

ITEM 25A

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

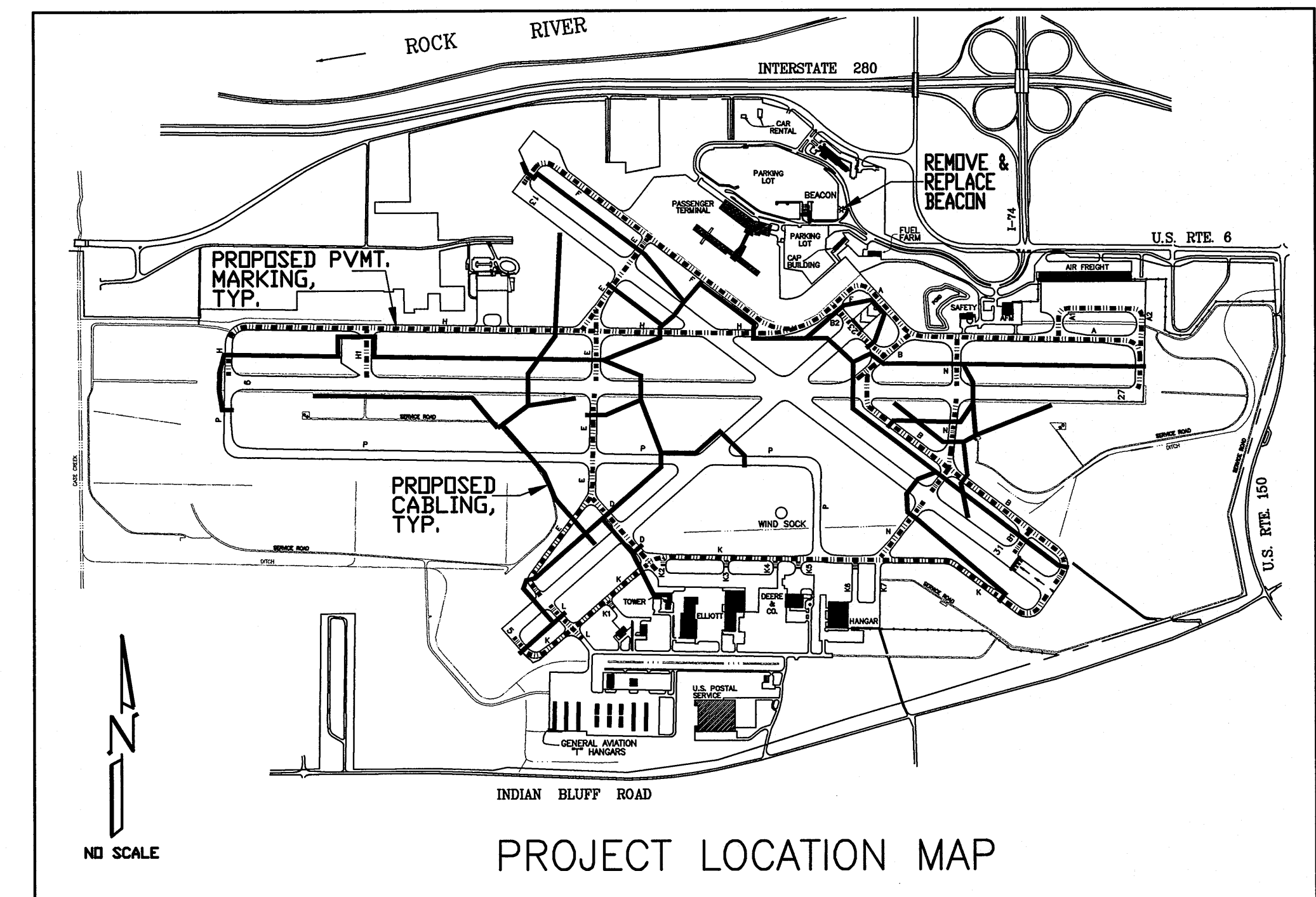
DIVISION OF AERONAUTICS
 CONSTRUCTION PLANS

FOR

QUAD-CITY
 INTERNATIONAL
 AIRPORT

ROCK ISLAND COUNTY, ILLINOIS

| INDEX OF SHEETS | |
|-----------------|---|
| SHEET NO. | TITLE |
| 1 | COVER SHEET AND INDEX OF SHEETS |
| 2 | SUMMARY OF QUANTITIES / GENERAL NOTES |
| 3-19 | PROPOSED CONSTRUCTION SAFETY AND PHASING PLAN |
| 20 | PROJECT AREA PLAN |
| 21 | LIGHTING AREA LOCATION MAP |
| 22-36 | RUNWAY 9-27 LIGHTING PLANS |
| 37-43 | RUNWAY 13-31 LIGHTING PLANS |
| 44-49 | RUNWAY 5-23 LIGHTING PLANS |
| 50-52 | ELECTRICAL VAULT MODIFICATION PLANS |
| 53-54 | ELECTRICAL VAULT NOTES |
| 55 | ALCMS DIAGRAM |
| 55A | TECHNOLOGY FIBER OPTIC RISER DIAGRAM AND SCHEDULES |
| 56 | ATCT MODIFICATION PLAN |
| 57 | EXISTING AIRFIELD EDGE LIGHT CIRCUITRY LAYOUT |
| 58 | PROPOSED RUNWAY GUARD LIGHT CIRCUITRY LAYOUT |
| 59-61 | LIGHTING DETAILS |
| 62 | FIBER OPTIC CABLE DETAILS |
| 63 | RELOCATE ELECTRICAL EQUIPMENT (EAST SCAN RPU) DETAILS |
| 63A-63B | EAST SCAN RPU POWER FEED DETAILS |
| 64 | SCAN SYSTEM DETAILS |
| 65 | BASE BID PAVEMENT MARKING AREA LOCATION MAP |
| 66-69 | BASE BID PROPOSED PAVEMENT MARKING PLANS & DETAILS |
| 70 | ADDITIVE ALTERNATE 1 PAVEMENT MARKING (PAINT) AREA LOCATION MAP |
| 71-79 | ADDITIVE ALTERNATE 1, PROPOSED PAVEMENT MARKING (PAINT) PLANS |
| 80 | ADDITIVE ALTERNATE 2, BEACON AREA PLAN |
| 81-83 | ADDITIVE ALTERNATE 2, BEACON / FENCE DETAILS |



WARNING



CALL BEFORE
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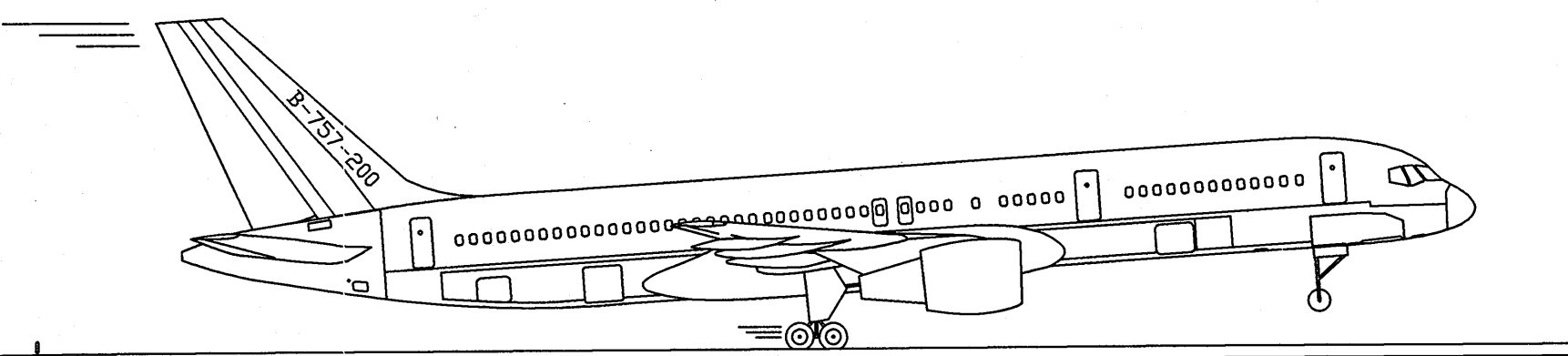
RGL, ALCMS, &
 PAVEMENT MARKING

RUNWAY GUARD LIGHTS (RGL), AIRPORT LIGHTING CONTROL &
 MONITORING SYSTEM (ALCMS), CABLING, OTHER MISCELLANEOUS
 ELECTRICAL ITEMS, AND PAVEMENT MARKING (PTM & PAINT).

ILLINOIS PROJECT MLI-4080
 A.I.P. PROJECT NO. 3-17-0068-XX
 AIRPORT CLASSIFICATION - AIR CARRIER

AIRCRAFT APPROACH CATEGORY - D
 AIRPLANE DESIGN GROUP - IV

LATITUDE 41°26'52.4", LONGITUDE 90°30'33.9", ELEVATION 589'M.S.L.



METROPOLITAN AIRPORT AUTHORITY
 OF ROCK ISLAND COUNTY, ILLINOIS

[Signature]
 05-17-2013 DATE APPROVED



I hereby certify that this plan was prepared by me or under my
 direct personal supervision and that I am a duly licensed
 Professional Engineer under the laws of the State of Illinois.
[Signature] 5/17/13
 Signature Date
 Jason L. McKenzie
 License No. 062-058089
 My license renewal date is November 30, 2013
 Pages or sheets covered by this seal: all

PREPARED BY



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 (309) 788-7644 • (563) 344-0260 • (815) 965-6400 • (815) 895-3825
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MAY 10, 2013
 OFFICIAL DATE OF PLANS

SUMMARY OF QUANTITIES

| ITEM NO. | ITEM DESCRIPTION | UNIT | QUANTITIES | | | | | |
|------------------|----------------------------------|------|------------|-------------------------|---------------|----------|-------------------------|---------------|
| | | | AS AWARDED | | | AS BUILT | | |
| | | | TOTAL | FEDERAL/ STATE/LOCAL | LOCAL ONLY | TOTAL | FEDERAL/ STATE/LOCAL | LOCAL ONLY |
| BASE BID: | | | | | | | | |
| AR108051 | POWER CABLE IN UNIT DUCT | L.F. | 4,500 | 4,500 | | | | |
| AR108258 | 2/C #8 5 KV UG CABLE IN UD | L.F. | 37,500 | 37,500 | | | | |
| AR108962 | REPLACE CABLE | L.F. | 13,100 | 13,100 | | | | |
| AR109210 | VAULT MODIFICATIONS | L.S. | 1 | 1 | | | | |
| AR109301 | 4 KW REGULATOR, STYLE 1 | EACH | 2 | 2 | | | | |
| AR109630 | LIGHTING CONTROL COMPUTER SYSTEM | L.S. | 1 | 1 | | | | |
| AR109907 | REMOVE TRANSFORMER | EACH | 1 | 1 | | | | |
| AR109962 | RELOCATE ELECTRICAL EQUIPMENT | L.S. | 1 | 1 | | | | |
| AR110014 | 4" DIRECTIONAL BORE | L.F. | 6,330 | 5,365 | 965 | | | |
| AR110710 | ELECTRICAL MANHOLE | EACH | 3 | 3 | | | | |
| AR125902 | REMOVE BASE MOUNTED LIGHT | EACH | 1 | 1 | | | | |
| AR125906 | REMOVE SPLICE CAN | EACH | 6 | 6 | | | | |
| AR125966 | RELOCATE SPLICE CAN | EACH | 2 | 2 | | | | |
| AR150510 | ENGINEER'S FIELD OFFICE | L.S. | 1 | 1 | | | | |
| AR150530 | TRAFFIC MAINTENANCE | L.S. | 1 | 1 | | | | |
| AR156500 | TEMPORARY EROSION CONTROL | L.S. | 1 | 1 | | | | |
| AR620510 | PAVEMENT MARKING | S.F. | 2,715 | 2,715 | | | | |
| AR620900 | PAVEMENT MARKING REMOVAL | S.F. | 41,590 | 41,590 | | | | |
| AR801603 | FIBER OPTIC CABLE IN 2" UD | L.F. | 9,550 | 4,960 | 4,590 | | | |
| AR801634 | RUNWAY GUARD LIGHT | EACH | 55 | 55 | | | | |
| AR801639 | REFURBISH RUNWAY GUARD LIGHT | EACH | 1 | 1 | | | | |
| AR801640 | PREFORMED THERMOPLASTIC MARKING | S.F. | 37,600 | 37,600 | | | | |
| AR801645 | FO JUNCTION ENCLOSURES | L.S. | 1 | | 1 | | | |

SUMMARY OF QUANTITIES, CONTINUED

| ITEM NO. | ITEM DESCRIPTION | UNIT | QUANTITIES | | | | | |
|--|--------------------------------|------|------------|-------------------------|---------------|----------|-------------------------|---------------|
| | | | AS AWARDED | | | AS BUILT | | |
| | | | TOTAL | FEDERAL/ STATE/LOCAL | LOCAL ONLY | TOTAL | FEDERAL/ STATE/LOCAL | LOCAL ONLY |
| ADDITIVE ALTERNATE 1 (PAVEMENT MARKING, PAINT, TAXIWAY CENTERLINES)* : | | | | | | | | |
| AS150530 | TRAFFIC MAINTENANCE | L.S. | 1 | 1 | | | | |
| AS620510 | PAVEMENT MARKING | S.F. | 69,850 | 69,850 | | | | |
| AS620900 | PAVEMENT MARKING REMOVAL | S.F. | 71,970 | 71,970 | | | | |
| ADDITIVE ALTERNATE 2 (R9-27, STA 153+20 TO STA 158+20, LT 1,400' TO LT 2,100'; REMOVE & REPLACE BEACON)** : | | | | | | | | |
| AT101510 | AIRPORT ROTATING BEACON | EACH | 1 | 1 | | | | |
| AT103410 | BEACON TOWER | EACH | 1 | 1 | | | | |
| AT103900 | REMOVE BEACON TOWER | EACH | 1 | 1 | | | | |
| AT110212 | 2" STEEL DUCT, DIRECT BURY | L.F. | 42 | 42 | | | | |
| AT110217 | 1 1/2" STEEL DUCT, DIRECT BURY | L.F. | 18 | 18 | | | | |
| AT110710 | ELECTRICAL MANHOLE | EACH | 1 | 1 | | | | |
| AT150530 | TRAFFIC MAINTENANCE | L.S. | 1 | 1 | | | | |
| AT152419 | UNCLASSIFIED DISPOSAL OFFSITE | C.Y. | 7 | 7 | | | | |
| AT162510 | CLASS E FENCE 10' | L.F. | 65 | 65 | | | | |
| AT162604 | CLASS E GATE - 4' | EACH | 1 | 1 | | | | |
| AT209510 | CRUSHED AGGREGATE BASE COURSE | TON | 16 | 16 | | | | |
| AT209600 | GEOTEXTILE FABRIC | S.Y. | 40 | 40 | | | | |
| AT801641 | REPLACE TOWER FOUNDATION | EACH | 1 | 1 | | | | |

* = SEE SHEETS 70 THROUGH 79 FOR ADDITIVE ALTERNATE 1, PROPOSED PAVEMENT MARKING (PAINT, TAXIWAY CENTERLINES) WORK.
 ** = SEE SHEETS 80 THROUGH 83 FOR ADDITIVE ALTERNATE 2, REMOVE AND REPLACE BEACON WORK.

GENERAL NOTES:

1. THE CONTRACTOR SHALL SALVAGE EXISTING AIRFIELD LIGHTING EQUIPMENT AS DETAILED IN THE CONSTRUCTION PLANS AND SPECIAL PROVISIONS PRIOR TO THE START OF EARTHWORK AND/OR CONSTRUCTION ACTIVITIES. SALVAGED EQUIPMENT SHALL BE CLEANED AND REUSED OR DELIVERED TO THE METROPOLITAN AIRPORT AUTHORITY.
2. THE CONTRACTOR SHALL EXCAVATE TEMPORARY EROSION CONTROL DRAINAGE SWALES, AS REQUIRED BY THE RESIDENT ENGINEER, TO CONTROL STORM WATER RUN-OFF.
3. AFTER CONSTRUCTION HAS BEEN COMPLETED, THE CONTRACTOR SHALL SEED AND HYDRAULIC MULCH ALL DISTURBED AREAS PER SPECIAL PROVISIONS 901 AND 908. THE COST FOR ALL SEEDING AND MULCHING ITEMS SHALL BE INCLUDED IN THE LIGHTING, CABLING, ELECTRICAL, AND/OR TRAFFIC MAINTENANCE CONTRACT UNIT PRICES.







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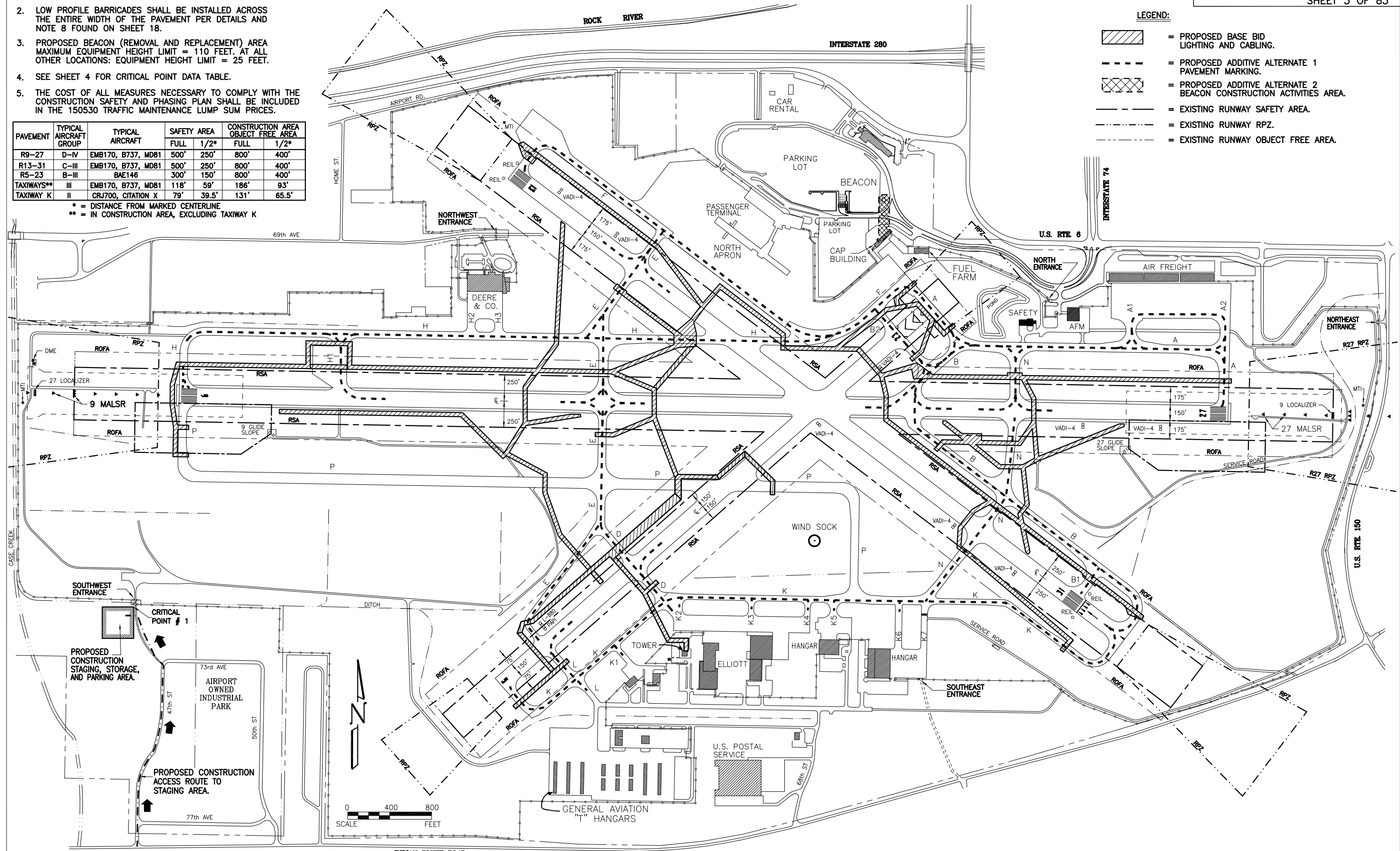
GENERAL NOTES:

- SEE SHEETS 4 THROUGH 19 FOR CONSTRUCTION SAFETY AND PHASING PLAN NOTES, CLOSED RUNWAY / TAXIWAY MARKINGS, LOW PROFILE BARRICADE LOCATIONS AND PHASING DETAILS.
- LOW PROFILE BARRICADES SHALL BE INSTALLED ACROSS THE ENTIRE WIDTH OF THE PAVEMENT PER DETAILS AND NOTE 8 FOUND ON SHEET 18.
- PROPOSED BEACON (REMOVAL AND REPLACEMENT) AREA MAXIMUM EQUIPMENT HEIGHT LIMIT = 110 FEET. AT ALL OTHER LOCATIONS: EQUIPMENT HEIGHT LIMIT = 25 FEET.
- SEE SHEET 4 FOR CRITICAL POINT DATA TABLE.
- THE COST OF ALL MEASURES NECESSARY TO COMPLY WITH THE CONSTRUCTION SAFETY AND PHASING PLAN SHALL BE INCLUDED IN THE 150530 TRAFFIC MAINTENANCE LUMP SUM PRICES.

| PAVEMENT | TYPICAL AIRCRAFT GROUP | TYPICAL AIRCRAFT | SAFETY AREA | | CONSTRUCTION AREA OBJECT FREE AREA | |
|------------|------------------------|--------------------|-------------|-------|------------------------------------|-------|
| | | | FULL | 1/2* | FULL | 1/2* |
| R9-27 | D-IV | EMB170, B737, MD81 | 500' | 250' | 800' | 400' |
| R13-31 | C-III | EMB170, B737, MD81 | 500' | 250' | 800' | 400' |
| R5-23 | B-III | BAE146 | 300' | 150' | 800' | 400' |
| TAXIWAYS** | III | EMB170, B737, MD81 | 118' | 59' | 186' | 93' |
| TAXIWAY K | II | CRJ700, CITATION X | 79' | 39.5' | 131' | 65.5' |

* = DISTANCE FROM MARKED CENTERLINE
 ** = IN CONSTRUCTION AREA, EXCLUDING TAXIWAY K

- LEGEND:**
-  = PROPOSED BASE BID LIGHTING AND CABLING.
 -  = PROPOSED ADDITIVE ALTERNATE 1 PAVEMENT MARKING.
 -  = PROPOSED ADDITIVE ALTERNATE 2 BEACON CONSTRUCTION ACTIVITIES AREA.
 -  = EXISTING RUNWAY SAFETY AREA.
 -  = EXISTING RUNWAY RPZ.
 -  = EXISTING RUNWAY OBJECT FREE AREA.



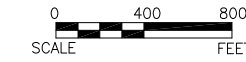
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LOCATION OF PROPOSED LIGHTING, CABLING AND PAVEMENT MARKING
 PROPOSED CONSTRUCTION SAFETY AND PHASING PLAN

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 4 OF 83

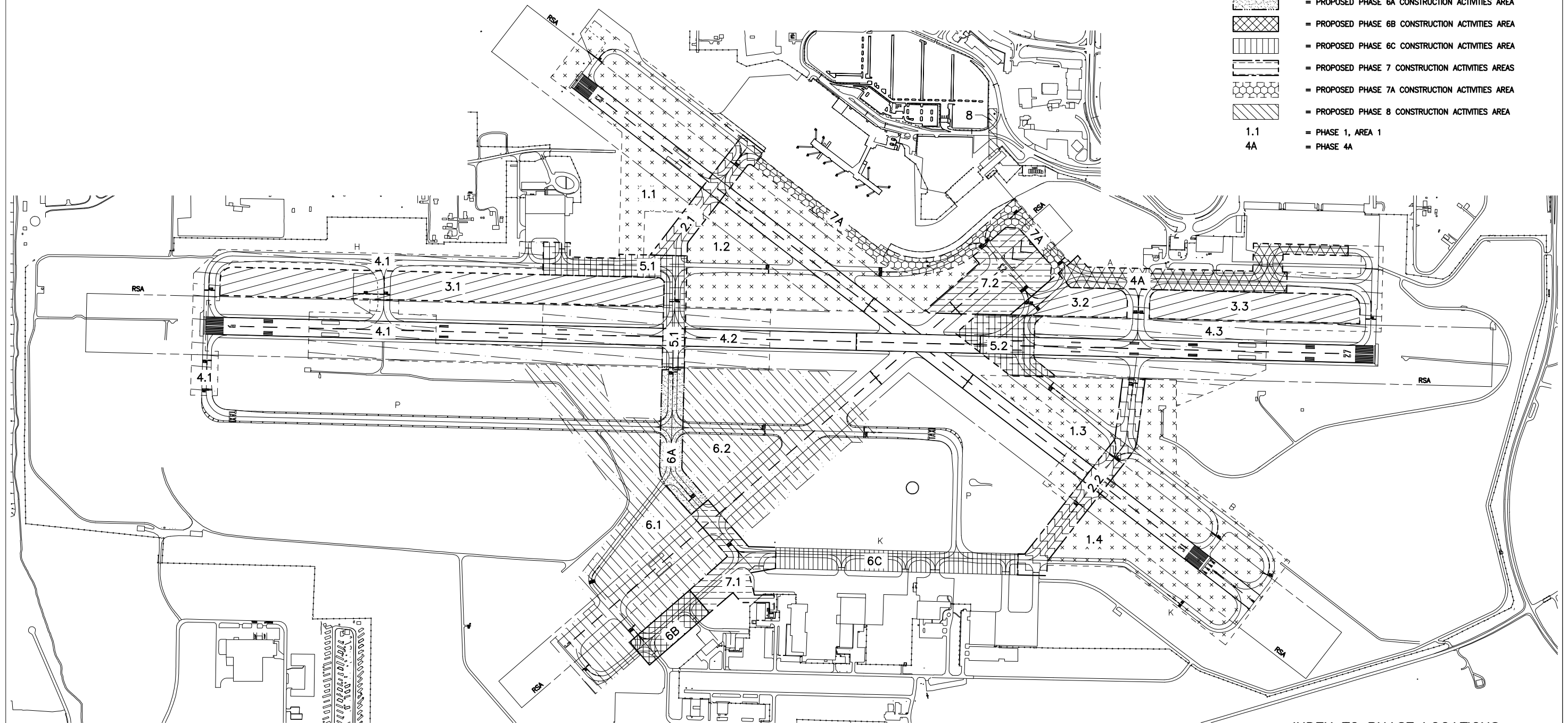
| CRITICAL POINT DATA | | | | | | | |
|---------------------|--|----------------|----------------|------------------|----------|----------------|--|
| NUMBER | LOCATION | LATITUDE | LONGITUDE | GROUND ELEVATION | | SHOWN ON SHEET | |
| | | | | EXISTING | PROPOSED | | |
| 1 | NE CORNER OF WEST BATCH PLANT STAGING AREA | 41D 26' 36.93" | 90D 31' 42.40" | 580.0' | 580.0' | 3 | |
| 2 | PHASE 1, SOUTH SIDE OF AREA 2 | 41D 26' 58.44" | 90D 30' 16.78" | 582.0' | 582.0' | 5 | |
| 3 | PHASE 1, NORTH SIDE OF AREA 3 | 41D 26' 53.04" | 90D 30' 06.60" | 576.5' | 576.5' | 5 | |
| 4 | PHASE 2, SOUTH SIDE OF AREA 1 | 41D 27' 03.17" | 90D 30' 47.26" | 584.0' | 584.0' | 6 | |
| 5 | PHASE 2, NORTH SIDE OF AREA 2 | 41D 26' 52.80" | 90D 29' 51.75" | 572.5' | 572.5' | 6 | |
| 6 | HAUL ROUTE E UNDER R9 APPROACH, SOUTH | 41D 26' 51.53" | 90D 31' 56.77" | 571.9' | 571.9' | 7 | |
| 7 | HAUL ROUTE E UNDER R9 APPROACH, CENTER | 41D 26' 57.36" | 90D 31' 56.22" | 572.0' | 572.0' | 7 | |
| 8 | HAUL ROUTE E UNDER R9 APPROACH, NORTH | 41D 27' 02.92" | 90D 31' 54.27" | 570.0' | 570.0' | 7 | |
| 9 | PHASE 3, SOUTH SIDE OF AREA 1 | 41D 26' 59.66" | 90D 31' 35.46" | 579.5' | 579.5' | 7 | |
| 10 | PHASE 3, SOUTH SIDE OF AREA 3 | 41D 26' 57.66" | 90D 29' 27.73" | 571.4' | 571.4' | 7 | |
| 11 | PHASE 4, NORTHEAST CORNER OF AREA 2 | 41D 26' 58.70" | 90D 30' 33.74" | 583.8' | 583.8' | 8 | |
| 12 | PHASE 4, WEST SIDE OF AREA 3 | 41D 26' 54.03" | 90D 30' 03.37" | 578.3' | 578.3' | 8 | |
| 13 | PHASE 4A, SOUTH SIDE | 41D 27' 00.57" | 90D 30' 00.15" | 581.5' | 581.5' | 9 | |
| 14 | PHASE 5, NORTHEAST CORNER OF AREA 1 | 41D 26' 03.10" | 90D 30' 43.11" | 585.0' | 585.0' | 10 | |
| 15 | PHASE 5, WEST SIDE OF AREA 2 | 41D 26' 56.66" | 90D 30' 12.90" | 582.5' | 582.5' | 10 | |

| CRITICAL POINT DATA | | | | | | | |
|---------------------|---------------------------------|----------------|----------------|------------------|----------|----------------|--|
| NUMBER | LOCATION | LATITUDE | LONGITUDE | GROUND ELEVATION | | SHOWN ON SHEET | |
| | | | | EXISTING | PROPOSED | | |
| 16 | PHASE 6, NORTH SIDE | 41D 26' 53.36" | 90D 30' 27.40" | 580.5' | 580.5' | 11 | |
| 17 | PHASE 6A, NORTH SIDE | 41D 26' 53.61" | 90D 30' 43.38" | 581.0' | 581.0' | 12 | |
| 18 | PHASE 6B, NORTH CORNER | 41D 26' 34.93" | 90D 30' 42.68" | 577.5' | 577.5' | 13 | |
| 19 | PHASE 6C, NORTH SIDE | 41D 26' 38.09" | 90D 30' 05.91" | 575.0' | 575.0' | 14 | |
| 20 | PHASE 7, NORTH CORNER OF AREA 1 | 41D 26' 43.73" | 90D 30' 42.05" | 579.0' | 579.0' | 15 | |
| 21 | PHASE 7, SOUTH SIDE OF AREA 2 | 41D 26' 58.42" | 90D 30' 15.97" | 582.3' | 582.3' | 15 | |
| 22 | PHASE 7A, SOUTH SIDE | 41D 27' 01.67" | 90D 30' 16.99" | 583.5' | 583.5' | 16 | |
| 23 | PHASE 8, SOUTHWEST CORNER | 41D 27' 11.35" | 90D 30' 09.34" | 588.0' | 588.0' | 17 | |
| 24 | BEACON TOWER (IN PHASE 8 AREA) | 41D 27' 15.20" | 90D 30' 09.23" | 596.0' | 596.0' | 17 | |

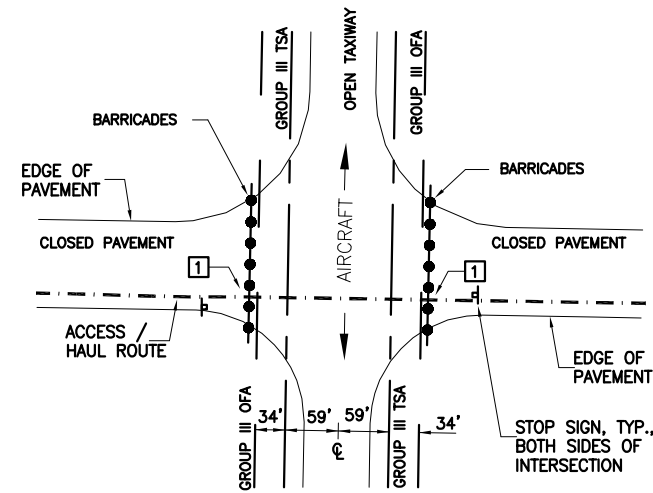


LEGEND:

- = PROPOSED PHASE 1 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 2 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 3 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 4 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 4A CONSTRUCTION ACTIVITIES AREA
- = PROPOSED PHASE 5 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 6 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 6A CONSTRUCTION ACTIVITIES AREA
- = PROPOSED PHASE 6B CONSTRUCTION ACTIVITIES AREA
- = PROPOSED PHASE 6C CONSTRUCTION ACTIVITIES AREA
- = PROPOSED PHASE 7 CONSTRUCTION ACTIVITIES AREAS
- = PROPOSED PHASE 7A CONSTRUCTION ACTIVITIES AREA
- = PROPOSED PHASE 8 CONSTRUCTION ACTIVITIES AREA
- 1.1 = PHASE 1, AREA 1
- 4A = PHASE 4A



INDEX TO PHASE LOCATIONS
 AND CRITICAL POINTS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

PHASE 1 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTHWEST AND SOUTHEAST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

**PHASE 1
 AIRFIELD STATUS**

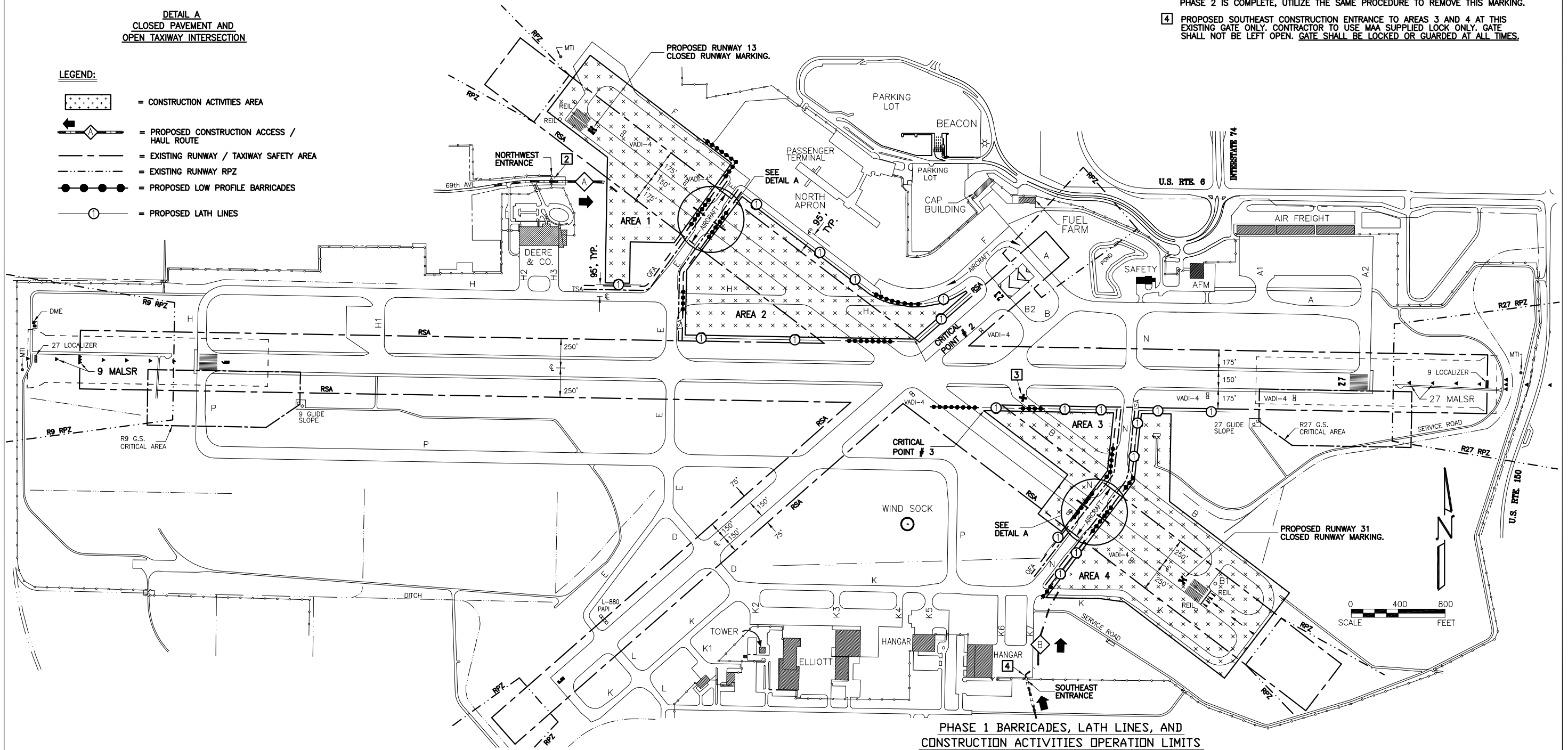
1. RUNWAY 13-31 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY F (NORTH OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY H (BETWEEN TAXIWAY E AND TAXIWAY F) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY B (SOUTH OF RUNWAY 9-27) CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY B1 CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY K (EAST OF TAXIWAY N) CLOSED TO AIRCRAFT TRAFFIC.
8. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.

NUMBERED LEGEND:

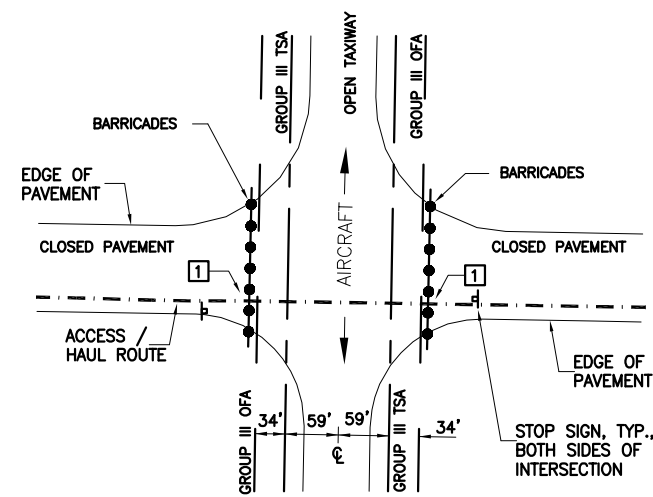
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY E AND N OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED NORTHWEST CONSTRUCTION ENTRANCE TO AREAS 1 AND 2 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED CLOSED TAXIWAY MARKING. PRIOR TO CLOSING RUNWAY 13-31 (WHILE AIRCRAFT OPERATIONS OCCUR ON RUNWAY 13-31); CLOSE RUNWAY 9-27, INSTALL THE CLOSED TAXIWAY MARKING AND CLOSE TAXIWAY B (BETWEEN RUNWAY 9-27 AND TAXIWAY N). THE AIRFIELD SHALL BE UNDER THE CONTROL OF THE TOWER (FAA ATCT) DURING THE INSTALLATION OF THIS MARKING. THE CONTRACTOR SHALL FOLLOW ALL INSTRUCTIONS AND DIRECTIONS ISSUED BY THE CONTROL TOWER WITHOUT DELAY. AFTER PHASE 2 IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THIS MARKING.
- 4 PROPOSED SOUTHEAST CONSTRUCTION ENTRANCE TO AREAS 3 AND 4 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES



PHASE 1 BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

NUMBERED LEGEND:

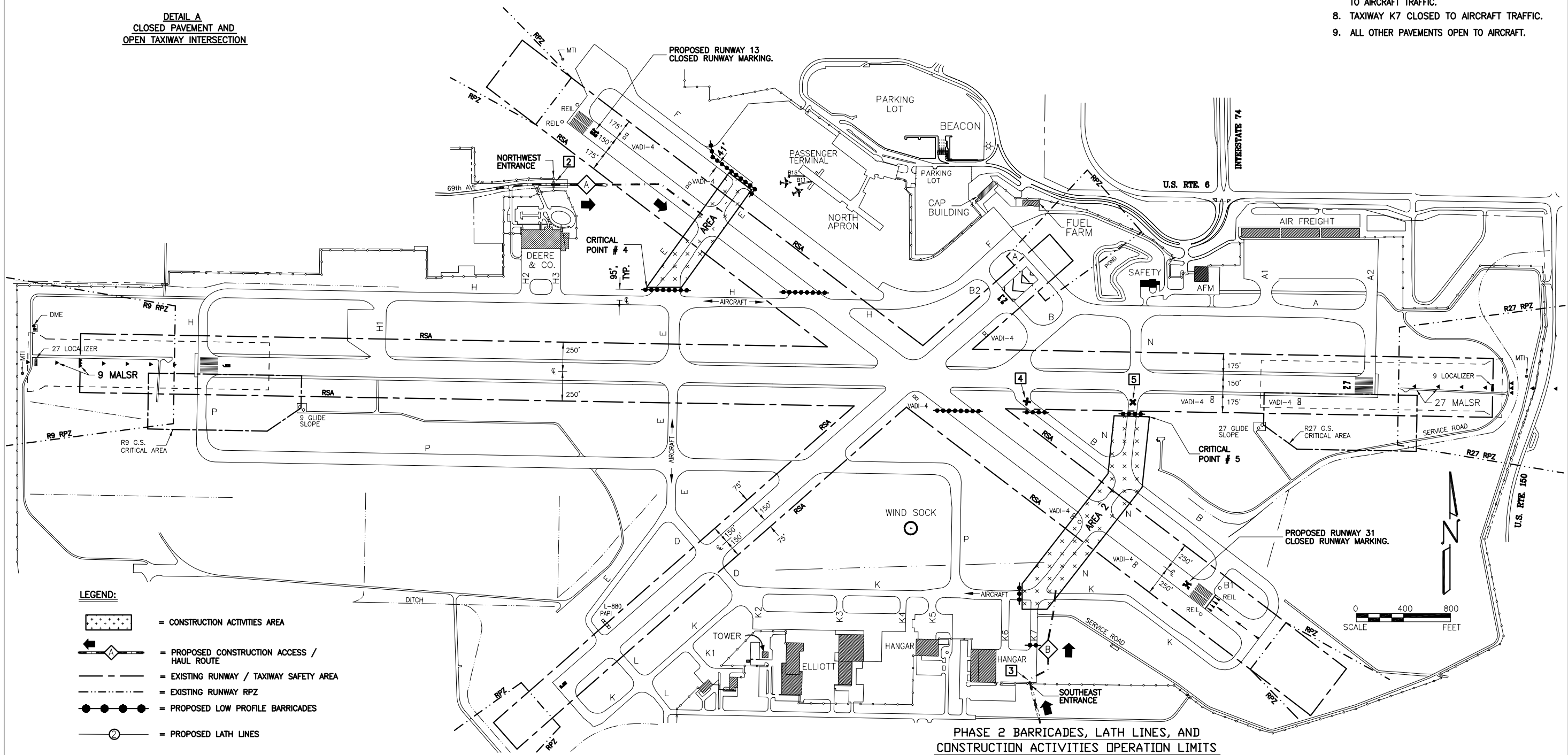
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY H OFA (OBJECT FREE AREA) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED NORTHWEST CONSTRUCTION ENTRANCE TO AREA 1 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED SOUTHEAST CONSTRUCTION ENTRANCE TO AREA 2 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).
- 5 PROPOSED CLOSED TAXIWAY MARKING. CLOSE RUNWAY 9-27 AND INSTALL CLOSED TAXIWAY MARKING BETWEEN THE NIGHTTIME HOURS OF 4:00 A.M. AND 5:00 A.M. CLOSED RUNWAY MARKINGS SHALL BE IN-PLACE ON BOTH ENDS OF RUNWAY 9-27 WHEN THE CONTRACTOR IS IN THE RUNWAY 9-27 SAFETY AREA. RUNWAY 9-27 SHALL BE REOPENED PRIOR TO 5:00 A.M. AFTER WORK IN AREA 2 IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THIS MARKING.

PHASE 2 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTHWEST AND SOUTHEAST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

**PHASE 2
 AIRFIELD STATUS**

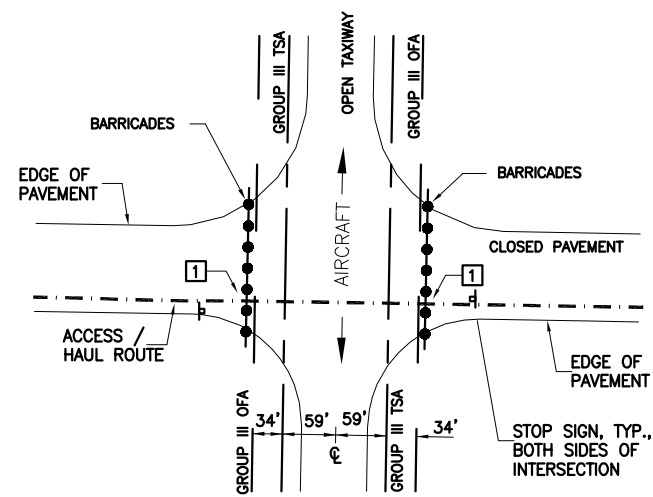
1. RUNWAY 13-31 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY F (NORTH OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY E (BETWEEN TAXIWAY F AND TAXIWAY H) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY B (SOUTH OF RUNWAY 9-27) CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY N (SOUTH OF RUNWAY 9-27) CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY B1 CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY K (EAST OF TAXIWAY K7) CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAY K7 CLOSED TO AIRCRAFT TRAFFIC.
9. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

PHASE 2 BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

NUMBERED LEGEND:

- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY A, H AND N OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO AREA 1 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO AREAS 2 AND 3 AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 PROPOSED CLOSED TAXIWAY MARKINGS. WHILE AIRCRAFT OPERATIONS OCCUR ON RUNWAY 13-31; CLOSE RUNWAYS 5-23 / 9-27, INSTALL THE CLOSED TAXIWAY MARKINGS, CLOSE TAXIWAY B2 (BETWEEN RUNWAY 5-23 AND TAXIWAY B), CLOSE TAXIWAY B (BETWEEN RUNWAY 9-27 AND TAXIWAY A) AND CLOSE TAXIWAY H1. THE AIRFIELD SHALL BE UNDER THE CONTROL OF THE TOWER (FAA ATCT) DURING THE INSTALLATION OF THIS MARKING. THE CONTRACTOR SHALL FOLLOW ALL INSTRUCTIONS AND DIRECTIONS ISSUED BY THE CONTROL TOWER WITHOUT DELAY. AFTER PHASE 3 IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THESE MARKINGS.

PHASE 3 NOTES:

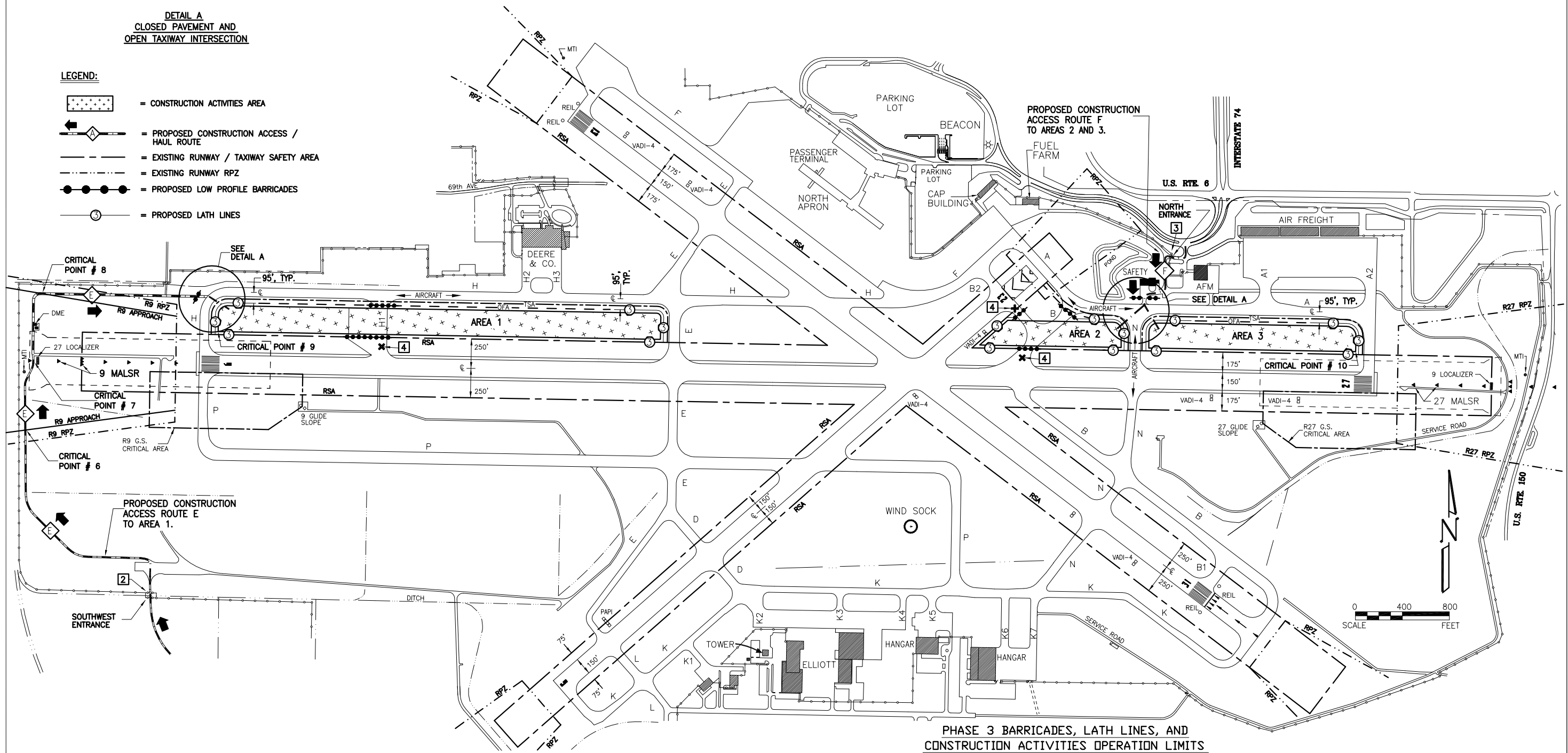
1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27, RUNWAY 13-31, AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

**PHASE 3
 AIRFIELD STATUS**

1. TAXIWAY H1 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY B (BETWEEN RUNWAY 9-27 AND TAXIWAY A) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY B2 (BETWEEN RUNWAY 5-23 AND TAXIWAY B) CLOSED TO AIRCRAFT TRAFFIC.
4. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES



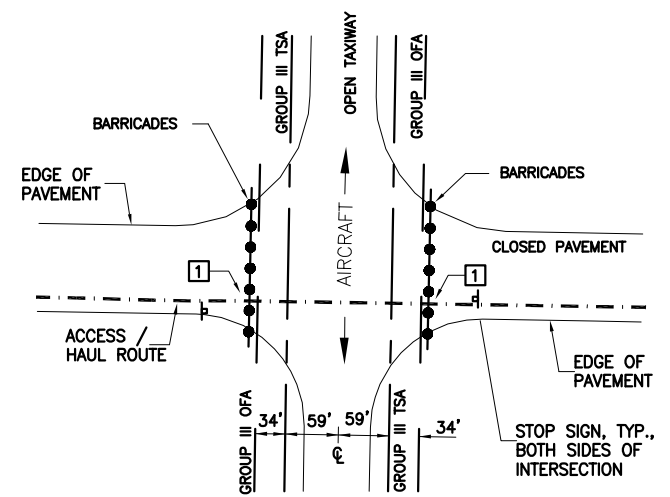
PHASE 3 BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS

PHASE 4 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 13-31 AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE.
2. RUNWAY 9-27 CLOSED RUNWAY MARKINGS SHALL BE IN-PLACE ON BOTH ENDS OF RUNWAY WHEN THE CONTRACTOR IS IN THE R9-27 RSA.
3. RUNWAY 13-31 SHALL BE OPEN TO AIRCRAFT WHEN RUNWAY 9-27 IS CLOSED.
4. CONTRACTOR SHALL MINIMIZE THE TIME SPENT IN THE RUNWAY 9-27 SAFETY AREA. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
5. ALL PROPOSED WORK IN THE PHASE 4 AREAS SHALL BE BROKEN DOWN INTO UNITS OF WORK WHICH CAN BE ACCOMPLISHED IN SEPARATE TWO DAY PERIODS. THE MAA RESERVES AND SHALL HAVE THE RIGHT TO STOP WORK AND REOPEN THE RUNWAY AND TAXIWAYS AT ANY TIME DURING THE WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
6. AT THE END OF EVERY WORK PERIOD, THE CONTRACTOR SHALL REMOVE ALL ITEMS FROM THE SAFETY, OBJECT FREE AND CRITICAL AREAS; REGRADE THE SAFETY, OBJECT FREE, AND CRITICAL AREAS AND REOPEN THE PAVEMENTS TO AIRCRAFT TRAFFIC. RUNWAY 9-27 SHALL BE OPEN TO AIRCRAFT TRAFFIC AT ALL TIMES WHEN THE CONTRACTOR IS NOT IN THE R9-27 SAFETY / CRITICAL AREAS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
7. AS A MINIMUM, THE CONTRACTOR SHALL WORK FOURTEEN HOURS PER DAY UNTIL RUNWAY 9-27 IS REOPENED TO AIRCRAFT TRAFFIC.
8. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTHEAST AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
9. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
10. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
11. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

PHASE 4 AIRFIELD STATUS

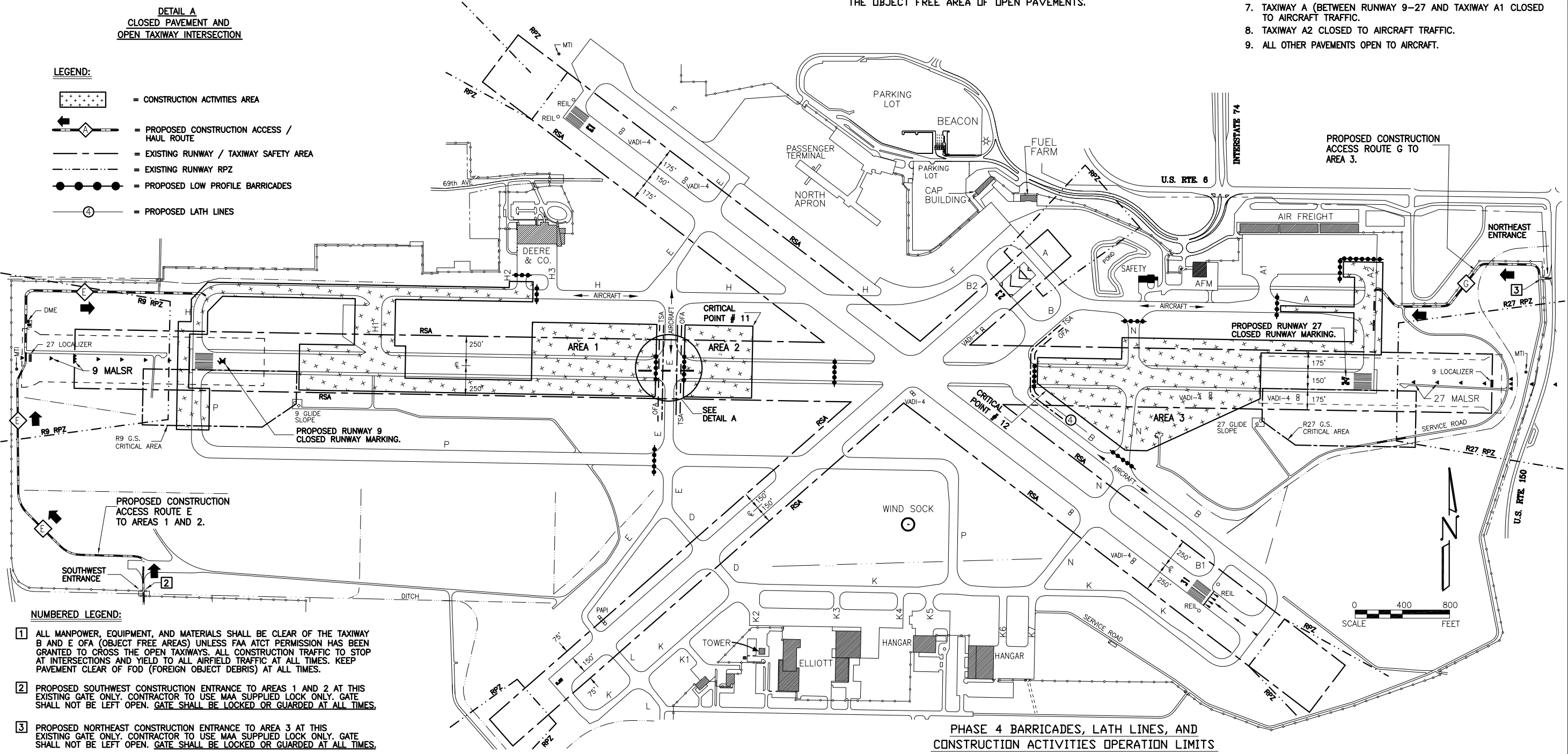
1. RUNWAY 9-27 CLOSED TO AIRCRAFT TRAFFIC FOR A SERIES OF NON-CONSECUTIVE TWO DAY PERIODS. THE TWO DAY PERIODS WILL BE SELECTED BY THE MAA BASED ON WEATHER AND AIR TRAFFIC CONDITIONS. RUNWAY 9-27 TO BE OPENED TO AIRCRAFT TRAFFIC BETWEEN THE TWO DAY WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. RUNWAY 5-23 & RUNWAY 13-31 OPEN TO AIRCRAFT TRAFFIC.
3. TAXIWAY P (WEST OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY H (WEST OF TAXIWAY H3) CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAYS H1 AND H2 CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY N (BETWEEN TAXIWAY A AND TAXIWAY B) CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY A (BETWEEN RUNWAY 9-27 AND TAXIWAY A1) CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAY A2 CLOSED TO AIRCRAFT TRAFFIC.
9. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



DETAIL A
CLOSED PAVEMENT AND
OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES



NUMBERED LEGEND:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY B AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
2. PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO AREAS 1 AND 2 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
3. PROPOSED NORTHEAST CONSTRUCTION ENTRANCE TO AREA 3 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.

PHASE 4 BARRICADES, LATH LINES, AND
CONSTRUCTION ACTIVITIES OPERATION LIMITS

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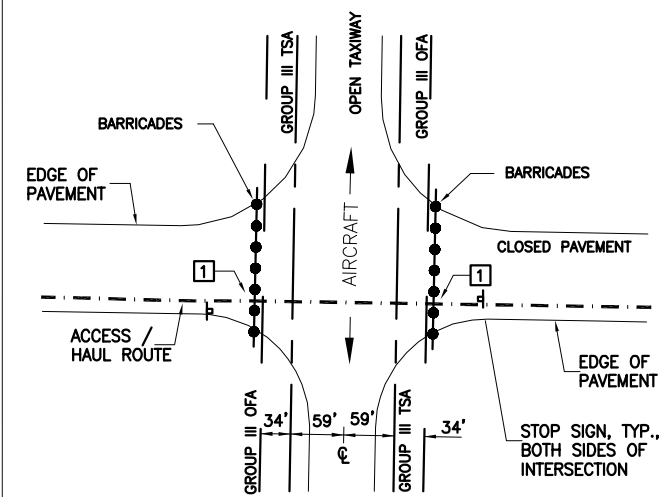
PHASE 4A
AIRFIELD STATUS

1. RUNWAY 9-27 CLOSED TO AIRCRAFT TRAFFIC FOR A SERIES OF NON-CONSECUTIVE TWO DAY PERIODS. THE TWO DAY PERIODS WILL BE SELECTED BY THE MAA BASED ON WEATHER AND AIR TRAFFIC CONDITIONS. RUNWAY 9-27 TO BE OPENED TO AIRCRAFT TRAFFIC BETWEEN THE TWO DAY WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. RUNWAY 5-23 & RUNWAY 13-31 OPEN TO AIRCRAFT TRAFFIC.
3. TAXIWAY P (WEST OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY H (WEST OF TAXIWAY H3) CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAYS H1 AND H2 CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY B (BETWEEN TAXIWAY A AND TAXIWAY B2 CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY N (BETWEEN TAXIWAY A AND TAXIWAY B CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAYS A, A1, AND A2 CLOSED TO AIRCRAFT TRAFFIC.
9. NO ACCESS TO AIR FREIGHT APRON DURING THIS PHASE.
10. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.

PHASE 4A NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 13-31 AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE.
2. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
3. COMPLETE THIS PHASE 4A WORK (WHILE RUNWAY 9-27 IS CLOSED) DURING PHASE 4.
4. RUNWAY 9-27 CLOSED RUNWAY MARKINGS SHALL BE IN-PLACE ON BOTH ENDS OF RUNWAY WHEN THE CONTRACTOR IS IN THE R9-27 RSA.
5. RUNWAY 13-31 SHALL BE OPEN TO AIRCRAFT WHEN RUNWAY 9-27 IS CLOSED.
6. CONTRACTOR SHALL MINIMIZE THE TIME SPENT IN THE RUNWAY 9-27 SAFETY AREA. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
7. ALL PROPOSED WORK IN THIS PHASE 4A AREA SHALL BE BROKEN DOWN INTO UNITS OF WORK WHICH CAN BE ACCOMPLISHED IN SEPARATE TWO DAY PERIODS. THE MAA RESERVES AND SHALL HAVE THE RIGHT TO STOP WORK AND REDOPEN THE RUNWAY AND TAXIWAYS AT ANY TIME DURING THE WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

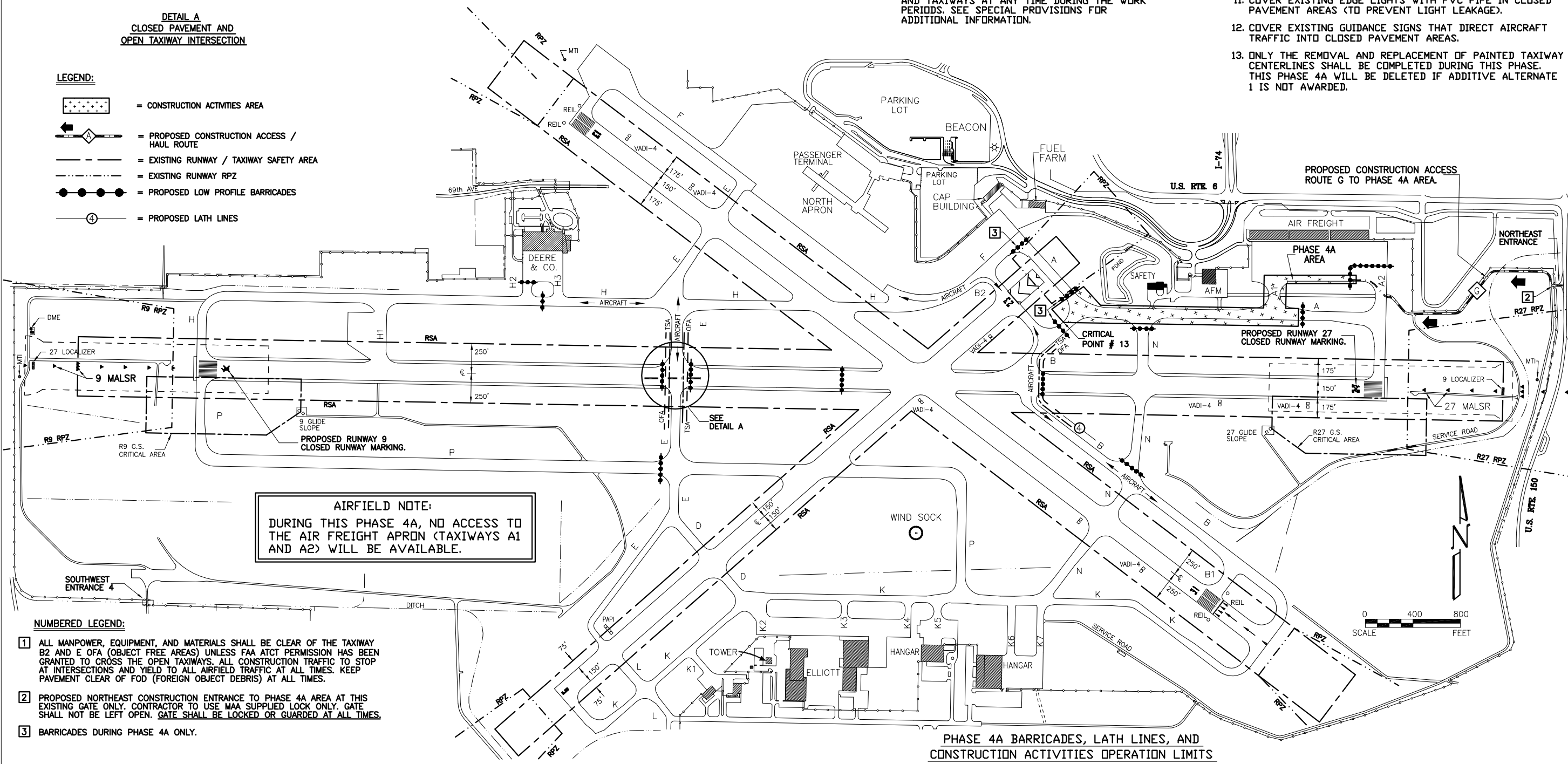
8. AT THE END OF EVERY WORK PERIOD, THE CONTRACTOR SHALL REMOVE ALL ITEMS FROM THE SAFETY, OBJECT FREE AND CRITICAL AREAS; REGRADE THE SAFETY, OBJECT FREE, AND CRITICAL AREAS AND REDOPEN THE PAVEMENTS TO AIRCRAFT TRAFFIC. RUNWAY 9-27 SHALL BE OPEN TO AIRCRAFT TRAFFIC AT ALL TIMES WHEN THE CONTRACTOR IS NOT IN THE R9-27 SAFETY / CRITICAL AREAS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
9. AS A MINIMUM, THE CONTRACTOR SHALL WORK FOURTEEN HOURS PER DAY UNTIL RUNWAY 9-27 IS REDOPENED TO AIRCRAFT TRAFFIC.
10. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTHEAST AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
11. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
12. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
13. ONLY THE REMOVAL AND REPLACEMENT OF PAINTED TAXIWAY CENTERLINES SHALL BE COMPLETED DURING THIS PHASE. THIS PHASE 4A WILL BE DELETED IF ADDITIVE ALTERNATE 1 IS NOT AWARDED.



DETAIL A
CLOSED PAVEMENT AND
OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES



AIRFIELD NOTE:
DURING THIS PHASE 4A, NO ACCESS TO
THE AIR FREIGHT APRON (TAXIWAYS A1
AND A2) WILL BE AVAILABLE.

NUMBERED LEGEND:

- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY B2 AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED NORTHEAST CONSTRUCTION ENTRANCE TO PHASE 4A AREA AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 BARRICADES DURING PHASE 4A ONLY.

PHASE 4A BARRICADES, LATH LINES, AND
CONSTRUCTION ACTIVITIES OPERATION LIMITS

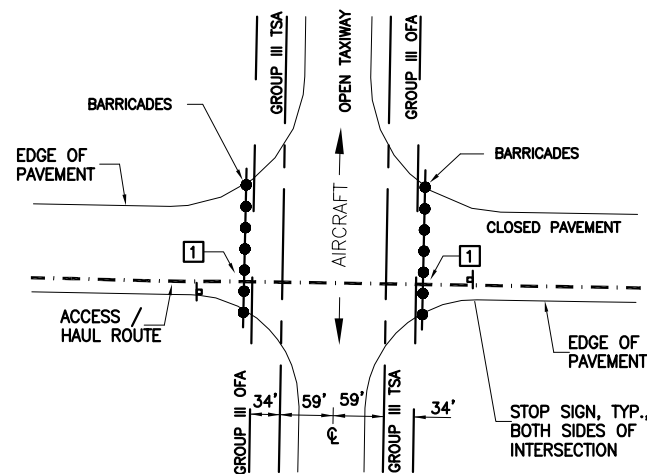
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PHASE 5 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 13-31 AND RUNWAY 5-23 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. RUNWAY 9-27 CLOSED RUNWAY MARKINGS SHALL BE IN-PLACE ON BOTH ENDS OF RUNWAY WHEN THE CONTRACTOR IS IN THE R9-27 RSA.
3. RUNWAY 13-31 SHALL BE OPEN TO AIRCRAFT WHEN RUNWAY 9-27 IS CLOSED.
4. CONTRACTOR SHALL MINIMIZE THE TIME SPENT IN THE RUNWAY 9-27 SAFETY AREA. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
5. ALL PROPOSED WORK IN THIS PHASE 5 AREA SHALL BE BROKEN DOWN INTO UNITS OF WORK WHICH CAN BE ACCOMPLISHED IN SEPARATE TWO DAY PERIODS. THE MAA RESERVES AND SHALL HAVE THE RIGHT TO STOP WORK AND REDOPEN THE RUNWAY AND TAXIWAYS AT ANY TIME DURING THE WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
6. AT THE END OF EVERY WORK PERIOD; THE CONTRACTOR SHALL REMOVE ALL ITEMS FROM THE SAFETY, OBJECT FREE AND CRITICAL AREAS; REGRADE THE SAFETY, OBJECT FREE, AND CRITICAL AREAS AND REDOPEN THE PAVEMENTS TO AIRCRAFT TRAFFIC. RUNWAY 9-27 SHALL BE OPEN TO AIRCRAFT TRAFFIC AT ALL TIMES WHEN THE CONTRACTOR IS NOT IN THE R9-27 SAFETY / CRITICAL AREAS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
7. AS A MINIMUM, THE CONTRACTOR SHALL WORK FOURTEEN HOURS PER DAY UNTIL RUNWAY 9-27 IS REDOPENED TO AIRCRAFT TRAFFIC.
8. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTHEAST AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
9. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
10. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
11. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

**PHASE 5
 AIRFIELD STATUS**

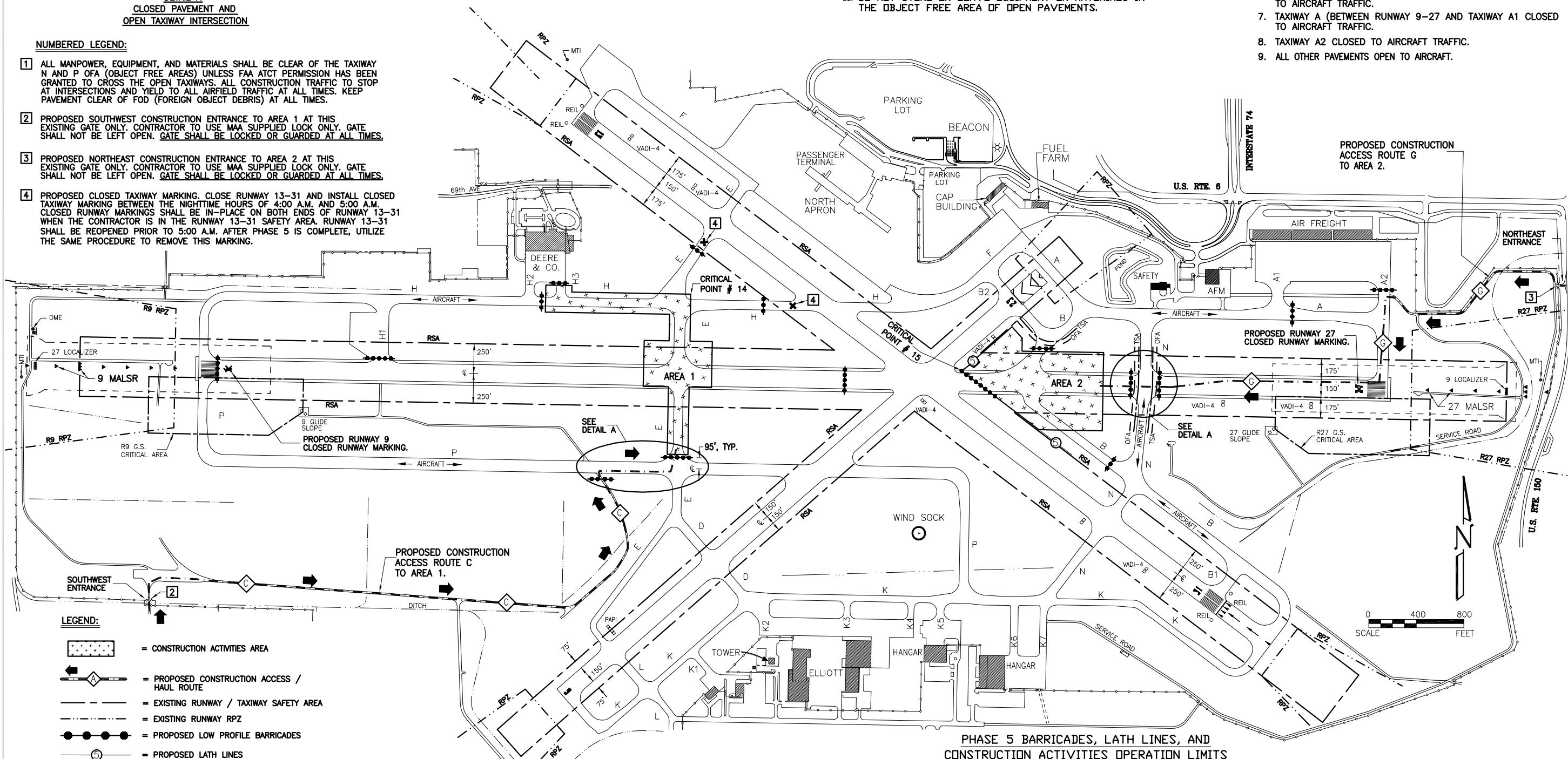
1. RUNWAY 9-27 CLOSED TO AIRCRAFT TRAFFIC FOR A SERIES OF NON-CONSECUTIVE TWO DAY PERIODS. THE TWO DAY PERIODS WILL BE SELECTED BY THE MAA BASED ON WEATHER AND AIR TRAFFIC CONDITIONS. RUNWAY 9-27 TO BE OPENED TO AIRCRAFT TRAFFIC BETWEEN THE TWO DAY WORK PERIODS. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. RUNWAY 5-23 & RUNWAY 13-31 OPEN TO AIRCRAFT TRAFFIC.
3. TAXIWAY H (BETWEEN RUNWAY 13-31 AND TAXIWAY H2) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY H3 CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY E (BETWEEN RUNWAY 13-31 AND TAXIWAY P) CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY B (BETWEEN TAXIWAY B2 AND TAXIWAY N) CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY A (BETWEEN RUNWAY 9-27 AND TAXIWAY A1) CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAY A2 CLOSED TO AIRCRAFT TRAFFIC.
9. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



**DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION**

NUMBERED LEGEND:

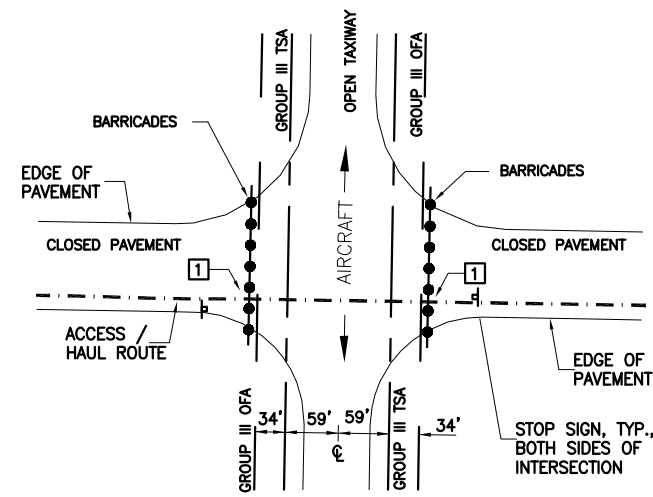
1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY N AND P OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
2. PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO AREA 1 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
3. PROPOSED NORTHEAST CONSTRUCTION ENTRANCE TO AREA 2 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
4. PROPOSED CLOSED TAXIWAY MARKING. CLOSE RUNWAY 13-31 AND INSTALL CLOSED TAXIWAY MARKING BETWEEN THE NIGHTTIME HOURS OF 4:00 A.M. AND 5:00 A.M. CLOSED RUNWAY MARKINGS SHALL BE IN-PLACE ON BOTH ENDS OF RUNWAY 13-31 WHEN THE CONTRACTOR IS IN THE RUNWAY 13-31 SAFETY AREA. RUNWAY 13-31 SHALL BE REOPENED PRIOR TO 5:00 A.M. AFTER PHASE 5 IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THIS MARKING.



LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

**PHASE 5 BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS**



DETAIL A
CLOSED PAVEMENT AND
OPEN TAXIWAY INTERSECTION

NUMBERED LEGEND:

- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY D AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO AREAS 1 AND 2 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO RUNWAY 23 THRESHOLD AREA AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 PROPOSED CLOSED TAXIWAY MARKING. WHILE AIRCRAFT OPERATIONS OCCUR ON RUNWAY 13-31; CLOSE RUNWAY 9-27, INSTALL THE CLOSED TAXIWAY MARKING AND CLOSE TAXIWAY P (BETWEEN RUNWAY 9-27 AND TAXIWAY E). THE AIRFIELD SHALL BE UNDER THE CONTROL OF THE TOWER (FAA ATCT) DURING THE INSTALLATION OF THIS MARKING. THE CONTRACTOR SHALL FOLLOW ALL INSTRUCTIONS AND DIRECTIONS ISSUED BY THE CONTROL TOWER WITHOUT DELAY. REMOVE THIS MARKING AFTER PHASE 7.

PHASE 6 NOTES:

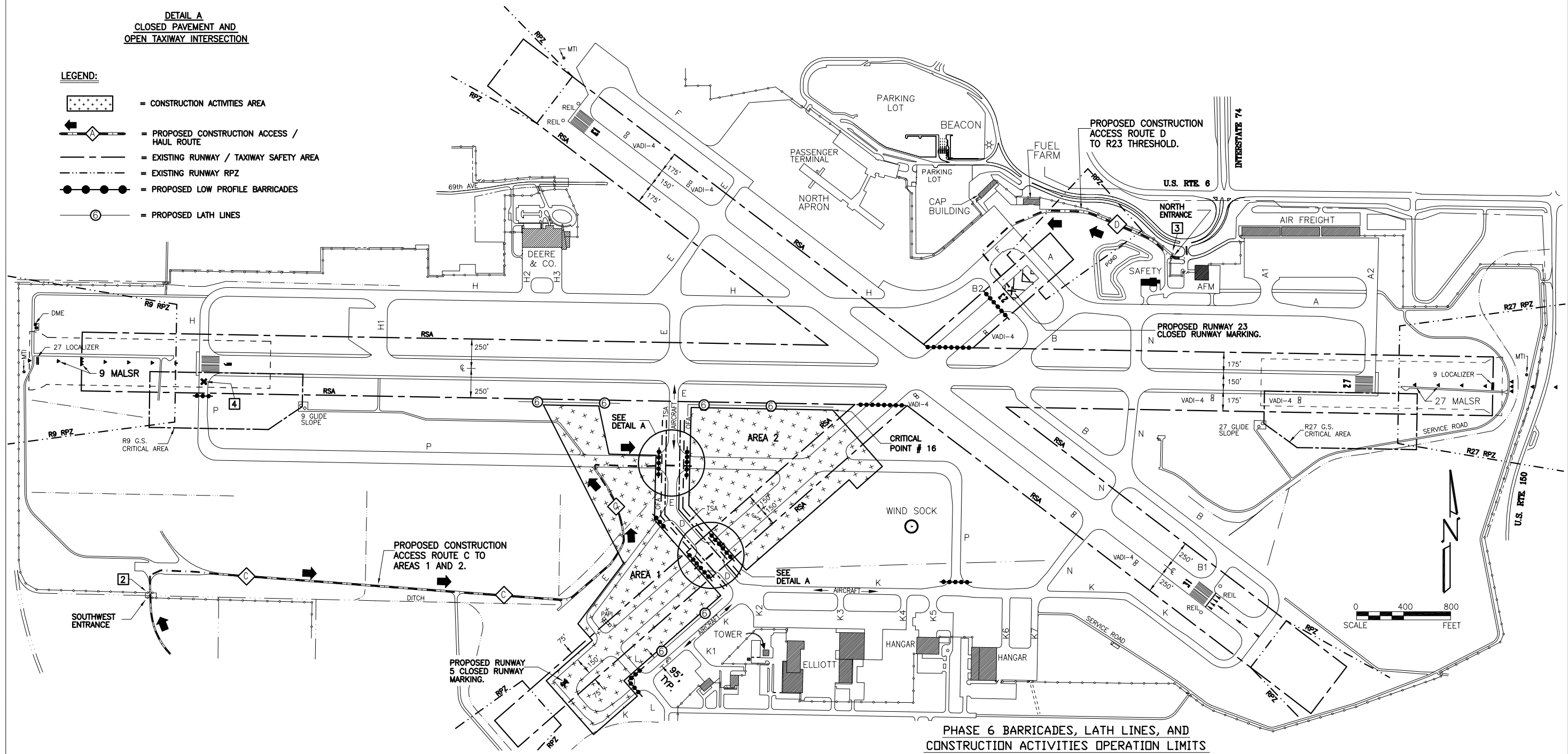
- 1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
- 2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
- 3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
- 4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
- 5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
- 6. COMPLETE PHASE 6A, 6B, AND 6C WORK WHILE WORKING IN AREAS 1 AND 2.

**PHASE 6
AIRFIELD STATUS**

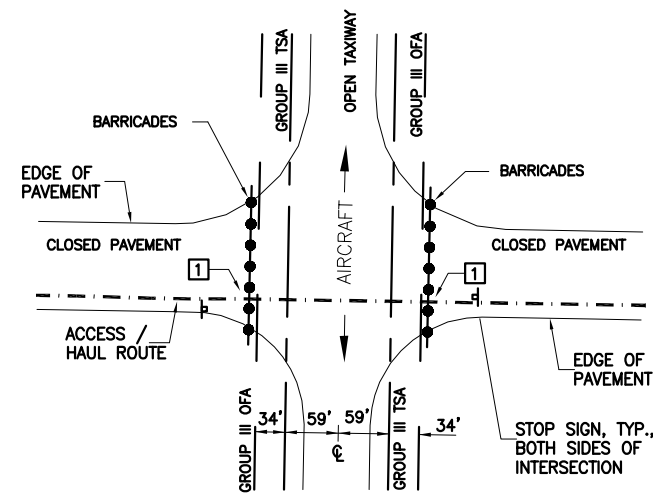
- 1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
- 2. TAXIWAY K (SOUTH OF TAXIWAY L) CLOSED TO AIRCRAFT TRAFFIC.
- 3. TAXIWAY L (NORTHWEST OF TAXIWAY K) CLOSED TO AIRCRAFT TRAFFIC.
- 4. TAXIWAY E (SOUTH OF TAXIWAY D) CLOSED TO AIRCRAFT TRAFFIC.
- 5. TAXIWAY P CLOSED TO AIRCRAFT TRAFFIC.
- 6. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES



PHASE 6 BARRICADES, LATH LINES, AND
CONSTRUCTION ACTIVITIES OPERATION LIMITS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

NUMBERED LEGEND:

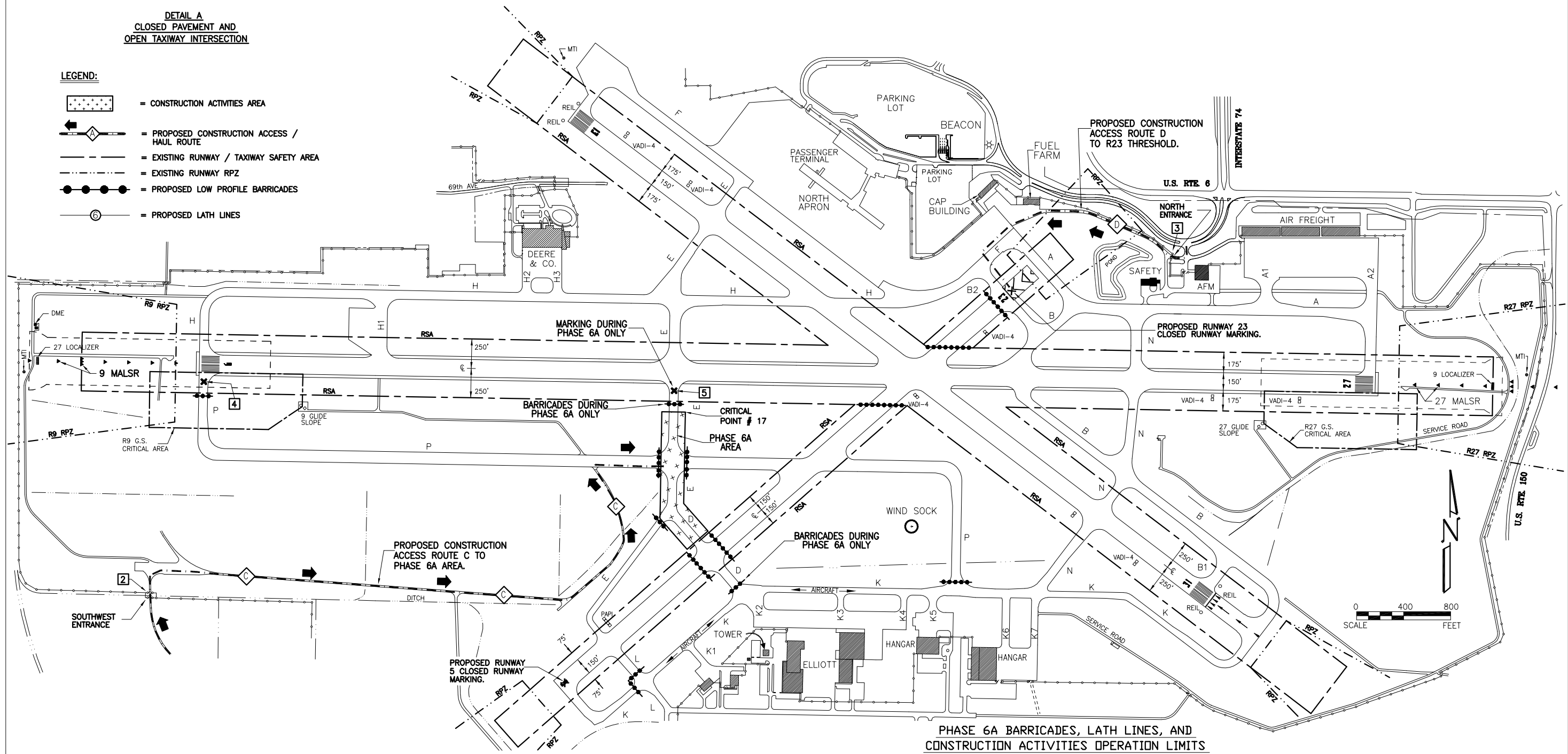
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY B2 OFA (OBJECT FREE AREA) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO PHASE 6A AREA AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO RUNWAY 23 THRESHOLD AREA AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).
- 5 PROPOSED CLOSED TAXIWAY MARKING. WHILE AIRCRAFT OPERATIONS OCCUR ON RUNWAY 13-31; CLOSE RUNWAY 9-27, INSTALL THE CLOSED TAXIWAY MARKING AND CLOSE TAXIWAY E (BETWEEN RUNWAY 9-27 AND TAXIWAY K). THE AIRFIELD SHALL BE UNDER THE CONTROL OF THE TOWER (FAA ATCT) DURING THE INSTALLATION OF THIS MARKING. THE CONTRACTOR SHALL FOLLOW ALL INSTRUCTIONS AND DIRECTIONS ISSUED BY THE CONTROL TOWER WITHOUT DELAY. AFTER PHASE 6A IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THIS MARKING.

PHASE 6A NOTES:

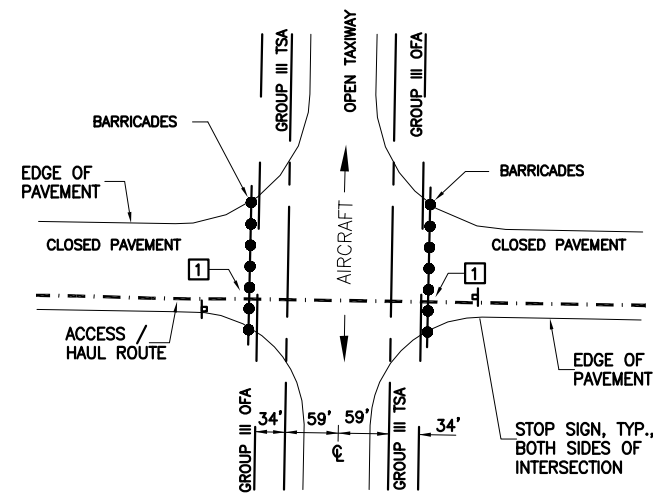
1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
6. ALL WORK IN THIS PHASE SHALL BE COMPLETED DURING A ONE EACH - TEN (10) HOUR WORK SHIFT.
7. COMPLETE THIS PHASE 6A WORK (WHILE RUNWAY 5-23 IS CLOSED) DURING PHASE 6.
8. THIS PHASE 6A SHALL NOT OCCUR AT THE SAME TIME AS PHASE 6C.

PHASE 6A
 AIRFIELD STATUS

1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY K (SOUTH OF TAXIWAY L) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY L (NORTHWEST OF TAXIWAY K) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY D CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY E (SOUTH OF RUNWAY 9-27) CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY P CLOSED TO AIRCRAFT TRAFFIC.
7. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



PHASE 6A BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

NUMBERED LEGEND:

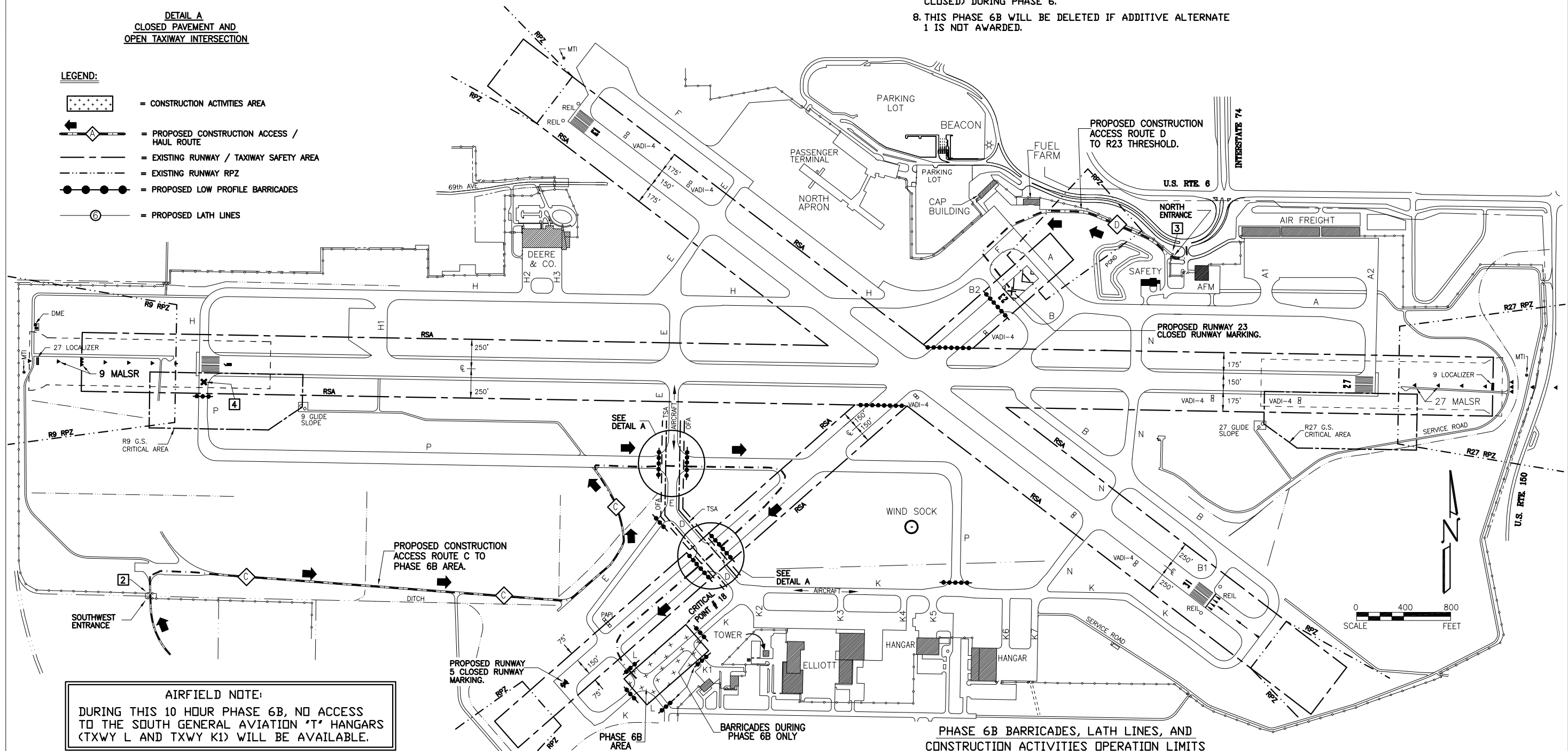
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY D AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO PHASE 6B AREA AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO RUNWAY 23 THRESHOLD AREA AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).

PHASE 6B NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
6. ONLY THE REMOVAL AND REPLACEMENT OF PAINTED TAXIWAY CENTERLINES SHALL BE COMPLETED DURING THIS PHASE. ALL WORK IN THIS PHASE SHALL BE COMPLETED DURING A ONE EACH - TEN (10) HOUR WORK SHIFT.
7. COMPLETE THIS PHASE 6B WORK (WHILE RUNWAY 5-23 IS CLOSED) DURING PHASE 6.
8. THIS PHASE 6B WILL BE DELETED IF ADDITIVE ALTERNATE 1 IS NOT AWARDED.

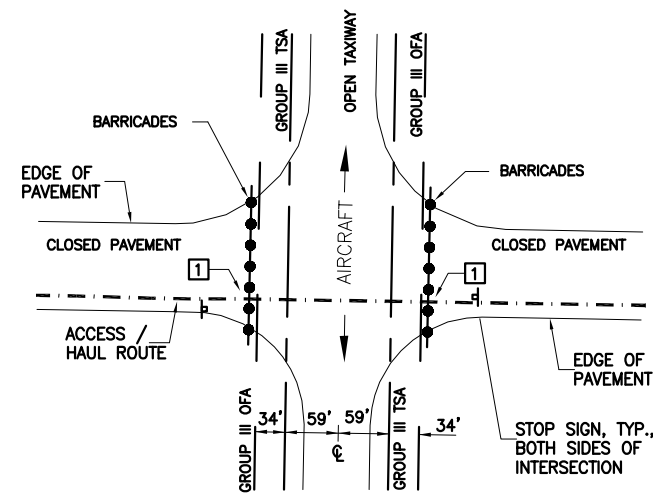
PHASE 6B
 AIRFIELD STATUS

1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY K (SOUTH OF TAXIWAY K2) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY L CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY E (SOUTH OF TAXIWAY D) CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY P CLOSED TO AIRCRAFT TRAFFIC.
6. NO ACCESS TO SOUTH GENERAL AVIATION "T" HANGARS DURING THIS 10 HOUR PHASE.
7. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



AIRFIELD NOTE:
 DURING THIS 10 HOUR PHASE 6B, NO ACCESS TO THE SOUTH GENERAL AVIATION "T" HANGARS (TXWY L AND TXWY K1) WILL BE AVAILABLE.

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DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

NUMBERED LEGEND:

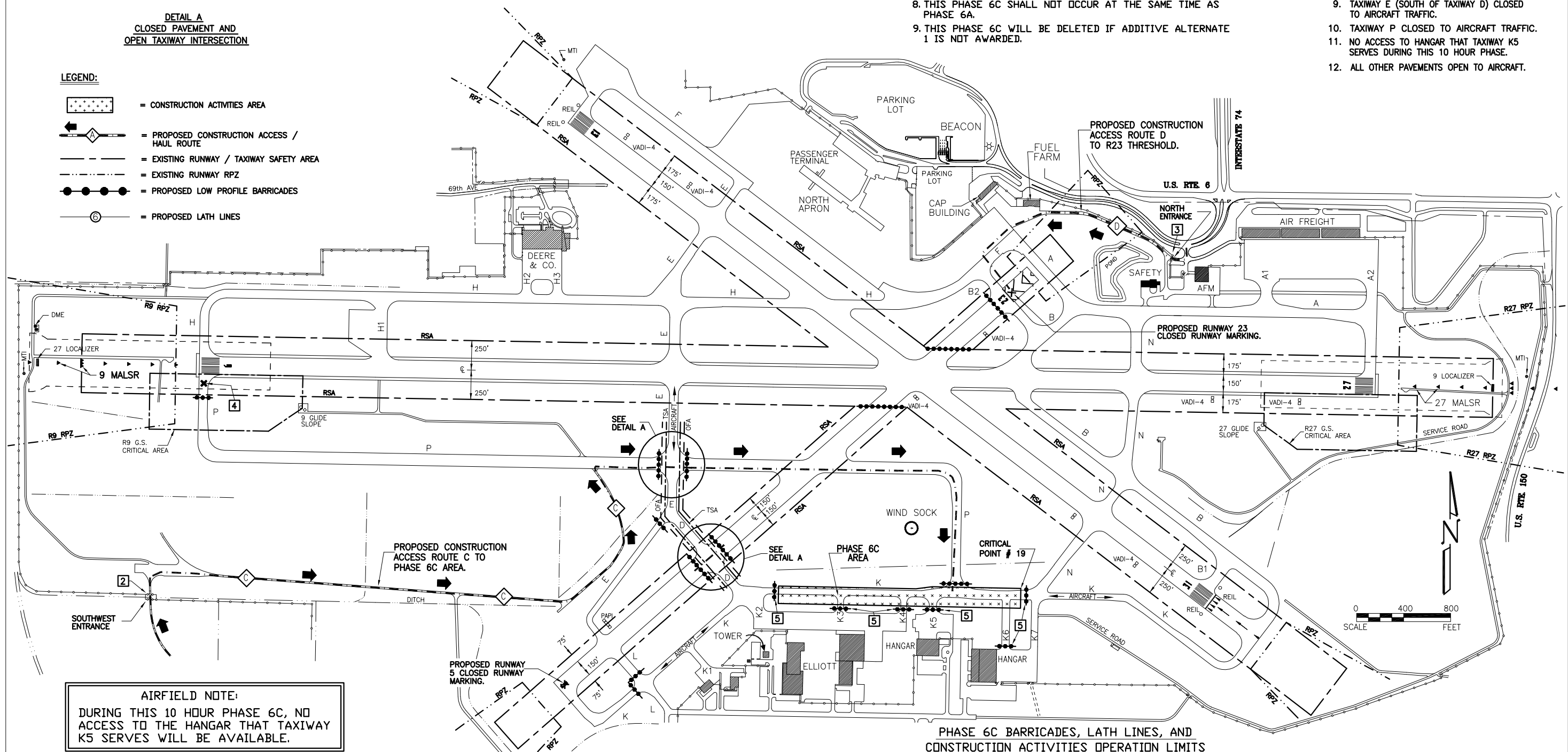
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY D AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO PHASE 6C AREA AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO RUNWAY 23 THRESHOLD AREA AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).
- 5 BARRICADES DURING PHASE 6C ONLY.

PHASE 6C NOTES:

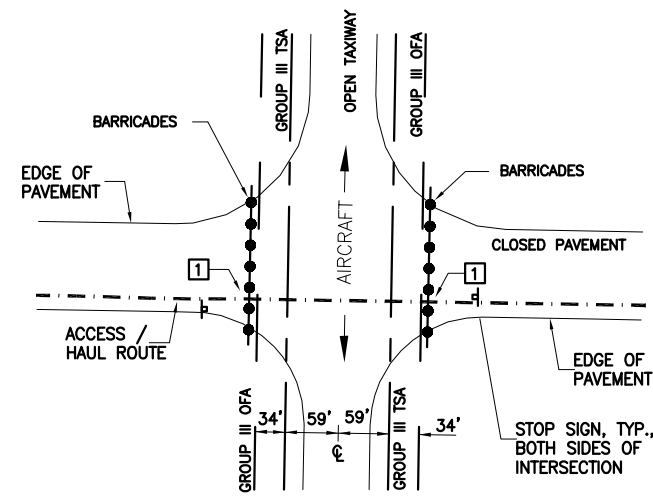
1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
6. ONLY THE REMOVAL AND REPLACEMENT OF PAINTED TAXIWAY CENTERLINES SHALL BE COMPLETED DURING THIS PHASE. ALL WORK IN THIS PHASE SHALL BE COMPLETED DURING A ONE EACH - TEN (10) HOUR WORK SHIFT.
7. COMPLETE THIS PHASE 6C WORK (WHILE RUNWAY 5-23 IS CLOSED) DURING PHASE 6.
8. THIS PHASE 6C SHALL NOT OCCUR AT THE SAME TIME AS PHASE 6A.
9. THIS PHASE 6C WILL BE DELETED IF ADDITIVE ALTERNATE 1 IS NOT AWARDED.

PHASE 6C
 AIRFIELD STATUS

1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY K (SOUTH OF TAXIWAY L) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY K (BETWEEN TAXIWAY K2 AND TAXIWAY K7) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY K3 CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY K4 CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY K5 CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY K6 CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAY L (NORTHWEST OF TAXIWAY K) CLOSED TO AIRCRAFT TRAFFIC.
9. TAXIWAY E (SOUTH OF TAXIWAY D) CLOSED TO AIRCRAFT TRAFFIC.
10. TAXIWAY P CLOSED TO AIRCRAFT TRAFFIC.
11. NO ACCESS TO HANGAR THAT TAXIWAY K5 SERVES DURING THIS 10 HOUR PHASE.
12. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



PHASE 6C BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION

LEGEND:

- = CONSTRUCTION ACTIVITIES AREA
- = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
- = EXISTING RUNWAY / TAXIWAY SAFETY AREA
- = EXISTING RUNWAY RPZ
- = PROPOSED LOW PROFILE BARRICADES
- = PROPOSED LATH LINES

NUMBERED LEGEND:

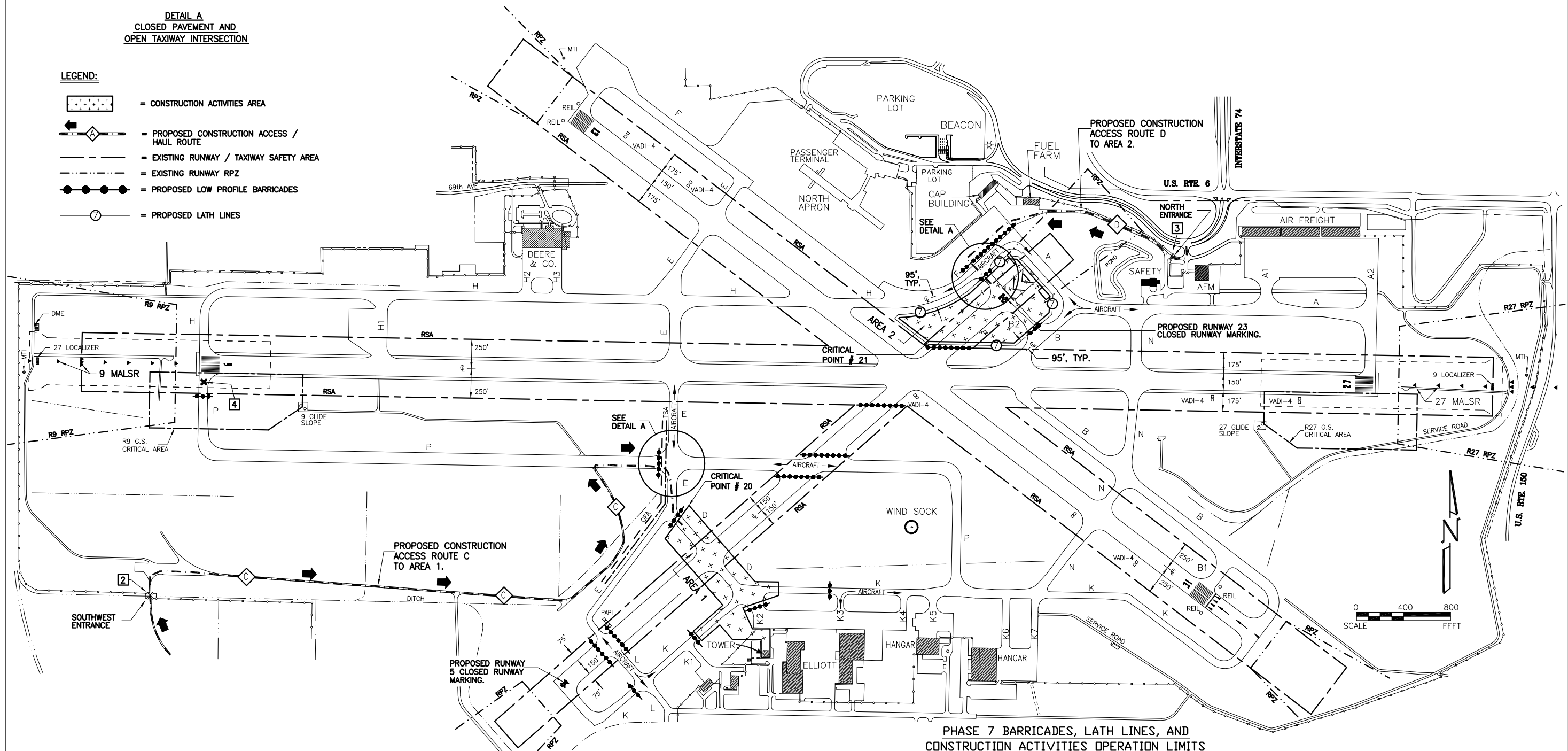
- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY B, E AND F OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE TO AREA 1 AT THIS EXISTING GATE ONLY. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO AREA 2 AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).

PHASE 7 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.

PHASE 7
 AIRFIELD STATUS

1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY K (SOUTH OF TAXIWAY L) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY K (BETWEEN TAXIWAY K1 AND TAXIWAY K3) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY K2 CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY D CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY P (WEST OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY B2 CLOSED TO AIRCRAFT TRAFFIC.
8. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



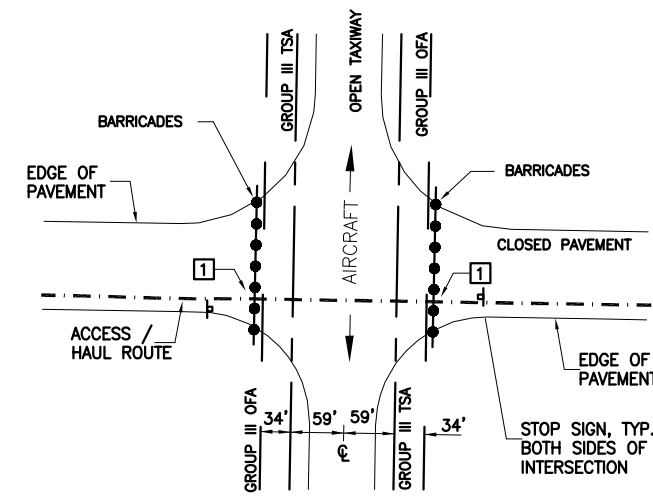
PHASE 7 BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS

NUMBERED LEGEND:

- 1 ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE TAXIWAY B AND E OFA (OBJECT FREE AREAS) UNLESS FAA ATCT PERMISSION HAS BEEN GRANTED TO CROSS THE OPEN TAXIWAYS. ALL CONSTRUCTION TRAFFIC TO STOP AT INTERSECTIONS AND YIELD TO ALL AIRFIELD TRAFFIC AT ALL TIMES. KEEP PAVEMENT CLEAR OF FOD (FOREIGN OBJECT DEBRIS) AT ALL TIMES.
- 2 PROPOSED SOUTHWEST CONSTRUCTION ENTRANCE. CONTRACTOR TO USE MAA SUPPLIED LOCK ONLY. GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 3 PROPOSED NORTH CONSTRUCTION ENTRANCE TO PHASE 7A AREA AT THIS EXISTING GATE ONLY (EQUIPPED WITH ELECTRIC GATE OPENER). GATE SHALL NOT BE LEFT OPEN. GATE SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 4 CLOSED TAXIWAY MARKING (PREVIOUSLY INSTALLED).
- 5 PROPOSED CLOSED TAXIWAY MARKING. WHILE AIRCRAFT OPERATIONS OCCUR ON RUNWAY 9-27; CLOSE RUNWAY 13-31, INSTALL THE CLOSED TAXIWAY MARKING AND CLOSE TAXIWAY H (BETWEEN RUNWAY 13-31 AND TAXIWAY F). THE AIRFIELD SHALL BE UNDER THE CONTROL OF THE TOWER (FAA ATCT) DURING THE INSTALLATION OF THIS MARKING. THE CONTRACTOR SHALL FOLLOW ALL INSTRUCTIONS AND DIRECTIONS ISSUED BY THE CONTROL TOWER WITHOUT DELAY. AFTER PHASE 7A IS COMPLETE, UTILIZE THE SAME PROCEDURE TO REMOVE THIS MARKING.
- 6 BARRICADES DURING PHASE 7A ONLY.
- 7 PROPOSED MOVING CONSTRUCTION OPERATION, DAY ONLY (FOR CENTERLINE PAINT REMOVAL AND REPLACEMENT ONLY) WITHIN THE NORTH RAMP NON-MOVEMENT AREA ONLY. CONTRACTOR SHALL NOT ENTER TAXIWAY E OFA. CONTRACTOR SHALL REMOVE ONLY WHAT HE CAN REPLACE PRIOR TO THE END OF EACH SINGLE CONTINUOUS WORK SHIFT.

PHASE 7A NOTES:

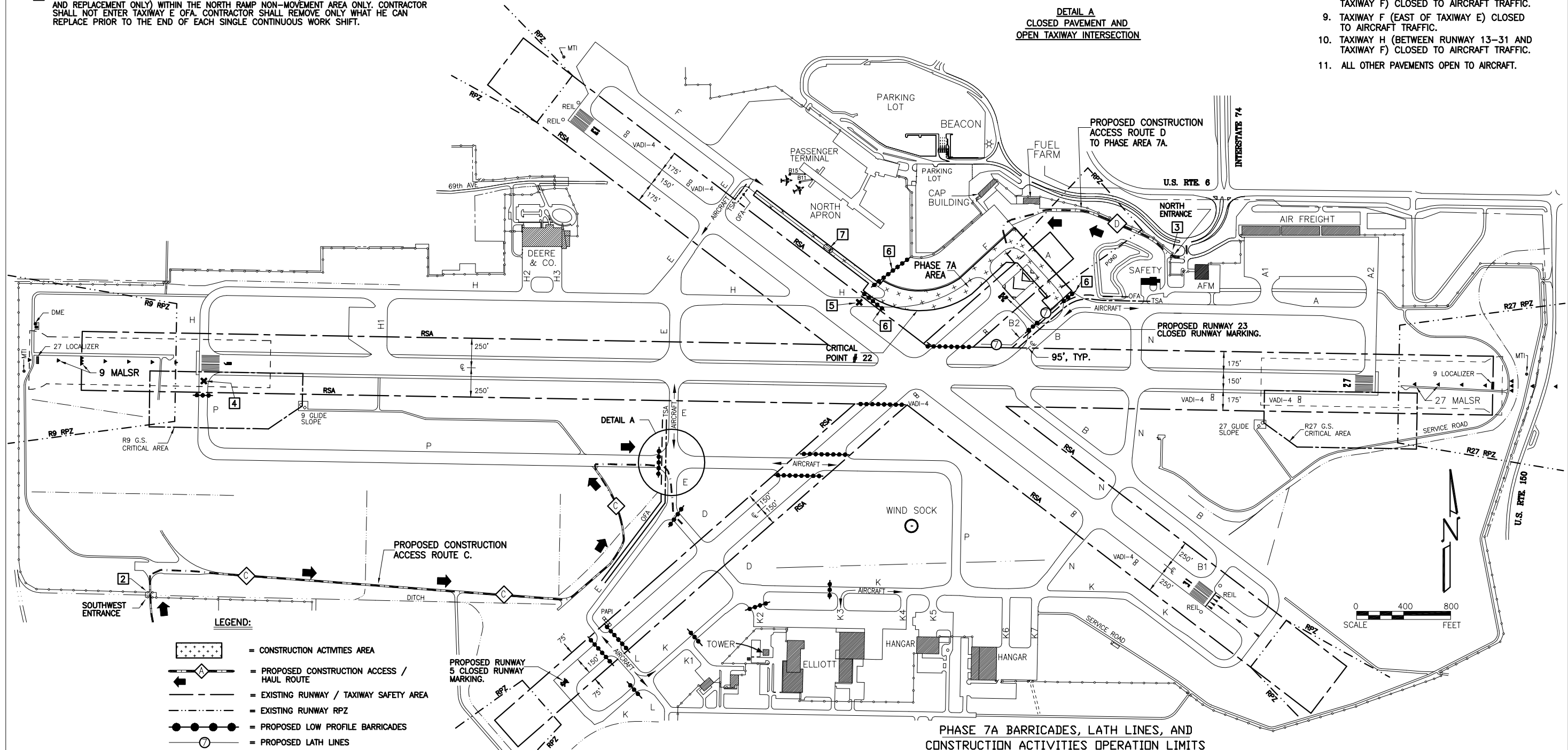
1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR OF THE RUNWAY 9-27 AND RUNWAY 13-31 SAFETY AREAS DURING THIS PHASE UNLESS NOTED OTHERWISE.
2. THE CONTRACTOR SHALL NOT CUT ACROSS THE AIRFIELD TO ACCESS THE DIFFERENT AREAS. THE CONTRACTOR SHALL USE PUBLIC ROADS TO ACCESS THE NORTH AND SOUTHWEST CONSTRUCTION ENTRANCE GATES.
3. COVER EXISTING EDGE LIGHTS WITH PVC PIPE IN CLOSED PAVEMENT AREAS (TO PREVENT LIGHT LEAKAGE).
4. COVER EXISTING GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
5. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
6. ALL WORK IN THIS PHASE SHALL BE COMPLETED DURING ONE (1) EACH - FIVE (5) CALENDAR DAY WORK PERIOD.
7. COMPLETE THIS PHASE 7A WORK (WHILE RUNWAY 5-23 IS CLOSED) DURING PHASE 7.



DETAIL A
 CLOSED PAVEMENT AND
 OPEN TAXIWAY INTERSECTION



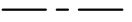
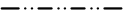


PHASE 7A AIRFIELD STATUS

1. RUNWAY 5-23 CLOSED TO AIRCRAFT TRAFFIC.
2. TAXIWAY K (SOUTH OF TAXIWAY L) CLOSED TO AIRCRAFT TRAFFIC.
3. TAXIWAY K (BETWEEN TAXIWAY K1 AND TAXIWAY K3) CLOSED TO AIRCRAFT TRAFFIC.
4. TAXIWAY K2 CLOSED TO AIRCRAFT TRAFFIC.
5. TAXIWAY D CLOSED TO AIRCRAFT TRAFFIC.
6. TAXIWAY P (WEST OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
7. TAXIWAY B2 CLOSED TO AIRCRAFT TRAFFIC.
8. TAXIWAY A (BETWEEN TAXIWAY B AND TAXIWAY F) CLOSED TO AIRCRAFT TRAFFIC.
9. TAXIWAY F (EAST OF TAXIWAY E) CLOSED TO AIRCRAFT TRAFFIC.
10. TAXIWAY H (BETWEEN RUNWAY 13-31 AND TAXIWAY F) CLOSED TO AIRCRAFT TRAFFIC.
11. ALL OTHER PAVEMENTS OPEN TO AIRCRAFT.



PHASE 7A BARRICADES, LATH LINES, AND
 CONSTRUCTION ACTIVITIES OPERATION LIMITS

LEGEND:

-  = CONSTRUCTION ACTIVITIES AREA
-  = PROPOSED CONSTRUCTION ACCESS / HAUL ROUTE
-  = EXISTING RUNWAY / TAXIWAY SAFETY AREA
-  = EXISTING RUNWAY RPZ
-  = PROPOSED LOW PROFILE BARRICADES
-  = PROPOSED LATH LINES

NUMBERED LEGEND:

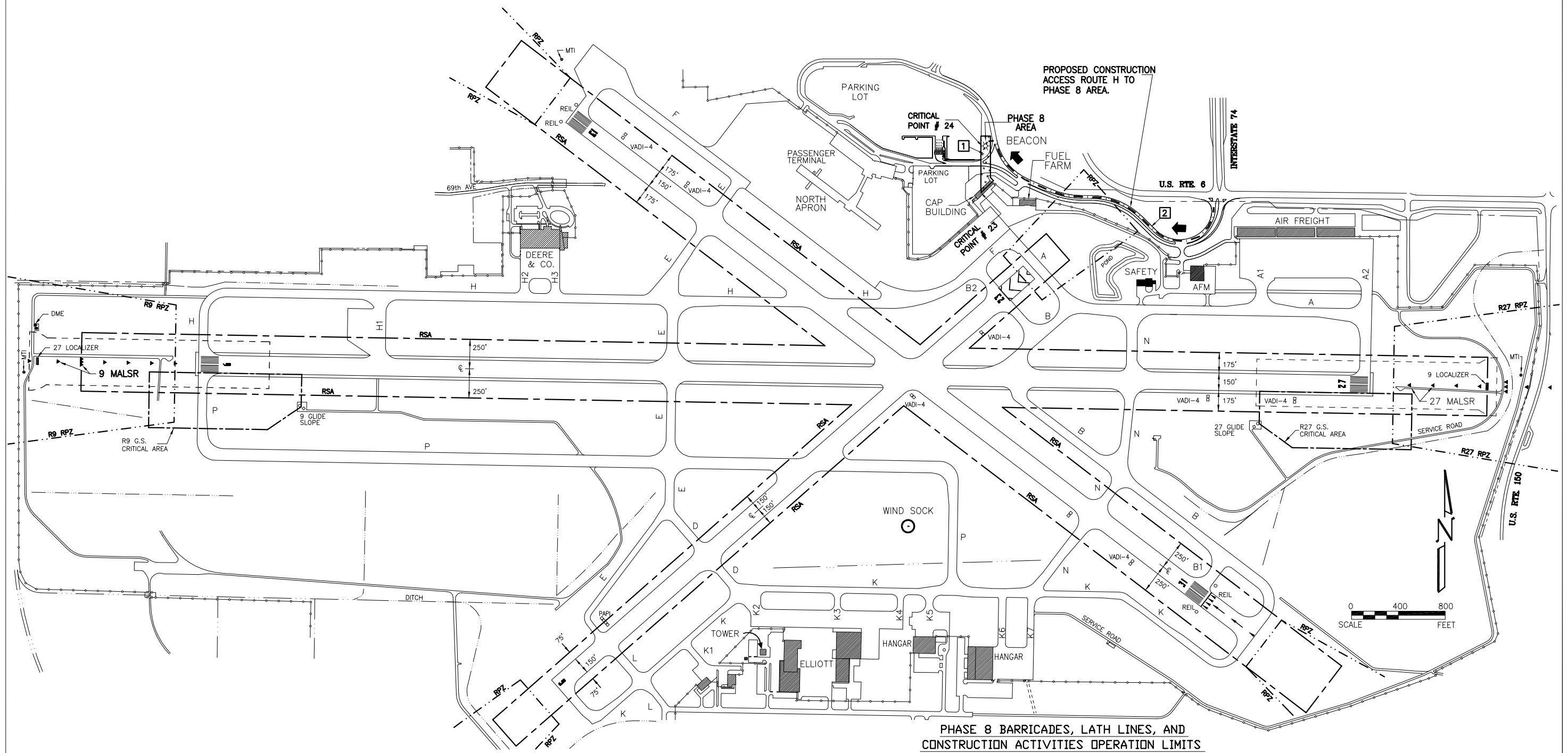
- 1** PROPOSED BEACON SITE IS OUTSIDE OF THE AIRFIELD SECURED AREA.
- 2** PROPOSED CONSTRUCTION ACCESS ROUTE.

PHASE 8 NOTES:

1. ALL MANPOWER, EQUIPMENT, AND MATERIALS SHALL BE CLEAR ALL RUNWAYS AND TAXIWAYS OBJECT FREE AND SAFETY AREAS DURING THIS PHASE.
2. DO NOT STORE OR LEAVE EQUIPMENT OR MATERIALS IN THE OBJECT FREE AREA OF OPEN PAVEMENTS.
3. THIS PHASE MAY BE COMPLETED SIMULTANEOUSLY WITH ANY OTHER PHASE.

PHASE 8 AIRFIELD STATUS

1. ALL AIRFIELD PAVEMENTS OPEN TO AIRCRAFT.

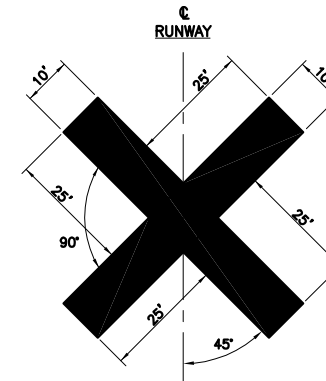


PHASE 8 BARRICADES, LATH LINES, AND CONSTRUCTION ACTIVITIES OPERATION LIMITS

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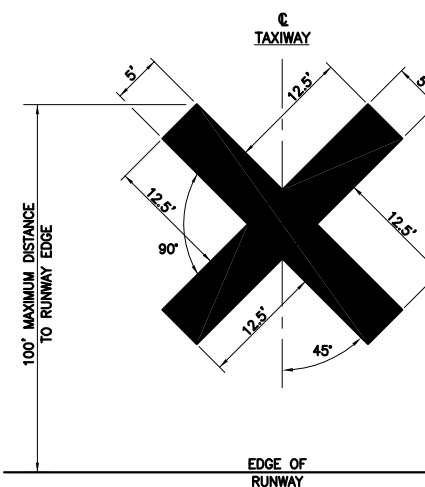
CONSTRUCTION ACTIVITIES GENERAL NOTES:

- THE METROPOLITAN AIRPORT AUTHORITY (MAA) SHALL DETERMINE WHEN AND WHERE THE CONTRACTOR WILL BE ALLOWED TO WORK. THE CONTRACTOR SHALL BE PREPARED TO EXIT THE RESTRICTED AREAS, SAFETY AREAS AND/OR AIRFIELD AT ALL TIMES WHEN DIRECTED TO DO SO BY THE MAA. ALL PAVEMENTS SHALL BE OPEN TO AIRCRAFT TRAFFIC UNLESS "NOTAMED" OTHERWISE DURING THE CONSTRUCTION OF THIS PROJECT. SEE THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON WORKING RESTRICTIONS AND CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF ALL BARRICADES AND LATH LINES AS SHOWN, PRIOR TO ANY EQUIPMENT ENTERING THE AIRFIELD OUTSIDE OF THE CONSTRUCTION STAGING AREA.
- CLOSED RUNWAY MARKINGS (OR L-893 LIGHTED RUNWAY CLOSURE MARKERS) ARE REQUIRED AT EACH END OF THE RUNWAY DURING ALL RUNWAY CLOSURES.
- THE CONTRACTOR SHALL NOT TRAVEL IN OR THROUGH THE RESTRICTED AREAS AND/OR SAFETY AREAS UNLESS PERMISSION IS RECEIVED AND CONTACT HAS BEEN MADE WITH THE FAA CONTROL TOWER.
- THE CONTRACTOR'S EMPLOYEES SHALL PARK IN THE PROPOSED CONSTRUCTION STAGING AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRANSPORTING EMPLOYEES TO THE PROPOSED CONSTRUCTION SITE. ONLY CONTRACTOR'S MARKED VEHICLES AND EQUIPMENT SHALL BE ALLOWED ON THE AIRFIELD. ALL CONSTRUCTION VEHICLES AND EQUIPMENT, EXCEPT THE PAVING TRAIN, SHALL BE PARKED IN THE CONSTRUCTION STAGING AREA DURING ALL NON-WORKING HOUR. THE PAVING TRAIN MAY BE PARKED ON THE AIRFIELD OUTSIDE ALL RESTRICTED AREAS IN A LOCATION AUTHORIZED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL LOCATE HIS TRAILER, THE ENGINEERS FIELD OFFICE, AND ALL OTHER NECESSARY FACILITIES AND MATERIALS IN THE PROPOSED CONSTRUCTION STAGING AREA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT WHATEVER ACCESS ROAD HE DEEMS NECESSARY BETWEEN THE EXISTING ROADS AND THE CONSTRUCTION AREAS. OVERNIGHT PARKING OF EMPLOYEE VEHICLES IN THE CONSTRUCTION STAGING AREA WILL NOT BE ALLOWED UNLESS AUTHORIZED BY THE MAA.
- THE CONTRACTOR SHALL PROCURE ENOUGH QUAD CITY AIRPORT SECURITY/IDENTIFICATION BADGES FOR HIS EMPLOYEES AND SUBCONTRACTOR EMPLOYEES FROM THE AIRPORT AUTHORITY TO GUARANTEE AT LEAST ONE MEMBER OF EACH CONSTRUCTION CREW WILL HAVE A BADGE. ANY CONSTRUCTION CREW WITHOUT A BADGE MEMBER SHALL NOT BE ALLOWED ON THE AIRFIELD SITE. ALL INDIVIDUALS WHO ARE ISSUED SECURITY BADGES MUST CORRECTLY WEAR THEIR OWN BADGE WHILE ON THE AIRFIELD. BADGES MAY BE OBTAINED, AFTER MEETING SECURITY REQUIREMENTS, FROM THE SECURITY OFFICE AT THE QCI AIRPORT. A FIFTY DOLLAR (\$50.00) REFUNDABLE DEPOSIT IS REQUIRED FOR EACH BADGE.
- THE CONTRACTOR SHALL USE THE DESIGNATED HAUL ROUTES, CONSTRUCTION STAGING AREA, AND ENTRANCE TO THE AIRFIELD AS SHOWN ON THE PHASING PLAN SHEETS. NO CONSTRUCTION TRAFFIC SHALL BE ALLOWED ON THE AIRFIELD OUTSIDE THE HAUL ROUTES AND WORK AREAS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL SUPPLY AND INSTALL TEMPORARY LOCKS ON EXISTING GATES AT THE PROPOSED CONSTRUCTION ENTRANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THE CONSTRUCTION ENTRANCE GATE CLOSED AT ALL TIMES. VIOLATIONS ARE SUBJECT TO FINES/PENALTIES AND THE CONTRACTOR SHALL PAY ANY FINES INCURRED, INCLUDING FINES INCURRED BY THE RESIDENT ENGINEER AND/OR MAA DUE TO THE CONTRACTOR'S NEGLIGENCE. ALL VEHICULAR TRAFFIC SHALL BE KEPT TO A MINIMUM. ALL VEHICLES ON THE APRONS, RAMPS, TAXIWAYS, OR RUNWAYS REQUIRE THE APPROVAL OF THE RESIDENT ENGINEER / MAA.
- THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL DESIGNATE, PRIOR TO BEGINNING CONSTRUCTION, A PERSON OR PERSONS WHO CAN BE CONTACTED IN AN EMERGENCY INVOLVING THEIR WORK OR EQUIPMENT. THESE DESIGNATED PEOPLE SHALL BE AVAILABLE ON A 24-HOUR / 7 DAYS PER WEEK BASIS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL LOW PROFILE BARRICADES EQUIPPED WITH FLASHING RED LIGHTS AND 20" X 20" ORANGE FLAGS AS SHOWN ON THE SAFETY PLAN OR AS DIRECTED BY THE RESIDENT ENGINEER. (TYPE II BARRICADES WITH LIGHTS AND FLAGS MAY BE USED IN THE INFIELD AREAS OUTSIDE OF THE SAFETY / CRITICAL AREAS.) THE CONTRACTOR WILL FURNISH, MAINTAIN, AND MOVE THE BARRICADES AS REQUIRED BY THE RESIDENT ENGINEER. THE BARRICADES SHALL BE SUFFICIENTLY WEIGHTED WITH SANDBAGS, FILLED WITH WATER / SAND OR OTHER APPROPRIATE METHOD TO WITHSTAND HIGH WINDS AND/OR JET BLAST WITHOUT DISLOCATION. BARRICADES SHALL BE CHECKED DAILY BY THE CONTRACTOR FOR PROPER PLACEMENT, ADEQUATE BALLAST, PROPER LIGHTING, PROPER FLAGGING AND WORKING BATTERIES. ALL DISCREPANCIES SHALL BE CORRECTED IMMEDIATELY. BARRICADES SHALL BE RELOCATED UPON THE COMPLETION OF EACH PHASE OF CONSTRUCTION. COST TO BE INCLUDED IN 150530 TRAFFIC MAINTENANCE LUMP SUM PRICE.
- WHEN THE CONTRACTOR'S VEHICLES AND EQUIPMENT ARE ON THE AIRFIELD, THEY SHALL BE PROPERLY MARKED. THE MARKING SHALL CONSIST OF A THREE FOOT (3') SQUARE FLAG WITH A CHECKERED PATTERN OF INTERNATIONAL ORANGE AND WHITE SQUARES OF NOT LESS THAN ONE FOOT (1') ON EACH SIDE, DISPLAYED IN FULL VIEW ABOVE THE VEHICLE OR EQUIPMENT. EACH VEHICLE SHALL HAVE A FLASHING YELLOW LIGHT MOUNTED ON TOP OF THE ROOF.
- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO RESTORE THE CONSTRUCTION STAGING AREA, SERVICE ROADS, ACCESS ROADS, AND HAUL ROADS TO THEIR ORIGINAL CONDITIONS FOLLOWING COMPLETION OF CONSTRUCTION. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REGRADING, FERTILIZING, SEEDING AND MULCHING OF EARTH SURFACES AND/OR REGRADING, GRAVELING & SEAL COATING OF TREATED SURFACES, AS REQUIRED, TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL GROUND SURFACES, GRAVEL ROADS, PAVEMENTS, AND OTHER FACILITIES DAMAGED BY THE CONTRACTOR WHILE COMPLETING THE PROPOSED WORK SHALL BE REPAIRED OR RETURNED TO ITS ORIGINAL STATE. COST TO BE INCLUDED IN THE 150530 TRAFFIC MAINTENANCE LUMP SUM PRICE.
- THE CONTRACTOR SHALL IMMEDIATELY SWEEP OR PICK UP ANY SOIL, DEBRIS, AGGREGATE CHIPS OR ROCK, OR LOOSE MATERIALS WHICH HAS BEEN DROPPED ONTO AIRPORT ROADS, RUNWAYS, TAXIWAYS, OR SODDED AREAS.
- THE DISPOSAL OF ALL MATERIALS NOT TO BE INCORPORATED IN EMBANKMENTS ON THE PROJECT SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT A LOCATION OFF AIRPORT PROPERTY.
- THE SEQUENCE OF CONSTRUCTION OPERATIONS AND DESCRIPTION OF CONDITIONS ARE OUTLINED IN THE PROJECT SPECIAL PROVISIONS. THE CONTRACTOR SHALL GIVE THE MAA A 96 HOUR NOTICE PRIOR TO THE START OF ANY WORK REQUIRING THE CLOSING OF ANY PAVEMENTS TO AIRCRAFT TRAFFIC SO THAT A NOTAM CAN BE ISSUED.
- WORKING HOURS OF THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONFORM TO ALL APPLICABLE LOCAL LAWS, INCLUDING ANY NOISE CONTROL.
- NO MOUNDS OF DIRT OR IRREGULARITIES GREATER THAN 3" WHICH, IN THE OPINION OF THE RESIDENT ENGINEER, COULD INTERFERE WITH ANY AIRFIELD OPERATIONS WILL BE PERMITTED ON THE AIRFIELD. NO EXPOSED FACES IN EXCESS OF ONE AND ONE-HALF (1-1/2) INCHES IN HEIGHT AND 2:1 SLOPES ON ANY EXCAVATION WILL BE PERMITTED WITHIN THE RESTRICTED AREAS.
- DUST ABATEMENT MEASURES WILL BE REQUIRED, WHEN IN THE OPINION OF THE RESIDENT ENGINEER, A HAZARD TO AIR TRAFFIC, LOCAL RESIDENCES, OR CONSTRUCTION PROJECT PERSONNEL EXISTS. PREVENTIVE MEASURES TO BE ACCOMPLISHED BY THE CONTRACTOR SHALL INCLUDE, BUT NOT BE LIMITED TO, WATERING AND TREATMENT WITH CALCIUM CHLORIDE.
- BY THE END OF EACH WORK DAY AND PRIOR TO LEAVING THE AIRFIELD, THE CONTRACTOR SHALL HAVE THOROUGHLY SWEEPED THE AIR TRAFFIC CORRIDORS ADJACENT TO THE WORK AREAS TO REMOVE DUST AND DEBRIS. IN ADDITION, ALL AIR TRAFFIC AREAS USED BY CONSTRUCTION PERSONNEL AND EQUIPMENT MUST BE CONTINUOUSLY SWEEPED AND MAINTAINED FREE OF DEBRIS. SWEEPERS SHALL BE PROVIDED BY THE CONTRACTOR FOR THE ENTIRE LENGTH OF THE CONTRACT AND SHALL BE OF A TYPE CAPABLE OF REMOVING ALL DUST AND DEBRIS TO THE SATISFACTION OF THE MAA. SWEEPERS MUST BE COMMERCIAL QUALITY AND APPROVED BY THE RESIDENT ENGINEER AND MAA PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN LATH LINES DURING THE LENGTH OF THE PROJECT AS SHOWN OR DIRECTED BY THE RESIDENT ENGINEER. SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- NO CHANGES SHALL BE MADE IN ANY PROVISIONS OF THIS CONSTRUCTION SAFETY AND PHASING PLAN UNLESS APPROVED IN WRITING BY THE METROPOLITAN METROPOLITAN AIRPORT AUTHORITY, THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DIVISION OF AERONAUTICS, AND THE FEDERAL AVIATION ADMINISTRATION. THE COST OF ALL MEASURES NECESSARY TO COMPLY WITH THE CONSTRUCTION SAFETY AND PHASING PLAN SHALL BE INCLUDED IN THE 150530 TRAFFIC MAINTENANCE LUMP SUM PRICE.



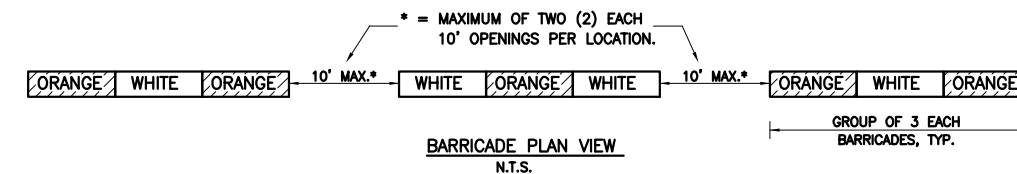
CLOSED RUNWAY MARKING
(SOLID CROSS)

DETAIL
N.T.S.

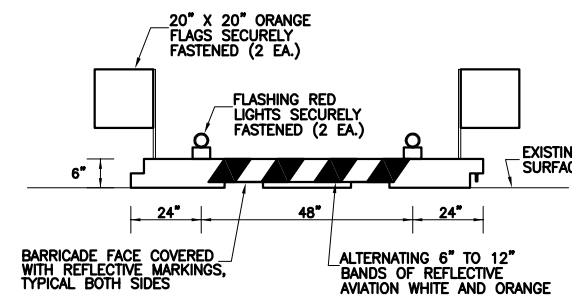


CLOSED TAXIWAY MARKING
(SOLID CROSS)

DETAIL
N.T.S.



BARRICADE PLAN VIEW
N.T.S.



LIGHTED LOW PROFILE BARRICADE DETAIL
N.T.S.

CLOSED RUNWAY MARKING NOTES:

- SOLID CROSS FOR CLOSED RUNWAY IS REQUIRED AT EACH END OF THE RUNWAY DURING ALL RUNWAY CLOSURES AND SHALL BE PLACED DIRECTLY OVER THE RUNWAY IDENTIFICATION NUMERALS UNLESS SHOWN OTHERWISE.
- THE CONTRACTOR SHALL INSTALL, REMOVE AND REINSTALL THE CROSSES AS REQUIRED BY WORKING CONDITIONS AND AS APPROVED BY THE RESIDENT ENGINEER.
- COLOR OF ALL CROSSES SHALL BE AVIATION YELLOW AND SHALL BE ADEQUATELY SECURED TO WITHSTAND JET BLAST WINDS OF 100 MPH.
- CLOSED RUNWAY MARKINGS SHALL BE MADE OF AVIATION YELLOW, DURABLE, LIGHTWEIGHT, VINYL COATED, WINDSCREEN MESH MATERIALS (NEUBERT AERO CORP. MODEL 31900XB OR APPROVED EQUAL). THE MARKERS SHALL BE ADHERED TO THE PAVEMENT BY AN APPROVED METHOD THAT IS ACCEPTABLE TO THE MAA, FAA AND RESIDENT ENGINEER. THE CONTRACTOR SHALL MAINTAIN THE MARKINGS IN EXCELLENT CONDITION. CONTRACTOR TO FURNISH AND SUPPLY FOUR (4) EACH NEUBERT RUNWAY CLOSURE MARKERS TO THE MAA. (SEE SPECIAL PROVISION SECTION 40-05.2.1 FOR ADDITIONAL INFORMATION.) THE COST FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVING THE TEMPORARY CLOSED RUNWAY MARKINGS SHALL BE INCLUDED IN THE AR150530-TRAFFIC MAINTENANCE LUMP SUM PRICE. SEPARATE MEASUREMENT FOR PAYMENTS / PAYMENTS SHALL NOT BE MADE FOR THE CLOSED RUNWAY MARKINGS.
- IF REQUIRED BY THE AIRPORT, THE CONTRACTOR SHALL SUBSTITUTE L-893 PORTABLE LIGHTED RUNWAY CLOSURE MARKERS FOR THE SOLID CROSSES. THE L-893 UNITS SHALL BE ON AND OPERATIONAL 24 HOURS PER DAY, SEVEN DAYS PER WEEK. IF THE AIRPORT PROVIDES L-893 UNITS FOR THE CONTRACTOR TO USE, THEN THE CONTRACTOR SHALL INSTALL, MAINTAIN, MOVE, RELOCATE, AND RETURN THE L-893 UNITS TO THE AIRPORT. THE COST OF INSTALLING, MAINTAINING, SUPPLYING & INSTALLING LAMPS, FUELING, OIL CHANGING (WEEKLY), MOVING, RELOCATING, AND RETURNING THE L-893 UNITS TO THE AIRPORT SHALL BE INCLUDED IN THE AR150530-TRAFFIC MAINTENANCE LUMP SUM PRICE. THE L-893 UNITS SHALL BE RETURNED TO THE MAA IN GOOD CONDITION (OR THE CONTRACTOR SHALL BE REQUIRED TO REPLACE THE UNITS). IF L-893 UNITS ARE USED, THE CONTRACTOR SHALL STILL BE REQUIRED TO FURNISH AND SUPPLY FOUR EACH NEUBERT RUNWAY CLOSURE MARKERS TO THE MAA.

CLOSED TAXIWAY MARKING NOTES:

- CLOSED TAXIWAY MARKINGS ARE REQUIRED ADJACENT TO OPEN (LANDING AND / OR TAXIING) RUNWAYS DURING ALL TAXIWAY CLOSURES AND SHALL BE PLACED OVER THE TAXIWAY CENTERLINE AND WITHIN 100' OF THE OPEN RUNWAY EDGE.
- THE CONTRACTOR SHALL INSTALL, REMOVE AND REINSTALL THE MARKINGS AS REQUIRED BY WORKING CONDITIONS AND AS APPROVED BY THE RESIDENT ENGINEER.
- COLOR OF ALL MARKINGS SHALL BE AVIATION YELLOW AND SHALL BE ADEQUATELY SECURED TO WITHSTAND JET BLAST WINDS OF 100 MPH.
- CLOSED TAXIWAY MARKINGS SHALL BE MADE OF AVIATION YELLOW, DURABLE, LIGHTWEIGHT, VINYL COATED, WINDSCREEN MESH MATERIALS (NEUBERT AERO CORP. MODEL CM32900TX OR APPROVED EQUAL). THE MARKERS SHALL BE ADHERED TO THE PAVEMENT BY AN APPROVED METHOD THAT DOES NOT VIOLATE RSA / ROFA CRITERIA AND IS ACCEPTABLE TO THE MAA, FAA AND RESIDENT ENGINEER. THE CONTRACTOR SHALL MAINTAIN THE MARKINGS IN EXCELLENT CONDITION. CONTRACTOR TO FURNISH AND SUPPLY FOUR (4) EACH NEUBERT TAXIWAY CLOSURE MARKERS TO THE MAA. (SEE SPECIAL PROVISION SECTION 40-05.2.1 FOR ADDITIONAL INFORMATION.) THE COST FOR FURNISHING, INSTALLING, MAINTAINING, AND REMOVING THE TEMPORARY CLOSED TAXIWAY MARKINGS SHALL BE INCLUDED IN THE AR150530 TRAFFIC MAINTENANCE LUMP SUM PRICE. SEPARATE MEASUREMENT FOR PAYMENTS / PAYMENTS SHALL NOT BE MADE FOR THE CLOSED TAXIWAY MARKINGS.
- CLOSED TAXIWAY MARKINGS SHALL BE PLACED WHEN THE RUNWAY IS OPEN TO AIRCRAFT (LANDING AND / OR TAXIING) AND THE TAXIWAY IS CLOSED.

LIGHTED LOW PROFILE BARRICADE NOTES:

- LOW PROFILE BARRICADES SHALL MEET THE REQUIREMENTS OF FAA AC-150/5370 -2F (LATEST REVISION) AND BE SPACED ACROSS THE WIDTH OF THE PAVEMENT WITH A MAXIMUM SPACING BETWEEN THE BARRICADE ENDS OF 10'. THE FLASHING RED LIGHTS SHALL BE ABLE TO ROTATE 90 DEGREES. ALTERNATE LIGHTS SO THAT EVERY OTHER LIGHT IS ROTATED 90 DEGREES. THE FLAGS SHALL NOT BLOCK OUT THE LIGHTS.
- LOW PROFILE BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY COMPONENT OF AN AIRCRAFT, AND WEIGHTED OR STURDILY ATTACHED TO THE SURFACE. THE BARRICADES SHALL BE FRANGIBLE AT GRADE LEVEL OR AS LOW AS POSSIBLE, BUT NOT MORE THAN 3 INCHES ABOVE THE GROUND / PAVEMENT SURFACE.
- LOW PROFILE BARRICADES SHALL BE PROPERLY SECURED TO PREVENT MOVEMENT BY WIND, PROP BLAST, OR JET BLAST WITH SPEEDS UP TO 100 MILES PER HOUR.
- LOW PROFILE BARRICADES SHALL BE APPROVED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL SUPPLY, INSTALL, AND MAINTAIN MANUFACTURED HIGH IMPACT, UV RESISTANT, POLYETHYLENE LOW PROFILE BARRICADES (NEUBERT AERO CORP. MODEL PC 9642 OR SIMILAR APPROVED EQUAL).

CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) NOTES :

A. COMPLIANCE :

- A.1. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY TO THE REQUIREMENTS OF THIS CONSTRUCTION SAFETY AND PHASING PLAN (CSPP), FAA AC 150/5370-2F (OR LATEST EDITION), AND ALL AIRPORT SAFETY AND SECURITY REGULATIONS AND REQUIREMENTS.
- A.2. 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 150/5370-2F (OR LATEST EDITION). NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL THE AIRPORT HAS APPROVED OF THE SPCD.
- A.3. THE CSPP COVERS OPERATIONAL SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INDIVIDUAL SAFETY OF HIS / HER PERSONNEL AND MEET ALL OSHA REQUIREMENTS.
- A.4. A MINIMUM OF 10 DAYS PRIOR TO THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS.
- A.5. IF THE PROPOSED PROJECT DISTURBS MORE THAN ONE (1) ACRE OF LAND, THE CONTRACTOR SHALL SUBMIT A SIGNED STORM WATER POLLUTION PREVENTION PROGRAM (SWPPP) CERTIFICATION STATEMENT TO THE AIRPORT PRIOR TO THE START OF CONSTRUCTION.
- A.6. ALL COST FOR ALL ITEMS LISTED ON THIS SHEET SHALL BE INCLUDED IN THE 150530 TRAFFIC MAINTENANCE LUMP SUM PRICE.

1. COORDINATION :

- 1.1. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR AND ALL MAJOR SUBCONTRACTORS SHALL ATTEND A PRECONSTRUCTION MEETING WITH THE AIRPORT, RESIDENT ENGINEER, AND THE ILLINOIS DIVISION OF AERONAUTICS (IDA).
- 1.2. AT OR PRIOR TO THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A PROPOSED SCHEDULE FOR THE PROJECT WORK. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION DATE FOR EACH ITEM OF WORK, EACH WORK PHASE AND EACH PAVEMENT THAT IS AFFECTED BY THE WORK. THIS SCHEDULE SHALL BE UPDATED WEEKLY.
- 1.3. DURING CONSTRUCTION, THE CONTRACTOR AND ALL MAJOR SUBCONTRACTORS SHALL ATTEND WEEKLY COORDINATION MEETINGS WITH THE AIRPORT STAFF AND THE RESIDENT ENGINEER.

2. PHASING :

- 2.1. THE TOTAL CONTRACT TIME SHALL BE 176 CALENDAR DAYS FOR BASE BID ONLY (ADD 10 CALENDAR DAYS IF ADDITIVE ALTERNATE 1 IS AWARDED, ADD 8 CALENDARS IF ADDITIVE ALTERNATE 2 IS AWARDED).
- 2.2. CONSTRUCTION PHASING SHALL BE AS NOTED BELOW AND AS DETAILED ON THE PROPOSED CONSTRUCTION SAFETY AND PHASING PLAN SHEETS.

PHASE 1 THROUGH PHASE 8 NOTES:

- 2.2.1. ALL PHASES SHALL CONSIST OF THE REMOVAL & REPLACEMENT OF PAVEMENT MARKINGS AND THE INSTALLATION OF UNDERGROUND ELECTRICAL CABLES, UNDERGROUND DUCTS, ABOVE GROUND RGL UNITS, AN ALCMS, AND OTHER MISCELLANEOUS UTILITIES UNLESS NOTED OTHERWISE.
- 2.2.2. UNLESS NOTED OTHERWISE OR PERMITTED BY THE AIRPORT, ALL PROPOSED WORK WITHIN THE PHASE CONSTRUCTION ACTIVITIES OPERATION LIMIT SHALL BE COMPLETED PRIOR TO STARTING WORK IN THE NEXT PHASE. EACH PHASE IS SHOWN SEPARATELY ON THE PHASING PLAN.
- 2.2.3. THE PROPOSED WORK PHASING PLAN PRESENTED IN THIS DOCUMENT IS NOT INTENDED TO RESTRICT THE CONTRACTOR TO THIS SPECIFIC PHASING PLAN. THE CONTRACTOR MAY SUBMIT THEIR OWN PHASING PLAN FOR REVIEW AND WRITTEN APPROVAL BY THE AIRPORT, IDOA, AND THE FAA.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITIES. :

- 3.1. ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION UNLESS NOTED OTHERWISE ON THE PHASING PLANS OR APPROVED BY THE AIRPORT.
- 3.2. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS / SAFETY, AIRCRAFT OPERATIONS / SAFETY SHALL TAKE PRECEDENCE AND GOVERN AS DETERMINED BY THE AIRPORT. FINAL AUTHORITY IN THE APPROVAL OF THE CONSTRUCTION PHASING / SEQUENCING LIES WITH THE AIRPORT.
- 3.3. ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY STOP AND YIELD WAY TO ALL AIRFIELD TRAFFIC AT ALL TIMES.

4. PROTECTION OF NAVIGATION AIDS (NAVAIDS) :

- 4.1. THE CONTRACTOR SHALL REMAIN CLEAR OF ALL NAVAIDS AND NAVAID FACILITIES AT ALL TIMES UNLESS NOTED OTHERWISE.
- 4.2. THE CONTRACTOR SHALL HAND DIG ALL TRENCHES IN THE AREA OF THE EXISTING NAVAIDS CABLES.
- 4.3. WHEN NOT WORKING IN THE AREA, THE CONTRACTOR SHALL REMAIN CLEAR OF ALL NAVAID CRITICAL AREAS. CONTRACTOR SHALL NOT ENTER A NAVAID CRITICAL WITHOUT PERMISSION.

5. CONTRACTOR ACCESS :

- 5.1. CONTRACTOR ACCESS SHALL BE AS INDICATED IN THIS SECTION AND AS SHOWN ON THE PROPOSED CONSTRUCTION SAFETY AND PHASING PLAN SHEETS.
- 5.2. THE CONTRACTOR SHALL ACCESS THE WORK AREAS USING ONLY THE GATES SHOWN.
- 5.3. CERTAIN CONTRACTOR EMPLOYEES SHALL OBTAIN AIRPORT IDENTIFICATION BADGES. THIS INCLUDES, BUT IS NOT LIMITED TO, FILLING OUT ALL NECESSARY PAPERWORK, FINGERPRINTING, ATTENDING AND PASSING TRAINING CLASSES CONCERNING SAFETY AND SECURITY AT THE AIRPORT, AND OTHER REQUIREMENTS. CONTRACTOR EMPLOYEES MUST MEET CERTAIN BACKGROUND CHECK CRITERIA AND THE CONTRACTOR MUST MAKE CERTAIN CERTIFICATIONS ABOUT EACH EMPLOYEE THAT WILL BE AT THE AIRPORT.
- 5.4. ALL CONTRACTOR EMPLOYEES WHO ARE DESIGNATED AS DRIVERS FOR THE CONTRACTOR WITHIN THE AIRFIELD OPERATIONS AREA (AOA) SHALL ALSO ATTEND AND PASS THE AIRPORT DRIVERS TRAINING PROGRAM. ONLY THOSE INDIVIDUALS WHO RECEIVE THIS DESIGNATION WILL BE ALLOWED TO OPERATE VEHICLES OR EQUIPMENT ON THE AIRPORT.
- 5.5. DRIVERS OF TRUCKS CONTAINING MATERIAL DELIVERIES (SUCH AS AGGREGATE, CONCRETE, ETC.) NEED NOT OBTAIN AN AIRPORT ID BADGE, BUT SHALL BE REQUIRED TO SUBMIT THEIR NAME, DRIVERS LICENSE NUMBER, TRUCK LICENSE PLATE NUMBER AND NAME OF TRUCKING COMPANY TO THE PRIME CONTRACTOR PRIOR TO ENTERING THE JOBSITE. THE PRIME CONTRACTOR SHALL KEEP A LOG OF ALL ENTRIES. WHILE INSIDE THE AOA, THE TRUCK DRIVERS SHALL BE ESCORTED BY THE CONTRACTOR.
- 5.6. CONTRACTOR WORK CREWS SHALL MAINTAIN RADIO CONTACT WITH THE AIR TRAFFIC CONTROL TOWER (ATCT) AT ALL TIMES WHEN INSIDE THE AIRPORT OPERATIONS AREA (AOA). THE CONTRACTOR SHALL SUPPLY AND MAINTAIN ALL APPROPRIATE RADIO EQUIPMENT NEEDED FOR COMMUNICATIONS.
- 5.7. THE CONTRACTOR'S PARKING, STAGING, AND STORAGE AREA SHALL BE AS SHOWN ON THE CSPP. WHEN THE CONTRACTOR IS NOT WORKING, EQUIPMENT SHALL BE STORED IN THE STAGING AREA UNLESS AUTHORIZED OTHERWISE BY THE AIRPORT.
- 5.8. THE CONTRACTOR SHALL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN ON THE CSPP UNLESS AUTHORIZED OTHERWISE BY THE AIRPORT. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE THE AIRFIELD IMAGINARY SURFACE AS DEFINED FEDERAL AVIATION REGULATION (FAR) PART 77 - OBJECTS AFFECTING NAVIGATE AIRSPACE.
- 5.9. THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES AND VISITORS ENTERING THE PROJECT SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE PROJECT SITE ON A DAILY BASIS SHALL ALSO BE KEPT BY THE CONTRACTOR.
- 5.10. ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING RUNWAYS, TAXIWAYS, AND / OR APRONS THAT ARE OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL OF A FLAGMAN OR ESCORT IN RADIO CONTACT WITH THE ATCT. THE CONTRACTOR SHALL PROVIDE ALL FLAGMEN. COST FOR FLAGMEN SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES.
- 5.11. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL PAVEMENTS, CONSTRUCTION AREAS, AND HAUL ROUTES WHICH WILL BE OPENED TO AIR TRAFFIC TO THE SATISFACTION OF AIRPORT OPERATIONS AND THE RESIDENT ENGINEER. A POWER BROOM AND OPERATOR SHALL BE ON SITE AT ALL TIMES WHEN ACTIVE PAVEMENTS ARE UTILIZED FOR CONSTRUCTION TRAFFIC OR WHEN A SECTION OF CLOSED PAVEMENT IS TO BE OPENED.
- 5.12. ALL PAVEMENTS, DRIVES, OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS, STORAGE AREAS, OR CONSTRUCTION TRAVEL SHALL BE MAINTAINED AND REPAIRED TO THE SAME OR BETTER CONDITION THAN THEY WERE PRIOR TO THE BEGINNING OF CONSTRUCTION OF THE PROPOSED WORK.
- 5.13. ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.
- 5.14. THE CONTRACTOR SHALL NOTIFY THE AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) GROUP IF ANY CONSTRUCTION ACTIVITY WILL REQUIRE THE BLOCKAGE OF ANY EMERGENCY ACCESS ROUTE TO OR ON THE AIRFIELD.

6. WILDLIFE MANAGEMENT :

- 6.1. THE CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS OR THE RESIDENT ENGINEER OF ANY WILDLIFE SEEN WITHIN THE AIRFIELD PERIMETER FENCE.
- 6.2. CONTRACTOR ACCESS POINTS INTO THE AIRFIELD SHALL BE AT GATES. GATES SHALL NOT BE LEFT OPEN. GATES SHALL BE LOCKED OR GUARDED AT ALL TIMES.
- 6.3. THE CONTRACTOR SHALL DISPOSE OF ALL TRASH (INCLUDING FOOD SCRAPS) IN APPROVED CONTRACTOR PROVIDED CONTAINERS.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT :

- 7.1. THE CONTRACTOR SHALL PICK-UP ANY AND ALL FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD.
- 7.2. PRIOR TO PROCEEDING ON TO THE AIRFIELD, THE CONTRACTOR SHALL STOP, GET OUT OF HIS / HER VEHICLE OR TRUCK, AND SECURE ALL LOOSE ITEMS FROM THEIR VEHICLE OR TRUCK. THIS EVENT SHALL ALSO OCCUR PRIOR TO DRIVING ONTO ANY AND ALL AIRPORT PAVEMENTS.

8. HAZARDOUS MATERIALS (HAZNAT) MANAGEMENT :

- 8.1. 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 :

- 9.1. THE CONTRACTOR AND EACH SUBCONTRACTOR SHALL DESIGNATE, PRIOR TO BEGINNING CONSTRUCTION, A PERSON OR PERSONS WHO CAN BE CONTACTED AND WILL RESPOND IN AN EMERGENCY INVOLVING THEIR WORK OR EQUIPMENT. THESE DESIGNATED PEOPLE SHALL BE AVAILABLE ON A 24-HOUR / 7 DAYS PER WEEK BASIS.
- 9.2. THE CONTRACTOR SHALL GIVE A MINIMUM OF 96 HOURS NOTICE TO AIRPORT OPERATIONS PRIOR TO CLOSING ANY PAVEMENTS SO THAT A PROPER NOTICE TO AIRMEN (NOTAMS) MAY BE ISSUED BY THE AIRPORT.
- 9.3. FOR ANY EQUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25 FEET (EXCLUDING THE BEACON TOWER), 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. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 45 DAYS FOR THE DETERMINATION (RESULTS) OF AN AIRSPACE. UNLESS NOTED OTHERWISE, NO EQUIPMENT WITH A HEIGHT GREATER THAN 25, SHALL BE USED UNTIL A DETERMINATION FROM THE FAA IS RECEIVED.
- 9.4. IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL 911.
- 9.5. CONTACTS FOR THIS PROJECT ARE LISTED BELOW.

| | |
|---|--------------|
| AIRPORT OPERATIONS - BRYAN JOHNSON | 309-757-1754 |
| AIRPORT CONSTRUCTION - BRYAN JOHNSON | 309-757-1754 |
| AIRPORT MAINTENANCE - MIKE ALLARDYCE | 309-757-1737 |
| MISSMAN DESIGN ENGINEER - JEFF MCKAY | 309-283-1588 |
| MISSMAN RESIDENT ENGINEER - ERIC MCLAUGHLIN | 309-738-6048 |

10. INSPECTION REQUIREMENTS :

- 10.1. THE CONTRACTOR SHALL INSPECT THE PROJECT SITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECK LIST FOUND IN FAA AC150/5370-2F, APPENDIX 3 (OR LATEST EDITION) MAY BE USED TO AID THE CONTRACTOR IN THE DAILY INSPECTIONS.
- 10.2. THE CONTRACTOR AND (SUBCONTRACTORS INVOLVED IN WORK) SHALL ATTEND A FINAL INSPECTION OF EACH PHASE WORK AREA PRIOR TO OPENING THE AREA TO AIRPORT OPERATIONS.

11. UNDERGROUND UTILITIES :

- 11.1. IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AT ALL CRITICAL POINTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS AND IS APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS AND / OR SUFFICIENCY OF THE UNDERGROUND UTILITIES INFORMATION INDICATED ON THE PLANS.
- 11.2. CONTRACTOR SHALL HAND DIG AROUND ALL UNDERGROUND FACILITIES.
- 11.3. BEFORE STARTING ANY CONSTRUCTION (DIGGING, DRILLING, EXCAVATING, ETC.) ON THE PROJECT, THE CONTRACTOR SHALL CALL J.U.L.I.E., CONTACT THE LOCAL FAA OFFICE, AND CONTACT AIRFIELD MAINTENANCE TO ARRANGE FOR UTILITY LOCATES. SEE SECTION 50-17 OF THE SPECIAL PROVISIONS FOR UTILITY CONTACT INFORMATION.
- 11.4. THE EDGE LIGHTS OF ALL OPEN TAXIWAYS AND RUNWAYS, FAA CABLES AND ALL OTHER UNDERGROUND AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE AND ACTIVE AT ALL TIMES. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPEN PAVEMENT AREAS ACTIVE AND OPERATIONAL SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICES.

12. PENALTIES :

- 12.1. NONCOMPLIANCE BY THE CONTRACTOR AND / OR SUBCONTRACTORS 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, PENALTIES AND / OR DEDUCTIONS AS ALLOWED BY LAW.

13. SPECIAL CONDITIONS :

- 13.1. OTHER CONSTRUCTION PROJECTS AND / OR AIRFIELD EVENTS MAY IMPACT THE OPERATIONS OF THIS CONTRACTOR. SEE COORDINATION SECTION OF THIS DOCUMENT AND THE PROJECT SPECIAL CONDITIONS FOR ADDITIONAL INFORMATION.

14. RUNWAY AND TAXIWAY VISUAL AIDS :

- 14.1. RUNWAY AND TAXIWAY CLOSURES ARE REQUIRED FOR THIS PROJECT. ALL RUNWAY AND TAXIWAY CLOSURES SHALL BE APPROVED BY THE AIRPORT. THE CONTRACTOR SHALL INSTALL AND MAINTAIN MARKING, LIGHTING, AND SIGNAGE ITEMS FOR CLOSED RUNWAYS AND TAXIWAYS THAT COMPLY WITH THE REQUIREMENTS OF FAA AC150/5370-2F AND 150/5340-18 (OR LATEST EDITION).
- 14.2. IF A TAXIWAY WILL BE CLOSED FOR AN EXTENDED PERIOD OF TIME (AS DETERMINED BY THE AIRPORT), THEN THE CONTRACTOR SHALL OBLITERATE OR PAINT OVER (BLACK PAINT) THE CENTERLINES THAT LEAD INTO THE CLOSED AREAS. THE CONTRACTOR SHALL REPAINT (12 YELLOW PAINT) THE CENTERLINES PRIOR TO REOPENING THE TAXIWAY. INCLUDE COST FOR THIS WORK IN THE 150530 TRAFFIC MAINTENANCE LUMP SUM PRICE.
- 14.3. INSTALL CLOSED RUNWAY / TAXIWAY MARKINGS ON CLOSED RUNWAYS / TAXIWAYS AS SHOWN ON THE CSPP.

14. RUNWAY AND TAXIWAY VISUAL AIDS (CONTINUED) :

- 14.4. DEACTIVATE LIGHT CIRCUITS AND / OR COVER LIGHT FIXTURES IN CLOSED PAVEMENT AREAS (AND AREAS LEADING INTO CLOSED PAVEMENT AREAS). REACTIVATE / UNCOVER PRIOR TO REOPENING PAVEMENTS. THE COST OF TEMPORARY JUMPER CABLES AND SPLICING REQUIRED FOR THIS SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICES.
- 14.5. COVER GUIDANCE SIGNS THAT DIRECT AIRCRAFT TRAFFIC INTO CLOSED PAVEMENT AREAS.
- 14.6. NAVAIDS (GLIDE SLOPES, LOCALIZERS, VADIs, PAPIS, REILS, MALSRs, ETC.) ARE CONTROLLED BY LOCAL FAA GROUPS. IF REQUIRED BY THE LOCAL FAA GROUPS, THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL FAA GROUPS TO INSURE THAT NAVAIDS FOR CLOSED PAVEMENTS ARE OFF.

15. MARKING AND SIGNS FOR ACCESS ROUTES :

- 15.1. BARRICADES AND SIGNS SHALL BE USED ALONG THE CONTRACTOR'S ACCESS ROUTE AS DETAILED ON THIS SHEET AND THE CSPP PLAN SHEETS.
- 15.2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN STOP SIGNS (PER MUTCD) ON BOTH SIDES OF ALL PAVEMENT CROSSINGS.

16. HAZARD MARKING AND LIGHTING :

- 16.1. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, MOVE, RELOCATE, AND REMOVE MARKING AND LIGHTING ITEMS IN AREAS OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, MATERIALS, TRAILERS, AND EQUIPMENT.
- 16.2. ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND / OR LIGHTED IN ACCORDANCE WITH FAA AC150/5370-2F AND 150/5210-5C (OR LATEST EDITION) AT ALL TIMES WHILE ON AIRPORT PROPERTY. UNLESS NOTED OR AUTHORIZED OTHERWISE, THE MAXIMUM EQUIPMENT HEIGHT IS 25' (110' IN ADDITIVE ALTERNATE 2 - 75' POLE BEACON AREA).
- 16.3. BARRICADES SHALL BE PLACE AT THE LOCATIONS SHOWN ON THE CSPP PLAN SHEETS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL INSPECT THE BARRICADES, BARRICADE FLAGS, AND BARRICADE LIGHTS AT LEAST ONCE DURING EACH WORK DAY TO INSURE PROPER PLACEMENT AND PROPER OPERATION OF THE BARRICADES, RED LIGHTS AND FLAGS.
- 16.4. SOLID CROSSES OR L-893 PORTABLE LIGHTED RUNWAY MARKERS SHALL BE USED FOR RUNWAY CLOSURES. IF REQUIRED BY THE AIRPORT, THE CONTRACTOR SHALL USE L-893 PORTABLE LIGHTED RUNWAY CLOSURE MARKERS FOR RUNWAY CLOSURES. THE AIRPORT MAY SUPPLY UP TO FOUR (4) EACH L-893 PORTABLE LIGHTED RUNWAY CLOSURE MARKERS (L-893 UNITS) FOR USE DURING THIS PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE RUNWAY CLOSURE MARKERS INCLUDING FUEL, OIL, OIL CHANGES, AND SUPPLYING AND INSTALLING REPLACEMENT LAMPS. IF ADDITIONAL L-893 UNITS ARE NEEDED, THE CONTRACTOR SHALL SUPPLY THE ADDITIONAL L-893 UNITS. INCLUDE COST FOR ADDITIONAL L-893 UNITS IN CONTRACT UNIT PRICES. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR WILL RETAIN POSSESSION OF ANY ADDITIONAL L-893 UNITS SUPPLIED BY THE CONTRACTOR DURING THIS PROJECT. THE L-893 UNITS SUPPLIED BY THE AIRPORT SHALL REMAIN THE PROPERTY OF THE AIRPORT AND SHALL BE RETURNED IN LIKE CONDITION WITH AN ALLOWANCE FOR NORMAL WEAR AND TEAR AS DETERMINED BY THE RESIDENT ENGINEER. ANY DAMAGE TO THE AIRPORT'S L-893 UNITS SHALL BE REPLACED BY THE CONTRACTOR WITH NEW L-893 UNITS OF SIMILAR TYPE AND DESIGN AT NO ADDITIONAL COST TO THE CONTRACT.

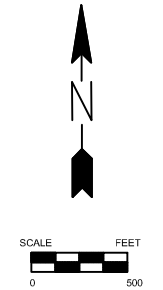
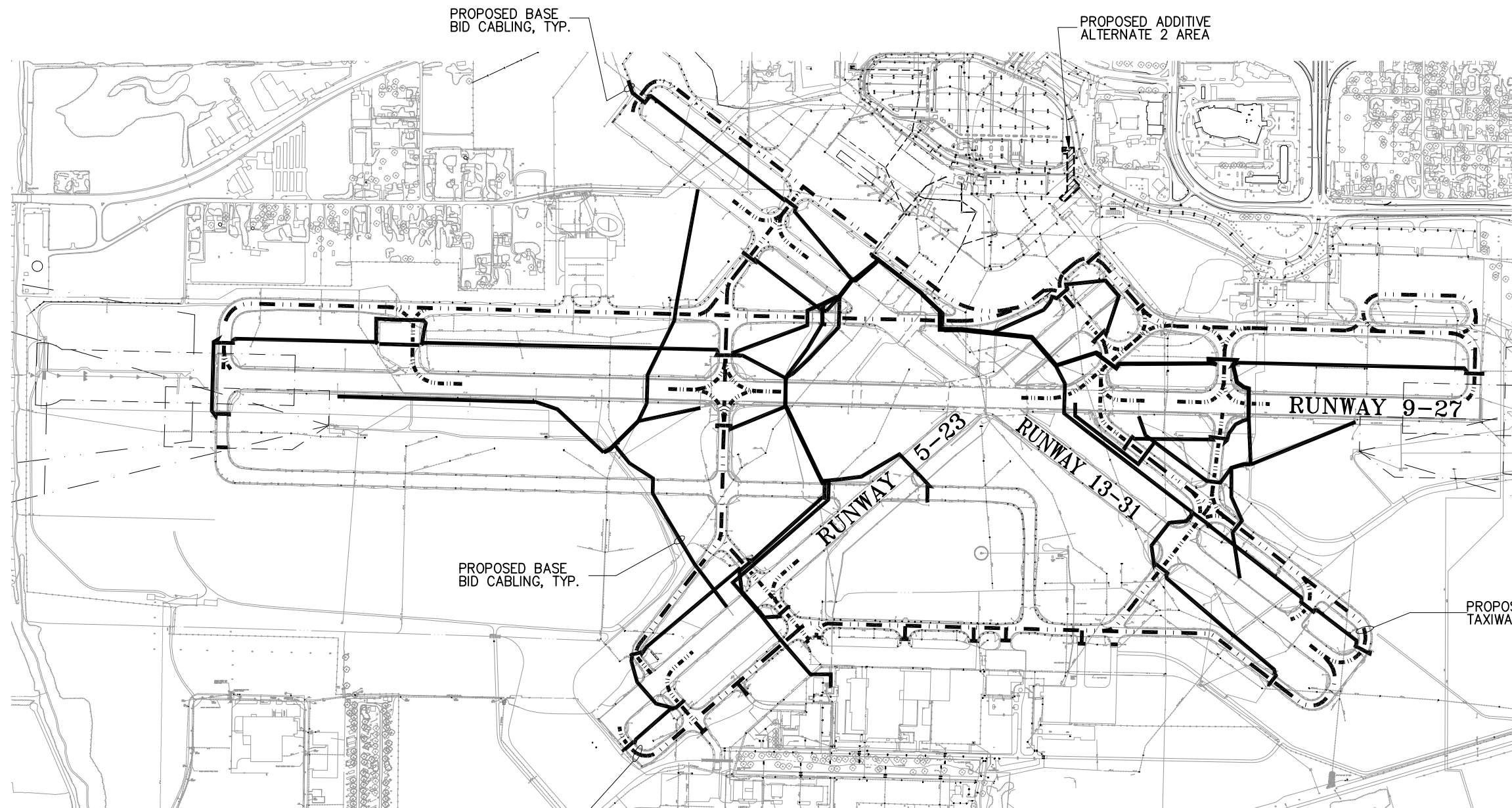
17. PROTECTION :

- 17.1. ALL WORK LOCATED WITHIN A RUNWAY SAFETY AREA WILL REQUIRE THE RUNWAY TO BE CLOSED. CONTRACTOR SHALL COORDINATE CLOSURE WITH AIRPORT. THE AIRPORT WILL DETERMINE WHEN THE RUNWAY WILL BE CLOSED AND WHEN THE CONTRACTOR MAY WORK IN THE RSA.
- 17.2. ALL WORK LOCATED WITHIN A TAXIWAY OBJECT FREE AREA WILL REQUIRE THE TAXIWAY TO BE CLOSED. CONTRACTOR SHALL COORDINATE CLOSURE WITH AIRPORT. THE AIRPORT WILL DETERMINE WHEN THE TAXIWAY WILL BE CLOSED AND WHEN THE CONTRACTOR MAY WORK IN THE TOFA.
- 17.3. CONTRACTOR SHALL NOT LEAVE STOCKPILES, MATERIALS OR EQUIPMENT IN THE RUNWAY / TAXIWAY OBJECT FREE AREAS.
- 17.4. CONTRACTOR PERSONNEL, MATERIALS, STOCKPILES, AND / OR EQUIPMENT MAY NOT PENETRATE A RUNWAY OBSTACLE FREE ZONE (OFZ) WHILE THE RUNWAY IS OPEN TO AIRCRAFT OPERATIONS.
- 17.5. CONTRACTOR PERSONNEL, MATERIALS, STOCKPILES, AND / OR EQUIPMENT MAY NOT PENETRATE A RUNWAY APPROACH / DEPARTURE SURFACE OR CLEARWAY (AS DEFINED IN APPENDIX 2, OF FAA AC150/5300-13, LATEST EDITION) WHILE THE RUNWAY IS OPEN TO AIRCRAFT OPERATIONS.

18 OTHER LIMITATIONS ON CONSTRUCTION :

- 18.1. DURING CONSTRUCTION, WHEN REQUIRED BY THE AIRPORT (BASED UPON WEATHER, OPERATIONAL NEEDS, OR EMERGENCY CONDITIONS AS DETERMINED BY THE AIRPORT), THE CONTRACTOR SHALL IMMEDIATELY CLEAN AND CLEAR THE JOB SITE AND / OR PAVEMENTS OF ALL MATERIALS, VEHICLES, EQUIPMENT AND PERSONNEL. INCLUDE COSTS IN CONTRACT UNIT PRICES.
- 18.2. BROKEN CONCRETE, BROKEN ASPHALT, AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR OF OFF AIRPORT PROPERTY UNLESS NOTED OR AUTHORIZED OTHERWISE.
- 18.3. CONTRACTOR SHALL NOT USE OPEN FLAME WELDING OR TORCHES UNLESS AIRPORT APPROVED FIRE SAFETY PRECAUTIONS ARE PROVIDED. CONTRACTOR SHALL NOT USE ELECTRICAL BLASTING CAPS ON OR WITHIN 1,000' OF THE AIRPORT PROPERTY.

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 20 OF 83



| TEMPORARY BENCH MARKS | | |
|-----------------------|--------|--|
| B.M. | ELEV. | DESCRIPTION |
| TBM 200 | 587.10 | HUB AT SE COR OF TXY H BORROW AREA, N1742722.2338, E2199623.7550, STATION 107+06.74, LT. 739.58' |
| TBM K | 578.34 | TOP OF RCP, S SIDE OF SERVICE RD, N1741508.6290, E2201629.7690, STATION 127+42.16, RT. 424.08' |
| TBM R | 581.52 | NE COR CONC BASE ELECT TRAN, S SIDE 9-27, BETWEEN SIGNS [2] - [3] N1741569.4966, E2200420.1701, STATION 115+31.40, RT. 393.12' |
| TBM T | 576.35 | CHIS. □ SE COR CONC PAD W SIDE GS BLDG, N1741651.7212, E2198675.6748, STATION 97+85.40, RT. 354.03' |
| TBM U | 583.18 | CHIS. □ HOLD SIGN BASE, NE COR, S SIDE R9, N1741775.92035, E2203365.21359, STATION 144+70.44, RT. 113.99' |

| PROJECT CONTROL POINTS | | | |
|------------------------|--|--------|------------|
| NUMBER | LOCATION | ELEV. | REMARK |
| 5 | STA. 108+94.45, RT. 339.57' N1741638.7660, E2199784.7412 | 580.05 | |
| 7 | STA. 121+74.76, RT. 449.70' N1741496.8955, E2201061.9416 | 577.67 | |
| 8 | STA. 127+73.19, RT. 413.69' N1741518.2450, E2201661.0745 | 579.45 | |
| 13 | STA. 143+25.87, RT. 1163.46' N1740729.9858, E2203194.7470 | 574.40 | 1/2" REBAR |
| 2000 | STA. 107+69.21, LT. 736.44' N1742717.7720, E2199686.1370 | 587.72 | SPK |

- NOTES:**
- SEE PLAN & PROFILE SHEETS FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL AND FIELD TILES.
 - CONTRACTOR SHALL REPAIR OR REPLACE ANY IMPROVEMENTS DAMAGED DURING CONSTRUCTION AT HIS OWN EXPENSE.

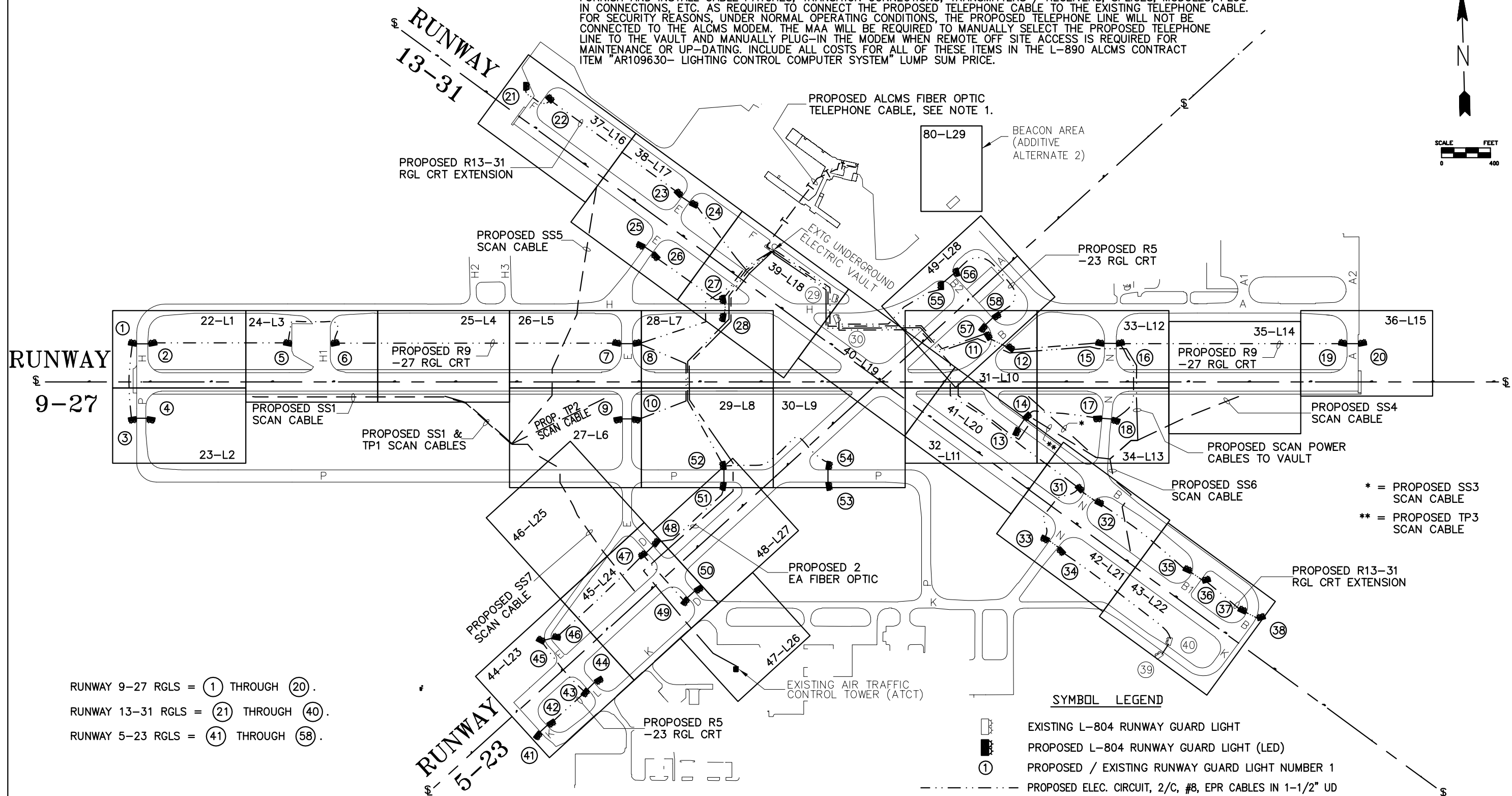
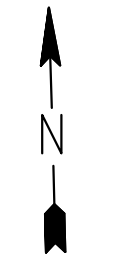
LEGEND:

- EDGE LIGHT
- GUIDANCE SIGN
- ELECTRICAL CABLE
- STORM SEWER OR UNDERDRAIN
- INLET
- OUTLET
- STORM MANHOLE
- SANITARY MANHOLE
- DRAINAGE DITCH
- CONDUIT OR DUCT BANK
- PROPOSED BASE BID ITEMS (RGL, ALCMS, CABLING AND PTM).
- PROPOSED ADDITIVE ALTERNATE 1, REMOVE AND REPLACE TAXIWAY CENTERLINES (PAINT).
- PROPOSED ADDITIVE ALTERNATE 2 AREA, REMOVE AND REPLACE BEACON.

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NOTE:

1. PROPOSED SHIELDED 6 STRAND MULTIMODE FIBER OPTIC TELEPHONE CABLE IN 1" FLEX CONDUIT (OR AS PER ALCMS MANUFACTURER REQUIREMENTS) TO BE INSTALLED IN EXISTING CABLE TRAY (IN UTILITY TUNNEL) BETWEEN ALCMS IN THE VAULT AND TELEPHONE CONNECTION IN THE TERMINAL BUILDING BASEMENT. CONTRACTOR SHALL FURNISH AND INSTALL PLUG-IN / MODULE CONNECTIONS FOR THE TELEPHONE LINE / FO CABLE AS REQUIRED. ESTIMATED CABLE LENGTH = 1,275 L.F. INSTALL CABLE ON EXISTING LOW VOLTAGE CABLE RACK IN UTILITY TUNNEL. CONTRACTOR SHALL INSTALL A TWO-WAY TOGGLE LINE SELECTION SWITCH ON A EXISTING TELEPHONE LINE, SELECTED BY THE MAA IN THE TERMINAL BUILDING BASEMENT. THE TOGGLE SWITCH WILL BE USED TO SELECT THE EXISTING BASEMENT TELEPHONE OR THE PROPOSED NEW ALCMS MODEM. CONTRACTOR SHALL FURNISH AND INSTALL CABLE PATCHES, TRANSITION CONNECTIONS, TRANSMITTERS / RECEIVERS, SPLICES, MODULES, PLUG-IN CONNECTIONS, ETC. AS REQUIRED TO CONNECT THE PROPOSED TELEPHONE CABLE TO THE EXISTING TELEPHONE CABLE. FOR SECURITY REASONS, UNDER NORMAL OPERATING CONDITIONS, THE PROPOSED TELEPHONE LINE WILL NOT BE CONNECTED TO THE ALCMS MODEM. THE MAA WILL BE REQUIRED TO MANUALLY SELECT THE PROPOSED TELEPHONE LINE TO THE VAULT AND MANUALLY PLUG-IN THE MODEM WHEN REMOTE OFF SITE ACCESS IS REQUIRED FOR MAINTENANCE OR UP-DATING. INCLUDE ALL COSTS FOR ALL OF THESE ITEMS IN THE L-890 ALCMS CONTRACT ITEM "AR109630- LIGHTING CONTROL COMPUTER SYSTEM" LUMP SUM PRICE.



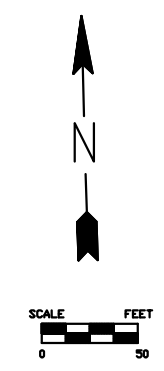
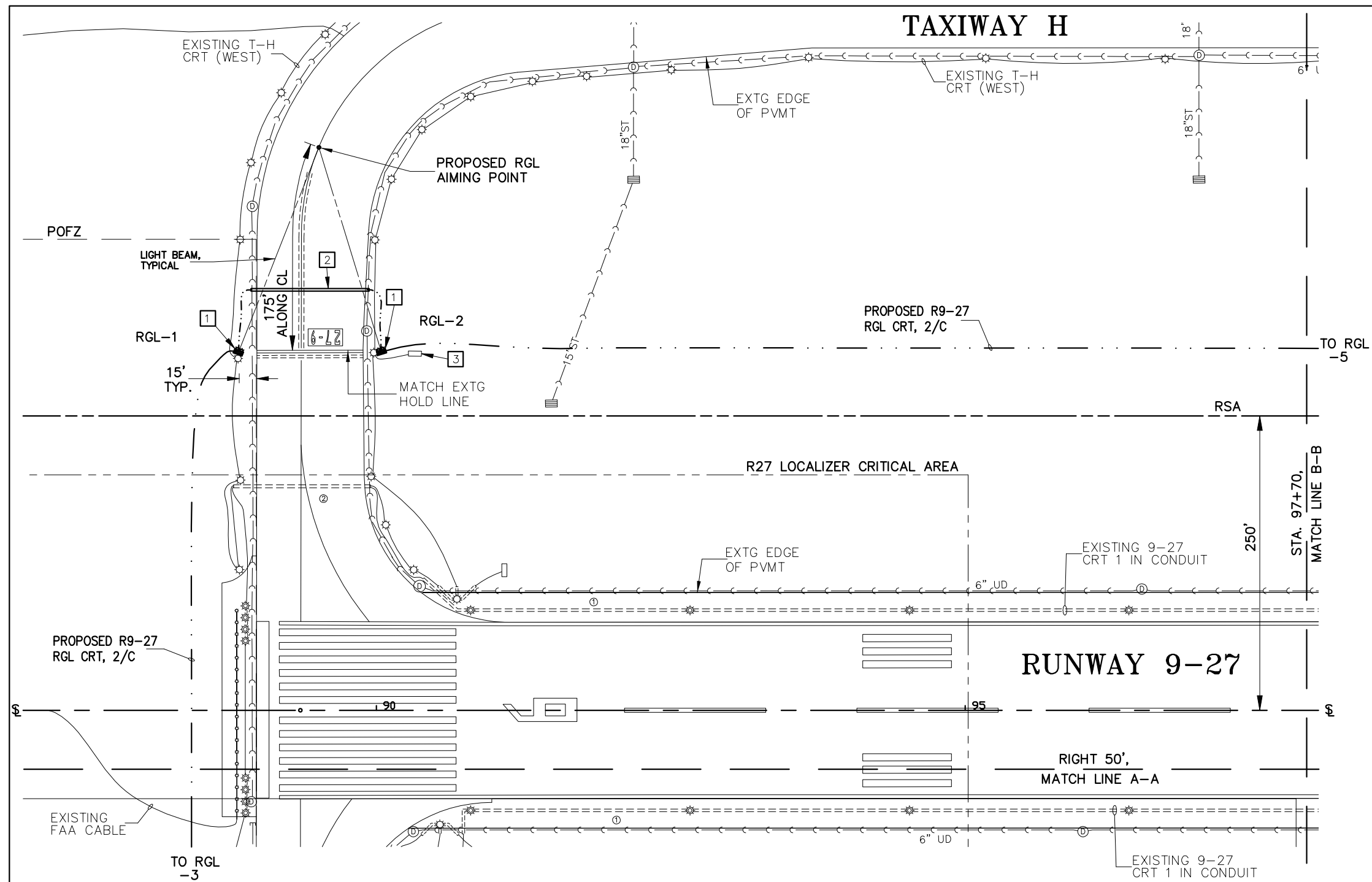
RUNWAY 9-27 RGLS = ① THROUGH ⑳ .
 RUNWAY 13-31 RGLS = ㉑ THROUGH ㉔ .
 RUNWAY 5-23 RGLS = ㉕ THROUGH ㉘ .

SYMBOL LEGEND

- EXISTING L-804 RUNWAY GUARD LIGHT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED ALCMS FIBER OPTIC TELEPHONE CABLE
- PROPOSED TYPE V SCAN CABLE
- PROPOSED SCAN RPU POWER SUPPLY CABLES
- 22-L1 = SHEET NUMBER 22, LIGHTING PLAN AREA 1

* = PROPOSED SS3 SCAN CABLE
 ** = PROPOSED TP3 SCAN CABLE

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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

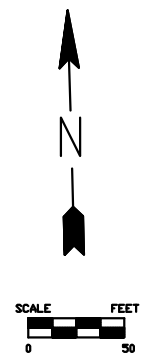
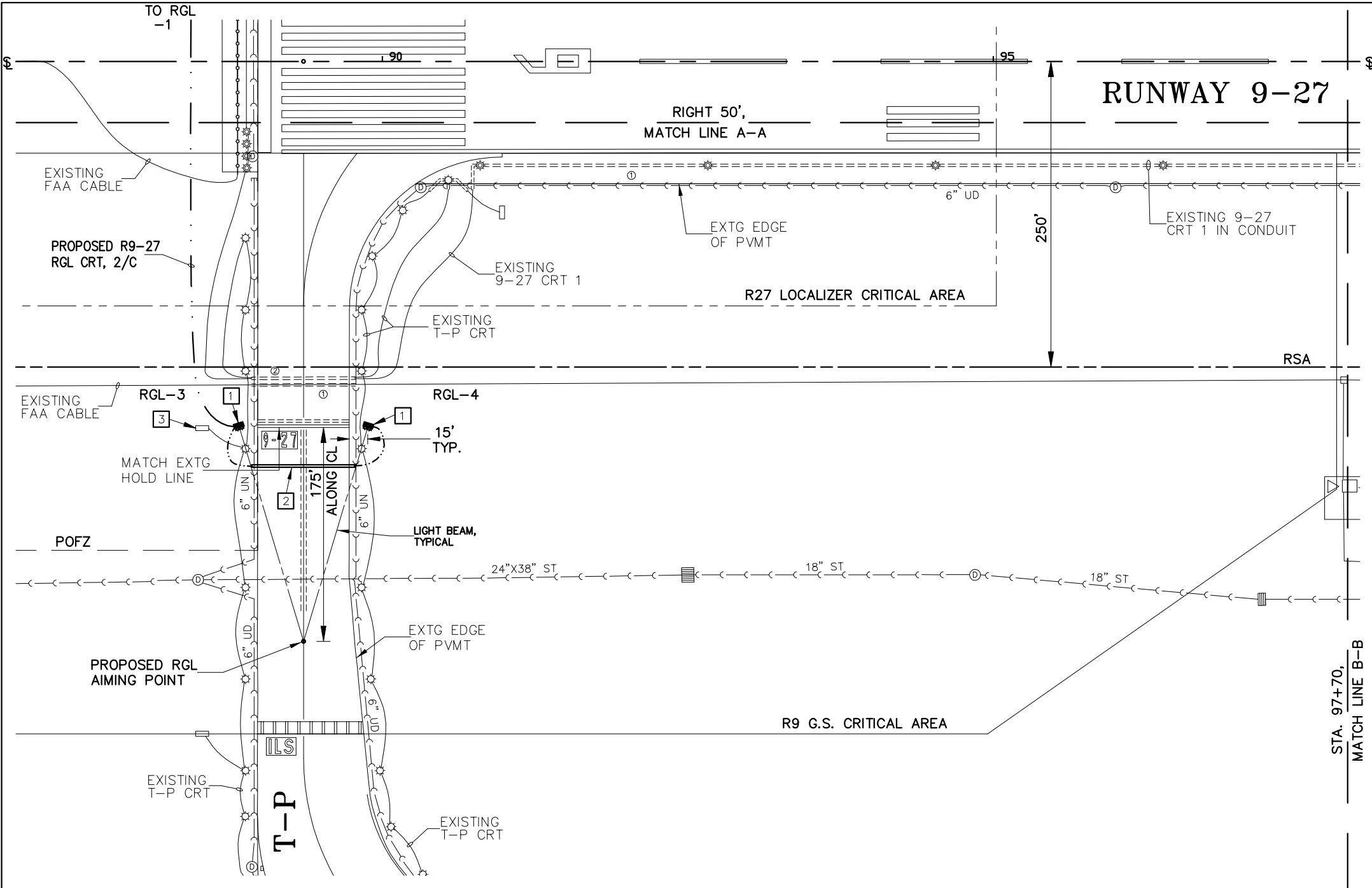
SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- PROPOSED ELECTRICAL CIRCUIT BY OTHERS
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 1** PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2** PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3** EXISTING RUNWAY HOLDING POSITION SIGN.

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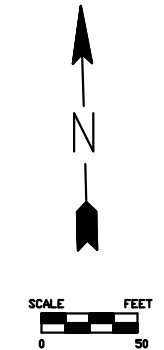
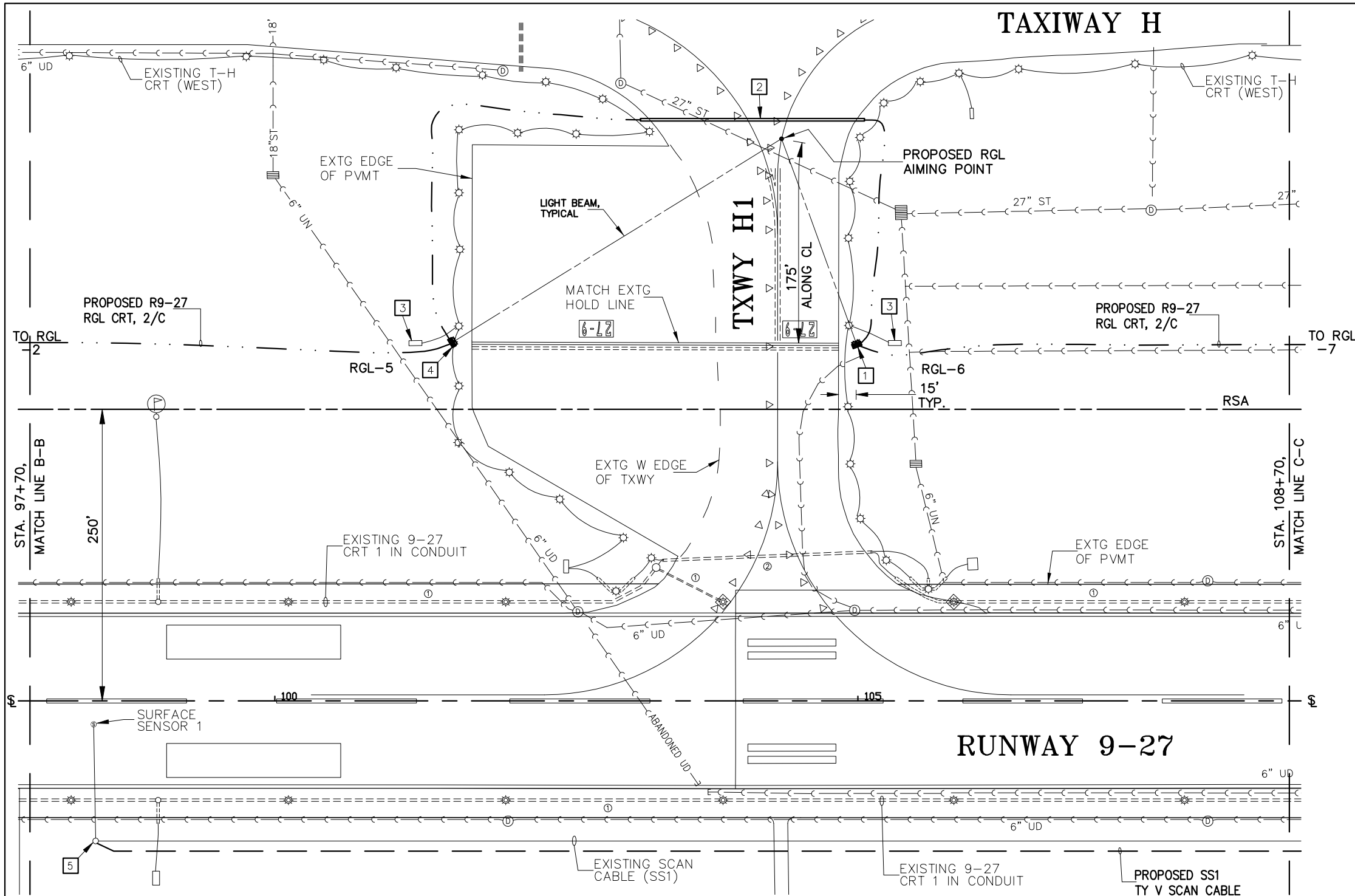
- GENERAL NOTES:**
- SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
 - SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
 - ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
 - TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

| | |
|--|---|
| | EXISTING L-861T MITL OR L-861 MIRL |
| | EXISTING L-862 HIRLQ OR L-862E HIRLQ |
| | EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT |
| | EXISTING L-867 SPLICE OR TRANSFORMER CAN |
| | EXISTING L-804 RUNWAY GUARD LIGHT |
| | EXISTING GUIDANCE SIGN |
| | EXISTING STORM OR SANITARY MANHOLE |
| | EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS |
| | EXISTING CONDUIT OR DUCT BANK |
| | EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT |
| | PROPOSED L-804 RUNWAY GUARD LIGHT (LED) |
| | PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN |
| | PROPOSED CONDUIT OR DUCT BANK |
| | PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD |
| | PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD |
| | PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH) |
| | PROPOSED TYPE V SCAN CABLE |
| | PROPOSED ELECTRICAL CIRCUIT BY OTHERS |
| | RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1 |

- NUMBERED LEGEND**
- PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
 - PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - EXISTING RUNWAY HOLDING POSITION SIGN.

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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- PROPOSED ELECTRICAL CIRCUIT BY OTHERS
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

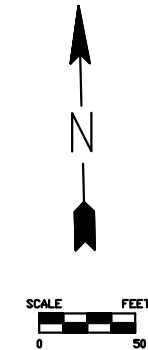
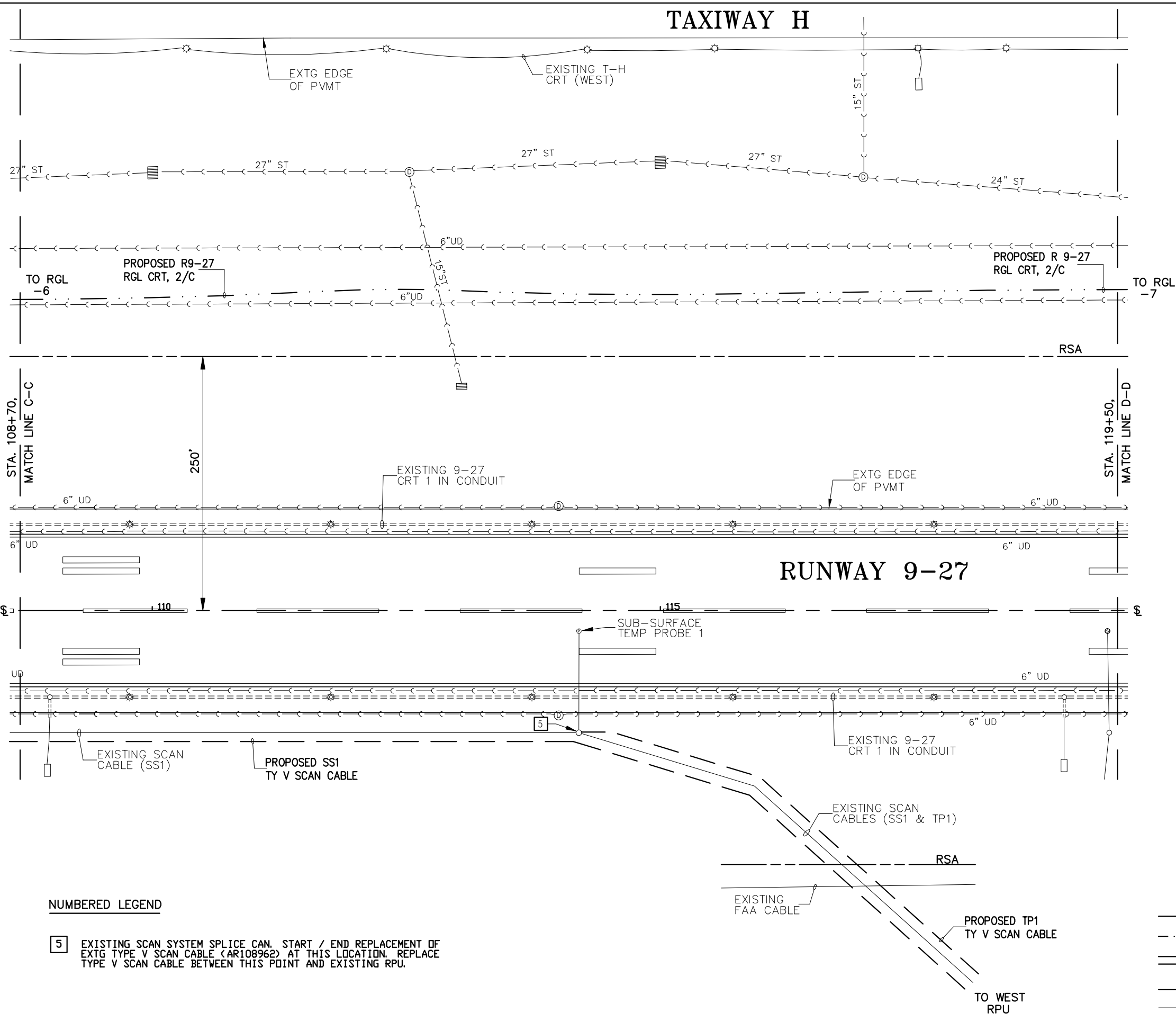
NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 4 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHT (AR801634). INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNIT AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF PAVEMENT. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 5 EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXTG TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TYPE V SCAN CABLE BETWEEN THIS POINT AND EXISTING RPV.

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TAXIWAY H

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 25 OF 83



- GENERAL NOTES:**
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- PROPOSED ELECTRICAL CIRCUIT BY OTHERS
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 5** EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXTG TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TYPE V SCAN CABLE BETWEEN THIS POINT AND EXISTING RPU.

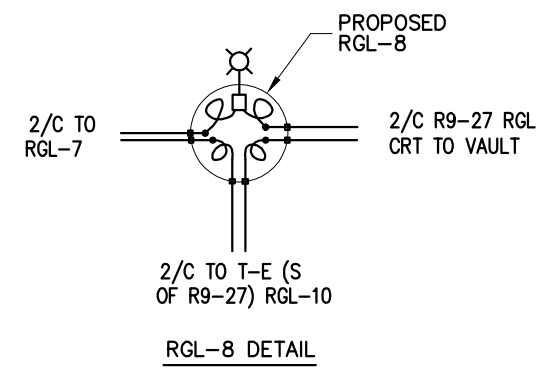
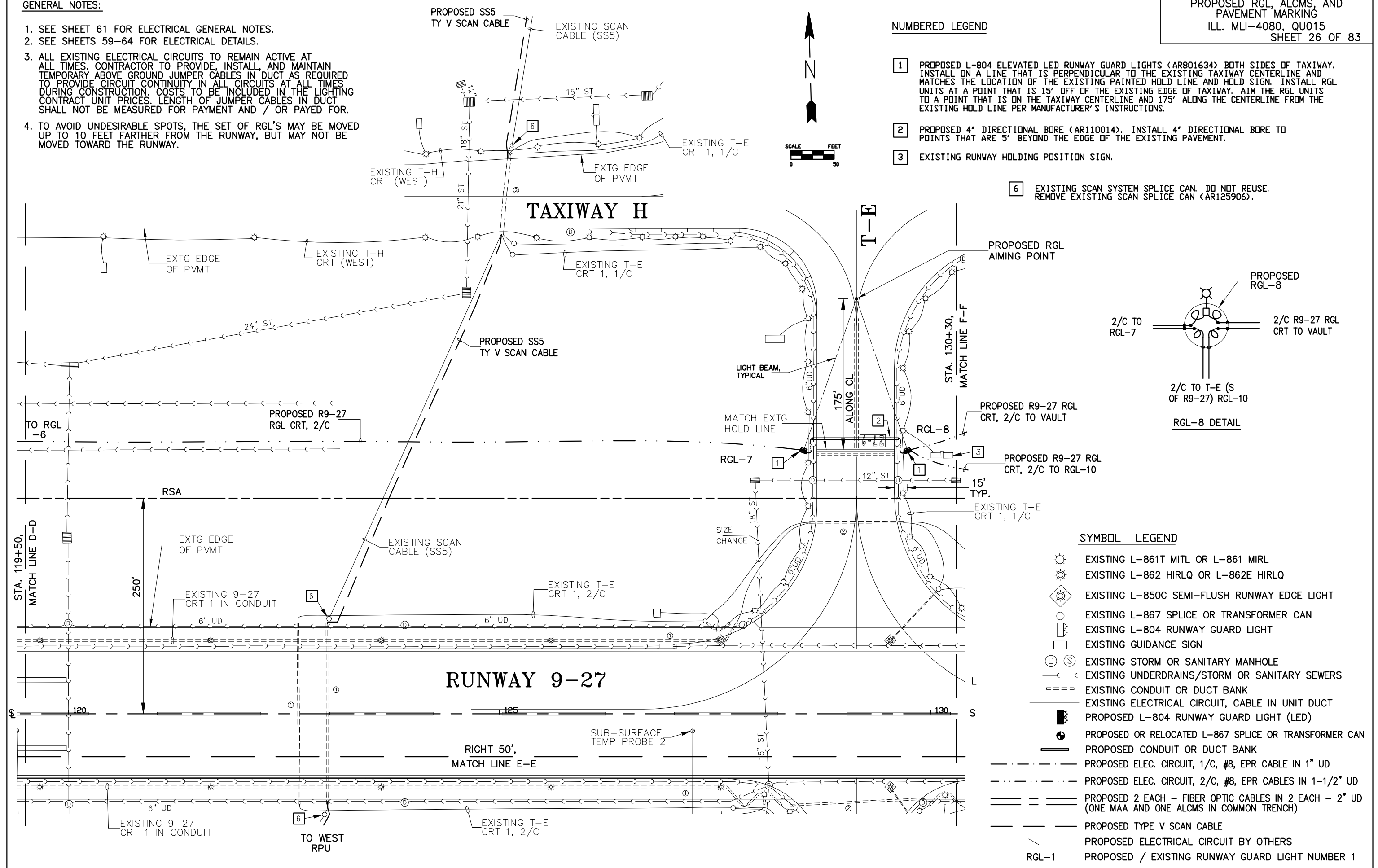
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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 6 EXISTING SCAN SYSTEM SPLICE CAN. DO NOT REUSE. REMOVE EXISTING SCAN SPLICE CAN (AR125906).

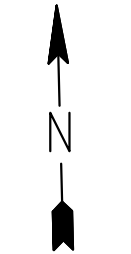
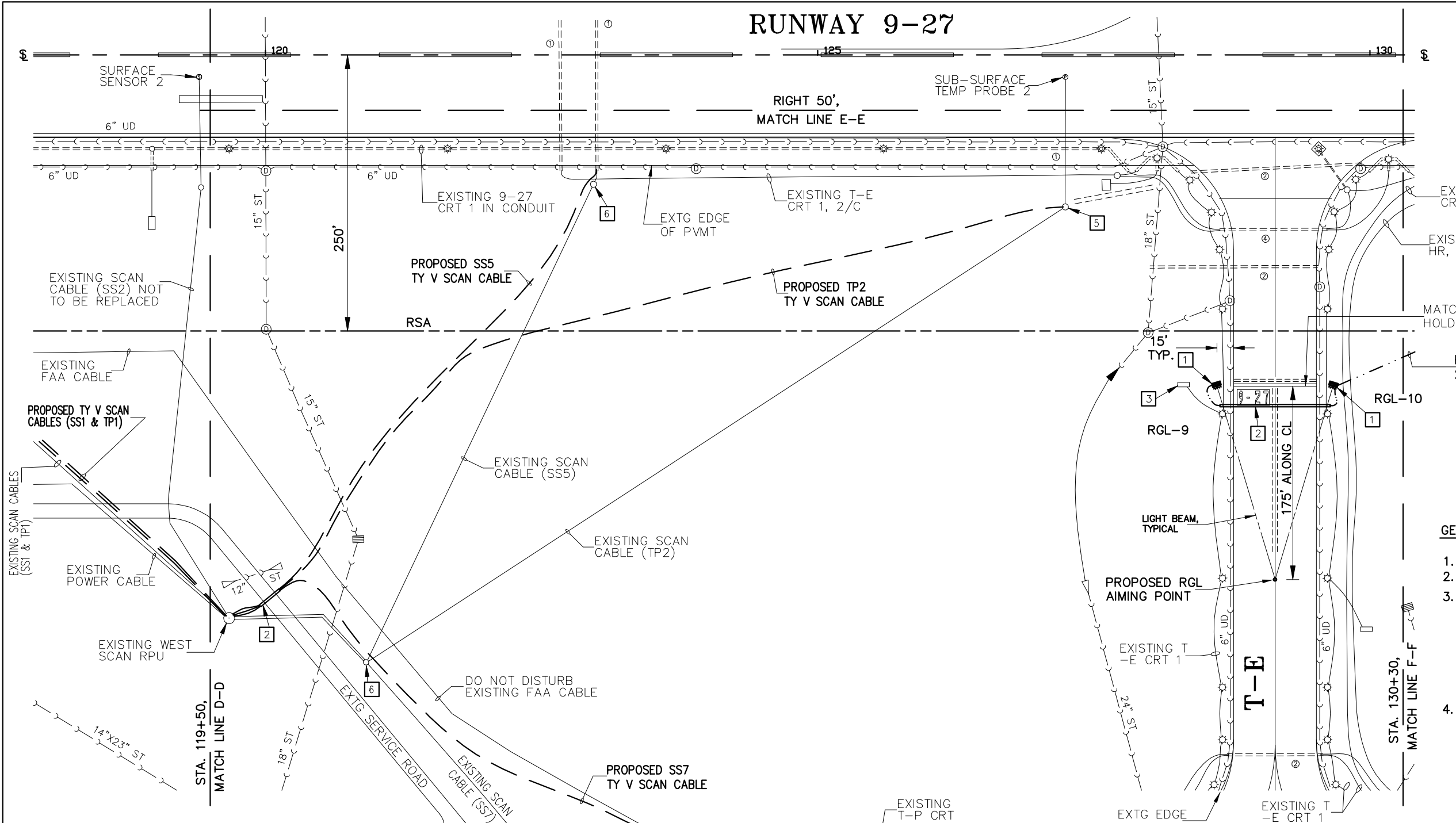


SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- PROPOSED ELECTRICAL CIRCUIT BY OTHERS
- PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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RUNWAY 9-27

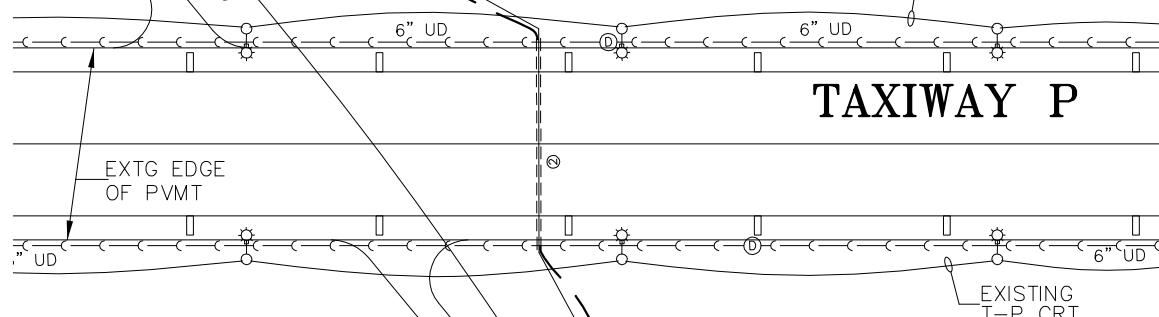


GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MTL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK

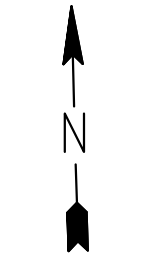
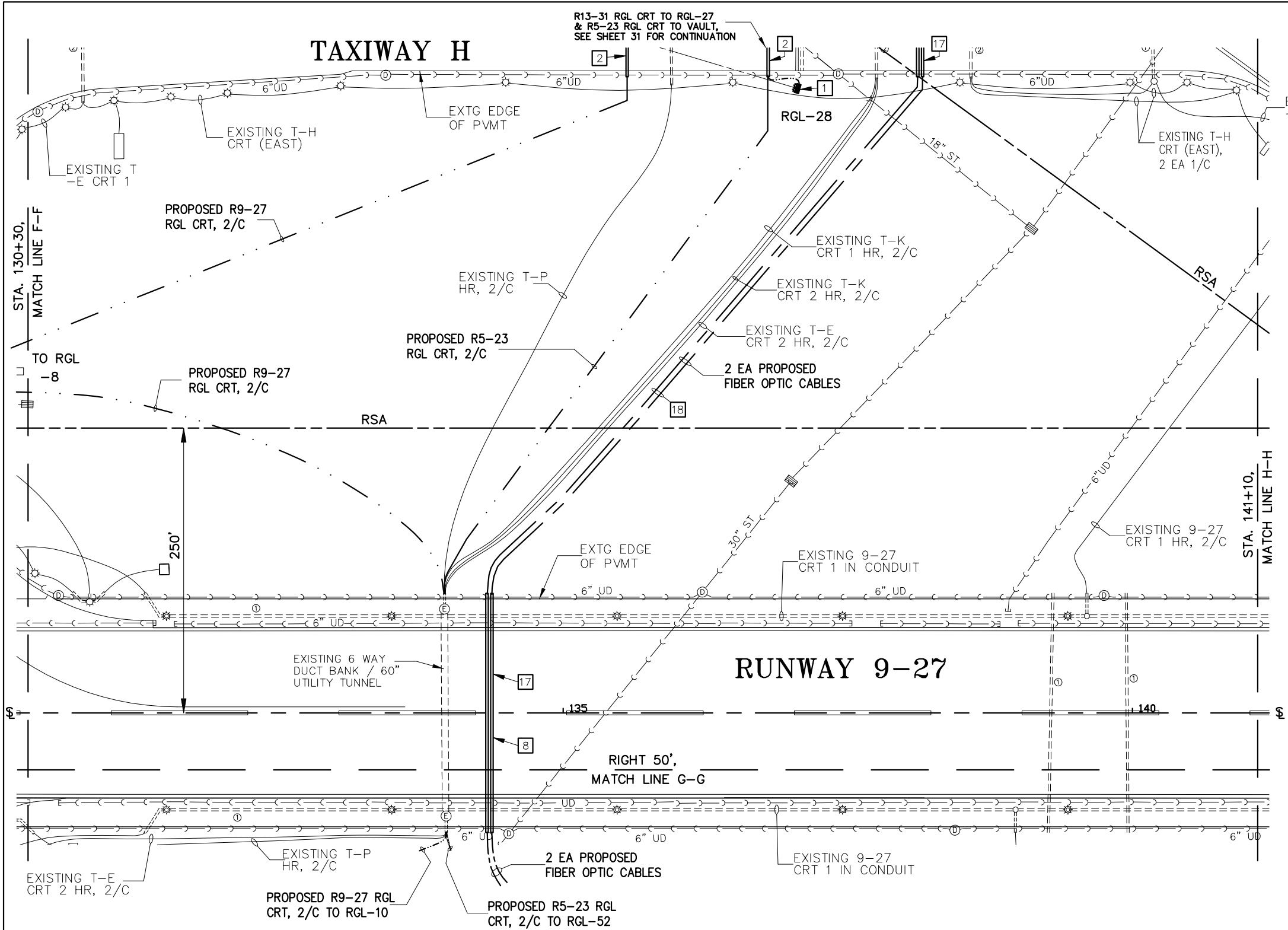


NUMBERED LEGEND

- 1** PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2** PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3** EXISTING RUNWAY HOLDING POSITION SIGN.
- 5** EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXISTING TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TY V SCAN CABLE BETWEEN THIS POINT AND EXTG. RPU.
- 6** EXTG SCAN SYSTEM SPLICE CAN. DO NOT REUSE. REMOVE EXTG SCAN SPLICE CAN (AR125906).

- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- PROPOSED ELECTRICAL CIRCUIT BY OTHERS
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

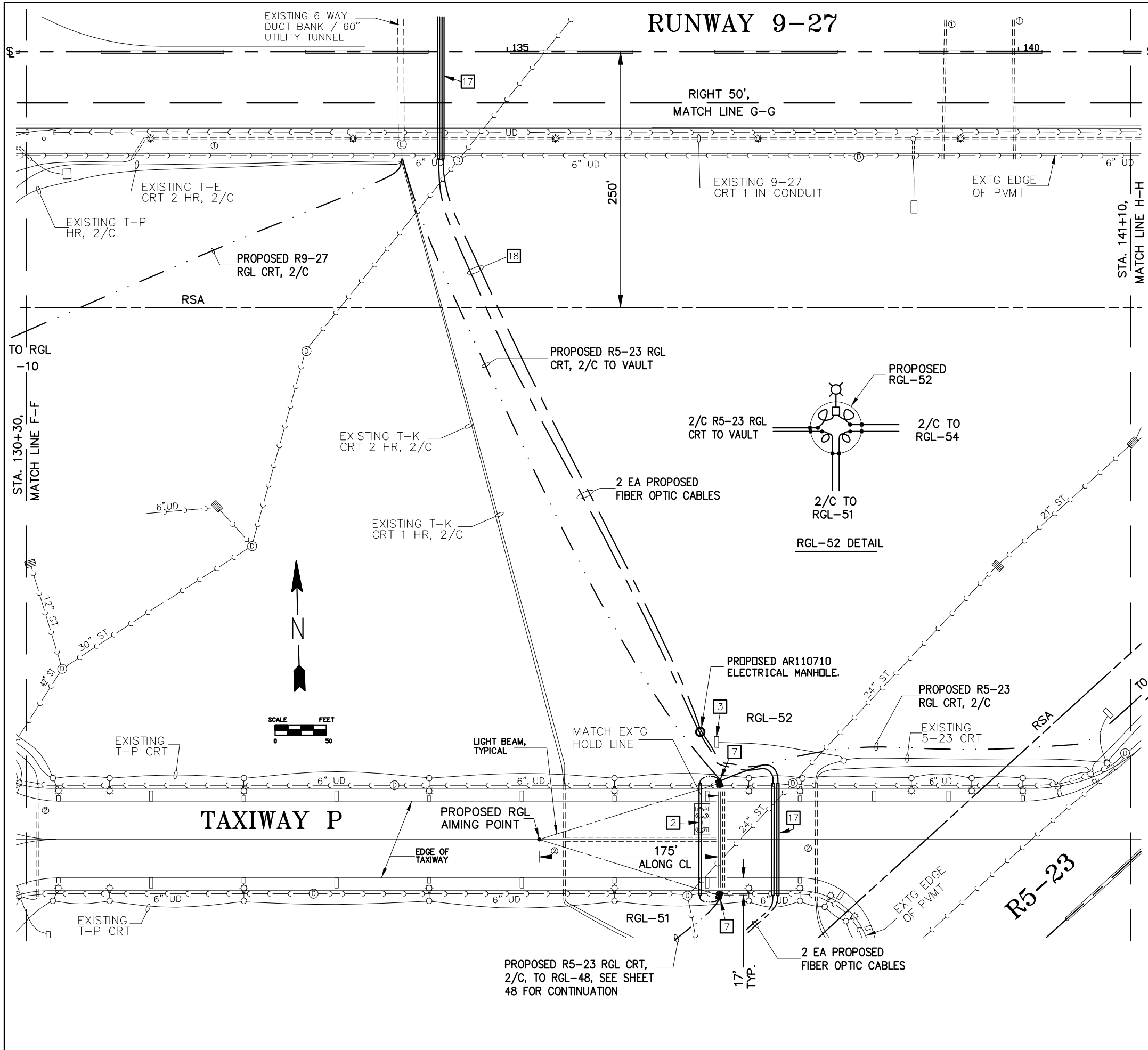
NUMBERED LEGEND

- SEE SHEET 24 FOR NUMBERED LEGEND ITEMS [1] THROUGH [5].
- [8] TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP RGL CRT CABLES AWAY FROM THE EDGE LIGHT CABLES.
- [17] PROPOSED 2 EACH - 4' DIRECTIONAL BORES (2 EA - AR10014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4' DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- [18] TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.

GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

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NUMBERED LEGEND

SEE SHEET 24 FOR NUMBERED LEGEND ITEMS [1] THROUGH [4].

- [2] PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- [3] EXISTING RUNWAY HOLDING POSITION SIGN.
- [7] PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) ON BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 17' OFF OF THE EXISTING EDGE OF TAXIWAY (WHICH IS ABOUT 4.5' OFF OF THE EDGE OF THE EXISTING PAVEMENT). AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- [17] PROPOSED 2 EACH - 4' DIRECTIONAL BORES (2 EA - AR110014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4' DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- [18] TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.

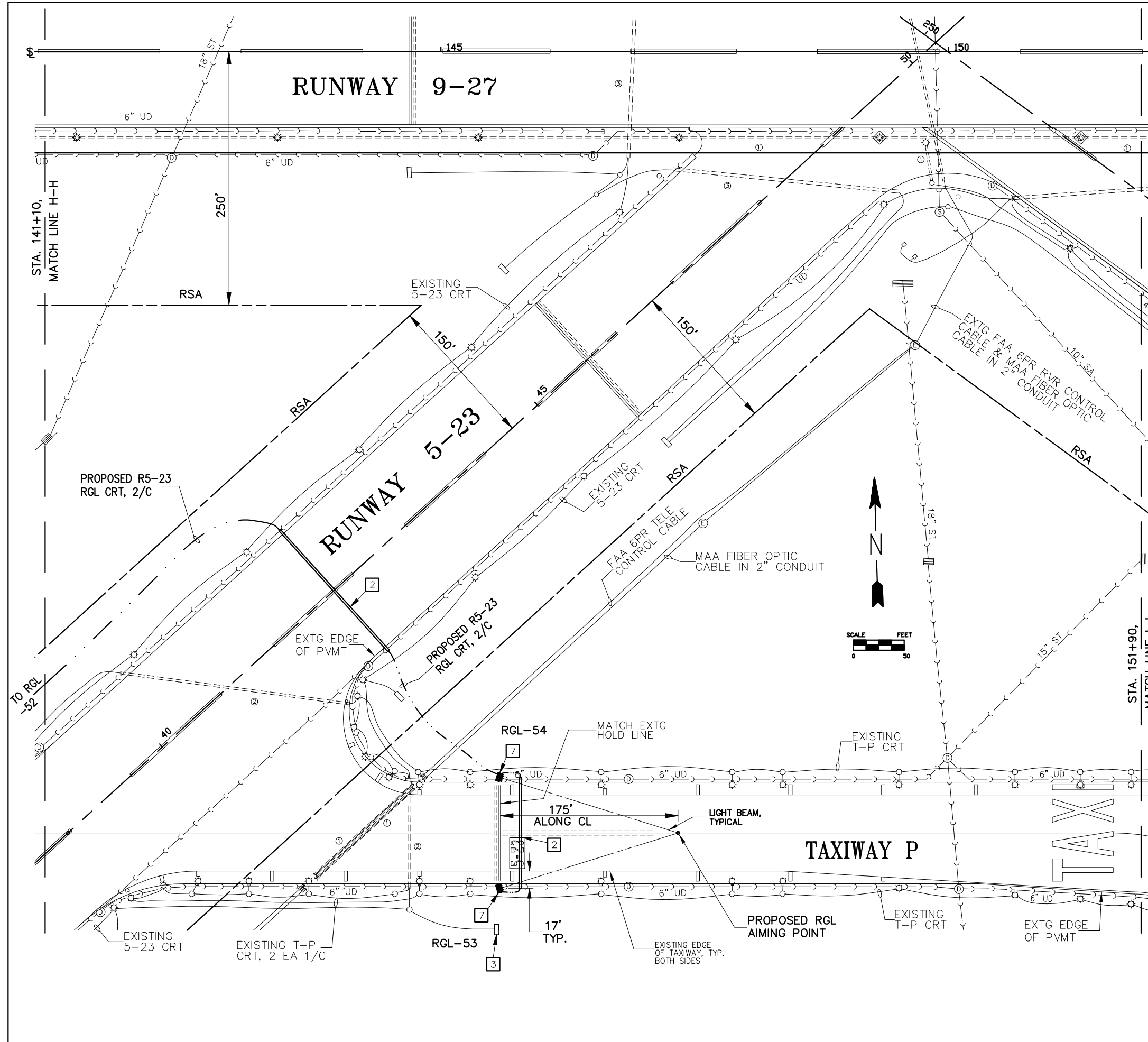
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1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
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4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" DUCT
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" DUCT
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" DUCT (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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NUMBERED LEGEND

- SEE SHEET 24 FOR NUMBERED LEGEND ITEMS 1 THROUGH 4.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - 3 EXISTING RUNWAY HOLDING POSITION SIGN.
 - 7 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) ON BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 17' OFF OF THE EXISTING EDGE OF TAXIWAY (WHICH IS ABOUT 4.5' OFF OF THE EDGE OF THE EXISTING PAVEMENT). AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.

GENERAL NOTES:

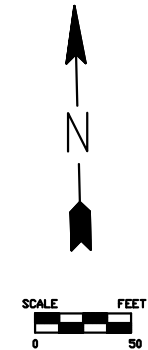
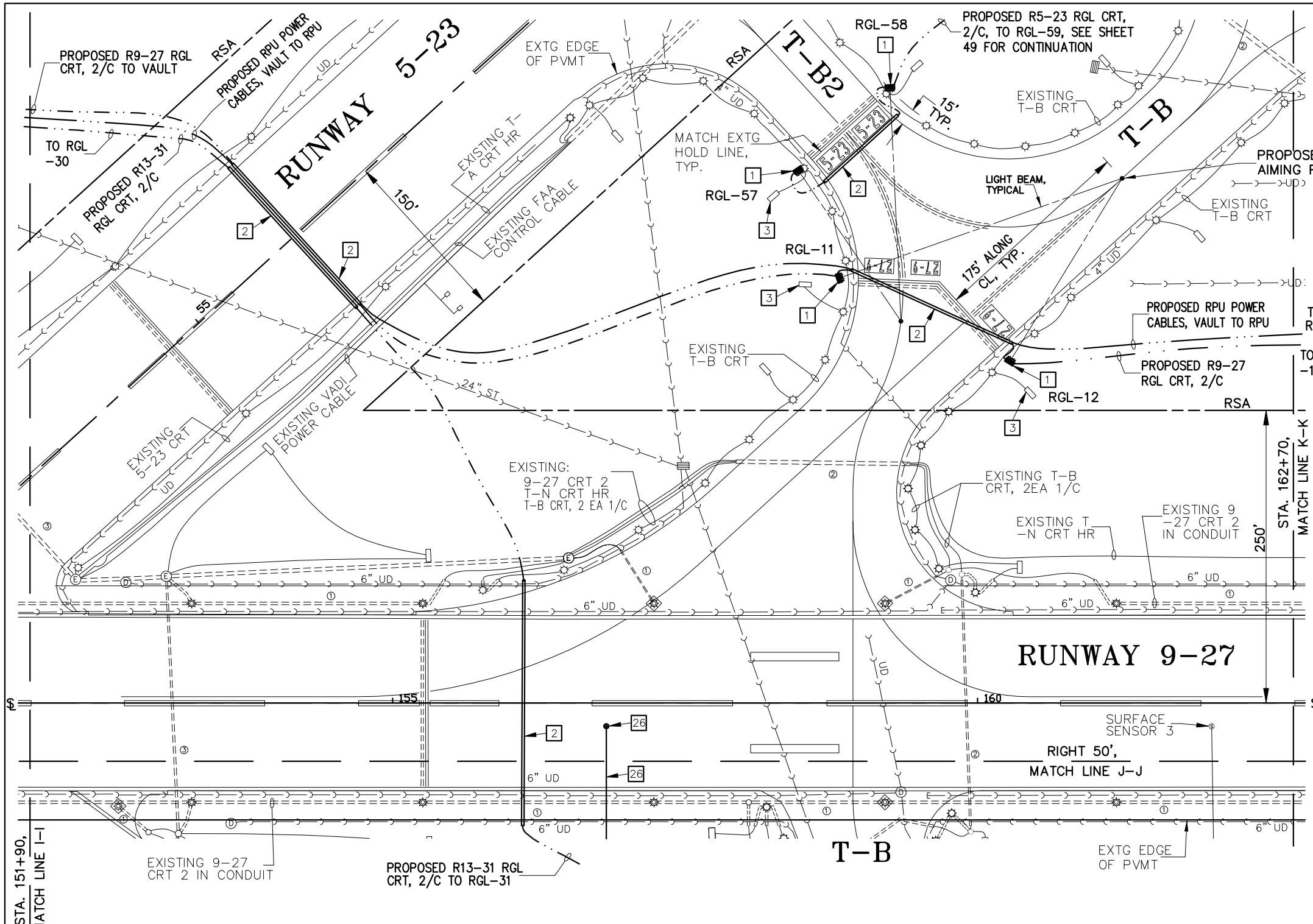
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4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
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- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 31 OF 83



GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
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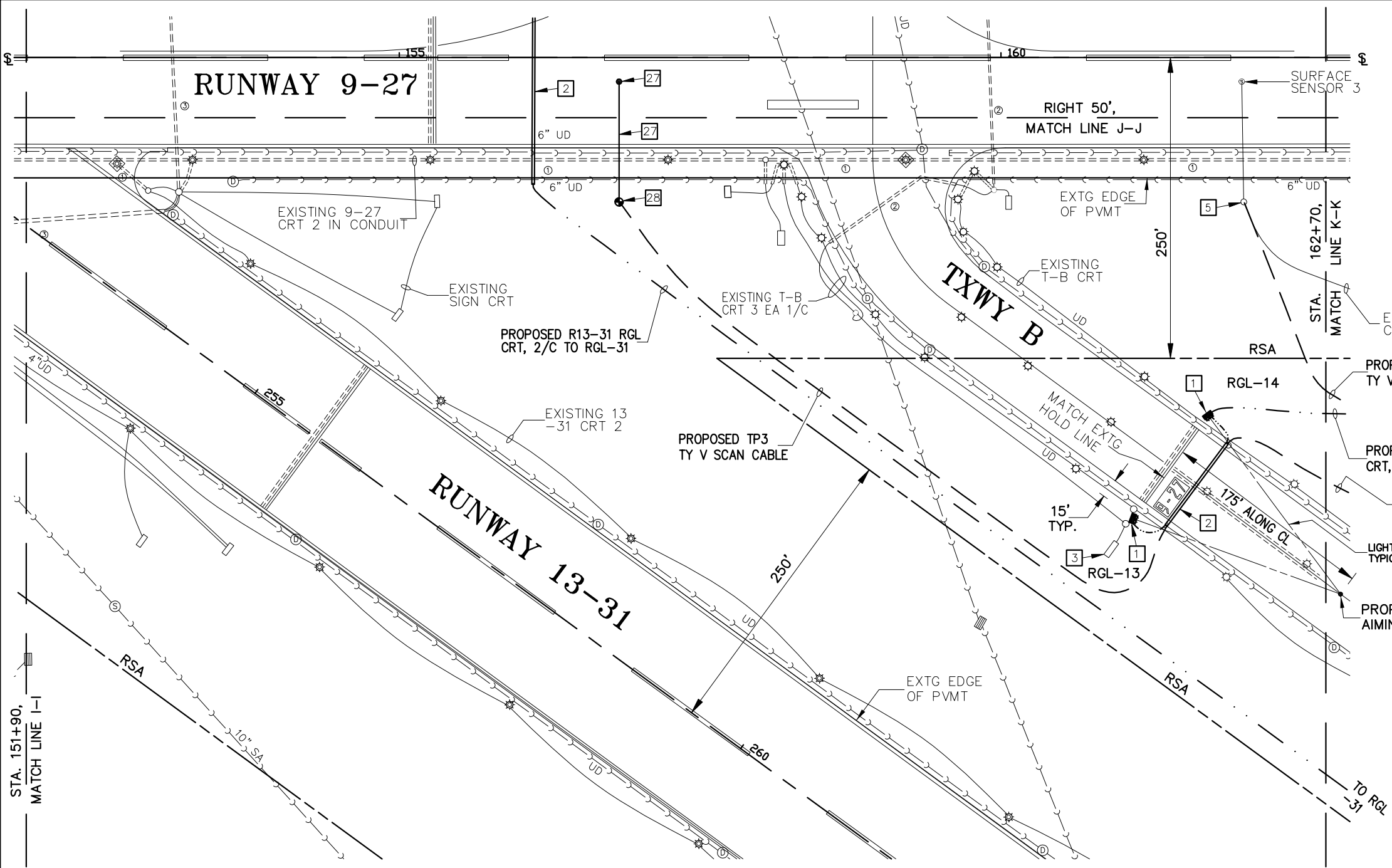
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- EXISTING L-862 HIRLQ OR L-862E HIRLQ
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- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 1** PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2** PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3** EXISTING RUNWAY HOLDING POSITION SIGN.
- 26** PROPOSED NEW SCAN SUB-SURFACE TEMPERATURE PROBE 3 (TP-3) AND SENSOR CABLE. INCLUDE ALL COSTS FOR THIS ITEM IN ITEM "AR109962-RELOCATE ELECTRICAL EQUIPMENT" CONTRACT UNIT PRICE.

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- GENERAL NOTES:**
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 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

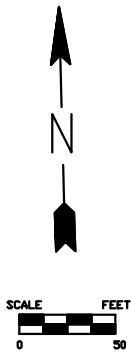
STA. 151+90,
MATCH LINE I-I

NUMBERED LEGEND

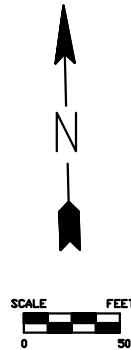
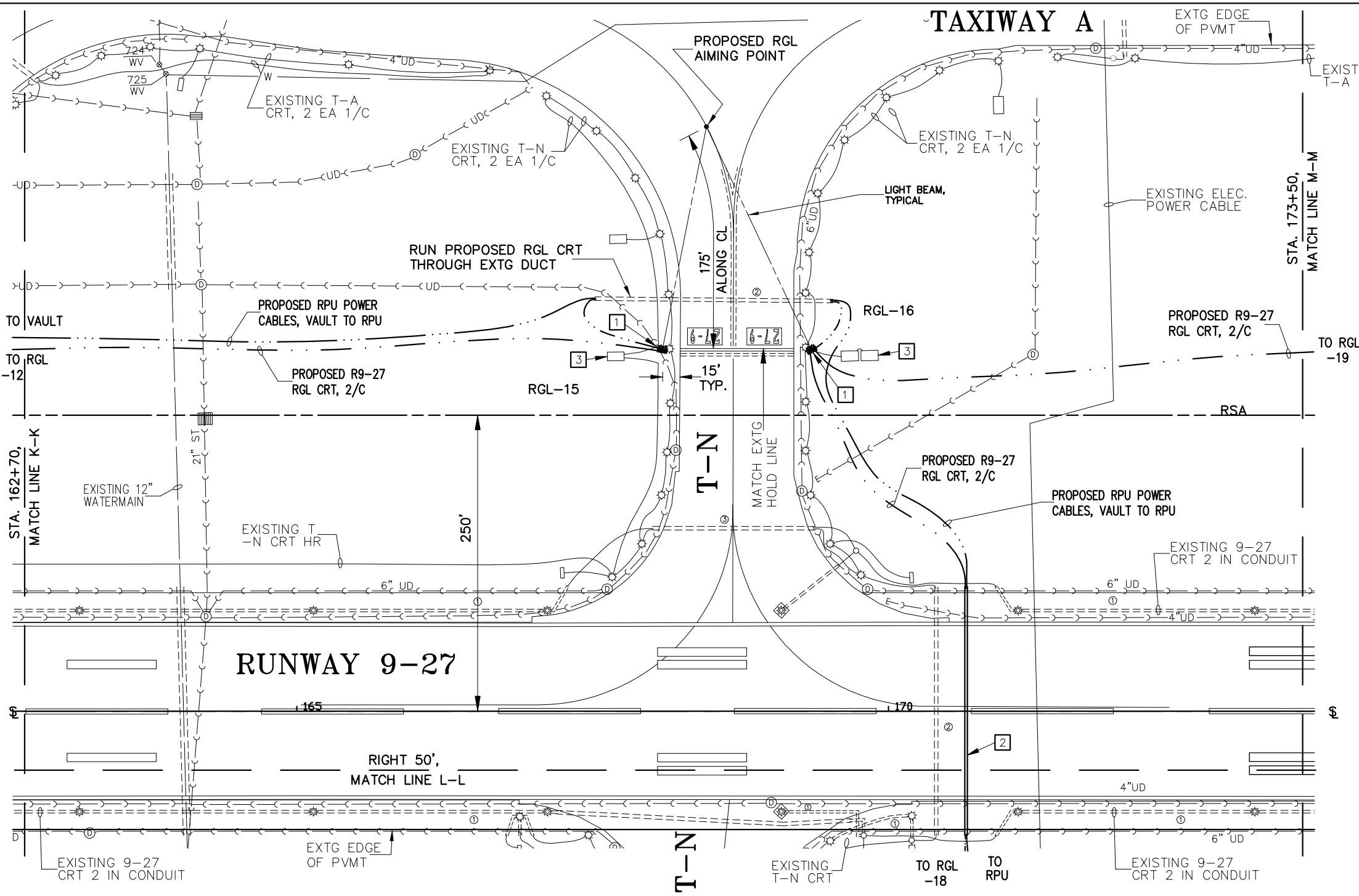
- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 5 EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXISTING TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TY V SCAN CABLE BETWEEN THIS POINT AND EXTG. RPU.
- 27 PROPOSED NEW SCAN SUB-SURFACE TEMPERATURE PROBE 3 (TP-3) AND SENSOR CABLE. INCLUDE ALL COST FOR THIS WORK IN ITEM 'AR109962-RELOCATE ELECTRICAL EQUIPMENT' CONTRACT UNIT PRICE.
- 28 PROPOSED AR125966 RELOCATED SPLICE CAN FOR SCAN SYSTEM ITEM TP-3.

SYMBOL LEGEND

- ▷ EXISTING L-853 RETROREFLECTIVE PAVEMENT MARKER
- ⊙ EXISTING L-861T MITL OR L-861 MIRL
- ⊙ EXISTING L-862 HIRLQ OR L-862E HIRLQ
- ⊙ EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- Ⓧ Ⓢ EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- — — EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- — — PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- — — PROPOSED CONDUIT OR DUCT BANK
- — — PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- — — PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- — — PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- — — PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1



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GENERAL NOTES:

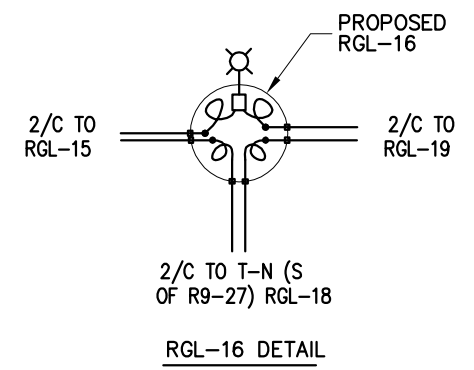
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

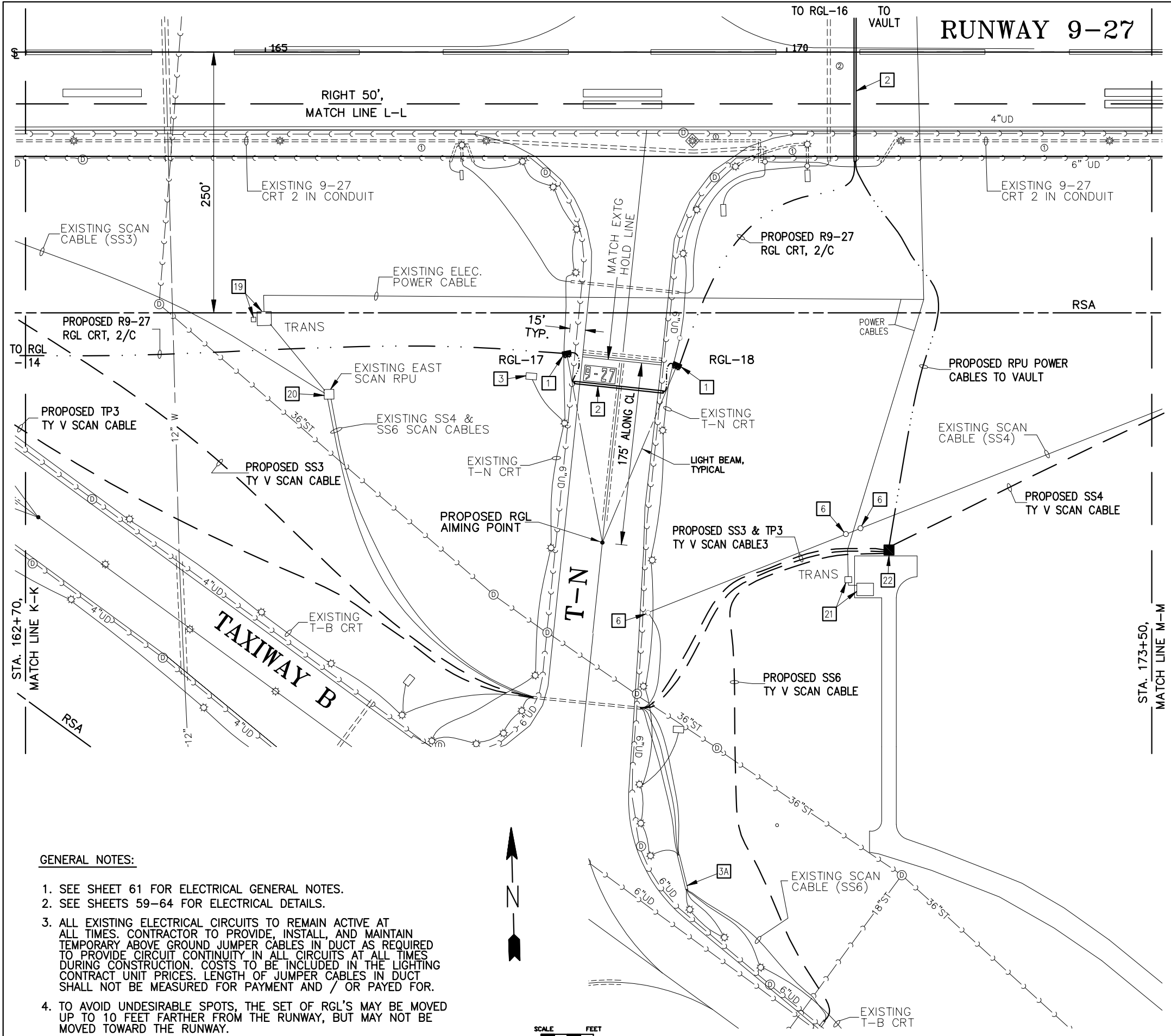
- EXISTING L-861T MTL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.



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NUMBERED LEGEND

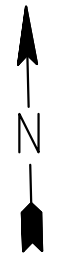
- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 3A EXTG DUCT. REMOVE EXTG ABANDONED SCAN SYSTEM CABLE FROM DUCT. INCLUDE CABLE REMOVAL COSTS IN REPLACE CABLE (AR108962) CONTRACT UNIT PRICE.
- 6 EXTG SCAN SYSTEM SPLICE CAN. DO NOT REUSE. REMOVE EXISTING SCAN SPLICE CAN (AR125906).
- 19 EXISTING TRANSFORMER AND ELECTRICAL SERVICE TO BE REMOVED (AR109907-REMOVE TRANSFORMER). CONTRACTOR TO COORDINATE AND COOPERATE WORK WITH MIDAMERICAN ENERGY COMPANY AS REQUIRED.
- 20 EXISTING EAST SCAN RPU TO BE RELOCATED TO LOCATION 22 UNDER ITEM AR109962-RELOCATE ELECTRICAL EQUIPMENT.
- 21 EXISTING TRANSFORMER / SHELTER TO BE REMOVED BY OTHERS IN THE FUTURE. DO NOT USE.
- 22 PROPOSED LOCATION FOR EAST SCAN RPU. SEE DETAILS ON SHEET 63.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

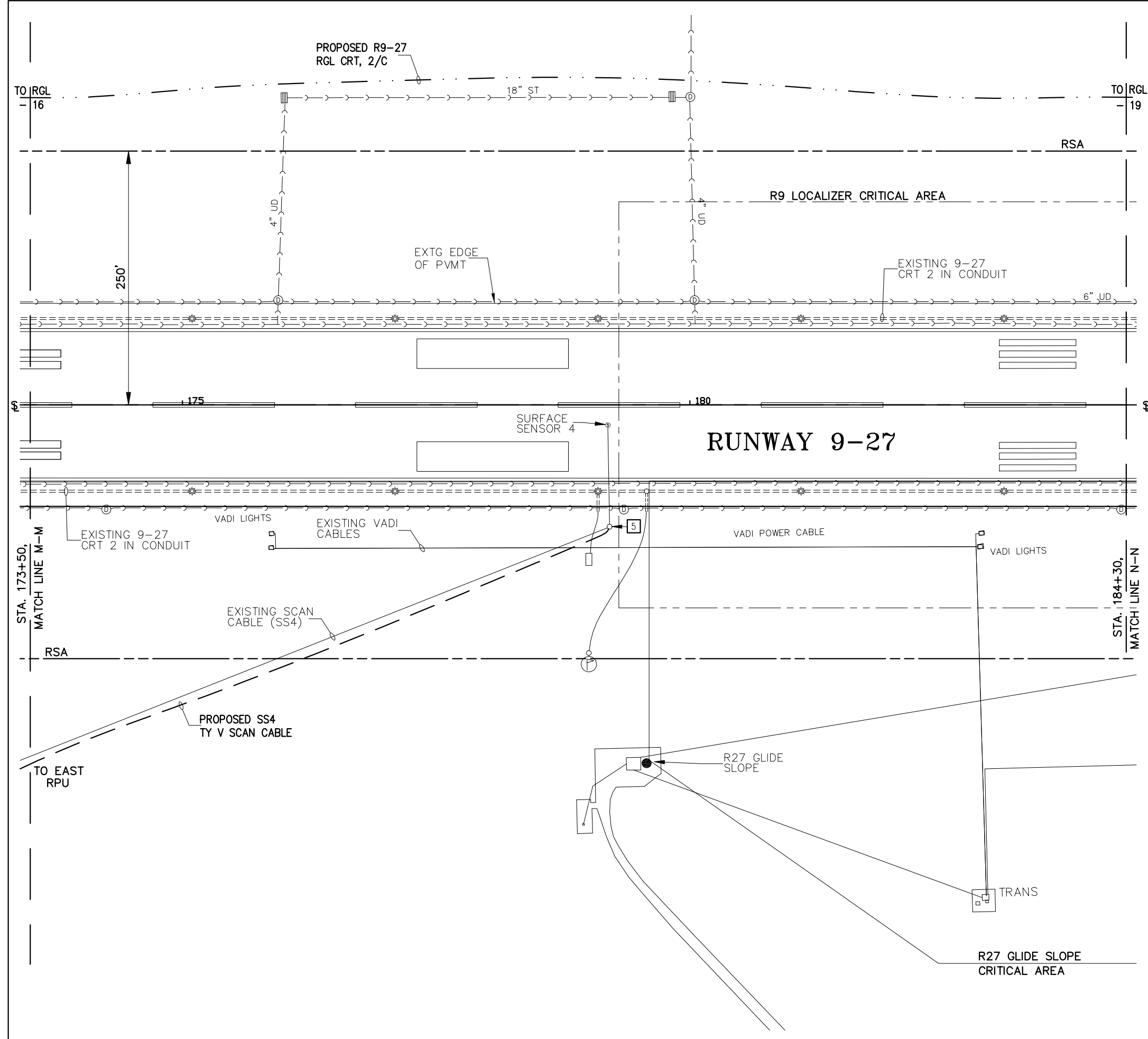
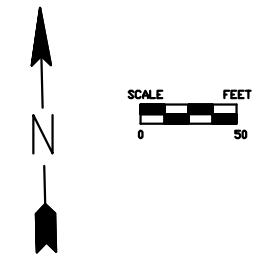
GENERAL NOTES:

- 1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
- 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
- 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
- 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.



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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 35 OF 83



NUMBERED LEGEND

- 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 5 EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXTG TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TYPE V SCAN CABLE BETWEEN THIS POINT AND EXISTING RPU.

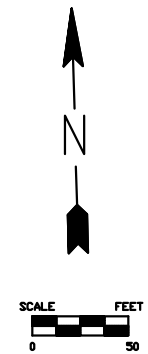
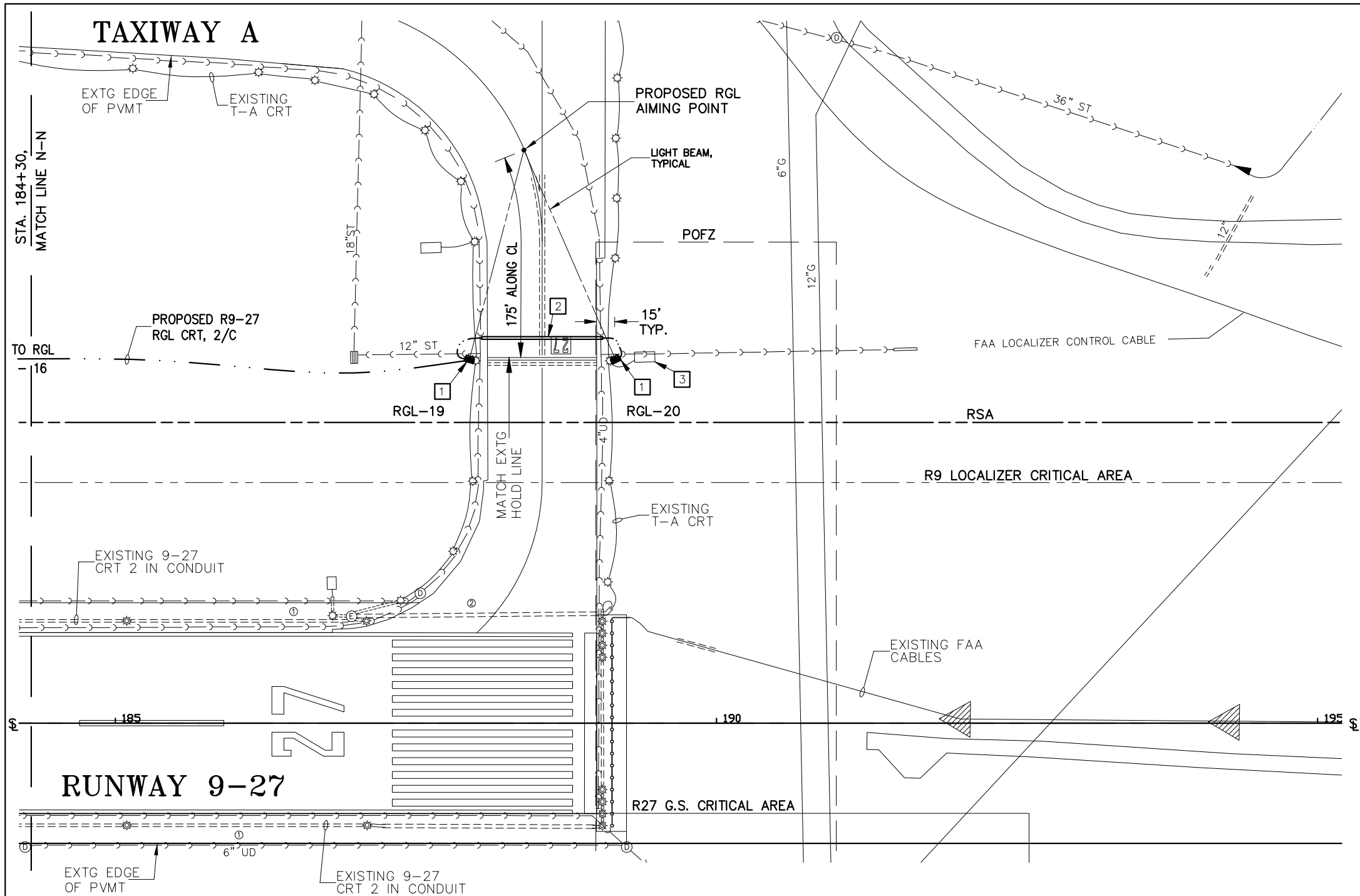
GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

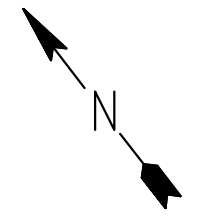
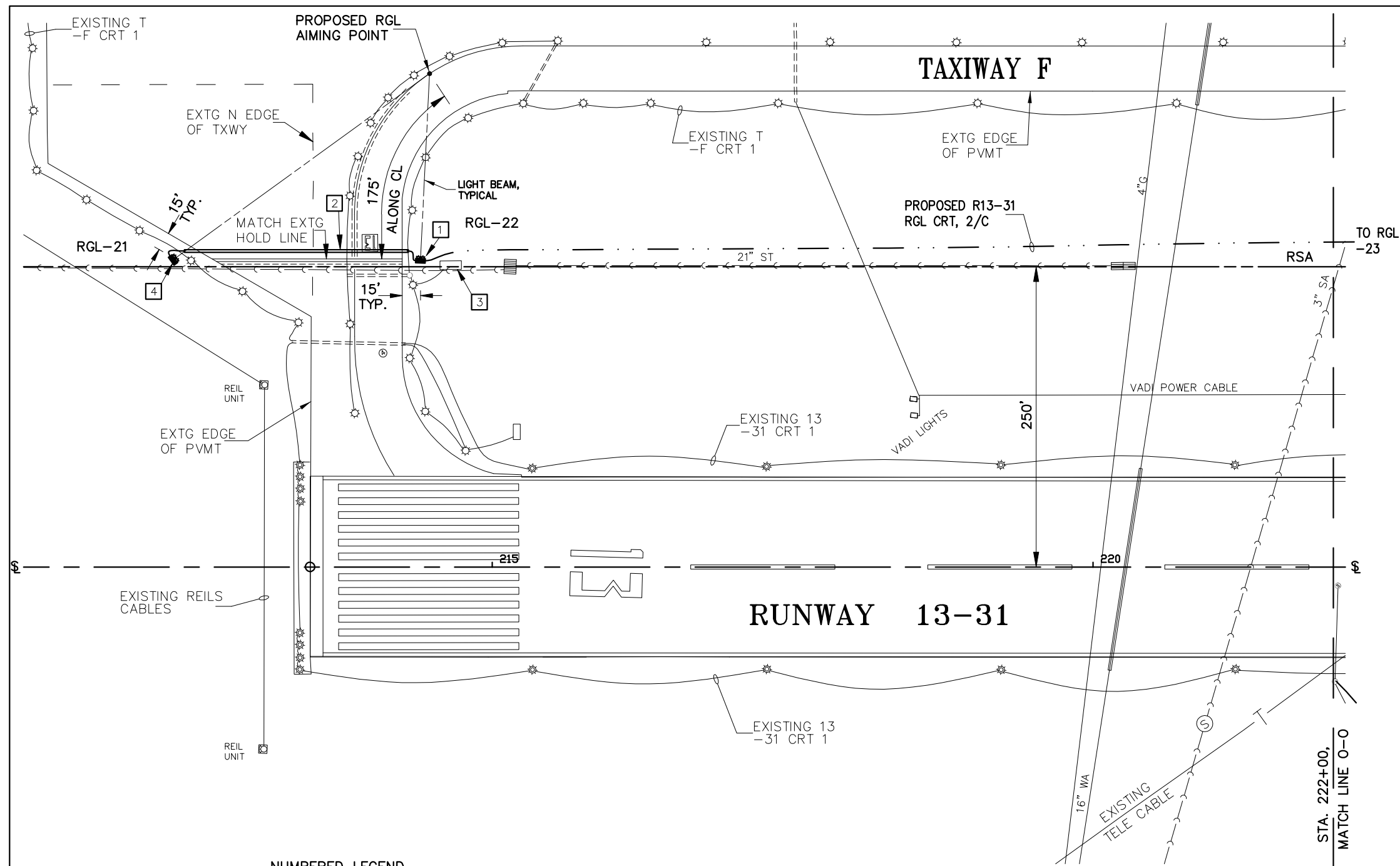
SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.

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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAID FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

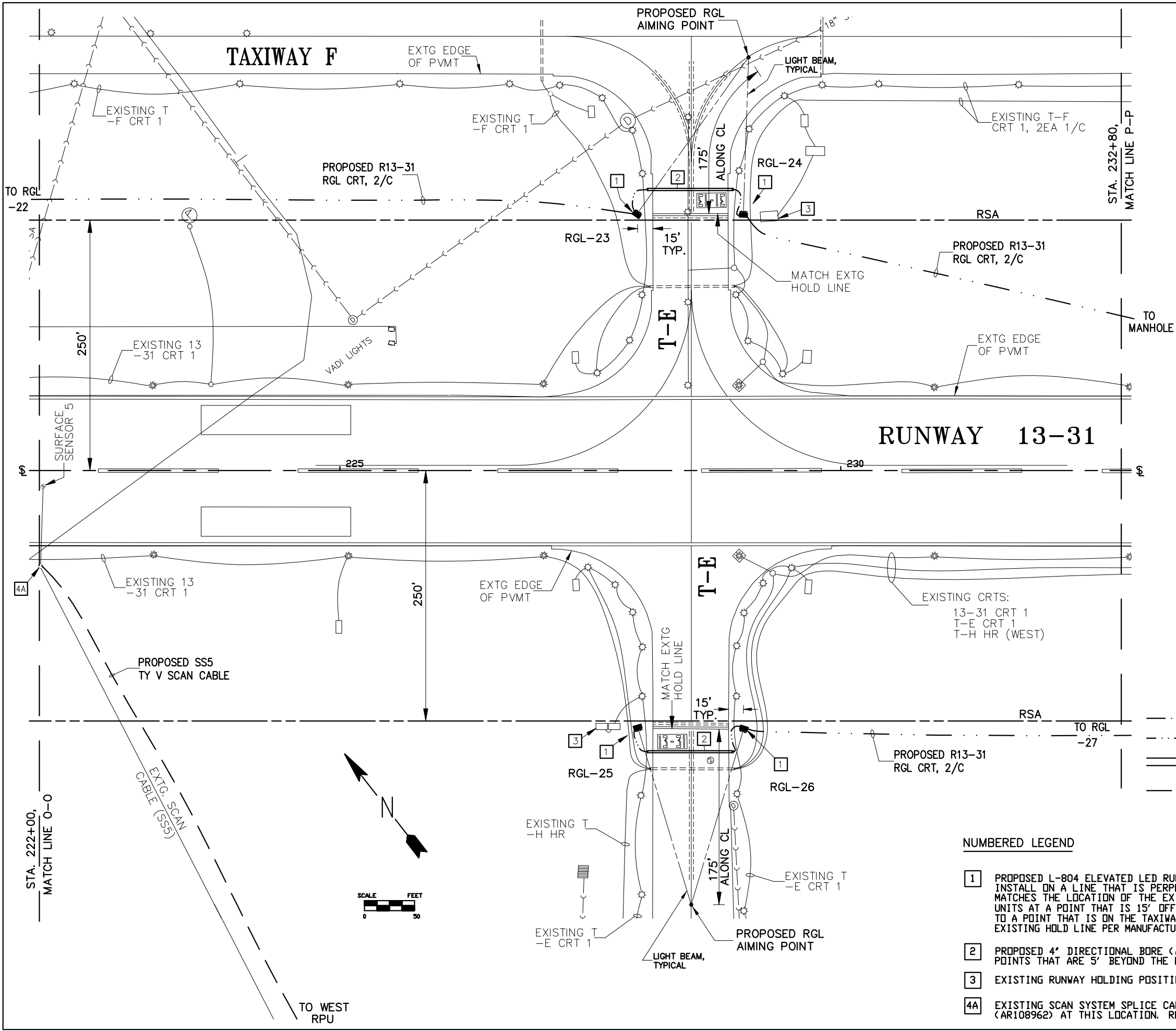
NUMBERED LEGEND

1. PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
2. PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
3. EXISTING RUNWAY HOLDING POSITION SIGN.
4. PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHT (AR801634). INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNIT AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF PAVEMENT. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

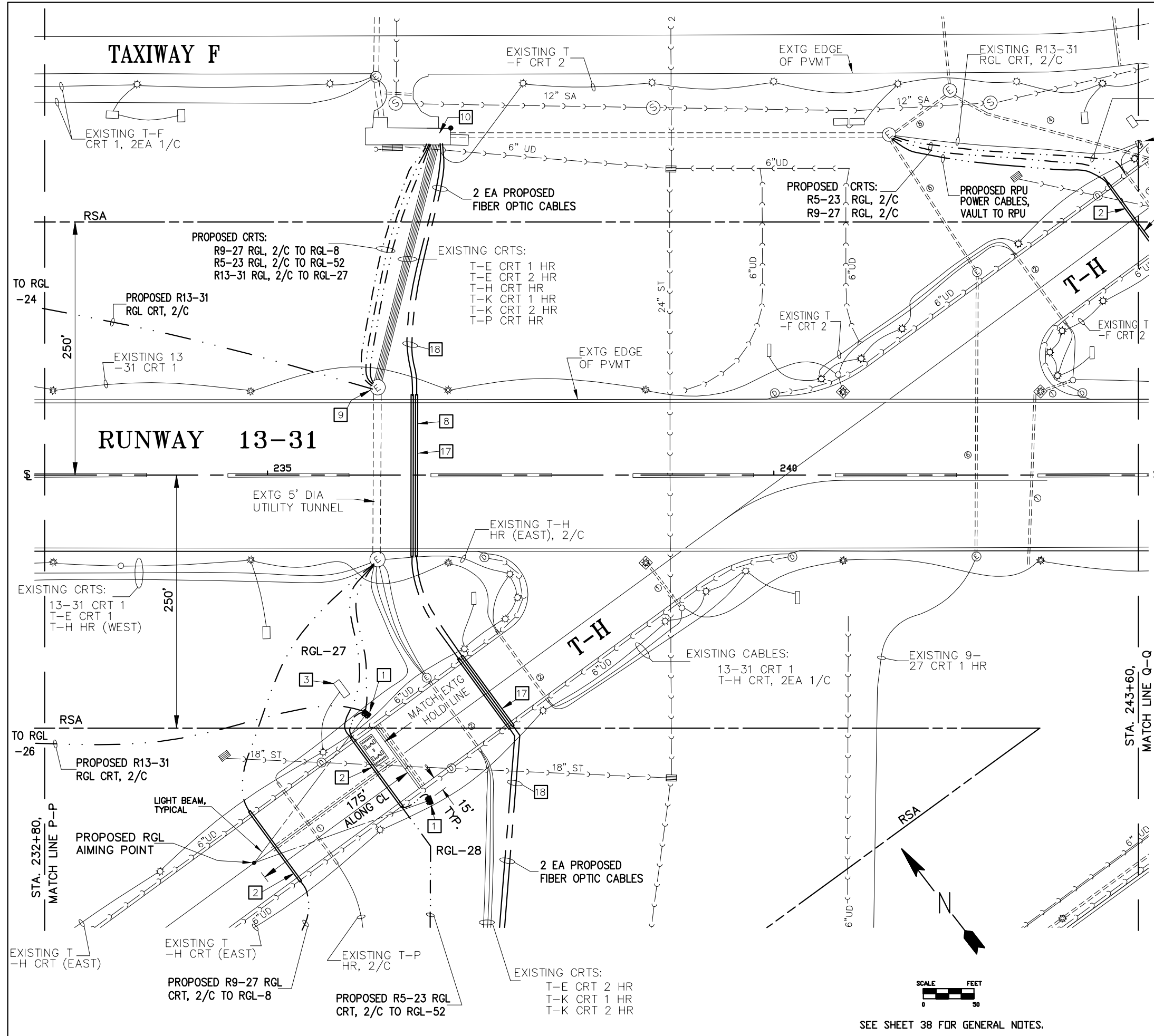
- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
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- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 4A EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXISTING TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TY V SCAN CABLE BETWEEN THIS POINT AND EXTG. RPU.

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**QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 39 OF 83**



NUMBERED LEGEND

- SEE SHEETS 24 THRU 29 FOR NUMBERED LEGEND ITEMS [4] THROUGH [7].
- [1] PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
 - [2] PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - [3] EXISTING RUNWAY HOLDING POSITION SIGN.
 - [8] TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP RGL CRT CABLES AWAY FROM THE EDGE LIGHT CABLES.
 - [9] EXISTING ELEC. MANHOLE. SEE DETAIL 'A' ON SHEET 41 FOR R13-31 RGL CIRCUIT DETAIL.
 - [10] EXISTING UNDERGROUND ELECTRIC VAULT. START / END PROPOSED RGL CRTS (3 EACH) IN VAULT. EACH OF THE THREE RGL CRTS (R9-27, R13-31, AND R5-23) WILL REQUIRE SPLICES IN THE VAULT. SEE DETAILS ON SHEET 40.
 - [17] PROPOSED 2 EACH - 4' DIRECTIONAL BORES (2 EA - AR110014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4' DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - [18] TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.

SYMBOL LEGEND

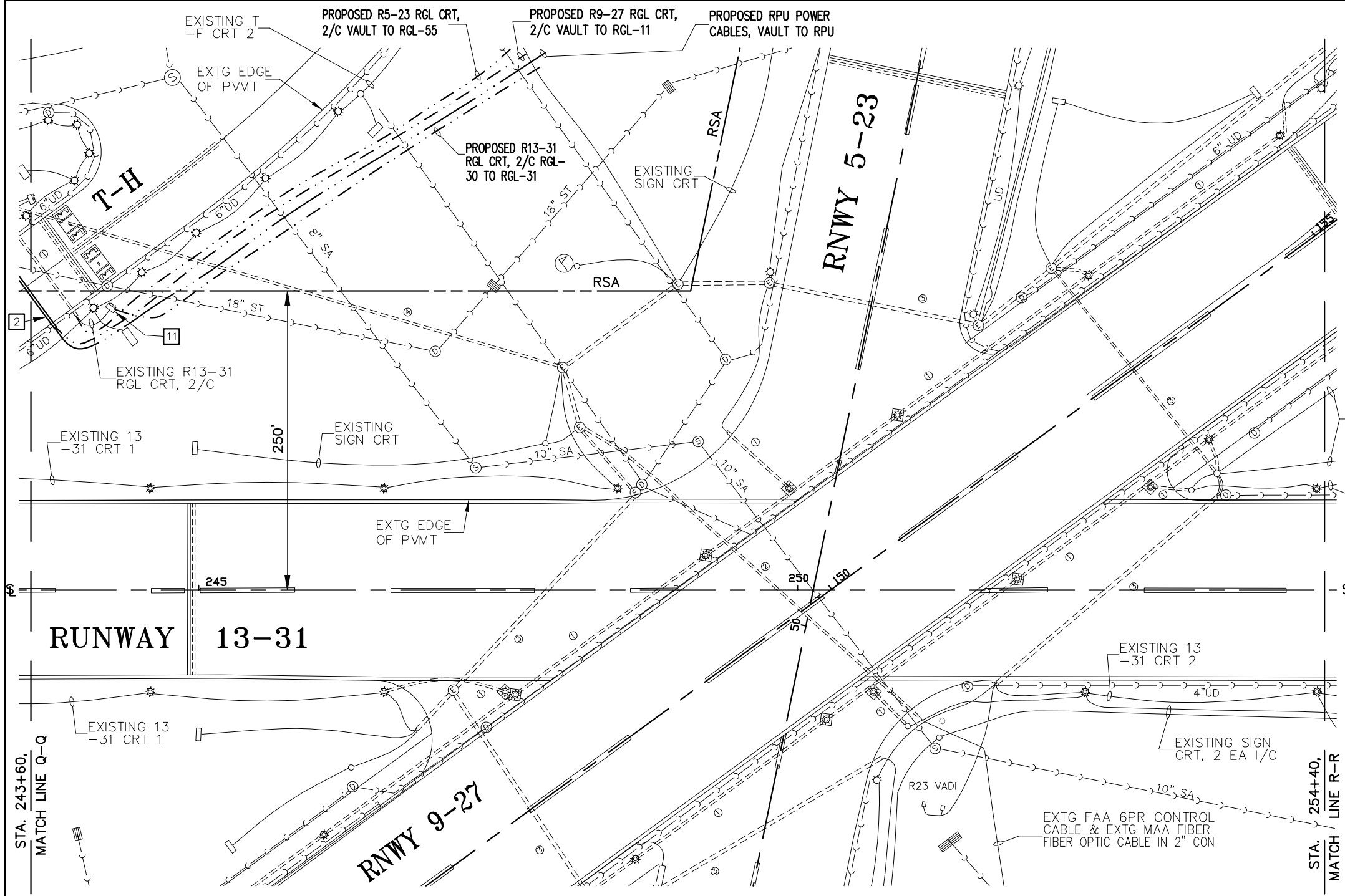
- EXISTING L-861T MITL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
-
-
-
-
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

SEE SHEET 38 FOR GENERAL NOTES.



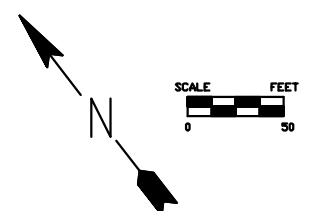
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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 40 OF 83



GENERAL NOTES:

- SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
- SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
- 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
- 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

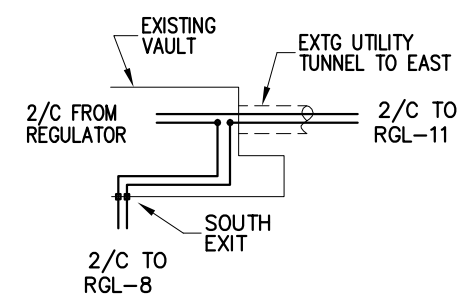


NUMBERED LEGEND

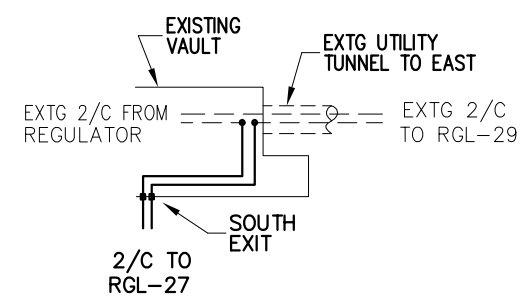
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 11 EXTG RGL-30 ON EXTG 2/C R13-31 RGL CRT. START / END PROPOSED 2/C R13-31 RGL CRT EXTENSION TO SOUTH (TO RGL-31) AT THIS LOCATION. SPLICE PROPOSED 2/C R13-31 RGL CRT CABLES INTO EXTG 2/C R13-31 RGL CRT CABLES IN THIS CAN.

SYMBOL LEGEND

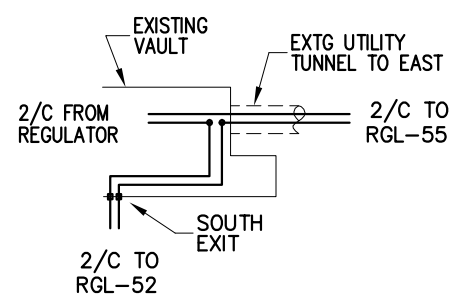
- EXISTING L-861T MITL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1



R9-27 RGL CRT
 SPLICE IN VAULT

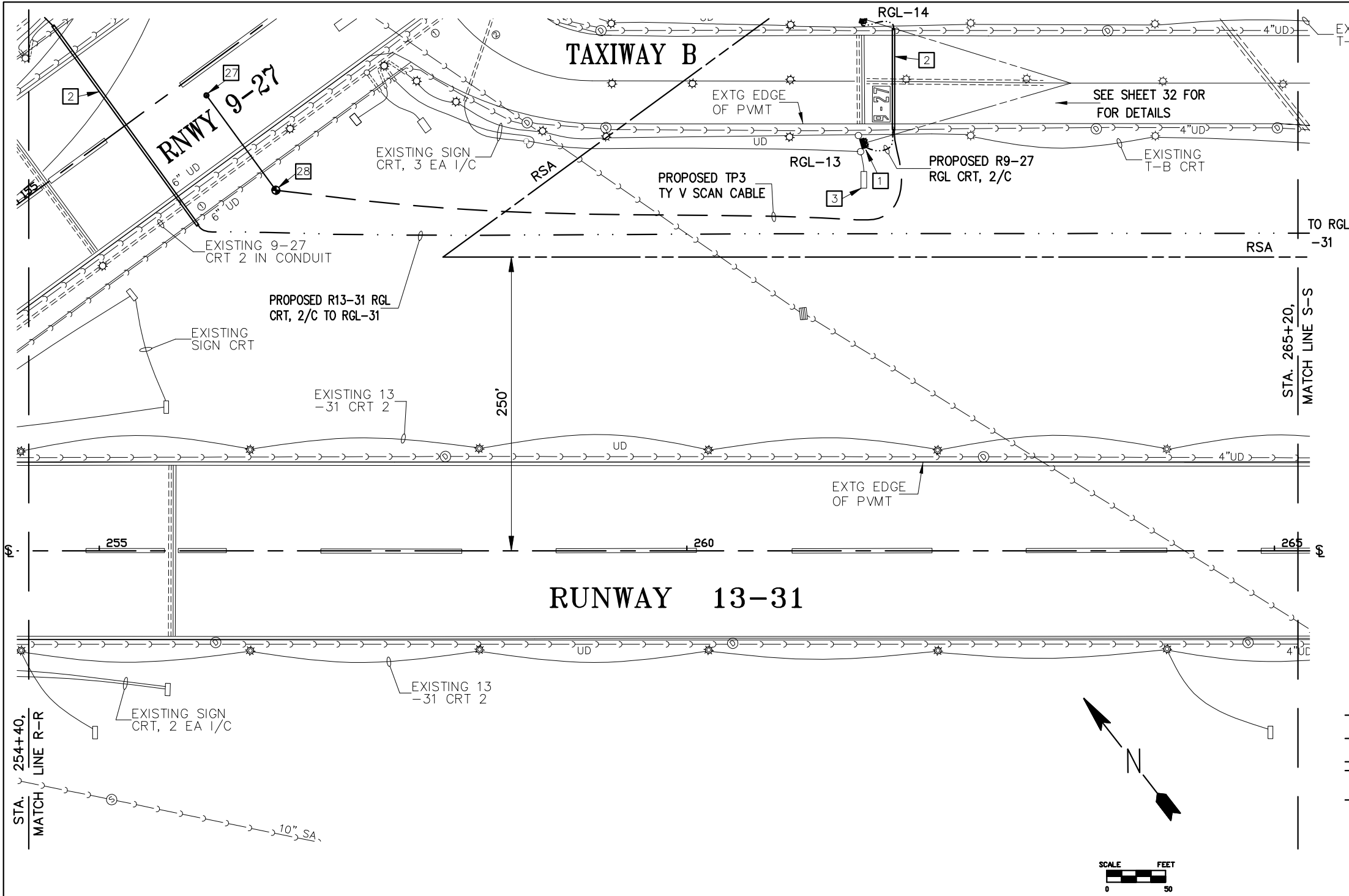


R13-31 RGL CRT
 SPLICE IN VAULT



R5-23 RGL CRT
 SPLICE IN VAULT

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GENERAL NOTES:

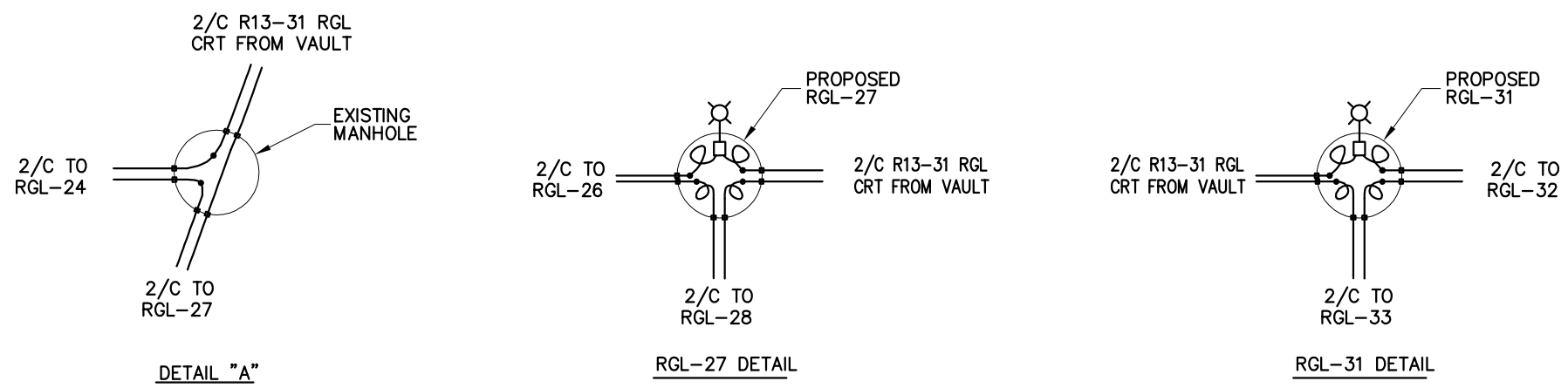
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

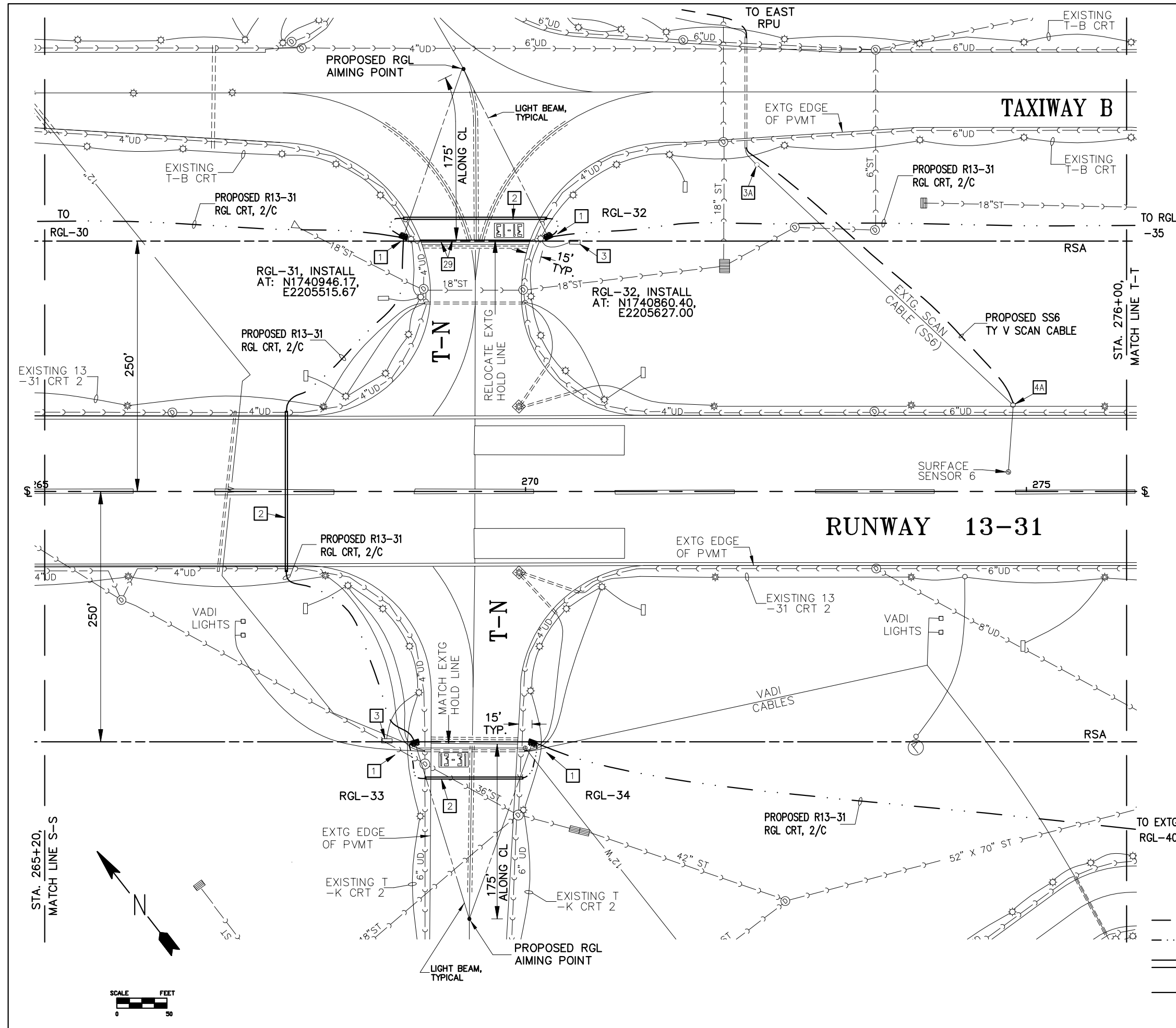
NUMBERED LEGEND

- 1** PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2** PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3** EXISTING RUNWAY HOLDING POSITION SIGN.
- 27** PROPOSED NEW SCAN SUB-SURFACE TEMPERATURE PROBE 3 (TP-3) AND SENSOR CABLE. INCLUDE ALL COSTS FOR THIS ITEM IN ITEM 'AR109962-RELOCATE ELECTRICAL EQUIPMENT' CONTRACT UNIT PRICE.
- 28** PROPOSED AR125966 RELOCATED SPLICE CAN FOR SCAN SYSTEM ITEM TP-3.



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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 42 OF 83



NUMBERED LEGEND

- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 3A EXTG SCAN SYSTEM SPLICE CAN. DO NOT REUSE. REMOVE EXTG SCAN SPLICE CAN (AR125906).
- 4A EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXTG TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TY V SCAN CABLE BETWEEN THIS POINT AND EXTG. RPU.
- 29 RELOCATE EXISTING HOLD LINE TO A POINT THAT IS OUTSIDE OF THE EXTG. RUNWAY SAFETY AREA. SEE SHEET 67 FOR PROPOSED NEW LOCATION.

GENERAL NOTES:

- 1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
- 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
- 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
- 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MTL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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GENERAL NOTES:

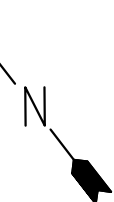
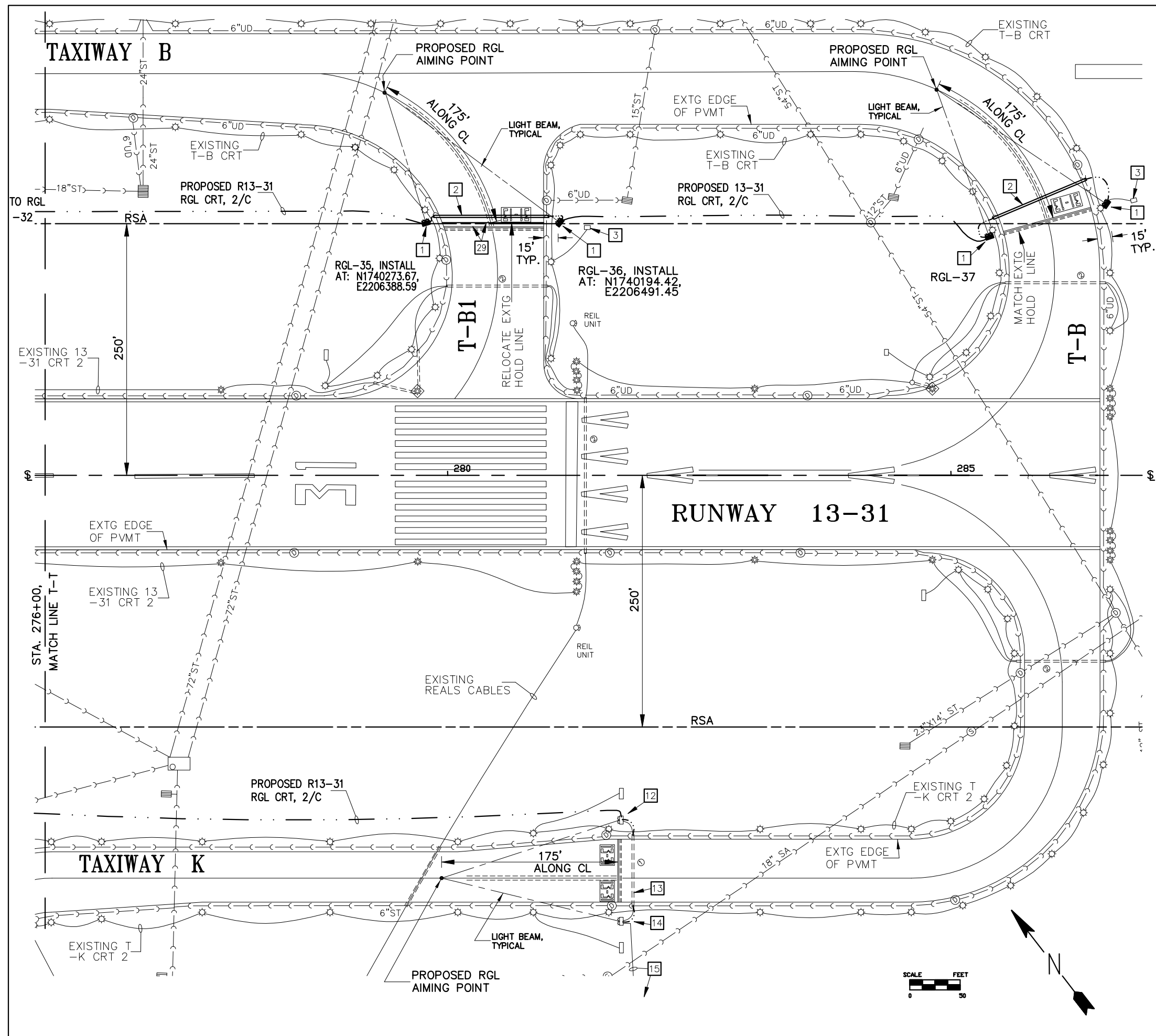
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

NUMBERED LEGEND

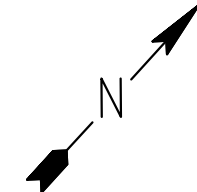
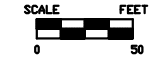
- SEE SHEETS 24 THRU 40 FOR NUMBERED LEGEND ITEMS [1] THROUGH [11].
- [12] EXISTING MODE 2 (VOLTAGE DRIVEN, 240VAC) LED RGL UNIT. REMOVE EXISTING BASE MOUNTED MODE 2 RGL LIGHT (AR125902). SUPPLY / INSTALL NEW MODE 1 (CURRENT DRIVEN) L-804 ELEVATED LED RUNWAY GUARD LIGHT (AR801634) PER DETAILS.
 - [13] EXISTING 4" DIA. CONDUIT. REMOVE EXISTING CABLES TO INSTALL THE PROPOSED NEW RGL CIRCUIT CABLES. CABLE REMOVAL COSTS TO BE INCLUDED CONTRACT UNIT PRICE FOR THE NEW CABLES (AR108258).
 - [14] EXISTING MODE 2 (VOLTAGE DRIVEN, 240VAC) LED RGL UNIT. REFURBISH (AR801639) EXISTING LED RGL UNIT BY CONVERTING FROM MODE 2 (VOLTAGE DRIVEN) TO MODE 1 (CURRENT DRIVEN). THIS WILL INCLUDE REMOVING EXISTING RGL FIXTURE, SPECIAL BASE PLATE (IF REQUIRED), ON / OFF SWITCH, POWER SUPPLY ASSEMBLY, CONNECTORS, PIGTAILS, ETC. AND THEN FURNISHING / INSTALLING NEW LED RGL FIXTURE, TRANSFORMER, SPECIAL BASE PLATE (IF REQUIRED), ON / OFF SWITCH, POWER SUPPLY ASSEMBLY, CONNECTORS, PIGTAILS, ETC. FURNISH AND INSTALL NEW GROUNDING ROD PER RGL INSTALLATION DETAILS. CONTRACTOR MAY REUSE THE EXISTING L-867 BASE CAN. REMOVE OLD WIRES AND SEAL UNUSED EXIT HUBS AS REQUIRED.
 - [15] DISCONNECT AND REMOVE EXISTING T-K RGL CABLES FROM EXISTING RUNWAY 31 VADI / REIL UTILITY TRANSFORMER PER MIDAMERICAN ENERGY COMPANY'S (MEC) REQUIREMENTS. REMOVE EXISTING SERVICE DISCONNECT AT TRANSFORMER SITE. CONTRACTOR SHALL COORDINATE ALL WORK WITH MEC AND MEET ALL MEC REQUIREMENTS. INCLUDE COST FOR THIS WORK IN CONTRACT UNIT PRICE FOR ITEM AR801639.
 - [29] RELOCATE EXISTING HOLD LINE TO A POINT THAT IS OUTSIDE OF THE EXTG. RUNWAY SAFETY AREA. SEE SHEET 67 FOR PROPOSED NEW LOCATION.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1



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NUMBERED LEGEND

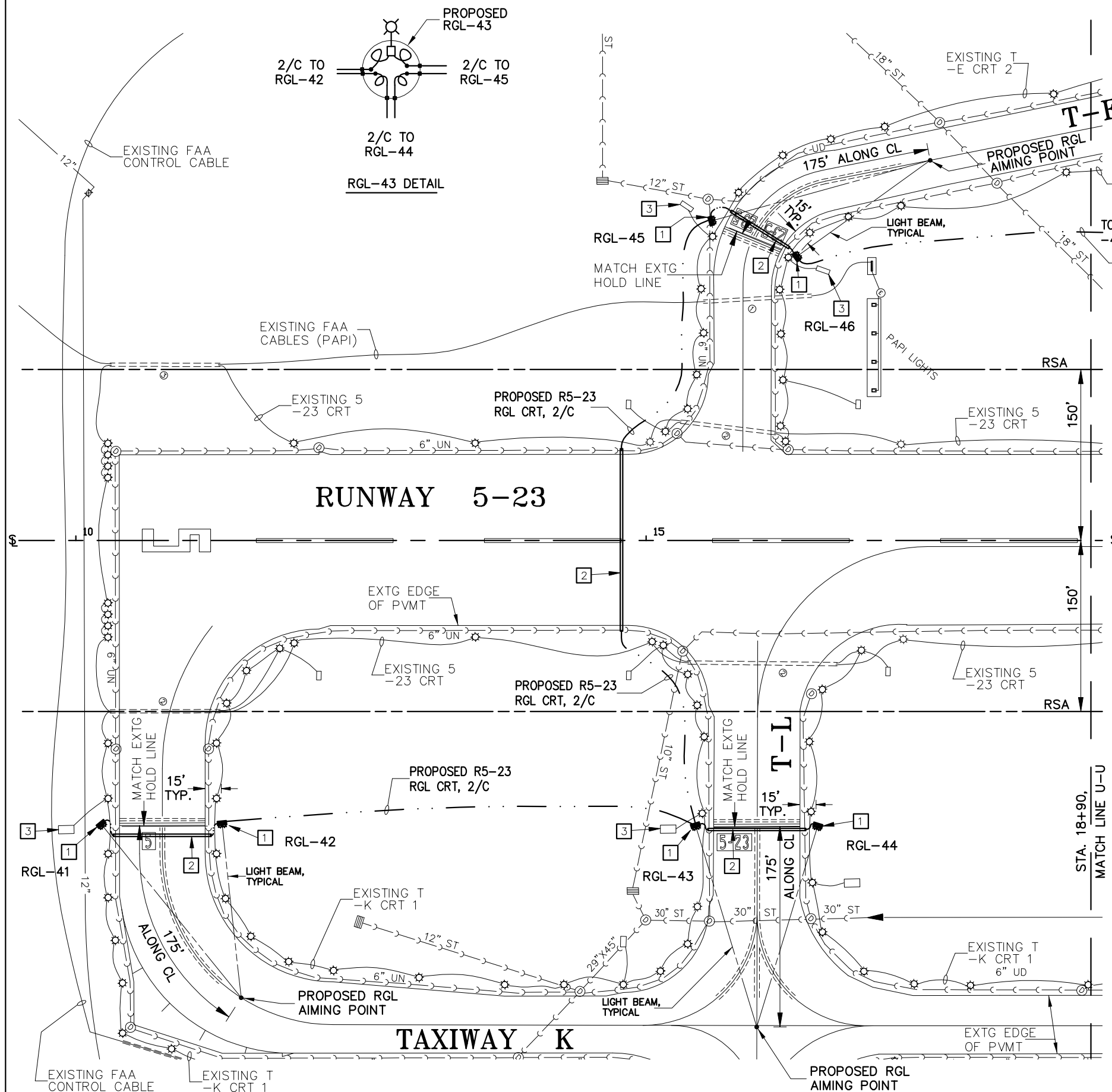
- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.

GENERAL NOTES:

- 1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
- 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
- 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAID FOR.
- 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

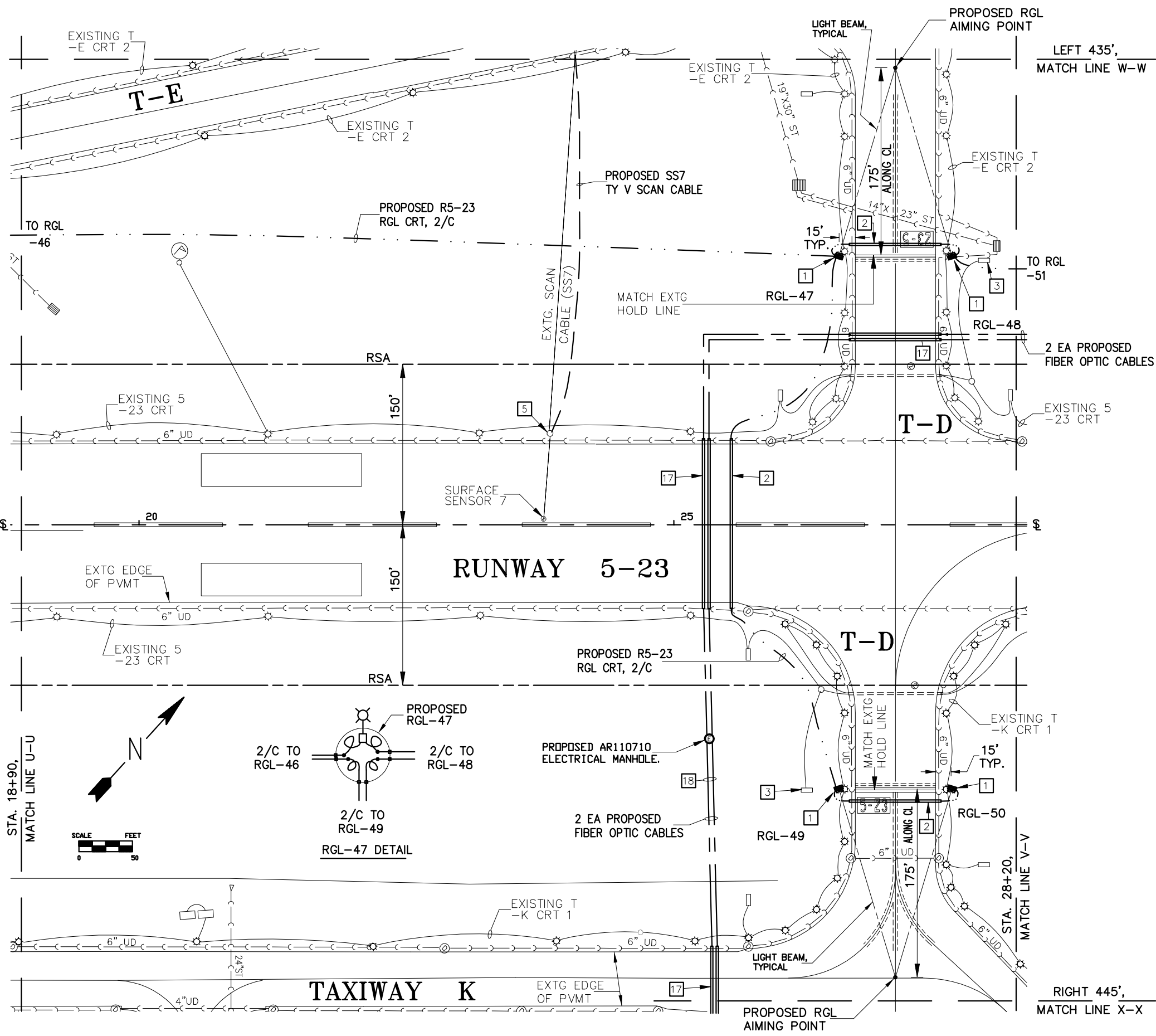
SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
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- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1



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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 45 OF 83

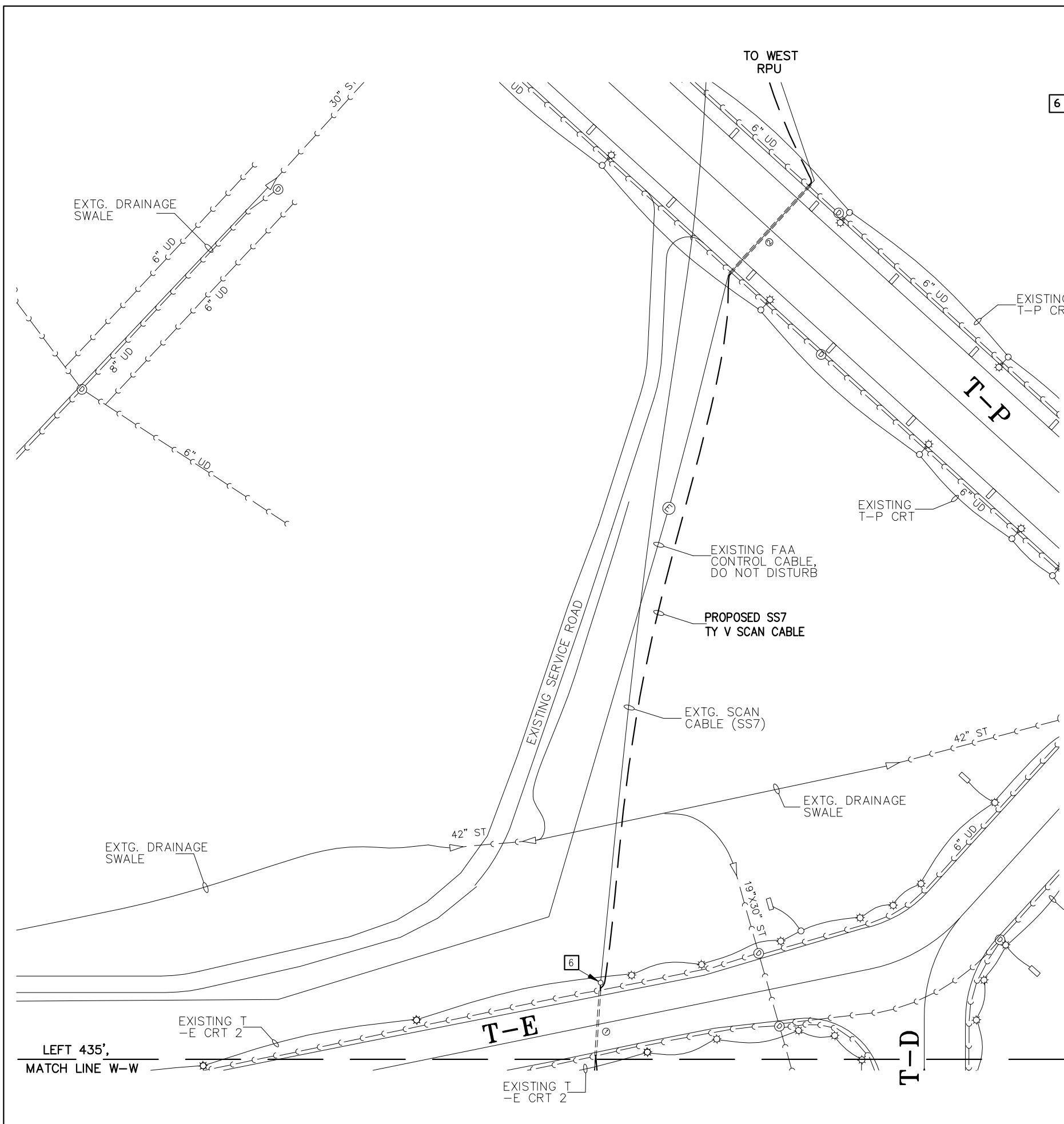


- NUMBERED LEGEND**
- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
 - 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - 3 EXISTING RUNWAY HOLDING POSITION SIGN.
 - 5 EXISTING SCAN SYSTEM SPLICE CAN. START / END REPLACEMENT OF EXTG TYPE V SCAN CABLE (AR108962) AT THIS LOCATION. REPLACE TYPE V SCAN CABLE BETWEEN THIS POINT AND EXISTING RPU.
 - 17 PROPOSED 2 EACH - 4" DIRECTIONAL BORES (2 EA - AR110014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4" DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
 - 18 TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.

- GENERAL NOTES:**
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
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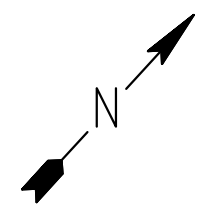
- SYMBOL LEGEND**
- EXISTING L-861T MITL OR L-861 MIRL
 - EXISTING L-862 HIRLQ OR L-862E HIRLQ
 - EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
 - EXISTING L-867 SPLICE OR TRANSFORMER CAN
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 - EXISTING CONDUIT OR DUCT BANK
 - EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
 - PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
 - PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
 - PROPOSED CONDUIT OR DUCT BANK
 - PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
 - PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
 - PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
 - PROPOSED TYPE V SCAN CABLE
 - RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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NUMBERED LEGEND

- 6 EXTG SCAN SYSTEM SPLICE CAN. DO NOT REUSE. REMOVE EXTG SCAN SPLICE CAN (AR125906).



GENERAL NOTES:

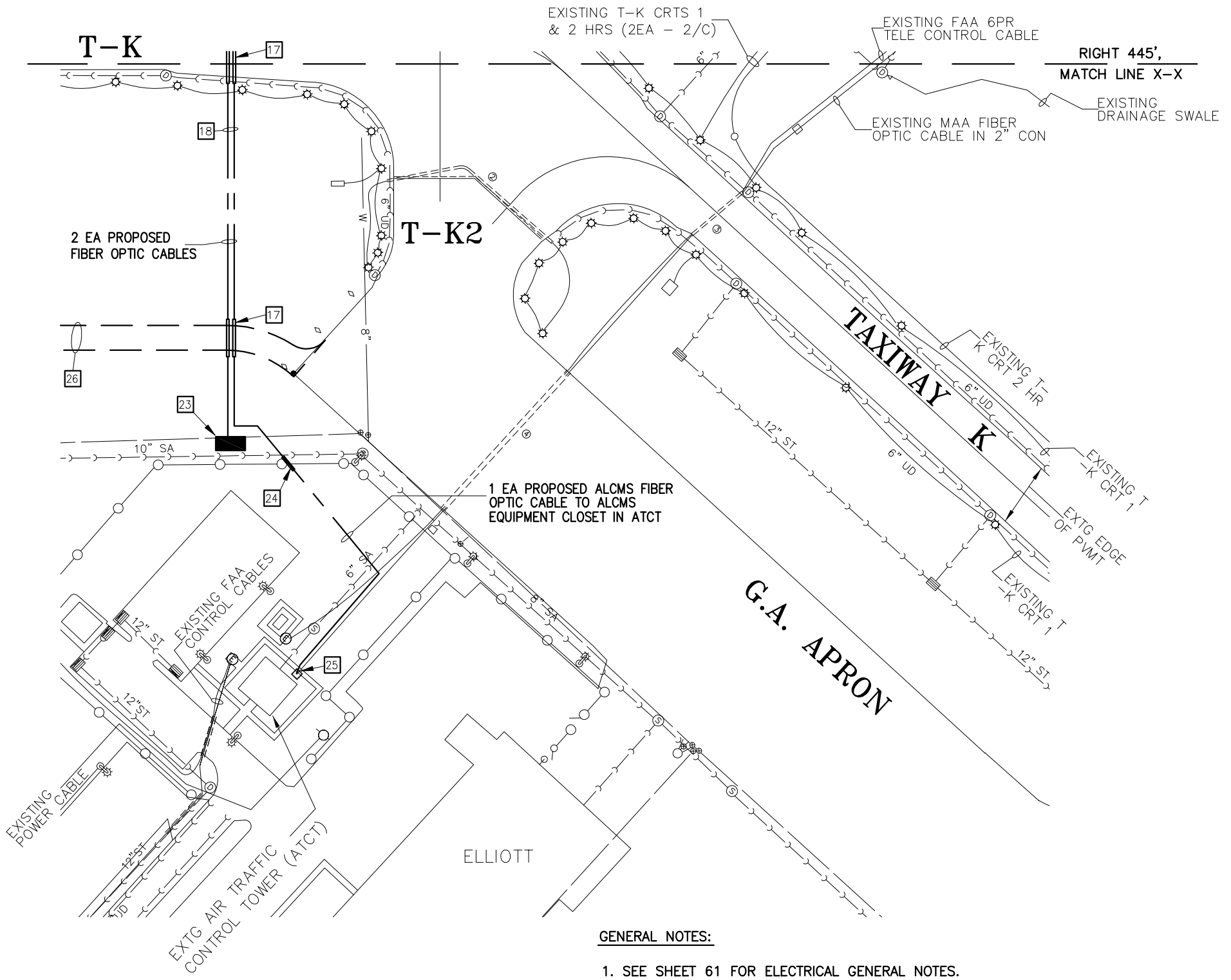
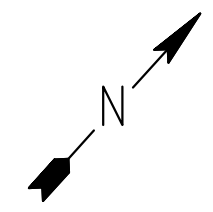
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 47 OF 83



NUMBERED LEGEND

- 17 PROPOSED 2 EACH - 4' DIRECTIONAL BORES (2 EA - AR110014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4' DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 18 TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.
- 23 PROPOSED FIBER OPTIC CABLE JUNCTION ENCLOSURE (AR801645). TERMINATE PROPOSED MAA FIBER OPTIC CABLE IN ENCLOSURE. SEE DETAILS ON SHEET 62.
- 24 PROPOSED 1 EACH - 4' DIRECTIONAL BORE (AR110014, 10 L.F.). THE CONTRACTOR SHALL NOT REMOVE ANY AIRFIELD PERIMETER SECURITY FENCING. THE CONTRACTOR SHALL NOT CRETE A BREACH THROUGH OR UNDER THE EXISTING SECURITY FENCE.
- 25 ATCT ACCESS POINT FOR ALCMS FIBER OPTIC CABLE.
- 26 APPROXIMATE LOCATION OF PROPOSED SOUTH SERVICE ROAD (BY OTHERS, MLI-4263).

SYMBOL LEGEND

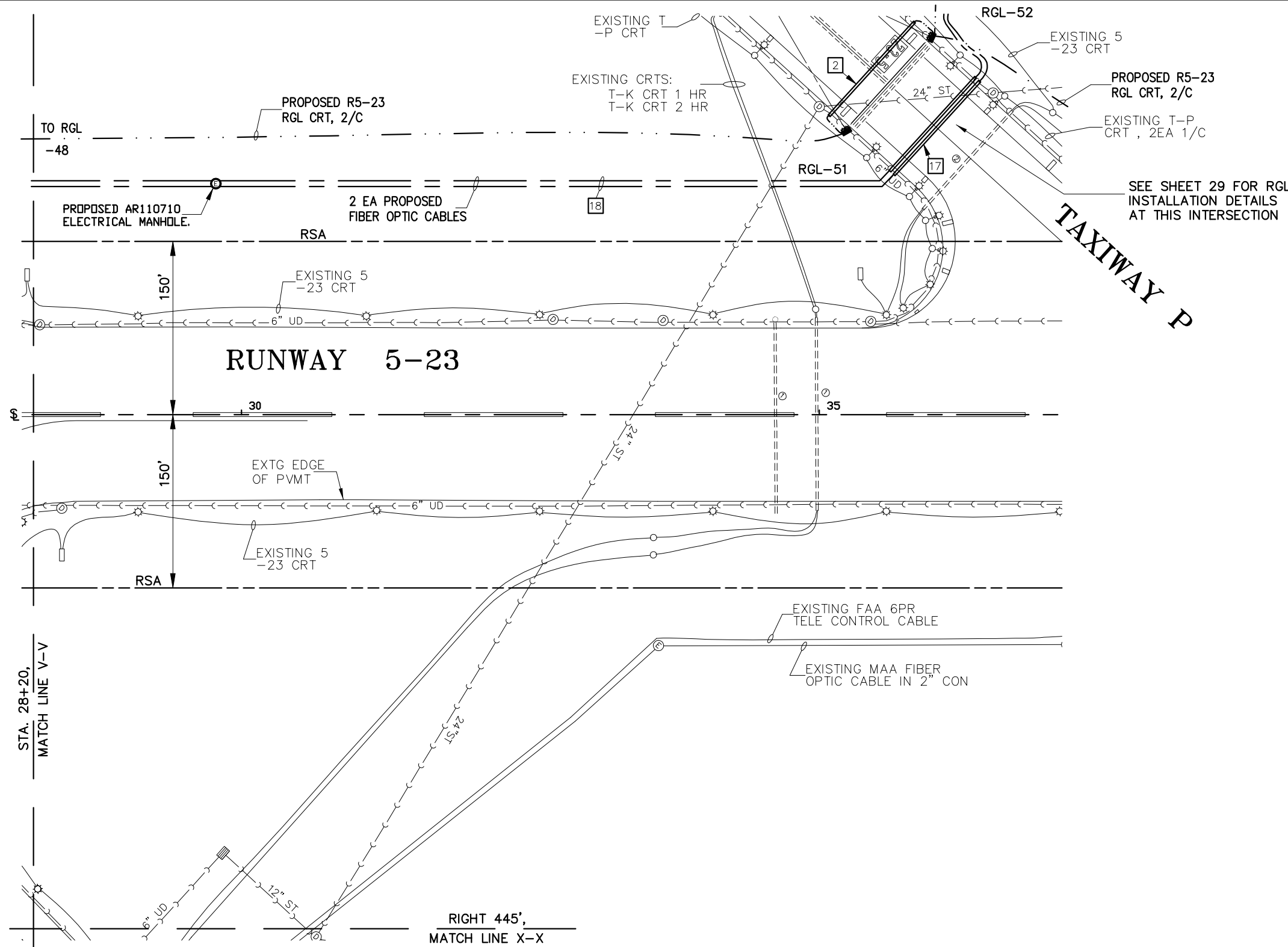
- EXISTING L-861T MITL OR L-861 MRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED LOCATION FOR RELOCATED OR NEW ELECTRICAL EQUIPMENT
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1"
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2"
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAID FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 48 OF 83



- GENERAL NOTES:**
1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
 2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
 3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
 4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

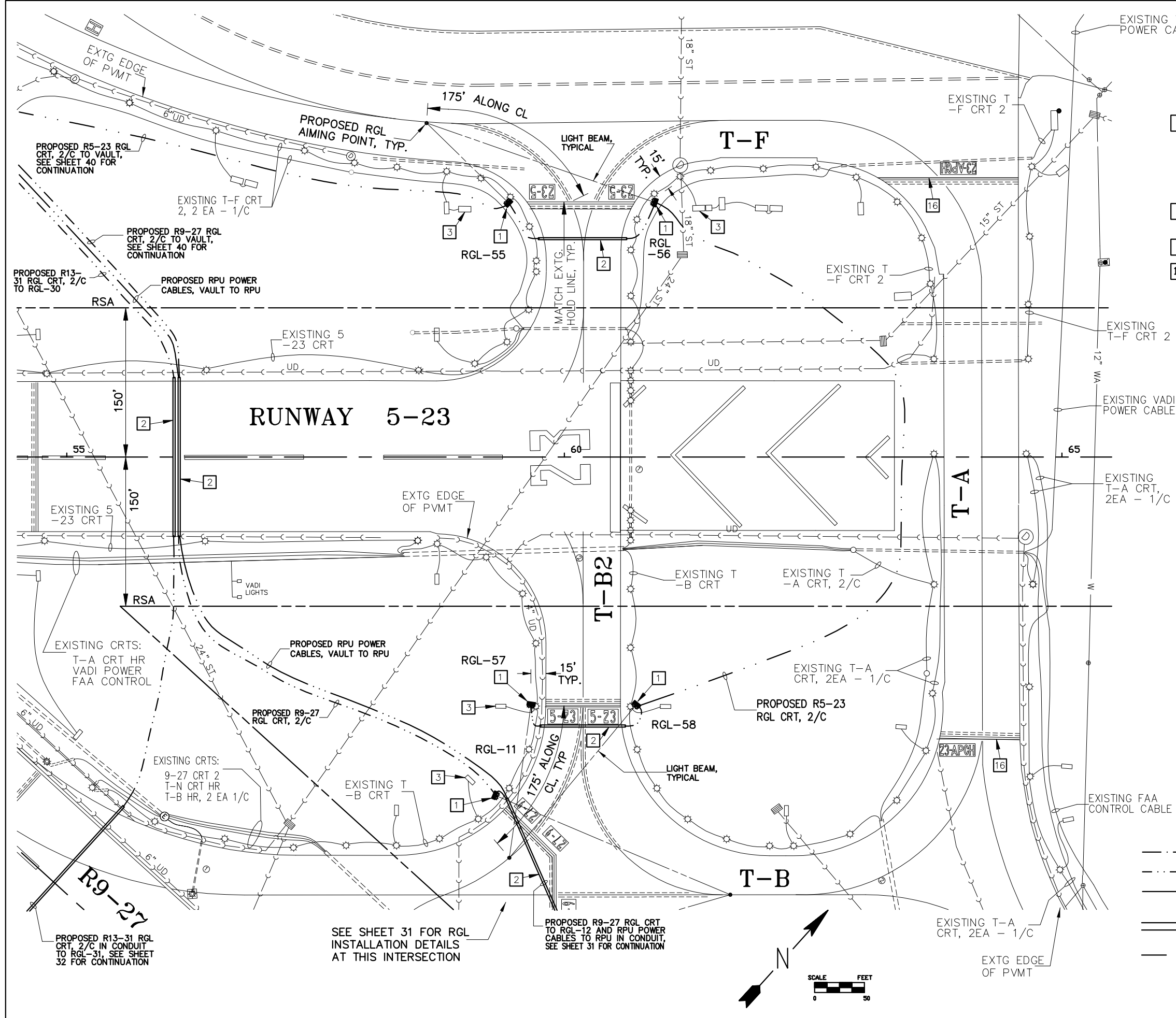
- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
- EXISTING GUIDANCE SIGN
- EXISTING STORM OR SANITARY MANHOLE
- EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- EXISTING CONDUIT OR DUCT BANK
- EXISTING ELECTRICAL CIRCUIT, CABLE IN UNIT DUCT
- PROPOSED L-804 RUNWAY GUARD LIGHT (LED)
- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1

NUMBERED LEGEND

- 2** PROPOSED 4' DIRECTIONAL BORE (AR110014). INSTALL 4' DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 17** PROPOSED 2 EACH - 4' DIRECTIONAL BORES (2 EA - AR110014, ONE LOCAL ONLY FUNDING AND ONE AIP FUNDING). INSTALL 2 EACH - 4' DIRECTIONAL BORES TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 18** TO PREVENT EMI (ELECTROMAGNETIC INTERFERENCE), KEEP FIBER OPTIC CONTROL CABLES AWAY FROM POWER CABLES.

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 49 OF 83



NUMBERED LEGEND

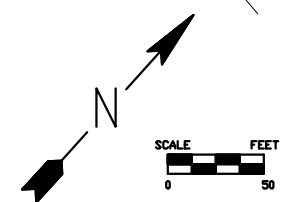
- 1 PROPOSED L-804 ELEVATED LED RUNWAY GUARD LIGHTS (AR801634) BOTH SIDES OF TAXIWAY. INSTALL ON A LINE THAT IS PERPENDICULAR TO THE EXISTING TAXIWAY CENTERLINE AND MATCHES THE LOCATION OF THE EXISTING PAINTED HOLD LINE AND HOLD SIGN. INSTALL RGL UNITS AT A POINT THAT IS 15' OFF OF THE EXISTING EDGE OF TAXIWAY. AIM THE RGL UNITS TO A POINT THAT IS ON THE TAXIWAY CENTERLINE AND 175' ALONG THE CENTERLINE FROM THE EXISTING HOLD LINE PER MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED 4" DIRECTIONAL BORE (AR110014). INSTALL 4" DIRECTIONAL BORE TO POINTS THAT ARE 5' BEYOND THE EDGE OF THE EXISTING PAVEMENT.
- 3 EXISTING RUNWAY HOLDING POSITION SIGN.
- 16 EXISTING APPROACH HOLDING POSITION. RGL UNITS ARE NOT REQUIRED AT APPROACH HOLDING POSITIONS.

GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAYED FOR.
4. TO AVOID UNDESIRABLE SPOTS, THE SET OF RGL'S MAY BE MOVED UP TO 10 FEET FARTHER FROM THE RUNWAY, BUT MAY NOT BE MOVED TOWARD THE RUNWAY.

SYMBOL LEGEND

- EXISTING L-861T MITL OR L-861 MIRL
- EXISTING L-862 HIRLQ OR L-862E HIRLQ
- EXISTING L-850C SEMI-FLUSH RUNWAY EDGE LIGHT
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- EXISTING L-804 RUNWAY GUARD LIGHT
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- PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- PROPOSED CONDUIT OR DUCT BANK
- PROPOSED ELEC. CIRCUIT, 1/C, #8, EPR CABLE IN 1" UD
- PROPOSED ELEC. CIRCUIT, 2/C, #8, EPR CABLES IN 1-1/2" UD
- PROPOSED 2-#1 + 1-#1 GRD, 600V, TYPE U.S.E. POWER CABLES IN 1 1/2" UD (AR108051)
- PROPOSED 2 EACH - FIBER OPTIC CABLES IN 2 EACH - 2" UD (ONE MAA AND ONE ALCMS IN COMMON TRENCH)
- PROPOSED TYPE V SCAN CABLE
- RGL-1 PROPOSED / EXISTING RUNWAY GUARD LIGHT NUMBER 1



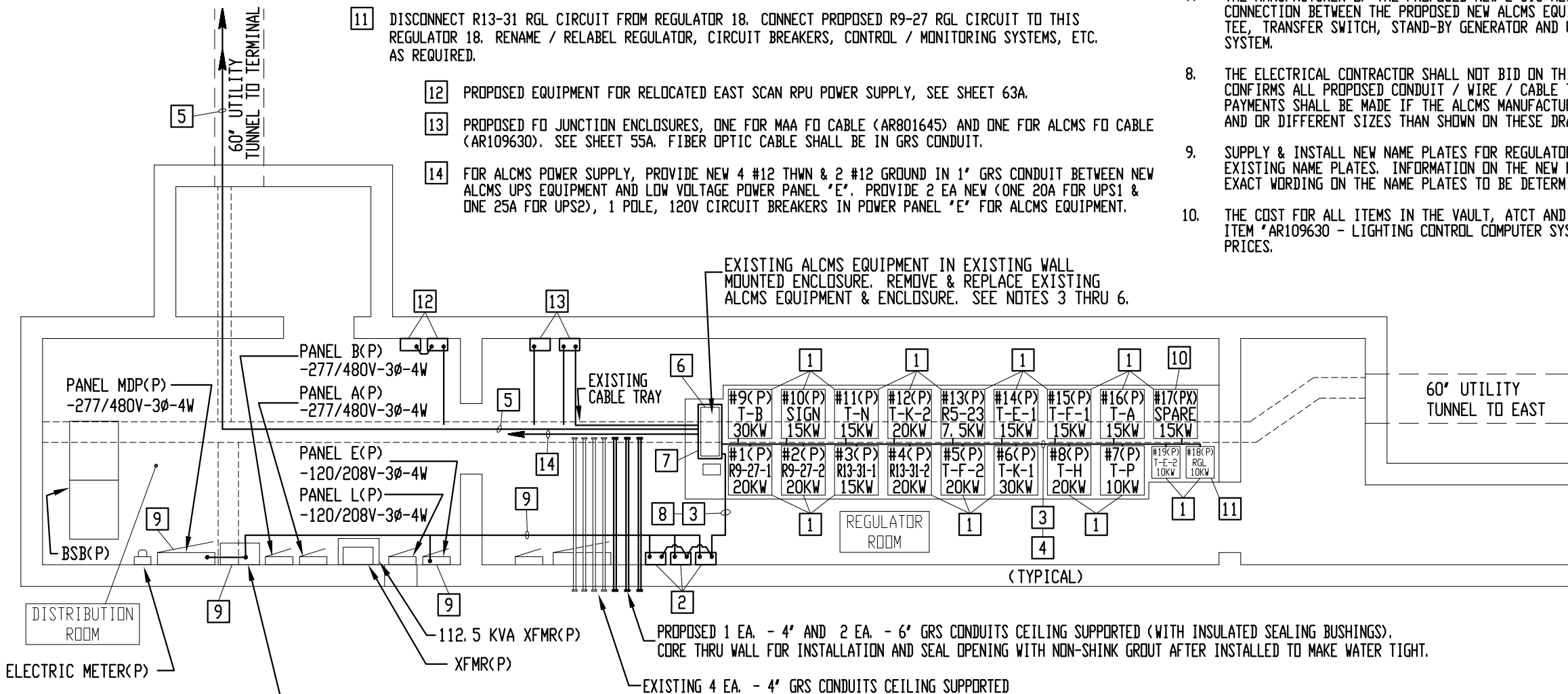
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NUMBERED LEGEND:

- 1 EXISTING / PROPOSED REGULATORS (20 EACH). CONTRACTOR TO FURNISH AND INSTALL DISTRIBUTED CONTROL AND MONITORING EQUIPMENT WITH INTERNAL CVM & IRM (DCME) MOUNTED ON UNISTRUT OR MOUNTING PLATE ABOVE EACH REGULATOR. CONNECT PROPOSED DCME TO EXISTING REGULATOR REMOTE CONTROLS INSIDE THE REGULATOR PER ALCMS EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED DCME UNITS MOUNTED ON SOUTHWEST WALL FOR UTILITY POWER, TRANSFER SWITCH, STAND-BY GENERATOR, BEACON AND WIND TEE OR AS REQUIRED BY ALCM MANUFACTURER. CONNECT PROPOSED DCME TO EXISTING ELECTRICAL EQUIPMENT PER ALCMS EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
- 3 PROPOSED UPS POWER TO DCME'S : 2 EA #10 THWN & 1 EA #10 GROUND IN 1" GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER). DAISY-CHAIN DCME POWER CIRCUIT TO ALL DCME'S.
- 4 PROPOSED 2 EA. - 24 AWG, SHIELDED, TWO TWISTED PAIR WITH A COMMON DRAIN WIRE (BELDEN 9842 OR AS REQUIRED BY ALCMS MANUFACTURER, TYPICAL FOR EACH DCME) IN 1" GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER).
- 5 PROPOSED SHIELDED 6 STRAND FIBER OPTIC TELEPHONE CABLE IN 1" FLEX CONDUIT BETWEEN ALCMS AND TELEPHONE CONNECTION IN TERMINAL BUILDING BASEMENT. ROUTE ON EXISTING LOW VOLTAGE CABLE TRAYS / RACKS. TO BE USED FOR OFF AIRPORT REMOTE ACCESS MAINTENANCE OF ALCMS VIA HIGH SPEED INTERNET OR DIAL-UP MODEM ONLY WHEN AUTHORIZED BY THE MAA. THIS TELEPHONE CABLE SHALL NOT BE CONNECTED TO ALCMS UNDER NORMAL OPERATING CONDITIONS.
- 6 EXISTING PLC EQUIPMENT ENCLOSURE (AND CONTROL CABLES) TO BE REMOVED.
- 7 PROPOSED NEW ALCMS RACK WITH INDUSTRIAL COMPUTER, DISPLAY MONITOR, AND PRINTER.
- 8 PROPOSED 2 EA. - 24 AWG, SHIELDED, TWO TWISTED PAIR WITH A COMMON DRAIN WIRE (BELDEN 9842 OR AS REQUIRED BY ALCMS MANUFACTURER, TYPICAL FOR EACH DCME) IN 1" CEILING SUPPORTED GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER).
- 9 PROPOSED #14 THWN CONTROL WIRES IN 1" CEILING SUPPORTED GRS CONDUITS (OR AS REQUIRED BY ALCMS MANUFACTURER) FOR REMOTE CONTROL / MONITORING UTILITY POWER IN MDP PANEL, AUTOMATIC TRANSFER SWITCH, STAND-BY GENERATOR, BEACON CONTROL IN PANEL E AND WIND TEE CONTROL IN PANEL E. PROVIDE ALL NETWORK INTERFACING HARDWARE AND EQUIPMENT.
- 10 REMOVE EXISTING SPARE 15 KW REGULATOR # 17 (TURN OVER TO MAA). INSTALL 2 EACH NEW STACKABLE AR109301 4KW STYLE 1 REGULATORS (FERRO-RESONANT TYPE WITH STACKING KIT) IN THIS LOCATION 17 / 17A. CONTRACTOR TO MAKE ALL CONNECTIONS TO RGL CIRCUITS (17 = R13-31 RGL AND 17A = R5-23 RGL), POWER, AND ALCMS AS REQUIRED.
- 11 DISCONNECT R13-31 RGL CIRCUIT FROM REGULATOR 18. CONNECT PROPOSED R9-27 RGL CIRCUIT TO THIS REGULATOR 18. RENAME / RELABEL REGULATOR, CIRCUIT BREAKERS, CONTROL / MONITORING SYSTEMS, ETC. AS REQUIRED.
- 12 PROPOSED EQUIPMENT FOR RELOCATED EAST SCAN RPU POWER SUPPLY, SEE SHEET 63A.
- 13 PROPOSED F0 JUNCTION ENCLOSURES, ONE FOR MAA F0 CABLE (AR801645) AND ONE FOR ALCMS F0 CABLE (AR109630). SEE SHEET 55A. FIBER OPTIC CABLE SHALL BE IN GRS CONDUIT.
- 14 FOR ALCMS POWER SUPPLY, PROVIDE NEW 4 #12 THWN & 2 #12 GROUND IN 1" GRS CONDUIT BETWEEN NEW ALCMS UPS EQUIPMENT AND LOW VOLTAGE POWER PANEL 'E'. PROVIDE 2 EA NEW (ONE 20A FOR UPS1 & ONE 25A FOR UPS2), 1 POLE, 120V CIRCUIT BREAKERS IN POWER PANEL 'E' FOR ALCMS EQUIPMENT.

ELECTRICAL VAULT PLAN NOTES:

1. ALL EXISTING CABLES AND EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. THE ELECTRICAL INSTALLATION AS A MINIMUM SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS. CONTRACTOR SHALL REMOVE ALL ABANDONED CABLES AND CONDUITS AFTER NEW CABLES AND ALCMS EQUIPMENT HAS BEEN INSTALLED AND IS OPERATIONAL.
2. SEE SHEET 53, 54, AND 61 FOR ELECTRICAL NOTES.
3. THE REPLACEMENT OF THE EXISTING ALCMS EQUIPMENT IN THE VAULT SHALL OCCUR WITHOUT THE DISRUPTION OF NORMAL AIRPORT OPERATIONS. ALL CONTROLS SHALL BE OPERATIONAL FOR MAA PERSONNEL PRIOR TO THE CLOSE OF CONSTRUCTION ACTIVITIES EACH DAY.
4. THE CONTRACTOR SHALL PLAN AND COORDINATE HIS WORK SO THAT THE AIRFIELD LIGHTING CONTROL SYSTEM IS OPERATIONAL AT ALL TIMES WHEN THE CONTRACTOR IS NOT WORKING ON THE SYSTEM. IN ORDER TO ACCOMPLISH AN ORDERLY TRANSFER OF CONTROL FROM THE EXISTING SYSTEM TO THE PROPOSED SYSTEM WITHOUT INTERRUPTION OF SERVICE, THE CONTRACTOR SHALL PROVIDE FOR TEMPORARY WIRING AND CABLING TO A TEMPORARY LOCATION FOR THE EXISTING PLC EQUIPMENT ENCLOSURE. THE CONTRACTOR SHALL RELOCATE THE EXISTING PLC EQUIPMENT ENCLOSURE TO THIS TEMPORARY LOCATION (LOCATION TO BE DETERMINED IN THE FIELD DURING CONSTRUCTION AND SUBJECT TO THE APPROVAL OF THE RESIDENT ENGINEER AND MAA PERSONNEL). TEMPORARY CONTROL WIRE, FIBER OPTIC CABLES, SPLICES, PATCHES, SUPPORT CONSOLE / CABINET, ETC. SHALL BE INCLUDED IN THE CONTRACTOR'S LUMP SUM PRICE FOR THIS ITEM. THE NEW ALCMS SYSTEM SHALL BE TESTED AND OPERATIONAL PRIOR TO THE REMOVAL OF THE TEMPORARY RELOCATED EXISTING PLC EQUIPMENT ENCLOSURE.
5. ALL NEW ALCMS EQUIPMENT SHALL BE INSTALLED IN A NEW ALCMS RACK (SUPPLIED WITH WHEELS). THE PROPOSED WHEELED ALCMS RACK SHALL BE INSTALLED IN THE SAME LOCATION AS THE EXISTING PLC ENCLOSURE. THE NEW ALCMS RACK SHALL INCLUDE SPACE FOR THE PROPOSED NEW VAULT COMPUTER, MONITOR, AND PRINTER. PROVIDE J-BOX, FLEX CONDUIT AND SUFFICIENT SLACK REQUIRED FOR NEW ALCMS RACK TO BE OPERATIONAL. THE NEW CONTROL SYSTEM SHALL BE TESTED AND OPERATIONAL PRIOR TO THE REMOVAL OF THE EXISTING RELOCATED PLC ENCLOSURE.
6. PROVIDE UPS AND RECEPTACLES FOR COMPUTER, MONITOR, AND PRINTER IN THE VAULT AS REQUIRED.
7. THE MANUFACTURER OF THE PROPOSED NEW L-890 ALCMS SHALL PROVIDE INTEGRATION DRAWINGS DETAILING THE METHOD OF CONNECTION BETWEEN THE PROPOSED NEW ALCMS EQUIPMENT ENCLOSURE AND THE REGULATORS (20 EACH), BEACON, WIND TEE, TRANSFER SWITCH, STAND-BY GENERATOR AND UTILITY POWER AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
8. THE ELECTRICAL CONTRACTOR SHALL NOT BID ON THIS PROJECT OR ORDER MATERIALS UNTIL THE ALCMS MANUFACTURER CONFIRMS ALL PROPOSED CONDUIT / WIRE / CABLE TYPES AND SIZES. NO EXTRA PAYMENTS OR MEASUREMENTS FOR PAYMENTS SHALL BE MADE IF THE ALCMS MANUFACTURER REQUIRES MORE CONDUITS / WIRES / CABLES, DIFFERENT TYPES, AND OR DIFFERENT SIZES THAN SHOWN ON THESE DRAWINGS.
9. SUPPLY & INSTALL NEW NAME PLATES FOR REGULATORS 17, 17A, AND 18 THAT MATCH THE TYPE AND STYLE OF THE EXISTING NAME PLATES. INFORMATION ON THE NEW NAME PLATES TO MATCH INFORMATION ON THE EXISTING NAME PLATES. EXACT WORDING ON THE NAME PLATES TO BE DETERMINED BY THE MAA IN THE FIELD AT THE TIME OF CONSTRUCTION.
10. THE COST FOR ALL ITEMS IN THE VAULT, ATCT AND / OR SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE CONTRACT ITEM 'AR109630 - LIGHTING CONTROL COMPUTER SYSTEM' AND / OR ITEM 'AR109210 - VAULT MODIFICATIONS' LUMP SUM PRICES.



| ELECTRICAL ABBREVIATIONS | |
|--------------------------|-------------------------|
| ABBREVIATION | DESCRIPTION |
| GND | GROUND |
| KVA | KILO-VOLT AMPERES |
| KW | KILOWATT |
| MDP | MAIN DISTRIBUTION PANEL |
| PH OR Ø | PHASE |
| V | VOLTS |
| XFMR | TRANSFORMER |
| (P) | PRESENT |
| (PR) | PRESENT TO BE RELOCATED |
| (PX) | PRESENT TO BE REMOVED |
| (R) | RELOCATED |

EXISTING ELECTRICAL VAULT PLAN

ELECTRICAL VAULT MODIFICATION PLAN

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RGL CIRCUITS & EAST SCAN RPU POWER SUPPLY ONE-LINE DIAGRAMS NOTES:

1. GROUNDS AND NEUTRALS ARE NOT SHOWN FOR CLARITY, BUT ARE REQUIRED PER N. E. C.
2. ALL POWER WIRE TO BE 600V INSULATED, TYPE THWN UNLESS OTHERWISE NOTED.
3. PROVIDE FOR REMOTE MONITORING AND CONTROL TO ALCMS. INCLUDE COST IN CONTRACT ITEM 'AR109630 LIGHTING CONTROL COMPUTER SYSTEM' LUMP SUM PRICE.
4. ROUTE CABLES IN CABLE TRAY SIMILAR TO THE EXISTING CABLING. SUPPLY & INSTALL MONITORING AND CONTROL CABLES AS REQUIRED BY ALCMS MANUFACTURER.
5. INSTALL DCME UNITS ON PROPOSED UNISTRUT FRAMES OR MOUNTING BRACKETS ABOVE THE REGULATORS. (FOR UNISTRUT, PAINT CUT-ENDS WITH ZINC RICH PAINT SYSTEM AS RECOMMENDED BY MANUFACTURER). MATCH EXISTING CONDITIONS. COORDINATE CONDUIT SIZES, TYPES AND OPENINGS WITH ALCMS MANUFACTURER.
6. IF REQUIRED, INSTALL PROPOSED MALE AND FEMALE L-823 CONNECTORS TO CONNECT THE EXISTING / PROPOSED AIRFIELD LIGHTING CIRCUITS IN THE EXISTING HIGH VOLTAGE WIREWAY. FURNISH AND INSTALL NEW CIRCUIT CABLES BETWEEN HIGH VOLTAGE WIREWAY AND REGULATORS AS REQUIRED.
7. THE COSTS FOR ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE CONTRACT ITEMS 'AR109210 VAULT MODIFICATIONS' AND 'AR109630 LIGHTING CONTROL COMPUTER SYSTEM' LUMP SUM PRICES.

| CONSTANT CURRENT REGULATOR SCHEDULE | | | | | | |
|-------------------------------------|----------------|-----------------|---------------|---------------------|-----------------|-------------------|
| REG. NO. | REG. SIZE (KW) | PRIMARY VOLTAGE | CRT LOAD (VA) | | PANEL CRT (OCP) | CIRCUIT BEING FED |
| | | | MEASURED | CALCULATED | | |
| 1 | 20 | 480 | 13,373 | --- | A-13 (60/2) | R-9-27-1 WEST |
| 2 | 20 | 480 | 8,784 | --- | A-10 (60/2) | R-9-27-2 EAST |
| 3 | 15 | 480 | 8,827 | --- | A-18 (60/2) | R-13-31-1 NORTH |
| 4 | 20 | 480 | 10,800 | --- | A-26 (70/2) | R-13-31-2 SOUTH |
| 5 | 20 | 480 | 12,336 | --- | A-21 (60/2) | T-F-2 |
| 6 | 30 | 480 | 19,200 | --- | B-6 (90/2) | T-K-1 |
| 7 | 10 | 480 | --- | *=4,616 **=6,778 | B-26 (60/2) NEW | T-P |
| 8 | 20 | 480 | 11,808 | --- | A-5 (60/2) | T-H |
| 9 | 30 | 480 | 24,480 | --- | A-39 (90/2) NEW | T-B |
| 10 | 15 | 480 | 8,904 | --- | A-2 (50/2) | SIGNS |
| 11 | 15 | 480 | 11,040 | --- | A-6 (50/2) | T-N |
| 12 | 20 | 480 | 11,808 | --- | B-22 (60/2) NEW | T-K-2 |
| 13 | 7.5 | 480 | --- | *=3,514 **=5,238 | B-13 (50/2) | R-5-23 |
| 14 | 15 | 480 | 10,416 | --- | A-30 (50/2) | T-E-1 |
| 15 | 15 | 480 | 7,440 | --- | A-34 (50/2) | T-F-1 |
| 16 | 15 | 480 | 11,040 | --- | A-1 (50/2) | T-A |
| 17 | 4 | 480 | --- | 2,860 | A-38 (20/3) | R13-31 RGL (NEW) |
| 17A | 4 | 480 | --- | 2,570 | B-10 (20/2) | R5-23 RGL (NEW) |
| 18 | 10 | 480 | --- | 3,065 | A-17 (40/2) | R9-27 RGL |
| 19 | 10 | 480 | --- | *=4,752 **=5,010 | B-1 (50/2) | T-E-2 |

P = PRESENT SIZE
 N = NEW SIZE (CHANGE PRESENT TO OR NEW UNIT)
 IRM = INSULATION RESISTANCE MONITORING
 CVM = CURRENT AND VOLTAGE MODULE

NUMBERED LEGEND:

- 1 EXISTING 2-6 AWG + 1-10 AWG GND IN CABLE TRAY BETWEEN PANEL A AND T-P REGULATOR #7. REMOVE EXISTING AND FURNISH & INSTALL PROPOSED NEW 2-6 AWG + 1-10 AWG GND IN CABLE TRAY BETWEEN PANEL B (B-26, 28) AND T-P REGULATOR #7.
- 2 EXISTING 2-6 AWG + 1-10 AWG GND IN CABLE TRAY BETWEEN PANEL A AND T-K-2 REGULATOR #12. REMOVE EXISTING AND FURNISH & INSTALL PROPOSED NEW 2-6 AWG + 1-10 AWG GND IN CABLE TRAY BETWEEN PANEL B (B-22, 24) AND T-K-2 REGULATOR #12.

RGL CIRCUITS & EAST SCAN RPU POWER SUPPLY ONE-LINE DIAGRAMS

SCALE: NONE

NOTE: * = LED CIRCUIT, HEATERS OFF
 ** = LED CIRCUIT, HEATERS ON

EXISTING ELECTRICAL PANEL A

EXISTING ELECTRICAL PANEL B

| PANEL : A (EXISTING) (EMERGENCY) | | VOLTAGE : 277/480V-3PH-4W | | | |
|-------------------------------------|-----------------|-------------------------------|----------------------------------|-----------------|----------|
| MOUNTING : SURFACE | | MAINS : 400A MLO | | | |
| CKT. NO. | BKR. | DESCRIPTION | DESCRIPTION | BKR. | CKT. NO. |
| 1 | 50/2 | 15 KW, T-A (REG#16) | 15 KW, SIGN (REG#10) | 50/2 | 2 |
| 3 | --- | --- | --- | --- | 4 |
| 5 | 60/2 | 20 KW, T-H (REG#8) | 15 KW, T-N (REG#11) | 50/2 | 6 |
| 7 | --- | --- | --- | --- | 8 |
| 9 | 60/2 | 10 KW, T-P (REG#7) | 20 KW, R9-27-2 (REG#2) | 60/2 | 10 |
| 11 | --- | --- | --- | --- | 12 |
| 13 | 60/2 | 20 KW, R9-27-1 (REG#1) | 20 KW, T-K-2 (REG#12) | 60/2 | 14 |
| 15 | --- | --- | --- | --- | 16 |
| 17 | 40/2 | 10 KW, R9-27 RGL (REG#18) | 15 KW, R13-31-1 (REG#3) | 60/2 | 18 |
| 19 | --- | --- | --- | --- | 20 |
| 21 | 60/2 | 20 KW, T-F-2 (REG#5) | SPACE | --- | 22 |
| 23 | --- | --- | SPACE | --- | 24 |
| 25 | --- | --- | 20 KW, R13-31-2 (REG#4) | 70/2 | 26 |
| 27 | --- | --- | --- | --- | 28 |
| 29 | 25/3 | 15 KVA XFMR | 15 KW, T-E-1 (REG#14) | 50/2 | 30 |
| 31 | --- | --- | --- | --- | 32 |
| 33 | --- | --- | 15 KW, T-F-1 (REG#15) | 50/2 | 34 |
| 35 | --- | SPACE | --- | --- | 36 |
| 37 | --- | SPACE | 4 KW, R13-31 RGL (REG#17) | 20/3 | 38 |
| 39 | 90/2 | 30 KW, T-B (REG#9) | --- | --- | 40 |
| 41 | --- | --- | --- | --- | 42 |

| PANEL : B (EXISTING) | | VOLTAGE : 277/480V-3PH-4W | | | |
|----------------------|------|-----------------------------------|---------------------------|------|----------|
| MOUNTING : SURFACE | | MAINS : 225A MLO | | | |
| CKT. NO. | BKR. | DESCRIPTION | DESCRIPTION | BKR. | CKT. NO. |
| 1 | 50/2 | 10 KW, T-E-2 (REG#19) | SPACE | --- | 2 |
| 3 | --- | --- | SPACE | --- | 4 |
| 5 | --- | SPACE | 30 KW, T-K-1 (REG#6) | 90/2 | 6 |
| 7 | --- | SPACE | --- | --- | 8 |
| 9 | 50/2 | SPARE BKR. | 4 KW, R5-23 RGL (REG#17A) | 20/2 | 10 |
| 11 | --- | --- | --- | --- | 12 |
| 13 | 50/2 | 7.5 KW, R-5-23 (REG#13) | SPACE | --- | 14 |
| 15 | --- | --- | SPACE | --- | 16 |
| 17 | --- | SPACE | SPACE | --- | 18 |
| 19 | --- | SPACE | SPACE | --- | 20 |
| 21 | 20/2 | 5KVA MINI-POWER ZONE FOR EAST RPU | 20 KW, T-K-2 (REG#12) | 60/2 | 22 |
| 23 | --- | --- | --- | --- | 24 |
| 25 | --- | SPACE | 10 KW, T-P (REG#7) | 60/2 | 26 |
| 27 | --- | SPACE | --- | --- | 28 |
| 29 | --- | SPACE | SPACE | --- | 30 |
| 31 | --- | SPACE | SPACE | --- | 32 |
| 33 | --- | SPACE | SPACE | --- | 34 |
| 35 | --- | SPACE | SPACE | --- | 36 |
| 37 | --- | SPACE | SPACE | --- | 38 |
| 39 | --- | SPACE | SPACE | --- | 40 |
| 41 | --- | SPACE | SPACE | --- | 42 |

1

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9

NUMBERED LEGEND:

- 1 REMOVE EXISTING T-P REG # 7 60A-2P CIRCUIT BREAKER A-9, 11 FROM PANEL A. INSTALL BLANK FILLERS IN SLOTS.
- 2 EXISTING REG # 18 40A-2P CIRCUIT BREAKER A-17,19. RELABEL AS REQUIRED FOR R9-27 RGL CIRCUIT.
- 3 EXISTING REG # 9 90A-2P CIRCUIT BREAKER A-39,41. REMOVE EXISTING AND FURNISH & INSTALL NEW PROPOSED 90A-2P. (SAME MANUFACTURER AS NEW A-38, 40, 42 CIRCUIT BREAKER).
- 4 REMOVE EXISTING T-K-2 REG # 12 60A-2P CIRCUIT BREAKER A-14, 16 FROM PANEL A. INSTALL BLANK FILLERS IN SLOTS.
- 5 EXISTING BLANKS (A-38, 40, 42). FURNISH & INSTALL NEW 20A-3P FOR NEW REG # 17 R13-31 RGL CIRCUIT (SAME MANUFACTURER AS NEW A-39, 41 CIRCUIT BREAKER). 3 POLE CB IS TO BE USED FOR ONLY A 2 POLE LOAD. CONNECT LOADS TO PHASES A (38) AND C (42).
- 6 EXISTING BLANKS (B-21, 23). FURNISH & INSTALL NEW 20A-2P CIRCUIT BREAKER FOR PROPOSED NEW 5 KVA MINI-POWER ZONE (TO SUPPLY POWER TO SCAN SYSTEM EAST RPU).
- 7 EXISTING BLANKS (B-10, 12). FURNISH & INSTALL NEW 20A-2P CIRCUIT BREAKER FOR PROPOSED NEW REG # 17A R5-23 RGL CIRCUIT.
- 8 EXISTING BLANKS (B-22, 24). FURNISH & INSTALL NEW 60A-2P CIRCUIT BREAKER FOR EXISTING 20 KW REG # 12 T-K-2 CIRCUIT.
- 9 EXISTING BLANKS (B-26, 28). FURNISH & INSTALL NEW 60A-2P CIRCUIT BREAKER FOR EXISTING 10 KW REG # 7 T-P CIRCUIT.
- 10 EXISTING PLC CIRCUIT BREAKER (E-7) TO BE REMOVED AFTER NEW ALCMS IS OPERATIONAL. INSTALL BLANK FILLER IN SLOT. AFTER REMOVAL OF THIS CIRCUIT BREAKER, PHASE BALANCE EXISTING PANEL (RELOCATE EXISTING CB AS REQUIRED) AND PROVIDE A NEW CIRCUIT SCHEDULE CARD.
- 11 EXISTING BLANK (E-21). FURNISH & INSTALL NEW 25A-1P CIRCUIT BREAKER FOR PROPOSED NEW ALCMS UPS2 CIRCUIT.
- 12 EXISTING BLANK (E-23). FURNISH & INSTALL NEW 20A-1P CIRCUIT BREAKER FOR PROPOSED NEW ALCMS UPS1 CIRCUIT.

ELECTRICAL POWER SUPPLY PANEL GENERAL NOTES:

- 1. VERIFY LOADS ON EACH CIRCUIT AND RE-BALANCE LOADS AS REQUIRED. RECORD PRIMARY AND SECONDARY VOLTAGE AND CURRENT FOR EACH REGULATOR AT MAXIMUM OUTPUT CURRENT LEVEL.
- 2. THE COSTS FOR ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE CONTRACT ITEM 'AR109210 VAULT MODIFICATIONS' CONTRACT LUMP SUM PRICE.

| 120/208V-3PH-4W | | LIGHTING PANEL "E" SCHEDULE | | 60 AMP (EMERGENCY) | |
|-----------------|-----------------|-----------------------------|-----------------------------------|--------------------|--------|
| CKT. # | BKR. | DESCRIPTION | DESCRIPTION | BKR. | CKT. # |
| 1 | 20/1 | REG ROOM N WALL RECEPTACLES | REGULATOR ROOM LIGHTS | 20/1 | 2 |
| 3 | 20/1 | REG ROOM S WALL RECEPTACLES | RVR RLIM | 20/1 | 4 |
| 5 | 20/1 | TRANSFORMER ROOM LIGHTS | TRANSFORMER ROOM WALL RECEPTACLES | 20/1 | 6 |
| 7 | 20/1 | PLC UPS | SPACE | --- | 8 |
| 9 | 20/1 | WIND CONE | SPACE | --- | 10 |
| 11 | 20/1 | BEACON CONTROL | SPACE | --- | 12 |
| 13 | --- | SPACE | SUMP PUMP | 20/3 | 14 |
| 15 | --- | SPACE | --- | --- | 16 |
| 17 | --- | SPACE | --- | --- | 18 |
| 19 | --- | SPACE | SPACE | --- | 20 |
| 21 | 25/1 | ALCMS UPS2 | SPACE | --- | 22 |
| 23 | 20/1 | ALCMS UPS1 | SPACE | --- | 24 |
| 25-41 | --- | SPACE | SPACE | --- | 26-42 |

10

11

12

ELECTRICAL VAULT MODIFICATIONS GENERAL NOTES:

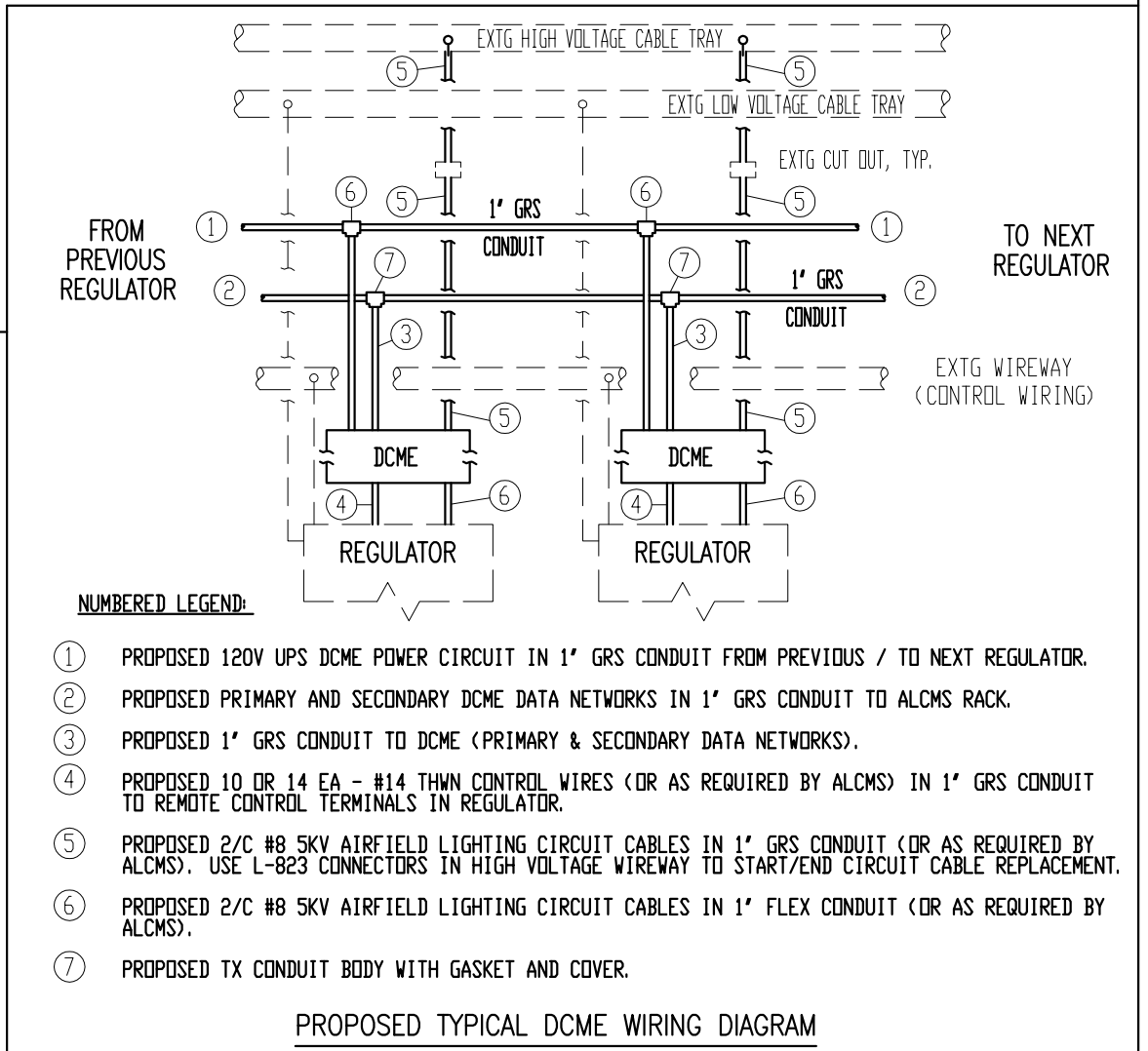
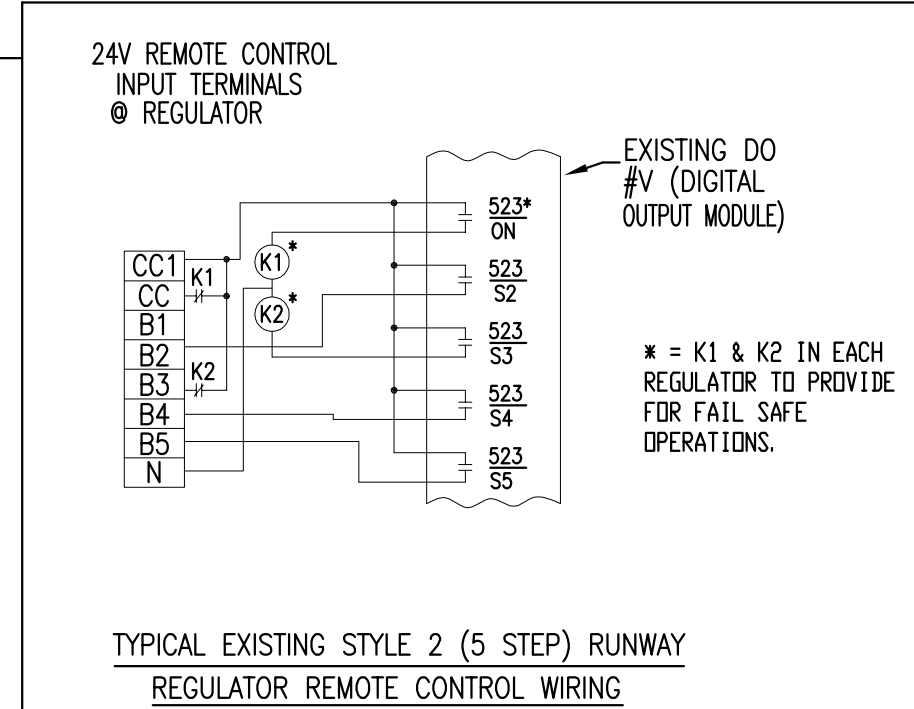
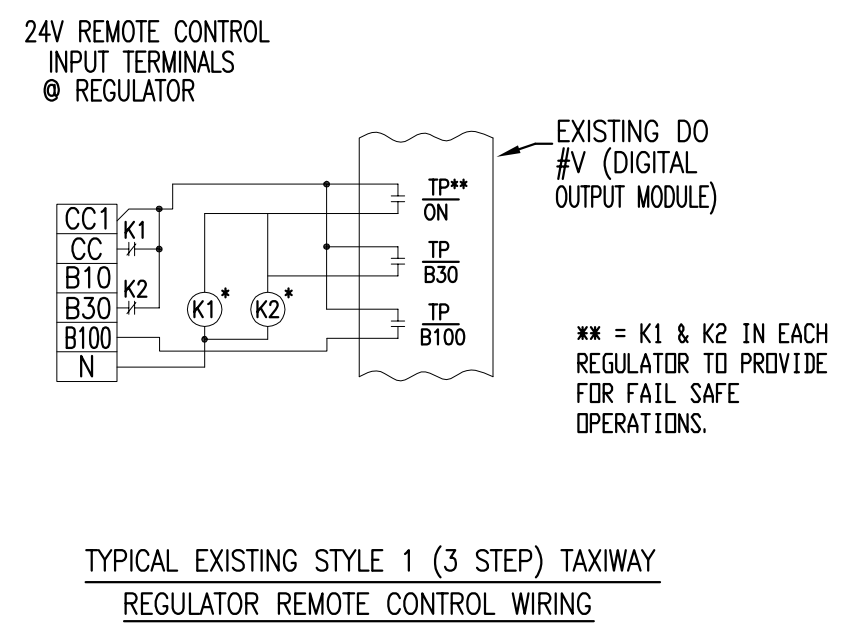
1. COLOR CODE ALL PHASE WIRING BY USE OF COLORED WIRE, INSULATION AND / OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK. BLACK AND RED FOR SINGLE-PHASE, THREE WIRE SYSTEMS AND BLACK, RED AND BLUE FOR THREE-PHASE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDENTIFIED BY EITHER A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE WIREWAYS.
2. ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
3. IN CONTROL WIRING THE SAME COLOR SHALL BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION, SUCH AS 10%, 30%, 100% BRIGHTNESS CONTROL, ETC.
4. ALL POWER AND CONTROL CIRCUIT CONDUCTORS SHALL BE COPPER, ALUMINUM IS NOT ACCEPTABLE. THIS INCLUDES WIRE, CABLE, BUSSES, TERMINALS, SWITCH/PANEL COMPONENTS, ETC.
5. LOW VOLTAGE (600V) AND HIGH VOLTAGE (5000V) CONDUCTORS SHALL BE INSTALLED IN SEPARATE WIREWAYS.
6. WHERE PROPOSED CABLES NEED TO UTILIZE EXISTING DUCTS, THE EXISTING UNUSED CABLES SHALL BE REMOVED. CONTRACTOR SHALL REMOVE ALL ABANDONED CABLES AND CONDUITS AFTER NEW CABLES AND ALCMS EQUIPMENT HAS BEEN INSTALLED AND IS OPERATIONAL.
7. NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, SWITCHES AND JUNCTION/PULL BOXES.
8. EQUIPMENT CABINETS SHALL NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT SHALL BE BROUGHT INTO THESE ENCLOSURES.
9. SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS, AND AT EASILY ACCESSIBLE LOCATIONS.
10. CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) SHALL BE THERMAL-MAGNETIC, MOLDED CASE, PERMENENT TRIP WITH 100 AMPERE, MINIMUM, FRAME.
11. ALL WALL AND CEILING MOUNTED EQUIPMENT, ENCLOSURES AND CONDUITS SHALL BE MOUNTED ON STRUT FRAMING TO ALLOW A MINIMUM OF 1/2' AIR SPACE BETWEEN WALL AND EQUIPMENT.
12. RIGID STEEL CONDUIT SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4 INCH.
13. ALL RIGID CONDUIT SHALL BE TERMINATED AT CONSTANT CURRENT REGULATORS WITH A SECTION (24' MINIMUM) OF FLEXIBLE CONDUIT.
14. UNLESS OTHERWISE SHOWN, ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF THE STRUCTURE.
15. ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC., SHALL BE GALVANIZED.
16. USE CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION. WHERE #4 AWG OR LARGER UNGROUNDED WIRE IS INSTALLED, USE INSULATED BUSHINGS.
17. USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
18. CONTRACTOR SHALL INSTALL NEW CABLES / CONDUITS IN EXISTING CABLE TRAYS.
19. STENCIL ALL ELECTRICAL EQUIPMENT TO IDENTIFY FUNCTION, CIRCUIT VOLTAGE AND PHASE. WHERE THE EQUIPMENT CONTAINS FUSES, ALSO STENCIL THE FUSE OR FUSE LINK AMPERE RATING. WHERE EQUIPMENT DOES NOT HAVE SUFFICIENT STENCILING AREA, THE STENCILING SHALL BE DONE ON THE WALL NEXT TO THE UNIT. THE LETTERS SHALL BE ONE INCH HIGH AND PAINTED IN WHITE OR BLACK PAINT TO PROVIDE THE HIGHEST CONTRAST WITH THE BACKGROUND.
20. THE MINIMUM SIZE OF PULL / JUNCTION BOXES, REGARDLESS OF THE QUANTITY AND SIZE OF THE CONDUCTORS SHOWN, SHALL BE AS FOLLOWS:
 - A. IN STRAIGHT PULLS, THE LENGTH OF THE BOX SHALL NOT BE LESS THAN EIGHT TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT. THE TOTAL AREA (INCLUDING THE CONDUIT CROSS-SECTIONAL AREA) OF A BOX END SHALL BE AT LEAST 3 TIMES GREATER THAN THE TOTAL TRADE CROSS-SECTIONAL AREA OF THE CONDUITS TERMINATING AT THE END.
 - B. IN ANGLE OR U PULLS, THE DISTANCE BETWEEN EACH CONDUIT ENTRY INSIDE THE BOX AND OPPOSITE WALL OF THE BOX SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT. THIS DISTANCE SHALL BE INCREASED FOR ADDITIONAL ENTRIES BY THE AMOUNT OF THE SUM OF THE DIAMETERS F ALL OTHER CONDUIT ENTRIES ON THE SAME WALL OF THE BOX. THE DISTANCE BETWEEN CONDUIT ENTRIES ENCLOSING THE SAME CONDUCTOR SHALL NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT.
21. A RUN OF CONDUIT BETWEEN TERMINATIONS AT EQUIPMENT ENCLOSURES, SQUARE DUCTS AND PULL / JUNCTION BOXES SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE TERMINATIONS. CAST CONDULET TYPE OUTLETS SHALL NOT BE TREATED AS PULL / JUNCTION BOXES.
22. IN TERMINAL BLOCK CABINETS THE MINIMUM SPACING BETWEEN PARALLEL TERMINAL BLOCKS SHALL BE 6 INCHES. THE MINIMUM SPACING BETWEEN TERMINAL BLOCK SIDES / ENDS AND CABINET SIDES / BOTTOM / TOP SHALL BE 5 INCHES. THE MINIMUM SPACING SHALL BE INCREASED AS REQUIRED BY THE NUMBER OF CONDUCTORS. ADDITIONAL SPACING SHALL BE PROVIDED AT CONDUCTOR ENTRANCES.
23. A SEPARATE AND CONTINUOUS NEUTRAL CONDUCTOR SHALL BE INSTALLED AND CONNECTED FOR EACH BREAKER CIRCUIT IN THE POWER PANELS FROM THE NEUTRAL BAR TO EACH POWER / CONTROL CIRCUIT.
24. THE FOLLOWING SHALL APPLY TO ALL ELECTRICAL PANELS / ENCLOSURES:
 - A. ALL COMPONENTS SHALL BE MOUNTED IN DUST PROOF ENCLOSURES WITH VERTICALLY HINGED COVERS.
 - B. THE ENCLOSURES SHALL HAVE AMPLE SPACE FOR THE CIRCUIT COMPONENTS, TERMINAL BLOCKS, PORTS, RECEPTACLES, PATCH PANELS AND INCOMING AND INTERAL WIRING / CABLES.
 - C. ALL INCOMING / OUTGOING WIRING / CABLES SHALL BE TERMINATED AT TERMINAL BLOCKS, PORTS, RECEPTACLES AND / OR PATCH PANELS.
 - D. EACH CONNECTION ON THE TERMINAL BLOCKS, PORTS, RECEPTACLE, PATCH PANELS AND ON THE CIRCUIT COMPONENTS SHALL BE CLEARLY IDENTIFIED.
 - E. ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR / SCREW TYPE (OR AT ETHERNET RECEPTACLES, PORTS OR PATCH PANELS). SOLDERED CLOSED-EYE TERMINATIONS OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
 - F. WHEN THE ENCLOSURE COVER IS OPENED, ALL CIRCUIT COMPONENTS, WIRING, PORTS, PATCH PANELS, RECEPTACLES AND TERMINALS SHALL BE EXPOSED AND ACCESSIBLE WITHOUT REMOVAL OF ANY PANELS, COVERS, ETC. (EXCEPT THOSE COVERING HIGH VOLTAGE COMPONENTS).
 - G. ACCESS TO OR REMOVAL OF A CIRCUIT COMPONENT, PORT, PATCH PANEL, RECEPTACLE OR TERMINAL BLOCK SHALL NOT REQUIRE THE REMOVAL OF ANY OTHER CIRCUIT COMPONENT, PORT, PATCH PANEL, RECEPTACLE OR TERMINAL BLOCK.
 - H. EACH CIRCUIT COMPONENT, PORT, PATCH PANEL, RECEPTACLE AND / OR TERMINAL BLOCK SHALL BE CLEARLY IDENTIFIED BY INDICATING ITS CORRESPONDING NUMBER AS SHOWN ON THE DRAWINGS AND ITS FUNCTION.
 - I. A COMPLETE WIRING DIAGRAM (NOT A SCHEMATIC DIAGRAM) SHALL BE MOUNTED ON THE INSIDE OF THE COVER. THE DIAGRAM SHALL REPRESENT EACH CONDUCTOR BY A SEPERATE LINE.
 - J. THE WIRING DIAGRAM SHALL IDENTIFY EACH CIRCUIT COMPONENT AND NUMBER / COLOR OF EACH INTERNAL CONDUCTOR AND TERMINAL.
 - K. ALL WIRING SHALL BE NEATLY TRAINED AND LACED.
 - L. MINIMUM WIRE SIZE SHALL BE NO. 12 AWG THWN.

ELECTRICAL VAULT MODIFICATIONS GENERAL NOTES (CONTINUED):

- 25. GROUND ALL NON-CURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING NO. 6 AWG BARE COPPER WIRE TO BE RUN INSIDE OF CABINETS AND IN CONDUITS TOGETHER WITH OTHER WIRES. WHERE THIS IS NOT FEASIBLE, RUN THE EXPOSED WIRE PARALLEL OR AT RIGHT ANGLES TO THE BUILDING LINES AND SECURE IT AT LEAST EVERY 24 INCHES AND WITHIN 6 INCHES FROM BENDS OR JUNCTIONS. THE EXPOSED WIRE MAY BE NO. 6 AWG IF IT IS NOT SUBJECT TO PHYSICAL ABUSE, OTHERWISE NO. 4 AWG SHALL BE USED.
- 26. ALL GROUNDING CONNECTIONS TO GROUND RODS, BUSSES, PANELS, ENCLOSURES, ETC. SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND GROUND CLAMPS. SOLDERED OR BOLT & WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS.
- 27. THE TOPS OF ALL GROUND RODS SHALL BE AT LEAST 12 INCHES BELOW THE FINISH GROUND ELEVATION.
- 28. THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 10 OHMS.
- 29. THE RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM, OR AT ISOLATED LOCATIONS SHALL NOT EXCEED 25 OHMS.
- 30. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES AND CABLES AS INDICATED ON THE PLANS WERE OBTAINED FROM EXISTING AIRPORT RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER, IN RESPECT TO THE ACCURACY OR SUFFICIENCY OF THE INFORMATION AND THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE CONDITIONS INDICATED ON THE PLANS ARE REPRESENTATIVE OF THOSE THAT WILL BE ACTUALLY ENCOUNTERED DURING THE CONSTRUCTION OF THIS PROJECT.
- 31. UNLESS OTHERWISE NOTED, ALL INDOOR SINGLE CONDUCTOR CONTROL WIRING SHALL BE #12 AWG.

- 32. A MINIMUM OF THREE EACH COPIES OF INSTRUCTION BOOKS SHALL BE SUPPLIED WITH EACH DIFFERENT TYPE OF ELECTRICAL EQUIPMENT. THE BOOKS DESCRIBING THE MORE SOPHISTICATED TYPE OF EQUIPMENT, SUCH AS REGULATORS, ALCMS, ETC. AS A MINIMUM SHALL CONTAIN THE FOLLOWING ITEMS:
 - A. A DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS.
 - B. THE THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH COMPONENT.
 - C. INSTALLATION INSTRUCTIONS.
 - D. SHUTDOWN AND START-UP INSTRUCTIONS.
 - E. PREVENTATIVE MAINTENANCE REQUIREMENTS.
 - F. TROUBLESHOOTING CHART WITH REPAIR INSTRUCTIONS.
 - G. COMPLETE POWER, CONTROL, NETWORK AND COMMUNICATIONS DETAILED WIRING DIAGRAMS SHOWING EACH CONDUCTOR, CONNECTION, AND COMPONENT. "BLACK" BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OR THE NARRATIVE SHALL SHOW VOLTAGES / CURRENTS / WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND / OR TROUBLESHOOTING THE EQUIPMENT OR SYSTEM. WHEN EQUIPMENT HAS SEVERAL MODES OF OPERATION, SUCH AS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS SHALL BE INDICATED FOR ALL OF THE DIFFERENT MODES.
 - H. PARTS LIST (WITH PART NUMBERS) WHICH SHALL INCLUDE ALL MAJOR AND MINOR COMPONENTS, SUCH AS RESISTORS, DIODES, ETC. THIS LIST SHALL INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURER AND THE CATALOG NUMBER.
 - I. SAFETY INSTRUCTIONS.
- 33. WRAP ALL PRIMARY AND SECONDARY POWER TRANSFORMER CONNECTIONS WITH SUFFICIENT LAYERS OF INSULATING TAPE AND COVER WITH INSULATING VARNISH FOR FULL VALUE OF CABLE INSULATION VOLTAGE.

- 34. BOTH ENDS OF EACH CONTROL CONDUCTOR SHALL BE TERMINATED AT A TERMINAL BLOCK. THE TERMINAL BLOCK SHALL BE OF PROPER RATING AND SIZE FOR THE FUNCTION INTENDED AND THEY SHALL BE LOCATED IN EQUIPMENT ENCLOSURES.
- 35. ALL CONTROL CONDUCTOR TERMINATIONS SHALL BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED, CLOSED-EYE TERMINATIONS, OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
- 36. BOTH ENDS OF ALL CONTROL CONDUCTORS SHALL BE IDENTIFIED AS TO THE CIRCUIT, TERMINAL BLOCK, AND TERMINAL NUMBER. ONLY STICK-ON LABELS SHALL BE USED.
- 37. ANY AND ALL MATERIALS REMOVED AND NOT REUSED SHALL REMAIN THE PROPERTY OF THE MAA. THIS INCLUDES, BUT IS NOT LIMITED TO, WIRE, CABLE, CONDUIT, ELECTRICAL EQUIPMENT, REGULATORS, ETC.
- 38. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
- 39. THE COSTS FOR ALL ITEMS IN THE VAULT AND / OR SHOWN ON THESE VAULT MODIFICATION PLAN DRAWINGS SHALL BE INCLUDED IN THE CONTRACT ITEM "AR109210- VAULT MODIFICATIONS" AND / OR "AR109630 - LIGHTING CONTROL COMPUTER SYSTEM" LUMP SUM PRICES.



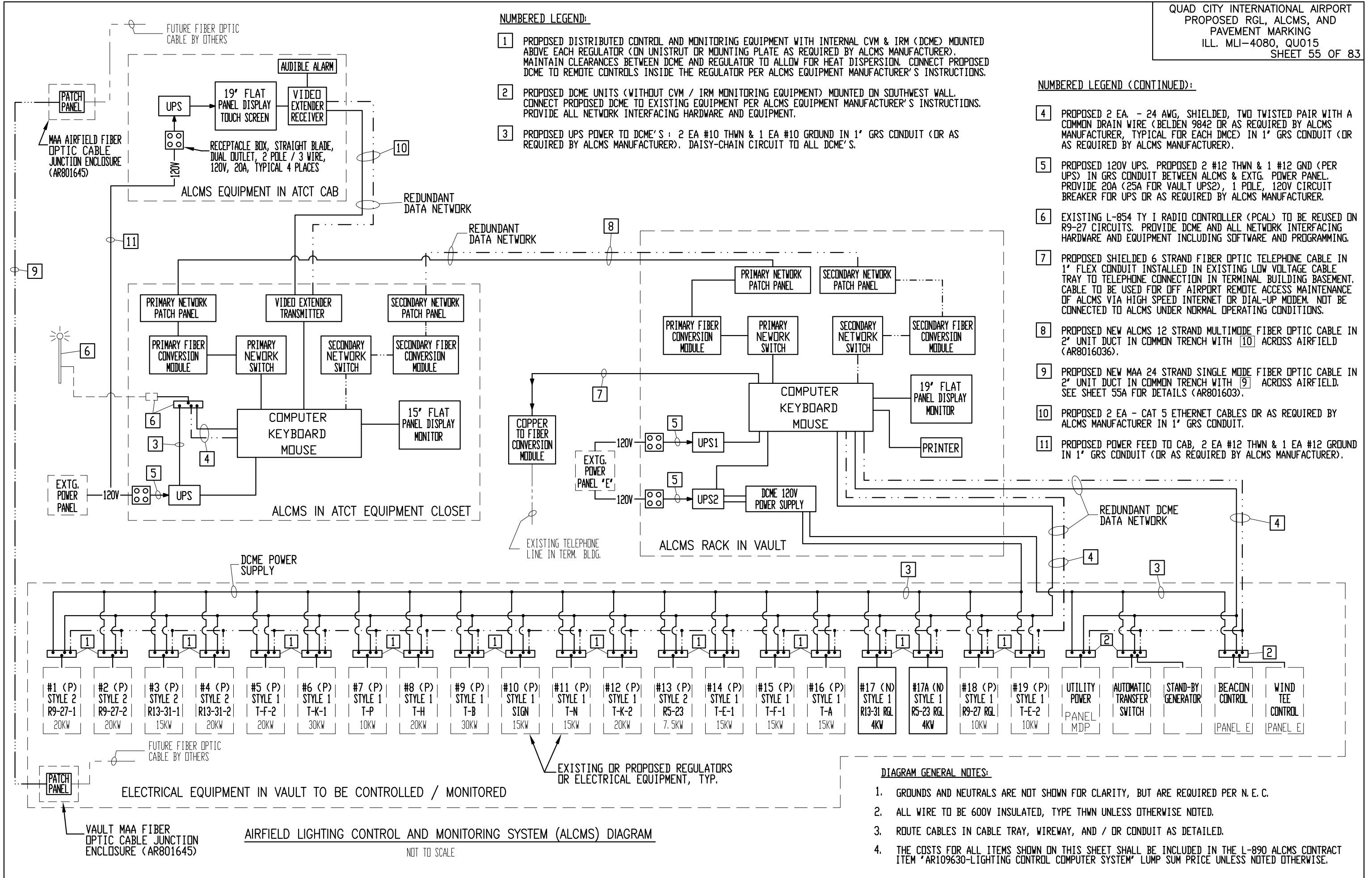
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NUMBERED LEGEND:

- 1 PROPOSED DISTRIBUTED CONTROL AND MONITORING EQUIPMENT WITH INTERNAL CVM & IRM (DCME) MOUNTED ABOVE EACH REGULATOR (ON UNISTRUT OR MOUNTING PLATE AS REQUIRED BY ALCMS MANUFACTURER). MAINTAIN CLEARANCES BETWEEN DCME AND REGULATOR TO ALLOW FOR HEAT DISPERSION. CONNECT PROPOSED DCME TO REMOTE CONTROLS INSIDE THE REGULATOR PER ALCMS EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
- 2 PROPOSED DCME UNITS (WITHOUT CVM / IRM MONITORING EQUIPMENT) MOUNTED ON SOUTHWEST WALL. CONNECT PROPOSED DCME TO EXISTING EQUIPMENT PER ALCMS EQUIPMENT MANUFACTURER'S INSTRUCTIONS. PROVIDE ALL NETWORK INTERFACING HARDWARE AND EQUIPMENT.
- 3 PROPOSED UPS POWER TO DCME'S : 2 EA #10 THWN & 1 EA #10 GROUND IN 1" GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER). DAISY-CHAIN CIRCUIT TO ALL DCME'S.

NUMBERED LEGEND (CONTINUED):

- 4 PROPOSED 2 EA. - 24 AWG, SHIELDED, TWO TWISTED PAIR WITH A COMMON DRAIN WIRE (BELDEN 9842 OR AS REQUIRED BY ALCMS MANUFACTURER, TYPICAL FOR EACH DCME) IN 1" GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER).
- 5 PROPOSED 120V UPS. PROPOSED 2 #12 THWN & 1 #12 GND (PER UPS) IN GRS CONDUIT BETWEEN ALCMS & EXTG. POWER PANEL. PROVIDE 20A (25A FOR VAULT UPS2), 1 POLE, 120V CIRCUIT BREAKER FOR UPS OR AS REQUIRED BY ALCMS MANUFACTURER.
- 6 EXISTING L-854 TY I RADIO CONTROLLER (PCAL) TO BE REUSED ON R9-27 CIRCUITS. PROVIDE DCME AND ALL NETWORK INTERFACING HARDWARE AND EQUIPMENT INCLUDING SOFTWARE AND PROGRAMMING.
- 7 PROPOSED SHIELDED 6 STRAND FIBER OPTIC TELEPHONE CABLE IN 1" FLEX CONDUIT INSTALLED IN EXISTING LOW VOLTAGE CABLE TRAY TO TELEPHONE CONNECTION IN TERMINAL BUILDING BASEMENT. CABLE TO BE USED FOR OFF AIRPORT REMOTE ACCESS MAINTENANCE OF ALCMS VIA HIGH SPEED INTERNET OR DIAL-UP MODEM. NOT BE CONNECTED TO ALCMS UNDER NORMAL OPERATING CONDITIONS.
- 8 PROPOSED NEW ALCMS 12 STRAND MULTIMODE FIBER OPTIC CABLE IN 2" UNIT DUCT IN COMMON TRENCH WITH 10 ACROSS AIRFIELD (AR8016036).
- 9 PROPOSED NEW MAA 24 STRAND SINGLE MODE FIBER OPTIC CABLE IN 2" UNIT DUCT IN COMMON TRENCH WITH 9 ACROSS AIRFIELD. SEE SHEET 55A FOR DETAILS (AR801603).
- 10 PROPOSED 2 EA - CAT 5 ETHERNET CABLES OR AS REQUIRED BY ALCMS MANUFACTURER IN 1" GRS CONDUIT.
- 11 PROPOSED POWER FEED TO CAB, 2 EA #12 THWN & 1 EA #12 GROUND IN 1" GRS CONDUIT (OR AS REQUIRED BY ALCMS MANUFACTURER).



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DIAGRAM GENERAL NOTES:

- 1. GROUNDS AND NEUTRALS ARE NOT SHOWN FOR CLARITY, BUT ARE REQUIRED PER N. E. C.
- 2. ALL WIRE TO BE 600V INSULATED, TYPE THWN UNLESS OTHERWISE NOTED.
- 3. ROUTE CABLES IN CABLE TRAY, WIREWAY, AND / OR CONDUIT AS DETAILED.
- 4. THE COSTS FOR ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE L-890 ALCMS CONTRACT ITEM "AR109630-LIGHTING CONTROL COMPUTER SYSTEM" LUMP SUM PRICE UNLESS NOTED OTHERWISE.

**QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 55A OF 83**

| GENERAL FIBER EQUIPMENT SCHEDULE | | | | | | | | | |
|----------------------------------|------------------------------|--|-------------------|-------------|---------------|-------------------------|--------------|--------------------|---------------------|
| Fiber Tag | From | To | Number of Strands | FIBER TYPE | CORE DIAMETER | Outside Jacket Diameter | Cable Length | Basis of design | APPROVED ALTERNATES |
| FO1 | UNDERGROUND ELECTRICAL VAULT | AIR TRAFFIC AND CONTROL TOWER (ATCT) | 12 | MULTI-MODE | 62.5 | 0.26" | FM | AFL (KR0028481001) | PRE-APPROVED EQUAL |
| FO2 | UNDERGROUND ELECTRICAL VAULT | OUTSIDE THE AIR TRAFFIC AND CONTROL TOWER (ATCT) | 24 | SINGLE-MODE | 9 | 0.33" | FM | AFL (KR0249871001) | PRE-APPROVED EQUAL |
| FO3 | UNDERGROUND ELECTRICAL VAULT | THE MAIN TERMINAL BUILDING | 6 | MULTI-MODE | 62.5 | 0.21" | FM | AFL (KR0028531001) | PRE-APPROVED EQUAL |

GENERAL NOTES:

1. ALL APPROVED ALTERNATE MANUFACTURERS WILL REQUIRE PERFORMANCE THAT IS EQUAL OR GREATER THAN THE BASIS OF DESIGN CABLING. CABLING THAT DOES NOT MEET THIS PERFORMANCE REQUIREMENT WILL BE REJECTED.
2. ALL FIBER CABLING SHALL BE INDOOR/OUTDOOR FIBER AND MARKINGS LABELD IN FEET.
3. FM = CONTRACTOR TO FIELD MEASURE AND FIELD DETERMINE.
4. ALL FIBER IS TO BE INSTALLED IN OVERHEAD CONDUIT WITHIN ENCLOSED BUILDINGS AND STRUCTURES OR INSTALLED IN UNDERGROUND CONDUIT DUCT BANKS BETWEEN FIBER PANEL LOCATIONS. NO DIRECT BURIAL CABLING WILL BE ACCEPTED.

| GENERAL TECHNOLOGY EQUIPMENT SCHEDULE | | | |
|---------------------------------------|----------|---|---|
| ITEM NO. | TAG NAME | DESCRIPTION | APPROVED MANUFACTURERS |
| 1 | SC-FDC-1 | FIBER DISTRIBUTION CABINET. PROVIDES UP TO (2) OPTICAL CASSETTES FOR ST CONNECTORS FOR UP TO 24-STRANDS OF FIBER. DIMENSIONS ARE 12" X 14" X 2.5" (HxWxD). PROVIDED WITH BLANK INSERTS FOR UNUSED PORTS. INSTALL FIBER DISTRIBUTION CABINET IN A NEMA 4 RATED ENCLOSURE. ENCLOSURE SIZE = 24 X 24 X 8 (HxWxD). ENCLOSURE SHALL BE SIZED TO ALLOW THE FIBER DISTRIBUTION CABINET TO FULLY OPEN, AND ACCOMMODATE THE BEND RADIUS REQUIREMENTS OF THE FIBER. | AFL CABINET WME-02 FIBER CASSETTE FM001173 HOFFMAN ENCLOSURE CSD2424855 OR PRE-APPROVED EQUAL |
| 2 | SC-FDC-2 | FIBER DISTRIBUTION CABINET. PROVIDES UP TO (2) OPTICAL CASSETTES FOR ST CONNECTORS FOR UP TO 24-STRANDS OF FIBER. DIMENSIONS ARE 12" X 14" X 2.5" (HxWxD). PROVIDED WITH BLANK INSERTS FOR UNUSED PORTS. INSTALL FIBER DISTRIBUTION CABINET IN A NEMA 4X RATED ENCLOSURE. ENCLOSURE SIZE = 24 X 24 X 8 (HxWxD). ENCLOSURE SHALL BE SIZED TO ALLOW THE FIBER DISTRIBUTION CABINET TO FULLY OPEN, AND ACCOMMODATE THE BEND RADIUS REQUIREMENTS OF THE FIBER. | AFL CABINET WME-02 FIBER PANEL FM001173 HOFFMAN ENCLOSURE CSD2424855 OR PRE-APPROVED EQUAL |
| 3 | SC-FDC-3 | FIBER DISTRIBUTION CABINET. PROVIDES UP TO (2) OPTICAL CASSETTES FOR ST CONNECTORS FOR UP TO 24-STRANDS OF FIBER. DIMENSIONS ARE 12" X 16" X 3.63" (HxWxD). PROVIDED WITH BLANK INSERTS FOR UNUSED PORTS. INSTALL FIBER DISTRIBUTION CABINET IN A NEMA 4 RATED ENCLOSURE. ENCLOSURE SIZE = 24 X 30 X 8 (HxWxD). ENCLOSURE SHALL BE SIZED TO ALLOW THE FIBER DISTRIBUTION CABINET TO FULLY OPEN, AND ACCOMMODATE THE BEND RADIUS REQUIREMENTS OF THE FIBER. | AFL CABINET WME-04 FIBER PANEL FM001173 HOFFMAN ENCLOSURE CSD2430855 OR PRE-APPROVED EQUAL |

GENERAL TECHNOLOGY NOTES:

1. "21 / 83" INDICATES SHEET NUMBER.
2. "SC-FDC-1" INDICATES TECHNOLOGY EQUIPMENT SCHEDULE ITEM LABELED AS "TAG NAME".
3. REFER TO GENERAL TECHNOLOGY EQUIPMENT SCHEDULE AND GENERAL FIBER EQUIPMENT SCHEDULE FOR FULL DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.
4. "# " INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL. IT IS SHOWN WITH.

ABBREVIATION KEY:

- T.C. TECHNOLOGY CONTRACTOR
- E.C. ELECTRICAL CONTRACTOR
- M.C. MECHANICAL CONTRACTOR
- G.C. GENERAL CONTRACTOR
- AFF ABOVE FINISH FLOOR
- BFC BELOW FINISHED CEILING
- C CONDUIT
- SM SIMILAR
- TYP TYPICAL
- J-BOX JUNCTION BOX

LINE TYPE KEY:

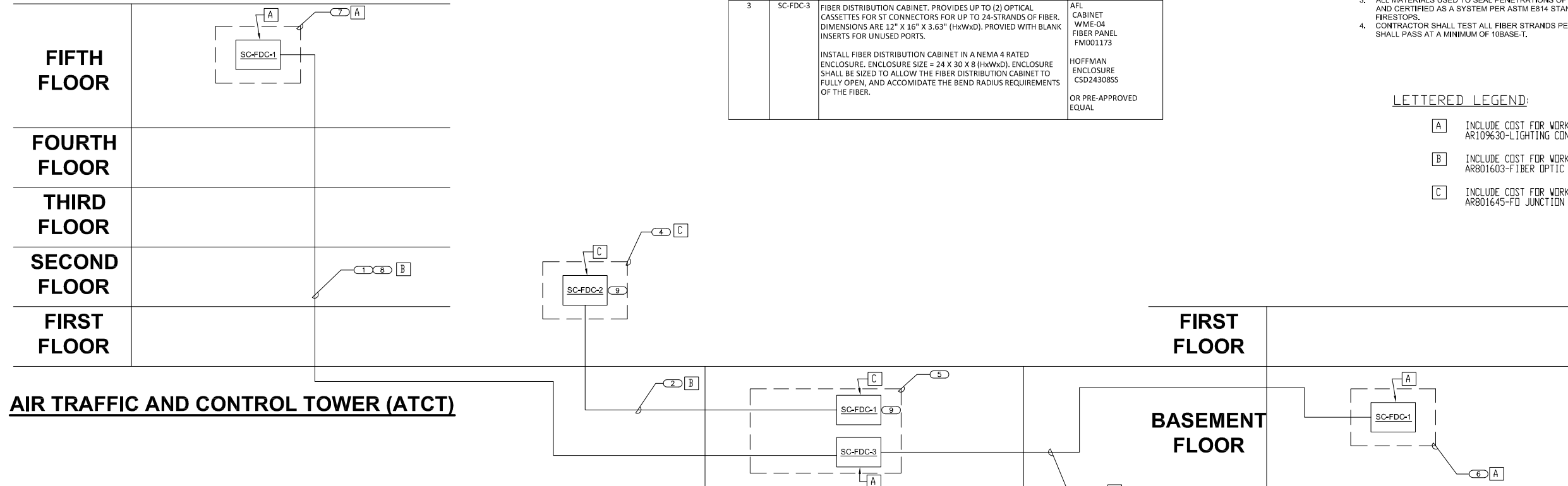
- NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)
- NEW WORK UNDERGROUND OR UNDERGROUND BY THIS CONTRACTOR (DARK LONG DASHED LINE)
- DASHED LINE
- NEW WORK BY OTHERS, AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)
- EXISTING TO BE REMOVED BY THIS CONTRACTOR (DARK SHORT DASHED LINE)

TECHNOLOGY INSTALLATION NOTES:

1. TELECOMMUNICATIONS EQUIPMENT SHALL BE MOUNTED TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TELECOMMUNICATION DEVICES ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
3. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS.
4. CONTRACTOR SHALL TEST ALL FIBER STRANDS PER MANUFACTURERS SPECIFICATIONS. ALL FIBER SHALL PASS AT A MINIMUM OF 10BASE-T.

LETTERED LEGEND:

- [A] INCLUDE COST FOR WORK IN CONTRACT ITEM AR109630-LIGHTING CONTROL COMPUTER SYSTEM.
- [B] INCLUDE COST FOR WORK IN CONTRACT ITEM AR801603-FIBER OPTIC CABLE IN 2" UD.
- [C] INCLUDE COST FOR WORK IN CONTRACT ITEM AR801645-FD JUNCTION ENCLOSURES.



1 TECHNOLOGY FIBER RISER DIAGRAM

NO SCALE

NOTES:

1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. SEE PLANS FOR MORE SPECIFIC ROUTING INFORMATION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL NETWORK GEAR, FIBER PATCH CORDS, TRANSCEIVERS, RECEIVERS, ETC. BY OTHERS.
3. COORDINATE ALL LOCATIONS WITH THE CIVIL ENGINEER AND OWNER PRIOR TO PURCHASE AND INSTALLATION.

KEYNOTES:

1. 12-STRAND MULTI-MODE 62.5 MICRON INDOOR/OUTDOOR RISER TIGHT BUFFERED RATED FIBER. REFER TO FIBER TAG "FO1" ON THE GENERAL FIBER EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
2. 24-STRAND SINGLE-MODE INDOOR/OUTDOOR RISER TIGHT BUFFERED RATED FIBER. REFER TO FIBER TAG "FO2" ON THE GENERAL FIBER EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
3. 6-STRAND MULTI-MODE 62.5 MICRON INDOOR/OUTDOOR RISER TIGHT BUFFERED RATED FIBER. REFER TO FIBER TAG "FO3" ON THE GENERAL FIBER EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
4. FIBER OPTIC CABLE JUNCTION ENCLOSURE. REFER TO SHEET 2183 AND NUMBERED LEGEND #23 ON 47/83 FOR PROPOSED LOCATION. ENCLOSURE SHALL BE SIZED TO SUPPORT SC-FDC-2 PLUS 50 PERCENT GROWTH.
5. ELECTRICAL VAULT WALL SPACE. REFER TO SHEET 2183 AND 39/83 FOR LOCATION OF THE ELECTRICAL VAULT. REFER TO 50/83 FOR PROPOSED LOCATION OF FIBER CABINETS. CONTRACTOR SHALL COORDINATE WITH USING AGENCY ON FINAL LOCATION OF ENCLOSURE PRIOR TO CABLE INSTALLATION.
6. WALL SPACE IN THE MAIN TERMINAL BUILDING BASEMENT. REFER TO NOTE NUMBER 1 ON 2183 FOR ADDITIONAL INFORMATION.
7. 5TH FLOOR WALL SPACE IN THE AIR TRAFFIC AND CONTROL TOWER. REFER TO SHEET 2183 AND 47/83 FOR LOCATION OF THE AIR TRAFFIC AND CONTROL TOWER.
8. INSTALL NEW FIBER IN EXISTING CHASE. REFER TO DRAWING 56 / 83 FOR ADDITIONAL INFORMATION.
9. COORDINATE FIBER TERMINATION POINT AND CONNECTOR TYPE PRIOR TO PURCHASE AND INSTALLATION.

DIAGRAM GENERAL NOTE:

THE COSTS FOR ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE L-890 ALCMS CONTRACT ITEM "AR109630-LIGHTING CONTROL COMPUTER SYSTEM" LUMP SUM PRICE UNLESS NOTED OTHERWISE.

NOTES:

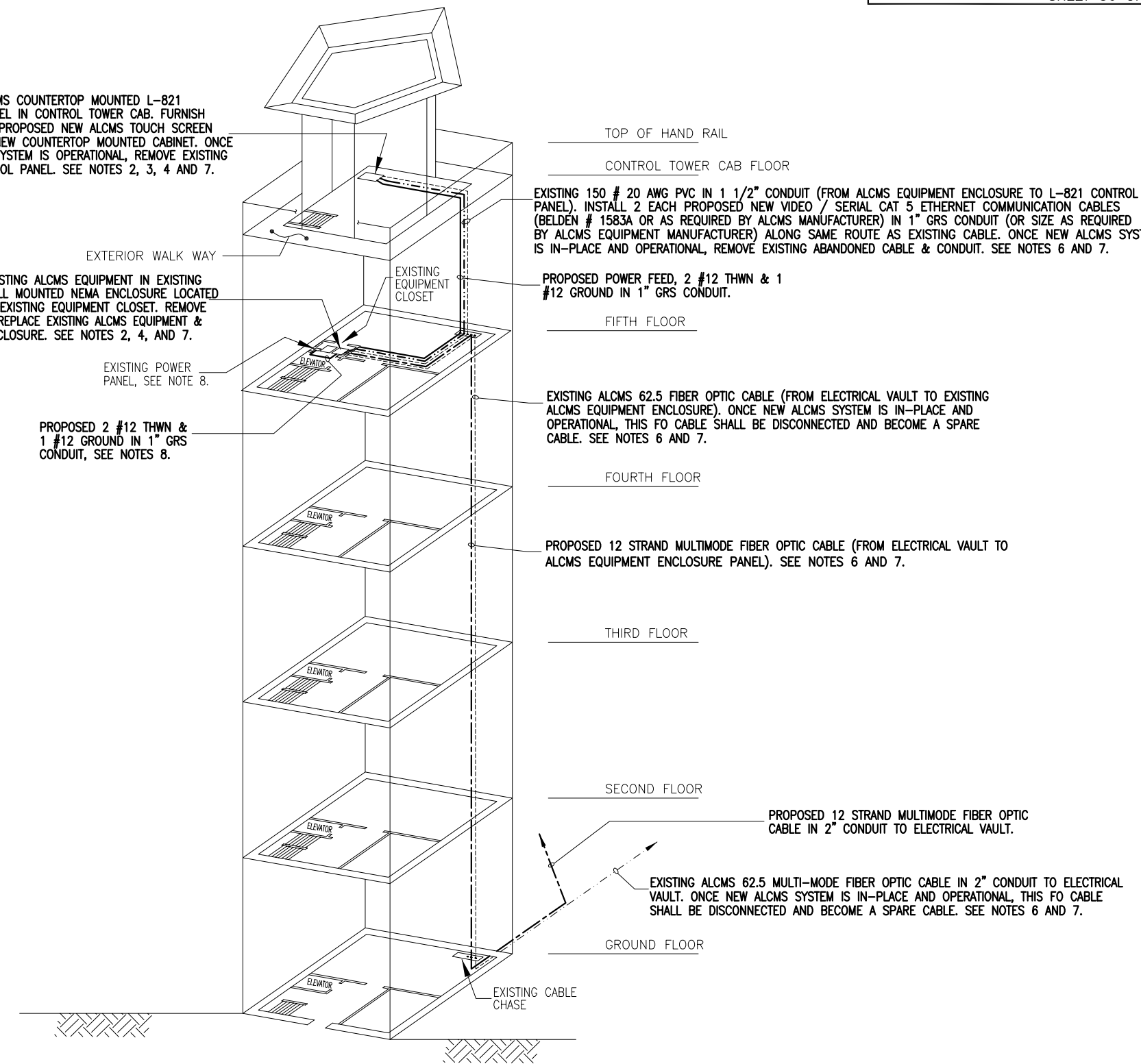
1. CONTRACTOR SHALL COORDINATE ALL WORK IN THE EXISTING CONTROL TOWER WITH THE FAA AIRWAYS FACILITIES REPRESENTATIVES, ATCT REPRESENTATIVES, MAA REPRESENTATIVES, AND THE RESIDENT ENGINEER. CONTRACTOR SHALL GIVE A NOTICE TO ALL PARTIES (AT LEAST 96 HOURS) PRIOR TO BEGINNING ANY WORK IN THE EXISTING TOWER. THE CONTRACTOR SHALL FOLLOW ALL SECURITY REQUIREMENTS WHILE WORKING IN THE EXISTING TOWER. REPLACEMENT OF THE EXISTING ALCMS EQUIPMENT IN THE ATCT SHALL OCCUR WITHOUT THE DISRUPTION OF NORMAL AIRPORT OPERATIONS. ALL CONTROLS SHALL BE OPERATIONAL FOR USE BY THE ATCT PERSONNEL PRIOR TO THE CLOSE OF CONSTRUCTION ACTIVITIES EACH DAY.
2. THE CONTRACTOR SHALL PLAN AND COORDINATE HIS WORK SO THAT THE AIRFIELD LIGHTING CONTROL SYSTEM IS OPERATIONAL AT ALL TIMES WHEN THE CONTRACTOR IS NOT WORKING ON THE SYSTEM IN THE TOWER. IN ORDER TO ACCOMPLISH AN ORDERLY TRANSFER OF CONTROL FROM THE EXISTING SYSTEM TO THE PROPOSED SYSTEM WITHOUT INTERRUPTION OF SERVICE, THE CONTRACTOR SHALL PROVIDE FOR TEMPORARY WIRING AND CABLING TO TEMPORARY LOCATIONS FOR THE EXISTING L-821 CONTROL PANEL AND THE EXISTING PLC EQUIPMENT ENCLOSURE. THE CONTRACTOR SHALL RELOCATE THE EXISTING L-821 CONTROL PANEL AND EXISTING PLC EQUIPMENT ENCLOSURE TO THESE TEMPORARY LOCATIONS (LOCATIONS TO BE DETERMINED IN THE FIELD DURING CONSTRUCTION AND SUBJECT TO THE APPROVAL OF THE RESIDENT ENGINEER, MAA, AND ATCT PERSONNEL). TEMPORARY CONTROL WIRE, FIBER OPTIC CABLES, SPLICES, PATCHES, TWO SUPPORT CONSOLES / CABINETS, ETC. SHALL BE INCLUDED IN THE CONTRACTOR'S LUMP SUM PRICE FOR THIS ITEM. THE NEW ALCMS SYSTEM SHALL BE TESTED AND OPERATIONAL PRIOR TO THE REMOVAL OF THE TEMPORARY RELOCATED EXISTING SYSTEM.
3. CONTRACTOR SHALL REMOVE THE EXISTING L-821 CONTROL PANEL AND INSTALL NEW COUNTERTOP MOUNTED CABINET AND TOUCH SCREEN MONITOR IN ITS PLACE (OR AT A LOCATION SELECTED BY THE TOWER CHIEF). CONTRACTOR SHALL MAKE ALL NECESSARY MODIFICATIONS AND REPAIRS TO THE EXISTING CABINET WORK / COUNTERTOP TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM TO THE SATISFACTION OF THE TOWER CHIEF, MAA, AND RESIDENT ENGINEER. NEW COUNTERTOP / CABINET WORK SHALL BE CUSTOM WOOD CONSOLE OF THE SIZE, TYPE, AND FINISH TO MATCH THE EXISTING COUNTERTOP / CABINET OR AS DIRECTED BY THE TOWER CHIEF.
4. ALL NEW ALCMS EQUIPMENT (EXCLUDING THE TOUCH SCREEN) SHALL BE INSTALLED IN A NEW WALL MOUNTED ENCLOSURE LOCATED WITHIN THE EXISTING EQUIPMENT CLOSET ON THE FIFTH FLOOR OF THE ATCT AS SHOWN TO THE LEFT. THE CONTRACTOR SHALL REMOVE THE EXISTING ENCLOSURE AND FURNISH / INSTALL A PROPOSED NEW WALL MOUNTED ENCLOSURE. THE PROPOSED NEW WALL MOUNTED ENCLOSURE SHALL FIT ON THE WALL INSIDE OF THE EXISTING EQUIPMENT CLOSET IN SAME FASHION AS THE EXISTING ENCLOSURE. CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS PRIOR TO PURCHASING THE NEW ENCLOSURE TO ENSURE THE NEW ENCLOSURE WILL FIT IN THE ALLOTTED SPACE.
5. PROVIDE UPS AND RECEPTACLES FOR TOUCH SCREEN MONITOR IN THE TOWER CAB.
6. CONTRACTOR SHALL PULL NEW CABLES / CONDUITS THROUGH EXISTING CABLE CHASE AND/OR CONDUITS.
7. CONTRACTOR SHALL REMOVE ALL ABANDONED CABLES AND CONDUITS AFTER NEW CABLES AND ALCMS EQUIPMENT HAS BEEN INSTALLED AND IS OPERATIONAL.
8. FOR ALCMS POWER SUPPLY, PROVIDE NEW 2 #12 THWN & 1 #12 GROUND IN 1" GRS CONDUIT BETWEEN NEW ALCMS UPS EQUIPMENT AND POWER PANEL. PROVIDE NEW 20A, 1 POLE, 120V CIRCUIT BREAKER IN POWER PANEL FOR ALCMS EQUIPMENT. AFTER INSTALLATION OF NEW CIRCUIT BREAKER, PHASE BALANCE EXISTING POWER PANEL (BY RELOCATING EXISTING CIRCUIT BREAKERS AS REQUIRED). AFTER ALCMS IS OPERATIONAL, REMOVE ABANDONED PLC CIRCUIT BREAKER AND INSTALL BLANK FILLER IN SLOT. AFTER REMOVAL OF THE PLC CIRCUIT BREAKER, PHASE BALANCE EXISTING PANEL (BY RELOCATING EXISTING CIRCUIT BREAKERS AS REQUIRED) AND PROVIDE NEW CIRCUIT SCHEDULE CARD.
9. SEE SHEETS 53, 54 AND 61 FOR ELECTRICAL NOTES.
10. THE ELECTRICAL CONTRACTOR SHALL NOT BID ON THIS PROJECT OR ORDER MATERIALS UNTIL ALCMS MANUFACTURER CONFIRMS ALL WIRE / CABLE TYPES AND SIZES. NO EXTRA PAYMENTS OR MEASUREMENTS FOR PAYMENTS SHALL BE MADE IF THE ALCMS MANUFACTURER REQUIRES MORE WIRES / CABLES, DIFFERENT TYPES, AND / OR DIFFERENT SIZES THAN SHOWN ON THESE DRAWINGS.
11. THE COSTS FOR ALL ITEMS IN THE ATCT, VAULT AND / OR SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE L-890 ALCMS CONTRACT ITEM "AR109630 - LIGHTING CONTROL COMPUTER SYSTEM" LUMP SUM PRICE.

EXISTING ALCMS COUNTERTOP MOUNTED L-821 CONTROL PANEL IN CONTROL TOWER CAB. FURNISH AND INSTALL PROPOSED NEW ALCMS TOUCH SCREEN MONITOR IN NEW COUNTERTOP MOUNTED CABINET. ONCE NEW ALCMS SYSTEM IS OPERATIONAL, REMOVE EXISTING L-821 CONTROL PANEL. SEE NOTES 2, 3, 4 AND 7.

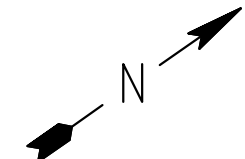
EXISTING ALCMS EQUIPMENT IN EXISTING WALL MOUNTED NEMA ENCLOSURE LOCATED IN EXISTING EQUIPMENT CLOSET. REMOVE & REPLACE EXISTING ALCMS EQUIPMENT & ENCLOSURE. SEE NOTES 2, 4, AND 7.

EXISTING POWER PANEL, SEE NOTE 8.

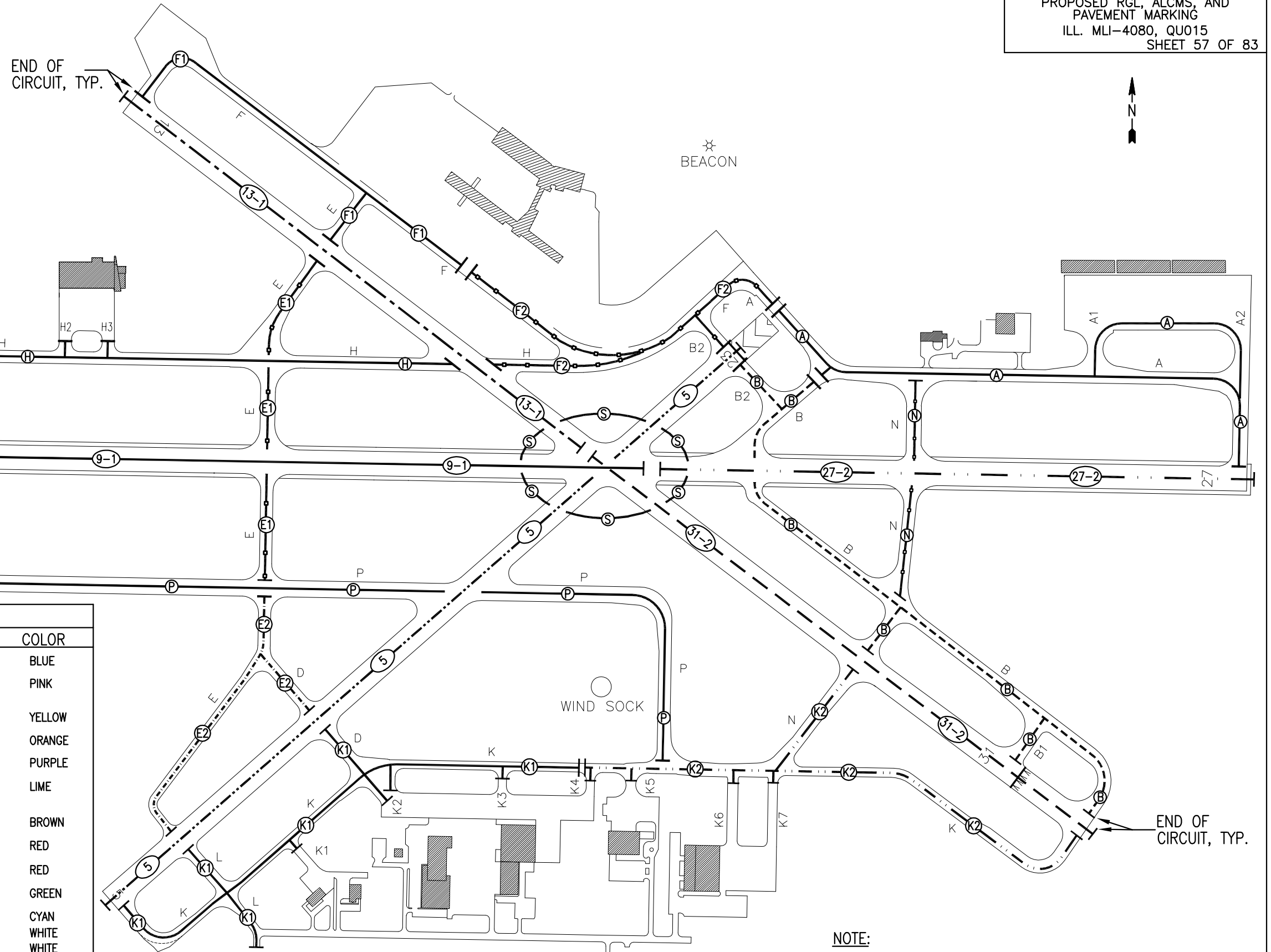
PROPOSED 2 #12 THWN & 1 #12 GROUND IN 1" GRS CONDUIT, SEE NOTES 8.



EXISTING AIR TRAFFIC CONTROL TOWER PLAN



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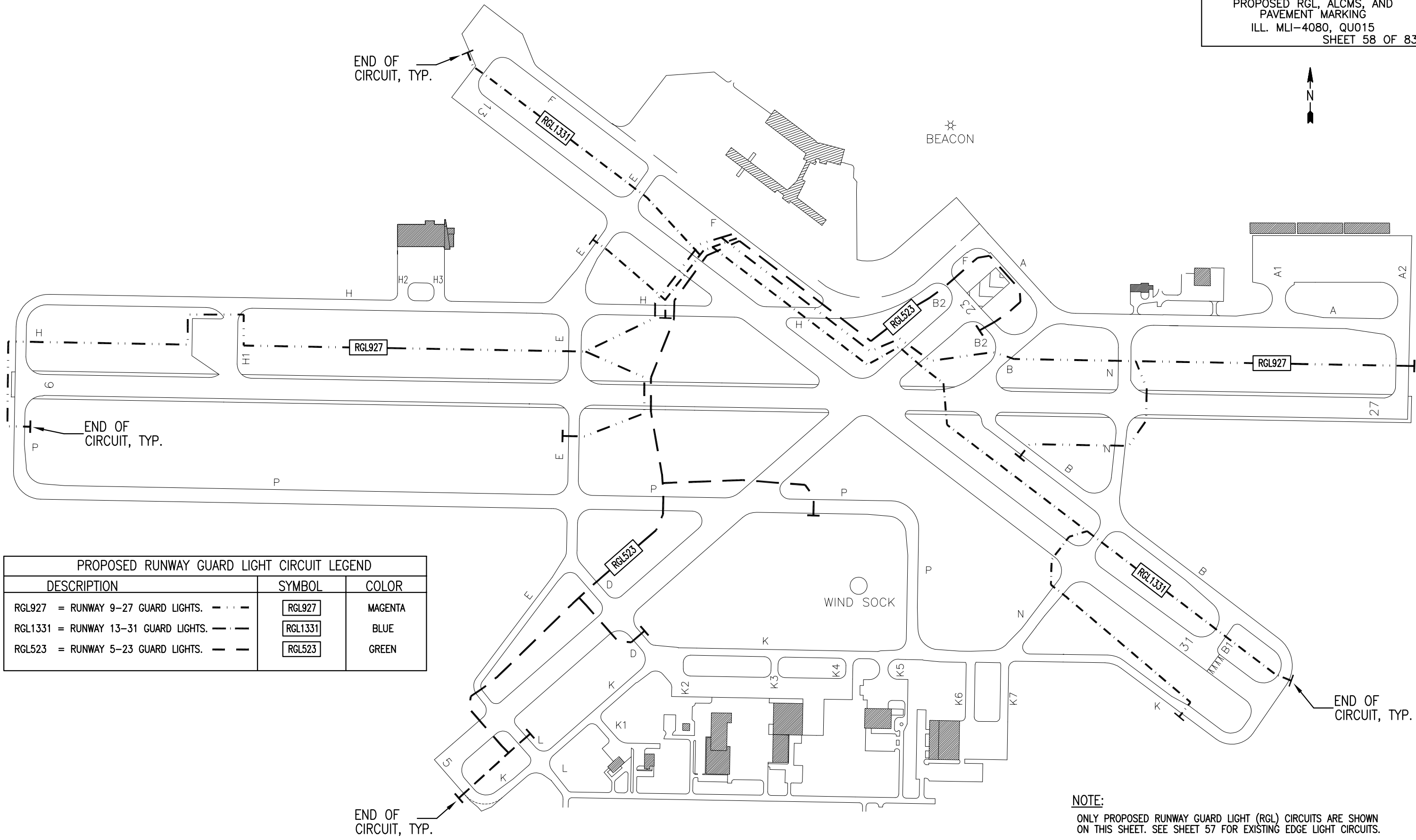
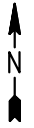
| EXISTING EDGE LIGHT CIRCUIT LEGEND | | |
|--|--------|--------|
| DESCRIPTION | SYMBOL | COLOR |
| TA = TXWY A EAST OF R5-23 CENTERLINE, TXWY A1, AND TXWY A2. | (A) | BLUE |
| TB = TXWY B EAST OF R5-23, TXWY B1, TXWY B2 SOUTH OF R5-23 AND TXWY N BETWEEN R13-31 AND TXWY B. | (B) | PINK |
| TE1 = TXWY E SOUTH OF R13-31 AND NORTH OF TXWY P. | (E1) | YELLOW |
| TE2 = TXWY E SOUTH OF TXWY P AND TXWY D NORTH OF R5-23. | (E2) | ORANGE |
| TF1 = APRON WEST OF VAULT, TXWY F AND TXWY E NORTH OF R13-31. | (F1) | PURPLE |
| TF2 = APRON EAST OF VAULT, TXWY H EAST OF R13-31, TXWY A NORTH OF R5-23, AND TXWY B1 NORTH OF R5-23. | (F2) | LIME |
| TH = TXWY H WEST OF R13-31, TXWY H1, TXWY H2, AND TXWY H3. | (H) | BROWN |
| TK1 = TXWY K WEST OF TXWY K4, TXWY D SOUTH OF R5-23, AND TXWY L. | (K1) | RED |
| TK2 = TXWY K EAST OF TXWY K4 AND TXWY N SOUTH OF R13-31. | (K2) | RED |
| TN = TXWY N SOUTH OF TXWY A AND NORTH OF TXWY B. | (N) | GREEN |
| TP = ALL OF TXWY P. | (P) | CYAN |
| SIGN = MID-FIELD RUNWAY HOLD POSITION SIGNS. | (S) | WHITE |
| 9271 = RUNWAY 9-27, WEST OF MID-FIELD. | (9-1) | WHITE |
| 9272 = RUNWAY 9-27, EAST OF MID-FIELD. | (27-2) | WHITE |
| 13311 = RUNWAY 13-31, NORTH OF MID-FIELD. | (13-1) | WHITE |
| 13312 = RUNWAY 13-31, SOUTH OF MID-FIELD. | (31-2) | WHITE |
| 523 = RUNWAY 5-23, ALL. | (5) | WHITE |




NOTE:
 ONLY EXISTING EDGE LIGHT CIRCUITS ARE SHOWN ON THIS SHEET.
 SEE SHEET 58 FOR PROPOSED RUNWAY GUARD LIGHT (RGL) CIRCUITS.

EXISTING AIRFIELD EDGE LIGHT CIRCUIT LOCATION MAP
 N.T.S.

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 58 OF 83

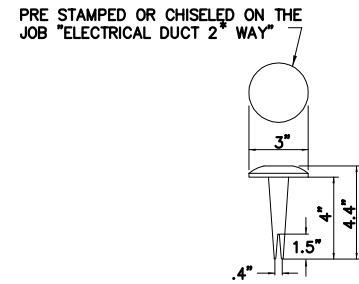
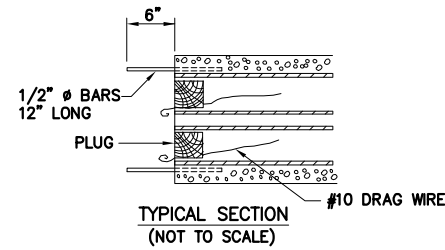


| PROPOSED RUNWAY GUARD LIGHT CIRCUIT LEGEND | | |
|--|---|---------|
| DESCRIPTION | SYMBOL | COLOR |
| RGL927 = RUNWAY 9-27 GUARD LIGHTS. |  | MAGENTA |
| RGL1331 = RUNWAY 13-31 GUARD LIGHTS. |  | BLUE |
| RGL523 = RUNWAY 5-23 GUARD LIGHTS. |  | GREEN |

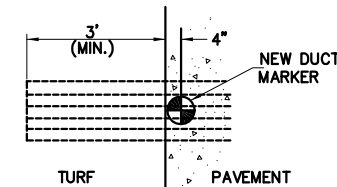
NOTE:
 ONLY PROPOSED RUNWAY GUARD LIGHT (RGL) CIRCUITS ARE SHOWN
 ON THIS SHEET. SEE SHEET 57 FOR EXISTING EDGE LIGHT CIRCUITS.

PROPOSED AIRFIELD RUNWAY GUARD LIGHT (RGL) CIRCUIT LOCATION MAP
 N.T.S.

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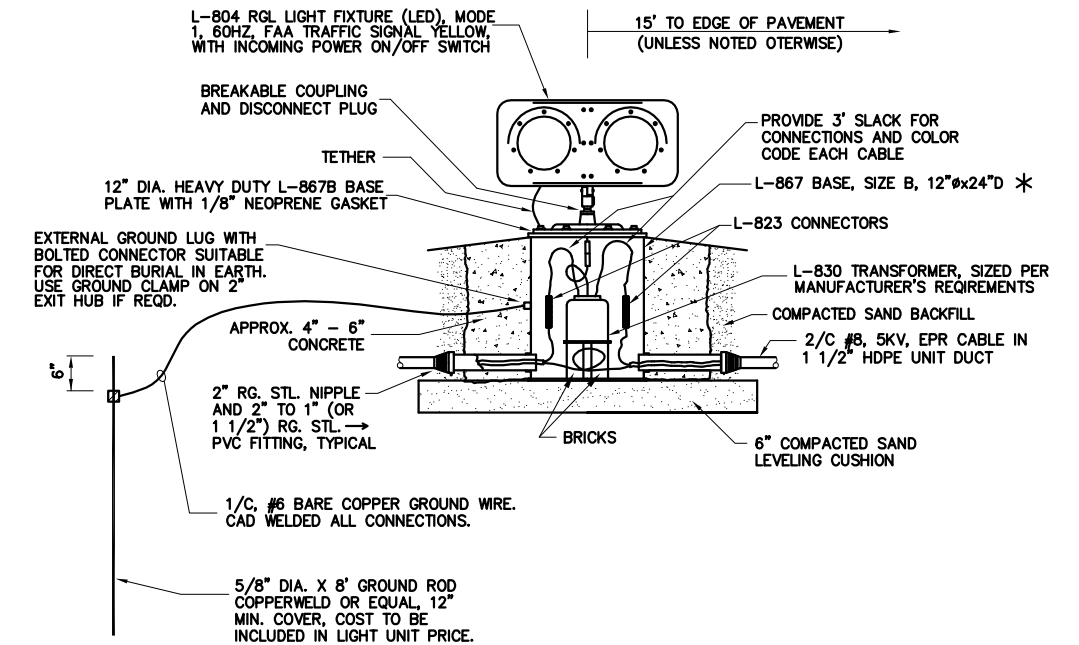
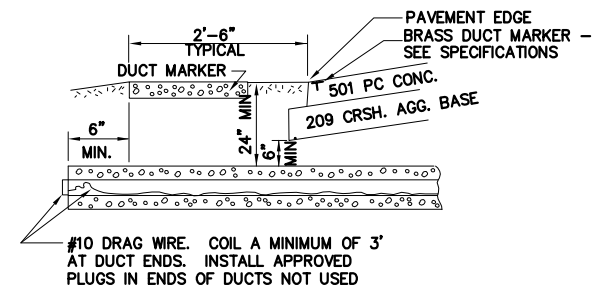
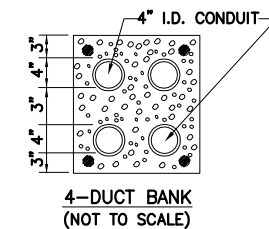
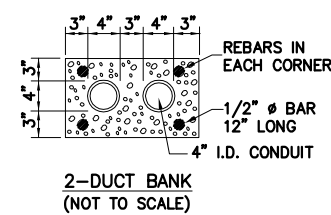


* 1, 2, OR 4 AS APPROPRIATE FOR
 PROPOSED / EXISTING DUCT BANK



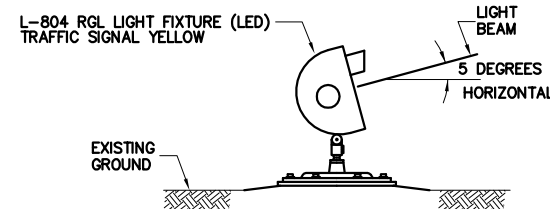
NOTE:
 FURNISH & INSTALL IN-PAVEMENT BRASS DUCT MARKERS AT
 ALL LOCATIONS WHERE EXISTING OR PROPOSED DUCTS / CONDUITS
 CROSSES EXISTING OR PROPOSED PAVEMENTS. COST OF DUCT
 MARKERS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES.

- NOTES :
- A. DIMENSIONS SHOWN ARE MINIMUM.
 - B. TOP OF CONCRETE ENCASEMENT TO BE NOT LESS THAN 24" BELOW FINISHED SUBGRADE.
 - C. DUCT CONCRETE SHALL BE 610 STRUCTURAL P.C. CONC.
 - D. PLASTIC DUCT (PVC) SHALL BE TYPE 1 CONFORMING TO FEDERAL SPEC. W-C-1094.
 - E. ALL DUCT SHALL BE 4" INSIDE DIA.
 - F. WHERE EDGE DRAINS ARE USED, THE LENGTH OF THE DUCT SHALL BE SUCH THAT THE ENDS OF THE DUCTS WILL NOT BE LESS THAN TWO FEET FROM THE OUTSIDE EDGE OF ANY POROUS GRANULAR BACKFILL MATERIAL.
 - G. WHERE EDGE DRAINS ARE NOT USED, THE LENGTH OF THE DUCT SHALL BE SUCH THAT THE ENDS OF THE DUCTS WILL NOT BE LESS THAN THREE FEET FROM THE EDGE OF ANY PAVED SURFACE.
 - H. CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE HOMERUN (TURF CABLE MARKER)
 - I. USE SPLIT DUCT IN DUCT BANKS AS REQUIRED WHERE EXISTING CABLES ARE PRESENT. COST OF SPLIT DUCT TO BE INCLUDED IN THE UNIT PRICE FOR DUCT BANK.



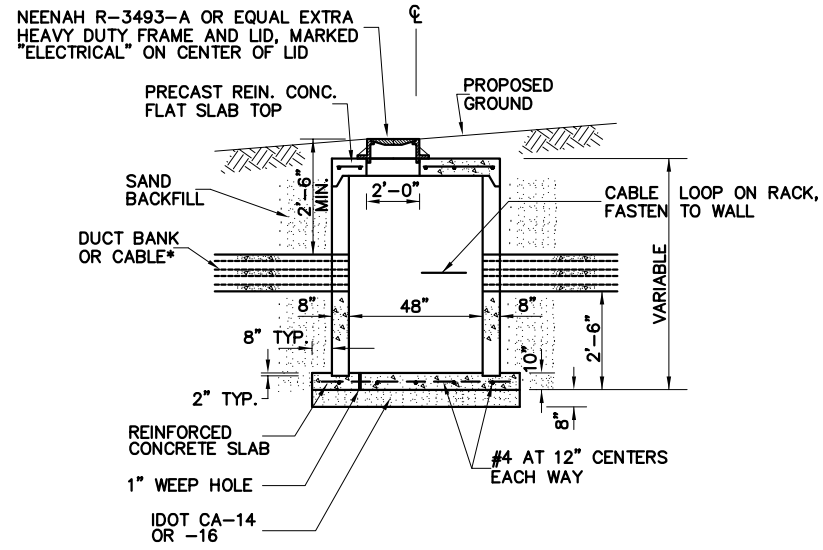
L-804 RUNWAY GUARD LIGHT INSTALLATION DETAILS
 BASE MOUNTED, 6.6 AMP SERIES CIRCUIT
 NOT TO SCALE

- NOTES :
1. BREAKING GROOVE OF BREAKABLE COUPLING SHALL BE 3" TO 3 1/2" ABOVE FINISHED GRADE.
 2. * ORDER L-867 BASE WITH ADDITIONAL 2" CONDUIT HUB APPROXIMATELY 90" FROM MAIN ENTRANCE HUB WHERE INDICATED ON PLAN SHEETS.
 3. ELEVATED RUNWAY GUARD LIGHTS SHALL BE APPROVED FAA L-804 LED TYPE AS MANUFACTURED BY ADB OR APPROVED EQUAL.
 4. TREAT ALL BOLTS WITH "NEVERSEEZ" OR APPROVED EQUAL.
 5. THE CONTRACTOR SHALL FURNISH TWO EACH SPARE L-804 RGL LIGHT FIXTURES (LED) TO THE MAA FOR FUTURE USE. INCLUDE COSTS FOR SPARE L-804 FIXTURES IN ITEM "AR801634-RUNWAY GUARD LIGHT" CONTRACT UNIT PRICE. THE SPARE FIXTURES SHALL NOT BE COUNTED FOR PAYMENT OR PAID FOR SEPARATELY.



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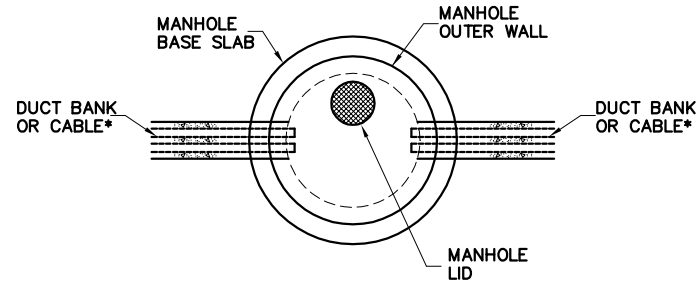
QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 60 OF 83



* = FOR CABLE: INSTALL 2" RG. STL. CONDUIT SLEEVES THROUGH MANHOLE WALL. INSTALL WATERPROOF BUSHINGS ON ENDS OF CONDUITS. SUPPLY AND INSTALL RIGID STL TO PVC FITTINGS WHERE REQUIRED.

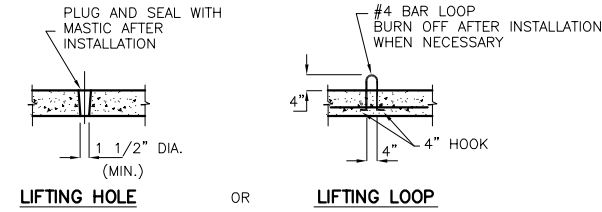
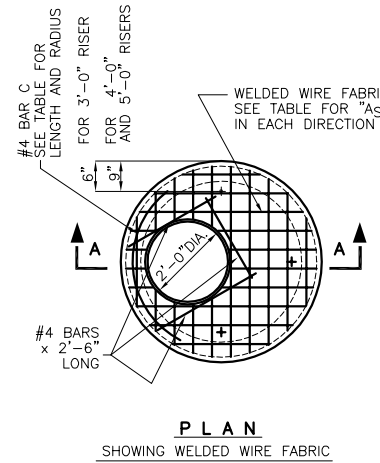
FURNISHING AND INSTALLING SAND CUSHION, CONCR. BASE SLAB, SAND BACKFILL, FRAME & LID, CABLE RACK AND FLAT SLAB TOP TO BE INCLUDED IN THE CONTRACT UNIT PRICE .

PROFILE VIEW

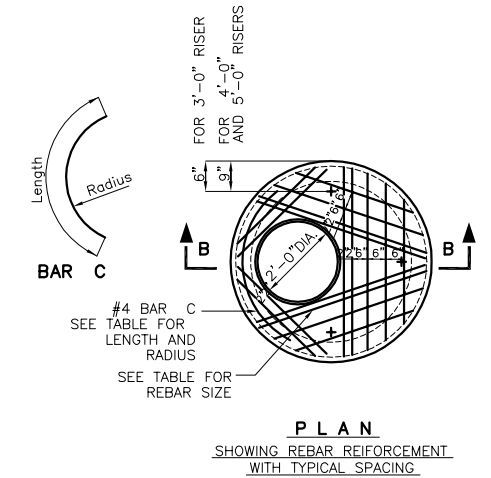


PLAN VIEW

DETAIL OF 110710 ELECTRICAL MANHOLE

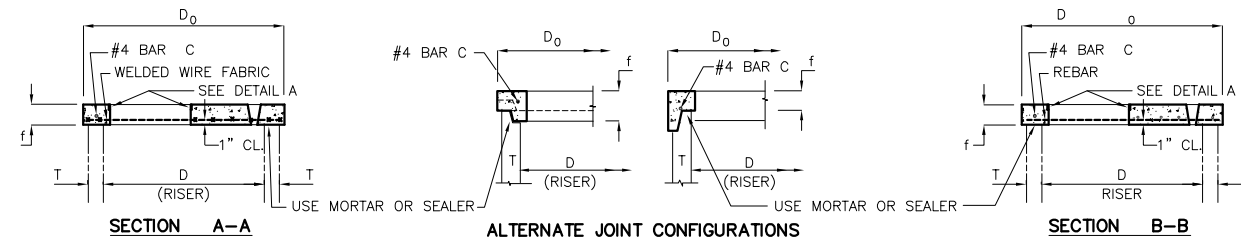


TYPICAL
 (3 REQUIRED PER SLAB)



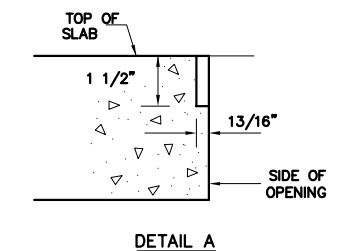
TABLE

| D | T | D ₀ (MIN) | f | REINFORCEMENT | | #4 BAR C | |
|-------|--|----------------------|----|----------------------------|-------------|----------|--------|
| | | | | "AS" W.W.F. EACH DIRECTION | OR BAR SIZE | LENGTH | RADIUS |
| 3'-0" | See Standard 60201, 602011, 602306, and 602501 | D + 2T | 6" | .20 sq.in./lin.ft. | #4 | 4'-0" | 1'-7" |
| 4'-0" | | | 6" | .35 sq.in./lin.ft. | #5 | 4'-6" | 2'-2" |
| 5'-0" | | | 8" | .35 sq.in./lin.ft. | #5 | 5'-0" | 2'-8" |



PRECAST REINFORCED CONCRETE
 FLAT SLAB TOP
 FOR MANHOLES, CATCH BASINS
 AND VALVE VAULTS

MODIFIED I.D.O.T.
 STANDARD 602601



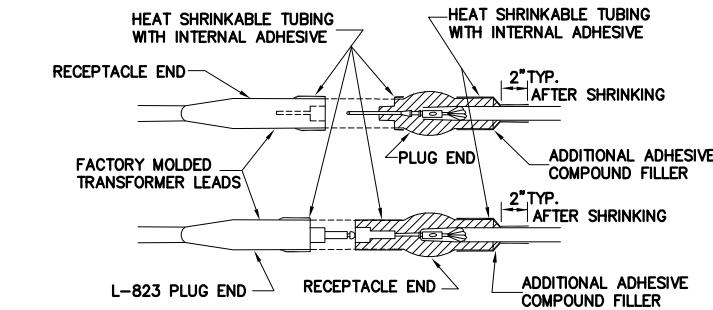
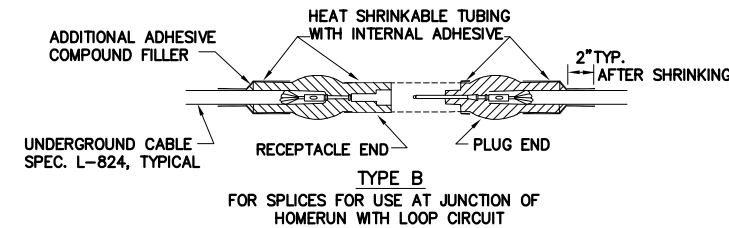
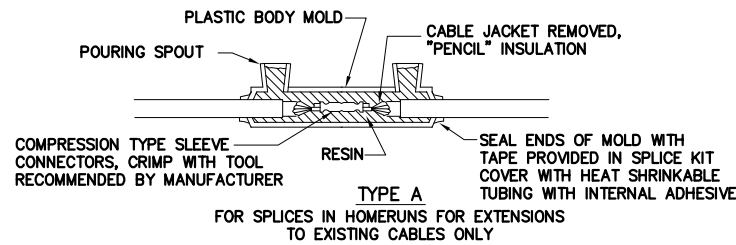
NOTES:

1. PRECAST FLAT SLAB TOPS SHALL CONFORM TO SECTION 602 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. REINFORCEMENT BARS OR WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 1006.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. JOINT CONFIGURATION AND DIMENSIONS SHALL MATCH AND FIT THE RISER JOINT DETAIL.
4. LIFTING DEVICES OTHER THAN SHOWN MAY BE USED SUBJECT TO APPROVAL BY THE ENGINEER.
5. THE FLAT SLAB TOP MAY BE USED IN LIEU OF THE TAPERED TOPS SHOWN ON STANDARDS 602001, 602011, 602306, 602401, OR 602501 AT THE OPTION OF THE CONTRACTOR OR WHEN FIELD CONDITIONS PROHIBIT THE USE OF TAPERED TOPS.
6. THE COST OF FURNISHING AND INSTALLING THE FLAT SLAB TOP SHALL BE INCLUDED IN THE UNIT PRICE FOR CATCH BASINS, MANHOLES, OR VALVE VAULTS.

QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 61 OF 83

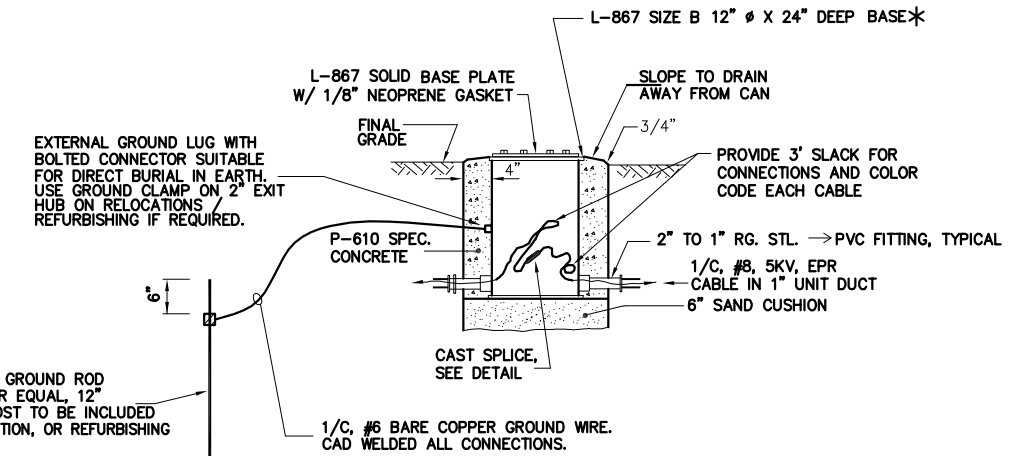
GENERAL ELECTRICAL NOTES:

- ALL EXCAVATION SHALL BE DONE VERY CAREFULLY. EXCAVATION BY HAND DIGGING SHALL BE REQUIRED AROUND ALL EXISTING DUCT BANKS, SPLICE CANS, MANHOLES, AND EXISTING CABLES. MANY EXISTING ACTIVE UNDERGROUND CABLES, WHOSE EXACT LOCATIONS CANNOT BE DETERMINED, ARE FOUND IN THE PROJECT AREA. IN ORDER TO AVOID EXISTING UNDERGROUND CABLES, THE CONTRACTOR SHALL CONNECT A THUMPER TO ALL EXISTING CIRCUITS AFTER WHICH THEY SHALL BE STAKED IN ALL AREAS REQUIRING TRENCHING OR EXCAVATION. CONTRACTOR SHALL ALSO NOTE THAT LOW VOLTAGE, FAA CABLES ALSO RUN UNDERGROUND THROUGHOUT THESE AREAS. ANY CABLE DAMAGED SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- A MINIMUM OF 3 FEET OF SLACK SHALL BE PROVIDED IN THE CABLES AT EACH TRANSFORMER, CONNECTOR, OR SPLICE POINT. ALL CABLE SPLICES SHALL OCCUR IN MANHOLES, LIGHT WELLS OR SPLICE CANS, UNLESS NOTED OTHERWISE.
- THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- ALL MANUFACTURERS FOR SUPPLYING AIRPORT LIGHTING EQUIPMENT SHALL APPEAR ON THE CURRENT FAA "APPROVED AIRPORT EQUIPMENT" LIST FOUND IN AC 150/5345-53C. THE EQUIPMENT SHALL COMPLY WITH THE APPLICABLE CURRENT FAA ADVISORY CIRCULAR LISTED IN THE FAA "APPROVED AIRPORT EQUIPMENT" LIST FOUND IN AC 150/5345-2 (AIRPORTS ELECTRONIC BULLETIN BOARD NUMBER 14).
- THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- IF THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT WHICH REQUIRES ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., BEYOND THAT SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, THEN THE COST FOR THE ADDITIONAL ITEMS SHALL BE INCLUDED TO THE CONTRACT UNIT PRICES.
- THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH THE EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC. OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES, STYLES, CLASSES, ETC. MAY BE FAA APPROVED.
- ALL CONCRETE FOR ELECTRICAL EQUIPMENT SHALL COMPLY WITH SPECIFICATION 610-STRUCTURAL PC CONCRETE 3500 PSI AT 28 DAYS, AIR ENTRAINED CONCRETE MIX SHALL BE USED.
- BASE MOUNTED BREAKABLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES SHALL NOT BE ACCEPTABLE. IT SHALL HAVE A 1/4" DIAMETER OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE CONNECTOR INTO THE BASE.
- THE ELEVATION OF THE BREAKABLE COUPLING GROOVE SHALL NOT EXCEED 1 1/2" ABOVE THE EDGE OF THE COVER IN THE CASE OF A BASE MOUNTED COUPLING.
- ALL PERMANENT CABLE SPLICES SHALL OCCUR IN MANHOLES, LIGHT WELLS, OR SPLICE CANS, UNLESS NOTED OTHERWISE.

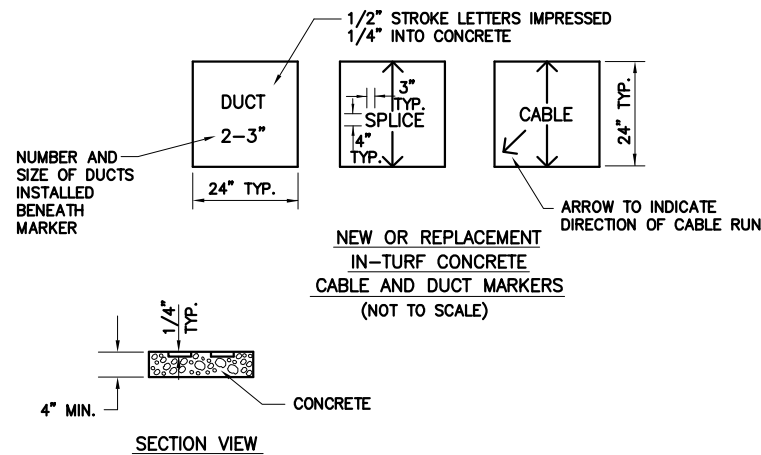


- NOTES :**
- SEE LIGHTING LAYOUT SHEET(S) FOR SPLICE TYPE
 - INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE

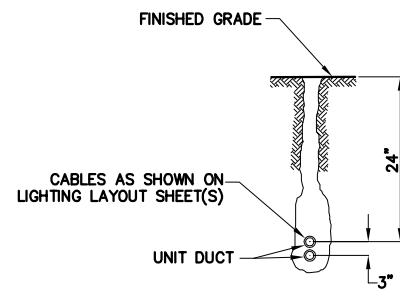
CABLE SPLICES
(NOT TO SCALE)



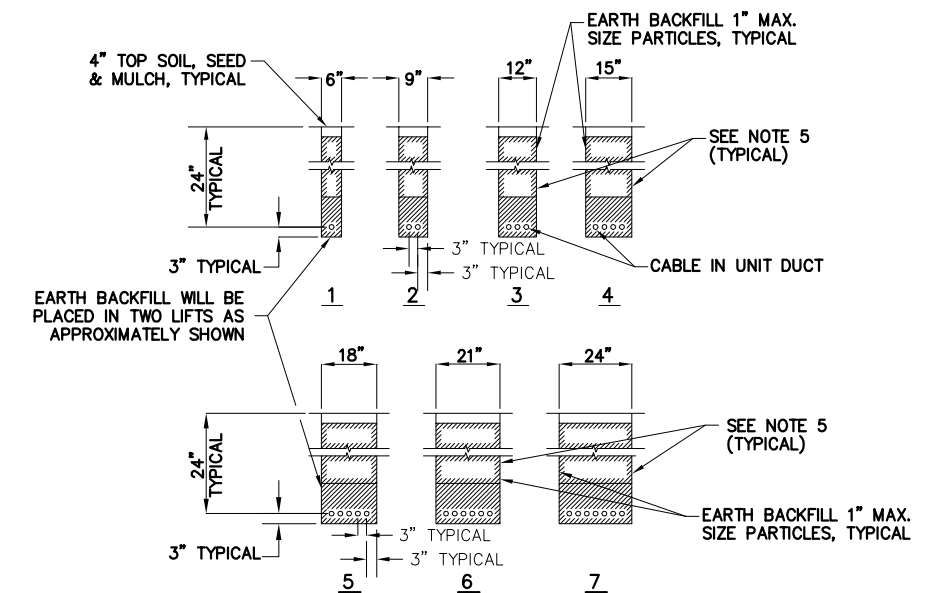
- NOTES :**
- * ORDER L-867 BASE WITH ADDITIONAL 2" CONDUIT HUB APPROXIMATELY 90" FROM MAIN ENTRANCE HUB WHERE SHOWN ON PLAN SHEETS.
 - SUPPLY & INSTALL NEW GROUNDING ROD WITH EACH INSTALLATION PER THIS DETAIL. INCLUDE GROUNDING ROD & WIRE COST IN CONTRACT UNIT PRICE.



- NOTES:**
- NEW MARKERS ARE REQUIRED ON ALL FAA CABLES. CABLE MARKERS SHALL BE INSTALLED BY THE CONTRACTOR AT ALL LOCATIONS SELECTED BY THE RESIDENT ENGINEER AND / OR THE FAA. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST THE ELEVATION OF EXISTING MARKERS AND / OR REPLACE EXISTING MARKERS DAMAGED DURING CONSTRUCTION.
 - COST OF CONCRETE MARKERS IS INCIDENTAL TO THE ASSOCIATED ITEMS OF DUCT OR CABLE.
 - EDGE EXPOSED CONCRETE WITH A 1/4" RADIUS TOOL.
 - WHERE ADDITIONAL SPACE TO FIT THE LEGEND IS REQUIRED, SOME OF THE FOLLOWING METHODS SHALL BE EMPLOYED.
 - REDUCE LETTER SIZE TO 3" HIGH, 2" WIDE.
 - INCREASE THE MARKER SIZE TO 30" X 30" MAX.
 - PROVIDE ADDITIONAL MARKERS PLACED SIDE BY SIDE.



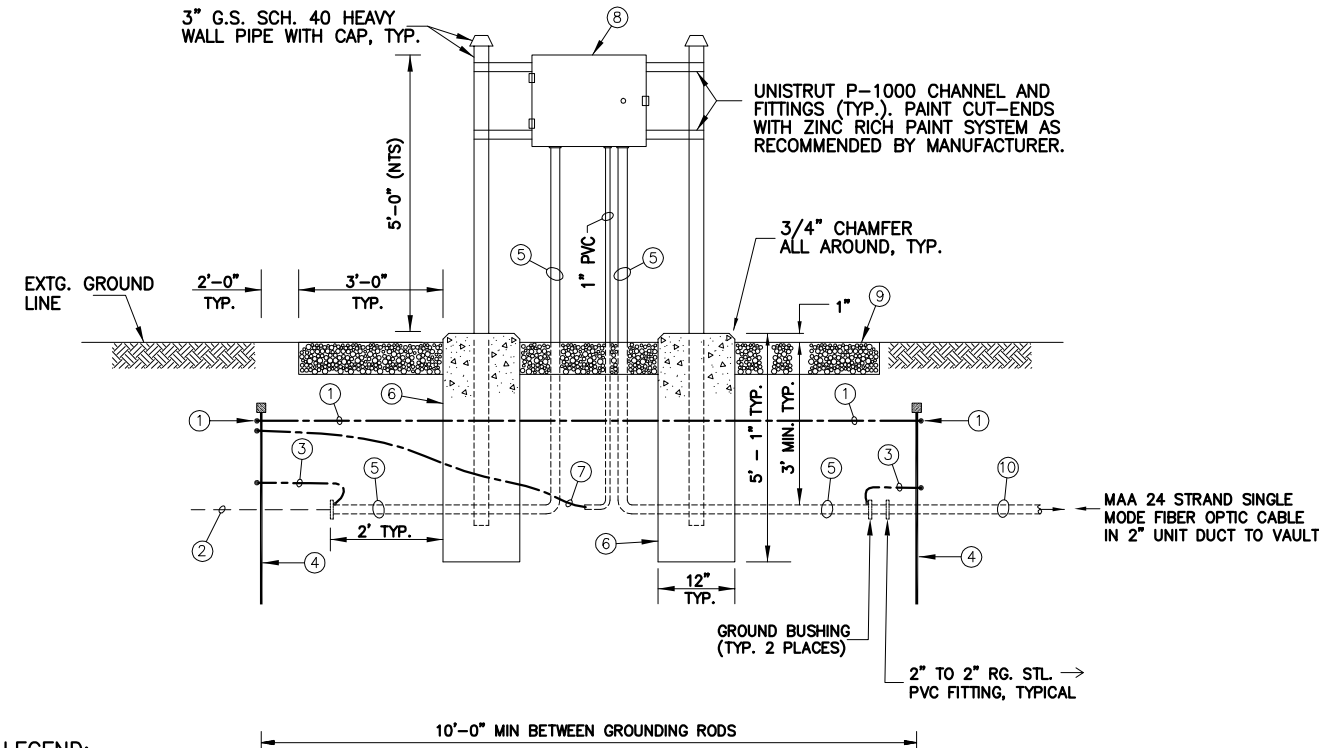
PLOVED CABLE
(NOT TO SCALE)



- CABLE TRENCH NOTES :**
- DETAIL NUMBERS INDICATE NO. OF CABLES.
 - TRENCHES WITH MORE THAN 7 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE; IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
 - DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 - ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH. RETURNING MATERIALS AND RATES MAY BE SHOWN ON THE PLANS.
 - INSTALL YELLOW PLASTIC WARNING RIBBON IN TRENCH 9" ABOVE CABLES (TYPICAL ALL TRENCHES).

CABLE TRENCHES (IN TURF)
(NOT TO SCALE)

ELEVATION VIEW
 MAA FIBER OPTIC CABLE
 JUNCTION ENCLOSURE (AR801645)
 (NOT TO SCALE)

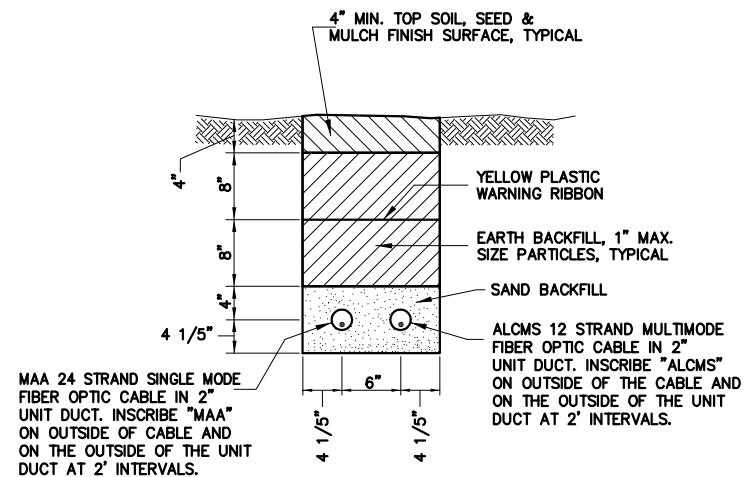


NUMBERED LEGEND:

- ① 1/C, #4/0 BARE COPPER PERIMETER GROUND WIRE ALL AROUND CRUSHED ROCK AREA. INSTALL GROUND WIRE AT 2' BELOW GROUND. CAD WELDED CONNECTIONS TO ALL GROUND RODS, GROUND BUSHINGS, ETC.
- ② FUTURE FIBER OPTIC CABLE BY OTHERS.
- ③ 1/C, #1/0 BARE COPPER GROUND WIRE. CADWELD CONNECTIONS ARE REQUIRED TO ALL GROUND RODS, GROUND BUSHINGS, ETC.
- ④ 3/4"x10' COPPER CLAD GROUND RODS 1'-6" MIN. COVER.
- ⑤ PROPOSED 2" G.S. STEEL CONDUIT WITH WIDE SWEEP ELBOW, GROUNDING BUSHING, AND RIGID STL. TO PVC FITTING.
- ⑥ PROPOSED P-610 SPEC. 12" DIA. CONCRETE FOUNDATION.
- ⑦ 1/C, #2 BARE COPPER GROUND WIRE IN 1" PVC.
- ⑧ PROPOSED FIBER OPTIC PATCH PANEL SHALL BE INSIDE A WATER TIGHT ELECTRICAL ENCLOSURE (WITH HINGED COVER, GASKET SEALING SURFACE, AND HASPS FOR SECURE PADLOCKING; HOFFMAN CSD24248SS OR APPROVED EQUAL). ENCLOSURE TO BE NEMA TYPE 4. A SECOND MAA WALL MOUNTED FO JUNCTION ENCLOSURE IS REQUIRED IN THE VAULT. INCLUDE COST FOR BOTH MAA FO JUNCTION ENCLOSURES IN THE CONTRACT ITEM AR801645 LUMP SUM PRICE.
- ⑨ CONTRACTOR SHALL REMOVE 6" OF TOPSOIL, COMPACT THE SUBGRADE, AND PLACED PROPOSED GEOTEXTILE FABRIC OVER SUBGRADE PRIOR TO PLACING PROPOSED 6" COMPACTED DEPTH OF IDOT CA-6 CRUSHED ROCK OVER EXCAVATED AREA.
- ⑩ MAA 24 STRAND SINGLE MODE FIBER OPTIC CABLE IN 2" UNIT DUCT.

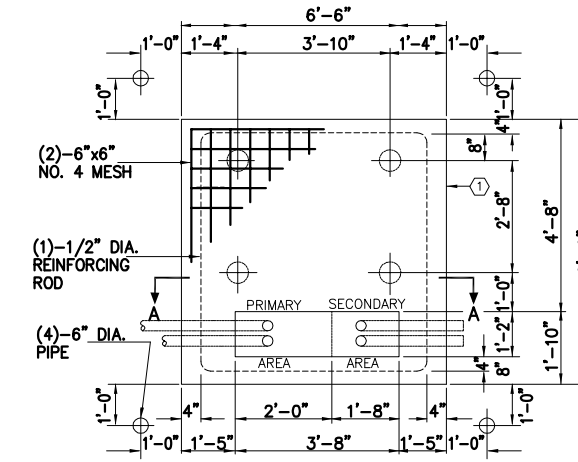
GENERAL NOTES :

- 1. SEE SHEET 55A FOR ADDITIONAL FIBER OPTIC CABLE & ENCLOSURE DETAILS.
- 2. THE COST OF WORK SHOWN IN THIS DETAIL SHALL BE INCLUDED IN CONTRACT ITEM AR801645.

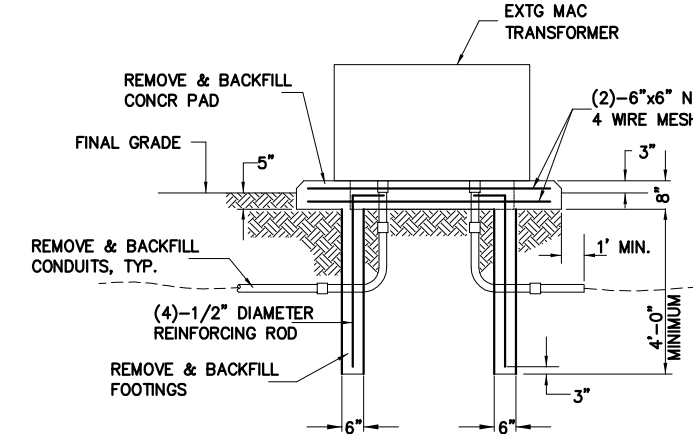


SEE SHEET 61 FOR
 CABLE TRENCH NOTES.

(A) FIBER OPTIC CABLES TRENCH DETAIL
 (ATCT / FO CABLE JUNCTION ENCLOSURE TO VAULT)
 (NOT TO SCALE)



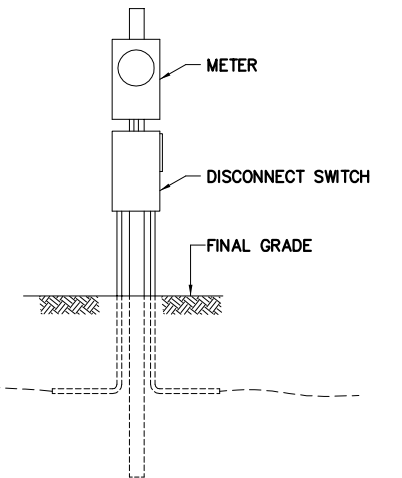
TOP VIEW



SECTION A-A

EXISTING CONCRETE TRANSFORMER
 PAD TO BE REMOVED

METER AND
 DISCONNECT SWITCH

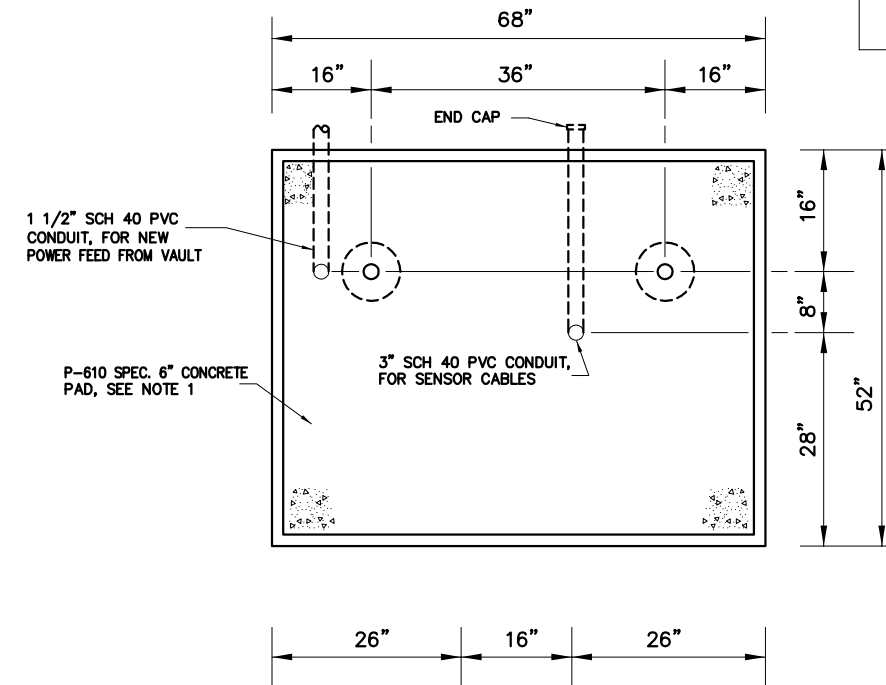


TRANSFORMER PAD REMOVAL NOTES :

- 1. BACKFILL VOIDS CREATED BY REMOVALS WITH COMPACTED SAND.
- 2. REMOVED ELECTRICAL EQUIPMENT SHALL BE TURNED OVER TO MAA.
- 3. THE CONTRACTOR SHALL DISPOSE OF REMOVED PCC FOUNDATIONS OFF OF AIRPORT PROPERTY.
- 4. REMOVAL INCLUDES TRANSFORMER PAD, CONDUITS, WIRES, DISCONNECT SWITCH, AND METER PEDESTAL.
- 5. THE CONTRACTOR SHALL COORDINATE THE REMOVAL WITH MIDAMERICAN ENERGY COMPANY.
- 6. THE COST OF WORK SHOWN IN THIS DETAIL SHALL BE INCLUDED IN CONTRACT ITEM AR109907-REMOVE TRANSFORMER.

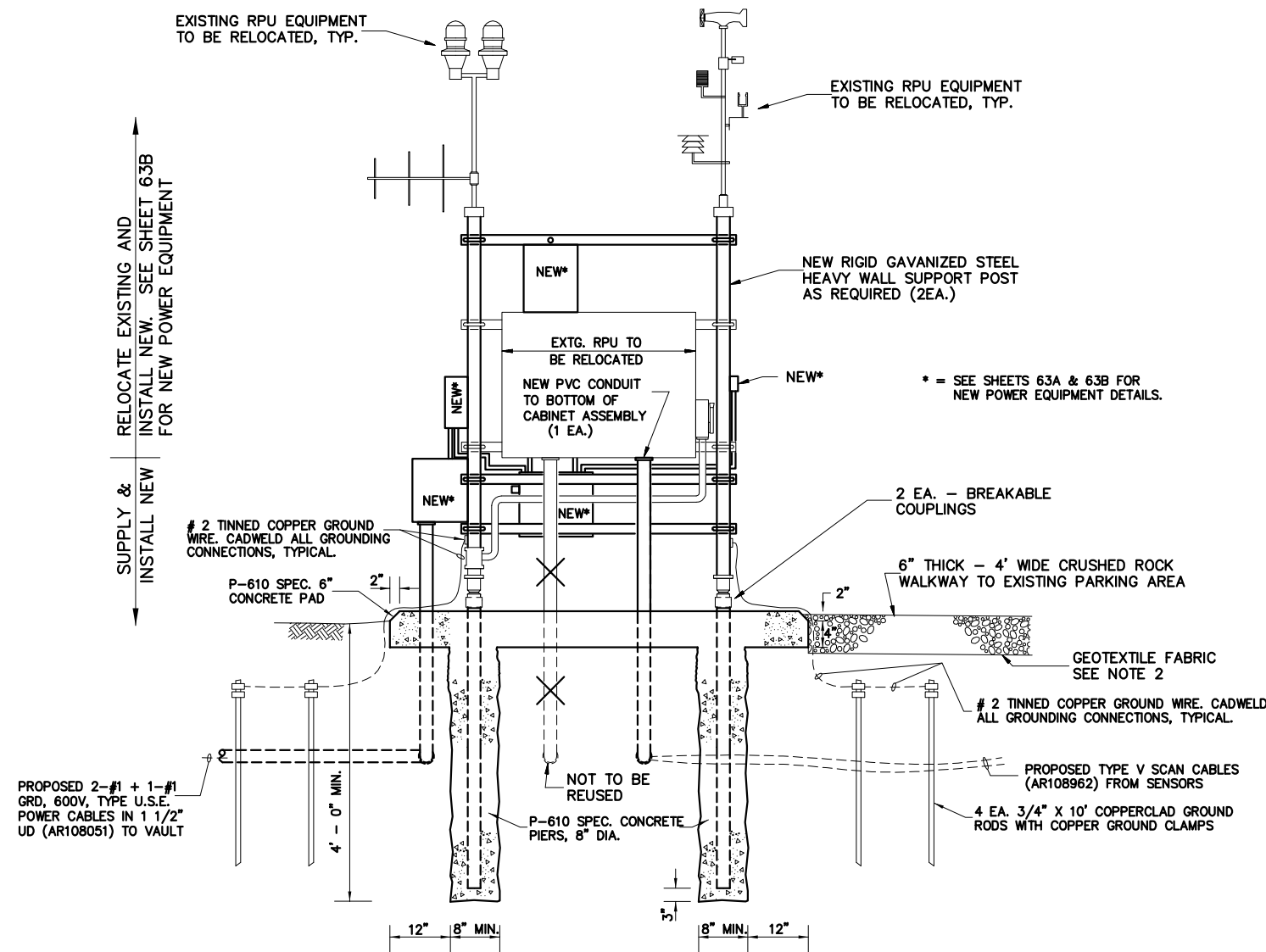
NOTES:

1. CONTRACTOR TO CONFIRM PAD DIMENSIONS IN THE FIELD AT THE TIME OF CONSTRUCTION. MATCH DIMENSIONS OF EXISTING PAD / EQUIPMENT.
2. CONTRACTOR TO SUPPLY / INSTALL NEW POWER EQUIPMENT, CONCRETE PAD, CONCRETE PIERS, PVC CONDUIT, RIGID STEEL CONDUIT, GROUND WIRE, GROUND, RODS, CRUSH ROCK, GEOTEX. FABRIC, SCAN CABLES, SPLICE CAN, ETC. CONTRACTOR TO REUSE EXISTING RPU EQUIPMENT.
3. THE CONTRACTOR SHALL SALVAGE THE EXISTING SCAN SYSTEM EQUIPMENT AS DETAILED IN THE CONSTRUCTION PLANS AND SPECIAL PROVISIONS. SALVAGED EQUIPMENT SHALL BE CLEANED AND REUSED.
4. THE RELOCATION OF THE EXISTING RPU EQUIPMENT (INCLUDING, BUT NOT LIMITED TO, CONCRETE PAD, CONCRETE PIERS, PVC CONDUIT, RIGID STEEL CONDUIT, FITTINGS, LOCATING EXTG. CABLES, REROUTING EXTG. CABLES, SPLICE CAN, CABLES, SPLICES, GROUNDING, WIRING, CABLE TRENCHING, REBAR, POWER EQUIPMENT, CRUSHED AGGREGATE ROCK, GEOTEXTILE FABRIC, TESTING, REMOVAL AND DISPOSAL OF EXISTING FOUNDATIONS, AND ALL OTHER ASSOCIATED WORK) SHALL BE INCLUDED AND PAID FOR UNDER CONTRACT ITEM "AR109962-RELOCATE ELECTRICAL EQUIPMENT" UNLESS NOTED OTHERWISE. ITEM "AR109962-RELOCATE ELECTRICAL EQUIPMENT" SHALL ALSO INCLUDE THE COST TO FURNISH AND INSTALL ONE (1) EACH - SCAN SYSTEM SUB-SURFACE TEMPERATURE PROBE.
5. SEE PLAN & PROFILE SHEETS FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL, UTILITIES, AND FIELD TILES.
6. SEE SHEETS 59 THROUGH 61 AND 63B FOR ELECTRICAL NOTES AND DETAILS.
7. THE COST OF ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN CONTRACT ITEM "AR109962-RELOCATE ELECTRICAL EQUIPMENT" UNLESS NOTED OTHERWISE.



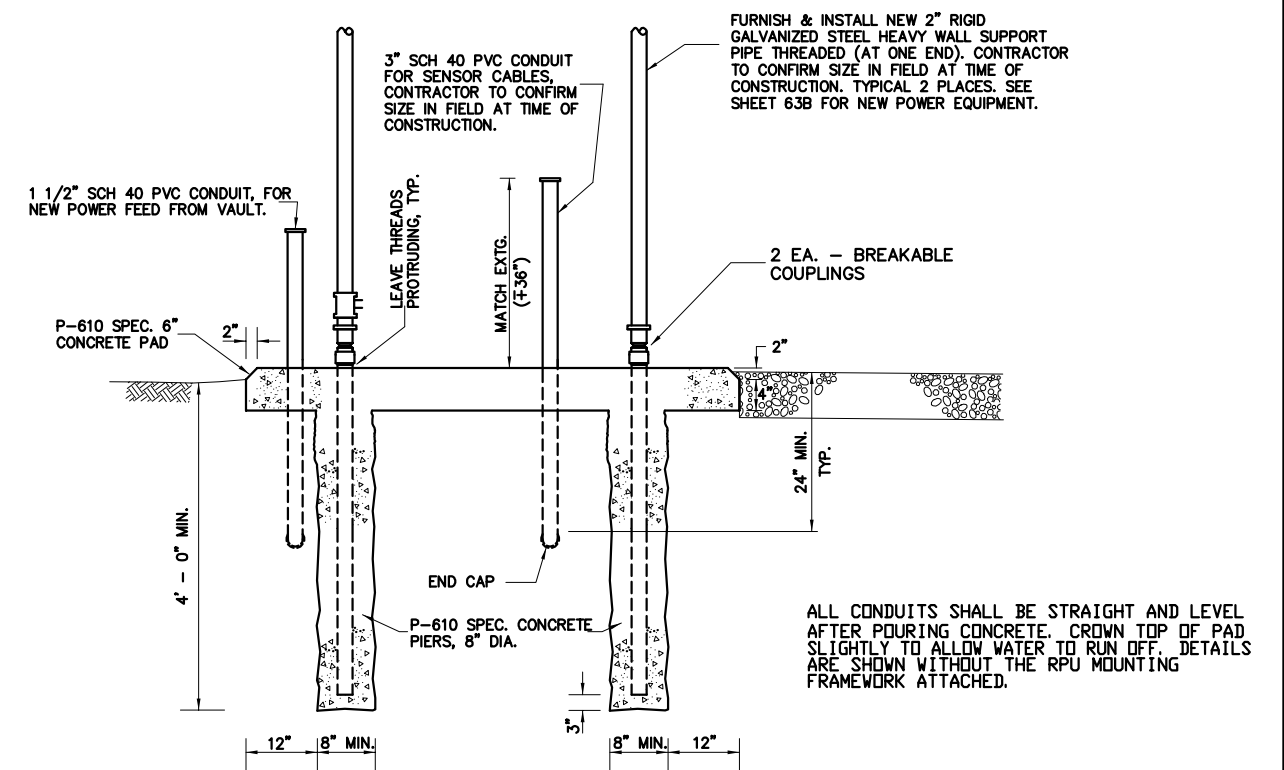
PROPOSED RPU CONCRETE PAD PLAN VIEW (LOOKING NORTH)

N. T. S.



DETAIL: EXISTING RPU

N. T. S.



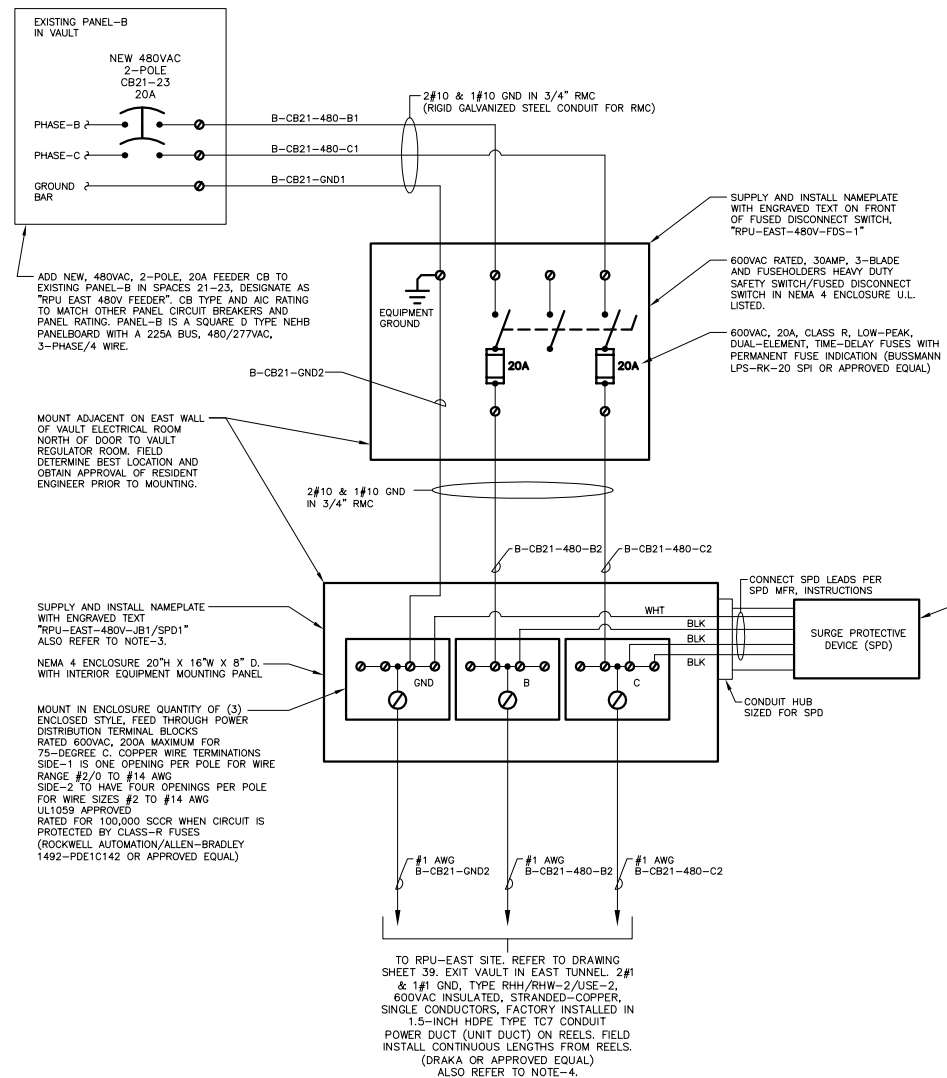
PROPOSED RPU CONCRETE PAD DETAILS

N. T. S.

RELOCATE ELECTRICAL EQUIPMENT (EAST SCAN RPU) DETAILS

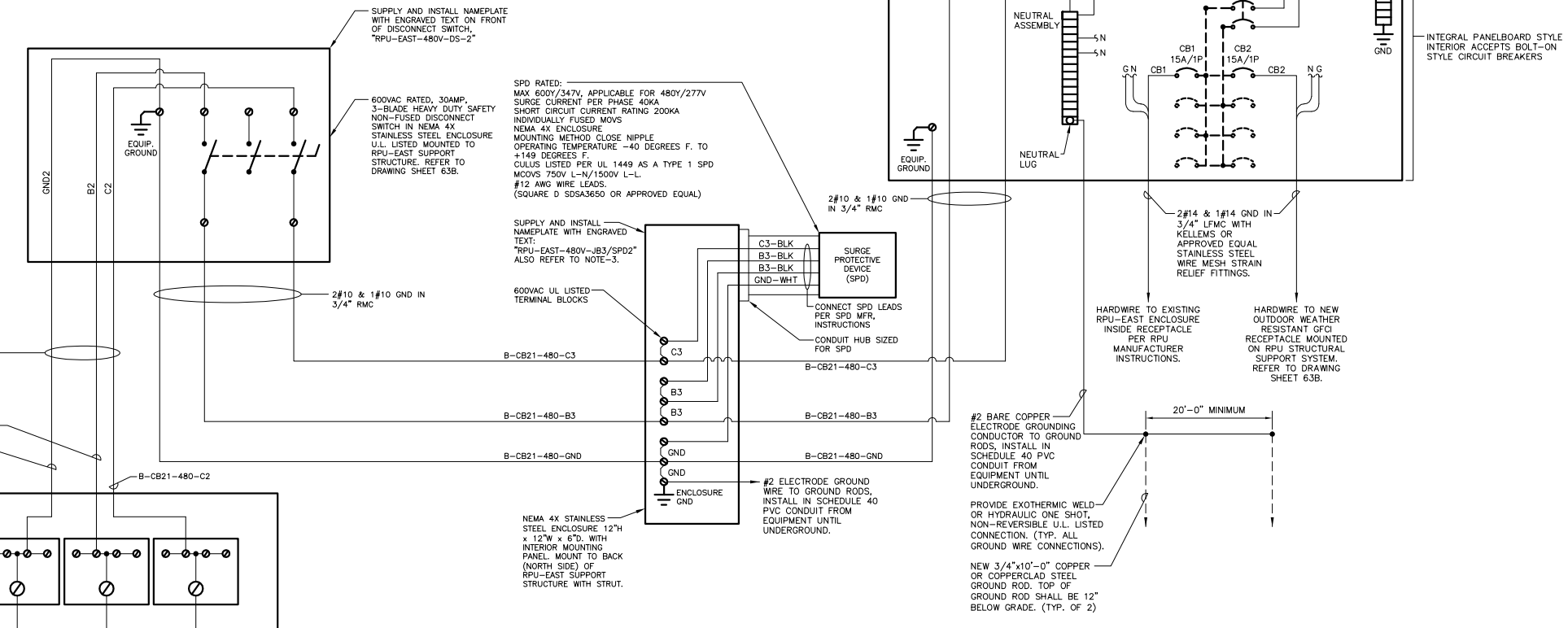
QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 63A OF 83

- SHEET 63A NOTES:
1. THE COST OF ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN CONTRACT ITEM AR109962, "RELOCATE ELECTRICAL EQUIPMENT" UNLESS NOTED OTHERWISE.
 2. THE #1 AWG POWER CABLE ROUTED IN UNIT DUCT BETWEEN THE EXISTING ELECTRICAL VAULT AND THE RELOCATED RPU-EAST UNIT SHALL BE INCLUDED IN CONTRACT ITEM AR108051, "POWER CABLE IN UNIT DUCT" UNLESS NOTED OTHERWISE.
 3. THE CONTRACTOR SHALL ADD AN ENGRAVED NAMEPLATE WITH TEXT "DANGER 480VAC" TO ALL JUNCTION BOX FRONTS THAT CONTAIN 480VAC POWER WIRING IN ADDITION TO ENGRAVING THE TAG NAME OF THE 480V DISCONNECT SWITCH TO TURN-OFF TO DE-ENERGIZE THE JUNCTION BOX.
 4. THE #1 AWG WIRING IS BASED ON A 4.335 FOOT DISTANCE FOR A SKVA TRANSFORMER FROM THE VAULT TO THE RPU SITE. CONTRACTOR TO FIELD MEASURE CONDUCTOR LENGTH REQUIRED.



1 RPU-EAST - NEW 480VAC POWER FEEDER AT EXISTING ELECTRICAL VAULT WIRING DIAGRAM

NO SCALE

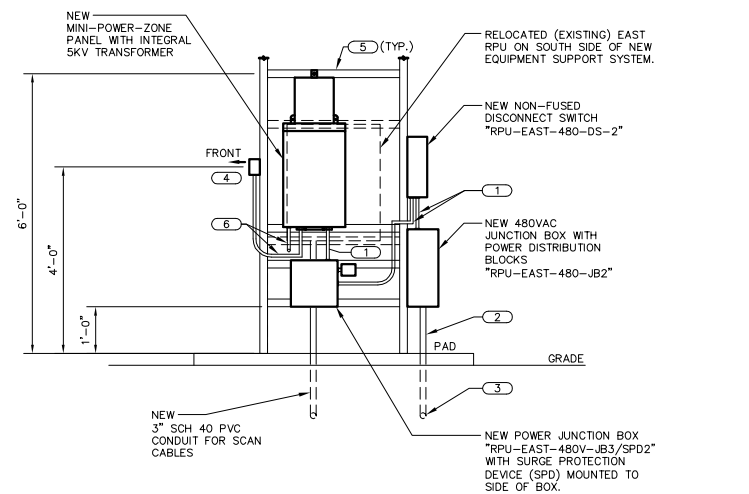


2 NEW 480VAC POWER FEEDER AND POWER DISTRIBUTION AT RELOCATED RPU-EAST LOCATION WIRING DIAGRAM

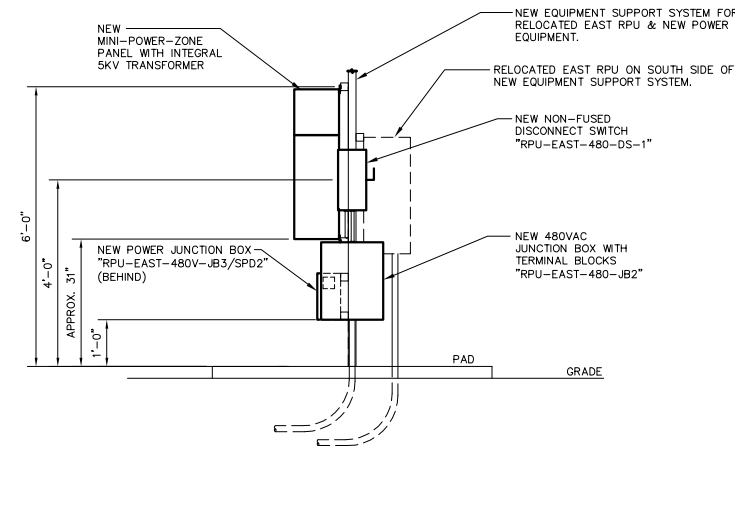
NO SCALE

UNDERGROUND RPU-EAST POWER CIRCUIT EXITS GROUND AT RPU SITE. REFER TO DRAWING SHEET 39. EXIT VAULT IN EAST TUNNEL. 2#1 & 1#1 GND, TYPE RHH/RHW-2/JUSE-2, 600VAC INSULATED, STRANDED-COPPER, SINGLE CONDUCTORS, FACTORY INSTALLED IN 1.5-INCH HDPE TYPE TC7 CONDUIT POWER DUCT (UNIT DUCT) ON REELS. FIELD INSTALL CONTINUOUS LENGTHS FROM REELS. (DRAKA OR APPROVED EQUAL)

G:\airport\A10T009-Design RnvY Guard Lights\KJWW.dwg, 5/17/2013 10:53:35 AM, jefm



ELEVATION - FRONT (LOOKING SOUTH)
 SCALE: NONE



ELEVATION - SIDE (LOOKING EAST)
 SCALE: NONE

**ELEVATION PLANS - RELOCATED RPU-EAST
 EQUIPMENT SUPPORT STRUCTURE**

SCALE: NONE

NOTES:

- REFER TO DRAWING SHEET 63A FOR RPU-EAST POWER WIRING FOR ADDITIONAL INFORMATION.

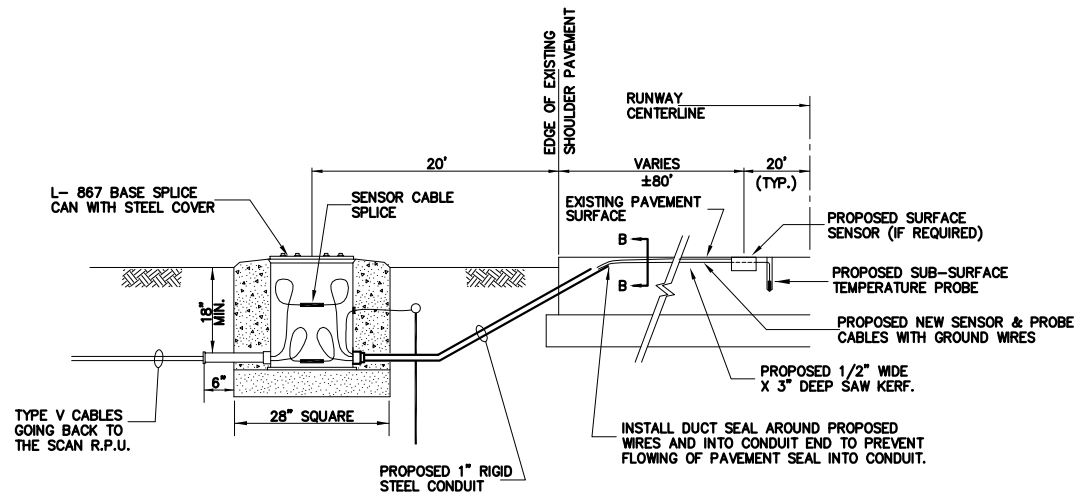
KEYNOTES:

- PROVIDE 3/4" RMC CONDUIT, PROVIDE WITH WEATHER TIGHT HUBS AT BOTH ENDS OF CONDUIT.
- PROVIDE 1 1/2" SCHEDULE 40 PVC CONDUIT TO COMPLETE POWER CONNECTION FROM UNDERGROUND THROUGH PAD TO JUNCTION BOX.
- 1 1/2" UNDERGROUND UNIT DUCT FROM EXISTING ELECTRICAL VAULT. REFER TO DRAWING SHEETS 31, 33, 34, 39, AND 40.
- PROVIDE INDUSTRIAL GRADE RECEPTACLE, GROUND FAULT DUPLEX, WEATHER RESISTANT, WEATHERPROOF COVERPLATE, 125 VOLT, 20 AMP, 3-WIRE GROUNDING TYPE, NEMA 5-20R, TEST AND RESET BUTTONS IN IMPACT RESISTANT THERMOPLASTIC FACE, NEMA 3R RATED WHILE IN USE, CAST ALUMINUM, NON-LOCKING, STANDARD DEPTH, VERTICAL MOUNT, HUBBELL GFR5362BKTR/WP826 OR APPROVED EQUAL.
- PROVIDE NEW 316 STAINLESS STEEL U-CHANNEL STRUT SUPPORT(S) AS REQUIRED FOR MOUNTING OF NEW ELECTRICAL EQUIPMENT TO RPU-EAST SUPPORT RACK SYSTEM (COOPER B-LINE OR APPROVED EQUAL).
- PROVIDE 3/4" LMC CONDUIT WITH KELLEMS OR APPROVED EQUAL STAINLESS STEEL WIRE MESH STRAIN RELIEF FITTINGS.

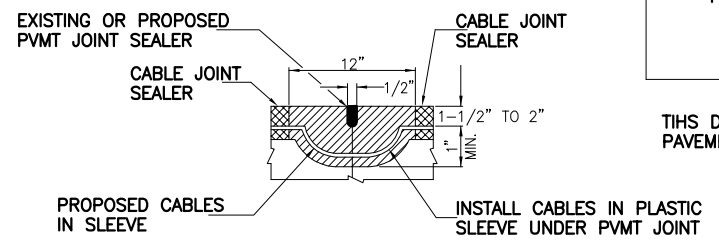
RPU POWER / RELOCATION GENERAL NOTE:

THE COSTS FOR ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN THE CONTRACT ITEM 'AR109962-RELOCATE ELECTRICAL EQUIPMENT' LUMP SUM PRICE UNLESS NOTED OTHERWISE.

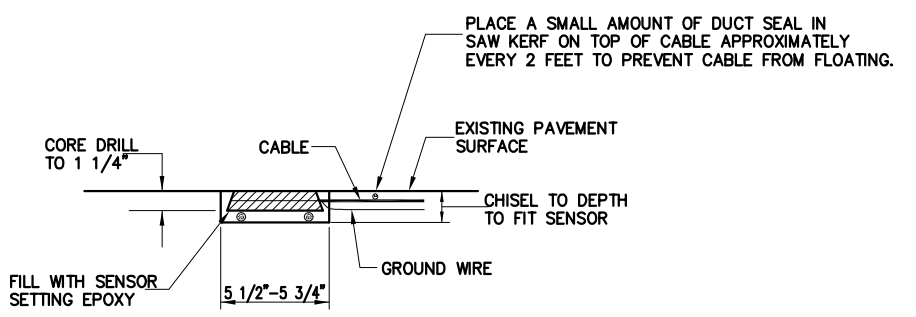
THIS DETAIL ALSO APPLIES TO THE RUNWAY
 PAVEMENT / SHOULDER PAVEMENT JOINT.



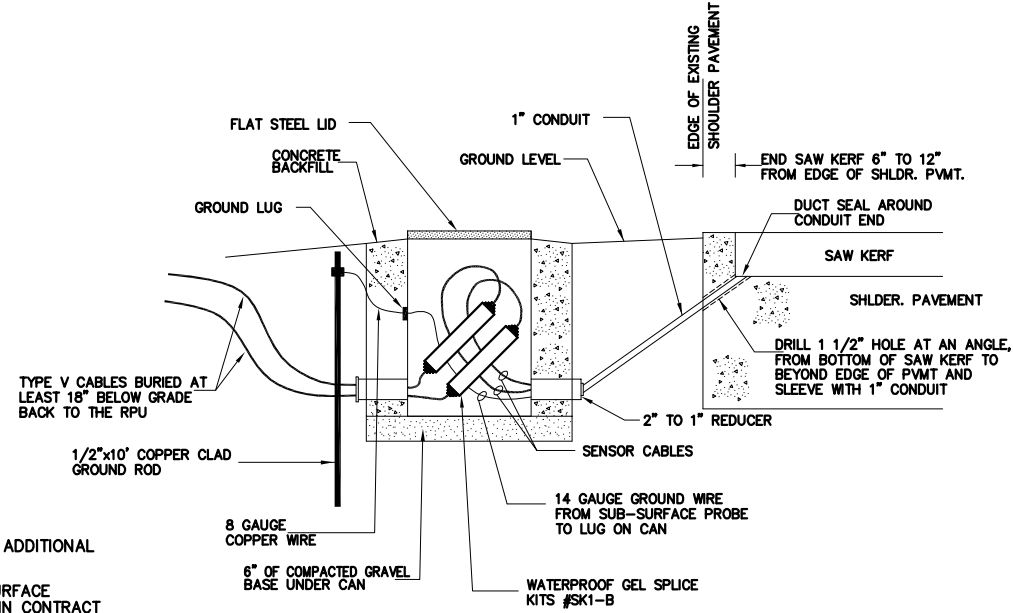
PROPOSED SUB-SURFACE TEMPERATURE PROBE AND SENSOR CABLE INSTALLATION PROFILE VIEW



SAW KERF AT PAVEMENT JOINT INTERSECTION

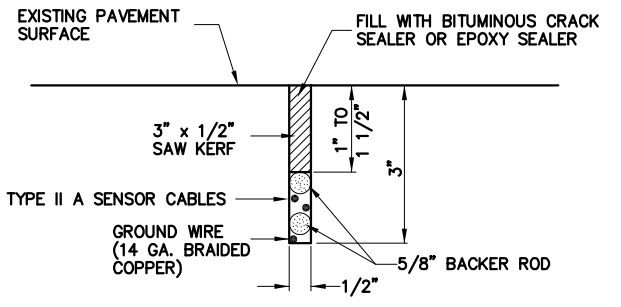


SECTION A-A

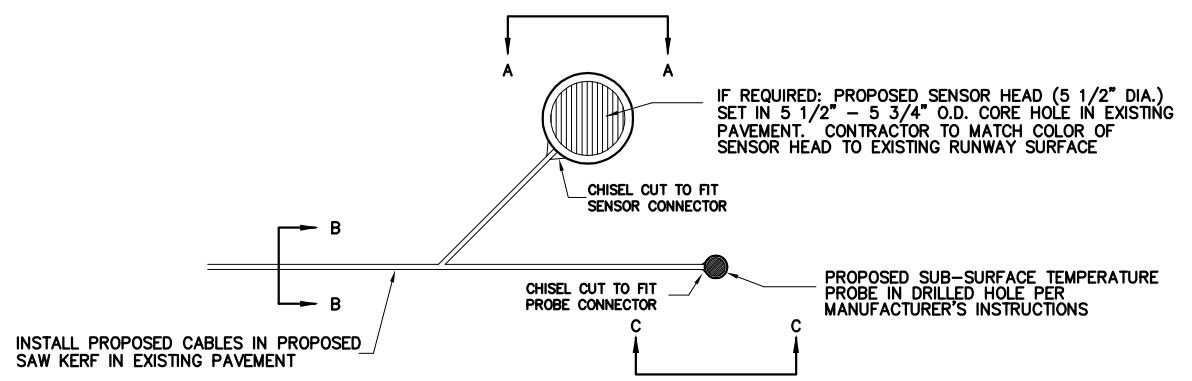


SCAN SYSTEM SPLICE CAN DETAILS

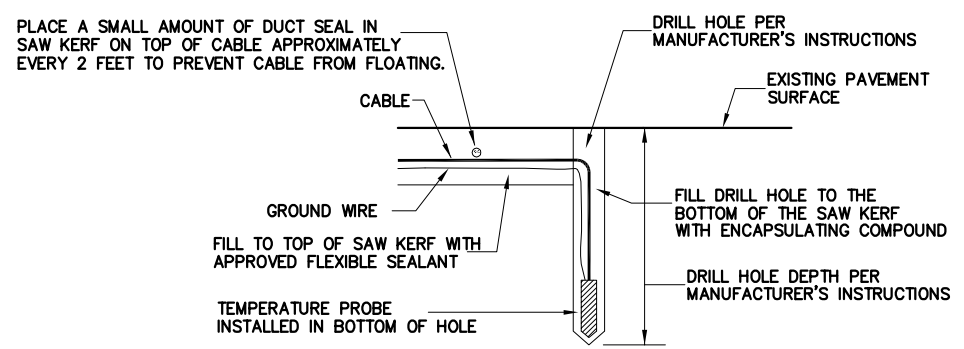
- NOTES :
1. SEE MANUFACTURER'S INSTRUCTIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
 2. FURNISH AND INSTALL ONE (1) NEW SUB-SURFACE TEMPERATURE PROBE (TP3). INCLUDE COST IN CONTRACT ITEM AR109962-RELOCATE ELECTRICAL EQUIPMENT.
 3. THE COSTS OF ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN CONTRACT ITEM AR109962-RELOCATE ELECTRICAL EQUIPMENT. THE TYPE V CABLE BETWEEN THE SPLICE CAN AND THE RPU WILL BE MEASURED AND PAID FOR UNDER CONTRACT ITEM AR108692 - REPLACE CABLE.



SECTION B-B



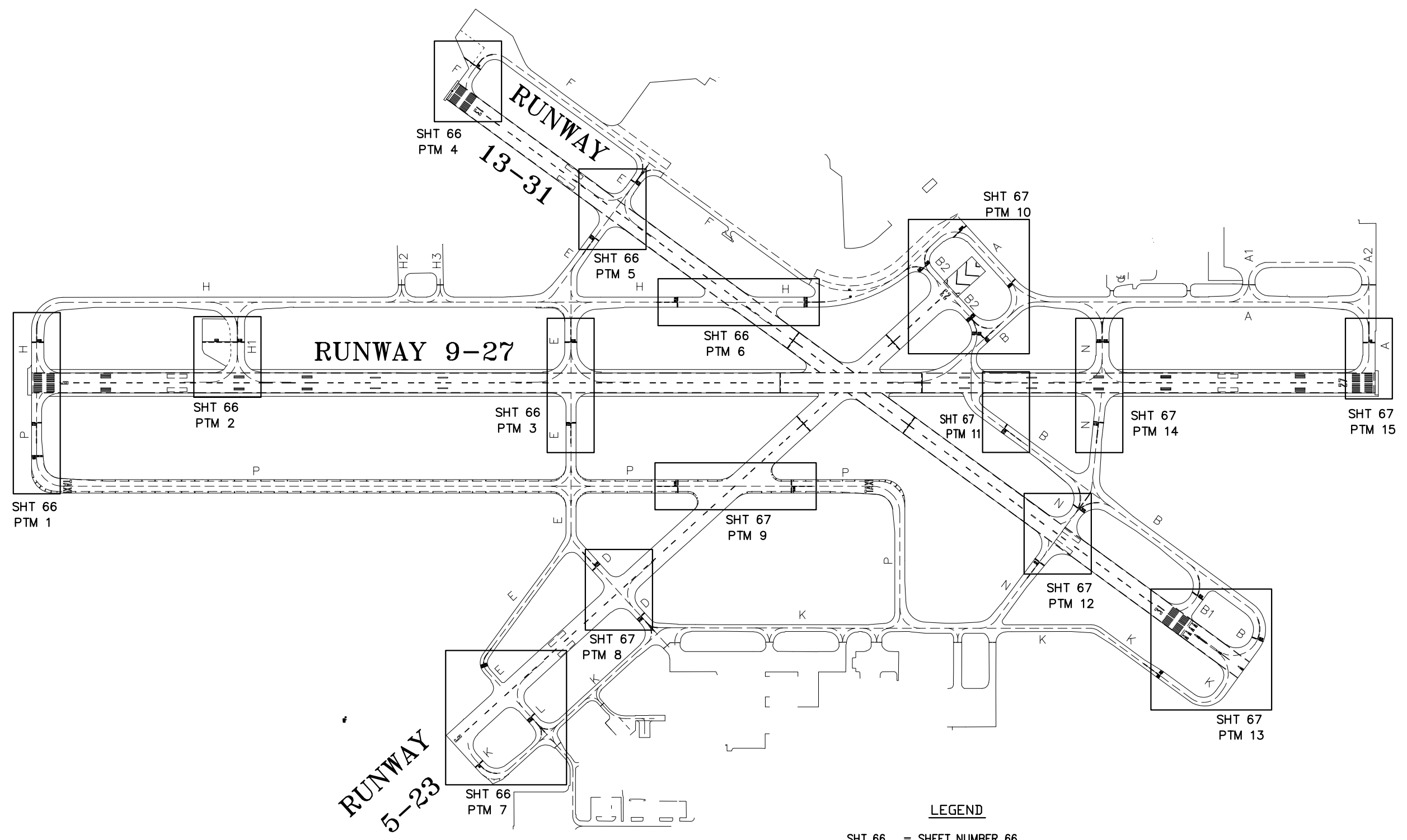
TYPICAL SENSOR HEAD / TEMPERATURE PROBE AND CABLE INSTALLATION DETAIL



SECTION C-C

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QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 65 OF 83



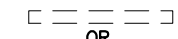
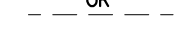

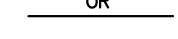
LEGEND
SHT 66 = SHEET NUMBER 66
PTM1 = PTM AREA 1 PLAN

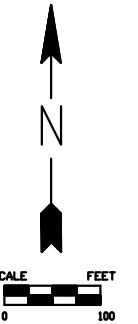
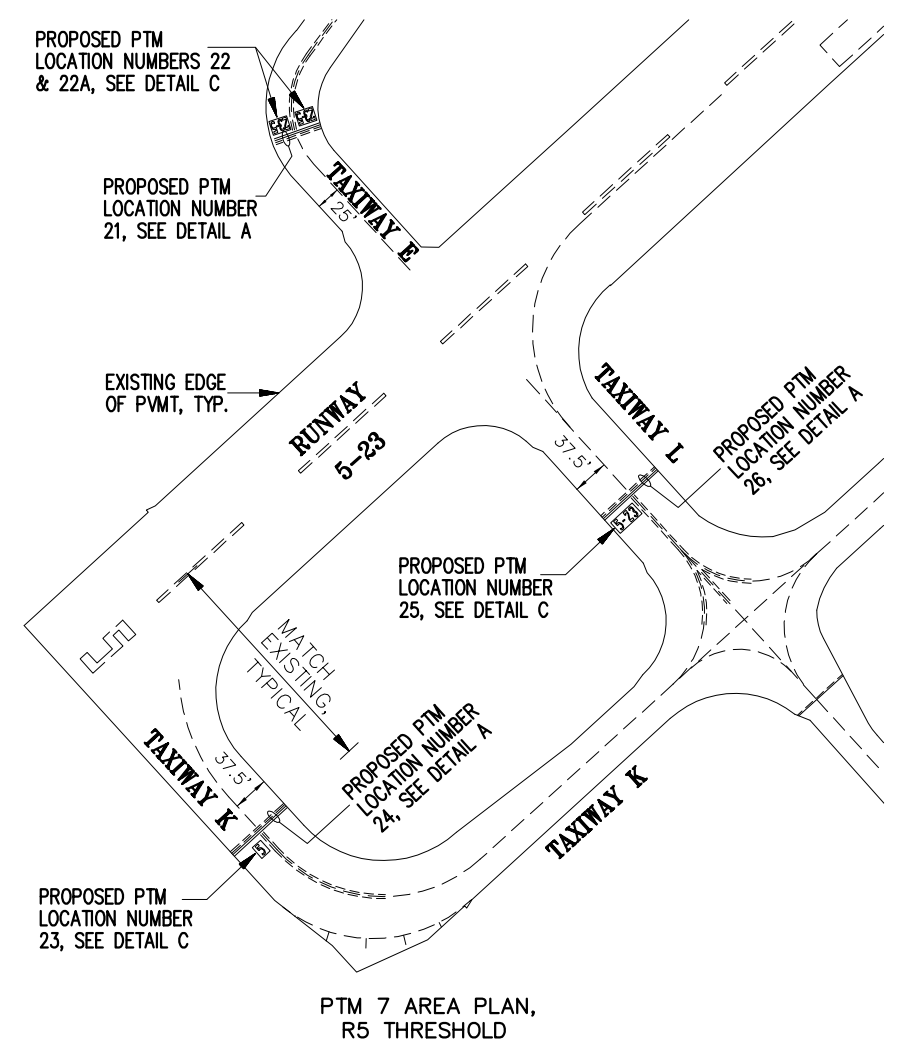
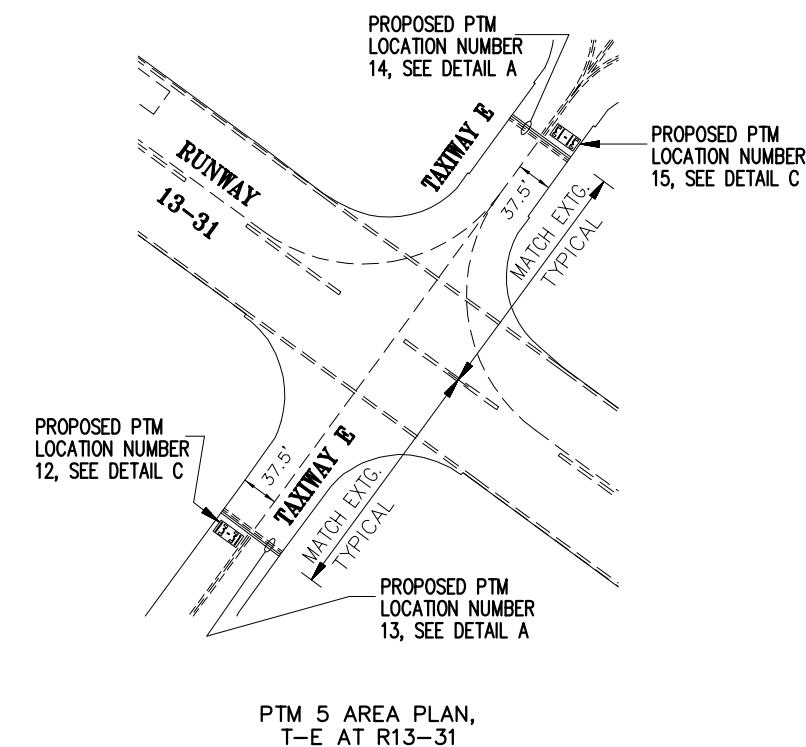
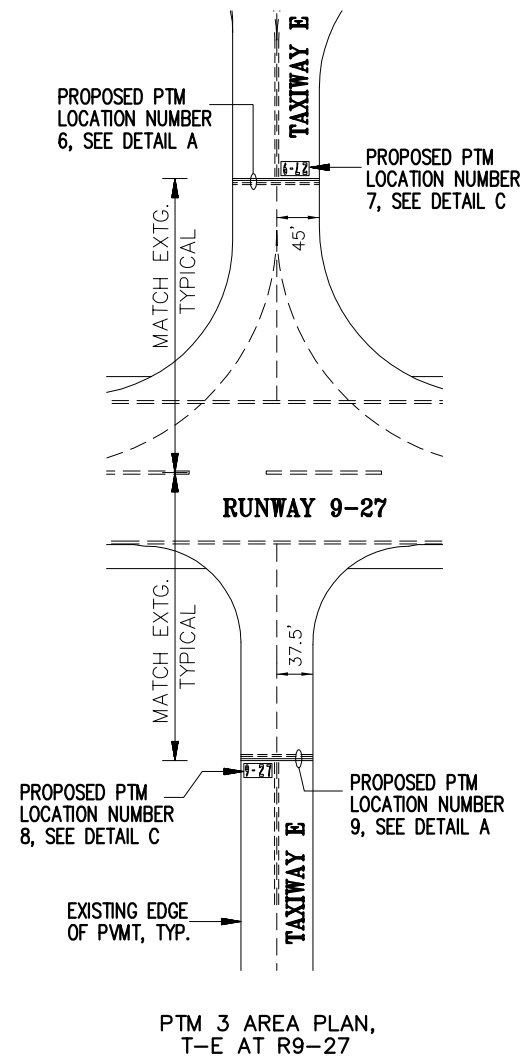
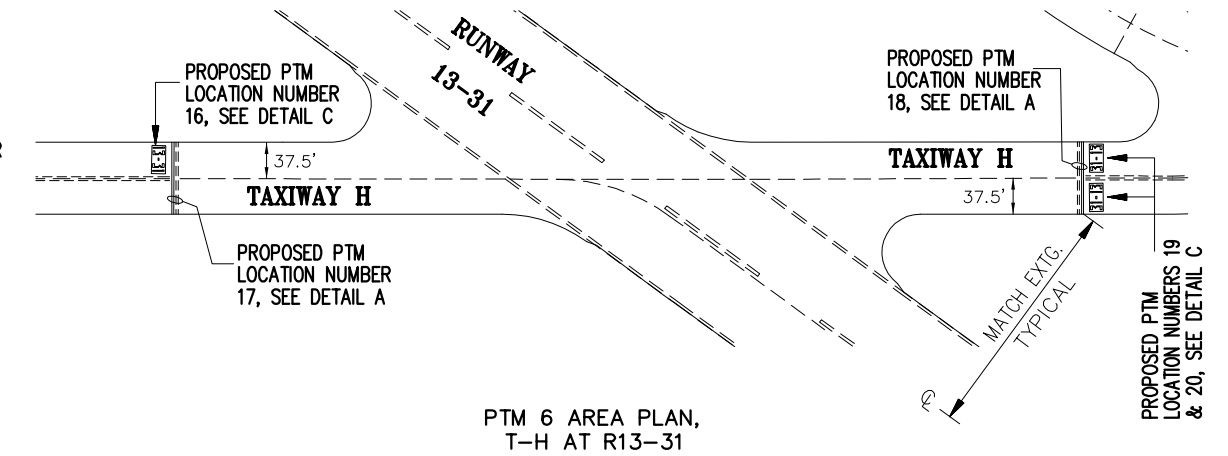
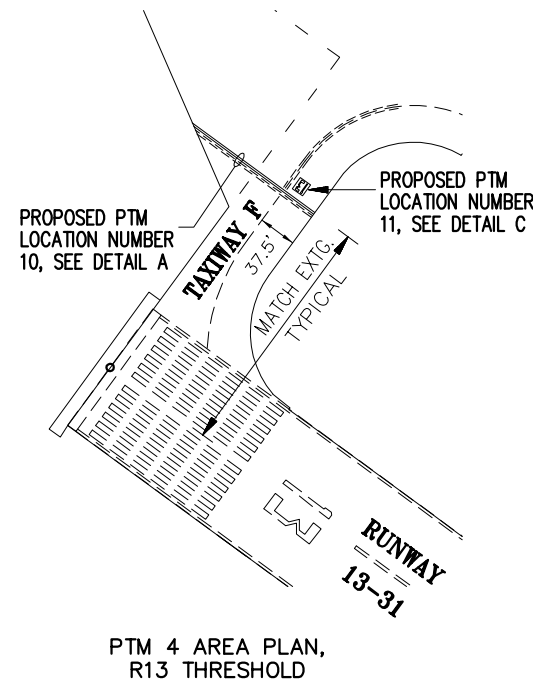
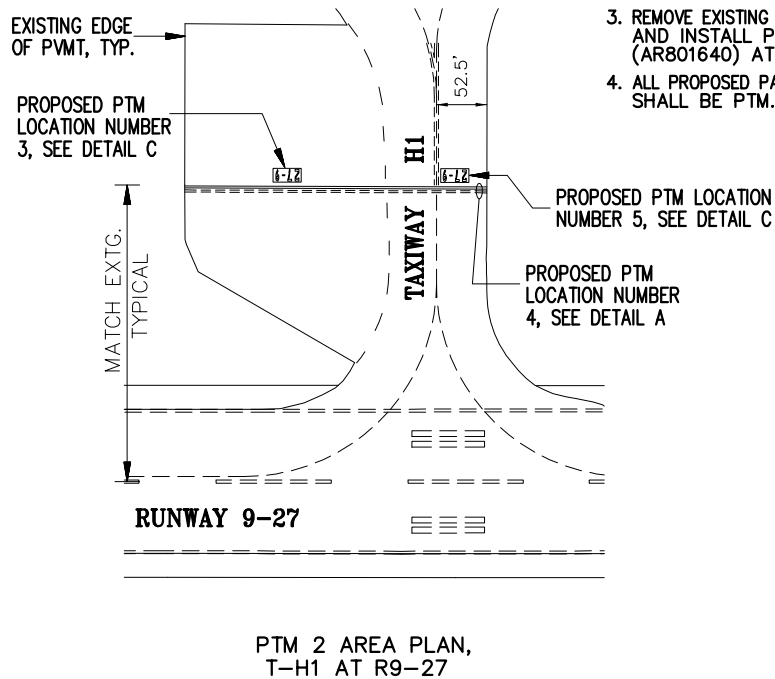
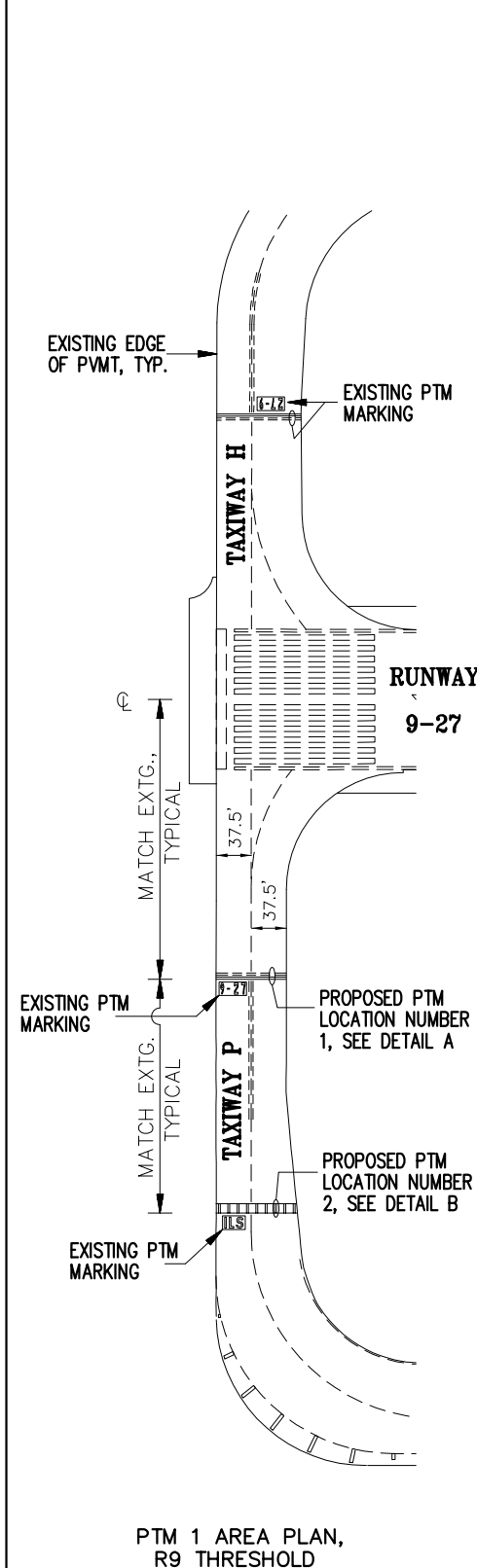
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NOTES:

1. SEE SHEET 68 FOR THERMOPLASTIC GENERAL NOTES.
2. SEE SHEETS 68 AND 69 FOR DETAILS.
3. REMOVE EXISTING PAINTED PAVEMENT MARKING (AR620900) AND INSTALL PROPOSED PTM PAVEMENT MARKING (AR801640) AT EACH LOCATION.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PTM.

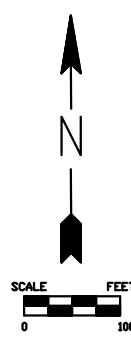
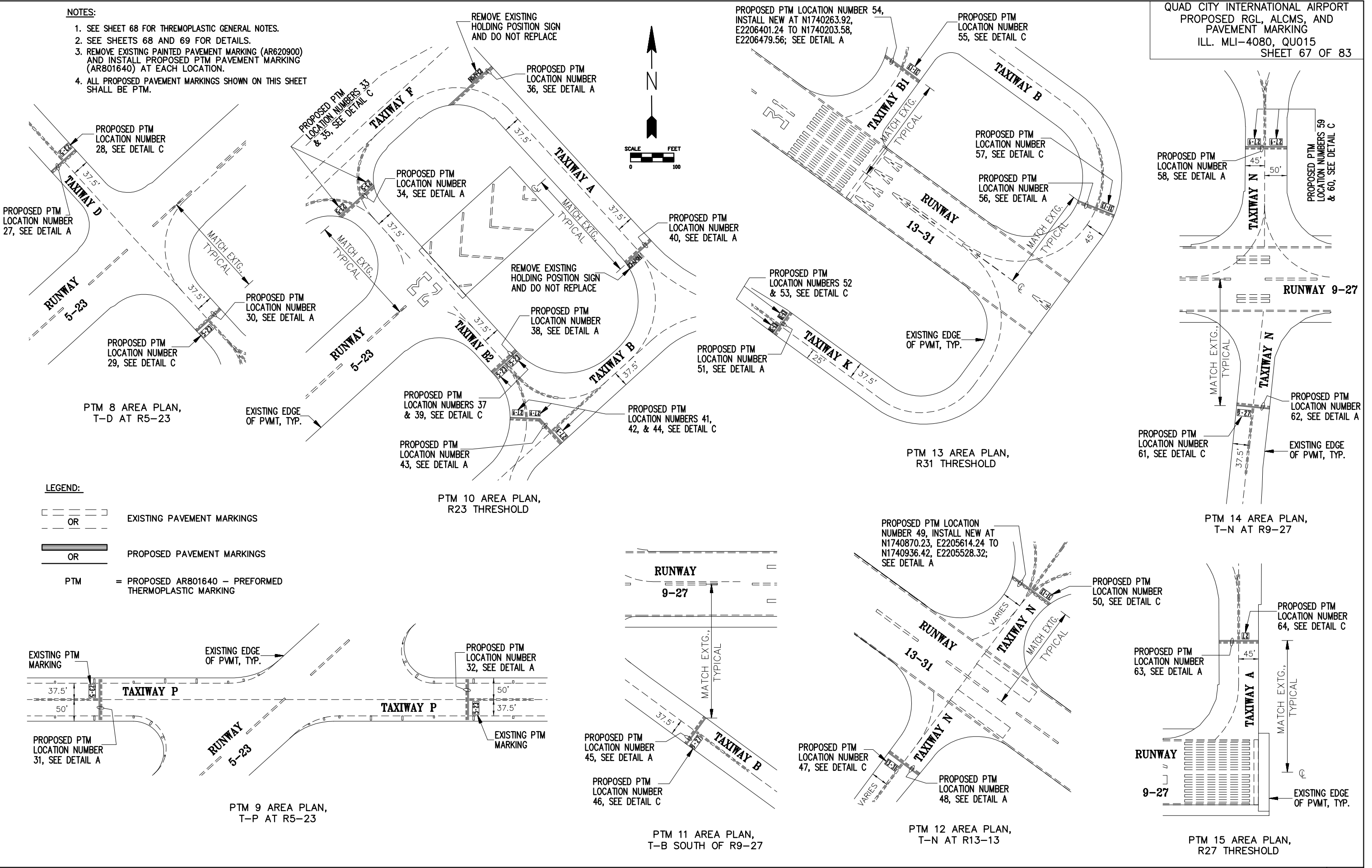
LEGEND:

-  OR  EXISTING PAVEMENT MARKINGS
-  OR  PROPOSED PAVEMENT MARKINGS
- PTM = PROPOSED AR801640 - PREFORMED THERMOPLASTIC MARKING



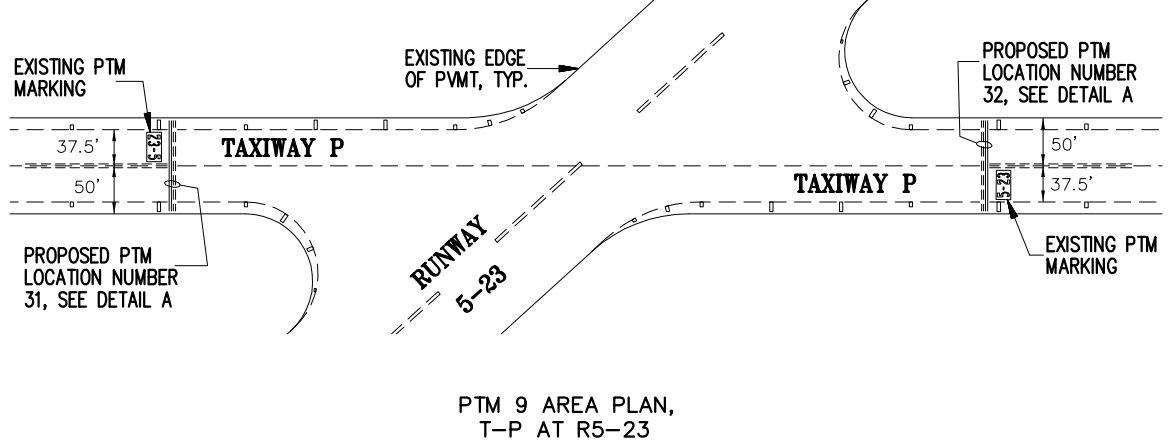
NOTES:

1. SEE SHEET 68 FOR THERMOPLASTIC GENERAL NOTES.
2. SEE SHEETS 68 AND 69 FOR DETAILS.
3. REMOVE EXISTING PAINTED PAVEMENT MARKING (AR620900) AND INSTALL PROPOSED PTM PAVEMENT MARKING (AR801640) AT EACH LOCATION.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PTM.

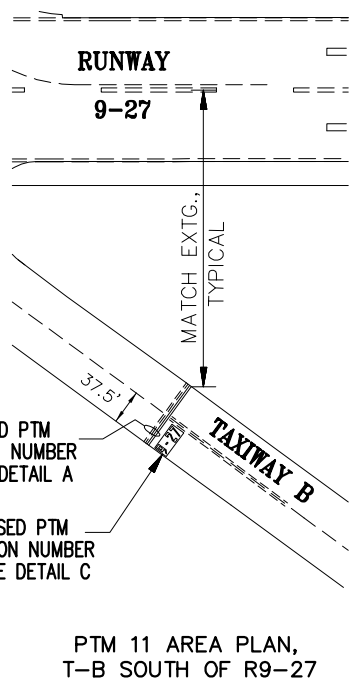


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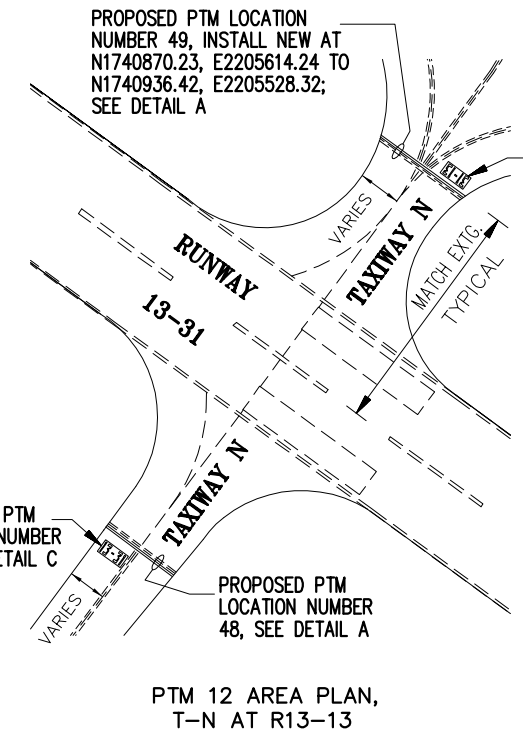
- EXISTING PAVEMENT MARKINGS
- OR
- PROPOSED PAVEMENT MARKINGS
- OR
- PTM = PROPOSED AR801640 - PREFORMED THERMOPLASTIC MARKING



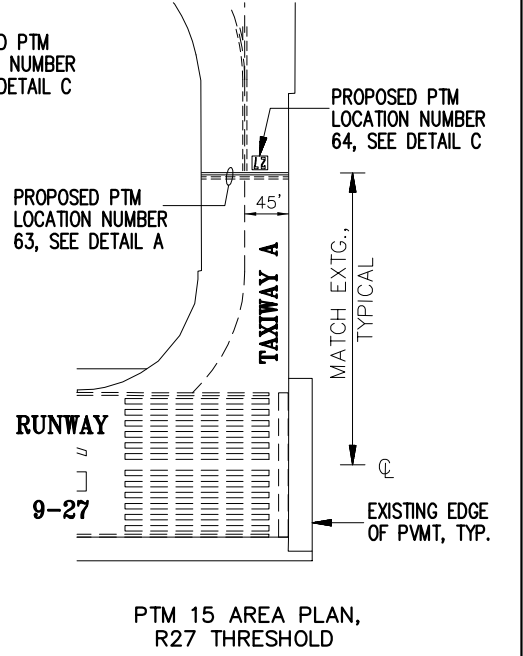
PTM 10 AREA PLAN, R23 THRESHOLD



PTM 13 AREA PLAN, R31 THRESHOLD

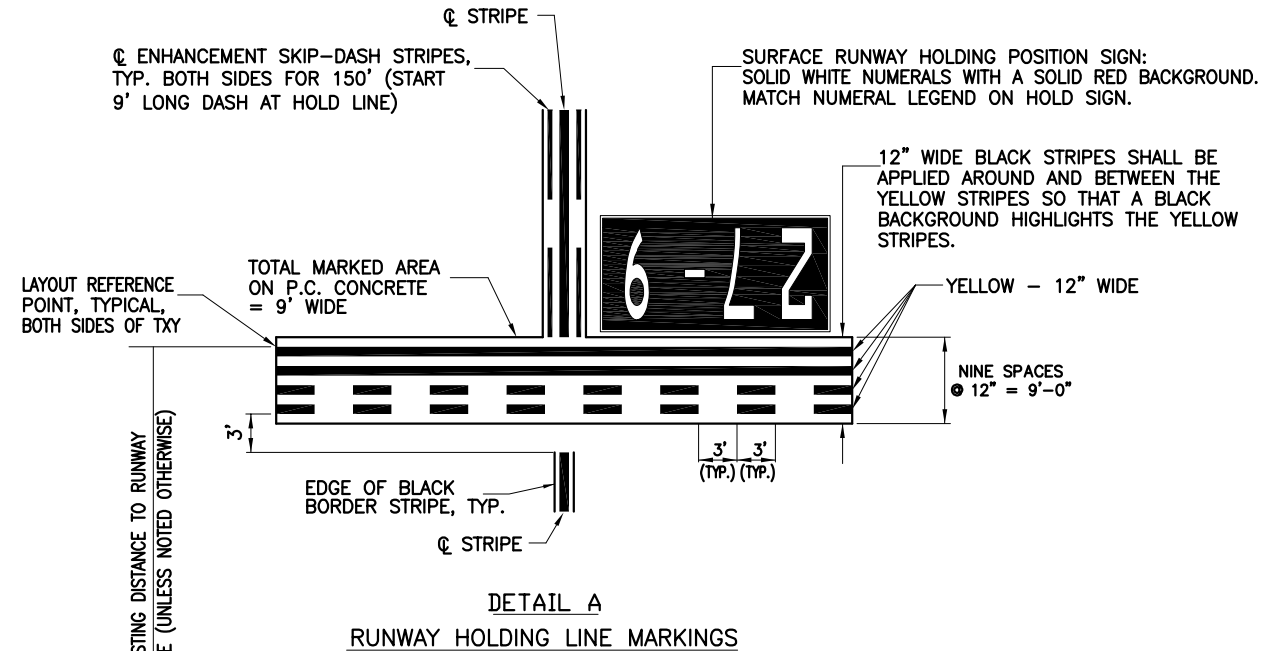


PTM 14 AREA PLAN, T-N AT R9-27

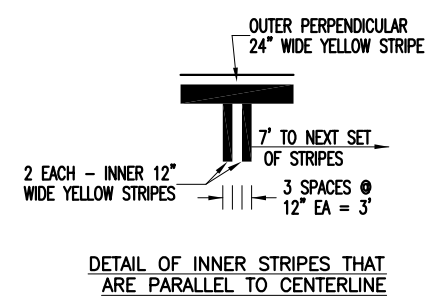
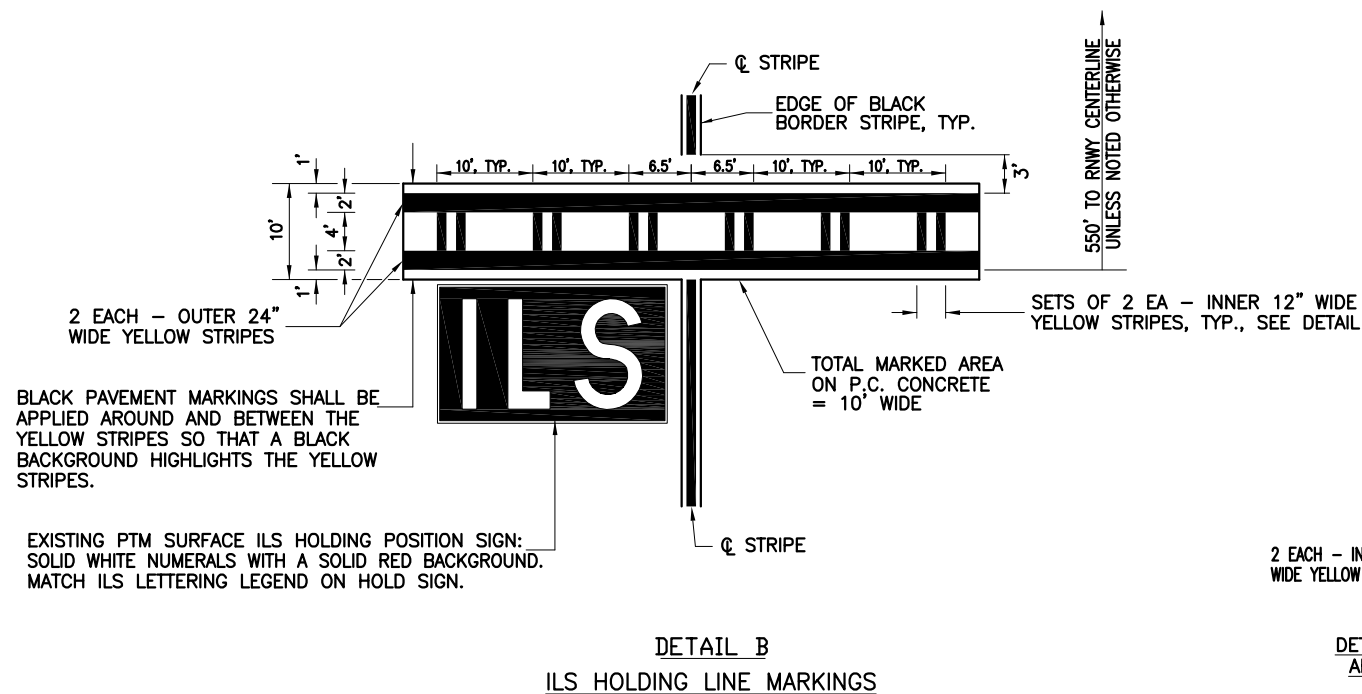


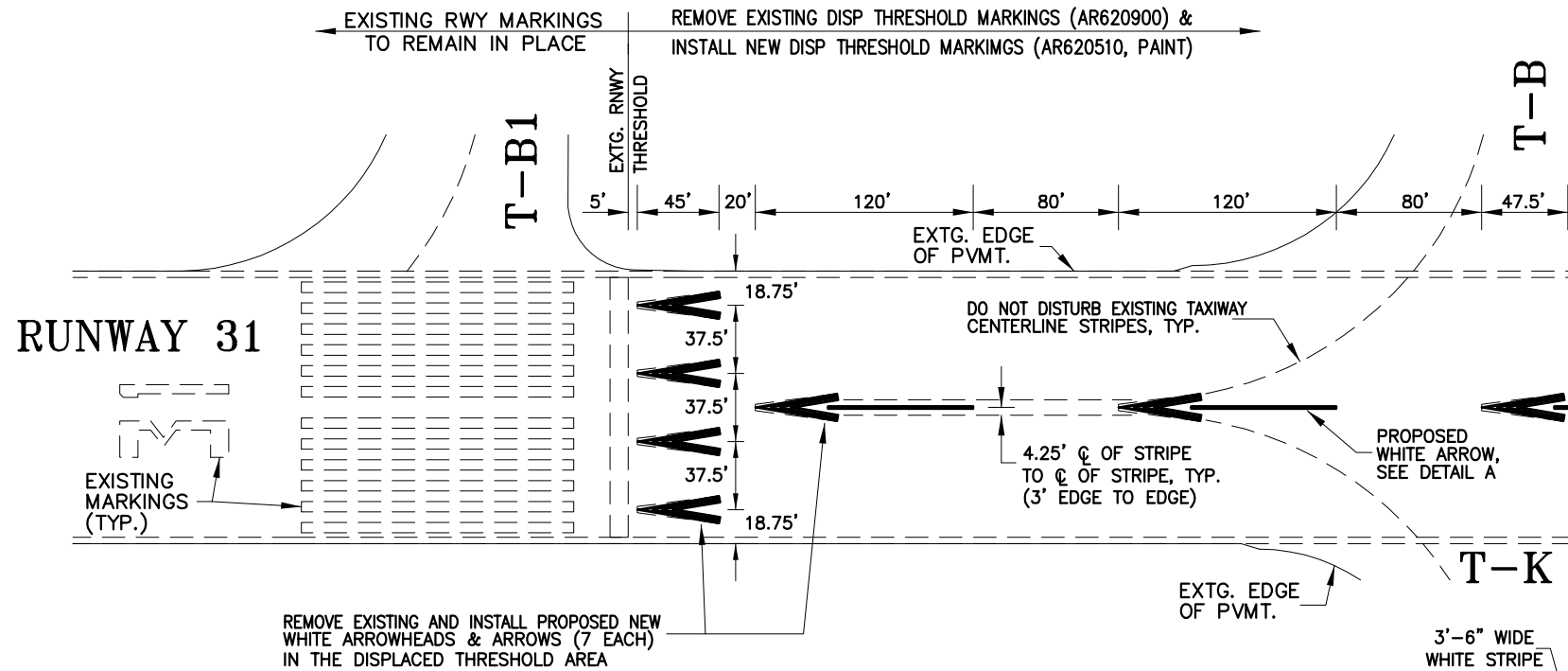
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| SCHEDULE OF PROPOSED AR801640 PREFORMED THERMOPLASTIC MARKINGS (PTM) | | | |
|---|---|-----------|-----------|
| LOCATION NUMBER | PTM PAVEMENT MARKING DESCRIPTION | SIZE (FT) | AREA (SF) |
| 1 | R9-27 HOLDING LINE ON T-P (SOUTH SIDE OF R9-27) | 9x75 | 675 |
| 2 | ILS HOLDING LINE ON T-P (SOUTH SIDE OF R9-27) | 10x87 | 870 |
| 3 | T-H1 SURFACE HOLD POSITION SIGN FOR R27-9 | 15.5x20.3 | 315 |
| 4 | R27-9 HOLDING LINE ON T-H1 (NORTH SIDE OF R27-9) | 9x315 | 2835 |
| 5 | T-H1 SURFACE HOLD POSITION SIGN FOR R27-9 | 15.5x20.3 | 315 |
| 6 | R27-9 HOLDING LINE ON T-E (NORTH SIDE OF R27-9) | 9x90 | 810 |
| 7 | T-E SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 8 | T-E SURFACE HOLD POSITION SIGN FOR R9-27 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 9 | R9-27 HOLDING LINE ON T-E (SOUTH SIDE OF R9-27) | 9x75 | 675 |
| 10 | R13 HOLDING LINE ON T-F (NORTH SIDE OF R13) | 9x160 | 1440 |
| 11 | T-F SURFACE HOLD POSITION SIGN FOR R13 | 15.5x9.5 | 148 |
| 12 | T-E SURFACE HOLD POSITION SIGN FOR R13-31 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 13 | R13-31 HOLDING LINE ON T-E (SOUTH SIDE OF R13-31) | 9x76 | 684 |
| 14 | R31-13 HOLDING LINE ON T-E (NORTH SIDE OF R31-13) | 9x75 | 675 |
| 15 | T-E SURFACE HOLD POSITION SIGN FOR R31-13 (NORTH SIDE) | 15.5x20.3 | 315 |
| 16 | T-H SURFACE HOLD POSITION SIGN FOR R13-31 (WEST SIDE) | 15.5x20.3 | 315 |
| 17 | R13-31 HOLDING LINE ON T-H (WEST SIDE OF R13-31) | 9x75 | 675 |
| 18 | R31-13 HOLDING LINE ON T-H (EAST SIDE OF R31-13) | 9x75 | 675 |
| 19 | T-H SURFACE HOLD POSITION SIGN FOR R31-13 (EAST SIDE) | 15.5x20.3 | 315 |
| 20 | T-H SURFACE HOLD POSITION SIGN FOR R31-13 (EAST SIDE) | 15.5x20.3 | 315 |
| 21 | R23-5 HOLDING LINE ON T-E (NORTH SIDE OF R23-5) | 9x50 | 450 |
| 22 | T-E SURFACE HOLD POSITION SIGN FOR R23-5 (NORTH SIDE) | 15.5x20.3 | 315 |
| 22A | T-E SURFACE HOLD POSITION SIGN FOR R23-5 (NORTH SIDE) | 15.5x20.3 | 315 |
| 23 | T-K SURFACE HOLD POSITION SIGN FOR R5 (SOUTH SIDE) | 15.5x7 | 109 |
| 24 | R5 HOLDING LINE ON T-K (SOUTH SIDE OF R5) | 9x75 | 675 |
| 25 | T-L SURFACE HOLD POSITION SIGN FOR R5-23 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 26 | R5-23 HOLDING LINE ON T-L (SOUTH SIDE OF R5-23) | 9x75 | 675 |
| 27 | R23-5 HOLDING LINE ON T-D (NORTH SIDE OF R23-5) | 9x75 | 675 |
| 28 | T-D SURFACE HOLD POSITION SIGN FOR R23-5 (NORTH SIDE) | 15.5x20.3 | 315 |
| 29 | T-D SURFACE HOLD POSITION SIGN FOR R5-23 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 30 | R5-23 HOLDING LINE ON T-D (SOUTH SIDE OF R5-23) | 9x75 | 675 |
| 31 | R23-5 HOLDING LINE ON T-P (WEST SIDE OF R23-5) | 9x96 | 865 |
| 32 | R5-23 HOLDING LINE ON T-P (EAST SIDE OF R5-23) | 9x96 | 865 |
| 33 | T-B2 SURFACE HOLD POSITION SIGN FOR R23-5 (NORTH SIDE) | 15.5x20.3 | 315 |
| 34 | R23-5 HOLDING LINE ON T-B2 (NORTH SIDE OF R23-5) | 9x101 | 909 |
| 35 | T-B2 SURFACE HOLD POSITION SIGN FOR R23-5 (NORTH SIDE) | 15.5x20.3 | 315 |
| 36 | R23-APCH HOLDING LINE ON T-A (NORTH SIDE) | 9x141 | 1270 |
| 37 | T-B2 SURFACE HOLD POSITION SIGN FOR R5-23 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 38 | R5-23 HOLDING LINE ON T-B2 (SOUTH SIDE OF R5-23) | 9x75 | 675 |
| 39 | T-B2 SURFACE HOLD POSITION SIGN FOR R5-23 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 40 | R23-APCH HOLDING LINE ON T-A (SOUTH SIDE) | 9x83 | 747 |
| 41 | T-B SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 42 | T-B SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 43 | R27-9 HOLDING LINE ON T-B (NORTH SIDE OF R27-9) | 9x143 | 1287 |
| 44 | T-B SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 45 | R9-27 HOLDING LINE ON T-B (SOUTH SIDE OF R9-27) | 9x75 | 675 |
| 46 | T-B SURFACE HOLD POSITION SIGN FOR R9-27 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 47 | T-N SURFACE HOLD POSITION SIGN FOR R13-31 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 48 | R13-31 HOLDING LINE ON T-N (SOUTH SIDE OF R13-31) | 9x86.2 | 776 |
| 49 | R31-13 HOLDING LINE ON T-N (NORTH SIDE OF R31-13) | 9x108 | 972 |
| 50 | T-N SURFACE HOLD POSITION SIGN FOR R31-13 (NORTH SIDE) | 15.5x20.3 | 315 |
| 51 | R13-31 HOLDING LINE ON T-K (SOUTH SIDE OF R13-31) | 9x63 | 567 |
| 52 | T-K SURFACE HOLD POSITION SIGN FOR R13-31 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 53 | T-K SURFACE HOLD POSITION SIGN FOR R13-31 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 54 | R31-13 HOLDING LINE ON T-B1 (NORTH SIDE OF R31-13) | 9x98 | 882 |
| 55 | T-B1 SURFACE HOLD POSITION SIGN FOR R31-13 (NORTH SIDE) | 15.5x20.3 | 315 |
| 56 | R31-13 HOLDING LINE ON T-B (NORTH SIDE OF R31-13) | 9x90 | 810 |
| 57 | T-B SURFACE HOLD POSITION SIGN FOR R31-13 (NORTH SIDE) | 15.5x20.3 | 315 |
| 58 | R27-9 HOLDING LINE ON T-N (NORTH SIDE OF R27-9) | 9x95 | 855 |
| 59 | T-N SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 60 | T-N SURFACE HOLD POSITION SIGN FOR R27-9 (NORTH SIDE) | 15.5x20.3 | 315 |
| 61 | T-N SURFACE HOLD POSITION SIGN FOR R9-27 (SOUTH SIDE) | 15.5x20.3 | 315 |
| 62 | R9-27 HOLDING LINE ON T-N (SOUTH SIDE OF R9-27) | 9x75.2 | 677 |
| 63 | R27 HOLDING LINE ON T-A (NORTH SIDE OF R27) | 9x90 | 810 |
| 64 | T-A SURFACE HOLD POSITION SIGN FOR R27 | 15.5x12 | 186 |



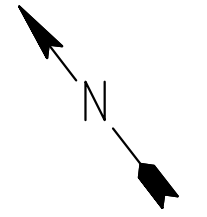
- GENERAL NOTES – PREFORMED THERMOPLASTIC MARKINGS (PTM):**
1. ALL RUNWAY MARKINGS SHALL BE WHITE UNLESS NOTED OTHERWISE.
 2. ALL TAXIWAY MARKINGS SHALL BE YELLOW UNLESS NOTED OTHERWISE.
 3. THE PTM MATERIALS SHALL BE APPLIED USING A VARIABLE SPEED SELF-PROPELLED MOBILE HEATER AS APPROVED BY THE RESIDENT ENGINEER AND IN CONFORMANCE WITH THE PTM MANUFACTURE'S SPECIFICATIONS.
 4. THE EXISTING PAVEMENT SHALL BE STRIPPED OF OLD PAINT, CLEANED, DRIED, AND FREE OF DEBRIS & CURING COMPOUND TO THE SATISFACTION OF THE RESIDENT ENGINEER PRIOR TO APPLYING THE PTM MATERIALS.
 5. AFTER PAVEMENT CLEANING AND PRIOR TO PTM INSTALLATION, A NON-VOC SEALER SHALL BE APPLIED TO THE PAVEMENT SURFACE. THE SEALER MATERIAL AND INSTALLATION METHOD SHALL CONFORM WITH THE PTM MANUFACTURER'S REQUIREMENTS. THE SEALER SHALL NOT BE MEASURED FOR PAYMENT. COSTS FOR PAVEMENT PREPARATION AND SEALER TO BE INCLUDED IN AR801640 – PTM CONTRACT UNIT PRICE.
 6. EXISTING TAXIWAY AND RUNWAY MARKINGS DAMAGED BY CONSTRUCTION OF THE PROJECT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
 7. MARKING LAYOUT BY CONTRACTOR, SEE SPECIAL PROVISIONS.



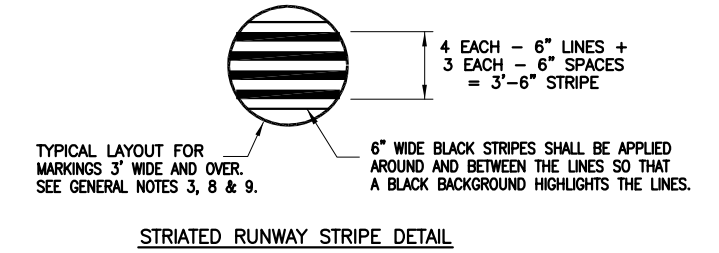
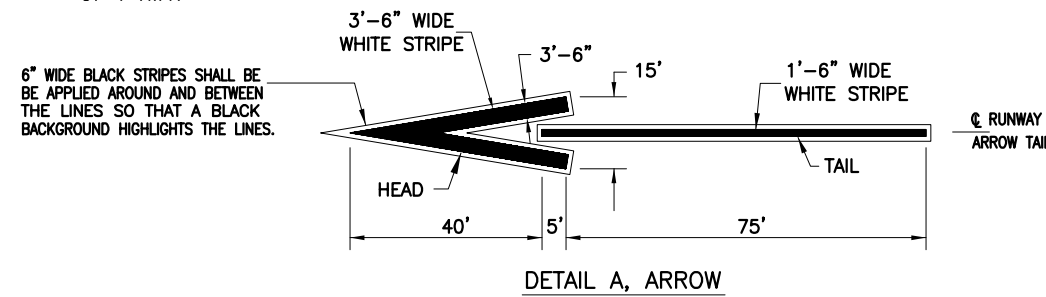


GENERAL NOTES - PAINTING:

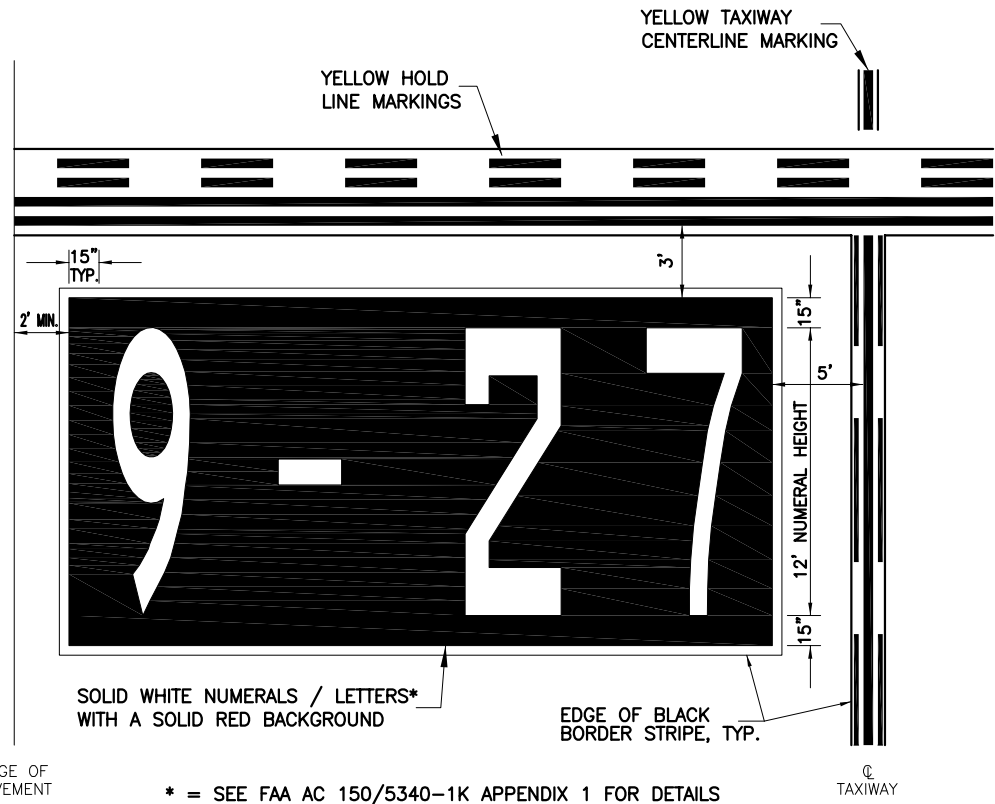
1. ALL RUNWAY MARKINGS SHALL BE WHITE UNLESS NOTED OTHERWISE.
2. ALL TAXIWAY MARKINGS SHALL BE YELLOW UNLESS NOTED OTHERWISE.
3. RUNWAY AND TAXIWAY MARKINGS 3' FEET WIDE AND OVER SHALL CONSIST OF SERIES OF LONGITUDINAL STRIPES 6" WIDE WITH EQUAL WIDTH SPACING BETWEEN THE STRIPES (STRIATED MARKINGS.) PAINTED SURFACE HOLDING POSITION SIGNS ARE NOT STRIATED.
4. ALL MARKINGS (WITH THE EXCEPTION OF BLACK MARKINGS) SHALL HAVE A REFLECTIVE MEDIA APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. BLACK MARKINGS SHALL NOT HAVE A REFLECTIVE MEDIA APPLIED.
5. TAXIWAY EDGE STRIPES AND TAXIWAY CENTERLINE STRIPES SHALL BE SOLID WITHOUT BORDERS TO MATCH THE EXISTING TAXIWAY MARKINGS UNLESS NOTED OTHERWISE. RUNWAY EDGE STRIPES SHALL BE STRIATED TO MATCH THE EXISTING RUNWAY MARKINGS.
6. EXISTING TAXIWAY AND RUNWAY MARKINGS DAMAGED BY CONSTRUCTION OF THE PROJECT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
7. MARKING LAYOUT BY CONTRACTOR, SEE SPECIAL PROVISIONS.
8. UNLESS NOTED OTHERWISE, ALL NEW PAVEMENT MARKINGS (EXCLUDING TAXIWAY CENTERLINES & EDGE STRIPES) SHALL BE OUTLINED WITH A SIX INCH (6") WIDE BLACK BORDER. FOR HOLD LINES, THE BLACK BORDER WIDTH SHALL BE INCREASED TO TWELVE INCHES (12").
9. BLACK BACKGROUND STRIPES SHALL BE APPLIED BETWEEN THE YELLOW / WHITE PAVEMENT STRIPES ON STRIATED MARKINGS.



BASE BID PAINT (AR620510) : RUNWAY 31 DISPLACED THRESHOLD MARKINGS



PTM (AR801640) SURFACE HOLDING POSITION SIGN



* = SEE FAA AC 150/5340-1K APPENDIX 1 FOR DETAILS OF THE WHITE NUMERAL / LETTER INSCRIPTION.

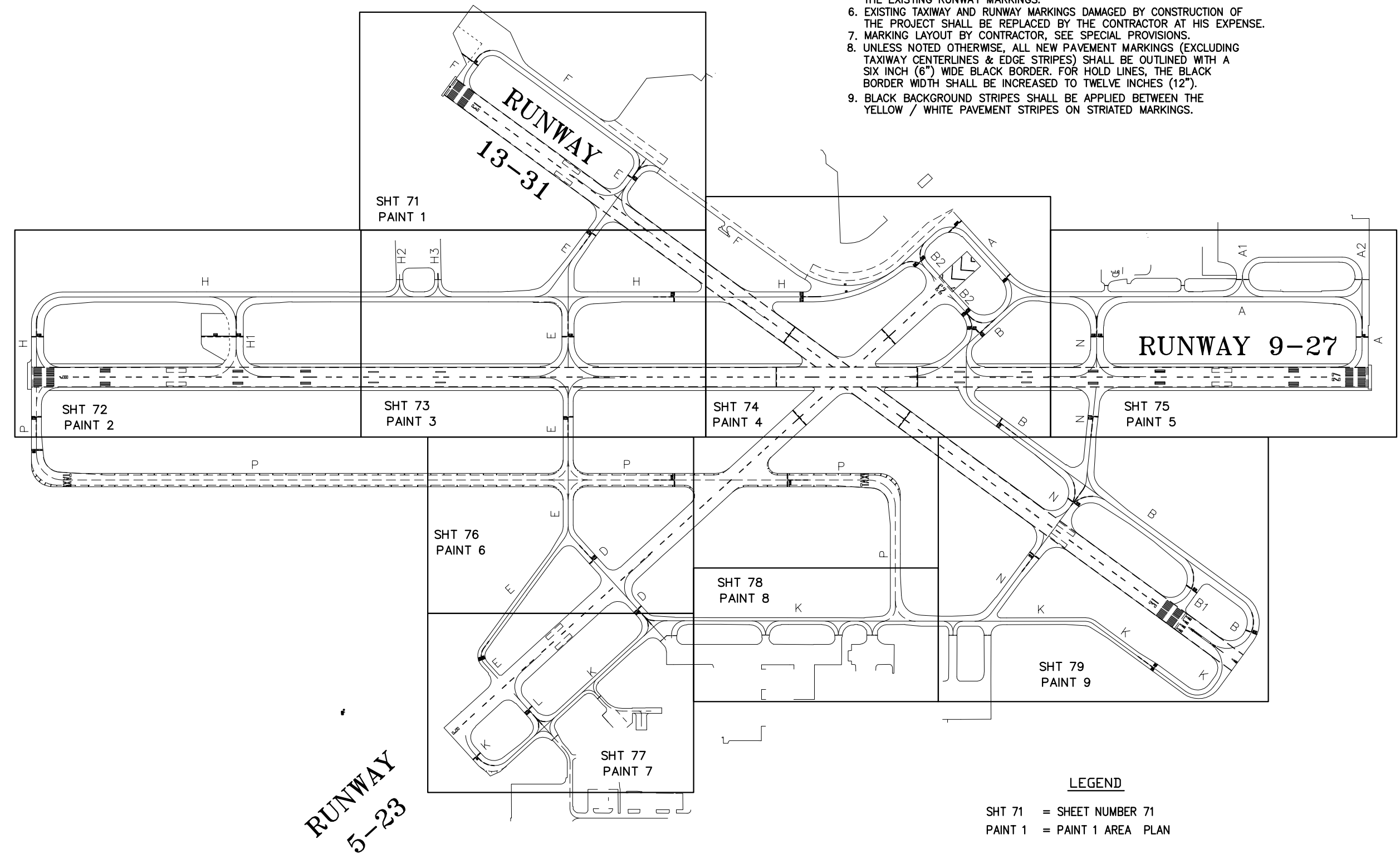
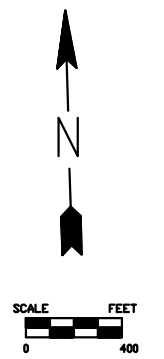
DETAIL C
 PTM (AR801640) SURFACE HOLDING POSITION SIGN
 (SOLID MARKING, NOT STRIATED)

| | | | | |
|--|--|--|---|---|
| INSCRIPTION : R27-9 HOLDING POSITION SIGN, 8 EACH AT LOCATIONS 3, 5, 7, 41, 42, 44, 59, & 60 | INSCRIPTION : R23-5 HOLDING POSITION SIGN, 5 EACH AT LOCATIONS 22, 22A, 28, 33, & 35 | INSCRIPTION : R31-13 HOLDING POSITION SIGN, 6 EACH AT LOCATIONS 15, 19, 20, 50, 55, & 57 | INSCRIPTION : R132 HOLDING POSITION SIGN, 1 EACH AT LOCATION 11 | INSCRIPTION : R5 HOLDING POSITION SIGN, 1 EACH AT LOCATION 23 |
| INSCRIPTION : R9-27 HOLDING POSITION SIGN, 3 EACH AT LOCATIONS 8, 46, & 61 | INSCRIPTION : R5-23 HOLDING POSITION SIGN, 4 EACH AT LOCATIONS 25, 29, 37, & 39 | INSCRIPTION : R13-31 HOLDING POSITION SIGN, 5 EACH AT LOCATIONS 12, 16, 47, 52, & 53 | INSCRIPTION : R27 HOLDING POSITION SIGN, 1 EACH AT LOCATION 64 | |

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GENERAL NOTES -- PAINTING:

1. ALL RUNWAY MARKINGS SHALL BE WHITE UNLESS NOTED OTHERWISE.
2. ALL TAXIWAY MARKINGS SHALL BE YELLOW UNLESS NOTED OTHERWISE.
3. RUNWAY AND TAXIWAY MARKINGS 3' FEET WIDE AND OVER SHALL CONSIST OF SERIES OF LONGITUDINAL STRIPES 6" WIDE WITH EQUAL WIDTH SPACING BETWEEN THE STRIPES (STRIATED MARKINGS.) PAINTED SURFACE HOLDING POSITION SIGNS ARE NOT STRIATED.
4. ALL MARKINGS (WITH THE EXCEPTION OF BLACK MARKINGS) SHALL HAVE A REFLECTIVE MEDIA APPLIED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. BLACK MARKINGS SHALL NOT HAVE A REFLECTIVE MEDIA APPLIED.
5. TAXIWAY EDGE STRIPES AND TAXIWAY CENTERLINE STRIPES SHALL BE SOLID WITHOUT BORDERS TO MATCH THE EXISTING TAXIWAY MARKINGS UNLESS NOTED OTHERWISE. RUNWAY EDGE STRIPES SHALL BE STRIATED TO MATCH THE EXISTING RUNWAY MARKINGS.
6. EXISTING TAXIWAY AND RUNWAY MARKINGS DAMAGED BY CONSTRUCTION OF THE PROJECT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
7. MARKING LAYOUT BY CONTRACTOR, SEE SPECIAL PROVISIONS.
8. UNLESS NOTED OTHERWISE, ALL NEW PAVEMENT MARKINGS (EXCLUDING TAXIWAY CENTERLINES & EDGE STRIPES) SHALL BE OUTLINED WITH A SIX INCH (6") WIDE BLACK BORDER. FOR HOLD LINES, THE BLACK BORDER WIDTH SHALL BE INCREASED TO TWELVE INCHES (12").
9. BLACK BACKGROUND STRIPES SHALL BE APPLIED BETWEEN THE YELLOW / WHITE PAVEMENT STRIPES ON STRIATED MARKINGS.



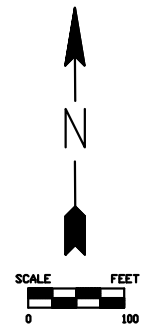
LEGEND

- SHT 71 = SHEET NUMBER 71
- PAINT 1 = PAINT 1 AREA PLAN

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NOTES:

1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.

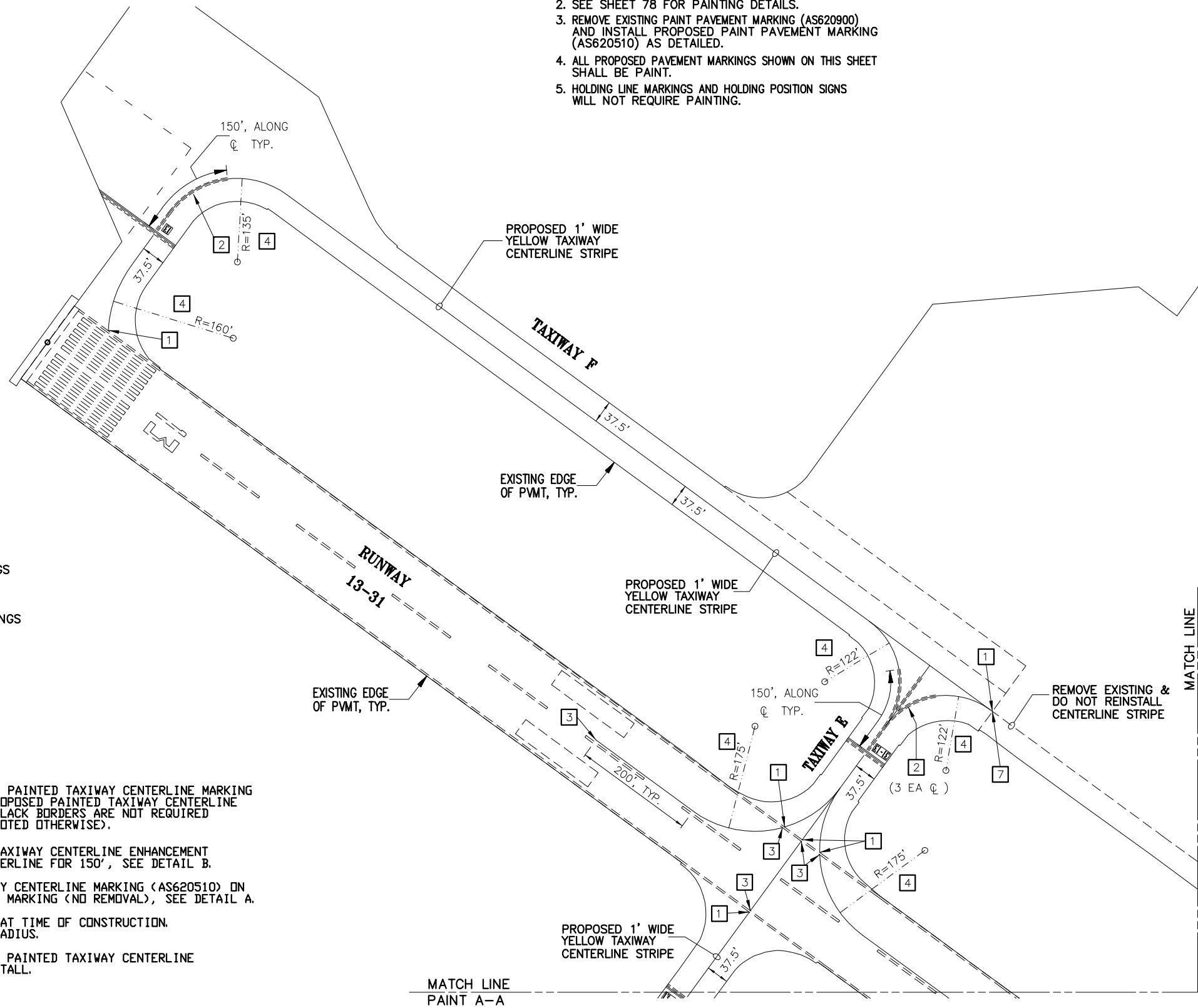


LEGEND:

- OR EXISTING PAVEMENT MARKINGS
- OR PROPOSED PAVEMENT MARKINGS

NUMBERED LEGEND

- 1** START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510). SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2** PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3** START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4** DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 7** START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND DO NOT REINSTALL.



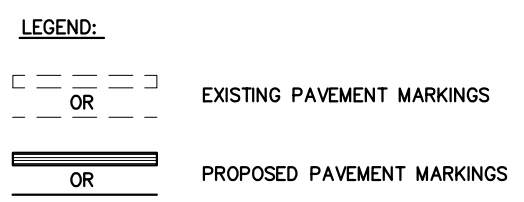
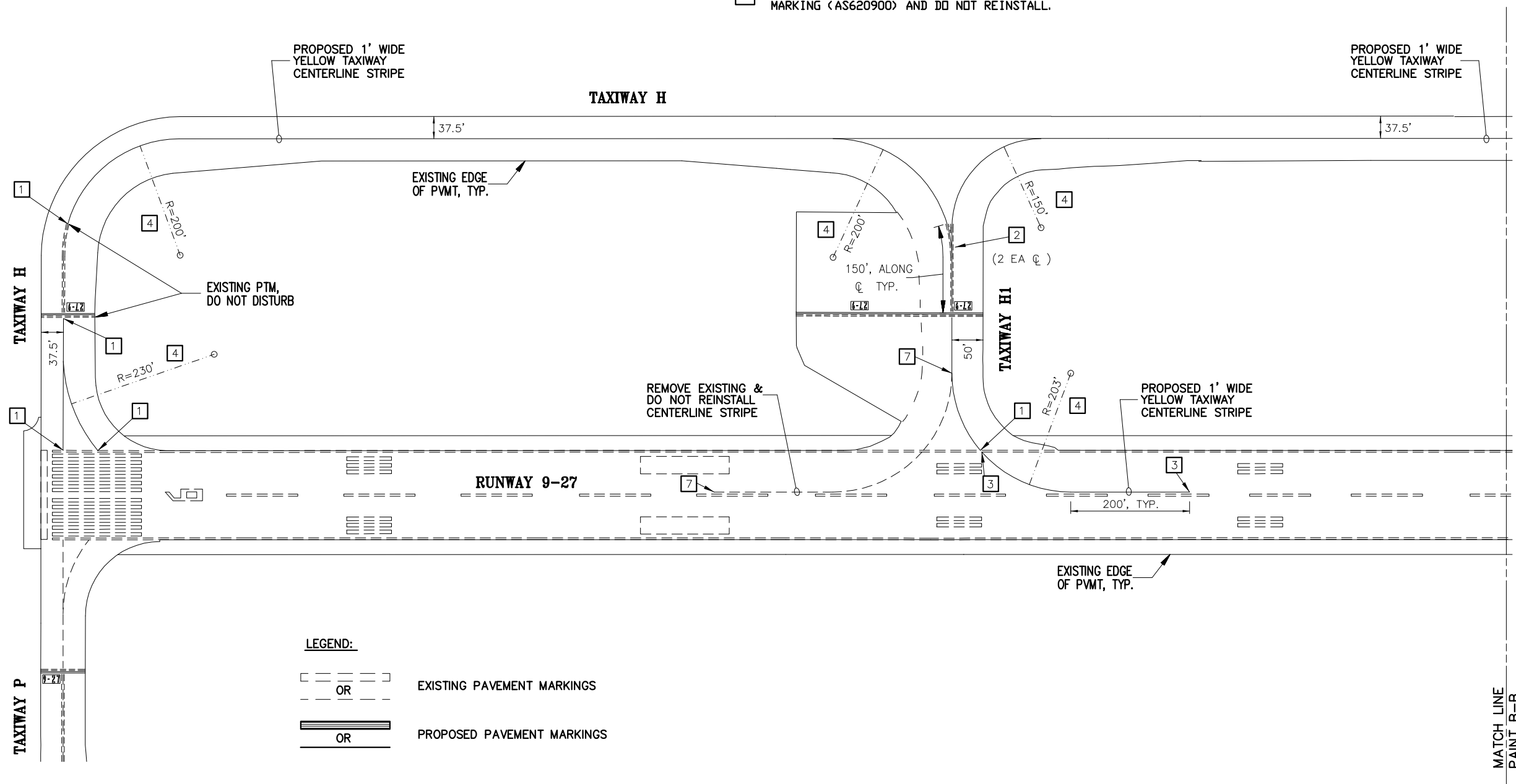
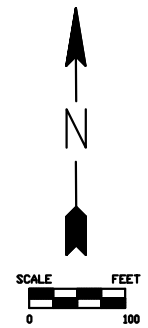
PAINT 1 AREA PLAN

NUMBERED LEGEND

- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510). SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 7 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND DO NOT REINSTALL.

NOTES:

- 1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
- 2. SEE SHEET 78 FOR PAINTING DETAILS.
- 3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
- 4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
- 5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.



PAINT 2 AREA PLAN

G:\Airports\A10T009-Design RnvY Guard Lights\PVMT MRKG ALT 1.dwg, 5/17/2013 11:16:12 AM, jefm

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 73 OF 83

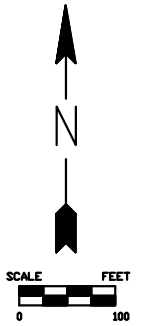
NOTES:

1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.

PROPOSED 1' WIDE
 YELLOW TAXIWAY
 CENTERLINE STRIPE

MATCH LINE
 PAINT A--A

RUNWAY
 13-31



TAXIWAY H2

TAXIWAY H3

PROPOSED 1' WIDE
 YELLOW TAXIWAY
 CENTERLINE STRIPE

TAXIWAY E

TAXIWAY H

LEGEND:

- EXISTING PAVEMENT MARKINGS
- OR
- PROPOSED PAVEMENT MARKINGS

NUMBERED LEGEND

- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 8 START / END PROPOSED NEW PAINTED TAXIWAY CENTERLINE MARKING (AS620510), NO REMOVAL, SEE DETAIL A.

MATCH LINE
 PAINT E--E

PAINT 3 AREA PLAN

EXISTING EDGE
 OF PVMT, TYP.

MATCH LINE
 PAINT C--C

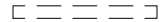

MATCH LINE
 PAINT B--B

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 74 OF 93

NOTES:

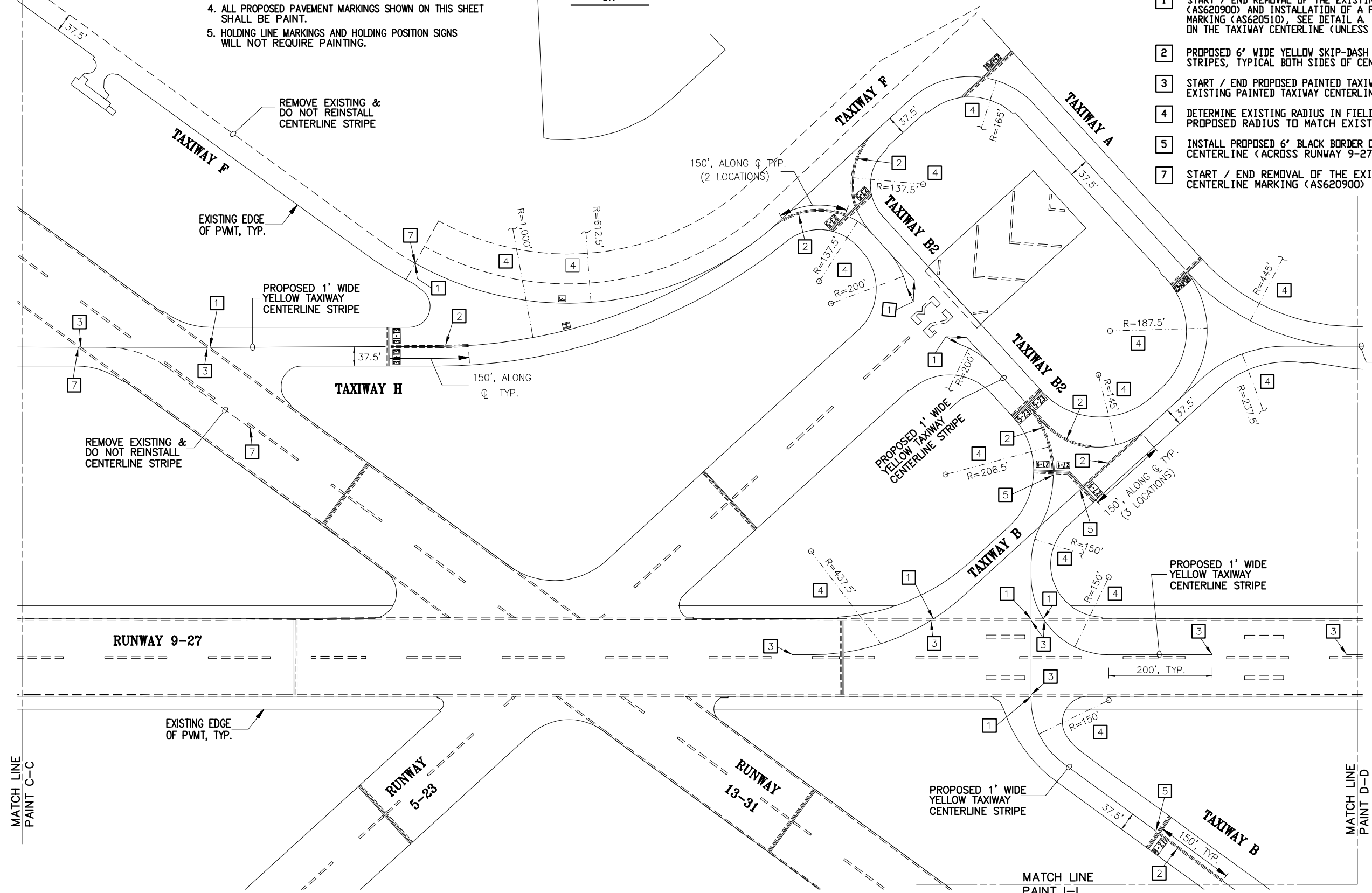
1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.

LEGEND:

-  EXISTING PAVEMENT MARKINGS
- OR
-  PROPOSED PAVEMENT MARKINGS

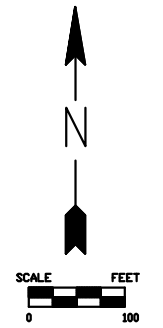
NUMBERED LEGEND

- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6" WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 5 INSTALL PROPOSED 6" BLACK BORDER ON BOTH SIDES OF THE TAXIWAY E CENTERLINE (ACROSS RUNWAY 9-27) BETWEEN THESE LOCATIONS.
- 7 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND DO NOT REINSTALL.



PAINT 4 AREA PLAN

PROPOSED 1' WIDE YELLOW TAXIWAY CENTERLINE STRIPE


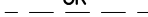

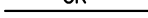


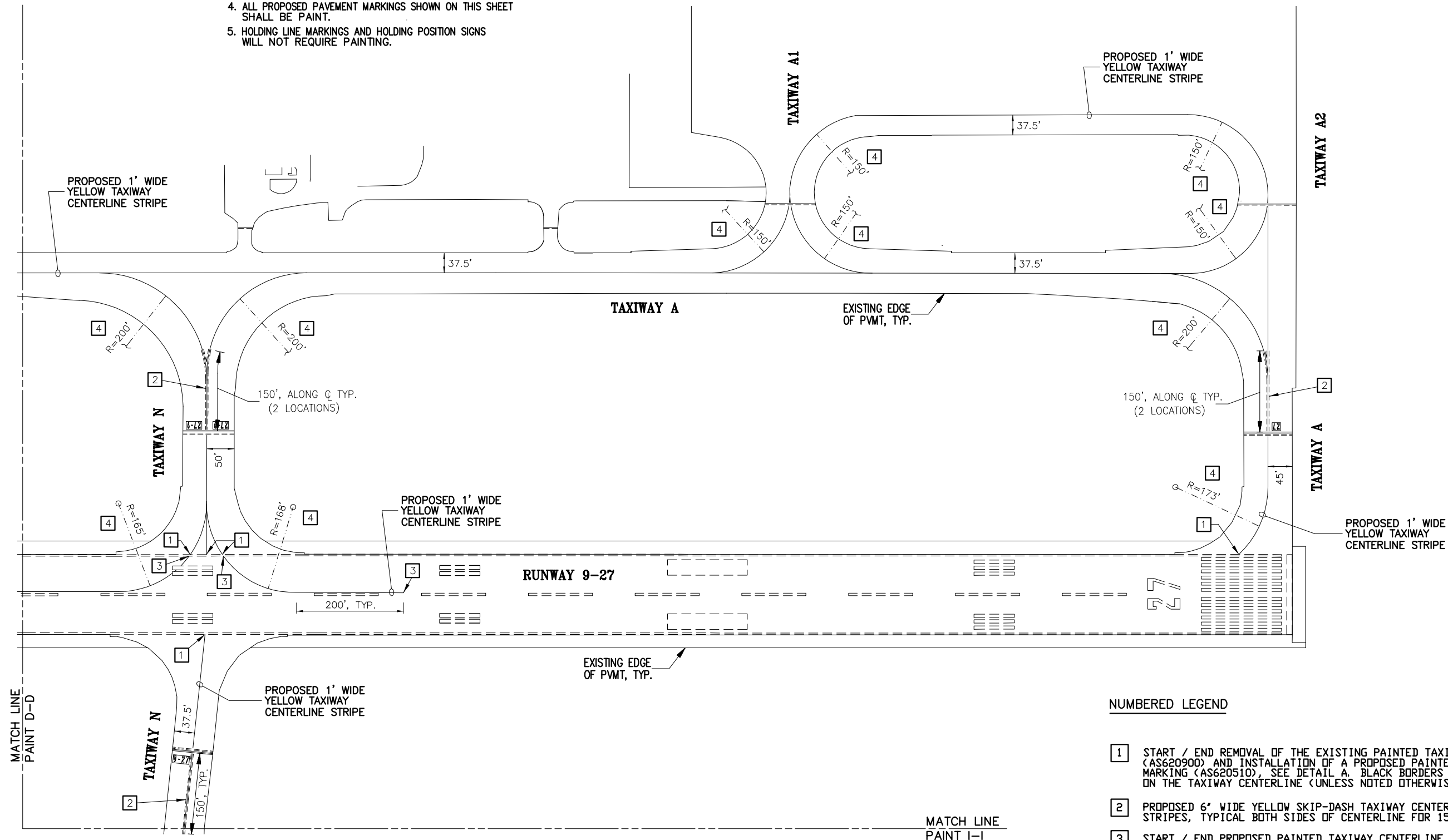
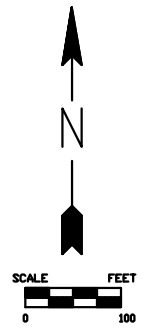
QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 75 OF 83

NOTES:

1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.

LEGEND:

- | | |
|--|----------------------------|
|  OR  | EXISTING PAVEMENT MARKINGS |
|  OR  | PROPOSED PAVEMENT MARKINGS |



NUMBERED LEGEND

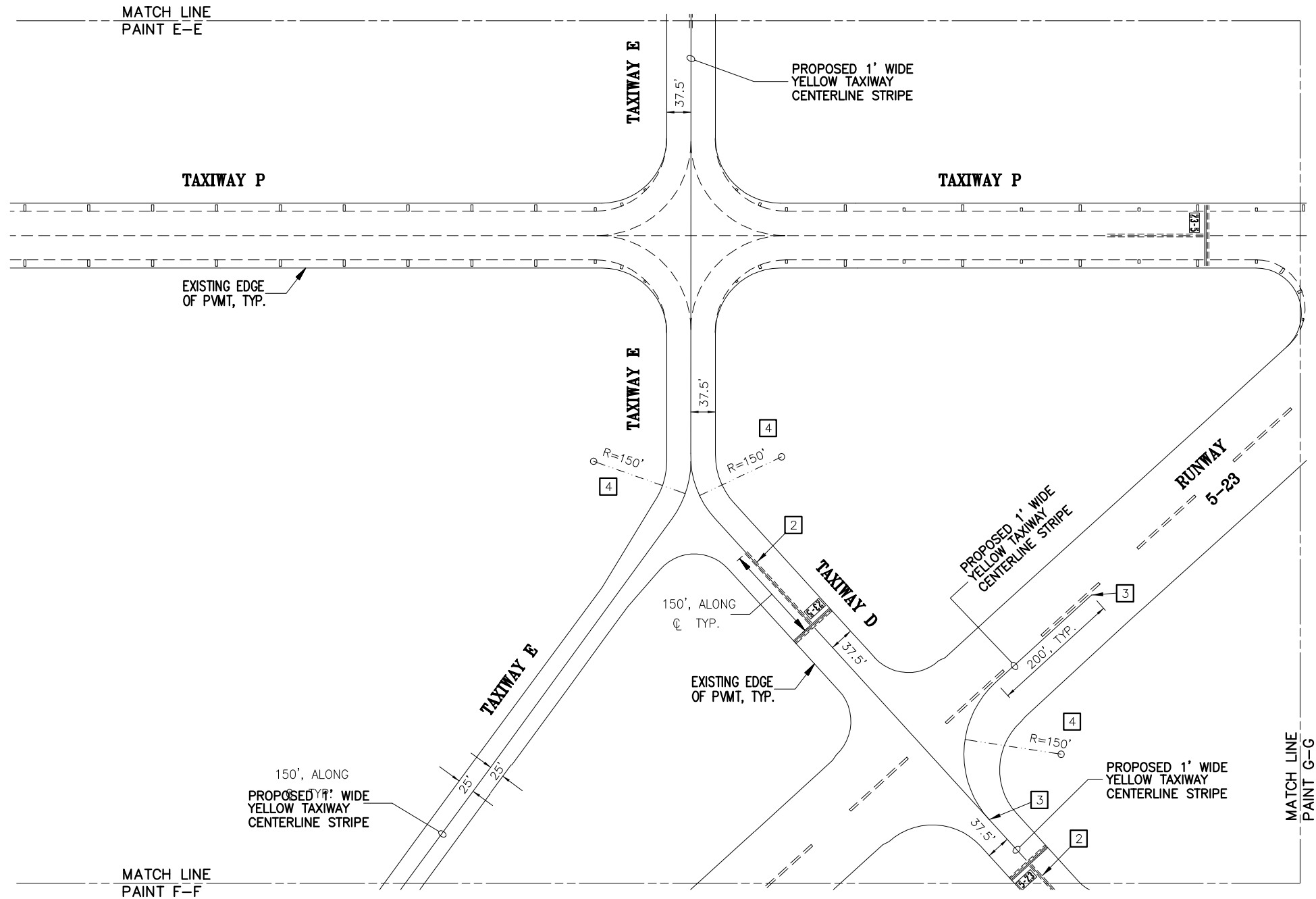
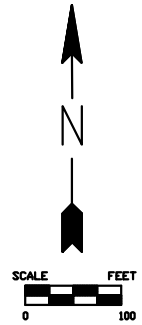
- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.

PAINT 5 AREA PLAN

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NUMBERED LEGEND

- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.



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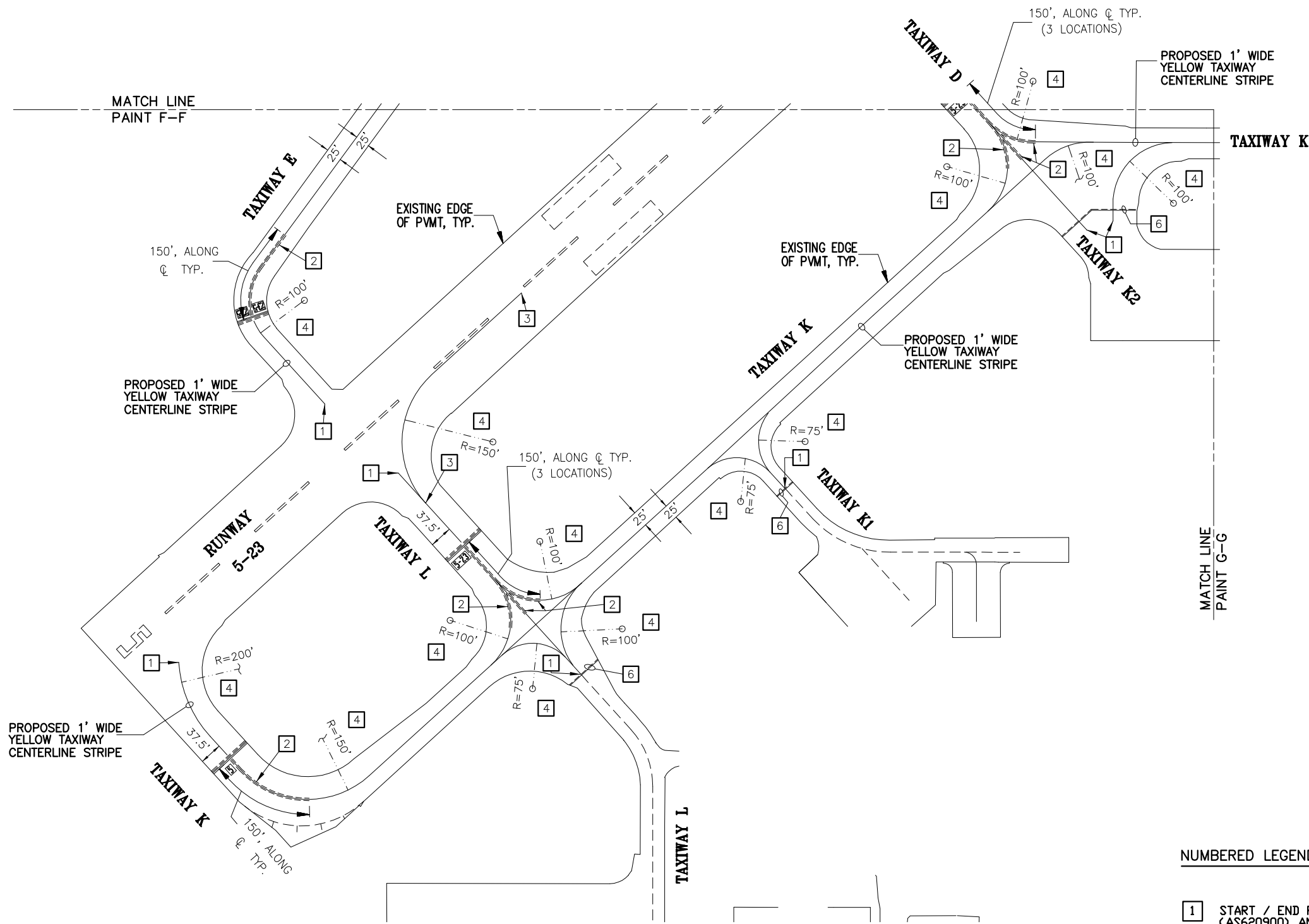
- EXISTING PAVEMENT MARKINGS
- OR
- PROPOSED PAVEMENT MARKINGS

NOTES:

- 1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
- 2. SEE SHEET 78 FOR PAINTING DETAILS.
- 3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
- 4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
- 5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.

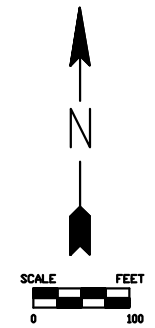
PAINT 6 AREA PLAN

QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 77 OF 83



LEGEND:

- EXISTING PAVEMENT MARKINGS
- OR
- PROPOSED PAVEMENT MARKINGS



NOTES:

1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
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NUMBERED LEGEND

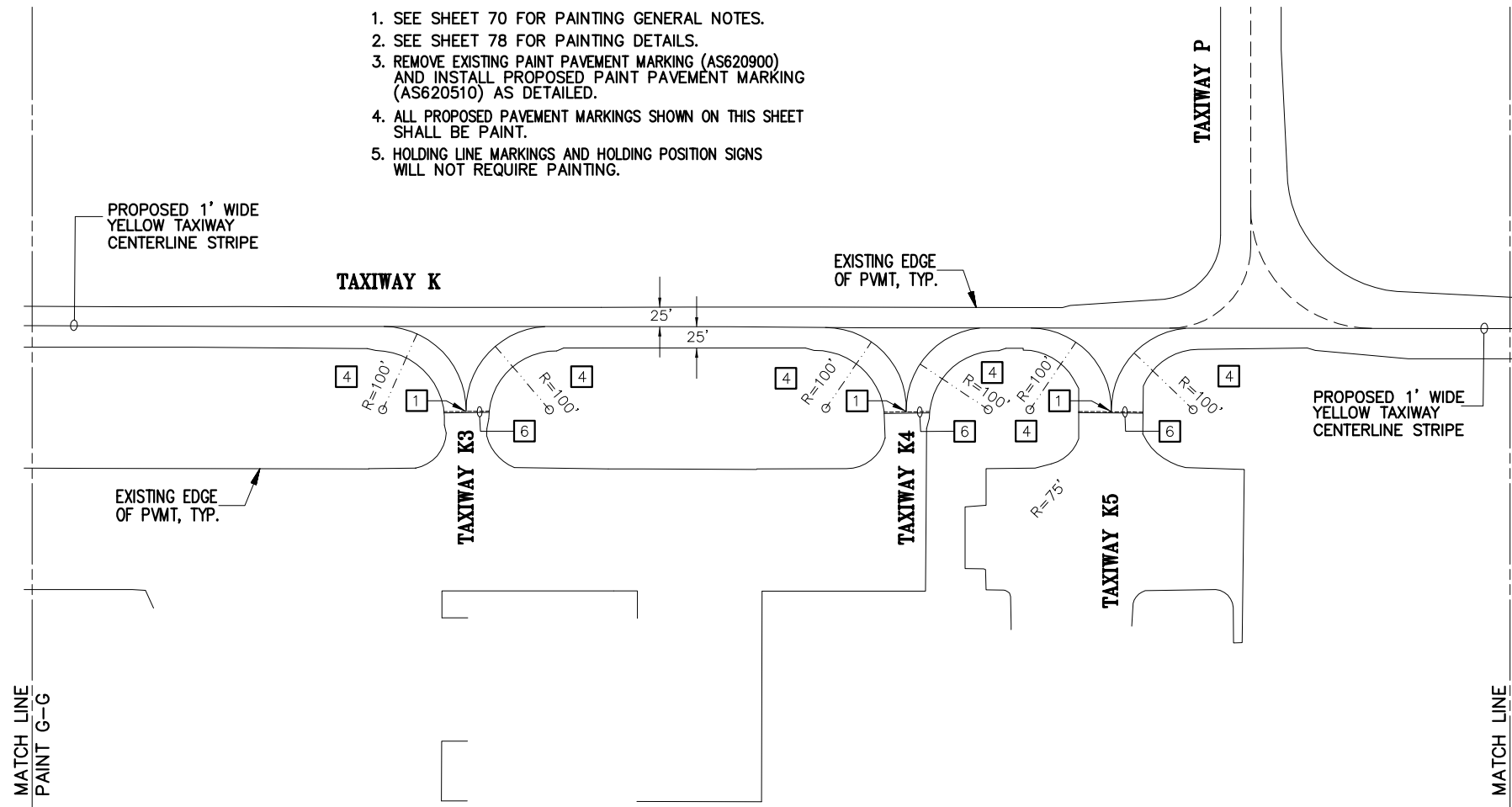
- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 6 REMOVE EXISTING PAINTED NON-MOVEMENT AREA MARKING (AS620900) AND INSTALL PROPOSED PAINTED NON-MOVEMENT AREA MARKING (AS620510), SEE DETAIL C.

PAINT 7 AREA PLAN

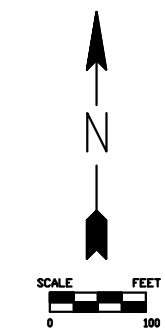
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NOTES:

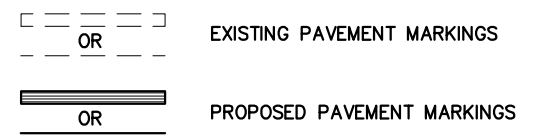
1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
2. SEE SHEET 78 FOR PAINTING DETAILS.
3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.



PAINT 8 AREA PLAN

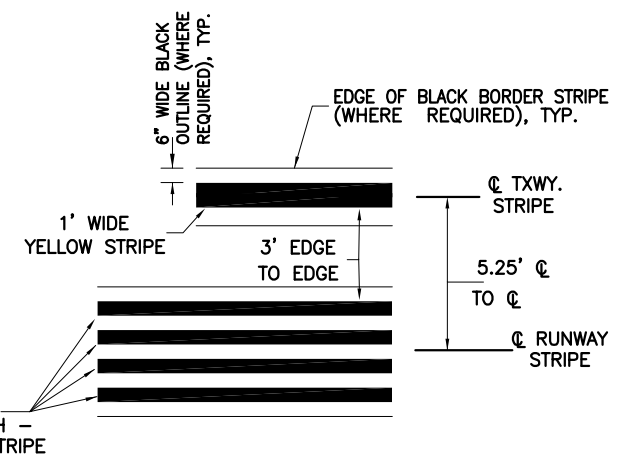


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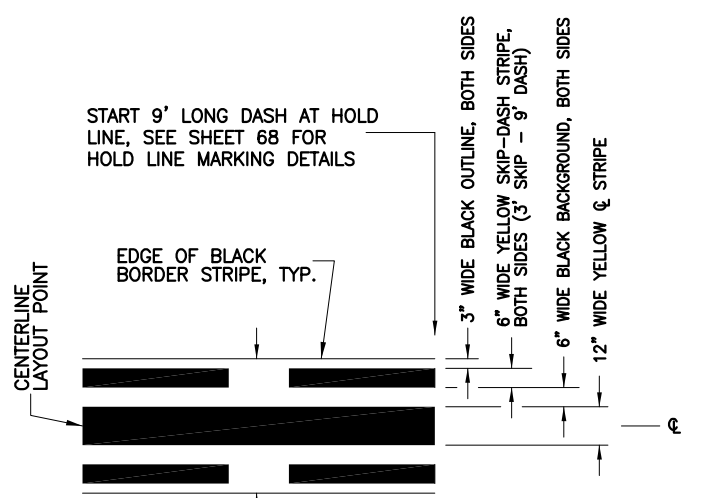


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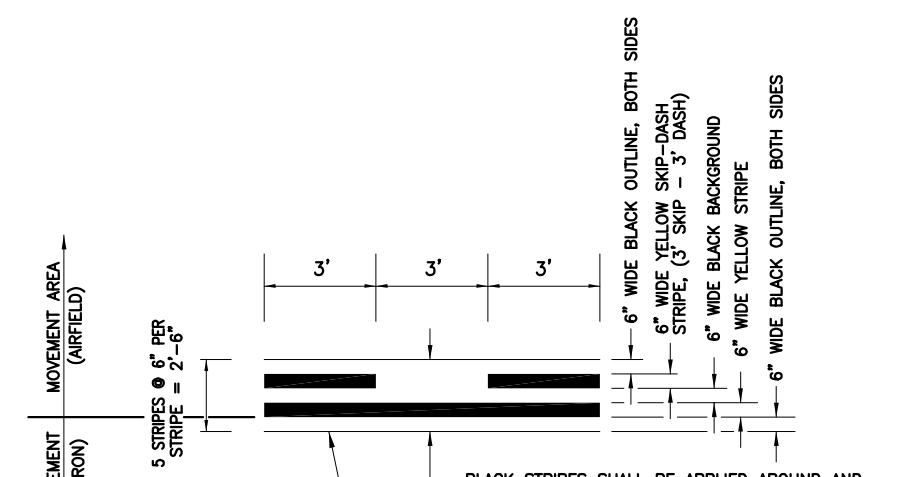
- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6" WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 6 REMOVE EXISTING PAINTED NON-MOVEMENT AREA MARKING (AS620900) AND INSTALL PROPOSED PAINTED NON-MOVEMENT AREA MARKING (AS620510), SEE DETAIL C.



DETAIL A
 RUNWAY C / TAXIWAY C STRIPES



DETAIL B
 TAXIWAY CENTERLINE ENHANCEMENT STRIPES



DETAIL C
 NON-MOVEMENT AREA MARKINGS

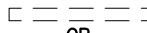

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QUAD CITY INTERNATIONAL AIRPORT
PROPOSED RGL, ALCMS, AND
PAVEMENT MARKING
ILL. MLI-4080, QU015
SHEET 79 OF 83

NUMBERED LEGEND

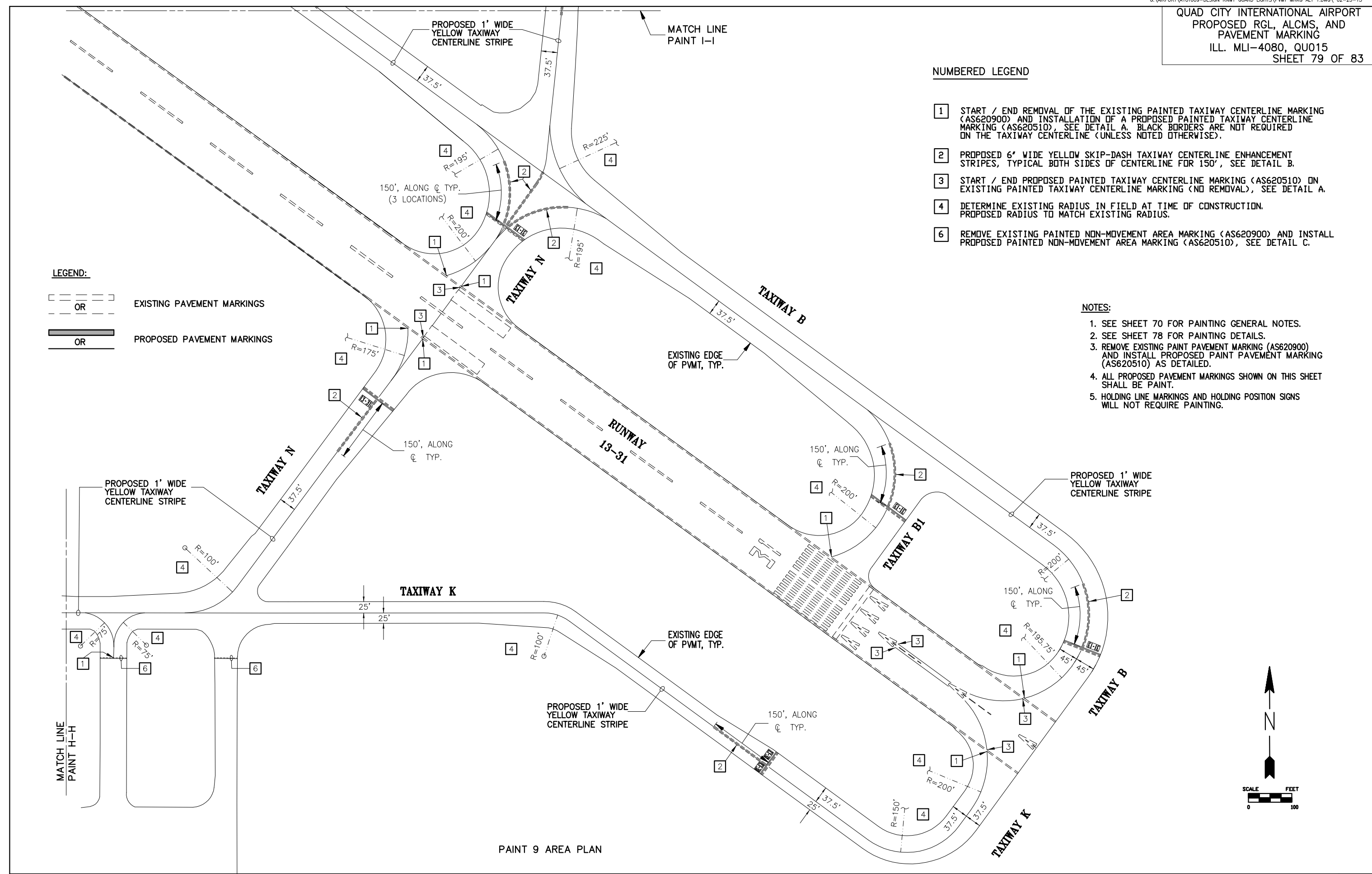
- 1 START / END REMOVAL OF THE EXISTING PAINTED TAXIWAY CENTERLINE MARKING (AS620900) AND INSTALLATION OF A PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510), SEE DETAIL A. BLACK BORDERS ARE NOT REQUIRED ON THE TAXIWAY CENTERLINE (UNLESS NOTED OTHERWISE).
- 2 PROPOSED 6' WIDE YELLOW SKIP-DASH TAXIWAY CENTERLINE ENHANCEMENT STRIPES, TYPICAL BOTH SIDES OF CENTERLINE FOR 150', SEE DETAIL B.
- 3 START / END PROPOSED PAINTED TAXIWAY CENTERLINE MARKING (AS620510) ON EXISTING PAINTED TAXIWAY CENTERLINE MARKING (NO REMOVAL), SEE DETAIL A.
- 4 DETERMINE EXISTING RADIUS IN FIELD AT TIME OF CONSTRUCTION. PROPOSED RADIUS TO MATCH EXISTING RADIUS.
- 6 REMOVE EXISTING PAINTED NON-MOVEMENT AREA MARKING (AS620900) AND INSTALL PROPOSED PAINTED NON-MOVEMENT AREA MARKING (AS620510), SEE DETAIL C.

LEGEND:

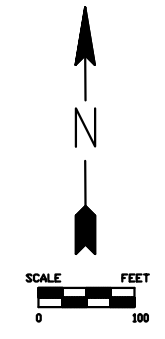
-  EXISTING PAVEMENT MARKINGS
- OR
-  PROPOSED PAVEMENT MARKINGS

NOTES:

- 1. SEE SHEET 70 FOR PAINTING GENERAL NOTES.
- 2. SEE SHEET 78 FOR PAINTING DETAILS.
- 3. REMOVE EXISTING PAINT PAVEMENT MARKING (AS620900) AND INSTALL PROPOSED PAINT PAVEMENT MARKING (AS620510) AS DETAILED.
- 4. ALL PROPOSED PAVEMENT MARKINGS SHOWN ON THIS SHEET SHALL BE PAINT.
- 5. HOLDING LINE MARKINGS AND HOLDING POSITION SIGNS WILL NOT REQUIRE PAINTING.



PAINT 9 AREA PLAN



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NUMBERED LEGEND

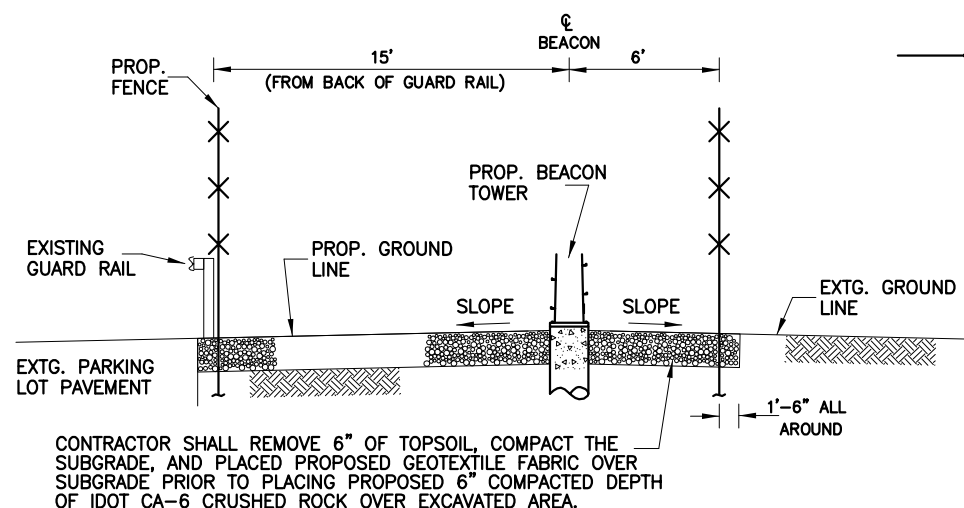
- 26 PROPOSED 10' HIGH CLASS E SECURITY FENCE WITH 4' WIDE WALKWAY GATE (ITEMS AT162510 AND AT162604). SEE SHEET 83 FOR DETAILS.
- 27 N1743836, 015, E2204509, 326, EXISTING GROUND ELEV. = 596.02. PROPOSED OL-802A AIRPORT ROTATING BEACON ON 75' TUBULAR STEEL BEACON POLE TOWER (ITEMS AT101510 AND AT103410). RELOCATE AND REWIRE EXISTING SECURITY CAMERA & EQUIPMENT FROM EXISTING BEACON TO PROPOSED BEACON AS REQUIRED (INCLUDE COSTS IN CONTRACT UNIT PRICES). SEE SHEETS 81 & 82 FOR DETAILS.
- 28 PROPOSED BEACON POWER & CONTROL WIRING IN 2" G. R. S. CONDUIT, DIRECT BURY (ITEMS AT101510 AND AT110212). POWER & CONTROL WIRING INCLUDES: 3 EA - #6 POWER & 1 EA - #8 GROUND TO LIGHT PANEL IN CAP BUILDING AND 2 EA - #10 BEACON CONTROL, 2 EA - #10 SPARE CONTROL & 1 EA - #8 GROUND TO THE EXISTING VAULT (LOCATED SOUTH OF TERMINAL BUILDING APRON). REPLACE POWER CABLES BETWEEN EXISTING CAP BUILDING AND PROPOSED BEACON. REPLACE CONTROL CABLES BETWEEN EXISTING VAULT AND PROPOSED BEACON. INCLUDE WIRING COST IN ITEM AT101510.
- 29 EXISTING BEACON AND PROPOSED AT110710 ELECTRICAL MANHOLE. REMOVE EXISTING BEACON LIGHT, BEACON TOWER, AND TOWER FOUNDATION (ITEM AT103900 - REMOVE BEACON TOWER). INSTALL PROPOSED AT110710 ELECTRICAL MANHOLE. INSTALL EXISTING CONDUITS FROM SOUTH INTO THIS MANHOLE. START / END SECURITY CAMERA CABLE EXTENSIONS AT THIS LOCATION. RELOCATE AND REWIRE EXISTING SECURITY CAMERA & EQUIPMENT TO NEW BEACON LOCATION, INCLUDE COSTS IN CONTRACT UNIT PRICES.
- 30 EXISTING BEACON POWER & CONTROL WIRING IN 2" G. S. R. CONDUIT, POWER CABLES BETWEEN LIGHTING PANEL IN CAP BUILDING AND BEACON. CONTROL CABLES BETWEEN UNDERGROUND ELECTRICAL VAULT (SOUTH OF TERMINAL BUILDING APRON) AND BEACON.
- 31 EXISTING 15A, 2 POLE 120/208 ELECTRICAL SERVICE IN LIGHTING PANEL IN CAP BUILDING FOR BEACON. START / END POWER CABLE REPLACEMENT AT THIS LOCATION.
- 32 REMOVE EXISTING AND FURNISH & INSTALL NEW: 2 EA - #10 BEACON CONTROL, 2 EA - #10 SPARE CONTROL & 1 EA - #8 GROUND TO THE EXISTING VAULT (LOCATED SOUTH OF TERMINAL BUILDING APRON). INCLUDE COST IN CONTRACT ITEM AT101510-AIRPORT ROTATING BEACON.

GENERAL NOTES:

1. SEE SHEET 61 FOR ELECTRICAL GENERAL NOTES.
2. SEE SHEETS 59-64 FOR ELECTRICAL DETAILS.
3. ALL EXISTING ELECTRICAL CIRCUITS TO REMAIN ACTIVE AT ALL TIMES. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN TEMPORARY ABOVE GROUND JUMPER CABLES IN DUCT AS REQUIRED TO PROVIDE CIRCUIT CONTINUITY IN ALL CIRCUITS AT ALL TIMES DURING CONSTRUCTION. COSTS TO BE INCLUDED IN THE LIGHTING CONTRACT UNIT PRICES. LENGTH OF JUMPER CABLES IN DUCT SHALL NOT BE MEASURED FOR PAYMENT AND / OR PAID FOR.
4. AFTER SITE WORK IS COMPLETE, CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS PER STANDARD SPECIFICATION 901 AND 908. INCLUDE COST FOR THIS WORK IN CONTACT ITEM "AT103900-REMOVE BEACON TOWER".
5. ALL WORK SHOWN ON THIS SHEET SHALL BE INCLUDED IN ADDITIVE ALTERNATE 2 (REMOVE & REPLACE BEACON).

SYMBOL LEGEND

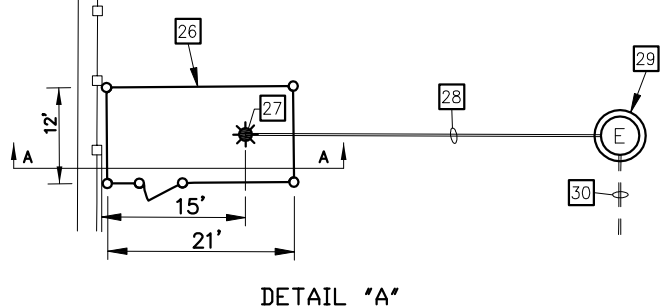
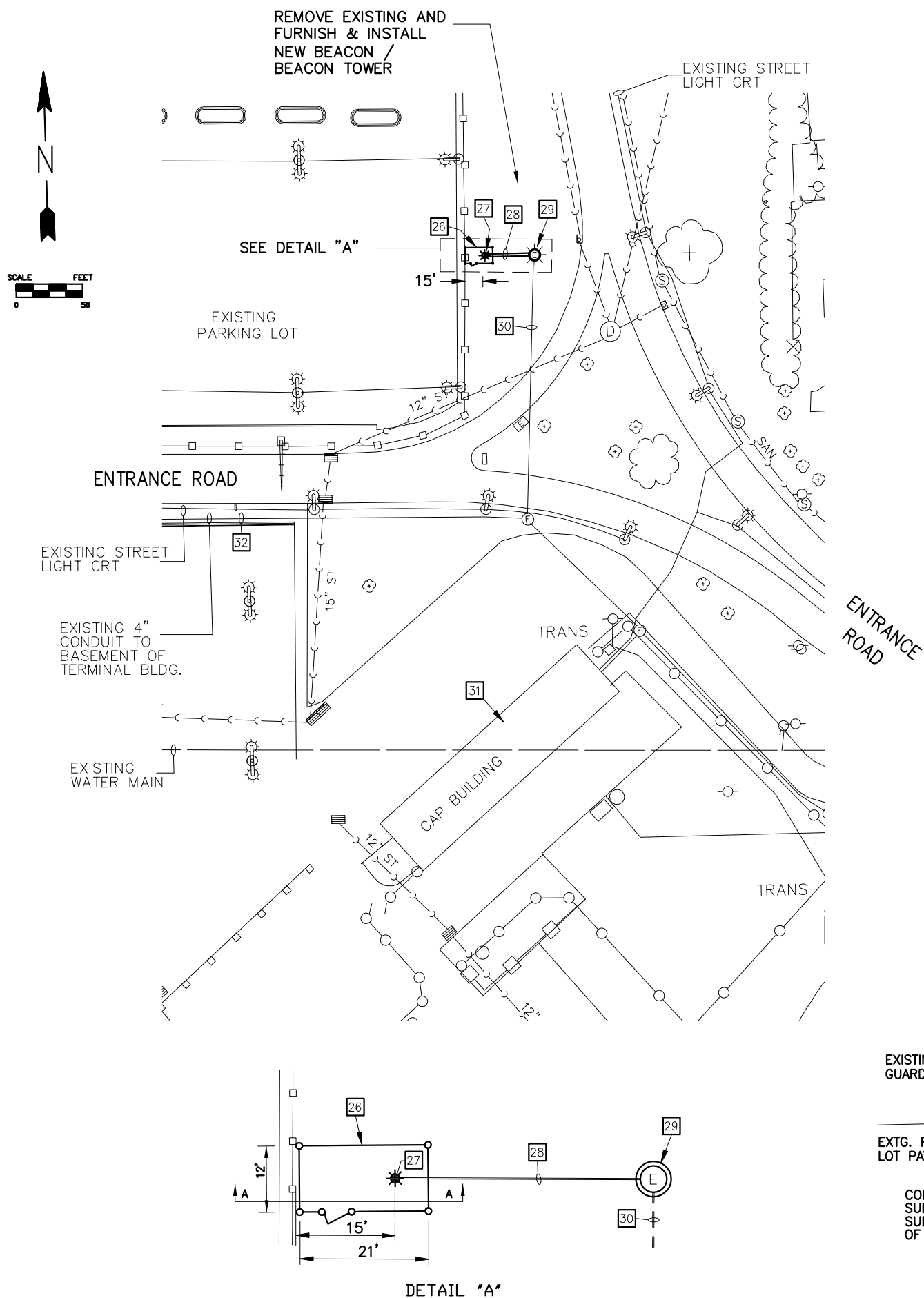
- EXISTING L-867 SPLICE OR TRANSFORMER CAN
- Ⓧ Ⓞ EXISTING STORM OR SANITARY MANHOLE
- — — EXISTING UNDERDRAINS/STORM OR SANITARY SEWERS
- ==== EXISTING CONDUIT OR DUCT BANK
- — — EXISTING ELECTRICAL CIRCUIT, CABLE
- ⊕ EXISTING STREET LIGHT
- ☼ EXISTING BEACON / POLE TOWER
- ⊕ PROPOSED OR RELOCATED L-867 SPLICE OR TRANSFORMER CAN
- ☼ PROPOSED L-802A BEACON ON 75' TUBULAR STEEL BEACON POLE TOWER
- Ⓧ PROPOSED ELECTRICAL MANHOLE
- — — PROPOSED CONDUIT OR DUCT BANK
- — — ○ PROPOSED 10' SECURITY FENCE WITH 4' WALKWAY GATE



CONTRACTOR SHALL REMOVE 6" OF TOPSOIL, COMPACT THE SUBGRADE, AND PLACED PROPOSED GEOTEXTILE FABRIC OVER SUBGRADE PRIOR TO PLACING PROPOSED 6" COMPACTED DEPTH OF IDOT CA-6 CRUSHED ROCK OVER EXCAVATED AREA.

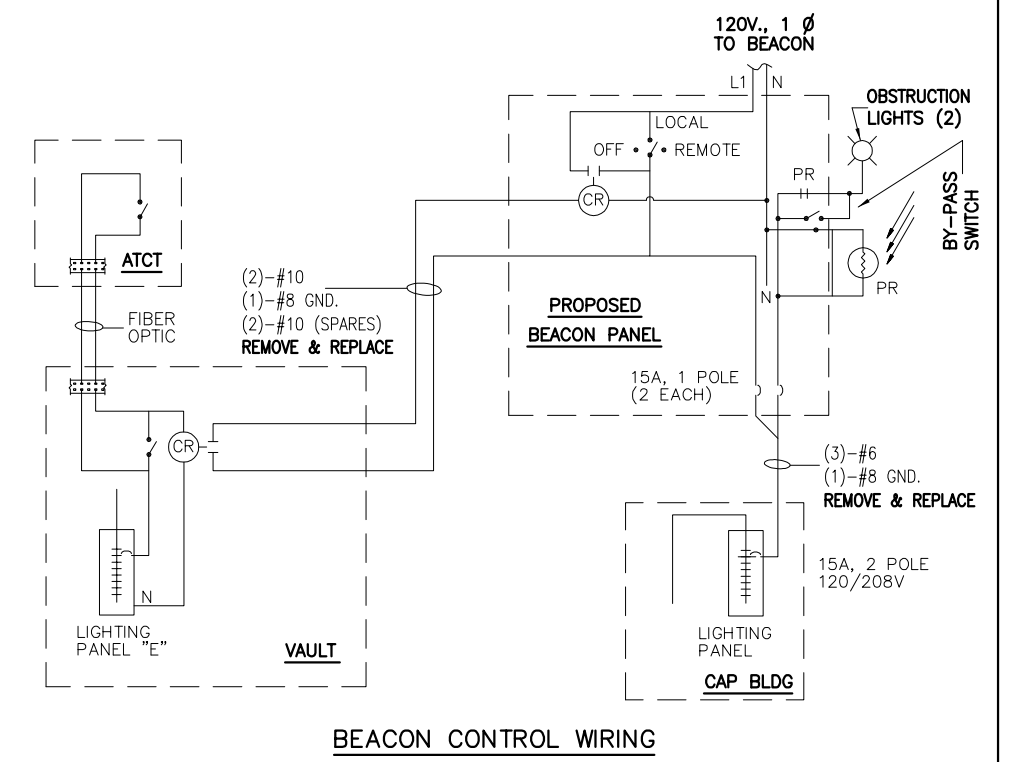
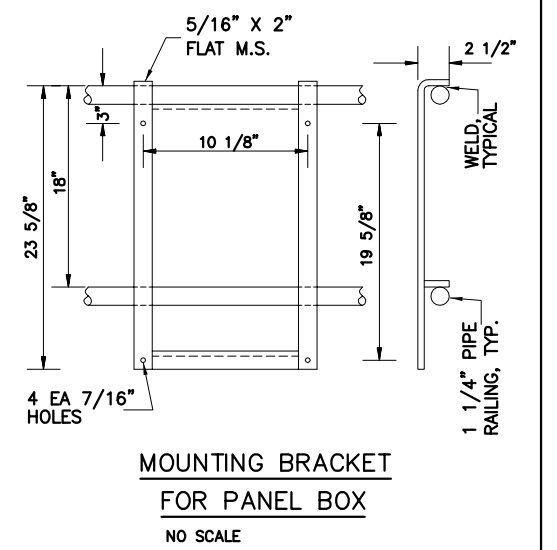
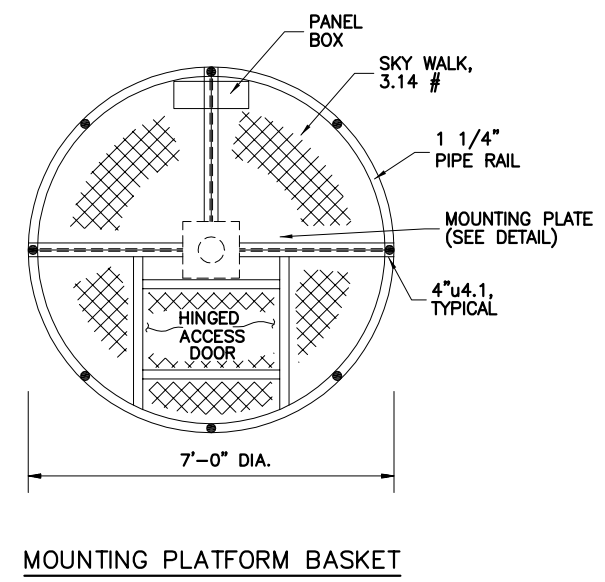
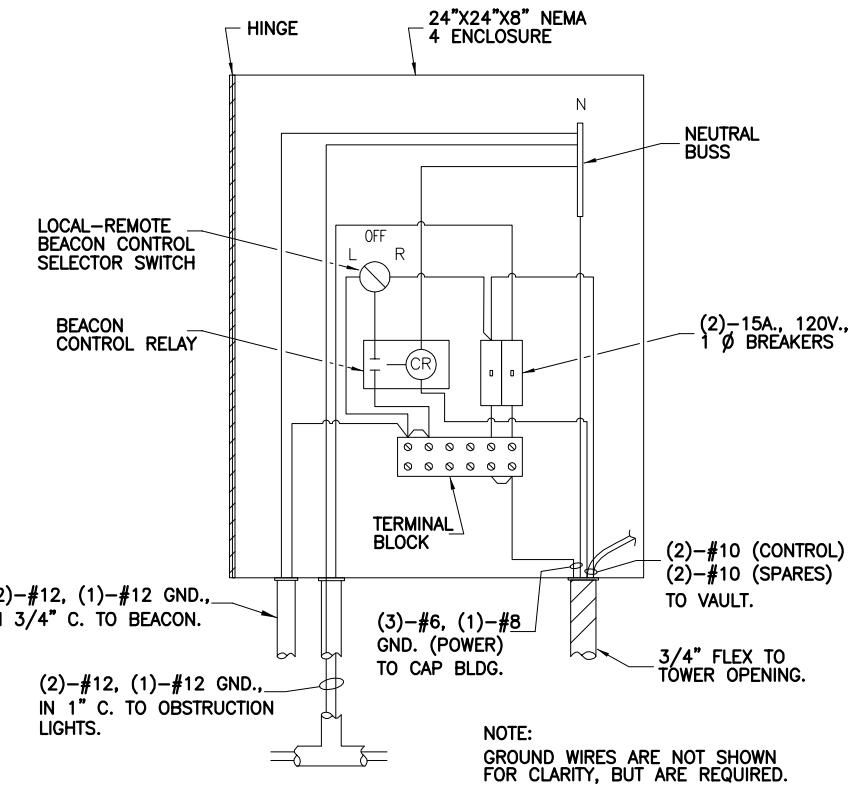
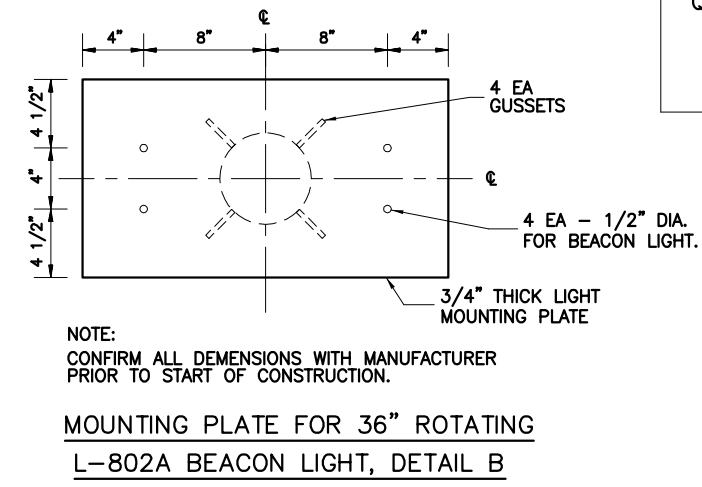
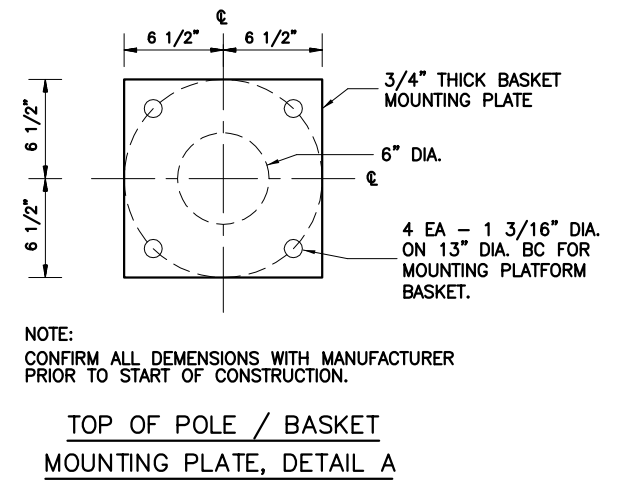
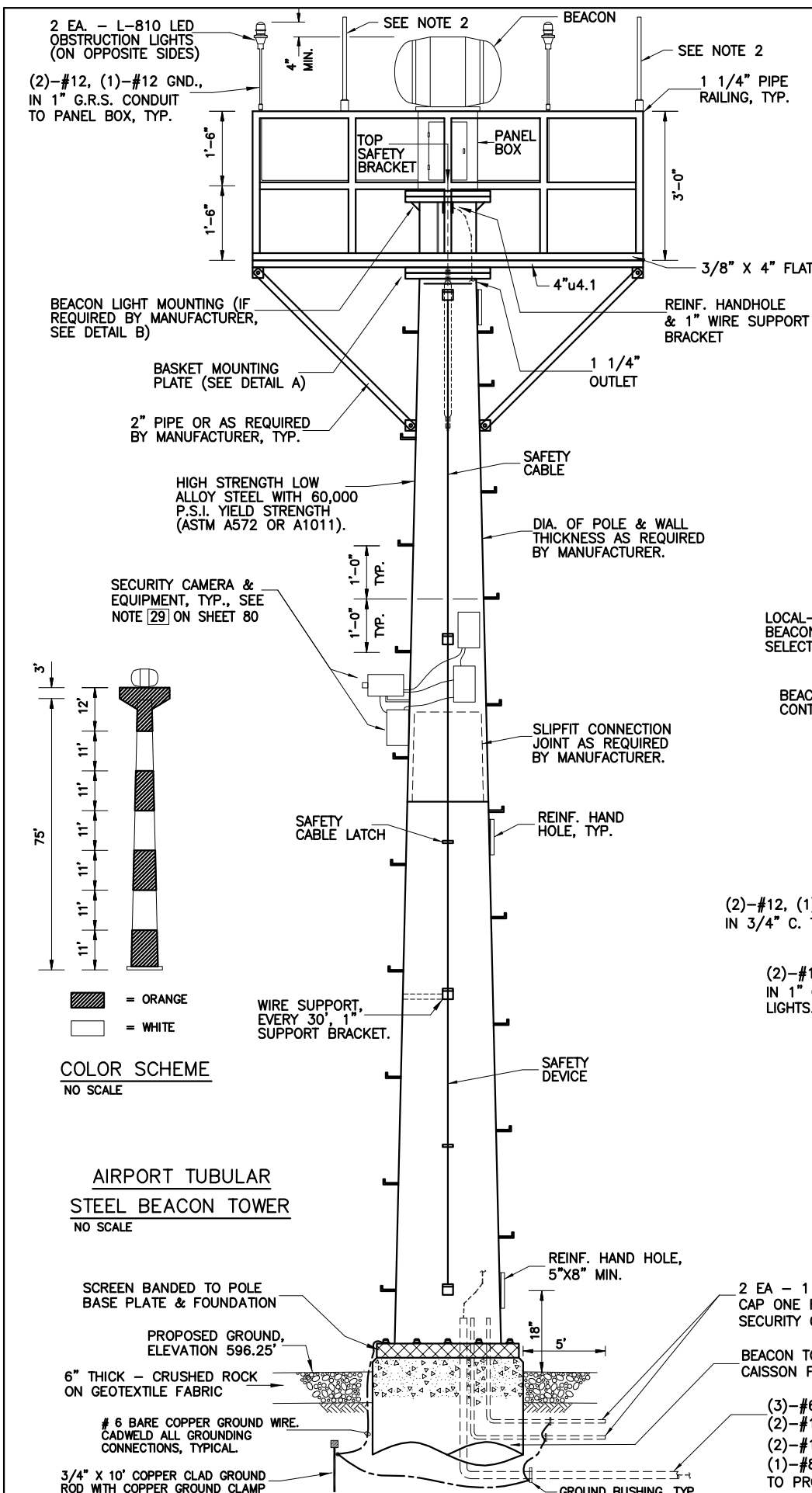
SECTION A-A
 NO SCALE

R9-27, STA 153+20 TO 158+20, LT 1,400' TO LT 2,100'



DETAIL "A"

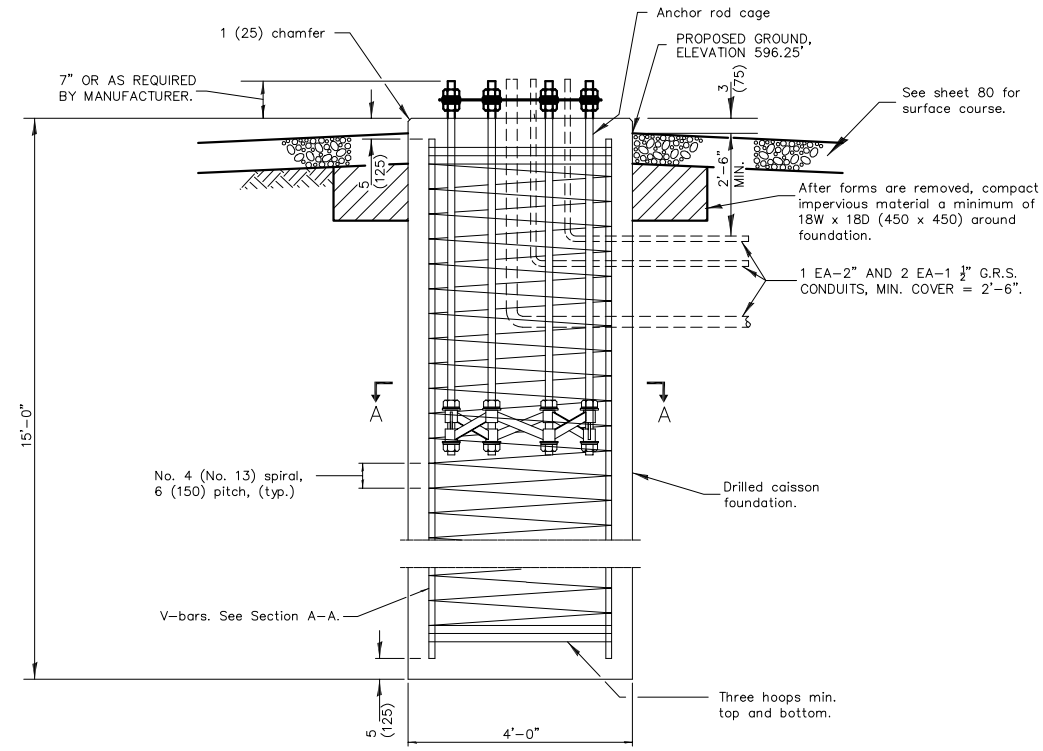
G:\airport\A10T009-Design RnvY Guard Lights\LIGHTING1.dwg, 5/17/2013 9:33:26 AM, jjeffm



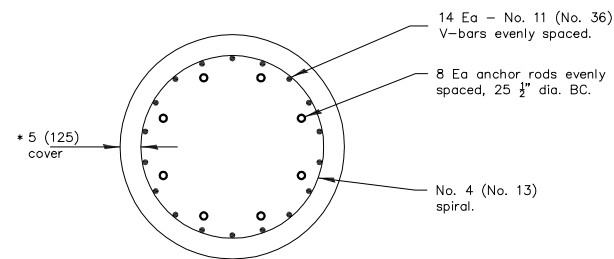
- NOTES:**
- SEE SHEET 80 FOR BEACON TOWER LOCATION.
 - INSTALL 2 EACH - LIGHTING RODS ON OPPOSITE SIDES OF THE BEACON TOWER. RODS SHALL BE EITHER GALVANIZED STEEL, COPPER, OR COPPER CLAD AND TAPER TO POINTS. THE RODS SHALL EXTEND TO POINTS THAT ARE AT LEAST 6" ABOVE THE HIGHEST POINT ON THE BEACON. LIGHTING RODS SHALL BE GROUNDED.
 - TO ALLOW FOR DRAINAGE FROM THE INSIDE OF THE POLE, DO NOT GROUT BETWEEN THE BASE PLATE AND THE FOUNDATION. NO WELDING ALLOWED ON ANCHOR BOLTS. TOWER TO WITHSTAND 100 MPH WIND SPEED WITH 1/2 WIND GUST.
 - CONFIRM ALL DIMENSIONS WITH THE MANUFACTURER PRIOR TO START OF CONSTRUCTION.
 - THE COST OF ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN CONTRACT ITEMS AT101510 - "AIRPORT ROTATING BEACON" AND / OR AT103410 - "BEACON TOWER" UNLESS NOTED OTHERWISE.

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QUAD CITY INTERNATIONAL AIRPORT
 PROPOSED RGL, ALCMS, AND
 PAVEMENT MARKING
 ILL. MLI-4080, QU015
 SHEET 82 OF 83



BEACON TOWER
 DRILLED CAISSON FOUNDATION
 DETAILS, ELEVATION VIEW

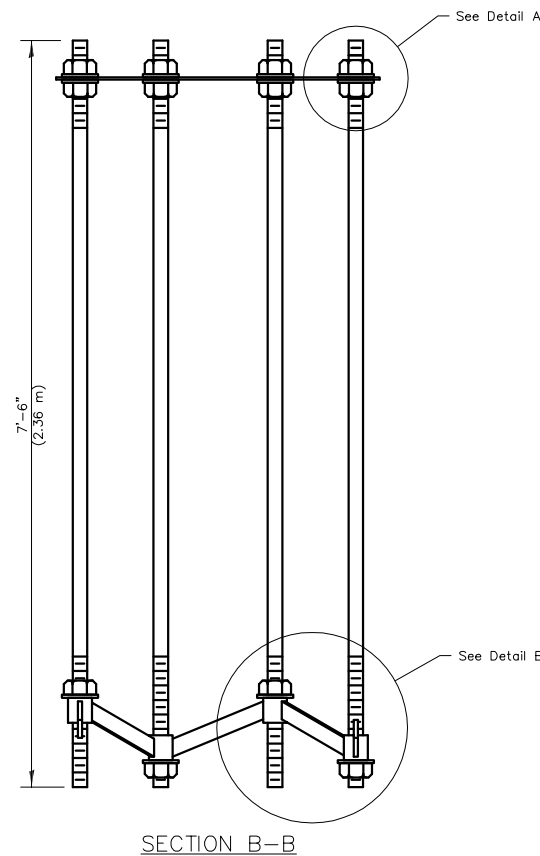


SECTION A-A

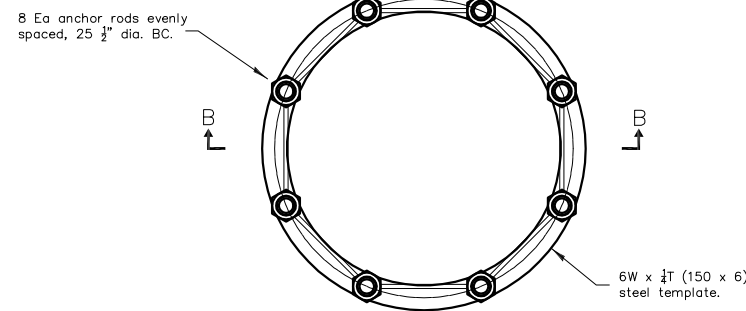
* See Rod and Reinforcement Table.

| ROD AND REINFORCEMENT TABLE | | | | |
|-----------------------------|------------------|-----------------------|-----------------------------|------------------|
| # ANCHOR ROD | ANCHOR ROD DIAM. | ROD CIRCLE DIAM. (BC) | DRILLED CAISSON DIAM. (MIN) | # OF V BARS REQD |
| 8 | 1 1/2" (38) | 25 1/2" (648) | 4'-0" (1.2 m) | 14 |

Diameter based on a 5 (125) conc. cover. The min. cover shall be 4 (100). When rock is encountered a 5 (125) cover against soil and a 2 (50) cover against rock shall be required.

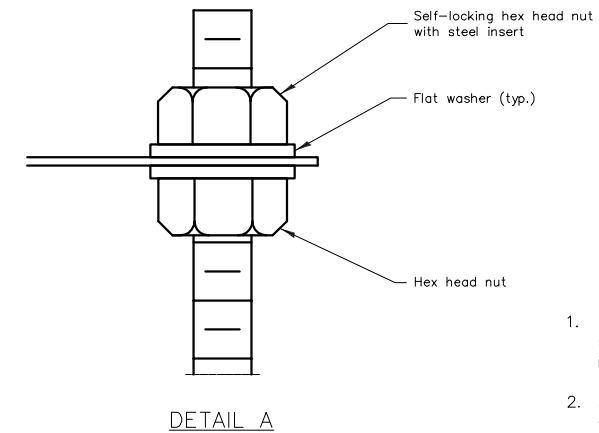


SECTION B-B

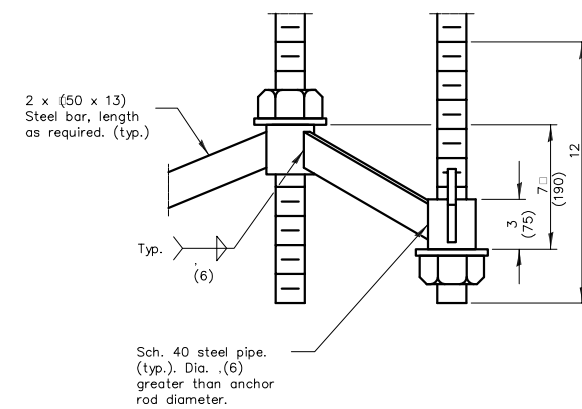


ANCHOR ROD CAGE (PLAN)

Contractor shall confirm all anchor rod cage details with beacon tower manufacturer prior to construction.



DETAIL A

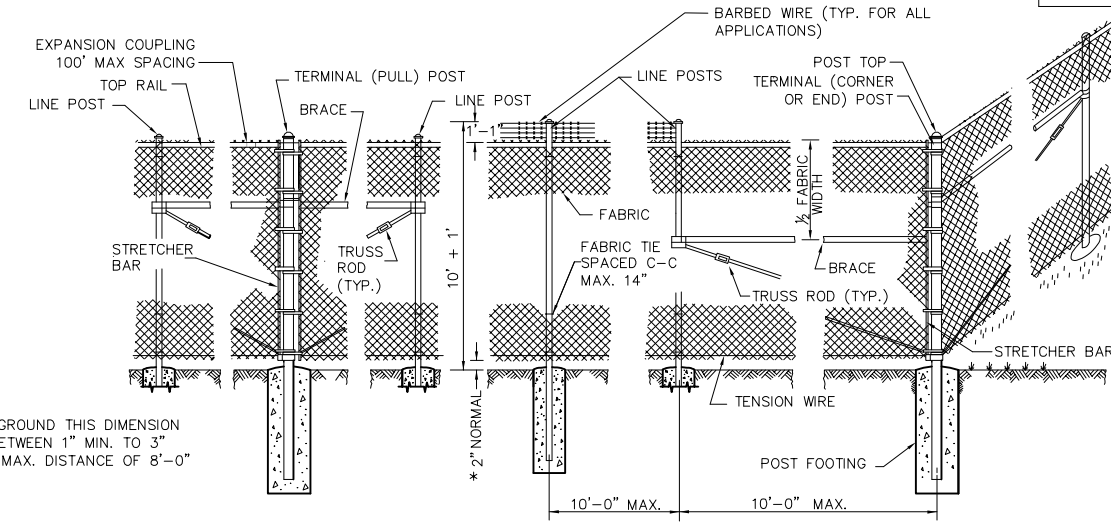
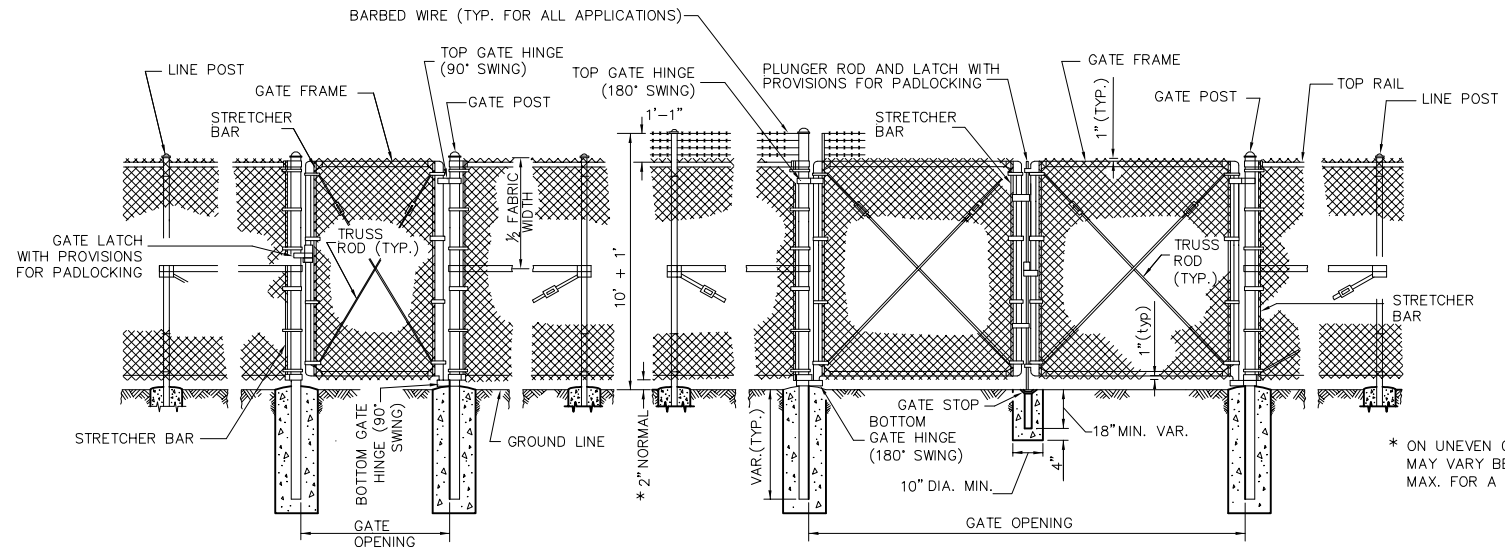


DETAIL B

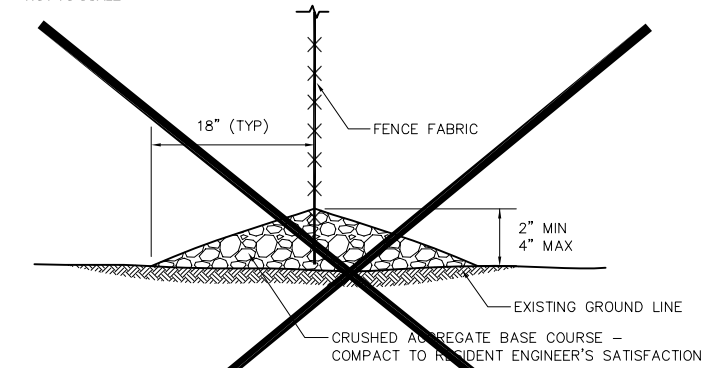
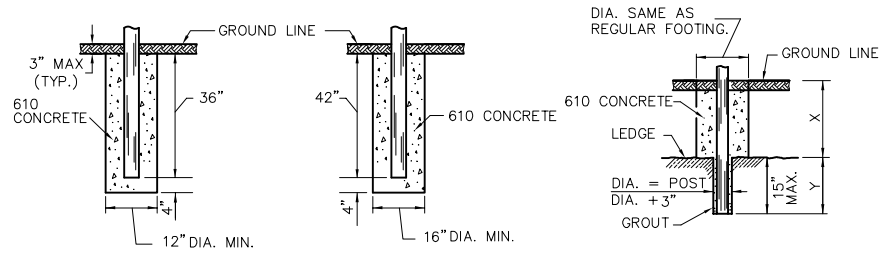
GENERAL NOTES

- The shaft length is based on soil borings. If different soils are encountered, the Resident Engineer shall be notified to provide a revised length.
- Anchor rod quantity, diameter, and length shall be determined by the tower manufacturer and approved by the Resident Engineer. This foundation shall have a minimum of 8 anchor rods.
- All foundation reinforcement steel shall be epoxy coated.
- The cost of reinforcement shall be included in contract item AT801641 - REPLACE TOWER FOUNDATION.
- Steel anchor rod forms shall not be removed for a minimum of 3 days after concrete is poured. The tower shall not be set for a minimum of 7 days or as approved by the Resident Engineer.
- Coordinate the rod circle diameter of the tower with the diameter of the anchor rod cage.
- The foundation shall be poured monolithically and shall have no construction joints.
- See sheet 81 for grounding.
- All dimensions are in inches (millimeters) unless otherwise shown.
- The concrete used to construct this foundation shall meet the requirements found in IDOT-DOA standard specification 610 STRUCTURAL PC CONCRETE (3,500 PSI) as modified by the project special provisions. The cost for this concrete shall be included in the "AT801641 - REPLACE TOWER FOUNDATION" contract unit price.
- CONFIRM ALL DIMENSIONS AND MEASUREMENTS WITH MANUFACTURER PRIOR TO START OF CONSTRUCTION.
- The cost of all items shown on this sheet shall be included in the "AT801641 - REPLACE TOWER FOUNDATION" contract unit price.

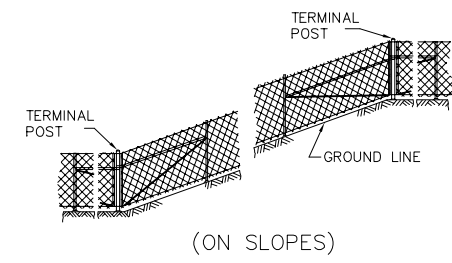
MODIFIED IDOT HIGHWAY STANDARD 837001



* ON UNEVEN GROUND THIS DIMENSION MAY VARY BETWEEN 1" MIN. TO 3" MAX. FOR A MAX. DISTANCE OF 8'-0"



NOTES: 1.) HEIGHT OF FENCE ABOVE GROUND SHALL BE APPROVED PRIOR TO PLACING AGGREGATE.
 2.) AGGREGATE COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CLASS E FENCE-10'.

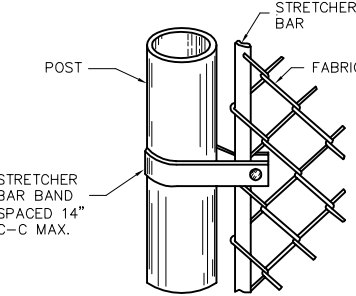
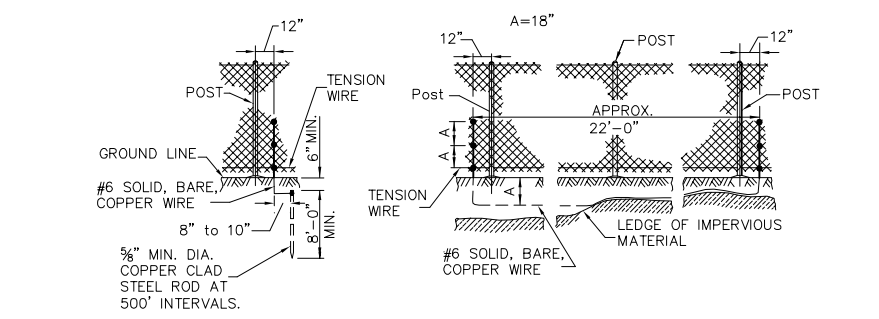


WHEN FENCE LINE HAS A CHANGE IN DIRECTION OF 15° OR MORE, A TERMINAL POST SHALL BE PLACED AS SHOWN ABOVE.
 WHERE ANGLE IS LESS THAN 15° AND EXISTING CONDITIONS REQUIRE A TERMINAL POST, THEY SHALL BE PLACED AS DIRECTED BY THE ENGINEER.



(LINE POST) (GATE & TERMINAL POST) (POST IN ROCK LEDGE)

NOTES: X + Y SHALL NOT EXCEED 24", 30" OR 36", AS APPLICABLE. WHEN X IS 0 TO 9", 15", OR 21", Y = 15", AND THE POST SHALL BE SHORTENED AS REQUIRED. WHEN X EXCEEDS 9", 15", OR 21", Y SHALL BE DECREASED CORRESPONDINGLY.



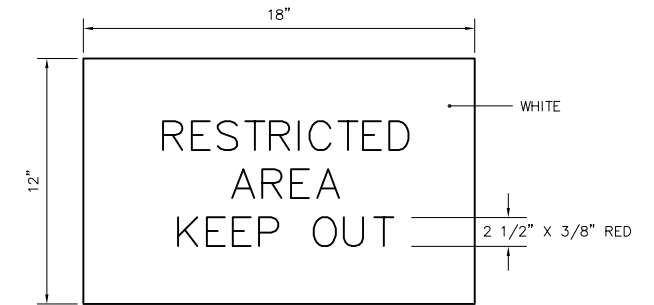
(STRETCHER BAR TO POST)

(FABRIC TO PIPE)

(FABRIC TO TENSION WIRES)

POST AND BRACE TABLE

| DESCRIPTION | DIA.-INCHES | WT-LBS/FT |
|------------------|-------------|-----------|
| LINE POST | 3.0 | 4.65 |
| TERMINAL POST | 4.0 | 6.56 |
| END POST | 4.0 | 6.56 |
| CORNER POST | 4.0 | 6.56 |
| PULL POST | 4.0 | 6.56 |
| GATE FRAMES | 2.0 | 2.28 |
| GATE POST | 4.0 | 9.10 |
| TOP RAIL | 1.625 | 1.84 |
| HORIZONTAL BRACE | 1.625 | 1.84 |



LOCATIONS: EACH GATE REQUIRES ONE SIGN AND EVERY 100' OF FENCE REQUIRES ONE SIGN (PLACED ON THE INSIDE).

NOTES: 1.) 0.08 GA. ALUMINUM SHEET.
 2.) THE COST OF FURNISHING & INSTALLING SIGNS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR FENCE / GATE.

SIGN DETAILS
NOT TO SCALE

GENERAL NOTES

- PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER. THEY SHALL BE PLACED AT 660' INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1320' AND GREATER THAN 660'.
- TRUSS RODS SHALL BE 3/8" ROUND GALVANIZED STEEL ROD WITH GALVANIZED TURNBUCKLES. THE ZINC COATING SHALL NOT BE LESS THAN 1.2 OUNCES PER SQUARE FOOT OF SURFACE.
- "H" SECTION STRUCTURAL SHAPE AND SQUARE TUBULAR PIPE SHALL NOT BE ALLOWED.
- THE COST OF ALL ITEMS SHOWN ON THIS SHEET SHALL BE INCLUDED IN CONTRACT ITEMS AT162510- CLASS E FENCE 10' AND AT162604 CLASS E GATE - 4'.