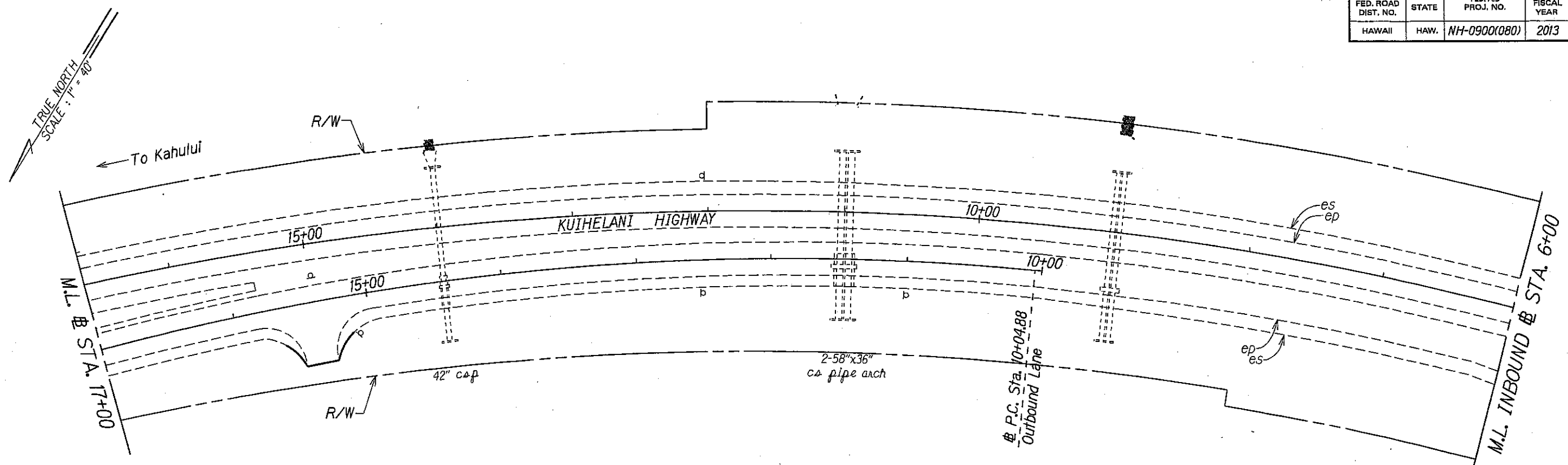
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN

KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY
PAVEMENT PREVENTIVE MAINTENANCE
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: 1" = 40' Date: May, 2012

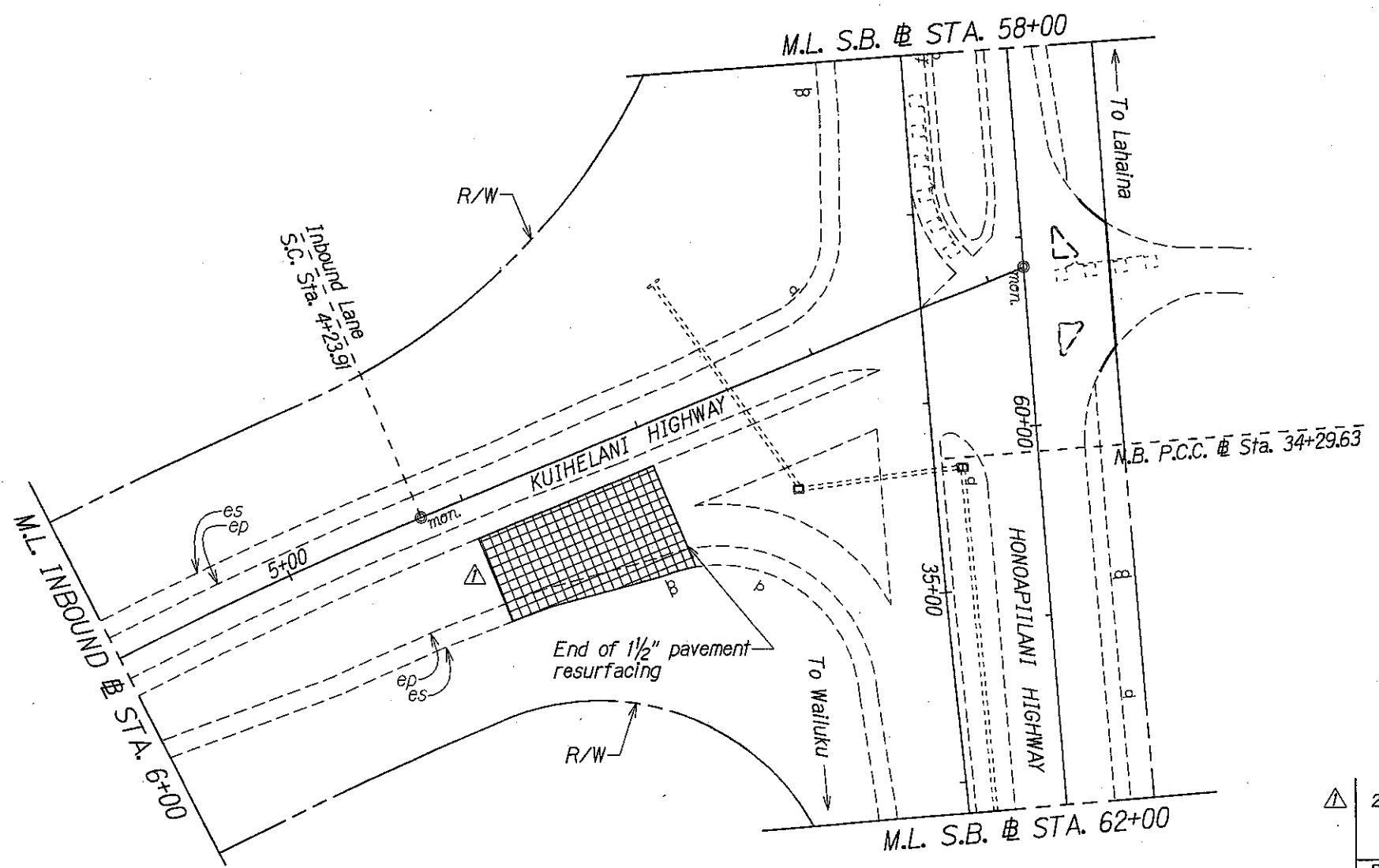
SHEET No. 1 OF 18 SHEETS
ADD. 9

ORIGINAL PLAN	
NOTE BOOK	
DESIGNED BY	
NOTED BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0900(080)	2013	ADD.21	47



TRUE NORTH
SCALE: 1" = 40'



2-11-13	Cold planing required end of 1 1/2" resurfacing.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

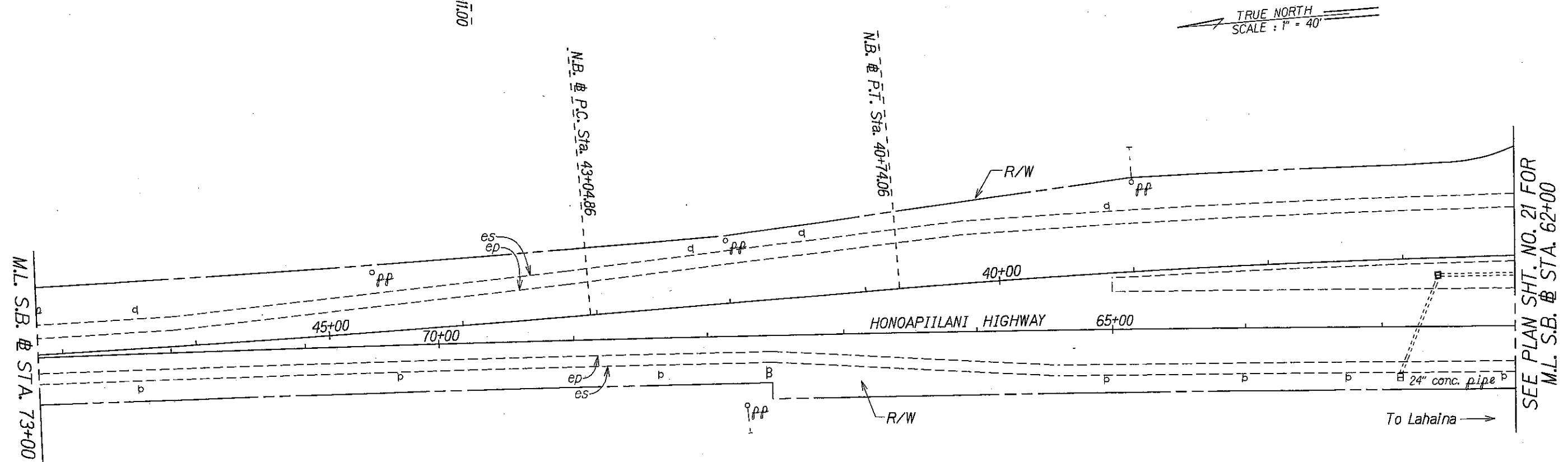
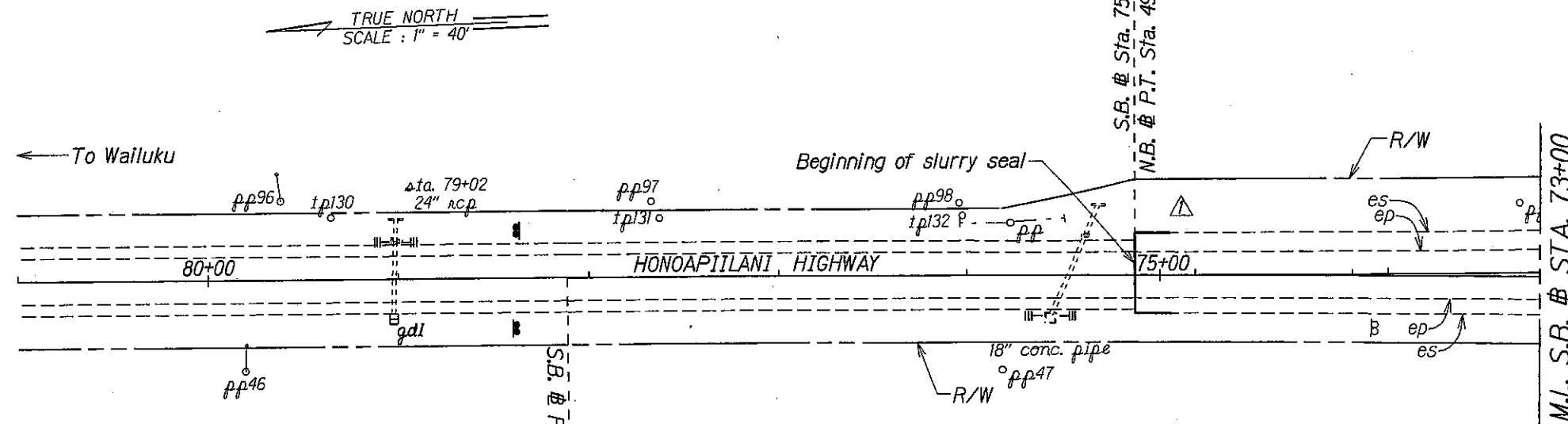
ROADWAY PLAN

KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY
PAVEMENT PREVENTIVE MAINTENANCE
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: 1" = 40' Date: May, 2012

SHEET No. 13 OF 18 SHEETS

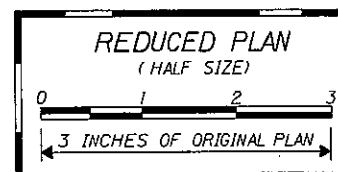
DATE	1/12
SURVEY PLOTTED BY	
DESIGNED BY	fred a.
QUANTITIES BY	mel/jy
CHECKED BY	gump/30p

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0900(080)	2013	ADD.22	47



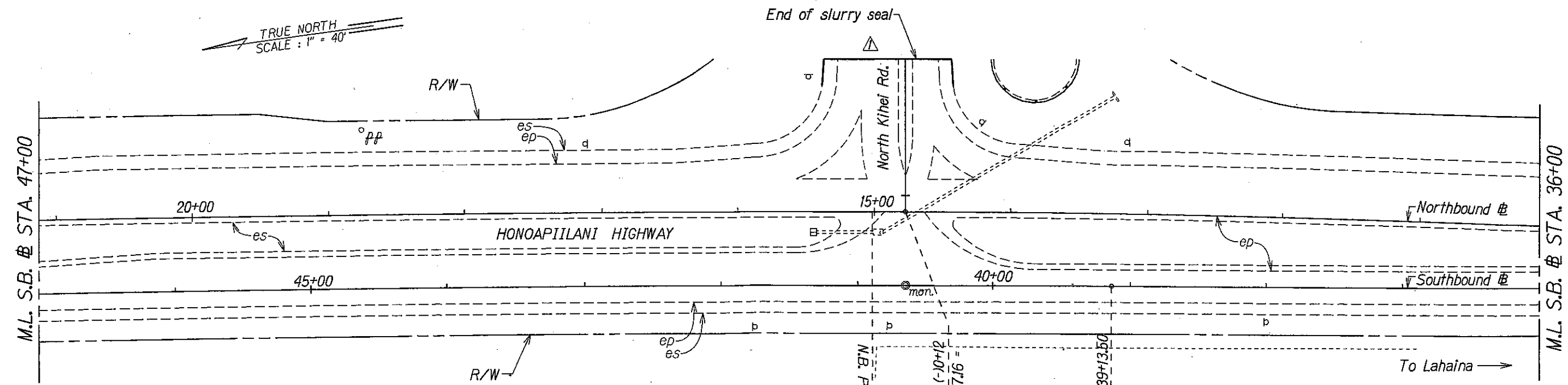
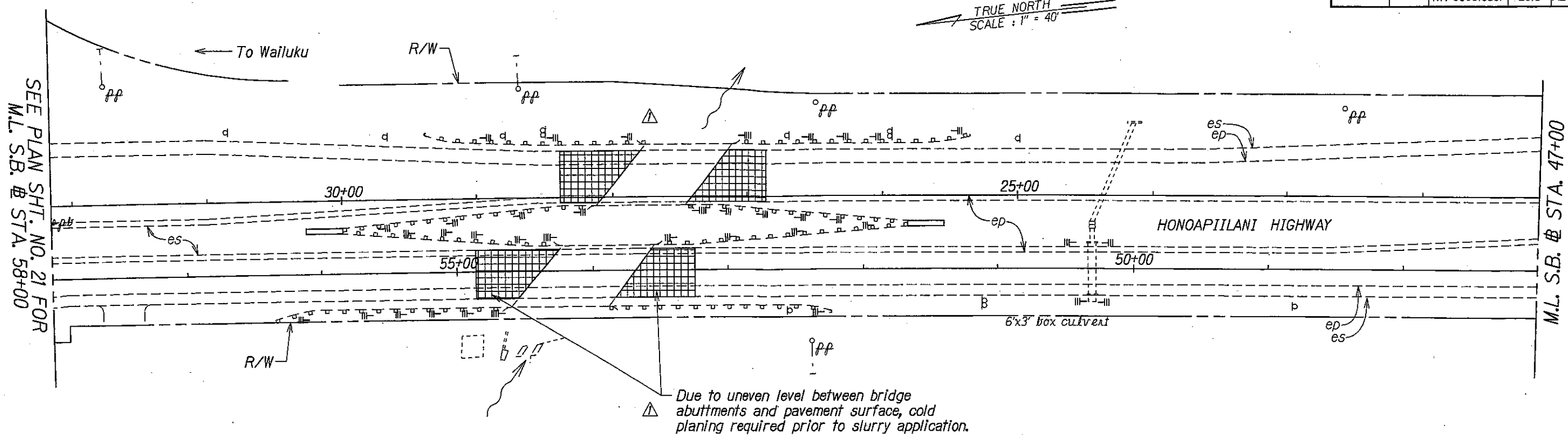
SEE PLAN SHT. NO. 21 FOR
M.L. S.B. & STA. 62+00

DESIGNED BY	DATE
DRAWN BY	1/12
CHECKED BY	
NOTED BY	
QUANTITIES BY	
REVISIONS	



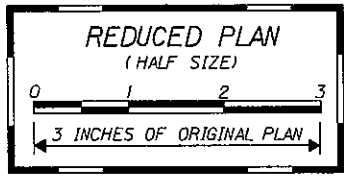
△	2-11-13	Cold planing deleted - Not required for slurry seal.
△	2-11-13	Added limit of slurry seal.
DATE	REVISION	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
ROADWAY PLAN
KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE Puunene Avenue to Honoapiilani Highway and Kuihelani Highway to Kapoli Street Federal-Aid Project No. NH-0900(080) Scale: 1" = 40' Date: May, 2012
SHEET No. 14 OF 18 SHEETS



ORIGINAL PLAN	DATE	7/13
DESIGNED BY	TRACED BY	
NOTED BY	CHECKED BY	
QUANTITIES BY		

DATE	REVISION
2-11-13	Cold planing deleted - Not required for slurry seal.
2-11-13	Added limit of slurry seal.
2-11-13	Added cold planing and note at bridge.



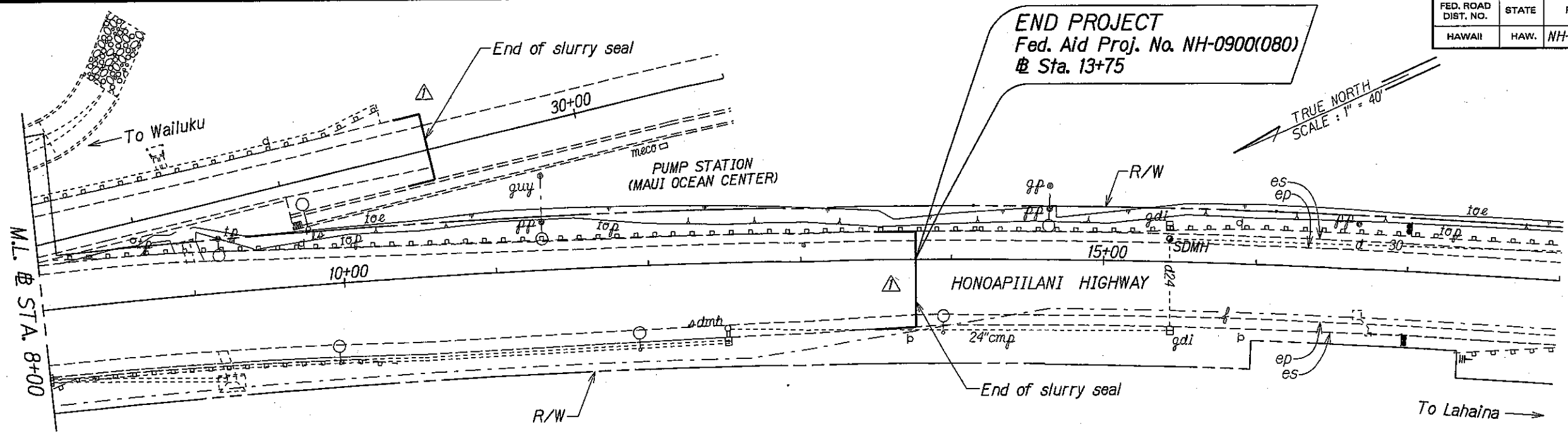
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY
PAVEMENT PREVENTIVE MAINTENANCE
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: 1" = 40' Date: May, 2012

SHEET No. 15 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0900(080)	2013	ADD.26	47



DESIGNED BY	DATE
TRACED BY	1/12
NOTED BY	
CHECKED BY	



△	2-11-13	Cold planing deleted - Not required for slurry seal.
△	2-11-13	Added limit of slurry seal.
DATE	REVISION	

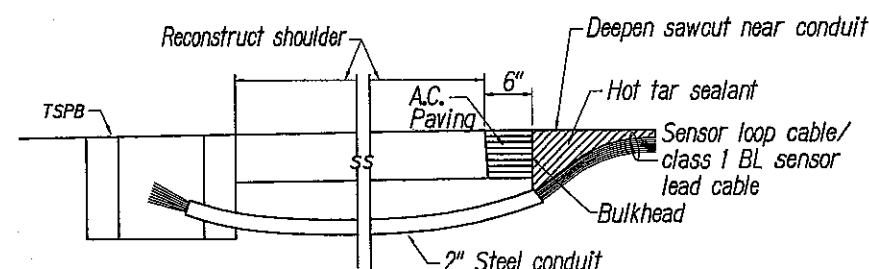
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
KUIHELANI HIGHWAY & HONOAPIILANI HIGHWAY
PAVEMENT PREVENTIVE MAINTENANCE
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: 1" = 40' Date: May, 2012
SHEET No. 18 OF 18 SHEETS

GENERAL NOTES:

1. The location of new inductance loops, shall be staked out in the field by the Contractor and approved by the Engineer prior to installation.
2. The Contractor shall inform the Engineer the Planning Branch @ 808 587-1838 at least three days prior to saw-cutting pavement and installing inductance loops.
3. Continuity of inductance loops and lead-in wires shall be tested and warranted for one year from date of acceptance by the Contractor.
4. Upon completion of sleeve, pull in in-bound lanes loop detector's cable and class 1 BL sensor cables, cables shall be tested for acceptance before and after installation into sleeve.
5. The Contractor shall restore all affected areas to their original condition. This item of work shall not be paid for separately, but shall be considered incidental of work of other paid items.
6. The Contractor shall be held liable for any damages incurred to the existing utilities and underground structures as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State.

LOOP LAYOUT NOTES:

1. Detector loop shall consist of four turns of 1c#12 cable meeting IMSA spec 5I-5 or equivalent embedded in a 3/8" minimum sawcut, except as noted.
2. Loop and lead-in to the first pullbox shall be one continuous wire. Lead-in wires from the same loop shall be twisted in pairs, two turns per foot. Do not twist on loop-pair with another loop-pair.
3. All lead-in wires shall be crimped with open end lugs that will fit into the terminal board slots snugly.
4. Stagger traffic loops on roadway less than 12 foot lane width.
5. The Contractor shall connect the inductance wires on each terminal slot.
6. The left lane in the direction of traffic flow is designated as lane 1, and the lane next to its right as lane 2 and so on as indicated on plans.
7. Vacuum and clean sawcut thoroughly before installing sensors and/or cables and filling with hot tar or epoxy sealant.
8. All loop lead-in wires in all enclosures including pullboxes shall be identified and labeled by direction of traffic flow and lane number as shown on plans.
9. All cables and wires terminated within an enclosure shall have a minimum 12" additional slack.

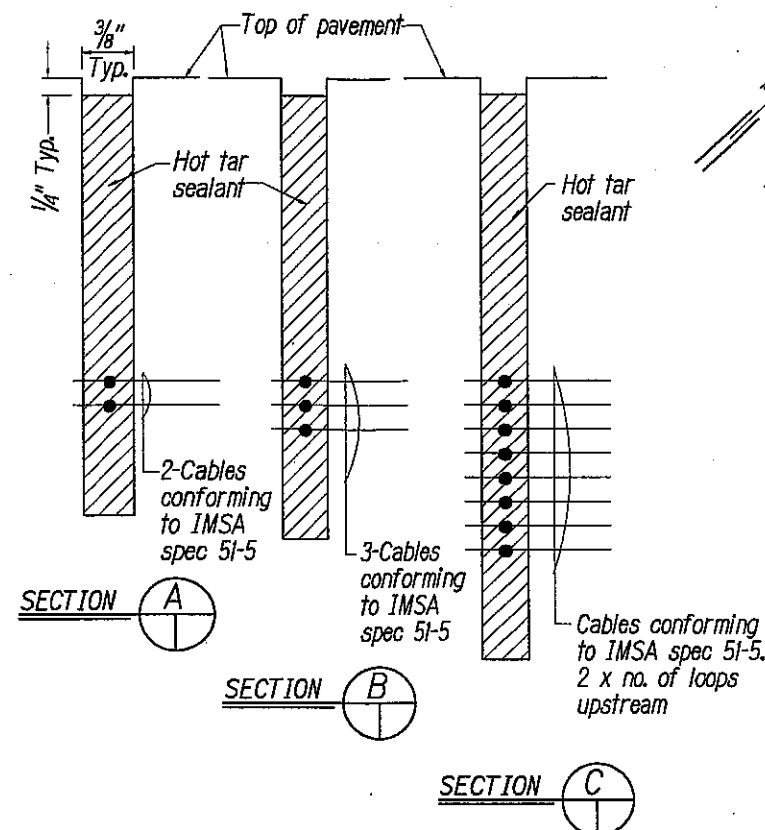


NOTES ON CONSTRUCTION AT END OF SAWCUT

1. Seal roadway end of conduit after installation of conductors
2. Install bulkhead across conduit trench.
3. Place hot tar in sawcut.
4. Backfill over conduit with new A.C.
5. Reconstruct curb and gutter as required.

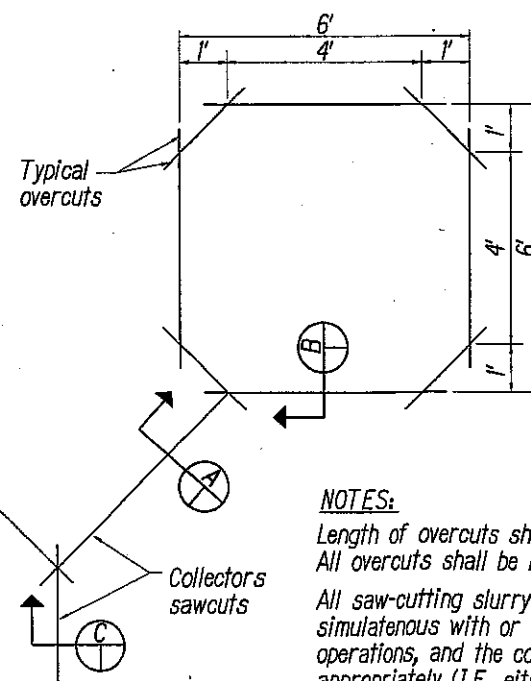
DETAIL OF SENSOR LOOP/ CLASS 1 BL SENSOR AT EDGE OF ROADWAY

Not to Scale



TYPICAL SECTION THROUGH SENSOR LOOP

Not to Scale



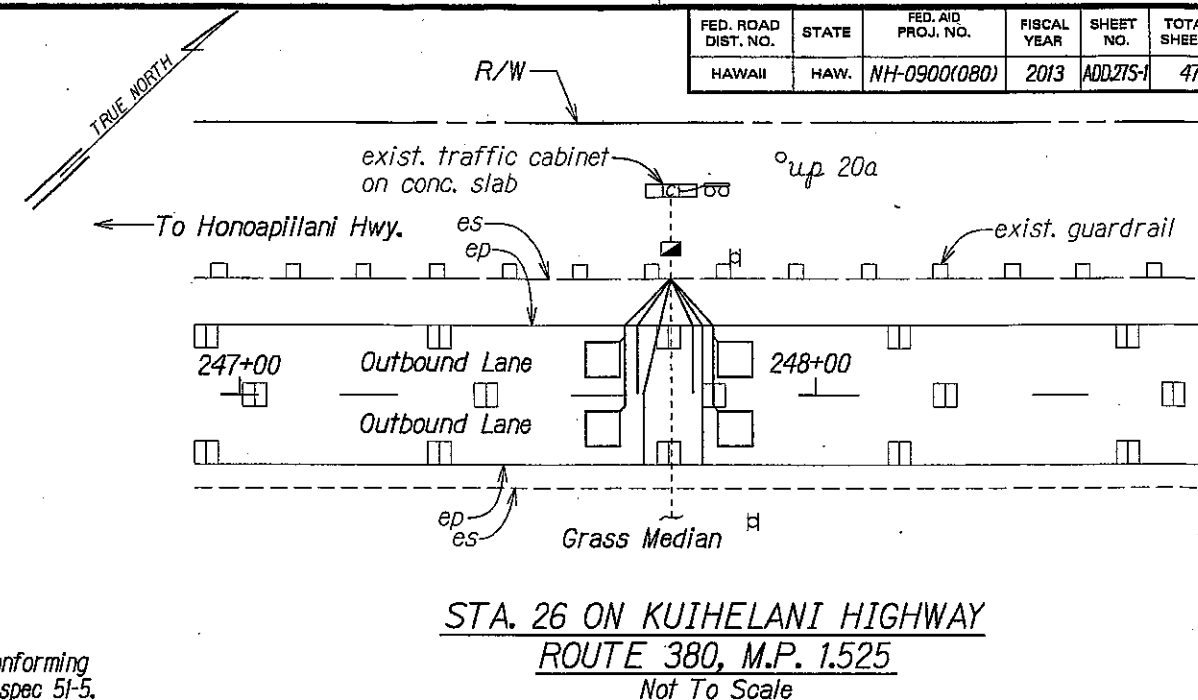
NOTES:

Length of overcuts shall be kept to a minimum. All overcuts shall be backfilled with hot tar.

All saw-cutting slurry shall be wet vacuumed, either simultaneous with or immediately after the saw-cutting operations, and the collected slurry disposed of appropriately (I.E., either, placed in a filter fabric lined filtration box or in a filter fabric lined dug up retention/percolation basin, and after filtration/percolation, the filter fabric and the retained sediments, disposed of appropriately).

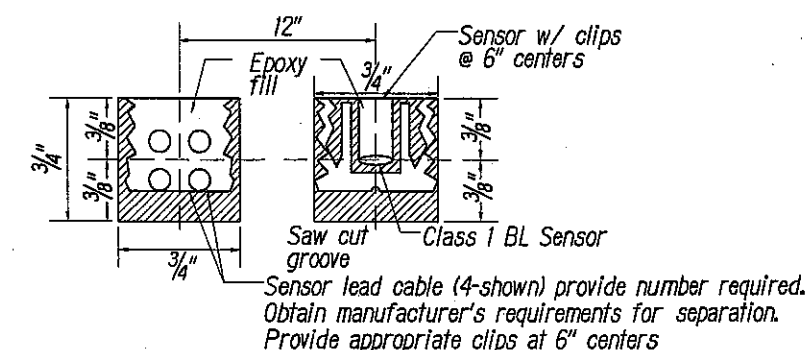
TYPICAL SENSOR LOOP SAWCUT DETAIL

Not to Scale



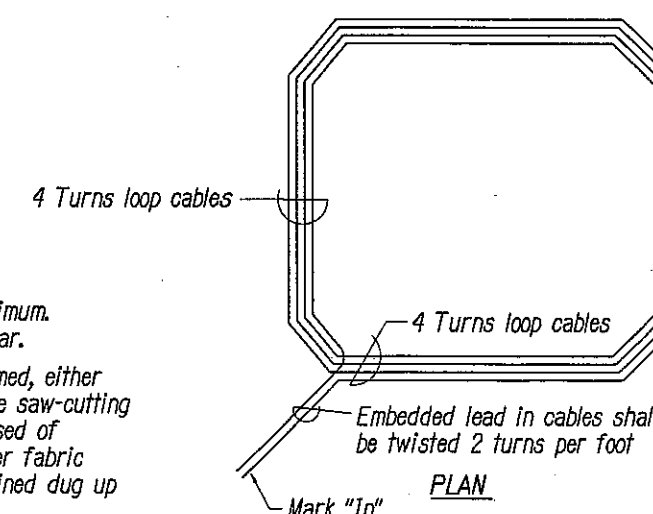
STA. 26 ON KUIHELANI HIGHWAY ROUTE 380, M.P. 1.525

Not To Scale



CLASS 1 BL SENSOR AND LEAD INSTALLATION DETAIL

Not to Scale



TYPICAL SENSOR LOOP WIRING DIAGRAM

Not to Scale



2-22-13 Added Traffic Counting Station Details Sheet.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**TRAFFIC COUNTING
STATION DETAILS**
KUIHELANI HWY. & HONOAPIILANI HWY. PAVEMENT PREVENTIVE MAINT.
Puunene Avenue to Honoapiilani Highway
and Kuihelani Highway to Kapoli Street
Federal-Aid Project No. NH-0900(080)
Scale: As Shown Date: February, 2013
SHEET No. 1 OF 1 SHEETS

ADD. 27S-1