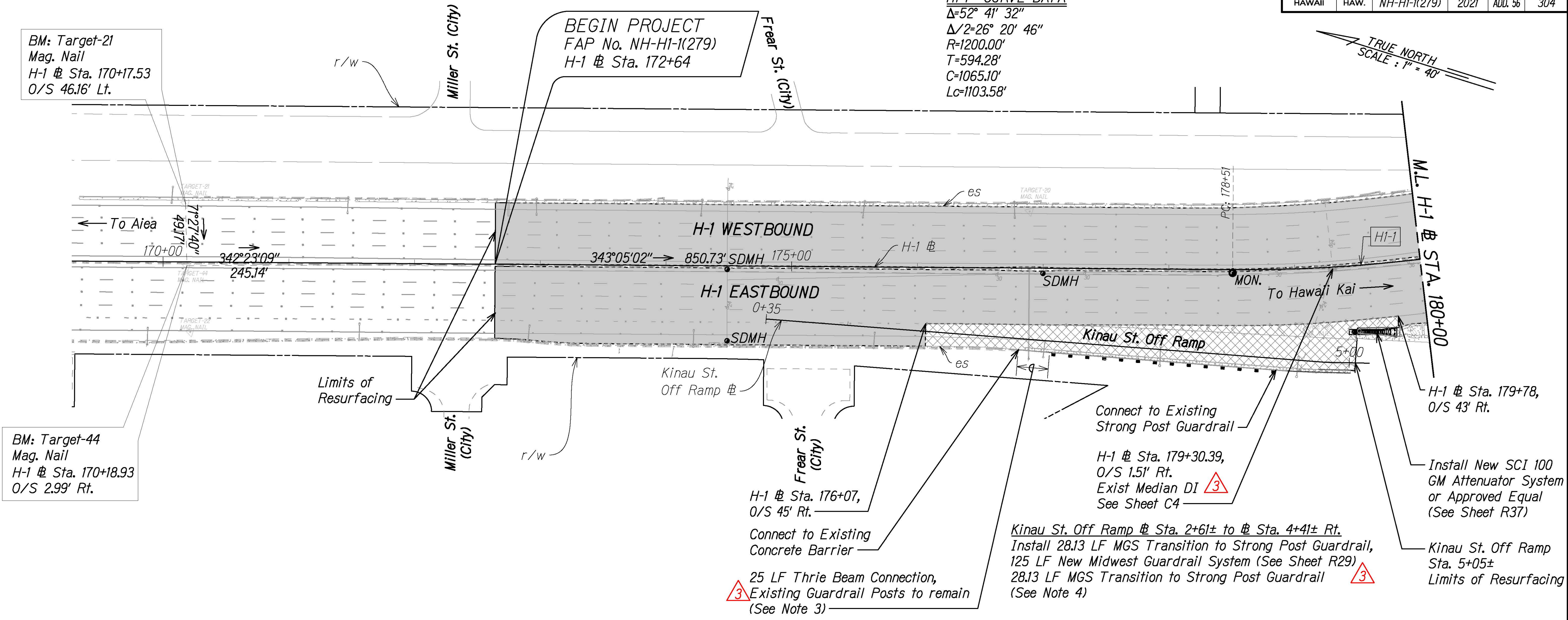
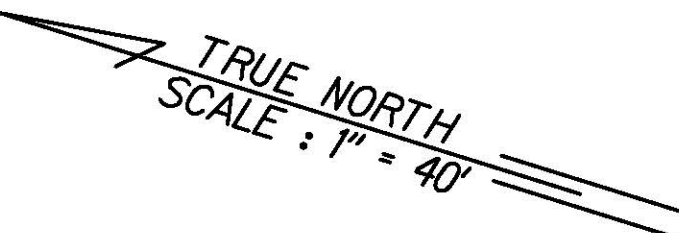
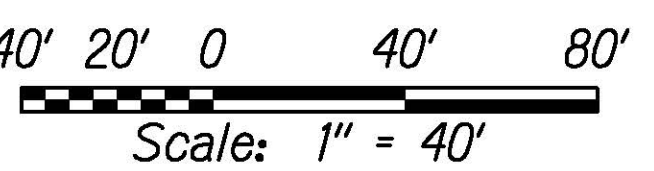


| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 56   | 304          |

H1-1 CURVE DATA  
Δ=52° 41' 32"  
Δ/2=26° 20' 46"  
R=1200.00'  
T=594.28'  
C=1065.10'  
Lc=1103.58'



GRAPHIC SCALE:

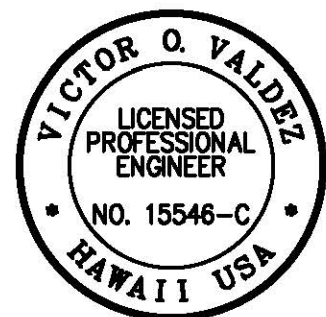


LEGEND:

- Resurfacing Limits:
  - 8" Cold Plane
  - 2" SMA
  - 2" HMA (Mix IV)
  - 4" HMA Conc. Base
- Resurfacing Limits:
  - 2" Cold Plane
  - 2" PMA
- Bench Mark

NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A. 3
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION  
SIGNATURE: [Signature] 04/30/22  
EXPIRATION DATE OF THE LICENSE

|                                                                      |                                                    |
|----------------------------------------------------------------------|----------------------------------------------------|
| 7/9/21                                                               | 3 Revised Guardrails, Added Exist. Median DI label |
| DATE                                                                 | REVISION                                           |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                    |
| ROADWAY PLAN                                                         |                                                    |
| INTERSTATE ROUTE H-1 RESURFACING                                     |                                                    |
| Miller Pedestrian Overpass to Kapiolani Interchange                  |                                                    |
| Federal-Aid Project No. NH-HI-1(279)                                 |                                                    |
| Scale: 1" = 40'                                                      | Date: August 2021                                  |
| SHEET No. R1 OF 41 SHEETS                                            |                                                    |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 57   | 304          |

H-1 @ Sta. 181+28 to @ Sta. 182+99 Lt.  
Install 28.13 LF MGS Transition to Strong Post Guardrail,  
48 LF New Midwest Guardrail System (See Sheet R29),  
50 LF New Midwest Guardrail System with Rubrails  
(See Sheet R29A)  
9 LF New Midwest Guardrail System (See Sheet R29),  
28.13 LF MGS Transition to Strong Post Guardrail  
(See Note 4)

25 LF Thrie Beam Connection,  
Existing Guardrail Posts to remain (See Note 3)  
Connect to Existing Concrete Structure

Vineyard Blvd. Off Ramp @ Sta. 167+50± to @ Sta. 167+89± Lt.  
Install 28.13 LF MGS Transition to Strong Post Guardrail,  
6 LF New Midwest Guardrail System (See Detail Sheet R29),  
6.25 LF Transition Section  
Thrie Beam to Midwest Guardrail (See Sheet R36)  
Connect to New Attenuator  
(See Note 4)

HI-1 CURVE DATA  
Δ=52° 41' 32"  
Δ/2=26° 20' 46"  
R=1200.00'  
T=594.28'  
C=1065.10'  
Lc=1103.58'

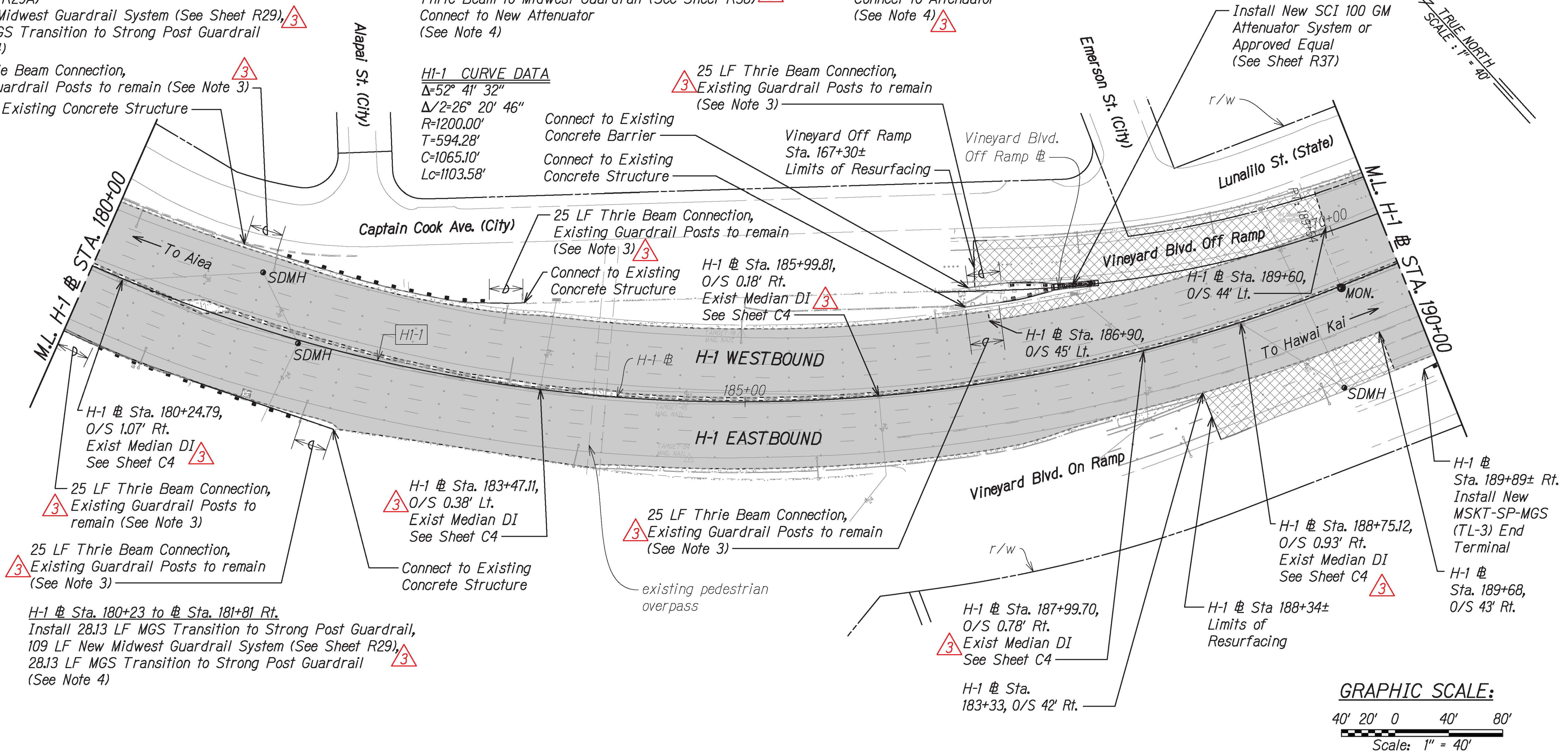
Connect to Existing  
Concrete Barrier  
Connect to Existing  
Concrete Structure

25 LF Thrie Beam Connection,  
Existing Guardrail Posts to remain  
(See Note 3)

Vineyard Off Ramp  
Sta. 167+30±  
Limits of Resurfacing

H-1 @ Sta. 186+99 to @ Sta. 187+44 Lt.  
Install 28.13 LF MGS Transition to Strong Post Guardrail,  
11 LF New Midwest Guardrail System (See Detail Sheet R29)  
6.25 LF Transition Section Thrie Beam to Midwest Guardrail (See Sheet R36)  
Connect to Attenuator  
(See Note 4)

Install New SCI 100 GM  
Attenuator System or  
Approved Equal  
(See Sheet R37)

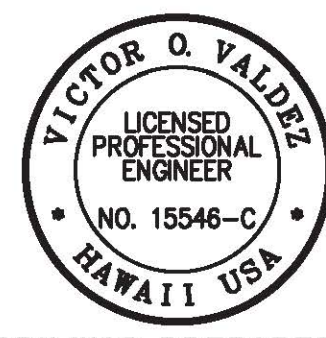


**LEGEND:**

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
2" Cold Plane  
2" PMA
- Bench Mark

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier/Structure, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

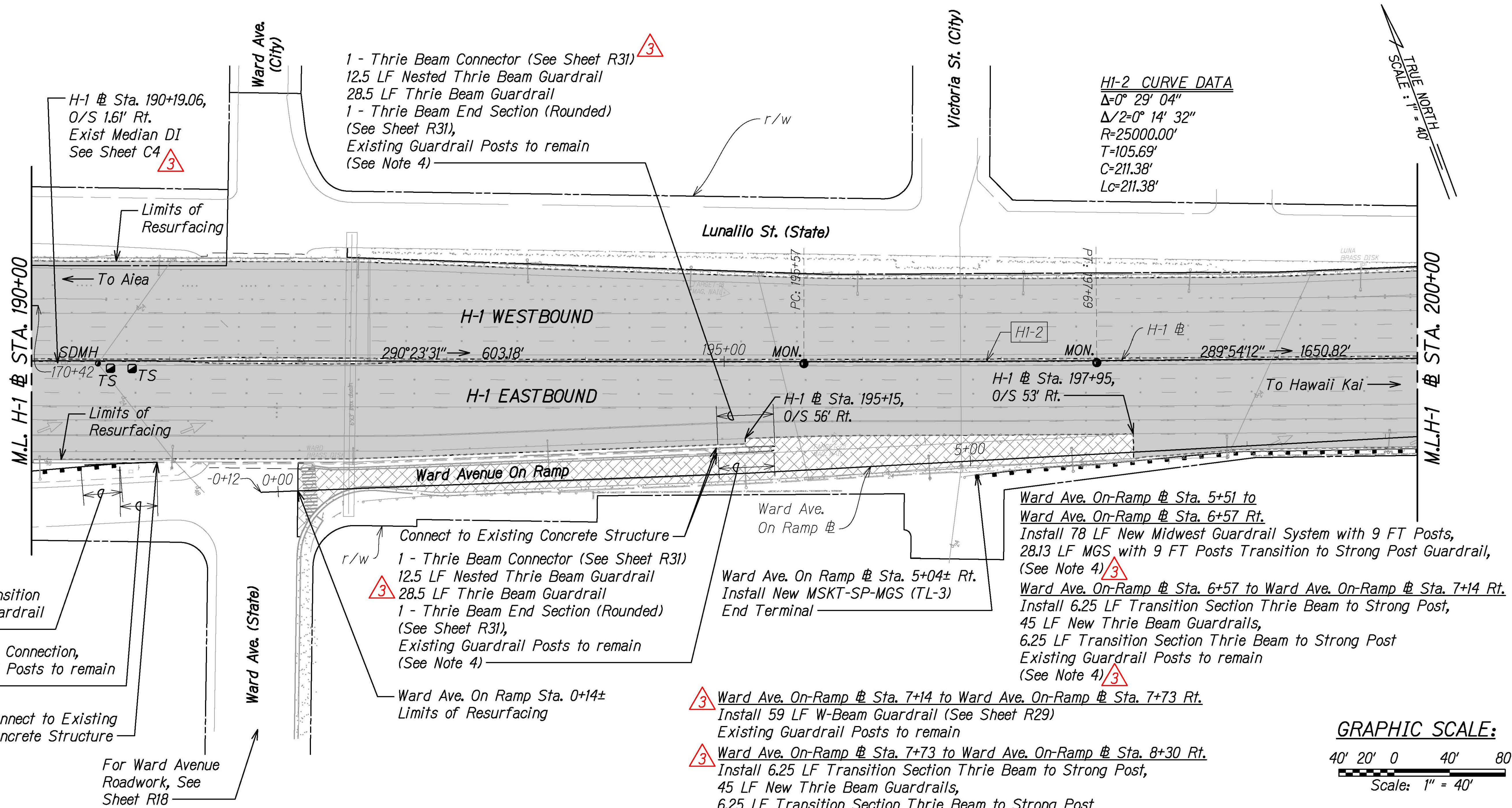


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION  
SIGNATURE  
04/30/22  
EXPIRATION DATE  
OF THE LICENSE

|                                                                      |                                                     |
|----------------------------------------------------------------------|-----------------------------------------------------|
| 7/9/21                                                               | Revised Guardrails,<br>Added Exist. Median DI label |
| DATE                                                                 | REVISION                                            |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                     |
| <b>ROADWAY PLAN</b>                                                  |                                                     |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                                     |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                                     |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                                     |
| Scale: 1" = 40'                                                      | Date: August 2021                                   |
| SHEET No. R2 OF 41 SHEETS                                            |                                                     |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 58   | 304          |



**LEGEND:**

- Resurfacing Limits:
  - 8" Cold Plane
  - 2" SMA
  - 2" HMA (Mix IV)
  - 4" HMA Conc. Base
- Resurfacing Limits:
  - 4" Cold Plane
  - 4" PMA
- Bench Mark

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Structure, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.



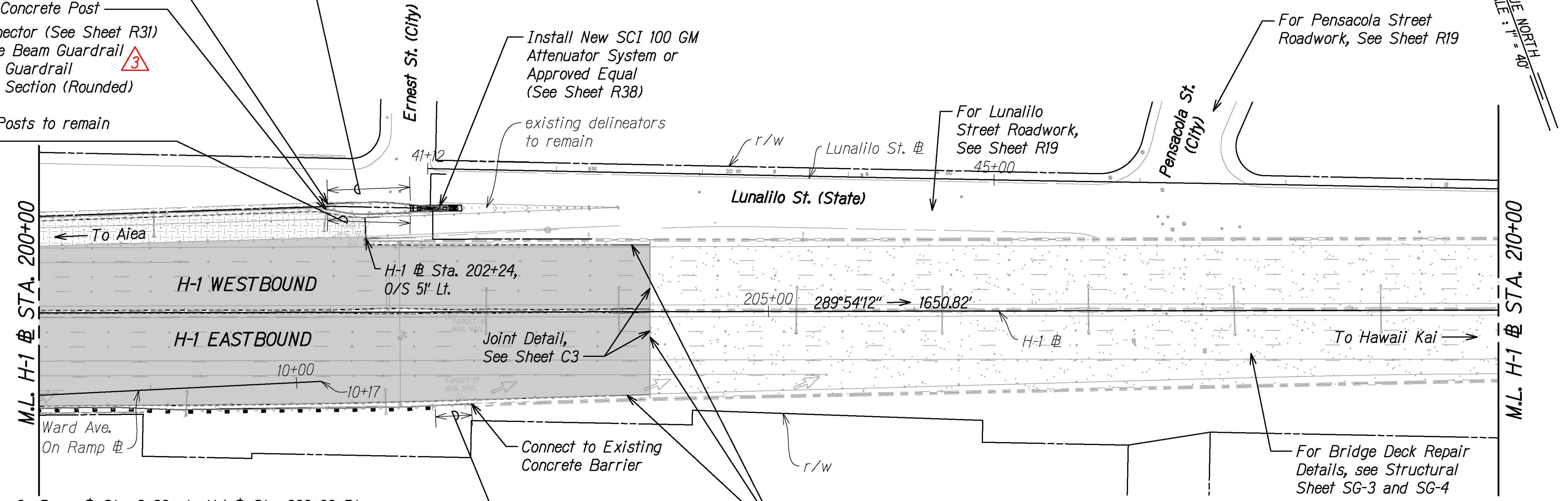
THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION  
SIGNATURE  
04/30/22  
EXPIRATION DATE  
OF THE LICENSE

|                                                                      |                                                                       |
|----------------------------------------------------------------------|-----------------------------------------------------------------------|
| 7/9/21                                                               | Revised Guardrails and Pavement Section, Added Exist. Median DI label |
| DATE                                                                 | REVISION                                                              |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                                       |
| <b>ROADWAY PLAN</b>                                                  |                                                                       |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                                                       |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                                                       |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                                                       |
| Scale: 1" = 40'                                                      | Date: August 2021                                                     |
| SHEET No. R3 OF 41 SHEETS                                            |                                                                       |



1 - Thrie Beam Connector (See Sheet R31)  
12.5 LF Nested Thrie Beam Guardrail 3  
47.5 LF Thrie Beam Guardrail  
1 - Thrie Beam End Section (Rounded) (See Sheet R31),  
Existing Guardrail Posts to remain  
(See Note 4)

Connect to Existing Concrete Barrier  
Connect to Existing Concrete Post  
1 - Thrie Beam Connector (See Sheet R31)  
12.5 LF Nested Thrie Beam Guardrail 3  
47.5 LF Thrie Beam Guardrail  
1 - Thrie Beam End Section (Rounded)  
(See Sheet R31),  
Existing Guardrail Posts to remain  
(See Note 4)



Ward Ave. On-Ramp Sta. 8+30± to H-1 Sta. 202+22 Rt.  
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
158 LF New Midwest Guardrail System with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
(See Note 4) 3  
H-1 Sta. 202+22 to H-1 Sta. 202+71 Rt.  
Replace 50 LF W-Beam Guardrail with Rubrails (See Sheet R29A)  
Existing Guardrail Posts to remain 3  
25 LF Thrie Beam Connection, Existing Guardrail Posts to remain (See Note 3) 3  
Sta. 204+19± Makiki Viaduct Limits of Resurfacing

| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 59   | 304          |

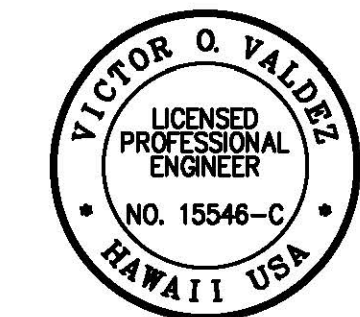
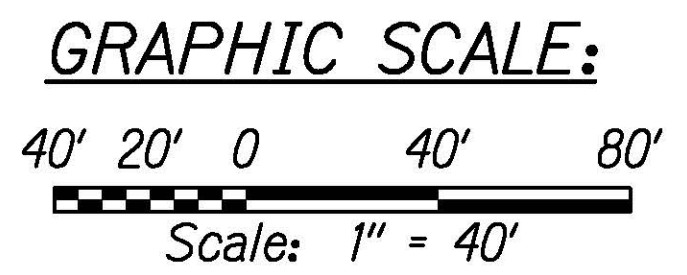
TRUE NORTH  
SCALE: 1" = 40'

**LEGEND:**

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
3.5" Cold Plane  
3.5" PMA
- 3 Bench Mark

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts including downspouts on the Makiki Viaduct within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier/Post, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27A. For Details, See Sheets R28 to R36A. 3
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

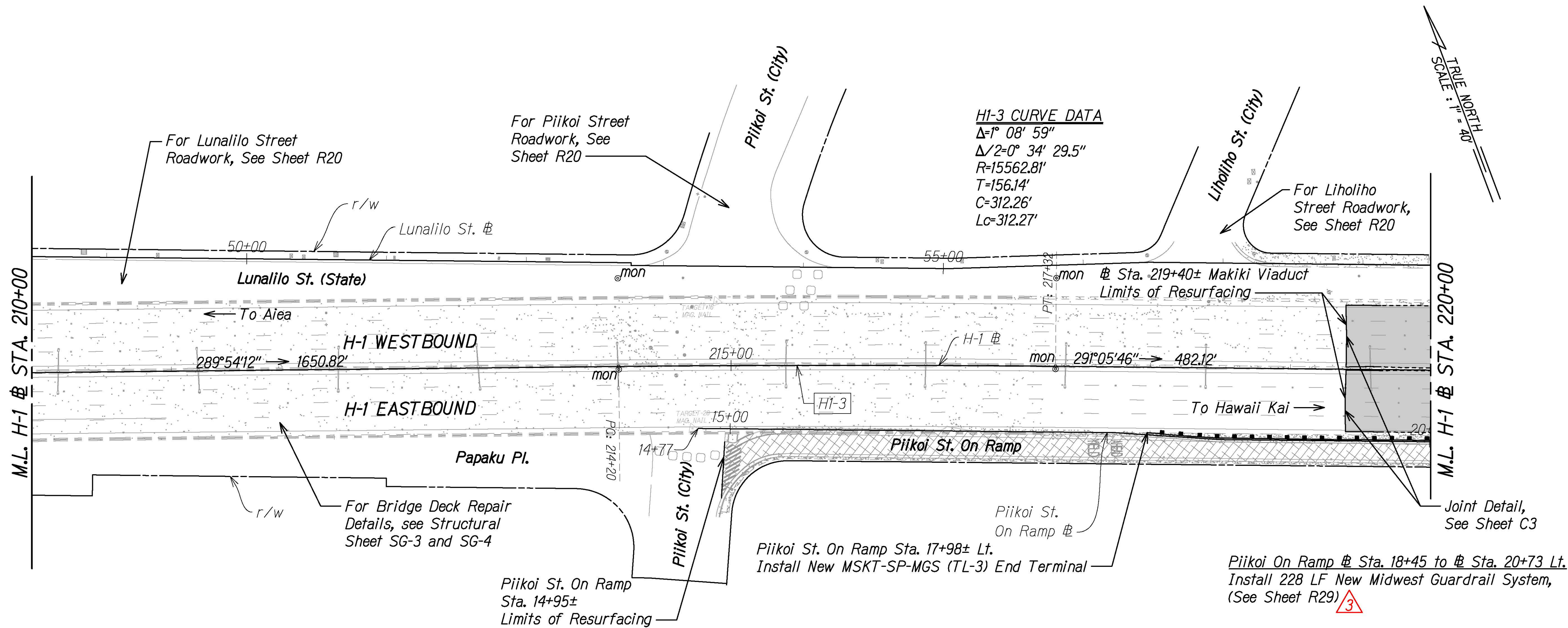


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION  
  
SIGNATURE  
04/30/22  
EXPIRATION DATE  
OF THE LICENSE

|                                                                                                                                 |                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 7/9/21                                                                                                                          | <span style="border: 1px solid red; padding: 0 2px;">3</span> Revised Guardrails and Pavement Section |
| DATE                                                                                                                            | REVISION                                                                                              |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                                                                                                       |
| <b>ROADWAY PLAN</b>                                                                                                             |                                                                                                       |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |                                                                                                       |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021                                                                                     |
| SHEET No. R4 OF 41 SHEETS                                                                                                       |                                                                                                       |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 60   | 304          |



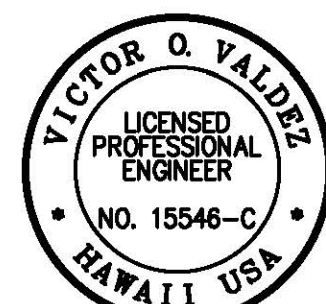
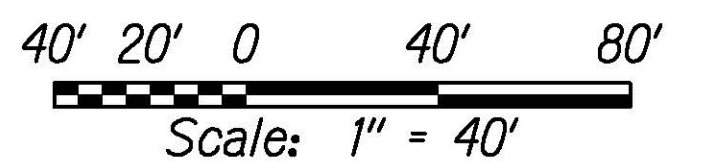
**LEGEND:**

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
4" Cold Plane  
4" PMA
- Bench Mark
- Street Monument

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts including downspouts on the Makiki Viaduct within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

**GRAPHIC SCALE:**



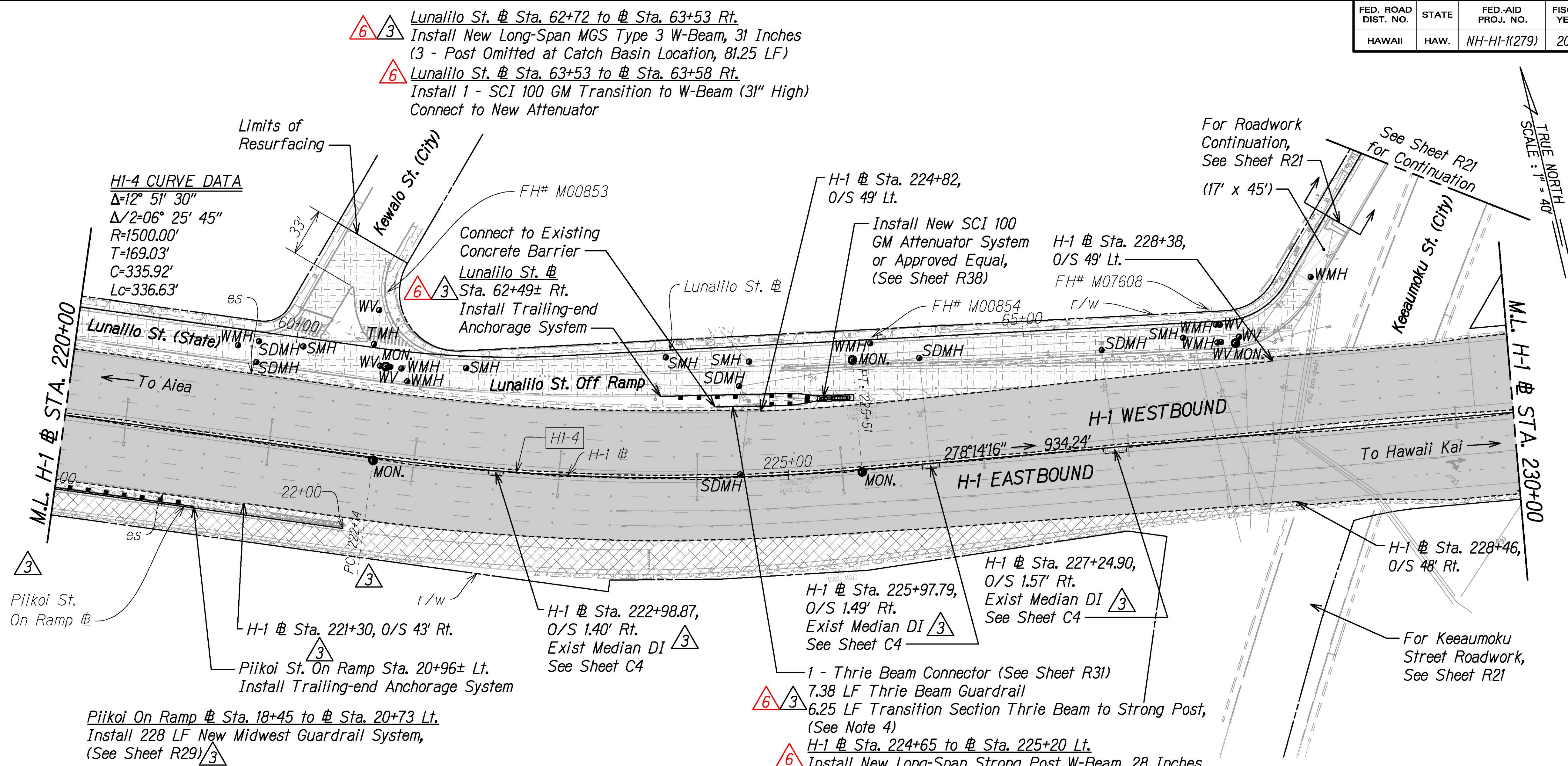
THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

|                                                                      |                                         |
|----------------------------------------------------------------------|-----------------------------------------|
| 7/9/21                                                               | Revised Guardrails and Pavement Section |
| DATE                                                                 | REVISION                                |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                         |
| <b>ROADWAY PLAN</b>                                                  |                                         |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                         |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                         |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                         |
| Scale: 1" = 40'                                                      | Date: August 2021                       |
| SHEET No. R5 OF 41 SHEETS                                            |                                         |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 61   | 304          |



**HI-4 CURVE DATA**  
Δ=12° 51' 30"  
Δ/2=06° 25' 45"  
R=1500.00'  
T=169.03'  
C=335.92'  
Lc=336.63'

**LEGEND:**

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
4" Cold Plane  
3.4" PMA
- Resurfacing Limits:  
3.5" Cold Plane  
3.5" PMA
- Bench Mark

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts including downspouts on the Piikoi Viaduct within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: [Signature]

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

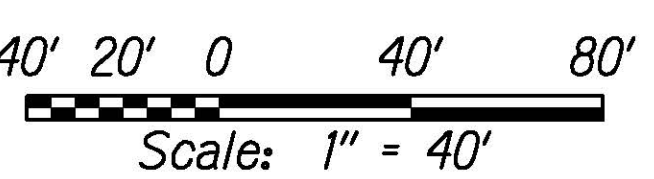
DATE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE  
EXPIRATION DATE  
04/30/22  
OF THE LICENSE

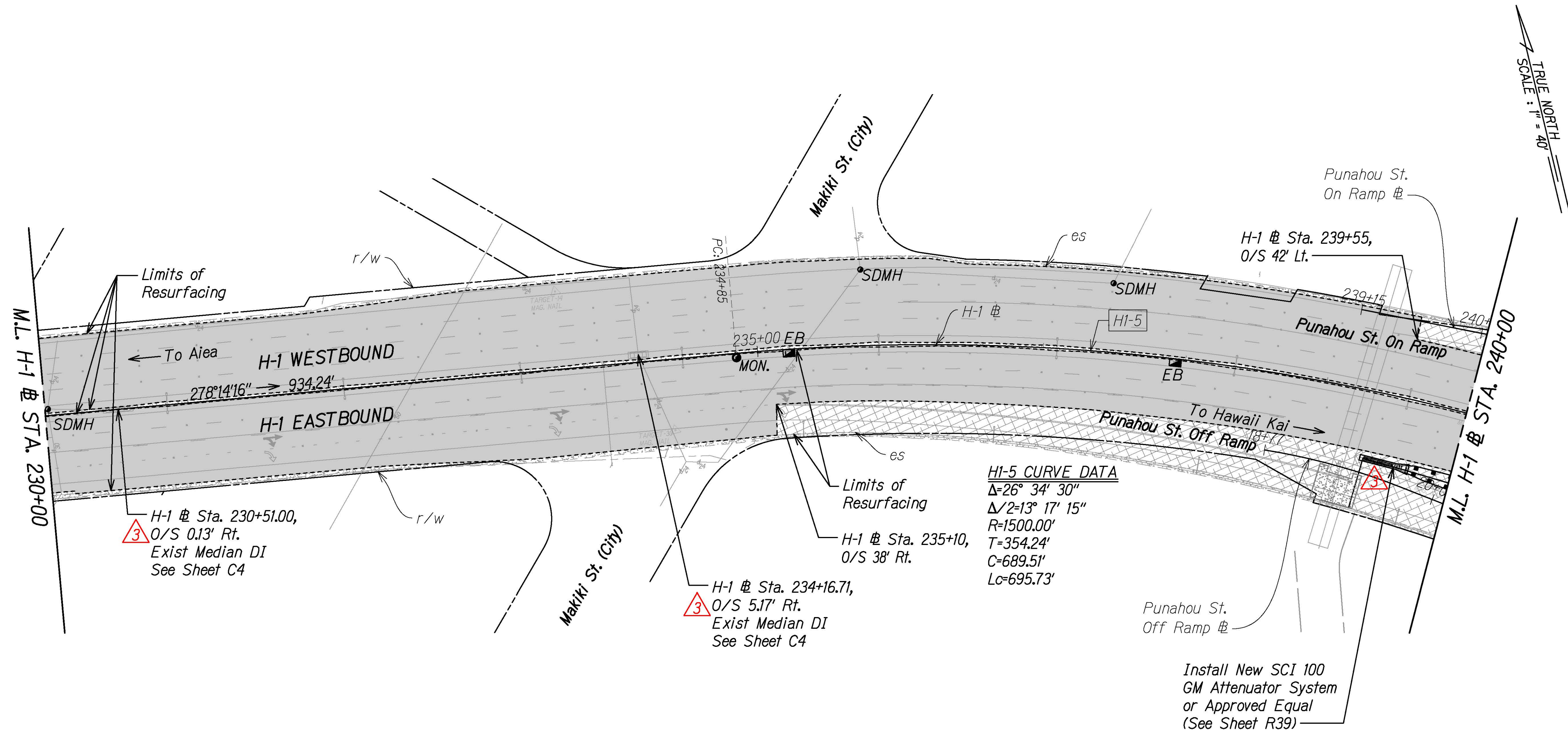
**GRAPHIC SCALE:**



|                                                                      |                                                                                                     |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 7/21/21                                                              | Revised Guardrails and Moved Attenuator                                                             |
| 7/9/21                                                               | BWS Tracings, Revised Guardrails Resurfacing Limits and Pav't Section, Added Exist. Median DI label |
| DATE                                                                 | REVISION                                                                                            |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                                                                     |
| <b>ROADWAY PLAN</b>                                                  |                                                                                                     |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                                                                                     |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                                                                                     |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                                                                                     |
| Scale: 1" = 40'                                                      | Date: August 2021                                                                                   |
| SHEET No. R6 OF 41 SHEETS                                            |                                                                                                     |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 62   | 304          |



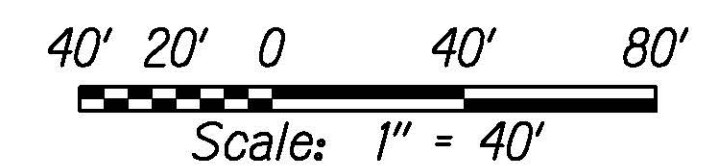
**LEGEND:**

- Resurfacing Limits:
  - 8" Cold Plane
  - 2" SMA
  - 2" HMA (Mix IV)
  - 4" HMA Conc. Base
- Resurfacing Limits:
  - 4" Cold Plane
  - 4" PMA
- Bench Mark

**NOTES:**

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

**GRAPHIC SCALE:**



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

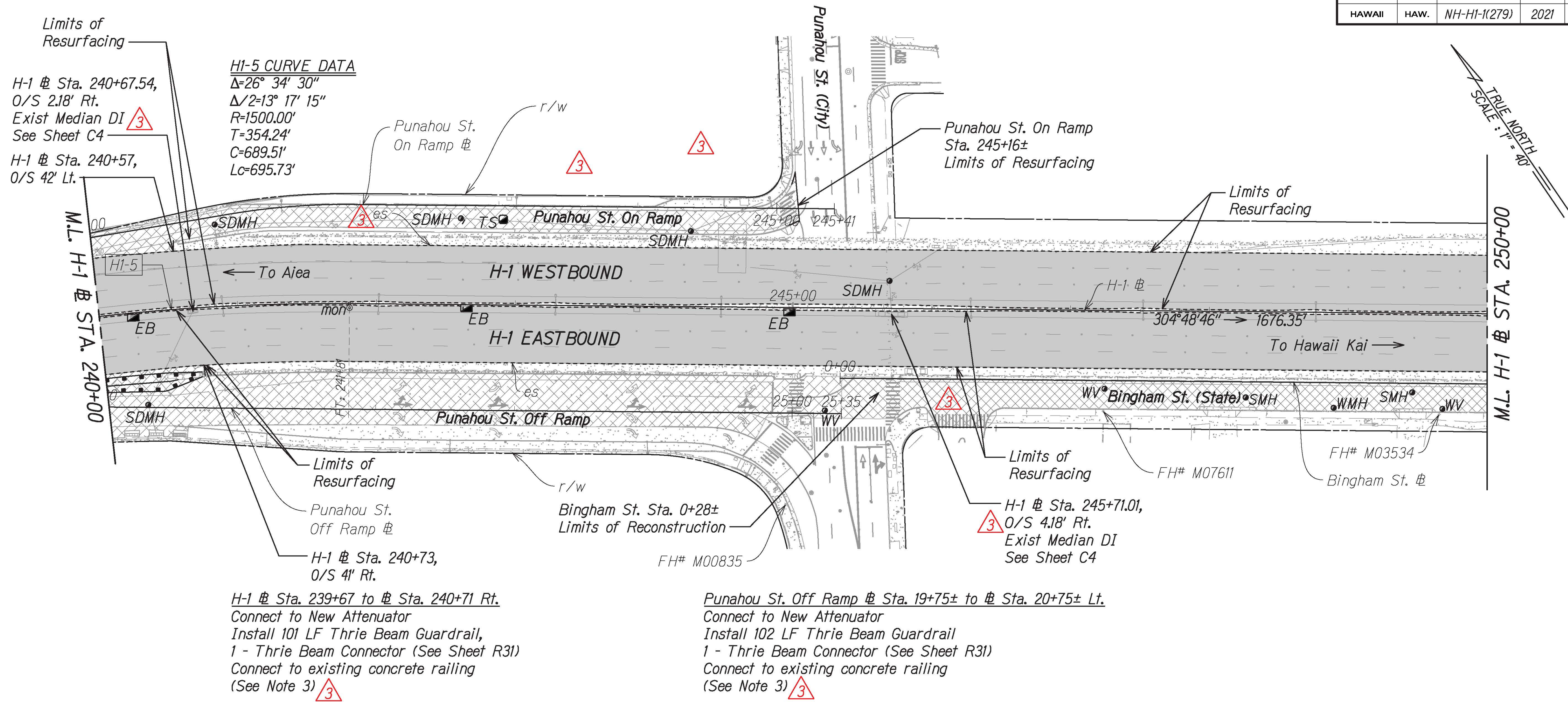
SIGNATURE

04/30/22  
EXPIRATION DATE  
OF THE LICENSE

|                                                                      |                                                                             |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 7/9/21                                                               | Revised Guardrails and<br>Pavement Section, Added Exist.<br>Median DI label |
| DATE                                                                 | REVISION                                                                    |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                                             |
| <b>ROADWAY PLAN</b>                                                  |                                                                             |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                                                             |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                                                             |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                                                             |
| Scale: 1" = 40'                                                      | Date: August 2021                                                           |
| SHEET No. R7 OF 41 SHEETS                                            |                                                                             |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 63   | 304          |



LEGEND:

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
4" Cold Plane  
4" PMA
- Resurfacing Limits:  
2" Cold Plane  
2" PMA
- Bench Mark

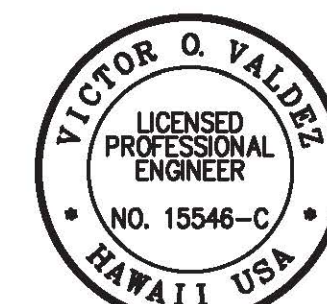
NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: 3

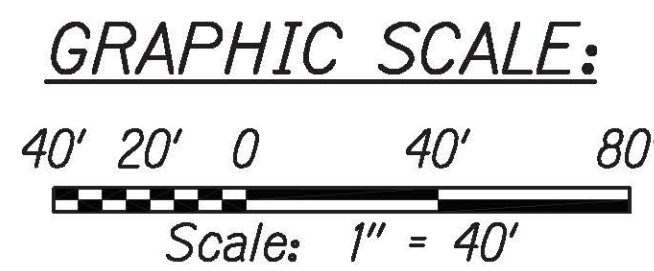
MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

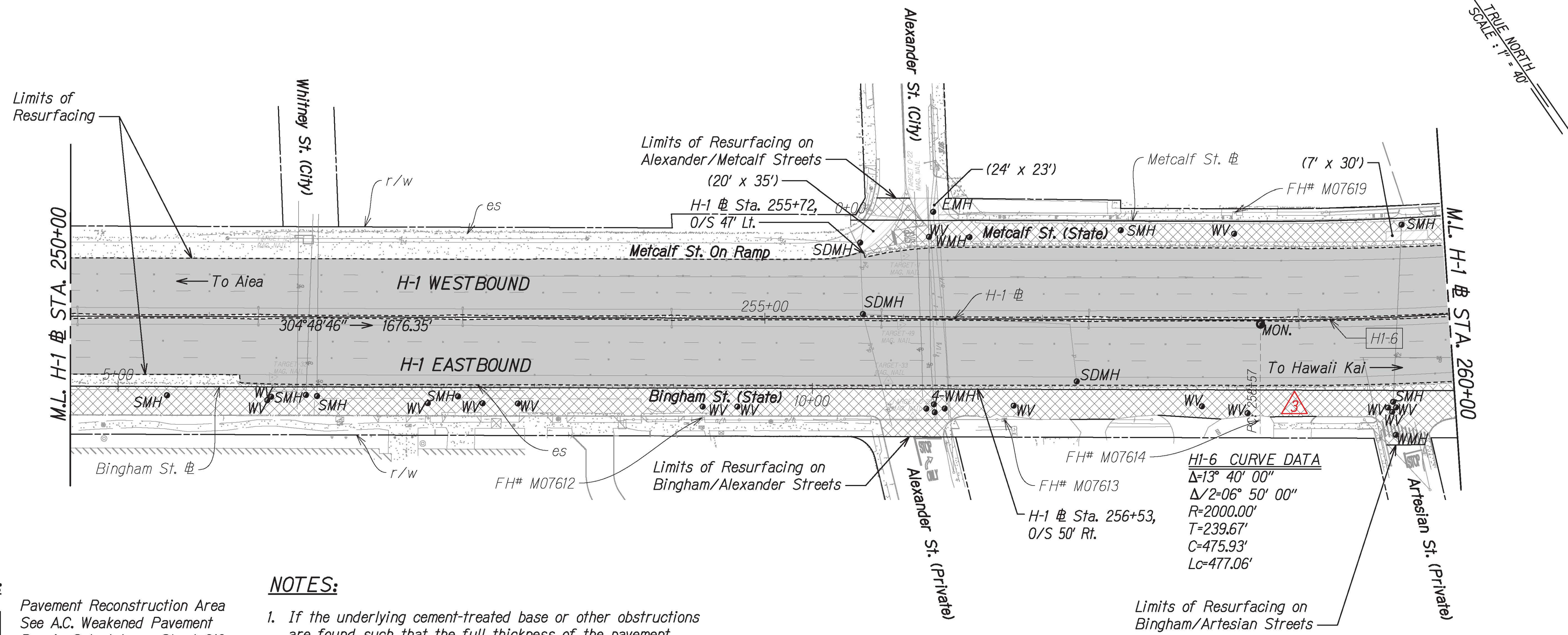
SIGNATURE  
EXPIRATION DATE OF THE LICENSE



|                                                                                                                                 |   |                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------------------------------------------------------------|
| 7/9/21                                                                                                                          | 3 | BWS Tracings, Revised Guardrails Resurfacing Limits and Pav't Section, Added Exist. Median DI label |
| DATE                                                                                                                            |   | REVISION                                                                                            |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |   |                                                                                                     |
| ROADWAY PLAN                                                                                                                    |   |                                                                                                     |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |   |                                                                                                     |
| Scale: 1" = 40' Date: August 2021                                                                                               |   |                                                                                                     |
| SHEET No. R8 OF 41 SHEETS                                                                                                       |   |                                                                                                     |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 64   | 304          |



**LEGEND:**

- Pavement Reconstruction Area  
See A.C. Weakened Pavement Repair Schedule on Sheet C16
- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Resurfacing Limits:  
2" Cold Plane  
2" PMA
- Bench Mark

**NOTES:**

1. If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
2. The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
3. For Pavement Elevations, See Sheet GR1 to GR21.
4. The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

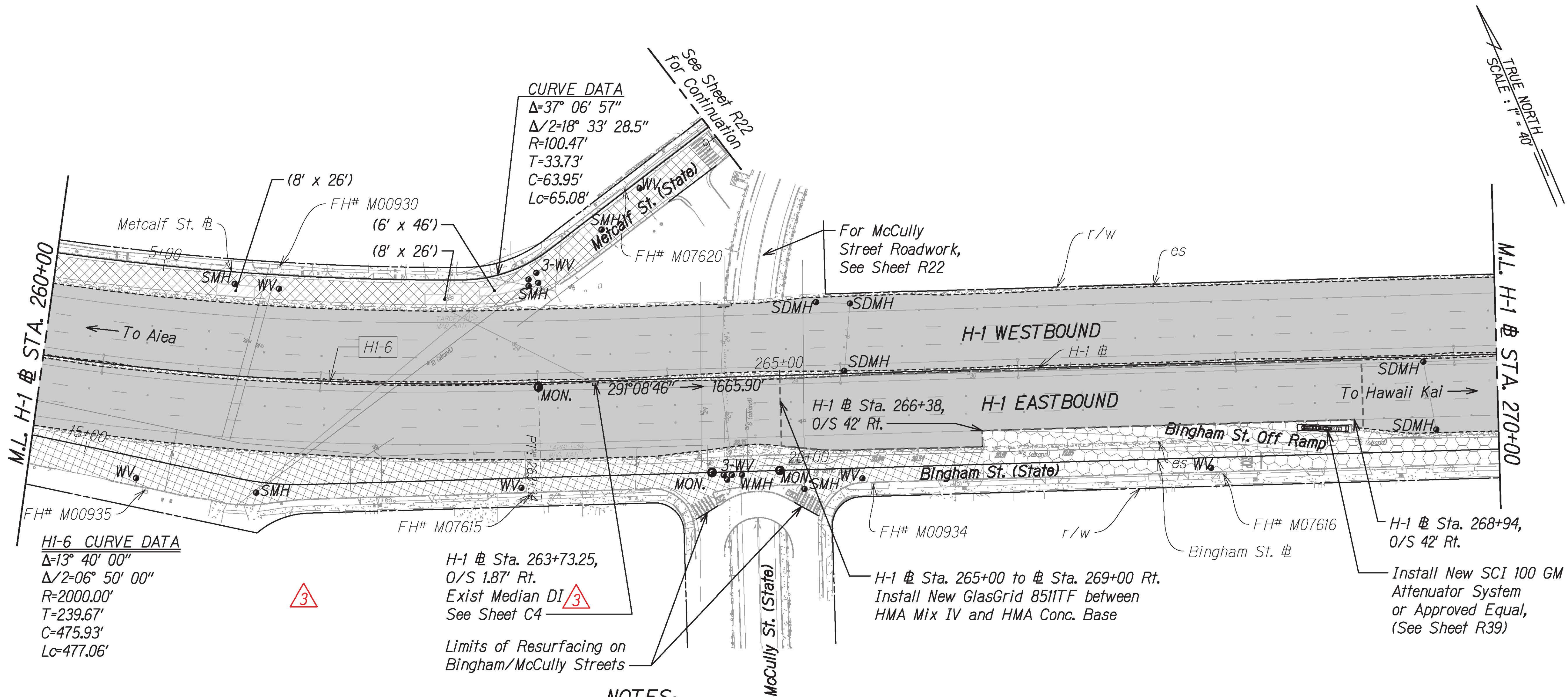
SIGNATURE: EXPIRATION DATE OF THE LICENSE: 04/30/22

**GRAPHIC SCALE:**  
40' 20' 0 40' 80'  
Scale: 1" = 40'

|                                                                      |                                           |
|----------------------------------------------------------------------|-------------------------------------------|
| 7/9/21                                                               | BWS Tracings and Revised Pavement Section |
| DATE                                                                 | REVISION                                  |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                           |
| <b>ROADWAY PLAN</b>                                                  |                                           |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                           |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                           |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                           |
| Scale: 1" = 40'                                                      | Date: August 2021                         |
| SHEET No. R9 OF 41 SHEETS                                            |                                           |

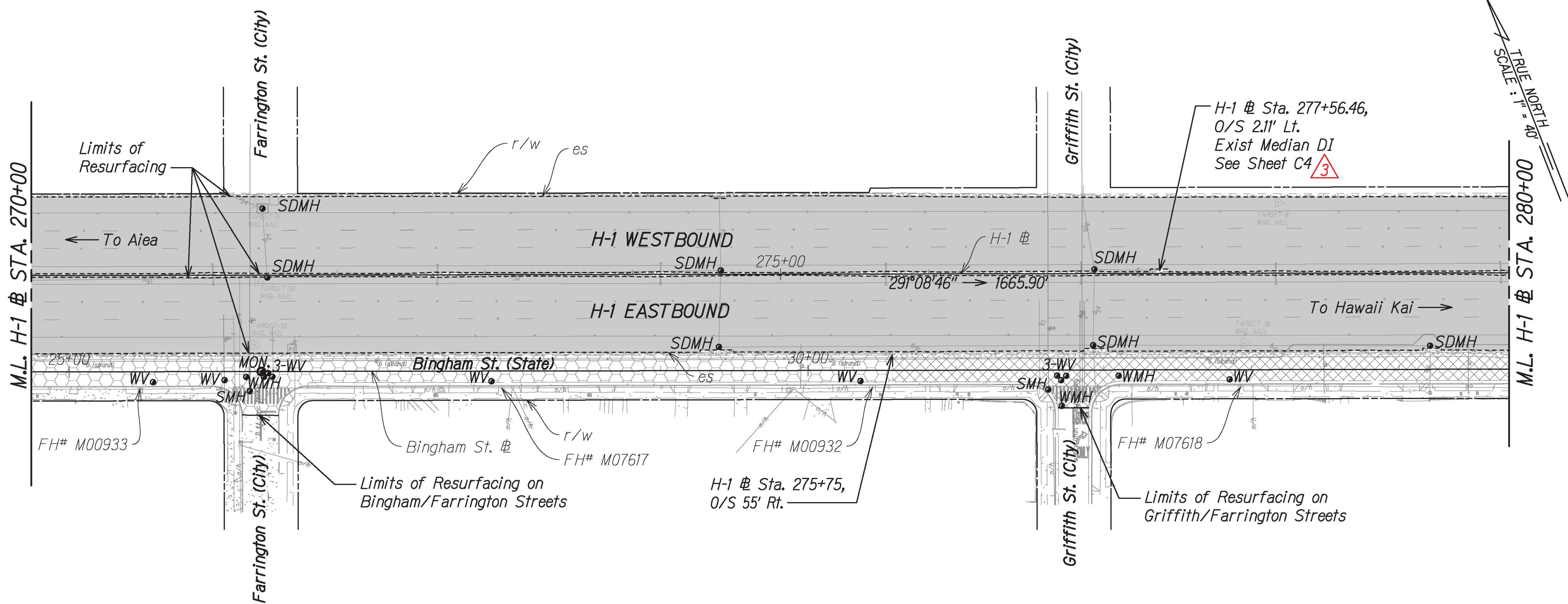


| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 65   | 304          |





| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 66   | 304          |



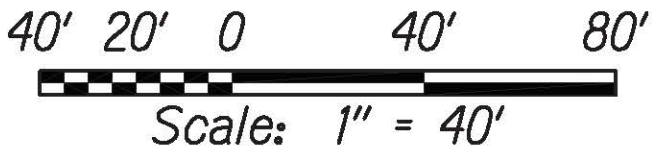
LEGEND:

- Resurfacing Limits:
  - 8" Cold Plane
  - 2" SMA
  - 2" HMA (Mix IV)
  - 4" HMA Conc. Base
- Resurfacing Limits:
  - 2" Cold Plane
  - 2" PMA
- Resurfacing Limits:
  - 8" Excavation
  - 2" PMA
  - 6" HMA Conc. Base
- Bench Mark

NOTES:

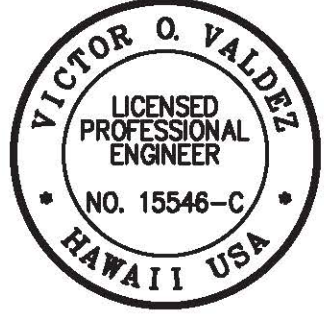
- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

GRAPHIC SCALE:



APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)



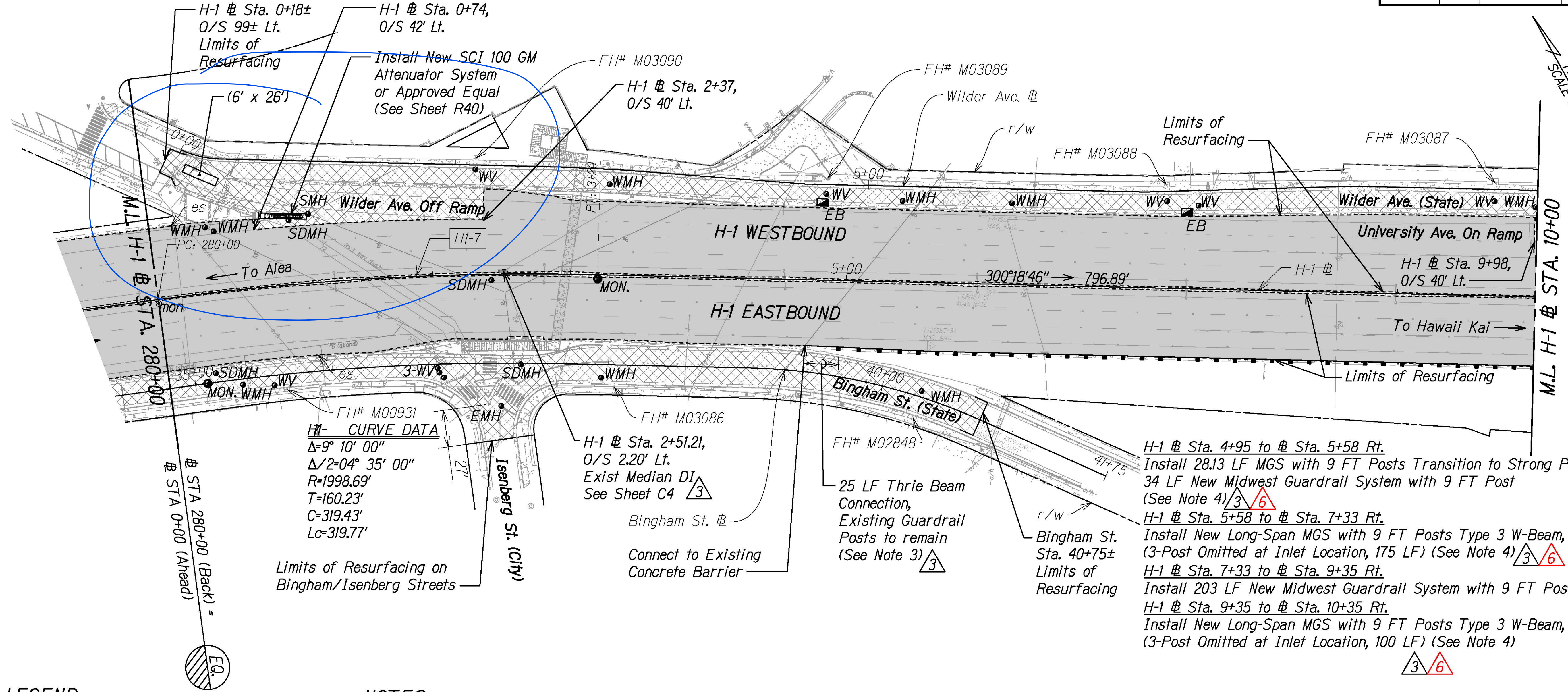
THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] EXPIRATION DATE OF THE LICENSE: 04/30/22

|                                                                      |          |                                                                         |
|----------------------------------------------------------------------|----------|-------------------------------------------------------------------------|
| 7/9/21                                                               | 3        | BWS Tracings and Revised Pavement Section, Added Exist. Median DI label |
| DATE                                                                 | REVISION |                                                                         |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |          |                                                                         |
| ROADWAY PLAN                                                         |          |                                                                         |
| INTERSTATE ROUTE H-1 RESURFACING                                     |          |                                                                         |
| Miller Pedestrian Overpass to Kapiolani Interchange                  |          |                                                                         |
| Federal-Aid Project No. NH-HI-1(279)                                 |          |                                                                         |
| Scale: 1" = 40' Date: August 2021                                    |          |                                                                         |
| SHEET No. R11 OF 41 SHEETS                                           |          |                                                                         |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 67   | 304          |



LEGEND:

- Pavement Reconstruction Area See A.C. Weakened Pavement Repair Schedule on Sheet C16
- Resurfacing Limits:
  - 8" Cold Plane
  - 2" SMA
  - 2" HMA (Mix IV)
  - 4" HMA Conc. Base
- Resurfacing Limits:
  - 2" Cold Plane
  - 2" PMA
- Bench Mark

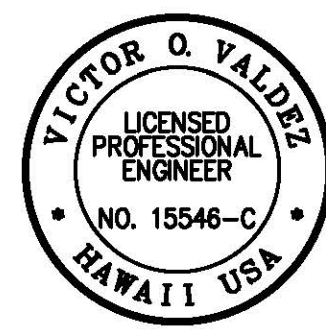
NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE

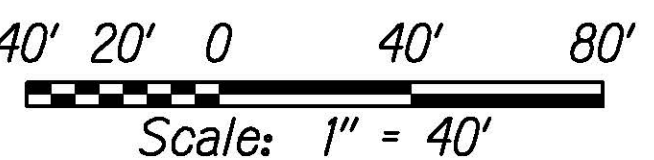


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE

EXPIRATION DATE  
OF THE LICENSE

GRAPHIC SCALE:



|         |  |                                                                        |
|---------|--|------------------------------------------------------------------------|
| 7/21/21 |  | Revised Guardrails                                                     |
| 7/9/21  |  | BWS Tracings and<br>Revised Guardrails<br>Added Exist. Median DI label |
| DATE    |  | REVISION                                                               |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY PLAN**

**INTERSTATE ROUTE H-1 RESURFACING**  
**Miller Pedestrian Overpass to Kapiolani Interchange**  
**Federal-Aid Project No. NH-HI-1(279)**

Scale: 1" = 40' Date: August 2021

SHEET No. R12 OF 41 SHEETS







G:\\_CIVIL\_3D PROJECTS\2016\_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPITOLI CIVIL DRAWINGS\R13-R17 ROADWAY PLAN.DWG 7/28/2021 11:59 AM

| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-H1-1(279)      | 2021        | ADD. 69   | 304          |

Ramp "U-5" Sta. 9+67± Limits of Resurfacing  
Ramp "U-8" Sta. 0+63± Limits of Resurfacing

Ramp "U-8" @ Sta. 1+69 to @ Sta. 2+41 Lt.  
Install 81 LF New Midwest Guardrail System  
(See Note 4 and Sheet R29) 3

Ramp "U-8" Sta. 1+28± Lt.  
Install New MSKT-SP-MGS (TL-3) End Terminal

Ramp "U-1" @ Sta. 2+81 to @ Sta. 7+20 Rt.  
Install 18 LF New W-Beam Guardrail (See Sheet R29),  
6.25 LF Transition Section Thrie Beam to Strong  
Post Guardrail (Symmetric, See Note 3),  
462 LF Thrie Beam Guardrails,  
Existing Guardrail Posts to remain  
(See Note 4) 3

Ramp "U-8" Sta. 2+62± Lt.  
Install Trailing-end Anchorage System

Ramp "U-6" Sta. 0+00± Rt.  
Install Trailing-end Anchorage System 3

Ramp "U-5" Sta. 6+93± Lt.  
Install Trailing-end Anchorage System 3

Ramp "U-6" @ Sta. 0+26 Rt. to H-1 @ Sta. 14+84 Lt.  
Install 62 LF New MGS, (See Sheet R29)  
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31"  
(3-Post Omitted at Catch Basin Location, 175 LF),  
325 LF New Midwest Guardrail System with 9 FT Posts,  
249 LF New Midwest Guardrail System with 9 FT  
Posts with Rubrails,  
28.13 LF MGS with 9 FT Posts Transition to  
Strong Post Guardrail (See Note 4) 3 6

Ramp "U-5" @ Sta. 6+70 Rt. to H-1 @ Sta. 19+96 Lt.  
Install 575 LF New Midwest Guardrail System  
with 9 FT Posts (See Note 4) 3 6

H-1 WB @ Sta. 19+41±  
= Ramp "U-5" Sta. 1+50±

\* 25 LF Thrie Beam  
Connection, Existing  
Guardrail Posts to  
remain (See Note 3)

H-1 EB @ Sta. 19+46±  
= Ramp "U-3" Sta. 0+96±

# LEGEND:

Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base

Resurfacing Limits:  
2" Cold Plane  
2" PMA

Resurfacing Limits:  
2" Cold Plane  
2" SMA 3

Resurfacing Limits:  
4" Cold Plane  
4" PMA 3

3 Bench Mark

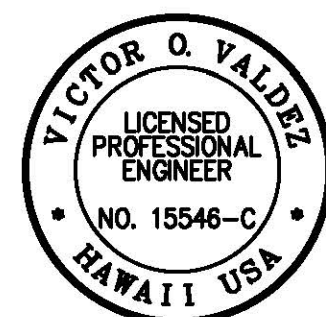
## NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See 3 Sheets R24 to R27B. For Details, See Sheets R28 to R36A. City/State R/W and BWS Easements Only)
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: 3

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE

04/30/22  
EXPIRATION DATE  
OF THE LICENSE

## GRAPHIC SCALE:

40' 20' 0 40' 80'  
Scale: 1" = 40'

|         |                                                                                                                          |
|---------|--------------------------------------------------------------------------------------------------------------------------|
| 7/21/21 | <span style="border: 1px solid black; padding: 0 2px;">6</span> Revised Guardrails                                       |
| 7/9/21  | <span style="border: 1px solid black; padding: 0 2px;">3</span> BWS Tracings, Revised Guardrails, Pav't Section & Limits |
| DATE    | REVISION                                                                                                                 |

|                                                                      |                   |
|----------------------------------------------------------------------|-------------------|
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                   |
| <b>ROADWAY PLAN</b>                                                  |                   |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                   |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                   |
| <b>Federal-Aid Project No. NH-H1-1(279)</b>                          |                   |
| Scale: 1" = 40'                                                      | Date: August 2021 |
| SHEET No. R14 OF 41 SHEETS                                           |                   |

ADD. 69



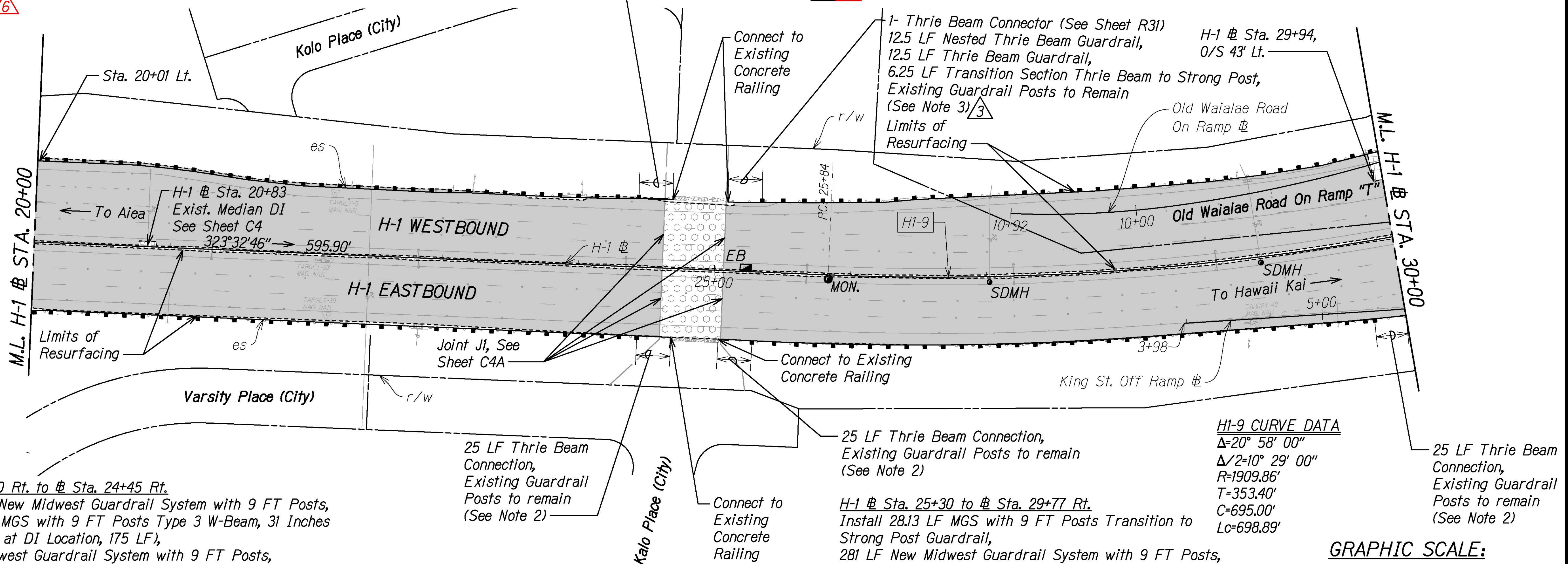
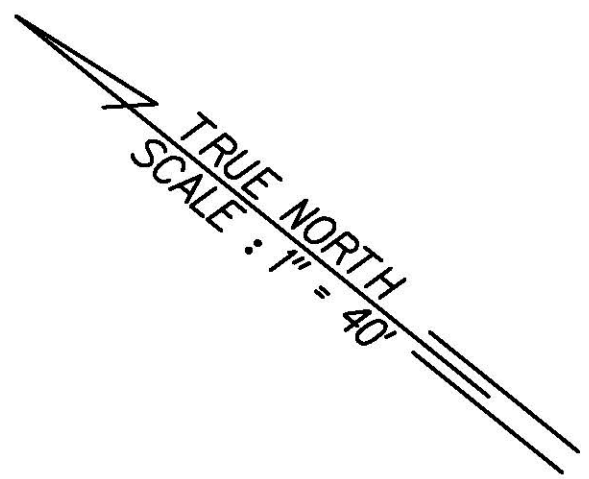
G:\CIVIL 3D PROJECTS\2016\_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPITV01 CIVIL DRAWINGS\R13-R17 ROADWAY PLAN.DWG 7/28/2021 4:52 PM

H-1 @ Sta. 19+96 to Sta. 21+70 Lt.  
Install New Long-Span MGS with 9 FT Posts  
Type 3 W-Beam, 31 Inches  
(3-Posts Omitted at Inlet Location, 175 LF), 6  
(See Note 3)  
H-1 @ Sta. 21+70 to Sta. 24+36 Lt.  
Install 237 LF New Midwest Guardrail System  
with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition  
to Strong Post Guardrail  
(See Note 3) 3 6

3 6.25 LF Transition Section Thrie Beam  
to Strong Post,  
12.5 LF Thrie Beam Guardrail,  
12.5 LF Nested Thrie Beam Guardrail,  
1- Thrie Beam Connector (See Sheet R31)  
Existing Guardrail Posts to Remain  
(See Note 3)

H-1 @ Sta. 25+39 to Waialae On Ramp @ Ah. Sta. 7+50 Lt.  
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
45 LF New Midwest Guardrail System with 9 FT Posts,  
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches  
(3-Post Omitted at Inlet Location, 175 LF),  
15 LF New Midwest Guardrail System with 9 FT Posts,  
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches  
(3-Post Omitted at Inlet Location, 175 LF),  
48 LF New Midwest Guardrail System with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail  
(See Note 3) 3 6

| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 70   | 304          |



H-1 @ Sta. 19+90 Rt. to @ Sta. 24+45 Rt.  
Install 208 LF New Midwest Guardrail System with 9 FT Posts,  
New Long-Span MGS with 9 FT Posts Type 3 W-Beam, 31 Inches  
(3-Post Omitted at DI Location, 175 LF),  
45 LF New Midwest Guardrail System with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail  
(See Note 3) 3

### LEGEND:

|  |                                                                                                            |
|--|------------------------------------------------------------------------------------------------------------|
|  | Resurfacing Limits:<br>8" Cold Plane<br>2" SMA<br>2" HMA (Mix IV)<br>4" HMA Conc. Base                     |
|  | Resurfacing Limits:<br>2" Cold Plane<br>2" SMA                                                             |
|  | Resurfacing Limits:<br>4" Cold Plane <span style="border: 1px solid red; padding: 2px;">3</span><br>4" PMA |
|  | Bench Mark                                                                                                 |

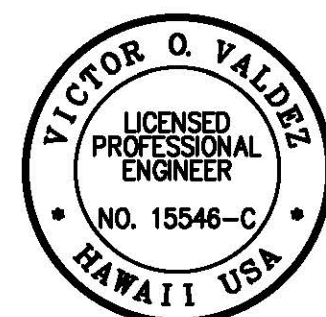
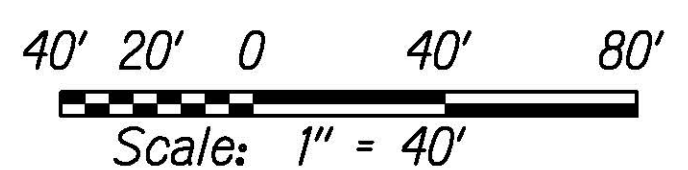
### NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- For Thrie Beam Connection to Existing Concrete Railing, See Sheet R36A. 3
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A. 3
- For Pavement Elevations, See Sheet GR1 to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

### H1-9 CURVE DATA

$\Delta=20^{\circ} 58' 00''$   
 $\Delta/2=10^{\circ} 29' 00''$   
 $R=1909.86'$   
 $T=353.40'$   
 $C=695.00'$   
 $Lc=698.89'$

### GRAPHIC SCALE:

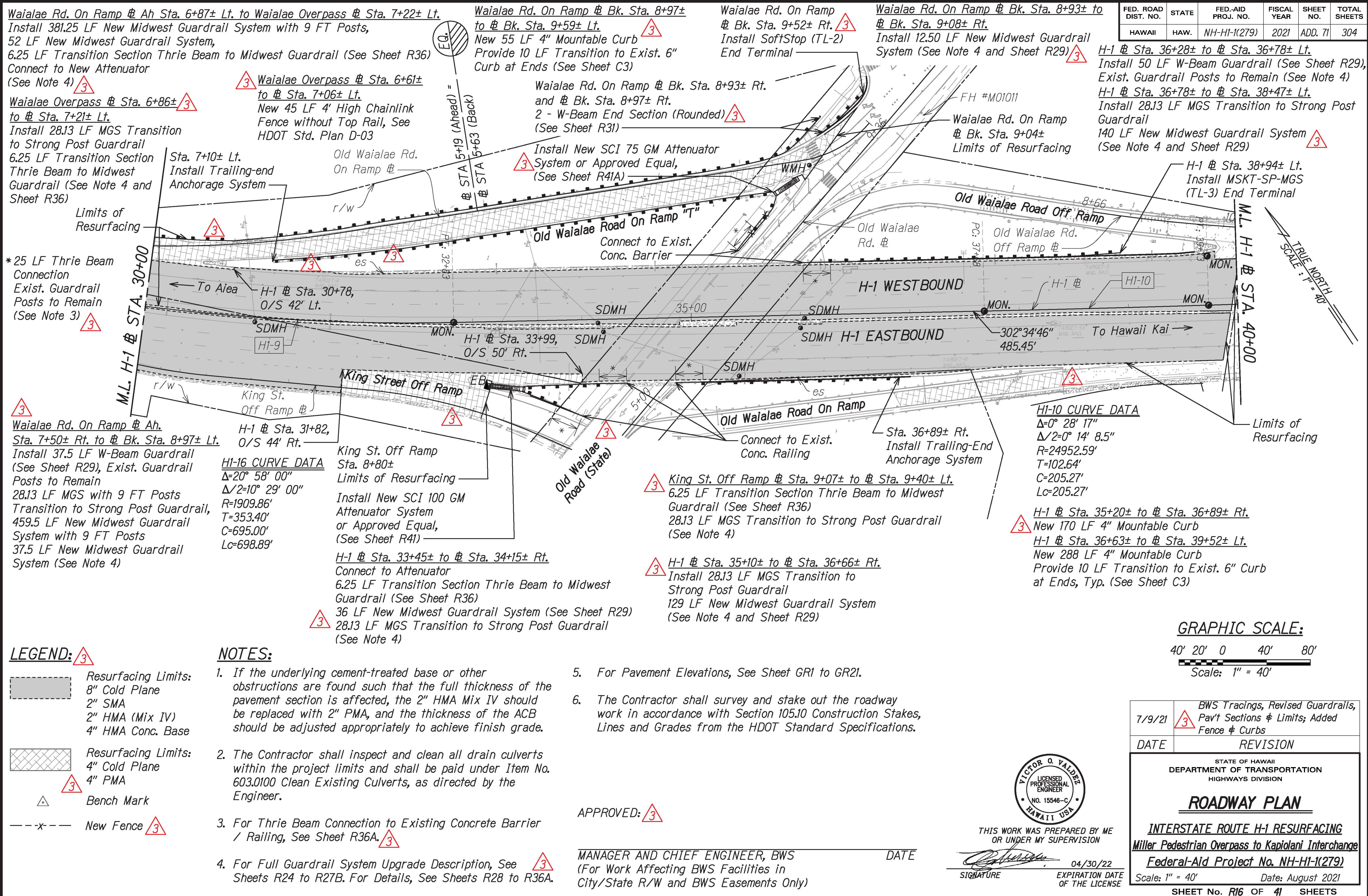


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: EXPIRATION DATE OF THE LICENSE: 04/30/22

|                                                                                                                                 |                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 7/21/21                                                                                                                         | <span style="border: 1px solid red; padding: 2px;">6</span> Revised Guardrails                                                       |
| 7/9/21                                                                                                                          | <span style="border: 1px solid red; padding: 2px;">3</span> Revised Guardrails, Pav't Section & Limits, Added Exist. Median DI Label |
| DATE                                                                                                                            | REVISION                                                                                                                             |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                                                                                                                                      |
| <b>ROADWAY PLAN</b>                                                                                                             |                                                                                                                                      |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |                                                                                                                                      |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021                                                                                                                    |
| SHEET No. R15 OF 41 SHEETS                                                                                                      |                                                                                                                                      |





Waialae Rd. On Ramp @ Ah Sta. 6+87± Lt. to Waialae Overpass @ Sta. 7+22± Lt.  
Install 381.25 LF New Midwest Guardrail System with 9 FT Posts,  
52 LF New Midwest Guardrail System,  
6.25 LF Transition Section Thrie Beam to Midwest Guardrail (See Sheet R36)  
Connect to New Attenuator  
(See Note 4) 3

Waialae Overpass @ Sta. 6+86± 3  
to @ Sta. 7+21± Lt.  
Install 28.13 LF MGS Transition  
to Strong Post Guardrail  
6.25 LF Transition Section  
Thrie Beam to Midwest  
Guardrail (See Note 4 and  
Sheet R36)

Sta. 7+10± Lt.  
Install Trailing-end  
Anchorage System  
Limits of  
Resurfacing

\* 25 LF Thrie Beam  
Connection  
Exist. Guardrail  
Posts to Remain  
(See Note 3) 3

Waialae Rd. On Ramp @ Ah.  
Sta. 7+50± Rt. to @ Bk. Sta. 8+97± Lt.  
Install 37.5 LF W-Beam Guardrail  
(See Sheet R29), Exist. Guardrail  
Posts to Remain  
28.13 LF MGS with 9 FT Posts  
Transition to Strong Post Guardrail,  
459.5 LF New Midwest Guardrail  
System with 9 FT Posts  
37.5 LF New Midwest Guardrail  
System (See Note 4)

King St. Off Ramp @  
H-1 @ Sta. 31+82,  
O/S 44' Rt.

**LEGEND:** 3  
Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base  
Resurfacing Limits:  
4" Cold Plane  
4" PMA  
Bench Mark  
New Fence 3

**NOTES:**  
1. If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.  
2. The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.  
3. For Thrie Beam Connection to Existing Concrete Barrier / Railing, See Sheet R36A. 3  
4. For Full Guardrail System Upgrade Description, See 3 Sheets R24 to R27B. For Details, See Sheets R28 to R36A.

Waialae Rd. On Ramp @ Bk. Sta. 8+97±  
to @ Bk. Sta. 9+59± Lt. 3  
New 55 LF 4" Mountable Curb  
Provide 10 LF Transition to Exist. 6"  
Curb at Ends (See Sheet C3)

Waialae Rd. On Ramp @ Bk. Sta. 8+93± Rt.  
and @ Bk. Sta. 8+97± Rt.  
2 - W-Beam End Section (Rounded) 3  
Install New SCI 75 GM Attenuator  
System or Approved Equal,  
(See Sheet R41A)

Old Waialae Road On Ramp "T"  
Connect to Exist.  
Conc. Barrier

Old Waialae Rd. @  
Off Ramp @  
H-1 @ Sta. 33+99,  
O/S 50' Rt.

King St. Off Ramp  
Sta. 8+80±  
Limits of Resurfacing  
Install New SCI 100 GM  
Attenuator System  
or Approved Equal,  
(See Sheet R41)

H-1 @ Sta. 33+45± to @ Sta. 34+15± Rt.  
Connect to Attenuator  
6.25 LF Transition Section Thrie Beam to Midwest  
Guardrail (See Sheet R36)  
36 LF New Midwest Guardrail System (See Sheet R29)  
28.13 LF MGS Transition to Strong Post Guardrail  
(See Note 4) 3

Waialae Rd. On Ramp @ Bk. Sta. 8+93± to  
@ Bk. Sta. 9+08± Rt. 3  
Install 12.50 LF New Midwest Guardrail  
System (See Note 4 and Sheet R29)

Waialae Rd. On Ramp  
@ Bk. Sta. 9+04±  
Limits of Resurfacing

Old Waialae Rd. @  
Off Ramp @  
H-1 @ Sta. 36+78± to @ Sta. 36+78± Lt.  
Install 50 LF W-Beam Guardrail (See Sheet R29),  
Exist. Guardrail Posts to Remain (See Note 4)

Old Waialae Road Off Ramp  
H-1 @ Sta. 36+78± to @ Sta. 38+47± Lt.  
Install 28.13 LF MGS Transition to Strong Post  
Guardrail  
140 LF New Midwest Guardrail System 3  
(See Note 4 and Sheet R29)

H-1 @ Sta. 38+94± Lt.  
Install MSKT-SP-MGS  
(TL-3) End Terminal

H-1 @ Sta. 35+20± to @ Sta. 36+89± Rt.  
New 170 LF 4" Mountable Curb  
H-1 @ Sta. 36+63± to @ Sta. 39+52± Lt.  
New 288 LF 4" Mountable Curb  
Provide 10 LF Transition to Exist. 6" Curb  
at Ends, Typ. (See Sheet C3)

5. For Pavement Elevations, See Sheet GR1 to GR21.  
6. The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: 3  
MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

FED. ROAD DIST. NO. STATE FED-AID PROJ. NO. FISCAL YEAR SHEET NO. TOTAL SHEETS

HAWAII HAW. NH-HI-1(279) 2021 ADD. 71 304

GRAPHIC SCALE:

40' 20' 0 40' 80'

Scale: 1" = 40'

7/9/21 3 BWS Tracings, Revised Guardrails, Pav't Sections & Limits; Added Fence & Curbs

DATE REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**ROADWAY PLAN**

**INTERSTATE ROUTE H-1 RESURFACING**  
**Miller Pedestrian Overpass to Kapiolani Interchange**  
**Federal-Aid Project No. NH-HI-1(279)**

Scale: 1" = 40' Date: August 2021

SHEET No. R16 OF 41 SHEETS

VICTOR O. VALDEZ  
LICENSED PROFESSIONAL ENGINEER  
NO. 15546-C  
HAWAII USA

THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE 04/30/22  
EXPIRATION DATE OF THE LICENSE

W:\\_CIVIL\_3D\_PROJECTS\2016\_2022\DOT-HWYS-H1-RESURFACING - MILLER TO KAPITOLI CIVIL DRAWINGS\R13-R17 ROADWAY PLANDWG 7/9/2021 11:03 AM



W:\\_CIVIL\_3D\_PROJECTS\2016\_2022\000 DOT-HWYS H1 RESURFACING - MILLER TO KAPOLANI CIVIL DRAWINGS\R13-R17 ROADWAY PLANDWG 7/9/2021 10:28 AM

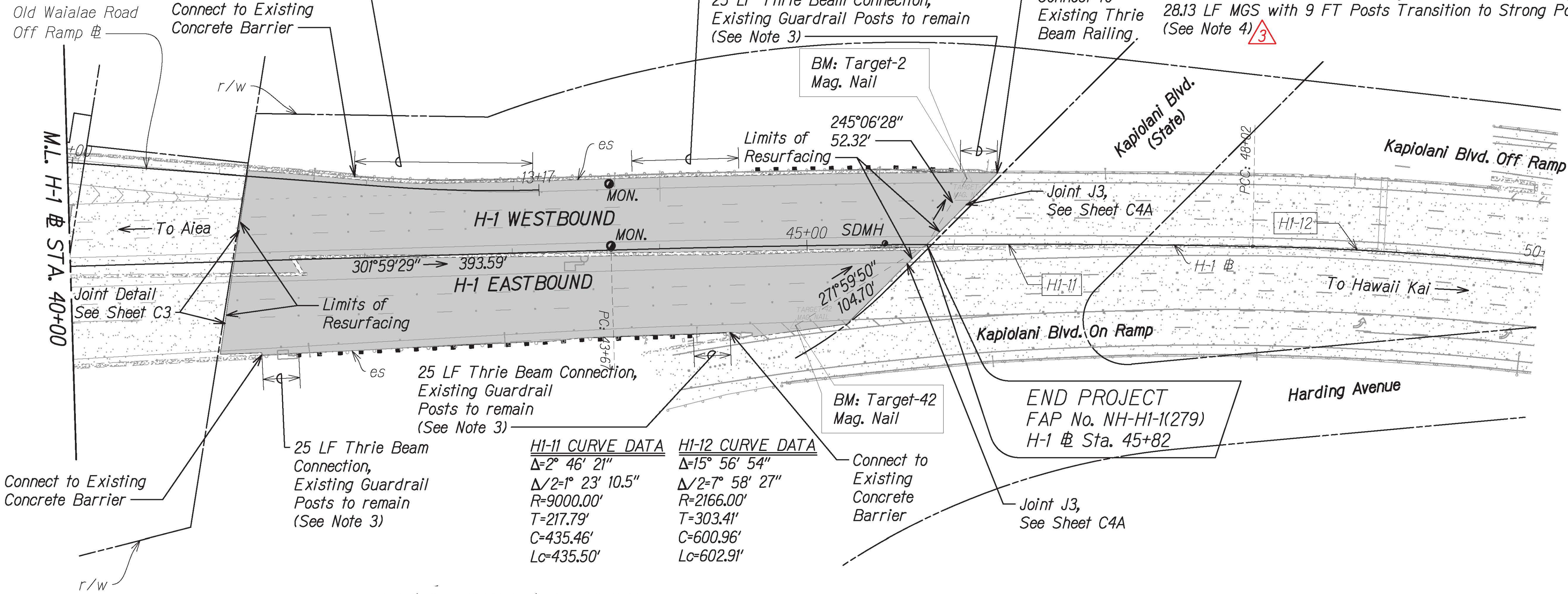
| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-H1-1(279)      | 2021        | ADD. 72   | 304          |

1 - Thrie Beam Connector (See Sheet R31)  
12.5 LF Nested Thrie Beam Guardrail,  
95.75 LF Thrie Beam Guardrail,  
6.25 LF Transition Section Thrie Beam to Strong Post,  
Existing Guardrail Posts to Remain  
(See Note 4)

H-1 @ Sta. 43+15 to @ Sta. 43+83 Lt.  
Install 68 LF W-Beam Guardrail  
(See Sheet R29)

6.25 LF Transition Section Thrie Beam to W-Beam (Symmetric)  
60 LF Thrie Beam Guardrail,  
6.25 LF Transition Section Thrie Beam to Strong Post (Symmetric),  
Existing Guardrail Posts to Remain  
(See Note 4)

H-1 @ Sta. 44+55 to @ Sta. 46+04 Lt.  
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
94 LF New Midwest Guardrail System with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
(See Note 4)



H-1 @ Sta. 41+53 to @ Sta. 44+19 Rt.  
Install 28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
210 LF New Midwest Guardrail System with 9 FT Posts,  
28.13 LF MGS with 9 FT Posts Transition to Strong Post Guardrail,  
(See Note 4)

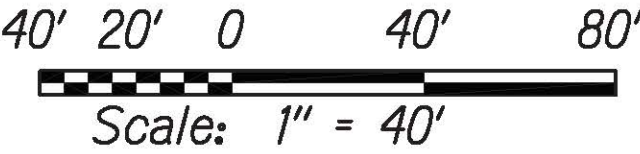
LEGEND:

- Resurfacing Limits:  
8" Cold Plane  
2" SMA  
2" HMA (Mix IV)  
4" HMA Conc. Base
- Bench Mark

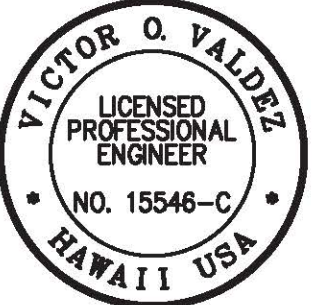
NOTES:

- If the underlying cement-treated base or other obstructions are found such that the full thickness of the pavement section is affected, the 2" HMA Mix IV should be replaced with 2" PMA, and the thickness of the ACB should be adjusted appropriately to achieve finish grade.
- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- For Thrie Beam Connection to Existing Concrete Barrier, See Sheet R36A.
- For Full Guardrail System Upgrade Description, See Sheets R24 to R27B. For Details, See Sheets R28 to R36A.
- For Pavement Elevations, See Sheet GRI to GR21.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

GRAPHIC SCALE:



|                                                                                                                                 |                    |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 7/9/21                                                                                                                          | Revised Guardrails |
| DATE                                                                                                                            | REVISION           |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                    |
| ROADWAY PLAN                                                                                                                    |                    |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-H1-1(279) |                    |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021  |
| SHEET No. R17 OF 41 SHEETS                                                                                                      |                    |

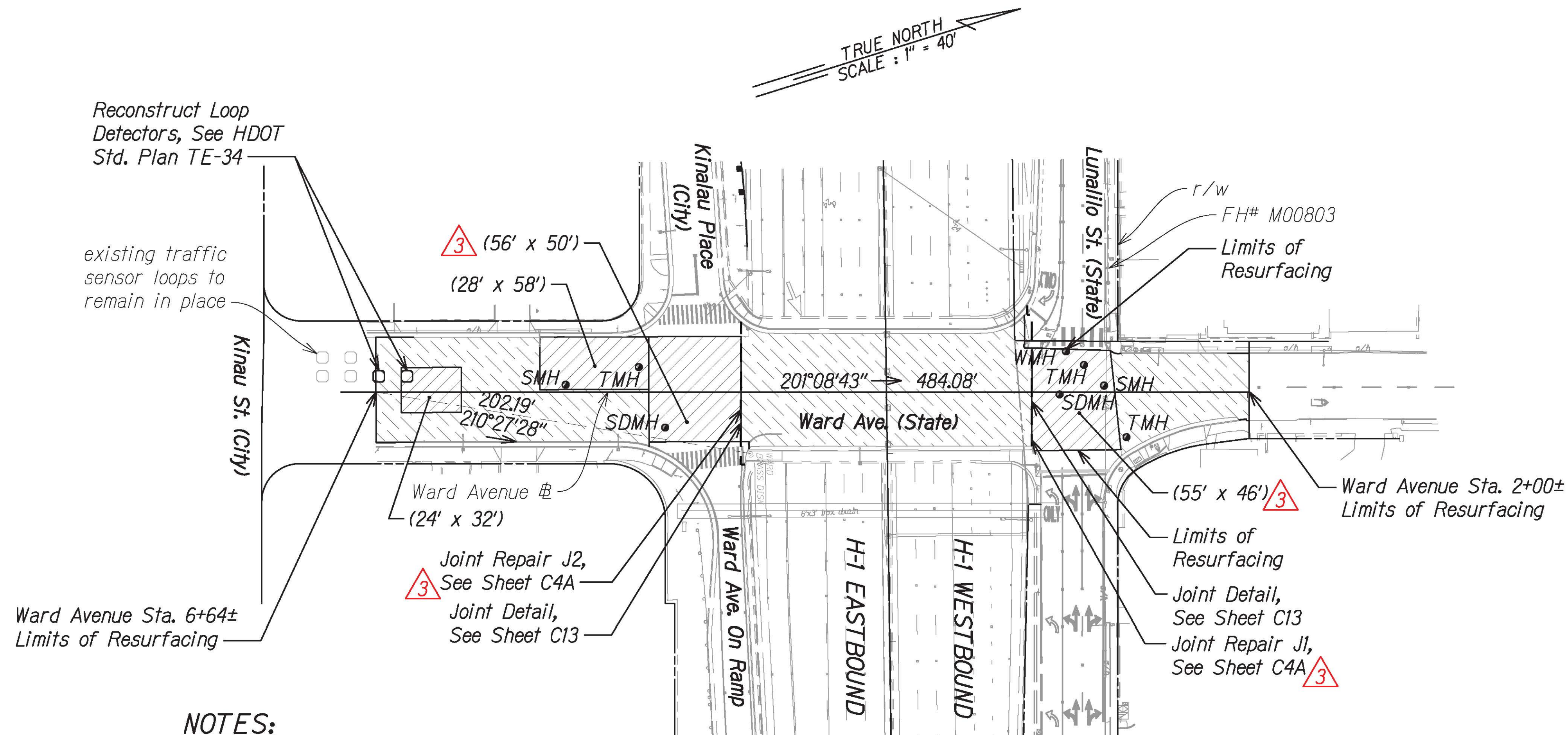


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22  
EXPIRATION DATE OF THE LICENSE



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 73   | 304          |



LEGEND:

- Pavement Reconstruction Area  
See A.C. Weakened Pavement Repair Schedule on Sheet C16
- Resurfacing Limits:  
5" Cold Plane  
 5" PMA
- Bench Mark

NOTES:

- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

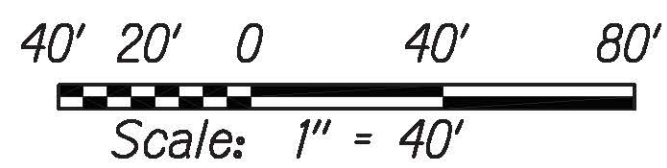
APPROVED:

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

APPROVED:

CHIEF, TRANSPORTATION TECHNOLOGY DIVISION, TTD  
City and County of Honolulu

GRAPHIC SCALE:



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION  
  
SIGNATURE EXPIRATION DATE  
04/30/22  
OF THE LICENSE

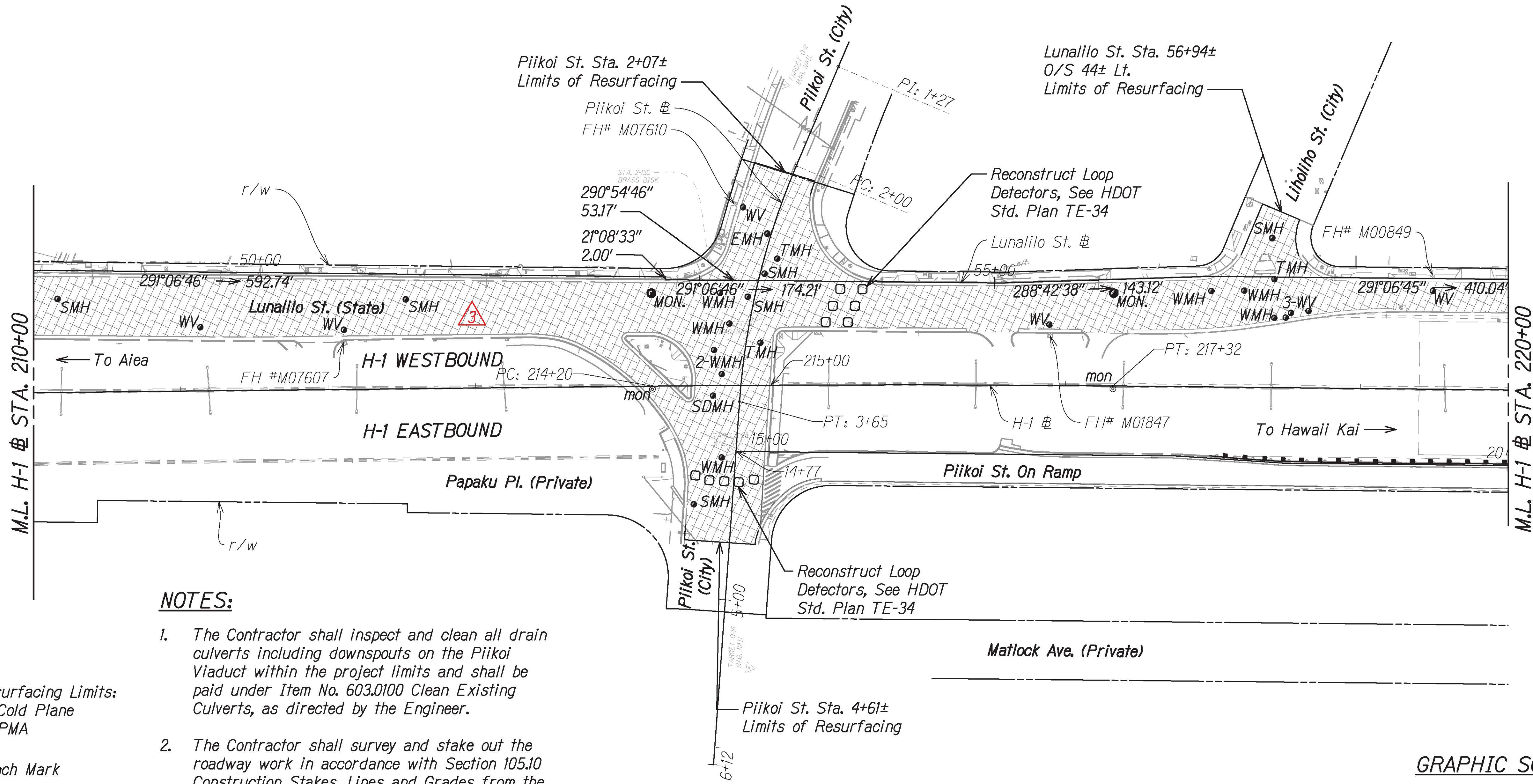
|                                                                                                                                 |                                                              |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| 7/9/21                                                                                                                          | BWS Tracings, Added Joint Repair, Revised Resurfacing Limits |
| DATE                                                                                                                            | REVISION                                                     |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                                                              |
| ROADWAY PLAN                                                                                                                    |                                                              |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |                                                              |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021                                            |
| SHEET No. R18 OF 41 SHEETS                                                                                                      |                                                              |







| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 75   | 304          |



TRUE NORTH  
SCALE: 1" = 40'

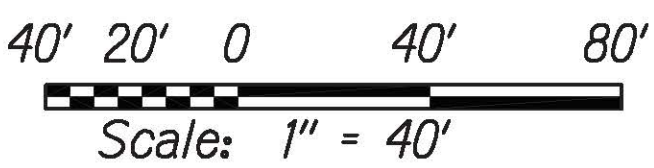
**LEGEND:**

- Resurfacing Limits:  
4" Cold Plane  
4" PMA
- Bench Mark

**NOTES:**

- The Contractor shall inspect and clean all drain culverts including downspouts on the Piikoi Viaduct within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

**GRAPHIC SCALE:**

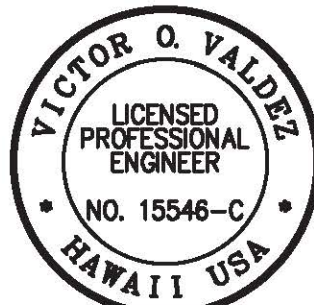


APPROVED:

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

APPROVED:

CHIEF, TRANSPORTATION TECHNOLOGY DIVISION, TTD  
City and County of Honolulu



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

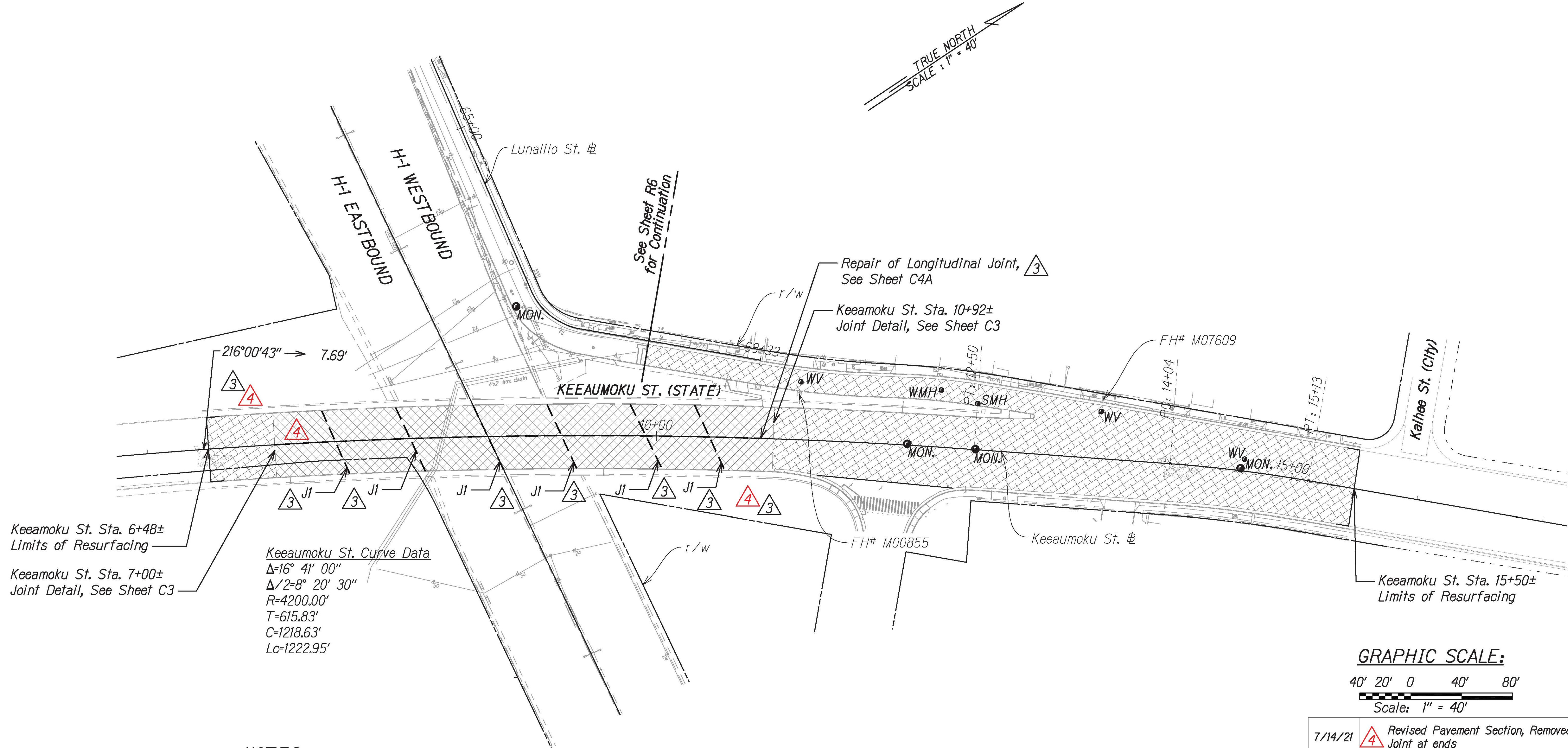
SIGNATURE: EXPIRATION DATE OF THE LICENSE: 04/30/22

|                                                                      |                                      |
|----------------------------------------------------------------------|--------------------------------------|
| 7/9/21                                                               | BWS Tracings,<br>Revised Resurfacing |
| DATE                                                                 | REVISION                             |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                      |
| <b>ROADWAY PLAN</b>                                                  |                                      |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                      |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                      |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                      |
| Scale: 1" = 40'                                                      | Date: August 2021                    |
| SHEET No. R20 OF 41 SHEETS                                           |                                      |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 76   | 304          |

G:\CIVIL 3D PROJECTS\2016\_2022\DOT-HWYS H1 RESURFACING - MILLER TO KAPUNI\01 CIVIL DRAWINGS\R18-R23 ROADWAY PLANDWG 7/14/2021 10:18 PM



LEGEND:

- Resurfacing Limits: 4" Cold Plane 4" PMA
- Resurfacing Limits: 2" Cold Plane 2" PMA
- Bench Mark

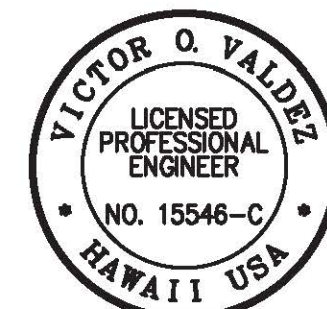
NOTES:

- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.
- J1, etc. denotes expansion joint repair type, See Sheet C4A.

APPROVED: [Signature]

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

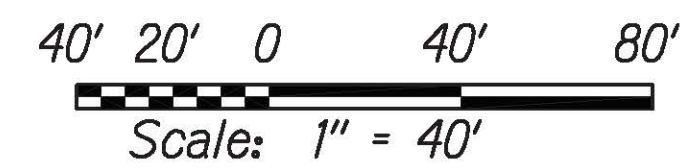
DATE



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: [Signature] 04/30/22  
EXPIRATION DATE OF THE LICENSE

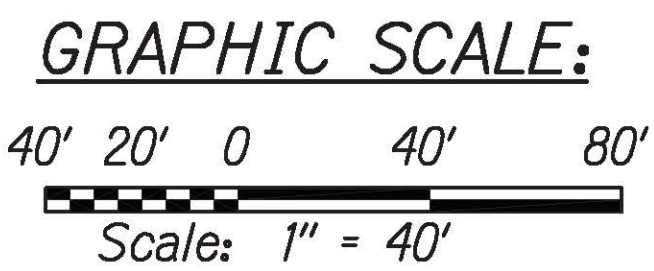
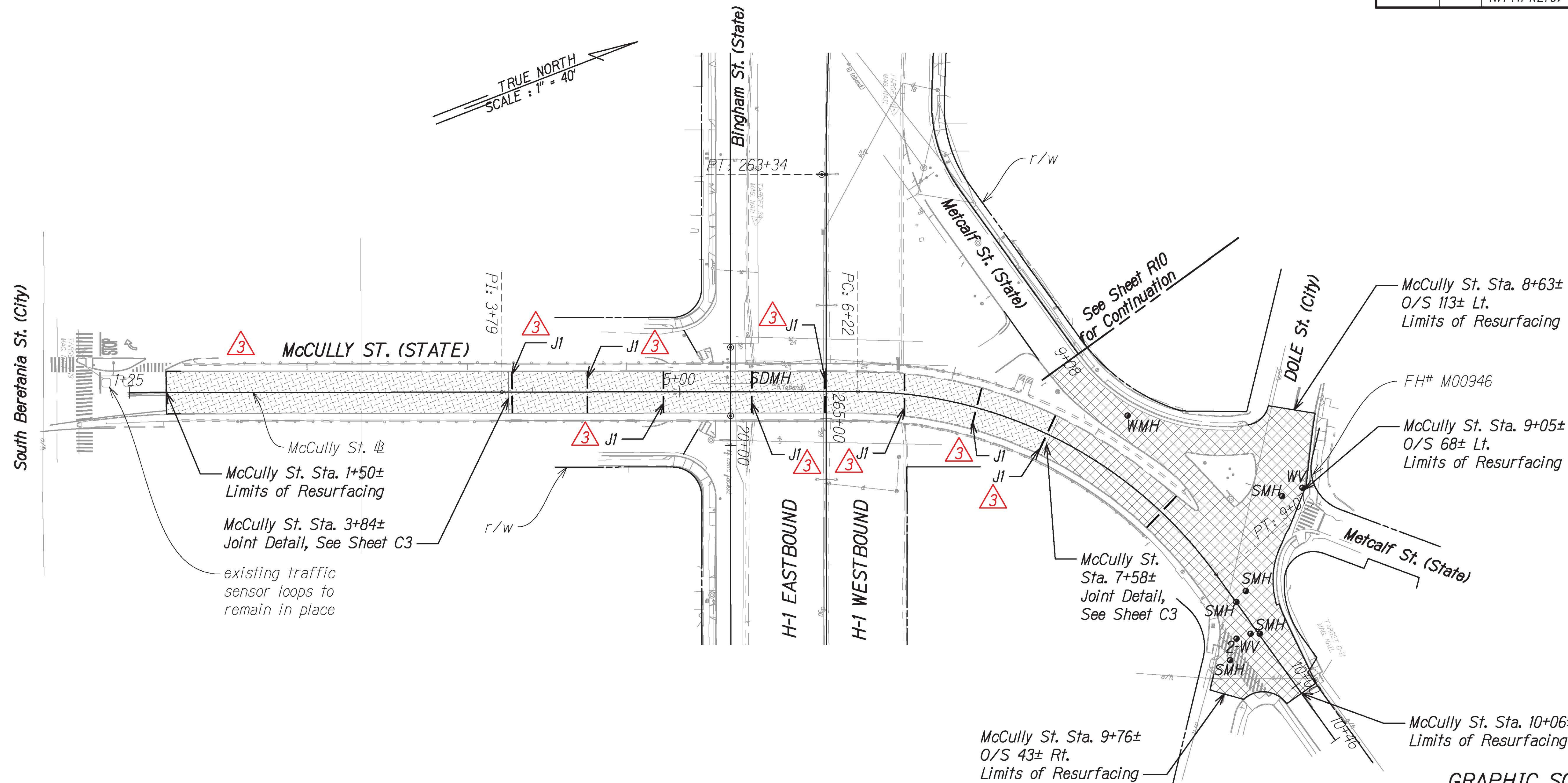
GRAPHIC SCALE:



|                                                                                                                                 |                                                          |
|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 7/14/21                                                                                                                         | [Symbol] Revised Pavement Section, Removed Joint at ends |
| 7/9/21                                                                                                                          | [Symbol] BWS Tracings, Added Repair Joint                |
| DATE                                                                                                                            | REVISION                                                 |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                                                          |
| ROADWAY PLAN                                                                                                                    |                                                          |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |                                                          |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021                                        |
| SHEET No. R21 OF 41 SHEETS                                                                                                      |                                                          |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 77   | 304          |



LEGEND:

- Resurfacing Limits:  
2" Cold Plane  
2" PMA
- Resurfacing Limits:  
3.5" Cold Plane  
3.5" PMA
- Bench Mark

NOTES:

- The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
- The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.
- J1, etc. denotes expansion joint repair type. See Sheet C4A.

APPROVED:

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE



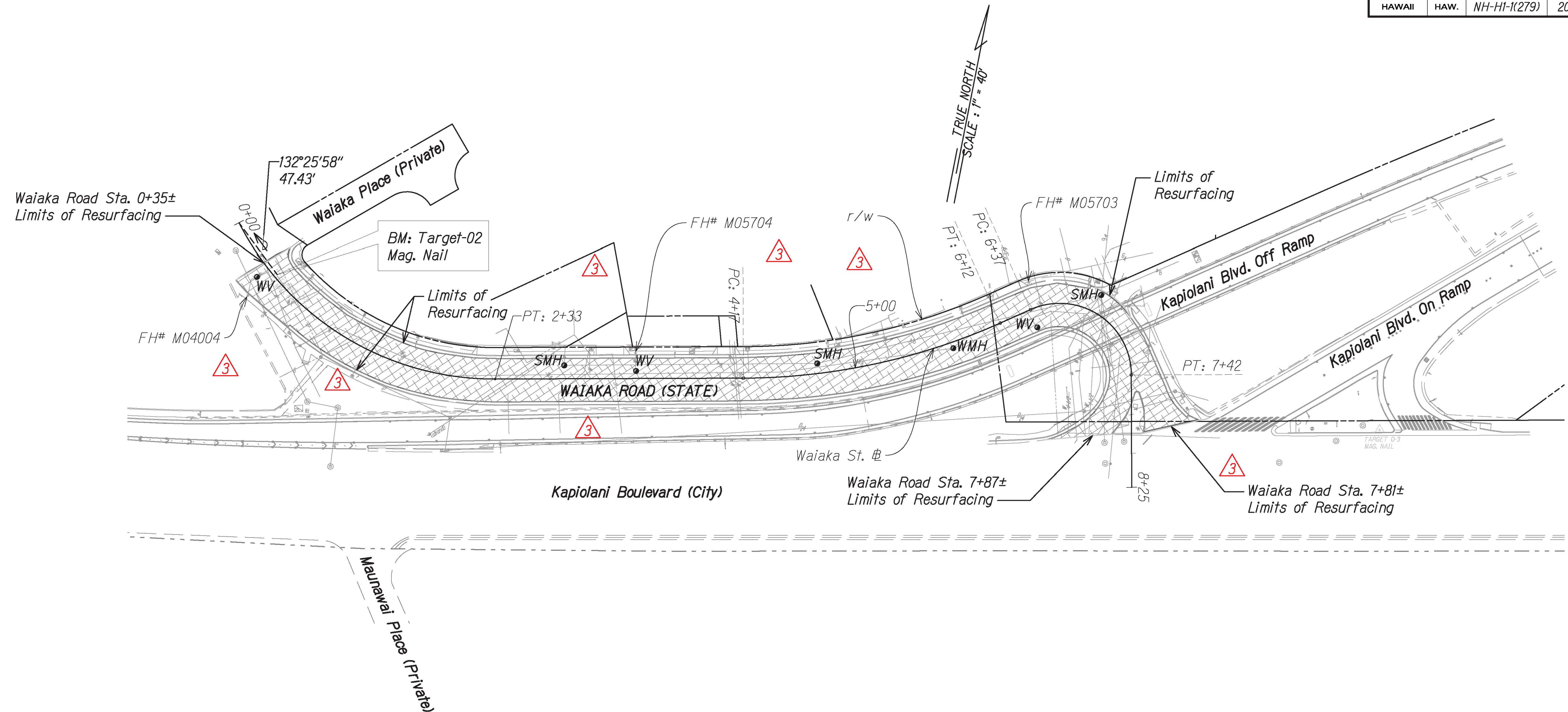
THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE: EXPIRATION DATE OF THE LICENSE: 04/30/22

|                                                                                                                                 |                                                     |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 7/9/21                                                                                                                          | BWS Tracings, Added Repair Joint, Added Resurfacing |
| DATE                                                                                                                            | REVISION                                            |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                                                            |                                                     |
| ROADWAY PLAN                                                                                                                    |                                                     |
| INTERSTATE ROUTE H-1 RESURFACING<br>Miller Pedestrian Overpass to Kapiolani Interchange<br>Federal-Aid Project No. NH-HI-1(279) |                                                     |
| Scale: 1" = 40'                                                                                                                 | Date: August 2021                                   |
| SHEET No. R22 OF 41 SHEETS                                                                                                      |                                                     |



| FED. ROAD DIST. NO. | STATE | FED-AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-HI-1(279)      | 2021        | ADD. 78   | 304          |



**LEGEND:**

-  Resurfacing Limits:  
4" Cold Plane  
4" PMA
-  Bench Mark

**NOTES:**

1. The Contractor shall inspect and clean all drain culverts within the project limits and shall be paid under Item No. 603.0100 Clean Existing Culverts, as directed by the Engineer.
2. The Contractor shall survey and stake out the roadway work in accordance with Section 105.10 Construction Stakes, Lines and Grades from the HDOT Standard Specifications.

APPROVED: 

MANAGER AND CHIEF ENGINEER, BWS  
(For Work Affecting BWS Facilities in  
City/State R/W and BWS Easements Only)

DATE

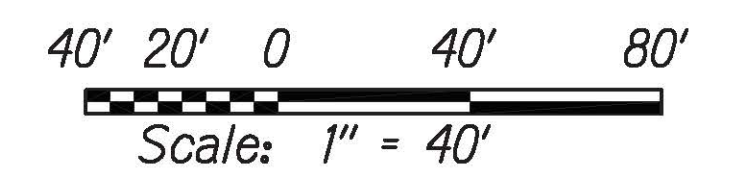


THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

SIGNATURE

04/30/22  
EXPIRATION DATE  
OF THE LICENSE

**GRAPHIC SCALE:**



|                                                                      |                                                                                                                                                                          |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7/9/21                                                               |  BWS Tracings, Removed Pavement<br>Reconstruction Areas, and Revised<br>Resurfacing |
| DATE                                                                 | REVISION                                                                                                                                                                 |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                                                                                                                                                                          |
| <b>ROADWAY PLAN</b>                                                  |                                                                                                                                                                          |
| <b>INTERSTATE ROUTE H-1 RESURFACING</b>                              |                                                                                                                                                                          |
| <b>Miller Pedestrian Overpass to Kapiolani Interchange</b>           |                                                                                                                                                                          |
| <b>Federal-Aid Project No. NH-HI-1(279)</b>                          |                                                                                                                                                                          |
| Scale: 1" = 40'                                                      | Date: August 2021                                                                                                                                                        |
| SHEET No. R23 OF 41 SHEETS                                           |                                                                                                                                                                          |