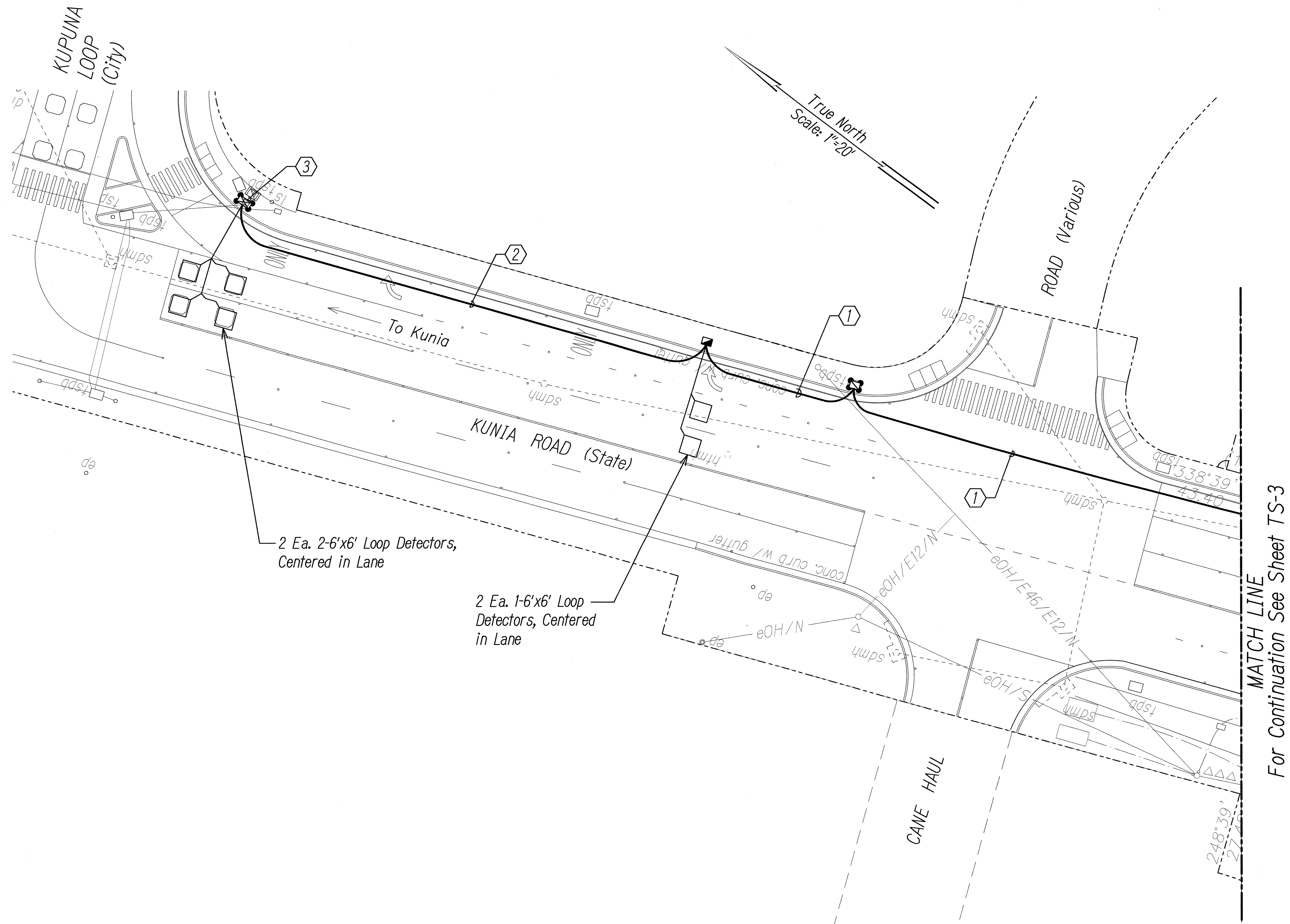


| FED.ROAD<br>DIST.NO. | STATE | PROJ. NO.   | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|----------------------|-------|-------------|----------------|--------------|-----------------|
| OAHU                 | HAW.  | HWY-0-01-13 | 2016           | 30           | 47              |

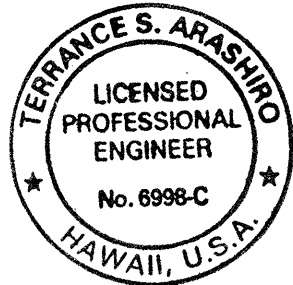


**TRAFFIC SIGNAL PLAN**

Scale: 1"=20'

| Conduit and Cable Schedule |                                  |                               |
|----------------------------|----------------------------------|-------------------------------|
| Symbol                     | Conduit.                         | Description                   |
| 1                          | 2" Conc.<br>2" Conc.             | *1-24c#19<br>Spare            |
| 2                          | 2" Conc.<br>2" Conc.<br>2" Conc. | *1-24c#19<br>1-2c#14<br>Spare |
| 3                          | Exist.<br>Exist.                 | 1-24c#19<br>1-2c#14           |

\*Install with Fabric Inner Duct



EXP. 4/30/16

*T.S.A.*

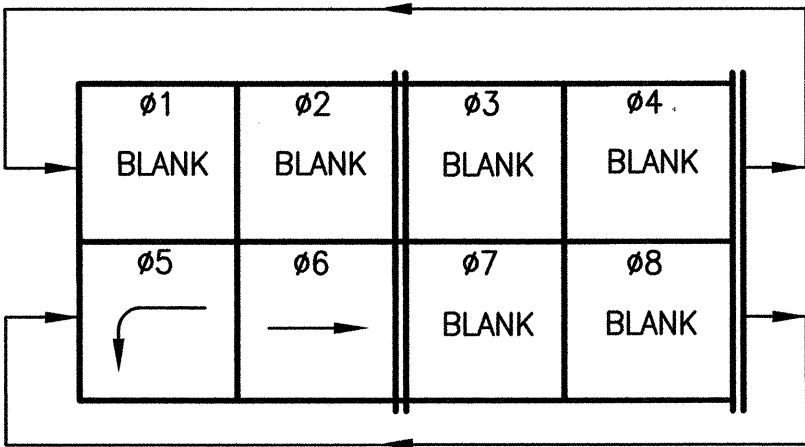
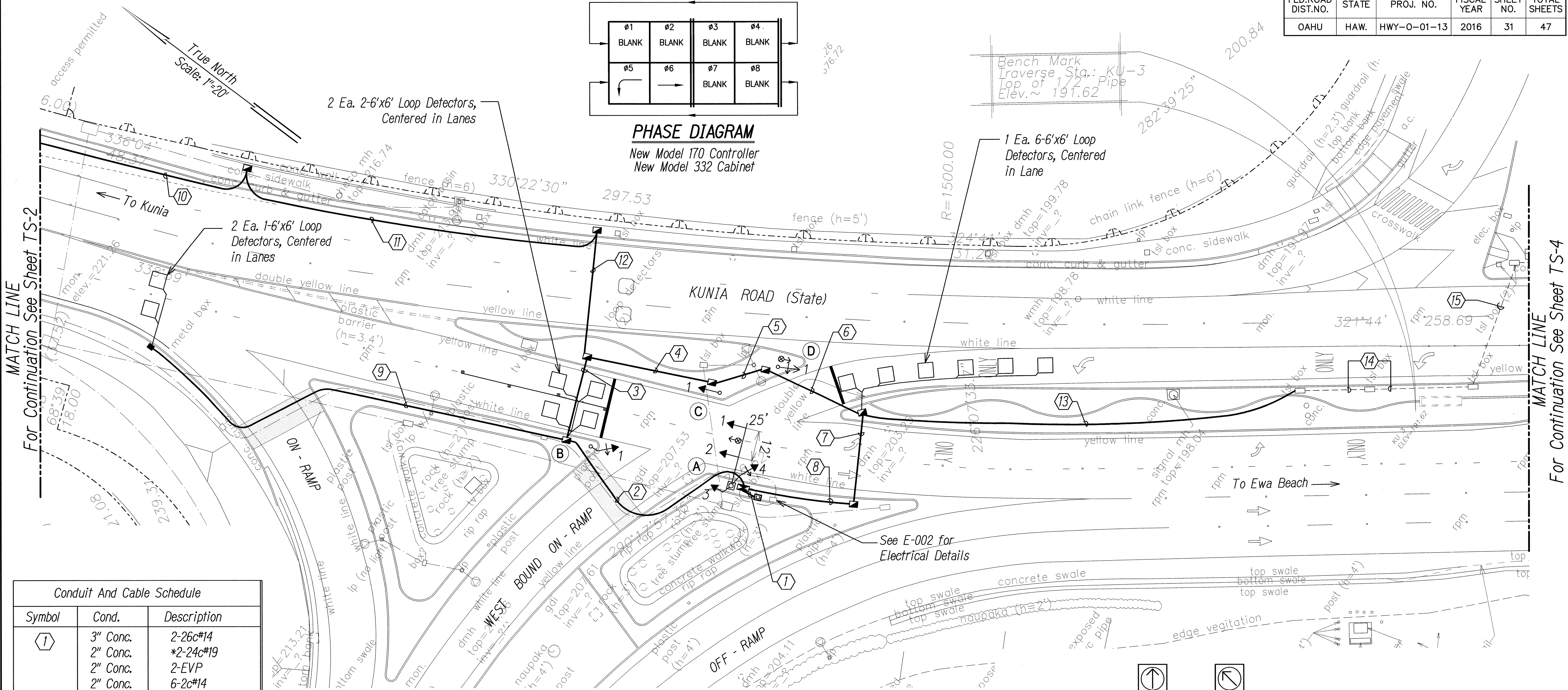
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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**KUNIA ROAD/H-1 WESTBOUND ON-RAMP**  
**TRAFFIC SIGNAL PLAN-1**  
TRAFFIC OPERATIONAL IMPROVEMENTS  
AT VARIOUS LOCATIONS  
Project No. HWY-0-01-13

Scale: As Noted Date: Oct 2015  
SHEET No. TS-2 OF 6 SHEETS



| FED. ROAD DIST. NO. | STATE | PROJ. NO.   | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------|-------------|-----------|--------------|
| OAHU                | HAW.  | HWY-0-01-13 | 2016        | 31        | 47           |



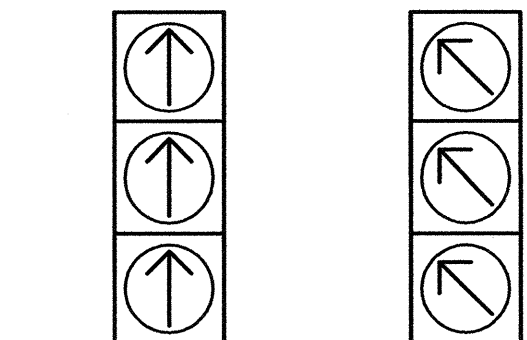
MATCH LINE  
For Continuation See Sheet TS-2

MATCH LINE  
For Continuation See Sheet TS-4

| Conduit And Cable Schedule |          |             |
|----------------------------|----------|-------------|
| Symbol                     | Cond.    | Description |
| ①                          | 3" Conc. | 2-26c#14    |
|                            | 2" Conc. | *2-24c#19   |
|                            | 2" Conc. | 2-EVP       |
|                            | 2" Conc. | 6-2c#14     |
|                            | 2" Conc. | 1-3c#6      |
| ②                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | 3-2c#14     |
|                            | 2" Conc. | *1-24c#19   |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
| ③                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | *1-24c#19   |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
| ④                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
| ⑤                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |

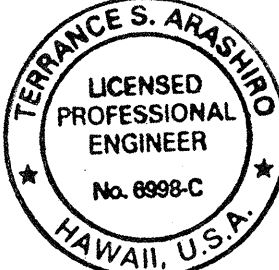
**TRAFFIC SIGNAL PLAN**  
Scale: 1"=20'

| Symbol   | Cond.    | Description | Symbol | Cond.    | Description | Symbol   | Cond.     | Description |           |          |
|----------|----------|-------------|--------|----------|-------------|----------|-----------|-------------|-----------|----------|
| ⑥        | 2" Conc. | 1-26c#14    | ⑧      | 2" Conc. | 1-26c#14    | ⑫        | 2" Conc.  | *1-24c#19   |           |          |
|          | 2" Conc. | 1-EVP       |        | 2" Conc. | Spare       |          | ⑬         | 2" Conc.    | *1-24c#19 |          |
|          | 2" Conc. | Spare       |        | 2" Conc. | 3-2c#14     | 2" Conc. |           | Spare       |           |          |
|          | 2" Conc. | Spare       |        | 2" Conc. | 1-EVP       | 2" Conc. | Spare     |             |           |          |
| ⑦        | 2" Conc. | 1-26c#14    | ⑨      | 2" Conc. | 2-2c#14     | ⑭        | Exist.    | 1-24c#19    |           |          |
|          | 2" Conc. | *1-24c#19   |        | ⑩        | 2" Conc.    |          | *1-24c#19 | ⑮           | Exist.    | 1-24c#19 |
|          | 2" Conc. | 3-2c#14     |        |          | 2" Conc.    |          | Spare     |             |           |          |
|          | 2" Conc. | 1-EVP       |        |          | 2" Conc.    |          | *1-24c#19 |             |           |          |
| 2" Conc. | Spare    | 2" Conc.    | Spare  |          |             |          |           |             |           |          |



\*Indicates Programmable Visibility Head.  
+Indicates Back Plate to be installed on signal head.

\*Install with Fabric Inner Duct

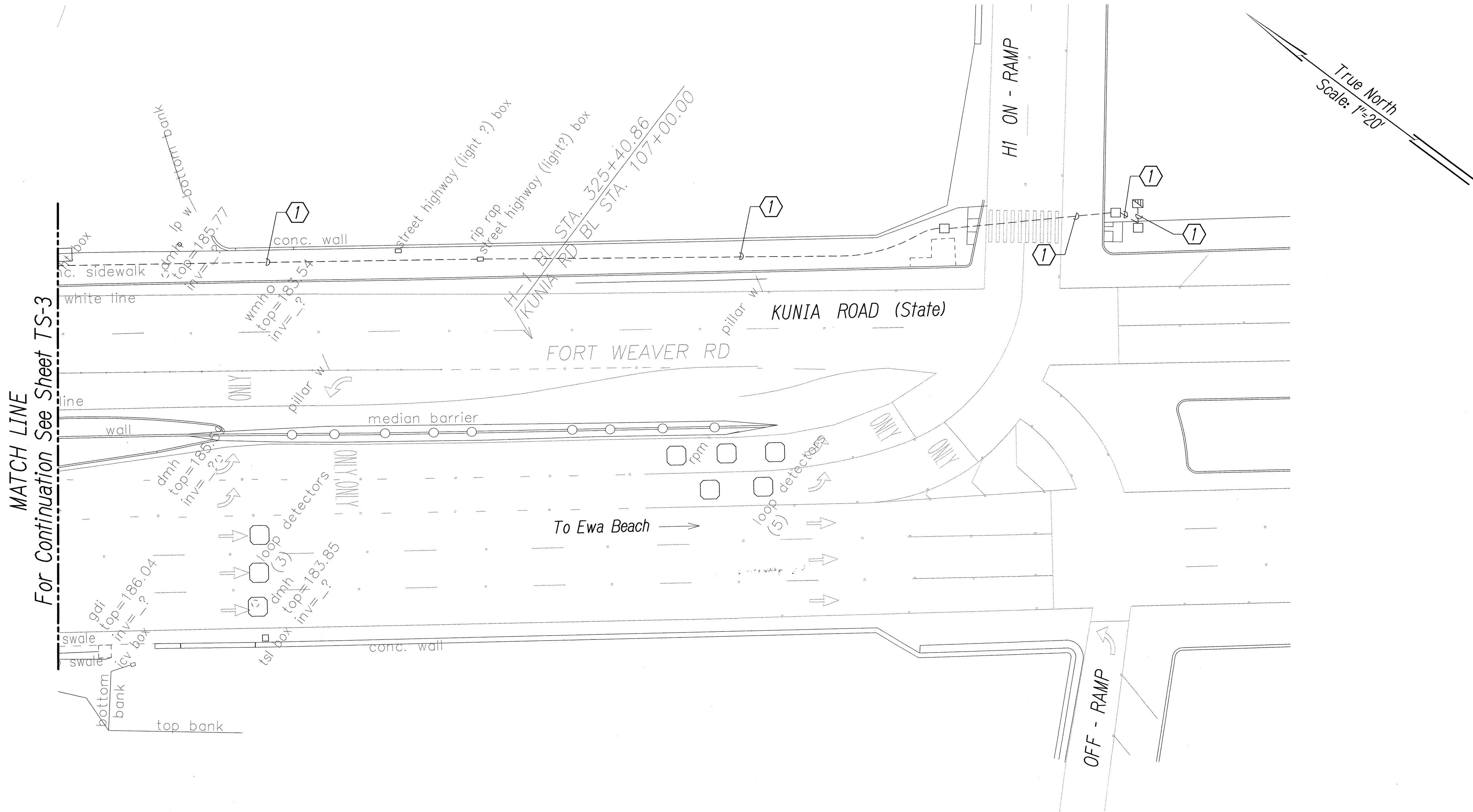


STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**KUNIA ROAD/H-1 WESTBOUND ON-RAMP**  
**TRAFFIC SIGNAL PLAN-2**  
TRAFFIC OPERATIONAL IMPROVEMENTS  
AT VARIOUS LOCATIONS  
Project No. HWY-0-01-13

Scale: As Noted Date: Oct 2015  
SHEET No. TS-3 OF 6 SHEETS



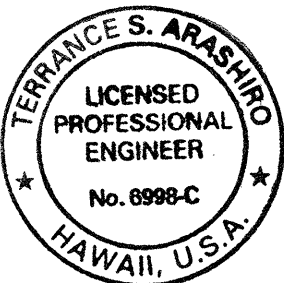
| FED. ROAD DIST. NO. | STATE | PROJ. NO.   | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------|-------------|-----------|--------------|
| OAHU                | HAW.  | HWY-0-01-13 | 2016        | 32        | 47           |



**TRAFFIC SIGNAL PLAN**  
 SCALE: 1"=20'

|               |                   |      |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK     | DRAWN BY          |      |
| No.           | DESIGNED BY       |      |
|               | QUANTITIES BY     |      |
|               | CHECKED BY        |      |

| Conduit and Cable Schedule |          |             |
|----------------------------|----------|-------------|
| Symbol                     | Conduit. | Description |
| 1                          | Exist.   | 1-24c#19    |



EXP. 4/30/16

*[Signature]*

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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**KUNIA ROAD/H-1 WESTBOUND ON-RAMP**  
**TRAFFIC SIGNAL PLAN-3**  
TRAFFIC OPERATIONAL IMPROVEMENTS  
AT VARIOUS LOCATIONS  
Project No. HWY-0-01-13

Scale: As Noted  
SHEET No. TS-4 OF 6 SHEETS

Date: Oct 2015

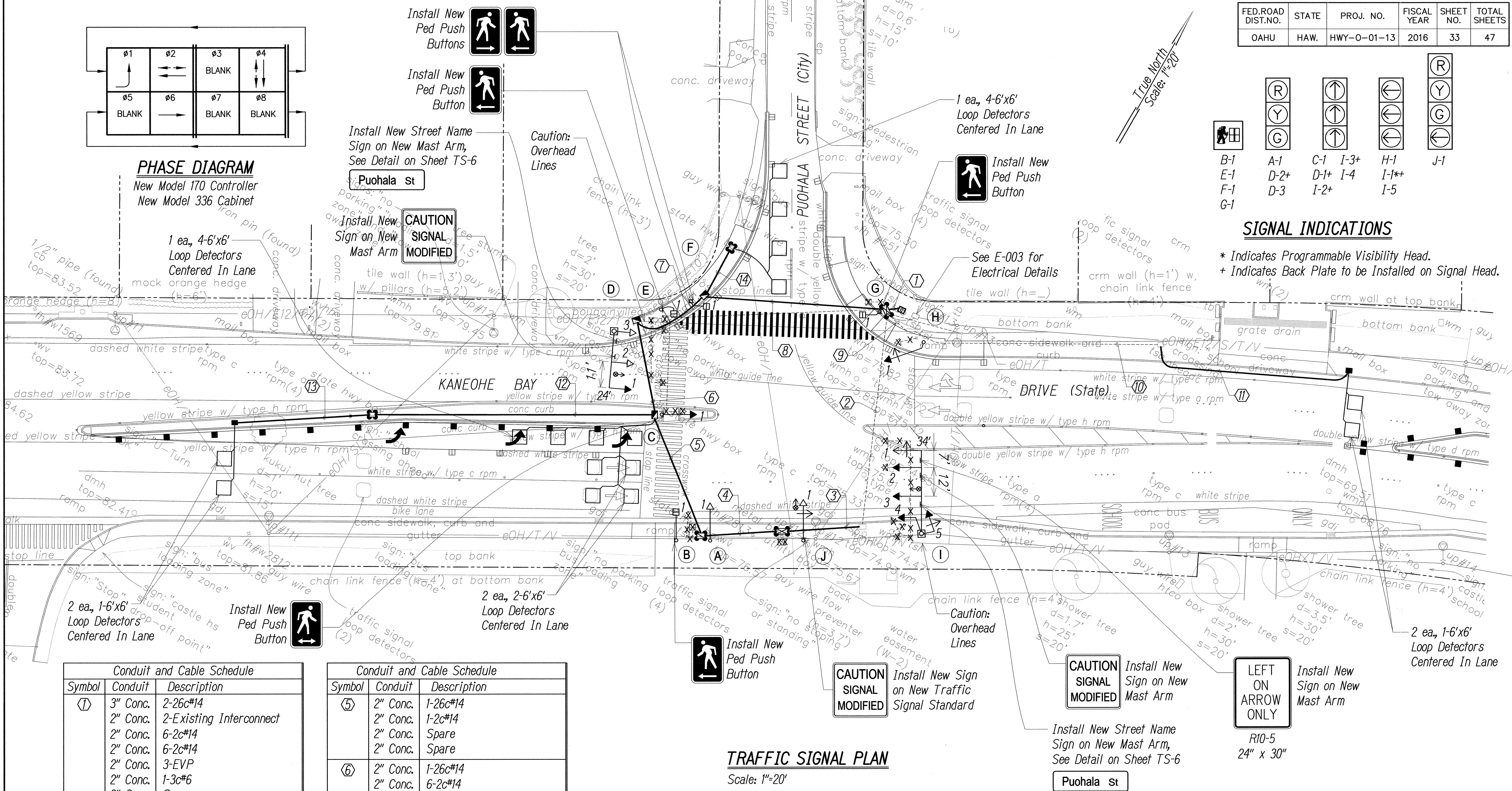


| FED. ROAD DIST. NO. | STATE | PROJ. NO.   | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------|-------------|-----------|--------------|
| OAHU                | HAW.  | HWY-0-01-13 | 2016        | 33        | 47           |

|     |      |      |      |       |     |
|-----|------|------|------|-------|-----|
|     |      |      |      |       |     |
| B-1 | A-1  | C-1  | I-3+ | H-1   | J-1 |
| E-1 | D-2+ | D-1+ | I-4  | I-1** |     |
| F-1 | D-3  | I-2+ |      | I-5   |     |
| G-1 |      |      |      |       |     |

# SIGNAL INDICATIONS

\* Indicates Programmable Visibility Head.  
+ Indicates Back Plate to be Installed on Signal Head.



| Conduit and Cable Schedule |          |                         |
|----------------------------|----------|-------------------------|
| Symbol                     | Conduit  | Description             |
| ①                          | 3" Conc. | 2-26c#14                |
|                            | 2" Conc. | 2-Existing Interconnect |
|                            | 2" Conc. | 6-2c#14                 |
|                            | 2" Conc. | 6-2c#14                 |
|                            | 2" Conc. | 3-EVP                   |
|                            | 2" Conc. | 1-3c#6                  |
| ②                          | Exist.   | 1-26c#14                |
|                            | Exist.   | 2-EVP                   |
| ③                          | 2" Conc. | 1-26c#14                |
|                            | 2" Conc. | 1-EVP                   |
|                            | 2" Conc. | Spare                   |
|                            | 2" Conc. | Spare                   |
| ④                          | 2" Conc. | 1-26c#14                |
|                            | 2" Conc. | Spare                   |
|                            | 2" Conc. | Spare                   |
|                            | 2" Conc. | Spare                   |
|                            | 2" Conc. | Spare                   |

| Conduit and Cable Schedule |          |             |
|----------------------------|----------|-------------|
| Symbol                     | Conduit  | Description |
| ⑤                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | 1-2c#14     |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
| ⑥                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | 6-2c#14     |
|                            | 2" Conc. | Spare       |
|                            | 2" Conc. | Spare       |
| ⑦                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | 6-2c#14     |
|                            | 2" Conc. | 1-EVP       |
|                            | 2" Conc. | Spare       |
| ⑧                          | 2" Conc. | 1-26c#14    |
|                            | 2" Conc. | 5-2c#14     |
|                            | 2" Conc. | 4-2c#14     |
|                            | 2" Conc. | 1-EVP       |
|                            | 2" Conc. | Spare       |

| Conduit and Cable Schedule |          |             |
|----------------------------|----------|-------------|
| Symbol                     | Conduit  | Description |
| ⑨                          | Exist.   | 3-2c#14     |
|                            |          | 1-4c#14     |
| ⑩                          | Exist.   | 2-2c#14     |
| ⑪                          | 2" Conc. | 2-2c#14     |
| ⑫                          | 2" Conc. | 2-2c#14     |
| ⑬                          | 2" Conc. | 2-2c#14     |
| ⑭                          | 2" Conc. | 2-2c#14     |

|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| DESIGNED BY       |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |
| ORIGINAL PLAN     |      |
| NOTE BOOK         |      |
| No.               |      |



This work was prepared by me or under my supervision and construction of this project will be under my observation. (Observation of construction as defined in Chapter 18-115 Subchapter 1 Definitions of the Hawaii Administrative Rules "Professional Engineers, Architects, Surveyors, and Landscape Architects.")

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**KANEOHE BAY DRIVE/PUOHALA STREET**  
**TRAFFIC SIGNAL PLAN**  
TRAFFIC OPERATIONAL IMPROVEMENTS  
AT VARIOUS LOCATIONS  
Project No. HWY-0-01-13

Scale: As Noted  
SHEET No. TS-5 OF 6 SHEETS

Date: Oct 2015