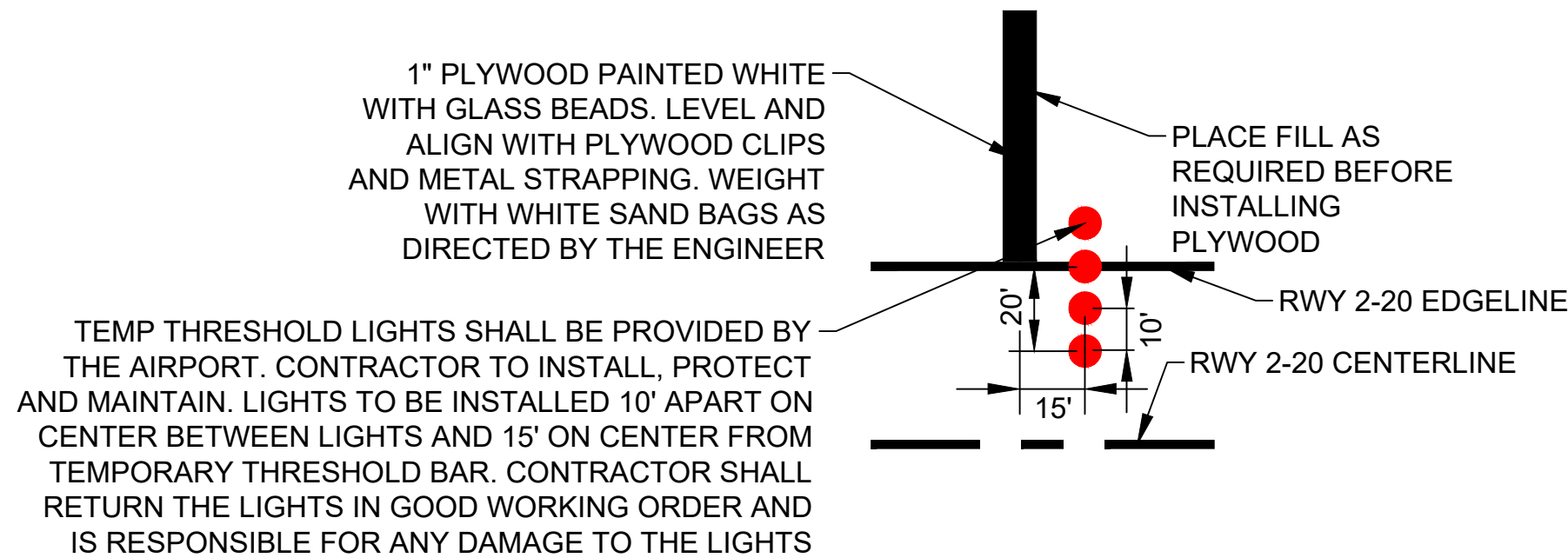


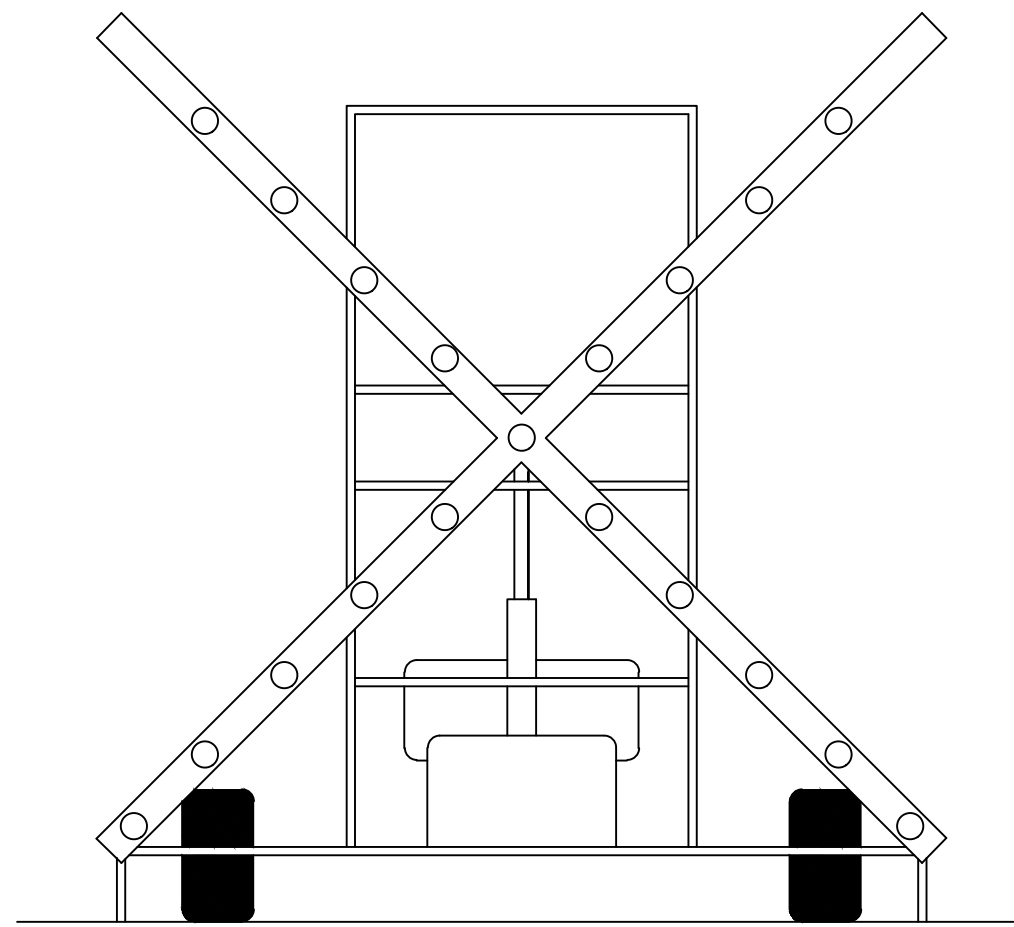
**BARRICADE NOTES:**

- WHERE INDICATED ON THE PLANS, LOW PROFILE BARRICADES (CONTINUOUS) SHALL BE INTERLOCKED CREATING A CONTINUOUS LINE. IN ALL OTHER LOCATIONS SPACING BETWEEN LOW PROFILE BARRICADES SHALL BE 15 FT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING PROPER POSITIONING AND OPERATION OF ALL BARRICADES FOR THE DURATION OF THE PROJECT.
- THE LOW PROFILE BARRICADES SHALL BE WEIGHTED AGAINST JET BLAST AND CAPABLE OF WITHSTANDING UP TO 110 MPH WIND FORCES. THE CONTRACTOR SHALL IMMEDIATELY REPLACE ANY BARRICADES THAT ARE PUNCTURED OR DO NOT RETAIN WATER.
- INSTALL A MINIMUM OF 2 BATTERY OPERATED RED PHOTOCELL LIGHTS EQUALLY SPACED PER EACH 8' LONG BARRICADE. LIGHTS SHALL MAINTAIN SUCH INTENSITY SO AS TO BE READILY IDENTIFIED FROM DISTANCES OF 200' OR GREATER DURING DARKNESS PERIODS.
- THE CONTRACTOR SHALL PROVIDE A SUBMITTAL TO THE ENGINEER FOR REVIEW OF THE PROPOSED LOW PROFILE BARRICADE AND RED PHOTOCELL LIGHTS TYPE AND MANUFACTURE PRIOR TO ORDERING OR ACQUIRING ANY BARRICADES. THE SUBMITTAL SHALL CONTAIN SUFFICIENT INFORMATION INCLUDING AS A MINIMUM BARRICADE TYPE, SIZE, MANUFACTURER, AND DATE OF MANUFACTURE, TO PROVIDE THE ENGINEER WITH SUFFICIENT INFORMATION TO PERFORM A THOROUGH AND COMPLETE REVIEW.

**1 LOW PROFILE BARRICADES**  
G-107,G-108,G-109, G-113 SCALE: NTS  
G-110, G-111, G-112



**3 TEMPORARY THRESHOLD BAR AND LIGHT DETAIL**  
G-110, G-111, G-113 SCALE: NTS

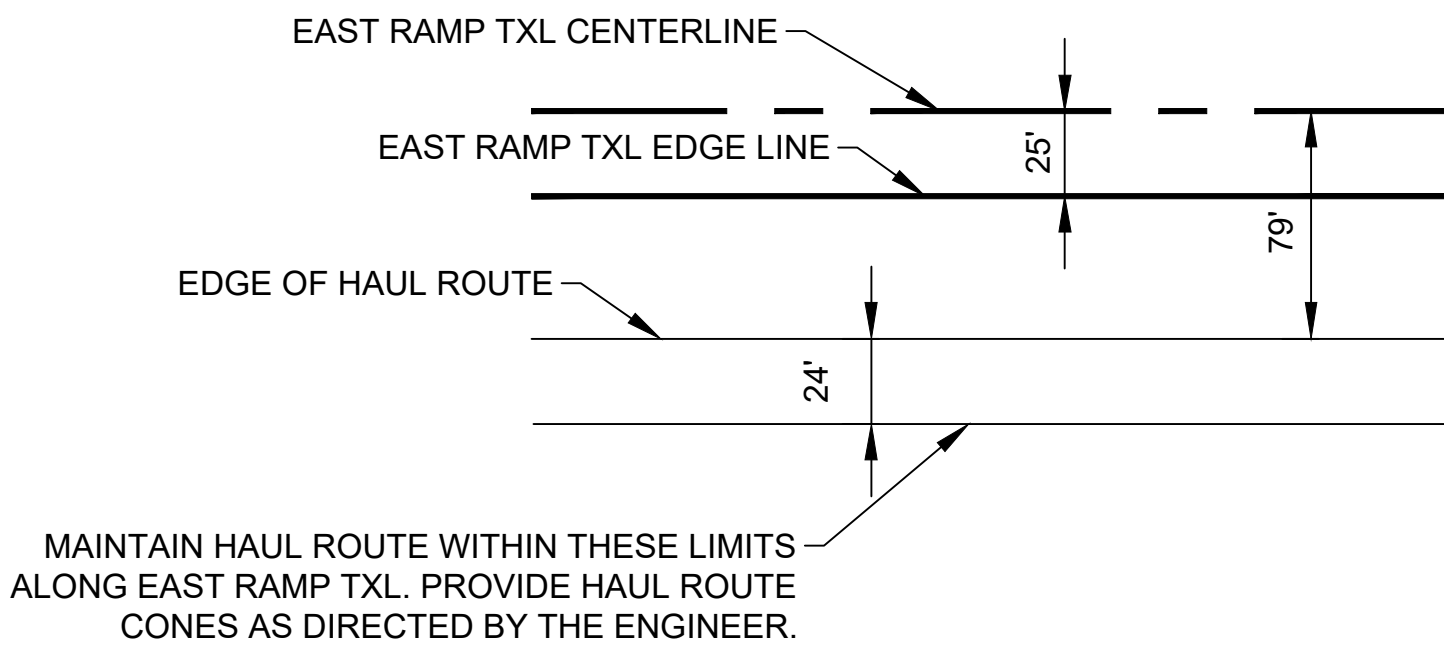


**LIGHTED 'X' NOTES:**

THE LIGHTED "X" RUNWAY CLOSURE MARKER SHALL CONFORM WITH FAA AC 150/5345-55 LATEST EDITION, AND AT A MINIMUM SHALL:

- BE A PORTABLE, TOWABLE UNIT THAT CAN BE QUICKLY MOVED TO AND FROM THE RUNWAY.
- CONSIST OF CLEAR INCANDESCENT OR LED LAMPS THAT TRANSMIT A WHITE COLOR, ARRANGED IN THE SHAPE OF A LETTER "X" WITH ARMS CROSSED AT AN APPROPRIATE ANGLE TO MAKE THE "X" DISCERNIBLE. THE ARMS SHALL BE PAINTED YELLOW ON ALL SIDES SO THAT THE UNIT WILL BE CLEARLY VISIBLE WHEN IT IS IN UPRIGHT POSITION.
- BE ENERGIZED BY A PORTABLE POWER SUPPLY.
- BE CONTROLLED SO THAT THE LIGHTED SIGNAL WILL FLASH AT AN APPROXIMATE RATE OF 2.5-3 SECONDS "ON" AND 1-2.5 SECONDS "OFF".
- PROVIDE THE FOLLOWING DAYTIME AND NIGHTTIME VISUAL REFERENCE DURING VISUAL FLIGHT RULE (VFR) CONDITIONS WHEN PLACED ON CENTERLINE AND WITHIN 250 FEET OF THE RUNWAY END:
  - VISIBLE TO THE PILOT AT A RANGE OF AT LEAST FIVE (5) NAUTICAL MILES.
  - RECOGNIZABLE AS A LETTER "X" FROM A RANGE OF AT LEAST ONE (1) NAUTICAL MILE.
- PROVIDE LAMP DIMMING CAPABILITY FOR NIGHTTIME OPERATIONS.
- PRODUCE A SIGNAL THAT PROVIDES A HORIZONTAL COVERAGE TO AT LEAST 15 DEGREES ON EACH SIDE OF THE RUNWAY CENTERLINE, AND A VERTICAL COVERAGE FROM 0 DEGREES TO 10 DEGREES ABOVE HORIZONTAL, BOTH DAY AND NIGHT, AT A RANGE OF 1 NAUTICAL MILES.
- ADJUSTABLE AIMING AND LEVELING TO ALLOW TILTING TO AN OPTIMUM ANGLE OF THREE DEGREES FROM VERTICAL.
- WITHSTAND A MINIMUM WIND SPEED OF AT LEAST 40 MPH WITHOUT AFFECTING AIMING OR OPERATION.
- INCLUDE AN ILLUMINATED FAILURE INDICATOR THAT IS VISIBLE FROM THE BACK (RUNWAY SIDE) OF THE UNIT.
- INCLUDE AN OPERATIONS PLACARD IN A CONSPICUOUS LOCATION THAT INSTRUCTS OPERATORS TO VISUALLY CHECK THE OPERATION OF THE DEVICE EVERY TWO HOURS.
- BE CAPABLE OF ONE PERSON SET-UP IN LESS THAN FIVE MINUTES USING A HYDRAULIC RAISING/LOWERING MECHANISM.
- HAVE DIESEL PORTABLE POWER WITH ADAPTER TO RUN DIRECTLY FROM ELECTRICAL OUTLETS.
- HAVE TRAILER HITCH OPTIONS INCLUDING TANDEM TOWING FOR ON-AIRPORT OPERATIONS.
- HAVE THE ABILITY TO PROVIDE UP TO 120 HOURS OF CONTINUOUS OPERATION.
- HAVE FAIL SAFE PROTECTION TO ENSURE THAT THE UNIT STAYS ON AS CONTINUOUS LIT IF THE FLASHER UNIT SHOULD FAIL.
- HAVE DIMENSIONING AND LIGHTING ARRANGEMENT THAT FOLLOWS THE DESIGN CRITERIA OF THE FAA'S AC 150/5345-55 LATEST EDITION.
- THE CONTRACTOR SHALL PROVIDE A SUBMITTAL TO THE ENGINEER FOR REVIEW OF THE PROPOSED LIGHTED "X" RUNWAY CLOSURE MARKER THAT THE CONTRACTOR PROPOSES TO USE ON THE PROJECT AND PRIOR TO ORDERING OR ACQUIRING ANY UNITS. THE SUBMITTAL SHALL CONTAIN SUFFICIENT INFORMATION ON THE PROPOSED LIGHTED "X" RUNWAY CLOSURE MARKER TYPE, MANUFACTURER, AND DATE OF MANUFACTURE, TO PROVIDE THE ENGINEER WITH SUFFICIENT INFORMATION/DATA TO PERFORM A THOROUGH AND COMPLETE REVIEW. THE CONTRACTOR SHALL FURNISH THE UNITS ONLY AFTER THE ENGINEER HAS TAKEN NO EXCEPTION TO THE LIGHTED "X" RUNWAY CLOSURE MARKER SUBMITTAL.
- CONTRACTOR SHALL HAVE AVAILABLE A MINIMUM OF TWO (2) SPARE BULBS PER MARKER

**2 LIGHTED "X" RUNWAY CLOSURE MARKER**  
G-107,G-108,G-109, G-113 SCALE: NTS  
G-110, G-111, G-112



**4 HAUL ROUTE DETAIL ADJACENT TO EAST RAMP TXL**  
G-108,G-109, G-113 SCALE: NTS  
G-110, G-111



I HEREBY CERTIFY THAT THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Signature: Shannon Rachel Holman  
Expiration Date: 4/30/24

DSGN.	DRWN.	CHKD.	APPD.
TR	NM	AC	SH

**KEY PLAN / NOTES:**



NO.	DATE	REVISIONS

**CONSTRUCTION DOCUMENTS**

JULY 11, 2022  
DATE

**PROJECT TITLE :**

**RESURFACE RUNWAY 2-20**

AT  
KAHULUI AIRPORT  
KAHULUI, MAUI, HAWAII

**PROJECT NO.:**

**AM1022-21**

**SHEET TITLE:**

**PHASING AND BARRICADE DETAILS**

DATE :	DWG. NO.
07/11/2022	G-113
SHEET :	13 OF 46 SHEETS