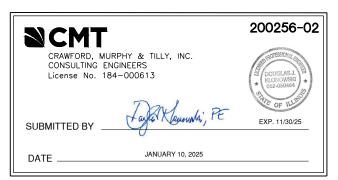
# VILLAGE OF SCHAUMBURG SCHAUMBURG, ILLINOIS

# CONSTRUCTION PLANS FOR SCHAUMBURG REGIONAL AIRPORT

AIRFIELD LIGHTING REHABILITATION: MIRLS, PAPIS, REILs

> ILLINOIS PROJECT: 06C-4837 AIP PROJECT: 3-17-SBGP-184/TBD

> > **JANUARY 10, 2025**



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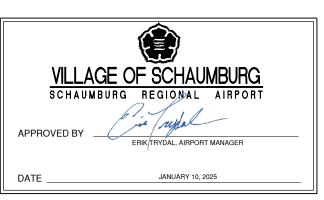
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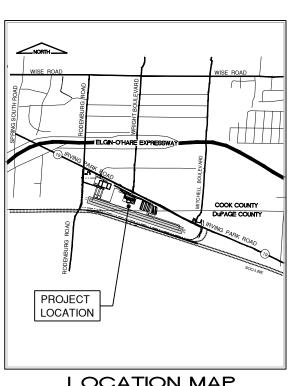
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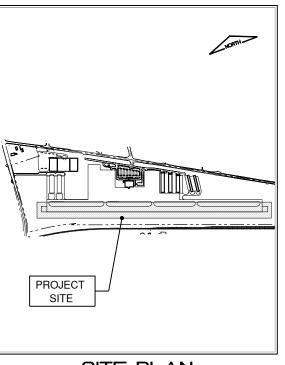
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SITE PLAN

SUMMARY OF QUANTITIES										
ITEM	DESCRIPTION	QUANTITY	UNIT	FIELD QUANTITY						
AR108158	1/C #8 5 KV UG CABLE IN UD	10690	FOOT							
AR108706	1/C #6 COUNTERPOISE	9110	FOOT							
AR109210	VAULT MODIFICATIONS	1	L SUM							
AR109331	15 KW REGULATOR, STYLE 1	1	EACH							
AR125400	REPLACE ISOLATION TRANSFORMER	11	EACH							
AR125511	MIRL, BASE MOUNTED - LED	36	EACH							
AR125546	MI THRESHOLD LIGHT BASE MTD-LED	12	EACH							
AR125565	SPLICE CAN	4	EACH							
AR125620	ABBREVIATED PAPI (L-881 SYSTEM)	2	EACH							
AR125908	REMOVE PAPI	2	EACH							
AR150510	ENGINEER'S FIELD OFFICE	1	L SUM							
AR150520	MOBILIZATION	1	L SUM							
AR800080	3 1/C #4 XLP-USE, 1/C #4 GND IN UD	285	FOOT							
AR800140	2 1/C #6 XLP-USE, 1/C #10 GND - 1" UD	2220	FOOT							
AR800145	2 1/C #4 XLP-USE, 1/C #10 GND IN 1-1/4" UD	3200	FOOT							
AR800192	INSTALL ALCMS L-890	1	L SUM							



JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS www.illinois1call.com

WWW.IIIIIUS LCBILLOIN

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENCINEER SHALL ALSO BE IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENCINEER SHALL ALSO BE IMMEDIATELY NOTIFIED, ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811

DESIGN AIRCRAFT APPROACH CATEGORY: B **DESIGN AIRCRAFT GROUP: I** 

#### SCHAUMBURG REGIONAL AIRPORT

TOWNSHIP: 40 NORTH RANGE: 10 EAST DUPAGE COUNTY

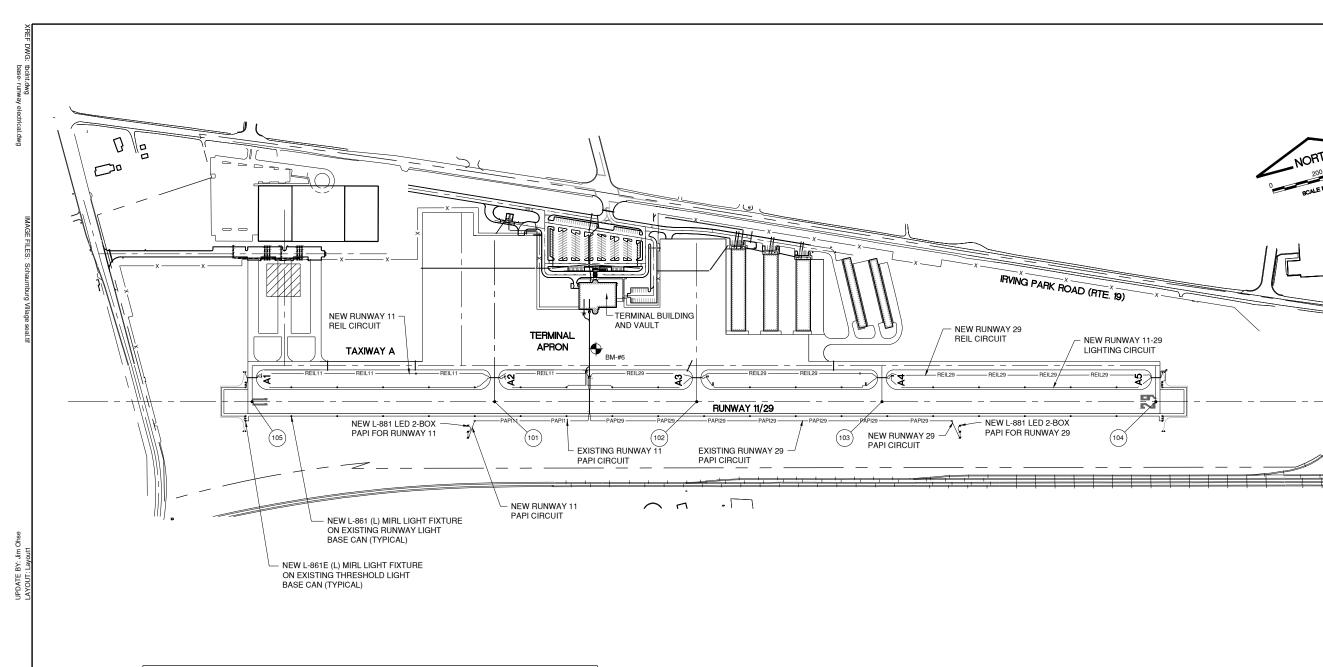
RANGE: 10 EAST COOK COUNTY

**BLOOMINGDALE TOWNSHIP** (SECTION: 4)

SCHAUMBURG TOWNSHIP (SECTION: 33)

TOWNSHIP: 41 NORTH

UNICOM RADIO FREQUENCY: 123.00 MHz



	HORIZONTAL CONTROL (NAD 83)										
POINT NUMBER	DESCRIPTION	NORTHING	EASTING	STATION							
101	RUNWAY 11/29 AND TAXIWAY A2	1,939,016.834	1,046,503.336	110+27.88 Q RUNWAY 11/29							
102	RUNWAY 11/29 AND TAXIWAY A3	1,938,799.016	1,047,316.674	118+69.88 Q RUNWAY 11/29							
103	RUNWAY 11/29 AND TAXIWAY A4	1,938,599.394	1,048,062.067	126+41.54 © RUNWAY 11/29							
104	RUNWAY 11/29 AND TAXIWAY A5	1,938,304.239	1,049,164.185	137+82.50 @ RUNWAY 11/29							
105	RUNWAY 11/29 AND TAXIWAY A1	1,939,278.211	1,045,527.346	100+17.50 @ RUNWAY 11/29							

VERTICAL CONTROL									
→ BENCHMARK	BENCHMARK DESCRIPTION								
BM - #6	NORTH RIM INLET AT EXISTING TERMINAL APRON STA. 214+50, 70'LT & TXY. A	800.17							

#### LEGEND

CONTRACTOR STAGING AND STORAGE AREA

HORIZONTAL / VERTICAL CONTROL POINT

PROJECT REFERENCE POINT

NEW BASE MOUNTED RUNWAY LIGHT (LED)

NEW BASE MOUNTED THRESHOLD LIGHT (LED)

NEW RUNWAY 11/29 CIRCUIT

NEW REIL CIRCUIT

——PAPI 29——

IL. CONTRACT: SH030 IL. LETTING ITEM: 01A

IL. PROJECT: 06C-4837 S.B.G. PROJECT: 3-17-SBGP-184/TBD

**REVISIONS** NUMBER BY DATE

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

REILS PAPIS,

SITE PLAN AND PROJECT CONTROL PLAN SCHAUMBURG REGIONAL AIRPORT SCHAUMBURG, ILLINOIS AIRFIELD LIGHTING REHABILITATION: MIRLs, P

CMT

DESIGN BY: MFZ DRAWN BY: JRO CHECKED BY: DJK APPROVED BY: DJK JOB No: 200256-02

**FINAL** 

SHEET 2 OF 15 SHEETS

EXISTING BUILDING

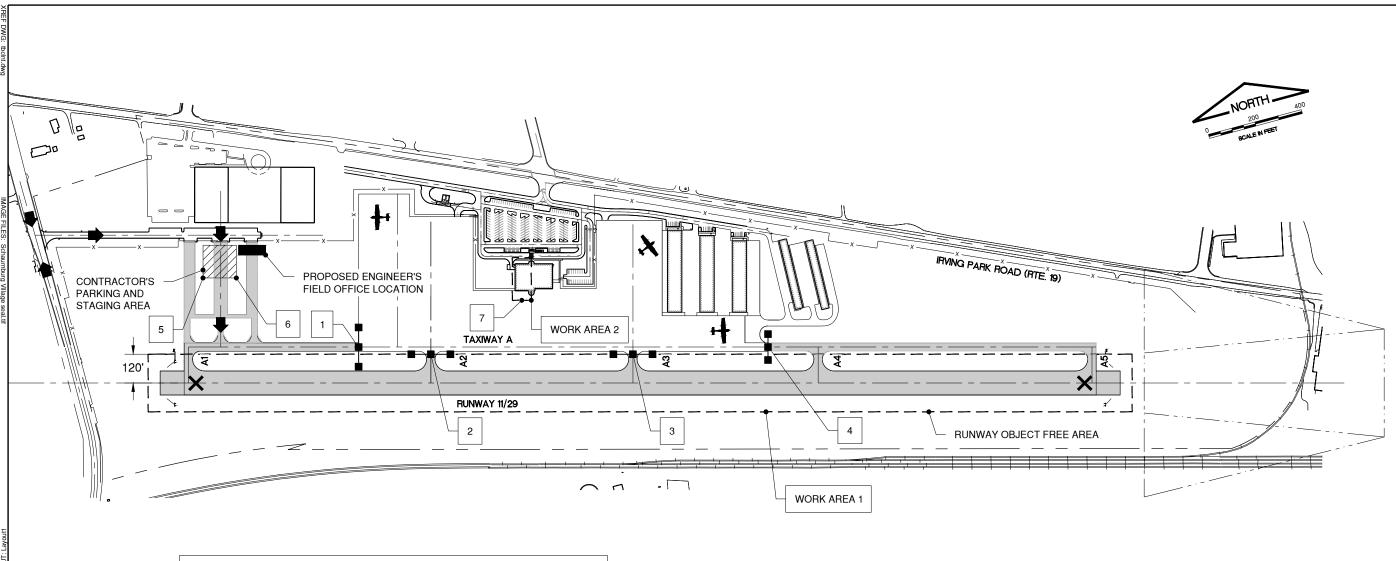
AIRPORT PROPERTY LINE

(101) NEW LED 2 BOX PAPI

ΔΔ EXISTING REIL

EXISTING RUNWAY 29 PAPI CIRCUIT

——PAPI 11—— EXISTING RUNWAY 11 PAPI CIRCUIT



AIRFIELD IMPACT MATRIX									
WORK AREA	WORK ITEMS								
1	RUNWAY 11/29 - CLOSED TAXIWAY A EAST OF TERMINAL APRON - CLOSED	AIRFIELD CABLING RUNWAY LIGHT MODIFICATION PAPI INSTALLATION REIL CABLING							
2	RUNWAY 11/29 - OPEN TAXIWAY A - OPEN	VAULT IMPROVEMENTS							

EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS	
RUNWAY	11-29
APPROACH CATEGORY	В
DESIGN GROUP	ı
RUNWAY SAFETY AREA WIDTH (RSA)	240'
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	240'
TAXIWAY SAFETY AREA WIDTH (TSA)	49'
TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	89'
RUNWAY OBSTACLE FREE ZONE (ROFZ)	250'

	FAA CRITICAL POINT TABLE											
POINT	WORK AREA	NORTHING	EASTING	LATITUDE	LONGITUDE	GROUND ELEVATION	OBSTRUCTION HEIGHT (FT)	ABOVE GROUND ELEVATION				
1	1	1939239.743	1046250.83	N 041°59'26.0"	W088°06'19.0"	788'	25'	813'				
2	1	1939132.75	1046534.38	N 041°59'25.0"	W088°06'15.2"	788'	25'	813'				
3	1	1938914.93	1047347.72	N 041°59'22.9"	W088°06'04.4"	788'	25'	813'				
4	1	1938798.00	1047900.47	N 041°59'21.7"	W088°05'57.1"	788'	25'	813'				
5	1	1939685.16	1045699.57	N 041°59'30.5"	W088°06'26.2"							
6	1	1939649.23	1045833.73	N 041°59'30.1"	W088°06'24.5"							
7	2	1939251.72	1046958.62	N 041°59'26.2"	W088°06'9.6"							

#### SUGGESTED SEQUENCE OF CONSTRUCTION

COORDINATE WITH RESIDENT ENGINEER AND AIRPORT MANAGER FOR REQUIRED PAVEMENT CLOSURES FOR WORK AREA.

PLACE REQUIRED BARRICADES AND PAVEMENT CLOSURE MARKERS.

COVER AND/OR DE-ENERGIZE SIGNS AND LIGHTS FOR CLOSED TAXIWAYS AND RUNWAYS.

COMPLETE LIGHTING IMPROVEMENTS AND RESTORATION.

CLEAN PAVEMENTS, RESTORE DISTURBED WORK AREAS AND REMOVE MISCELLANEOUS DEBRIS FROM WORK AREA.

REMOVE BARRICADES AND PAVEMENT CLOSURE MARKERS.

#### WORK AREA 2

COORDINATE WITH RESIDENT ENGINEER AND AIRPORT MANAGER FOR REQUIRED PAVEMENT CLOSURES FOR WORK AREA.

COMPLETE LIGHTING AND VAULT IMPROVEMENTS

CLEAN PAVEMENTS, RESTORE DISTURBED WORK AREAS AND REMOVE MISCELLANEOUS DEBRIS FROM WORK AREA.

#### **LEGEND**

— — WORK AREA LIMITS AIRPORT PROPERTY LINE EXISTING FENCE CONTRACTOR'S ACCESS ROUTE RUNWAY CLOSED MARKER LOW PROFILE BARRICADES AIRFIELD PAVEMENT CLOSED TO TRAFFIC CONTRACTOR STAGING AND STORAGE AREA

#### **NOTES**

- WORK WITHIN RUNWAY 11/29 RSA AND ROFZ SHALL BE LIMITED TO DAILY CLOSURES, DAILY CLOSURES SHALL BE ANTICIPATED AS 7:00 AM 4:00 PM, UNLESS NOTED OTHERWISE BY THE AIRPORT
- 2. RUNWAY AND TAXIWAY CIRCUITS SHALL BE RECONNECTED AT THE END OF THE WORK DAY BY THE CONTRACTOR FOR LIGHTS AND SIGNS TO REMAIN
- 3. SEE SEQUENCE OF CONSTRUCTION PLAN NOTES AND DETAIL SHEETS FOR CONTRACTOR RESPONSIBILITIES FOR CONTRACTOR ACCESS, INCLUDING CLEANING OF PAVEMENTS LISED AS HALLI BOLITES AND RESTORATION OF STAGING AND STORAGE AREAS
- CONCRETE WASHOUT AREA SHALL BE LOCATED IN THE STAGING AND STORAGE AREA AND SHALL BE MAINTAINED BY THE CONTRACTOR. COST INCIDENTAL

IL. CONTRACT: SH030

IL. LETTING ITEM: 01A IL. PROJECT: 06C-4837 S.B.G. PROJECT: 3-17-SBGP-184/TBD

REVISIONS								
NUMBER	BY	DATE						

THIS BAR IS FOLIAL TO 2"

AT FULL SCALE (34X22).

RE

PAPIs,

PLAN

SCHAUMBURG REGIONAL AIRPORT SCHAUMBURG, ILLINOIS LIGHTING REHABILITATION: MIRLS, P CONSTRUCTION Р EQUENCE AIRFIELD

CMT

DESIGN BY: MFZ DRAWN BY: JRO CHECKED BY: DJK APPROVED BY: DJK 200256-02 JOB No:

**FINAL** 

SHEET 3 OF 15 SHEETS

#### **GENERAL**

- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW THE REQUIREMENTS OF THE AIRPORT'S APPROVED CONSTRUCTION SAFETY AND PHASING PLAN (CSPP), FAA AC 150/5370-2, AND ALL AIRPORT SAFETY AND SECURITY REQUIREMENTS.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE AIRPORT FOR APPROVAL A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH FAA AC 150/5370-2. NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL THE AIRPORT HAS APPROVED THE SPCD.
- THE CSPP COVERS OPERATIONAL SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INDIVIDUAL SAFETY OF HIS/HER PERSONNEL AND MEETING SAFETY REQUIREMENTS.
- A MINIMUM OF 10 DAYS PRIOR TO THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SLIPPLIERS
- A MINIMUM OF 10 DAYS PRIOR TO THE NOTICE TO PROCEED THE CONTRACTOR SHALL SUBMIT THE SPCD FOR APPROVAL
- THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED. TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE NEW IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SLIGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED WITH THE APPROVAL OF THE RESIDENT ENGINEER. HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT.
- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER AND AIRPORT FOR ALL PHASES. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO THE
- ALL EXISTING AND PROPOSED FENCE LINES, EXCEPT AS OTHERWISE NOTED, SHALL BE MAINTAINED AND SHALL SERVE AS CONSTRUCTION AROUND THE PERIMETER OF THE PROJECT. ALL EXISTING GATES SHALL BE MAINTAINED, CLOSED AND LOCKED AS DIRECTED BY THE AIRPORT OWNER'S REPRESENTATIVE, SHOULD THE CONTRACTOR CHOOSE TO KEEP A GATE OPEN FOR CONSTRUCTION OPERATIONS, COMPETENT SECURITY GUARD SHALL MONITOR THE OPEN GATE. ANY COST SHALL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE DUST CONTROL AT ALL TIMES DURING THE PROJECT DURATION. A WATER TRUCK SHALL BE REQUIRED TO BE ONSITE DURING ALL CONSTRUCTION OPERATION WORKING HOURS, UNLESS WAIVED BY THE AIRPORT PAYMENT FOR DUST CONTROL SHALL BE CONSIDERED INCIDENTAL
- PAYMENT FOR ALL AIRSIDE AND BOADWAY TRAFFIC CONTROL INCLUDING BUT NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCING, BARRICADES, SIGNING, FLAGGER, AIR OPERATIONS AREA (A.O.A) LATH AND RIBBON, ETC. SHALL BE CONSIDERED INCIDENTAL
- ALL CONTRACTOR COSTS ASSOCIATED WITH THE REQUIREMENTS LISTED ON THIS SHEET SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNI ESS A SPECIFIC PAY ITEM IS PROVIDED.

#### 1. COORDINATION

- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE WITH THE AIRPORT, RESIDENT ENGINEER, AND ILLINOIS DIVISION OF AERONAUTICS (IDA). THE COST OF PREPARING FOR AND ATTENDING THE PRECONSTRUCTION CONFERENCE SHALL BE INCIDENTAL TO THE
- ON OR BEFORE THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE FOR THE PROJECT. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION
  6. WILDLIFE MANAGEMENT DATE FOR EACH ITEM OF WORK. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS. ALL COSTS ASSOCIATED WITH THE SCHEDULE SHALL BE INCIDENTAL TO THE CONTRACT
- THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A COORDINATION PLAN WITH THE AIRPORT OR HIS/HER DESIGNATED REPRESENTATIVE, REGARDING DE-ENERGIZING AND ENERGIZING OF THE AIRFIELD CIRCUITS IMPACTED BY CONSTRUCTION ACTIVITY.

#### 2. PHASING

- TOTAL BASE BID CONTRACT TIME SHALL BE 49 CALENDAR DAYS.
- PHASING SHALL BE AS SHOWN ON THE CONSTRUCTION SAFETY

#### 3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

- WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT
- AIRCRAFT OPERATIONS HAVE THE RIGHT-OF-WAY ON THE AIRFIELD. ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY YIELD TO ONCOMING AIRCRAFT AT ALL TIMES.
- SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARY RELOCATE EQUIPMENT AT ANY TIME TO ALLOW AN AIRCRAFT TO PASS. THE CONTRACTOR SHALL DO SO IMMEDIATELY AT NO EXTRA COST TO

#### 4. PROTECTION OF NAVIGATION AIDS (NAVAIDS)

THE CONTRACTOR SHALL REMAIN CLEAR OF THE ILS CRITICAL AREAS AND OTHER NAVAIDS FACILITIES AT ALL TIMES.

#### 5. CONTRACTOR ACCESS

- CONTRACTOR ACCESS SHALL BE AS NOTED BELOW AND AS SHOWN ON THE SITE PLAN AND CONSTRUCTION SAFETY AND PHASING PLAN
- THE CONTRACTOR IS TO ACCESS THE SITE USING THE EXISTING GATE SHOWN. THE ENTRANCE SHALL BE SIGNED ACCORDINGLY AS TO ALLOW ONLY CONSTRUCTION VEHICLES ACCESS IF APPLICABLE AND WILL ONLY BE ACCESSIBLE DURING THE CONTRACTOR'S SCHEDULED WORK DAY. ALL SIGNAGE SHALL CONFORM TO IDOT CONSTRUCTION STANDARDS FOR VEHICLES ENTERING AND LEAVING THE SITE.
- SUPERVISORY PERSONNEL SHALL DEMONSTRATE IN THE PRESENCE OF 3. THE AIRPORT MANAGER THAT THEY ARE FAMILIAR WITH AIRPORT RADIO AND AIRPORT DRIVING PROCEDURES IN ORDER TO PERFORM WORK OTHER CONSTRUCTION PERSONNEL CAN BE WITHIN THE AIRFIELD LIMITS PROVIDED THAT THEY ARE UNDER ESCORT AND IN THE PRESENCE OF AN AUTHORIZED SUPERVISOR. KNOWLEDGE OF THE AIRPORTS PROCEDURES BY THE SUPERVISORY PERSONNEL MUST BE DEMONSTRATED PRIOR TO THE START OF CONSTRUCTION.
- DRIVERS OF TRUCKS CONTAINING MATERIAL DELIVERIES (AGGREGATE, CONCRETE, ETC.) NEED NOT OBTAIN AN AIRPORT ID BADGE BUT SHALL BE REQUIRED TO SUBMIT THEIR NAME, DRIVER'S LICENSE NUMBER, TRUCK LICENSE PLATE NUMBER AND NAME OF TRUCKING COMPANY TO THE PRIME CONTRACTOR PRIOR TO ENTERING THE JOBSITE
- THE CONTRACTOR'S STORAGE AND STAGING AREA WILL BE AS SHOWN IN THE CONSTRUCTION SAFETY AND PHASING PLAN SHEET
- THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES ENTERING THE JOB SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE JOB SITE SHALL ALSO BE KEPT
- THE CONTRACTOR'S MATERIAL AND EQUIPMENT, WHEN NOT IN USE. SHALL BE STORED IN THE CONTRACTOR'S STAGING AREA. ALL DELIVERIES, EQUIPMENT REFUELING, EQUIPMENT MAINTENANCE AND EQUIPMENT TRANSFER SHALL TAKE PLACE WITHIN THE CONTRACTOR'S
- THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE SURFACES DEFINED BY F.A.R. TITLE 14 PART 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE
- ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING RUNWAYS, TAXIWAYS AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL BY A FLAGMAN OR ESCORT MONITORING AIRPORT TRAFFIC ON THE RADIO. THE CONTRACTOR SHALL PROVIDE HIS OWN FLAGMEN
- ALL PAVEMENTS, DRIVES OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS, STORAGE AREAS AND/OR STAGING AREAS SHALL BE MAINTAINED AND REPAIRED TO THE SAME CONDITION OR BETTER THAN THEY WERE PRIOR TO BEGINNING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR
- 11. ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.

- THE CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS OR THE RESIDENT ENGINEER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.
- CONTRACTOR ACCESS GATES SHALL REMAIN CLOSED WHEN THE CONTRACTOR IS NOT WORKING
- THE CONTRACTOR SHALL DISPOSE OF ALL TRASH INCLUDING FOOD SCRAPS IN APPROVED CONTRACTOR PROVIDED CONTAINERS

#### 7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

- THE CONTRACTOR SHALL PICK UP ANY FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD PAVEMENTS.
- THE CONTRACTOR SHALL SECURE ALL LOOSE ITEMS FROM VEHICLES PRIOR TO DRIVING ON AIRFIELD PAVEMENTS.

#### 8. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

THE CONTRACTOR SHALL DEVELOP A HAZMAT MANAGEMENT PLAN AND KEEP COPIES ON THE JOBSITE OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS HANDLED ON THE JOBSITE.

#### 9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

- THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
- THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO AIRPORT OPERATIONS PRIOR TO CLOSING ANY PAVEMENTS SO THAT PROPER NOTAMS MAY BE ISSUED BY THE AIRPORT.
- FOR ANY FOUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25', THE CONTRACTOR SHALL PROVIDE TO THE AIRPORT THE TYPE OF EQUIPMENT, TOTAL HEIGHT, AND LOCATION WHERE THE EQUIPMENT WILL BE USED. THE AIRPORT WILL SUBMIT FAA FORM 7460-1 TO THE FAA FOR AN AIRSPACE STUDY. NO EQUIPMENT WITH A HEIGHT GREATER THAN 25' SHALL BE USED UNTIL A DETERMINATION FROM FAA IS RECEIVED.
- IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL 911.
- CONTACTS FOR THIS PROJECT WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING PRIOR TO THE PROJECT START

#### 10. INSPECTION REQUIREMENTS

- THE CONTRACTOR SHALL INSPECT THE JOBSITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECKLIST FOUND IN APPENDIX 3 OF FAA AC 150/5370-2 MAY BE USED TO AID IN THE INSPECTIONS.
- THE CONTRACTOR SHALL ATTEND AN INSPECTION OF EACH PHASE WORK AREA PRIOR TO OPENING THE AREA TO AIRPORT OPERATIONS.

#### 11. UNDERGROUND UTILITIES

- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROURD UTILITIES AT CRITICAL POINTS. SEE SECTION 70-17 OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE FITHER EXPRESSED, OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY/OWNER OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE OWNER AND THE ENGINEER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.
- BEFORE INITIATING ANY DIGGING, DRILLING OR EXCAVATING ON THE AIRPORT PROPERTY. THE CONTRACTOR SHALL CALL JULILIE, AND CONTACT THE LOCAL FAA OFFICE TO ARRANGE FOR UTILITY LOCATES. SEE SECTION 70-16 OF THE SPECIAL PROVISIONS FOR UTILITY CONTACT INFORMATION.
- SHOULD A UTILITY COMPANY OR GOVERNMENT AGENCY BE UNABLE TO LOCATE FACILITIES, THE CONTRACTOR SHALL LOCATE THESE FACILITIES. PAYMENT FOR THIS LOCATION SHALL BE INCIDENTAL TO THE IMPROVEMENTS REQUIRING THE LOCATE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL AIRPORT OWNED UTILITIES AND SHALL BE CONSIDERED INCIDENTAL TO THE

#### 12. PENALTIES

NONCOMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE AIRPORT'S APPROVED. CSPP AND THE CONTRACTOR'S APPROVED SPCD MAY RESULT IN FINES AS ALLOWED BY LAW

#### 13. SPECIAL CONDITIONS

ADJACENT CONSTRUCTION MAY IMPACT THE OPERATIONS OF THE CONTRACTOR

#### 14. RUNWAY AND TAXIWAY VISUAL AIDS

RUNWAY OR TAXIWAY CLOSURES (IF REQUIRED) ARE AS DETAILED IN THE CONSTRUCTION SAFETY AND PHASING PLAN SHEET FOR THIS PROJECT, IF ANY BUNWAY OR TAXIWAY CLOSURES ARE REQUESTED. BY THE CONTRACTOR AND APPROVED BY THE AIRPORT, THE CONTRACTOR SHALL USE MARKING, LIGHTING AND SIGNS THAT FOLLOW THE REQUIREMENTS OF FAA AC 150/5370-2.

#### 15. MARKING AND SIGNS FOR ACCESS ROUTES

MARKING AND SIGNAGE FOR THE ACCESS ROUTE SHALL BE AS SHOWN ON THE CONSTRUCTION SAFETY AND PHASING PLAN SHEET OR AS DIRECTED BY THE RESIDENT ENGINEER.

#### 16. HAZARD MARKING AND LIGHTING

- THE CONTRACTOR SHALL FURNISH ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, AND HIS/HER CONSTRUCTION EQUIPMENT
- ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND/OR LIGHTED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2 AND 150/5210-5 AT ALL TIMES WHILE OPERATING ON AIRPORT PROPERTY. THE MAXIMUM EQUIPMENT HEIGHT IS 25'.
- BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE CONSTRUCTION SAFETY AND PHASNG PLAN SHEET OR AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL PLACE ALL BARRICADES AND CONSTRUCTION SETBACK LINES ITEMS AS SHOWN PRIOR TO INITIATING WORK IN FACH PHASE, ALL COSTS TO FURNISH INSTALL, REPOSITION, AND MAINTAIN THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL INSPECT THE BARRICADES ONCE DURING EACH WORK DAY TO INSURE PROPER PLACEMENT AND PROPER OPERATION OF THE RED LIGHTS AND FLAG PLACEMENT.
- ACCESS TO ACTIVE RUNWAY AND TAXIWAY PAVEMENTS SHALL BE SIGNED WITH STOP SIGNS MOUNTED ON TYPE II BARRICADES (2 EACH, RIGHT AND LEFT). IN ADDITION TO THE STOP SIGNS, WARNING SIGNS. (2 EACH, RIGHT AND LEFT) SHALL BE MOUNTED. WARNING SIGNS SHALL STATE "UNAUTHORIZED ACCESS NOT ALLOWED".

#### 17. PROTECTION

CONTRACTOR PERSONNEL, VEHICLES, EQUIPMENT AND BARRICADES SHALL NOT BE ALLOWED WITHIN THE TAXIWAY OBJECT FREE AREA (TOFA) OF ACTIVE TAXIWAYS AND THE RUNWAY SAFETY AREA (RSA)

#### 18. OTHER LIMITATIONS ON CONSTRUCTION

- IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE AIRPORT, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT
- THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING RUNWAYS AND TAXIWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE RESIDENT ENGINEER SHOULD THE CONTRACTOR TRACK ANY DEBRIS ONTO EXISTING PAVEMENTS, THIS DEBRIS SHALL BE REMOVED IMMEDIATELY WITH A PICK UP SWEEPER. A PICK LIP SWEEPER SHALL BE REQUIRED TO BE ON SITE AND OPERATE DURING ALL CONSTRUCTION OPERATION WORKING HOURS.
- THE CONTRACTOR SHALL PROVIDE WASTE RECEPTACLES THROUGHOUT THE WORK ZONE AND MAINTAIN SANITARY FACILITIES FOR EMPLOYEES TO USE. FACILITIES WITHIN THE HANGARS/AIRPORT BUILDINGS SHALL NOT BE USED.
- WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICAL AREA LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVEABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED. ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE APPROVED BY THE ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY.
- THE CONTRACTOR SHALL SUPPLY AND HAVE IN THEIR POSSESSION AT ALL TIMES AT LEAST ONE AIRPORT RADIO. IN THE EVENT THAT THE AIRPORT MANAGER NEEDS TO CONTACT THE CONTRACTOR DIRECTLY, THE OPERATOR OF SAID RADIO SHALL BE FAMILIAR WITH AIRPORT RADIO PROCEDURES AND TUNED INTO THE GROUND CONTROL FREQUENCY.
- BROKEN CONCRETE, BROKEN ASPHALT, AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS

IL. CONTRACT: SH030

IL. LETTING ITEM: 01A

IL. PROJECT: 06C-4837 S.B.G. PROJECT: 3-17-SBGP-184/TBD

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PAPIS, SCHAUMBURG REGIONAL AIRPORT SCHAUMBURG, ILLINOIS LIGHTING REHABILITATION: MIRLs, P Qν TRUCTION DETAILS CONS S AND ШШ CE OF

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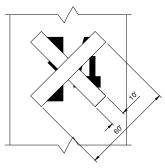
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SHEET 4 OF 15 SHEETS

#### **CLOSED RUNWAY MARKER NOTES**

- DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING YELLOW CROSSES AT THE LOCATION AND DIMENSIONS DETAILED ON THE SEQUENCE OF CONSTRUCTION AND PER AC 150/5370-2 (LATEST EDITION). THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.
- 2. TEMPORARY CLOSED RUNWAY MARKERS SHALL BE YELLOW.
- TEMPORARY MARKERS SHALL BE MATERIAL APPROVED BY THE ENGINEER.
- 4. CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION.
- 5. MARKERS SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
- COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

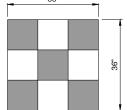


**TEMPORARY** CLOSED RUNWAY MARKER DETAIL

ON PAVEMENT - NO SCALE

#### AIRFIELD LIGHTS AND SIGNS NOTES

- CONTRACTOR SHALL COVER ALL AIRFIELD SIGNS AND TAXIWAY LIGHTS ON CLOSED TAXIWAYS UNTIL THE TAXIWAY IS RE-OPENED FOR AIRCRAFT USE. THE METHOD AND MATERIALS USED TO COVER THE SIGNS AND LIGHTS SHALL MEET THE ENGINEER'S AND AIRPORT'S APPROVAL. COST INCIDENTAL TO THE CONTRACT. REMOVING LAMPS FROM ENERGIZED FIXTURES AS A MEANS TO REMOVE THE LIGHTS OR FIXTURES FROM SERVICE SHALL NOT BE
- 2. CONTRACTOR SHALL TURN OFF RUNWAY EDGE LIGHTING REGULATOR AND LOCK-OUT/TAG-OUT CIRCUIT BREAKER AND CUT OUT INSIDE THE ELECTRICAL VAULT. DURING ALL RUNWAY CLOSURES. CONTRACTOR SHALL COORDINATE ACCESS TO THE VAULT WITH THE AIRPORT MANAGER/RESIDENT ENGINEER PRIOR TO RE-OPENING THE RUNWAY, THE CONTRACTOR SHALL COORDINATE WITH AIRPORT MANAGER/RESIDENT ENGINEER TO RE-ENERGIZE THE RUNWAY CIRCUIT.

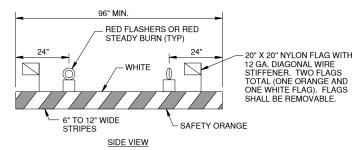


CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG

NOT TO SCALE



#### PLAN VIEW



#### AIRSIDE LOW PROFILE LIGHTED BARRICADE

NOT TO SCALE

#### **BARRICADE NOTES**

- 1. FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90^.
- 2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR
- 3. BARRICADES TO BE PLACED WITH A MAXIMUM OF 4' SPACING END TO END UP TO THE EDGE OF PAVEMENT ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
- 4. FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
- 5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF IT COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
- BARRICADES SHALL BE OF A COMMERCIAL DESIGN AND SHALL MEET CURRENT FAA REQUIREMENTS.
- 7. PLACE ALL BARRICADES OUTSIDE RUNWAY SAFETY AREAS AND OUTSIDE TAXIWAY OBJECT FREE AREAS.
- 8. ALL COST ASSOCIATED WITH THE LOW PROFILE BARRICADES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

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IL. CONTRACT: SH030 IL. LETTING ITEM: 01A IL. PROJECT: 06C-4837 S.B.G. PROJECT: 3-17-SBGP-184/TBD

RE PAPIs, SCHAUMBURG REGIONAL AIRPORT SCHAUMBURG, ILLINOIS LIGHTING REHABILITATION: MIRLs, P

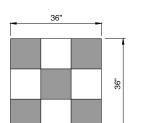
CE OF CONSTRUCTION NOTES AND DETAILS SEQUENC SENERAL

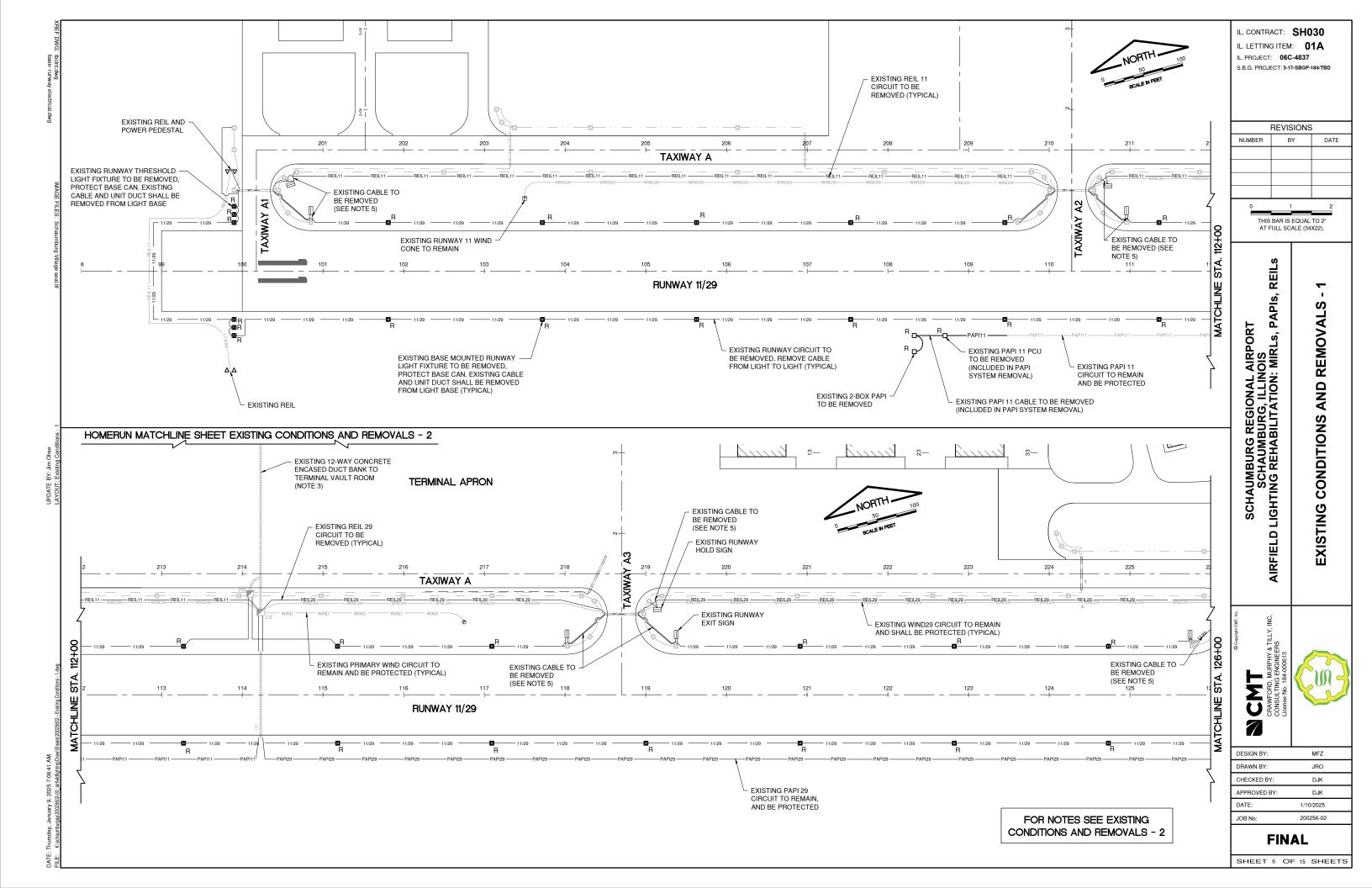
AIRFIELD

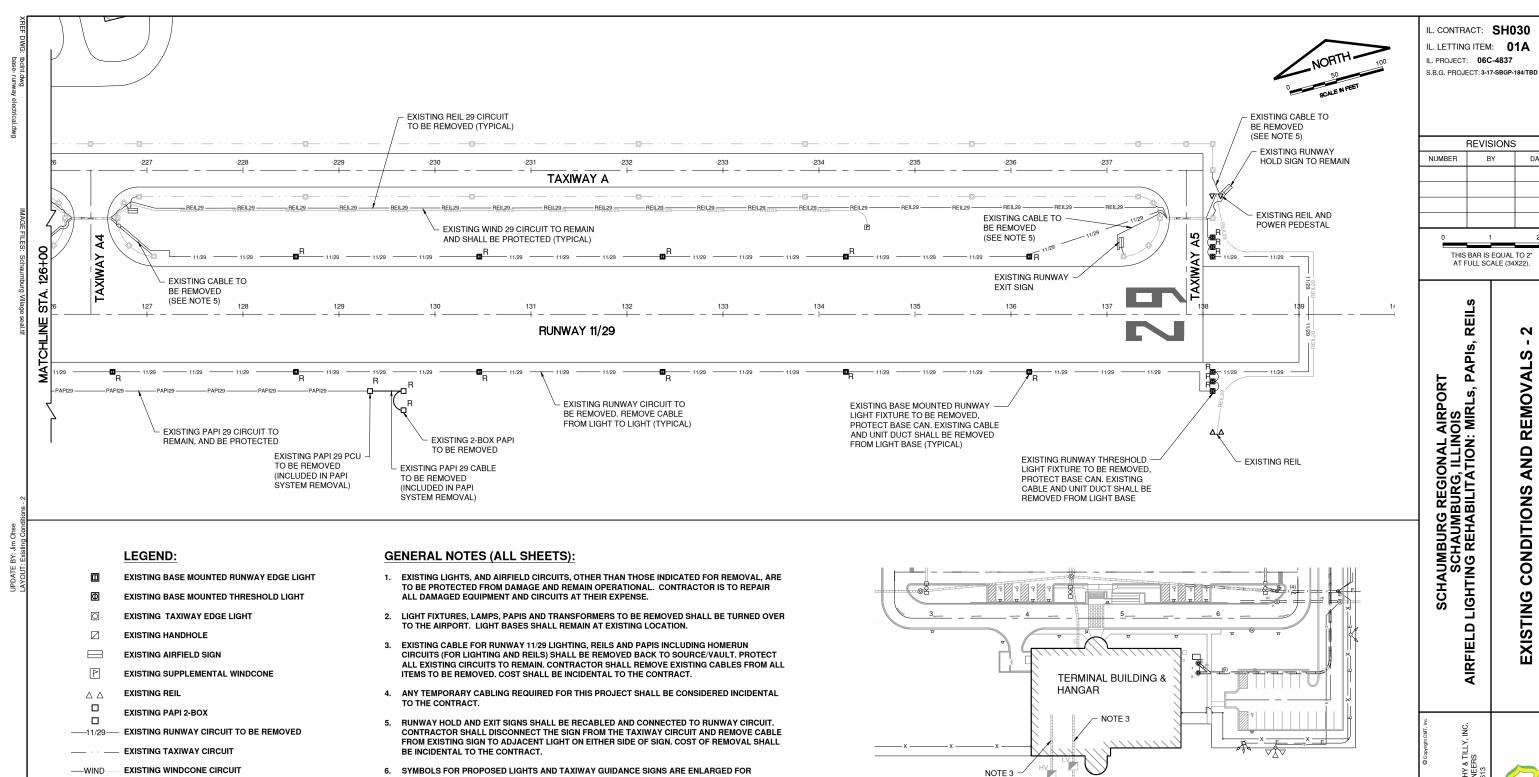
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SHEET 5 OF 15 SHEETS







**EXISTING REIL CIRCUIT TO BE REMOVED** 

**EXISTING HOME RUN ELECTRICAL DUCT** 

**EXISTING UNDERDRAIN EXISTING ELECTRICAL DUCT** 

ITEM TO BE REMOVED — EXISTING PAPI CIRCUIT



HOMERUN MATCHLINE SHEET EXISTING CONDITIONS AND REMOVALS - 1

AIRFIELD

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AND REMOVALS

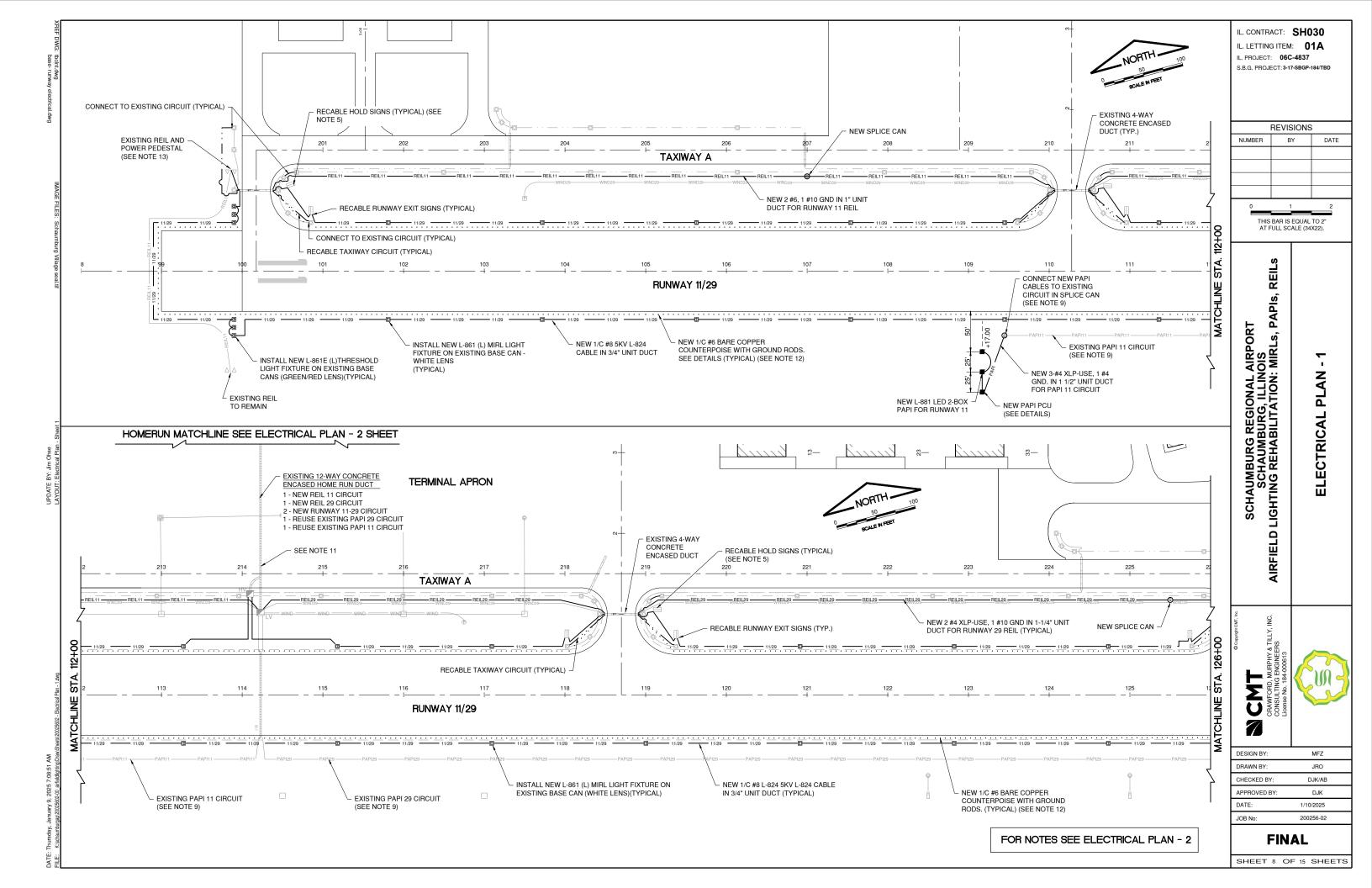
CONDITIONS

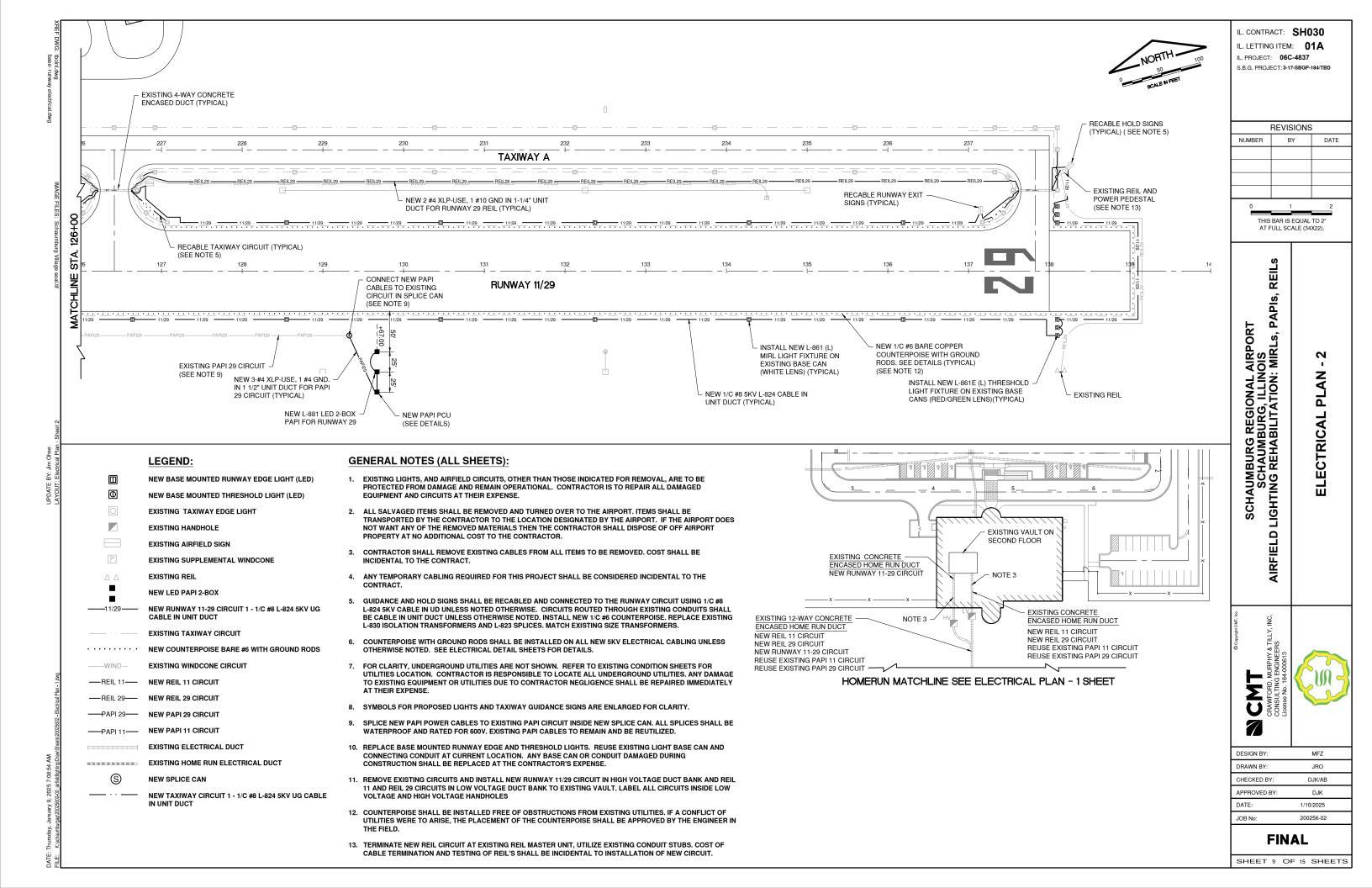
**EXISTING** 

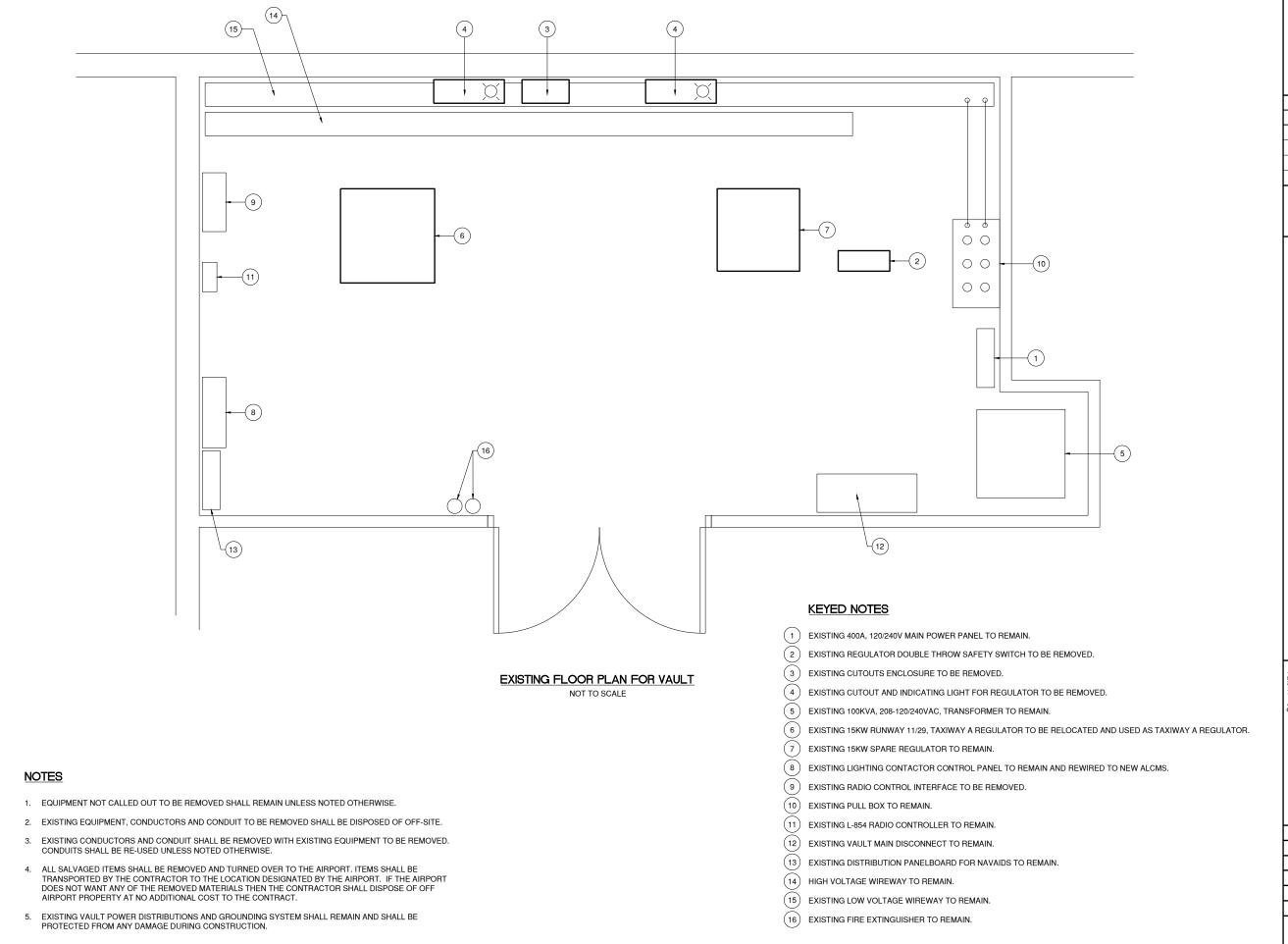
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SHEET 7 OF 15 SHEETS







IL. CONTRACT: SH030
IL. LETTING ITEM: 01A

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SCHAUMBURG REGIONAL AIRPORT
SCHAUMBURG, ILLINOIS
AIRFIELD LIGHTING REHABILITATION: MIRLS, P.
VAULT EXISTING CONDITIONS

CRAWFORD, MURPHY & TILLY, INC. CONSULTING ENGINEERS License No. 184-000613

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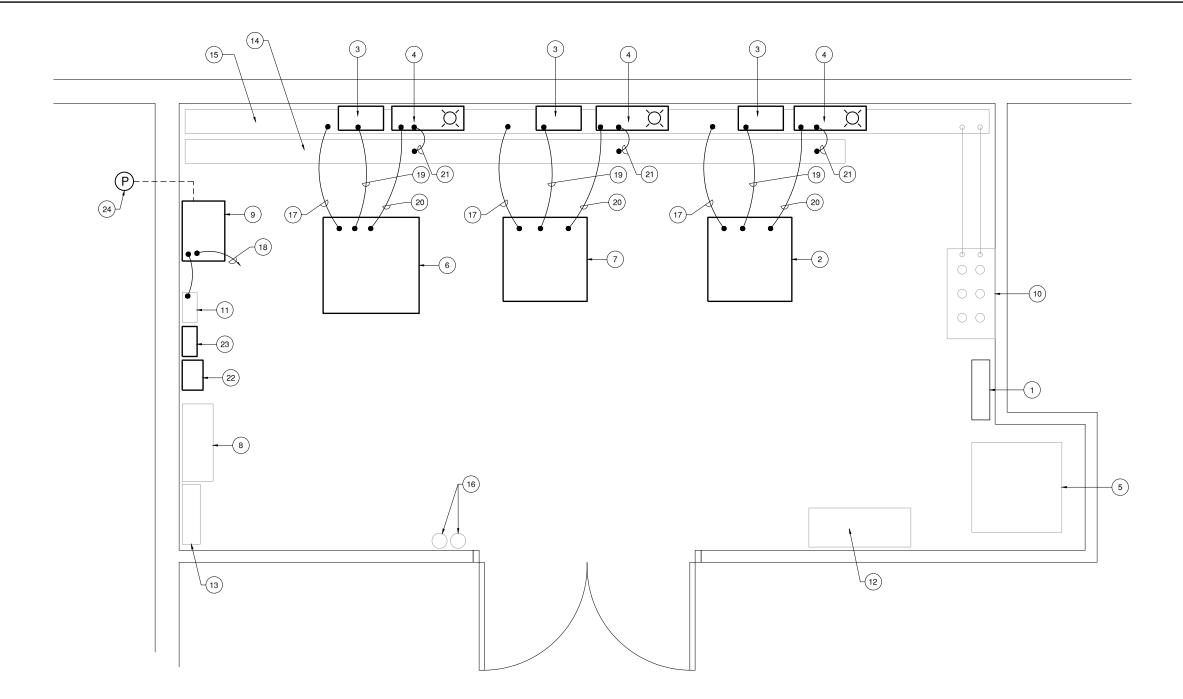
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 1/10/2025

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SHEET 10 OF 15 SHEETS



## NEW FLOOR PLAN FOR VAULT

NOT TO SCALE

#### **KEYED NOTES**

- 1 EXISTING 400A, 120/240V MAIN POWER PANEL.
- 2 EXISTING 15KW SPARE REGULATOR.
- (3) NEW WALL MOUNTED INTERFACE UNIT FOR ALCMS, AS REQUIRED BY ALCMS MANUFACTURER.
- 4 NEW CUTOUT AND INDICATOR LIGHT FOR REGULATOR. MOUNTED IN 12" x 12" x 8" ENCLOSURE (SEE DETAIL).
- (5) EXISTING 100KVA, 208-120/240VAC, TRANSFORMER.
- (6) NEW 15KW, 240V, 3-STEP REGULATOR FOR RUNWAY 11/29.
- 7 RELOCATED 15KW 240V, 3-STEP REGULATOR FOR TAXIWAY A.
- 8 EXISTING LIGHTING CONTACTOR CONTROL PANEL (NOTE 5).
- 9 NEW L-890 AIRFIELD LIGHTING CONTROL AND MONITORING (ALCMS) CABINET AND TOUCH SCREEN.

- (10) EXISTING PULL BOX.
- (11) EXISTING L-854 RADIO CONTROLLER (NOTE 6).
- (12) EXISTING VAULT MAIN DISCONNECT.
- (13) EXISTING DISTRIBUTION PANELBOARD FOR NAVAIDS.
- (14) EXISTING HIGH VOLTAGE WIREWAY.
- (15) EXISTING LOW VOLTAGE WIREWAY.
- (16) EXISTING FIRE EXTINGUISHER.
- 17) NEW 2 #2 THWN, 1 #6 GND. IN 1" FLEXIBLE METALLIC CONDUIT TO 120/240V POWER PANEL.
- (18) NEW 2 #12 THWN, 1 #12 GND. IN 1" CONDUIT TO 120/240V POWER PANEL.

- (19) NEW CONTROL AND COMMUNICATION CABLES IN FLEXIBLE CONDUIT AS RECOMMENDED BY ALCMS MANUFACTURER.
- (20) NEW (2) 1/C #8, 5KV, TYPE C CABLES IN 1" FLEXIBLE METALLIC CONDUIT TO INDICATING LIGHT EQUIPMENT.
- (21) NEW (2) 1/C #8, 5KV, TYPE C CABLES IN 1" FLEXIBLE METALLIC CONDUIT TO EDGE LIGHT (NOTE 7).
- (22) NEW WALL MOUNTED INTERFACE UNITS TO INTERFACE EXISTING CONTACTORS FOR WINDCONE, PAPI, REIL AND BEACON CIRCUITS WITH NEW ALCMS.
- (23) NEW WALL MOUNTED INTERFACE UNIT TO INTERFACE EXISTING L-854 RADIO CONTROLLER WITH ALCMS.
- (24) NEW PHOTCELL AND INTERFACE WITH ALCMS.

#### NOTES

- 1. EXISTING EQUIPMENT TO REMAIN IS SHOWN FOR INFORMATION ONLY. NEW WORK IS SHOWN IN BOLD.
- 2. INSTALL LAMACOID NAMEPLATES ON ALL EQUIPMENT.
- 3. INSTALL NEW CIRCUIT BREAKERS AS SHOWN ON PANELBOARD SCHEDULE.
- 4. CONTRACTOR SHALL VERIFY EXISTING AIRFIELD LIGHTING CIRCUITS AND LABEL ALL NEW AND EXISTING CIRCUITS IN HANDHOLE, PULL BOX AND WIREWAY.
- 5. CONNECT EXISTING "AUTO" SELECTOR SWITCHES TO ALCMS INTERFACE FOR ALL EXISTING CIRCUITS.
- 6. CONNECT EXISTING OUTPUTS OF L-854 RADIO CONTROLLER TO ALCMS INTERFACE.
- CONNECT RUNWAY 11/29 AND TAXIWAY CIRCUITS TO HOMERUNS IN HV WIREWAY WITH L-823 CONNECTORS. INSTALL L-823 CONNECTORS FOR SPARE CIRCUITS. PROVIDE SLACK FOR SPARE REGULATOR TO BE CONNECTED TO AIRFIELD LIGHTING CIRCUITS. LABEL ALL CIRCUITS.
- 8. INSTALL NEW PHOTOCELL FOR DAY/NIGHT MODE OF ALCMS.
- 9. CONNECT NEW REIL CIRCUITS TO EXISTING CONTACTORS.

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S.B.G. PROJECT: 3-17-SBQP-184/TBD

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SCHAUMBURG REGIONAL AIRPORT
SCHAUMBURG, ILLINOIS
LIGHTING REHABILITATION: MIRLS, PAPIS,
VAULT IMPROVEMENTS

CRAWFORD, MURPHY & TILLY, INC. CONSULTING ENGINEERS
License No. 184-000613

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 LN

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 JRO

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 AB

 APPROVED BY:
 DJK

 DATE:
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SHEET 11 OF 15 SHEETS

## **NOTES**

- 1 NEW AND RELOCATED CONSTANT CURRENT REGULATOR. MANUFACTURER AND CONTRACTOR SHALL PROVIDE ALL REQUIRED CT'S AND INTERFACE MODULES FOR COMPLETE L-829 AND L-890 SYSTEM.
- (2) PROVIDE ALL REQUIRED TRANSCEIVER AND INTERFACING PANEL FOR BEACON AND RADIO CONTROLLER
- (3) CONSTANT CURRENT REGULATOR CCR MICROPROCESSOR BASED CONTROL/MONITOR PANEL WITH REMOTE AND LOCAL CONTROL FOR CCR STATUS, DIMMING CONTROL AND CABLE INSULATION MONITOR.
- (4) COORDINATE ALL RADIO INTERFACING EQUIPMENT WITH OWNER. PROVIDE ALL NETWORK INTERFACING HARDWARE AND EQUIPMENT. INCLUDING SOFTWARE AND PROGRAMMING.
- (5) PROVIDE UPS POWER FOR DCME UNITS.
- (6) CAT 6 DATA LINE IN CONDUIT TYPICAL U.O.N. COORDINATE ALL WORK WITH ALCMS MANUFACTURER (CONSTANT CURRENT REGULATOR MANUFACTURER). PROVIDE ALL REQUIRED DATA CONNECTION LINKS.
- (7) 24 AWG. SHIELDED TWISTED PAIR WITH A COMMON, MEETING EIARS-485 APPLICATIONS (BELDEN 9842) OR AS REQUIRED BY ALCMS MANUFACTURER.
- (8) MICROPROCESSOR BASED CONTROL/MONITOR PANEL WITH REMOTE AND LOCAL CONTROL (DCME) FOR EXISTING CONTACTORS.
- (9) MICROPROCESSOR BASED CONTROL/MONITOR PANEL WITH REMOTE AND LOCAL CONTROL (DCME) FOR L-854
- (10) EXISTING CONTACTORS WIRED TO HAND-OFF-AUTO SELECTOR SWITCH INTERFACE "AUTO" MODE TO ALCMS.
- (11) NEW PHOTOCELL FOR DAY AND NIGHT OPERATIONS.

#### PANELBOARD SCHEDULE

PANEL DESIGNATION: PP LOCATION: VAULT MFR & TYPE: SQUARE D BOND NEUTRAL AND GROUND BAR: NO NEUTRAL BUS RATING: N/A SERVICE ENTRANCE RATED: NO

POLE: 42 SHORT CIRCUIT RATING: 42KA SERIES OR FULLY RATED: SERIES

TVSS & DISCONNECT REQUIRED: NO

VOLTS: 120/240V PHASE: 1 WIRE: 3

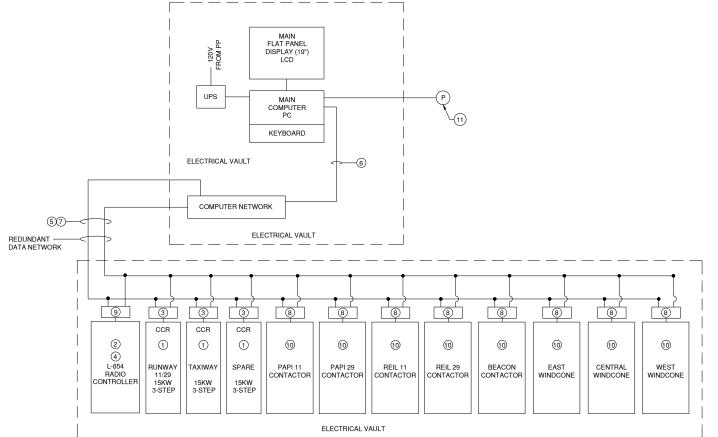
MOUNTING: SURFACE ENCL RATING: NEMA 1

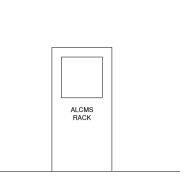
BUS RATING (AMPS): 400 BUS: COPPER MAIN CIRCUIT BREAKER: 400/2

CKT		BREAKER	LOAD	USAGE	PHASE	AMPS	PC	DLE	PHASE	AMPS	USAGE	LOAD	BREAKER		CKT
NO.	LOAD	SIZE	AMPS	FACTOR	Α	В	N	Ο.	Α	В	FACTOR	AMPS	SIZE	LOAD	NO.
1	NEW 15KW REGULATOR RWY 11-29	100A/2P	63	0.5	31.5		1	2	31.5		0.5	63	100A/2P	RELOCATED 15 KW REGULATOR TWYA	2
3	NEW 19KW REGULATOR RWT 11-29	100AVZP	63	0.5		31.5	3	4		31.5	0.5	63	100AVZP	RELOCATED 13 KW REGULATOR TWTA	4
5	RELOCATED 15KW REGULATOR SPARE	100A/2P	63	0.5	31.5		5	6	0				15A/2P	REIL 11	6
7	RELOCATED 13KW REGULATOR SPARE	100AVZF	63	0.5		31.5	7	8		0			TOAVZP	NEIL II	8
9	REIL 29	15A/2P			0		9	10	0				15A/2P	EAST WINDCONE	10
11	NEIL 29	TJAV2F				0	11	12		0			TUHVZF	EAST WINDCONE	12
13	CENTRAL WINDCONE	15A/2P			0		13	14	0				15A/2P	WEST WINDCONE	14
15	CENTRAL WINDCONE	13AVZP				0	15	16		0			TSAV2P	WEST WINDCONE	16
17	L-821 PANEL	15A/1P			0		17	18	0				45A/2P	FUTURE 15KW REGULATOR	18
19	FUTURE 15KW REGULATOR	45A/2P				0	19	20		0			4JHVZF	TOTORE ISKN REGULATOR	20
21	TOTOKE ISKW REGULATOR	43/02/			0		21	22	0				20A/2P	BEACON LIGHT	22
23	EAST GATE	20A/2P				0	23	24		0			ZUAVZF	BEACON EIGHT	24
25	EAST GATE	20/02/			0		25	26	0				20A/2P	WEST GATE	26
27	L-890 ALCMS	20A/1P	5	1		5	27	28		0			204721	WEST GATE	28
29	PAPI 11	20A/2P			0		29	30	0				20A/1P	SPARE	30
31	FAFITI	20A/2F				0	31	32		0			20A/1P	SPARE	32
33	PAPI 29	20A/2P			0		29	30	O				20A/1P	SPARE	34
35	PAPI 29	207021				0	31	32		0			20A/1P	SPARE	36
37	SPARE	20A/2P			0		29	30	0				20A/1P	SPARE	38
39	SFARE	204721				0	31	32		0			20A/1P	SPARE	40
41	SPARE	20A/1P			0		29	30	0				20A/1P	SPARE	42
	SECTION TOTAL:				63	68			31.5	31.5					
									Α	В	_			TOTAL USAGE LOAD:	
					PHASI	ETOTALA	MPS:		94.5	99.5				2328	) VA

#### NOTES:

1. CONTRACTOR SHALL VERIFY ALL EXISTING CIRCUITS

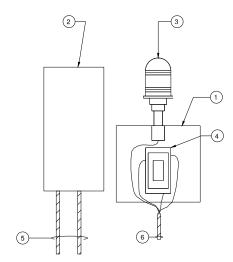




#### VAULT ALCMS RACK ELEVATION

NOT TO SCALE

INSTALL POWER AND COMMUNICATION CONDUITS AS REQUIRED.



#### NEW EQUIPMENT MOUNTING ENCLOSURE DETAIL NOT TO SCALE

#### **EQUIPMENT NOMENCLATURE**

- (1.) EQUIPMENT MOUNTING ENCLOSURE, 12" x 12" x 8", MOUNTED ON WALL.
- 2. ALCMS INTERFACE UNIT, REQUIRED BY ALCMS MANUFACTURER.
- (3.) RUNWAY/TAXIWAY INDICATOR LIGHT (LED).
- (4.) S-1 CUT-OUT.
- (5.) DATA/CONTROL CABLES (AS REQUIRED BY ALCMS MANUFACTURER) IN 1" CONDUIT TO REGULATOR.
- (6.) 4 #8 5KV AIRFIELD LIGHTING CABLES IN FLEX CONDUIT TO HIGH VOLTAGE WIREWAY



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**DETAILS** 

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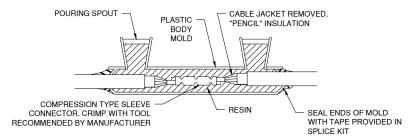
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SHEET 12 OF 15 SHEETS

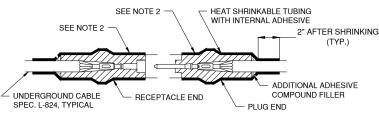
## AIRFIELD LIGHTING AND EQUIPMENT CONTROL DIAGRAM

NOT TO SCALE



#### **TYPE A - CABLE SPLICE**

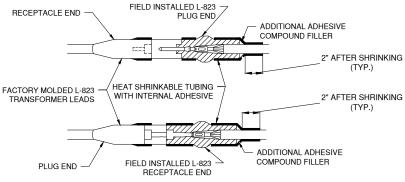
FOR SPLICES IN HOMERUN AND FOR EXTENSIONS TO EXISTING CABLES ONLY



#### **TYPE B - CABLE SPLICE**

N.T.S

FOR SPLICES AT HANDHOLE AND SPLICE CANS FOR EXTENSION OR JUNCTION OF HOMERUNS WITH LOOP CIRCUITS



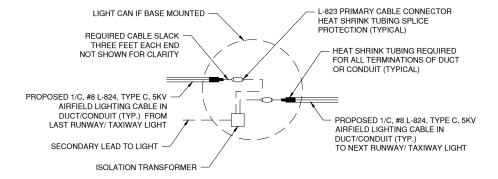
#### TYPE C & D - CABLE SPLICE

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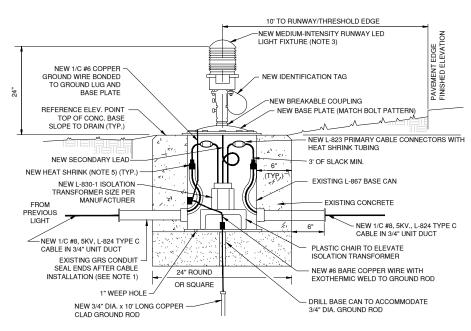
FOR SPLICES AT RUNWAY / TAXIWAY LIGHTS AND SURFACE MOVEMENT GUIDANCE SIGNS

#### **NOTES**

- THE INSIDE DIAMETER OF THE SPLICE CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
- HEAT SHRINK THE ENTIRE SPLICE USING PROPERLY SIZED HEAT SHRINK TUBING WITH AN INTEGRAL INTERNAL ADHESIVE SEALANT. AN ACCEPTABLE COMPLETED SPLICE SHALL HAVE A CONTINUOUS SEALED HEAT SHRINK TUBE OVERLAPPING THE CABLE A MINIMUM OF 2-INCHES LONGER THAN THE SPLICE ON BOTH ENDS.
- THE CONTRACTOR SHALL MAINTAIN ON SITE A MINIMUM OF TWO (2) TYPE A AND TYPE B SPLICE KITS AT ALL TIMES FOR EMERGENCY REPAIR. UPON COMPLETION OF THE PROJECT THE CONTRACTOR SHALL TRANSFER TO THE AIRPORT TWO COMPLETE SPLICE KITS OF EACH TYPE.
- CONTRACTOR MAY INSTALL FAA APPROVED "COMPLETE KIT" IN LIEU OF L-823 SPLICE WITH HEAT SHRINK.



# $\underline{\text{TYPICAL LIGHTING CIRCUIT CONNECTION DETAIL}}_{\text{NTS}}$

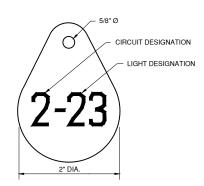


# REPLACE BASE MOUNTED MEDIUM INTESITY RUNWAY/THRESHOLD EDGE LIGHT (LED)

1

NOTES:

- CONTRACTOR SHALL VERIFY THE CONDITION AND SIZE OF GRS CONDUIT ENTRANCES/STUBS PER THE CABLING PLAN.
- 2. FOR PAY ITEM MIRL, BASE MOUNTED-LED AND MI THRESHOLD LIGHT, BASE MOUNTED LED, CONTRACTOR SHALL REUSE EXISTING BASE CAN AND CONDUITS. PAY ITEM SHALL INCLUDE NEW FIXTURE, TRANSFORMER, GROUNDING, BASE PLATE, ID TAGS AND CONNECTORS.
- B. LED LIGHT FIXTURES SHALL BE L-861(L) FOR EDGE LIGHT, OR L-861E(L) FOR THRESHOLD/END LIGHT.
- BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
- TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
- 6. AT THE CONTRACTOR'S OPTION, IN LIEU OF TAPE AND HEAT SHRINKABLE TUBING, A SELF-SEALING STYLE CONNECTOR L-823 "COMPLETE KITS" OR FAA APPROVED EQUAL MAY BE USED.



# LIGHT IDENTIFICATION DETAIL

#### NOTES:

- ON NEW LIGHTS, INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH A SET SCREW.
- NUMERALS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. ALL EXISTING AND PROPOSED
  TAXIWAY AND RUNWAY LIGHTS SHALL BE TAGGED AS DIRECTED BY THE RESIDENT ENGINEER.
  ALL LIGHTS ON EXISTING CIRCUITS THAT HAVE LIGHTING IMPROVEMENTS (PROPOSED OR
  RELOCATED LIGHTS) SHALL BE RETAGGED.
- 3. COST OF TAGGING LIGHTS SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IL. CONTRACT: SH030

IL. LETTING ITEM: 01A

IL. PROJECT: 06C-4837

S.B.G. PROJECT: 3-17-SBQP-184/TBD

REVISIONS

NUMBER BY DATE

0 1 2

THIS BAR IS EQUAL TO 2° AT FULL SCALE (34X22).

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SCHAUMBURG REGIONAL AIRPORT
SCHAUMBURG, ILLINOIS
LIGHTING REHABILITATION: MIRLS, PAPIS,
ELECTRICAL DETAILS - 1

WOORD, MURPHY & TILLY, INC. Sulling is No. 184-00613

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DESIGN BY: LN

DRAWN BY: JRO

CHECKED BY: AB

APPROVED BY: DJK

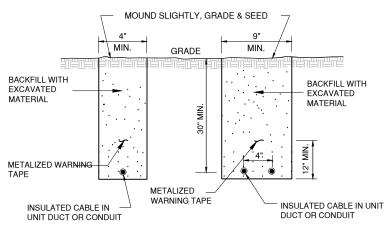
DATE: 1/10/2025

JOB No: 200256-02

**FINAL** 

SHEET 13 OF 15 SHEETS

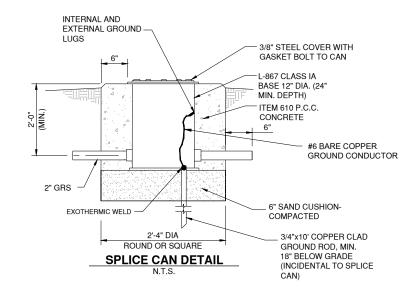
DATE: Thursday, January 9, 2025 7:09:10 AM



#### TRENCH DETAIL

#### **NOTES**

- TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
- 2. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
- ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL.



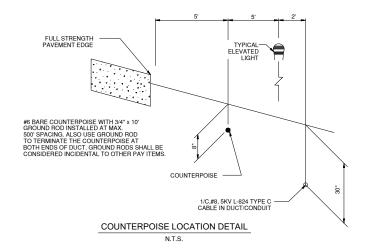
# MOUND SLIGHTLY, GRADE & SEED 9" GRADE MIN. "CAUTION" TAPE (TYPICAL) COUNTERPOISE (HV CABLES ONLY) BACKFILL RESTORATION PER L-108-3.3 BACKFILL SEE SPECIFICATIONS INSULATED CABLE IN UNIT DUCT, DUCT BANK OR PVC IN TRENCH

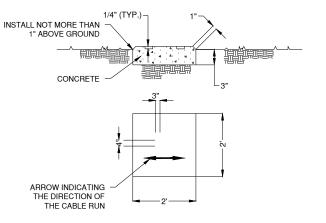
#### COUNTERPOISE LOCATION DETAIL

NOT TO SCALE

#### COLINTEDDOISE NOTES

- CABLES SHALL NOT BE PLACED LESS THAN 30" DEEP IN ANY ONE TRENCH. CABLES WITH DIFFERENT VOLTAGE RATINGS SHALL NOT BE INSTALLED IN THE SAME TRENCH.
- 2. LOW AND HIGH VOLTAGE CABLES MAY BE COLOCATED IN A COMMON TRENCH. SEPARATION BETWEEN HIGH AND LOW VOLTAGE CABLES SHALL BE INCREASED TO 12".
- 3. GROUND RODS SHALL BE INSTALLED AT 500' MAXIMUM INTERVALS. A NEW GROUND ROD SHALL BE INSTALLED AT THE COUNTERPOISE START/END POINTS AND AT AT POINTS WERE COUNTERPOISE INTERSECT. COST OF GROUND RODS SHALL BE INCIDENTAL TO THE COUNTERPOISE PAY ITEM.

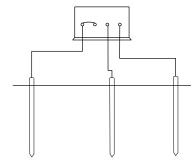




# TURF CABLE / DUCT / SPLICE MARKER DETAIL

#### **NOTES**

- DUCT MARKERS SHALL BE INSTALLED AT BOTH EDGES OF PAVEMENT AND WHERE PROPOSED ELECTRICAL DUCTS CROSS BOTH NEW AND EXISTING PAVEMENTS.
- 2. CABLE MARKERS SHALL BE INSTALLED AT ANY CHANGE OF DIRECTION AND EVERY 200' ALONG THE CABLE RUN.
- 3. SPLICE MARKERS SHALL BE INSTALLED DIRECTLY OVER ANY HOME RUN DIRECT BURY SPLICES.
- 4. THE COST OF FURNISHING AND INSTALLING MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.



# GROUND TEST-FALL OF POTENTIAL METHOD

#### **NOTES**

- ALL RODS SHALL BE IN A STRAIGHT LINE.
- 2. GROUND ROD TEST: BEFORE ANY WIRE IS CONNECTED TO THE GROUND RODS EACH ROD SHALL BE TESTED IN THE PRESENCE OF THE ENGINEER.. A WRITTEN RECORD OF THE RESULTS OF EACH INDIVIDUAL TEST SHALL BE PREPARED AND SIGNED BY THE CONTRACTOR AND THE ENGINEER. A DIRECT READING, SINGLE TEST, PORTABLE GROUND TESTING MEGGER SHALL BE USED TO TEST EACH GROUND ROD. THE AUXILIARY OR REFERENCED GROUND RODS SHALL BE 3/4" COPPER CLAD STEEL, NOT LESS THAN 4'-0" IN LENGTH, DRIVEN IN 3'-6" DEEP, AND SHALL BE INSTALLED IN A STRAIGHT LINE FROM THE GROUND ROD BEING TESTED. NO. 12 STRANDED WIRE LEADS WITH HIGH GROUND ROD BEING TESTED. THE TWO REFERENCE RODS, AND TO THE PROPER GROUNDING POST ON THE INSTRUMENT. THE MEEGER INDICATES THE RESISTANCE TO EARTH IN OHMS. THESE TESTS SHALL NOT BE MADE WITHIN 48 HOURS AFTER RAINFALL OR DURING RAINY OR FOGGY WEATHER. IN ADDITION, AFTER GROUND RODS ARE TESTED AND CONNECTED, A COMPLETE SYSTEM TEST SHALL BE MADE IN A SIMILAR MANNER, USING THE SAME METHOD, AND THE SYSTEM TEST SHALL NOT EXCEED 1 OHM.

IL. CONTRACT: SH030

IL. LETTING ITEM: 01A

IL. PROJECT: 06C-4837

S.B.G. PROJECT: 3-17-SBQP-184/TBD

REVISIONS

NUMBER BY DATE

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THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

SCHAUMBURG REGIONAL AIRPORT
SCHAUMBURG, ILLINOIS
IELD LIGHTING REHABILITATION: MIRLS, PAPIS, REI
ELECTRICAL DETAILS - 2

CRAWFORD, MURPHY & TILLY, INC. CONSULTING ENGINEERS
License No. 184-000613

DESIGN BY: LN

DRAWN BY: JRO

CHECKED BY: AB

APPROVED BY: DJK

DATE: 1/10/2025

JOB No: 200256-02

**FINAL** 

SHEET 14 OF 15 SHEETS

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END OF RUNWAY

#2/0 BARE COPPER GROUND RING

2" GRS CONDUIT (TYP.

4" WIDE CONCRETE ENVELOPE

GROUND TO L-867 CAN

3/4" DIAM. x 10' LONG GROUND ROD (MIN. 12" BURY)

#6 BARE COPPER TO GROUND -LUG ON FLOOR FLANGE

WATERTIGHT FLEXIBLE CONDUIT -SIZE PER MANUFACTURER

#6 BARE COPPER

#### AIMING OF TYPE L-881 (2-BOX) PAPI RELATIVE TO PRESLECTED GLIDE PATH (3°00')

	, ,
	AIMING ANGLE (IN MINUTES OF ARC)
LIGHT UNIT	STANDARD INSTALLATION
UNIT NEAREST RUNWAY	15' ABOVE GLIDE PATH
NEXT ADJACENT UNIT	15' BELOW GLIDE PATH

RUNWAY	11	29
HEIGHT GROUP USED FOR SITING	1	1
THRESHOLD STATIONING	100+00	138+00
THRESHOLD ELEVATION	801.0'	801.0'
THRESHOLD CROSSING HEIGHT	40'	40'
STATION FOR PAPIS	108+32.75	129+67.00
GLIDE PATH ANGLE*	3.0°	3.0°
REFERENCE POINT ELEVATION **	801.0'	801.0'

\* THE VISUAL GLIDE PATH ANGLE IS THE CENTER OF THE ON COURSE ZONE AND IS MEASURED FROM THE HORIZONTAL

#2/0 BARE COPPER

6" CONCRETE PAD AROUND PAPI FOUNDATION AND L-867 BASE CAN.

GROUND RING

BREAKABLE COUPLING (TYP.)

\* ELEVATION OF CENTER OF PAPI LIGHTS

- 1/2" JOINT MATERIAL

STYLE A

BOX

PAPI LIGHT BOX

HOUSING

48" CONC.

FTG.

SIGNAL

00

 $\circ \bullet$ 

END OF RUNWAY

FOUNDATIONS:
FOUNDATIONS FOR MOUNTING LIGHT BOXES SHALL BE MADE OF ITEM 610 CONCRETE. ALL LIGHT BOXES SHALL BE FRANGIBLY MOUNTED TO THE FOUNDATION.

AZIMUTHAL AIMING:
EACH LIGHT UNIT SHALL BE AIMED OUTWARD INTO THE APPROACH ZONE ON A LINE PARALLEL TO THE RUNWAY CENTERLINE WITHIN A TOLERANCE OF ±1/2 DEGREE.

#### MOUNTING HEIGHT TOLERANCES:

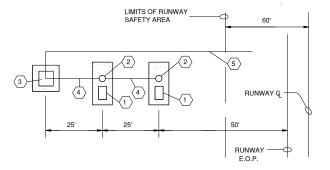
THE BEAM CENTERS OF ALL LIGHT UNITS SHALL BE WITHIN ±1 INCH OF A HORIZONTAL PLANE AT THE REFERENCE ELEVATION GIVEN IN THE TABLE.

#### TOLERANCE ALONG LINE PERPENDICULAR TO RUNWAY:

THE FRONT FACE OF EACH LIGHT UNIT IN A BAR SHALL BE LOCATED ON A LINE PERPENDICULAR TO THE RUNWAY CENTERLINE WITHIN ±6 INCHES.

THE DIFFERENCE IN LATERAL SPACING BETWEEN LIGHT UNITS SHALL NOT EXCEED 1'-0".

- 1 L-881(L) PAPI LIGHT BOX.
- 2 L-867 CAN WITH SOLID LID.
- (3) PAPI PCU. SEE DETAIL, THIS SHEET.
- PAPI LIGHT BOX POWER & TILT SWITCH WIRING.
- PAPI POWER WIRING TO ELECTRICAL VAULT.



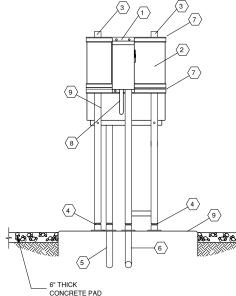
DISTANCE FROM THRESHOLD TO PAPI

**RUNWAY 29 TYPICAL PROFILE** 

#### **RUNWAY 29 PAPI PLAN**

(RWY. 11 MIRROR IMAGE)

N.T.S.



#### PAPI PCU PLAN AND ELEVATION

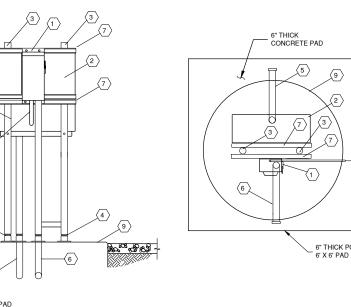
- 1. HEAVY DUTY FUSIBLE DISCONNECT, 600VAC, 30A, NEMA 3R. SQUARE D H361AWK OR EQUAL, WITH TWO
- 2.) 120/240V PAPI POWER & CONTROL UNIT, WITH PHOTOCELL.

ON 4" CA-6 BASE

- (3.) 2" GALVANIZED EMT LEGS WITH TOPS CAPPED.
- 2" GRS CONDUIT WITH PAPI LIGHT HOUSING POWER & PAPI TILT CONTROL CABLES, PER PAPI
- 6. CONDUIT AND WIRING TO VAULT AS FOLLOWS:

PAPI 11: 3 #4 XLP-USE, ONE #4 GND IN 1-1/2"UNIT DUCT

- $\langle 7 \rangle$ 1-5/8" X 1-5/8" GALVANIZED STRUT
  - TWO #12 THWN, ONE #12 NEUTRAL, ONE #12 GND IN 3/4" CONDUIT, TO PAPI POWER & CONTROL UNIT.
- 9 CONCRETE FOOTING, 36" DIAMETER X 48" DEEP (MIN.). SEE PAPI INSTALLATION FOR REBAR AND WIRE MESH
  - 3/4" DIA, BY 10 FT, LONG COPPER CLAD GROUND ROD WITH #6 SOLID BARE COPPER GROUND CABLE ATTACHED BY EXOTHERMIC WELDING, OTHER END OF CABLE TERMINATES ON GROUND LUG IN DISCONNECT. (NOT SHOWN IN ELEVATION VIEW).



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IL. CONTRACT: SH030 IL. LETTING ITEM: 01A

S.B.G. PROJECT: 3-17-SBGP-184/TBD

**REVISIONS** 

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PAPIS,

SCHAUMBURG REGIONAL AIRPORT SCHAUMBURG, ILLINOIS LIGHTING REHABILITATION: MIRLs, P

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**ELECTRICAL DETAILS** 

DATE

IL. PROJECT: 06C-4837

NUMBER

DESIGN BY: LN JRO CHECKED BY APPROVED BY DJK JOB No: 200256-02

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SHEET 15 OF 15 SHEETS

BREAKABLE COUPLING WITH QUICK -CONNECT ASSEMBLIES PER MFG, (SUPPLIED WITH PAPI'S) STAINLESS STEEL HOOK BOLT W/NUTS (TYP.) EMBEDDED
MINIMUM OF 8" IN CONCRETE SLOPE TO -6" (P-610) CONCRETE #6 GROUND PAD ON 4" CA-6 BASE TO L-867 CAN - 1 1/2" MAX. FINISHED GRADE #6 GROUND TO 8648 80 80 88 FLOOR FLANGE EXOTHERMIC WELD **EQUIVALENT** 0 SONOTUBE FORMED TO OBTAIN 1A SIZE B (12") SMOOTH SIDES (TYP.) 3/4" DIAM. X 10' LONG — COPPER CLAD GROUND WEEP HOLE P-610 CONCRETE ROD (MIN, 12" BURY) SAND BEDDING #4 BARS SPACED AROUND WIRE MESH, 6" x 6", NO. 6 ON 1' CENTERS 3" COVER ON ALL REINF. RODS BOTTOM, TOP & SIDES 48" DIA. CONCRETE FOOTING AS NEEDED FOR PAPI LIGHT BOX MOUNTING PAPI SIDE ELEV. PAPI DETAIL

DISTANCE FROM THRESHOLD TO PAPI

**RUNWAY 11 TYPICAL PROFILE** 

TO NEXT LIGHT BOX -

#2/0 BARE COPPER GROUND 3/4" DIA. X 10'L COPPERCLAD GROLIND ROD (TYP) LIGHT BOX CONNECT TO GROUP VIA EXOTHERMIC WELD, CADWELD, OR EQUIVALENT LIGHT BOX #6 BARE COPPER GROUND (TYP.)

PAPI GROUND RING DETAIL

N.T.S.

PAPI 29: 3#4 XLP-USE, ONE #4 GND IN 1-1/2" UNIT DUCT