



State of Hawaii, Department of Health, Clean Water Branch

**NOI Form C**

**NOI for HAR, Chapter 11-55, Appendix C - NPDES General Permit Authorizing Discharges of Storm Water Associated With Construction Activities (as defined in 40 CFR §§122.26(b)(14)(x) and 122.26(b)(15)(i))**

**All sections of this form MUST be completed for National Pollutant Discharge Elimination System (NPDES) General Permit compliance.**

**C.1 – General Information**

*You are required to fulfill all requirements. By submitting the NOI, you are certifying that:*

- *I prepared a Storm Water Pollution Prevention Plan (SWPPP) in accordance with HAR, Chapter 11-55, Appendix C, Section 7 prior to submitting this NOI.*
- *I will comply with all terms, conditions, and requirements in HAR Chapter 11-55, Appendix C.*
- *I will implement, operate, and maintain my SWPPP to ensure that storm water discharges associated with construction activities will not violate HAR, Chapter 11-54; HAR, Chapter 11-55; and HAR, Chapter 11-55, Appendix C.*

**C.2 - Existing Pollution Sources/ History of Land Use**

*Describe the history of land use at the existing Facility/Project site: All sites are either located adjacent to State Department of Transportation (DOT) highways and interchanges or within the highway itself, all within the limits of DOT right-of-way. The areas were all constructed as a part of the DOT highways and there are no other historical uses for the project sites.*

*Determine if the existing Facility/Project site may contain any existing pollution source(s) by using the following references. Place a check next to all references you utilized to determine existing pollution source(s). You are required to check at least one reference.*

- a. *DOH, Solid and Hazardous Waste Branch-Hawaii Underground Storage Tank- Leaking Underground Storage Tank database*
- b. *Phase I and/or Phase II Environmental Site Assessments, as applicable*
- c. *Recent site inspections*
- d. *Past land use history*
- e. *Soil sampling data, if available*
- f. *Other (specify): \_\_\_\_\_*

You are also required to check the Department of Health, Hazard Evaluation and Emergency Response (HEER) Office Sites, Incidents and Records through the “Viewer” in iHEER at: <https://eha-cloud.doh.hawaii.gov/iheer>.

**Note: The HEER Office is currently updating site information for sites. Most, but not all sites may be displayed on the viewer map. Site Document data upload is ongoing and not all documents may be currently available via this website. To get the complete record for the site, a [record request form](#) can be filled and submitted it to the HEER Office. Users will then be notified when they are able to download all information via the iHEER system website.**

Describe any existing pollution source(s) identified in the references you checked above and from HEER Office Sites, Incidents and Records: No existing pollution sources were observed.

Describe any corrective measures that have been undertaken for any existing pollution source(s): N/A

**Note: You are required to contact the Department of Health, Office of Hazard Evaluation and Emergency Response at (808) 586-4249 and through e-permitting Form “Notification of Construction Activities” at Form Finder <https://eha-cloud.doh.hawaii.gov/epermit/finder> if contaminated soil, vapor, or groundwater is known to be present at your project site. Notify at least 90 days prior to surface and subsurface disturbing activities (demolition, building/site configuration changes, grading, excavation, or prior to any other activities) that may disturb the ground surface at HEER sites. If you missed the 90 days notification time frame, notify the HEER Office as soon as possible to avoid any potential delays regarding your project.**

**C.3 - Construction Site Estimates**

Please provide the following estimates for the construction site.

Total project area including areas to be left undisturbed: \_\_\_\_\_ 13.51 acres  
 Construction site area to be disturbed including storage and staging areas: \_\_\_\_\_ 13.51 acres  
 Impervious area before construction: \_\_\_\_\_ 3.10 acres  
 Impervious area after construction: \_\_\_\_\_ 3.10 acres

**C.4 - Quantity of Storm Water Runoff**

Estimate the quantity of storm water runoff during construction when the greatest and/or maximum area of disturbance occurs. Provide the supporting calculations in an attachment or insert in this section.

\_\_\_\_\_ Millions of Gallons per Day (MGD)  
 or  
 \_\_\_\_\_ 41.61 Cubic Feet per Second (CFS)

**C.5 - Soil Characterization**

Describe the nature of the soil on the project site (including the potential to encounter contaminated soil) and the nature of the fill material to be used:

**Project Area 1 (Paiwa IC to Waikele)**

Molokai silty clay loam (MuB), 3 to 7 percent slopes, Molokai silty clay loam (MuC), 7 to 15 percent slopes, Molokai silty clay loam (MuD), 15 to 25 percent slopes, and Waipahu silty clay (WzB), 2 to 6 percent slopes are the soils found in Project Area 1.

**Project Area 2 (H-2, North of Waiawa IC)**

Helemano silty clay (HLMG), 30 to 90 percent slopes, Lahaina silty clay (LaC), 7 to 15 percent slopes, Molokai silty clay loam (MuB), 3 to 7 percent slopes, Molokai silty clay loam (MuC), 7 to 15 percent slopes, Molokai silty clay loam (MuD), 15 to 25 percent slopes, and Rock land (rRK) are the soils found in Project Area 2.

**Project Area 3 (Vicinity of Waiawa IC)**

Ewa silty clay loam (EaB), 3 to 6 percent slopes, Helemano silty clay (HLMG), 30 to 90 percent slopes, Kawaihapai clay loam (KIA), 0 to 2 percent slopes, Molokai silty clay loam (MuB), 3 to 7 percent slopes, Rock land (rRK), Waipahu silty clay (WzA), 0 to 2 percent slopes, Waipahu silty clay (WzB), 2 to 6 percent slopes, and Waipahu silty clay (WzC), 6 to 12 percent slopes, are the soils found in Project Area 3..

**Project Area 4 (Ke'ehi IC/Middle Street)**

Fill land (FL), mixed, Honouliuli clay (HxA), 0 to 2 percent slopes, and Ewa silty clay loam (EmA), moderately shallow, 0 to 2 percent slopes are the soils found in Project Area 4.

**C.6 - Nature and Sequence of Construction Activity**

What is the function of the construction activity (Please check all applicable activity(ies))?

- Residential    Commercial    Industrial    Road Construction    Linear Utility  
 Other (please specify): CCTV and Conduit installations

What is being constructed? The Freeway Management System, Phase 3, Unit 1 project is situated at various locations on Oahu, and is entirely within the State right-of-way. Project area descriptions are Ke'ehi Interchange and Middle Street to its intersection with the H-1 Freeway and North King Street; Waiawa Interchange and the H-2 Freeway to Waipio Gentry; and Paiwa Interchange and the H-1 Freeway to Waikele. The proposed project consists of the installation of camera poles (for CCTV systems) and footings, splice cabinets and footings, and connections to existing power and communications infrastructure. Most of these installations will require ground-disturbing activities that include trenching and excavations for splice cabinets between 4.0 to 8.0 feet in depth, and footing excavations for traffic camera poles between 15.0 and 25.0

feet in depth. Additionally, trenching will be required in some areas to facilitate power and communications connections.

*Describe the scope of work and major construction activities you wish to be covered in this NOI, including baseyards and staging areas. You may only include project areas where the locations of impervious structures are known; project areas where the final grades are known; and work areas that will be performed by one (1) general contractor. A separate NOI will be required for all other project areas.*

The scope of the major construction activities include installation of foundations, cabinets and poles for three traffic camera locations, and conduits via trenching and on structures to provide fiber optic communication and power at the specified locations along the H-1/ H-2 Freeways and Middle Street.

**C.7 - Existing or Pending Permits, Licenses, or Approvals**

Place a check next to all applicable Federal, State, or County permits, Licenses, or approvals for the project and specify the permit number.

Other NPDES Permit or NGPC File No.: \_\_\_\_\_

Department of the Army Permit (Section 404): \_\_\_\_\_

*If your project requires work in, above, under or adjacent to State waters, please contact the Army Corps of Engineers (COE) Regulatory Branch at (808) 438-9258 regarding their permitting requirements. Provide a copy of the COE permitting jurisdictional determination (JD) or the JD with COE Person's Name, Phone Number, and Date Contacted.*

Facility on SARA 313 List (identify SARA 313 chemicals on project site): \_\_\_\_\_

RCRA Permit (Hazardous Wastes): \_\_\_\_\_

Section 401 Water Quality Certification: \_\_\_\_\_

Other (Specify): \_\_\_\_\_

*County-approved Erosion and Sediment Control Plan and/or Grading Permit*

*a. Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?*

Yes. Please complete Section C.7.b below and skip Section C.7.c.

No. Please complete Section C.7.c below and skip Section C.7.b.



- b. *Is a copy County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, attached?*
- Yes, see Attachment \_\_\_\_\_*
- No, the County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, will be submitted at least 30 calendar days before the start of construction activities.*
- c. *Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required.*
- See Attachment \_\_\_\_\_ for the County written determination.*
- Provide the County contact person information (Name, Department, Phone Number, and Date Contacted): \_\_\_\_\_*
- The project is a Federal Project and does not require County approval.*
- Other (specify): Per letter of agreement with the City and County of Honolulu, this project falls under the typical project not requiring a grading permit (communication or other utility installation and traffic signal modernization and installation). A copy of the letter agreement is included in Form C Attachment C.*

### **C.8 - Project Site Maps and Construction Plans/Drawings**

*Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.*

*Please reference which maps account for the features listed below.*

- a. *Island on which the project is located. See Attachment A-1, Exhibit 1*
- b. *Vicinity of the project on the island. See Attachment A-1, Exhibit 2*
- c. *Legal boundaries of the project. See Attachment A-2, Exhibits 4 to 22*
- d. *Receiving State water(s) from Section 6 of e-Permitting form and receiving separate drainage system(s) from Section 7 of e-Permitting form, identified and labeled. See Attachment A-4, Exhibit 42 to 51*
- e. *Location of ALL discharge points from Section 6 of e-Permitting form with identification numbers. See Attachment A-4, Exhibit 42 to 51*
- f. *Boundaries of 100-Year flood plans. See Attachment A-5, Exhibit 52 to 56*
- g. *Areas of soil disturbance. See Attachments A-2 and A-3, Exhibits 4 to 41*
- h. *Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed. See Attachment A-2, Exhibits 4 to 22*
- i. *Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Pre-construction, during-construction, and*

post-construction topography will remain the same as the existing conditions. See Attachment A-3 and A-4, Exhibits 23 to 51.

- j. During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Pre-construction, during-construction, and post-construction topography will remain the same as the existing conditions. See Attachment A-3 and A-4, Exhibits 23 to 51.
- k. Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Pre-construction, during-construction, and post-construction topography will remain the same as the existing conditions. See Attachment A-3 and A-4, Exhibits 23 to 51.

**C.9 - Construction Schedule**

Provide the following estimated dates:

The date when construction activity will begin. TBD

The date when each major construction activity begins. TBD

The date when the Notice of Cessation form will be submitted. TBD

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***Site Specific BMPs Plan Attachments***

***Attachment A - Project Site Maps and Construction Plans/Drawings (Section C.8)***

***PROJECT SITE MAPS, CONSTRUCTION PLANS/DRAWINGS***

**ATTACHEMENT A**

**EXHIBIT 1**

**EXHIBIT 2**

**EXHIBIT 3**

**EXHIBIT 4-22**

**EXHIBIT 23-41**

**EXHIBIT 42-51**

**EXHIBIT 52-56**

**VICINITY MAP**

**LOCATION MAP (CCTV & CONDUIT)**

**LOCATION MAP (DRAINAGE AREAS)**

**SITE AND BMP PLANS**

**DRAINAGE MAPS**

**OUTFALL MAPS**

**FLOOD MAPS**



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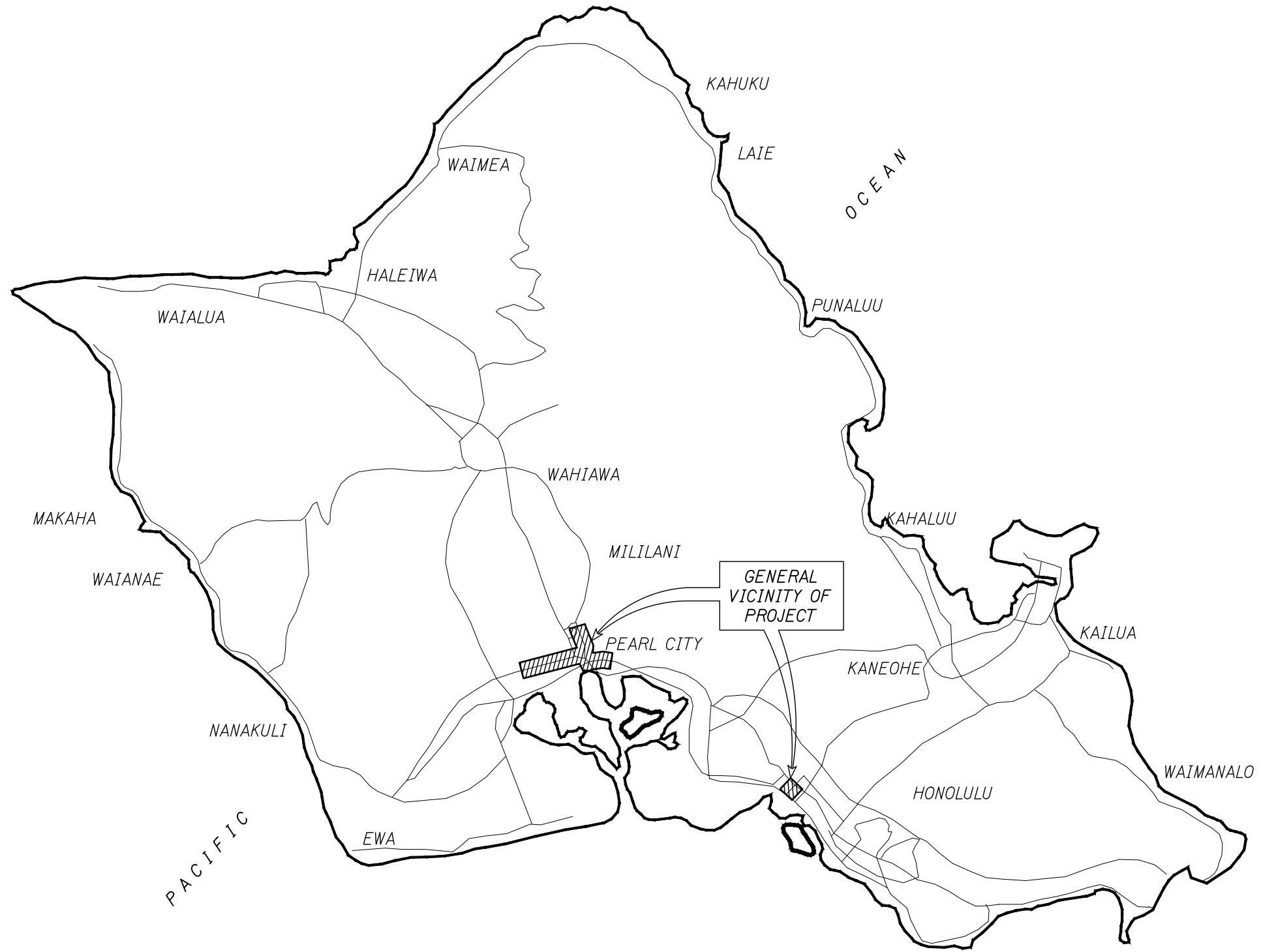
# **Attachment A-1**

## **Vicinity and Location Maps- Form C**

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FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\0\_VICINITY MAPS\01-VICINITY MAP\_ISLAND OF OAHU.DWG



*VICINITY MAP - ISLAND OF OAHU*

NOT TO SCALE

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

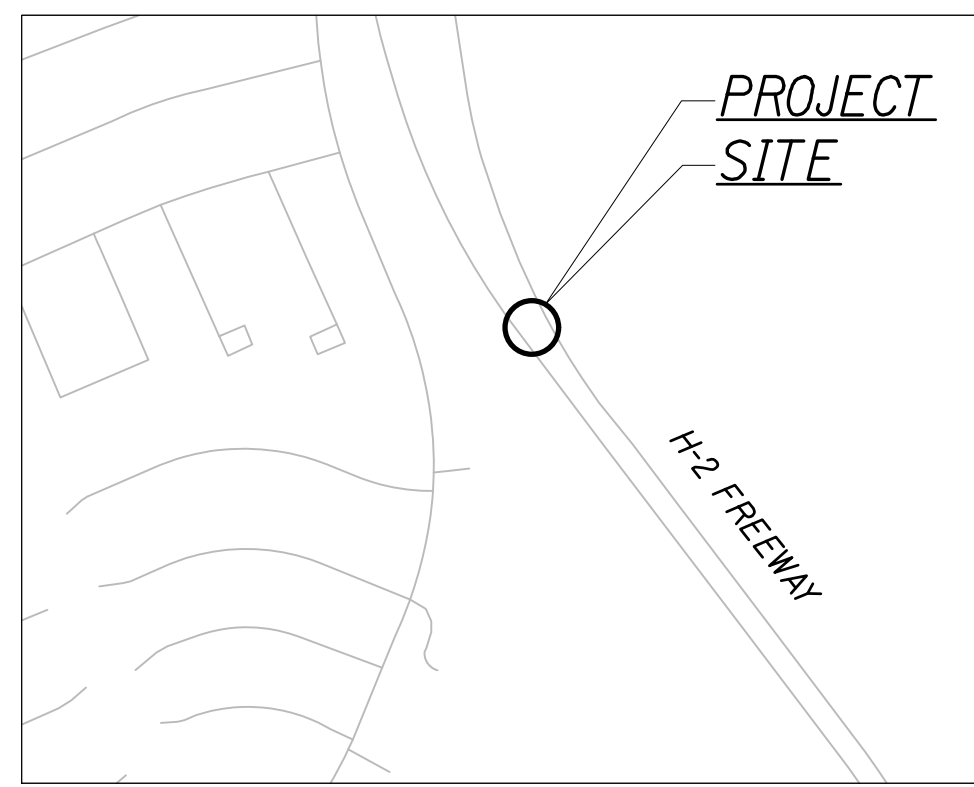
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

VICINITY MAP  
 ISLAND OF OAHU

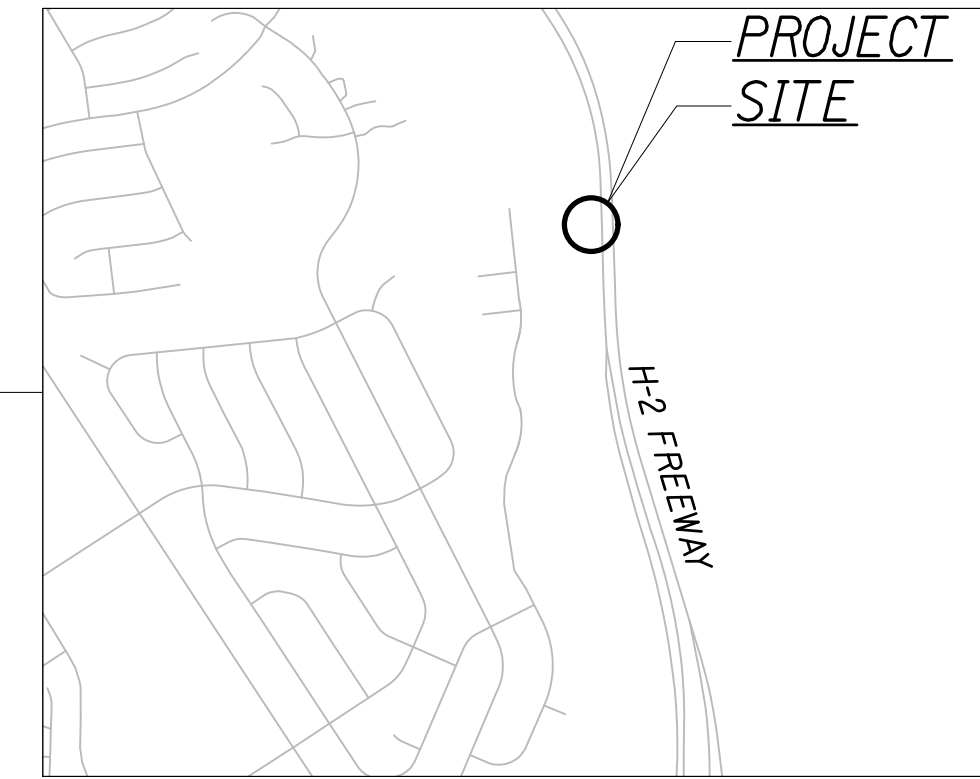
EXHIBIT

01

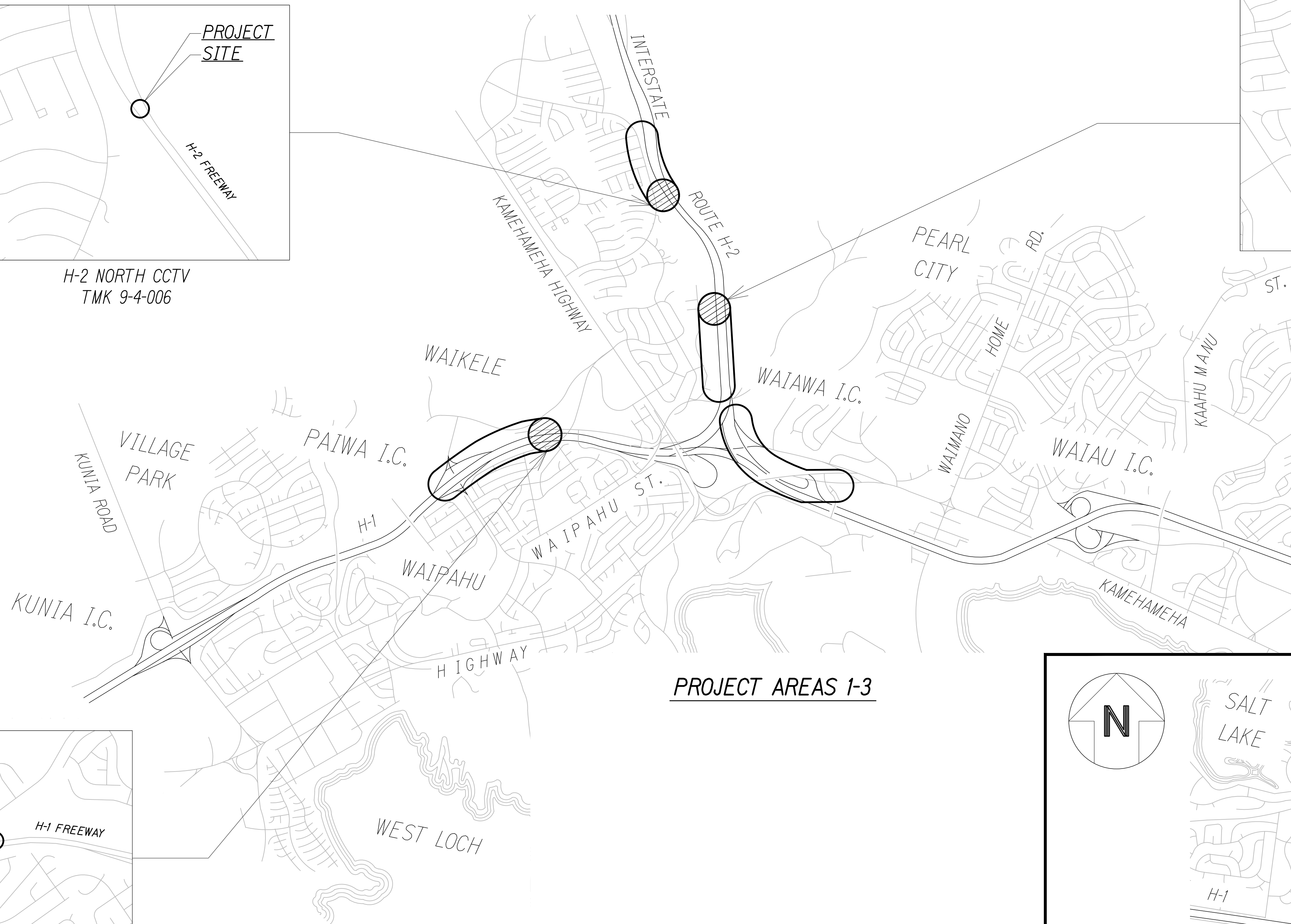
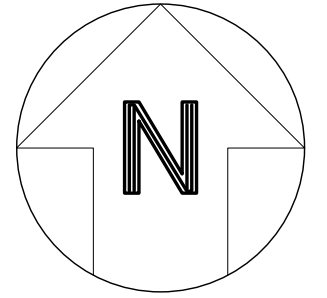
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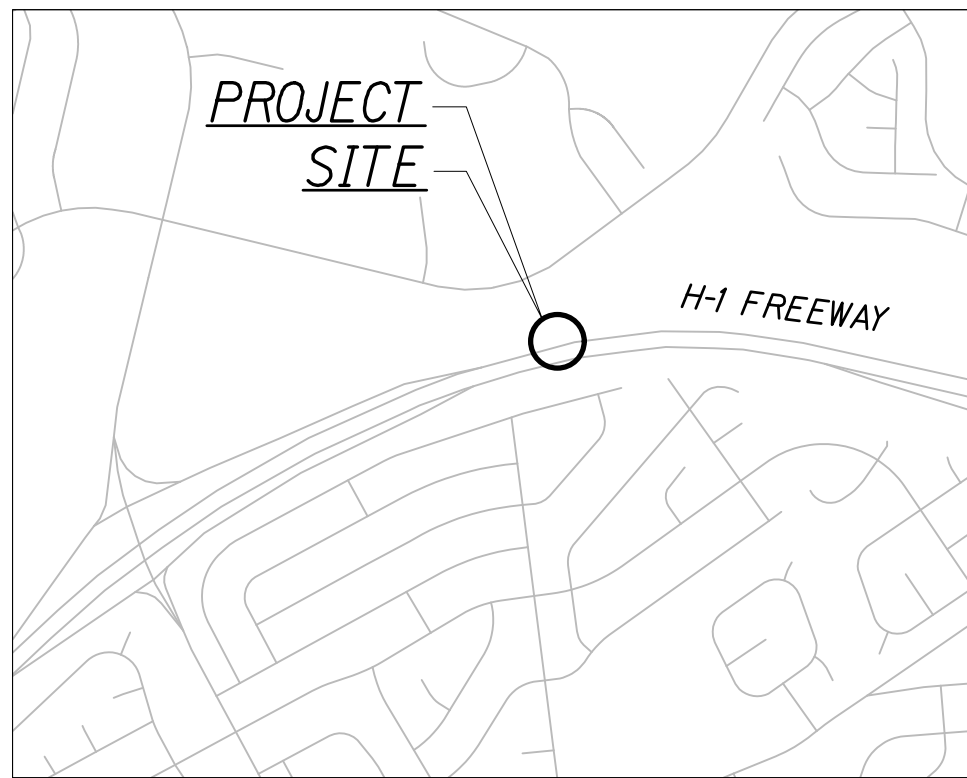
H-2 NORTH CCTV  
TMK 9-4-006



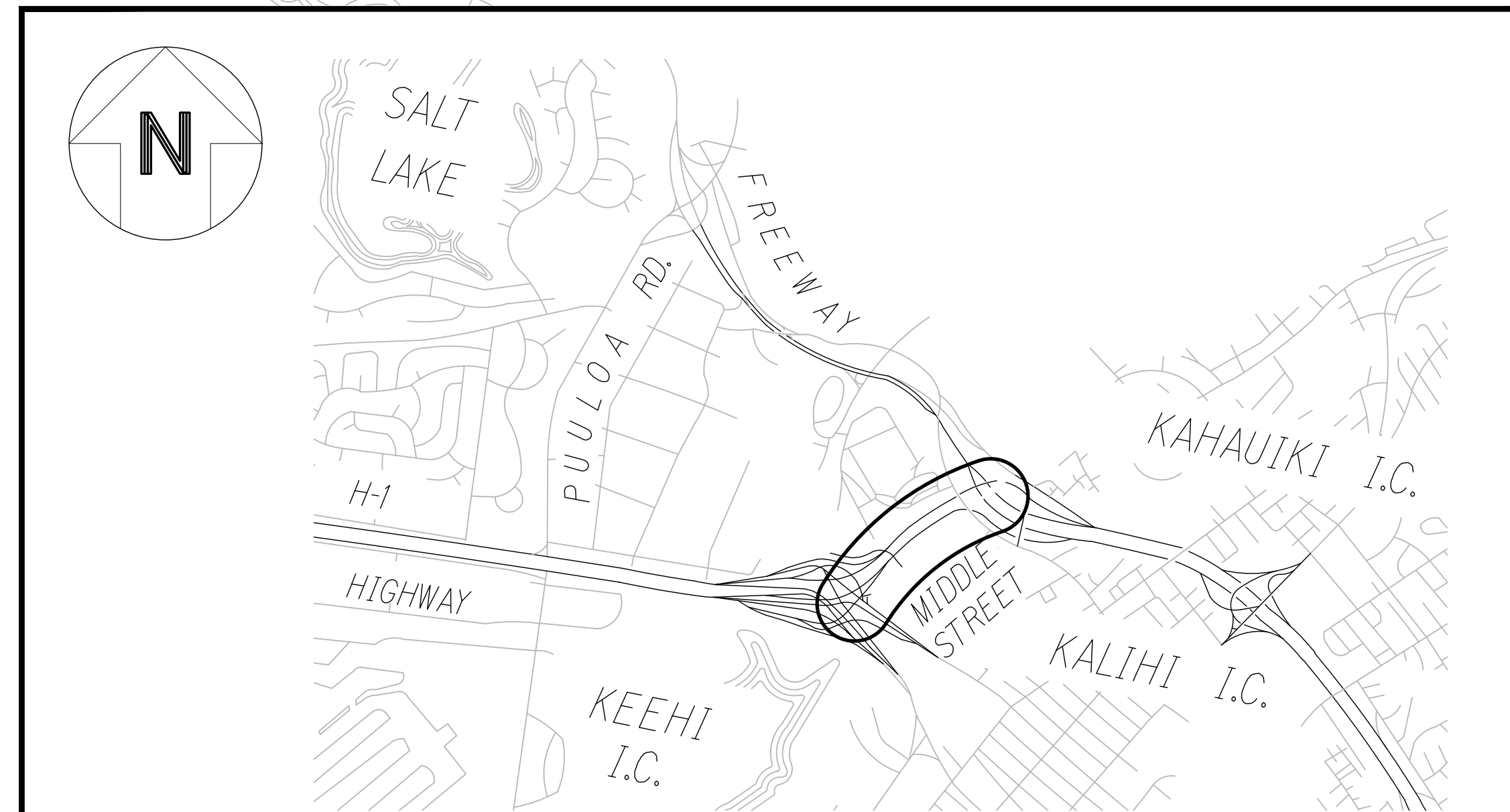
H-2 SOUTH CCTV  
TMK 9-6-004



PROJECT AREAS 1-3


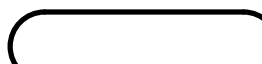


WAIKELE CCTV  
TMK 9-4-007



PROJECT AREA 4

LEGEND:

-  CCTV Site
-  New Conduit or Support Infrastructure

FREWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

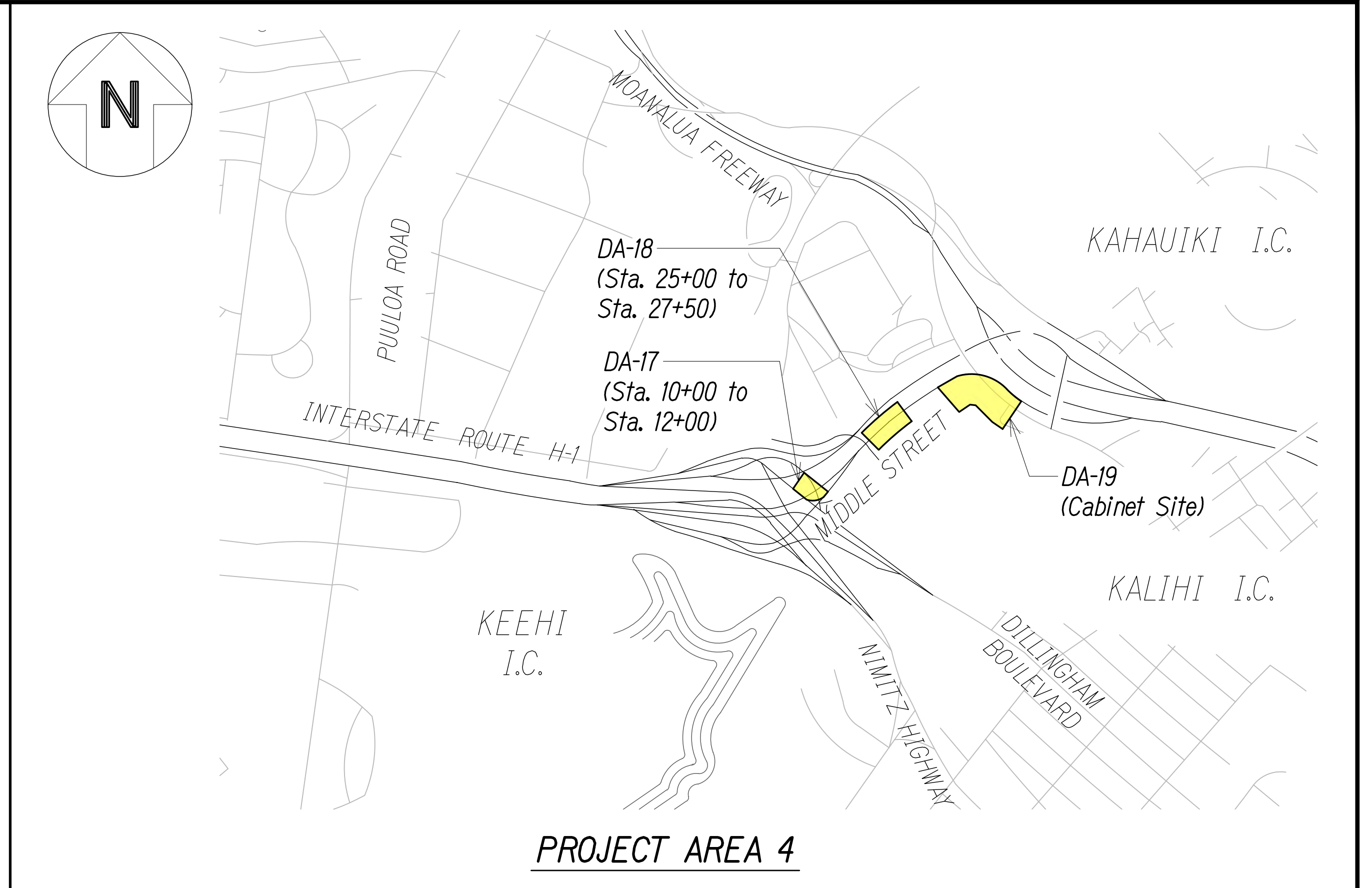
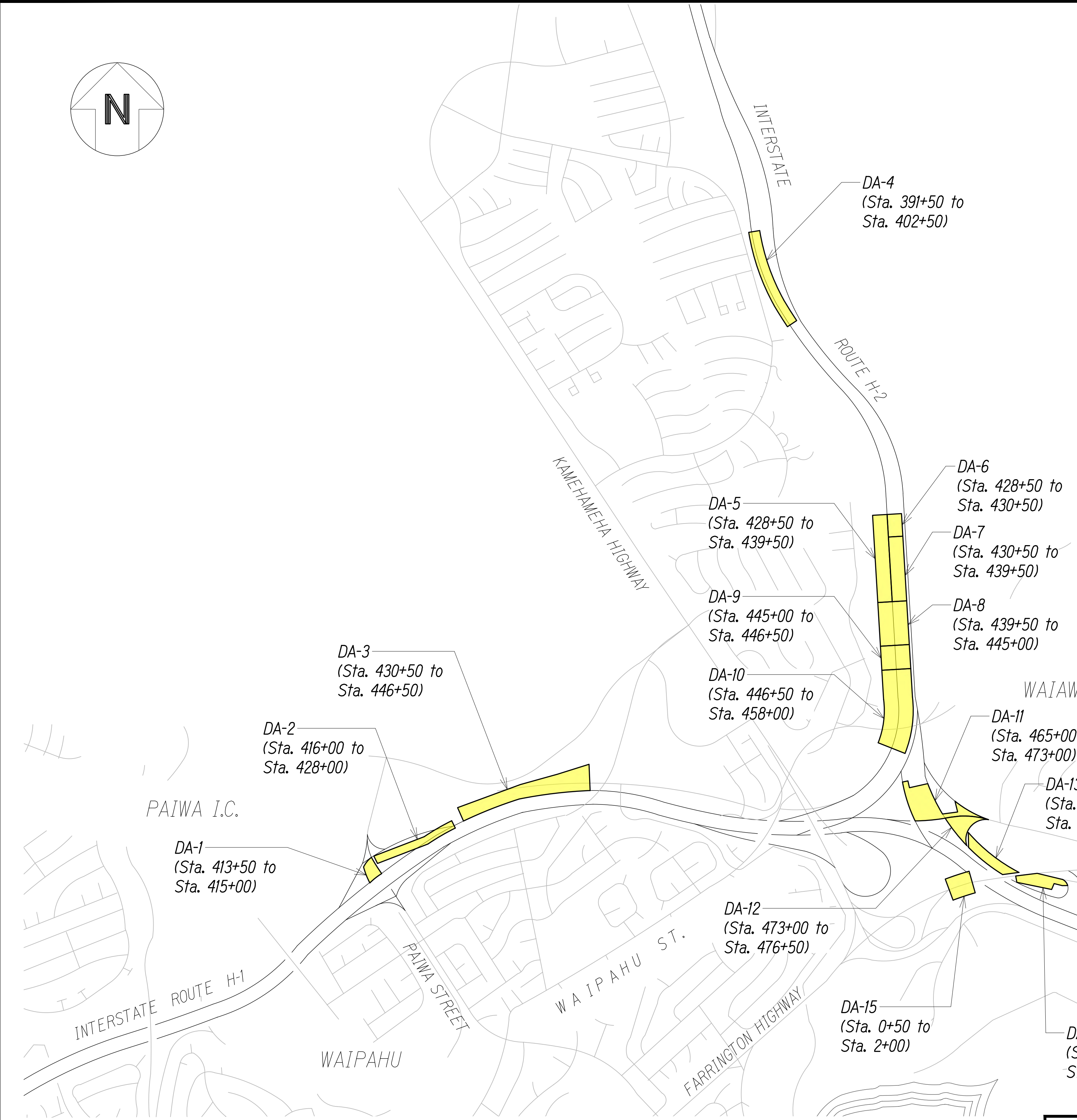
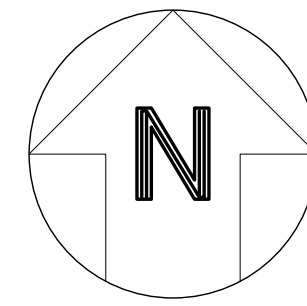
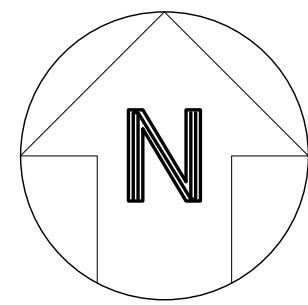
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**LOCATION MAP**  
CCTV & CONDUIT LOCATIONS

EXHIBIT

**02**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\0\_VICINITY MAPS\03-LOCATION MAP\_DRAINAGE AREAS.DWG



**PROJECT AREAS 1-3**

**FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**AUSTIN, TSUTSUMI, & ASSOC., INC.**  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**LOCATION MAP  
DRAINAGE AREAS (DA)**

**EXHIBIT  
03**



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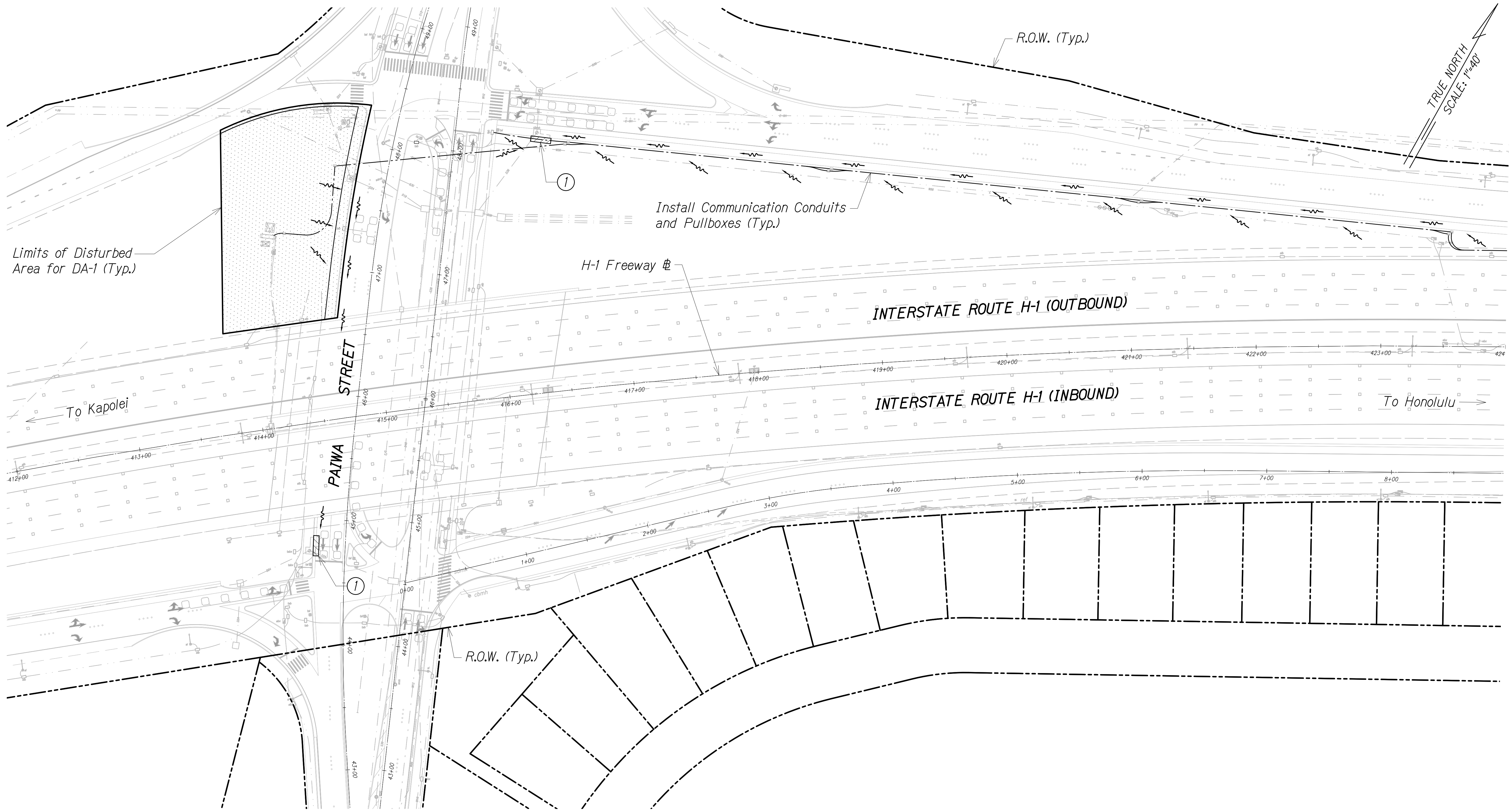
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# **Attachment A-2**

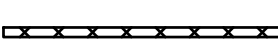
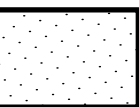
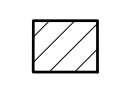

Site and BMP Plans- Form C

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**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

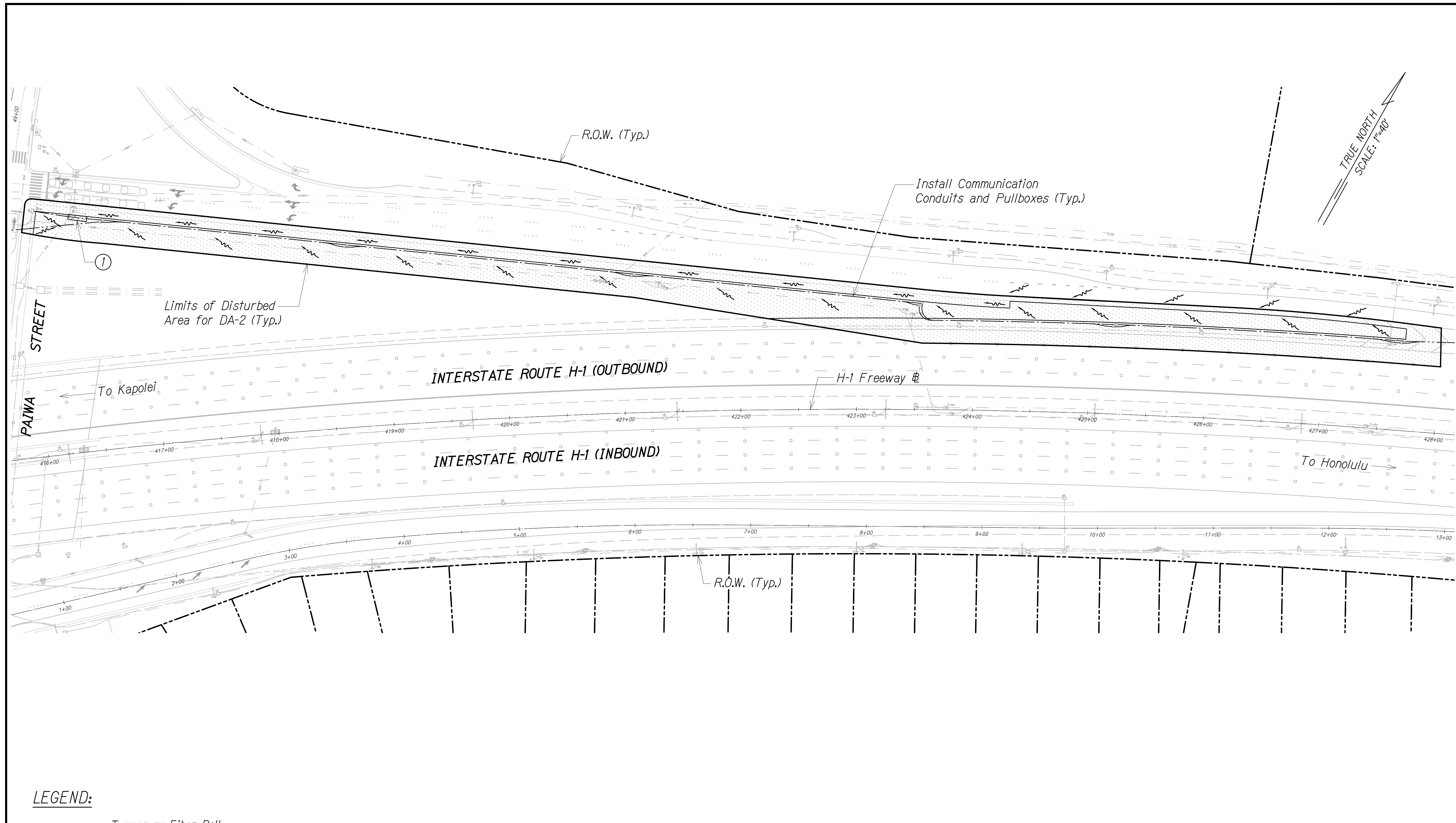
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-1 (STA. 413+50 TO STA. 415+00)

EXHIBIT  
**04**

TRUE NORTH  
 SCALE: 1"=40'



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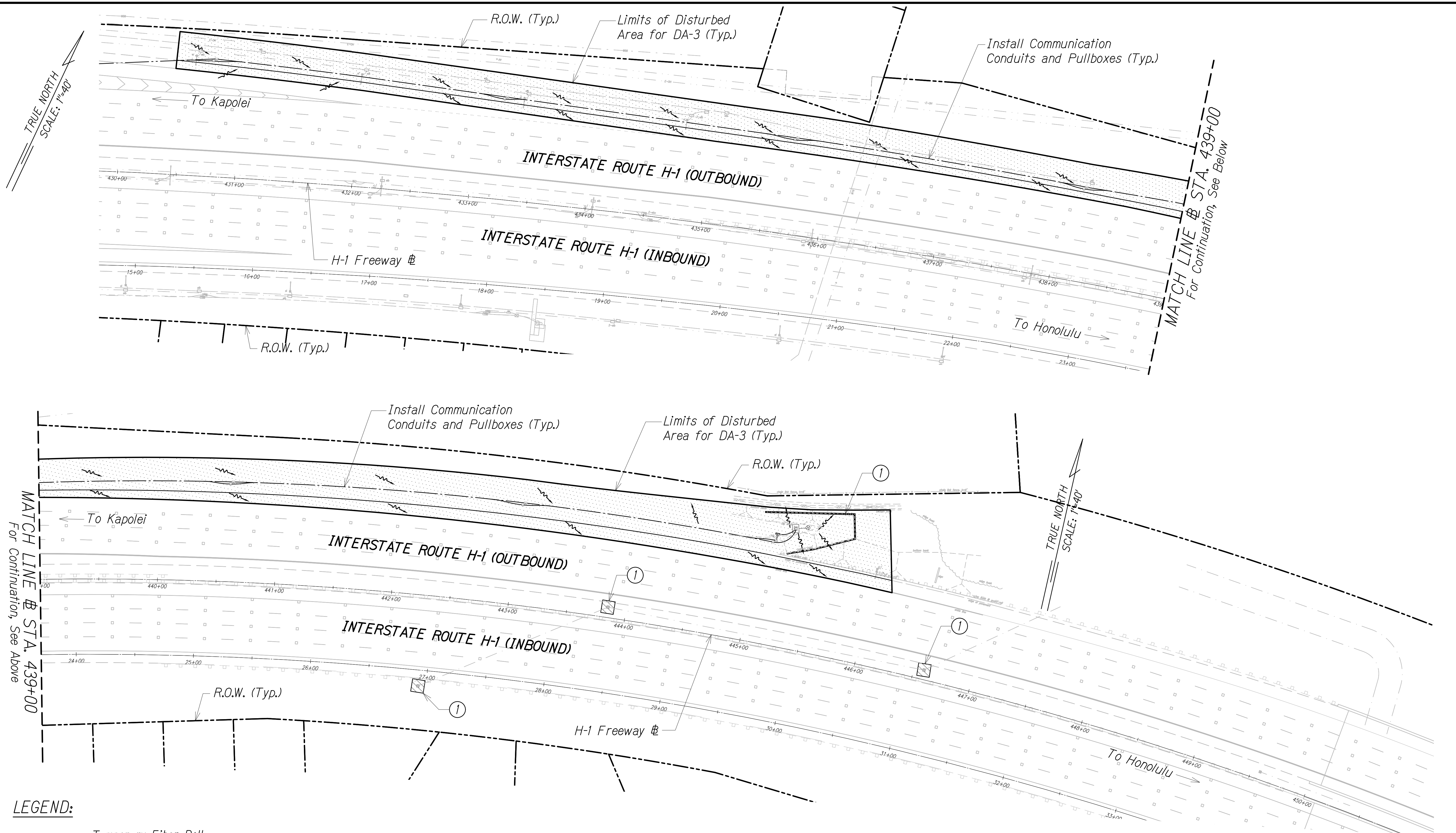
**LEGEND:**

- Temporary Fiber Roll
- Disturbed Area
- Temporary Sediment Barrier
- Flow Direction

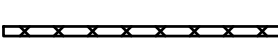
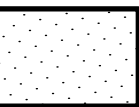
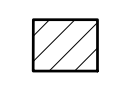

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

|   |  |   |
|---|--|---|
| <p><b>FREEWAY MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</b></p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>SITE AND BMP PLAN<br/>DA-2 (STA. 416+00 TO STA. 428+00)</b></p> | <p>EXHIBIT</p> <p style="font-size: 2em; font-weight: bold;">05</p> |
|---|--|---|



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

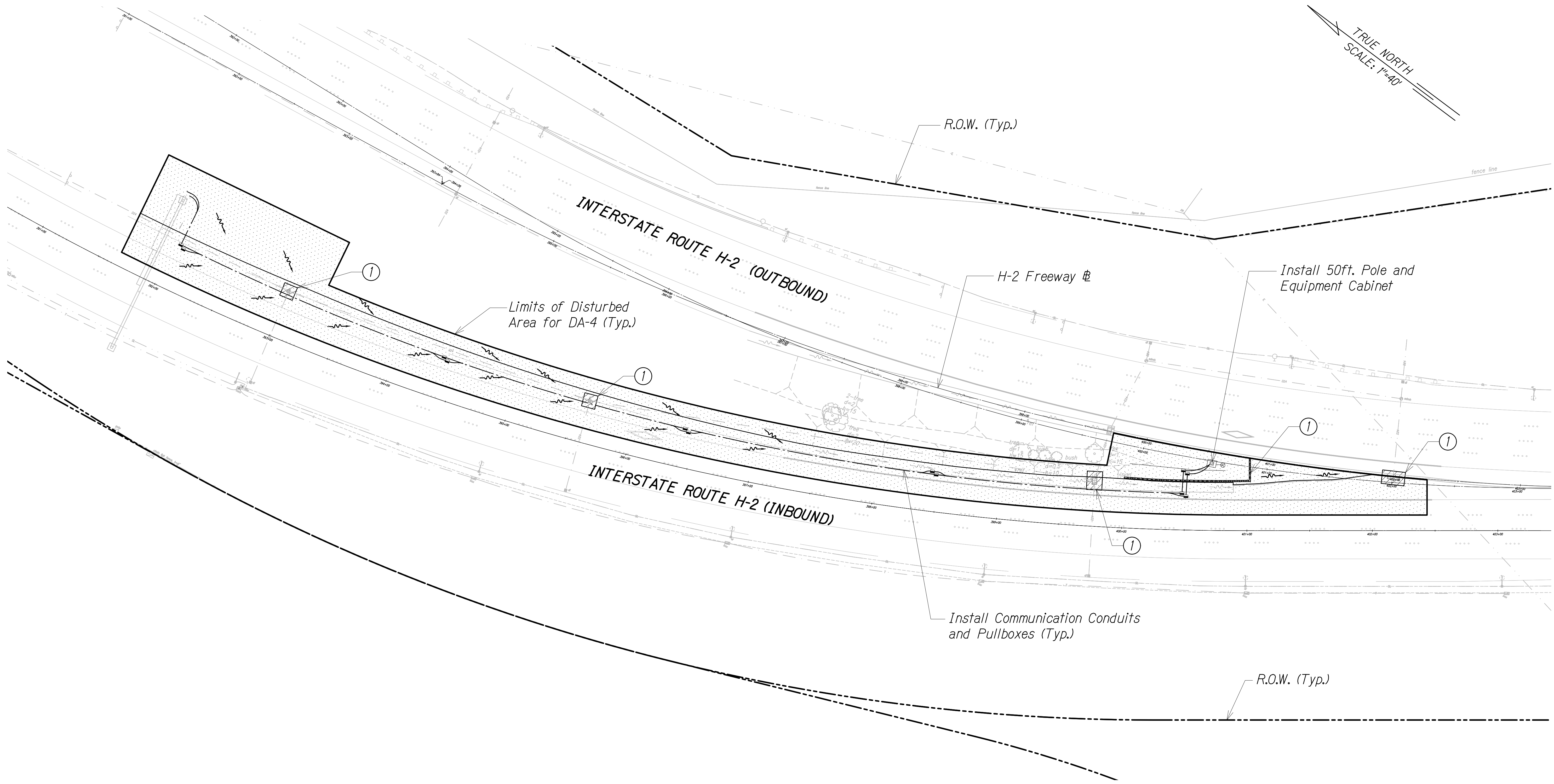
- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREeway MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

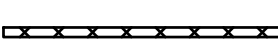
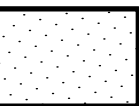
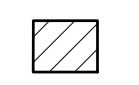

**AUSTIN, TSUTSUMI, & ASSOC., INC.**  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-3 (STA. 430+50 TO STA. 446+50)

EXHIBIT  
**06**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\07-SITE AND BMP PLAN - 4.DWG



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

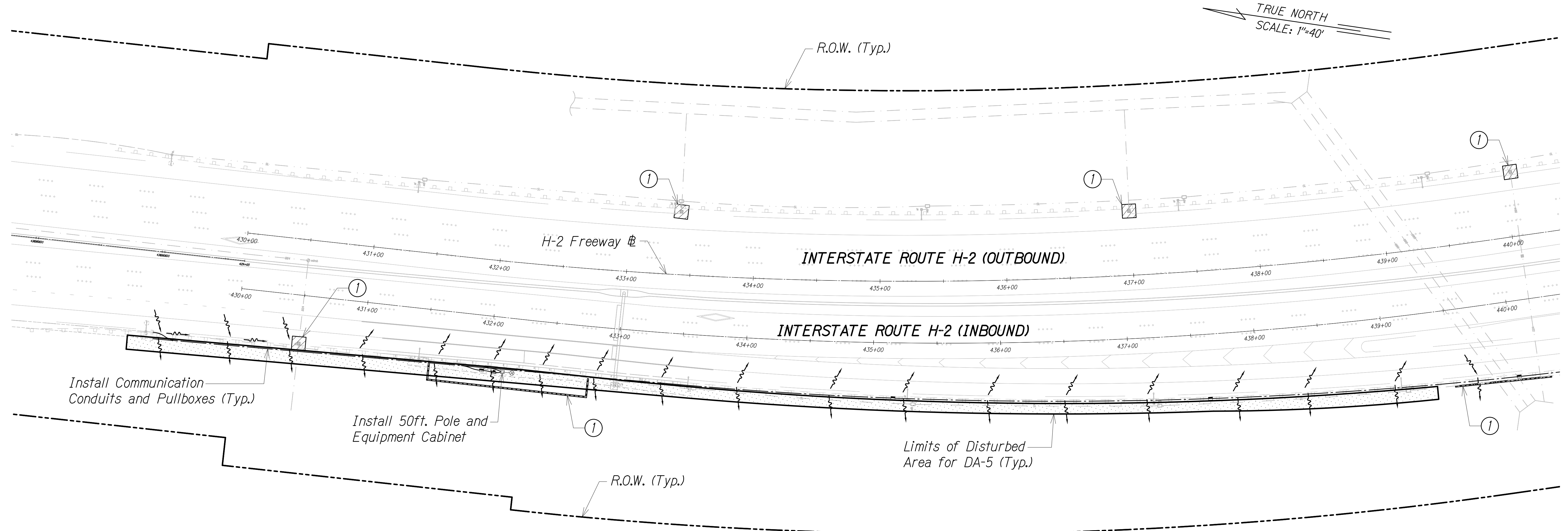
- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

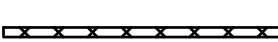
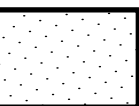
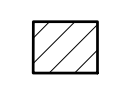

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-4 (STA. 391+50 TO STA. 402+50)

EXHIBIT  
**07**





**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

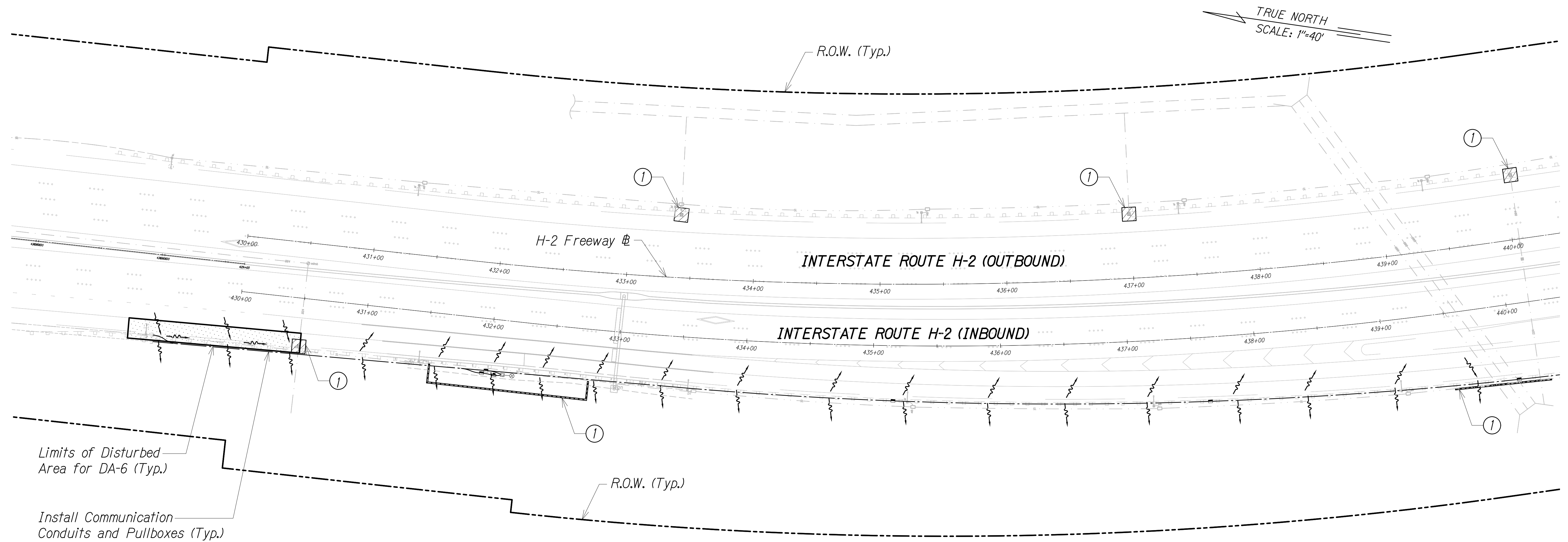
FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-5 (STA. 428+50 TO STA. 439+50)

EXHIBIT

**08**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\09-SITE AND BMP PLAN - 6.DWG



**LEGEND:**

- Temporary Fiber Roll
- Disturbed Area
- Temporary Sediment Barrier
- Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

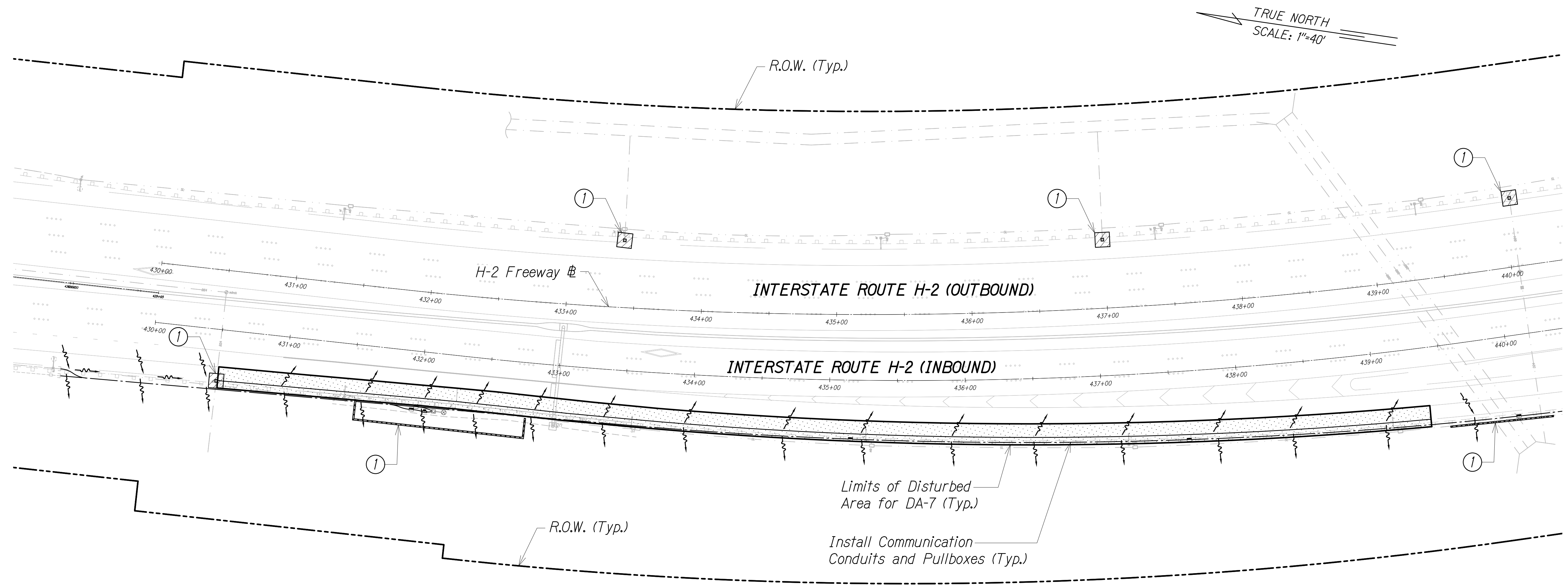
**FREWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)**

**AUSTIN, TSUTSUMI, & ASSOC., INC.**  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**SITE AND BMP PLAN  
 DA-6 (STA. 428+50 TO STA. 430+50)**

EXHIBIT

09



**LEGEND:**

- Temporary Fiber Roll
- Disturbed Area
- Temporary Sediment Barrier
- Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

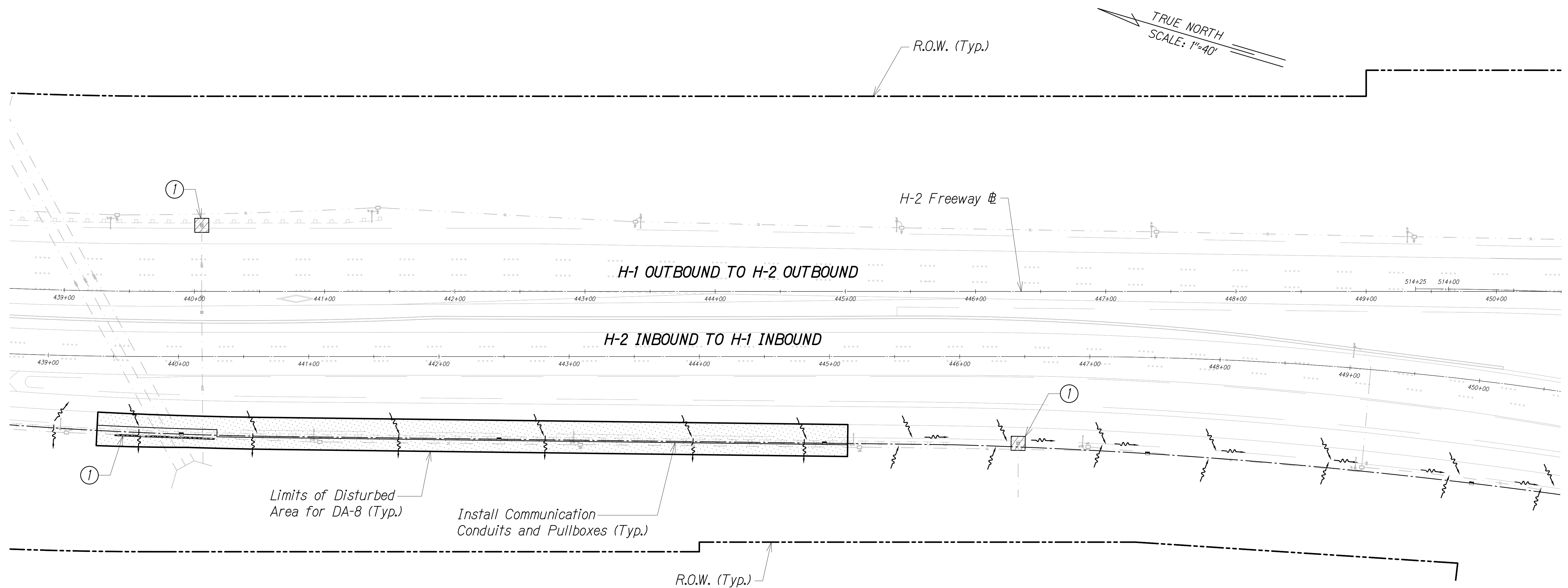
**FREeway MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)**

**ATA AUSTIN, TSUTSUMI, & ASSOC., INC.**  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**SITE AND BMP PLAN**  
 DA-7 (STA. 430+50 TO STA. 439+50)

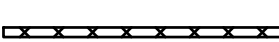
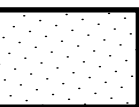
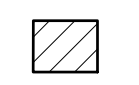

EXHIBIT

10

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\11-SITE AND BMP PLAN - 8.DWG



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

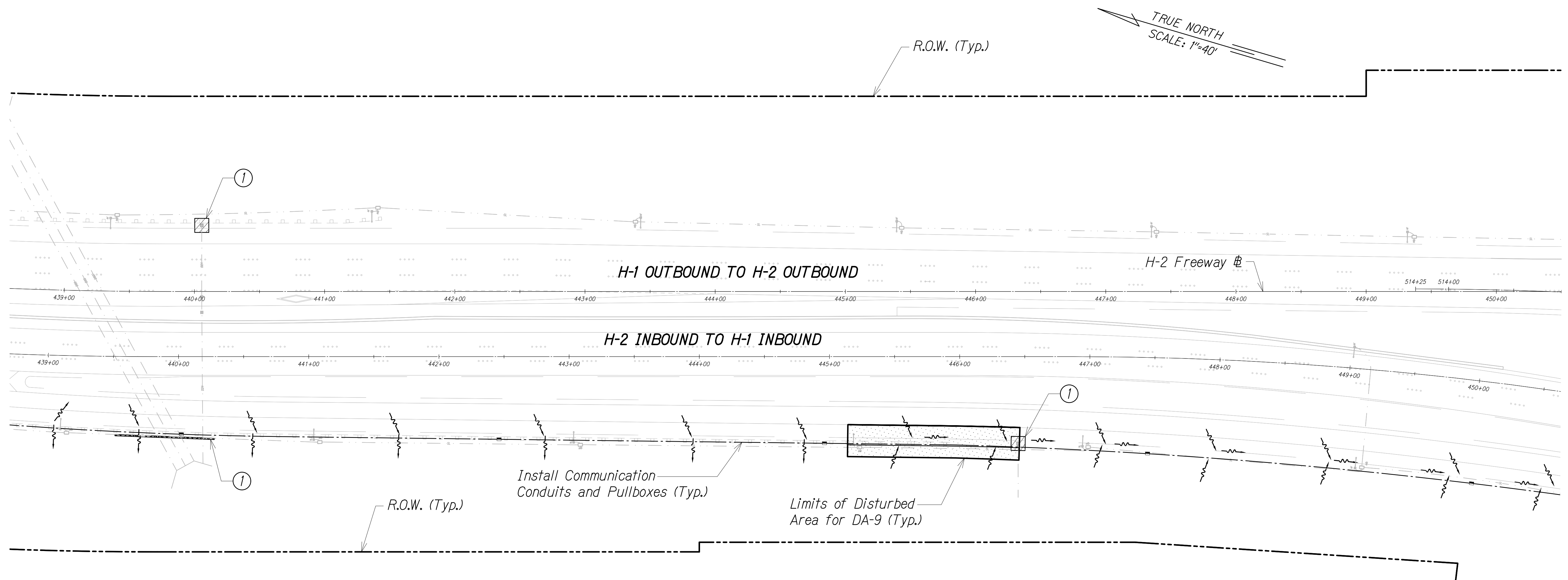
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

SITE AND BMP PLAN  
DA-8 (STA. 439+50 TO STA. 445+00)

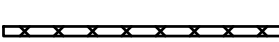
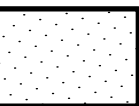
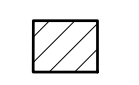

EXHIBIT

11

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\12-SITE AND BMP PLAN - 9.DWG



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

**FREWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)**

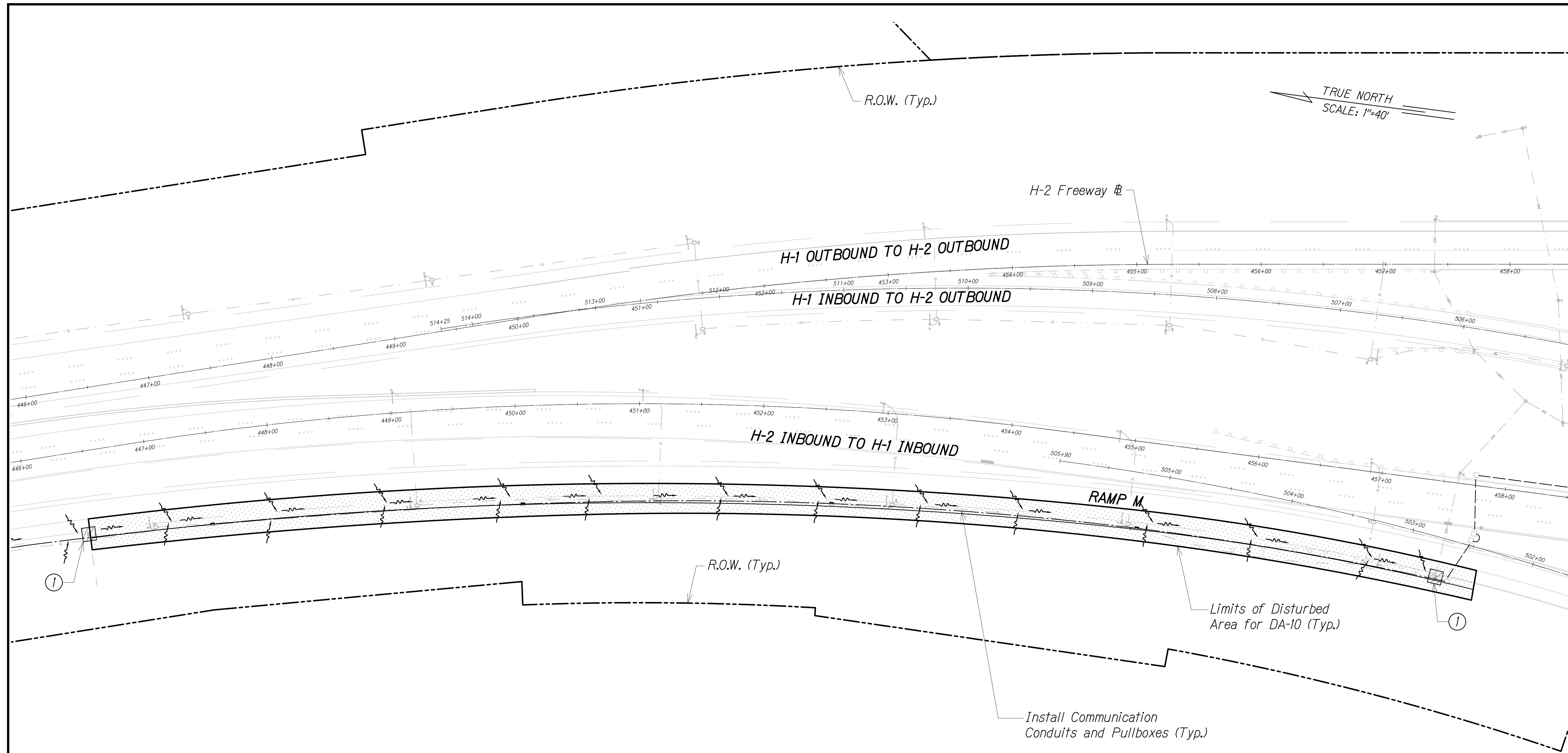
**ATA AUSTIN, TSUTSUMI, & ASSOC., INC.**  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**SITE AND BMP PLAN  
 DA-9 (STA. 445+00 TO STA. 446+50)**

EXHIBIT


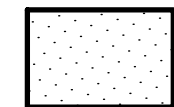

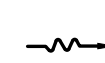
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FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\13-SITE AND BMP PLAN - 10.DWG



TRUE NORTH  
SCALE: 1"=40'

**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

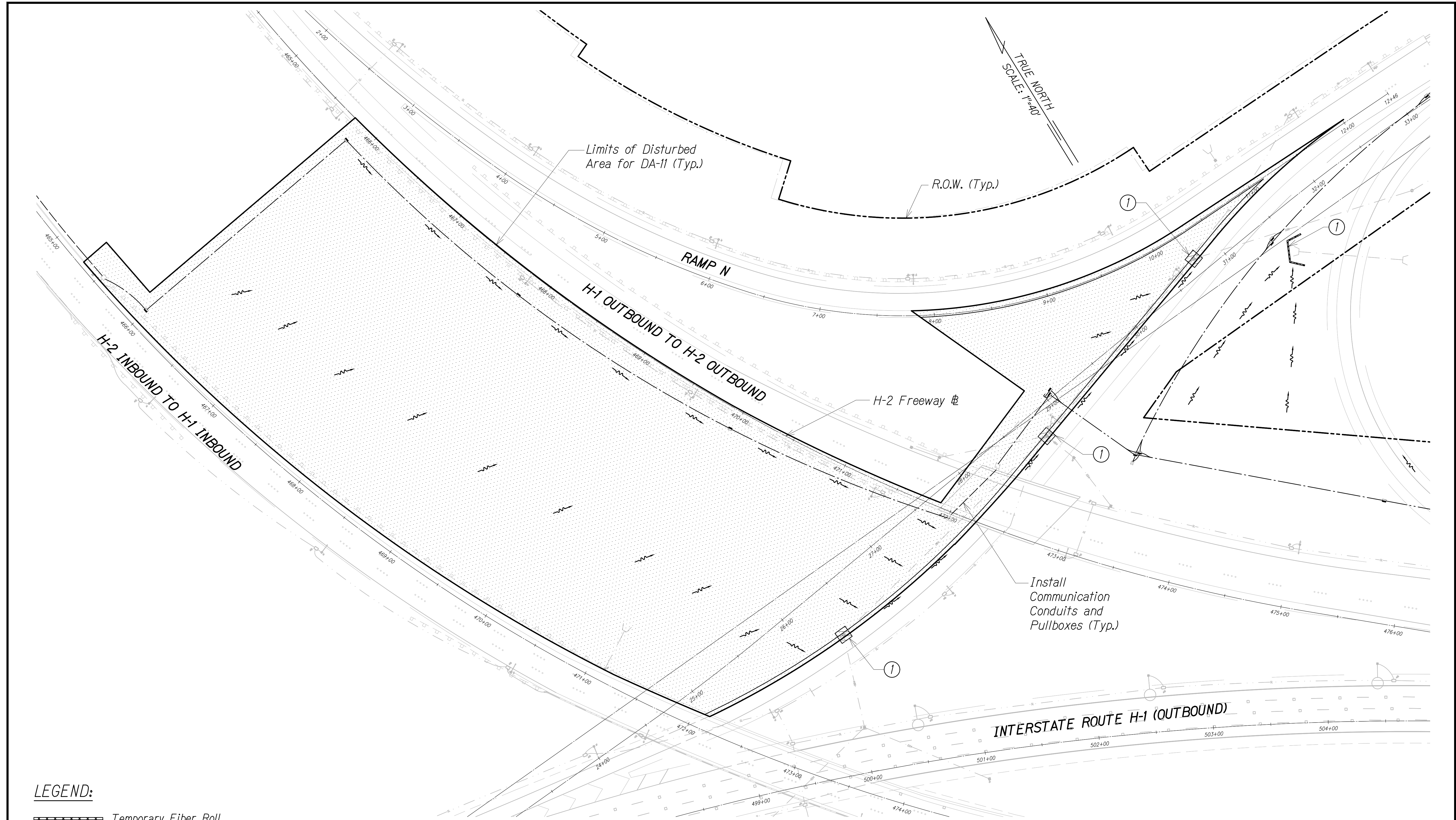
**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**ATA AUSTIN, TSUTSUMI, & ASSOC., INC.**  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**SITE AND BMP PLAN  
DA-10 (STA. 446+50 TO STA. 458+00)**

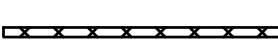
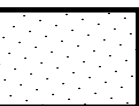
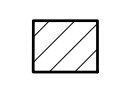

EXHIBIT

**13**





**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

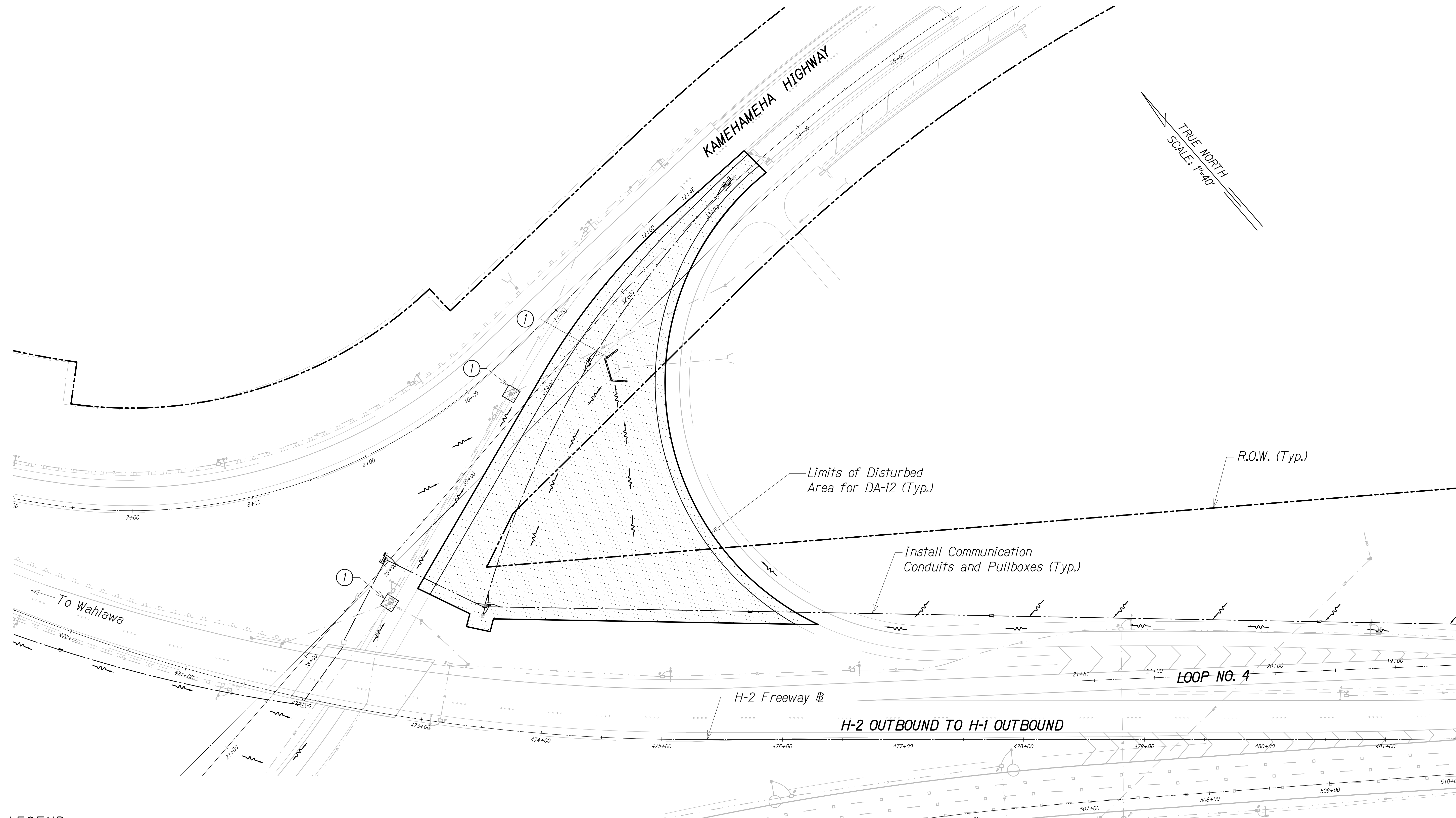
**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**SITE AND BMP PLAN  
DA-11 (STA. 465+00 TO STA. 473+00)**

EXHIBIT

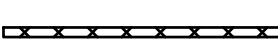
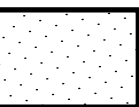
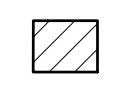

**14**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\15-SITE AND BMP PLAN - 12.DWG



TRUE NORTH  
SCALE: 1"=40'

**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

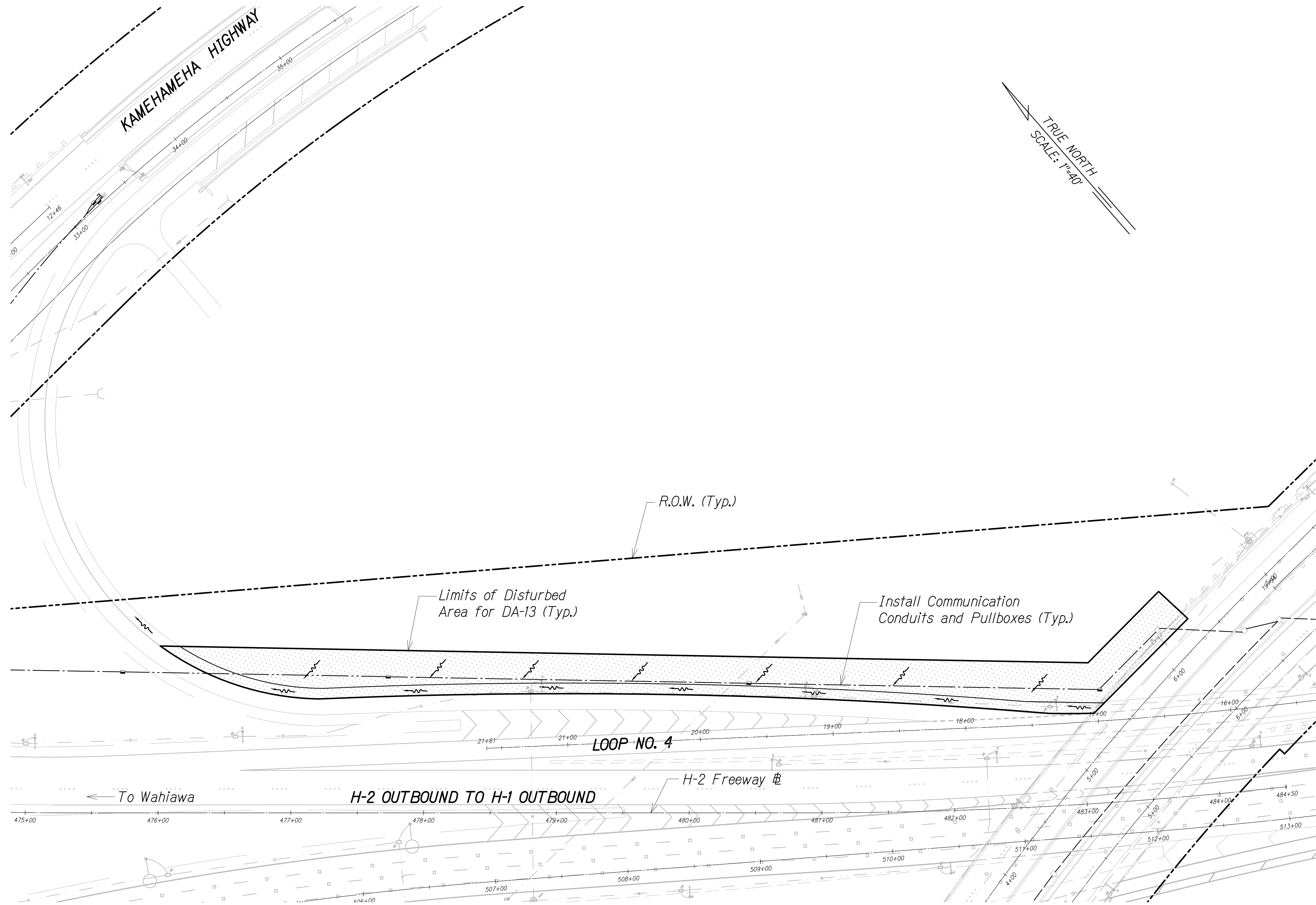
**FREWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

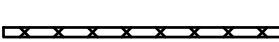
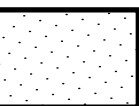
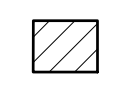

**SITE AND BMP PLAN  
DA-12 (STA. 473+00 TO STA. 476+50)**

EXHIBIT

**15**



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**AUSTIN, TSUTSUMI, & ASSOC., INC.**  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**SITE AND BMP PLAN  
DA-13 (STA. 476+00 TO STA. 484+00)**

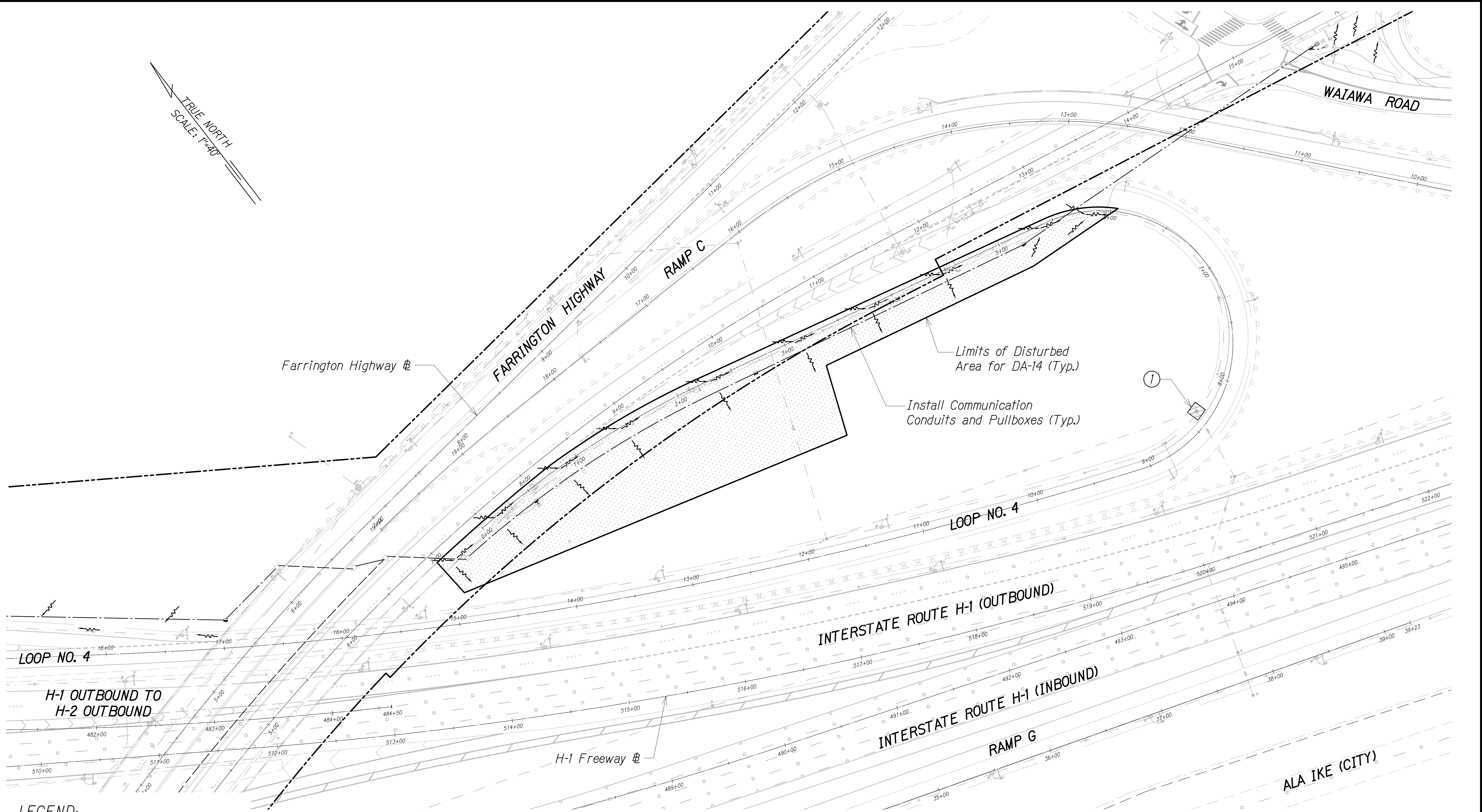
EXHIBIT

**16**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\17-SITE AND BMP PLAN - 14.DWG

TRUE NORTH  
SCALE: 1"=40'



**LEGEND:**

- Temporary Fiber Roll
- Disturbed Area
- Temporary Sediment Barrier
- Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

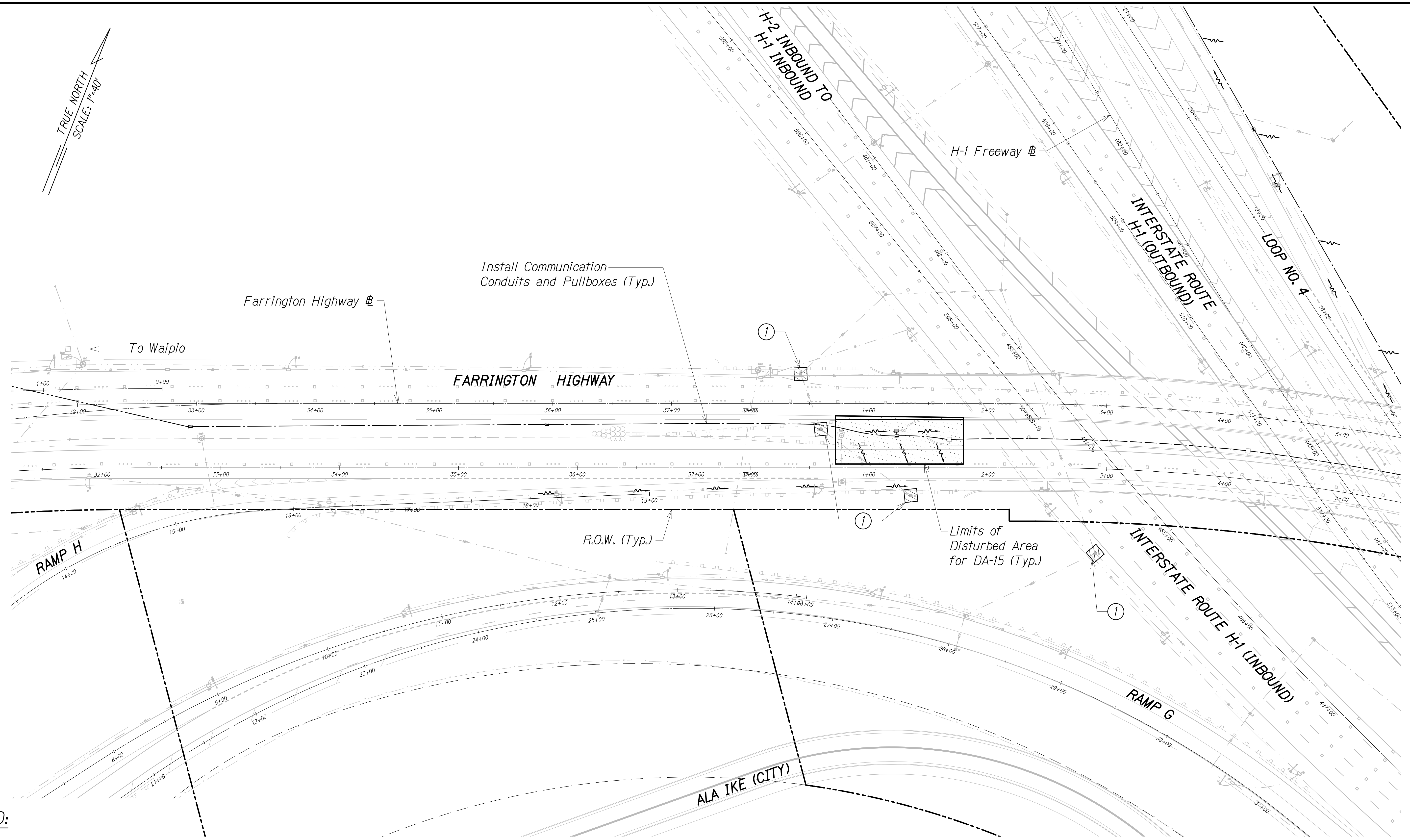
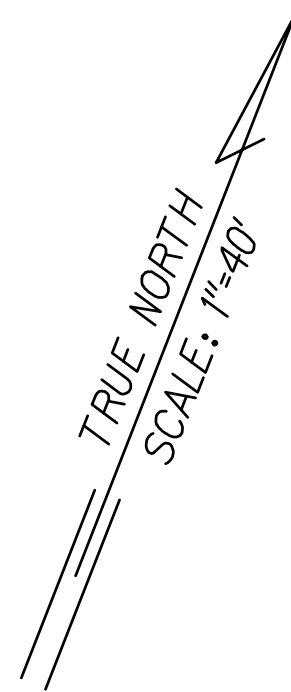
FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
SITE AND BMP PLAN  
DA-14 (STA. 7+00 TO STA. 13+50)



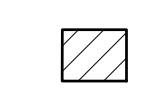

EXHIBIT

17

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\18-SITE AND BMP PLAN - 15.DWG



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-15 (STA. 0+50 TO STA. 2+00)

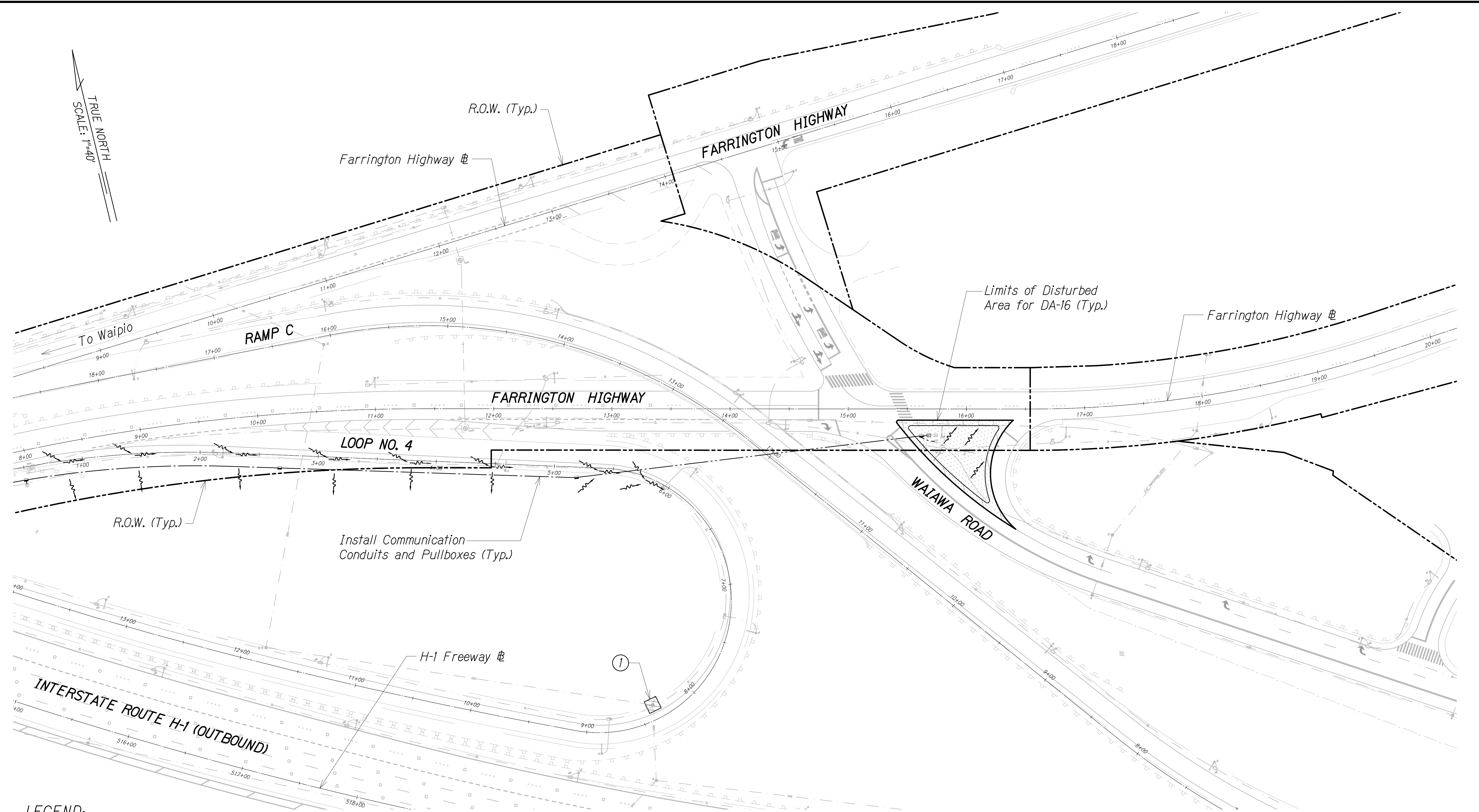
EXHIBIT

18


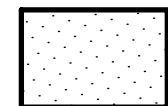
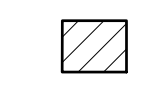



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\1\_SITE PLANS\19-SITE AND BMP PLAN - 16.DWG

TRUE NORTH  
SCALE: 1"=40'



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

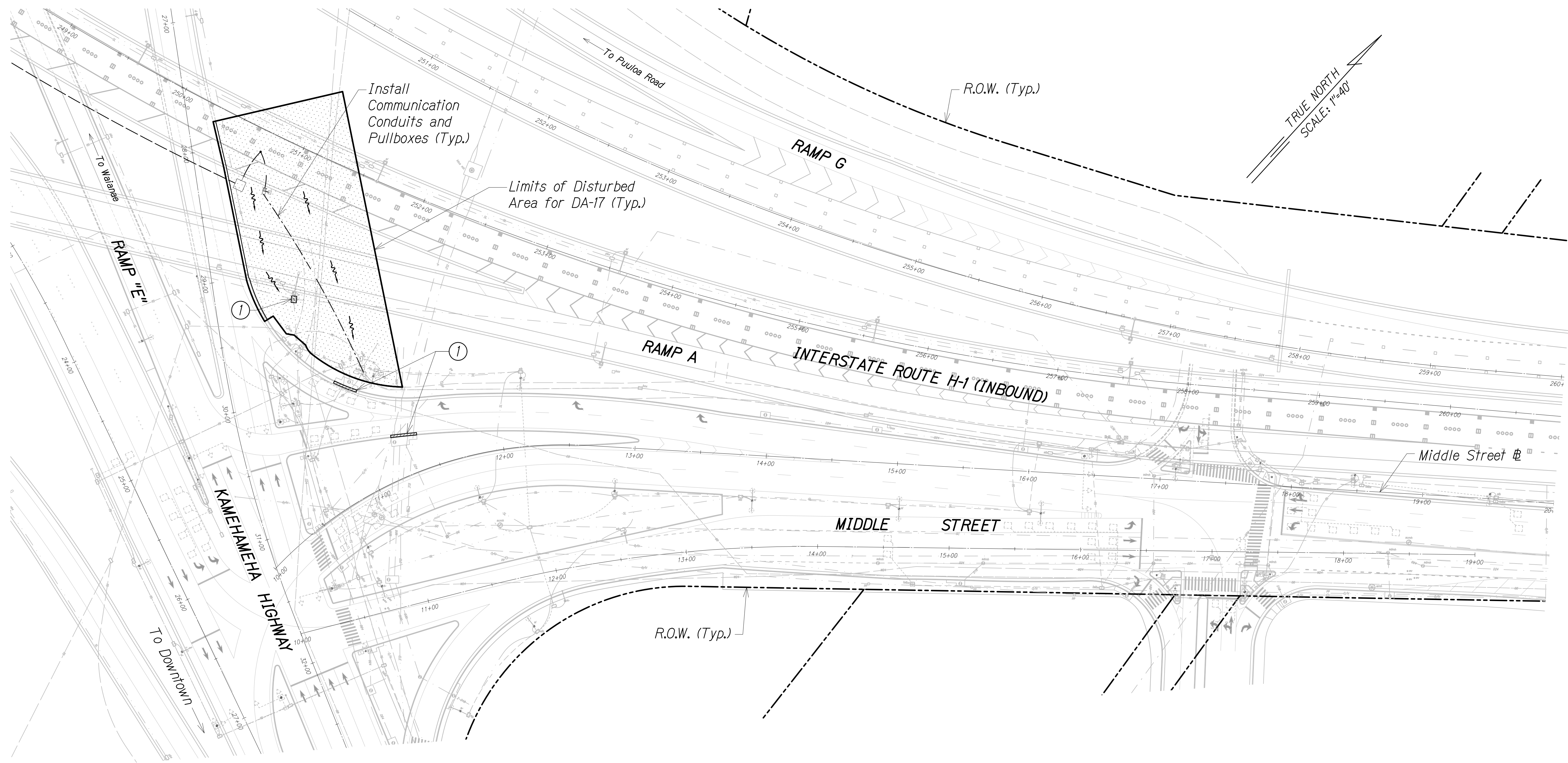
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

SITE AND BMP PLAN  
DA-16 (STA. 15+00 TO STA. 16+50)

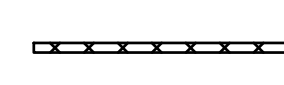
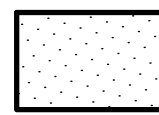
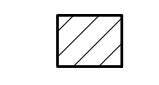
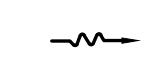
EXHIBIT

19





**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

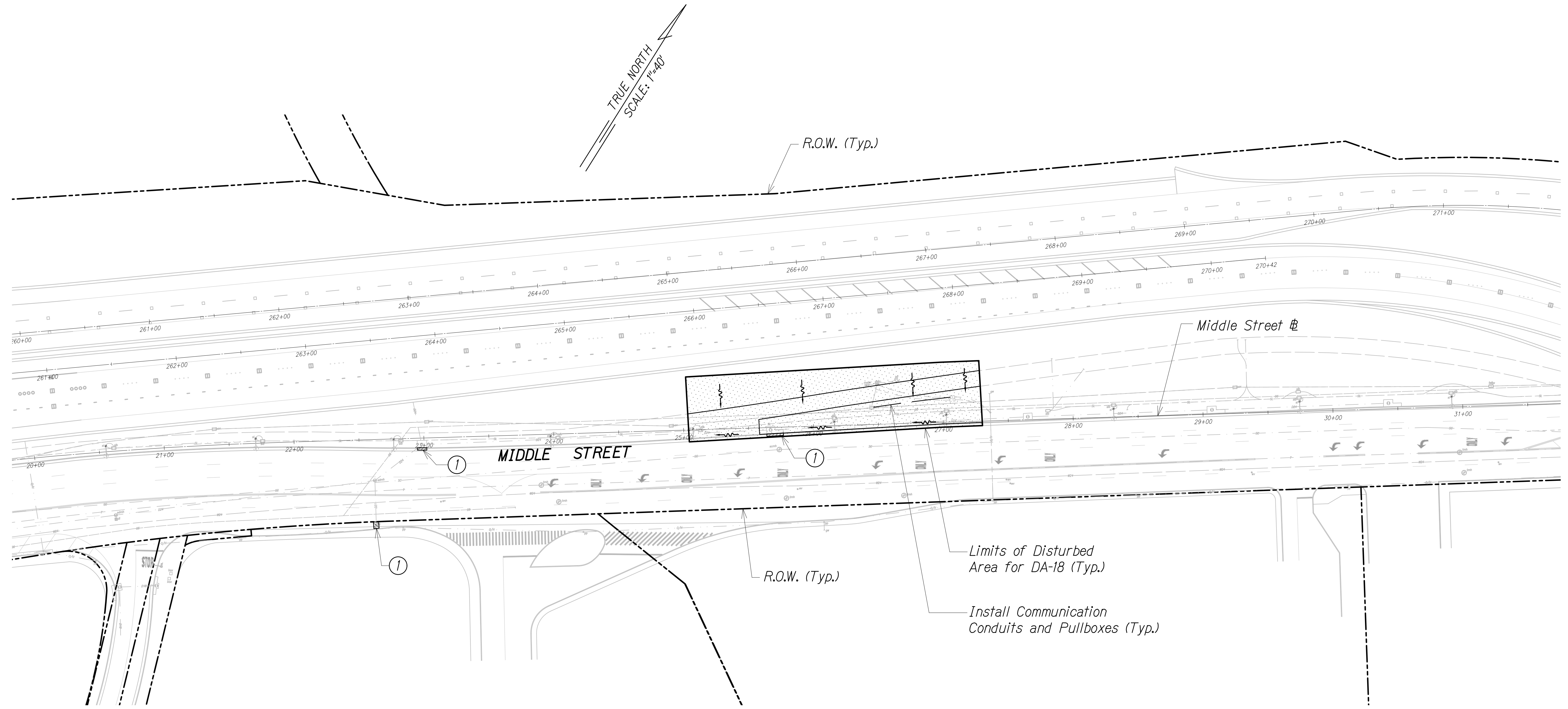
- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

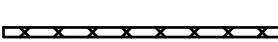
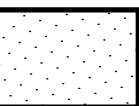
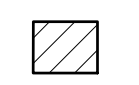

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
SITE AND BMP PLAN  
DA-17 (STA. 10+00 TO STA. 12+00)

EXHIBIT

20



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

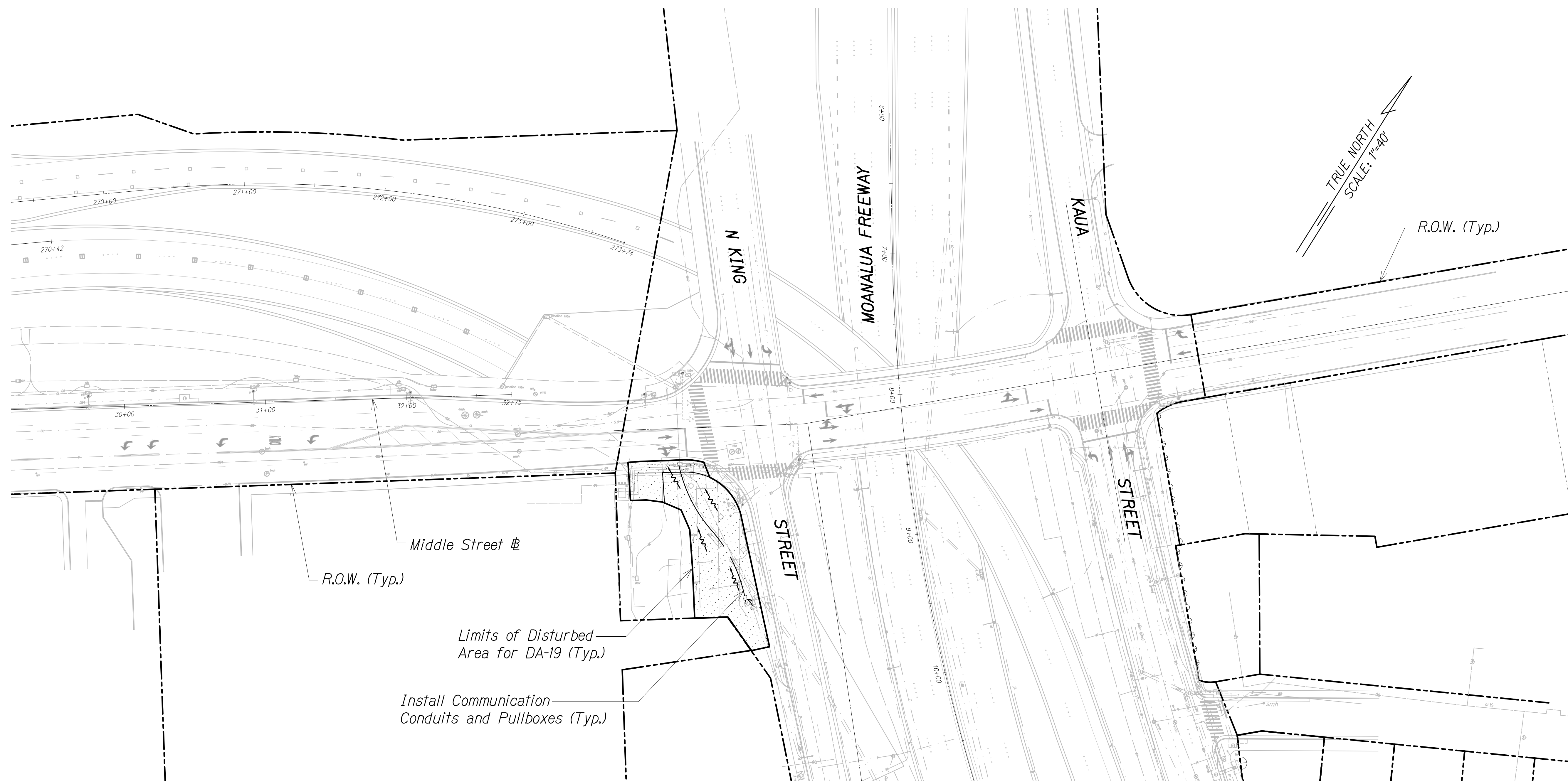
- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

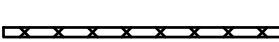
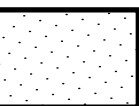
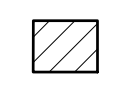

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 SITE AND BMP PLAN  
 DA-18 (STA. 25+00 TO STA. 27+50)

EXHIBIT

21



**LEGEND:**

-  Temporary Fiber Roll
-  Disturbed Area
-  Temporary Sediment Barrier
-  Flow Direction

**Notes:**

- ① Existing storm drain inlet, catch basin, or downstream outfall. Contractor to observe Best Management Practices and take measures required. Protect existing storm drain inlets and catch basins located downstream of the project site with Best Management Practices.

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

SITE AND BMP PLAN  
 DA-19 (CABINET SITE)

EXHIBIT

**22**



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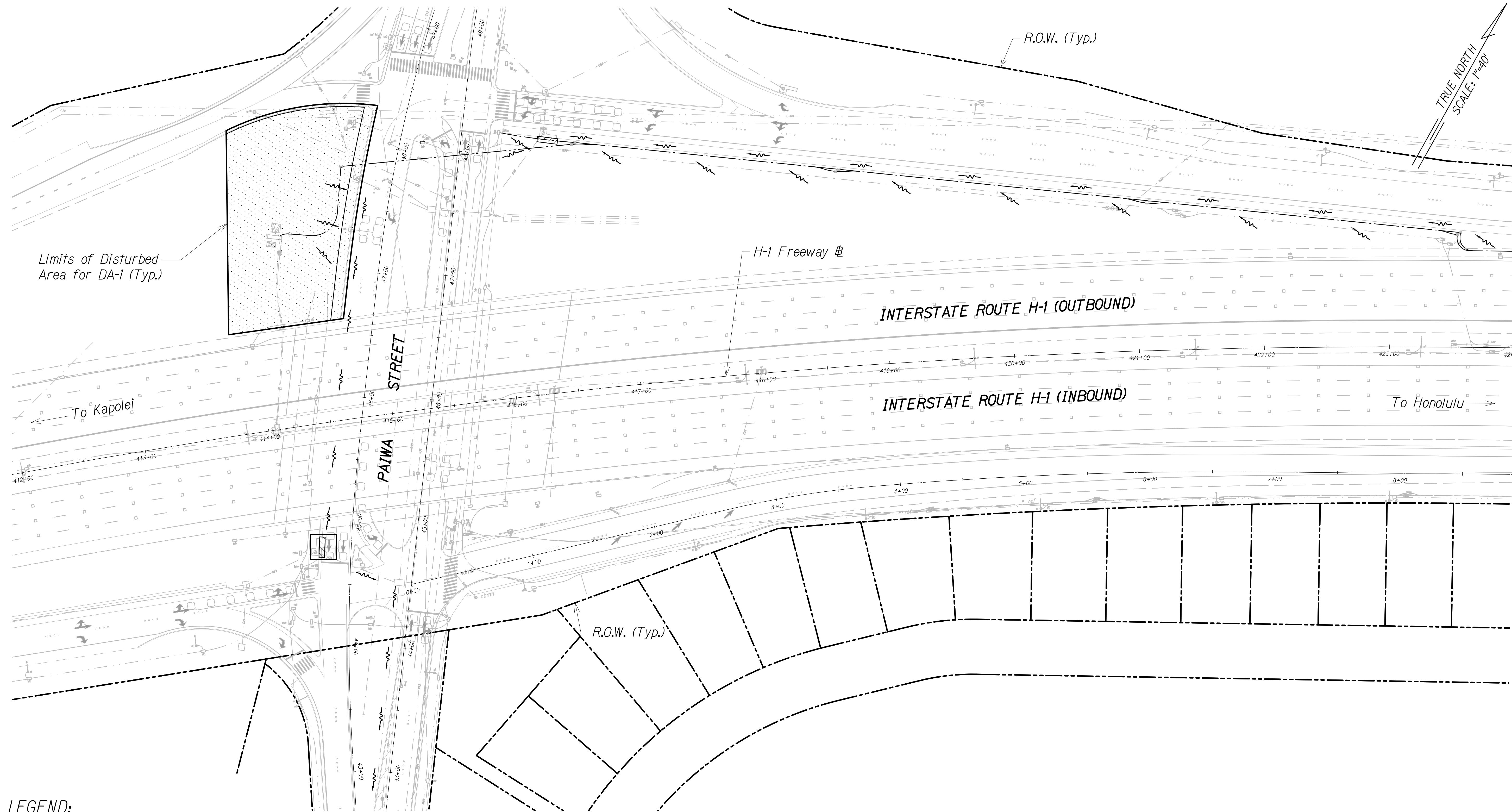
# **Attachment A-3**

## **Drainage Maps- Form C**

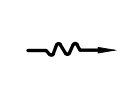
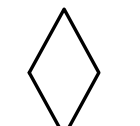
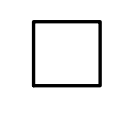
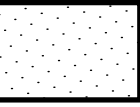
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**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

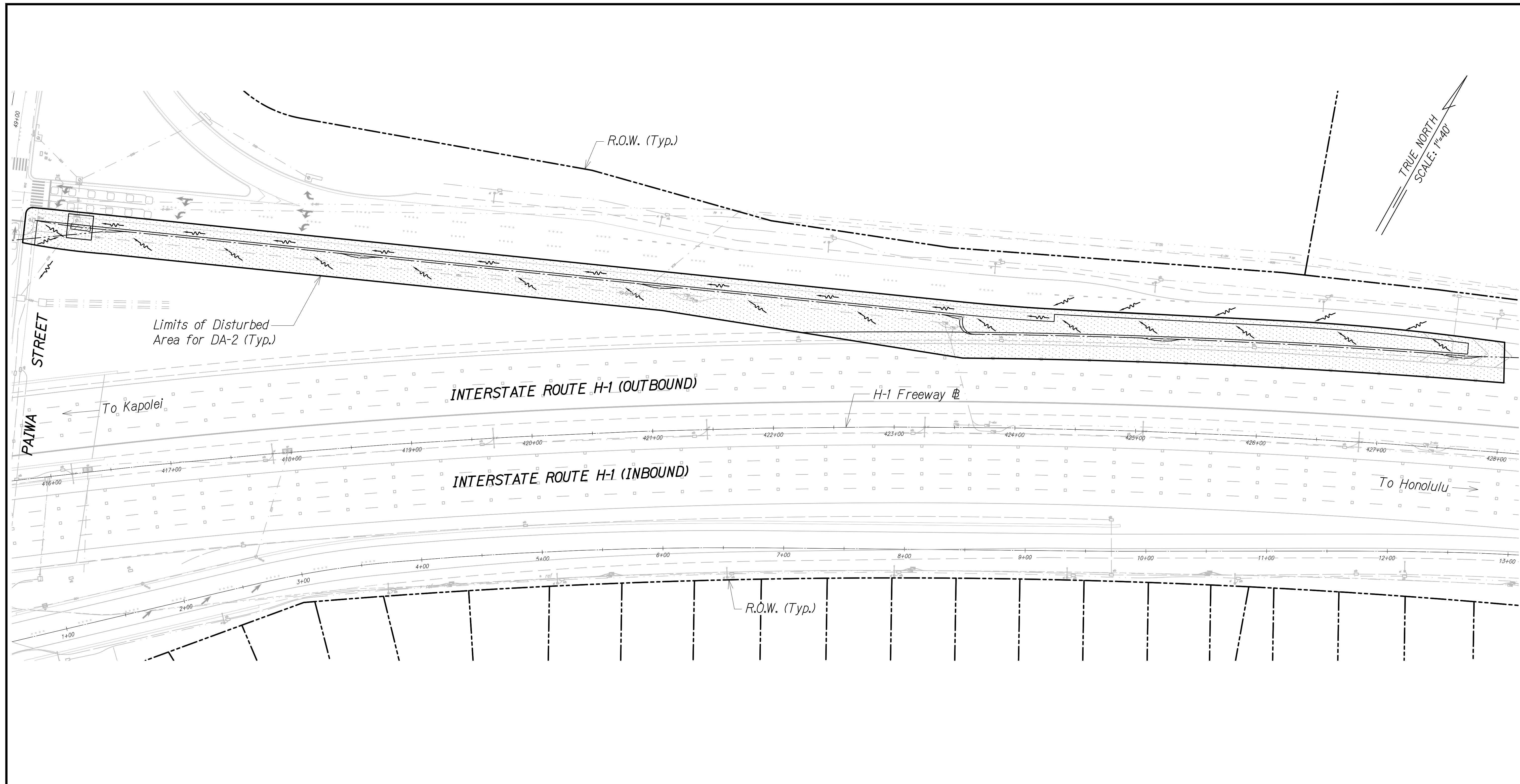
*Notes:*  
See Outfall Map 42 For Discharge Point

**FREWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)**


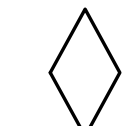

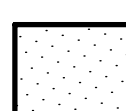
**ATA AUSTIN, TSUTSUMI, & ASSOC., INC.**  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
 DA-1 (STA. 413+50 TO STA. 415+00)

**EXHIBIT**  
23

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\24-DRAINAGE MAP - 2.DWG

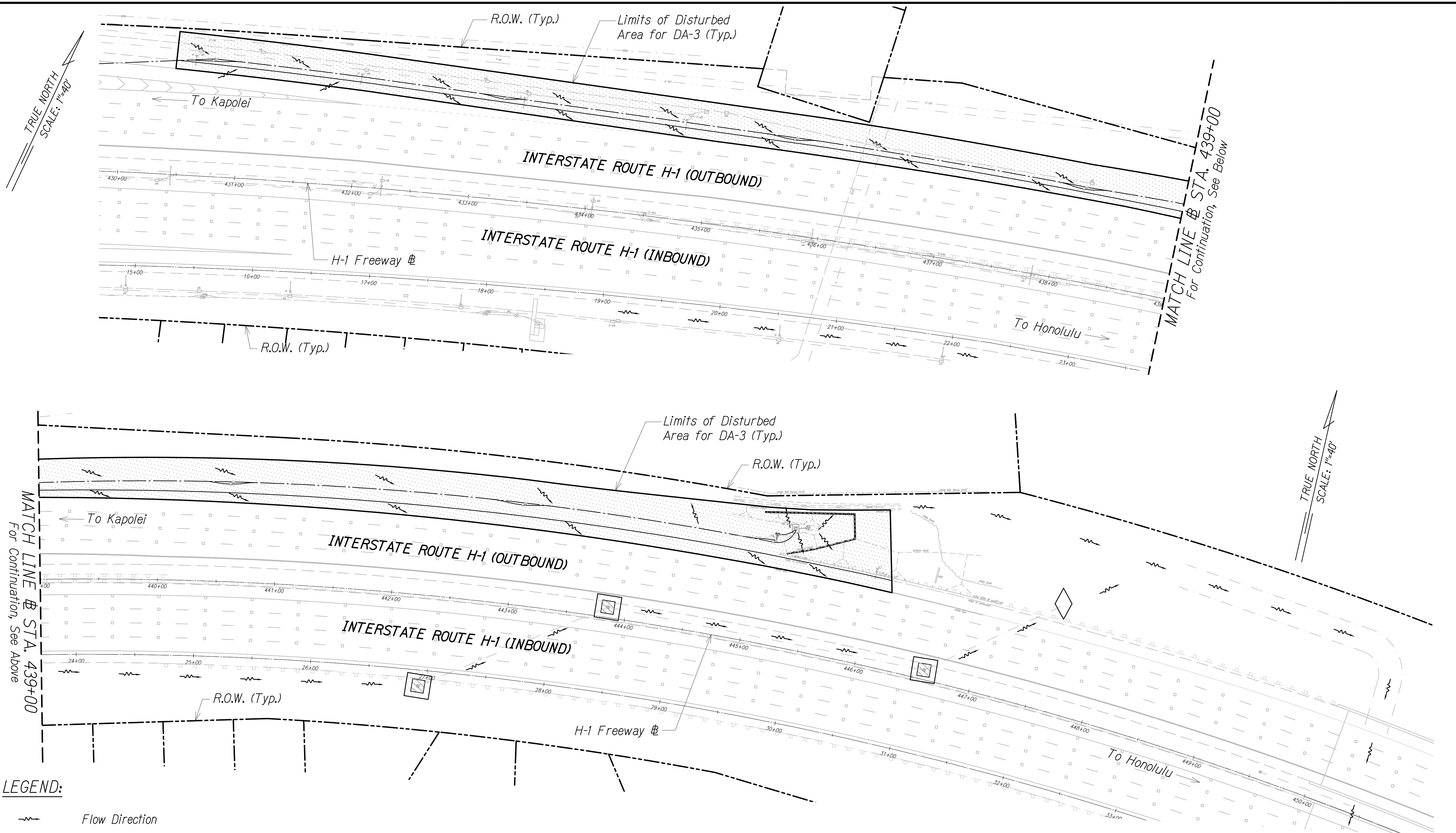


**LEGEND:**

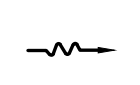
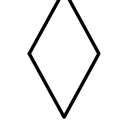
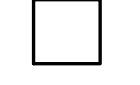
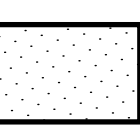
-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 42 For Discharge Point

|   |   |   |
|---|---|---|
| <p><b>FREeway MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</b></p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-2 (STA. 416+00 TO STA. 428+00)</p> | <p>EXHIBIT</p> <p style="font-size: 2em;"><b>24</b></p> |
|---|---|---|



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 42 For Discharge Point

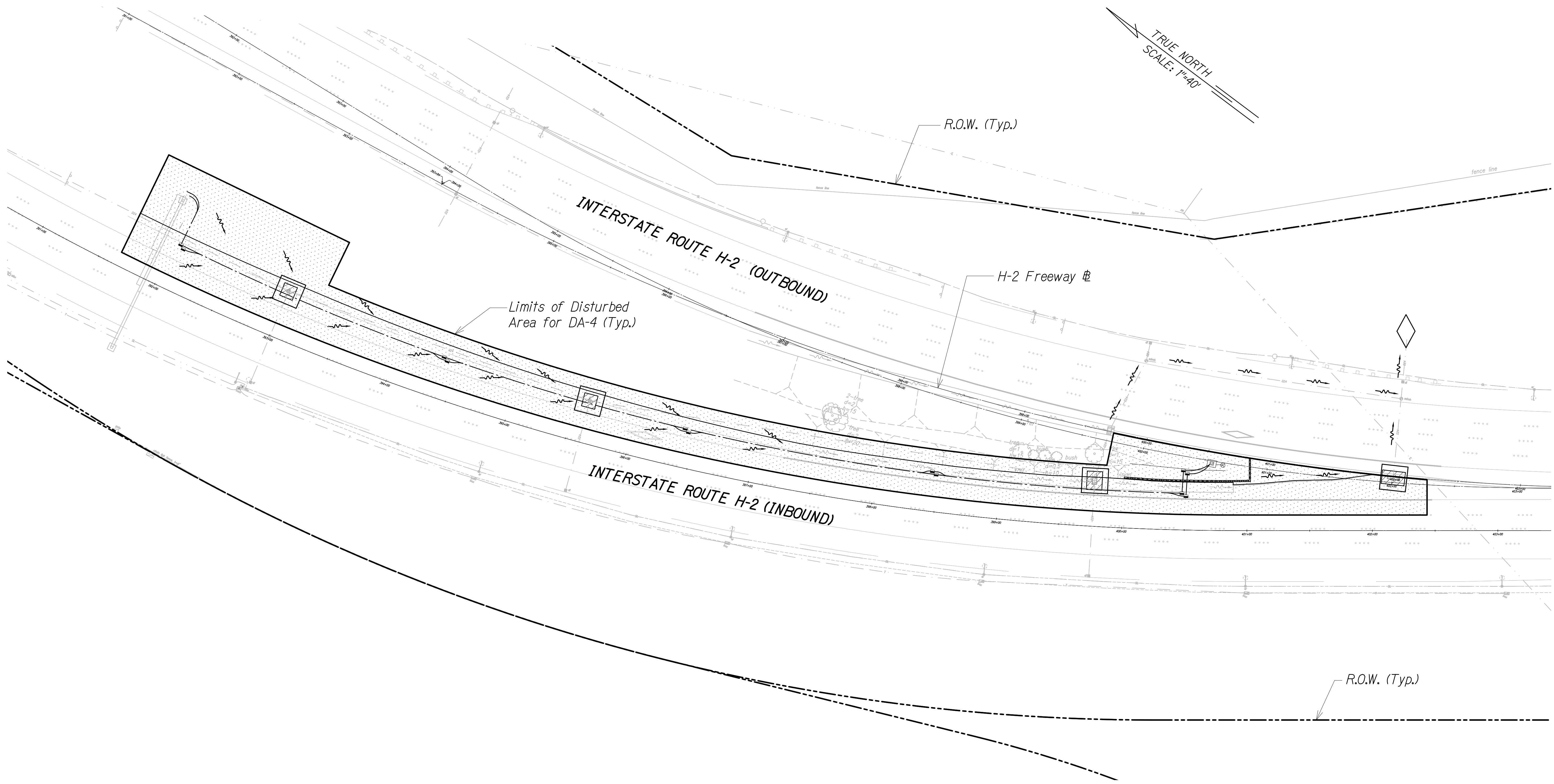
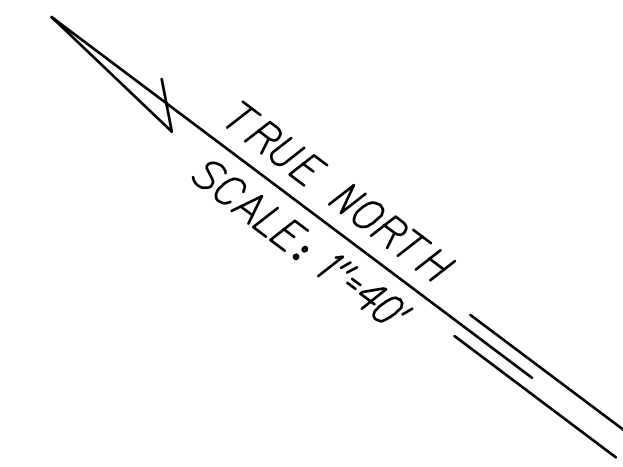
**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**AUSTIN, TSUTSUMI, & ASSOC., INC.**  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-3 (STA. 430+50 TO STA. 446+50)


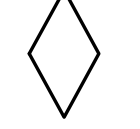
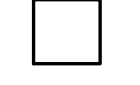

**EXHIBIT**  
**25**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\26-DRAINAGE MAP - 4.DWG



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

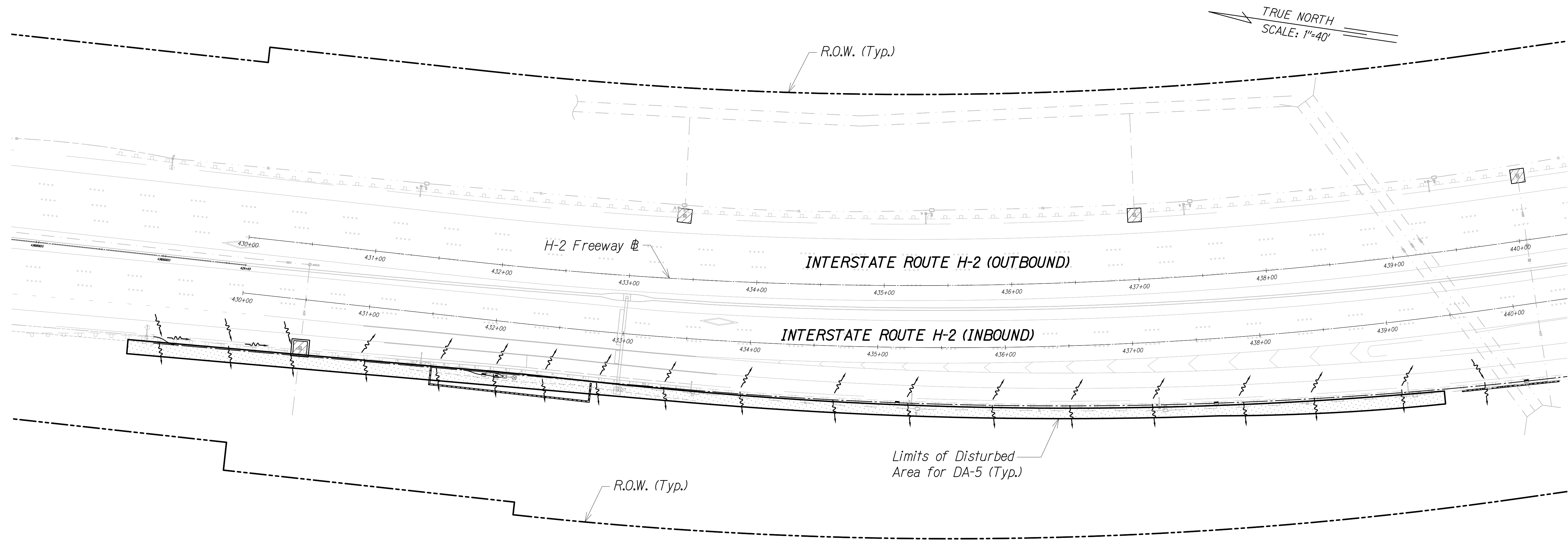
*Notes:*  
See Outfall Map 43 For Discharge Point

**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**


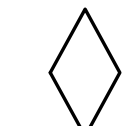

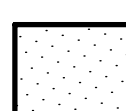
**ATA AUSTIN, TSUTSUMI, & ASSOC., INC.**  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-4 (STA. 391+50 TO STA. 402+50)

**EXHIBIT**  
**26**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\27-DRAINAGE MAP - 5.DWG



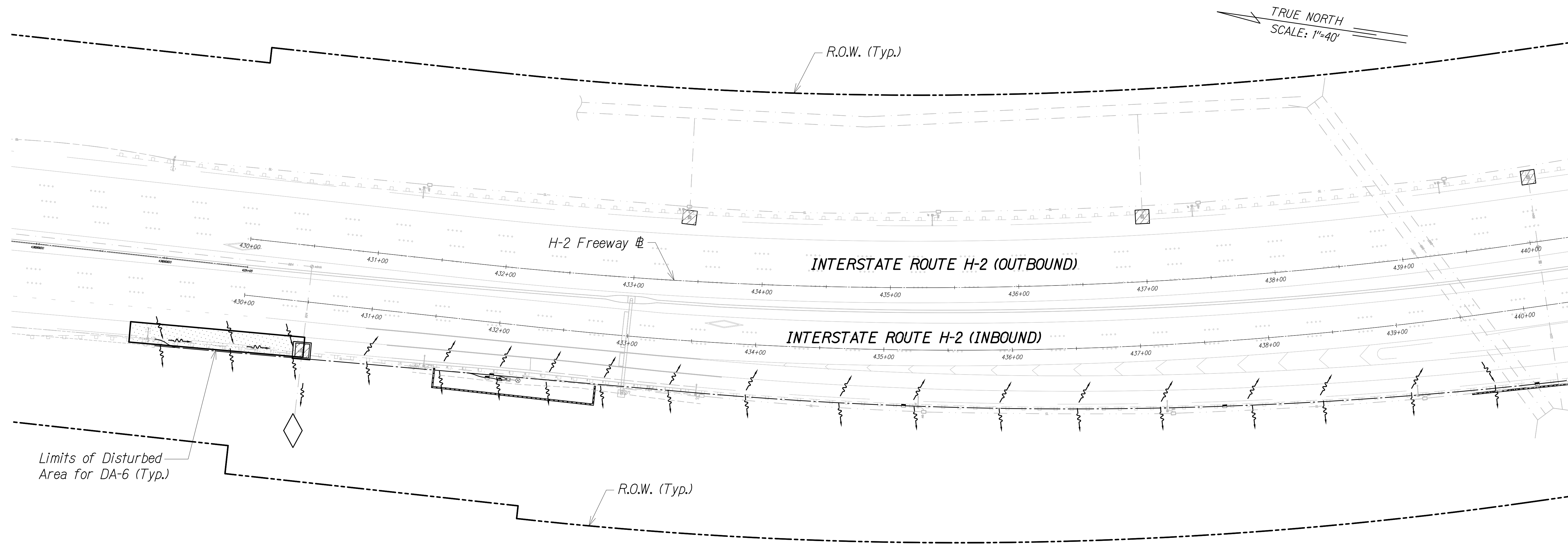
**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area


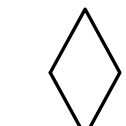

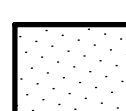
*Notes:*  
See Outfall Map 44 For Discharge Point

|  |   |                              |
|--|---|------------------------------|
| <p>FREeway MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-5 (STA. 428+50 TO STA. 439+50)</p> | <p>EXHIBIT<br/><b>27</b></p> |
|--|---|------------------------------|

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\28-DRAINAGE MAP - 6.DWG



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 45 For Discharge Point

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

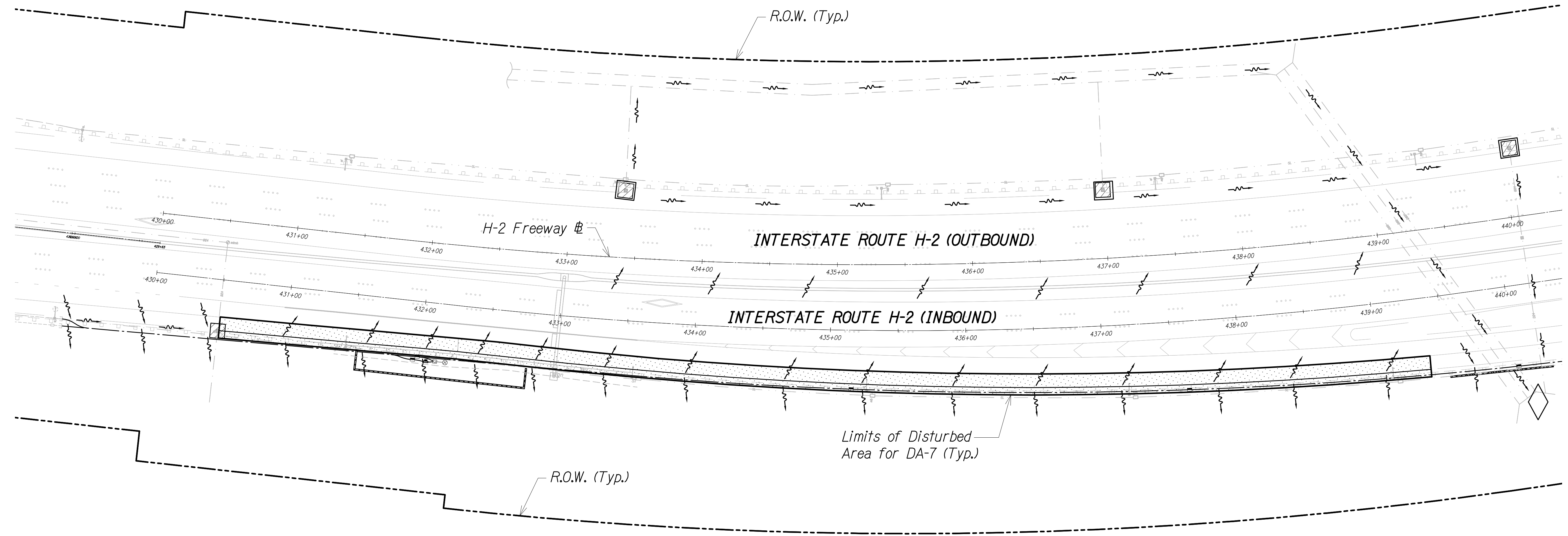
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-6 (STA. 428+50 TO STA. 430+50)

EXHIBIT


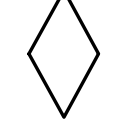
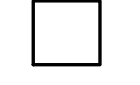
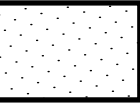
**28**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\29-DRAINAGE MAP - 7.DWG

TRUE NORTH  
SCALE: 1"=40'



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 45 For Discharge Point

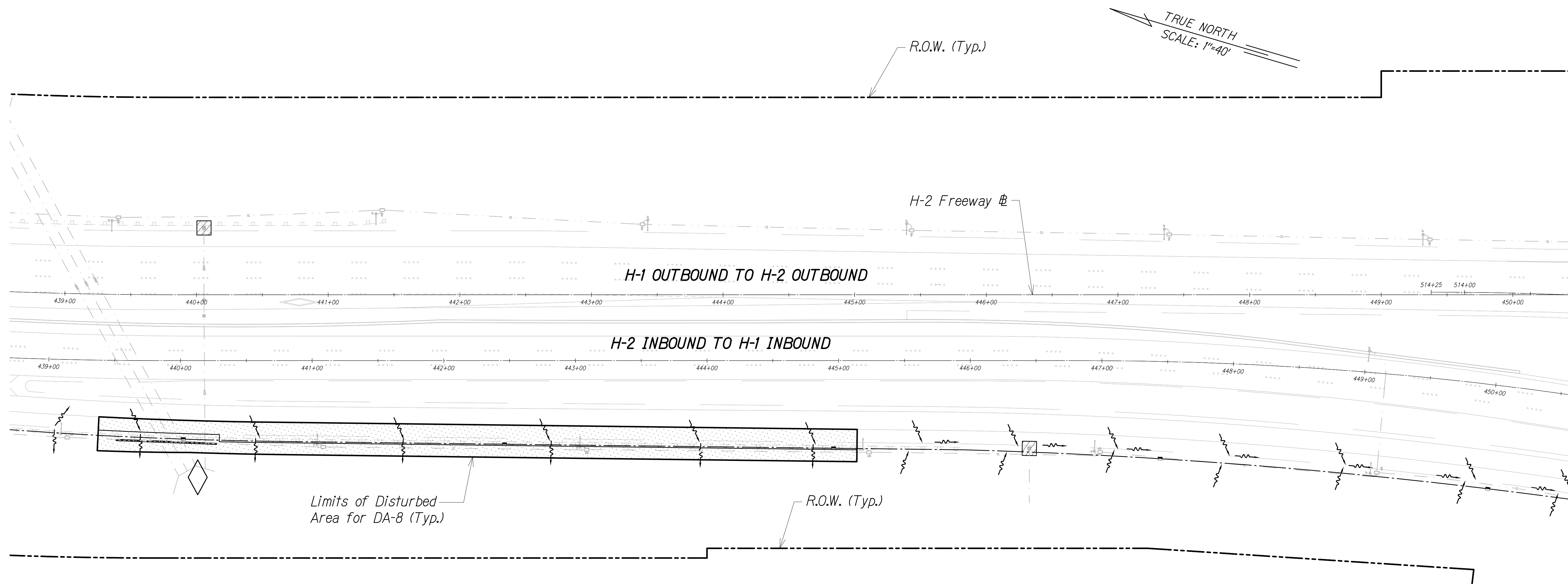
FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
 DA-7 (STA. 429+00 TO STA. 439+50)


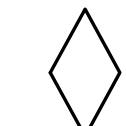

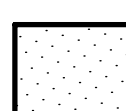
EXHIBIT  
**29**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\30-DRAINAGE MAP - 8.DWG



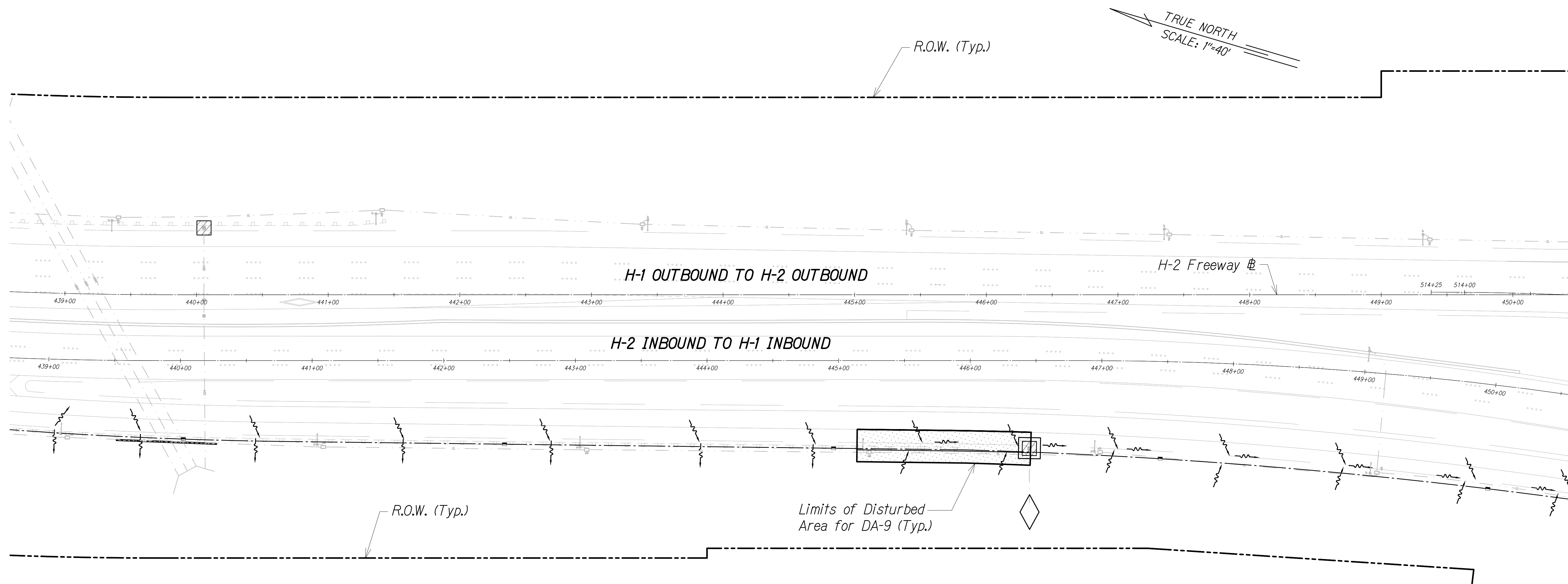
**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area


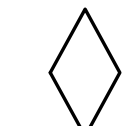

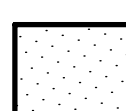
*Notes:*  
See Outfall Map 46 For Discharge Point

|   |   |   |
|---|---|---|
| <p><b>FREeway MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</b></p> | <p><b>ATA AUSTIN, TSUTSUMI, &amp; ASSOC., INC.</b><br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-8 (STA. 439+50 TO STA. 445+00)</p> | <p>EXHIBIT</p> <p style="font-size: 2em;"><b>30</b></p> |
|---|---|---|

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\31 - DRAINAGE MAP - 9.DWG



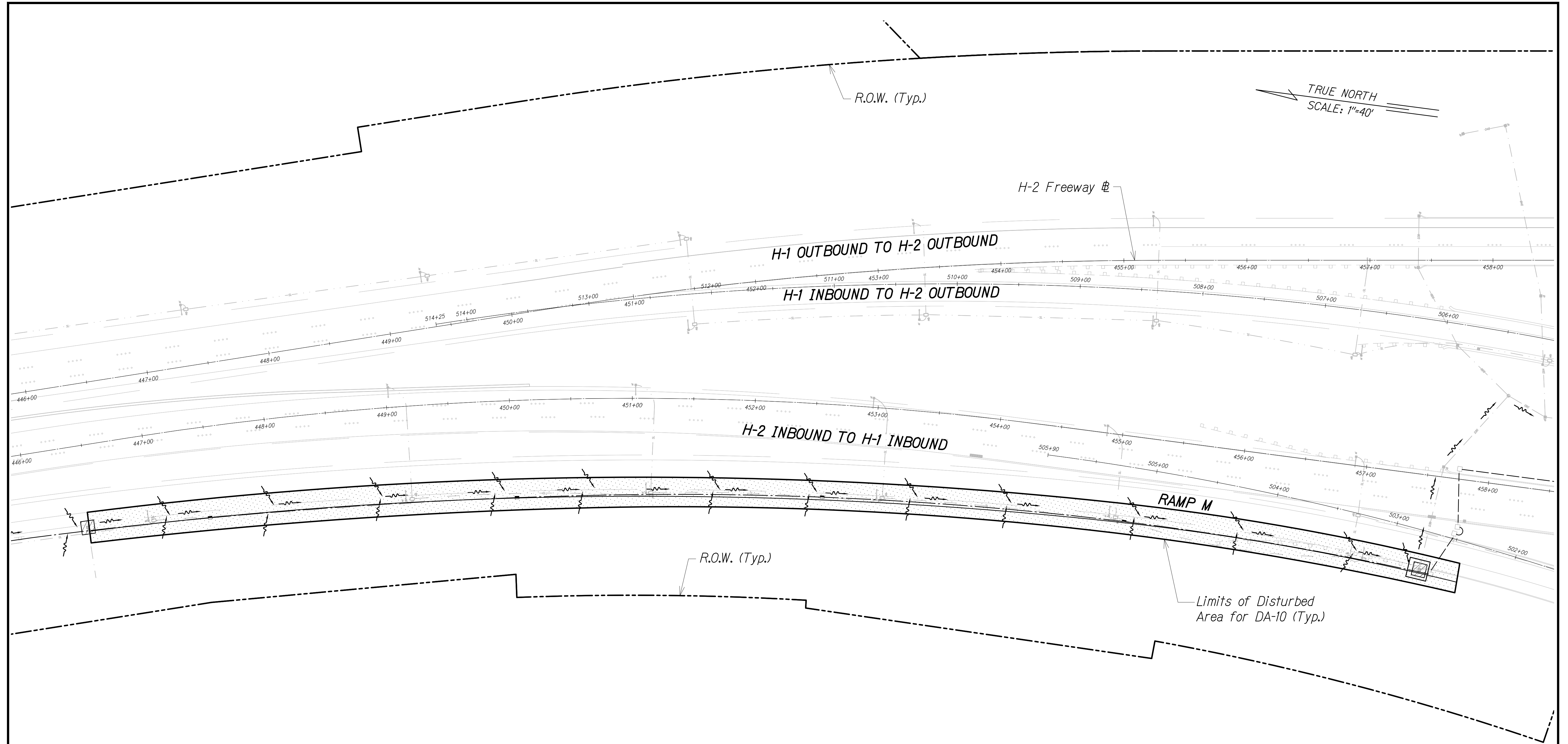
**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area


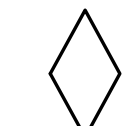

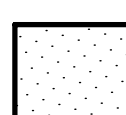
*Notes:*  
See Outfall Map 47 For Discharge Point

|  |   |                              |
|--|---|------------------------------|
| <p>FREeway MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-9 (STA. 445+00 TO STA. 446+50)</p> | <p>EXHIBIT<br/><b>31</b></p> |
|--|---|------------------------------|

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\32-DRAINAGE MAP - 10.DWG



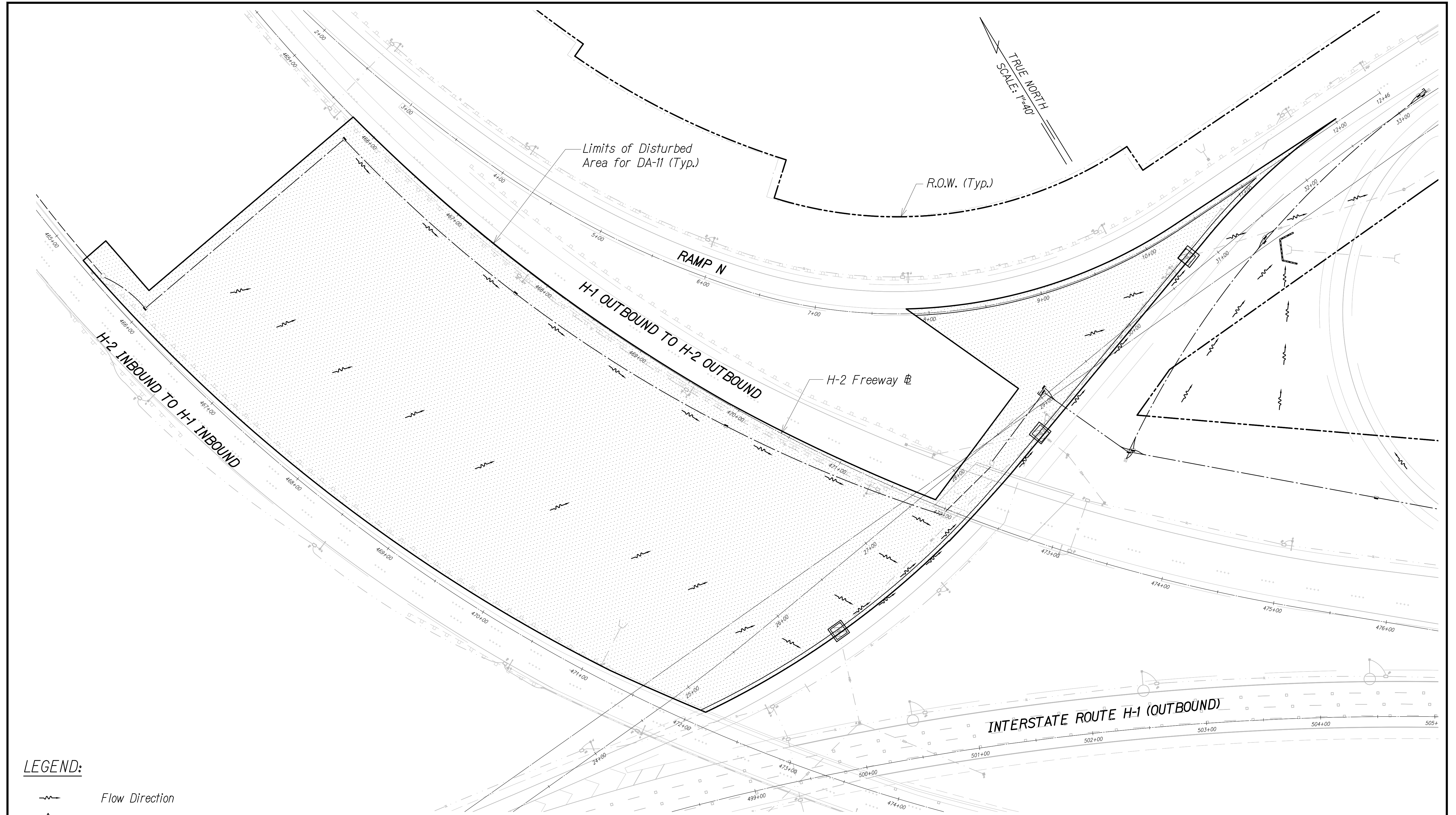
**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area


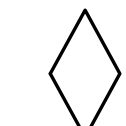

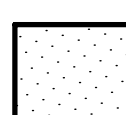
*Notes:*  
See Outfall Map 47 For Discharge Point

|  |  |                              |
|--|--|------------------------------|
| <p>FREeway MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-10 (STA. 446+50 TO STA. 458+00)</p> | <p>EXHIBIT<br/><b>32</b></p> |
|--|--|------------------------------|

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\33-DRAINAGE MAP - 11.DWG



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 48 For Discharge Point

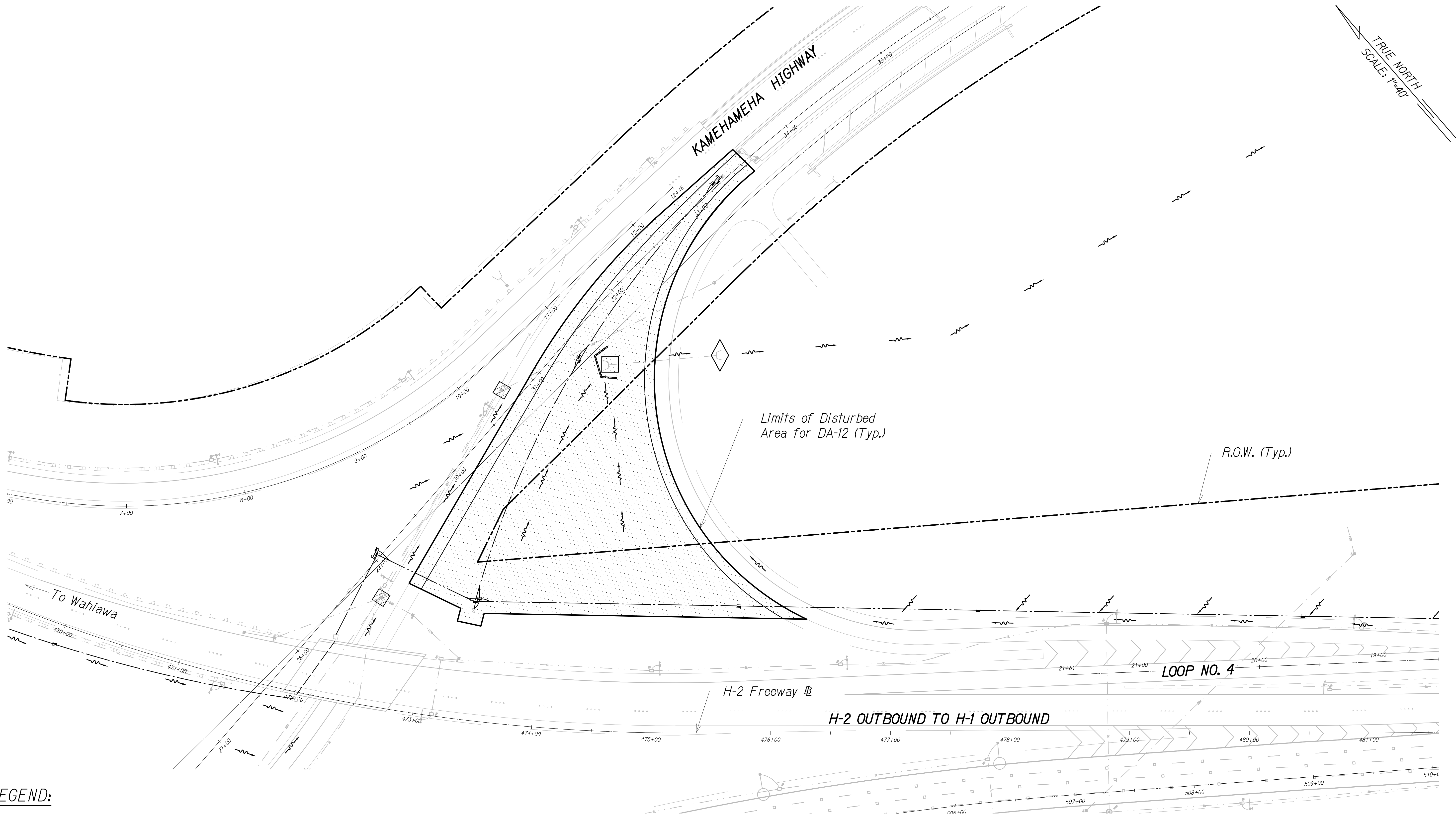
**FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)**

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-11 (STA. 465+00 TO STA. 473+00)


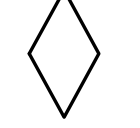
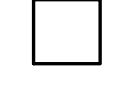
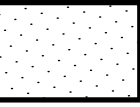
**EXHIBIT**  
**33**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\34-DRAINAGE MAP - 12.DWG



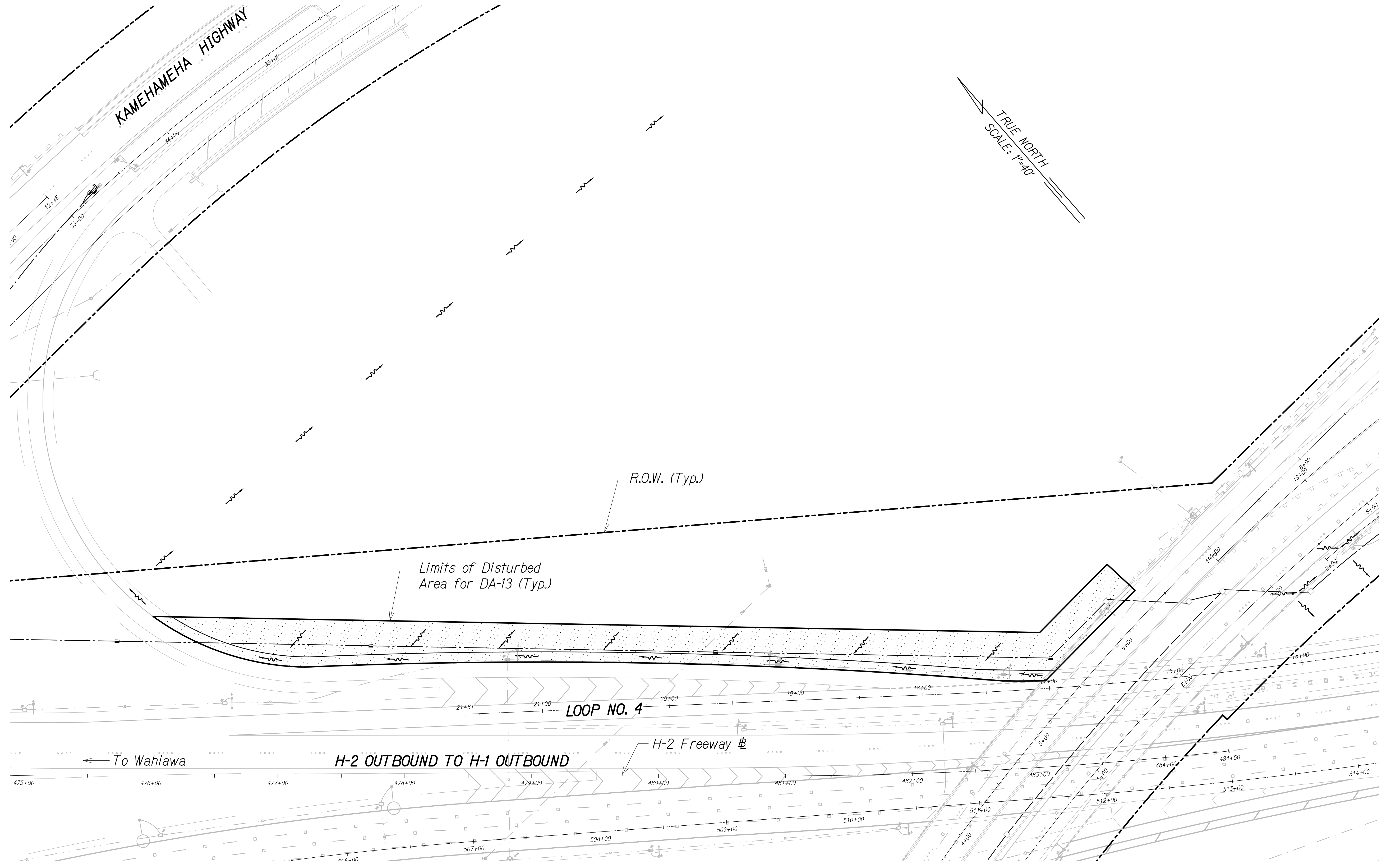
**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area


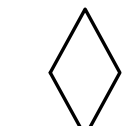

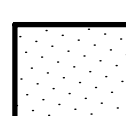
**Notes:**  
See Outfall Map 49 For Discharge Point

|  |  |   |
|--|--|---|
| <p><b>FREWAY MANAGEMENT SYSTEM,<br/>PHASE 3, UNIT 1<br/>FEDERAL AID PROJECT NO. NH-0300(152)</b></p> | <p><b>ATA</b> AUSTIN, TSUTSUMI, &amp; ASSOC., INC.<br/>ENGINEERS, SURVEYORS • HONOLULU, HAWAII</p> <p><b>DRAINAGE MAP</b><br/>DA-12 (STA. 473+00 TO STA. 476+50)</p> | <p>EXHIBIT</p> <p style="font-size: 2em; font-weight: bold;">34</p> |
|--|--|---|

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\35-DRAINAGE MAP - 13.DWG



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 49 For Discharge Point

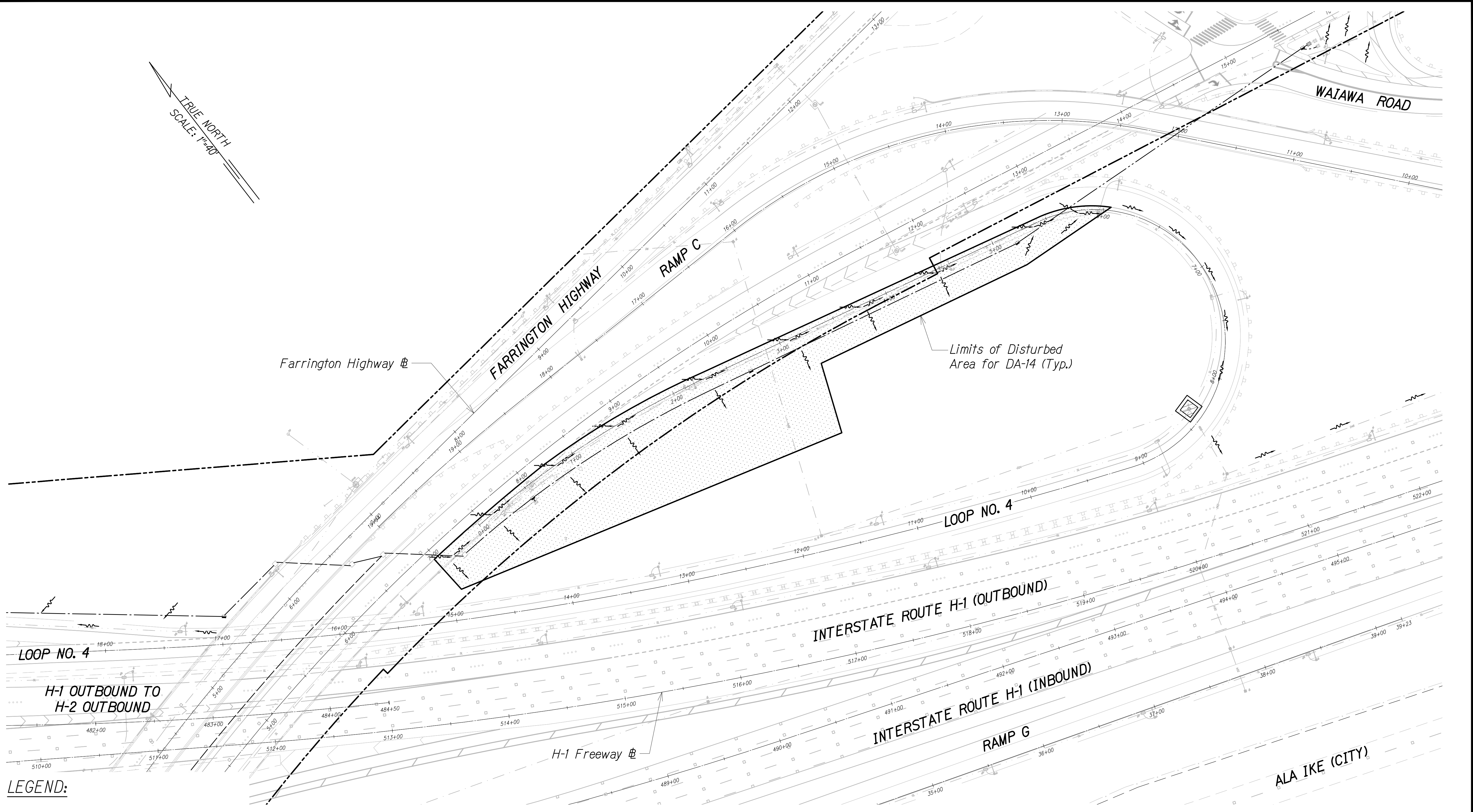
FREeway MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-13 (STA. 476+00 TO STA. 484+00)

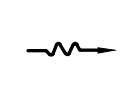
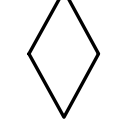
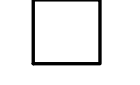
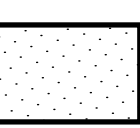
EXHIBIT  
**35**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\36-DRAINAGE MAP - 14.DWG

TRUE NORTH  
SCALE: 1"=40'



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 50 For Discharge Point

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

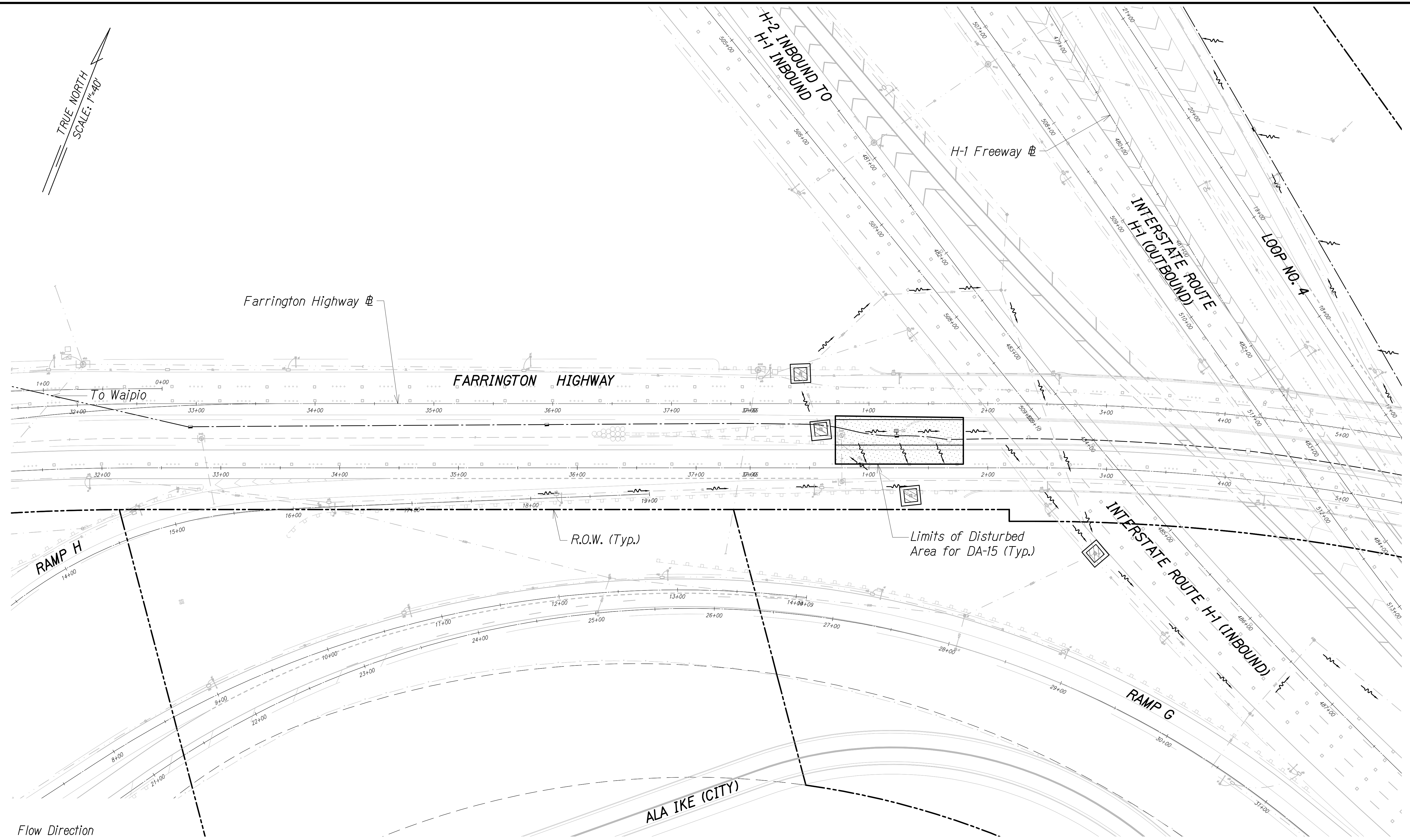
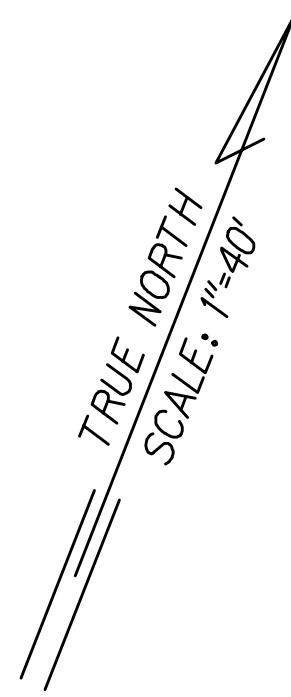
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

**DRAINAGE MAP**  
 DA-14 (STA. 7+00 TO STA. 13+50)


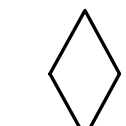

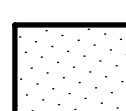
EXHIBIT  
**36**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\37-DRAINAGE MAP - 15.DWG



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 50 For Discharge Point

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

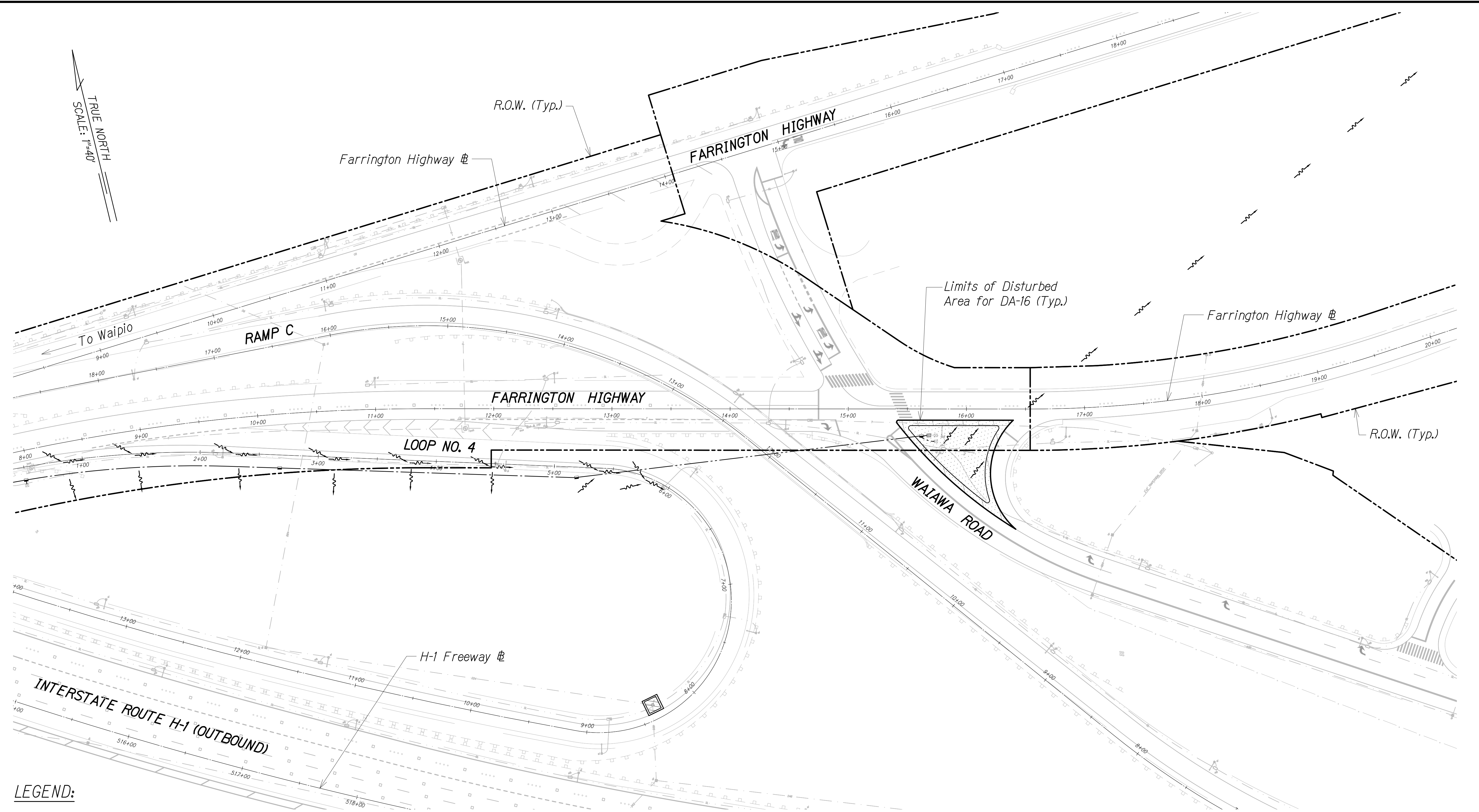
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
DRAINAGE MAP  
DA-15 (STA. 0+50 TO STA. 2+00)

EXHIBIT  
**37**

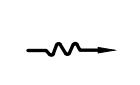
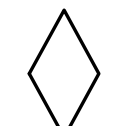
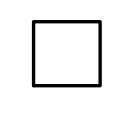
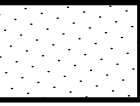


FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\38-DRAINAGE MAP - 16.DWG

TRUE NORTH  
SCALE: 1"=40'



**LEGEND:**

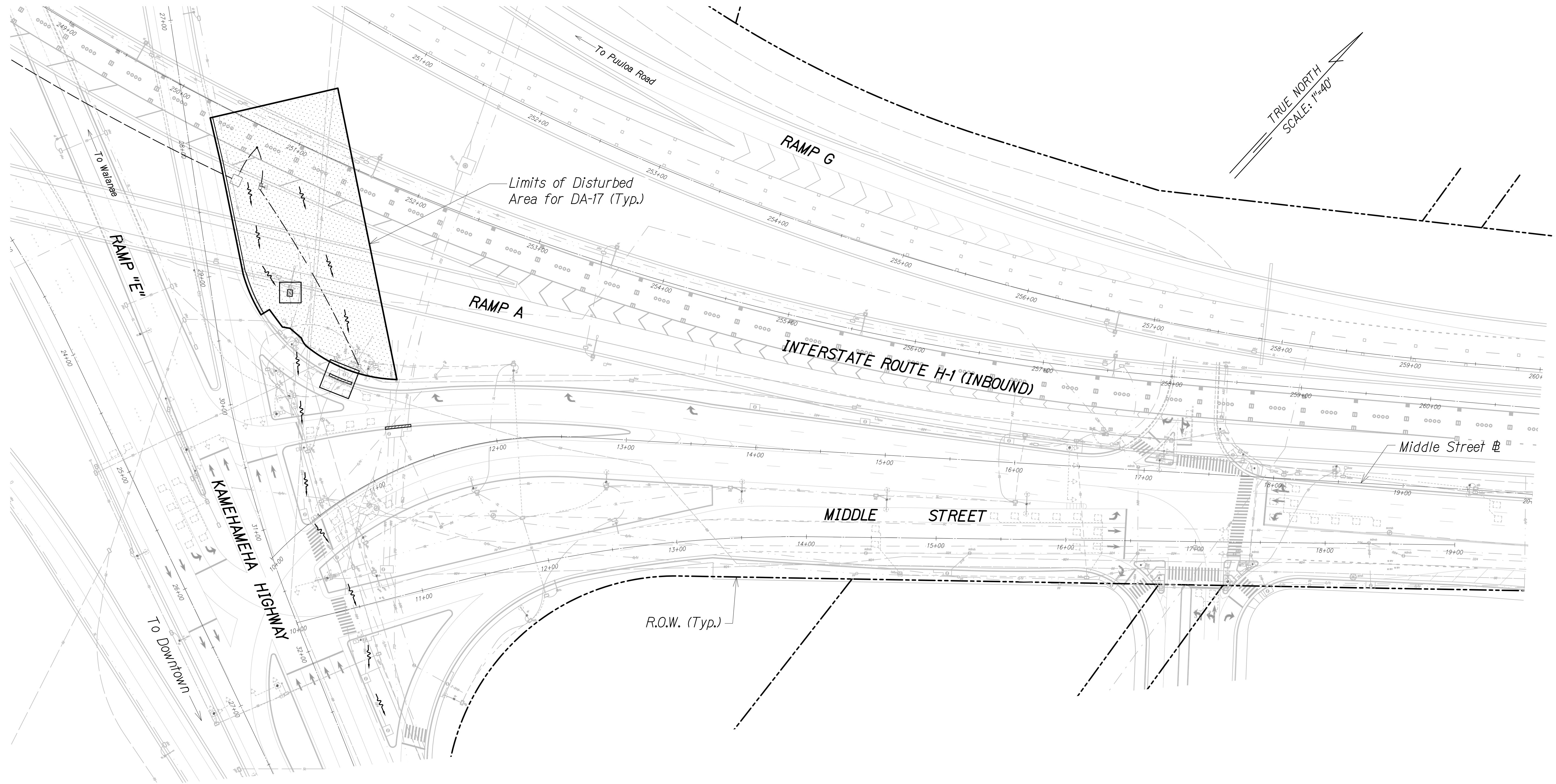
-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 50 For Discharge Point

FREeway MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

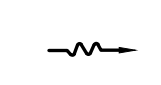
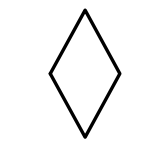
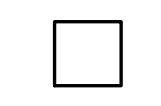
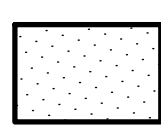
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 DRAINAGE MAP  
 DA-16 (STA. 15+00 TO STA. 16+50)

EXHIBIT  
**38**



TRUE NORTH  
SCALE: 1"=40'

**LEGEND:**

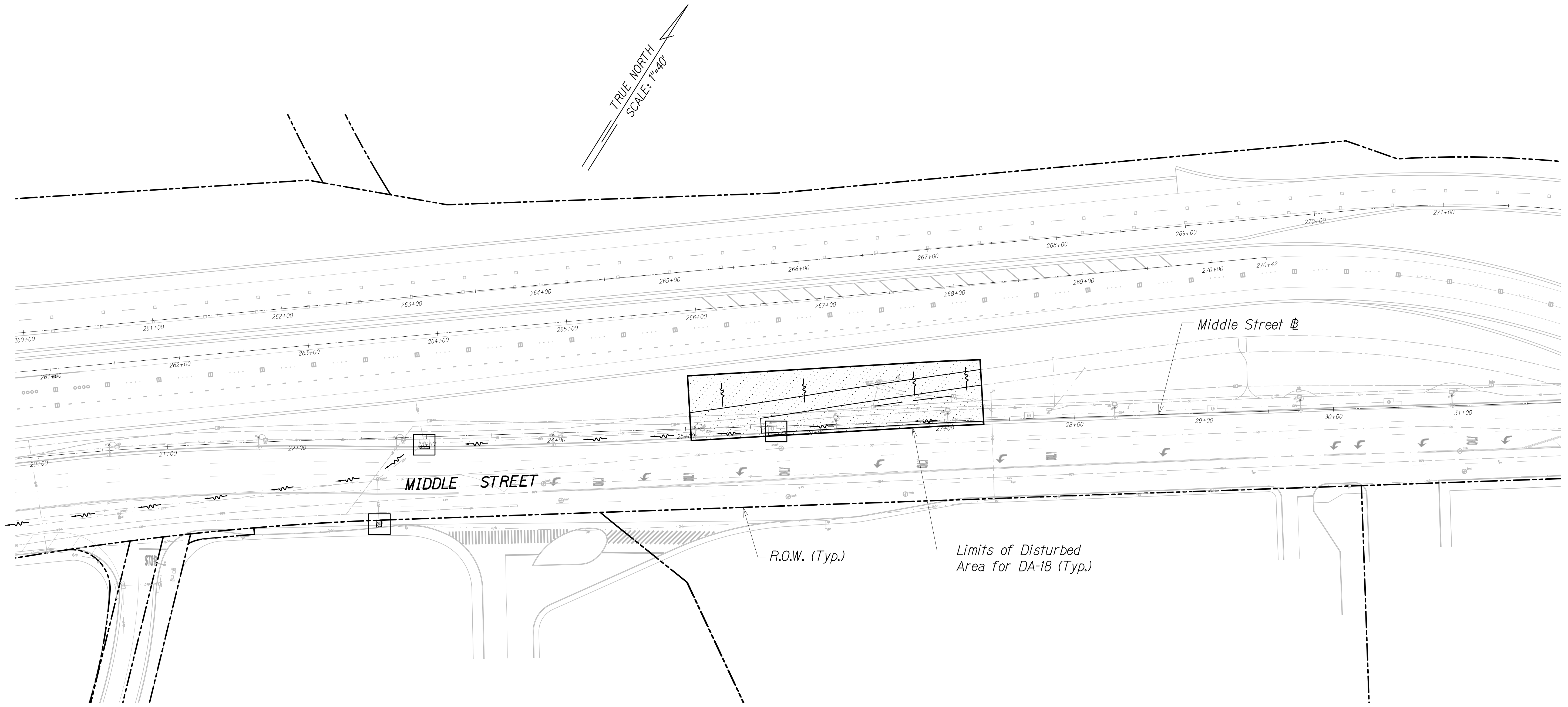
-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 51 For Discharge Point

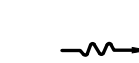

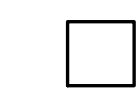
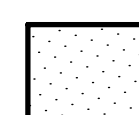
FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-17 (STA. 10+00 TO STA. 12+00)

EXHIBIT  
**39**



**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 51 For Discharge Point

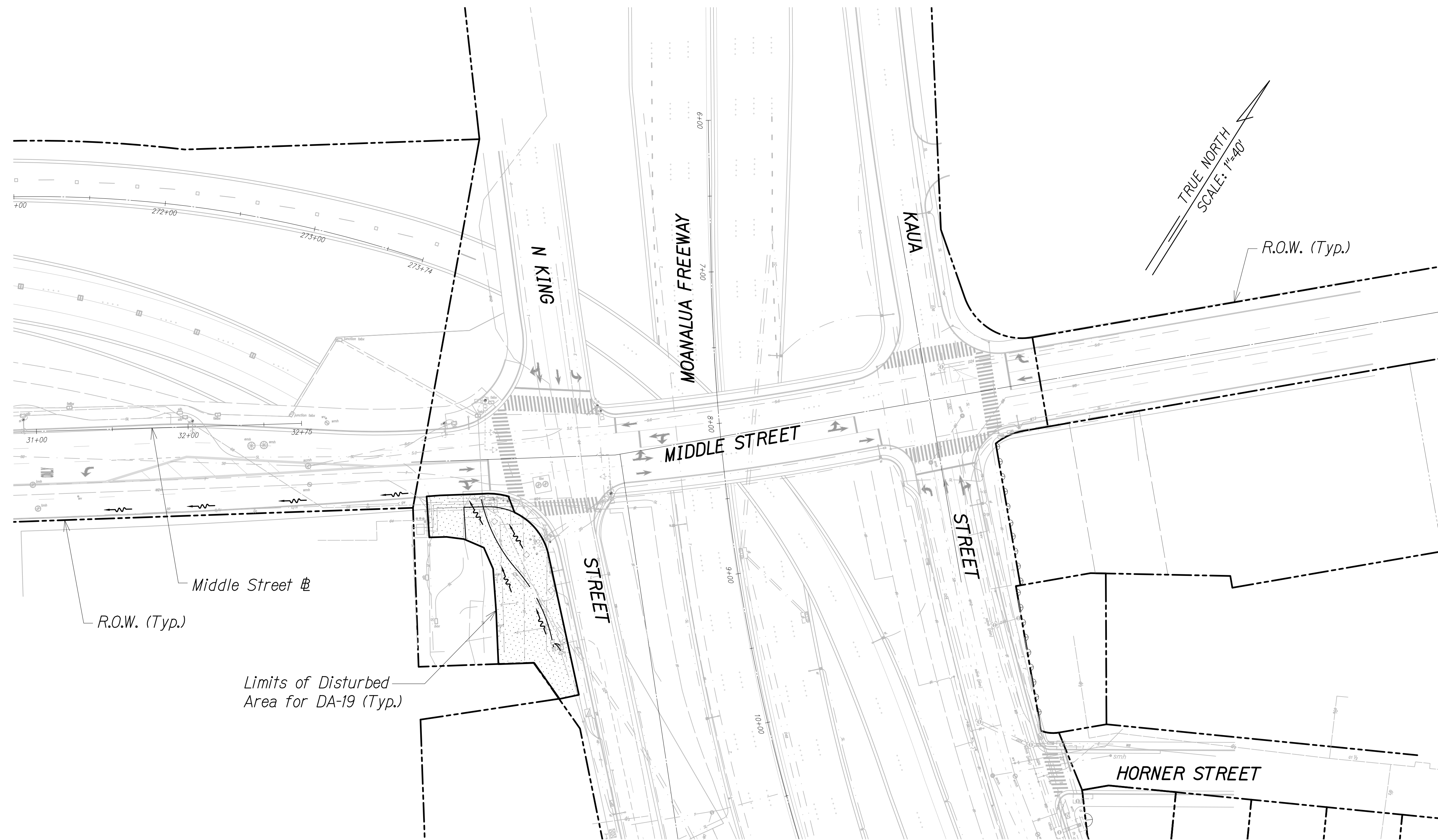
FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-18 (STA. 25+00 TO STA. 27+50)

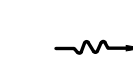
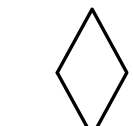
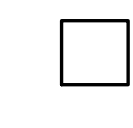
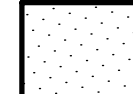
EXHIBIT

**40**





**LEGEND:**

-  Flow Direction
-  Storm Water Outlet Point
-  Drain Inlet
-  Disturbed Area

*Notes:*  
See Outfall Map 51 For Discharge Point

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**DRAINAGE MAP**  
DA-19 (CABINET SITE)

EXHIBIT  
**41**





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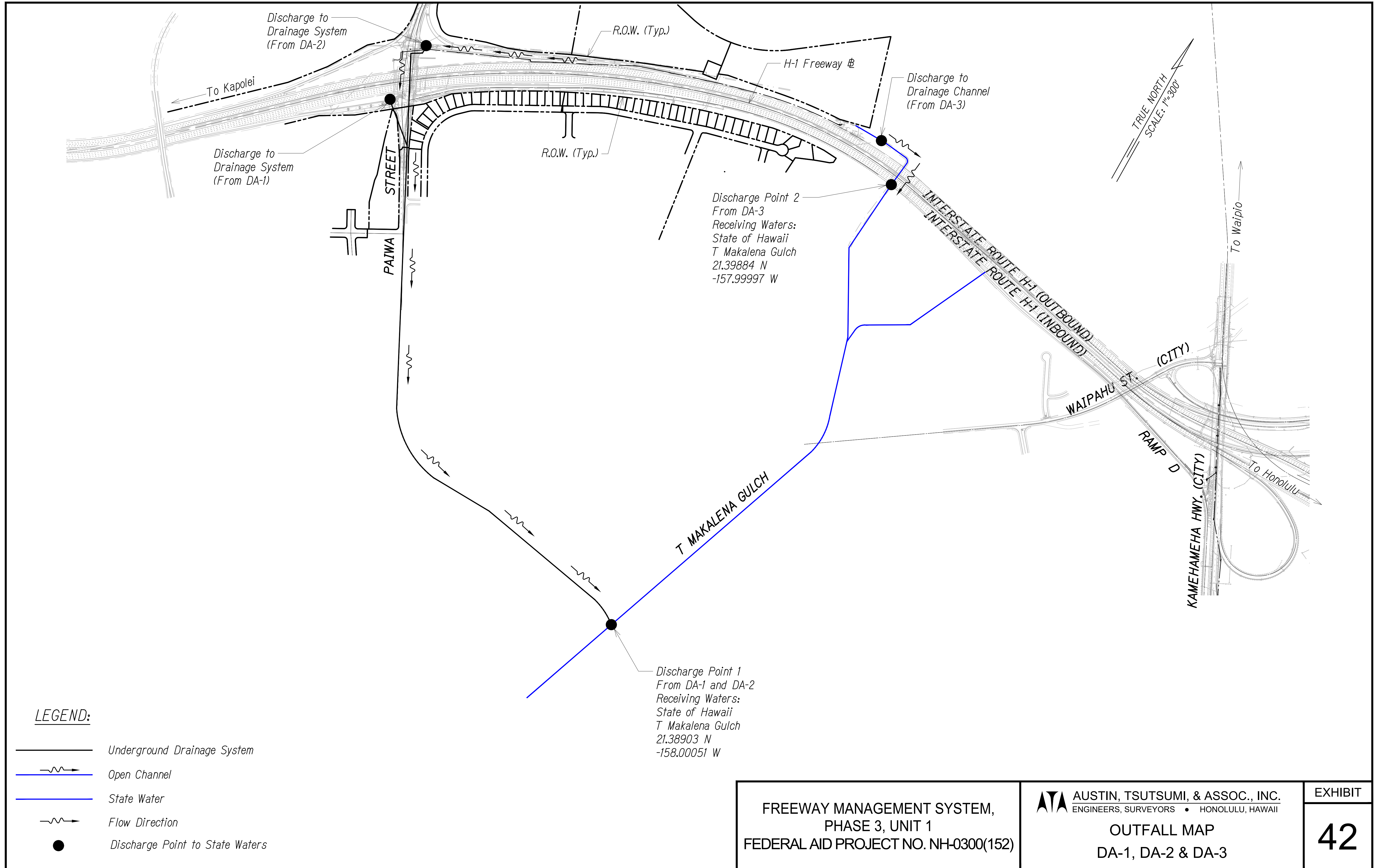
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# **Attachment A-4**

## **Outfall Maps- Form C**

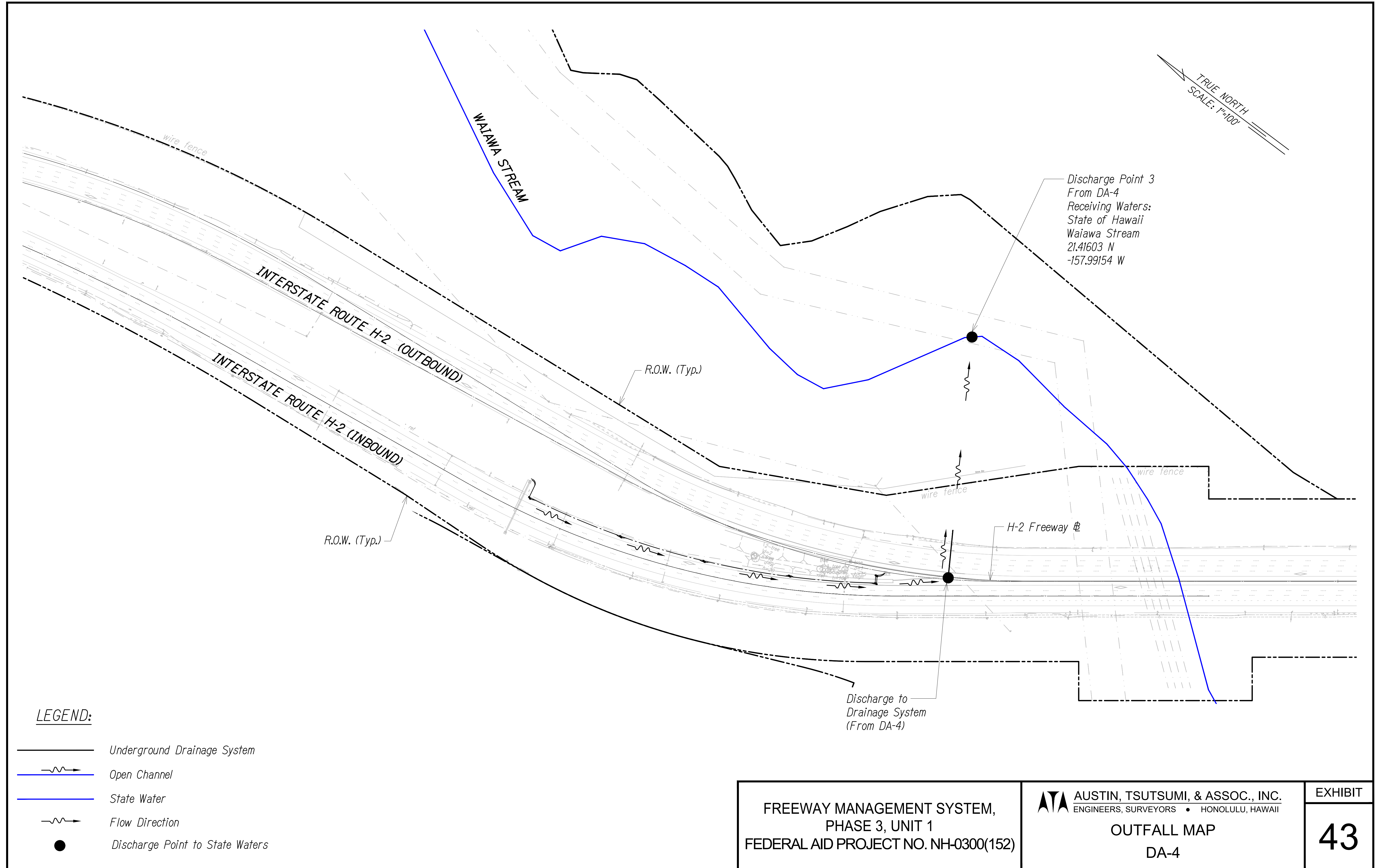
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FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\43-OUTFALL MAP - 2.DWG



**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREeway MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

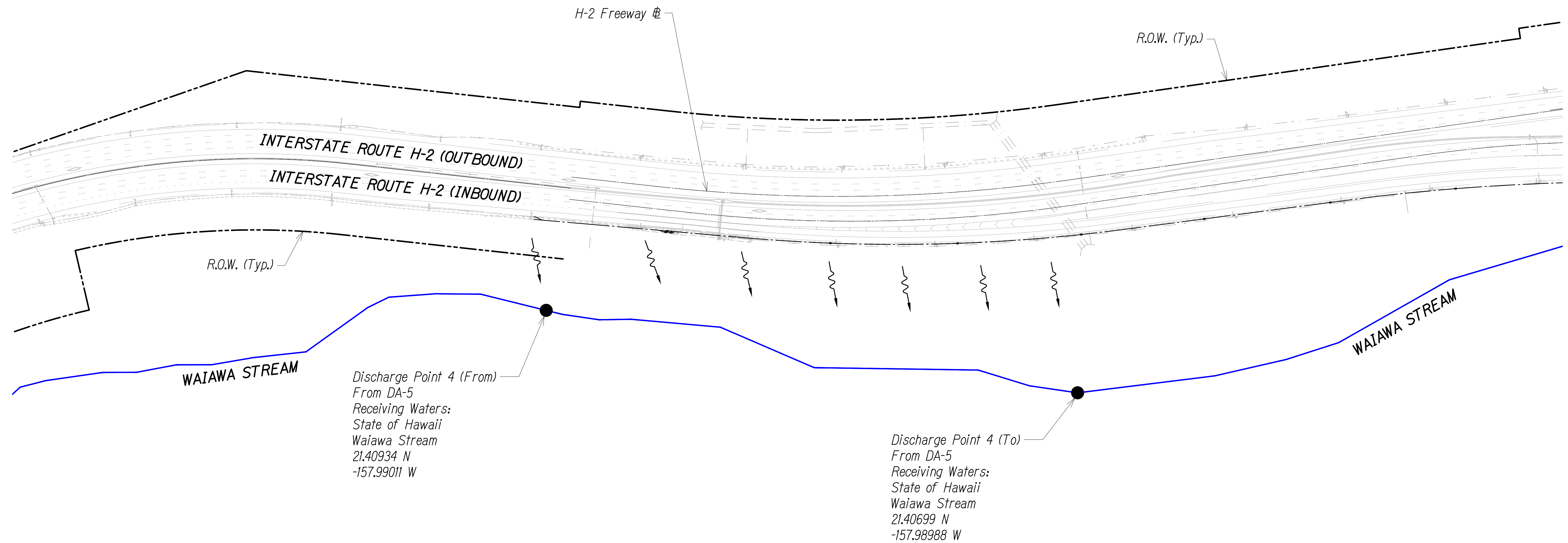
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

OUTFALL MAP  
 DA-4






EXHIBIT  
**43**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\44-OUTFALL MAP - 3.DWG

TRUE NORTH  
SCALE: 1"=100'



**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

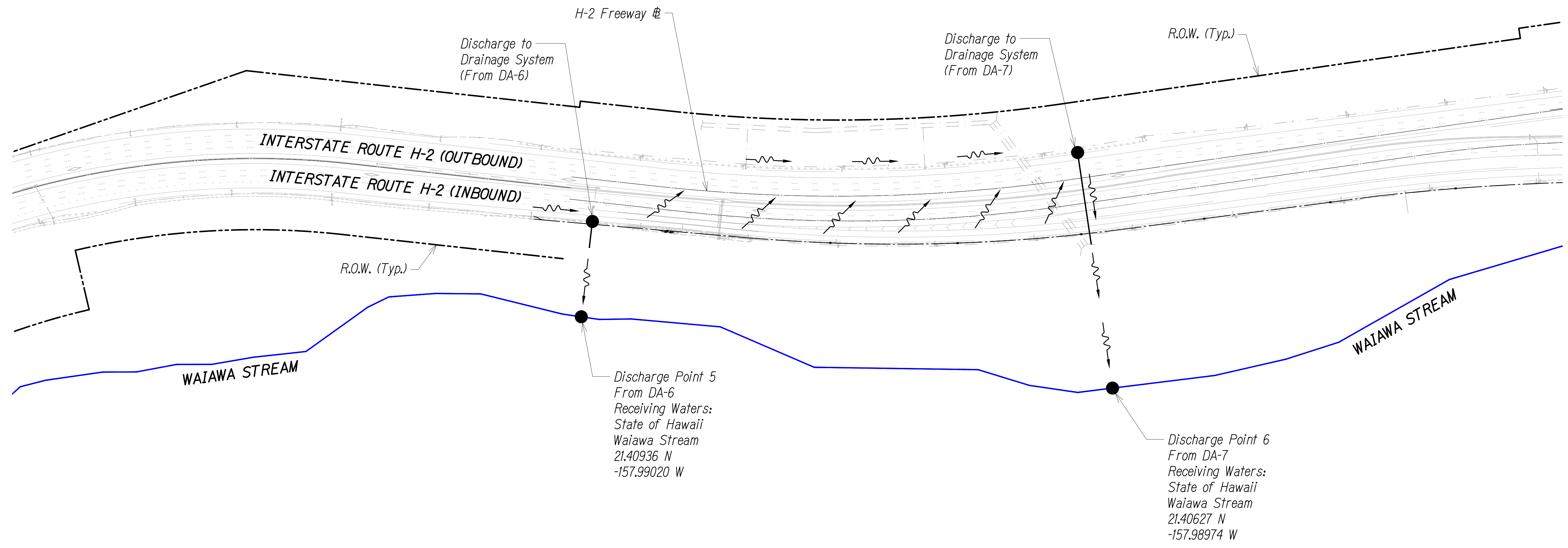
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**OUTFALL MAP**  
DA-5

EXHIBIT  
**44**








FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\45-OUTFALL MAP - 4.DWG

TRUE NORTH  
SCALE: 1"=100'



**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**OUTFALL MAP**  
DA-6 & DA-7

EXHIBIT  
**45**

FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\46-OUTFALL MAP - 5.DWG

TRUE NORTH  
SCALE: 1"=100'

R.O.W. (Typ.)

H-2 Freeway

INTERSTATE ROUTE H-2 (OUTBOUND)

INTERSTATE ROUTE H-2 (INBOUND)

RAMP M

WAIAWA STREAM






WAIAWA STREAM

WAIAWA STREAM

Discharge Point 7 (From)  
From DA-8  
Receiving Waters:  
State of Hawaii  
Waiawa Stream  
21.40561 N  
-157.98980 W

Discharge Point 7 (To)  
From DA-8  
Receiving Waters:  
State of Hawaii  
Waiawa Stream  
21.40524 N  
-157.98986 W

**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

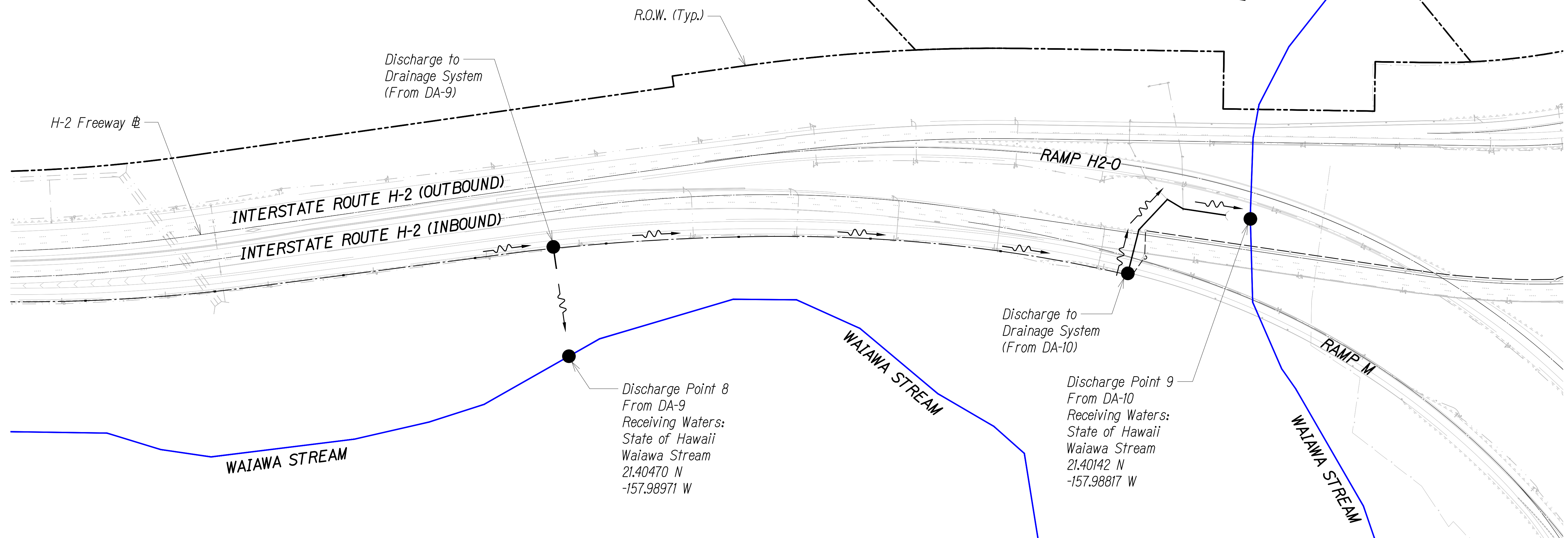
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
**OUTFALL MAP**  
DA-8

EXHIBIT  
**46**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\47-OUTFALL MAP - 6.DWG

TRUE NORTH  
SCALE: 1"=100'








Discharge to  
Drainage System  
(From DA-9)

Discharge to  
Drainage System  
(From DA-10)

Discharge Point 8  
From DA-9  
Receiving Waters:  
State of Hawaii  
Waiawa Stream  
21.40470 N  
-157.98971 W

Discharge Point 9  
From DA-10  
Receiving Waters:  
State of Hawaii  
Waiawa Stream  
21.40142 N  
-157.98817 W

**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

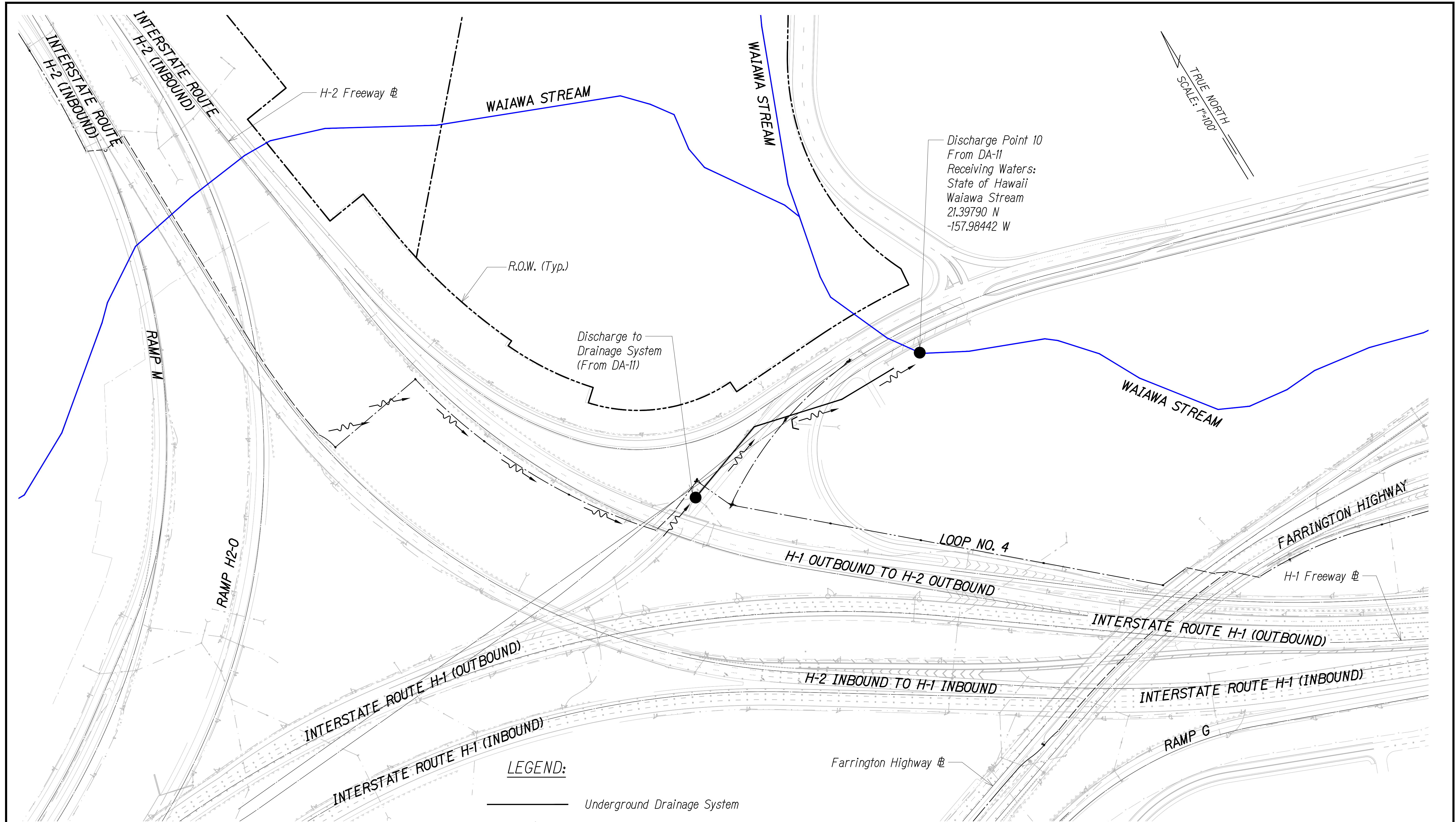
FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

OUTFALL MAP  
DA-9 & DA-10

EXHIBIT  
**47**





Discharge Point 10  
From DA-11  
Receiving Waters:  
State of Hawaii  
Waiawa Stream  
21.39790 N  
-157.98442 W

TRUE NORTH  
SCALE: 1"=100'

**LEGEND:**

- Underground Drainage System
- Open Channel
- State Water
- Flow Direction
- Discharge Point to State Waters

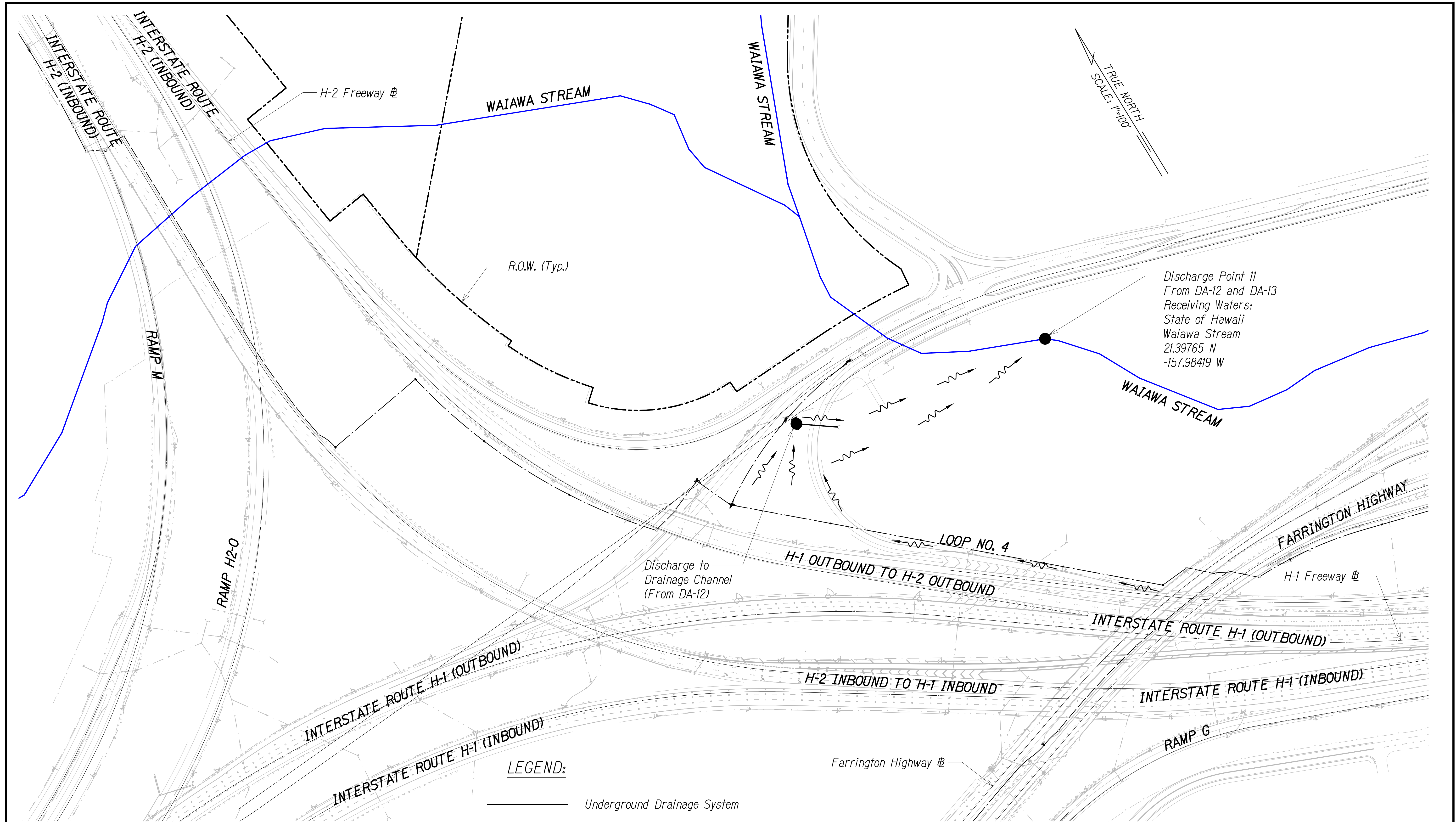
FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII






OUTFALL MAP  
DA-11

EXHIBIT  
**48**





**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

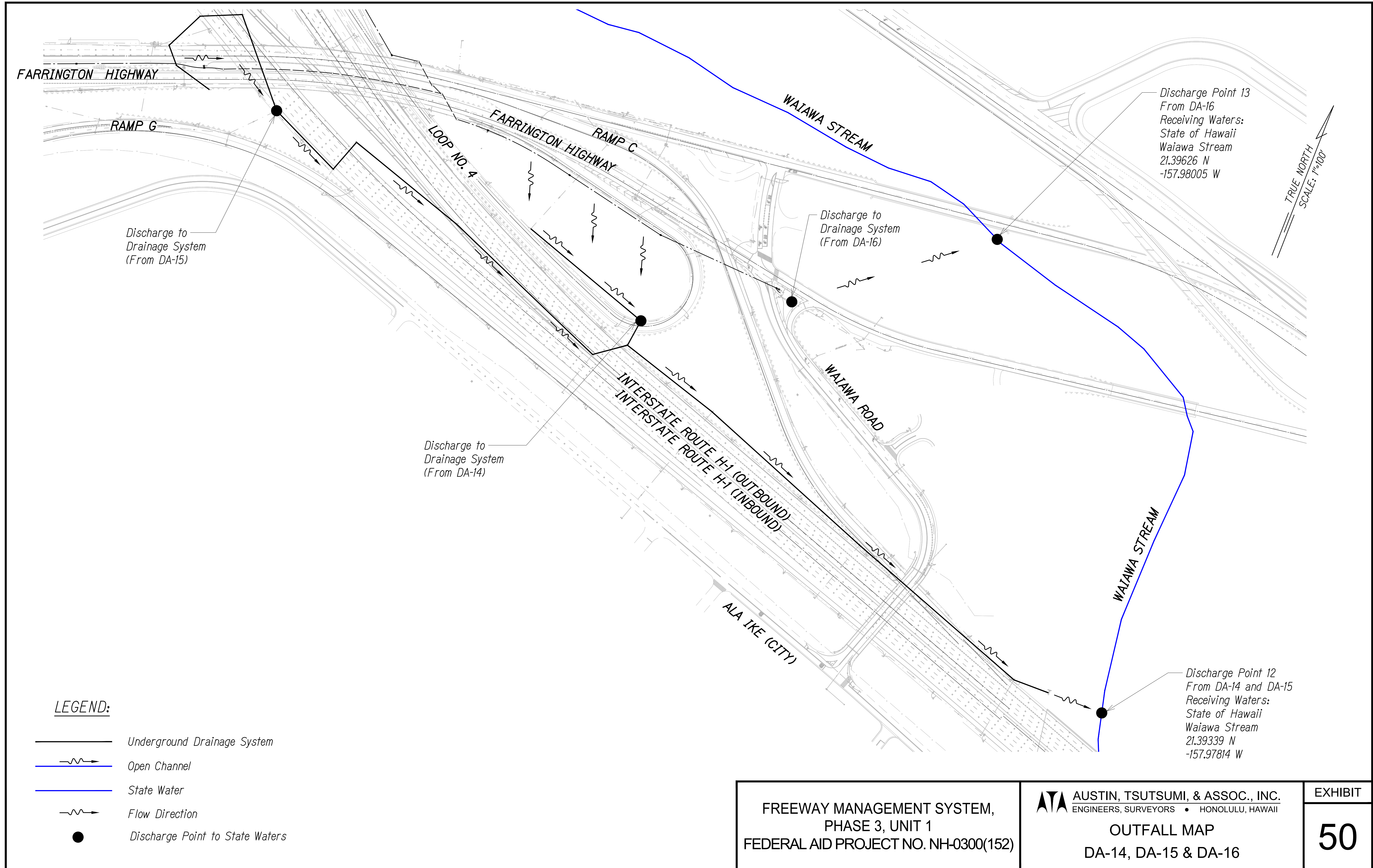
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

OUTFALL MAP  
 DA-12 & DA-13

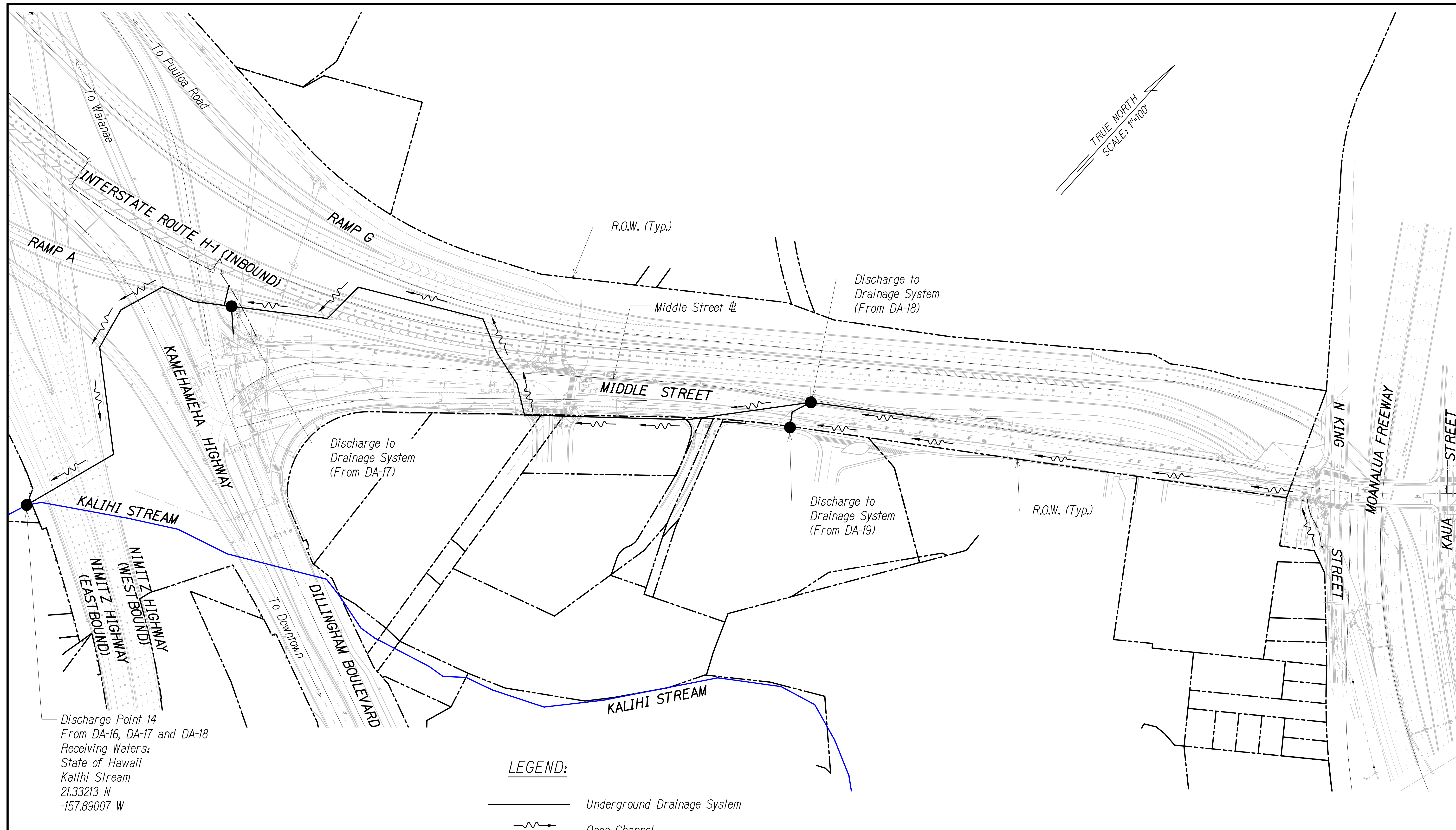
EXHIBIT  
**49**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\2\_DRAINAGE MAPS\50-OUTFALL MAP - 9.DWG












Discharge Point 14  
 From DA-16, DA-17 and DA-18  
 Receiving Waters:  
 State of Hawaii  
 Kalihi Stream  
 21.33213 N  
 -157.89007 W

**LEGEND:**

-  Underground Drainage System
-  Open Channel
-  State Water
-  Flow Direction
-  Discharge Point to State Waters

FREWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
 OUTFALL MAP  
 DA-17, DA-18 & DA-19

EXHIBIT  
**51**



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# **Attachment A-5**

## **Flood Maps- Form C**

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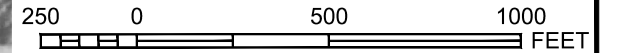
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FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\3\_FLOOD\_ZONE MAPS\52 -100-YR FLOOD\_ZONE MAP\_H-1 STA 413+50 TO 446+50.DWG



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0238G

**FIRM**

FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF HONOLULU, HAWAII

PANEL 238 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                    | NUMBER | PANEL | SUFFIX |
|------------------------------|--------|-------|--------|
| HONOLULU, CITY AND COUNTY OF | 150001 | 0238  | G      |

Notice to User: The Map Number shown below should be used when placing map orders, the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER 15003C0238G

MAP REVISED JANUARY 19, 2011

Federal Emergency Management Agency

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

ATA AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

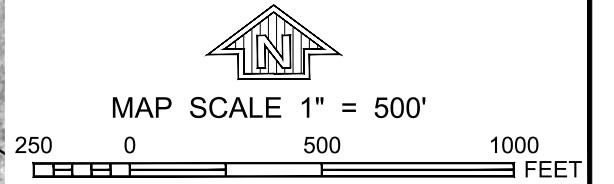
100-YR FLOOD ZONE MAP  
(H-1 STA. 413+50 TO STA. 446+50)

EXHIBIT

52



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\3\_FLOOD\_ZONE MAPS\53 -100-YR FLOOD\_ZONE MAP\_H-2 STA 391+50 TO 402+50.DWG



**NEIP** PANEL 0237F

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
 CITY AND COUNTY  
 OF HONOLULU,  
 HAWAII

PANEL 237 OF 395  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                       | NUMBER | PANEL | SUFFIX |
|---------------------------------|--------|-------|--------|
| HONOLULU,<br>CITY AND COUNTY OF | 150001 | 0237  | F      |

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
15003C0237F

**MAP REVISED**  
SEPTEMBER 30, 2004

Federal Emergency Management Agency

FREEWAY MANAGEMENT SYSTEM,  
 PHASE 3, UNIT 1  
 FEDERAL AID PROJECT NO. NH-0300(152)

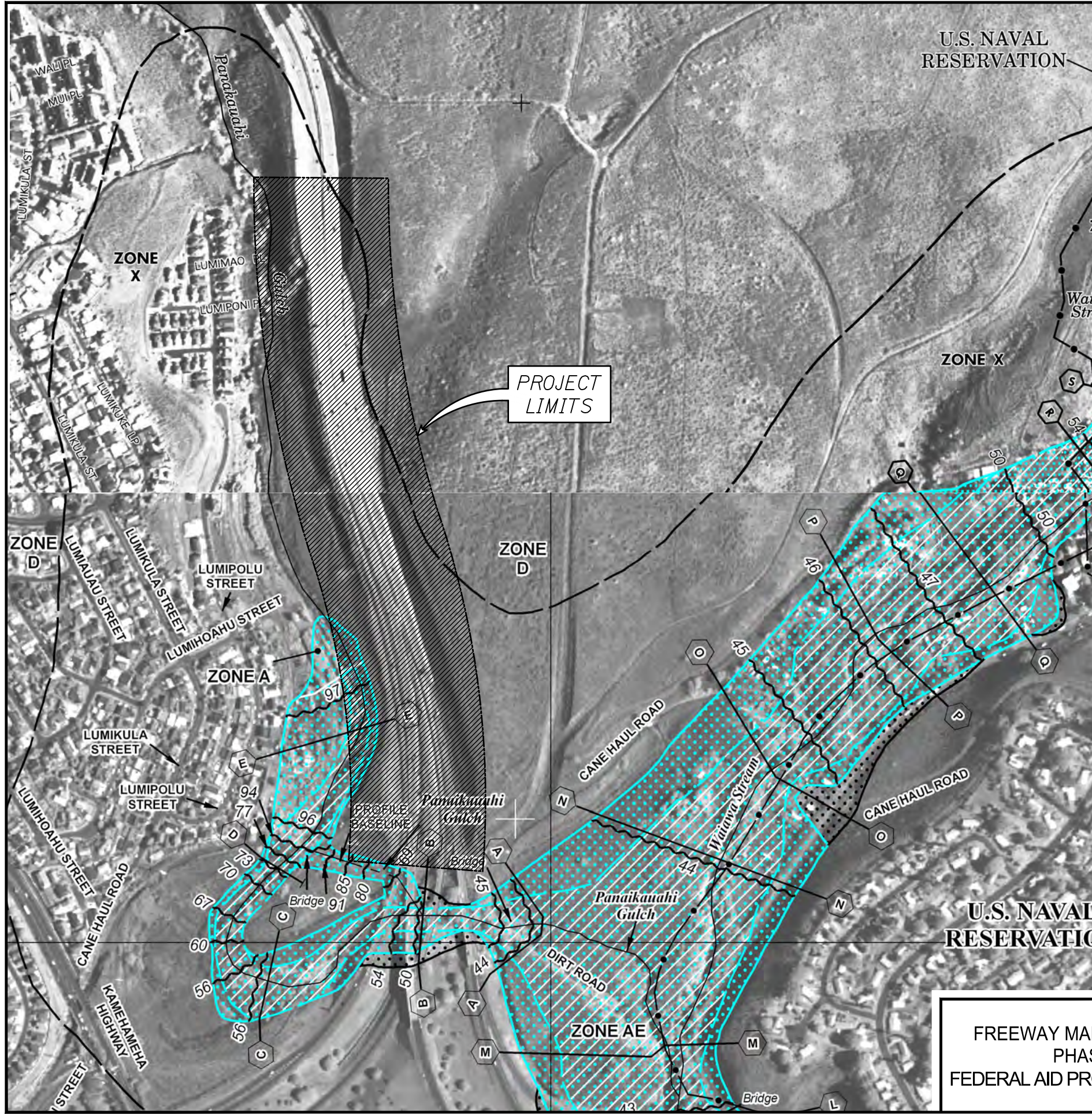
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
 ENGINEERS, SURVEYORS • HONOLULU, HAWAII

100-YR FLOOD ZONE MAP  
 (H-2 STA. 391+50 TO STA. 402+50)

EXHIBIT  
**53**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\3\_FLOOD\_ZONE MAPS\54 -100-YR FLOOD\_ZONE MAP\_H-2 STA 428+00 TO 458+00.DWG



U.S. NAVAL RESERVATION

ZONE X

PROJECT LIMITS

ZONE D

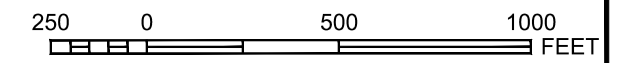
ZONE A

U.S. NAVAL RESERVATION

ZONE AE



MAP SCALE 1" = 500'



**NFIP** PANEL 0239G

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF HONOLULU, HAWAII


PANEL 239 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                    | NUMBER | PANEL | SUFFIX |
|------------------------------|--------|-------|--------|
| HONOLULU, CITY AND COUNTY OF | 150001 | 0239  | G      |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
15003C0239G

**MAP REVISED**  
JANUARY 19, 2011

Federal Emergency Management Agency

**NATIONAL FLOOD INSURANCE PROGRAM**

**NFIP** PANEL 0237F

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF HONOLULU, HAWAII


PANEL 237 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                    | NUMBER | PANEL | SUFFIX |
|------------------------------|--------|-------|--------|
| HONOLULU, CITY AND COUNTY OF | 150001 | 0237  | F      |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



**MAP NUMBER**  
15003C0237F

**MAP REVISED**  
SEPTEMBER 30, 2004

Federal Emergency Management Agency

**NATIONAL FLOOD INSURANCE PROGRAM**

FREWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

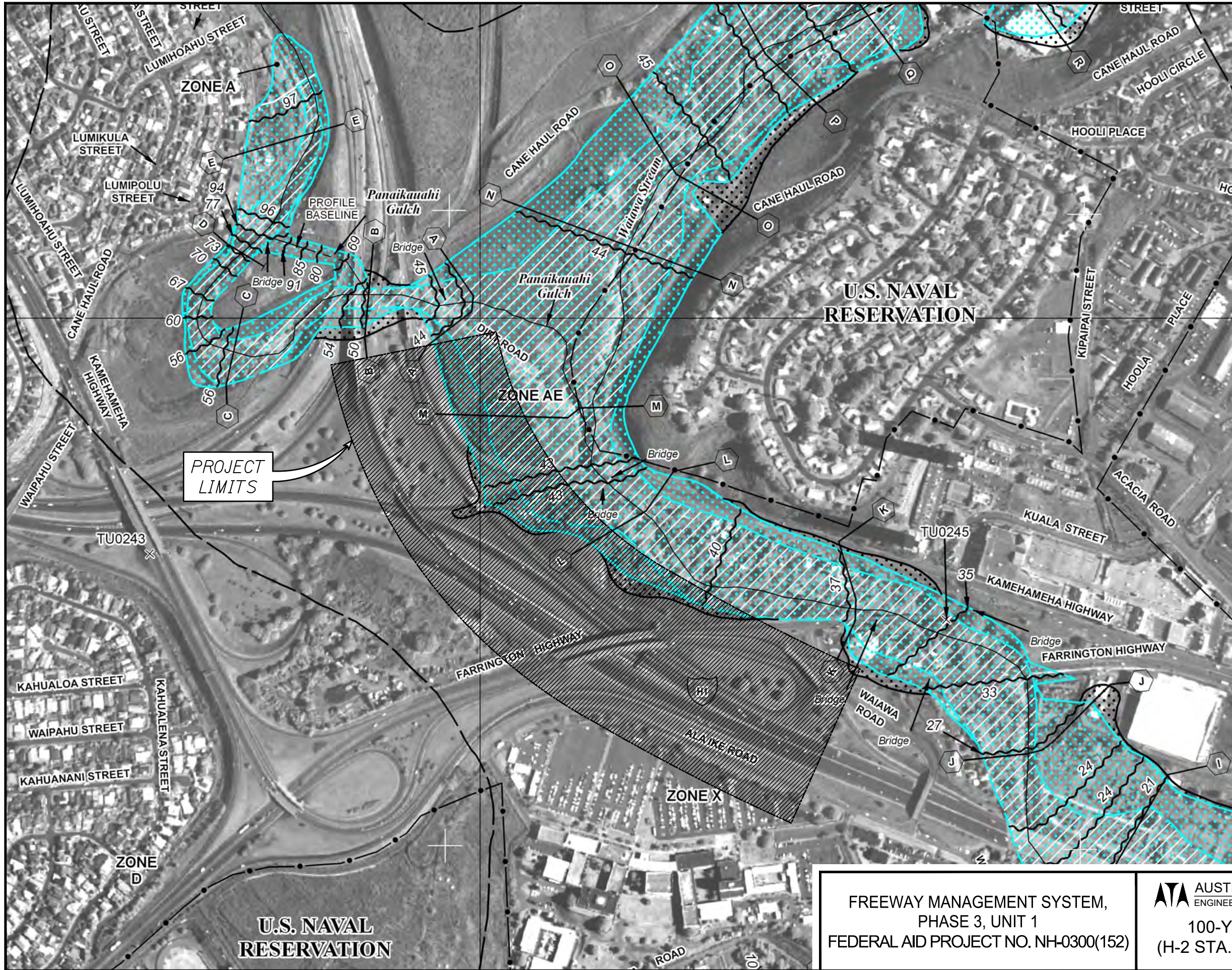
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

100-YR FLOOD ZONE MAP  
(H-2 STA. 428+00 TO STA. 458+00)

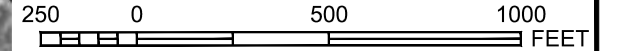
EXHIBIT  
**54**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\3\_FLOOD\_ZONE MAPS\55 -100-YR FLOOD\_ZONE MAP\_H-2 STA 465+00 TO 520+00.DWG



MAP SCALE 1" = 500'



**NFIP** PANEL 0239G

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF  
HONOLULU,  
HAWAII

PANEL 239 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                   | NUMBER | PANEL | SUFFIX |
|-----------------------------|--------|-------|--------|
| HONOLULU CITY AND COUNTY OF | 150001 | 0239  | G      |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
15003C0239G

**MAP REVISED**  
JANUARY 19, 2011

Federal Emergency Management Agency

FREWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

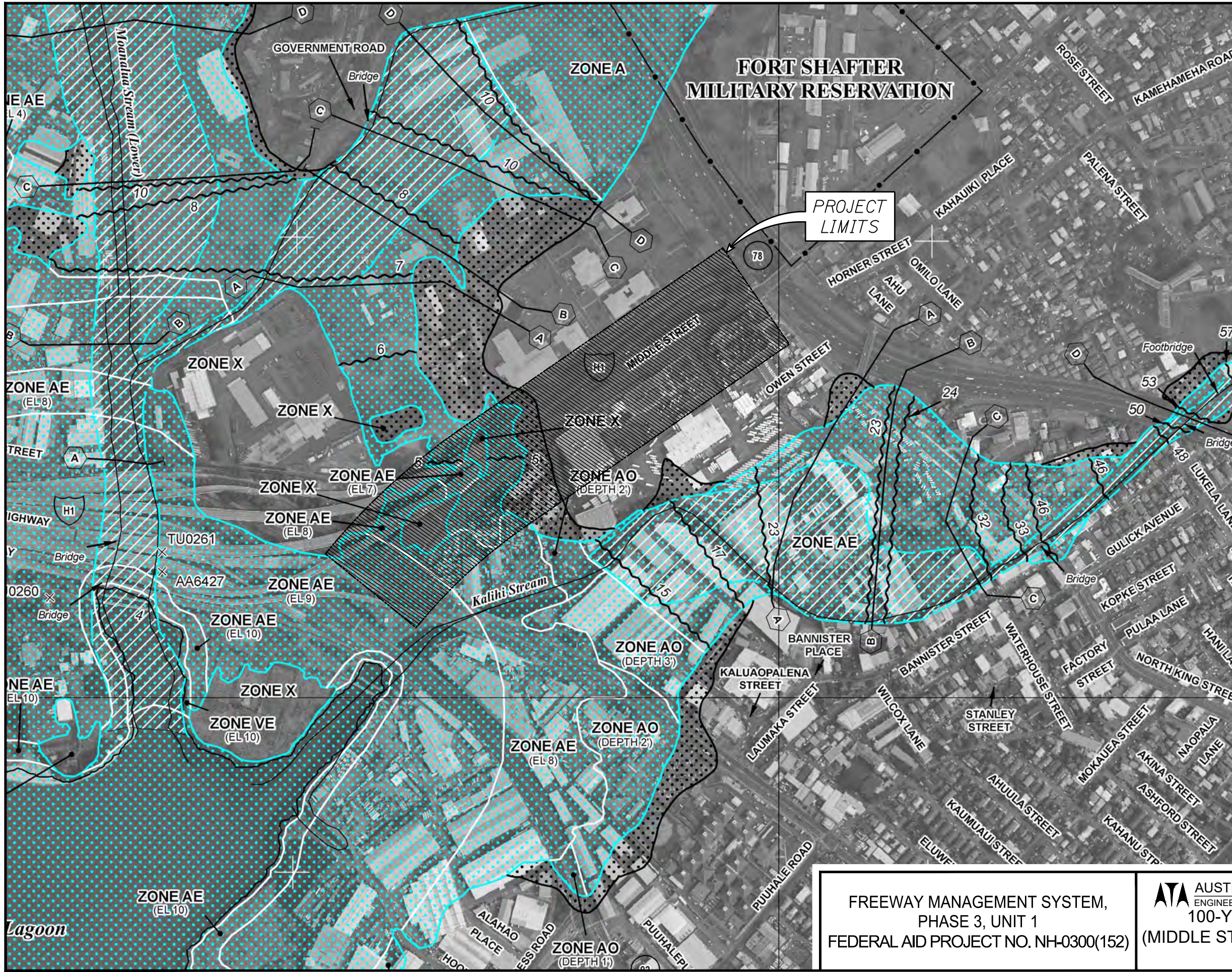
**ATA** AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII

100-YR FLOOD ZONE MAP  
(H-2 STA. 465+00 TO STA. 520+00)

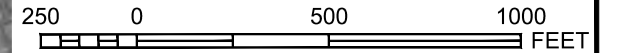
EXHIBIT  
**55**



FN: Z:\2019\19-890.1 (19-201 FMS PHASE 3\_FP 1 UNIT 1) NK-ZEY\NPDES\EXHIBITS\3\_FLOOD\_ZONE\_MAPS\56 -100-YR FLOOD\_ZONE\_MAP\_MIDDLE ST STA 10+00 TO 35+00.DWG



MAP SCALE 1" = 500'



PANEL 0353G

**FIRM**  
FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF  
HONOLULU,  
HAWAII

PANEL 353 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY                    | NUMBER | PANEL | SUFFIX |
|------------------------------|--------|-------|--------|
| HONOLULU, CITY AND COUNTY OF | 150001 | 0353  | G      |

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER  
15003C0353G

MAP REVISED  
JANUARY 19, 2011

Federal Emergency Management Agency

FREEWAY MANAGEMENT SYSTEM,  
PHASE 3, UNIT 1  
FEDERAL AID PROJECT NO. NH-0300(152)

ATA AUSTIN, TSUTSUMI, & ASSOC., INC.  
ENGINEERS, SURVEYORS • HONOLULU, HAWAII  
100-YR FLOOD ZONE MAP  
(MIDDLE STREET STA. 10+00 TO STA.  
35+00)

EXHIBIT  
**56**





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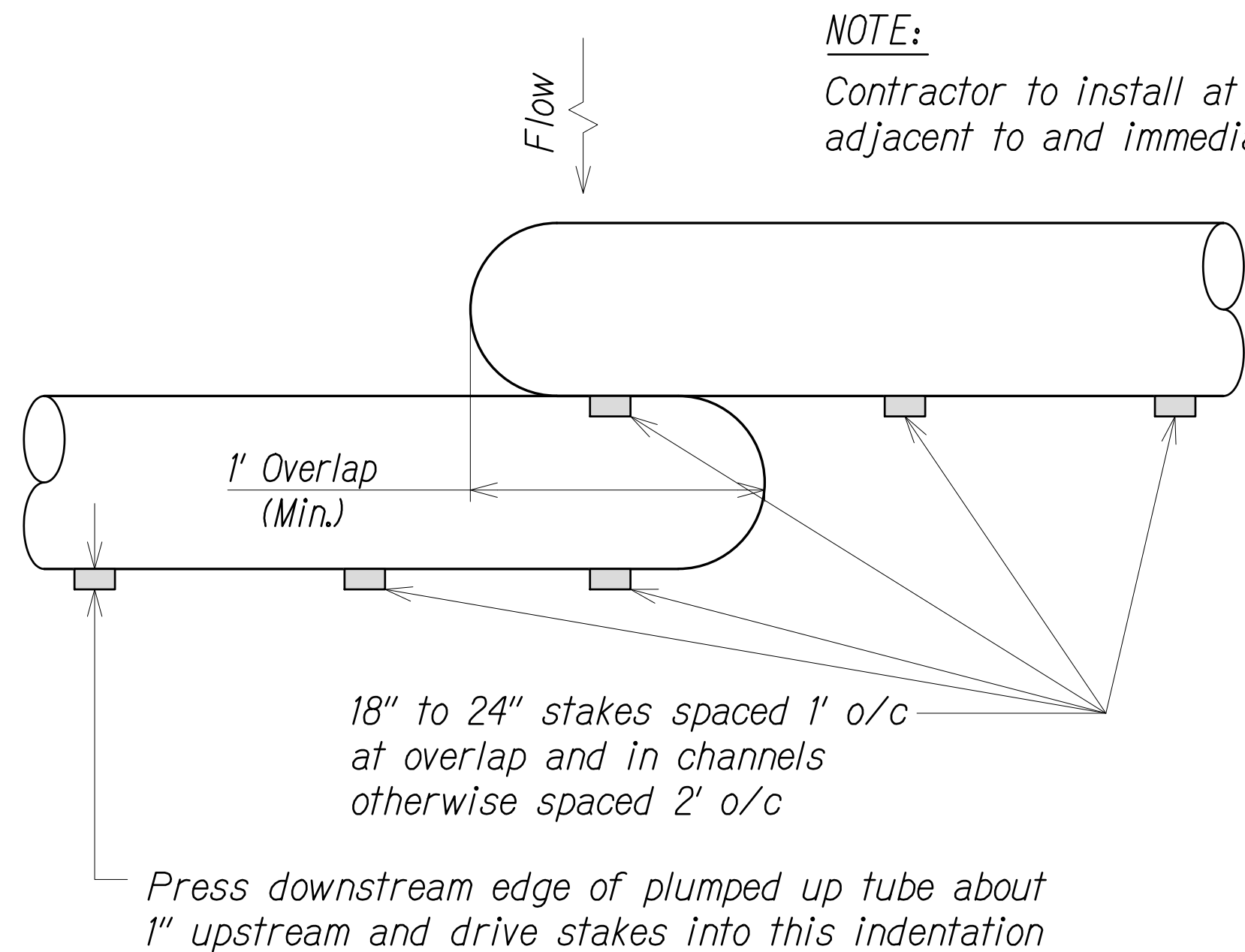
# **Attachment A-6**

## **BMP Details- Form C**

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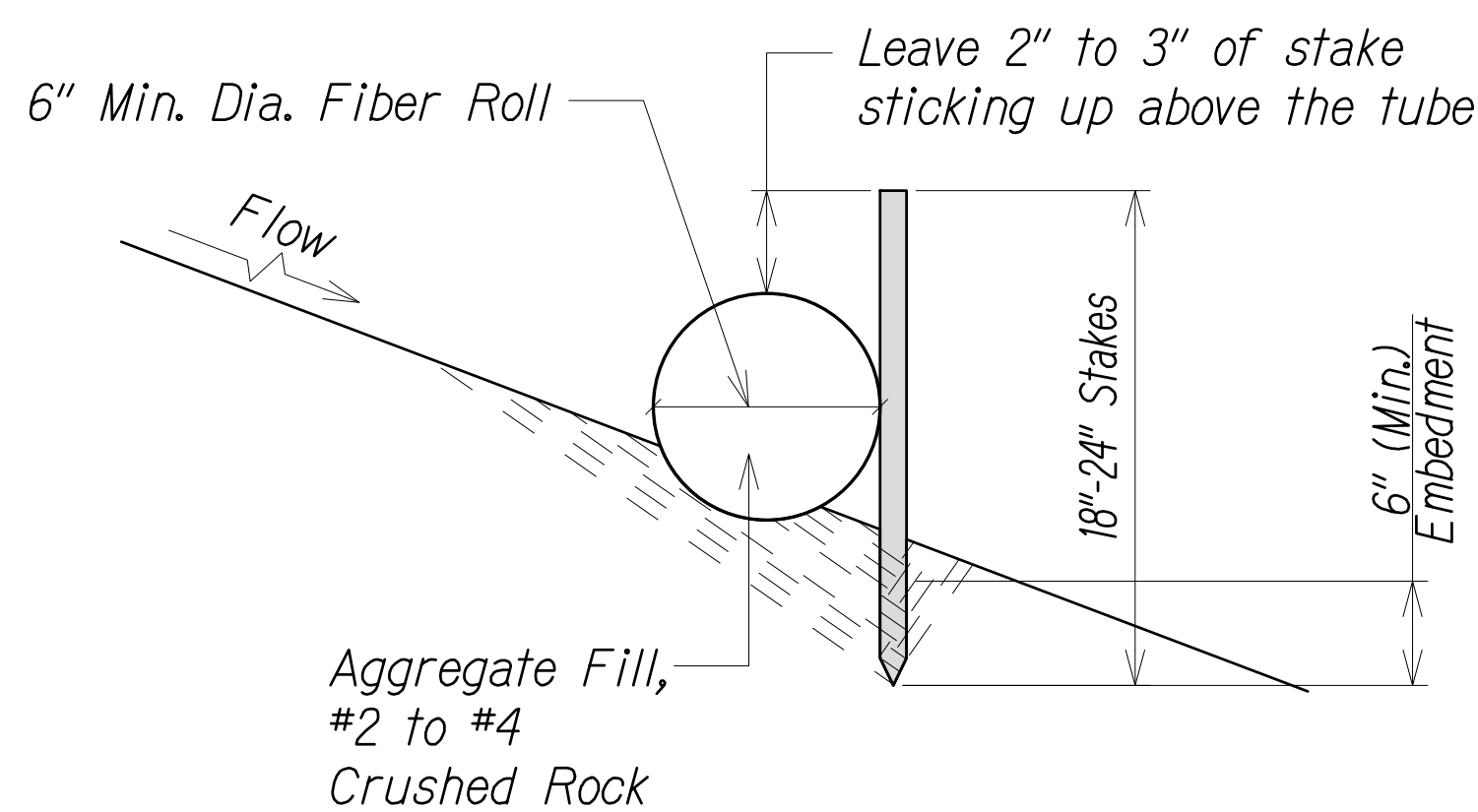
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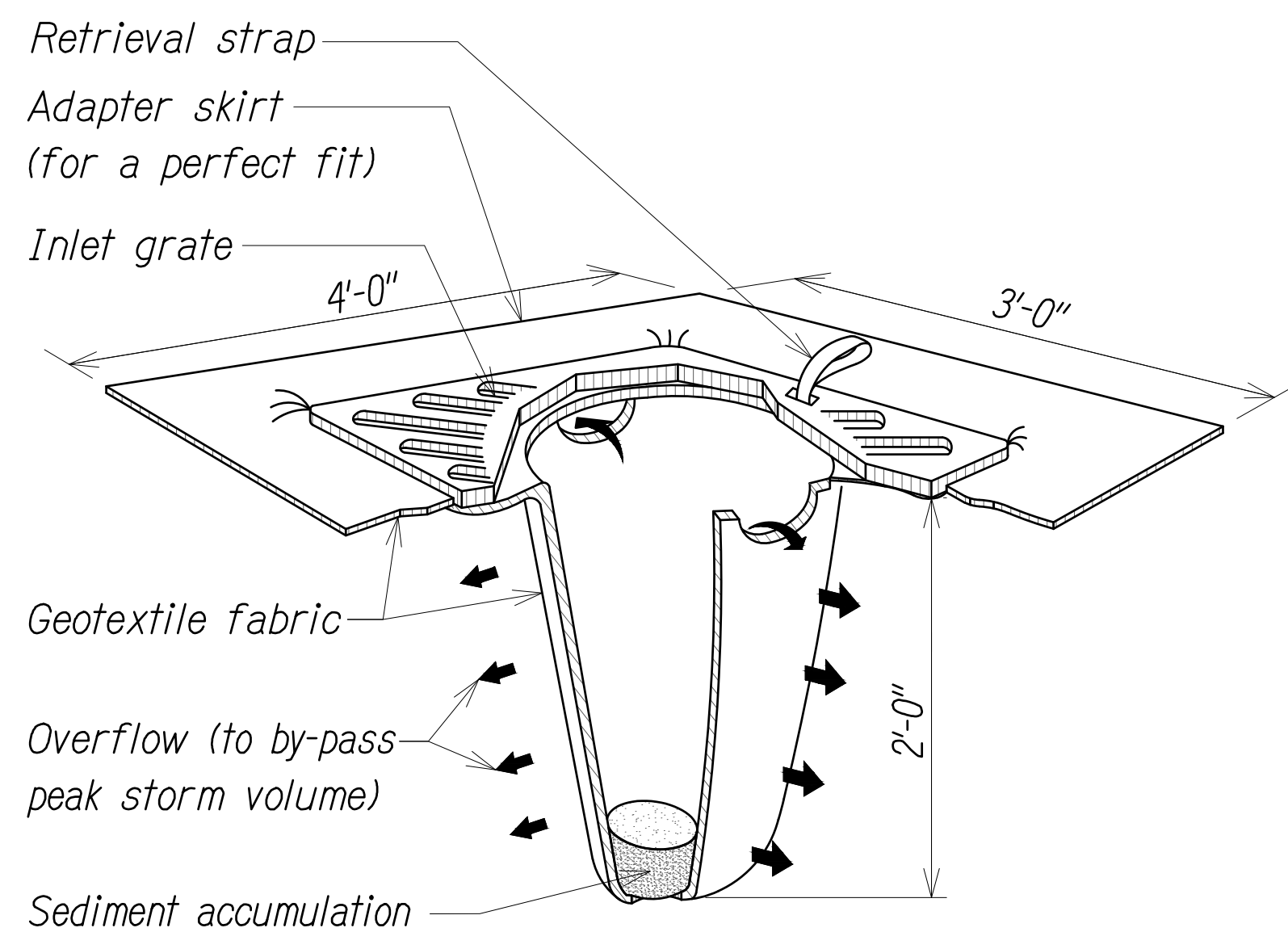
**PLAN**

**NOTE:**  
Contractor to install at all existing catch basins or drain inlets adjacent to and immediately down stream of all work areas.



**SECTION**

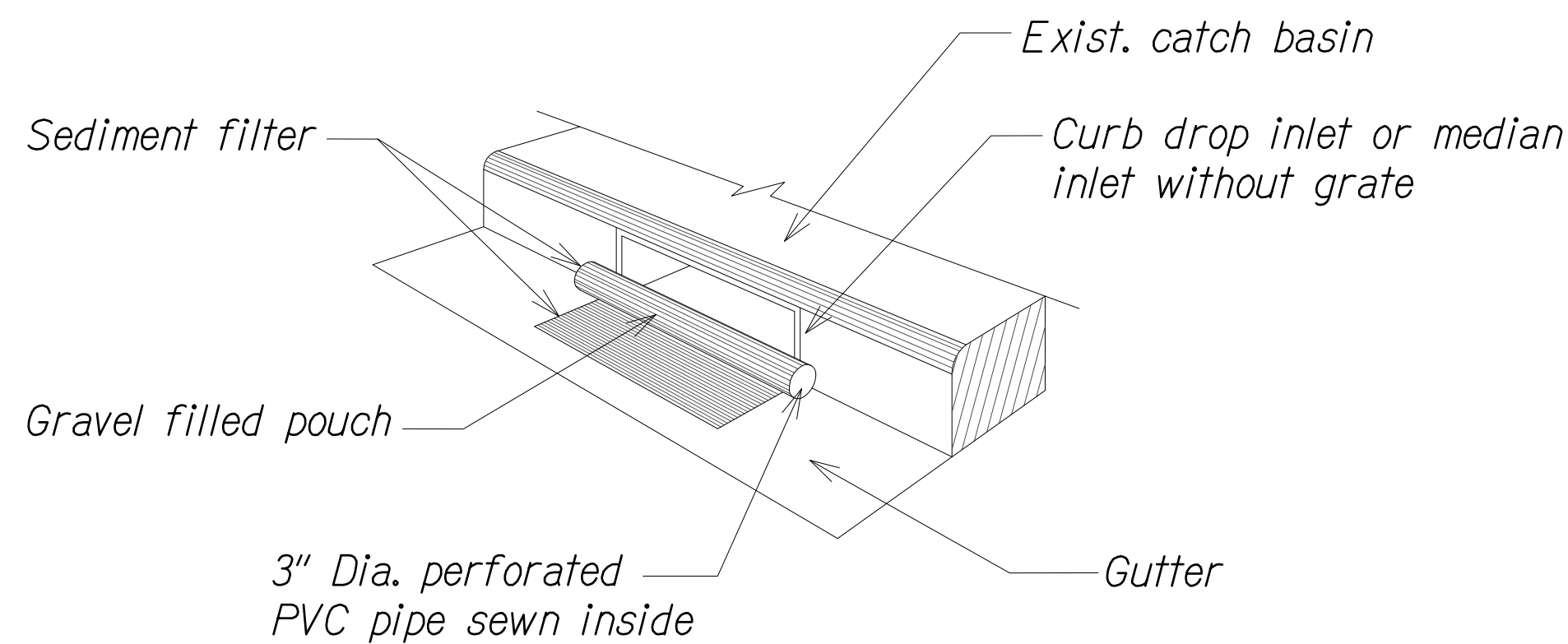
**TEMPORARY FIBER ROLL DETAIL**  
Not To Scale



**NOTES:**

1. All inlet protection on road shoulders shall be protected from damage by vehicular traffic with Type II barricades with amber flashers.
2. Contractor shall check the condition of the filter at the beginning and ending of each work day and repair/ clean as necessary.

**TEMPORARY SEDIMENT BARRIER**  
**AT DRAIN INLET**  
Not To Scale



**TEMPORARY STORM DRAIN PROTECTION**  
Not To Scale

**EROSION CONTROL/BEST MANAGEMENT PRACTICES NOTES:**

1. Erosion control measures to be installed prior to start of work, and be maintained until completion of project.
2. All construction BMPs shall be inspected weekly, and within 24 hours of any rainfall event of 0.25 inches or greater in a 24 hour period. The Contractor shall submit a copy of the SWPPP Inspection and Maintenance Report Form to the Engineer within 24 hours of the inspection.
3. Remove filter at times of above normal rainfall events and replace them when the event has passed.
4. The final lift of each day's work shall be compacted to prevent erosion of fill material.
5. Good housekeeping shall be utilized to ensure protection of roadways from mud, dirt, and debris.
6. The Contractor shall ensure that all tires of construction vehicles are sufficiently cleaned off so that dirt or debris is not tracked off the construction site. Washing off tires with water will not be acceptable unless the runoff is contained and does not enter the storm drain system.
7. Any dirt or grassed area disturbed shall be restored by seeded hydromulch.
8. At the end of construction operations and at the completion of the project, Contractor shall inspect all catch basin, drain inlet and drain manhole surrounding the project site. Any accumulated sediment and debris found in storm drain structures shall be removed. Please note that flushing into the drain structures is prohibited.
9. Contractor shall submit proposed storm drain and sediment barrier for acceptance prior to installation.



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# Attachment B

## Drainage Calculations- Form C

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### Freeway Management System Phase 3 Unit 1 Drainage Calculations

| DRAINAGE AREA | C    | Area    |         | *T <sub>c</sub> | CF    | I <sub>10</sub> | Q <sub>10</sub> | Discharge Point No. | Discharge Point Name | Discharge Point Location |            | Receiving Water Classification |
|---------------|------|---------|---------|-----------------|-------|-----------------|-----------------|---------------------|----------------------|--------------------------|------------|--------------------------------|
|               |      | (SF)    | (acres) | (min)           | (min) | (in/hr)         | (cfs)           |                     |                      | Lat.                     | Long.      |                                |
| DA-1          | 0.46 | 17,984  | 0.41    | 12.00           | 2.2   | 2.5             | 1.05            | 1                   | T Makalena Gulch     | 21.38903                 | -158.00051 | Class 2, Inland                |
| DA-2          | 0.68 | 44,026  | 1.01    | 7.50            | 2.5   | 2.5             | 4.27            | 1                   | T Makalena Gulch     | 21.38903                 | -158.00051 | Class 2, Inland                |
| DA-3          | 0.52 | 58,773  | 1.35    | 6.00            | 2.7   | 2.5             | 4.74            | 2                   | T Makalena Gulch     | 21.39884                 | -157.99997 | Class 2, Inland                |
| DA-4          | 0.74 | 50,491  | 1.16    | 4.00            | 2.9   | 2.6             | 6.47            | 3                   | Waiawa Stream        | 21.41603                 | -157.99154 | Class 2, Inland                |
| DA-5          | 0.40 | 9,974   | 0.23    | 4.00            | 2.9   | 2.5             | 0.66            | 4                   | Waiawa Stream        | 21.40699                 | -157.98988 | Class 2, Inland                |
| DA-6          | 0.95 | 2,168   | 0.05    | 2.00            | 3.2   | 2.5             | 0.38            | 5                   | Waiawa Stream        | 21.40936                 | -157.9902  | Class 2, Inland                |
| DA-7          | 0.75 | 13,909  | 0.32    | 0.50            | 3.4   | 2.5             | 2.05            | 6                   | Waiawa Stream        | 21.40627                 | -157.98974 | Class 2, Inland                |
| DA-8          | 0.73 | 14,179  | 0.33    | 2.00            | 3.2   | 2.5             | 1.89            | 7                   | Waiawa Stream        | 21.40524                 | -157.98986 | Class 2, Inland                |
| DA-9          | 0.75 | 3,223   | 0.07    | 3.00            | 3.1   | 2.5             | 0.43            | 8                   | Waiawa Stream        | 21.4047                  | -157.98971 | Class 2, Inland                |
| DA-10         | 0.75 | 27,592  | 0.63    | 7.50            | 2.5   | 2.5             | 2.95            | 9                   | Waiawa Stream        | 21.40142                 | -157.98817 | Class 2, Inland                |
| DA-11         | 0.41 | 190,278 | 4.37    | 27.00           | 1.5   | 2.5             | 6.78            | 10                  | Waiawa Stream        | 21.3979                  | -157.98442 | Class 2, Inland                |
| DA-12         | 0.44 | 50,086  | 1.15    | 16.50           | 1.9   | 2.5             | 2.41            | 11                  | Waiawa Stream        | 21.39765                 | -157.98419 | Class 2, Inland                |
| DA-13         | 0.52 | 24,752  | 0.57    | 9.00            | 2.4   | 2.5             | 1.79            | 11                  | Waiawa Stream        | 21.39765                 | -157.98419 | Class 2, Inland                |
| DA-14         | 0.48 | 36,362  | 0.83    | 6.00            | 2.7   | 2.5             | 2.71            | 12                  | Waiawa Stream        | 21.39339                 | -157.97814 | Class 2, Inland                |
| DA-15         | 0.65 | 4,290   | 0.10    | 12.00           | 2.4   | 2.5             | 0.35            | 12                  | Waiawa Stream        | 21.39339                 | -157.97814 | Class 2, Inland                |
| DA-16         | 0.59 | 3,914   | 0.09    | 10.00           | 2.3   | 2.5             | 0.31            | 13                  | Waiawa Stream        | 21.3979                  | -157.98442 | Class 2, Inland                |
| DA-17         | 0.41 | 19,517  | 0.45    | 10.00           | 2.3   | 2.4             | 1.01            | 14                  | Kalihi Stream        | 21.33213                 | -157.89007 | Class 2, Inland                |
| DA-18         | 0.58 | 11,300  | 0.26    | 5.00            | 2.8   | 2.4             | 1.02            | 14                  | Kalihi Stream        | 21.33213                 | -157.89007 | Class 2, Inland                |
| DA-19         | 0.49 | 5,773   | 0.13    | 11.00           | 2.2   | 2.4             | 0.34            | 14                  | Kalihi Stream        | 21.33213                 | -157.89007 | Class 2, Inland                |

**Totals 13.51 acres**

**41.61 cfs**



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# **Attachment C**

CCH Letter of Agreement- Form C


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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
DESIGN BRANCH  
M E M O R A N D U M

HWY-DH 2.3846  
DATE: November 13, 2009

TO: HWY- C, O, -T, -L, -DS, -DD, -DH, -DB, -DL  
FROM: HWY-D   
SUBJECT: CITY AND COUNTY OF HONOLULU, DEPARTMENT OF PLANNING AND  
PERMITTING (DPP) - GRADING PERMIT SUBMITTAL REQUIREMENTS

---

This is a follow up to a HWY Memo dated September 8, 2008 (Attachment 2). The original self-certification form has been revised to include a paragraph stating that the Department of Transportation has reviewed the City and County of Honolulu Rules Relating to Soil Erosion Standards and Guidelines and has submitted the required documents to DPP. (See revised self-certification form in Attachment 1)

Documents required for submittal to DPP include the revised self certification form, Universal Soil Loss calculations, and Erosion Control Plans. The Design Engineer shall be responsible to complete the self certification form and prepare the soil loss calculations. The Oahu District office shall be responsible to ensure that these documents along with the Erosion Control Plans are submitted to DPP prior to the start of construction.

**Again as a reminder, these submittals are only applicable to construction projects on Oahu that require a Grading Permit from DPP.** In general, projects such as: pavement preservation, resurfacing, reconstruction, and rehabilitation; roadway, traffic, and drainage safety improvements; landscaping; utility work; rockfall; retaining and sound walls will not apply. The Table in Attachment 2 provides a detailed description of projects that do not require a Grading Permit.

Should you have any questions, please contact Scot Urada, Design Branch Head at 692-7559, or Curtis Matsuda at 692-7561 of our Hydraulic Design Section.

Attachments

CM: mjkn

c: HWY

To: Department of Planning and Permitting  
City & County of Honolulu  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Attention: Permitting & Inspection Section

From: State of Hawaii  
Department of Transportation  
Highways Division  
601 Kamokila Boulevard, Room 688A  
Kapolei, Hawaii 96707

Subject: Non applicability for Detailed Plan review for projects requiring Grading Permits:

Project No: \_\_\_\_\_

Project Title: \_\_\_\_\_

\_\_\_\_\_

TMK No(s): \_\_\_\_\_

Detailed plan review and approval for the above project by the City & County of Honolulu is not applicable for the reasons stated in the HWY-D letter no. 2.8186 dated June 25, 2008 and as agreed with in DPP Letter 2008/ELOG-1912 dated August 12, 2008.

We certify that the work has been reviewed and is found to be in compliance with Chapter 14, Articles 13, 14 & 15 as amended, Revised Ordinances of Honolulu.

The Department of Transportation and/or its consultant have reviewed the City & County of Honolulu Rules Relating to Soil Erosion Standards and Guidelines (Guidelines) and the attached Erosion Control Plan and related documents have been prepared in accordance with the referenced Guidelines.

For questions regarding this matter, please contact Scot Urada at 692-7559, Engineering Program Manager, Design Branch, Highways Division.

Project Manager: \_\_\_\_\_  
Print name

Date: \_\_\_\_\_

Section Head: \_\_\_\_\_  
signature

Date: \_\_\_\_\_

Branch Head: \_\_\_\_\_  
signature

Date: \_\_\_\_\_

Original: HWY-OC  
cc: Project File



Mailed out  
SEP 19 2008  
mfp

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
DESIGN BRANCH  
M E M O R A N D U M

HWY-D 2.9279  
DATE: September 15, 2008

TO: HWY-C, -D, -L, -T, -O  
FROM: HWY *Open m Jami*  
SUBJECT: WAIVER OF DETAILED PLAN REVIEW - LETTER OF AGREEMENT  
(LOA) BETWEEN HAWAII STATE DEPARTMENT OF TRANSPORTATION  
AND CITY & COUNTY OF HONOLULU (C&C) DATED AUGUST 12, 2008

---

By letter of agreement (Attachment A), the C&C has agreed not to conduct a detailed plan review for DOT-Highways projects requiring grading permits provided that DOT submits a self certification form (page 2 of Attachment B) along with any required grading permit applications. This applies only to projects on Oahu that require grading permits.

Upon completion of design, the design Project Manager shall use Attachment C, Typical Projects not Requiring Grading Permits dated 8-20-08 and Attachment D, Revised Ordinances of Honolulu to determine whether if the project requires a grading permit or not.

If the project does not require a grading permit, no grading plan review by C&C is needed. The Project Manager checks the applicable block and signs on page 1 of Attachment B. The original is furnished to HWY-OC, and a copy is placed in the project file.

However if a project requires a grading permit, the following shall be done:

1. The Project Manager shall complete check the applicable block and sign page 1 of Attachment B, and complete page 2 of this form. The signatures of Section Head and Branch Head will be that of the office managing the PS&E.
2. The signed originals will be provided to HWY-OC prior to the preconstruction conference. A copy of this form will be kept in the design project file.
3. At the preconstruction meeting, page 2 of the original, signed form will be provided to the construction contractor, who in turn, will provide this to the C&C when a grading permit is processed.

Memo to HWY-C, -D, -L, -T, -O

HWY-D 2.9279

Page 2

September 15, 2008

It should be noted that this specifically pertains to grading plan review for projects on Oahu. The possibility exists that a project may affect other C&C facilities such as sewer lines, waterlines, traffic signals, sidewalks, etc. While such work may not require a grading permit, these plans will still require review and approval by C&C.

If you have any questions regarding this matter, please contact Scot Urada, Design Branch Head at 692-7559.

Attachment

SU:su



# SELF-CERTIFICATION FORM

To: Department of Planning and Permitting  
City & County of Honolulu  
650 South King Street, 7<sup>th</sup> Floor  
Honolulu, Hawaii 96813

Attention: Permitting & Inspection Section

From: State of Hawaii  
Department of Transportation  
Highways Division  
601 Kamokila Boulevard, Room 688A  
Kapolei, Hawaii 96707

Subject: Non applicability for Detailed Plan review for projects requiring Grading Permits:

Project No: \_\_\_\_\_

Project Title: \_\_\_\_\_  
\_\_\_\_\_

TMK No(s): \_\_\_\_\_

Detailed plan review and approval for the above project by the City & County of Honolulu is not applicable for the reasons stated in the HWY-D letter no. 2.8186 dated June 25, 2008 and as agreed with in DPP Letter 2008/ELOG-1912 dated August 12, 2008.

We certify that the work has been reviewed and is found to be in compliance with Chapter 14, Articles 13, 14 & 15 as amended, Revised Ordinances of Honolulu.

For questions regarding this matter, please contact Scot Urada at 692-7559, Engineering Program Manager, Design Branch, Highways Division.

Section Head: \_\_\_\_\_

Date: \_\_\_\_\_

Branch Head: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT B**

**SUPERSEDED**

**Typical projects not requiring Grading Permits  
(for DOT's use only to determine non-applicability)**

8-20-08

|    | <b>Project Type</b>  | <b>Typical Scope of Work</b>  |
|----|--|---|
| 1  | Pavement Preservation and Maintenance (PPM)  | Application of chip seal, slurry seal, cold plane and replace up to 1-1/2 inches of asphalt.  |
| 2  | Road Resurfacing   | Cut and replace asphalt, place more than 1-1/2 inches of asphalt, ultra thin white topping  |
| 3  | Road Rehabilitation  | Demolition and replacement of PCC, removal and repair and replacement of entire pavement section including PCC or AC and underlying pavement structure materials.   |
| 4  | Electrical, water, sewer, drainage, communication or other utility installation or relocations | Trenching, removal and/or installation of conduits or pipes, trench backfill, and patching.   |
| 5  | Traffic Signal Modernization and/or Installation   | Trenching, installation of electrical and communication conduits, backfill, patching, replacement of traffic signal hardware, installation of poles & mast arms, augering and placement of concrete foundations, placement of small concrete pads for electrical equipment. |
| 6  | Lighting Improvements  | Trenching, installation of electrical conduits, backfill, patching, augering and placement of concrete light foundations, placement of small concrete pads for electrical transformers and equipment.   |
| 7  | Guardrail and Shoulder Improvements  | Excavation for shoulder pavement section, install concrete sidewalks and wheel chair ramps, guardrails and end treatments, relocating street lights, grading to "shape" shoulder areas.   |
| 8  | Intersection Improvements  | Installation of pavement structures & sidewalks; minor grading and/or shaping; sometimes installation of traffic signal facilities and installation of electrical and communication conduits.   |
| 9  | Landscape Improvements   | Installation of trees, shrubs, irrigation facilities and other architectural features.  |
| 10 | Retaining Walls or Sound Walls   | Excavation and backfill for footings and walls.   |
| 11 | Rockfall Protection  | Installation of anchors, restraining or containment mesh, restraining or energy absorbing fencing. Slope scaling and removal of boulders.   |
| 12 | Drainage Improvements  | Trenching and replacement of drainage pipes, installation of catchment, inlet or outlet structures, installation of AC or concrete berms or curbs, installation of concrete gutters. Earth or lined ditches and/or swales.  |

**Exclusions (Section 14, Article 13.5, ROH)**

1. *Excavation* which does not alter the general drainage pattern with respect to abutting properties, which does not exceed 50 cubic yards of materials on any one site, and does not exceed three feet in vertical height at its deepest point; **provided that the cut meets the cut slopes and distance from property lines requirement in Section 14-15.1, ROH (attachment D).**
2. *Fill* which does not alter the general drainage pattern with respect to abutting properties, which does not exceed 50 cubic yards of materials on any one site, and does not exceed three feet in vertical height at its deepest point; **provided that the cut meets the cut slopes and distance from property lines requirement in Section 14-15.1, ROH.**
3. Grubbing that does not alter the general drainage pattern with respect to abutting properties and does not exceed a total of 15,000 square feet.

the corrective measures to be taken. Grading operations shall cease until corrective measures satisfactory to the chief engineer have been taken. In addition, whenever the work is not being done in conformance with a NPDES permit, the state department of health will be notified.

(Sec. 23-2.9, R.O. 1978 (1983 Ed.); Am. Ord. 92-122)

**Article 15. Grading, Grubbing and Stockpiling**

**Sections:**

**14-15.1 Conditions of permit.**

**14-15.2 Special requirements.**

**Sec. 14-15.1 Conditions of permit.**

The requirements of subsections (a), (b) and (c) may be modified by the director of planning and permitting based on the engineer's soils report and engineering slope hazard report.

(a) Height. Where a cut or fill is greater than 15 feet in height, terraces or benches shall be constructed at vertical intervals of 15 feet except that where only one bench is required, it shall be at the midpoint. The minimum width of such terraces or benches shall be at least eight feet and provided with drainage provisions to control erosion on the slope face and bench surface.

(b) Cut Slopes. Under the following soil conditions, no cut may be steeper in slope than the ratio of its horizontal to its vertical distance as shown below:

- (1) One-half horizontal to one vertical in unweathered rock or mudrock;
- (2) One horizontal to one vertical in decomposed rock;
- (3) One and one-half horizontal to one vertical in soils of low plasticity, cuts of any height in highly plastic soils shall be as recommended in the applicable report.

(c) Fill Slopes. Fills shall not be steeper than a ratio of two horizontal to one vertical except that fill using highly plastic clays shall have slopes as recommended in the applicable report.

(d) Distance from property line. The horizontal distance from the top of a cut slope or the bottom of a fill slope to the adjoining property line shall not be less than as follows:

| Height of Cut or Fill       | Distance from Property Line (in feet) |
|-----------------------------|---------------------------------------|
| Zero feet to 4 feet         | 2                                     |
| More than 4 feet to 8 feet  | 4                                     |
| More than 8 feet to 15 feet | 6                                     |
| More than 15 feet           | 8                                     |

These requirements may be modified by the director of planning and permitting when cuts or fills are supported by retaining walls or when the permittee submits an engineer's soils report or engineering slope hazard report stating that the soil conditions will permit a lesser horizontal distance without causing damage or danger to the adjoining property.

(e) Area Opened. The maximum-sized parcel of land that may be opened for grading or grubbing is 15 acres. Noncontiguous increments may be worked concurrently provided no single parcel exceeds 15 acres, provided the work is in conformance with the NPDES permit. The area of land that may be opened may be reduced by the director of planning and

*Attachment P*



permitting to control pollution and minimize storm damage. However, if soils, hydrologic, climatic and construction conditions warrant, and adequate erosion prevention measures have been taken, the director of planning and permitting may authorize additional area to be opened. Additional area may not be opened for grading or grubbing until measures to prevent dust or erosion problems in the area already graded or grubbed have been undertaken to the satisfaction of the director.

(f) **Fills.** The requirements of subdivisions (1), (2) and (3) may be modified by the director of planning and permitting if the permittee submits an engineer's soils report recommending criteria for the proposed fill for its intended use.

(1) Fill material shall be selected to meet the requirements and conditions of the particular fill for which it is to be used. The fill material shall not contain vegetation or organic matter. Where rocks, concrete, or similar materials of greater than eight inches in diameter are incorporated into the fill, they shall be placed in accordance with the recommendation of a soils engineer.

(2) **Preparation of Ground Surface.** Before placing or stockpiling, the natural ground surface shall be prepared by removing the vegetation and, if required by the director of planning and permitting, shall be notched by a series of benches and/or subsurface drains installed. No fill shall be placed over any water spring, marsh, refuse dump, nor upon a soft, soggy or springy foundation; provided, that this requirement may be waived by the director of planning and permitting if the permittee submits an engineer's soils report recommending criteria for the fill.

(3) **Placement and Compaction.** Fill materials shall be spread and compacted in a series of eight-inch to 10-inch layers when compacted, unless otherwise recommended by the soils engineer. Except for slopes, the fill shall be compacted to 90 percent of maximum density as determined by the most recent ASTM soil compaction test D1557 unless the engineer's soils report justifies a lesser degree of compaction, or unless otherwise recommended by the soils engineer.

(g) **Vegetation.** Whenever feasible, natural vegetation should be retained by becoming part of the erosion control plan during construction or part of the permanent landscaping plan if applicable. If it is necessary that vegetation be removed, trees, timber, plants, shrubbery and other woody vegetation, after being uprooted, displaced or dislodged from the ground by excavation, clearing or grubbing, shall not be stored or deposited along the banks of any stream, river or natural watercourse. After being uprooted, displaced or dislodged, such vegetation shall be disposed of by means approved in writing by the director of planning and permitting or removed from the site within a reasonable time, but not to exceed three months.

(h) **Drainage Provisions.** Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Positive drainage shall be provided to prevent the accumulation or retention of surface water in pits, gullies, holes or similar depressions. All drainage facilities shall be designed to carry surface waters to a street, storm drain inlet or natural watercourse and shall include an erosion and sedimentation control plan to prevent sediment-laden runoff from leaving the site, either during or following construction. The director of planning and permitting may require such detention or retention drainage structures and pipes to be constructed or installed, which in the director's opinion, are necessary to prevent erosion damage, prevent sediment-laden runoff from leaving the site, and to satisfactorily carry off surface waters. The flow of any existing and known natural underground drainage shall not be impeded or changed so as to cause damage to adjoining property.

(i) **Debris Prohibited.** No person shall perform any grading operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses.

(j) **Work Days.** No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the director of planning and permitting, provided such grading work is also in conformance with Hawaii Administrative Rules, Chapter 11-43, "Community Noise Control for Oahu."

(k) **Dust Control.** All work areas within and without the actual grading area shall be maintained free from dust which will cause a nuisance or hazard to others and in conformance with the air pollution control standards contained in Hawaii Administrative Rules, Chapter 11-60, "Air Pollution Control."

(l) **Water Quality Standards.** All grading operations authorized under Articles 13 through 16 of this chapter shall be performed in conformance with the applicable provisions of the water pollution control and water quality standards contained in Hawaii Administrative Rules, Chapter 11-55, "Water Pollution Control" and Chapter 11-54, "Water Quality Standards" and if applicable, the NPDES permit for the project. Any dewatering discharge into state waters will require an NPDES permit from the department of health under Chapter 11-55, "Water Pollution Control." Any dewatering discharge into the city-owned storm sewer system will require a construction dewatering permit from the director of planning and permitting and an NPDES permit for the discharge of any pollutant into state waters through the city-owned storm sewer system from the department of health, State of Hawaii.

(m) **Notification of Completion.** The permittee or the permittee's agent shall notify the director of planning and permitting or the director's representative when the grading operation is ready for final inspection. Final approval shall not be given until completion of all work including installation of all drainage structures and their protective devices, completion of all planting showing a healthy growth in conformance with the approved plans and specifications, and the required reports have been submitted.

(n) **Report After Grading.**

(1) When grading involves cuts or fills for which an engineer's soils report was required, the permittee shall submit a

final report, prepared by an engineer, upon the completion of such work. This report shall contain:

(A) A description of materials used in the fill and its moisture content at the time of compaction, the

procedure used in depositing and compacting the fill, the preparation of original ground surface before

making the fill, but not limited to benching and subsurface drainage, and a plan or tabulation showing the

general location and elevation of compaction tests made in the fill together with a tabulation of relative

compaction densities obtained at each location, the location of subdrains and other pertinent features of

the fill necessary for its stability.

(B) A certification that the work was done in conformity to this chapter, the approved plans and

specifications and the engineer's soils report.

(2) Where a slope hazard evaluation and mitigation plan was required to be submitted with a grading permit

application, the permittee shall submit a final assessment report, prepared by an engineer, upon the completion of

site work, prior to building construction. The assessment report shall contain a verification that the prevention

measures and any stabilization measures called for in the engineering slope hazard report or construction plans

were done in conformity with this chapter, and the approved plans and specifications.

(o) As-Graded Plan. Upon completion of grading areas over one acre or areas graded under subdivision rules, an as-graded plan prepared by an engineer or land surveyor shall be submitted if required by the director of planning and permitting.  
(Sec. 23-3.1, R.O. 1978 (1983 Ed.); Am. Ord 92-122, 04-27)

**Sec. 14-15.2 Special requirements.**

- (a) Any person performing or causing to be performed any excavation or fill shall, at such person's own expense, provide the necessary means to prevent the movement of earth of the adjoining properties, to protect the improvements thereon, and to maintain the existing natural grade of adjoining properties.
- (b) Any person performing or causing to be performed, any excavation or fill shall be responsible for the maintenance or restoration of street pavements, sidewalks and curbs, and improvements of public utilities which may be affected. The maintenance or restoration of street pavements, sidewalks and curbs shall be performed in accordance with the requirements of the City and County of Honolulu and the maintenance and restoration of improvements of public utilities shall be in conformity with the standards of the public utility companies affected. At cuts fronting any street, a suitable and adequate barrier shall be installed to provide protection to the public.
- (c) Any person depositing or causing to be deposited, any silt or other debris in ditches, watercourses, drainage facilities and public roadways, shall remove such silt or other debris. In case such person shall fail, neglect or refuse to comply with the provisions of this section within 48 hours after written notice, served upon such person, either by mail or by personal service, the chief engineer may proceed to remove the silt and other debris or to take any other action the chief engineer deems appropriate. The costs incurred for any action taken by the chief engineer shall be payable by such person.
- (d) At any stage of the grading, grubbing or stockpiling work, if the chief engineer finds that further work as authorized by an existing permit is likely to create soil erosion problems or to endanger any life, limb or property, the chief engineer may require safety precautions, which may include but shall not be limited to the construction of flatter exposed slopes, the construction of additional silting or sediment basins, drainage facilities or benches; the removal of rocks, boulders, debris and other dangerous objects which, if dislodged, are likely to cause injury or damage; the construction of fences or other suitable protective barriers; or may refer to the local soil and water conservation district for advice from the soil conservation service or other appropriate agencies on the planting or sodding of slopes and bare areas. All planted or sodded areas shall be maintained. An irrigation system or watering facilities may be required by the chief engineer.
- (e) At any stage of the grading, grubbing or stockpiling operations, if the chief engineer finds that further work as authorized by an existing permit is likely to create dust problems which may jeopardize health, property or the public welfare, the chief engineer may require additional dust control precautions and, if these additional precautions are not effective in controlling dust, may stop all operations. These additional dust control measures may include such items as sprinkling water, applying mulch treated with bituminous material, or applying hydro mulch.
- (f) Hillside lots shall be graded in such a manner that any parcels which may be created therefrom, including all separate building sites which may be contained within said parcels, can be satisfactorily graded and developed as individual building sites.  
(Sec. 23-3.2, R.O. 1978 (1983 Ed.))

**Article 16. Violations, Penalties and Liabilities for Grading, Grubbing and**



## **Stockpiling**

### **Sections:**

- 14-16.1 General.**
- 14-16.2 Notice of violation--Stop work.**
- 14-16.3 Criminal prosecution.**
- 14-16.4 Administrative enforcement.**
- 14-16.5 Liability.**
- 14-16.6 Rule-making powers.**
- 14-16.7 Decisions of the chief engineer.**

#### **Sec. 14-16.1 General.**

It is unlawful for any person to do any act forbidden, or to fail to perform any act required, by the provisions of Articles 13 through 16 of this chapter. Whenever a corporation violates any of the provisions of Articles 13 through 16 of this chapter, the violation shall be deemed to be also that of the individual directors, officers or agents of the corporation who in their capacity as directors, officers or agents of such corporation have authorized, ordered or done any of the acts constituting in whole or in part such violation. (Sec. 23-4.1, R.O. 1978 (1983 Ed.); Am. Ord. 90-71)

#### **Sec. 14-16.2 Notice of violation--Stop work.**

- (a) Whenever any person, firm or corporation violates any provision of Articles 13 through 16 of this chapter, the chief engineer shall serve the person, firm or corporation with a notice of violation which shall require the person, firm or corporation responsible to correct the violation.
- (b) The notice of violation shall include but not be limited to the following information:
- (1) The date of issuance of the notice;
  - (2) The name and address of the person or entity notified and the location of the violation;
  - (3) The section number of the ordinance, code or rule which has been violated;
  - (4) The nature of the violation; and
  - (5) An order to stop work if deemed necessary by the chief engineer; and
  - (6) The deadline for correction of the violation.
- (c) If the chief engineer deems it necessary for work to stop, the work shall cease upon receipt of the notice and shall not resume until corrective measures satisfactory to the chief engineer have been taken. If the notice includes a stop work order, the chief engineer shall notify and transmit a copy to the chief of police concurrently with the issuance of the notice. The chief of police shall have the power to enforce the stop work order pursuant to Section 6-1604, Revised Charter of Honolulu, 1973, as amended. (Added by Ord. 90-71; Am. Ord. 91-07)

#### **Sec. 14-16.3 Criminal prosecution.**

Any person, firm or corporation violating any of the provisions of Articles 13 through 16 of this chapter shall be deemed guilty of a misdemeanor for each and every day or portion thereof during which any violation of any provisions of this chapter is committed and, upon conviction of any such violation, such person shall be punishable by a fine of not more than \$1,000.00 or by imprisonment for not more than one year, or by both fine and imprisonment. (Added by Ord. 90-71)

#### **Sec. 14-16.4 Administrative enforcement.**

(a) In lieu of or in addition to enforcement pursuant to Section 14-16.3, if the chief engineer determines that any person, firm or corporation is not complying with a notice of violation, the chief engineer may issue an order to the person or entity responsible for the violation, pursuant to this section.

(b) Contents of Order.

(1) The order may require the party responsible for the violation to do any or all of the following:

(A) Correct the violation within the time specified in the order;

(B) Upon compliance with the provisions of HRS Chapter 91, pay a civil fine not to exceed \$1,000.00 in the manner, at the place and time specified in the order; and

(C) Upon compliance with the provisions of HRS Chapter 91, pay a civil fine not to exceed \$1,000.00 per day for each day in which the violation occurs, in the manner and at the time and place specified in the order.

(2) The order shall advise the party responsible for the violation that the order shall become final 30 calendar days after the date of its delivery.

(c) Judicial Enforcement of Order. The chief engineer may institute a civil action in any court of competent jurisdiction for the enforcement of any order issued pursuant to this section. Where the civil action has been instituted to enforce the civil fine imposed by said order, the chief engineer need only show that the notice of violation and order were served, that a civil fine was imposed, the amount of the civil fine imposed and that the fine imposed has not been paid.

(Added by Ord. 90-71)

#### **Sec. 14-16.5 Liability.**

The provisions of Articles 13 through 16 of this chapter shall not be construed to relieve or alleviate the liability of any person for damages resulting from performing, or causing to be performed, any grading, grubbing or stockpiling operation. The city, its officers and employees shall be free from any liability, cost or damage which may accrue from any grading, grubbing or stockpiling or any work connected therewith, authorized by Articles 13 through 16 of this chapter. (Sec. 23-4.2, R.O. 1978 (1983 Ed.); Am. Ord. 90-71)

#### **Sec. 14-16.6 Rule-making powers.**

The chief engineer shall be empowered to promulgate rules and regulations pursuant to HRS Chapter 91, for the implementation of the provisions of Articles 13 through 16 of this chapter. (Sec. 23-4.3, R.O. 1978 (1983 Ed.); Am. Ord. 90-71)

#### **Sec. 14-16.7 Decisions of the chief engineer.**

Decisions of the chief engineer made in accordance with the provisions of Articles 13 through 16 of this chapter, and/or decisions involving variations from the standards referred to herein shall be made a matter of record in the permit file. (Sec. 23-4.4, R.O. 1978 (1983 Ed.); Am. Ord. 90-71)

### **Article 17. Excavation and Repairs of Streets and Sidewalks**

#### **Sections:**

- 14-17.1 Permit required--Application--Insurance--Bond--Permit fee.**
- 14-17.2 Notice of commencement, prosecution of work and inspection.**
- 14-17.3 Trench excavation, backfill and pavement restoration.**
- 14-17.4 Repairs by city.**