

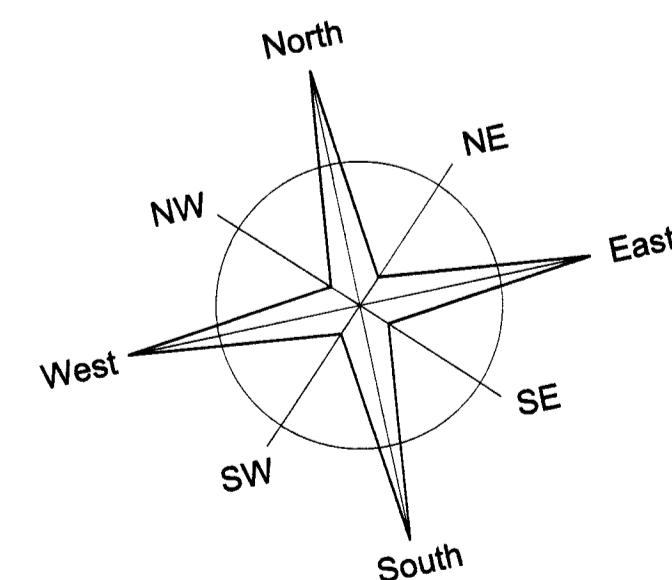
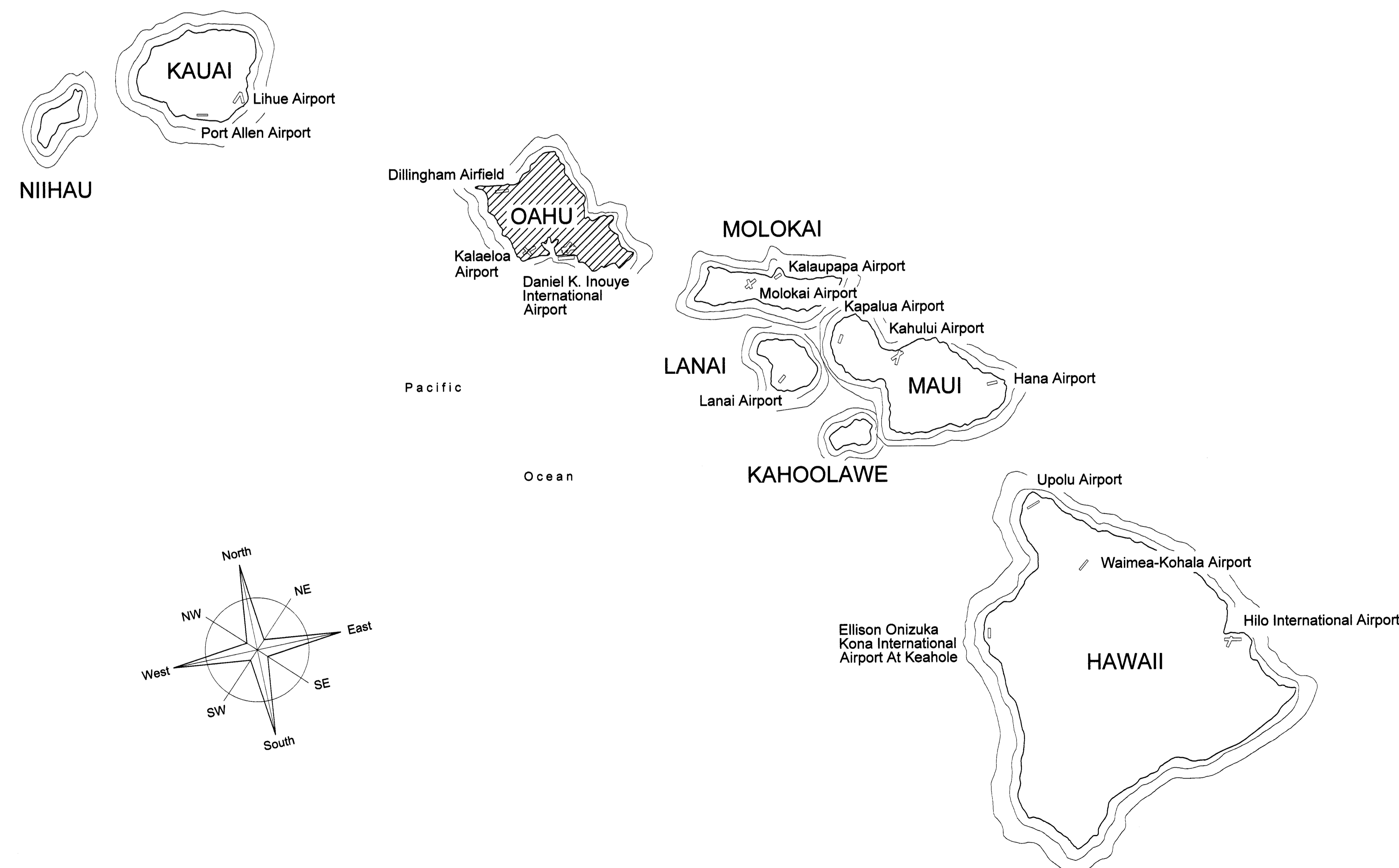
Airports Division

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

PLANS FOR
**LIGHTNING WARNING
SYSTEM**

AT

**DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII
PROJECT NO. CO1335-53**



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

RONALD N. S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

PROJECT TEAM

PRIME / ELECTRICAL:
RONALD N. S. HO & ASSOCIATES, INC.
2153 N. KING STREET, SUITE 201
HONOLULU, HAWAII 96819
(808) 941-0577

ENGINEERING SUPPORT
RHA ENERGY PARTNERS
2153 N KING STREET, SUITE 303
HONOLULU, HAWAII 96819

STRUCTURAL ENGINEERING
KAI HAWAII, INC.
50 S. BERETANIA STREET, #C-199L
HONOLULU, HAWAII 96813

ENVIRONMENTAL CONSULTANTS
ENVIRONMENTAL RISK ANALYSIS, LLC
905A MAKAHIKI WAY
HONOLULU, HAWAII 96826

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII
APPROVED:
Ronald N. S. Ho
DIRECTOR OF TRANSPORTATION
DATE: 5/15/2023

| NO. | DATE | REVISIONS |
|------------|------|----------------|
| △ 05/17/23 | | ADDENDUM NO. 1 |

PROJECT TITLE :
**LIGHTNING DETECTION
AND WARNING SYSTEM**

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII
PROJECT NO.:
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:
TITLE SHEET

DATE:
MAY 2023
DWG NO.:
1 OF 47
SHEET NO.:
T-1

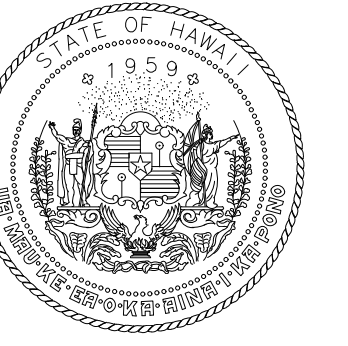
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GENERAL NOTES

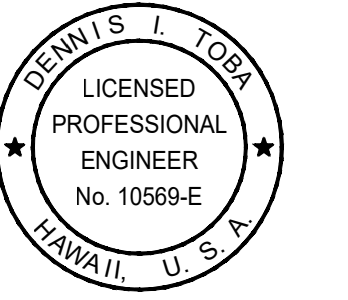
- CONTRACTOR SHALL FURNISH AND INSTALL A FULLY FUNCTIONAL, OPERATIONAL, AND COMMISSIONED LIGHTNING DETECTION OR PREDICTION AND WARNING SYSTEM.
- ALL SYSTEM AND SUBSYSTEM COMPONENTS SHALL BE INSTALLED PER MANUFACTURES INSTRUCTIONS, INCLUDING SYSTEM START-UP, TESTING AND COMMISSIONING TO BE CONDUCTED BY QUALIFIED MANUFACTURE-APPROVED PERSONNEL.
- RESOLVE ALL DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK.
- SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE RECORD DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, SUBMIT DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE CONTRACTING OFFICER. DO NOT PROCEED UNTIL APPROVAL IS OBTAINED FROM THE CONTRACTING OFFICER.
- THE SYSTEM, AT A MINIMUM, SHALL CONSIST OF A LIGHTING DETECTION AND/OR PREDICTION SYSTEM (LDS) AND SUFFICIENT QUANTITY OF LIGHTING WARNING SYSTEMS (LWS) AS TO PROVIDE ADEQUATE AUDIBILITY AND VISIBILITY OF LWS ALERTS BY GROUND CREW PERSONNEL WORKING WITHIN THE AIRPORT APRON AREAS DESIGNATED IN THE DESIGN AND SPECIFICATIONS.
- THE SYSTEM SHALL INCLUDE DATA MANAGEMENT AND GRAPHICAL USER INTERFACES TO CONFIGURE, MANAGE, AND CONTROL THE SYSTEM AND MONITOR SYSTEM DATA, INCLUDING BUT NOT LIMITED TO, APPROACHING WEATHER AND APPROACHING LIGHTNING STORMS, LIGHTING STRIKES (CLOUD-TO-CLOUD OR CLOUD-TO-GROUND) OR PREDICTED LIGHTING STRIKES.
- THE SYSTEM SHALL INCLUDE A DEDICATED TERMINAL OR HUMAN MACHINE INTERFACE (HMI) TO BE LOCATED AT THE DKIIA RAMP CONTROL OFFICE, LOCATED ON THE 10TH FLOOR OF THE ADMIN TOWER BUILDING. PROVIDE CONNECTIONS TO THE DKIIA'S EXISTING LAN SYSTEM AND UP TO TWO COMPUTERS, IDENTIFIED BY THE STATE, AS REQUIRED. CONTRACTOR TO COORDINATE NETWORK ACCESS AND CONNECTIVITY WITH DKIIA'S I.T. DEPARTMENT REQUIREMENTS AND PERSONNEL.
- THE LDS TO PROVIDE TWO MODES OF ACTIVATING OR DE-ACTIVATING ALL LWS SIMULTANEOUSLY:
 - MODE 1: MANUAL OPERATION – PROVIDE THE MEANS TO ALLOW RAMP CONTROL TO MANUALLY ACTIVE OR DE-ACTIVATE THE LWS.
 - MODE 2: AUTOMATED OPERATION – PROVIDE THE MEANS TO ALLOW THE LWS' TO BE AUTOMATICALLY ACTIVATED OR DE-ACTIVATED BASED ON ALERTS FROM THE LDS.
 - ENABLE EITHER OF THE ABOVE MENTIONED MODES AT THE DIRECTION OF THE STATE.
- THE LDS SHALL PROVIDE, AT A MINIMUM, REAL-TIME WEB-BASED COLOR WEATHER MAP THAT INDICATES APPROACHING STORMS' SIZE, DIRECTION, AND SPEED.
- ALL COMMUNICATION BETWEEN THE LDS AND VARIOUS LWS SHALL BE WIRELESS THROUGH EITHER DEDICATED CELLULAR OR RADIO COMMUNICATION BETWEEN THE MAIN LDS AND LWS' INSTALLED. CONTRACTOR SHALL CONDUCT RF TESTING OR OTHER APPROPRIATE COMMUNICATION FIELD TESTS PRIOR TO INSTALLATION TO DEMONSTRATE AND CONFIRM APPROPRIATE SIGNAL STRENGTH BETWEEN THE LDS AND LWS AND WITH NON-INTERFERENCE WITH OTHER DKIIA COMMUNICATION SIGNALS. TEST RESULTS SHALL BE SUBMITTED TO THE STATE.
- CONTRACTOR TO INSTALL MULTIPLE LWS' AS NECESSARY TO PROVIDE SUFFICIENT AUDIBLE AND VISUAL COVERAGE OF ALL GROUND APRON, MAINTENANCE, AND SERVICE AREAS DESIGNATED IN THE DESIGN PLANS AND SPECIFICATIONS.
- THE LWS' SHALL CONSIST, AT A MINIMUM, THE FOLLOWING:
 - CONTROL UNIT.
 - HIGH OUTPUT HORN.
 - HIGH INTENSITY BLUE STROBE LIGHT.
 - RADIO OR CELLULAR COMMUNICATION SYSTEM.
 - PHOTOVOLTAIC SYSTEM WITH BATTERY STORAGE.
 - FRAMING/SUPPORTS AS NECESSARY.
 - MOUNTING HARDWARE.
 - SIGNAGE.
- ALL LWS COMPONENTS SHALL BE RATED FOR EXTERIOR USE AND HIGHLY CORROSION RESISTANT (316 STAINLESS STEEL OR AIRCRAFT ALUMINUM WHENEVER POSSIBLE), UV STABILIZED, AND WEATHERPROOF.
- ALL LWS' SHALL BE STAND-ALONE SELF-POWERED UNIT INCLUDING SOLAR PV PANEL AND BATTERY STORAGE SYSTEM CAPABLE OF POWERING THE LWS FOR UP TO 24-HOURS ON BATTERY POWER ONLY (ASSUMING BATTERY AT 80% STATE OF CHARGE WITH NO ADDITIONAL SOLAR PV CHARGING AVAILABLE).
- THE LWS HORN'S DECIBEL LEVEL SHALL PROVIDE A MINIMUM OF +3 DECIBELS ABOVE THE AIROPORT APRON AMBIENT SOUND LEVEL OF 72 DB FOR THE APRON AREAS DESIGNATED IN THE DRAWINGS AND SPECIFICATIONS.
- THE LWS STROBE LIGHT(S) SHALL BE VISIBLE FROM SURROUNDING AND ADJACENT GROUND CREWS AND PERSONNEL WITH CLEAR LINES OF SIGHT TO THE STROBE LIGHT(S).
- NO GROUND PENETRATIONS SHALL BE ALLOWED AT ANY LWS INSTALLATION LOCATION.
- FOR ANY LWS GROUND BALLASTED AND NON-PENETRATING INSTALLATION, PORTABLE WATER FILLED BARRIERS (WFB) SHALL BE INSTALLED ON ALL SIDES OF LWS THAT MAY BE EXPOSED TO VEHICULAR TRAFFIC OR AS MAY BE NECESSARY TO SAFELY PROTECT PERSONNEL AND THE LWS FROM ACCIDENTS, COLLISION OR DAMAGE.
- CONTRACTOR SHALL PROVIDE UP TO 2-DAYS OF IN-PERSON TRAINING TO DESIGNATED DKIIA PERSONNEL BY MANUFACTURE-APPROVED AND QUALIFIED PERSONNEL ON LDS AND LWS USE, CONFIGURATION, OPERATIONS, AND MAINTENANCE. TRAINING SHALL INCLUDE TRAINING MANUALS FOR END-USE OPERATOR ON BASIC SYSTEM CONFIGURATION, SET-UP, AND OPERATOR USE OF THE VARIOUS SYSTEM FUNCTIONALITIES.
- 5 YEAR WARRANTY AND OPERATIONS AND MAINTENANCE SERVICE TO BE PROVIDED TO INCLUDE, AT A MINIMUM, SYSTEM SOFTWARE SUPPORT AND UPGRADES AS MAY BE REQUIRED TO MAINTAIN SYSTEM, CUSTOMER SERVICE SUPPORT, 24-HR EMERGENCY CONTACT NUMBER, MATERIALS AND WORKMANSHIP DEVELOPING DEFECTS AND MALFUNCTIONS SHALL BE REPAIRED AND/OR REPLACED, TO CONFORM WITH INTENT OF THE SPECIFICATION AND DRAWINGS, AT NO ADDITIONAL COST TO THE STATE.
- ALL LDS OR LWS MOUNTED SYSTEMS SHALL SUBMIT STAMPED SHOP DRAWING SUBMITTALS FOR STATE REVIEW/APPROVAL DETAILING STRUCTURAL MOUNTING DETAILS AND STAMPED BY A LICENSED STRUCTURAL ENGINEER QUALIFIED IN THE STATE OF HAWAII PRIOR TO INSTALLATION.
- CONTRACTOR TO PROVIDE HAZARDOUS MATERIALS ABATEMENT AS DETAILED IN THE DRAWINGS OR SPECIFICATIONS FOR ALL AREAS THE LDS OR LWS MAY BE INSTALLED. CONTRACTOR RESPONSIBLE FOR MEANS AND METHODS TO SAFELY AND PROPERLY CONDUCT ANY HAZARDOUS REMEDIATION WORK INVOLVED.

| AIRFIELD LIGHTNING DETECTION AND WARNING SYSTEM | |
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| T-2 | GENERAL NOTES & DRAWING SHEET INDEX |
| E-1 | ELECTRICAL NOTES, LEGENDS & SYMBOLS |
| E-2 | OVERALL SITE PLAN |
| E-3 | MAIN TERMINAL SITE PLAN |
| E-4 | SOUTH RAMP SITE PLAN |
| E-5 | MAUKA EXPANSION TERMINAL ISOMETRIC VIEW - 1 |
| E-6 | INTER ISLAND TERMINAL ISOMETRIC VIEW - 1 |
| E-7 | INTER ISLAND TERMINAL ISOMETRIC VIEW - 2 |
| E-8 | INTER ISLAND TERMINAL ISOMETRIC VIEW - 3 |
| E-9 | EWA CONCOURSE ISOMETRIC VIEW - 1 |
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| E-23 | DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 1 |
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| E-32 | HAWAIIAN AIRLINES CARGO ISOMETRIC VIEW - 1 |
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| E-43 | SOUTH RAMP ISOMETRIC VIEW - 9 |
| E-44 | SOUTH RAMP ISOMETRIC VIEW - 10 |
| E-45 | MAIN LIGHTNING SYSTEM INTERFACE & RAMP CONTROL OFFICE DETAILS |

LIGHTNING DETECTION AND WARNING SYSTEM GENERAL NOTES AND DRAWING SHEET INDEX



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
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KEY PLAN:

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| | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:







LIGHTNING DETECTION AND WARNING SYSTEM GENERAL NOTES AND DRAWING SHEET INDEX

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| DATE : | MAY 2023 | SHEET NO. : | T-2 |
| DWG NO. : | 2 OF 47 | | |






GENERAL ELECTRICAL NOTES

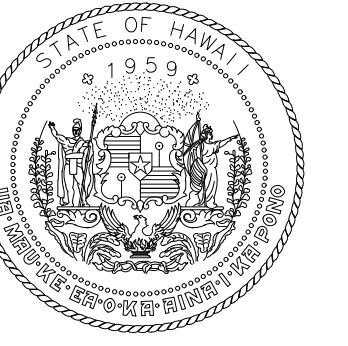
- PLANS DO NOT INDICATE COMPLETE EXISTING ELECTRICAL CONDITIONS. CONTRACTOR(S) SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND EXTENT OF DEMOLITION WORK AND NEW WORK PRIOR TO THE START OF WORK. REPORT ANY DISCREPANCIES AND/OR DIFFERENCES IN DRAWINGS WITH RESPECT TO EXISTING CONDITIONS TO THE CONTRACTING OFFICER.
- RESOLVE ALL DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK.
- SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE RECORD DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE SPECIFIED IN THE CONTRACT DOCUMENTS, SUBMIT DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE CONTRACTING OFFICER. DO NOT PROCEED UNTIL APPROVAL IS OBTAINED FROM THE CONTRACTING OFFICER.
- ALL EXTERIOR MOUNTED JUNCTION BOXES SHALL BE NEMA 4X, STAINLESS STEEL (316).
- PROVIDE EXPANSION/DEFLECTION CONDUIT FITTINGS, OR FLEXIBLE CONDUIT SEGMENTS, AT ALL EXPANSION JOINTS.
- PROVIDE REMOVABLE DUCT SEAL ON ALL CONDUITS ENTERING BUILDINGS. INSTALL DUCT SEAL WITH MIN. 1" OVERLAP AROUND CONDUIT ENDS AND MIN. 2" DEEP INSIDE OF CONDUITS.
- UNLESS OTHERWISE SPECIFICALLY INDICATED, CONDUITS SHALL NOT BE ROUTED ACROSS DOORS, WINDOW OPENINGS, OR INTERFERE WITH THEIR OPERATION. CONDUITS SHALL NOT BE ROUTED UNDER LIGHT FIXTURES AND SHALL NOT RESTRICT ACCESS TO EXISTING JUNCTION BOXES, DEVICES, LIGHT FIXTURES, ETC. ROUTE EXPOSED CONDUITS AS HIGH AS PRACTICABLE.
- NOT ALL PENETRATIONS ARE INDICATED. PENETRATE WALLS, SLABS, BEAMS, AND CEILINGS AS NECESSARY TO COMPLETE CONDUIT INSTALLATIONS. FIRE STOP, PATCH AND PAINT PENETRATIONS TO MATCH EXISTING FIRE RATINGS AND ADJACENT FINISHES. FOR PENETRATIONS THROUGH EXTERIOR WALLS, PROVIDE CONDUITS, CONDUIT BODIES, JUNCTION BOXES, AND FIRE STOPPING IMMEDIATELY AFTER PENETRATIONS ARE MADE SO AS TO MAKE PENETRATIONS WEATHERPROOF AND FIRE STOPPED BY THE END OF THE WORK DAY.
- NOT ALL JUNCTION BOXES ARE SHOWN. PROVIDE JUNCTION BOXES AS NECESSARY TO LIMIT TO A MAXIMUM OF FOUR 90° CONDUIT BENDS IN EACH CONDUIT RUN.
- FOR WORK WITHIN EXISTING BUILDINGS, CHALK MARK ALL PROPOSED EXPOSED CONDUIT ROUTES, JUNCTION BOX LOCATIONS, AND OUTLET LOCATIONS. ATTAIN APPROVAL FROM THE CONTRACTING OFFICER PRIOR TO ROUGH-IN. REROUTE CONDUITS AND RELOCATE JUNCTION BOXES AND OUTLETS AS DIRECTED BY THE CONTRACTING OFFICER. REMOVE ALL VISIBLE CHALK MARKS UPON INSTALLATION OF CONDUITS, JUNCTION BOXES, AND OUTLETS.
- PRIME AND PAINT ALL NEW JUNCTION BOXES, CONDUITS, OUTLETS, DEVICE COVERS, HANGERS, C-CHANNELS, AND SUPPORTS TO MATCH THE SURROUNDING SURFACES OR PER DKIIA STANDARDS.
- PROVIDE DEDICATED NEUTRALS FOR ALL NEW BRANCH CIRCUITS. SIZE NEUTRALS TO MATCH CURRENT CARRYING CONDUCTORS.
- THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF ADA STANDARDS.
- ALL JUNCTION BOXES SHALL BE SIZED IN ACCORDANCE TO NEC SECTION 314.28.
- PROVIDE SEISMIC PROTECTION MEASURES FOR ALL ELECTRICAL INSTALLATIONS IN ACCORDANCE WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC). SEISMIC PROTECTION MEASURES SHALL BE PROVIDED IN ADDITION TO ANY OTHER REQUIREMENTS CALLED FOR IN OTHER SECTIONS OF THE SEISMIC DESIGN CATEGORY OF THE PROJECT SITE. RESISTANCE TO LATERAL FORCES INDUCED BY EARTHQUAKES SHALL BE ACCOMPLISHED WITHOUT CONSIDERATION OF FRICTION BY RESULTING FROM GRAVITY LOADS.
- PROVIDE WARNING SIGNS ON NEW ELECTRICAL EQUIPMENT SUCH AS SWITCHBOARDS, PANELBOARDS, CONTROL PANELS, AND ENCLOSURES TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS AS REQUIRED PER NEC 110.16.
- COORDINATE ALL WORK WITH UTILITY COMPANIES. SUBMIT SHOP DRAWINGS FOR RESPECTIVE WORK AND ATTAIN APPROVALS FROM UTILITY COMPANIES PRIOR TO ORDERING MATERIALS.

SYMBOL NOTES:

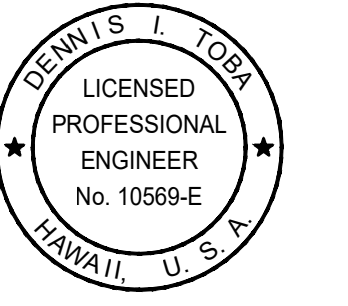
| SYMBOL | DESCRIPTION |
|---|---|
| LDS | LIGHTNING DETECTION OR PREDICTION SYSTEM |
| LWS | LIGHTNING WARNING SYSTEM |
|  | YELLOW HIGHLIGHTED AREAS WITH BLACK BORDER INDICATE LIGHTNING WARNING SYSTEM (LWS) ALLOWABLE MOUNTING LOCATIONS. |
|  | NOTE INDICATOR, "SEE NOTE NO. 1" INDICATED, ALL OTHERS SIMILAR |
|  | ADDENDUM NOTE INDICATOR "ADDENDUM NO. 1" INDICATED, ALL OTHERS SIMILAR. |
|  | MOUNTING NOTE, "SEE MOUNTING LEGEND NOTE NO. 1" INDICATED, ALL OTHERS SIMILAR. |
|  | AREAS WITHIN DIAGONAL HATCHED AREAS INDICATE DESIGNATED AREAS WHERE LIGHTNING WARNING SYSTEM HORN SHALL BE AUDIBLE AS SPECIFIED IN DRAWINGS AND SPECIFICATIONS. |
|  | EXISTING LIGHT POLE (TYPICAL). |

MOUNTING LEGEND NOTES:

-  NON-PENETRATING BALLASTED ROOF MOUNT
-  NON-PENETRATING BALLASTED GROUND MOUNT
-  ANCHORED WALL MOUNT
-  FASTENED STEEL LIGHT POLE MOUNT
-  FASTENED APRON LIGHT CONCRETE POLE MOUNT




Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
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KEY PLAN:

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PROJECT TITLE :


LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

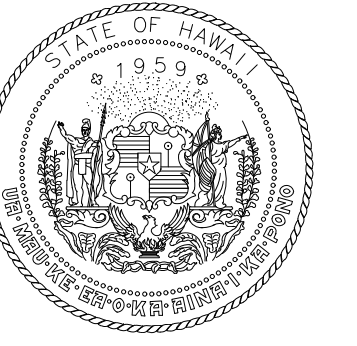
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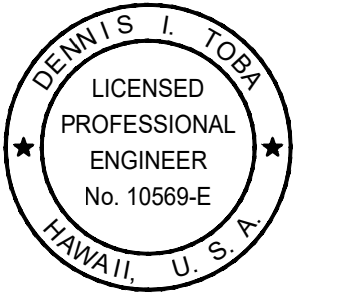
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GENERAL NOTES

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| DATE : | MAY 2023 | SHEET NO. :  |
| DWG NO. : | 3 OF 47 | |



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
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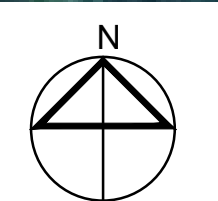
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OVERALL SITE PLAN

DATE :
MAY 2023
DWG NO. :
4 OF 47

SHEET NO. :

△ E-2

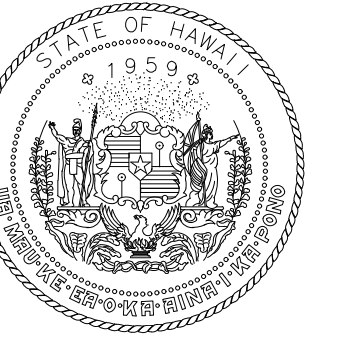


OVERALL SITE PLAN
NOT TO SCALE

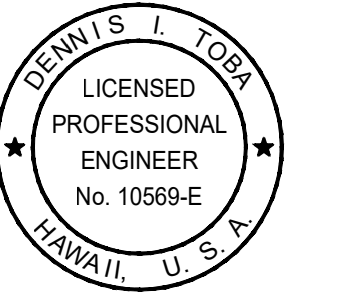


Google Earth
 Image © 2023 Airbus

MAIN TERMINAL SITE PLAN
 NOT TO SCALE



Airports Division
 DEPARTMENT OF TRANSPORTATION
 STATE OF HAWAII



Daniel K. Inouye 2023.05.17
 RONALD N.S. HO & ASSOCIATES, INC.
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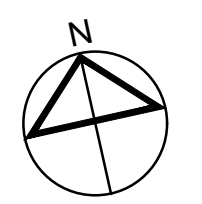
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LIGHTNING WARNING SYSTEM
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 DANIEL K. INOUE INTERNATIONAL AIRPORT
 HONOLULU, OAHU, HAWAII

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SHEET TITLE:
 MAIN TERMINAL SITE PLAN

DATE :
 MAY 2023
 DWG NO. :
 5 OF 47

SHEET NO. :
 △ **E-3**



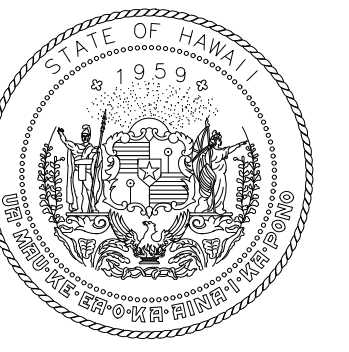
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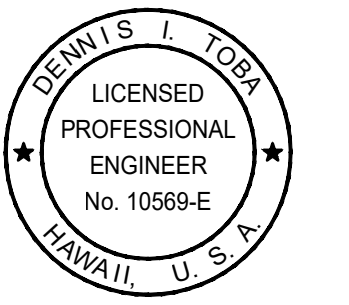
Google Earth
Image © 2023 Airbus

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SOUTH RAMP SITE PLAN
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| △ | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

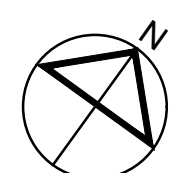
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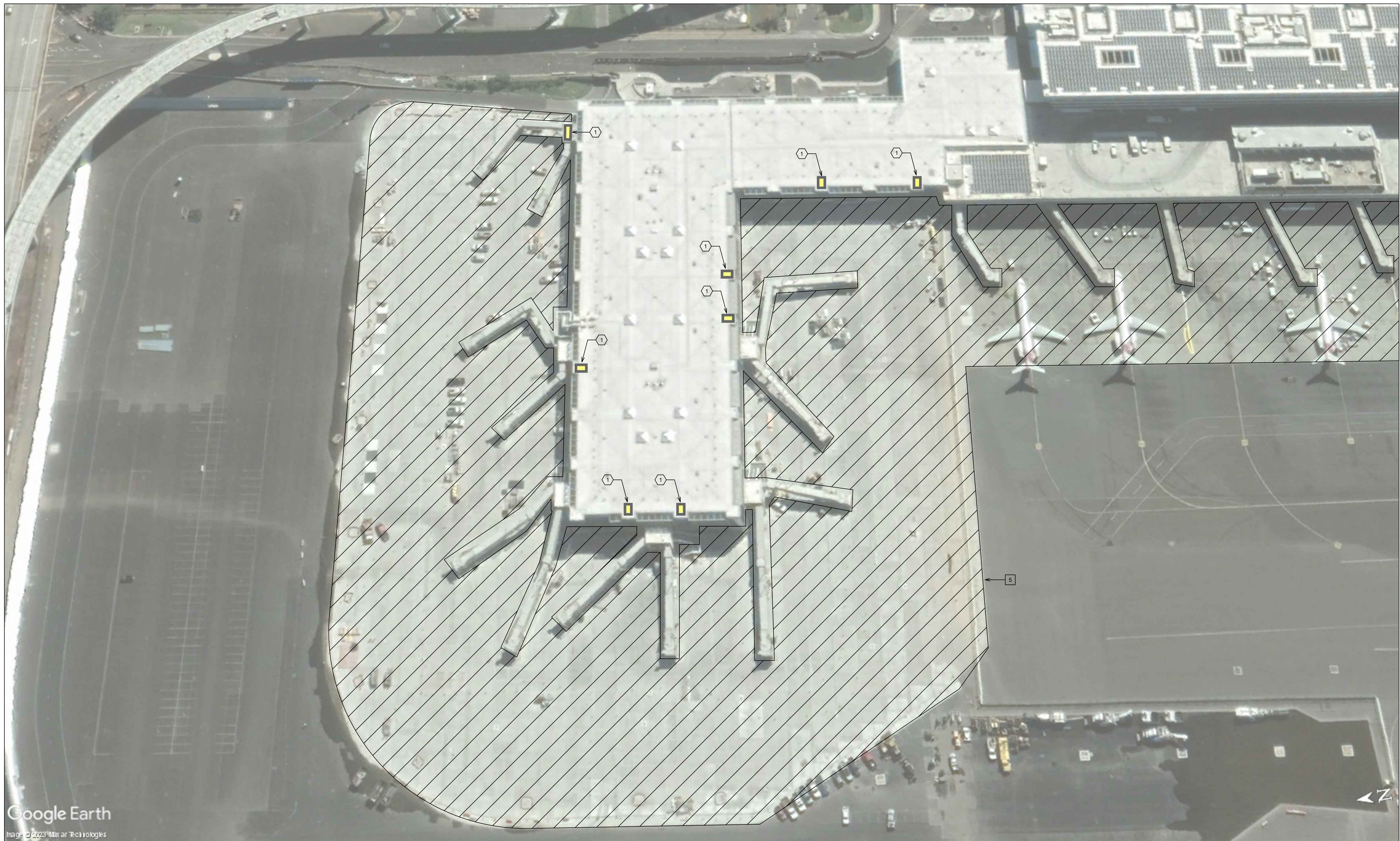
SOUTH RAMP SITE PLAN

DATE :
MAY 2023
DWG NO. :
6 OF 47

SHEET NO. :

△ **E-4**





Google Earth
Image © 2023 Maxar Technologies

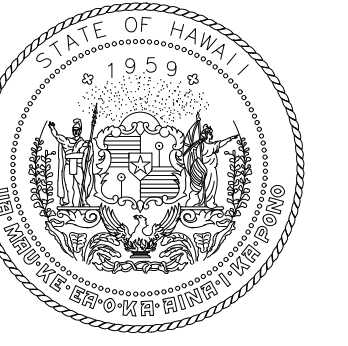
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

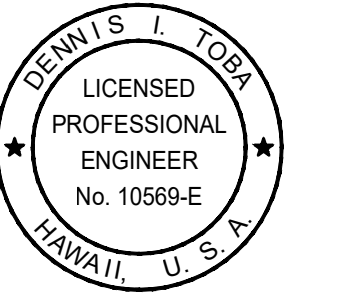
SHEET NOTES:

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- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

MAUKA EXPANSION ISOMETRIC VIEW
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

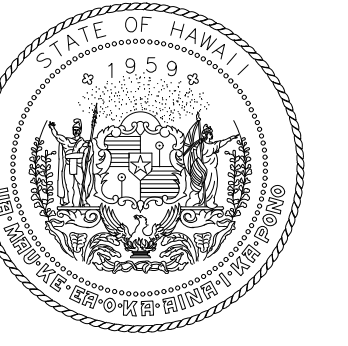
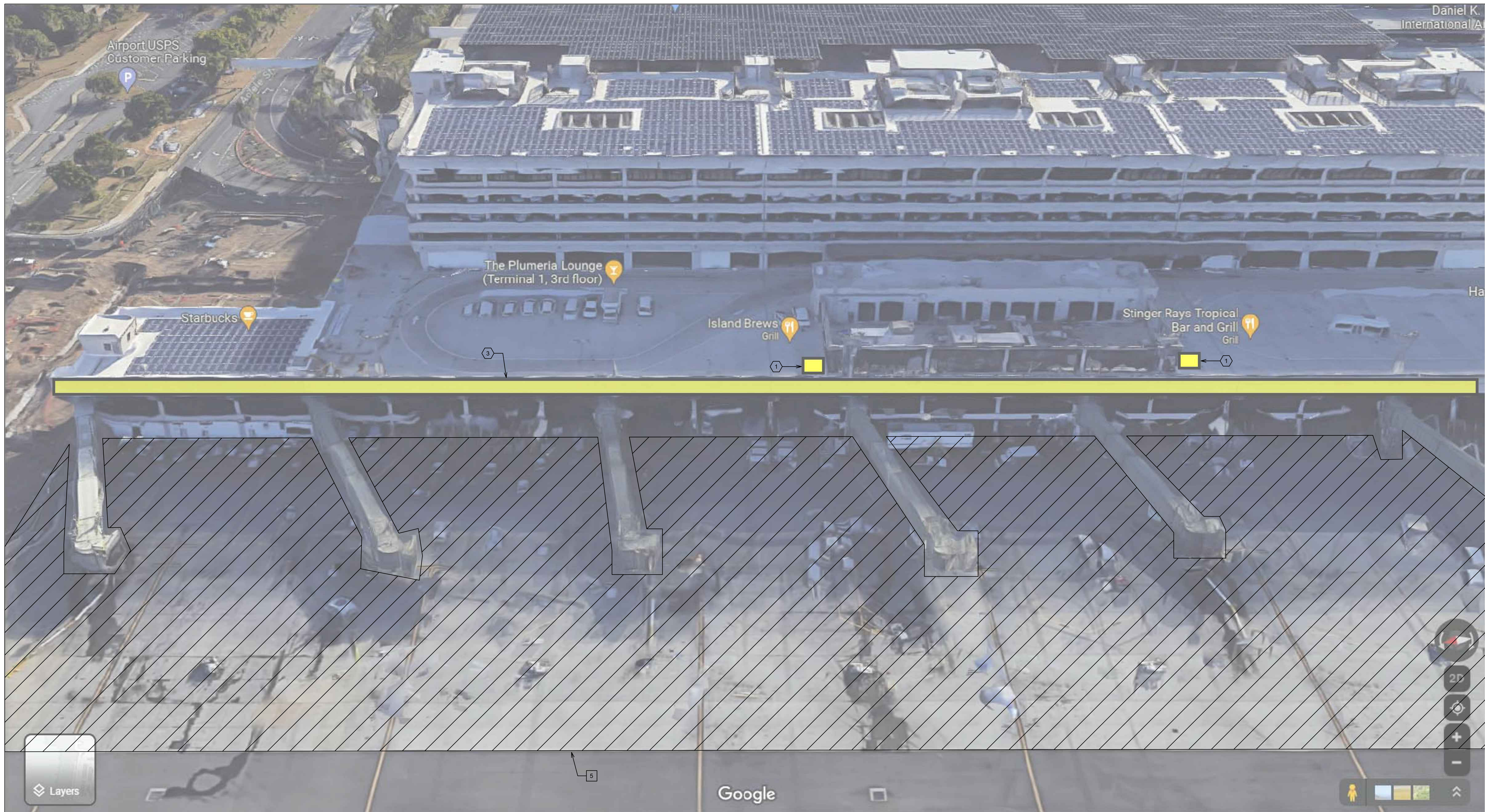
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AIP PROJECT NO:

SHEET TITLE:

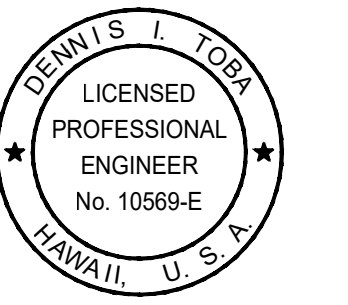
MAUKA EXPANSION
ISOMETRIC VIEW

DATE :
MAY 2023
DWG NO. :
7 OF 47

SHEET NO. :
E-5



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

INTER ISLAND TERMINAL
ISOMETRIC VIEW - 1

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-6 |
| DWG NO. : | |
| 8 OF 47 | |

MOUNTING LEGEND NOTES:

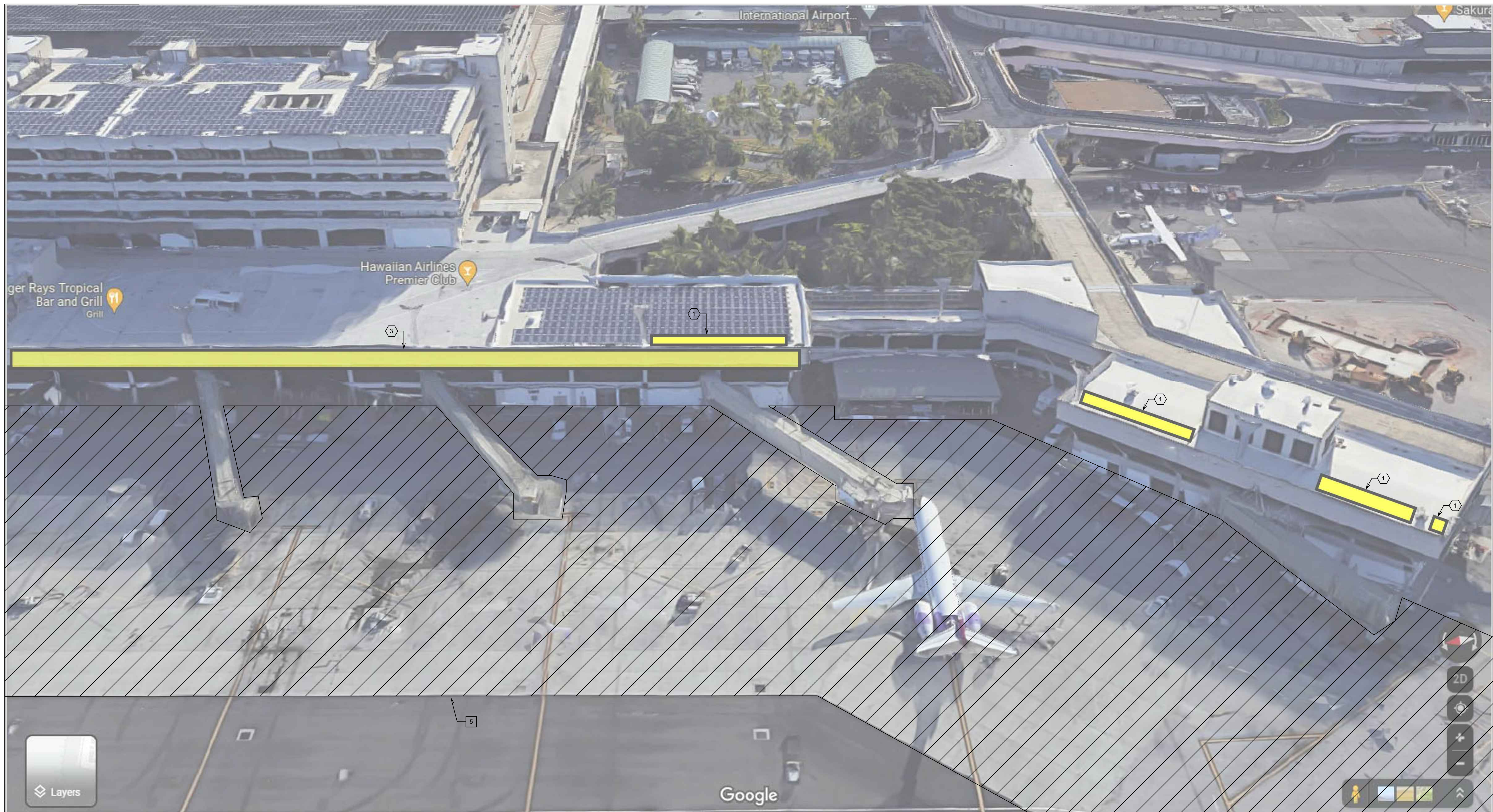
- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

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- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

INTER ISLAND TERMINAL ISOMETRIC VIEW - 1
NOT TO SCALE

Z:\VACAD\PROJECTS\219051\1\006\INTER ISLAND TERMINAL ISOMETRIC VIEW - 1 5/17/2023 4:22PM.Txd



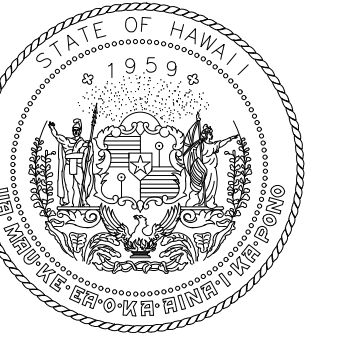
MOUNTING LEGEND NOTES:

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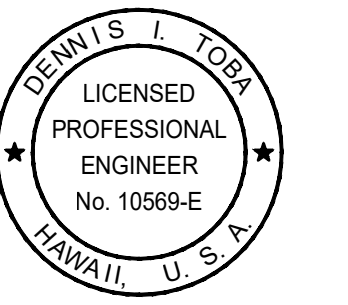
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INTER ISLAND TERMINAL ISOMETRIC VIEW - 2
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

INTER ISLAND TERMINAL
ISOMETRIC VIEW - 2

DATE :
MAY 2023
DWG NO. :
9 OF 47

SHEET NO. :
E-7



Stinger Rays Tropical Bar and Grill

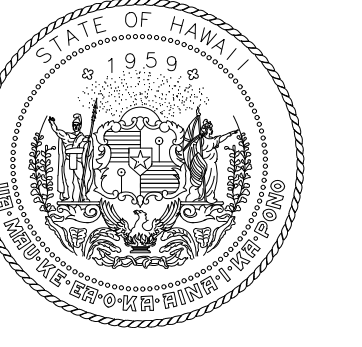
MOUNTING LEGEND NOTES:

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- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

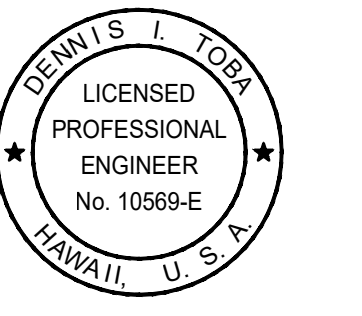
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INTER ISLAND TERMINAL ISOMETRIC VIEW - 3
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

INTER ISLAND TERMINAL
ISOMETRIC VIEW - 3

DATE :
MAY 2023
DWG NO. :
10 OF 47

SHEET NO. :
E-8

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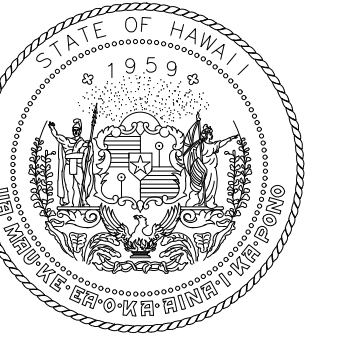
MOUNTING LEGEND NOTES:

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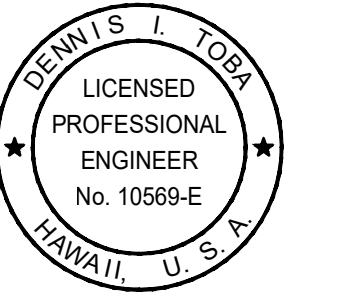
SHEET NOTES:

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EWA CONCOURSE ISOMETRIC VIEW - 1
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

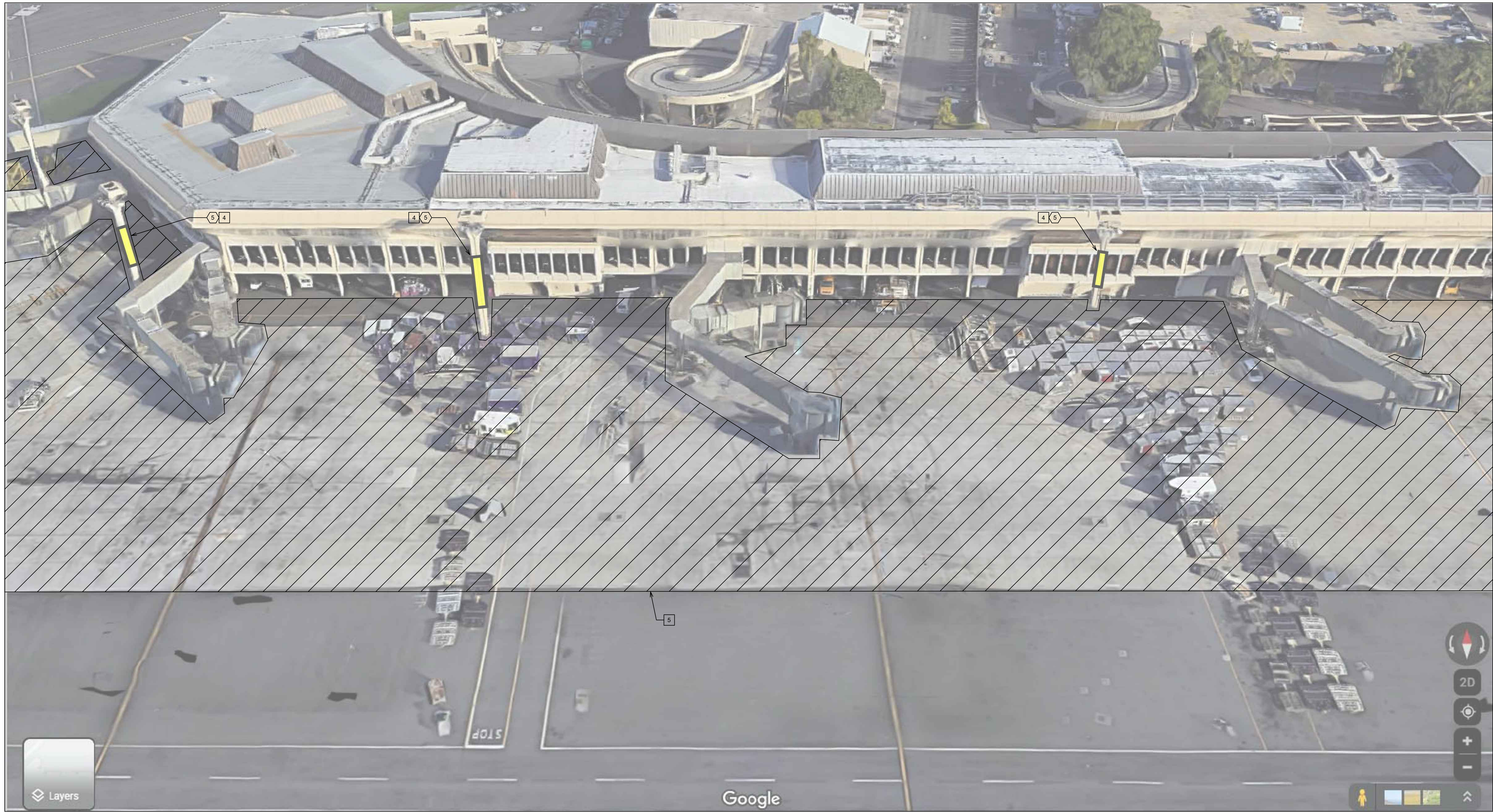
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

EWA CONCOURSE
ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
11 OF 47

SHEET NO. :
E-9



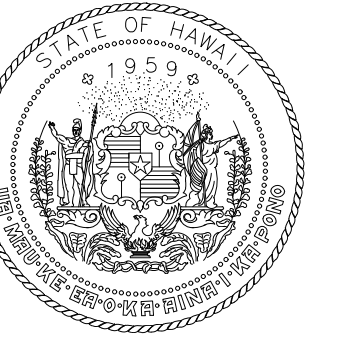
MOUNTING LEGEND NOTES:

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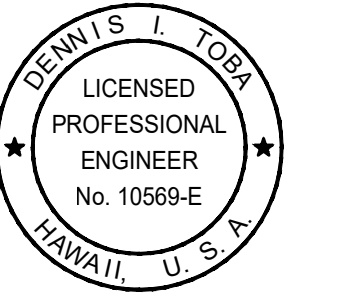
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EWA CONCOURSE ISOMETRIC VIEW - 2
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| △ | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

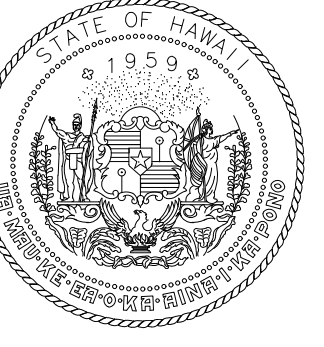
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AIP PROJECT NO:

SHEET TITLE:

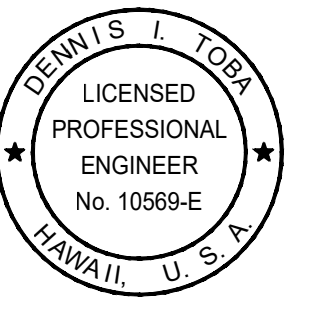
EWA CONCOURSE
ISOMETRIC VIEW - 2

DATE :
MAY 2023
DWG NO. :
12 OF 47

SHEET NO. :
△ E-10



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :
LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO. :
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:
EWA CONCOURSE
ISOMETRIC VIEW - 4

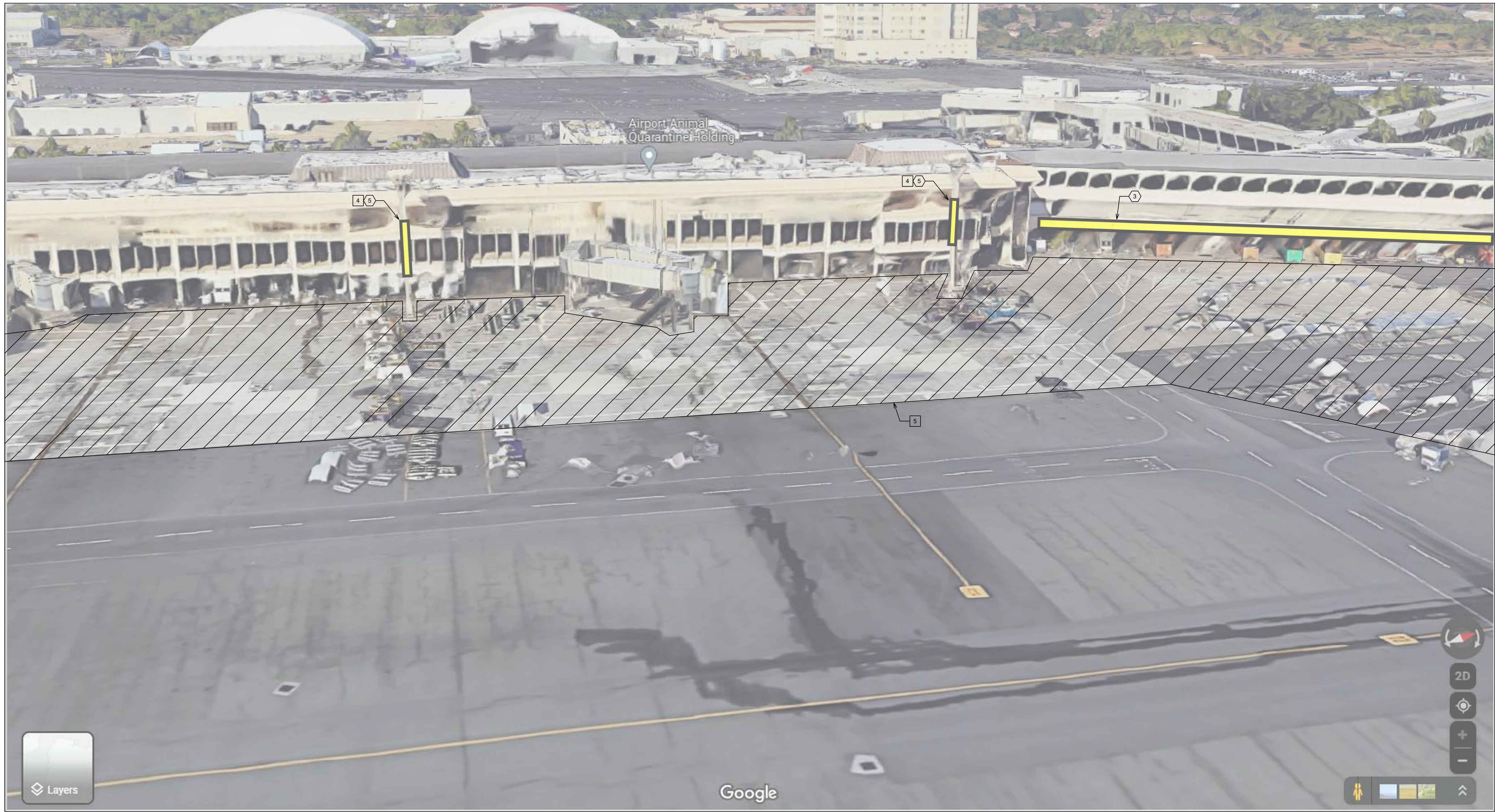
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|-----------------------|----------------------------|
| DATE : MAY 2023 | SHEET NO. : E-12 |
| DWG NO. : 14 OF 47 | |

- MOUNTING LEGEND NOTES:**
- ① NON-PENETRATING BALLASTED ROOF MOUNT
 - ② NON-PENETRATING BALLASTED GROUND MOUNT
 - ③ ANCHORED WALL MOUNT
 - ④ FASTENED STEEL LIGHT POLE MOUNT
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 - ⑥ DO NOT USE THIS APRON LIGHT CONCRETE POLE FOR MOUNTING.

EWA CONCOURSE ISOMETRIC VIEW - 4
NOT TO SCALE

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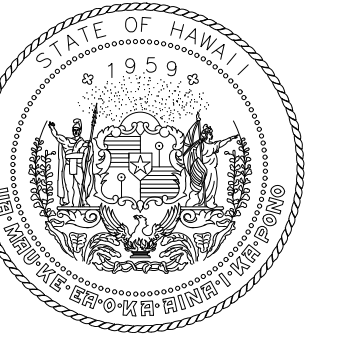
EWA CONCOURSE ISOMETRIC VIEW - 5
NOT TO SCALE

MOUNTING LEGEND NOTES:

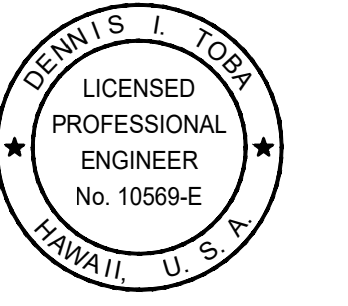
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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| △ | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :
LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:
EWA CONCOURSE
ISOMETRIC VIEW - 5

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | △ E-13 |
| DWG NO. : | |
| 15 OF 47 | |

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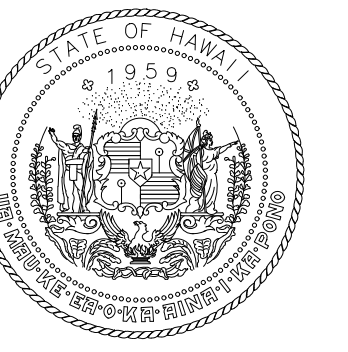
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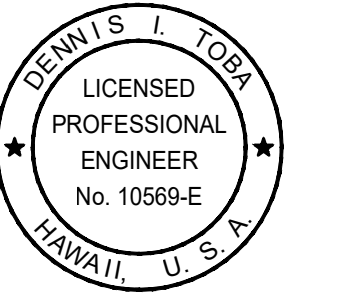
SHEET NOTES:

- 1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
- 3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
- ④ LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.
- ⑥ DO NOT MOUNT ON TOP OF THE SKYLIGHT.

Y CONCOURSE ISOMETRIC VIEW - 1
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
16 OF 47

SHEET NO. :
E-14



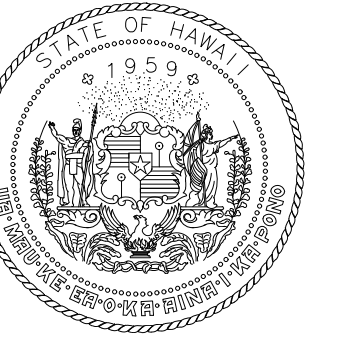
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

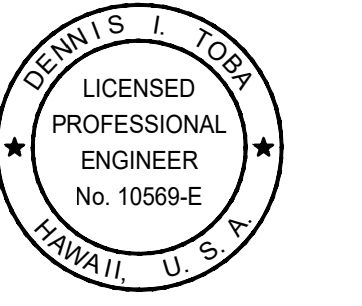
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Y CONCOURSE ISOMETRIC VIEW - 2
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
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PROJECT TITLE :

LIGHTNING WARNING SYSTEM

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DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

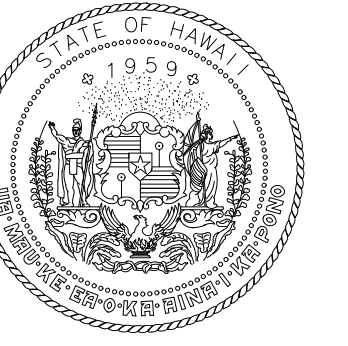
SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 2

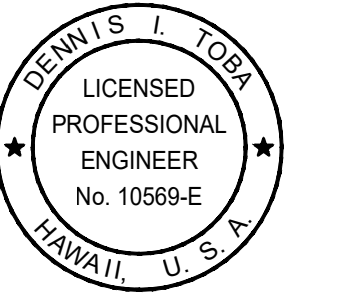
DATE :
MAY 2023
DWG NO. :
17 OF 47

SHEET NO. :

E-15



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| | | | |
|-------|-------|-------|-------|
| DSGN. | DRWN. | CHKD. | APPD. |
| MC | CAD | KC | DT |

KEY PLAN:



MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

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Y CONCOURSE ISOMETRIC VIEW - 3
NOT TO SCALE

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| NO. | DATE | ADDENDUM NO. | REVISIONS |
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

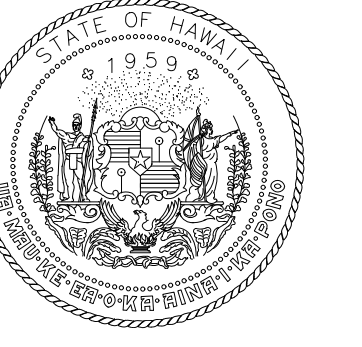
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

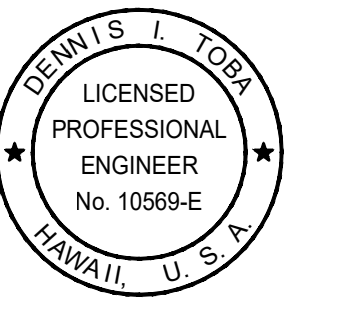
Y CONCOURSE
ISOMETRIC VIEW - 3

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| DATE : | SHEET NO. : |
| MAY 2023 | E-16 |
| DWG NO. : | |
| 18 OF 47 | |

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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| MC | CAD | KC | DT |

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| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| 1 | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 4

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-17 |
| DWG NO. : | |
| 19 OF 47 | |

MOUNTING LEGEND NOTES:

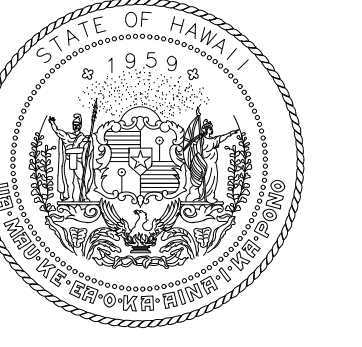
- ① NON-PENETRATING BALLASTED ROOF MOUNT
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- ③ ANCHORED WALL MOUNT
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SHEET NOTES:

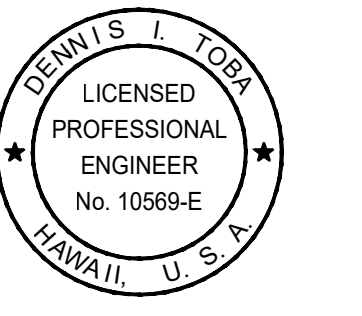
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Y CONCOURSE ISOMETRIC VIEW - 4
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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KEY PLAN:

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PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 5

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| DATE : | SHEET NO. : |
| MAY 2023 | E-18 |
| DWG NO. : | |
| 20 OF 47 | |

MOUNTING LEGEND NOTES:

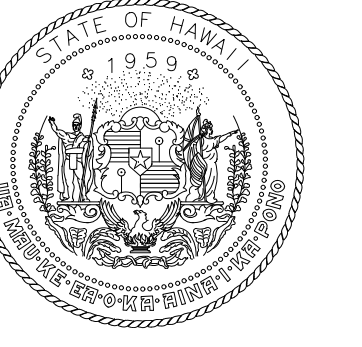
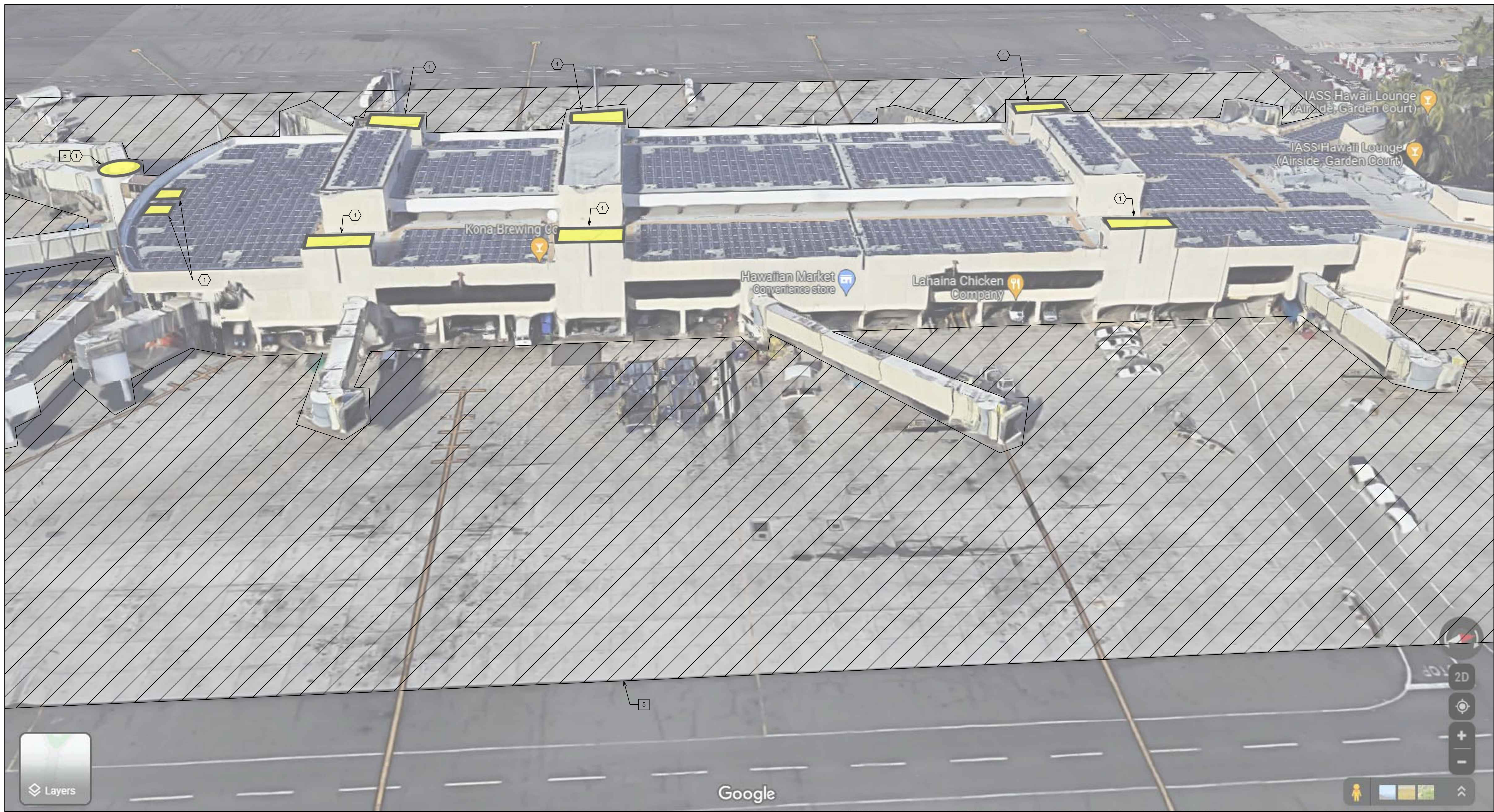
- ① NON-PENETRATING BALLASTED ROOF MOUNT
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- ③ ANCHORED WALL MOUNT
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SHEET NOTES:

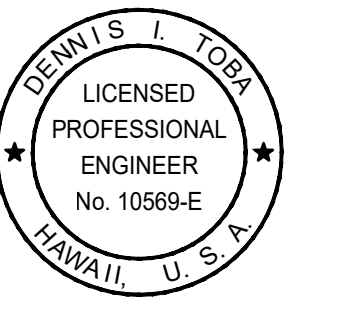
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Y CONCOURSE ISOMETRIC VIEW - 5
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
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PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 6

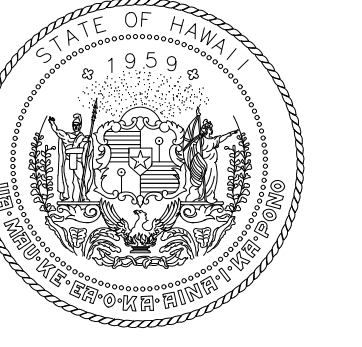
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| DATE : | SHEET NO. : |
| MAY 2023 | E-19 |
| DWG NO. : | |
| 21 OF 47 | |

- MOUNTING LEGEND NOTES:**
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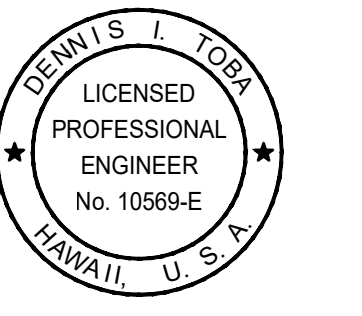
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Y CONCOURSE ISOMETRIC VIEW - 6
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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KEY PLAN:

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|-----|----------|----------------|-----------|
| 1 | 05/17/23 | ADDENDUM NO. 1 | |

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LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 7

DATE :
MAY 2023
DWG NO. :
22 OF 47

SHEET NO. :
E-20

- MOUNTING LEGEND NOTES:**
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Y CONCOURSE ISOMETRIC VIEW - 7
NOT TO SCALE

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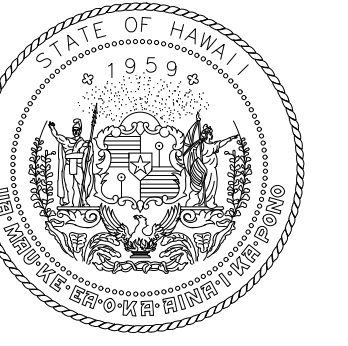
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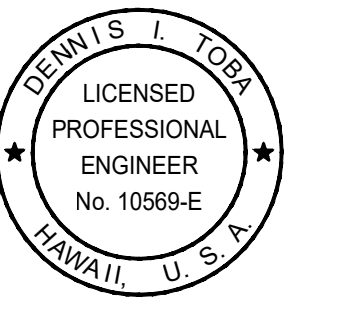
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Y CONCOURSE ISOMETRIC VIEW - 8
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
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| MC | CAD | KC | DT |

KEY PLAN:

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|-----|----------|----------------|-----------|
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PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

Y CONCOURSE
ISOMETRIC VIEW - 8

DATE :
MAY 2023
DWG NO. :
23 OF 47

SHEET NO. :
E-21



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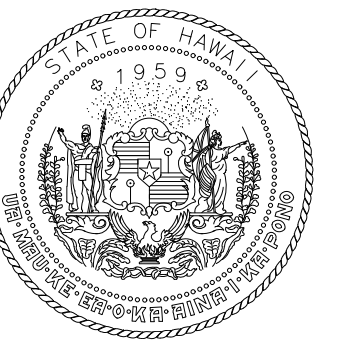
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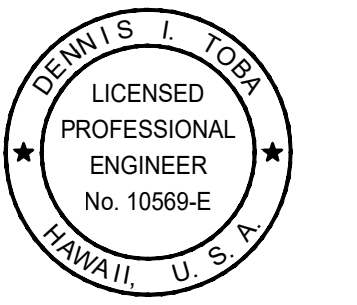
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Y CONCOURSE ISOMETRIC VIEW - 9
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
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KEY PLAN:

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|-----|----------|----------------|
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PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

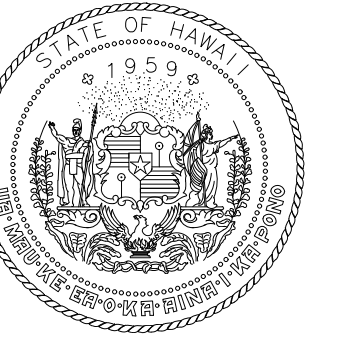
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AIP PROJECT NO:

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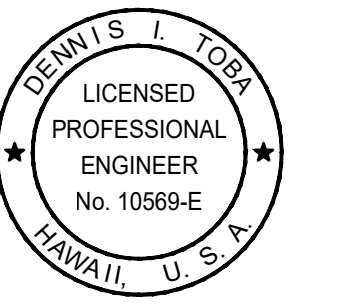
Y CONCOURSE
ISOMETRIC VIEW - 9

DATE :
MAY 2023
DWG NO. :
24 OF 47

SHEET NO. :
E-22



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
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PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE
ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
25 OF 47

SHEET NO. :

E-23

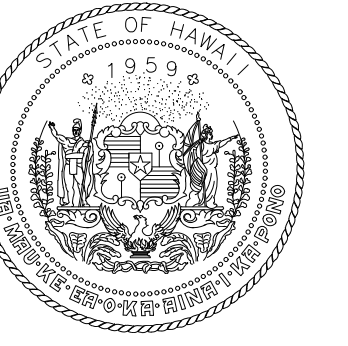
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

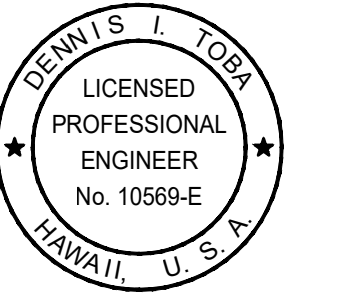
SHEET NOTES:

- 1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
- 3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
- ④ LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 1
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE
ISOMETRIC VIEW - 2

DATE :
MAY 2023
DWG NO. :
26 OF 47

SHEET NO. :

E-24

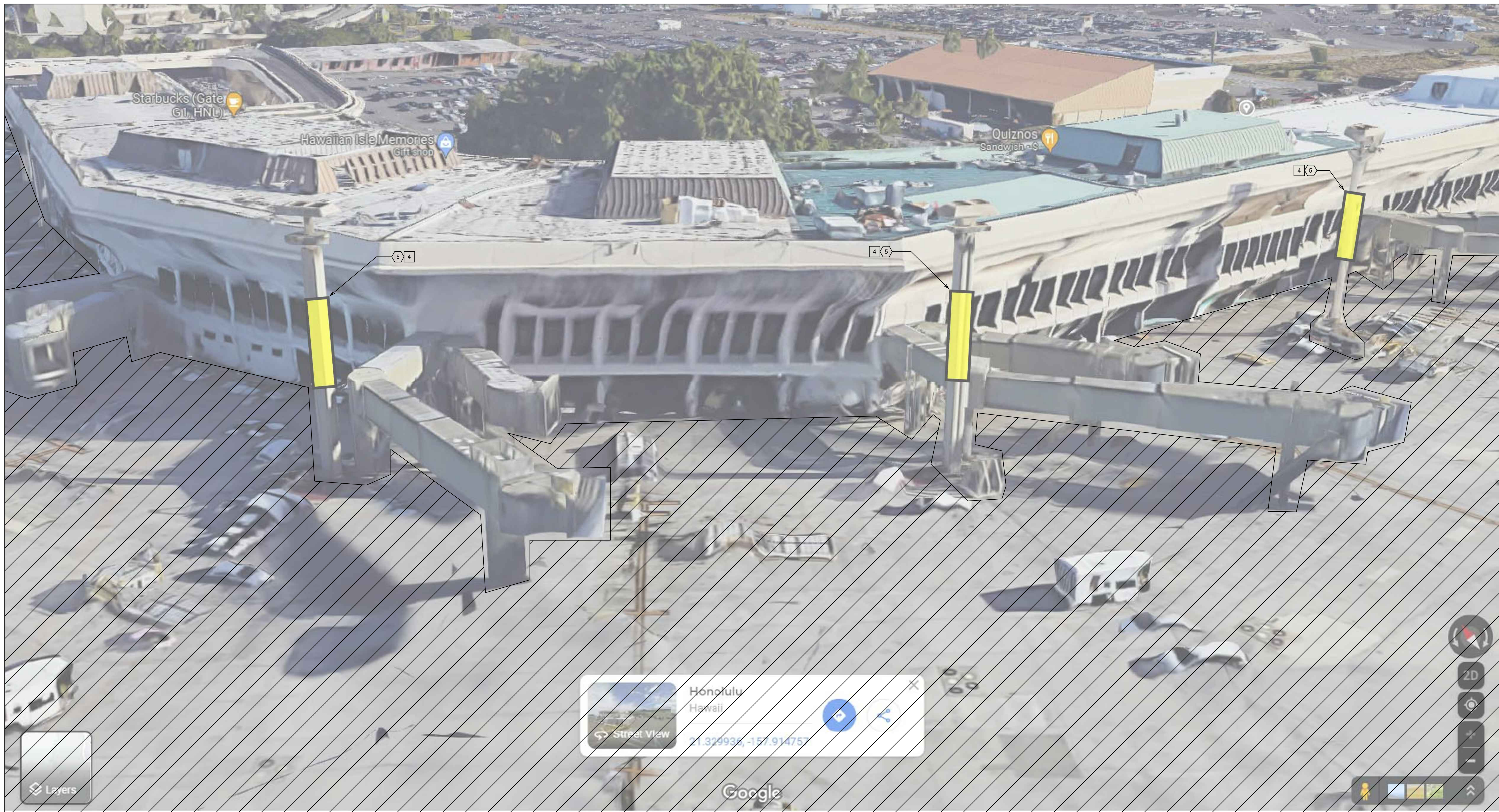
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
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- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 2
NOT TO SCALE



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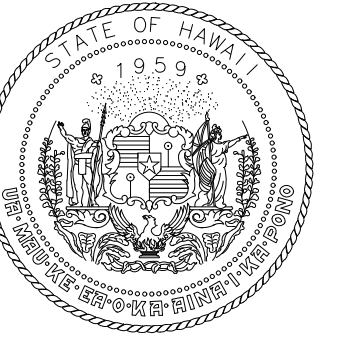
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
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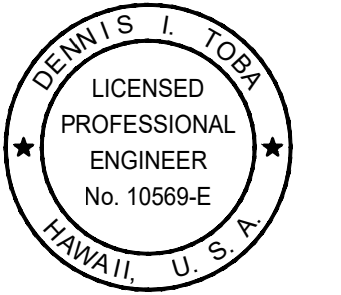
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 3
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

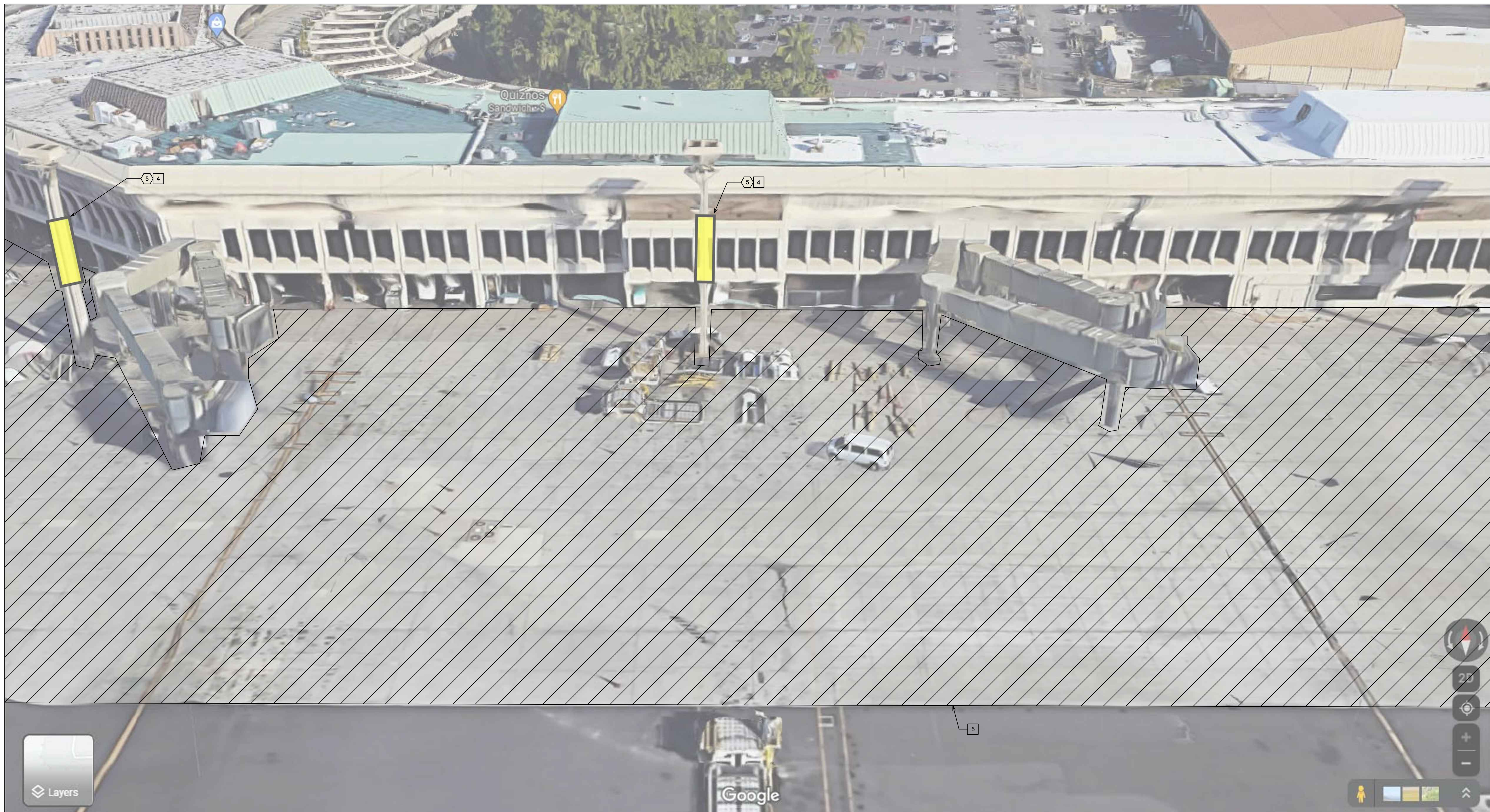
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE
ISOMETRIC VIEW - 3

DATE :
MAY 2023
DWG NO. :
27 OF 47

SHEET NO. :
E-25



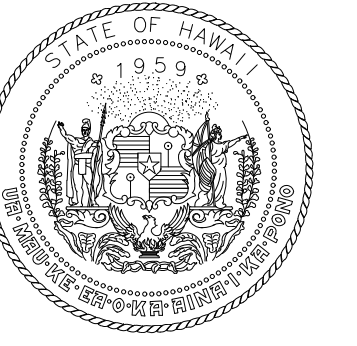
MOUNTING LEGEND NOTES:

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- ③ ANCHORED WALL MOUNT
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- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

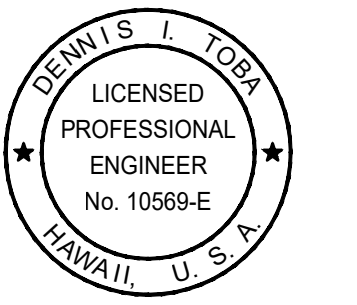
SHEET NOTES:

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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 4
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

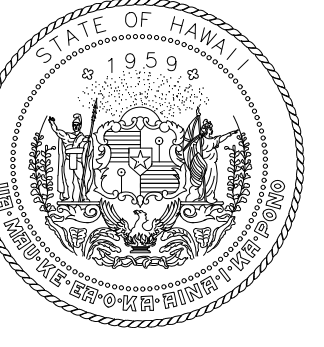
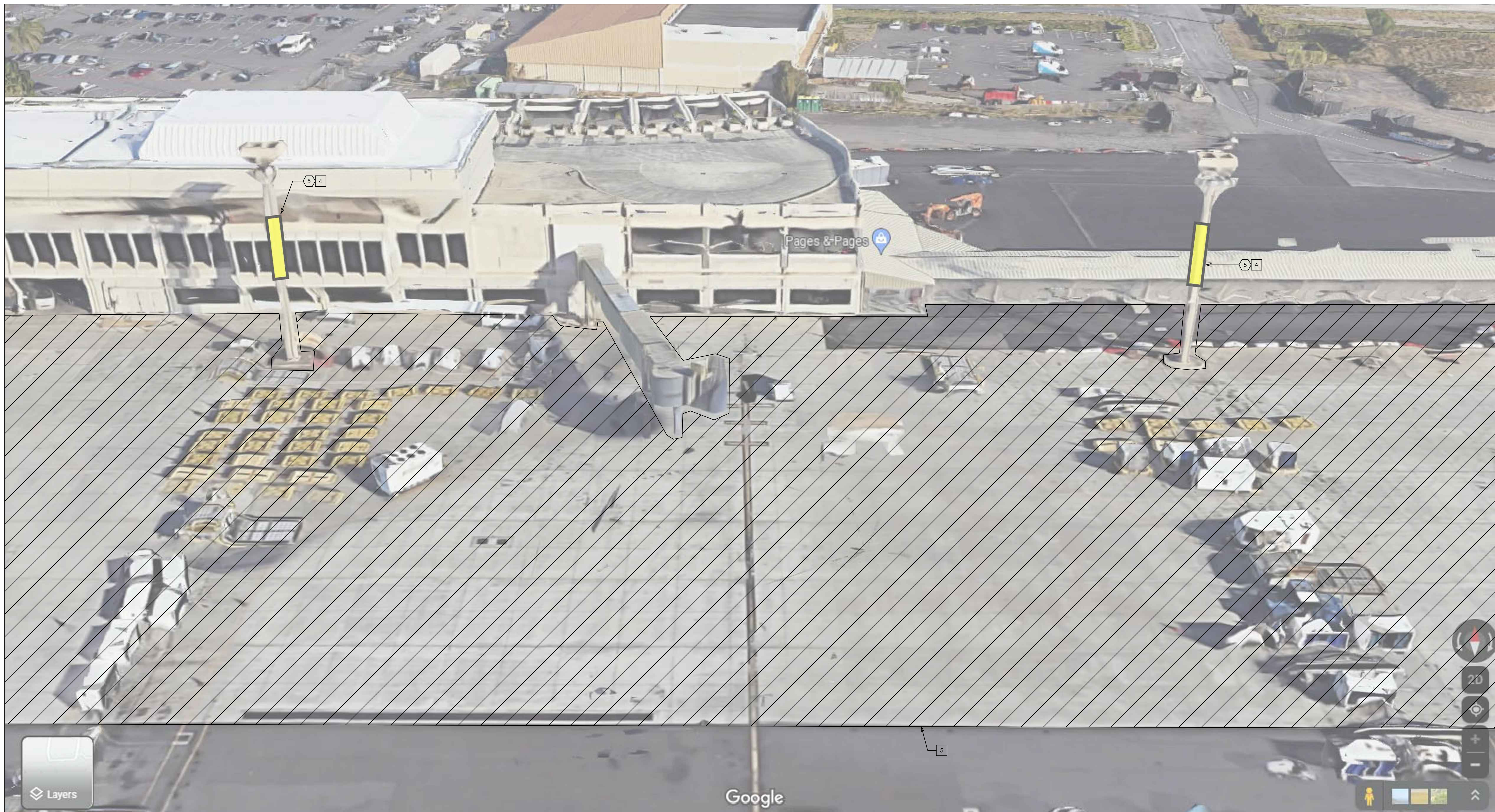
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

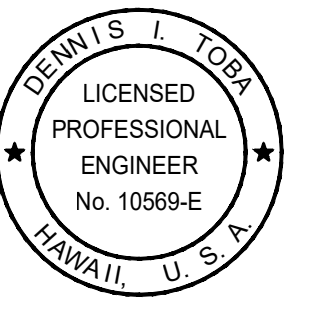
DIAMOND HEAD CONCOURSE
ISOMETRIC VIEW - 4

DATE :
MAY 2023
DWG NO. :
28 OF 47

SHEET NO. :
E-26



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 5

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-27 |
| DWG NO. : | |
| 29 OF 47 | |

MOUNTING LEGEND NOTES:

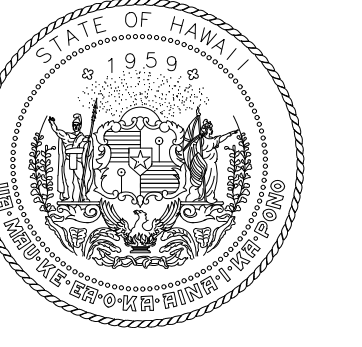
- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

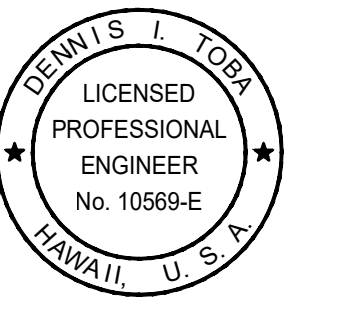
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 5
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| | | | |
|-------|-------|-------|-------|
| DSGN. | DRWN. | CHKD. | APPD. |
| MC | CAD | KC | DT |

KEY PLAN:

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| NO. | DATE | ADDENDUM NO. | REVISIONS |
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 6

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-28 |
| DWG NO. : | |
| 30 OF 47 | |

MOUNTING LEGEND NOTES:

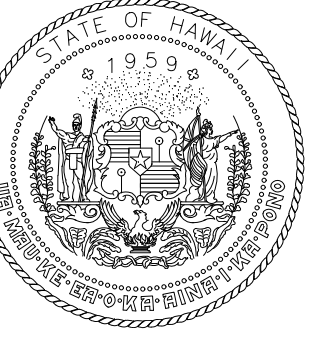
- ① NON-PENETRATING BALLASTED ROOF MOUNT
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SHEET NOTES:

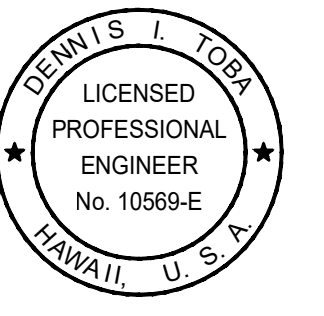
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 6
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 7

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-29 |
| DWG NO. : | |
| 31 OF 47 | |

MOUNTING LEGEND NOTES:

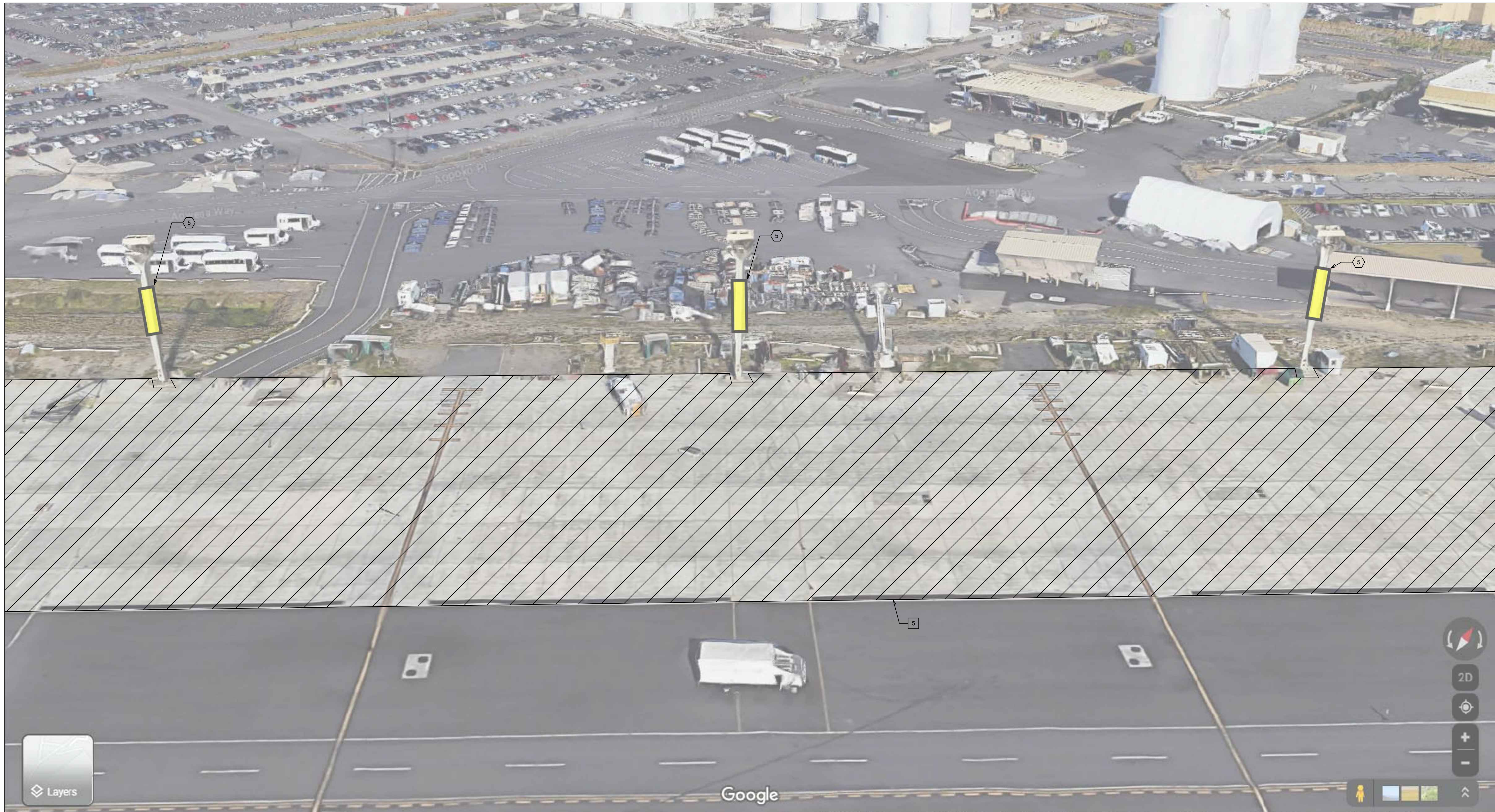
- ① NON-PENETRATING BALLASTED ROOF MOUNT
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 7
NOT TO SCALE

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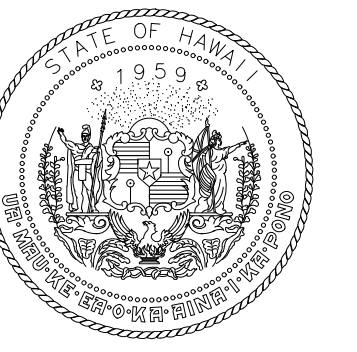
MOUNTING LEGEND NOTES:

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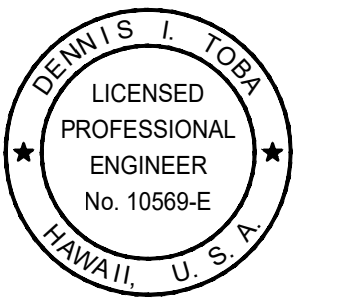
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 8
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

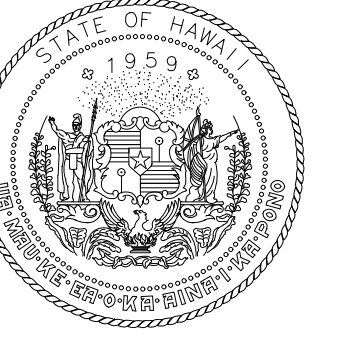
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AIP PROJECT NO:

SHEET TITLE:

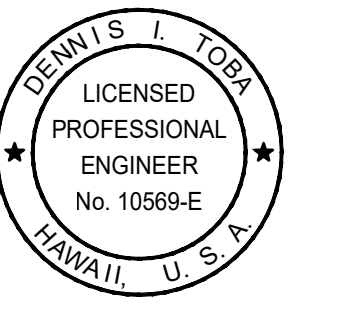
DIAMOND HEAD CONCOURSE
ISOMETRIC VIEW - 8

DATE :
MAY 2023
DWG NO. :
32 OF 47

SHEET NO. :
E-30



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

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|-----|----------|----------------|
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PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 9

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|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-31 |
| DWG NO. : | |
| 33 OF 47 | |

MOUNTING LEGEND NOTES:

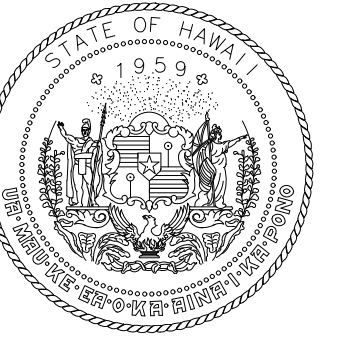
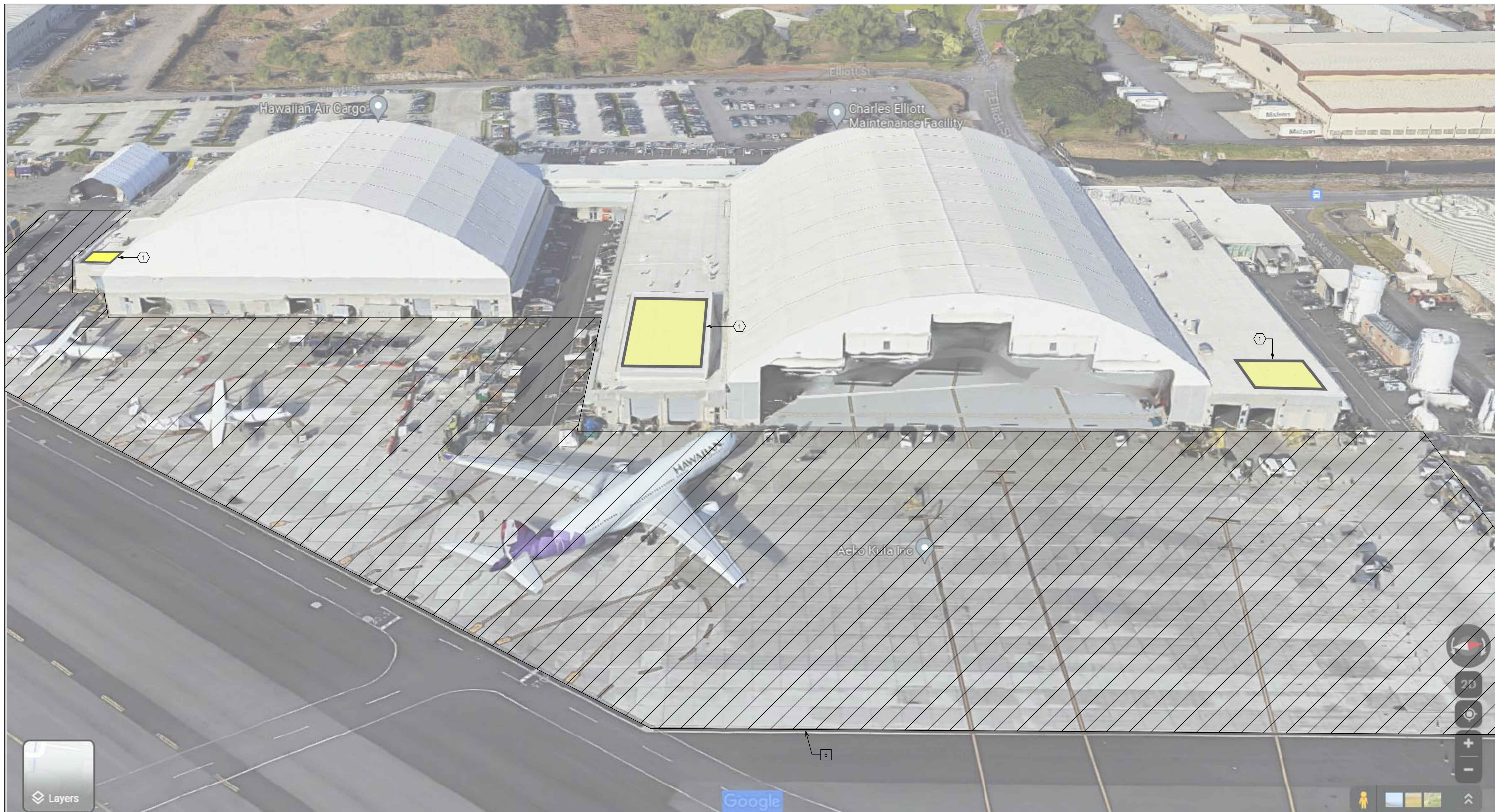
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- ③ ANCHORED WALL MOUNT
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SHEET NOTES:

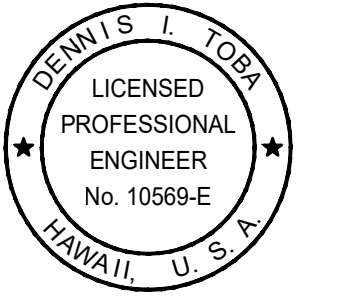
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DIAMOND HEAD CONCOURSE ISOMETRIC VIEW - 9
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

HAWAIIAN AIRLINES CARGO
ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
34 OF 47

SHEET NO. :
E-32

MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

- 1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
- 3. PV PANELS SHALL BE ORIENTED TO MINIMIZE SHADING FROM SURROUNDING STRUCTURES.
- ④ LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

HAWAIIAN AIRLINES CARGO ISOMETRIC VIEW - 1
NOT TO SCALE

Z:\VACANT\PROJECTS\219051\1\0022_HAWAIIAN_AIRLINES_CARGO_ISOMETRIC_VIEW - 1_5/17/2023_2:55PM_Tad



Honolulu Airport
Rescue Fire Fighting

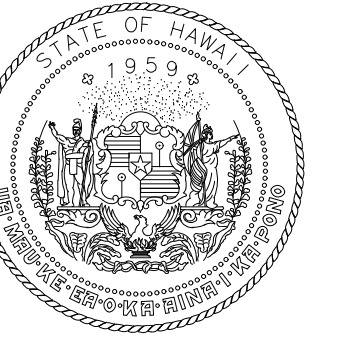
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
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- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

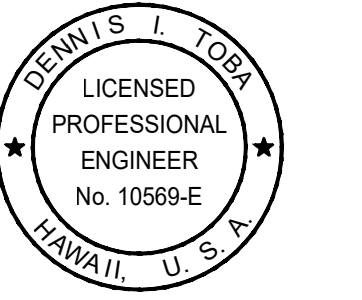
SHEET NOTES:

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ARFF ISOMETRIC VIEW - 1
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

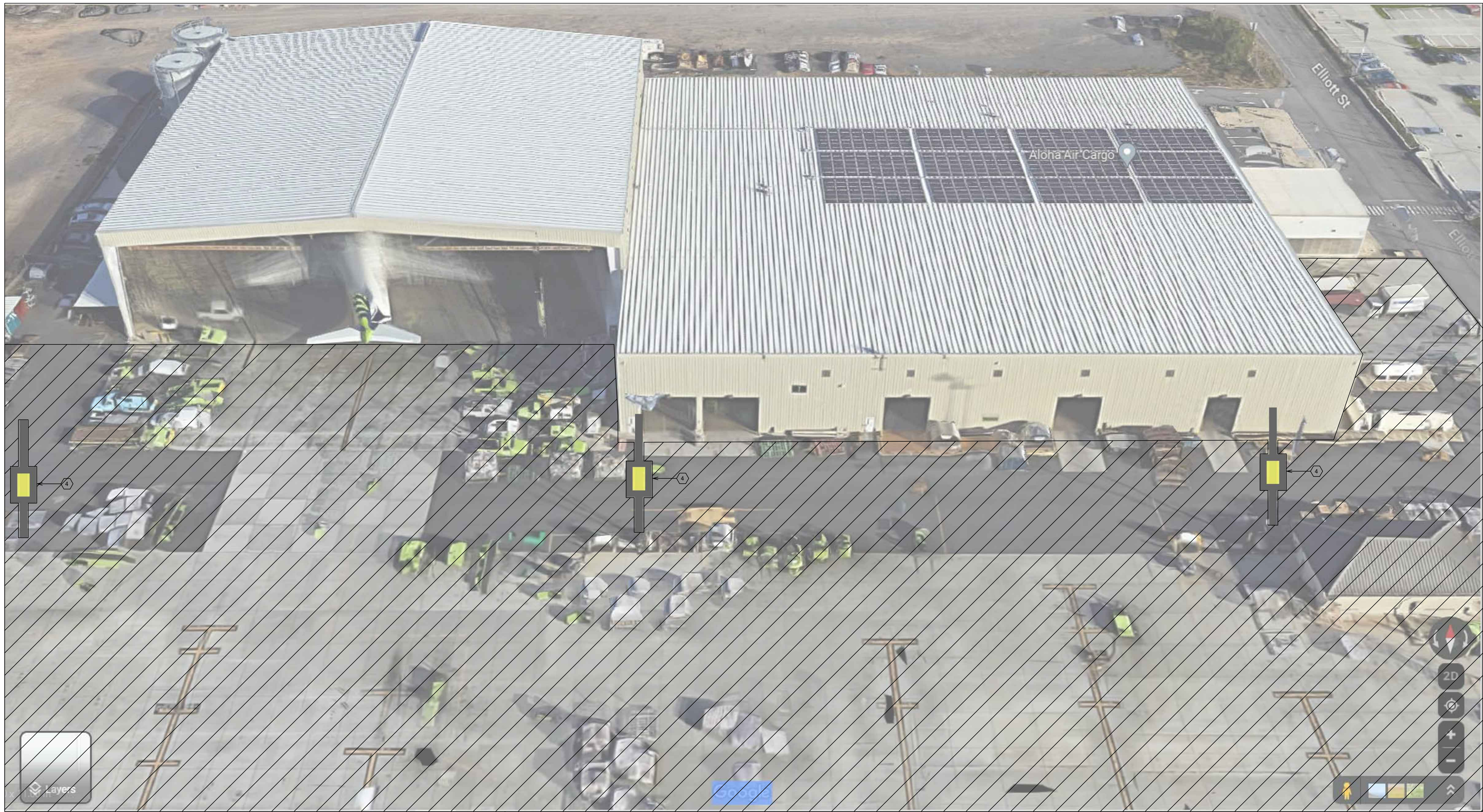
SHEET TITLE:

ARFF ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
35 OF 47

SHEET NO. :

E-33



Z:\VACAD\PROJECTS\219051\A001\ALOHA AIR CARGO ISOMETRIC VIEW - 1 5/17/2023 2:55PM Tor

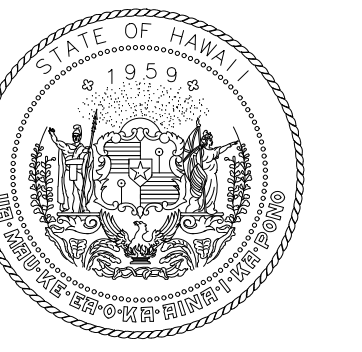
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

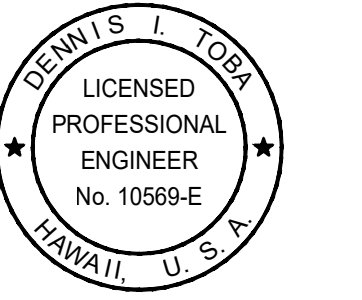
SHEET NOTES:

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ALOHA CARGO ISOMETRIC VIEW - 1
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

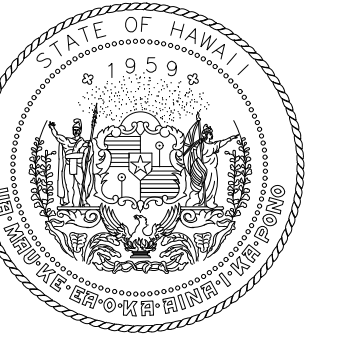
PROJECT TITLE :
LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

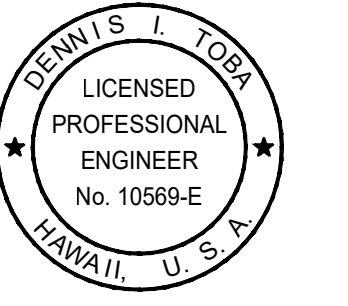
PROJECT NO.:
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:
ALOHA CARGO
ISOMETRIC VIEW - 1

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-34 |
| DWG NO. : | |
| 36 OF 47 | |



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 1

DATE :
MAY 2023
DWG NO. :
37 OF 47

SHEET NO. :
E-35

MOUNTING LEGEND NOTES:

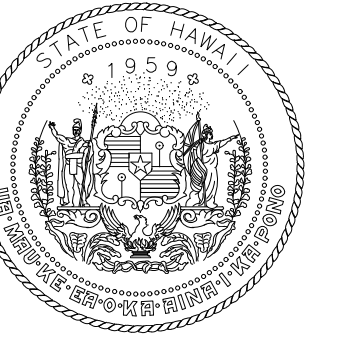
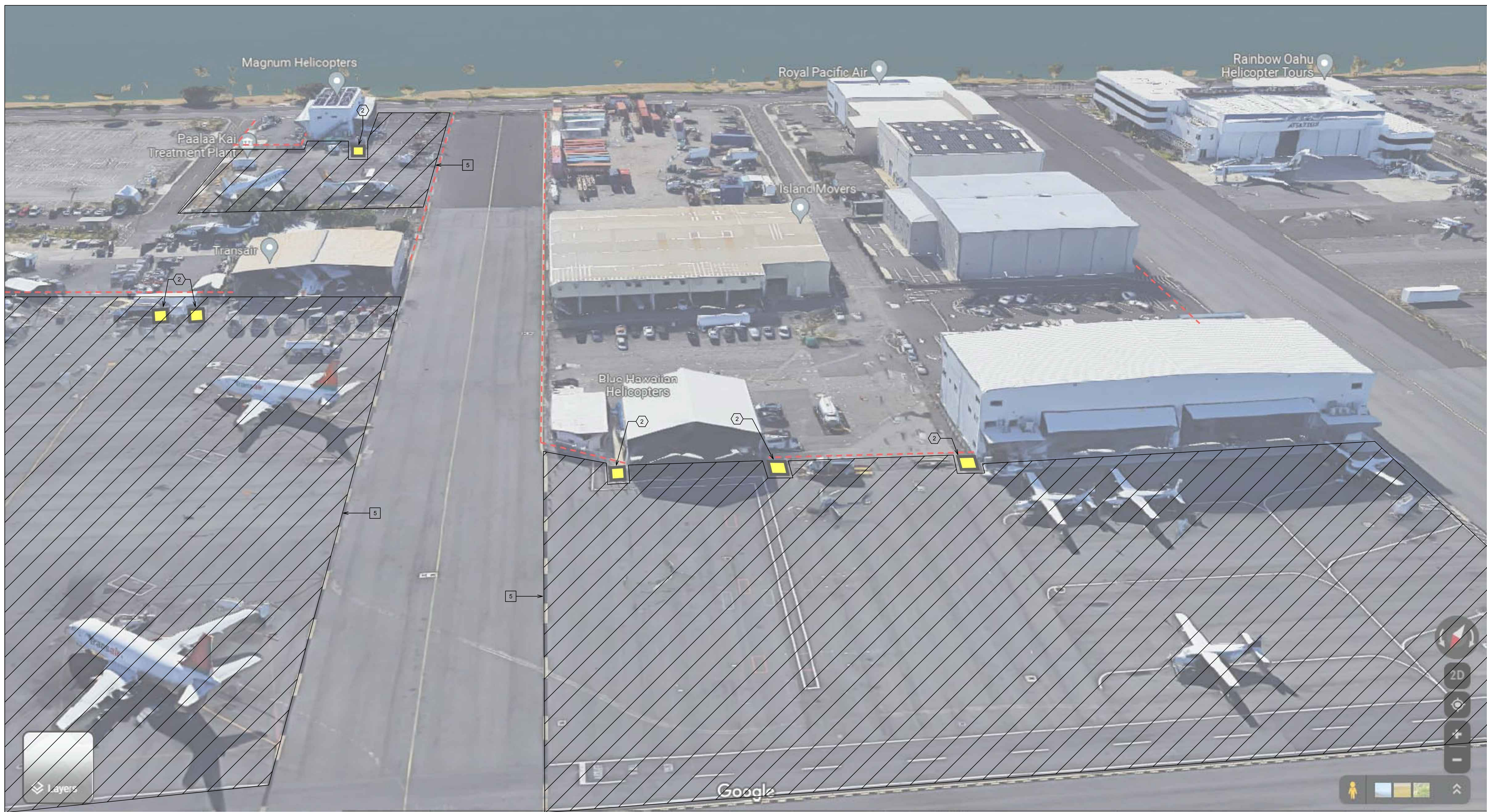
- ① NON-PENETRATING BALLASTED ROOF MOUNT
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- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

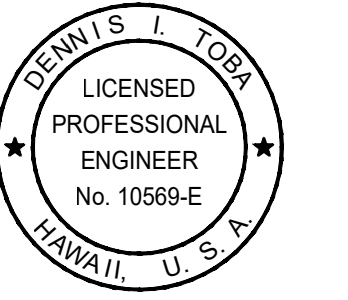
- 1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
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SOUTH RAMP ISOMETRIC VIEW - 1
NOT TO SCALE

Z:\AIAO\PROJECTS\219051\1\0305_SOUTH_RAMP_ISOMETRIC_VIEW - 1_5/17/2023_2:56PM_T04



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| △ | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :
LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

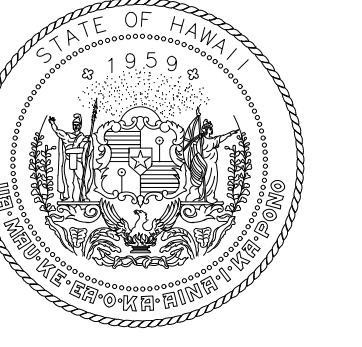
PROJECT NO.:
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:
SOUTH RAMP
ISOMETRIC VIEW - 2

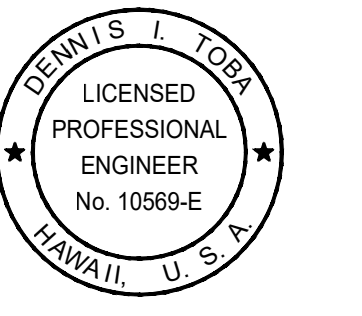
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| DATE : MAY 2023 | SHEET NO. : E-36 |
| DWG NO. : 38 OF 47 | |

SOUTH RAMP ISOMETRIC VIEW - 2
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 3

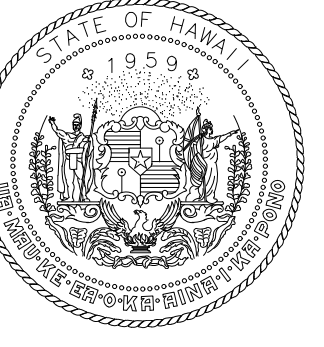
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|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-37 |
| DWG NO. : | |
| 39 OF 47 | |

- MOUNTING LEGEND NOTES:**
- ① NON-PENETRATING BALLASTED ROOF MOUNT
 - ② NON-PENETRATING BALLASTED GROUND MOUNT
 - ③ ANCHORED WALL MOUNT
 - ④ FASTENED STEEL LIGHT POLE MOUNT
 - ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

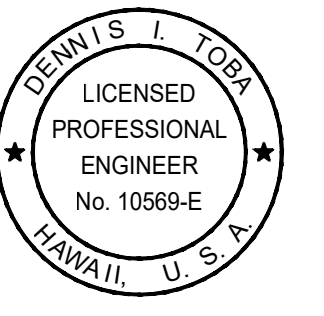
- SHEET NOTES:**
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SOUTH RAMP ISOMETRIC VIEW - 3
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| 1 | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 4

| | |
|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-38 |
| DWG NO. : | |
| 40 OF 47 | |

MOUNTING LEGEND NOTES:

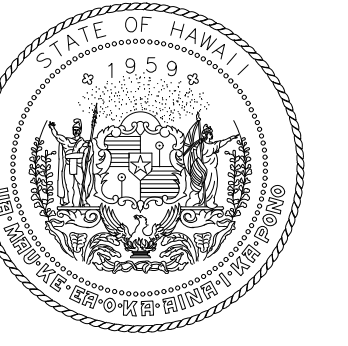
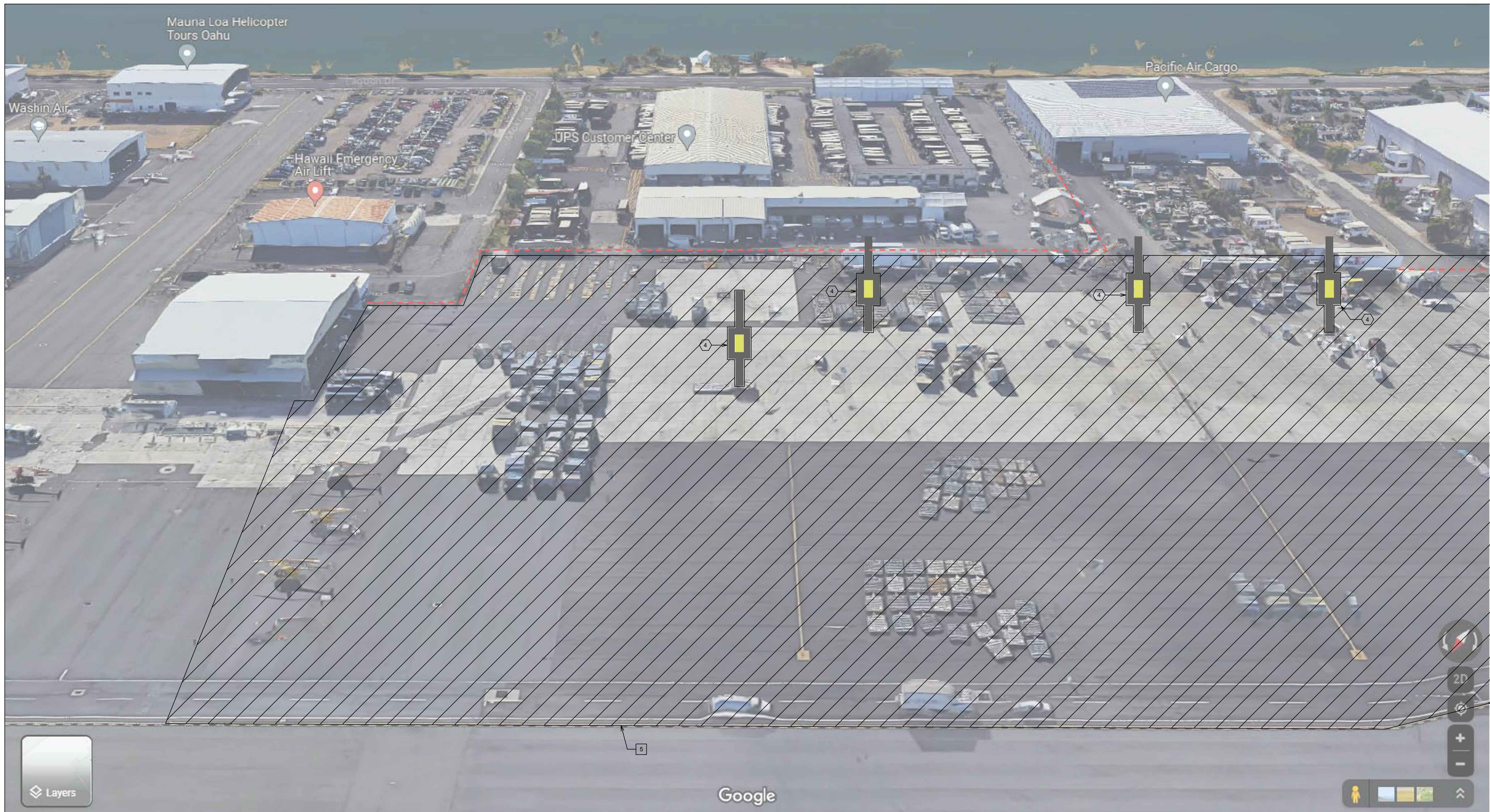
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- ④ FASTENED STEEL LIGHT POLE MOUNT
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SHEET NOTES:

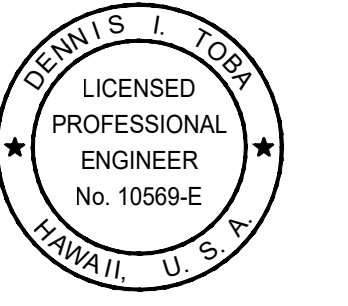
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SOUTH RAMP ISOMETRIC VIEW - 4
NOT TO SCALE

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Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 5

DATE :
MAY 2023
DWG NO. :
41 OF 47

SHEET NO. :
E-39

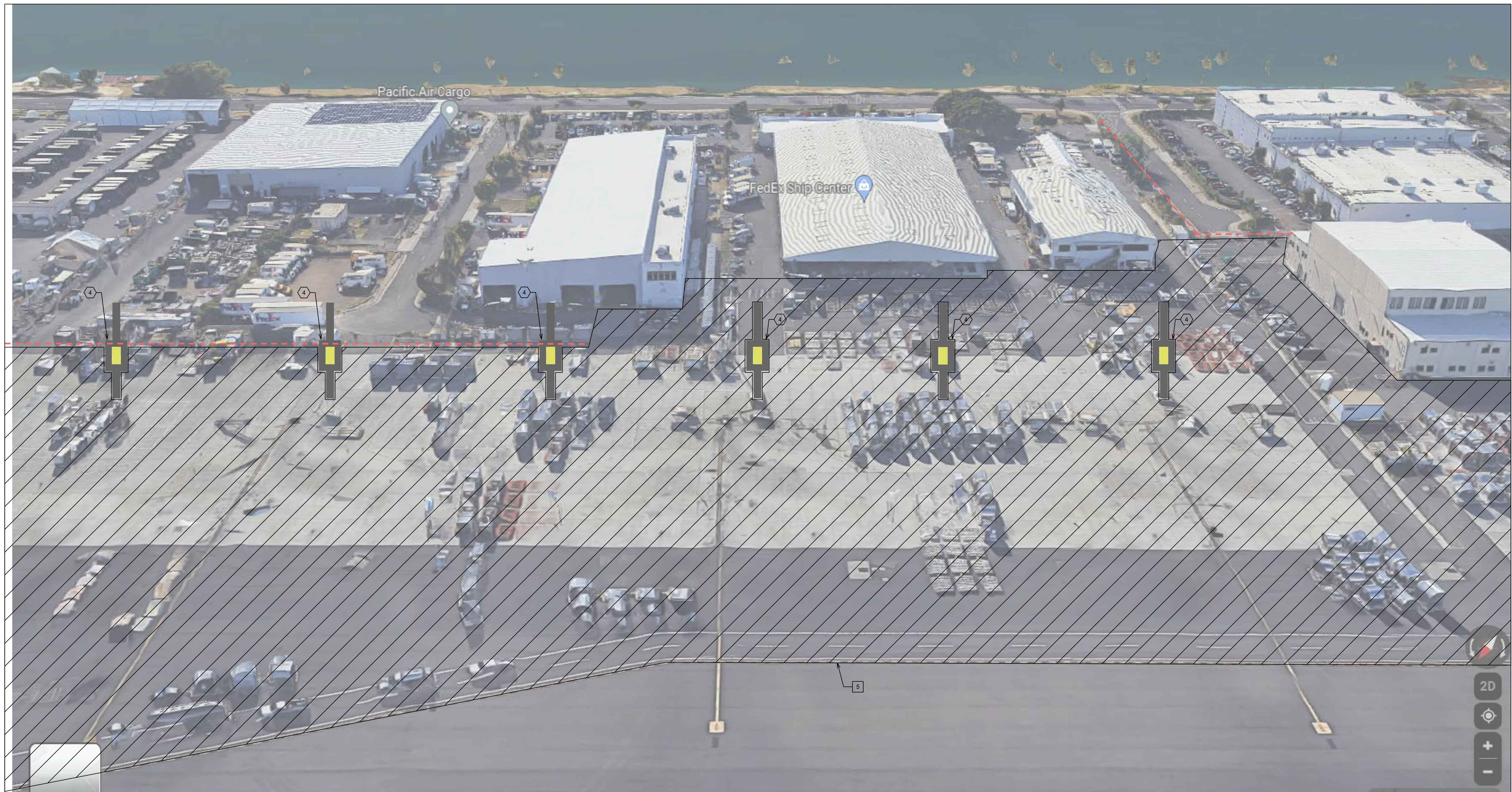
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
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SOUTH RAMP ISOMETRIC VIEW - 5
NOT TO SCALE



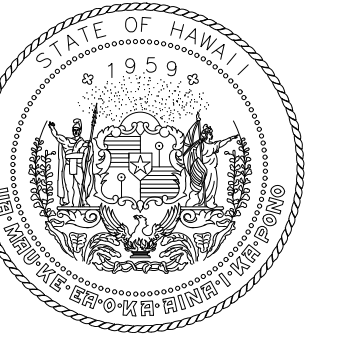
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
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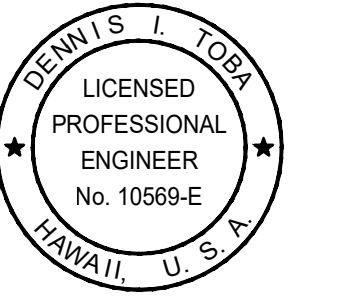
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SOUTH RAMP ISOMETRIC VIEW - 6
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

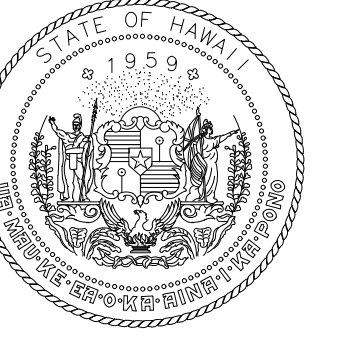
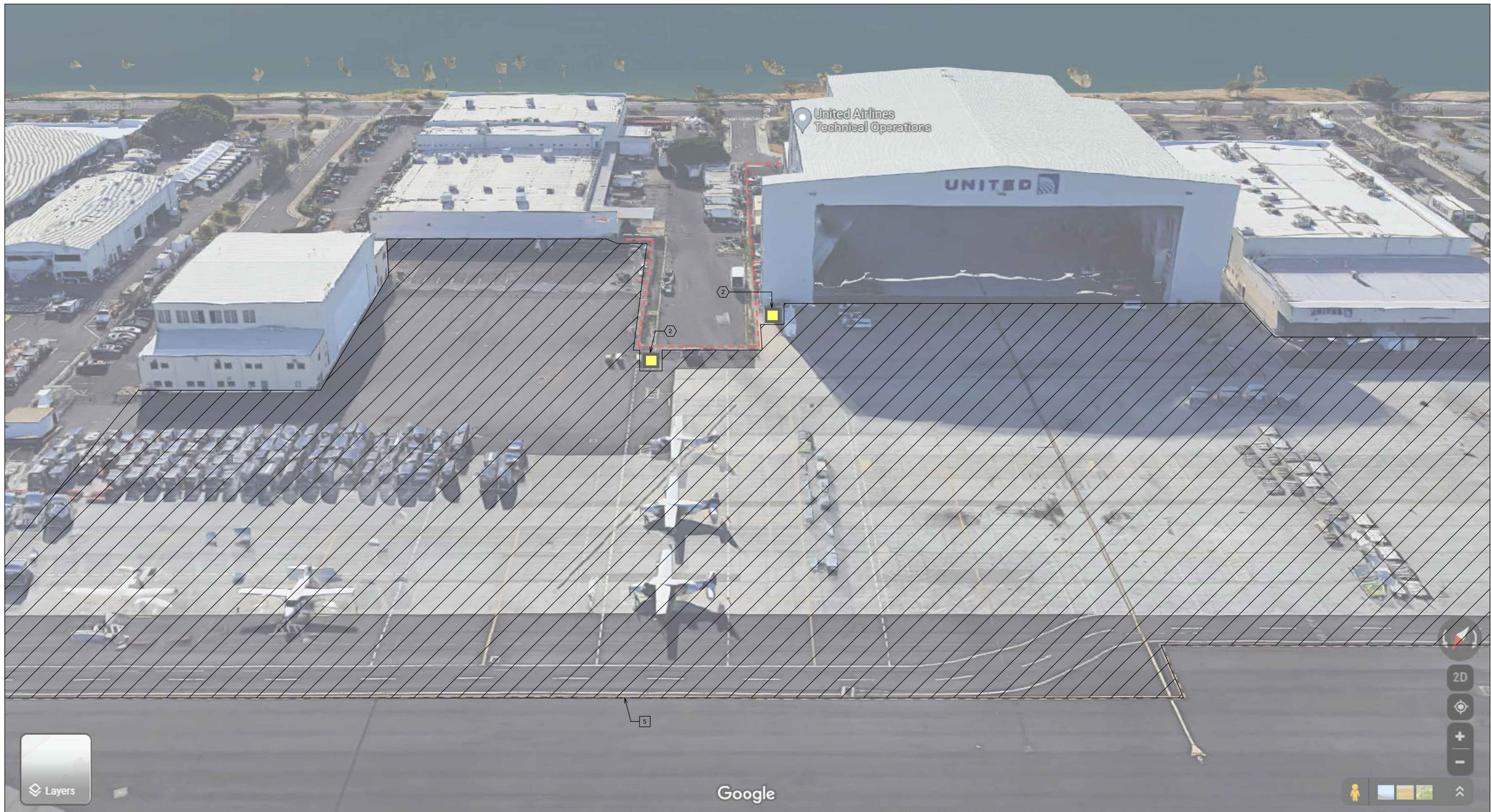
SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 6

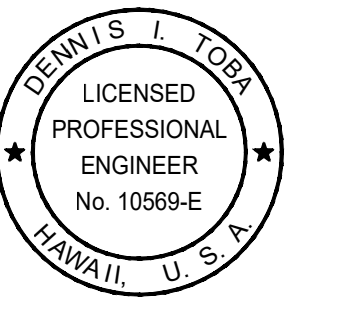
DATE :
MAY 2023
DWG NO. :
42 OF 47

SHEET NO. :

E-40



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 7

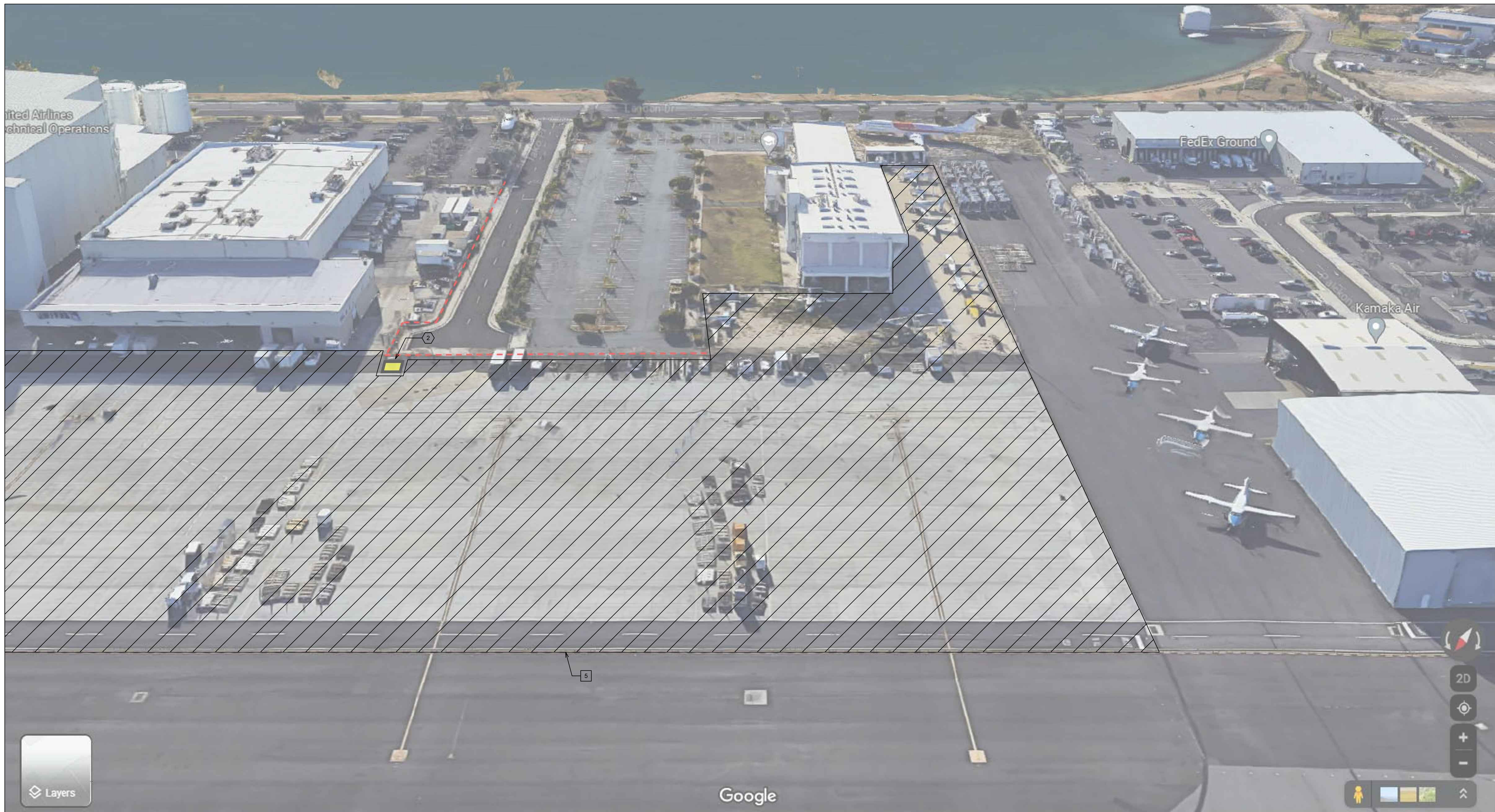
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|-----------|-------------|
| DATE : | SHEET NO. : |
| MAY 2023 | E-41 |
| DWG NO. : | |
| 43 OF 47 | |

- MOUNTING LEGEND NOTES:**
- ① NON-PENETRATING BALLASTED ROOF MOUNT
 - ② NON-PENETRATING BALLASTED GROUND MOUNT
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- SHEET NOTES:**
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 - ④ LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
 - ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

SOUTH RAMP ISOMETRIC VIEW - 7
NOT TO SCALE

Z:\A\A\PROJECTS\219051\1\04\1_SOUTH_RAMP_ISOMETRIC_VIEW - 7_5/17/2023_2:59PM_T04



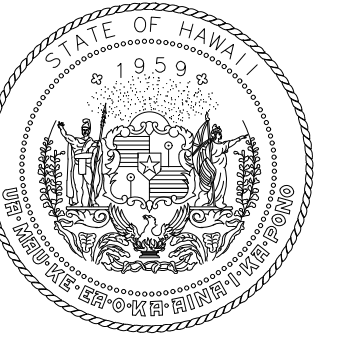
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

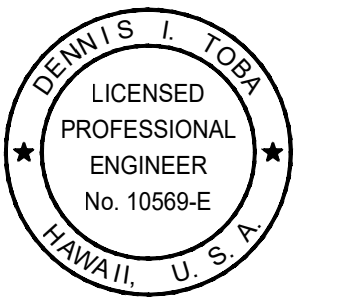
SHEET NOTES:

1. YELLOW HIGHLIGHTED AREAS INDICATE ALLOWABLE LIGHTNING WARNING SYSTEM MOUNTING LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY ALL MOUNTING LOCATIONS PRIOR TO INSTALLATION AND SUBMIT FOR OWNER APPROVAL.
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- ④ LIGHTNING WARNING SYSTEM MOUNTING LOCATION SHALL BE HIGHER THAN THE JET BRIDGE ROOFTOP TO PROVIDE VISUAL LINE OF SIGHT OF THE STROBE LIGHT BY GROUND PERSONNEL.
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SOUTH RAMP ISOMETRIC VIEW - 8
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

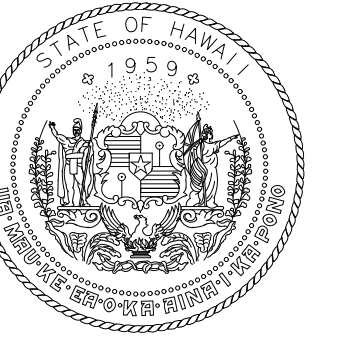
STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

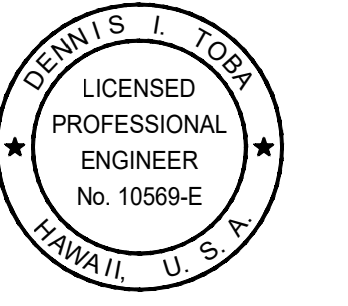
SOUTH RAMP
ISOMETRIC VIEW - 8

DATE :
MAY 2023
DWG NO. :
44 OF 47

SHEET NO. :
E-42



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

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|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| 1 | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 9

DATE :
MAY 2023
DWG NO. :
45 OF 47

SHEET NO. :
E-43

MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
- ④ FASTENED STEEL LIGHT POLE MOUNT
- ⑤ FASTENED APRON LIGHT CONCRETE POLE MOUNT

SHEET NOTES:

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- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

SOUTH RAMP ISOMETRIC VIEW - 9
NOT TO SCALE



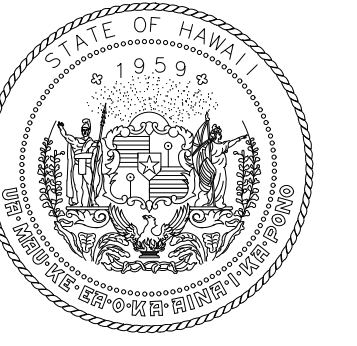
MOUNTING LEGEND NOTES:

- ① NON-PENETRATING BALLASTED ROOF MOUNT
- ② NON-PENETRATING BALLASTED GROUND MOUNT
- ③ ANCHORED WALL MOUNT
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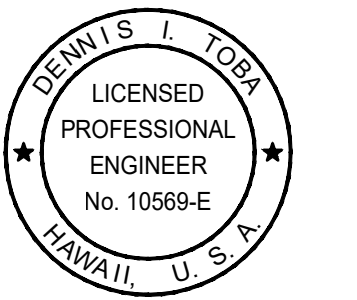
SHEET NOTES:

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- ⑤ AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.

SOUTH RAMP ISOMETRIC VIEW - 10
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
|-------|-------|-------|-------|
| MC | CAD | KC | DT |

KEY PLAN:

| NO. | DATE | ADDENDUM NO. | REVISIONS |
|-----|----------|----------------|-----------|
| | 05/17/23 | ADDENDUM NO. 1 | |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM

AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO: CO1335-53
AIP PROJECT NO:

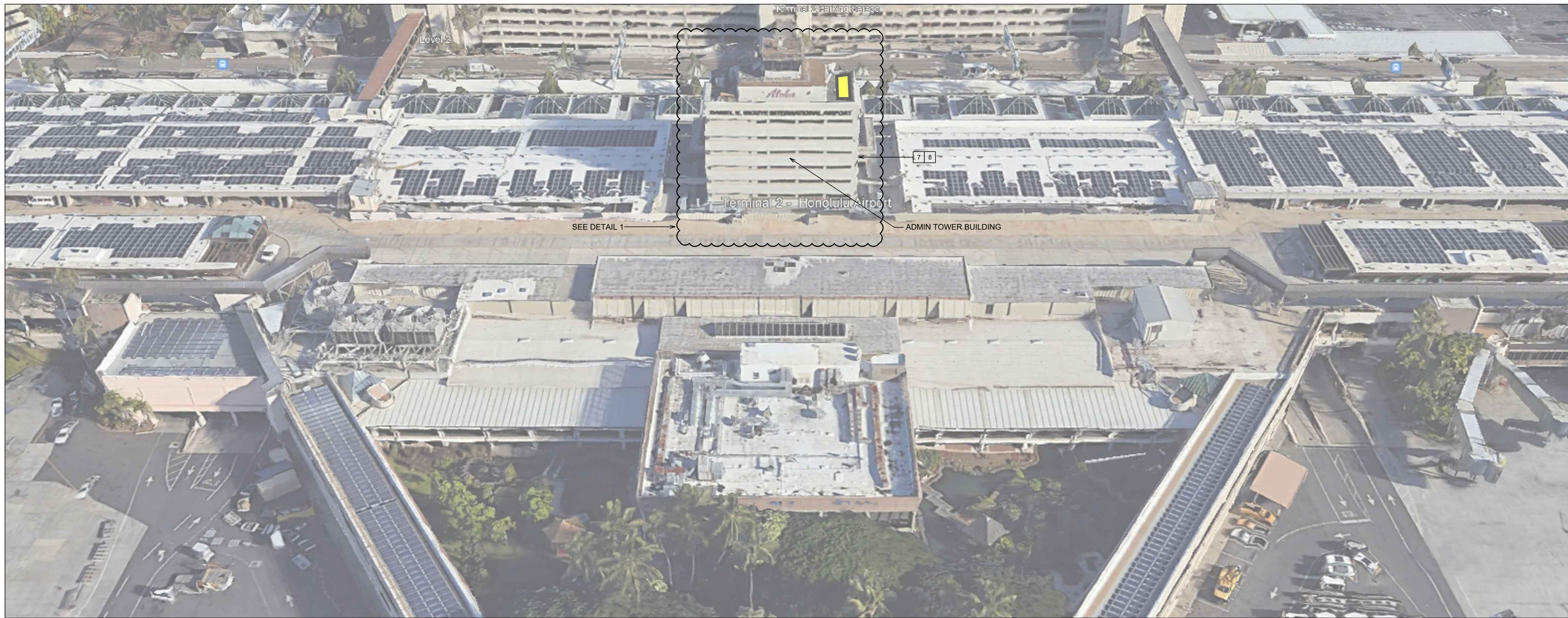
SHEET TITLE:

SOUTH RAMP
ISOMETRIC VIEW - 10

DATE :
MAY 2023
DWG NO. :
46 OF 47

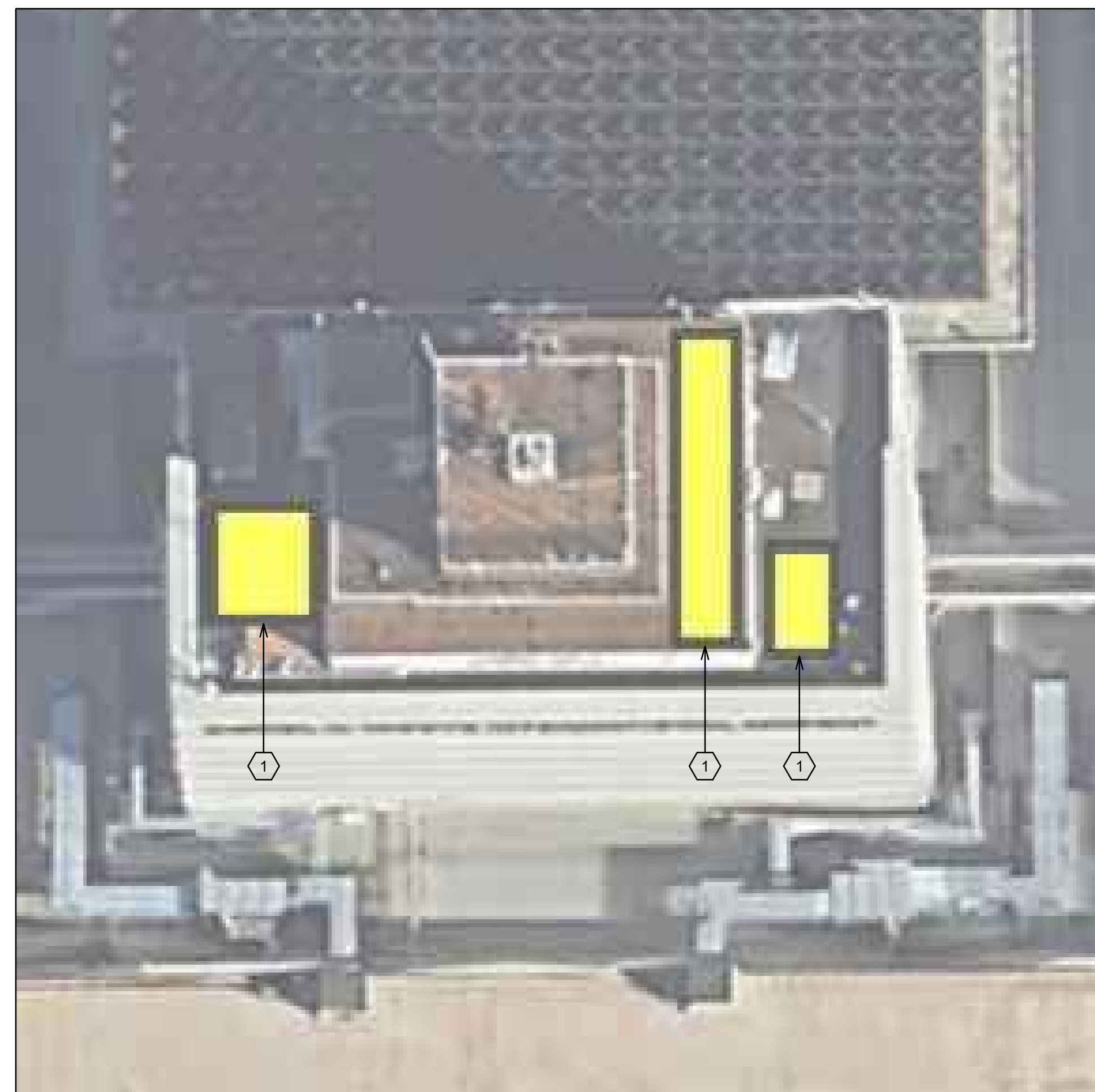
SHEET NO. :
E-44

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SEE DETAIL 1

ADMIN TOWER BUILDING



DETAIL 1

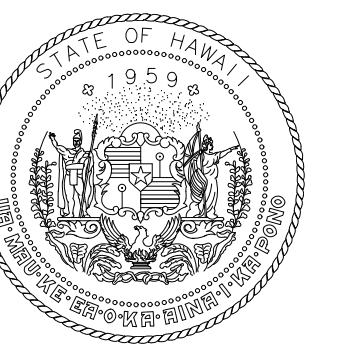
MOUNTING LEGEND NOTES:

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- ② NON-PENETRATING BALLASTED GROUND MOUNT
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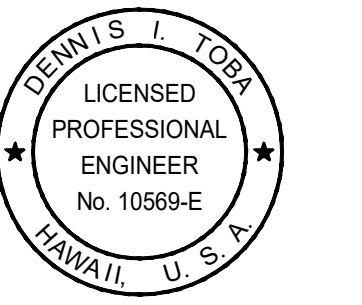
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- 5. AREA WITHIN HATCHED AREA SHALL MAINTAIN MINIMUM WARNING SYSTEM HORN AUDIBLE LEVEL OF +3 DB ABOVE APRON AMBIENT SOUND LEVEL.
- 6. NOT AVAILABLE MOUNTING LOCATION.
- 7. RAMP CONTROL OFFICE IS ON THE 10TH FLOOR OF THE ADMIN TOWER BUILDING. THE LIGHTNING SYSTEM'S MAIN CONTROL TERMINAL OR HUMAN MACHINE INTERFACE (HMI) SHALL BE LOCATED IN THE RAMP CONTROL OFFICE. THE RAMP CONTROL OPERATOR SHALL HAVE CONTROL ACCESS TO MANUALLY ACTIVATE OR DEACTIVATE THE LIGHTNING DETECTION AND WARNING SYSTEM INCLUDING ANY ALERTS, NOTIFICATIONS, OR ALL CLEAR SIGNALS. THE RAMP CONTROL OFFICE SHALL ALSO HAVE AN ALERT OR NOTIFICATION AT THIS LOCATION.
- 8. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH THE STATE'S IT STAFF TO PROVIDE A SPARE NETWORK PORT TO BE USED FOR THE MAIN LIGHTNING SYSTEM INTERFACE.

MAIN LIGHTING SYSTEM INTERFACE & RAMP CONTROL OFFICE DETAILS
NOT TO SCALE



Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII



Daniel K. Inouye, 2023.05.17
RONALD N.S. HO & ASSOCIATES, INC.
LICENSE EXPIRATION DATE: 4/30/24

| DSGN. | DRWN. | CHKD. | APPD. |
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KEY PLAN:

| NO. | DATE | REVISIONS |
|-----|----------|----------------|
| △ | 05/17/23 | ADDENDUM NO. 1 |

PROJECT TITLE :

LIGHTNING WARNING SYSTEM
AT
DANIEL K. INOUE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

STATE PROJECT NO.: CO1335-53
AIP PROJECT NO.:

SHEET TITLE:

MAIN LIGHTING SYSTEM
INTERFACE & RAMP CONTROL
OFFICE DETAILS

DATE :
MAY 2023
DWG NO. :
47 OF 47

SHEET NO. :
△ E-45