



LAKE HAVASU CITY, ARIZONA
ADMINISTRATIVE SERVICES DEPARTMENT
◆ PROCUREMENT ◆

INVITATION TO BID
RUNWAY LIGHTS AND SIGNS IMPROVEMENT PROJECT
PROJECT NO. B25-PW-ARP-104015-500657
ADDENDUM NO. 2
APRIL 17, 2025

Attention is called to the following changes, additions, clarifications and/or deletions to the original solicitation and they shall be considered in preparing submissions:

There is no change in the opening date. **Submissions are due no later than 3:00 p.m., Arizona Time, APRIL 30, 2025**, at the City Clerk's Office, 2330 McCulloch Blvd. N., Lake Havasu City, AZ 86403 or online via DemandStar.

ITEM ONE (1): MINUTES AND ATTENDANCE

The minutes and attendance sheet from the pre-bid conference held April 10, 2025 are hereby attached (see Attachment A).

ITEM TWO (2): QUESTIONS AND ANSWERS

The following questions were received during the pre-bid conference and subsequent site walk.

Question 1: Please clarify whether or not any new conduit and trenching is required for the new REILs?

Answer 1: The intent of the design is to use the existing conduit paths and replace existing REIL cable segments with new cable.

Question 2: Since the existing foundations remain, and there is only one (1) conduit stubbed out of the concrete base at each REIL, how are supply voltage, sync wires, and runway current interlock wires routed?

Answer 2: The existing cables are routed through the conduit from the existing hand holes. Refer to Attachment B plan markups, as-builts and photos.

Question 3: The detail on EA-404 shows a new external disconnect switch on one of the units, which is the associated bid item for the disconnect switch?

Answer 3: The new 240V disconnect for each master REIL are considered incidental to the installation of new REILs and Contractor should reflect that in Bid Price.

Question 4: Where is the existing current sensing transformer for the REILs located?

Answer 4: Typically the current sensing Isolation Transformer is located in the runway threshold light, closest to the Master Unit. Contractor may have to field verify during the process of removing the existing runway lights for cable and fixture replacement activities. Bid pricing should reflect the labor costs associated with minor, common and typical field verification work.

Question 5: Please label the existing conduits, which carry power, sync signal, and runway current interlock for each REIL.

Answer 5: Every attempt was made to gain access to hand holes and REILs to determine existing conditions. Contractor may have to field verify some items during construction and bid price should reflect additional labor to perform such tasks. Refer to Attachment B plan markups, as-builts and photos.

Question 6: The Northing and the Easting given for each DRM sign is referenced to which part of the sign?

Answer 6: The location point is the center of the inboard end of sign, closest to the pavement / runway.

Question 7: Runway circuits are off for the duration of the project, can the taxiway circuit be off, as well, for safety?

Answer 7: L-100-1.5 Temporary Lighting and Circuits as Section L-100-3.2 reflect that runway cable removals shall be performed in segments and reconnected nightly to maintain operation of the circuits during non-construction hours.

c. Work associated with runway re-cabling shall be performed during coordinated runway closures in segments, reconnected to remaining existing circuit segments and tested for operation prior to the end of each shift before re-opening runway if required to prevent the need for excessive temporary cabling.

100-3.2 DEMOLITION. Airfield Lighting and Signage.

- a. Removal of existing conductors associated with runway(s) that are required to remain active during daytime operations (or as required by Airport) shall be performed in segments during each shift or construction phase, immediately followed by installation of new cable or temporary airfield circuit jumpers, reconnection and testing prior to end of shift to maintain operation of lighting during hours when construction is not occurring.

The Taxiway circuit may be locked out nightly for safety but must be returned to operation at the end of each shift. The runway cable that routes through existing taxiway connectors was replaced in 2018 TWA reconstruction and is designed to remain in place, so access to taxiway cable segments is minimal.

Andrew Klos, CPPB
Senior Procurement Specialist

Attachment A
PRE-BID MEETING MINUTES
FOR
CONSTRUCTION OF
RUNWAY LIGHTS AND SIGNS IMPROVEMENT PROJECT
LAKE HAVASU CITY MUNICIPAL AIRPORT
April 10, 2025

I. INTRODUCTION

- A. Welcome to the Pre-Bid Meeting for the Runway Lights And Signs Improvement Project.
- B. Attendees fill out name, affiliation, mailing address and phone number on the sign-in sheet for correspondence.
- C. A site visit will be conducted immediately following this meeting, no questions answered shall be considered inclusive unless issued in writing.

II. PROJECT DESCRIPTION

- A. General Description - The proposed project generally includes the removal and replacement of the Airport's existing Runway Edge Lights, Runway End Identifier Lights (REIL's), and Runway Distance Remaining Signs and associated conductors.
- B. Project Schedule & Liquidated Damages: Project completion shall be 40 calendar days after Notice to Proceed. For liquidated damages Refer to the Schedule of Liquidated Damages in Section 100.
- C. Special Items:
 - 1. This project will require night work for work within the runway safety areas. Day work will be allowed for work in the vault building and other activities outside the RSA.
 - 2. Be sure to complete and acknowledge enclosure of the forms listed in Section 300 to include:
 - Bid Proposal including the Bid Schedule (unit prices to be written in words and numerals)
 - Arizona Statutory Bid Bond
 - Bidder's Statement of Qualifications
 - Affidavit of Contractor Certifying No Collusion
 - Hazard Communication Program
 - Employment Eligibility VerificationAlso acknowledge receipt of addenda.
 - 3. CSPP Document in proposal – Safety Plan compliance. Must be filled out.
 - 4. Range of estimated construction cost:
\$480K to \$520K

III. SAFETY AND OPERATIONAL REQUIREMENTS

- A. Safety during construction is the No. 1 priority for the protection of the Airport users, employees and the contractor's employees. The Contractor is responsible for safety during Construction on Airport Projects. Contractor is advised to prepare the proposal, accounting for all safety requirements and barricades.

1. The Contractor is responsible for his employees and for compliance with OSHA standards, rules and regulations.
 2. Barricades and lighted X's must be placed prior to start of construction.
 3. No deviations of men and equipment from designated work areas and access routes will be allowed.
- B. Prevention of Foreign Object Damage (FOD) is extremely important as ingestion of material into jet engines and propellers will cause extensive damage.
1. Work areas must be kept clean and pavements must be continually swept to prevent the accumulation of dirt and debris.
 2. Trash and debris must be placed in appropriate containers. It gets windy here and we must prevent trash from blowing onto the airfield.
- C. Security
1. Contractor must provide padlocks for the access gate (to be buddy locked) and gate must be kept locked at all times.
 2. If a gate is to remain open, the contractor must post a gate guard to ensure no unauthorized entry.
 3. Open, unattended gates are subject to fines by the FAA of up to \$10,000.00. Fines incurred by the Owner will be passed on to and become the responsibility of the contractor.
- D. Construction safety phasing plan (CSPP)
1. Phasing plan description
 2. The proposal requires the construction safety plan compliance document be completed, if the contractor has better routing or safety, phasing plans then this would be acceptable but must be approved.

IV. LABOR REQUIREMENTS & DBE GOALS

- A. Prevailing Wage - contractor must pay prevailing wage & Salary Rates in accordance with the current Federal Wage-rate Schedules.
- Wage-rate interviews will be conducted as part of this project.
- B. Bidders List - Bidders are to list all firms that provide a quote for any portion of the project regardless of whether they are awarded or not. Be sure all line items are completed. Any contracts that are issued from the on-call agreements (i.e. Design, planning, etc.) must include this requirement.
- C. Small Business Enterprise Participation - In order to actively implement the City's program elements to foster small business participation and to comply with the requirement of good faith implementation of our DBE program, the City will require for FAA funded projects all bidders to complete and submit the FOSTERING SMALL BUSINESS PARTICIPATION form for construction work items as well as for professional services work items. The forms shall be completed and submitted to the Sponsor at time of bid or for negotiated projects, prior to receiving the Notice to Proceed.
- D. Prompt Payment Requirements - Primes must pay subs within 7 days after receiving payment from the owner. This includes retainage once scope of work is completed.

V. ADDENDA

- A. Any changes or modifications identified at this meeting will be made by addendum to all prospective bidders. At least one more addendum will be issued to distribute the minutes from this meeting.
- B. Other questions raised after this meeting or on the site visit must be submitted by email to Randy Behm, at rbehm@cscos.com with a copy to purchasing@lhcaz.gov. to be considered for future addendum.
- C. No interpretation of the meaning of the Contract Documents, Contract Drawings or other portions of the Contract will be made orally. Every request for such interpretation must be in writing to Randy Behm, at rbehm@cscos.com with a copy to purchasing@lhcaz.gov, and to be given consideration must be received by April 25, 2025, 3:00 p.m. Arizona Time. Inquiries received will then be answered in an Addendum. Failure of any Bidder to receive any such addenda or interpretation shall not relieve said Bidder from any obligation under the bid as submitted. All addenda so issued shall become part of the Contract

VII. QUESTIONS & GENERAL DISCUSSION

Question: Section 500 Contract - 15 states: “*Asbestos License. The CONTRACTOR shall possess an asbestos abatement license if required under A.R.S. Title 32 or 49.*”

Is an asbestos license required?

Answer: An asbestos license is not required.

Question: The documents show both 30 days and 40 days for project completion, which is correct?

Answer: This project has 40 calendar days for completion.

Question: What are the nighttime work hours?

Answer: The nighttime working hours will be 9 p.m. to 6 a.m.

Question: This project contains items with longer lead times than the time allowed after the issuance of the Notice to Proceed.

Answer: A Limited Notice to Proceed will be issued to account for lead times.

A site visit was conducted immediately following the meeting

Question: Are any, or all, of the signs to be relocated?

Answer: Only the Runway Distance Remaining Signs are to be relocated and replaced.

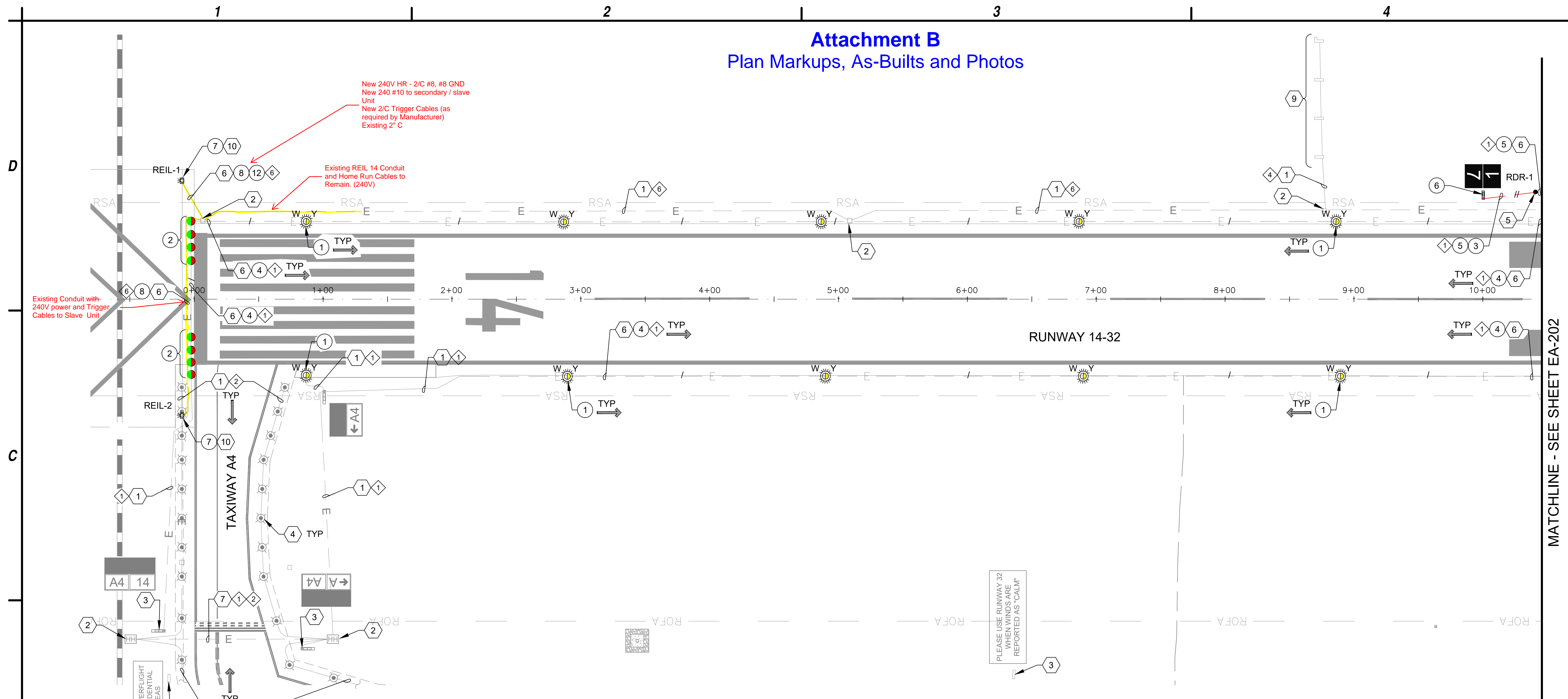
Question: Where is the junction box for the electrical vault building?

Answer: The junction box for the electrical vault building is located approximately 3' from the Southeast wall of the vault building.

Question: Are the threshold lights high intensity?

Answer: No, all are medium intensity lights on a 3-step circuit (CCR).

Attachment B Plan Markups, As-Builts and Photos

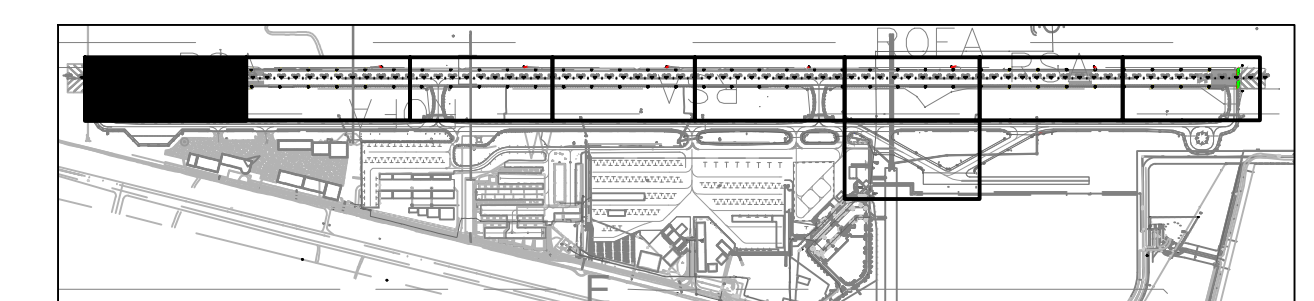
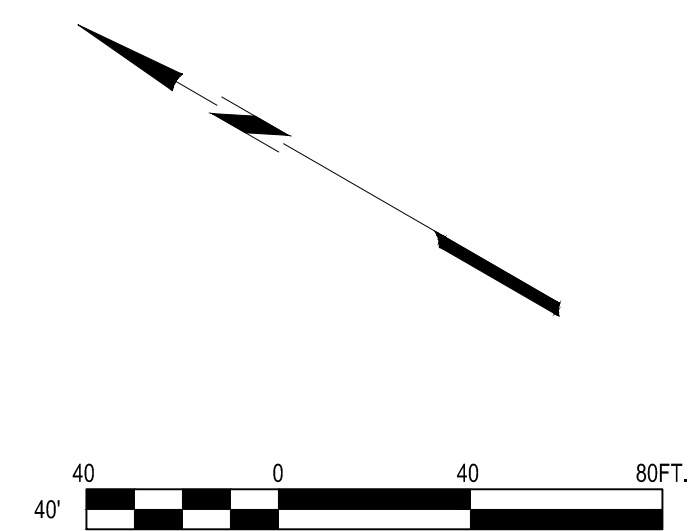


- CONSTRUCTION NOTE ○
- ① NEW ELEVATED LED L-861(L) RUNWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON EXISTING L-867 BASE CAN. (10 TOTAL)
 - ② NEW ELEVATED LED L-861E(L) RUNWAY END/THRESHOLD LIGHT AND ISOLATION TRANSFORMER ON EXISTING L-867 BASE CAN. (8 TOTAL)
 - ③ 1-2" C SE (40 LF)
 - ④ NEW 1/C #8-5KV L-824, TYPE "C" AIRFIELD LIGHTING CABLE. (2,145 LF)
 - ⑤ NEW 2/C #8-5KV L-824, TYPE "C" AIRFIELD LIGHTING CABLE. (50 LF)
 - ⑥ NEW SIZE 5 RUNWAY DISTANCE REMAINING SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. (1 TOTAL)
 - ⑦ INSTALL NEW L-849 (L) LED REIL UNIT ON EXISTING CONCRETE FOUNDATION. (1 PAIR)
 - ⑧ **NEW 2-#10 TWHN CABLES, #10 NEUTRAL, #10 GND (WITH 2/C TRIGGER WIRE) (250 LF)**
 - ⑫ **NEW 2/C #8-5KV L-824, TYPE "C" AIRFIELD LIGHTING CABLE WITH #6 GND (NAVAID) (55 LF)**

- ◇ REFERENCE NOTE ◇
- ① EXISTING CONDUIT AND CONDUCTOR
 - ② EXISTING HANDHOLE/PULLBOX
 - ③ EXISTING AIRFIELD GUIDANCE SIGN
 - ④ EXISTING ELEVATED EDGE LIGHT
 - ⑤ APPROXIMATE SPLICE POINT OF EXISTING CONDUIT AND COUNTERPOISE
 - ⑥ EXISTING CONDUIT
 - ⑦ EXISTING DUCTBANK
 - ⑨ EXISTING PAPI
 - ⑩ EXISTING REIL RUNWAY INTERLOCK/CURRENT SENSING CONTROL CABLES. RECONNECT TO NEW REILS.

- ◇ CIRCUIT IDENTIFICATION ◇
- ① RUNWAY 14/32 CIRCUIT
 - ② TAXIWAY A NORTH CIRCUIT
 - ④ PAPI 14 CIRCUIT
 - ⑥ REIL 14 CIRCUIT Panel P1, CKT 2,4 (240V)

PLEASE USE RUNWAY 32 WHEN WINDS ARE REPORTED AS "CALM"



KEY MAP
NTS

MATCHLINE - SEE SHEET EA-202

C&S
COMPANIES

C&S Engineers, Inc.

16719 East Palmdale Blvd.,
Suite 302
Fountain Hills, AZ 85268
Phone: (480) 816-5548
Fax: (480) 816-5540
www.creng.com

CR engineers

36996
CATHERINE
ALCORN
Professional Engineer (Qualified)
Arizona, U.S.A.

LAKE HAVASU CITY, ARIZONA
INCORPORATED 1978

**RUNWAY LIGHTS AND SIGNS
IMPROVEMENT PROJECT**

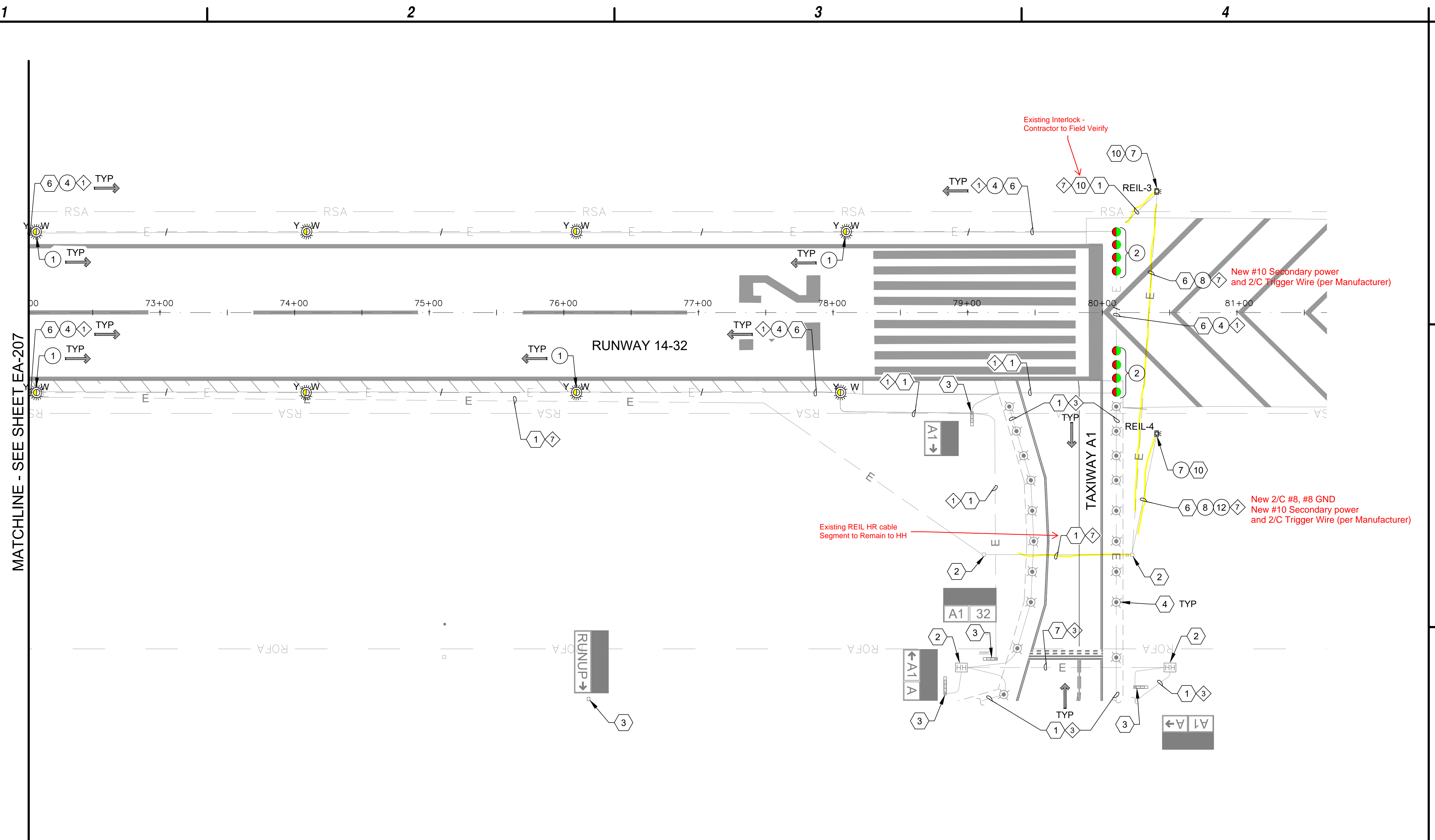
**LAKE HAVASU CITY MUNICIPAL AIRPORT
LAKE HAVASU CITY, ARIZONA**

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: K33004009		
DATE: MARCH 2025		
DRAWN BY: JBW		
DESIGNED BY: SW		
CHECKED BY: CA		

**AIRFIELD
ELECTRICAL
PLAN**

EA-201
16 of 31

Mar 17, 2025 - 4:37pm
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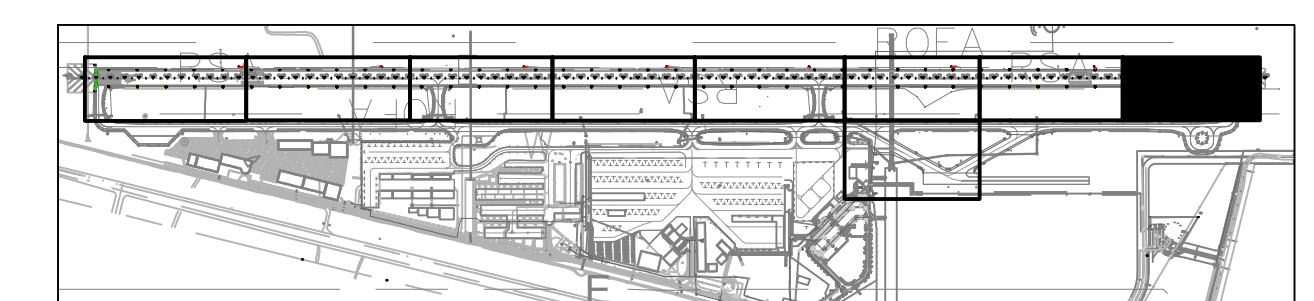
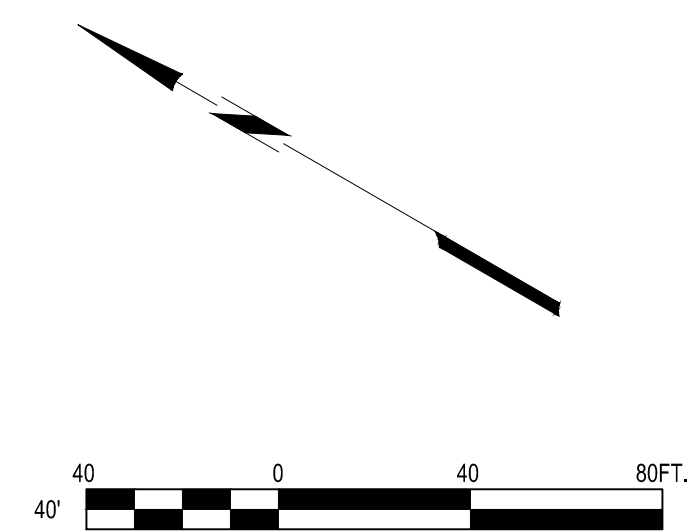


MATCHLINE - SEE SHEET EA-207

- CONSTRUCTION NOTE ○
- ① NEW ELEVATED LED L-861(L) RUNWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON EXISTING L-867 BASE CAN. (8 TOTAL)
 - ② NEW ELEVATED LED L-861E(L) RUNWAY END/THRESHOLD LIGHT AND ISOLATION TRANSFORMER ON EXISTING L-867 BASE CAN. (8 TOTAL)
 - ④ NEW 1/C #8-5KV L-824, TYPE "C" AIRFIELD LIGHTING CABLE. (1,675 LF)
 - ⑦ INSTALL NEW L-849 (L) LED REIL UNIT ON EXISTING CONCRETE FOUNDATION. (1 PAIR)
 - ⑧ NEW 2-#10 TWHN CABLES, #10 NEUTRAL, #10 GND (WITH 2/C TRIGGER WIRE) (405 LF)
 - ⑫ NEW 2/C #8-5KV L-824, TYPE "C" AIRFIELD LIGHTING CABLE WITH #6 GND (NAVAID) (115 LF)

- ◊ REFERENCE NOTE ◊
- ① EXISTING CONDUIT AND CONDUCTOR
 - ② EXISTING HANDHOLE/PULLBOX
 - ③ EXISTING AIRFIELD GUIDANCE SIGN
 - ④ EXISTING ELEVATED EDGE LIGHT
 - ⑥ EXISTING CONDUIT
 - ⑦ EXISTING DUCTBANK
 - ⑩ EXISTING REIL RUNWAY INTERLOCK/CURRENT SENSING CONTROL CABLES. RECONNECT TO NEW REILs.

- ◇ CIRCUIT IDENTIFICATION ◇
- ① RUNWAY 14/32 CIRCUIT
 - ③ TAXIWAY A SOUTH CIRCUIT
 - ⑤ PAPI 32 CIRCUIT
 - ⑦ REIL 32 CIRCUIT Panel P1, CKT 6.8 (240V)



KEY MAP
NTS



**RUNWAY LIGHTS AND SIGNS
IMPROVEMENT PROJECT**

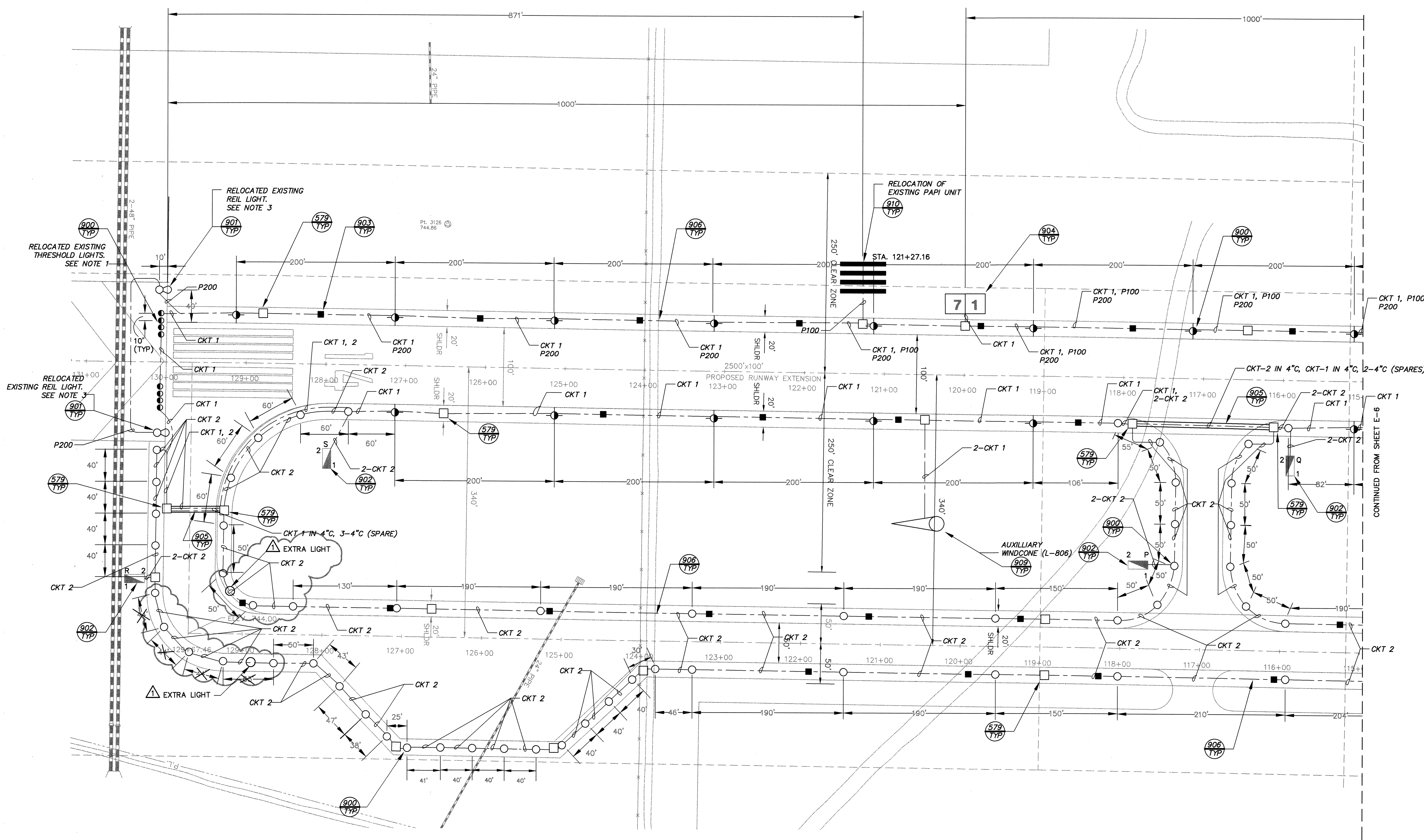
**LAKE HAVASU CITY MUNICIPAL AIRPORT
LAKE HAVASU CITY, ARIZONA**

MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: K33004009		
DATE: MARCH 2025		
DRAWN BY: JBW		
DESIGNED BY: SW		
CHECKED BY: CA		

**AIRFIELD
ELECTRICAL
PLAN**

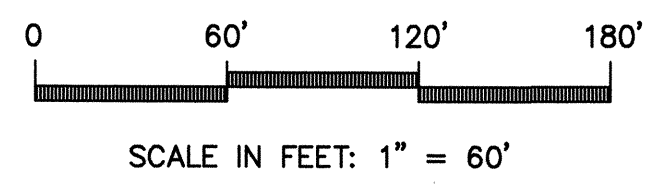
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T:\81478000-LAKE HAVASU\TASK ORDER NO. 8\PLANS\NEW_RUNWAY\AS BUILTS\ABR872E7.DWG



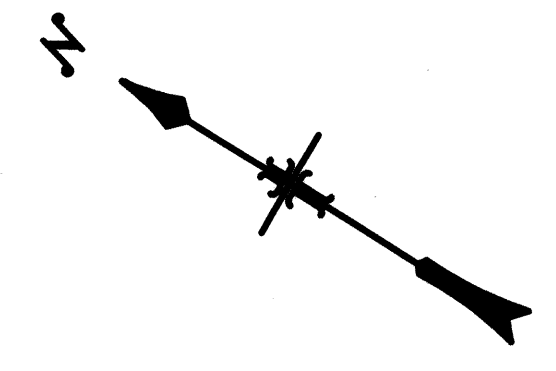
- CKT 1: #8, 1/C 5KV L-824 TYPE C, 2°C
(UNLESS OTHERWISE NOTED)
- CKT 2: #8, 1/C 5KV L-824 TYPE C, 2°C
(UNLESS OTHERWISE NOTED)
- P100: #8, 2/C 600V L-824 TYPE C,
#8 GND, 2°C
- P200: #4, 2/C 600V L-824 TYPE C,
#8 GND, 2°C

- NOTES:**
1. NEW LOCATION FOR 8 EXISTING THRESHOLD LIGHTS.
 2. EXISTING TAXIWAY LIGHT FIXTURE AND TRANSFORMER TO BE DISCONNECTED, REMOVED, AND RETURNED TO OWNER.
 3. NEW LOCATION FOR 2 EXISTING REILS.



CR Engineers, Inc.
4545 East Shea Blvd., Suite 202
Phoenix, AZ 85028-9078
(602)998-5550

CONDUIT SCHEDULE



RECORD DRAWING

NO.	DATE	REVISION	BY	APPD.
1	11/07/02	RECORD DRAWING		

Date	DATE
Designed	DESIGNED
Drawn	DRAWN
Checked	CHECKED
File No.	FILE

**LAKE HAVASU AIRPORT
RUNWAY/TAXIWAY
EXTENSION**

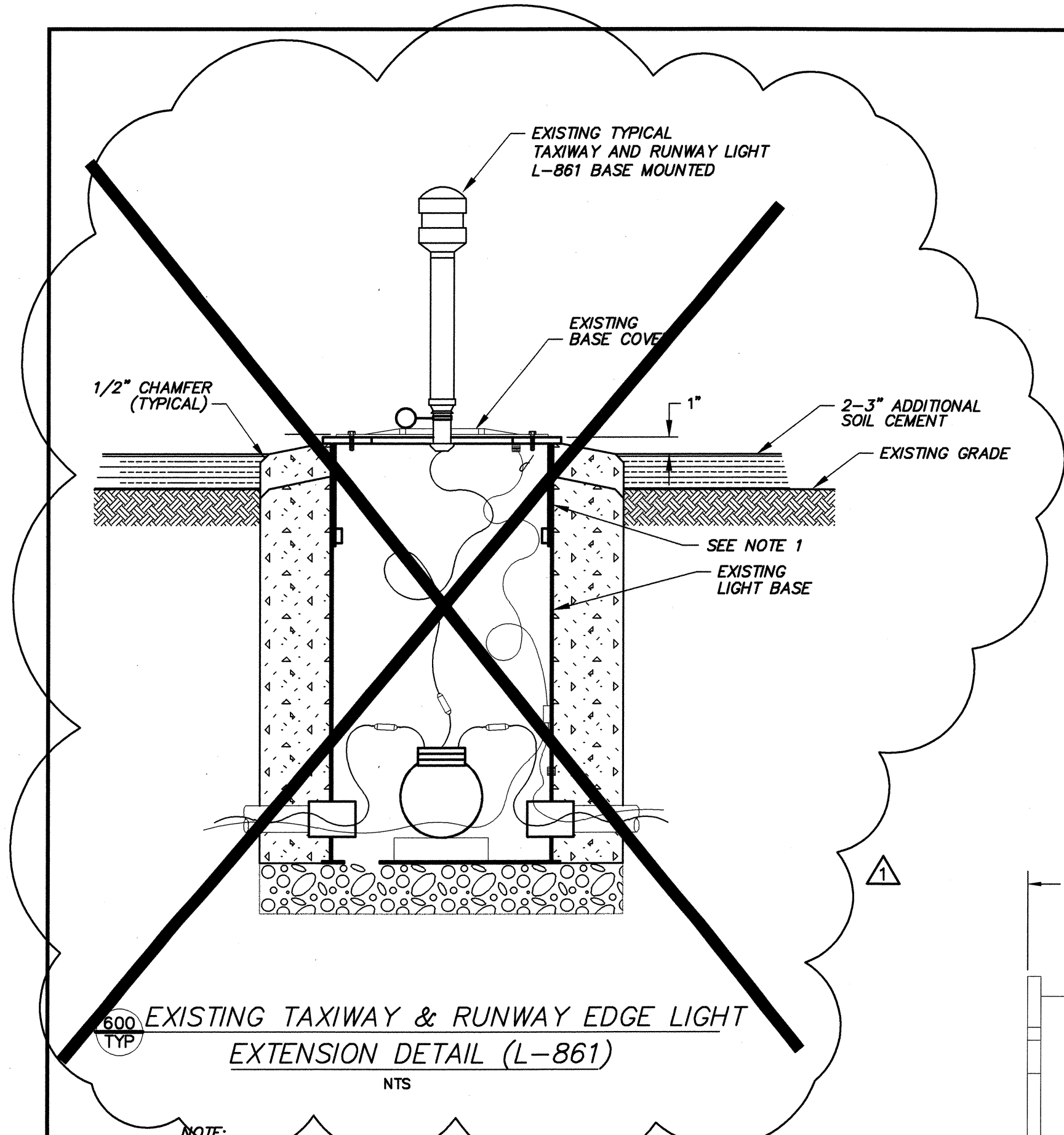
Stantec Consulting Inc.
8211 South 48th Street
Phoenix, Arizona 85044 USA
Phone: (602) 438-2200 Fax: (602) 431-9562
www.stantec.com



RUNWAY/TAXIWAY SITE PLAN

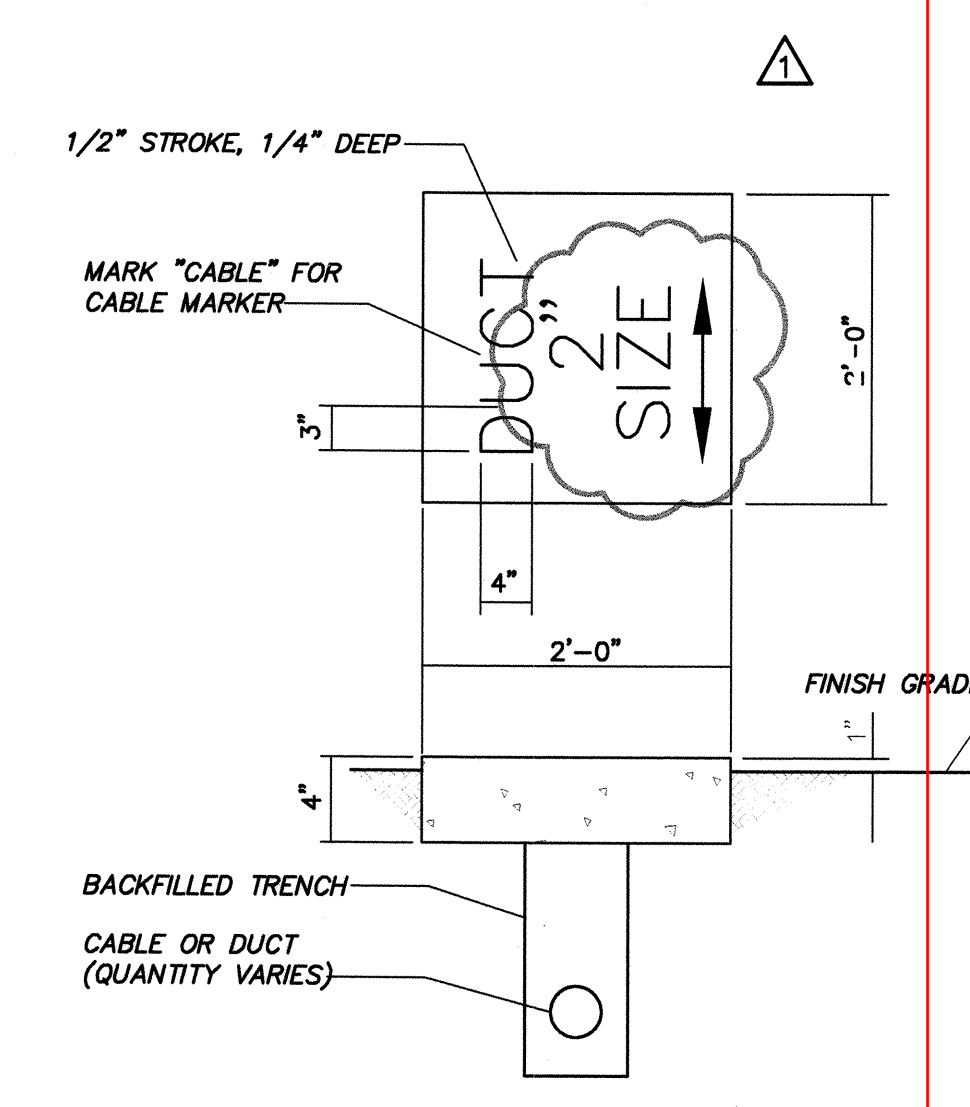
SHEET	E-7
PROJECT NO.	81478000
DWG. NO.	

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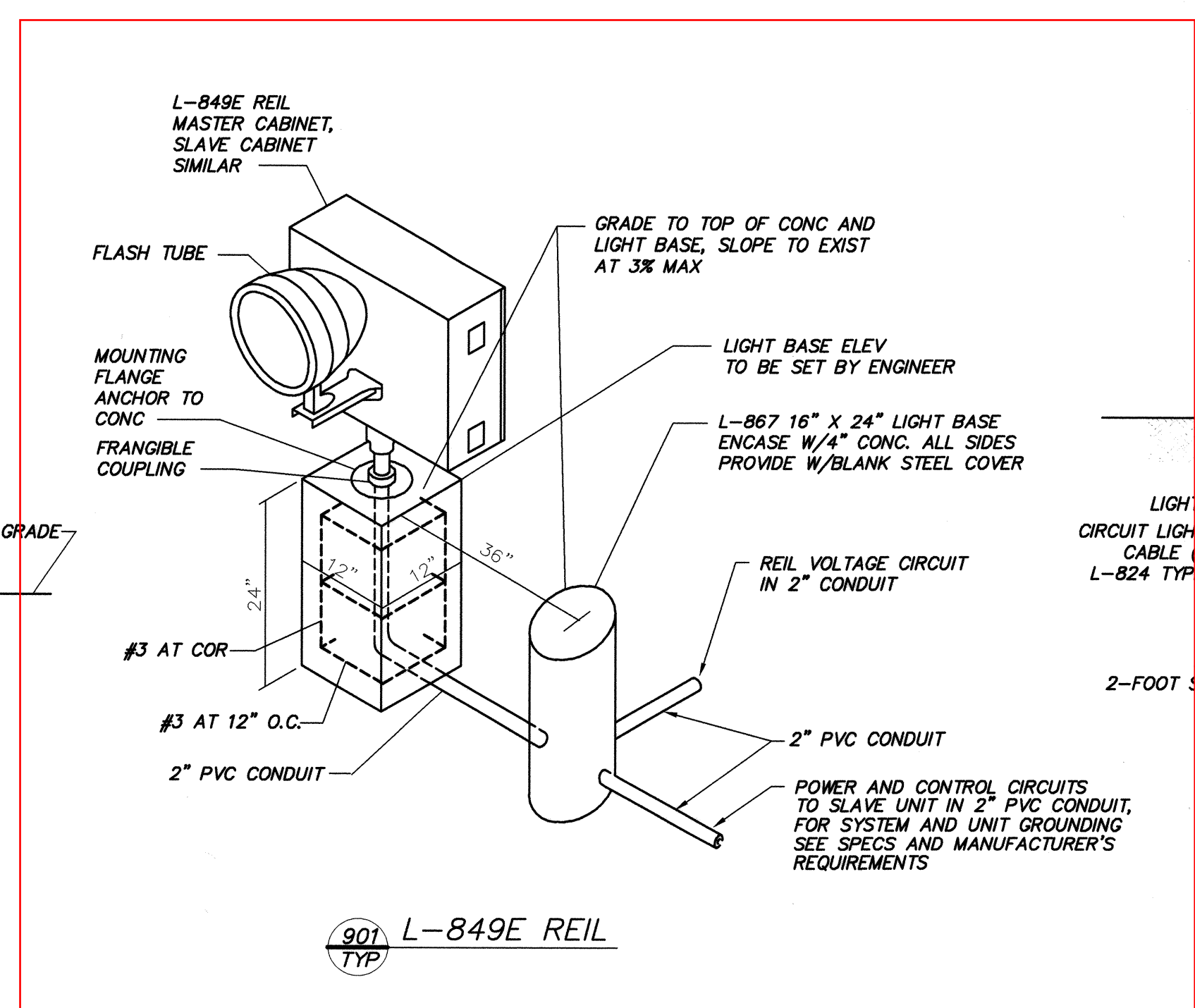


600 TYP EXISTING TAXIWAY & RUNWAY EDGE LIGHT EXTENSION DETAIL (L-861) NTS

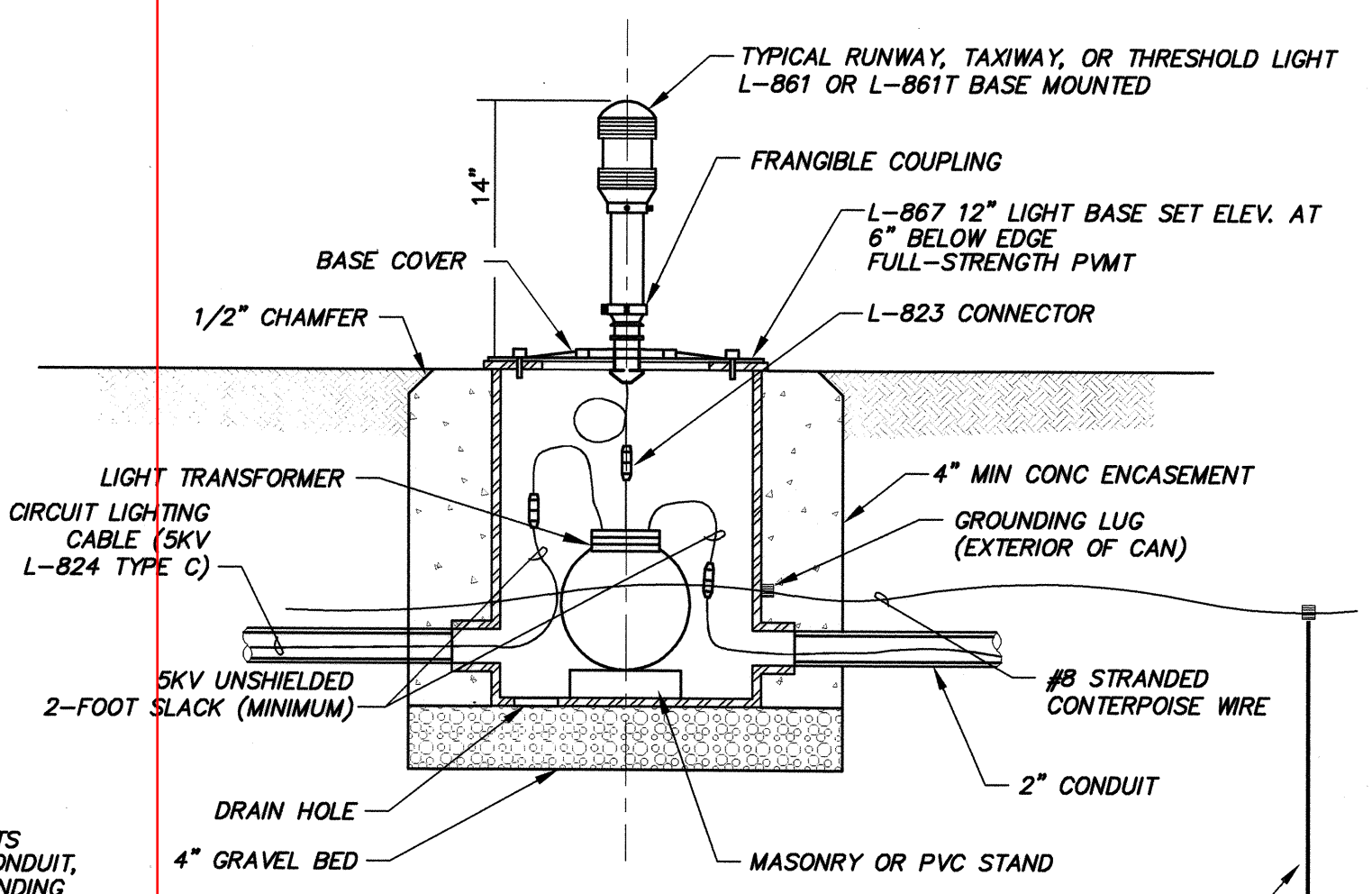
- NOTE:
1. INSTALL NEW ADJUSTABLE BASE EXTENSION BEFORE GRADING. REMOVE MATERIAL AND PLYWOOD COVER AFTER PAVING, AND ADJUST BASE EXTENSION HEIGHT. SECURE WITH SET SCREWS. FINISH WITH CONCRETE RING AROUND BASE COVER. SEE DETAIL 601 TYP



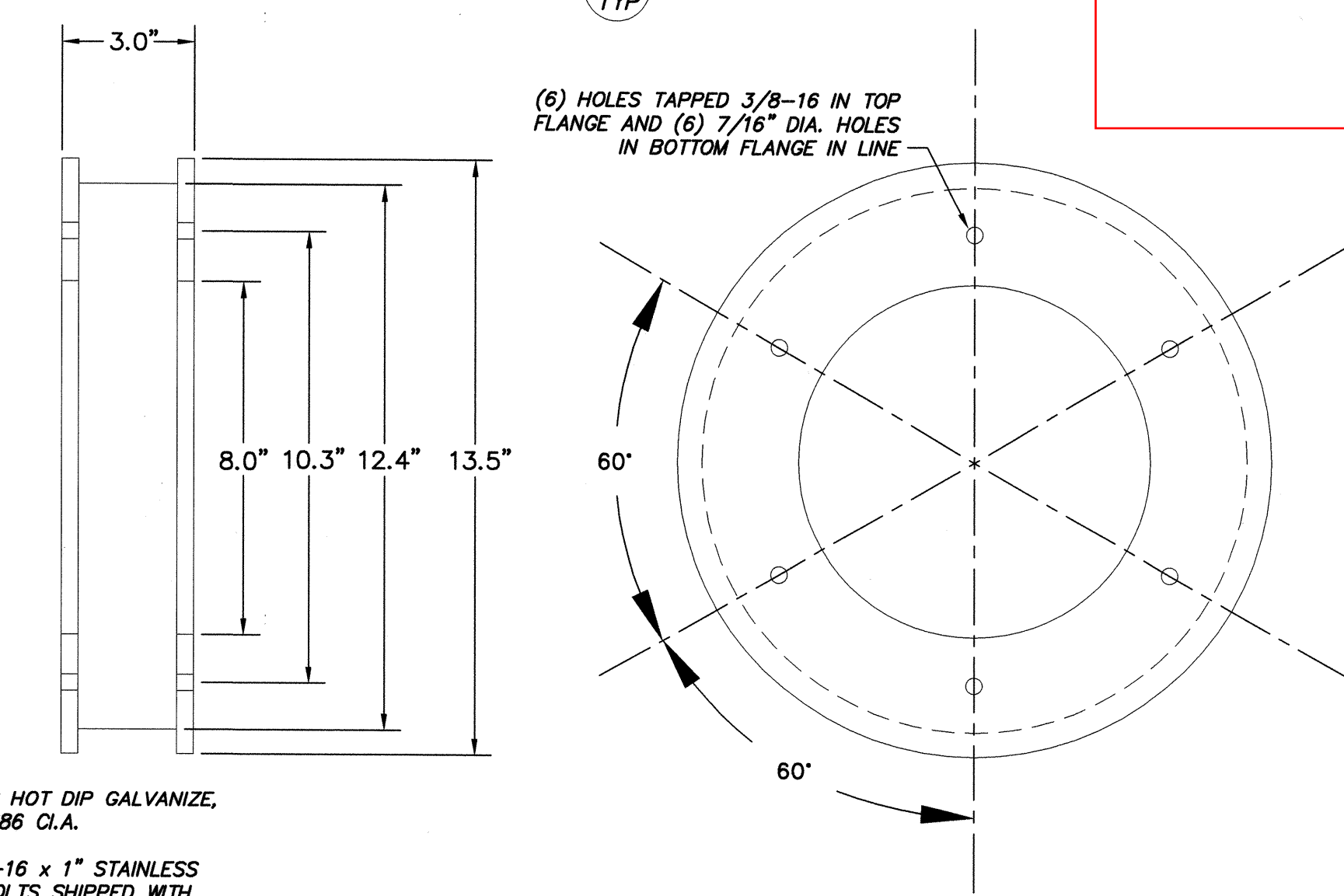
903 TYP CABLE/DUCT MARKER



901 TYP L-849E REIL

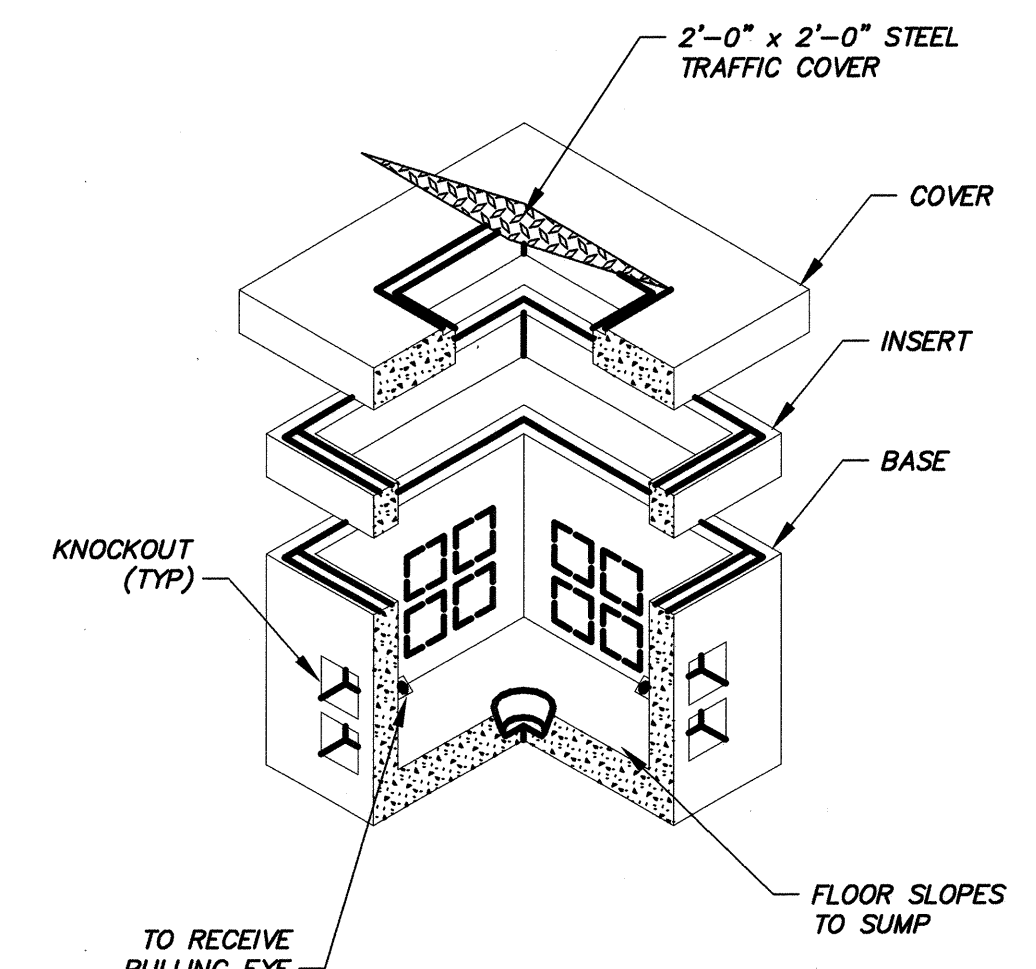


900 TYP RUNWAY, TAXIWAY, AND THRESHOLD LIGHTS

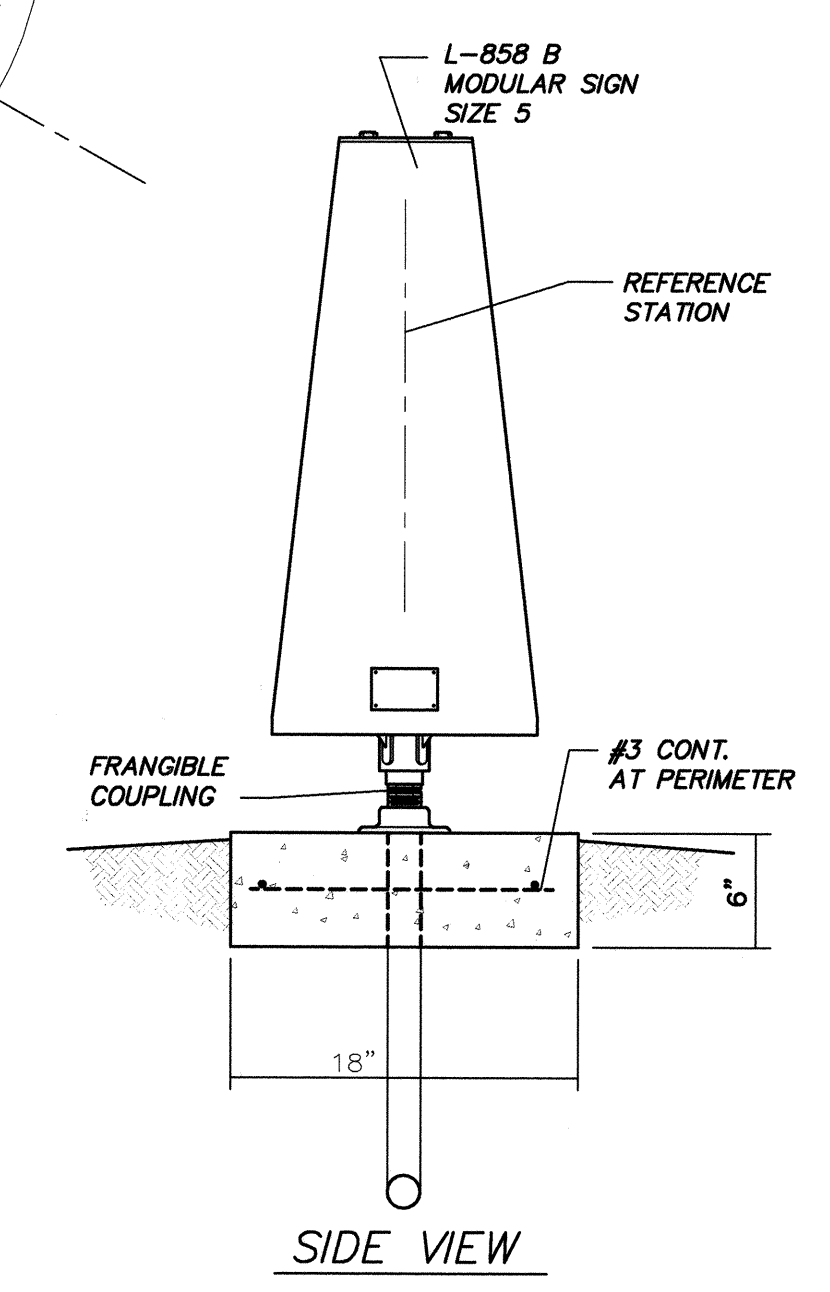


601 TYP L-867 EXTENSION DETAIL NTS

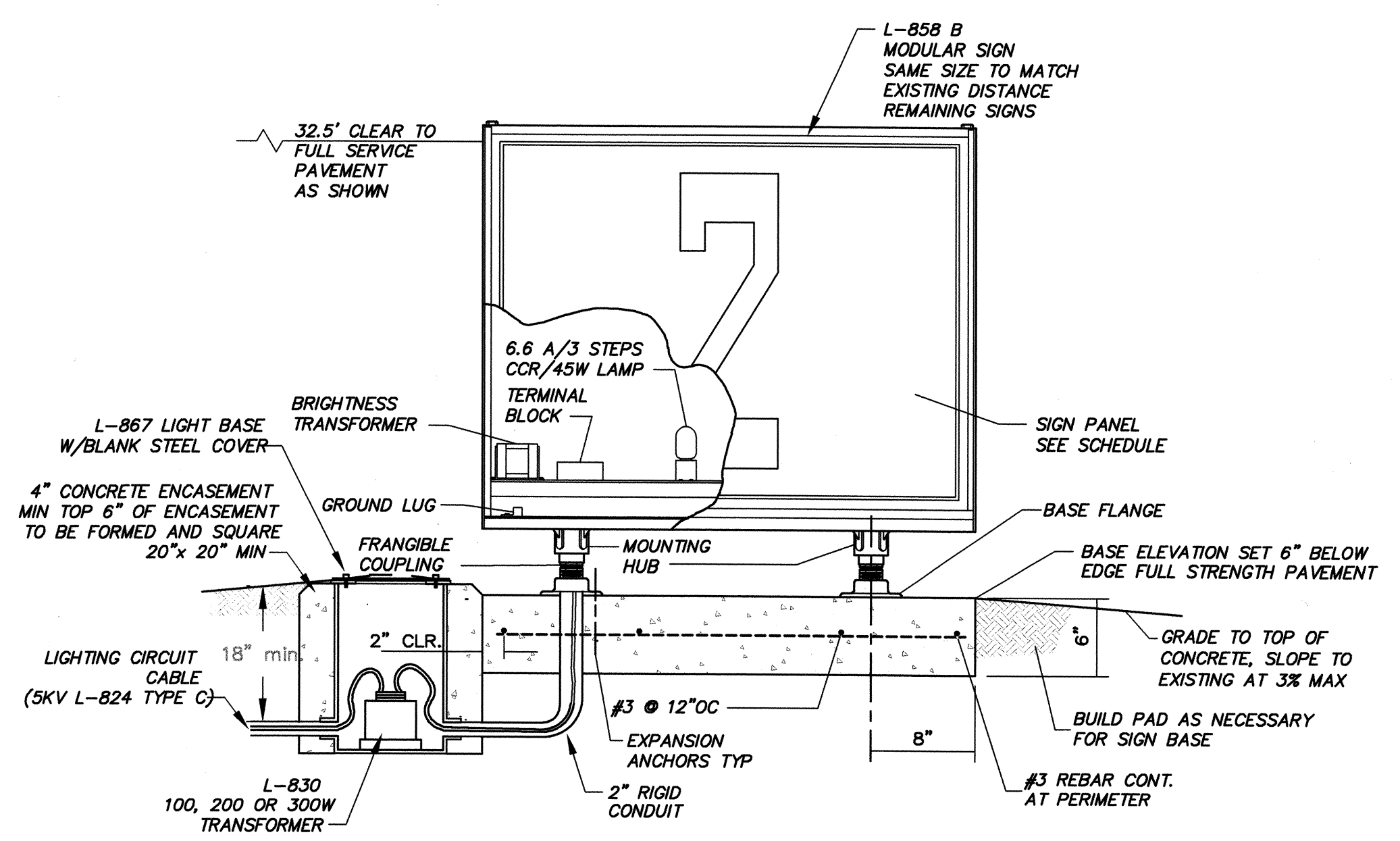
- NOTES:
1. FINISH IS HOT DIP GALVANIZE, ASTM A386 CL. A.
 2. (6) 3/8-16 x 1\"/>
 - 3. PLYWOOD COVER FOR L-867 EXTENSION IS 1/2\"/>



579 TYP UNDERGROUND CONCRETE PULLBOX (3' x 3' x 3')



SIDE VIEW



FRONT VIEW

904 TYP DISTANCE REMAINING SIGNS

EXISTING DISTANCE REMAINING SIGN SCHEDULE

STA	SIDE 1	SIDE 2	TYPE
60+00	1 (EXISTING)	7	EXISTING
70+00	2 (EXISTING)	6	EXISTING
80+00	3 (EXISTING)	5	EXISTING
90+00	4 (EXISTING)	4	EXISTING

NOTE: REPLACE SIDE 2 WITH FACES GIVEN ABOVE.

NEW DISTANCE REMAINING SIGN SCHEDULE

STA	SIDE 1	SIDE 2	TYPE
100+00	5	3	L-858B
110+00	6	2	L-858B
120+00	7	1	L-858B

RECORD DRAWING

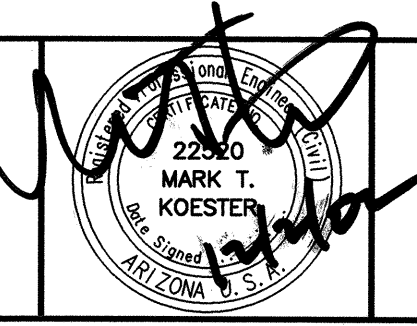
TYPICAL DETAILS

CR Engineers, Inc.
 4545 East Shea Blvd, Suite 202
 Phoenix, AZ 85028-3076
 (602)998-8680

Date 9/22/99
 Designed CA/JA
 Drawn JG
 Checked RVB
 File No. P872E10

**LAKE HAVASU AIRPORT
 RUNWAY/TAXIWAY
 EXTENSION**

Stantec Consulting Inc.
 8211 South 48th Street
 Phoenix, Arizona 85044 USA
 Phone: (602) 438-2200 Fax: (602) 431-9582
 www.stantec.com



NO.	DATE	REVISION	BY	APPD.
1	11/07/02	RECORD DRAWING		

SHEET **E-10**
 PROJECT NO. 81478000
 DWG. NO.



(REIL 32 Master Unit)



(REIL 32 Slave Unit)



(REIL 32 Slave Unit)



(REIL 32 HH at A1 and wiring)



(REIL 14 Master Unit)



REIL 14 Hand Hole – RWY and REIL Wiring



(REIL 14 Master Unit)