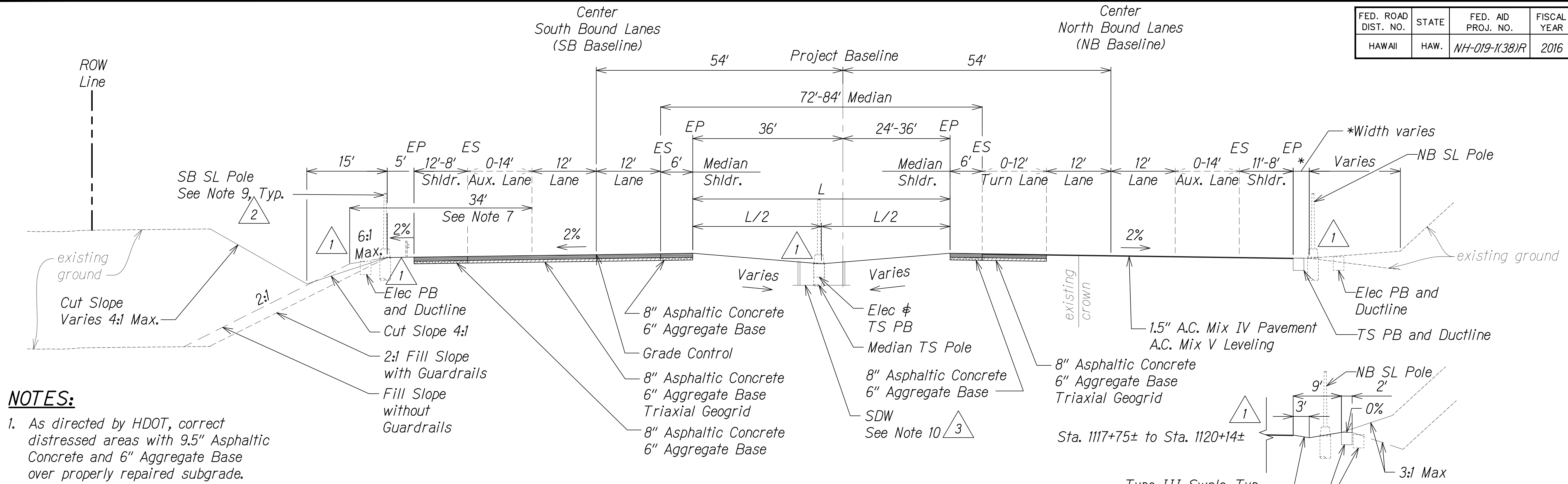


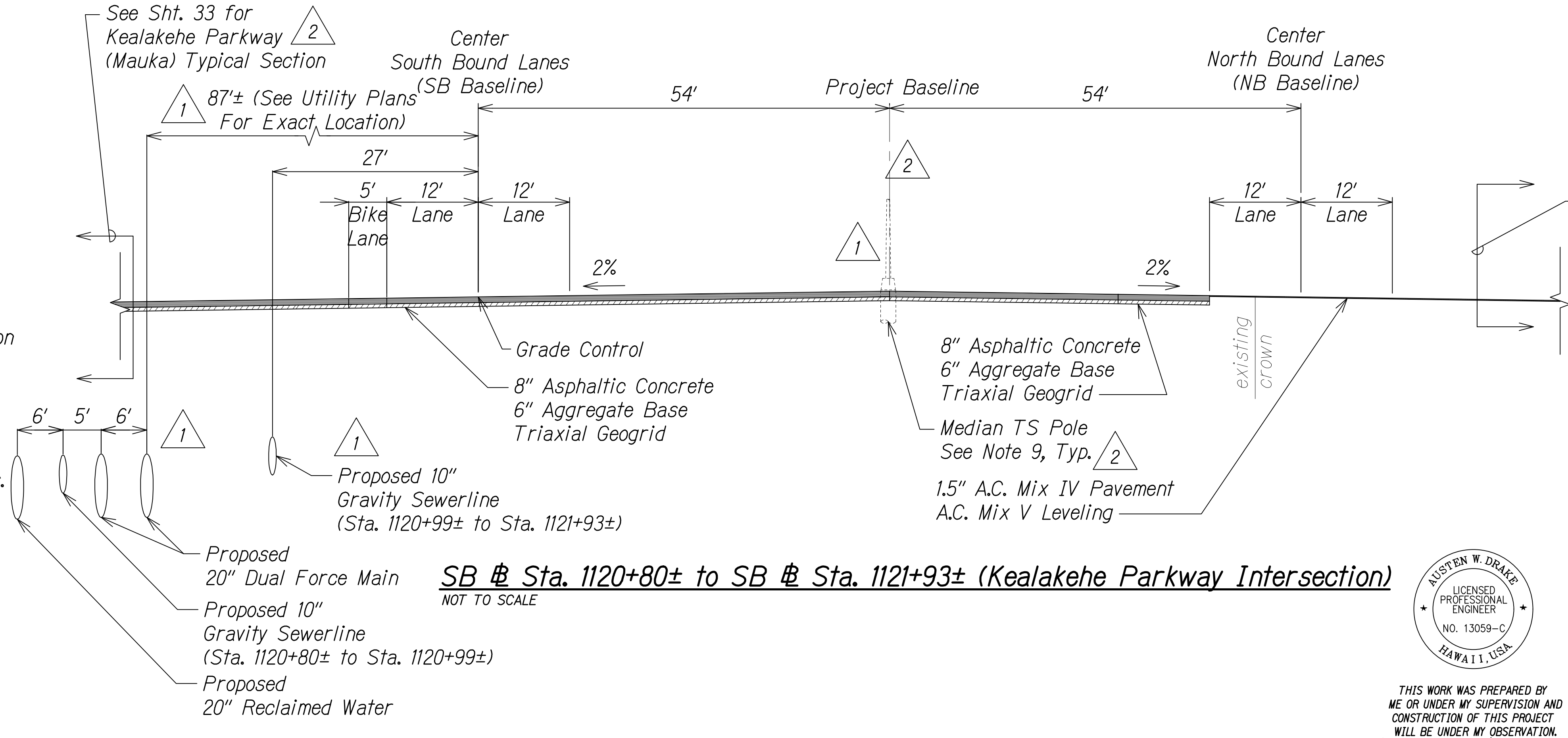
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(38)R	2016	C.O. 13	528



NOTES:

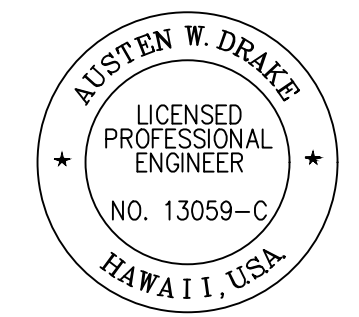
- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- For Swale section, see Sht. 13S-1.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.
- See Grading and Drainage Plans for exact locations and structure/grate types.

SB Sta. 1110+00± to SB Sta. 1120+80±
NOT TO SCALE



SB Sta. 1120+80± to SB Sta. 1121+93± (Kealakehe Parkway Intersection)
NOT TO SCALE

DATE	REVISION
1/31/17	Added drywell location
8/1/16	Revised linetype; Added elec. # traffic signal note instead of stationing # ref. to side road section
1/22/16	Added drainage infrastructure per MOA; Revised makai fill slopes; Civil util. realignment; Added elec. poles and boxes



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Signature: Austen W. Drake
Date: APRIL 30, 2018
Expiration Date of the License

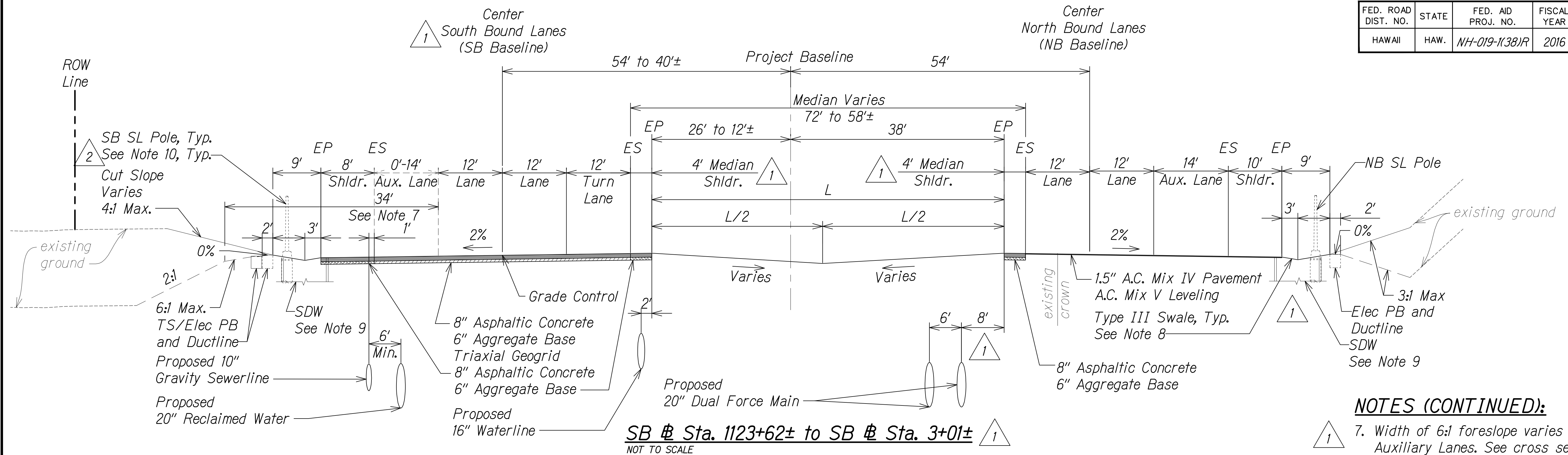
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

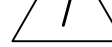


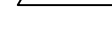
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

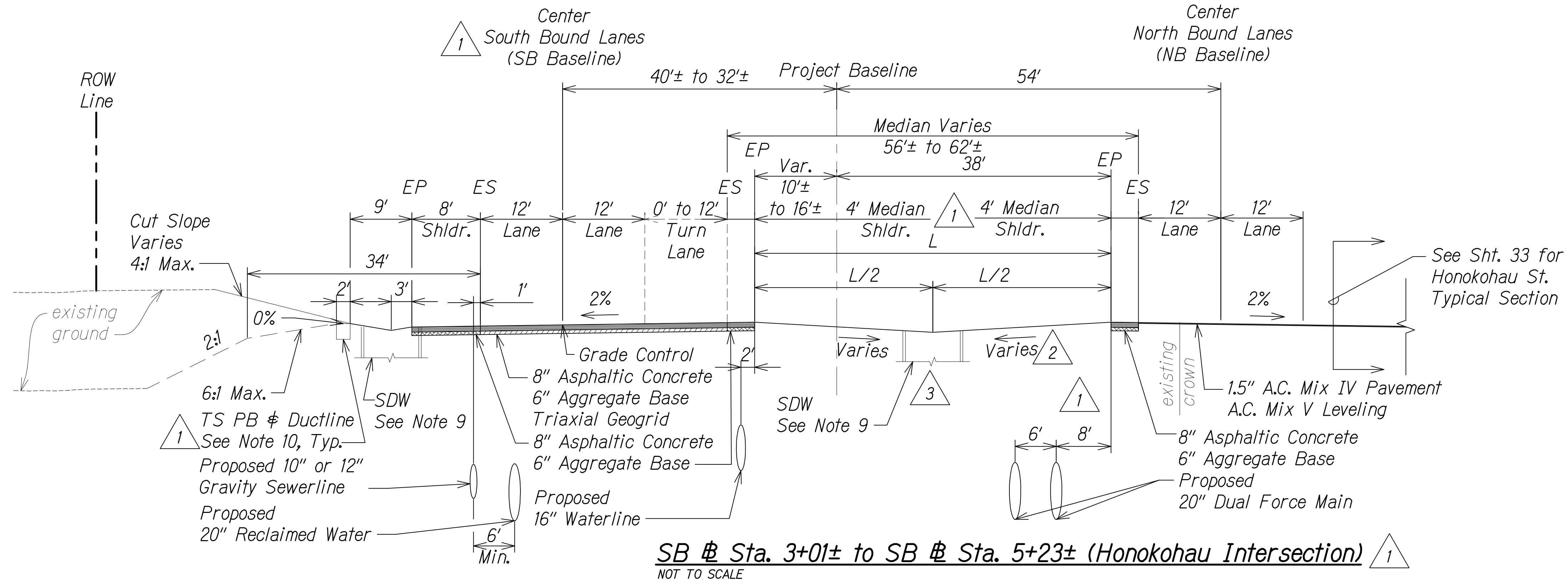
SHEET No. 1 OF 24 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(38)R	2016	C.O. 14	528






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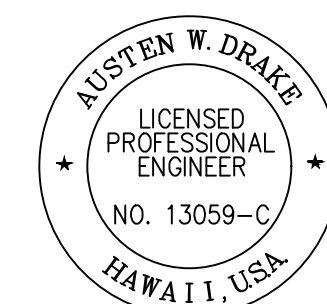
-  7. Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
-  8. For Swale section, see Sht. 13S-1.
-  9. See Grading and Drainage Plans for exact locations and structure/grate types.
-  10. See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



NOTES:

1. As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
2. For median swale grading:
5% Minimum
16.7% Maximum
3. For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
4. All Stations referred to the South Bound Baseline.
5. Refer to the Baseline Data plans for the South Bound alignment information.
6. Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.

1/31/17	 Added drywell
8/1/16	 Added elec. & traffic signal note instead of stationing; Revised limits and added ref. to side road section
1/22/16	 Added drainage infrastructure per MOA; Civil util. and SB @ realignment; Added elec. poles and boxes; Reduced median shoulder
DATE	REVISION



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.

Auten W. Drake APRIL 30, 2018

SIGNATURE EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

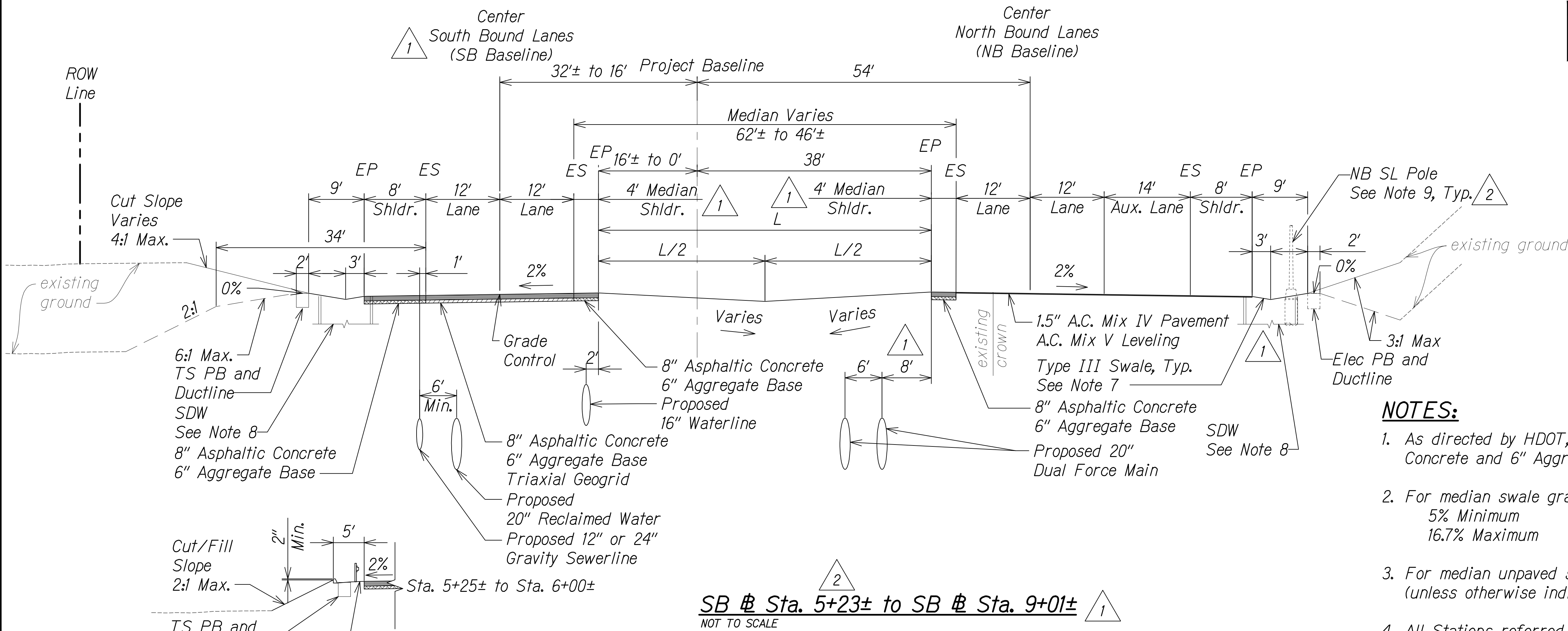
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R

Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 2 OF 24 SHEETS

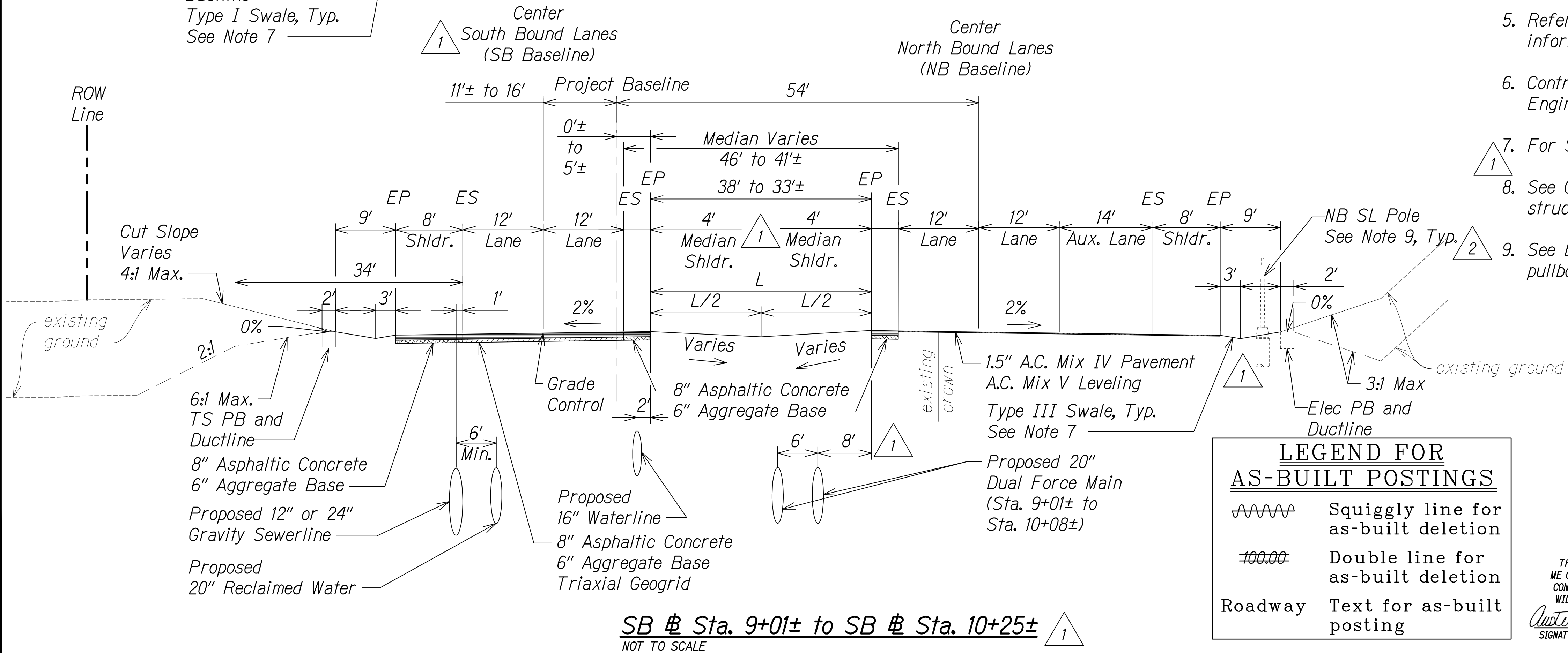
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-1(38)R	2016	C.O. 15	528 522



NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.

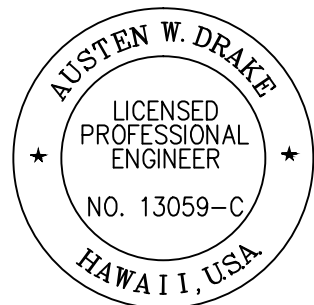


LEGEND FOR AS-BUILT POSTINGS

~~~~~ Squiggly line for as-built deletion

== Double line for as-built deletion

Roadway Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

*Austen W. Drake* APRIL 30, 2018  
SIGNATURE EXPIRATION DATE OF THE LICENSE

|         |          |                                                                                                                             |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------|
| 8/1/16  | 2        | Added elec. & traffic signal note; Revised limits                                                                           |
| 1/22/16 | 1        | Civil util. & SB & realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE    | REVISION |                                                                                                                             |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY TYPICAL SECTIONS**

QUEEN KAAHUMANU HIGHWAY WIDENING  
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)  
Federal Aid Project No. NH-019-1(38)R

Scale: AS NOTED Date: AUGUST 2016

SHEET No. 3 OF 24 SHEETS

"AS-BUILT"

C.O. 15

NOTES:

- 

9. See *Electrical and Traffic Signal Drawings* for pole, ductline and pullbox locations.

- $$\triangle 2^9$$

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING  
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)  
Federal Aid Project No. NH-019-1(38)R

Scale: AS NOTED      Date: DECEMBER 2016

QUEEN KAAHUMANU HIGHWAY WIDENING  
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)

Federal Aid Project No. NH-019-1(38)R

Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 3A OF 24 SHEETS


**C.O. 15S-1**



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ME OR UNDER MY SUPERVISION AND  
CONSTRUCTION OF THIS PROJECT  
WILL BE UNDER MY OBSERVATION.

Austen W. Drake APRIL 30, 2018  
SIGNATURE EXPIRATION DATE  
OF THE LICENSE

SB @ Sta. 10+25± to SB @ Sta. 18+85±  
NOT TO SCALE



A triangle with the number 1 inside it.

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

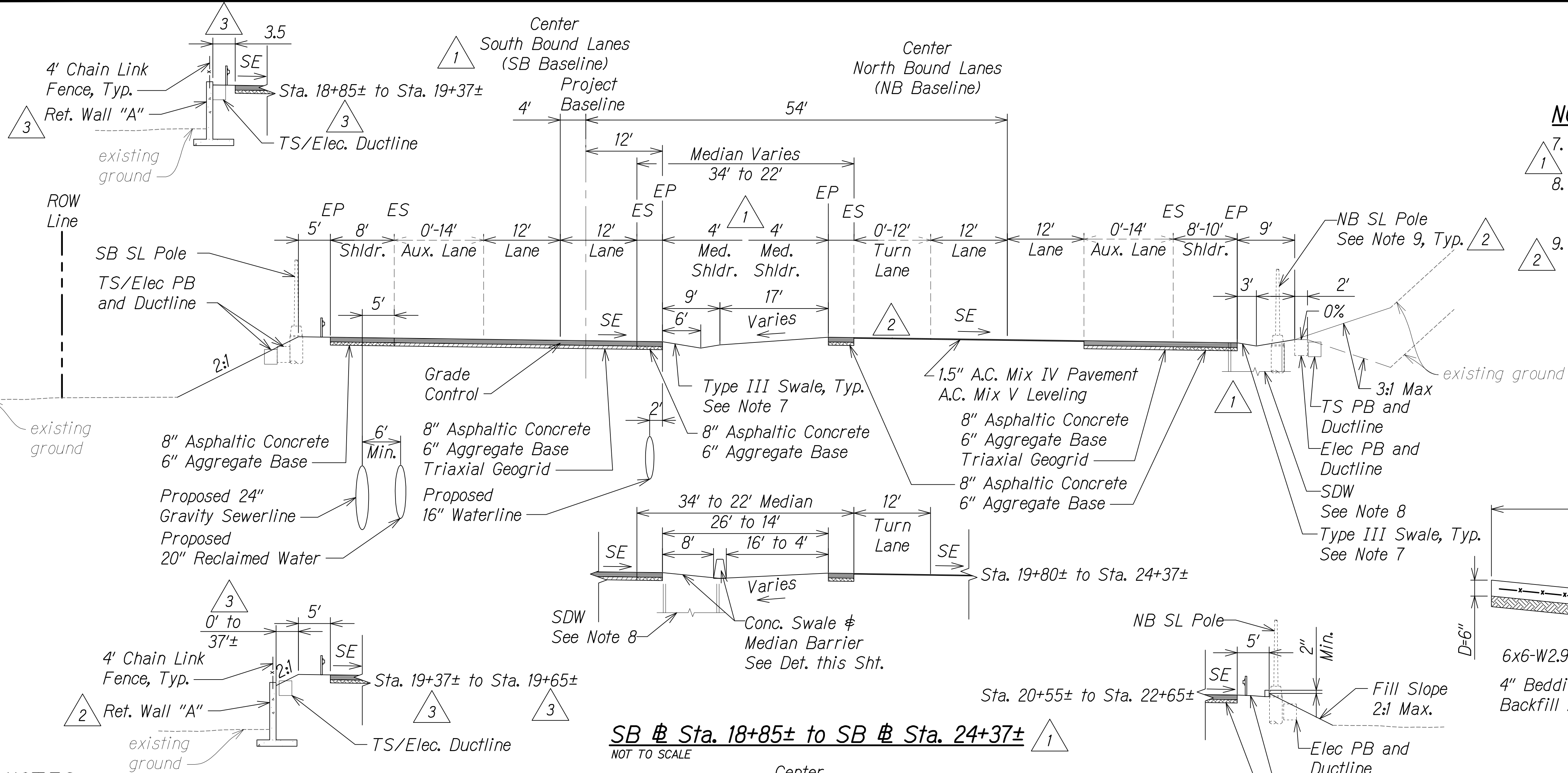
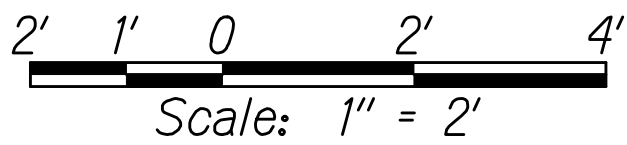
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| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-019-1(38)R      | 2016        | C.O. 16   | 528          |

NOTES (CONTINUED):

7. For Swale section, see Sht. 13S-1.
8. See Grading and Drainage Plans for exact locations and structure/grate types.
9. See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.

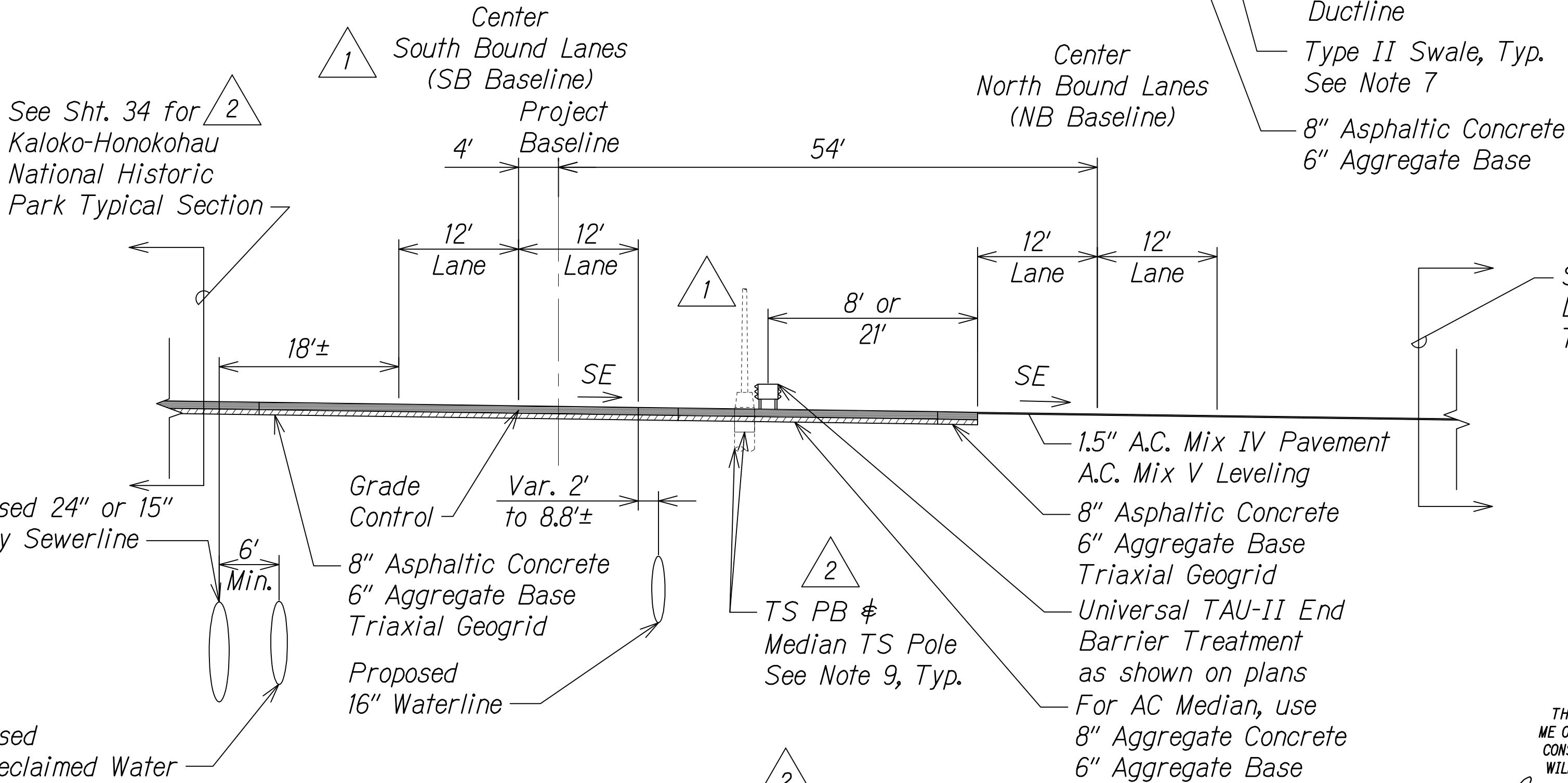
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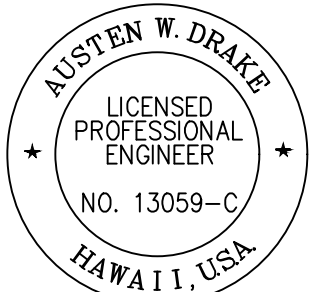
NOTES:

1. As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
2. For median swale grading (except at locations with barriers):  
5% Minimum  
16.7% Maximum
3. For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
4. All Stations referred to the South Bound Baseline.
5. Refer to the Baseline Data plans for the South Bound alignment information.
6. Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.

SB # Sta. 18+85± to SB # Sta. 24+37±  
NOT TO SCALE



SB # Sta. 24+37± to SB # Sta. 27+07± (National Park/Lanihau Street Intersection)  
NOT TO SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.  
Austen W. Drake  
SIGNATURE  
APRIL 30, 2018  
EXPIRATION DATE OF THE LICENSE

| DATE    | REVISION                                                                                                                                                    |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/31/17 | 3 Revised walls due to revised Arch site locations & field buffers                                                                                          |
| 8/1/16  | 2 Changed median barrier type & pav't section; Added elec. & traffic signal note instead of stationing, ref. wall identification, ref. to side road section |
| 1/22/16 | 1 Civil util. & SB # realignment; Added drainage infrastructure/ref. walls per MOA; Added elec. poles and boxes; Reduced median shoulder                    |

|                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                      |
| ROADWAY TYPICAL SECTIONS                                                                                                  |
| QUEEN KAAHUMANU HIGHWAY WIDENING<br>Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)<br>Federal Aid Project No. NH-019-1(38)R |
| Scale: AS NOTED Date: DECEMBER 2016                                                                                       |
| SHEET No. 4 OF 24 SHEETS                                                                                                  |



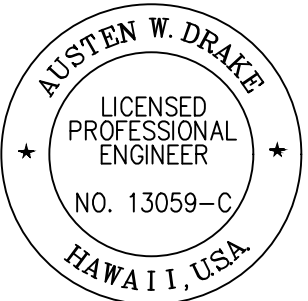
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-019-1(38)R      | 2016        | C.O. 17   | 528          |

NOTES:

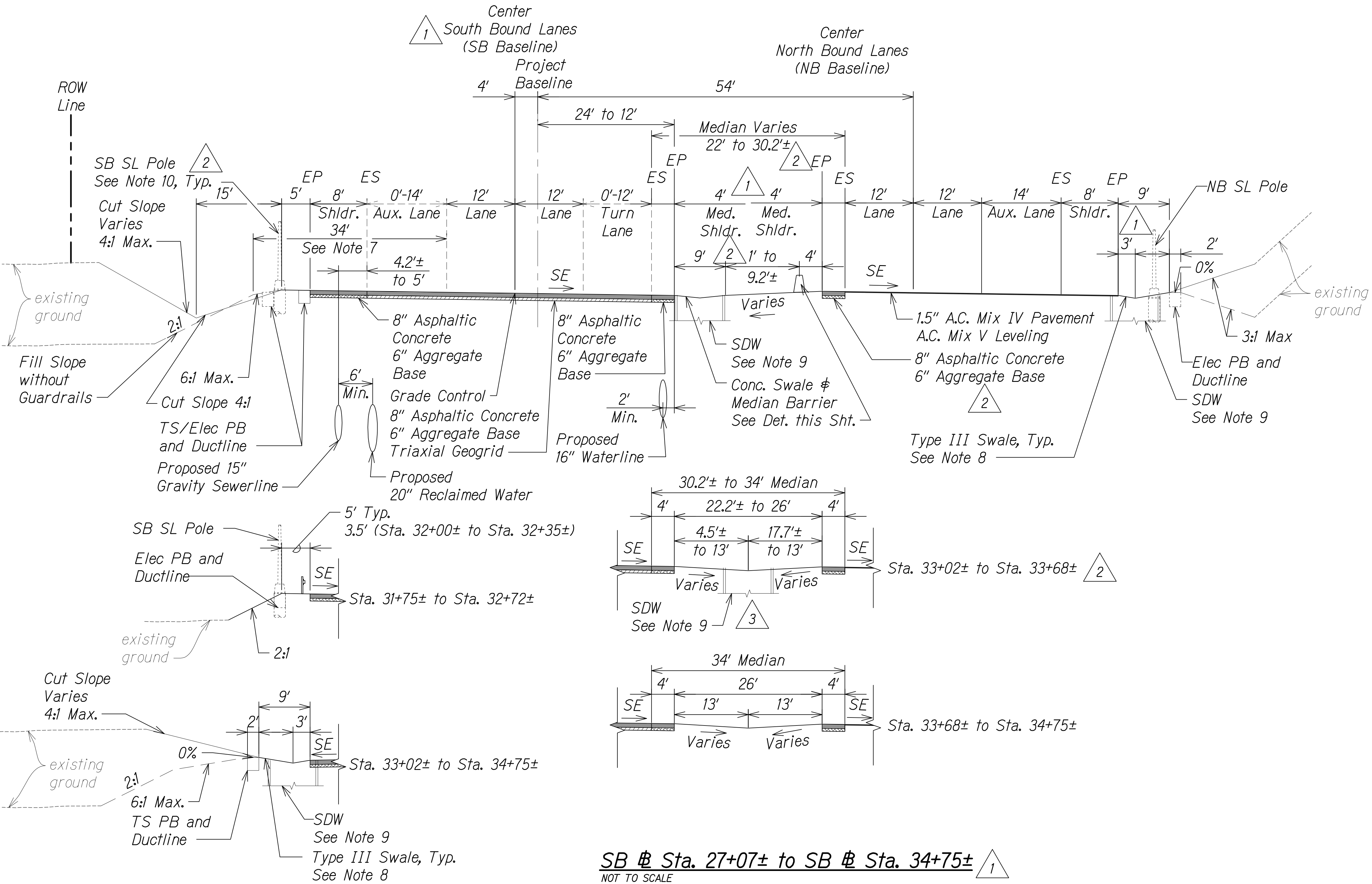
- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading (except at locations with barriers):  
5% Minimum  
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.

|         |          |                                                                                                                             |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------|
| 1/31/17 | 3        | Added drywell                                                                                                               |
| 8/1/16  | 2        | Changed median barrier type; Added elec. & traffic signal note instead of stationing; Revised dimensions & added section    |
| 1/22/16 | 1        | Civil util. & SB & realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE    | REVISION |                                                                                                                             |

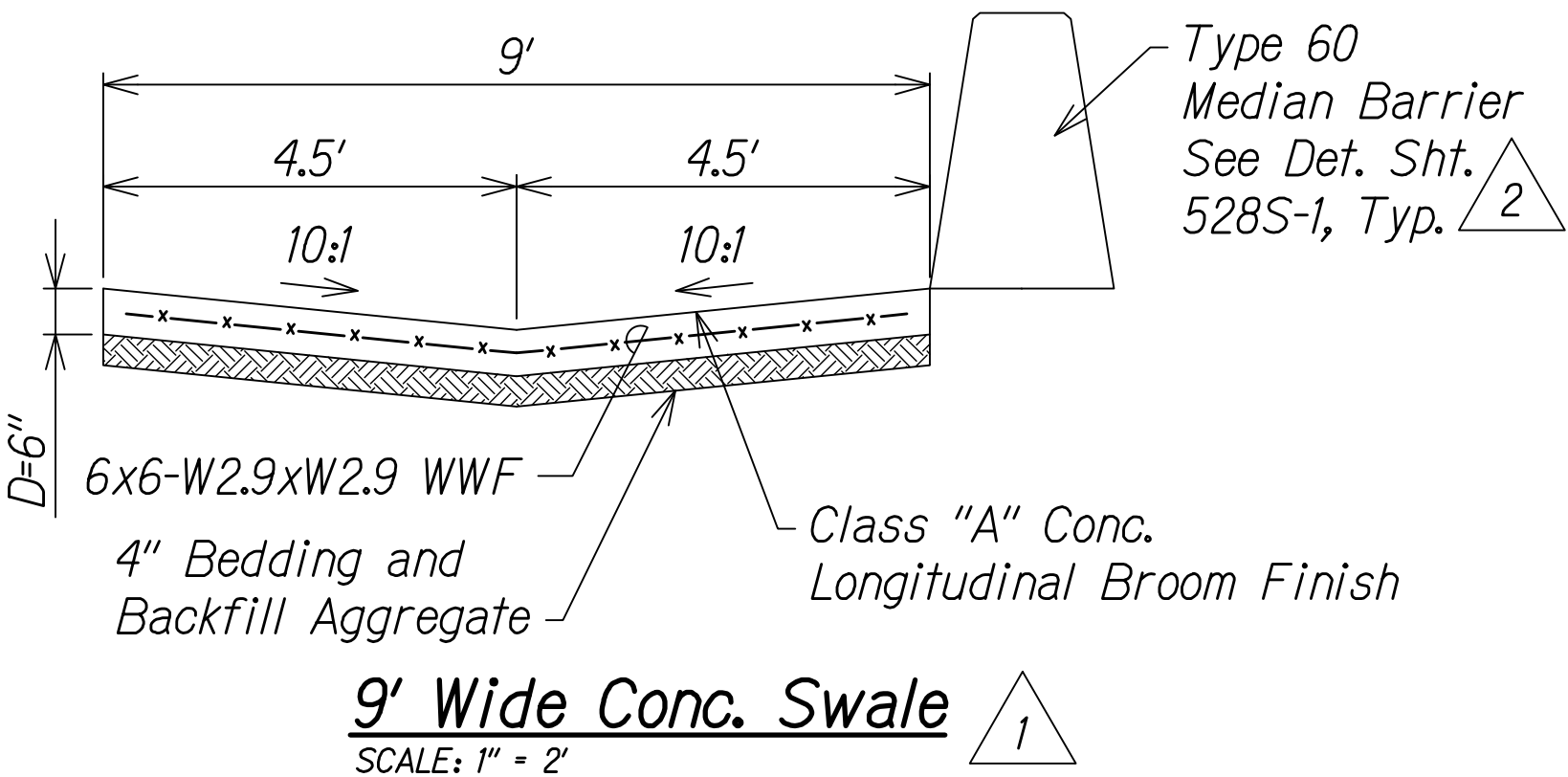
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| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION             |                     |
| ROADWAY TYPICAL SECTIONS                                                         |                     |
| QUEEN KAAHUMANU HIGHWAY WIDENING<br>Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2) |                     |
| Federal Aid Project No. NH-019-1(38)R                                            |                     |
| Scale: AS NOTED                                                                  | Date: DECEMBER 2016 |
| SHEET No. 5 OF 24 SHEETS                                                         |                     |



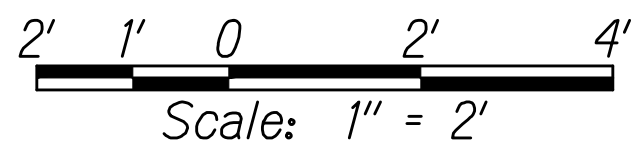
THIS WORK WAS PREPARED BY  
ME OR UNDER MY SUPERVISION AND  
CONSTRUCTION OF THIS PROJECT  
WILL BE UNDER MY OBSERVATION.  
Austen W. Drake  
SIGNATURE  
APRIL 30, 2018  
EXPIRATION DATE  
OF THE LICENSE



SB & Sta. 27+07± to SB & Sta. 34+75±  
NOT TO SCALE



GRAPHICAL SCALE:



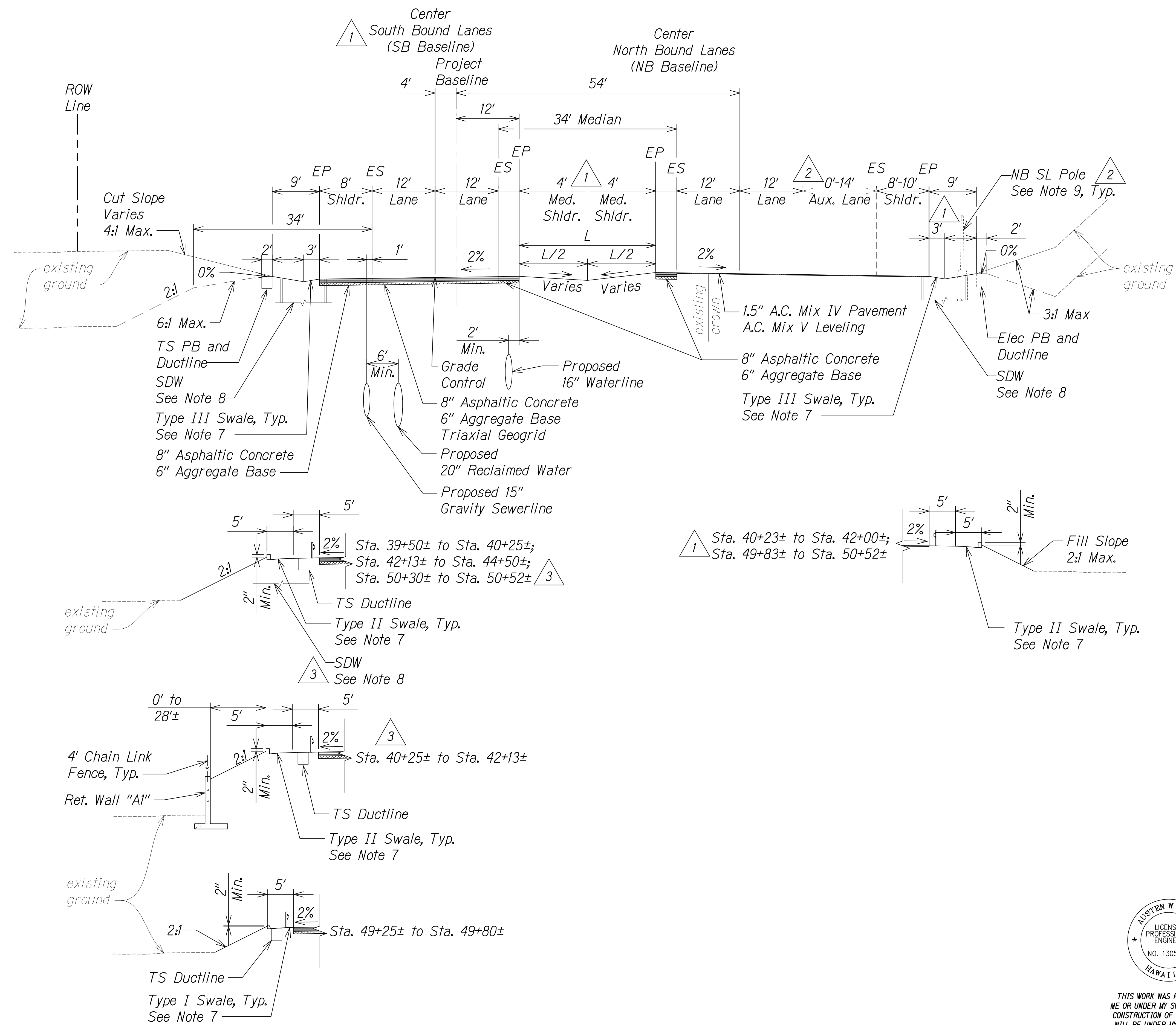
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| ORIGINAL PLAN | DATE |
| NOTED BY      |      |
| DESIGNED BY   |      |
| QUANTITIES BY |      |
| CHECKED BY    |      |

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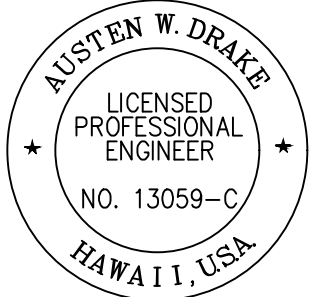
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-019-1(38)R      | 2016        | C.O. 18   | 528          |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:  
5% Minimum  
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB # Sta. 34+75± to SB # Sta. 50+52±  
NOT TO SCALE



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CONSTRUCTION OF THIS PROJECT  
WILL BE UNDER MY OBSERVATION.  
Austen W. Drake  
SIGNATURE  
APRIL 30, 2018  
EXPIRATION DATE  
OF THE LICENSE

|         |          |                                                                                                                             |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------|
| 1/31/17 | 3        | Revised walls due to updated Arch site location and field buffer; Added drywell location                                    |
| 8/1/16  | 2        | Added elec. & traffic signal note instead of stationing; Revised dimension                                                  |
| 1/22/16 | 1        | Civil util. & SB # realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE    | REVISION |                                                                                                                             |

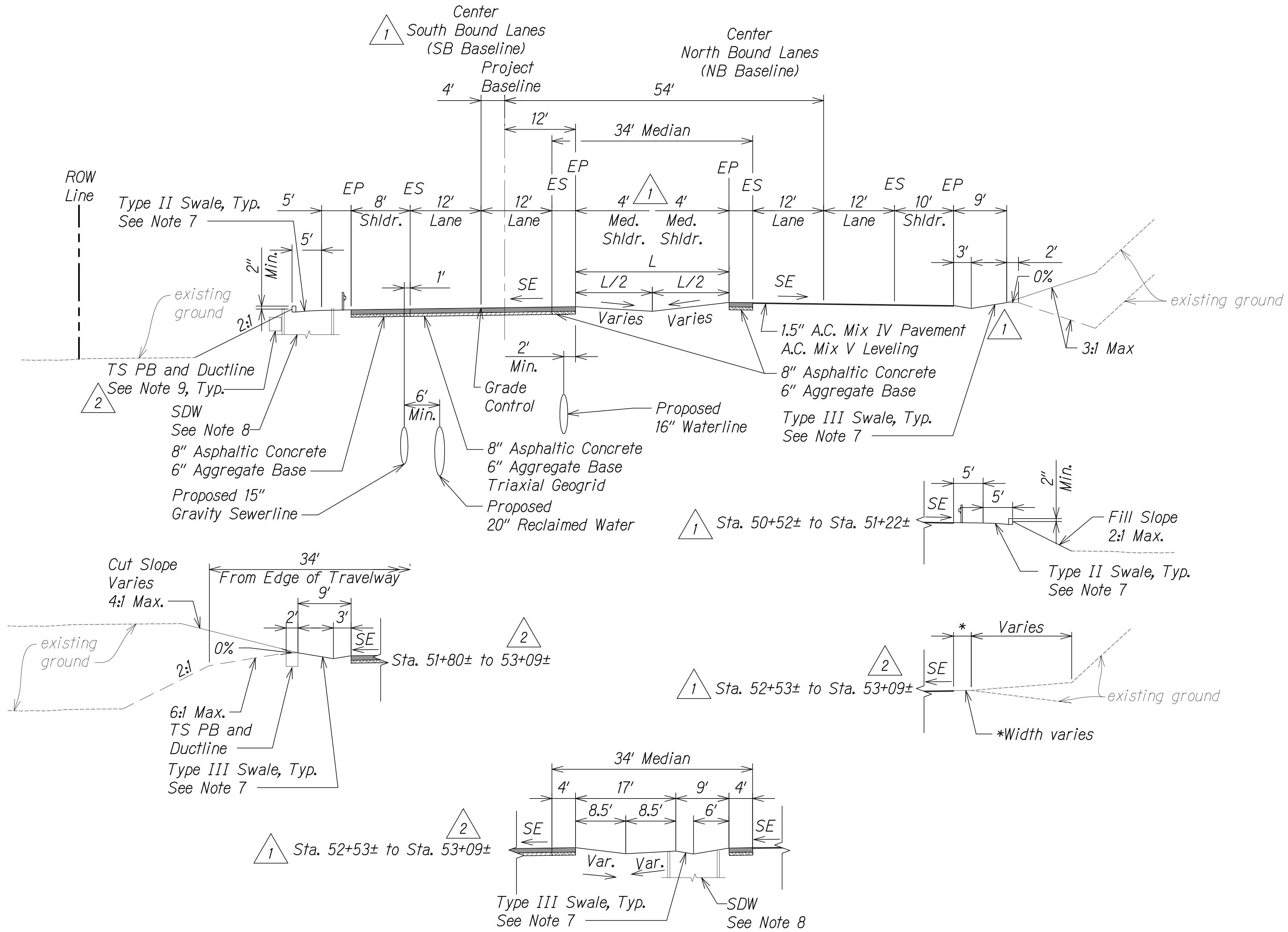
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| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                      |                     |
| ROADWAY TYPICAL SECTIONS                                                                                                  |                     |
| QUEEN KAAHUMANU HIGHWAY WIDENING<br>Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)<br>Federal Aid Project No. NH-019-1(38)R |                     |
| Scale: AS NOTED                                                                                                           | Date: DECEMBER 2016 |
| SHEET No. 6 OF 24 SHEETS                                                                                                  |                     |



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-019-1(38)R      | 2016        | C.O. 19   | 528<br>522   |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:  
5% Minimum  
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



**SB @ Sta. 50+52± to SB @ Sta. 53+09±**  
NOT TO SCALE

**LEGEND FOR AS-BUILT POSTINGS**

Squiggly line for as-built deletion

Double line for as-built deletion

Roadway Text for as-built posting

AUSTIN W. DRAKE  
LICENSED PROFESSIONAL ENGINEER  
NO. 13059-C  
HAWAII, USA

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

*Austin W. Drake*  
SIGNATURE

APRIL 30, 2018  
EXPIRATION DATE OF THE LICENSE

|         |                                                                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------|
| 8/1/16  | <b>2</b> Shift in Ala Nui Kaloko to match exist. access road; Added elec. & traffic signal note                                      |
| 1/22/16 | <b>1</b> Civil util. & SB @ realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE    | REVISION                                                                                                                             |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY TYPICAL SECTIONS**

QUEEN KAAHUMANU HIGHWAY WIDENING  
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)  
Federal Aid Project No. NH-019-1(38)R  
Scale: AS NOTED Date: AUGUST 2016

SHEET No. 7 OF 24 SHEETS

|               |      |
|---------------|------|
| ORIGINAL PLAN | DATE |
| NO. 1         |      |
| NO. 2         |      |
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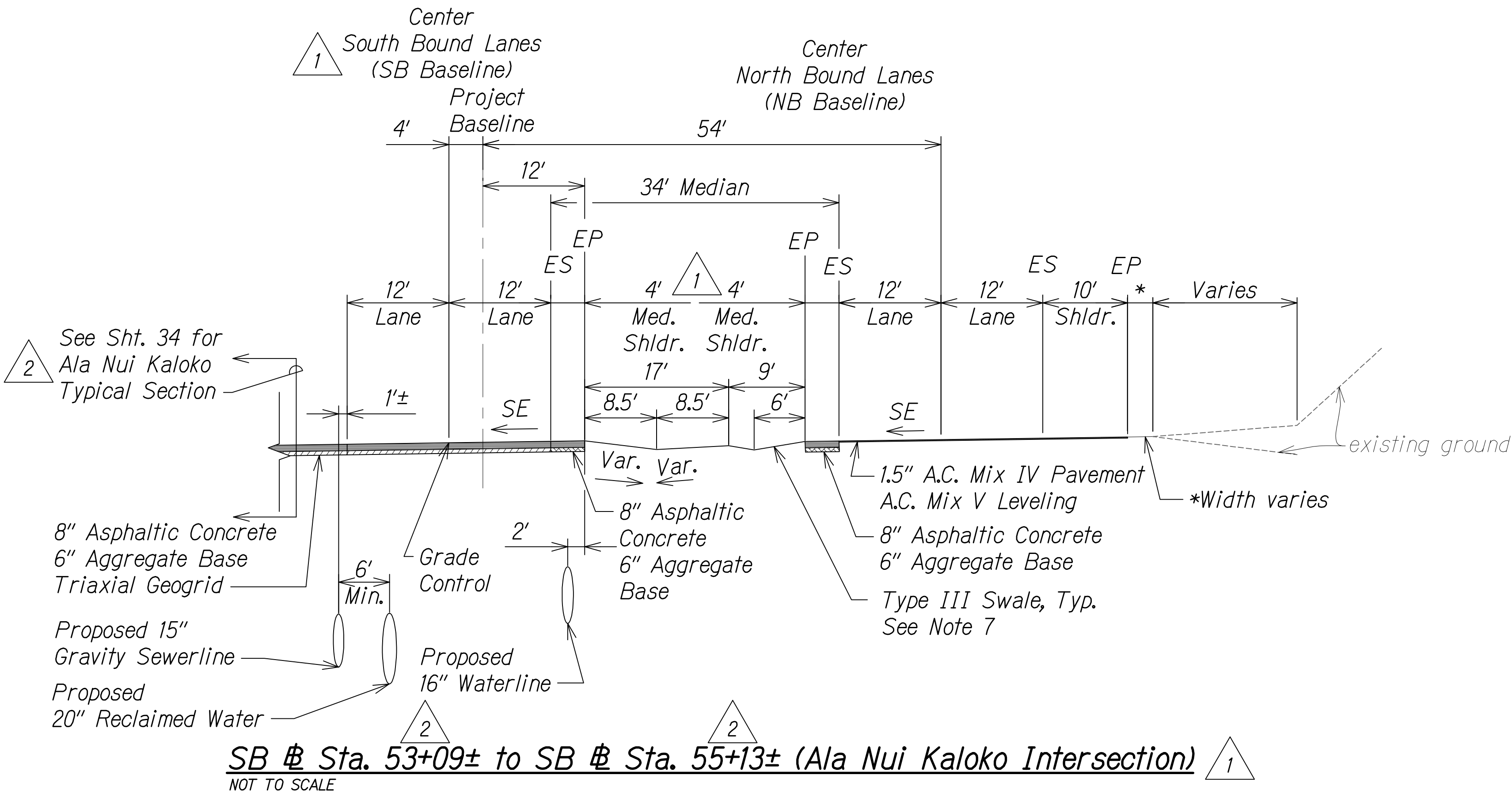
"AS-BUILT"

C.O. 19

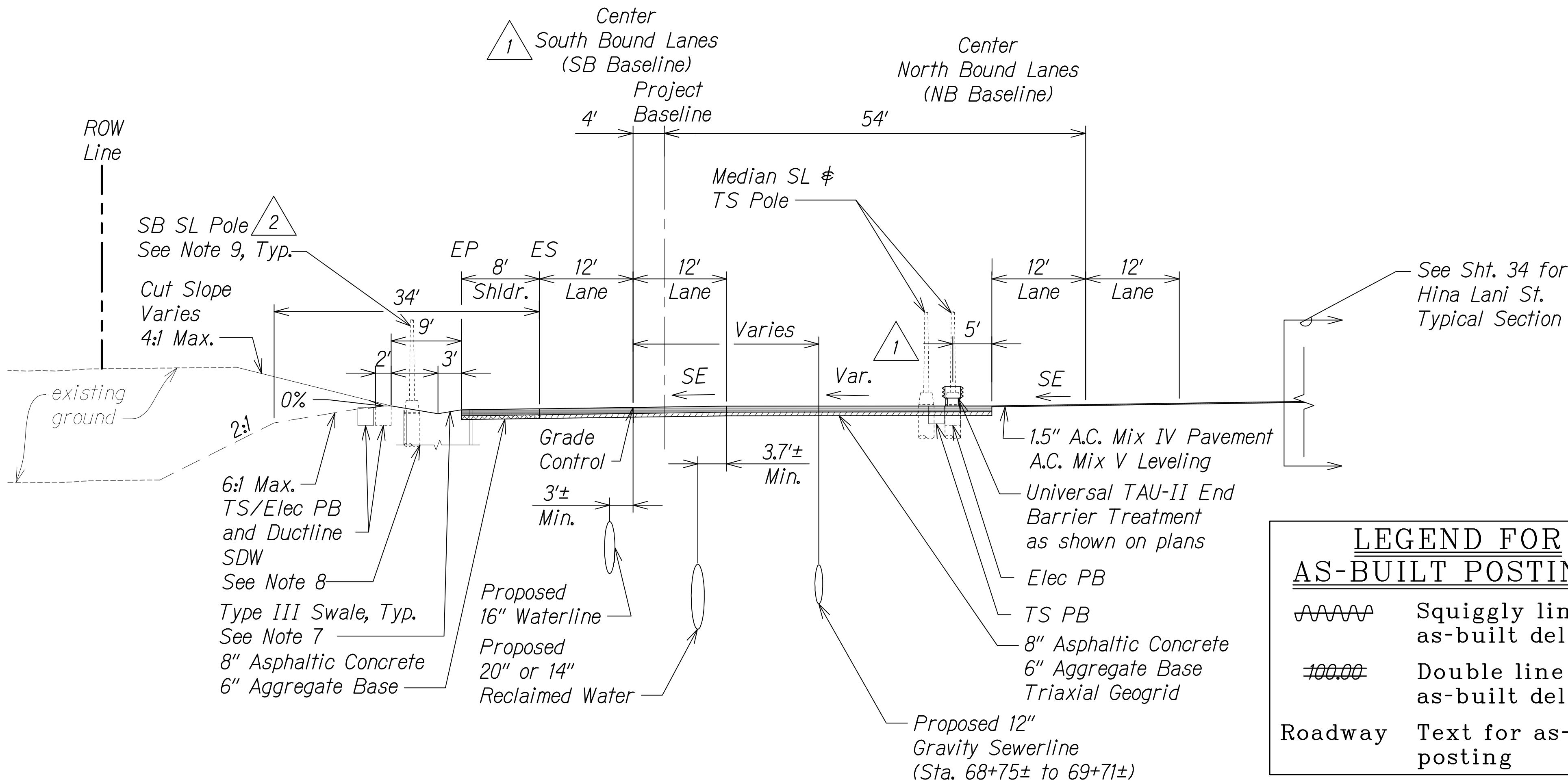
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-019-1(38)R      | 2016        | C.O. 20   | 528<br>522   |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:  
5% Minimum  
16.67% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB @ Sta. 53+09± to SB @ Sta. 55+13± (Ala Nui Kaloko Intersection) 1



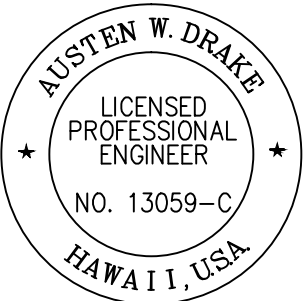
SB @ Sta. 68+75± to SB @ Sta. 70+91± (Hina Lani St. Intersection) 1

**LEGEND FOR AS-BUILT POSTINGS**

~~~~~ Squiggly line for as-built deletion

~~=====~~ Double line for as-built deletion

Roadway Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Signature: Austen W. Drake
Date: APRIL 30, 2018
Expiration Date of License: 1/27/2016 6:45 PM

| | | |
|---------|----------|--|
| 8/1/16 | 2 | Shift in Ala Nui Kaloko to match exist. access road; Added elec. # traffic signal note instead of stationing # ref. to side road section |
| 1/22/16 | 1 | Civil util. # SB @ realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE | REVISION | |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahke Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R

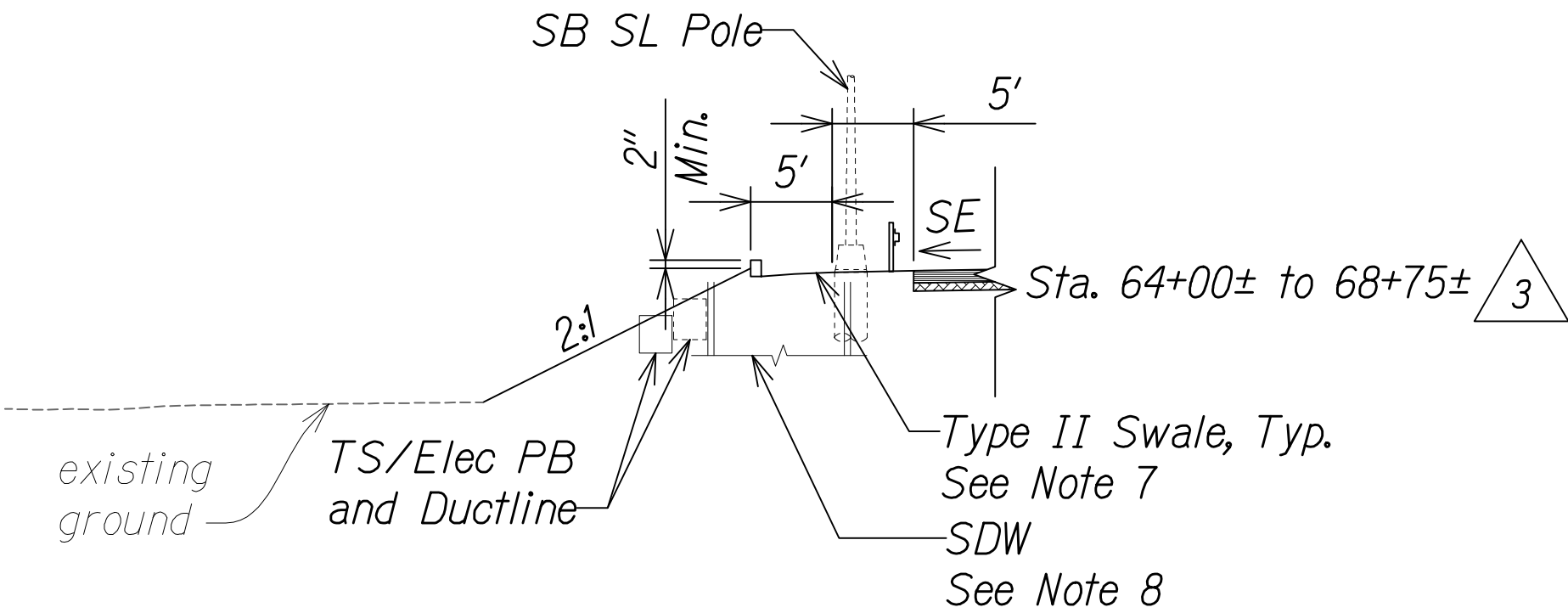
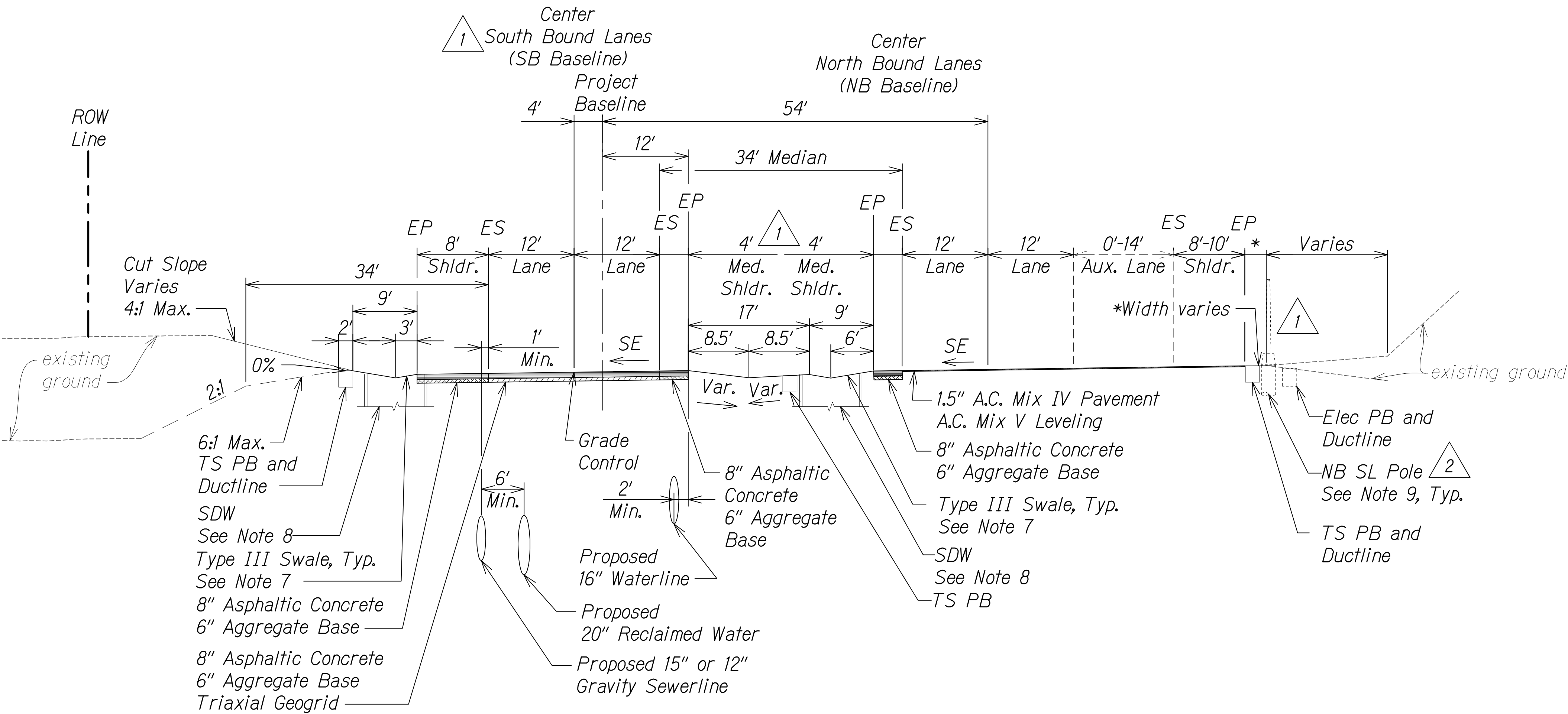
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SHEET No. 8 OF 24 SHEETS

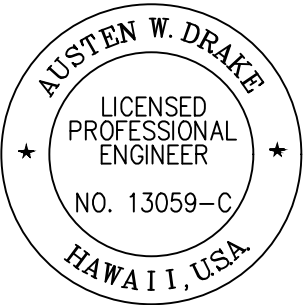
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 21 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.67% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



2
SB @ Sta. 55+13± to SB @ Sta. 68+75±
NOT TO SCALE



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WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

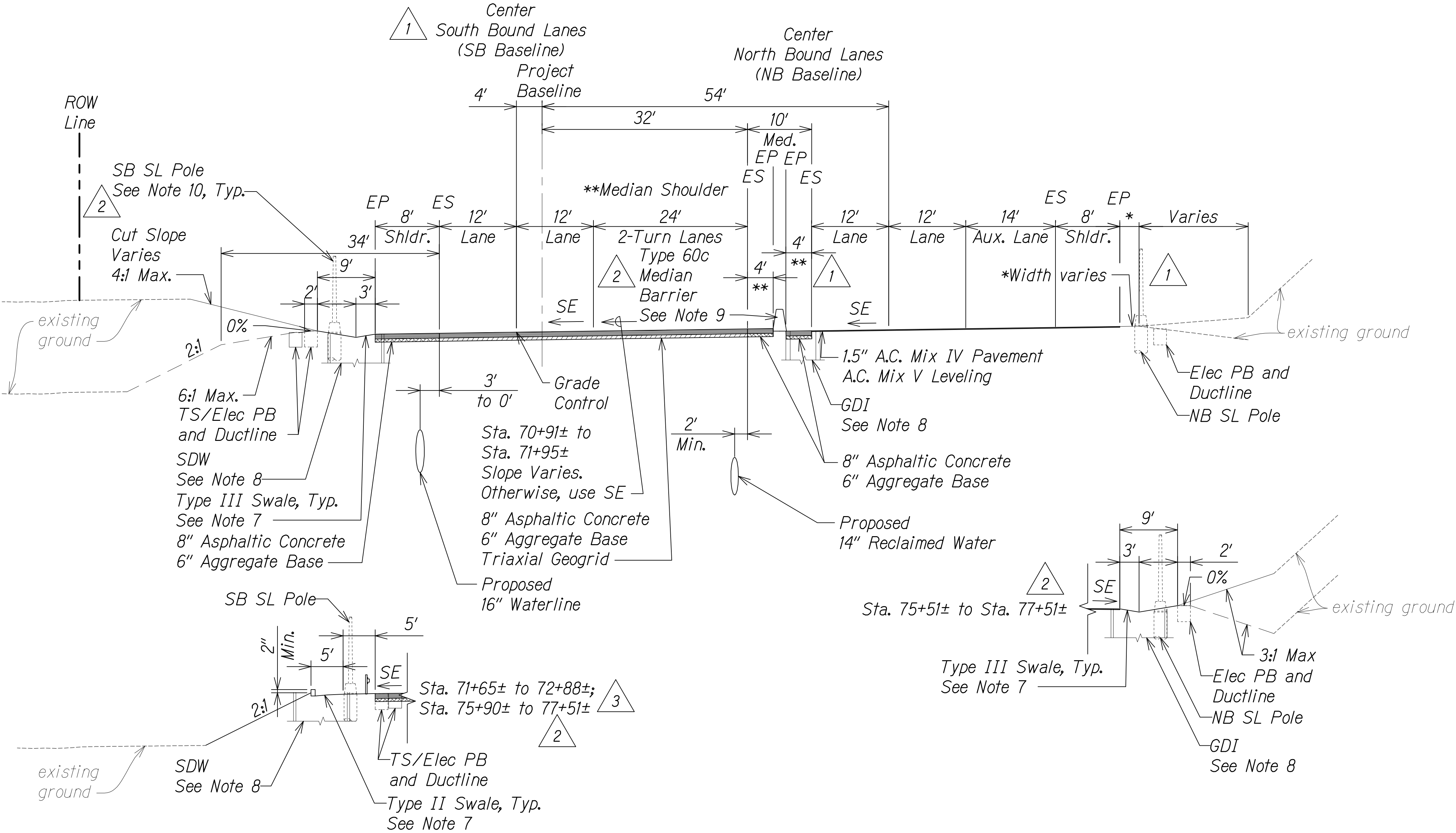
| | | |
|---------|----------|--|
| 1/31/17 | 3 | Removed walls due to revised Arch site locations & field buffers |
| 8/1/16 | 2 | Shift in Ala Nui Kaloko to match exist. access road; Added elec. & traffic signal note instead of stationing, ret. wall identification |
| 1/22/16 | 1 | Civil util. & SB @ realignment; Added drainage infrastructure/ret. wall per MOA; Added elec. poles & boxes; Reduced median shoulder |
| DATE | REVISION | |

| | |
|---|---------------------|
| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | |
| ROADWAY TYPICAL SECTIONS | |
| QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahke Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R | |
| Scale: AS NOTED | Date: DECEMBER 2016 |
| SHEET No. 9 OF 24 SHEETS | |

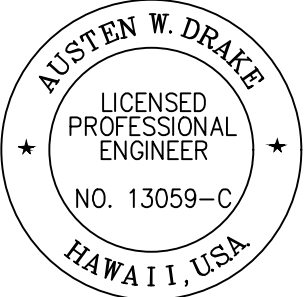
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|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 22 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Sht. 528S-1 for median barrier detail.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB # Sta. 70+91± to SB # Sta. 77+51±
NOT TO SCALE

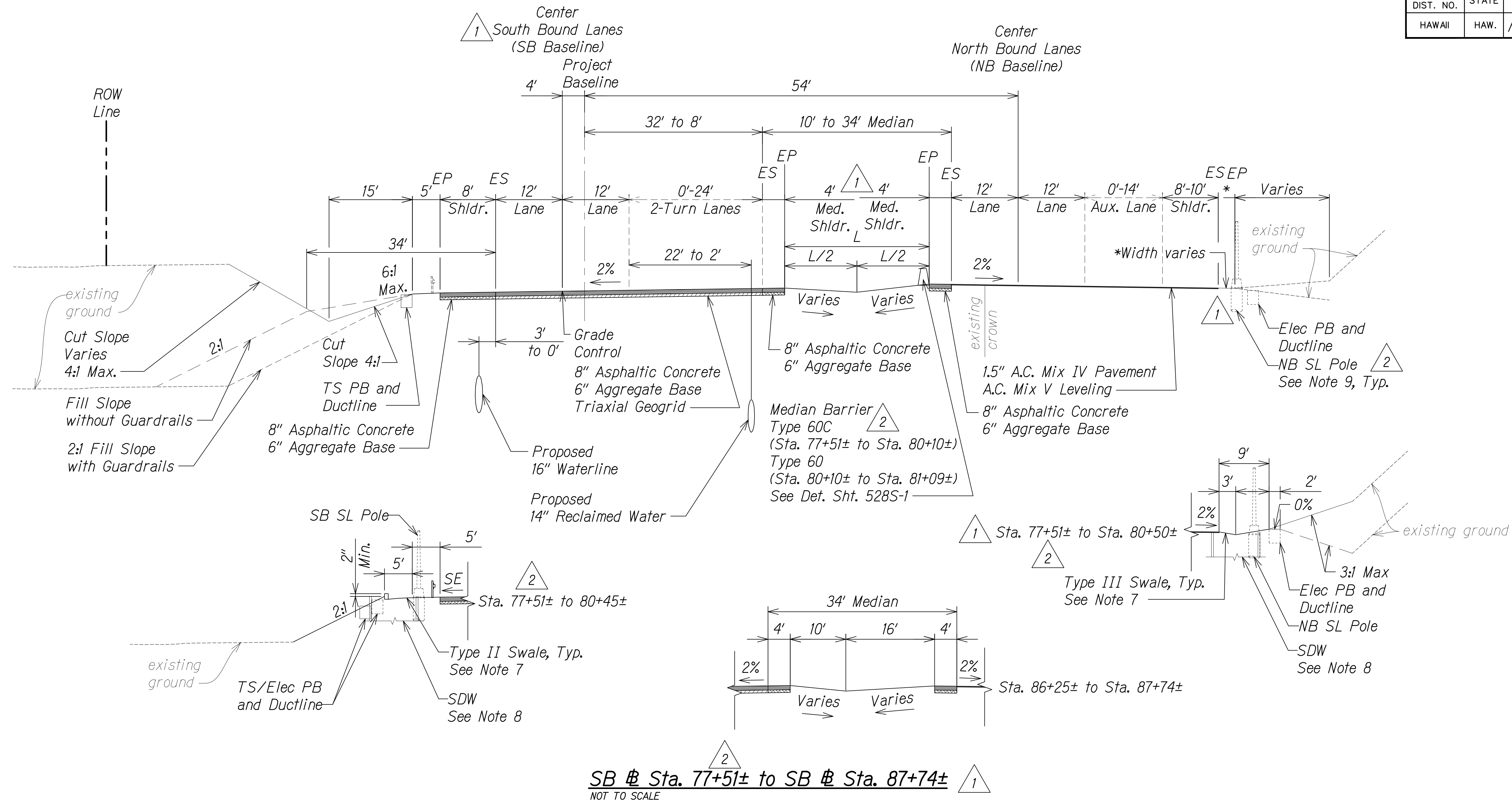


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Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

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| 1/31/17 | 3 | Removed walls due to revised Arch site locations & field buffers |
| 8/1/16 | 2 | Changed median barrier type; Added elec. & traffic signal note, ret. wall identification; Revised limits |
| 1/22/16 | 1 | Civil util. & SB & realignment; Added drainage infrastructure/ret. walls per MOA; Added elec. poles & boxes; Reduced median shoulder |
| DATE | REVISION | |

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| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | |
| ROADWAY TYPICAL SECTIONS | |
| QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R | |
| Scale: AS NOTED | Date: DECEMBER 2016 |
| SHEET No. 10 OF 24 SHEETS | |

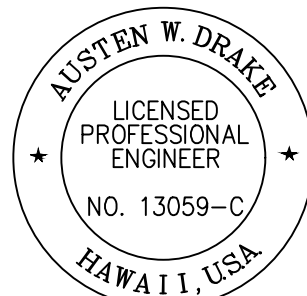
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 22S-1 | 528 |



NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.

| | | |
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| 8/1/16 | 2 | Changed median barrier type; Added elec. & traffic signal note instead of stationing; Revised limits |
| 1/22/16 | 1 | Civil util. & SB # realignment; Added drainage infrastructure per MOA; Added elec. poles and boxes; Reduced median shoulder |
| DATE | REVISION | |



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Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

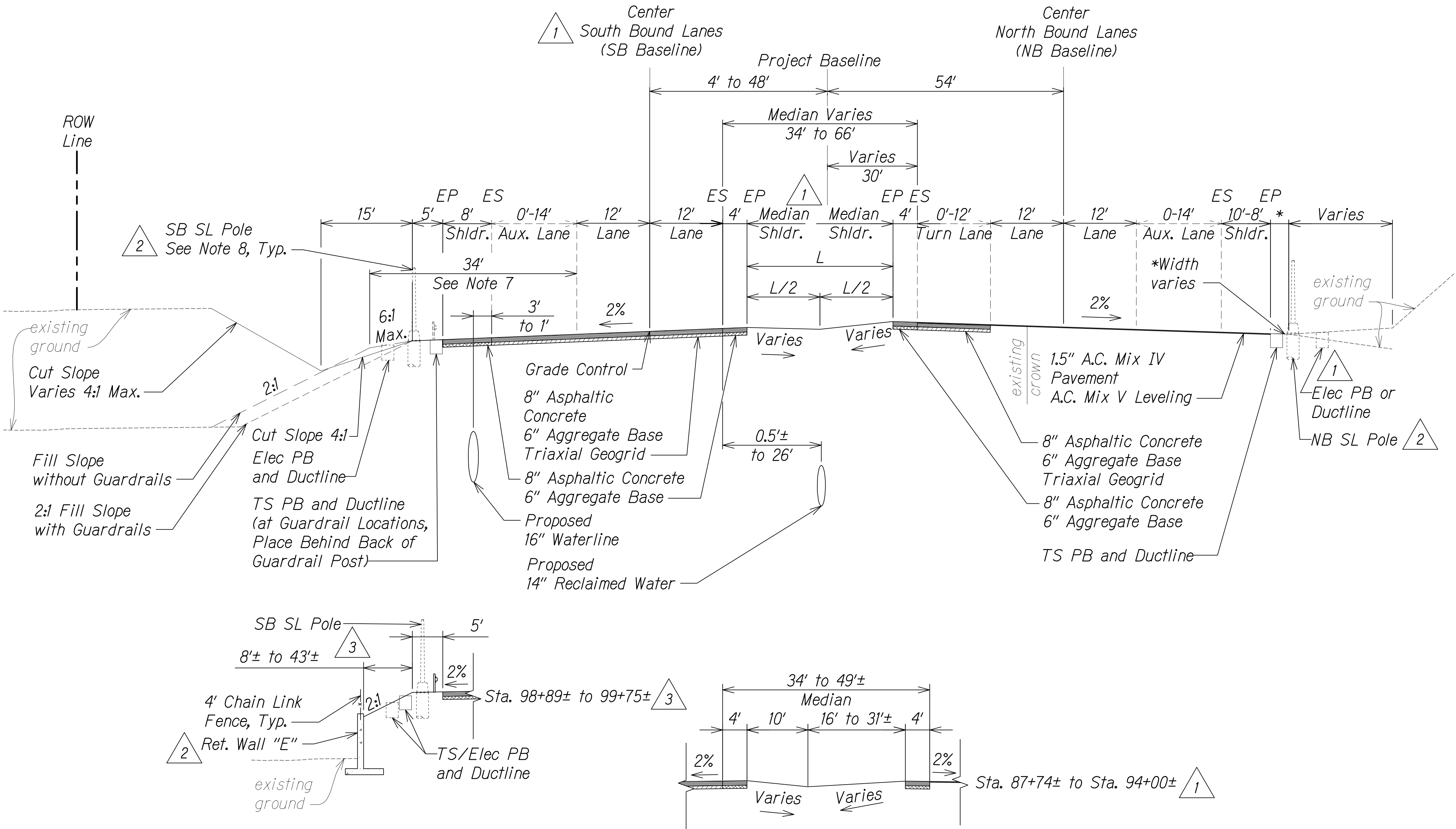
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 10A OF 24 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 23 | 528 |

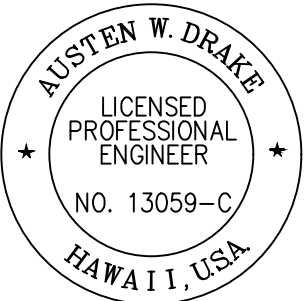
NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading (except at locations with barriers):
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB @ Sta. 87+74± to SB @ Sta. 104+56±
NOT TO SCALE

| | | |
|---------|----------|--|
| 1/31/17 | 3 | Revised walls due to revised Arch site locations & field buffers |
| 8/1/16 | 2 | Added elec. & traffic signal note instead of stationing & ret. wall identification |
| 1/22/16 | 1 | Civil util. & SB @ realignment; Added drainage infrastructure/ret. walls per MOA; Added elec. poles & boxes; Reduced median shoulder |
| DATE | REVISION | |



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WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahoe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R

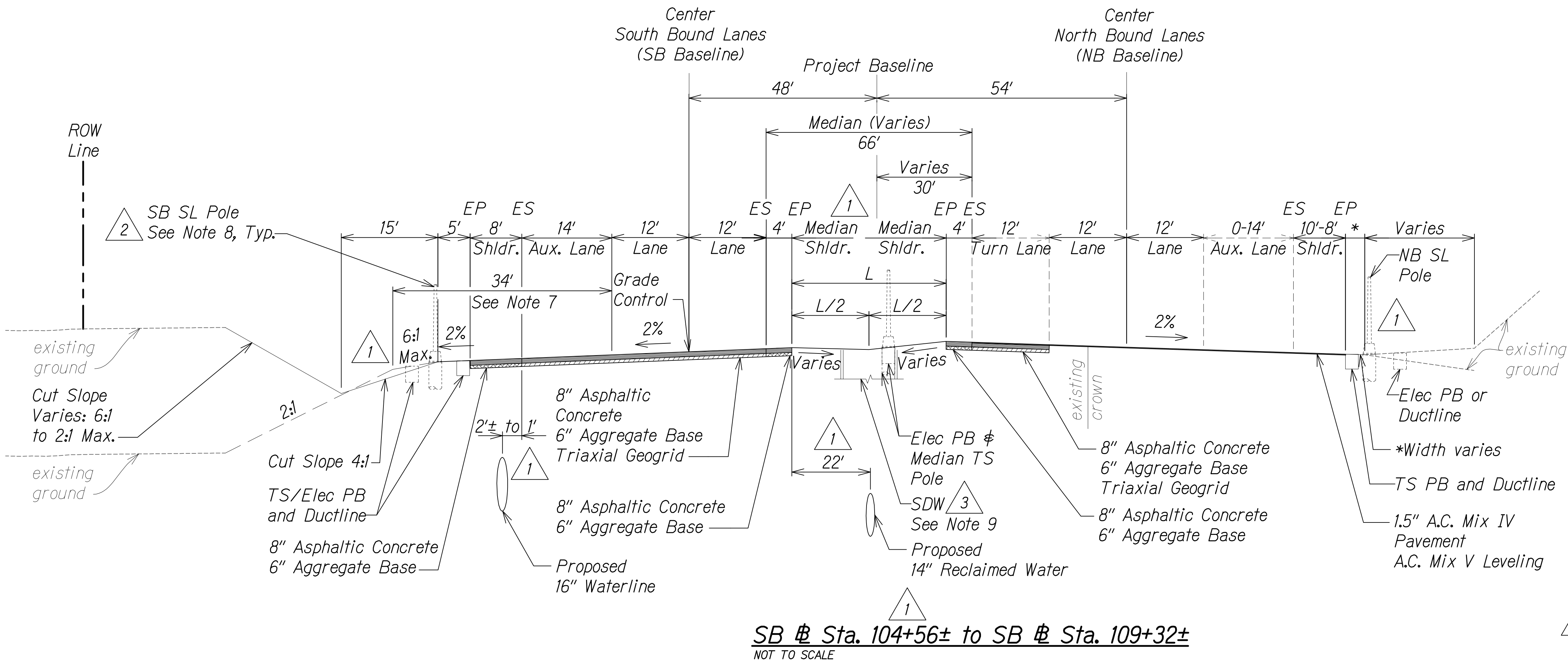
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SHEET No. 11 OF 24 SHEETS

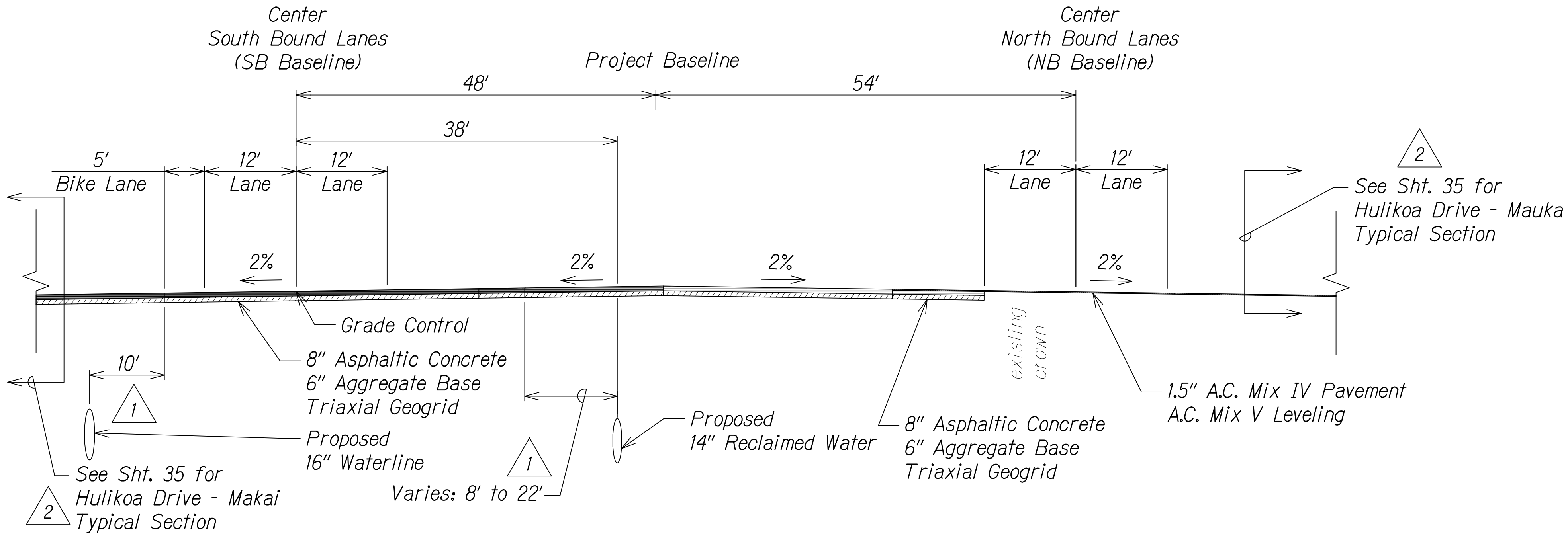
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 24 | 528 |

NOTES:

- 1. As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- 2. For median swale grading:
5% Minimum
16.7% Maximum
- 3. For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- 4. All Stations referred to the South Bound Baseline.
- 5. Refer to the Baseline Data plans for the South Bound alignment information.
- 6. Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- 7. Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- 8. See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.
- 9. See Grading and Drainage Plans for exact locations and structure/grate types.

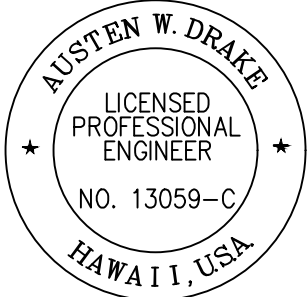


SB # Sta. 104+56± to SB # Sta. 109+32±
NOT TO SCALE



SB # Sta. 109+32± to SB # Sta. 110+32± (Hulikoa Drive)
NOT TO SCALE

| | | |
|---------|----------|--|
| 1/31/17 | 3 | Added drywell location |
| 8/1/16 | 2 | Added elec. # traffic signal note instead of stationing # ref. to side road section |
| 1/22/16 | 1 | Civil util. realignment; Added elec. poles and boxes; Reduced median shoulder; Makai Fill Slope Rev. |
| DATE | REVISION | |



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Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R

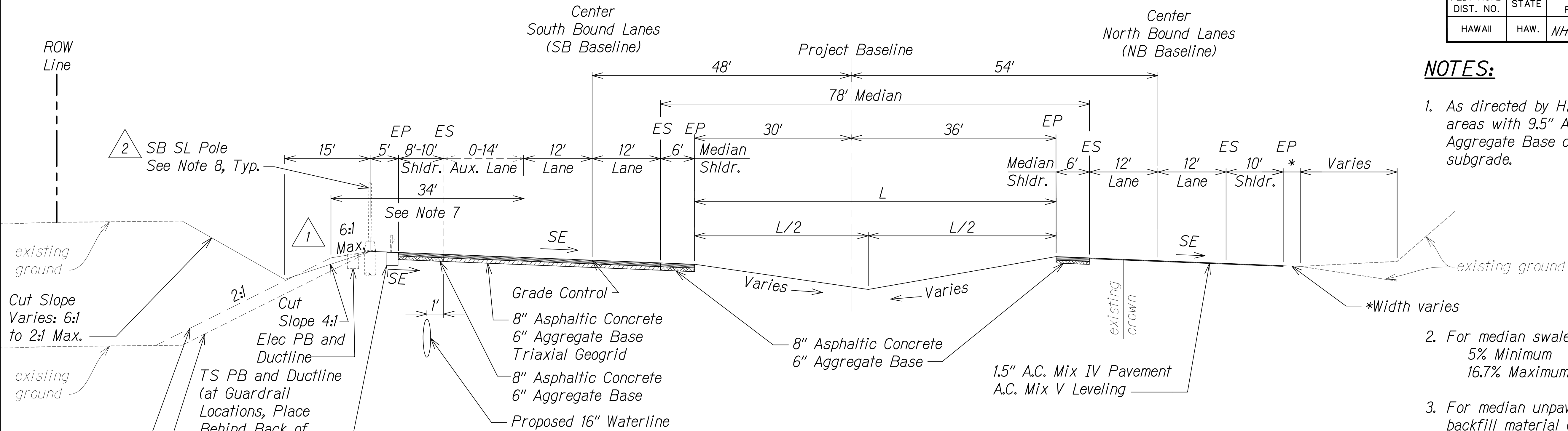
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SHEET No. 12 OF 24 SHEETS

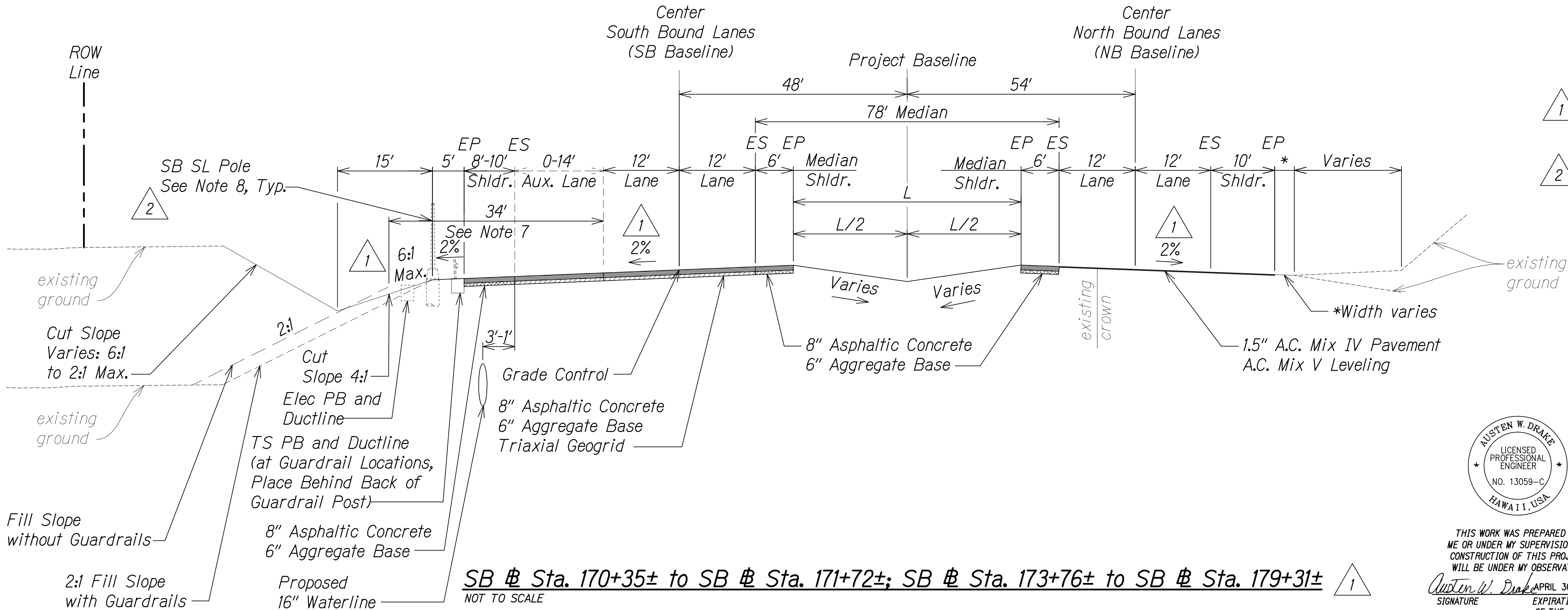
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
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| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 26 | 528 |

NOTES:

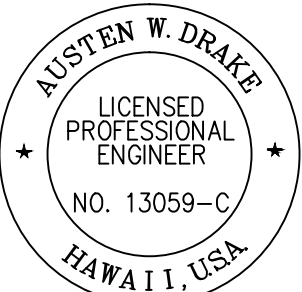
- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB @ Sta. 159+75± to SB @ Sta. 170+35±
NOT TO SCALE



SB @ Sta. 170+35± to SB @ Sta. 171+72±; SB @ Sta. 173+76± to SB @ Sta. 179+31±
NOT TO SCALE



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WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

| | | |
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| 8/1/16 | 2 | Added elec. & traffic signal note instead of stationing & ref. wall identification; Revised limits |
| 1/22/16 | 1 | Added elec. poles and boxes; Revised cross slope & makai fill slope; Added ref. wall per MOA |
| DATE | REVISION | |

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| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | |
| ROADWAY TYPICAL SECTIONS | |
| QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R | |
| Scale: AS NOTED | Date: AUGUST 2016 |
| SHEET No. 14 OF 24 SHEETS | |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 27 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.

| | | |
|---------|----------|---|
| 1/31/17 | 3 | Revised walls due to revised Arch site locations & field buffers |
| 8/1/16 | 2 | Updated utility location; Added elec. & traffic signal note, ref. wall identification & ref. to side road section; Revised OTEC right section |
| 1/22/16 | 1 | Added elec. poles and boxes; Makai fill slope rev.; Added ref. wall per MOA |
| DATE | REVISION | |

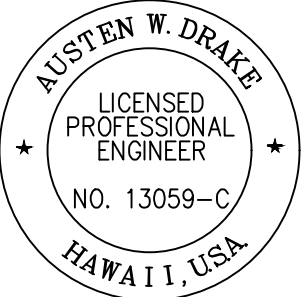
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

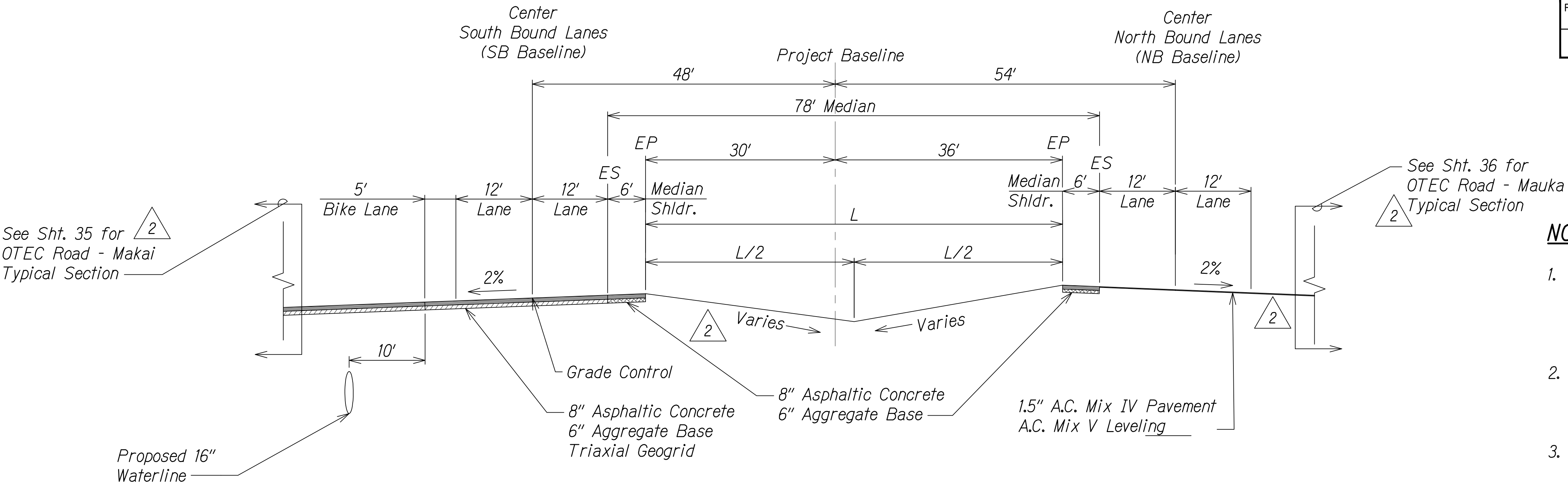
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahke Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R

Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 15 OF 24 SHEETS

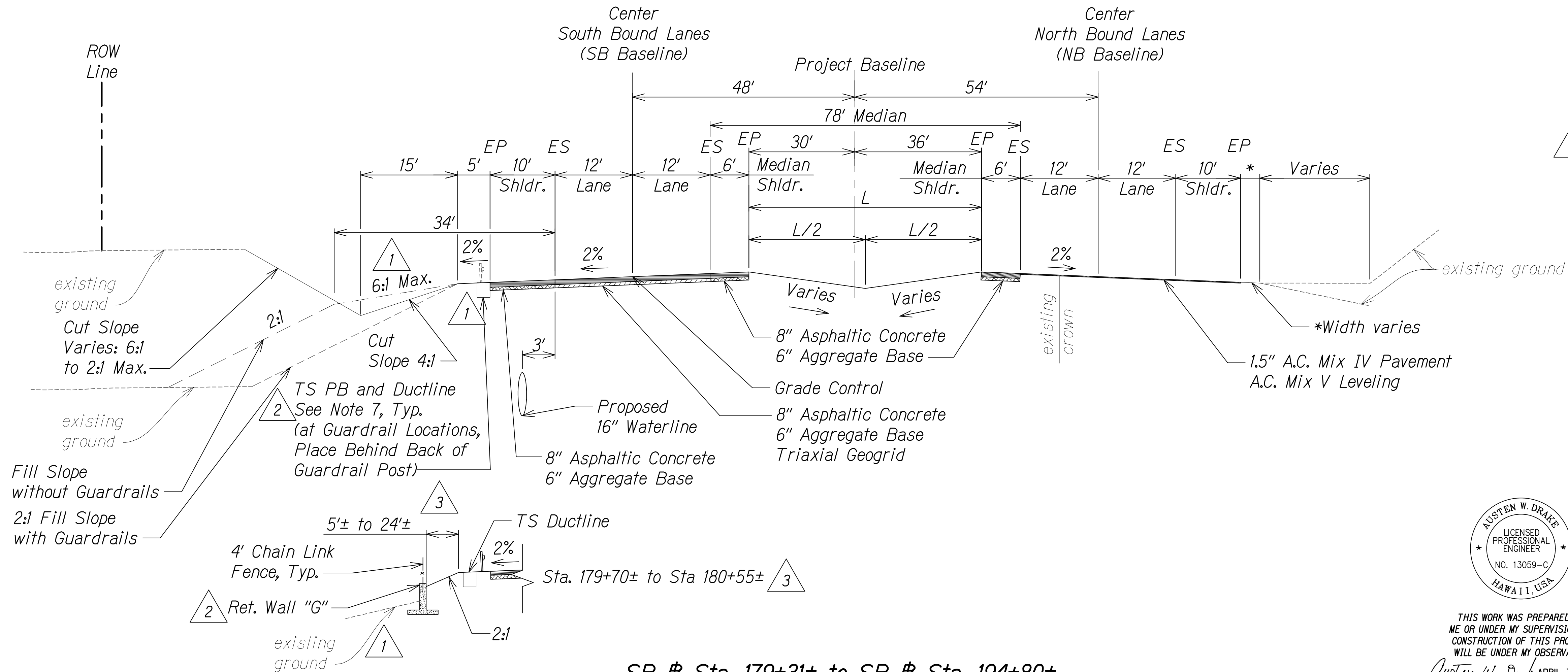


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Austen W. Drake
SIGNATURE APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE



SB @ Sta. 171+72± to SB @ Sta. 173+76± (OTEC Intersection)

NOT TO SCALE



SB @ Sta. 179+31± to SB @ Sta. 194+80±

NOT TO SCALE

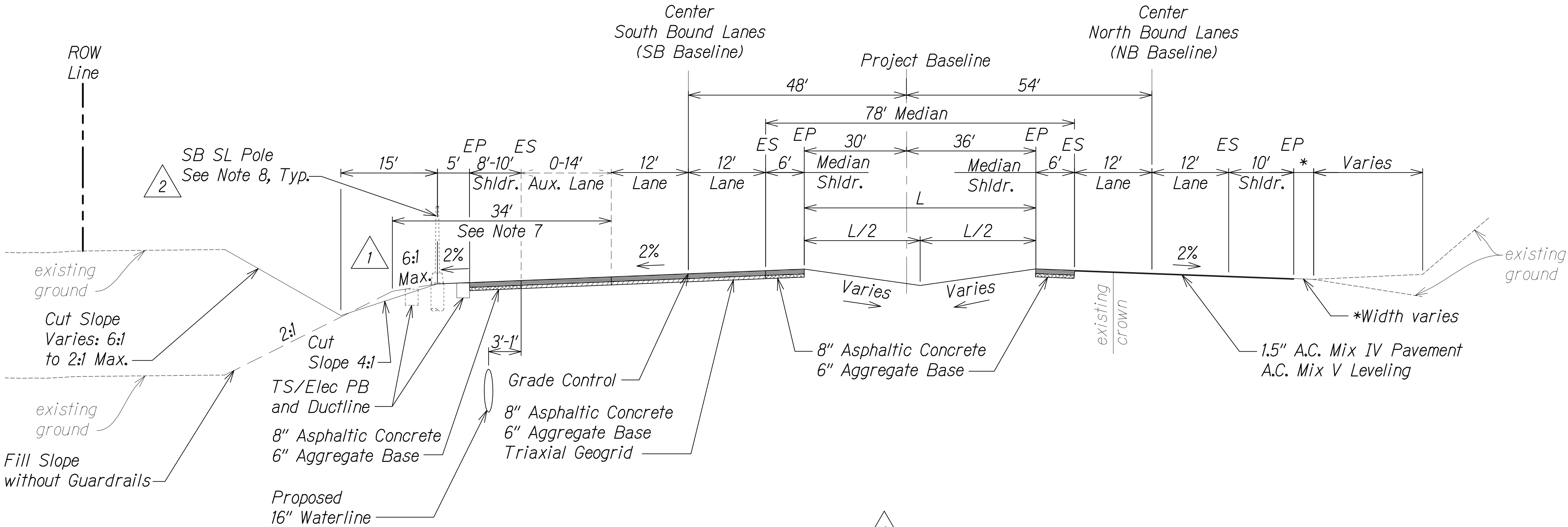
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W:_CIVIL_3D PROJECTS\2008_003_001 GBI QUEEN K HWY WIDENING\01 CIVIL DRAWINGS\027 TYPICAL SECTIONS 15.DWG 2/1/2017 4:13 PM

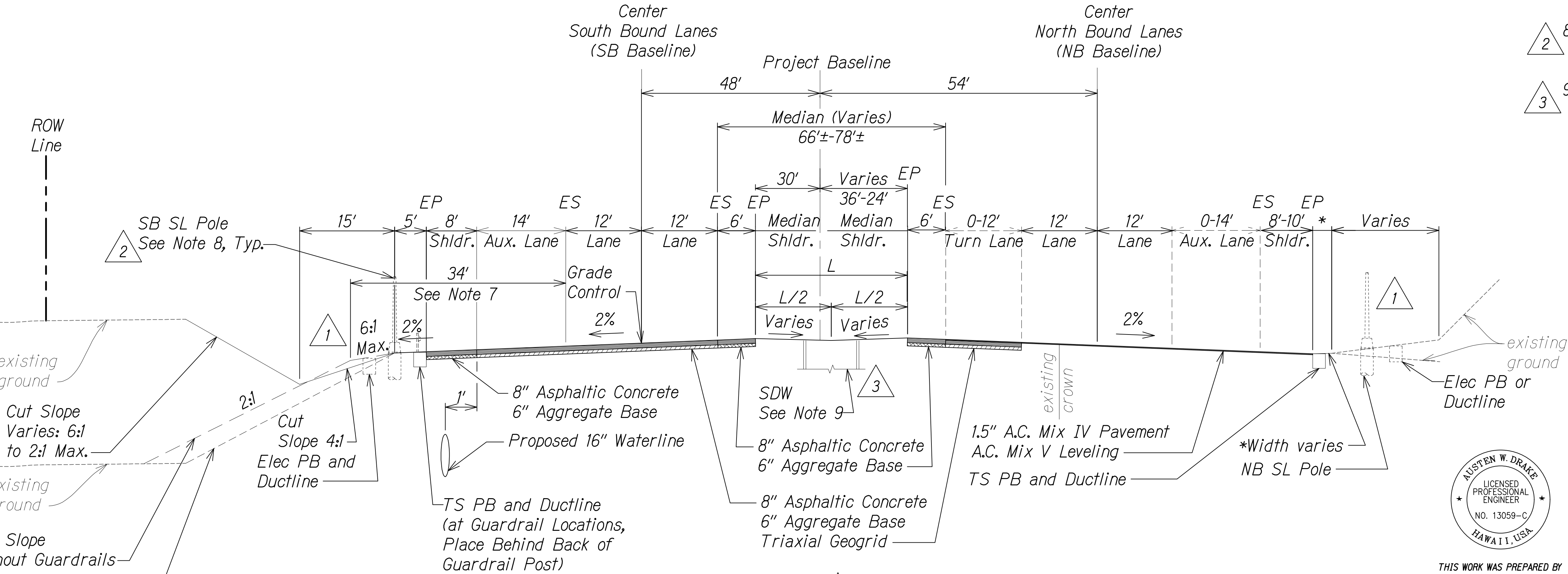
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 28 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.
- See Grading and Drainage Plans for exact locations and structure/grate types.



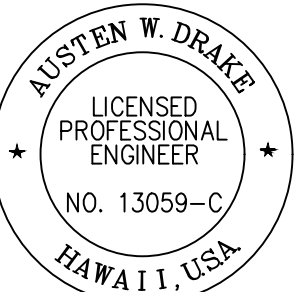
SB # Sta. 194+80± to SB # Sta. 200+45±; SB # Sta. 222+81± to SB # Sta. 226+17±
NOT TO SCALE



SB # Sta. 200+45± to SB # Sta. 206+90±
NOT TO SCALE

| | | |
|---------|----------|---|
| 1/31/17 | 3 | Added drywell location |
| 8/1/16 | 2 | Added elec. # traffic signal note instead of stationing; Revised limits |
| 1/22/16 | 1 | Added elec. poles and boxes; Makai fill slope rev. |
| DATE | REVISION | |

| | |
|---|---------------------|
| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | |
| ROADWAY TYPICAL SECTIONS | |
| QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2) | |
| Federal Aid Project No. NH-019-1(38)R | |
| Scale: AS NOTED | Date: DECEMBER 2016 |



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

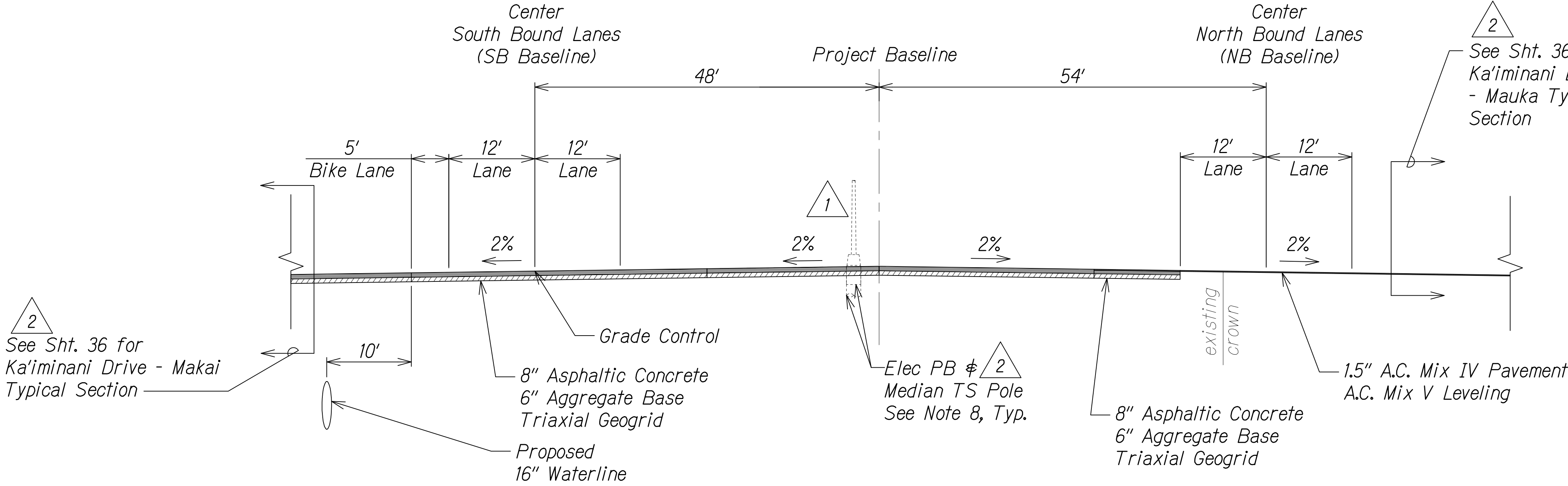
W:_CIVIL_3D PROJECTS\2008_003_001 GRI QUEEN K HWY WIDENING\01 CIVIL DRAWINGS\028 TYPICAL SECTIONS 16.DWG 2/13/2017 2:30 PM

| | |
|------------------|---------------|
| ORIGINAL
PLAN | DATE |
| NOTE BOOK | DESIGNED BY |
| | TRACED BY |
| | QUANTITIES BY |
| | CHECKED BY |

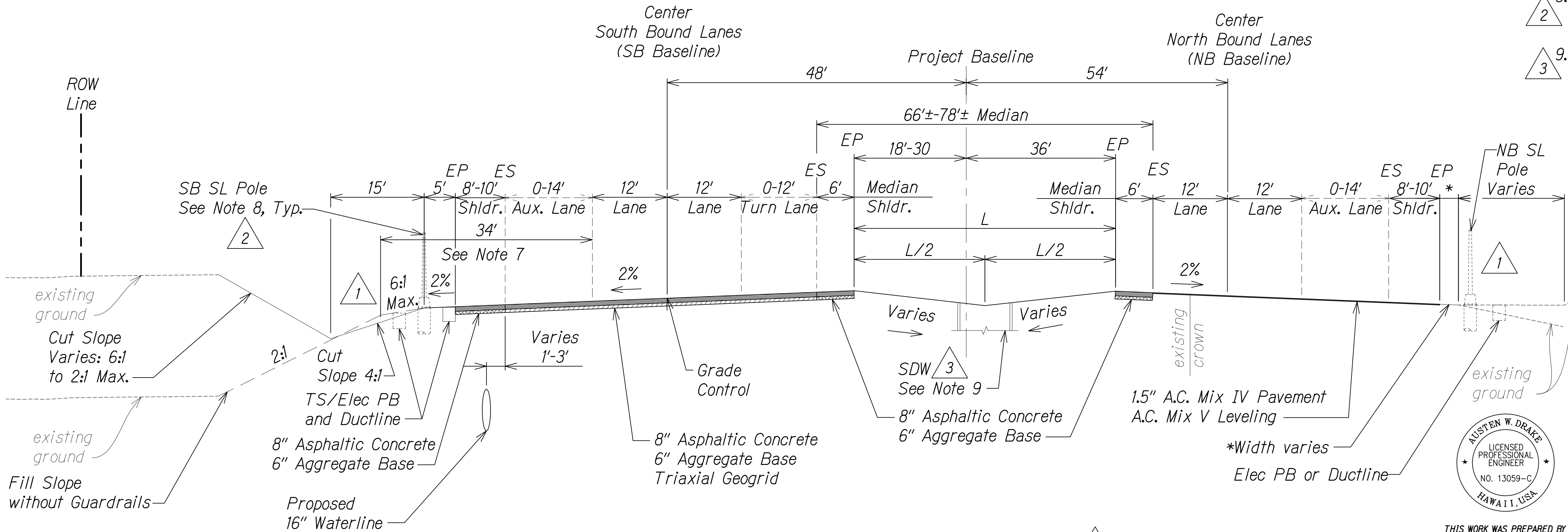
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 29 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- Width of 6:1 foreslope varies adjacent to Auxiliary Lanes. See cross sections for dimensions.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.
- See Grading and Drainage Plans for exact locations and structure/grate types.



SB @ Sta. 206+90± to SB @ Sta. 209+18±; (Ka'imani Drive Intersection)
NOT TO SCALE



SB @ Sta. 209+18± to SB @ Sta. 219+51±
NOT TO SCALE

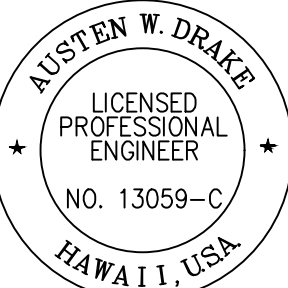
| DATE | REVISION |
|---------|---|
| 1/31/17 | Added drywell location |
| 8/1/16 | Added elec. # traffic signal note instead of stationing # ref. to side road section; Revised limits |
| 1/22/16 | Added elec. poles and boxes; Makai fill slope rev. |

| DATE | REVISION |
|---------|---|
| 1/31/17 | Added drywell location |
| 8/1/16 | Added elec. # traffic signal note instead of stationing # ref. to side road section; Revised limits |
| 1/22/16 | Added elec. poles and boxes; Makai fill slope rev. |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

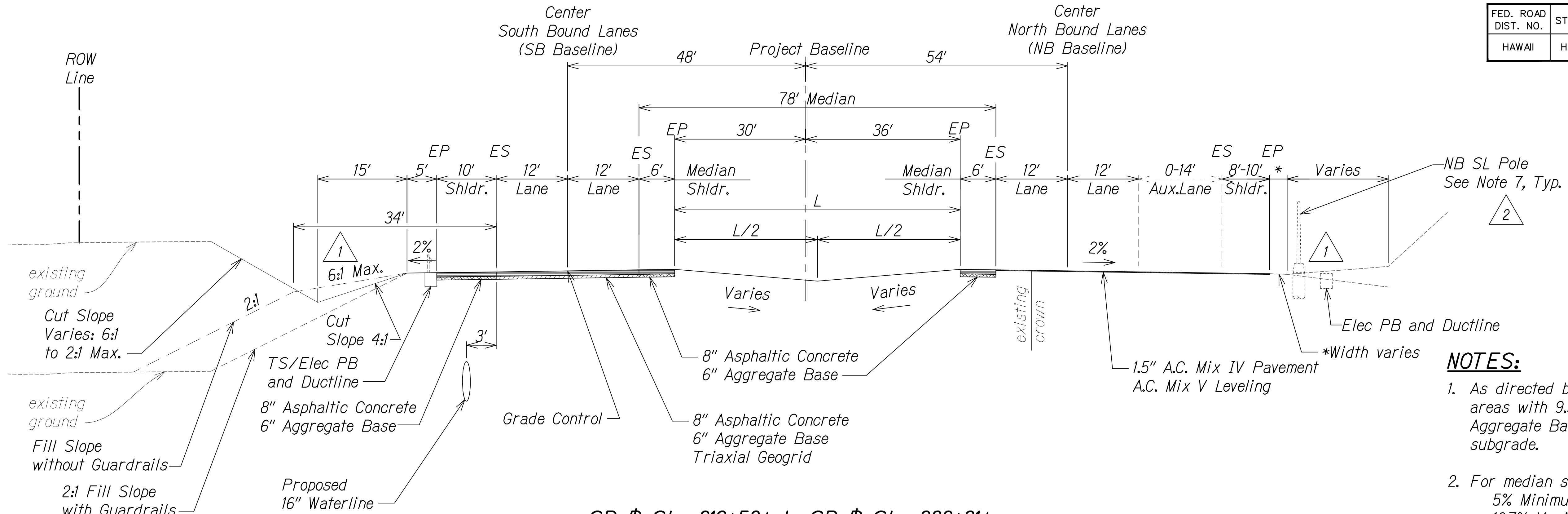
ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahi Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016



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CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

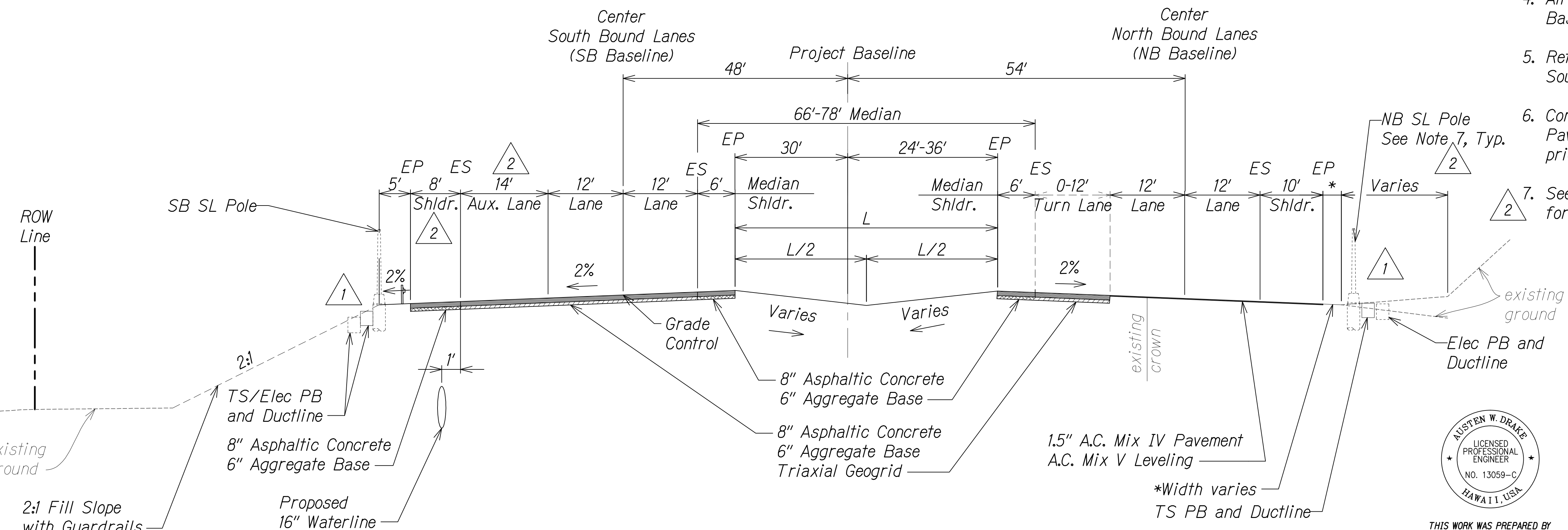
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 30 | 528 |



SB # Sta. 219+50± to SB # Sta. 222+81±
NOT TO SCALE

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.



SB # Sta. 226+17± to SB # Sta. 234+06±
NOT TO SCALE

| | | |
|---------|----------|---|
| 8/1/16 | 2 | Added elec. # traffic signal note instead of stationing; Revised dimensions |
| 1/22/16 | 1 | Added elec. poles and boxes; Makai fill slope rev. |
| DATE | REVISION | |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Signature: Austen W. Drake
EXPIRATION DATE OF THE LICENSE: APRIL 30, 2018

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

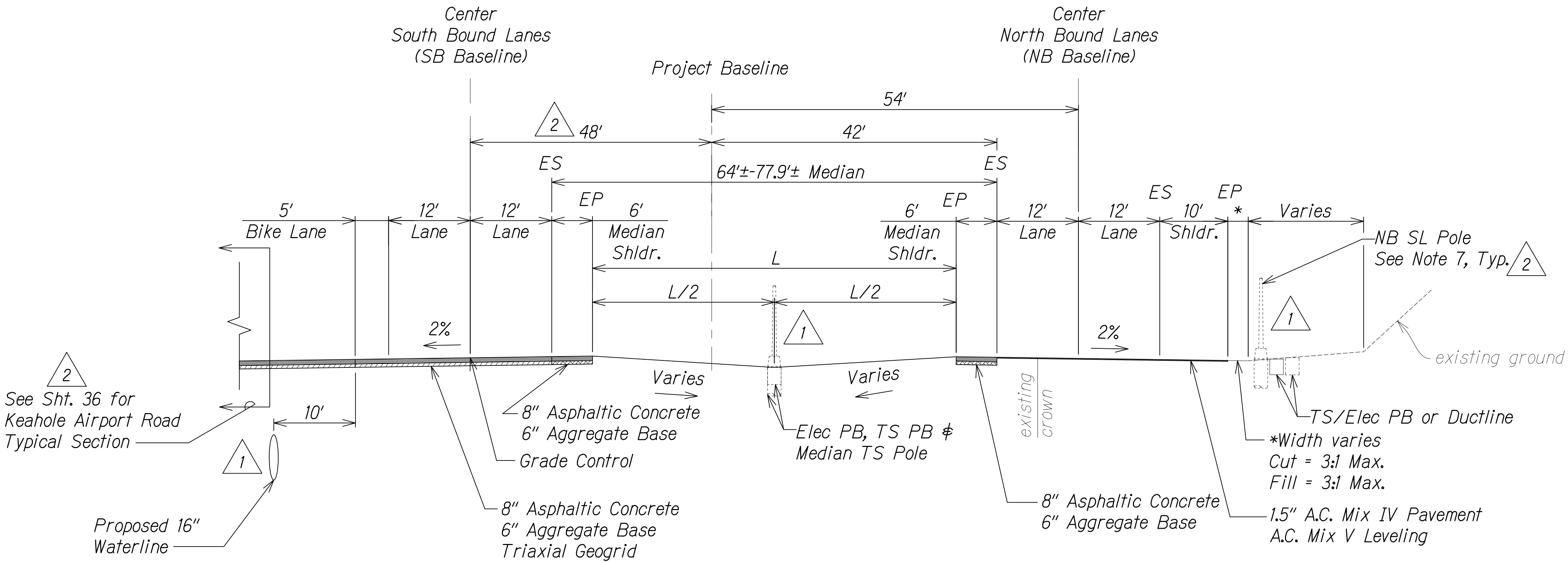
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: AUGUST 2016

SHEET No. 18 OF 24 SHEETS

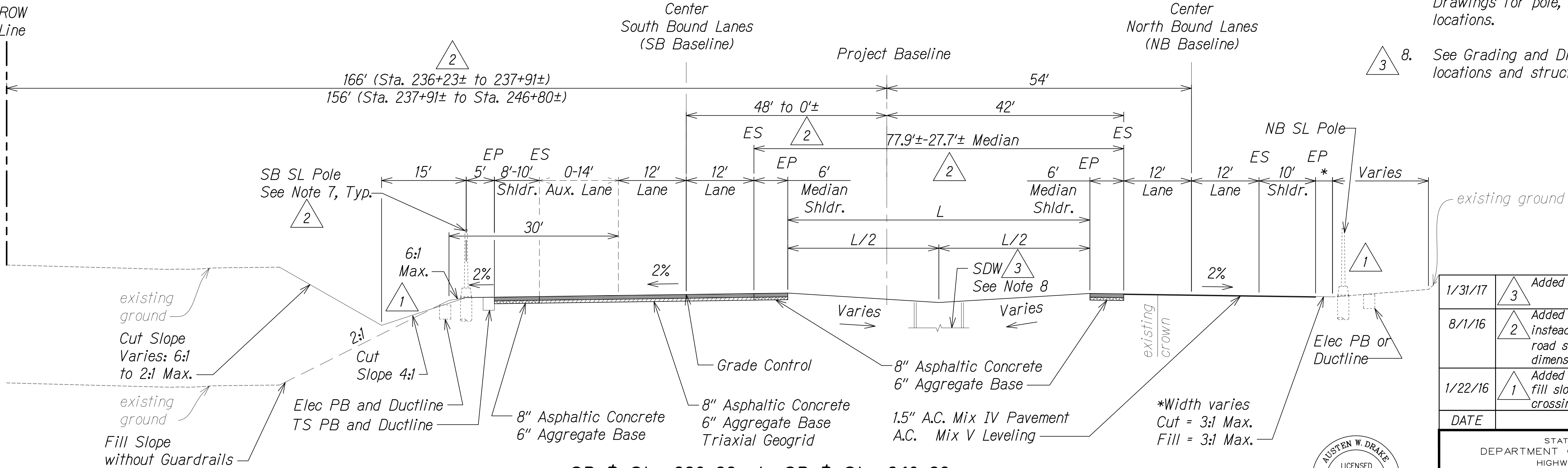
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 31 | 528 |

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- See Electrical and Traffic Signal Drawings for pole, ductline and pullbox locations.
- See Grading and Drainage Plans for exact locations and structure/grate type

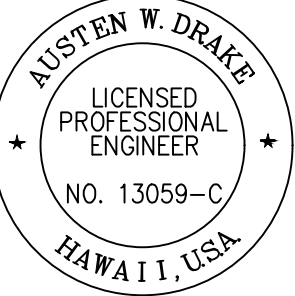


SB # Sta. 234+06± to SB # Sta. 236+23± (Keahole Airport Intersection)
NOT TO SCALE



SB # Sta. 236+23± to SB # Sta. 246+80±
NOT TO SCALE

| DATE | REVISION |
|---------|--|
| 1/31/17 | Added drywell location |
| 8/1/16 | Added elec. & traffic signal note instead of stationing & ref. to side road section; Revised limits & dimensions |
| 1/22/16 | Added elec. poles and boxes; Makai fill slope rev.; Added waterline crossing |



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Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE

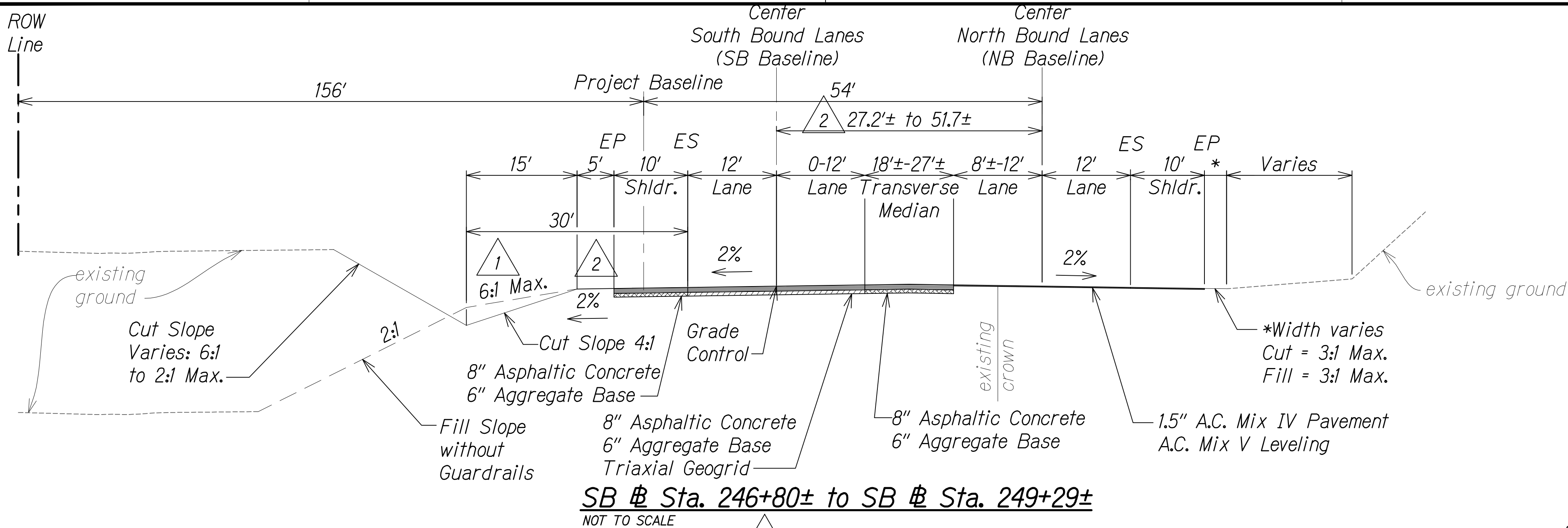
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahoe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

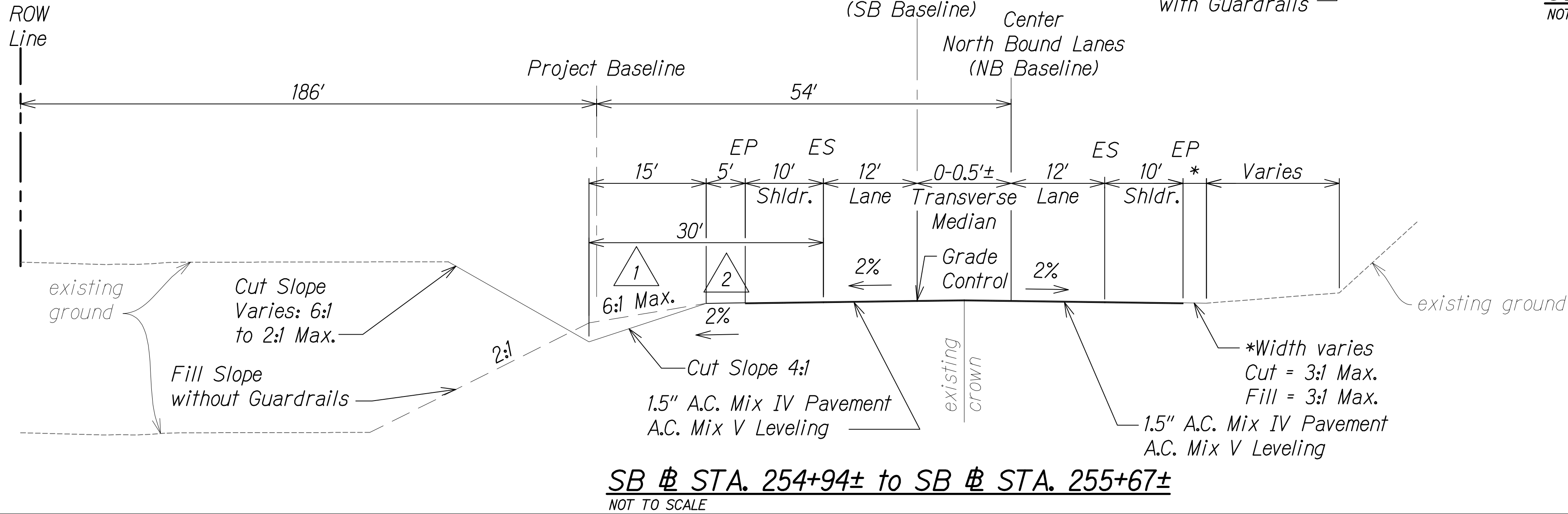
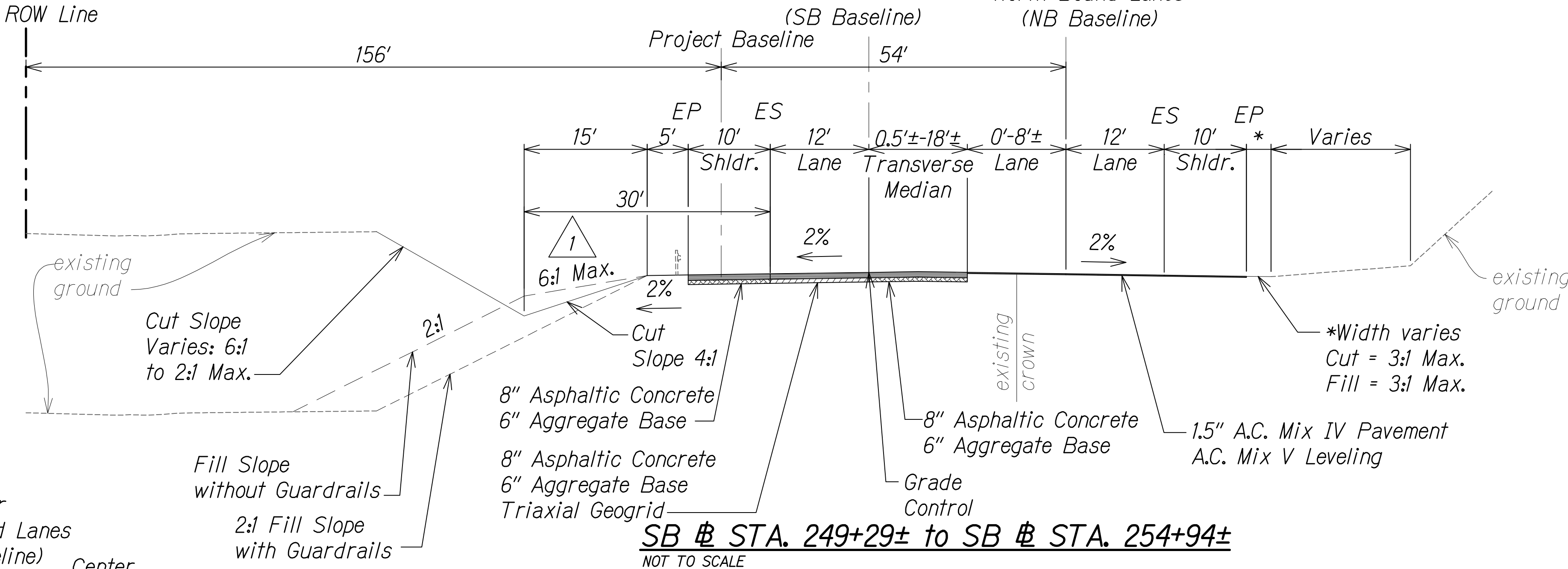
SHEET No. 19 OF 24 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 32 | 528 |

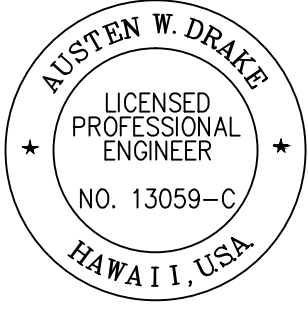


NOTES:

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- For median swale grading:
5% Minimum
16.7% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.



| | | |
|---------|---|--|
| 8/1/16 | 2 | Revised limits & dimensions;
Removed guardrails |
| 1/22/16 | 1 | Makai fill slope rev. |
| DATE | | REVISION |



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WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

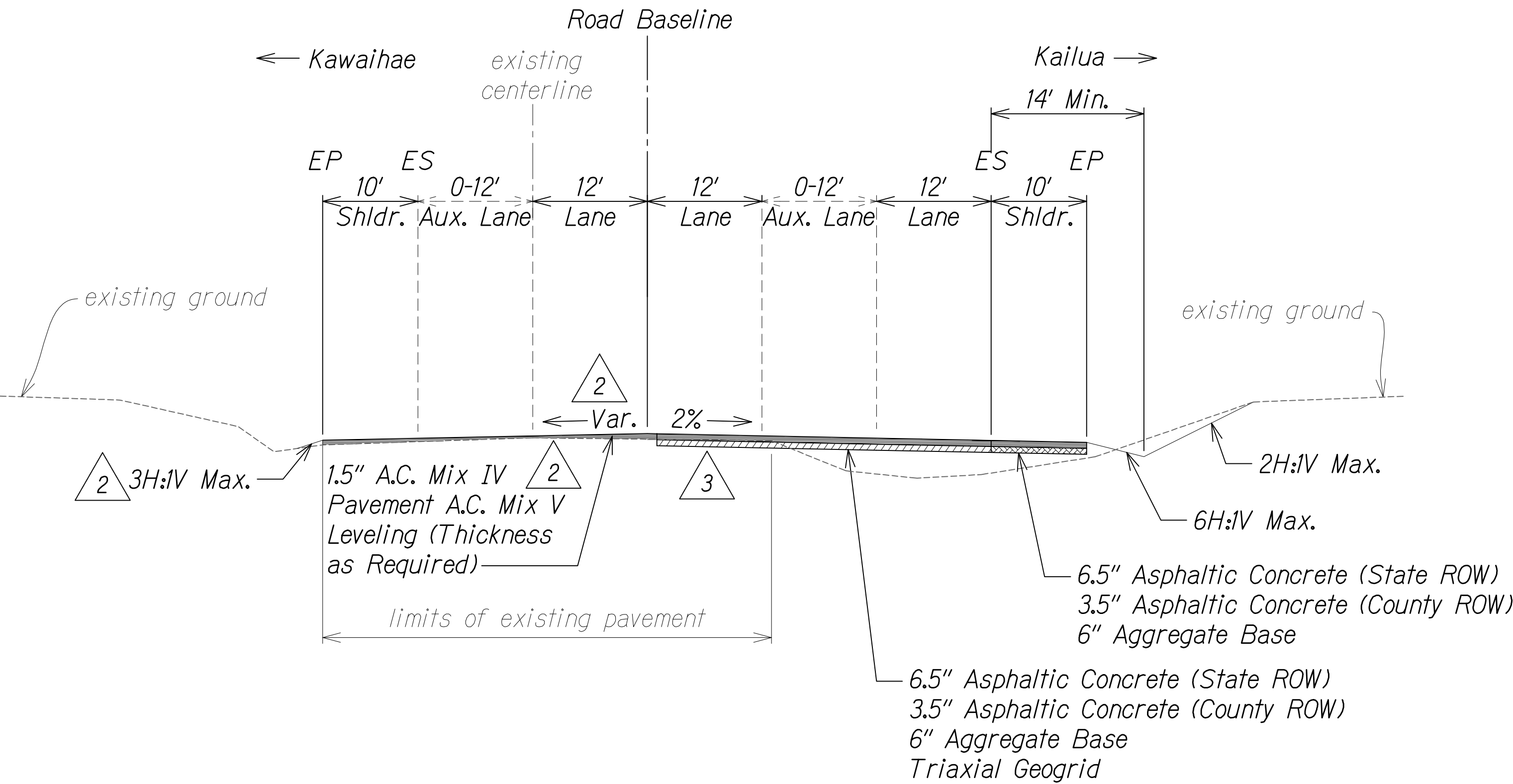
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

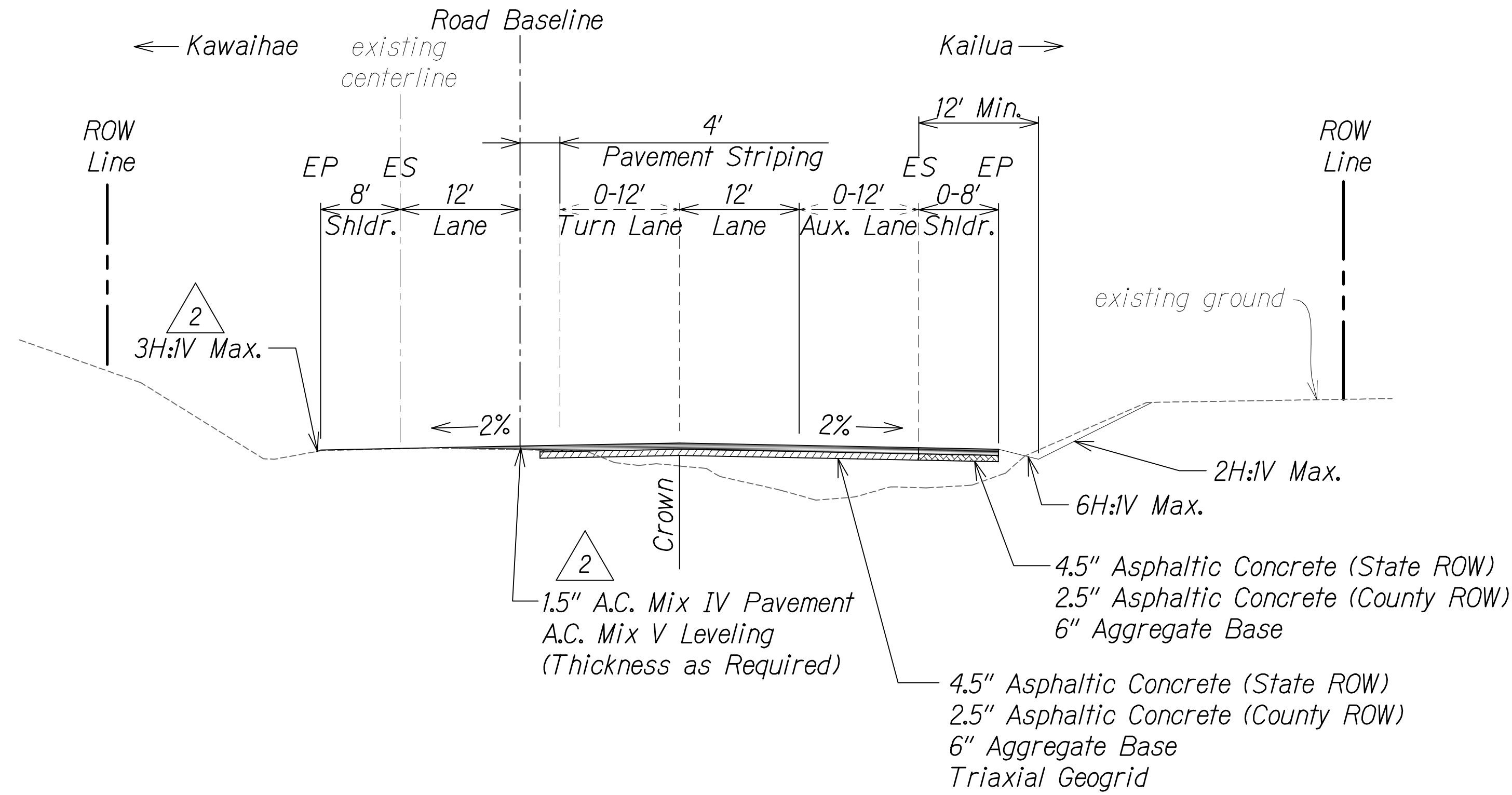
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: AUGUST 2016

SHEET No. 20 OF 24 SHEETS

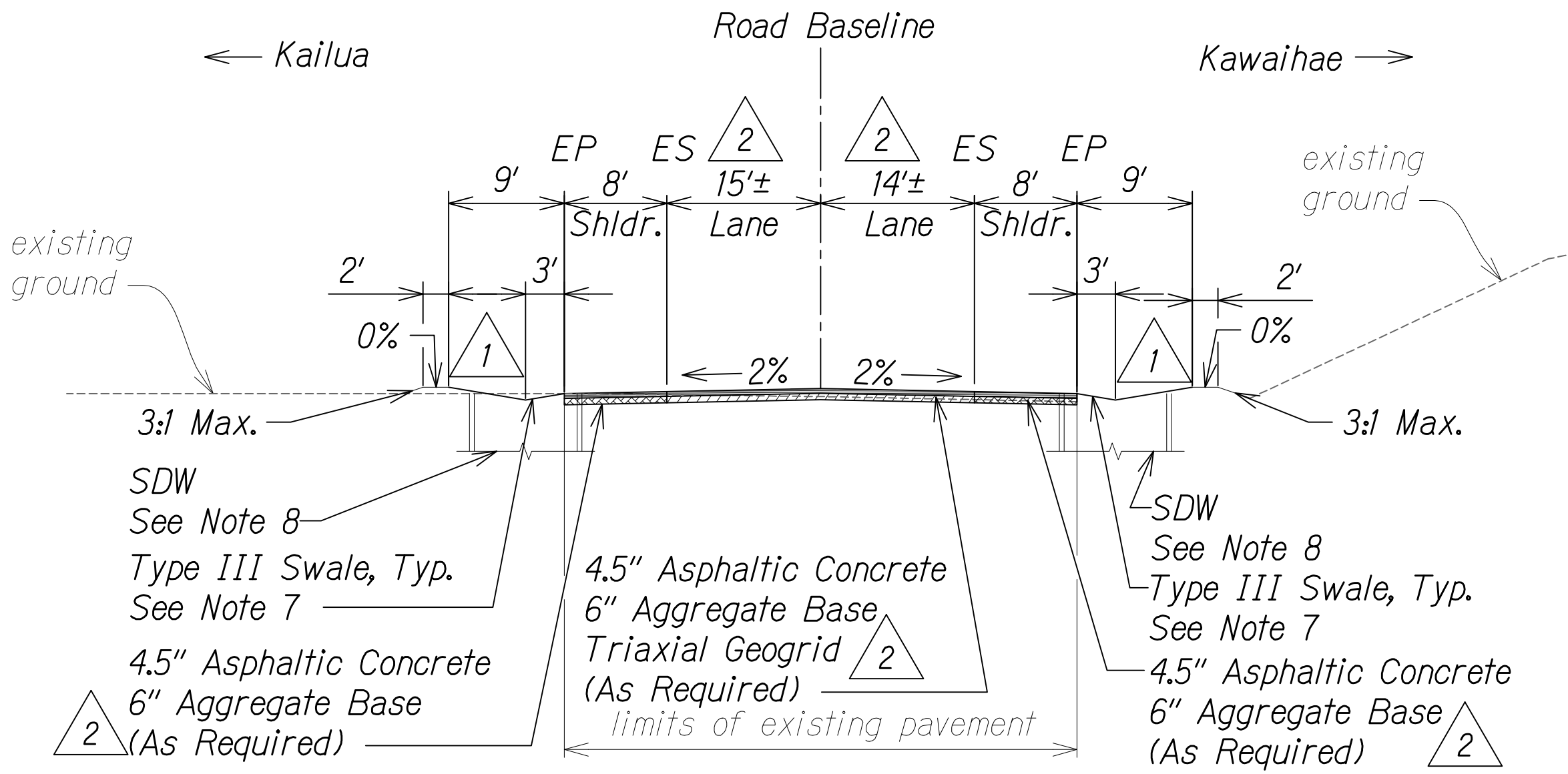
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 33 | 528 |



KEALAKEHE PARKWAY (MAUKA)
NOT TO SCALE



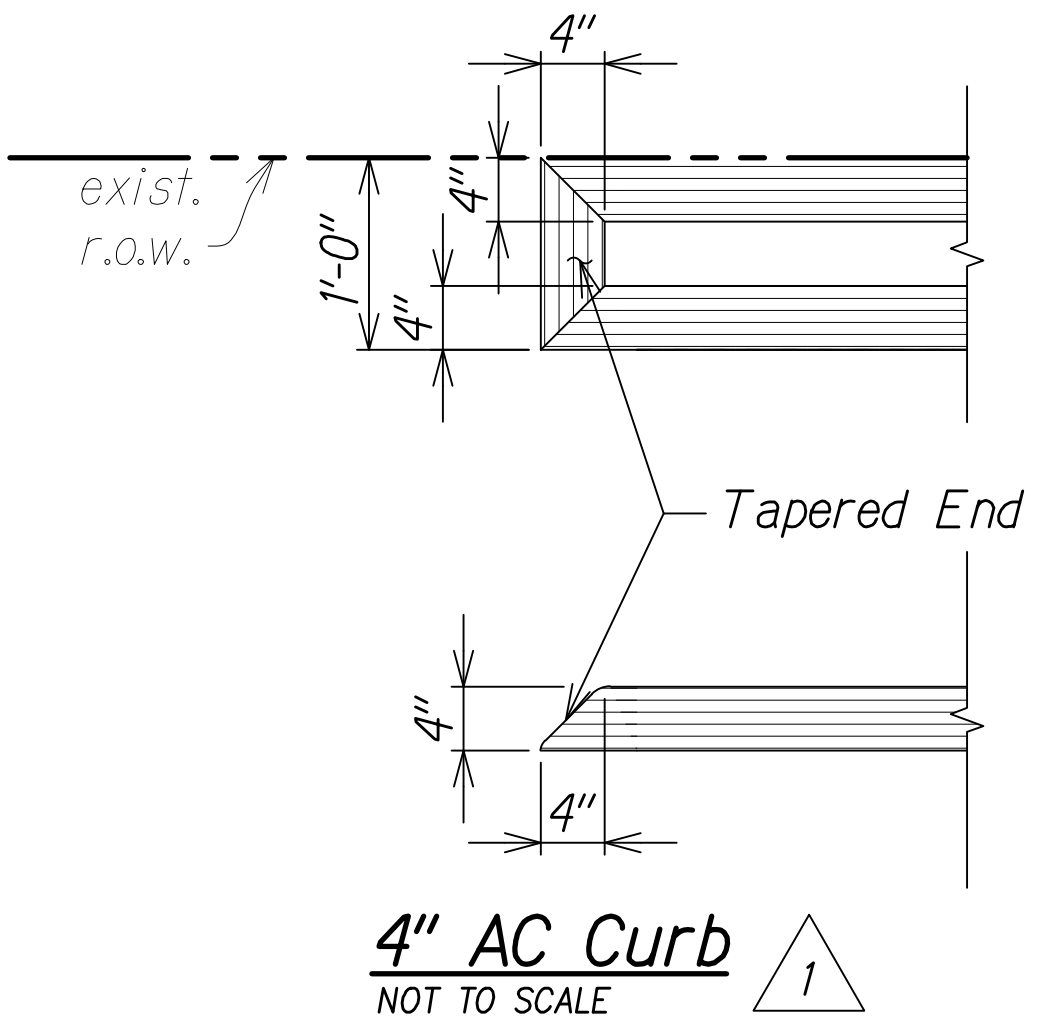
KEALAKEHE PARKWAY (MAKAI)
NOT TO SCALE



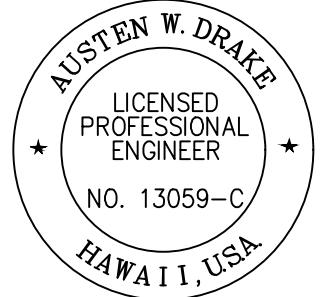
HONOKOHAU STREET
NOT TO SCALE

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading:
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16.67% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
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- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.



| | |
|---------------|-------------------|
| ORIGINAL PLAN | DATE |
| NO. 1 | 1/31/2017 1:13 PM |
| DESIGNED BY | |
| CHECKED BY | |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---------|---|
| 1/31/17 | 3 Revised overlay and full pavement limits |
| 8/1/16 | 2 Revised section callouts |
| 1/22/16 | 1 Added drainage infrastructure per MOA; Added AC curb detail |

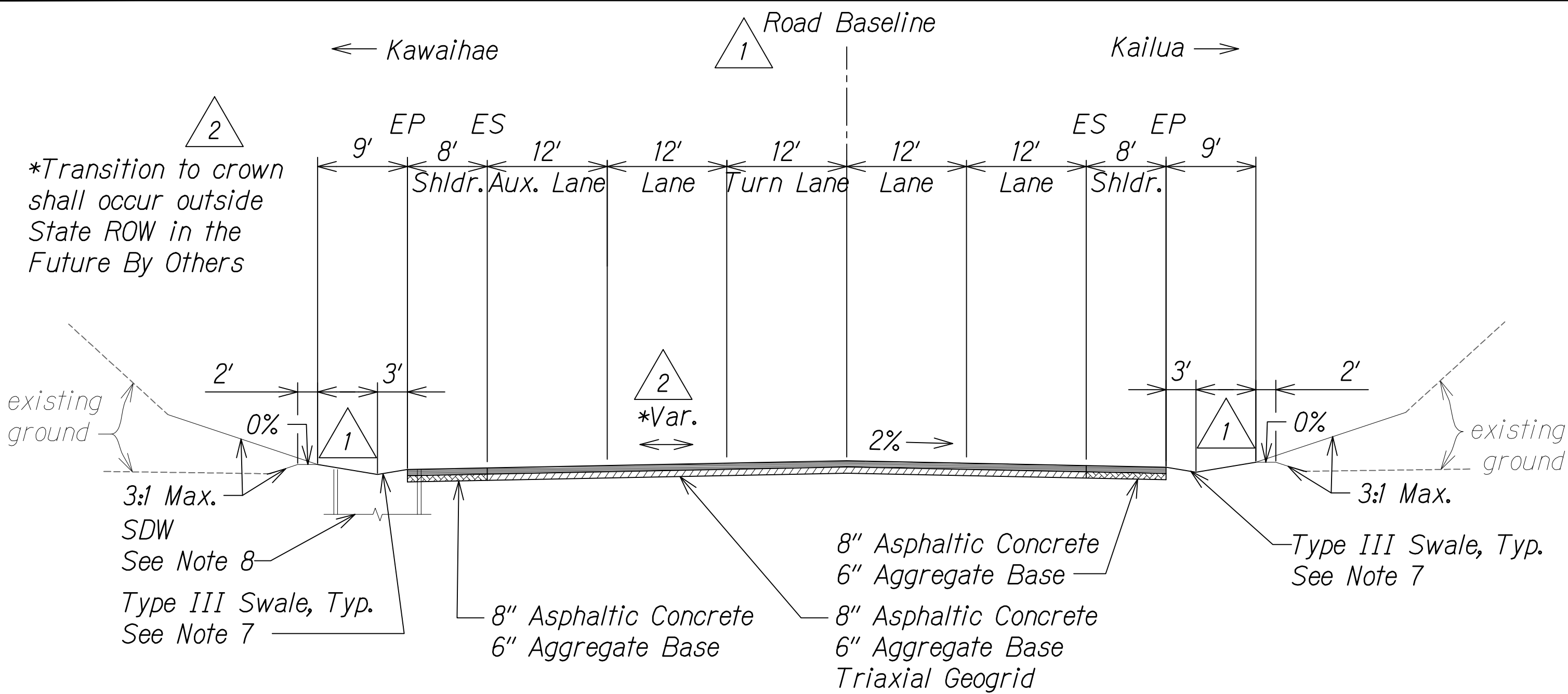
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

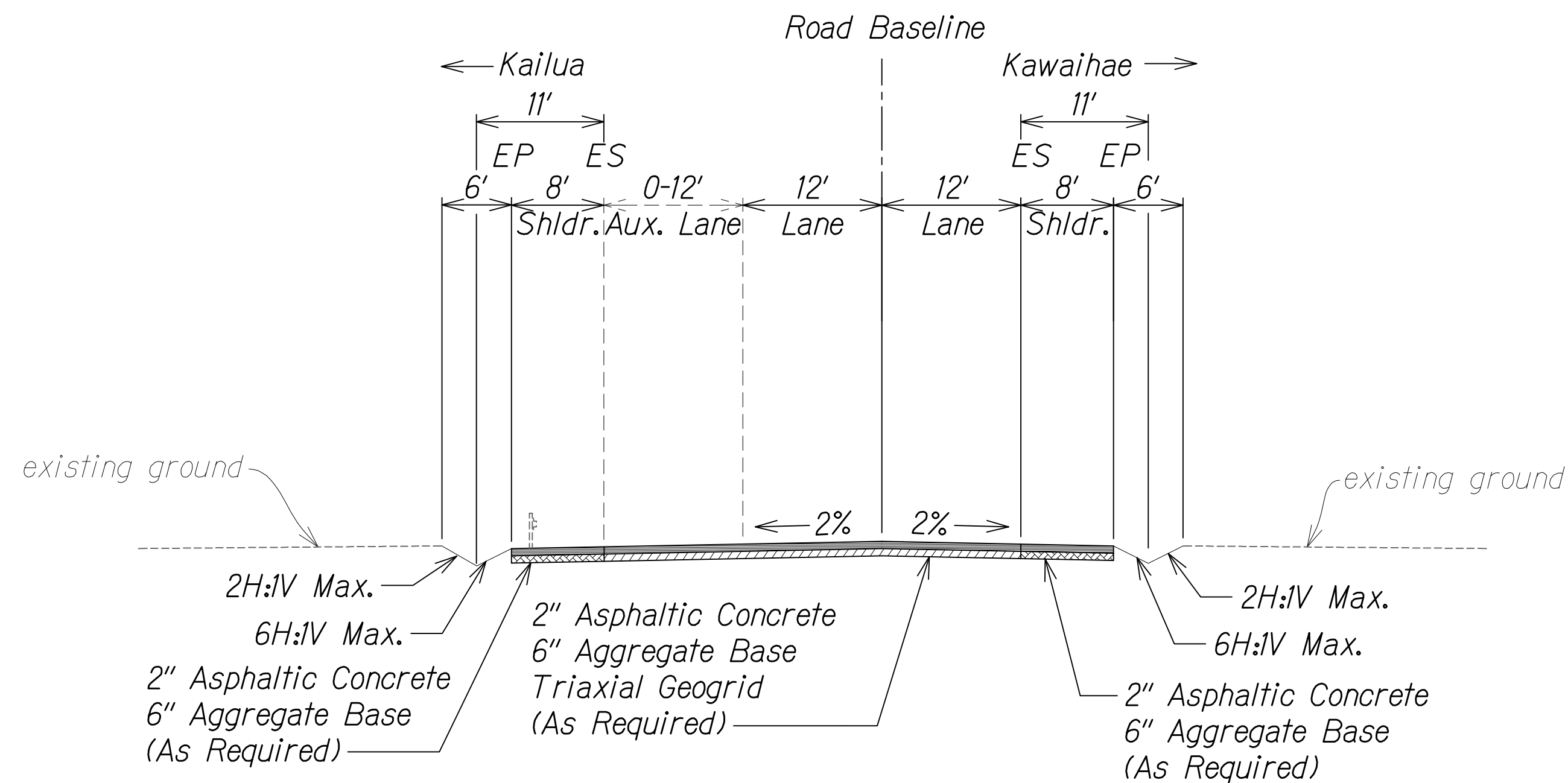
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahake Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 21 OF 24 SHEETS

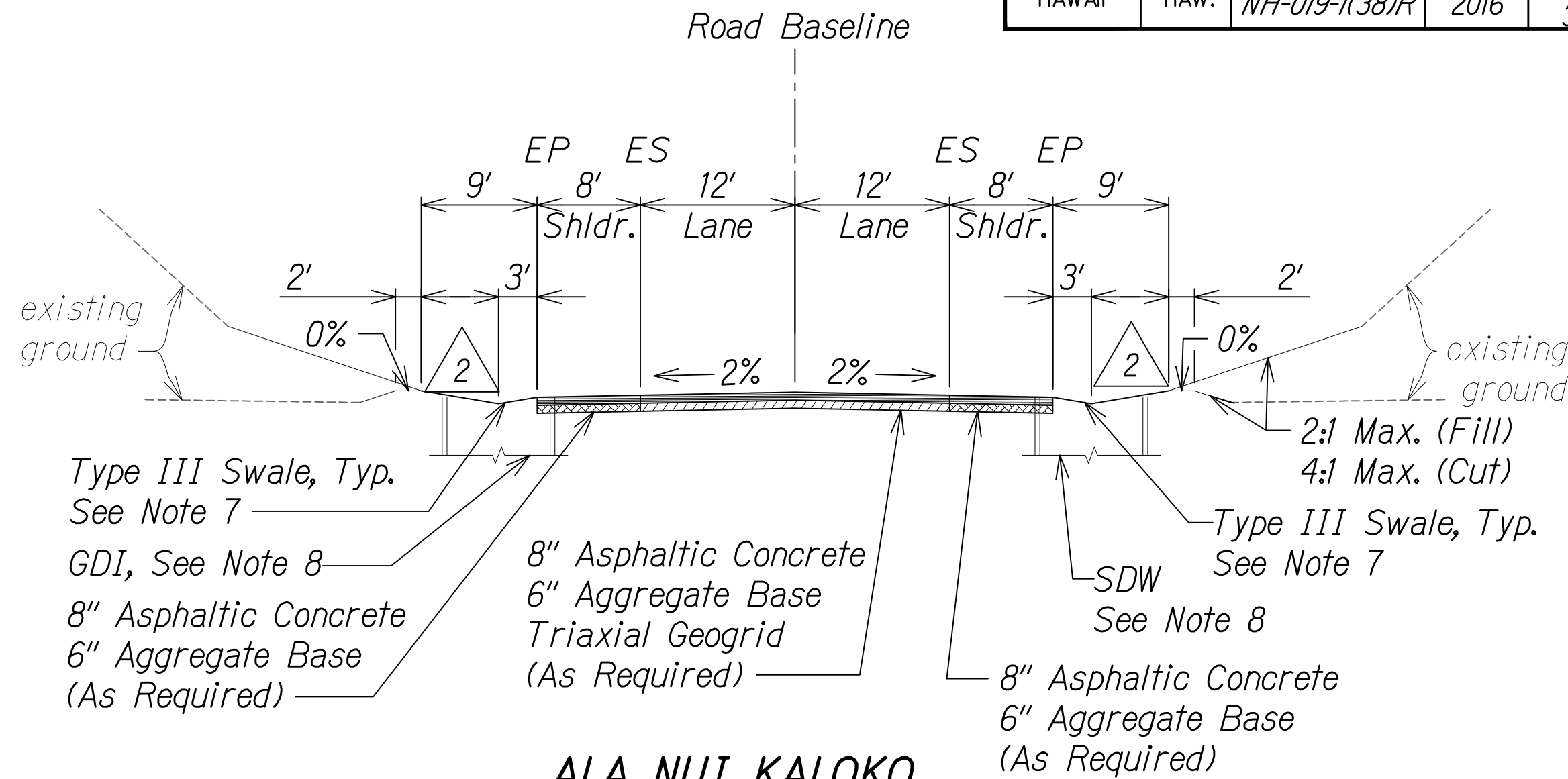
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 34 | 528 |



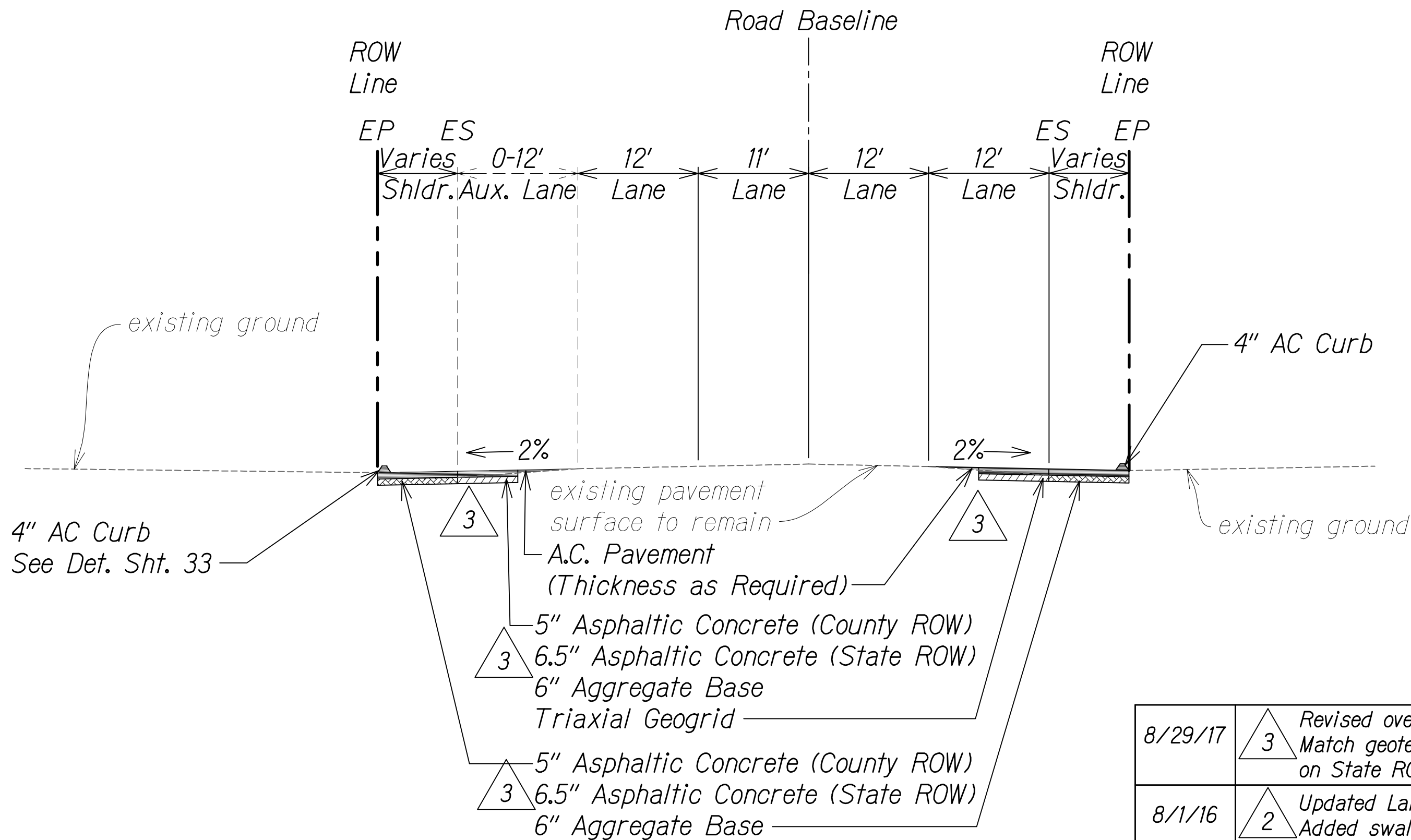
LANIHAU STREET (FUTURE)
NOT TO SCALE



TO KALOKO-HONOKOHAU NATIONAL HISTORICAL PARK
NOT TO SCALE



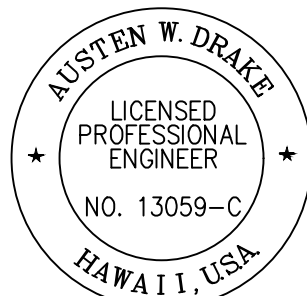
ALA NUI KALOKO
NOT TO SCALE



HINA LANI STREET
NOT TO SCALE

NOTES:

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- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.



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Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---------|--|
| 8/29/17 | 3 Revised overlay & full pav't limits; Match geotechnical recommendation on State ROW AC section |
| 8/1/16 | 2 Updated Lanihau left cross slope; Added swale at Ala Nui Kaloko |
| 1/22/16 | 1 Shift and revision in Lanihau St. (Future) section; Added drainage infrastructure per MOA |

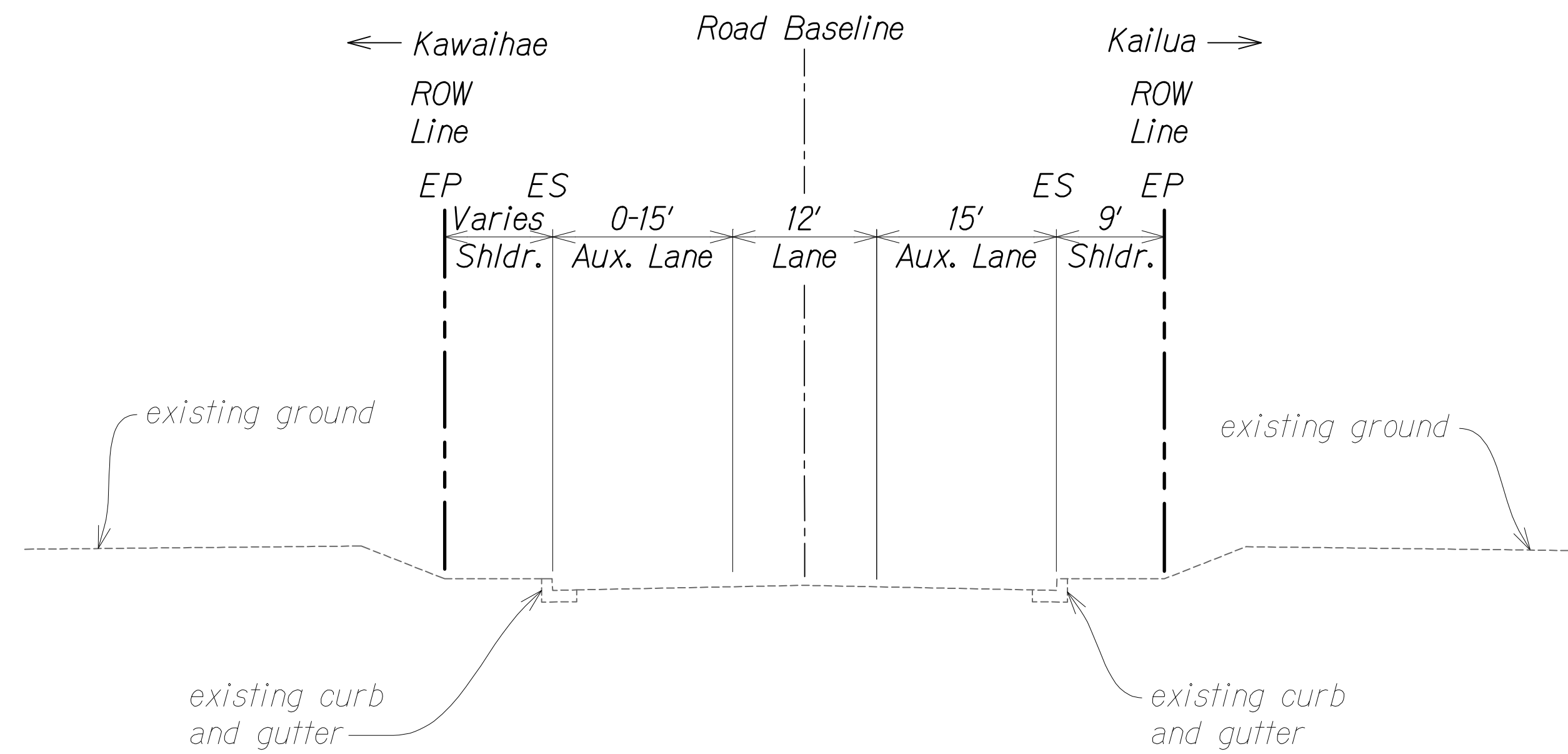
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

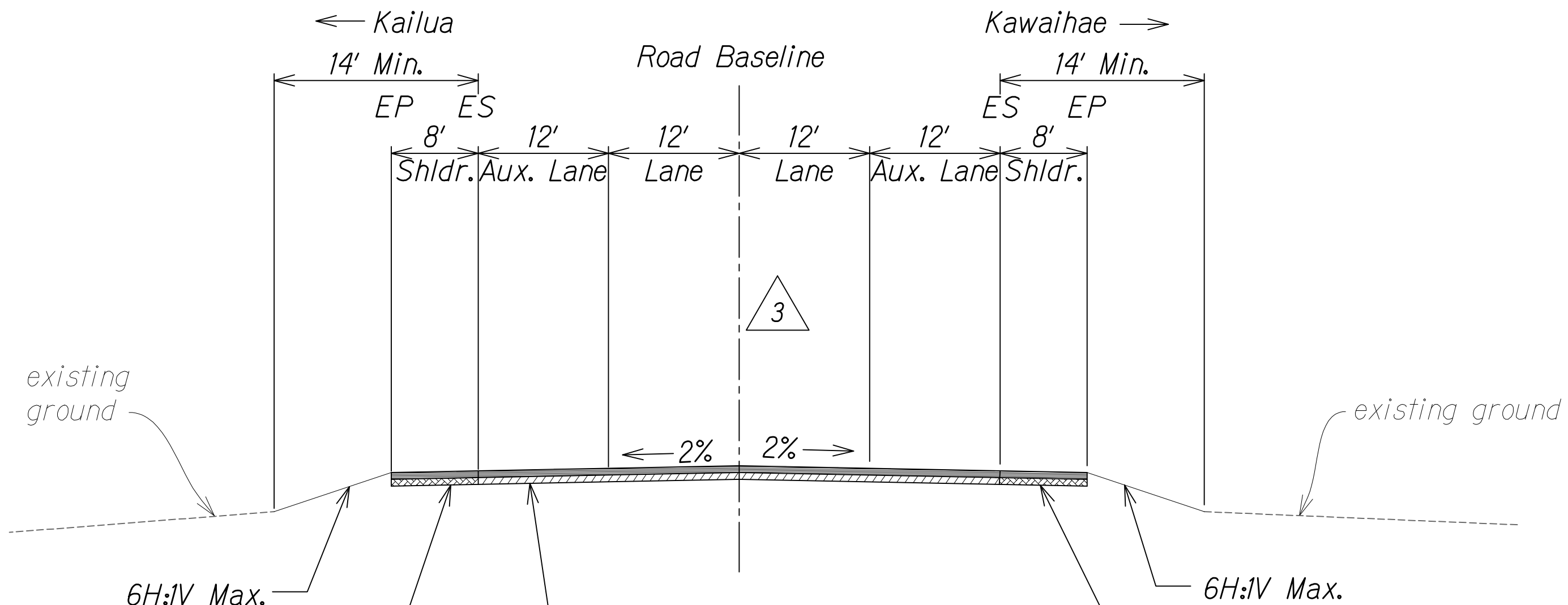
QUEEN KAAHUMANU HIGHWAY WIDENING
Kealahou Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 22 OF 24 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 35 | 528 |



HULIKOA DRIVE - MAUKA (EXISTING)
NOT TO SCALE



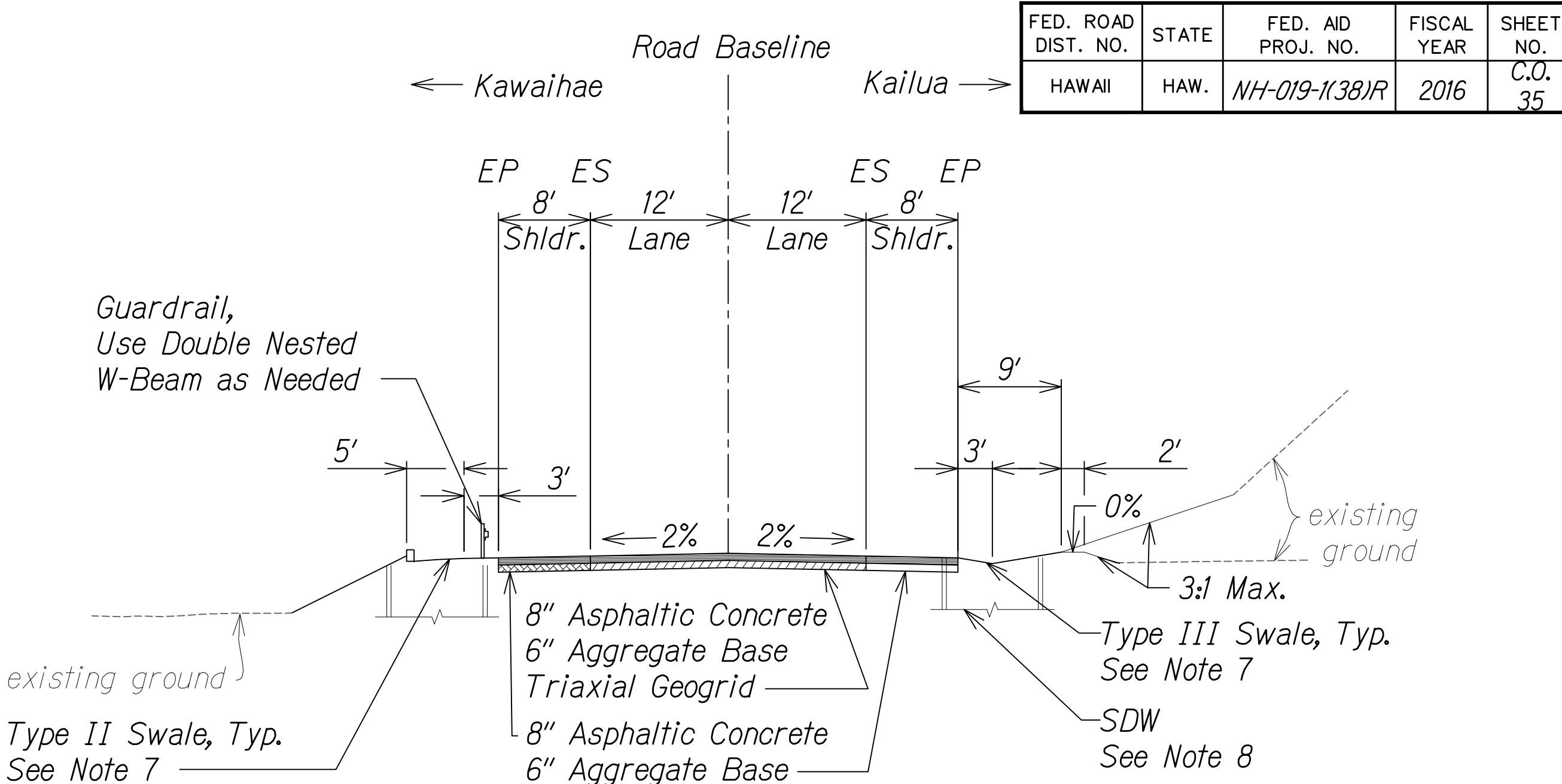
1 8" Asphaltic Concrete
6" Aggregate Base
Triaxial Geogrid 1

6H:1V Max.

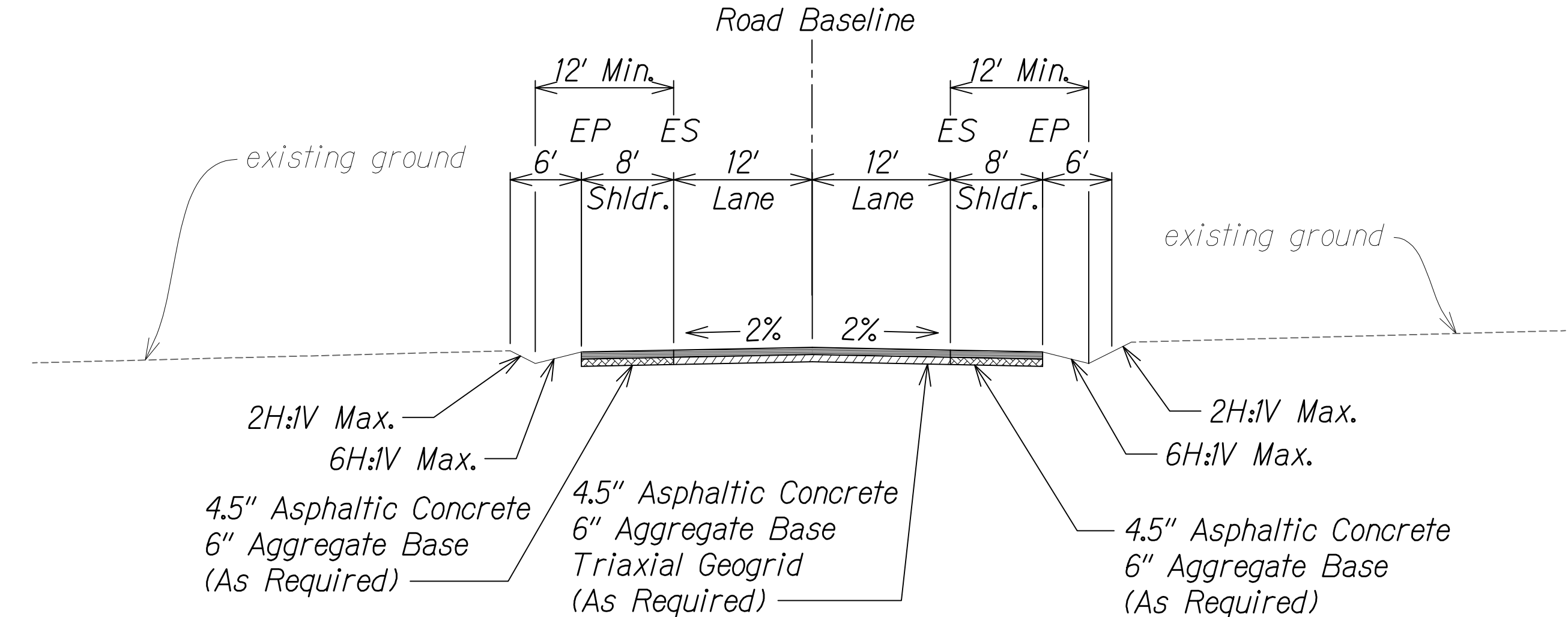
8" Asphaltic Concrete
6" Aggregate Base
Triaxial Geogrid 1

6H:1V Max.

HULIKOA DRIVE - MAKAI
NOT TO SCALE



NORTH ACCESS ROAD (FUTURE)
NOT TO SCALE

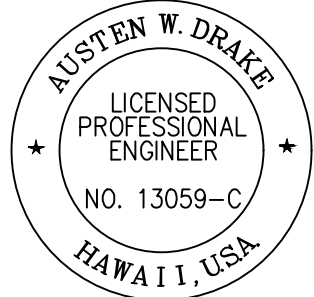


OTEC ROAD - MAKAI (EXISTING)
NOT TO SCALE

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
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16.67% Maximum
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- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.
- For Swale section, see Sht. 13S-1.
- See Grading and Drainage Plans for exact locations and structure/grate types.

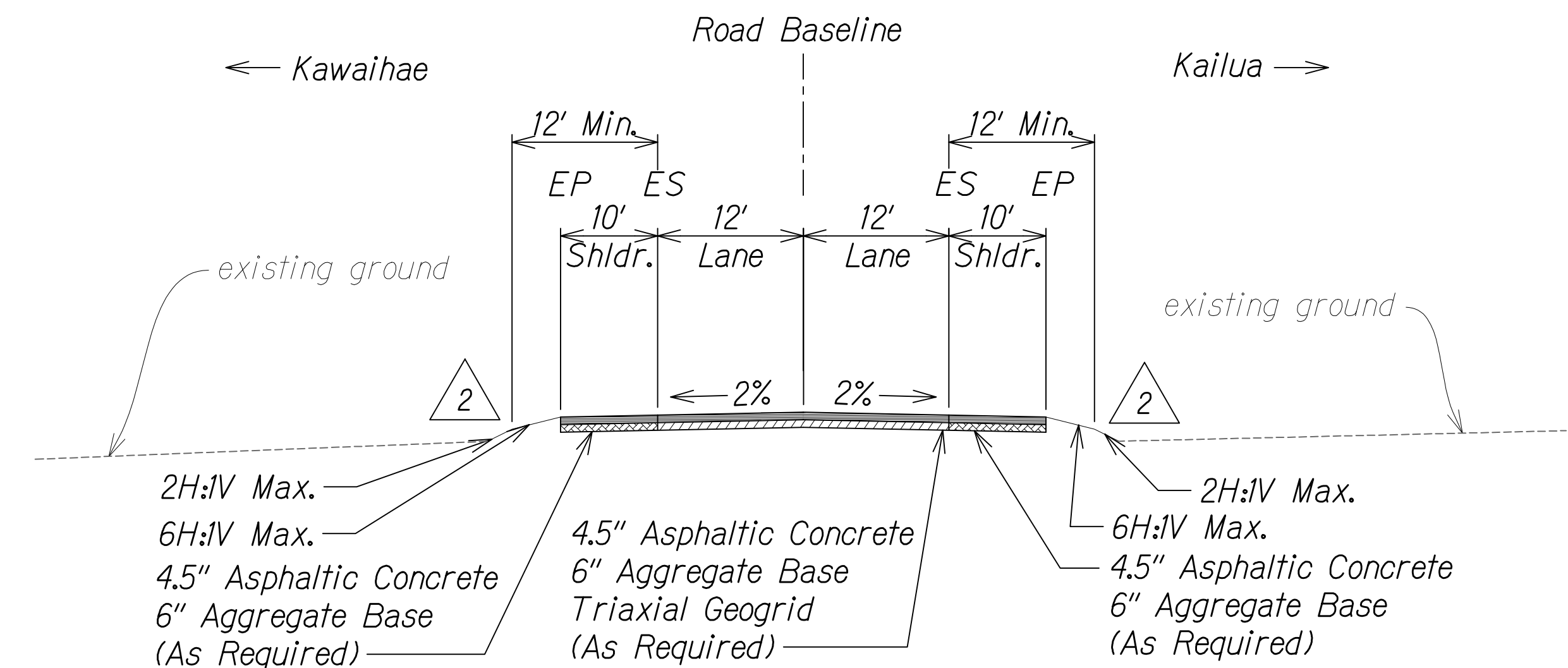
| | | |
|----------|----------|---|
| 11/13/17 | 4 | Added North Access Road section |
| 2/20/17 | 3 | Shifted Hulikoa Drive - Makai baseline location to match exist. |
| 1/22/16 | 1 | Revised pavement section for Hulikoa Drive - Makai; Removed Kohanaiki Dwy section |
| DATE | REVISION | |



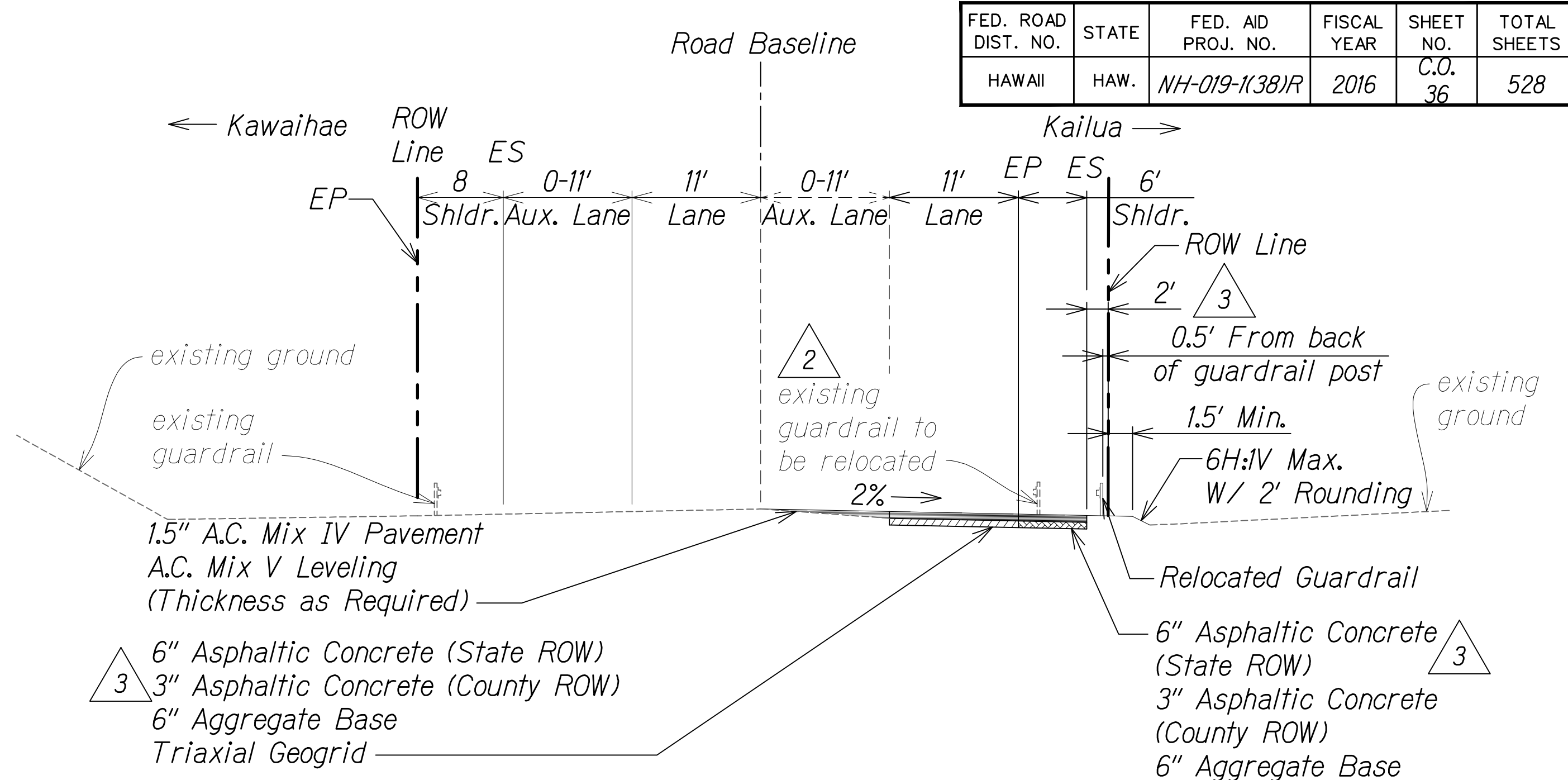
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE
OF THE LICENSE

| | |
|--|---------------------|
| STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION | |
| ROADWAY TYPICAL SECTIONS | |
| QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R | |
| Scale: AS NOTED | Date: DECEMBER 2016 |
| SHEET No. 23 OF 24 SHEETS | |

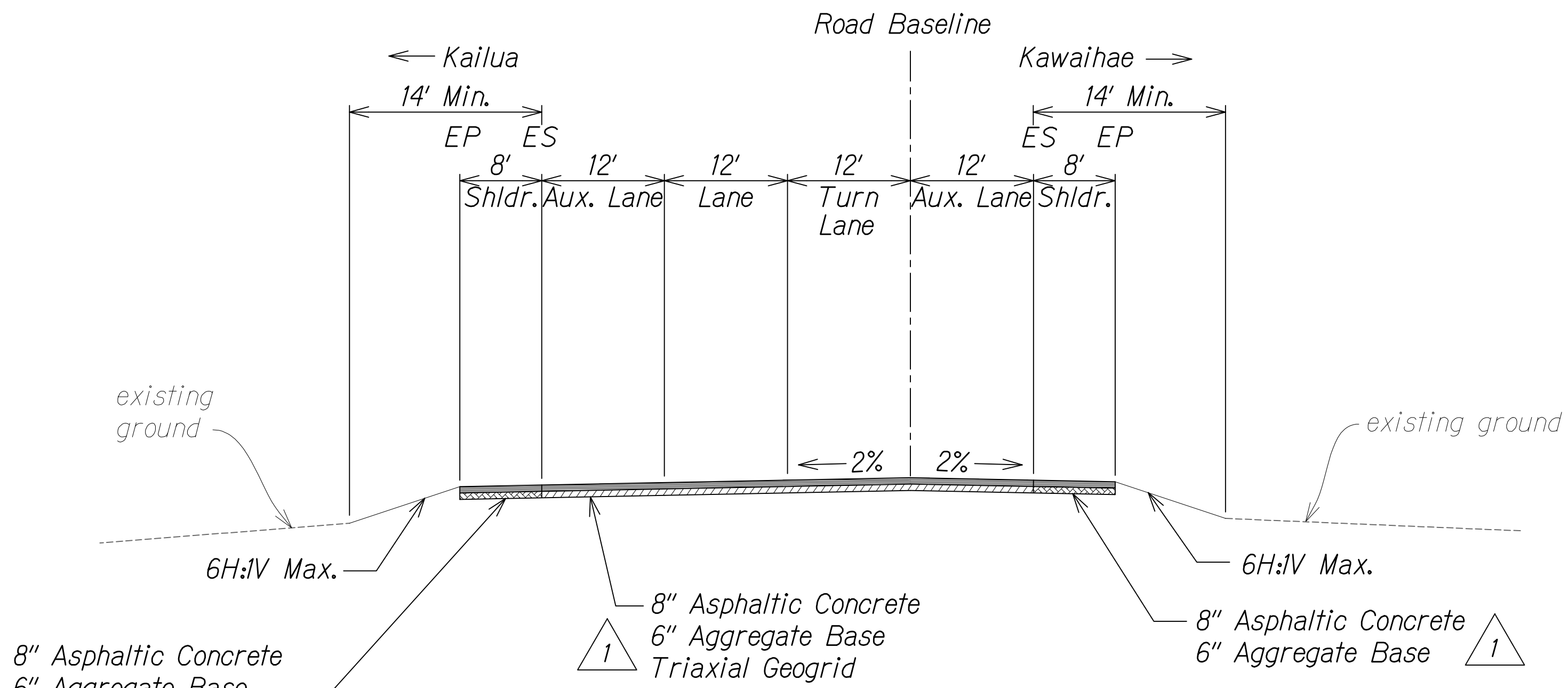
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | NH-019-1(38)R | 2016 | C.O. 36 | 528 |



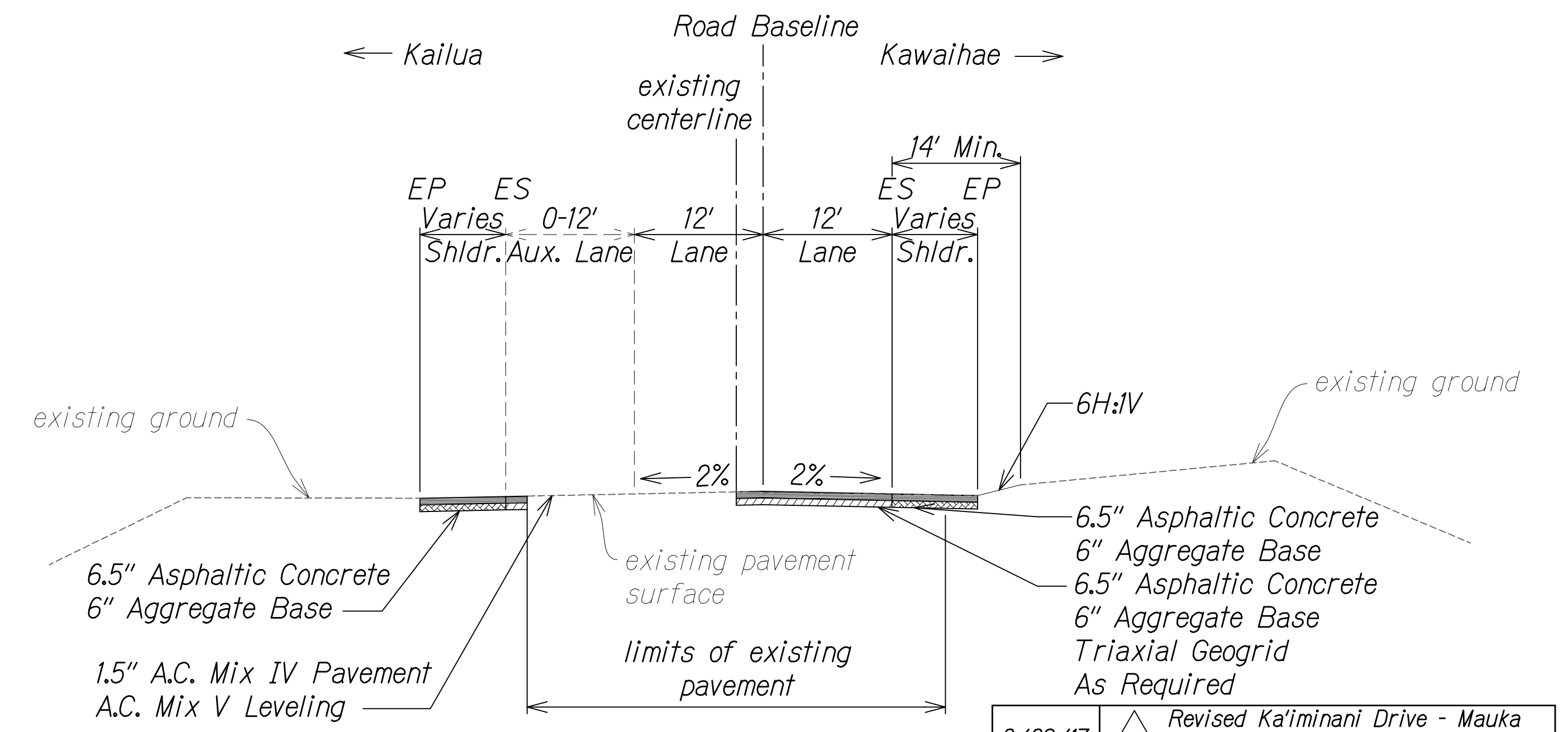
OTEC ROAD - MAUKA (FUTURE)
NOT TO SCALE



KA'IMINANI DRIVE - MAUKA (EXISTING)
NOT TO SCALE



KA'IMINANI DRIVE - MAKAI (FUTURE)
NOT TO SCALE

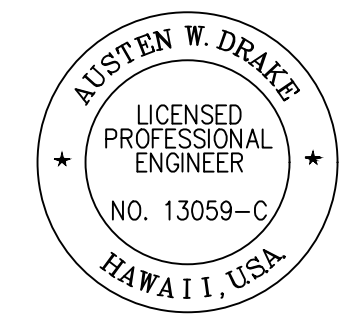


KEAHOLE AIRPORT ROAD (EXISTING)
NOT TO SCALE

NOTES:

- As directed by HDOT, correct distressed areas with 9.5" Asphaltic Concrete and 6" Aggregate Base over properly repaired subgrade.
- For median swale grading: 5% Minimum 16.67% Maximum
- For median unpaved sections use 6" minus backfill material (unless otherwise indicated on landscape plans).
- All Stations referred to the South Bound Baseline.
- Refer to the Baseline Data plans for the South Bound alignment information.
- Contractor to submit Reconstruction Pavement Plans for Engineer's approval prior to start of work.

| | |
|---------------|--------------------|
| ORIGINAL PLAN | DATE |
| NO. 1 | 8/29/2017 11:42 AM |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
Austen W. Drake
SIGNATURE
APRIL 30, 2018
EXPIRATION DATE OF THE LICENSE

| DATE | REVISION |
|---------|--|
| 8/29/17 | 3 Revised Ka'imani Drive - Mauka Rt. section; Match geotechnical recommendations on AC section |
| 8/1/16 | 2 Revised Ka'imani Drive - Mauka section & removed OTEC swale |
| 1/22/16 | 1 Revised pavement section for Ka'imani Drive - Makai |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY TYPICAL SECTIONS

QUEEN KAAHUMANU HIGHWAY WIDENING
Kealakehe Pkwy. To Keahole Airport Rd.(Ph. 2)
Federal Aid Project No. NH-019-1(38)R
Scale: AS NOTED Date: DECEMBER 2016

SHEET No. 24 OF 24 SHEETS