

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	NH-IM-0300(75)	2012	73	138

ELECTRICAL SYMBOLS					
SYMBOL			DECODIDITION		
EXIST	REMOVE	NEW	DESCRIPTION		
*C)			Highway Light Pole		
Φ			Utility Wood Pole		
[<u>]</u>	<u>{*</u> J*	J	Junction Box		
©	tt.		Traffic Camera		
r _ 7			Pullbox		
			Type A Pullbox		
	て×ス		Sign Light Fixture		
			Conduit Stub Out		
e	- ×		Overhead Highway Communications Circuit		
	~***********	~~~~~	Exposed Flex Conduit		
		·////	Exposed Temporary Power Cables		
e	_ x		Exposed Conduit		
e	xx		Conduit Concealed/Buried Below Finished Grade		
	BL		Denotes Baseline		
	Exst / Exi	ist	Denotes Existing		

SYMBOL NOTES:

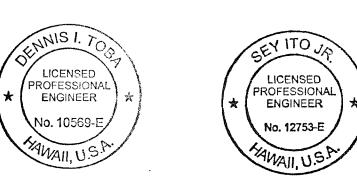
- "X" through symbol indicates item to be removed/demolished.
- 2. "e" through symbol indicates existing item.
- 3. Solid lines indicate new item/work.

GENERAL ELECTRICAL NOTES

- 1. Existing electrical equipment shall remain unless indicated otherwise.
- The location of existing underground utilities shown on plans are from existing records and are approximations only. Contractor shall exercise caution when construction crosses or is in close proximity to existing underground utilities. Damages to utility companies' existing facilities shall be repaired by the respective utility company and repair costs shall be paid by the contractor at no increase in contract time or contract price.
- 3. CAUTION!!! Contractor shall exercise extreme caution when working on the existing handhole/pullboxes.

ELECTRICAL DEMOLITION NOTES

- 1. The Contractor shall verify all existing circuit wiring prior to any demolition work.
- 2. The Contractor shall remove all conduits and exposed raceways, lights, photocells, cabinets, junction boxes related to sign lighting for all signs, unless otherwise noted.



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EXPIRATION DATE OF THE LICENSE 4/30/2014

PRINCIPAL-IN-CHARGE

Federal Aid Project NO. - NH-IM-0300(75

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL ELECTRICAL NOTES

AND ELECTRICAL SYMBOLS LIST

INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE

Date: September 21, 2012 Scale: As Shown

SHEET No. **E1.1** OF 138 SHEETS

STATE RIGHT OF WAY BACKFILL NOTES

TRENCH BACKFILL MATERIAL "A" When Tested According to AASHTO T176, The Sand Equivalent Value

Shall be 20 or Greater. TRENCH BACKFILL MATERIAL "B" When Tested According to AASHTO

T176, The Sand Equivalent Value of the Backfill Material Shall be Equal to or Greater Than the Surrounding Soil.

TRENCH BACKFILL MATERIAL "C" Excavate Material and Provide 3" Backfill Material "A", See Above.

CONCRETE - 3" ENCASEMENT, 3000 PSI COMPRESSIVE STRENGTH @ 28 DAYS.

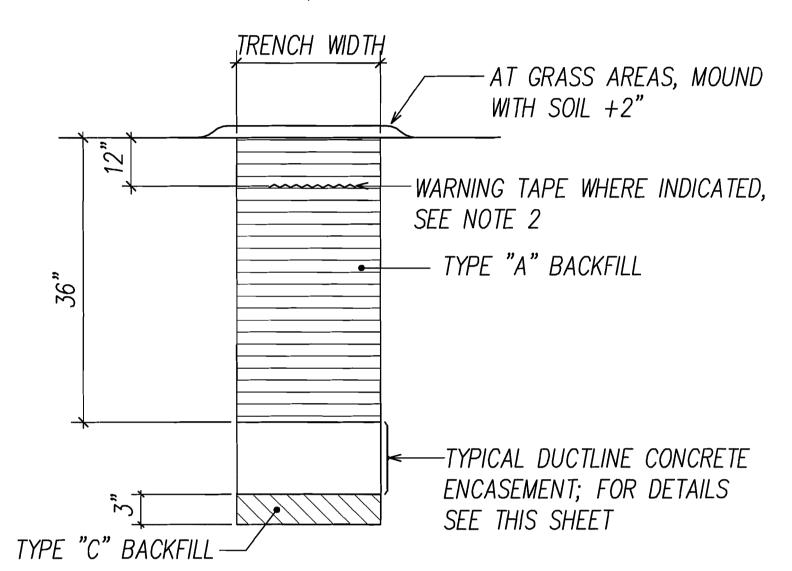
NOTE:

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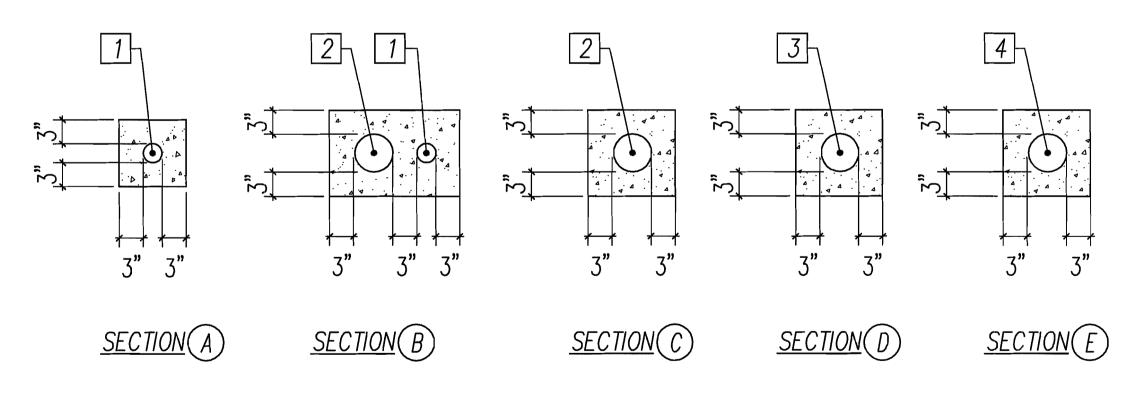
See Specification Section 703.21 for Additional Trench Backfill Material Requirements.

GENERAL DUCTLINE DUCT SECTION NOTES:

- If trench is located on unpaved area, the Contractor shall replace 10" A.C. Base Course and 4" A.C. Pavement with Type "A" backfill material.
- The Metal Detectable Red Plastic Warning Tape shall be a minimum 5 mils thick and 4" wide with a continuous metallic backing and corrosion resistant 1' min thick foil core. The message on the tape shall read, "CAUTION — STATE HWY LIGHTING BURIED BELOW," utilizing 1 1/2 inches series "C" block lettering. The message will be repeated with a 4 1/4" spacing between top line of message and start of next repeat.



BACKFILL SECTION WITHIN STATE R-O-W BEYOND PAVED ROADWAY

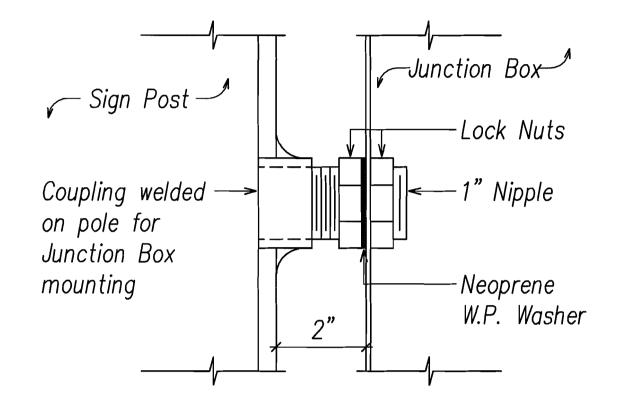


	DU	CT AND CAI	BLE SCHEDULE
NO.	DUCT SIZE	CABLE	DESCRIPTION
1	1"C	PULL-CORD	FUTURE CONDUCTORS
2	2"C	3#2, 1#6GND 1	HIGHWAY LIGHTING
3	2"C	MATCH EXISTING	HIGHWAY LIGHTING
4	MATCH EXIST	PULL-CORD	FUTURE CONDUCTORS

HIGHWAY LIGHT DUCT SECTION DETAILS

NOT TO SCALE

FED. ROAD DIST. NO. FED. AID PROJ. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS HAW. NH-IM-0300(75) 2012 74

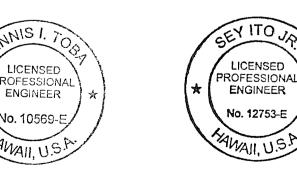


Coordinate Conduit Nipple Requirements with Pole Manufacturer. See Structural Drawings for Sign Post Detail.

CONDUIT NIPPLE DETAIL

General Sheet Note(s):

1 Match Existing Conduit and Conductor Sizes.



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EXPIRATION DATE OF THE LICENSE 4/30/2014 EXPIRATION DATE OF THE LICENSE 4/30/2014 DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

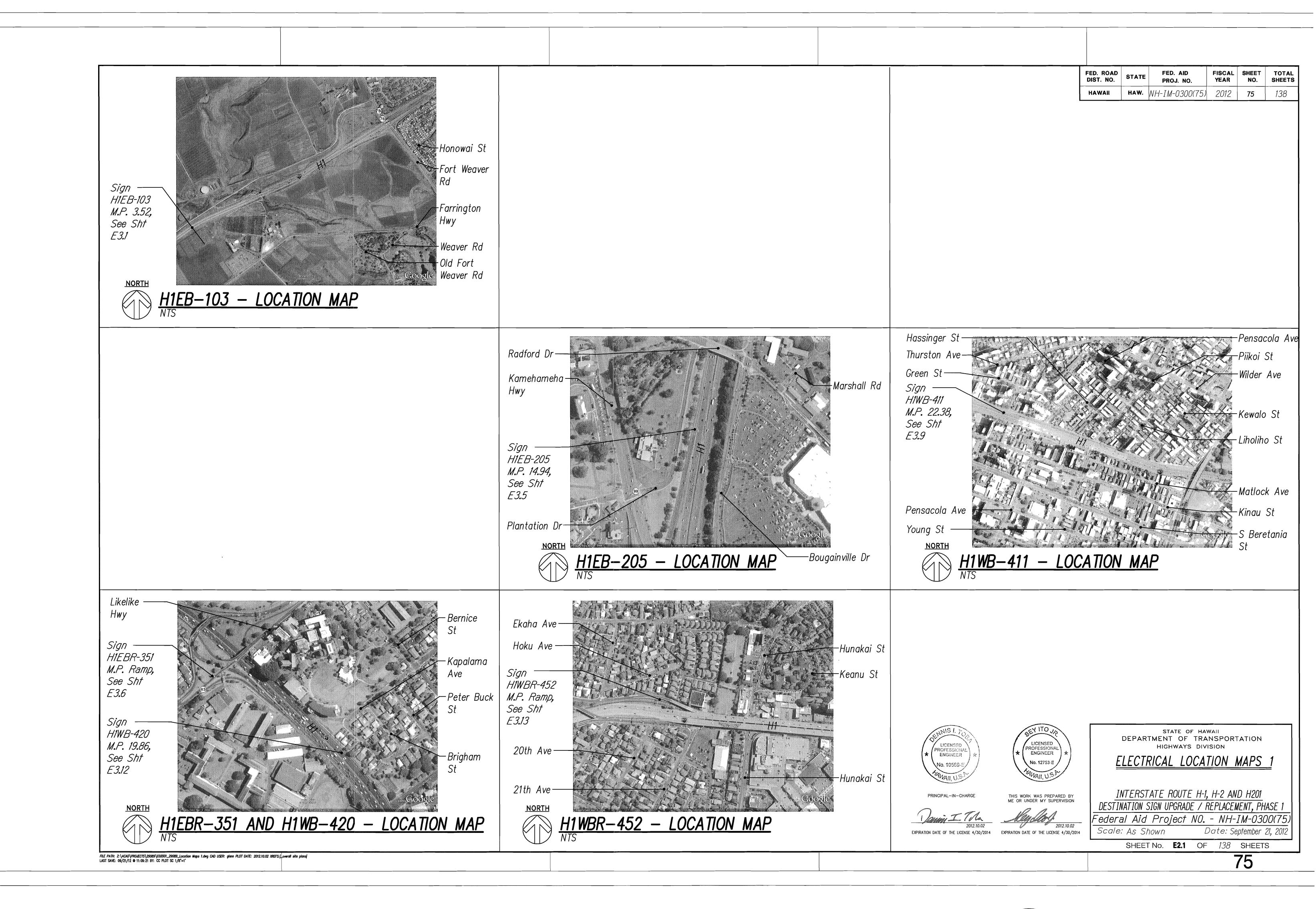
STATE OF HAWAII

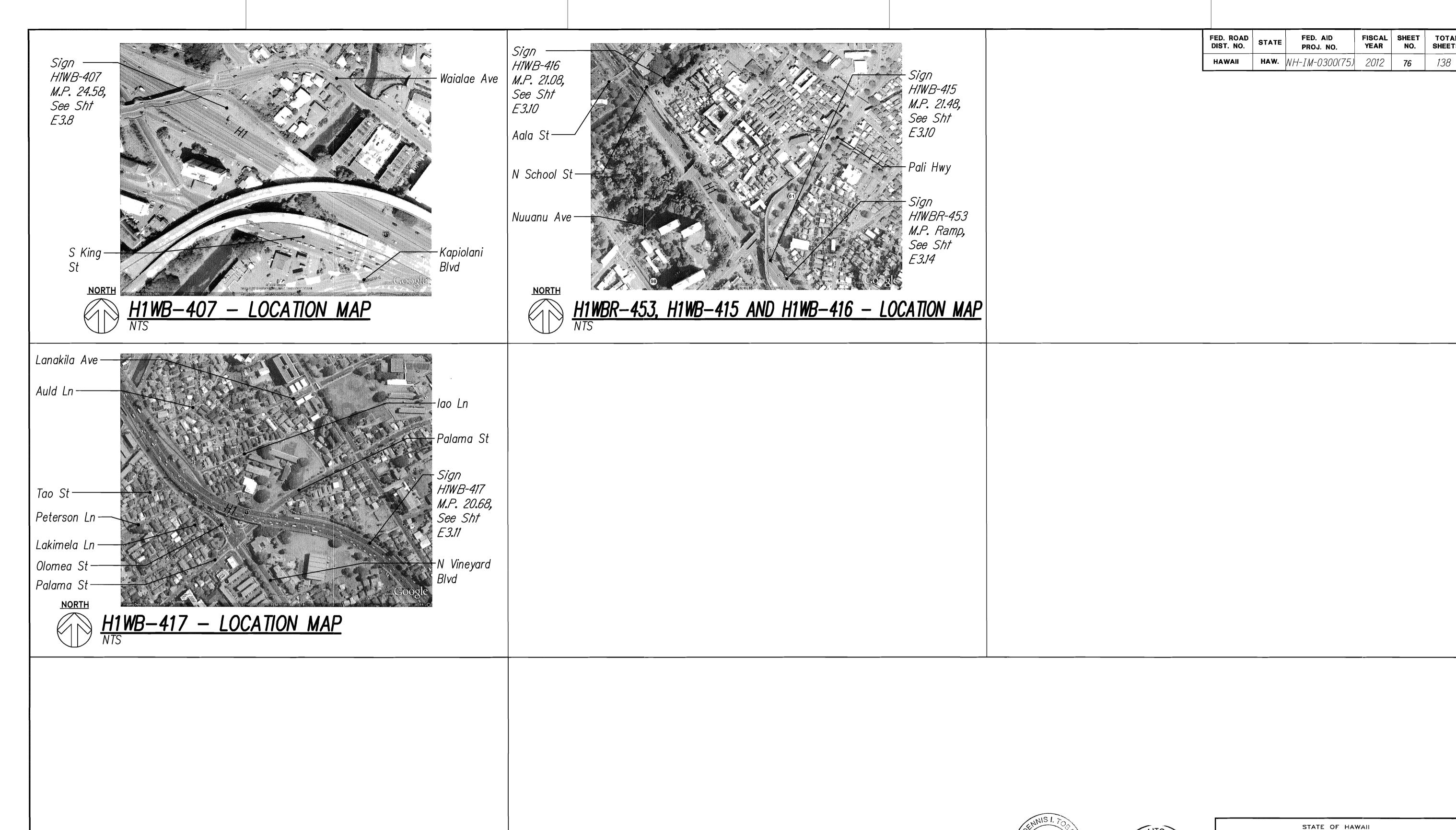
DUCT SECTION AND JUNCTION BOX

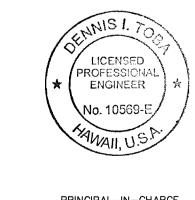
MOUNTING DETAILS INTERSTATE ROUTE H-1, H-2 AND H201

DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE Federal Aid Project NO. - NH-IM-0300(75 Date: September 21, 201 Scale: As Shown

SHEET No. **E1.2** OF 138 SHEETS







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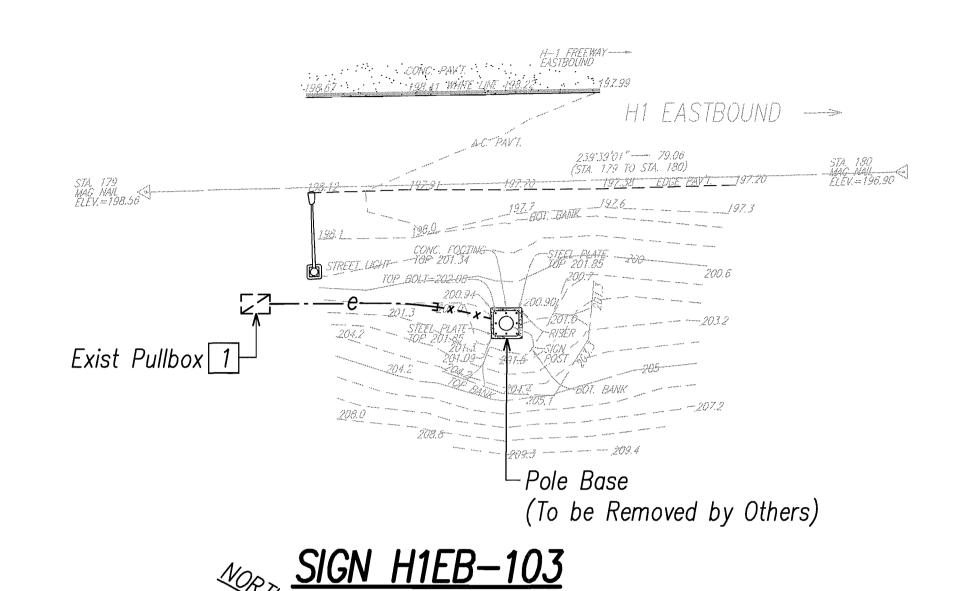
EXPIRATION DATE OF THE LICENSE 4/30/2014 EXPIRATION DATE OF THE LICENSE 4/30/2014

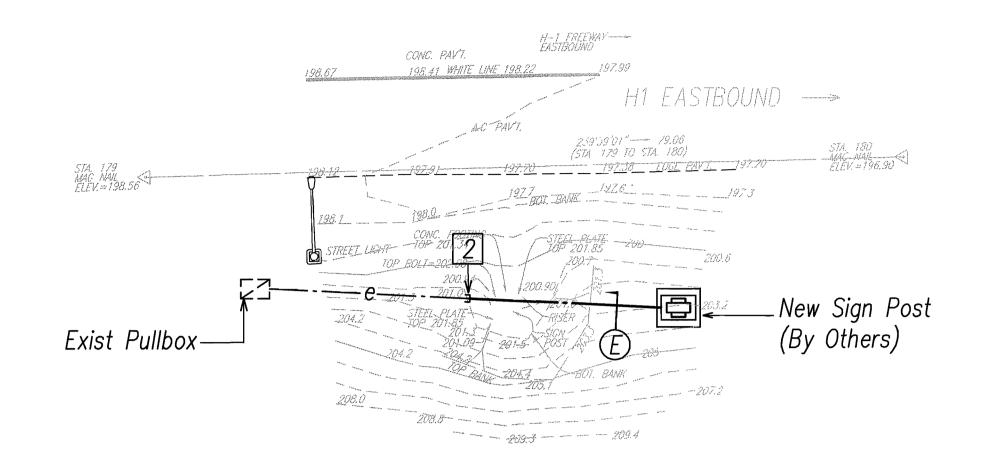
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL LOCATION MAPS 2

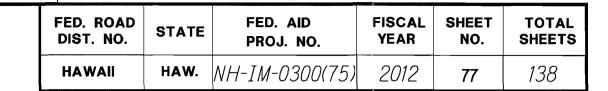
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE 1 Federal Aid Project NO. - NH-IM-0300(75) Scale: As Shown Date: September 21, 2012

SHEET No. **E2.2** OF 138 SHEETS



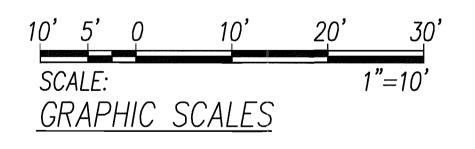


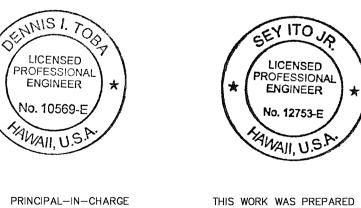
SIGN H1EB-103 REVISED ELECTRICAL PLAN



General Sheet Note(s):

- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- Connect New Conduit to Exist Conduit Stub Out.





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EXPIRATION DATE OF THE LICENSE 4/30/2014 EXPIRATION DATE OF THE LICENSE 4/30/2014

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

DEMOLITION AND REVISED ELECTRICAL

PLANS AND ELEVATIONS 1 INTERSTATE ROUTE H-1, H-2 AND H201

DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE Federal Aid Project NO. - NH-IM-0300(75)

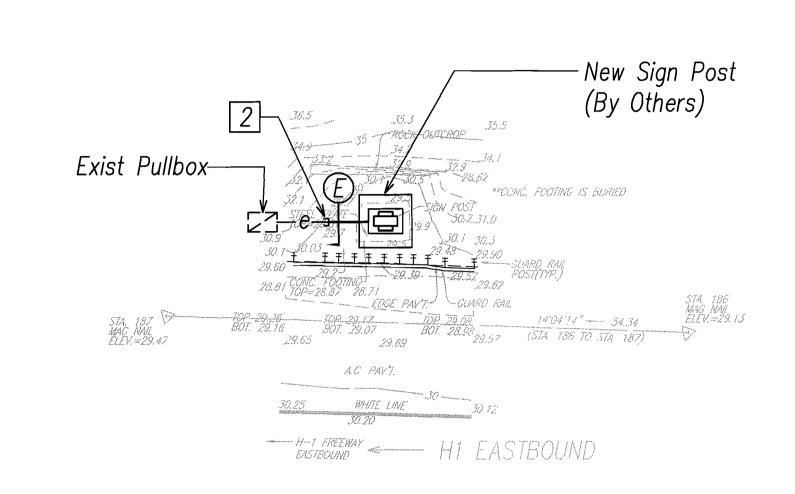
Date: September 21, 2012

SHEET No. **E3.1** OF 138 SHEETS

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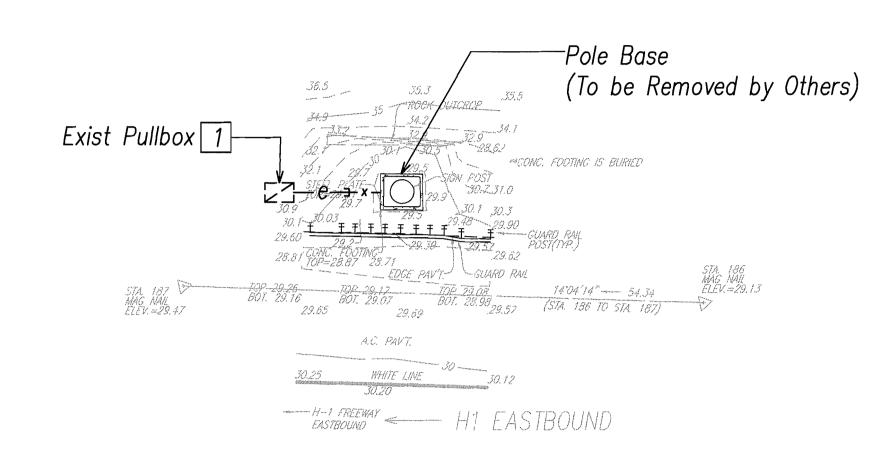
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HAWAII	HAW.	NH-IM-0300(75)	2012	78	138

- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- 2 Connect New Conduit to Exist Conduit Stub Out.



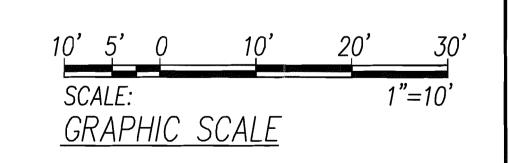
SIGN H1EB-205 REVISED ELECTRICAL PLAN

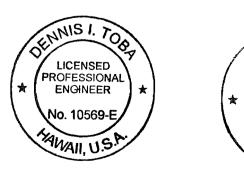
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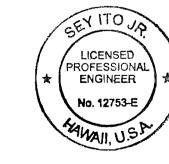


SIGN H1EB-205 DEMOLITION ELECTRICAL PLAN

Scale: 1"=10"







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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

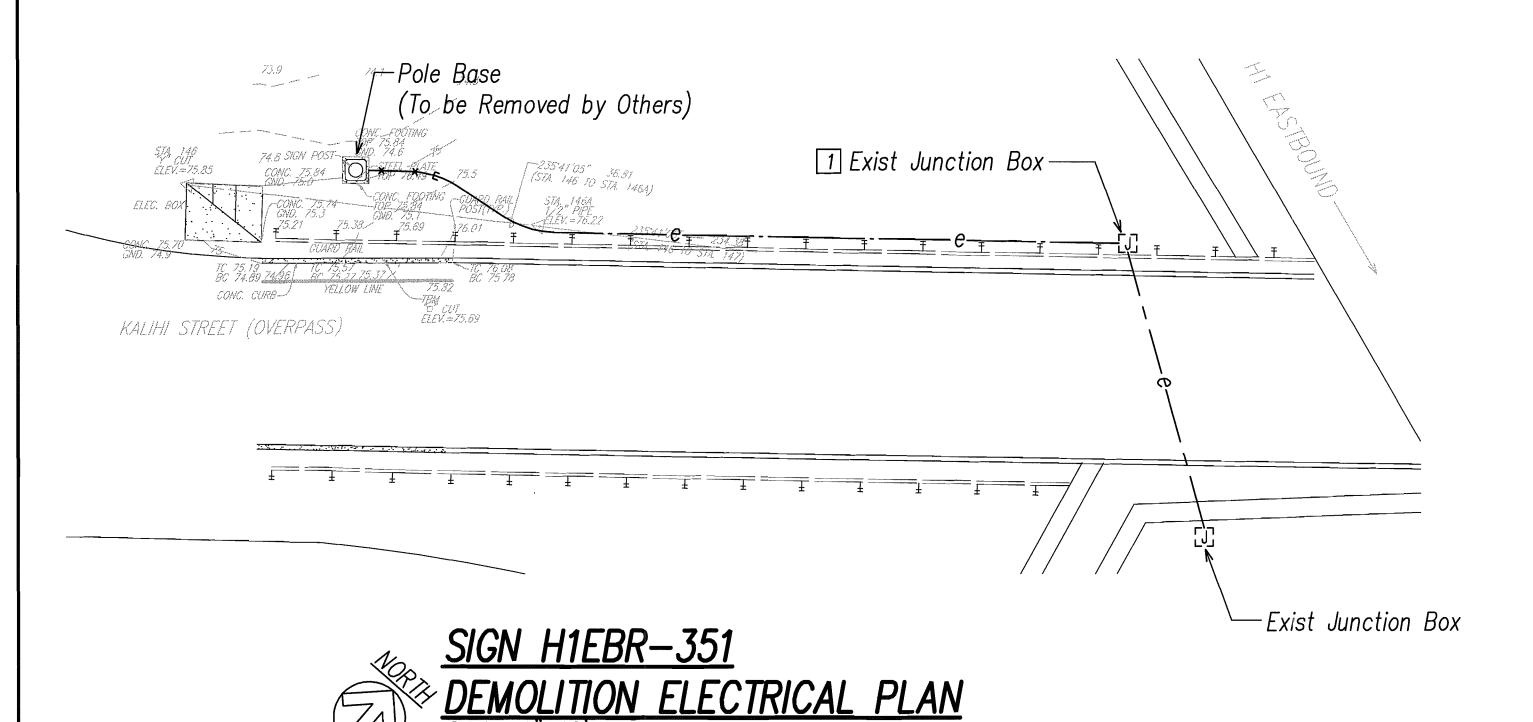
DEMOLITION AND REVISED ELECTRICAL

PLANS AND ELEVATIONS 5

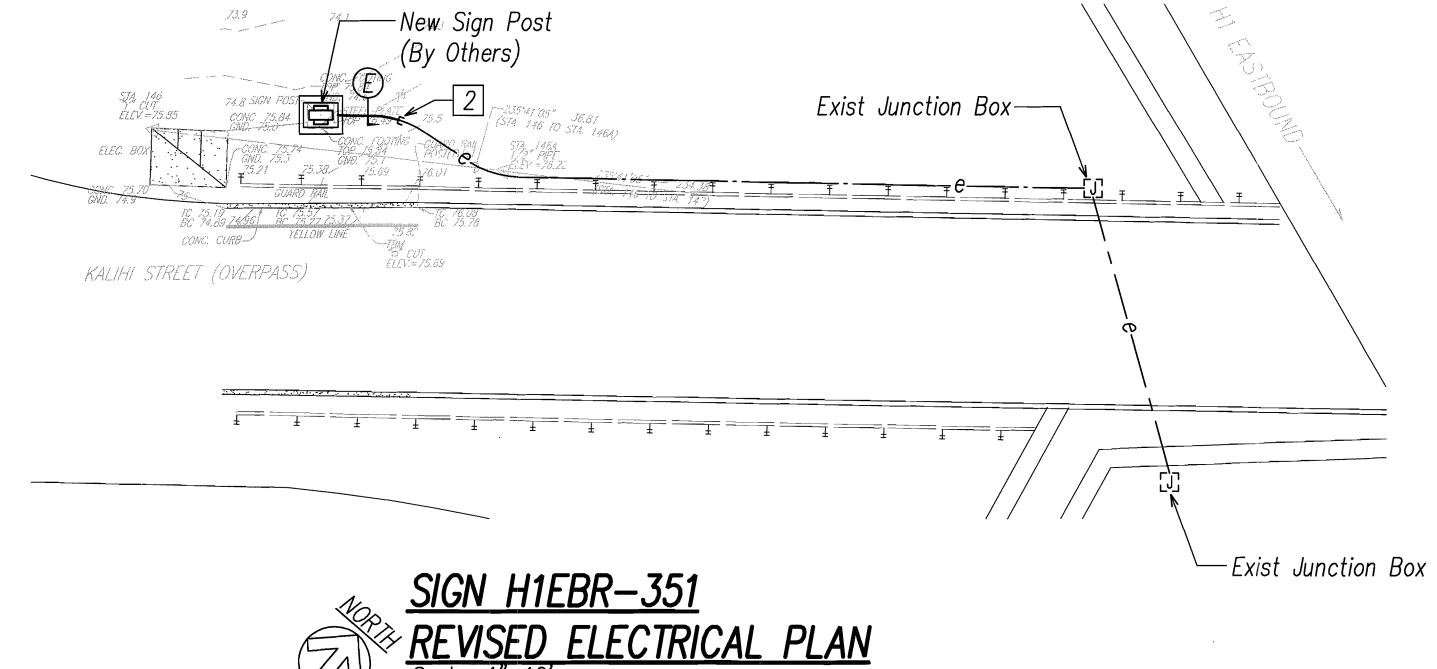
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE 1 Date: September 21, 201

SHEET No. **E3.5** OF 138 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-IM-0300(75)	2012	79	138

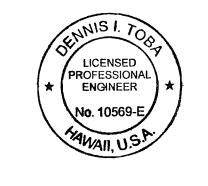


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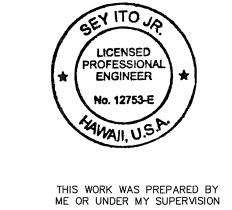


General Sheet Note(s):

- 1 Pullback and Hot—Cap, Coil and Conductors in Junction Box as Required.
- 2 Connect New Conduit to Exist Conduit Stub Out.



PRINCIPAL-IN-CHARGE



EXPIRATION DATE OF THE LICENSE 4/30/2014 EXPIRATION DATE OF THE LICENSE 4/30/2014

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>DEMOLITION AND REVISED ELECTRICAL</u>

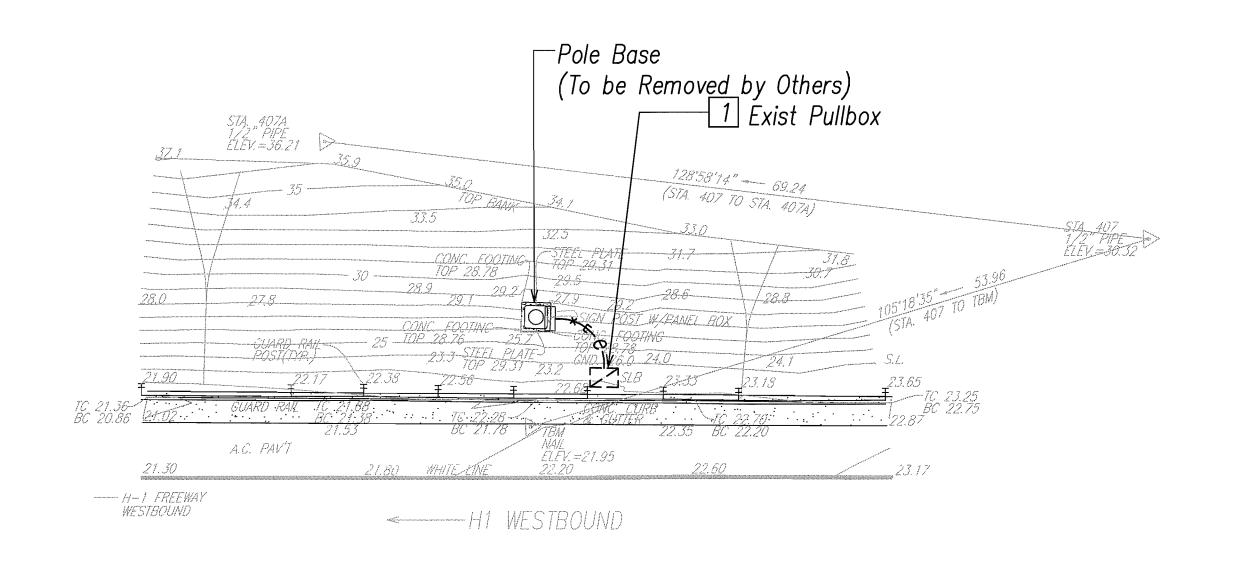
PLANS AND ELEVATIONS 6

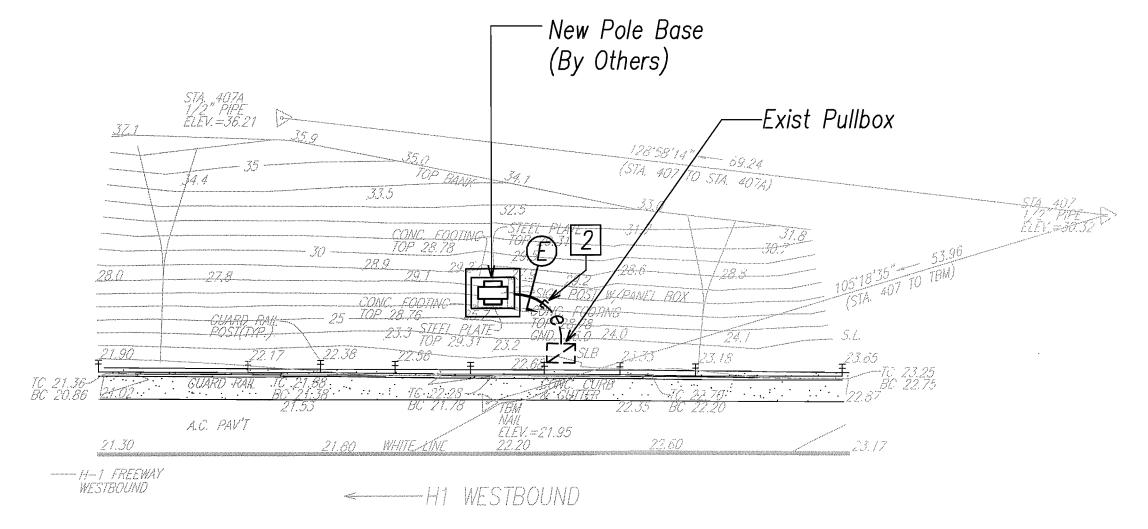
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE 1 Federal Aid Project NO. - NH-IM-0300(75)

Date: September 21, 2012 Scale: As Shown

SHEET No. **E3.6** OF 138 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-IM-0300(75)	2012	80	138





- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- 2 Connect New Conduit to Exist Conduit Stub Out.



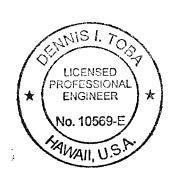
SIGN H1WB-407

DEMOLITION ELECTRICAL PLAN

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



SIGN H1WB-407
REVISED ELECTRICAL PLAN
Scale: 1/8"=1'-0"



PRINCIPAL-IN-CHARGE

EXPIRATION DATE OF THE LICENSE 4/30/2014

Description of the License 4/30/2014

EXPIRATION DATE OF THE LICENSE 4/30/2014

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ENGINEER

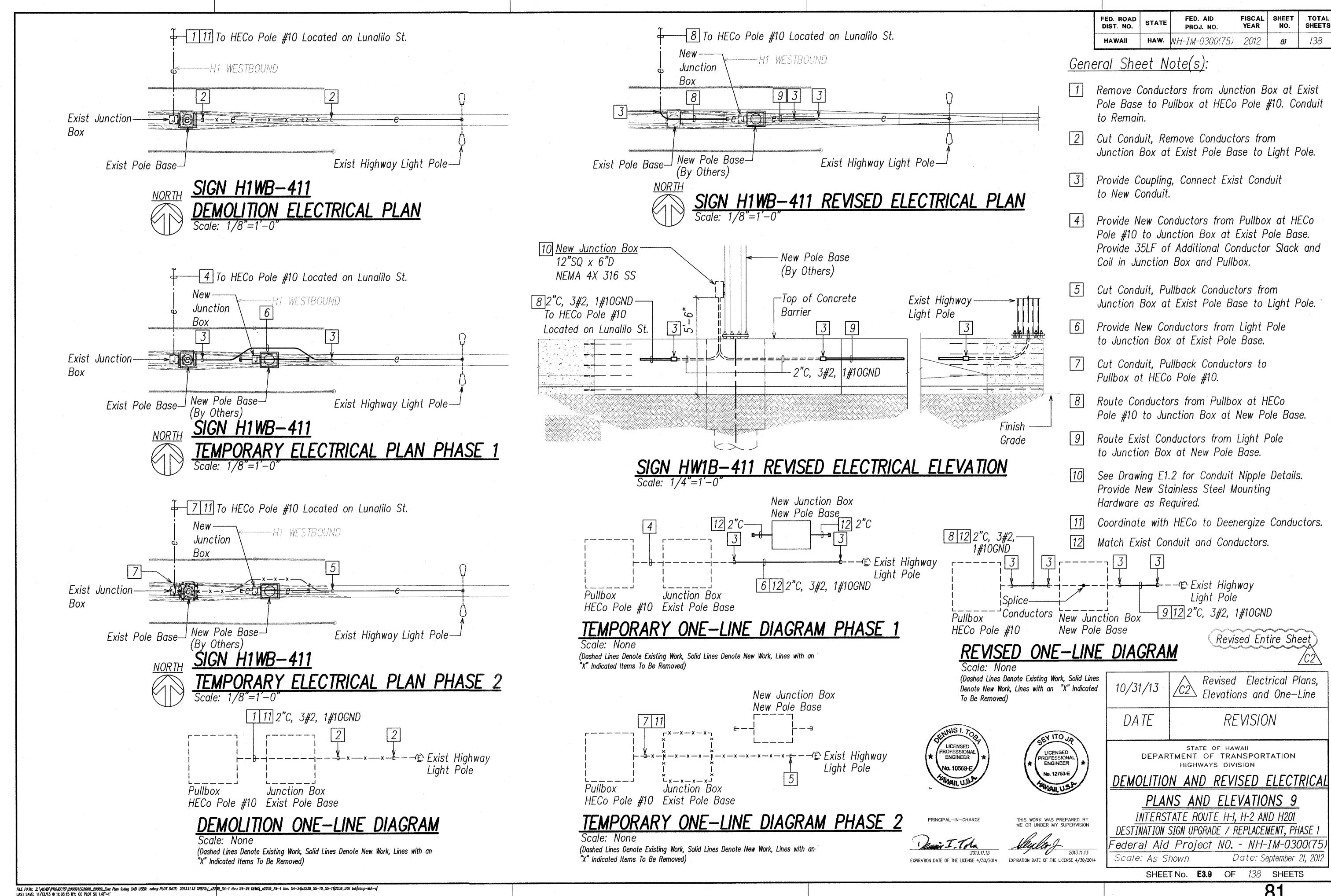
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

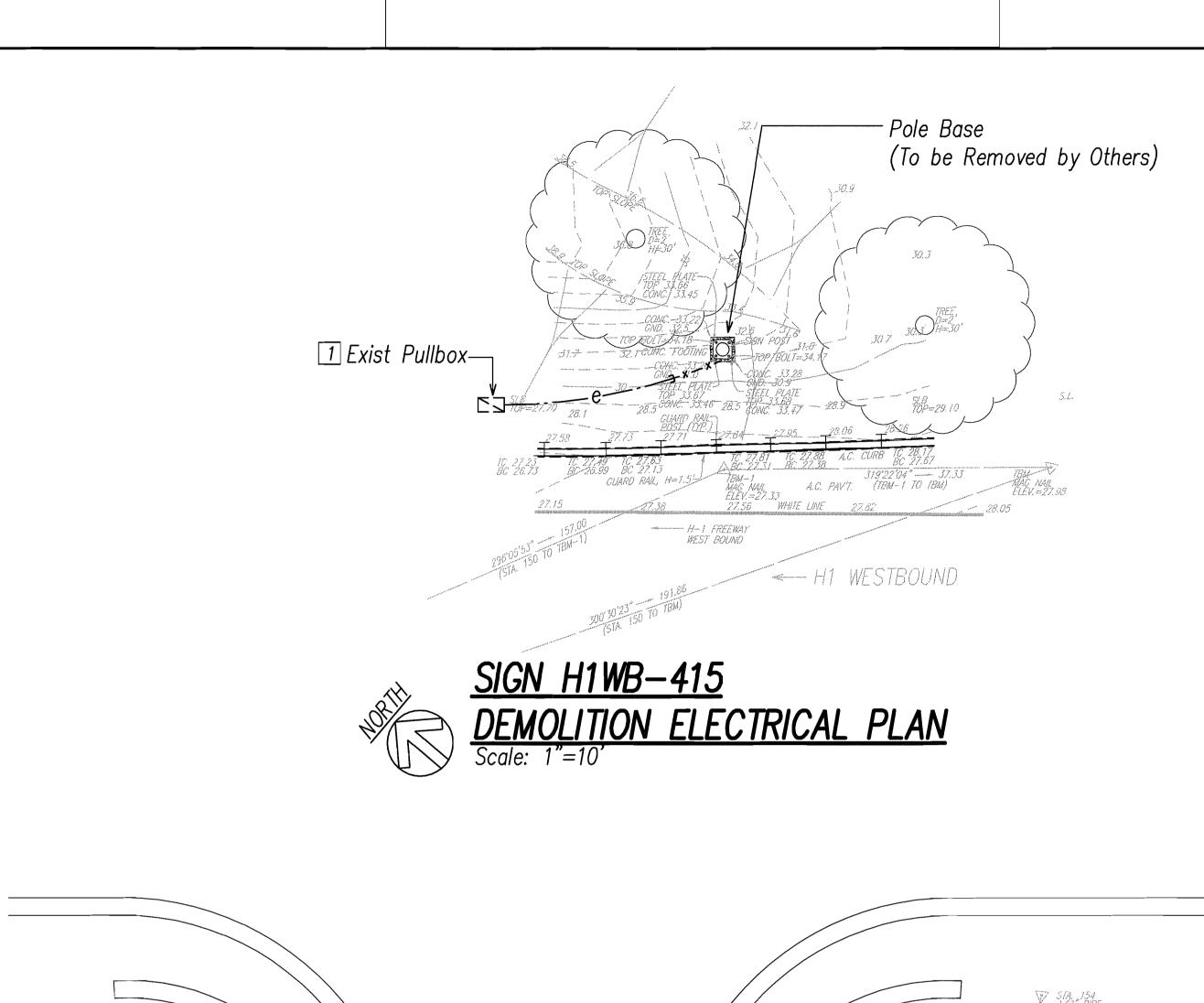
<u>DEMOLITION AND REVISED ELECTRICAL</u> <u>PLANS AND ELEVATIONS 8</u>

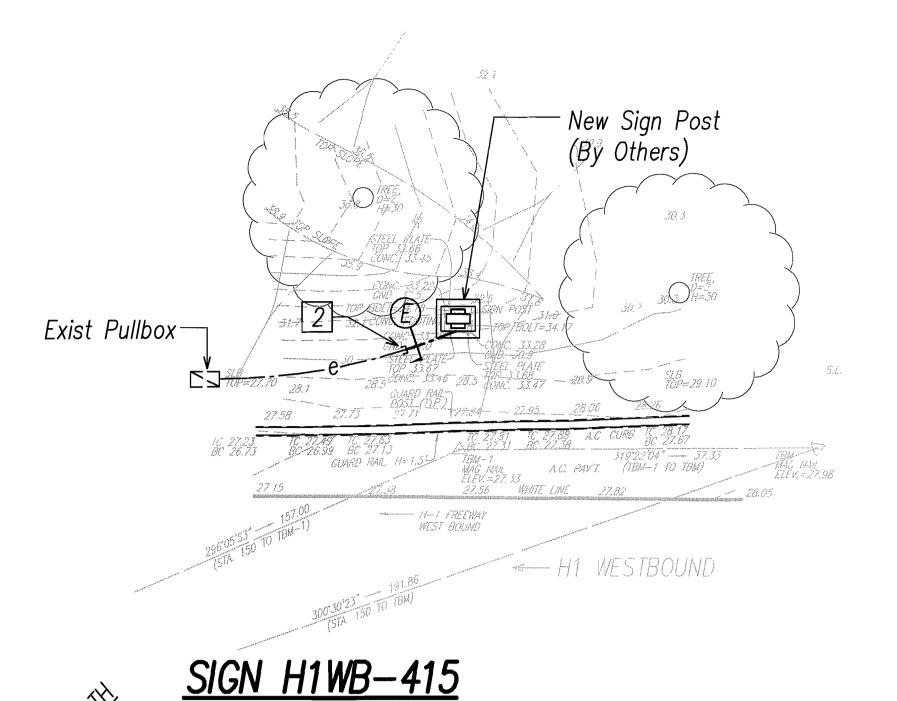
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHA

Scale: As Shown

Date: September 21, 2012







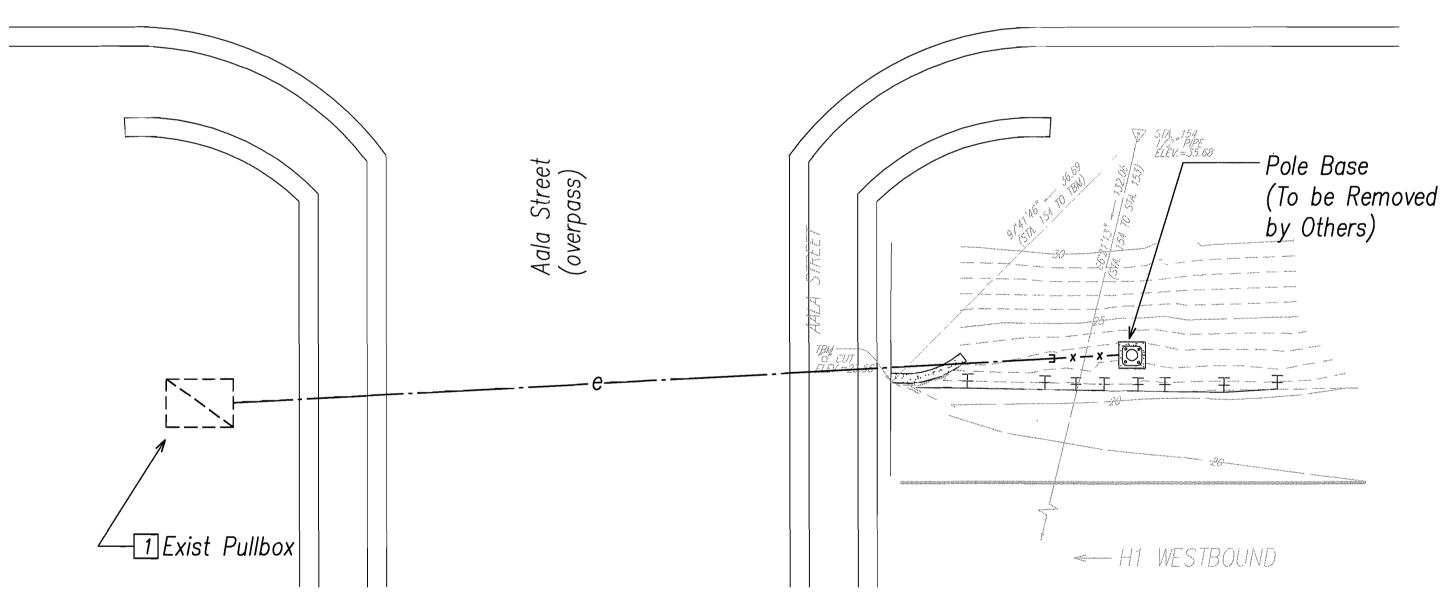
REVISED ELECTRICAL PLAN

Scale: 1"=10"

FISCAL SHEET TOTAL YEAR NO. SHEETS HAW. NH-IM-0300(75)

General Sheet Note(s):

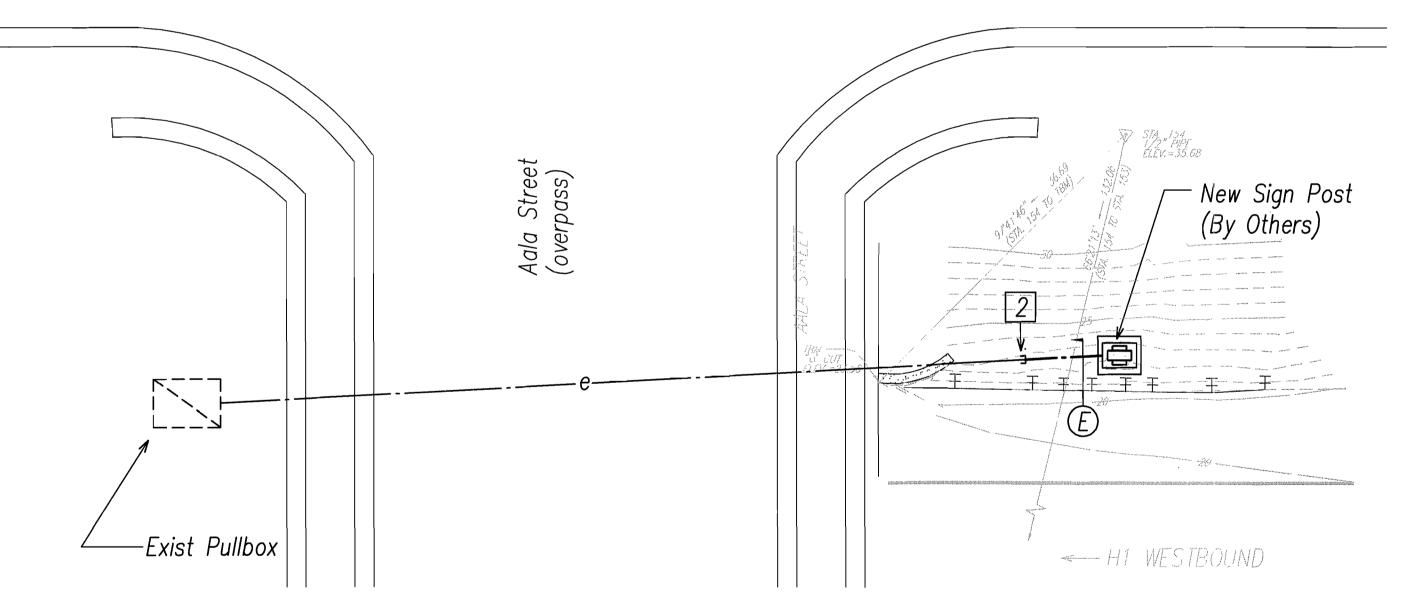
- Pullback And Hot-Cap, Coil and Stow Conductors in Pullbox as Required.
- Connect New Conduit to Exist Conduit Stub Out.



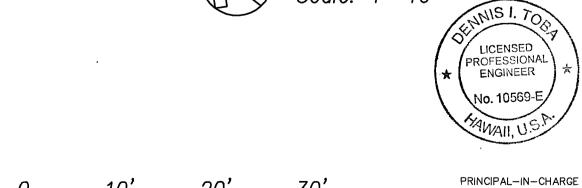
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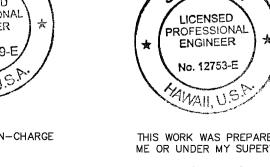
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DEMOLITION ELECTRICAL PLAN









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EXPIRATION DATE OF THE LICENSE 4/30/2014

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION DEMOLITION AND REVISED ELECTRICAL

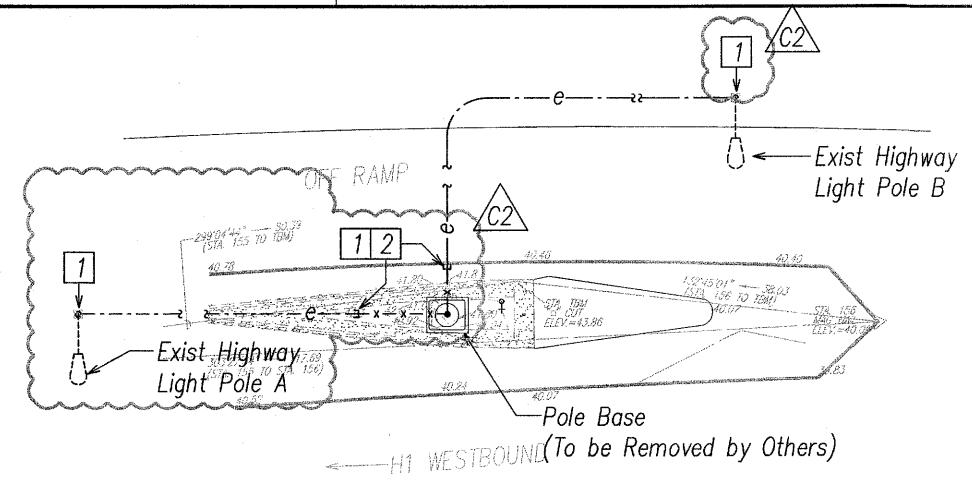
PLANS AND ELEVATIONS 10

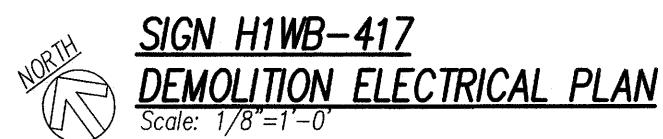
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE Federal Aid Project NO. - NH-IM-0300(75) Scale: As Shown

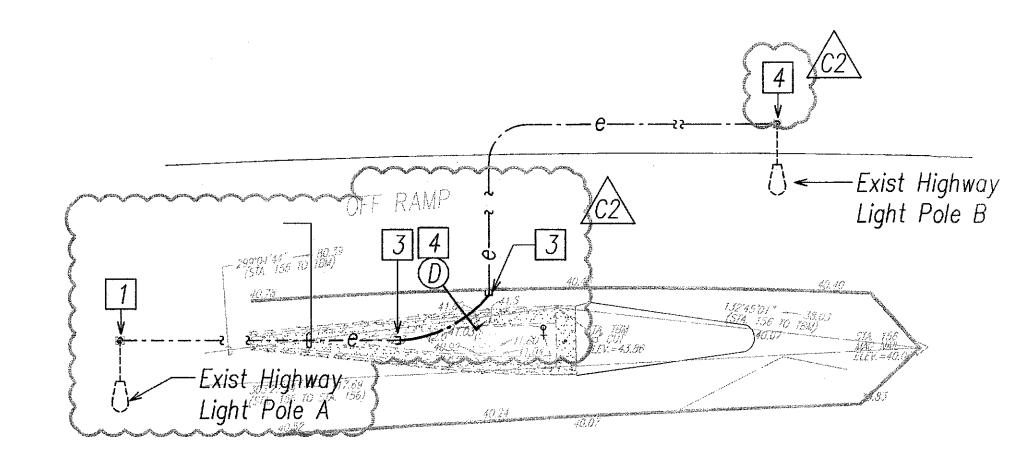
SHEET No. **E3.10** OF 138 SHEETS

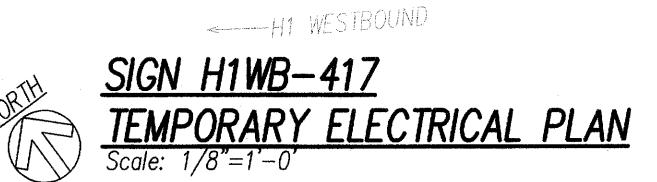
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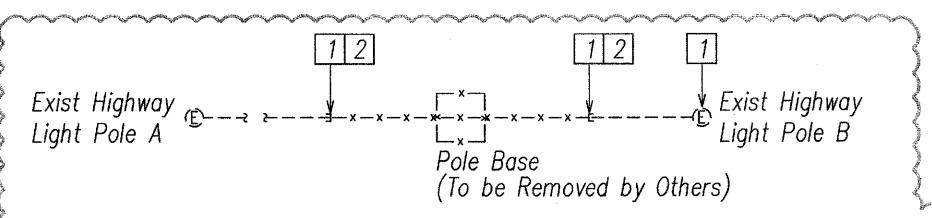
82











DEMOLITION ONE-LINE DIAGRAM

Scale: None
(Dashed Lines Denote Existing Work, Solid Lines Denote New Work, Lines with an

"X" Indicated Items To Be Removed)

4 Temporary Power Conduit.

Match Existing Conductor Sizes

Exist Highway

Light Pole A

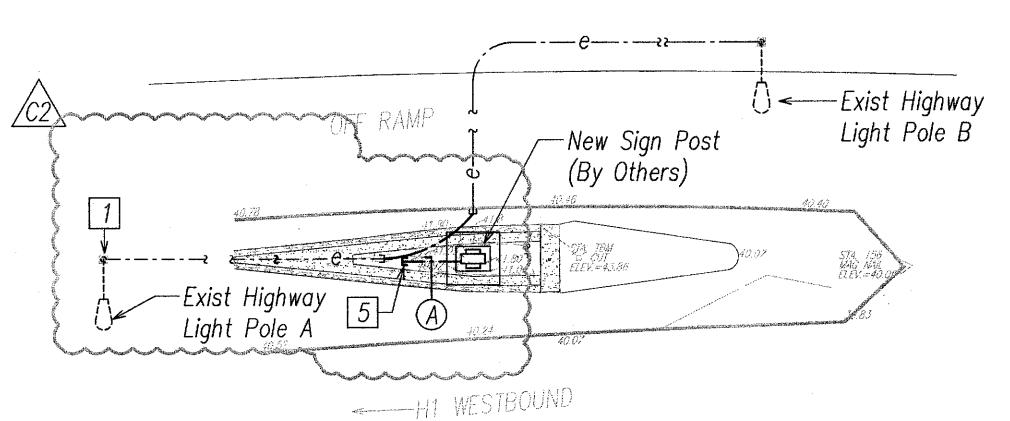
Exist Highway

Light Pole B

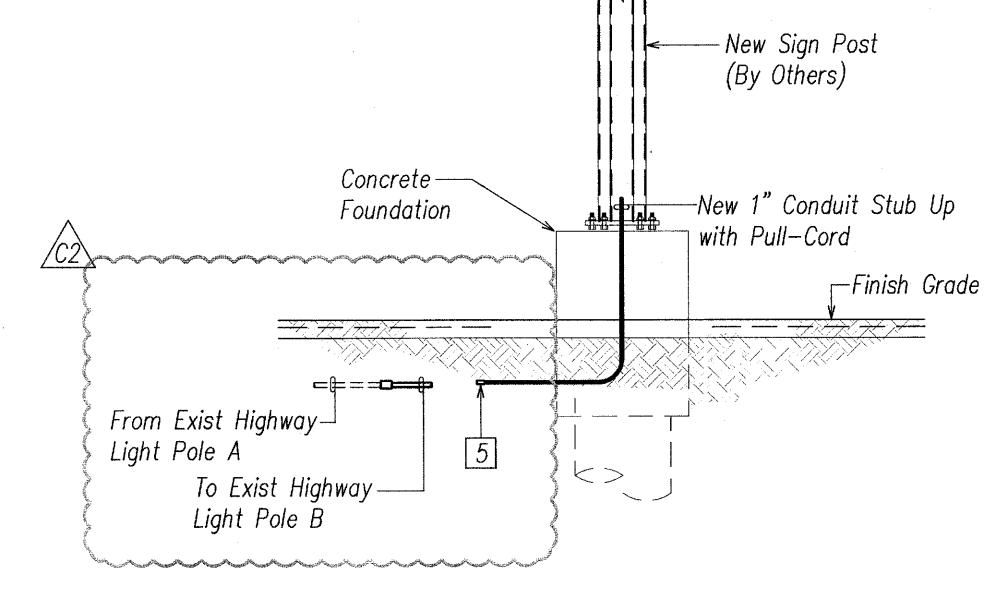
TEMPORARY ONE-LINE DIAGRAM

Scale: None

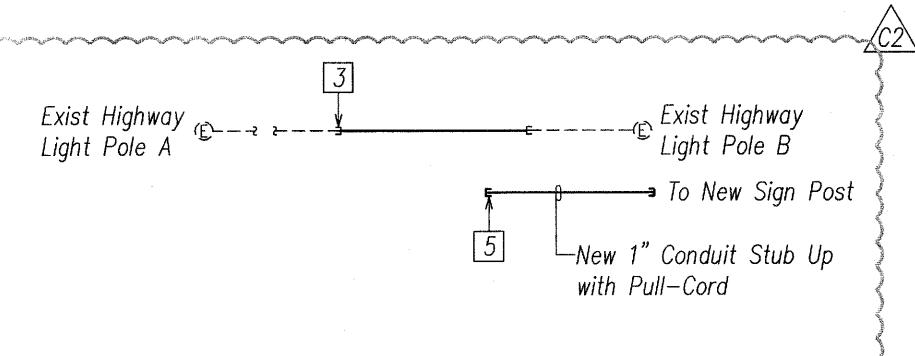
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SIGN H1WB-417 REVISED ELECTRICAL PLAN Scale: 1/8"=1'-0'



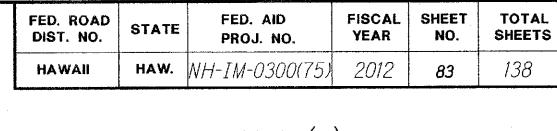




REVISED ONE-LINE DIAGRAM

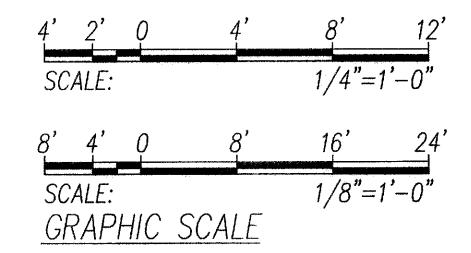
Scale: None (Dashed Lines Denote L

(Dashed Lines Denote Existing Work, Solid Lines Denote New Work, Lines with an "X" Indicated Items To Be Removed)



<u>General Sheet Note(s):</u>

- Remove Conductors From Light Pole
 Pole B to Light Pole A, Cap Conductors
 in Light Pole A for Reconnection.
- 2 Cut Conduit Flush.
- 3 Provide Coupling, Connect Exist Conduit to New Conduit.
- Provide New Conductors from Light
 Pole A to Light Pole B. Do Not Splice
 within Conduit.
- 5 Coordinate Stub Location with "Interstate Route H—1 Rehabilitation, Middle Street to Vicinity of Ward Avenue" Project.



10/31/13 Revised Electrical Plans, Elevations and One—Line

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LICENSED PROFESSIONAL ENGINEER

No. 12753-€

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EXPIRATION DATE OF THE LICENSE 4/30/2014

LICENSED

PROFESSIONAL ENGINEER

PRINCIPAL-IN-CHARGE

DEMOLITION AND REVISED ELECTRICAL

PLANS AND ELEVATIONS 11

INTERSTATE ROUTE H-1, H-2 AND H201
DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE I

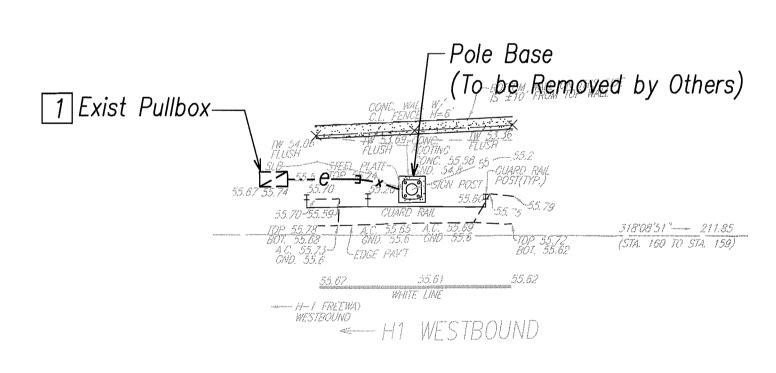
Scale: As Shown Date: September 21, 2012

SHEET No. E3.11 OF 138 SHEETS

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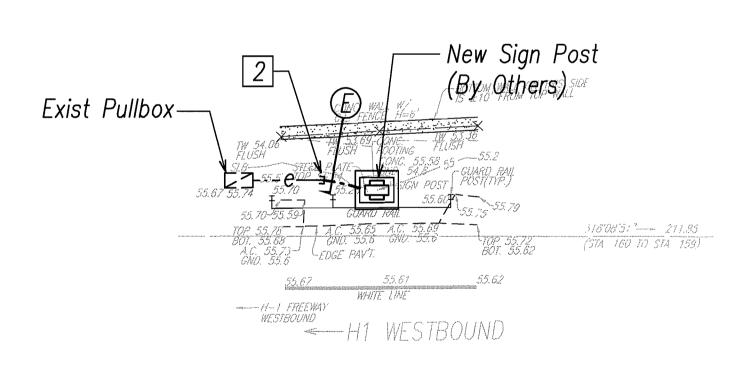
FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	NH-IM-0300(75)	2012	84	138

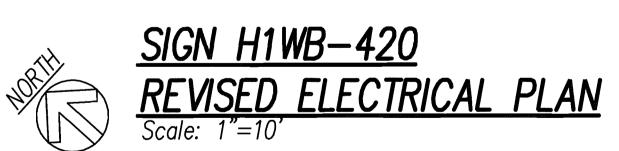
- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- 2 Connect New Conduit to Exist Conduit Stub Out.

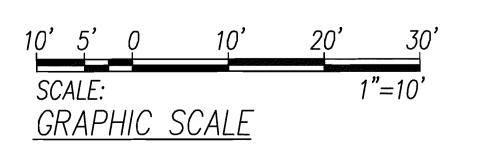


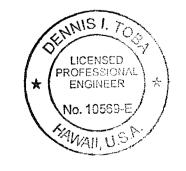
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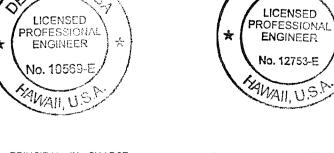












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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DEMOLITION AND REVISED ELECTRICAL

PLANS AND ELEVATIONS 12

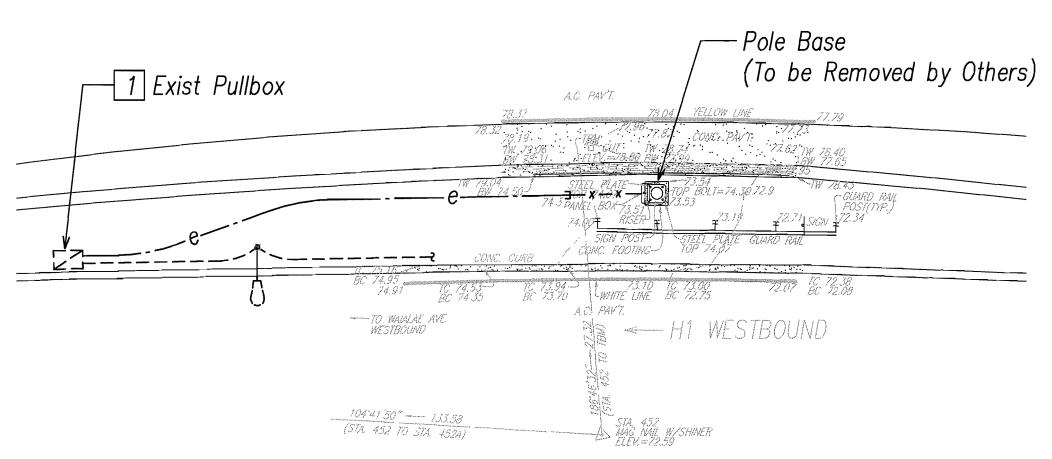
INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE 1 Federal Aid Project NO. - NH-IM-0300(75)

Date: September 21, 2012 Scale: As Shown SHEET No. **E3.12** OF 138 SHEETS

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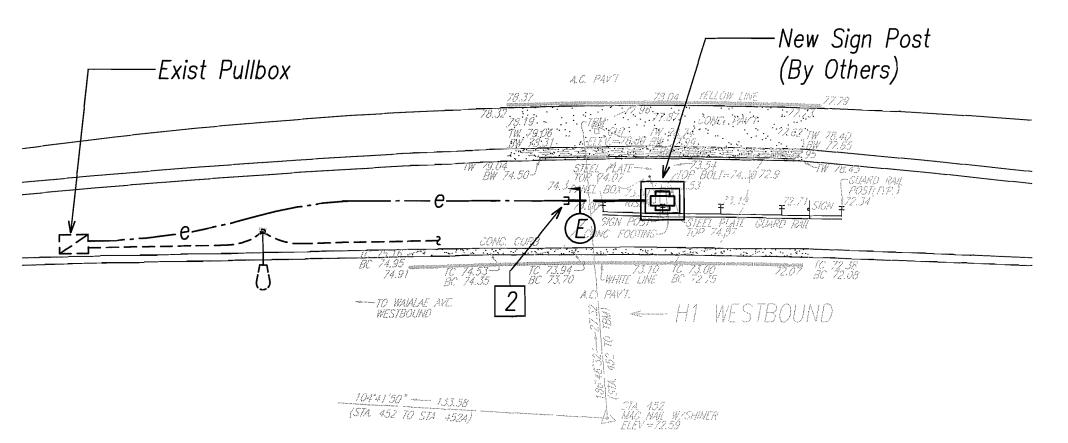
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-IM-0300(75)	2012	85	138

- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- 2 Connect New Conduit to Exist Conduit Stub Out.





FILE PATH: Z:\ACAD\PROJECTS\29089\E03013_29089_Elec Plan 13.dwg CAD USER: glenn PLOT DATE: 2012.10.02 XREFS:_x09143-10 DEMO_x09143-11 DEMO\x09143-11 DEMO\x09143-10_x09143-10_x09143-10_x09143-11_x09143-15_x09143-15_x09143-15_x09143-11_x09143-15





SCALE:

GRAPHIC SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION EXPIRATION DATE OF THE LICENSE 4/30/2014 EXPIRATION DATE OF THE LICENSE 4/30/2014

LICENSED PROFESSIONAL ENGINEER

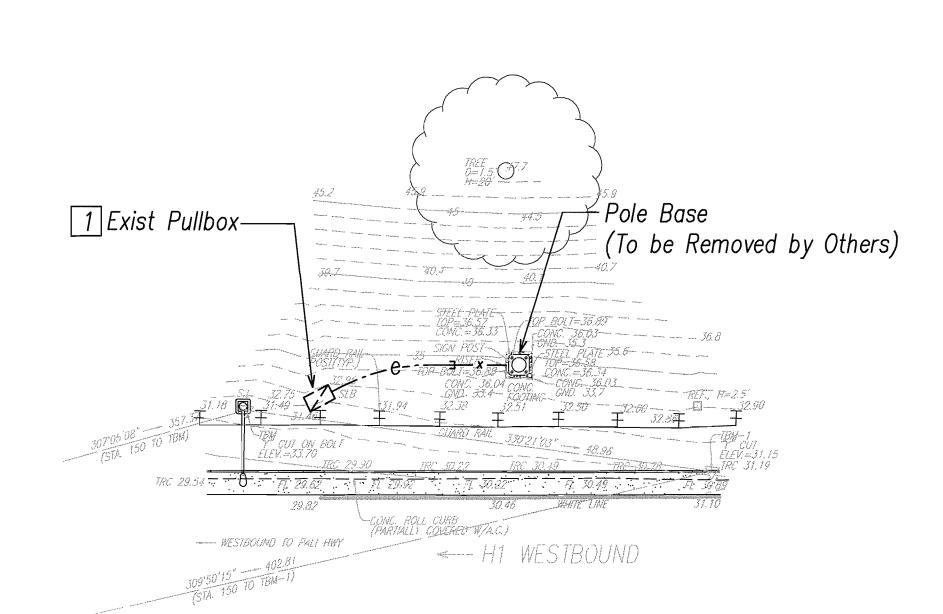
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

<u>DEMOLITION AND REVISED ELECTRICAL</u>

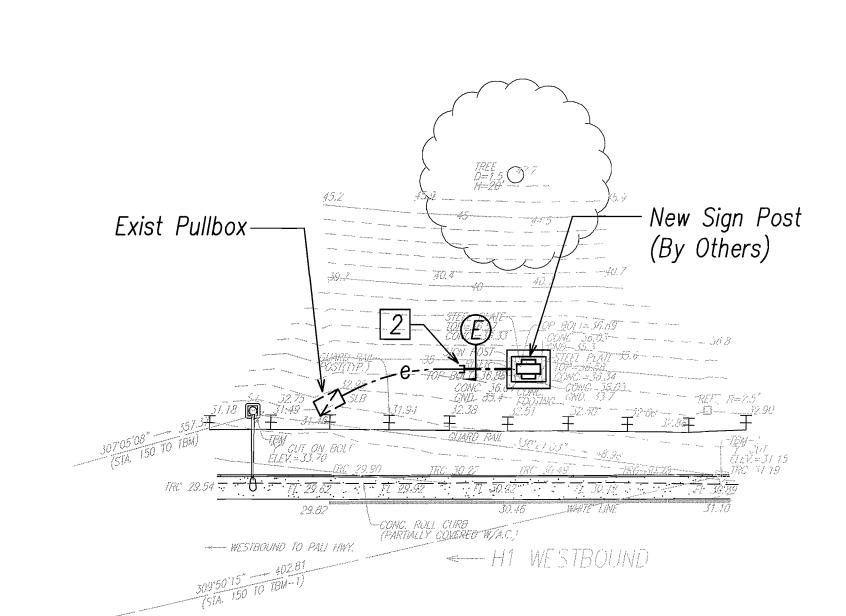
PLANS AND ELEVATIONS 13

INTERSTATE ROUTE H-1, H-2 AND H201 DESTINATION SIGN UPGRADE / REPLACEMENT, PHASE 1 Federal Aid Project NO. - NH-IM-0300(75) Date: September 21, 2012 Scale: As Shown

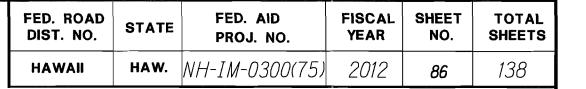
SHEET No. **E3.13** OF 138 SHEETS











- 1 Pullback And Hot—Cap, Coil and Stow Conductors in Pullbox as Required.
- Connect New Conduit to Exist Conduit Stub Out.







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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION AND REVISED ELECTRICAL

PLANS AND ELEVATIONS 14

INTERSTATE ROUTE H-1, H-2 AND H201

Scale: As Shown

Date: September 21, 2012

SHEET No. **E3.14** OF 138 SHEETS

