



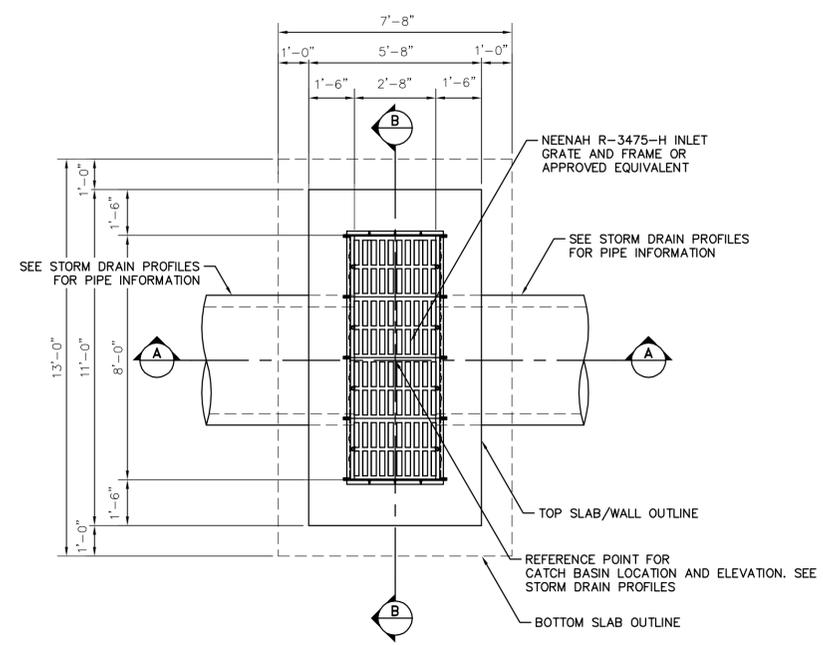
**Kimley-Horn  
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601 NW LOOP 410, SUITE 350  
SAN ANTONIO, TEXAS 78216  
PHONE: (210) 541-9166  
TEXAS REGISTERED FIRM,  
NO. 928

**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**

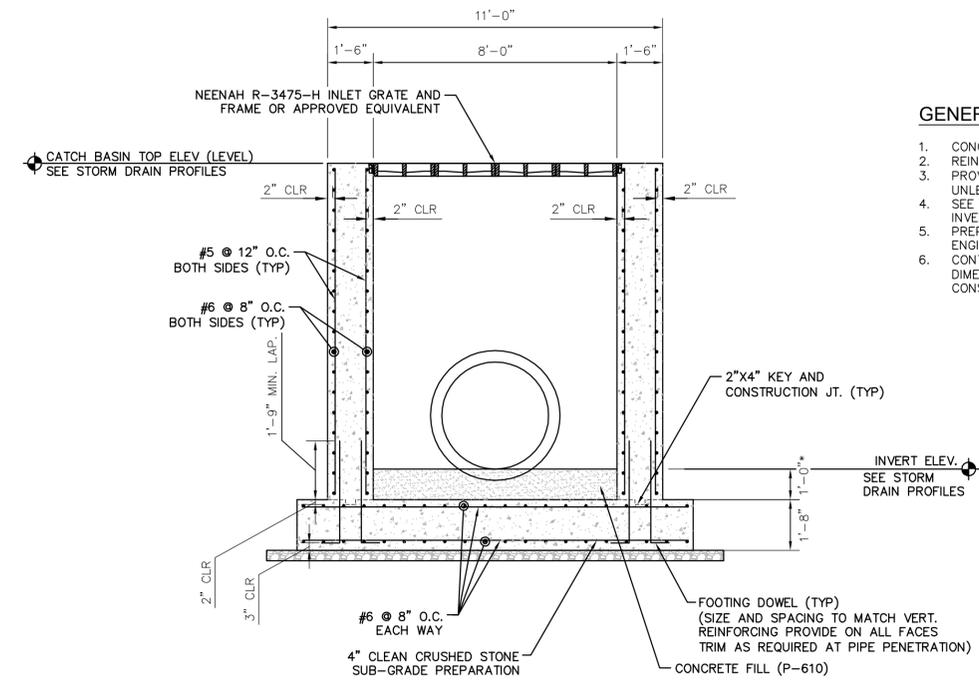


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FILE NAME:	33-00193-R1CS-501	
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SHEET TITLE:		

**STORM DRAIN  
STRUCTURE DETAILS**



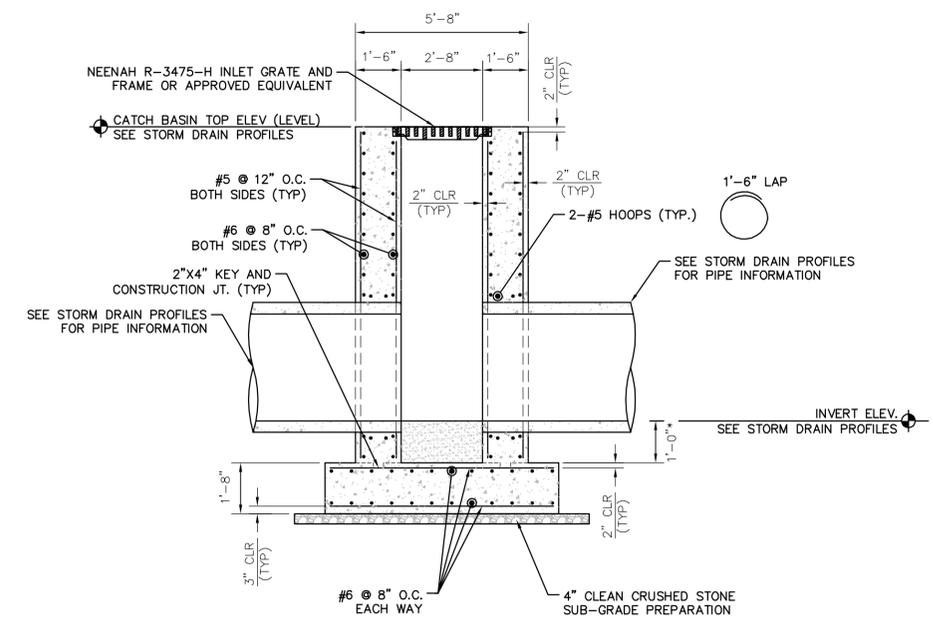
**1**  
C9.4  
**2.67' x 8' CATCH BASIN PLAN**  
N.T.S.



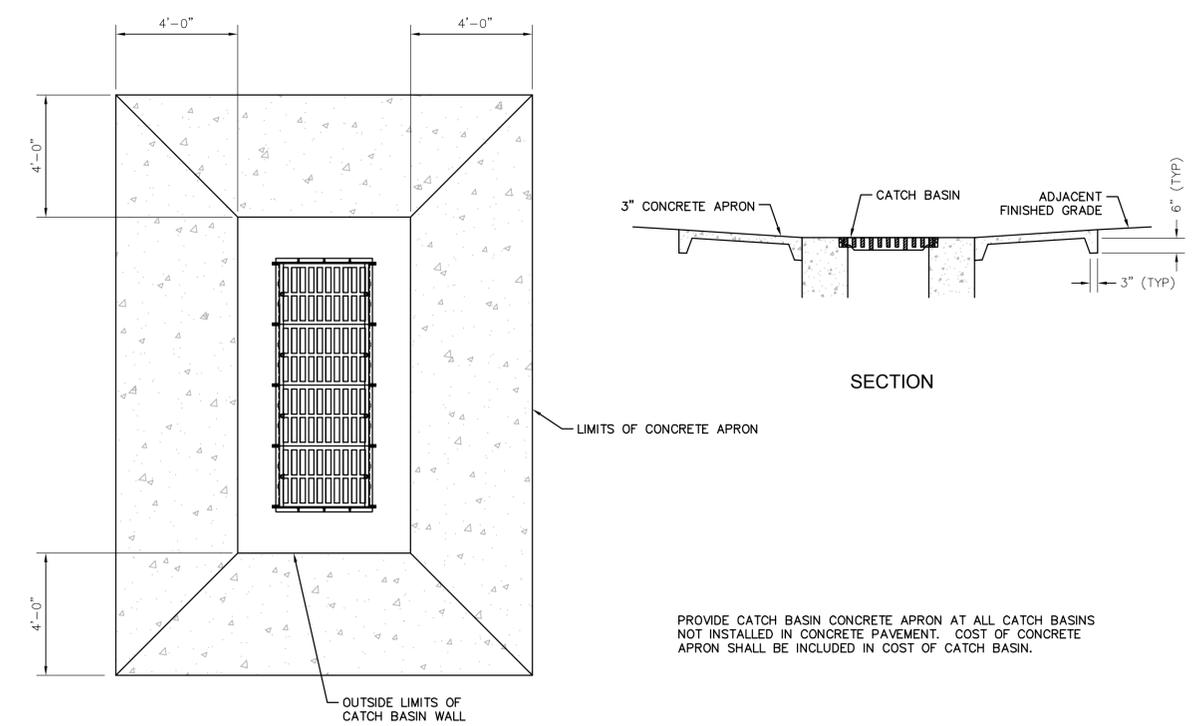
**SECTION B-B**  
N.T.S.

**GENERAL NOTES**

1. CONCRETE  $f'_c = 4,000$  P.S.I. @ 28 DAYS
2. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60
3. PROVIDE 2" CLEAR COVER FOR REINFORCING STEEL UNLESS NOTED OTHERWISE
4. SEE STORM DRAIN PROFILES FOR CATCH BASIN TOP ELEVATIONS AND INLET INVERT ELEVATIONS
5. PREPARE SUB-GRADE IN ACCORDANCE WITH PROJECT GEOTECHNICAL ENGINEERS RECOMMENDATIONS
6. CONTRACTOR SHALL VERIFY 2'-8" X 8'-0" CATCH BASIN INTERIOR DIMENSIONS WITH SELECTED INLET GRATE MANUFACTURER PRIOR TO CONSTRUCTION OF CATCH BASIN



**SECTION A-A**  
N.T.S.



**2**  
C9.4  
**CATCH BASIN CONCRETE APRON**  
N.T.S.

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**PAVEMENT  
MARKING PLAN  
BASE BID**

**LEGEND**

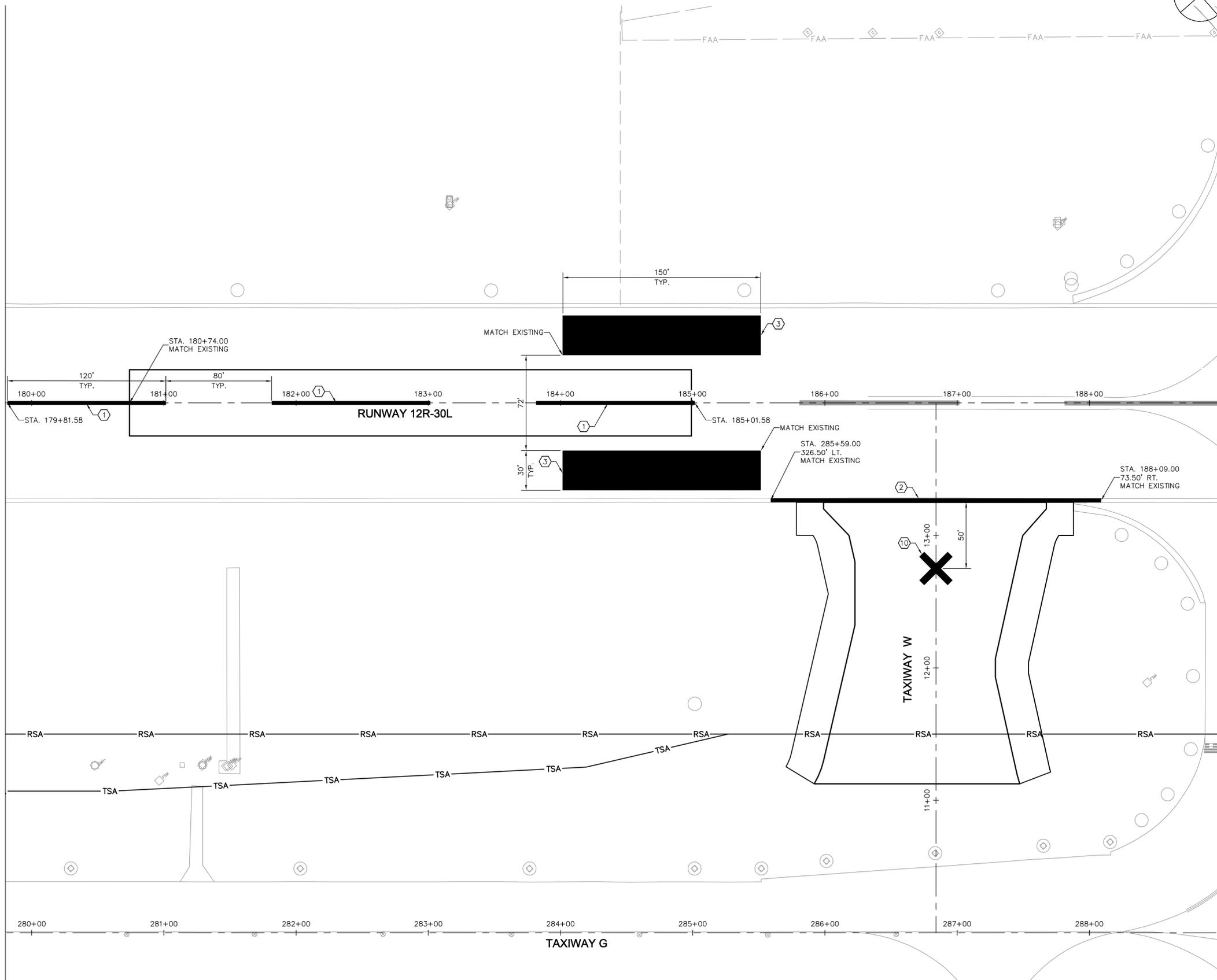
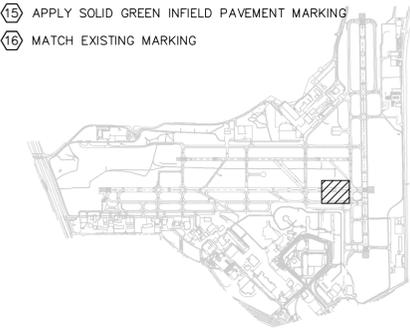
- ⊕ RUNWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊖ RUNWAY EDGE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- RUNWAY TOUCHDOWN ZONE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊕ TAXIWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊖ TAXIWAY EDGE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS

**GENERAL NOTES**

1. PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL AVIATION ADMINISTRATION'S ADVISORY CIRCULAR AC-150/5340. IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE ADVISORY CIRCULAR, THE ADVISORY CIRCULAR SHALL TAKE PRECEDENCE.
2. THE CONTRACTOR SHALL REMOVE CURING MATERIALS FROM THE PCCP PRIOR TO THE APPLICATION OF MARKINGS.
3. CONTRACTOR TO SURVEY EXISTING PAVEMENT MARKINGS SHOWN OUTSIDE OF PAVING LIMITS AND TO REINSTALL AT THOSE LOCATIONS UNLESS SPECIFIED OTHERWISE.
4. PROVIDE DOUBLE APPLICATION OF ALL NEW PAVEMENT MARKINGS (2 COATS)
5. ALL PERMANENT MARKINGS, LOCATED ON PCC, SHALL HAVE A SIX-INCH (6") WIDE BLACK BORDER.
6. EVERY EFFORT HAS BEEN MADE TO ACCURATELY DEPICT ALL MARKINGS THAT WILL BE RE-STRIPED ON THIS PROJECT, HOWEVER, ADDITIONAL MARKINGS MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
7. SURFACES THAT ARE OBSTRUCTED DUE TO DEBRIS OR FLAKING PAINT SHALL BE THOROUGHLY CLEANED AND SWEEPED BEFORE APPLYING NEW MARKINGS.
8. ENGINEER TO REVIEW AND APPROVE PAVEMENT MARKING LAYOUT BEFORE MARKING IS PERFORMED.
9. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.

**CONSTRUCTION NOTES**

1. APPLY THIRTY-SIX INCH (36") WIDE SOLID WHITE RUNWAY CENTERLINE PAVEMENT MARKING PER DETAIL 1, SHEET C12.4
2. APPLY THIRTY-SIX INCH (36") WIDE SOLID WHITE RUNWAY EDGE LINE PAVEMENT MARKING PER DETAIL 2, SHEET C12.4
3. APPLY SOLID WHITE RUNWAY AIMING POINT PAVEMENT MARKING WITH SIX INCH (6") BLACK BORDER
4. APPLY SOLID WHITE RUNWAY DESIGNATION MARKING WITH SIX INCH (6") BLACK BORDER PER DETAIL 5, SHEET C12.5
5. APPLY ENHANCED RUNWAY HOLDING POSITION PAVEMENT MARKING PER DETAIL 6, SHEET C12.4
6. APPLY SIX INCH (6") WIDE SOLID YELLOW TAXIWAY CENTERLINE PAVEMENT MARKING PER DETAIL 3, SHEET C12.4
7. APPLY DOUBLE SIX INCH (6") WIDE SOLID YELLOW TAXIWAY EDGE PAVEMENT MARKING PER DETAIL 4, C12.4
8. REFER TO DETAIL 1, SHEET C12.5 FOR RUNWAY/TAXIWAY INTERSECTION INFORMATION
9. APPLY THIRTY-SIX INCH (36") WIDE SOLID YELLOW TAXIWAY SHOULDER PAVEMENT MARKING PER DETAIL 5, SHEET C12.4
10. APPLY SOLID YELLOW CLOSED TAXIWAY PAVEMENT MARKING PER DETAIL 2, SHEET C12.5
11. APPLY SURFACE PAINTED HOLD POSITION SIGN PER DETAIL 3, SHEET C12.5
12. APPLY BLACK PAINT TO PCC PAVEMENT THAT LIES OUTSIDE OF TAXIWAY EDGE MARKINGS (NPI)
13. APPLY DASHED YELLOW INTERMEDIATE HOLDING POSITION MARKING PER DETAIL 4, SHEET C12.5
14. APPLY SOLID WHITE TOUCHDOWN ZONE MARKING PER DETAIL 6, SHEET C12.5
15. APPLY SOLID GREEN INFIELD PAVEMENT MARKING
16. MATCH EXISTING MARKING



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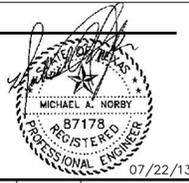




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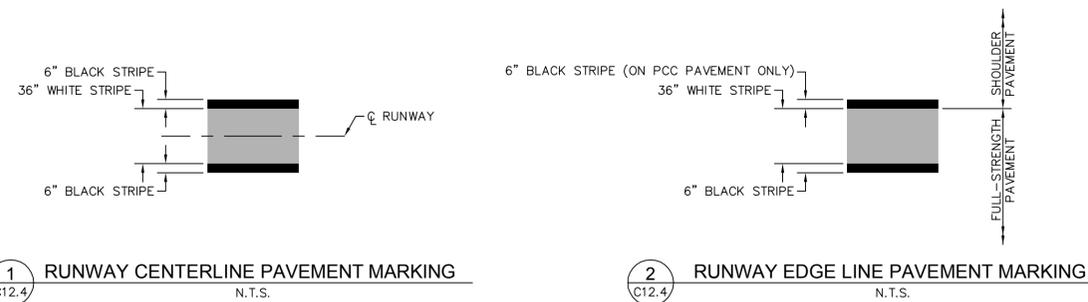
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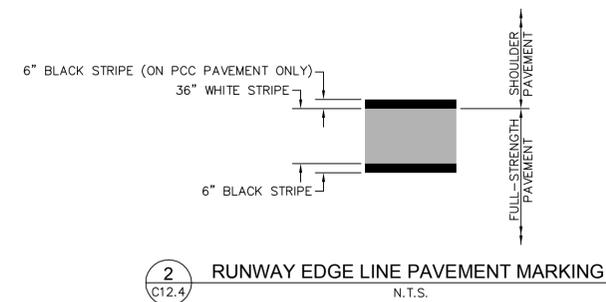


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PAVEMENT MARKING  
DETAILS



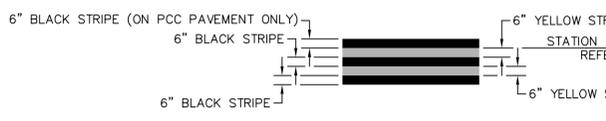
**1**  
C12.4 **RUNWAY CENTERLINE PAVEMENT MARKING**  
N.T.S.



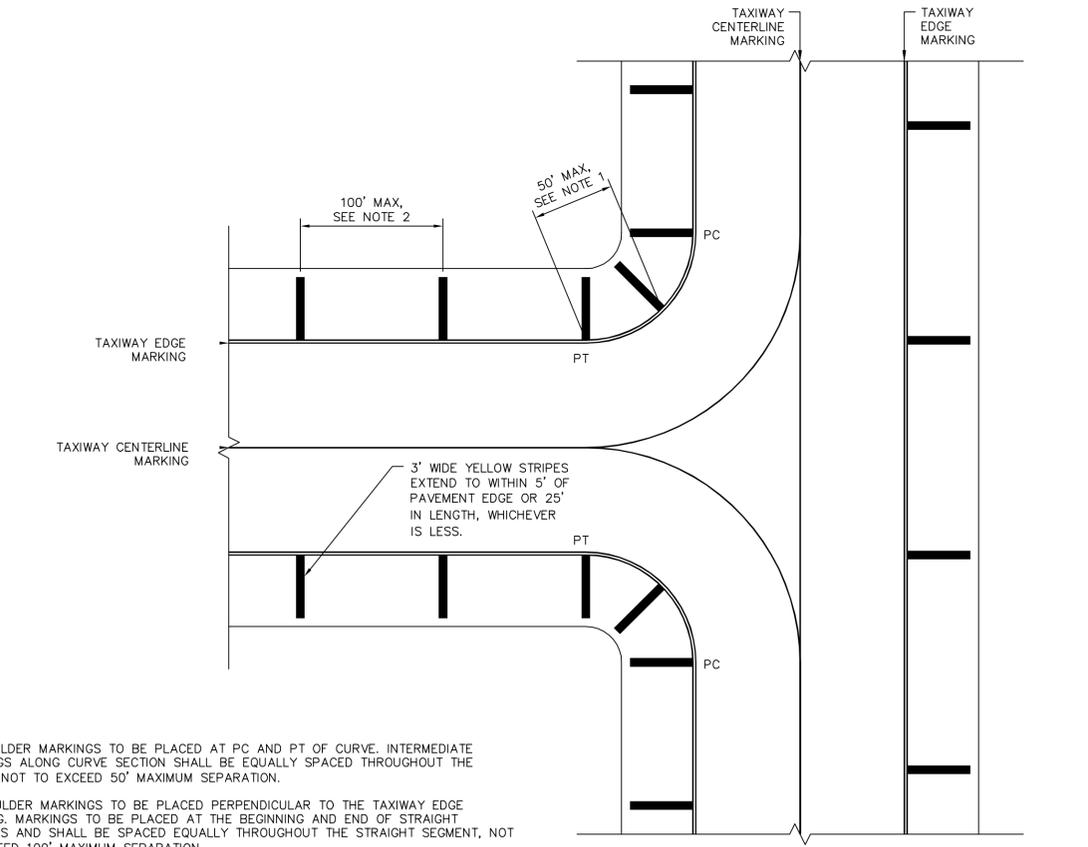
**2**  
C12.4 **RUNWAY EDGE LINE PAVEMENT MARKING**  
N.T.S.



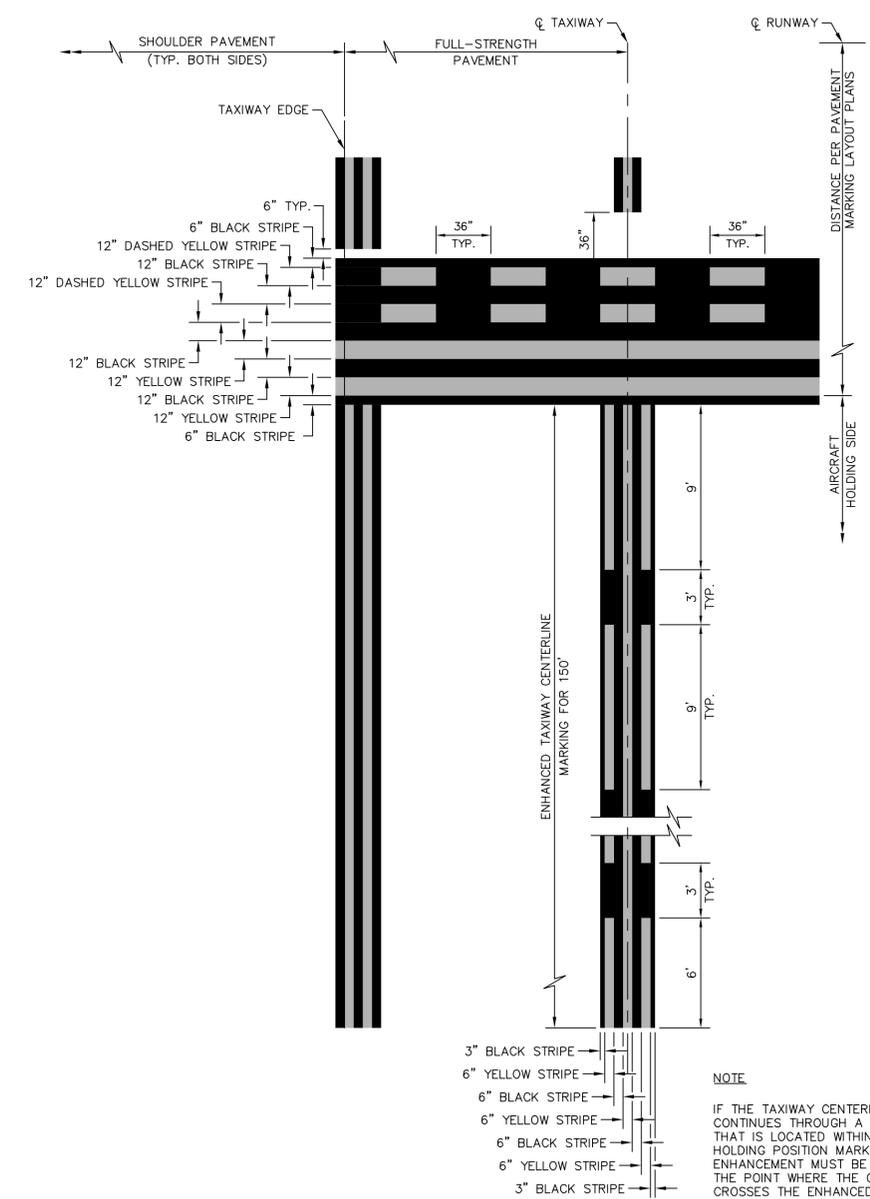
**3**  
C12.4 **TAXIWAY CENTERLINE PAVEMENT MARKING**  
N.T.S.



**4**  
C12.4 **TAXIWAY EDGE LINE PAVEMENT MARKING**  
N.T.S.



**5**  
C12.4 **TAXIWAY SHOULDER PAVEMENT MARKING LAYOUT**  
N.T.S.



**6**  
C12.4 **ENHANCED RUNWAY HOLDING POSITION PAVEMENT MARKING DETAIL**  
N.T.S.

**NOTE**  
IF THE TAXIWAY CENTERLINE TO BE ENHANCED CONTINUES THROUGH A TAXIWAY/TAXIWAY INTERSECTION THAT IS LOCATED WITHIN 150 FEET OF A RUNWAY HOLDING POSITION MARKING, THE TAXIWAY CENTERLINE ENHANCEMENT MUST BE TERMINATED 5 FEET PRIOR TO THE POINT WHERE THE OTHER TAXIWAY CENTERLINE CROSSES THE ENHANCED TAXIWAY CENTERLINE.

- NOTES:**
1. SHOULDER MARKINGS TO BE PLACED AT PC AND PT OF CURVE. INTERMEDIATE MARKINGS ALONG CURVE SECTION SHALL BE EQUALLY SPACED THROUGHOUT THE CURVE, NOT TO EXCEED 50' MAXIMUM SEPARATION.
  2. SHOULDER MARKINGS TO BE PLACED PERPENDICULAR TO THE TAXIWAY EDGE MARKING. MARKINGS TO BE PLACED AT THE BEGINNING AND END OF STRAIGHT SECTIONS AND SHALL BE SPACED EQUALLY THROUGHOUT THE STRAIGHT SEGMENT, NOT TO EXCEED 100' MAXIMUM SEPARATION.

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SITE DESCRIPTION

PROJECT NAME AND LOCATION: VARIOUS TAXIWAYS AND RUNWAYS, SAN ANTONIO INTERNATIONAL AIRPORT

CONTACT AND PHONE NO.:

PROJECT DESCRIPTION: RECONSTRUCTION AND REHABILITATION OF SEVERAL AREAS OF PAVEMENT WITH ASSOCIATED ASSOCIATED GRADING, DRAINAGE, AND UTILITY IMPROVEMENTS.

MAJOR SOIL DISTURBING ACTIVITIES: DEMOLITION, EXCAVATION, GRADING, TRENCHING, AND BACKFILLING.

TOTAL PROJECT AREA (ACRES):                      BASE BID: 4.0 ACRES

ALTERNATE 1: 4.9 ACRES

ALTERNATE 2: 1.2 ACRES

ALTERNATE 3: 1.7 ACRES

ALTERNATE 4: 1.1 ACRES

ALTERNATE 5: 2.4 ACRES

TOTAL AREA TO BE DISTURBED:                      BASE BID: 11.4 ACRES

ALTERNATE 1: 4.9 ACRES

ALTERNATE 2: 1.8 ACRES

ALTERNATE 3: 2.8 ACRES

ALTERNATE 4: 2.4 ACRES

ALTERNATE 5: 4.3 ACRES

WEIGHTED RUNOFF COEFFICIENT:                      C = 0.61  
(AFTER CONSTRUCTION)

EXISTING CONDITION OF SOIL, VEGETATIVE COVER AND % OF VEGETATIVE COVER:                      60%

DESCRIPTION OF WATER DISCHARGED NOT ASSOCIATED WITH CONSTRUCTION:                      N/A

NAME OF RECEIVING WATERS: SALADO CREEK

IDENTIFY STORMWATER DISCHARGE POINTS: THE STORMWATER ENTERS THE EXISTING ONSITE STORM DRAIN SYSTEM.

THE STORM DRAIN SYSTEM OUTFALLS INTO SALADO CREEK.

A DESCRIPTION AND TIME FRAME FOR INSTALLATION OF STABILIZATION PRACTICES IN CONJUNCTION WITH CONSTRUCTION:                      CONTROLS WILL BE INSTALLED BEFORE CONSTRUCTION

ACTIVITY BEGINS AT EACH WORK AREA.

EROSION AND SEDIMENTATION CONTROLS

SOIL STABILIZATION PRACTICES:

- HYDROMULCHING
- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING OR SEEDING
- MULCHING
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER:

DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED TEMPORARILY OR PERMANENTLY, SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITIES ARE SCHEDULED TO RESUME AND DONE WITHIN 21 DAYS.

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- GRAVEL FILTRATION BAGS
- ROCK BERMS
- DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- DIVERSION, DIKE AND SWALE COMBINATIONS
- PAVED FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)
- TIMBER MATTING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT BASINS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET SEDIMENT STRUCTURES
- CURBS AND GUTTERS
- STORM SEWERS
- VELOCITY CONTROL STRUCTURES
- GEOTEXTILES

OTHER:

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORMWATER MANAGEMENT) ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS: INSTALLATION OF ROCK BERMS AND GRAVEL FILTRATION BAGS.

DEMOLITION, EXCAVATION, GRADING, TRENCHING, BACKFILL, PERMANENT STABILIZATION, SITE CLEANUP.

A DESCRIPTION OF MAINTENANCE PROCEDURES FOR CONTROL MEASURES USED: ROCK BERMS-- INSPECTION SHOULD BE

MADE WEEKLY AND AFTER EACH RAINFALL. REMOVE SEDIMENT WHEN BUILDUP REACHES 3 INCHES. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICES AND OTHER STRUCTURES. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED AND APPROVED BY PROJECT REPRESENTATIVE.

GRAVEL FILTER BAGS: INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICES AND OTHER STRUCTURES. INSPECT FILTER FABRIC AND PATCH OR REPLACE IF TORN OR MISSING. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

STORMWATER MANAGEMENT: THE STORM WATER CONTROLS INDICATED FOR THIS PROJECT ARE THE STORM WATER CONTROLS INDICATED FOR THIS PROJECT ARE DESIGNED TO MINIMIZE STORM WATER POLLUTION BEFORE RUNOFF LEAVES THE SITE.

A DESCRIPTION OF PERMANENT STORM WATER MANAGEMENT CONTROLS: FOLLOWING CONSTRUCTION, SOILED AREAS WILL BE PERMANENTLY VEGETATED AND STORM SEWERS WILL COLLECT RUNOFF TO MINIMIZE EROSION OF UNPAVED AREAS. EROSION CONTROLS AT THE SPOILS DISPOSAL SITES LOCATED ELSEWHERE ON THE AIRPORT PROPERTY SHALL BE PLANNED AND IMPLEMENTED BY THE CONTRACTOR.

OTHER EROSION AND SEDIMENTATION CONTROLS

MAINTENANCE:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREAS ADJACENT TO CREEKS AND DRAINAGEWAYS SHALL HAVE PRIORITY, FOLLOWED BY DEVICES PROTECTING STORM SEWER INLETS.

INSPECTION:

AN INSPECTION WILL BE PERFORMED BY THE CONTRACTOR EVERY 14 DAYS AS WELL AS AFTER EVERY 1 / 2" OR MORE OF RAIN (RECORDED ON A NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER INSPECTION. BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL BE CORRECTED BEFORE THE NEXT SCHEDULED INSPECTION.

WASTE MATERIALS:

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION AND THE TRASH WILL BE HAULED TO A LOCAL DUMP. NO CONSTRUCTION MATERIALS WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ACIDS FOR CLEANING MASONRY SURFACES, GASOLINE, MOTOR OIL, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS AND MEETS REPORTING REQUIREMENTS, THE NATIONAL RESPONSE CENTER SHOULD BE CONTACTED AT 800-424-8802, AND ANY REQUIRED CHANGES MADE TO THE SWPPP. IN THE EVENT OF A LIFE THREATENING SPILL THE SAN ANTONIO FIRE DEPARTMENT SHOULD BE NOTIFIED AS WELL AS THE APPROPRIATE CITY INSPECTORS.

SANITARY WASTE

OFFSITE EXCAVATION SOURCE LOCATION

TO BE DETERMINED BY THE CONTRACTOR.

OFFSITE FILL SOURCE LOCATION

TO BE DETERMINED BY THE CONTRACTOR.

OFFSITE VEHICLE TRACKING

- HAUL ROADS DAMPENED FOR DUST CONTROL.
- LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD TO BE REMOVED DAILY
- STABILIZED CONSTRUCTION ENTRANCE.

OTHER:

CERTIFICATION THAT SITE DISTURBANCE AND / OR DISCHARGES WILL NOT EFFECT LISTED ENDANGERED SPECIES AND THEIR HABITAT. WHAT METHOD IS USED TO SATISFY THE ENDANGERED SPECIES REQUIREMENTS?

REMARKS:

N/A  
DISPOSAL AREAS, STOCKPILES AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT ENTERS RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, BODY OF WATER, STREAMBED OR FLOODPLAIN CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED AS SOON AS POSSIBLE OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSEWORK, PILING DEBRIS OR OTHER OBSTRUCTION PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT PART OF THE FINISHED WORK.

CITY OF  
SAN ANTONIO  
AVIATION  
DEPARTMENT



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 COPYRIGHT: 2013  
 SHEET TITLE:  
**STORM WATER  
 POLLUTION  
 PREVENTION  
 COVER SHEET  
 BASE BID**

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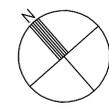
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**STORM WATER  
POLLUTION  
PREVENTION PLAN  
AND SEEDING  
BASE BID**

C13.2  
SHEET NO. 54 OF 214



**LEGEND**

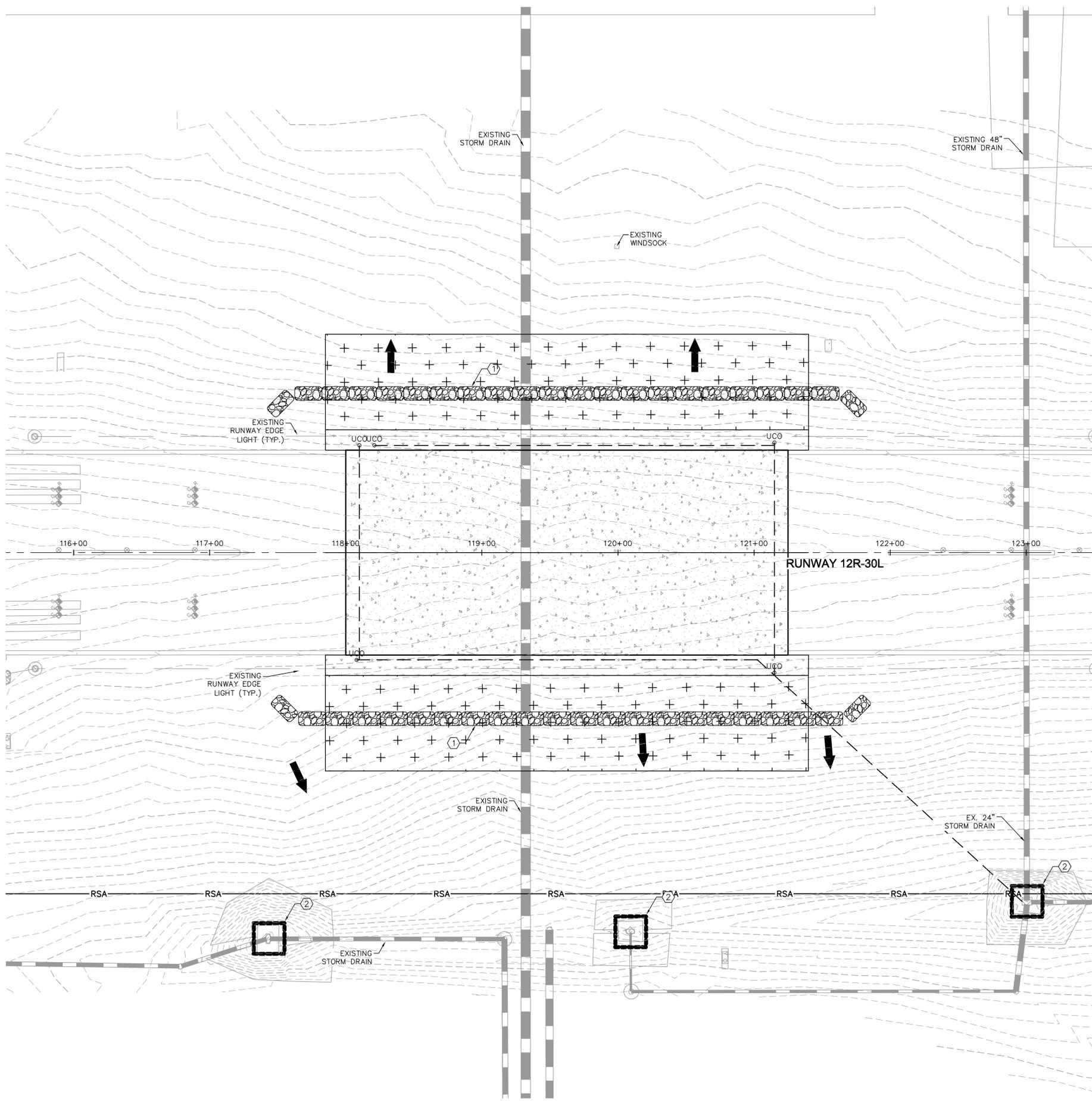
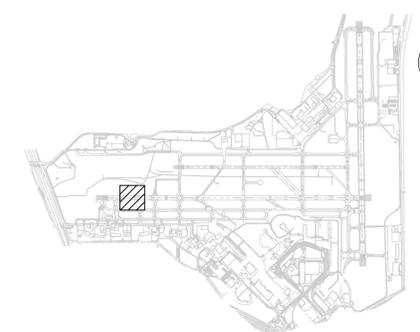
- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- PROPOSED SEEDING AREA
- PROPOSED SOD AREA
- ROCK FILTER DAM
- DRAINAGE INLET PROTECTION
- FLOW DIRECTION ARROW
- GRADING LIMITS
- DRAINAGE TO BE REMOVED
- PROPOSED DRAINAGE LINE

**GENERAL NOTES**

1. THE PURPOSE OF THE SWPPP IS TO PROTECT THE EXISTING DRAINAGE BASINS, CHANNELS, AND PIPE NETWORKS FROM SEDIMENTATION AND CONTAMINANTS.
2. THIS PROPOSED LAYOUT SHOWS THE FINAL CONDITION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING BMP INSTALLATIONS DURING CONSTRUCTION.
3. PLACE WATTLES IN FRONT OF ALL INLETS.
4. SEEDING SHALL BE PERFORMED AND PAID FOR ALL AREAS AFFECTED BY GRADING AND EARTHWORK. OTHER AREAS INCIDENTALLY AFFECTED BY CONSTRUCTION EQUIPMENT SHALL BE RESEED AT THE CONTRACTOR'S EXPENSE.
5. SEE SPECIFICATION T-901 FOR SEEDING REQUIREMENTS AND SEED MIX, AND SPECIFICATION T-904 FOR SODDING REQUIREMENTS.
6. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.
7. LIMITS OF SODDING ARE A TYPICAL WIDTH OF 15 FEET OFF OF THE EDGES OF PROPOSED PAVEMENT.

**CONSTRUCTION NOTES**

- ① INSTALL ROCK FILTER DAM PER DETAIL, SHEET C13.4.
- ② INSTALL CATCH BASIN PROTECTION PER DETAIL, SHEET C13.4.



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POLLUTION  
PREVENTION PLAN  
AND SEEDING  
BASE BID**

C13.3  
SHEET NO. 55 OF 214

**LEGEND**

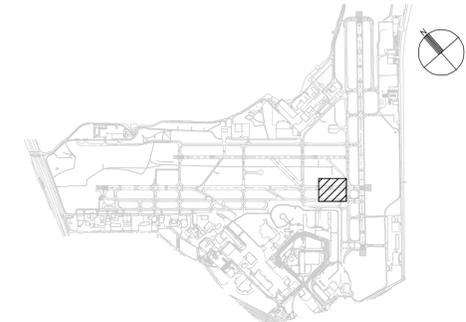
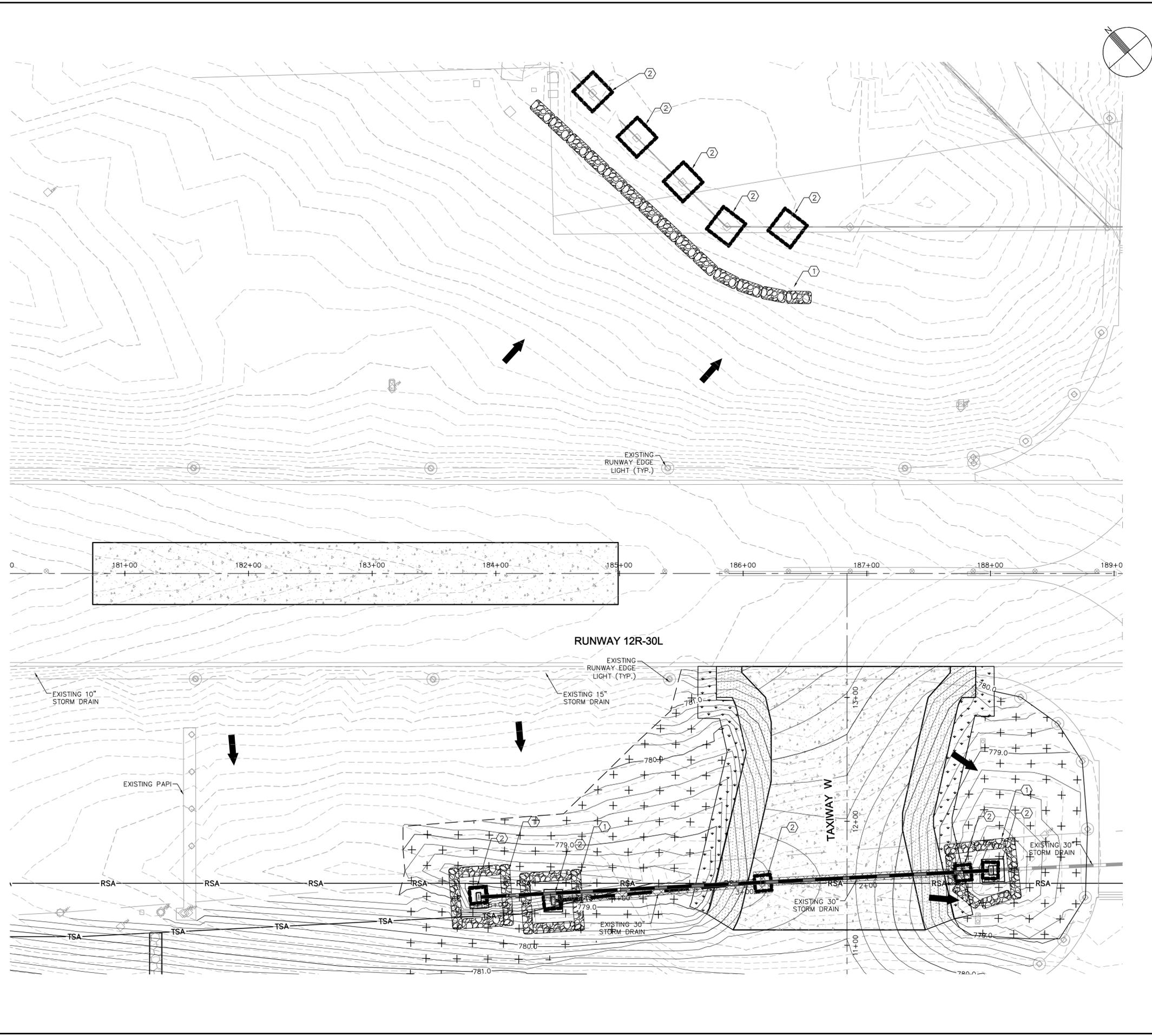
- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- PROPOSED SEEDING AREA
- PROPOSED SOD AREA
- ROCK FILTER DAM
- DRAINAGE INLET PROTECTION
- FLOW DIRECTION ARROW
- GRADING LIMITS
- DRAINAGE TO BE REMOVED
- PROPOSED DRAINAGE LINE

**GENERAL NOTES**

1. THE PURPOSE OF THE SWPPP IS TO PROTECT THE EXISTING DRAINAGE BASINS, CHANNELS, AND PIPE NETWORKS FROM SEDIMENTATION AND CONTAMINANTS.
2. THIS PROPOSED LAYOUT SHOWS THE FINAL CONDITION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING BMP INSTALLATIONS DURING CONSTRUCTION.
3. PLACE WATTLES IN FRONT OF ALL INLETS.
4. SEEDING SHALL BE PERFORMED AND PAID FOR ALL AREAS AFFECTED BY GRADING AND EARTHWORK. OTHER AREAS INCIDENTALLY AFFECTED BY CONSTRUCTION EQUIPMENT SHALL BE RESEED AT THE CONTRACTOR'S EXPENSE.
5. SEE SPECIFICATION T-901 FOR SEEDING REQUIREMENTS AND SEED MIX, AND SPECIFICATION T-904 FOR SODDING REQUIREMENTS.
6. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.
7. LIMITS OF SODDING ARE A TYPICAL WIDTH OF 15 FEET OFF OF THE EDGES OF PROPOSED PAVEMENT.

**CONSTRUCTION NOTES**

- ① INSTALL ROCK FILTER DAM PER DETAIL, SHEET C13.4.
- ② INSTALL CATCH BASIN PROTECTION PER DETAIL, SHEET C13.4.



40 0 40 80  
SCALE IN FEET

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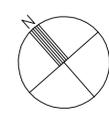
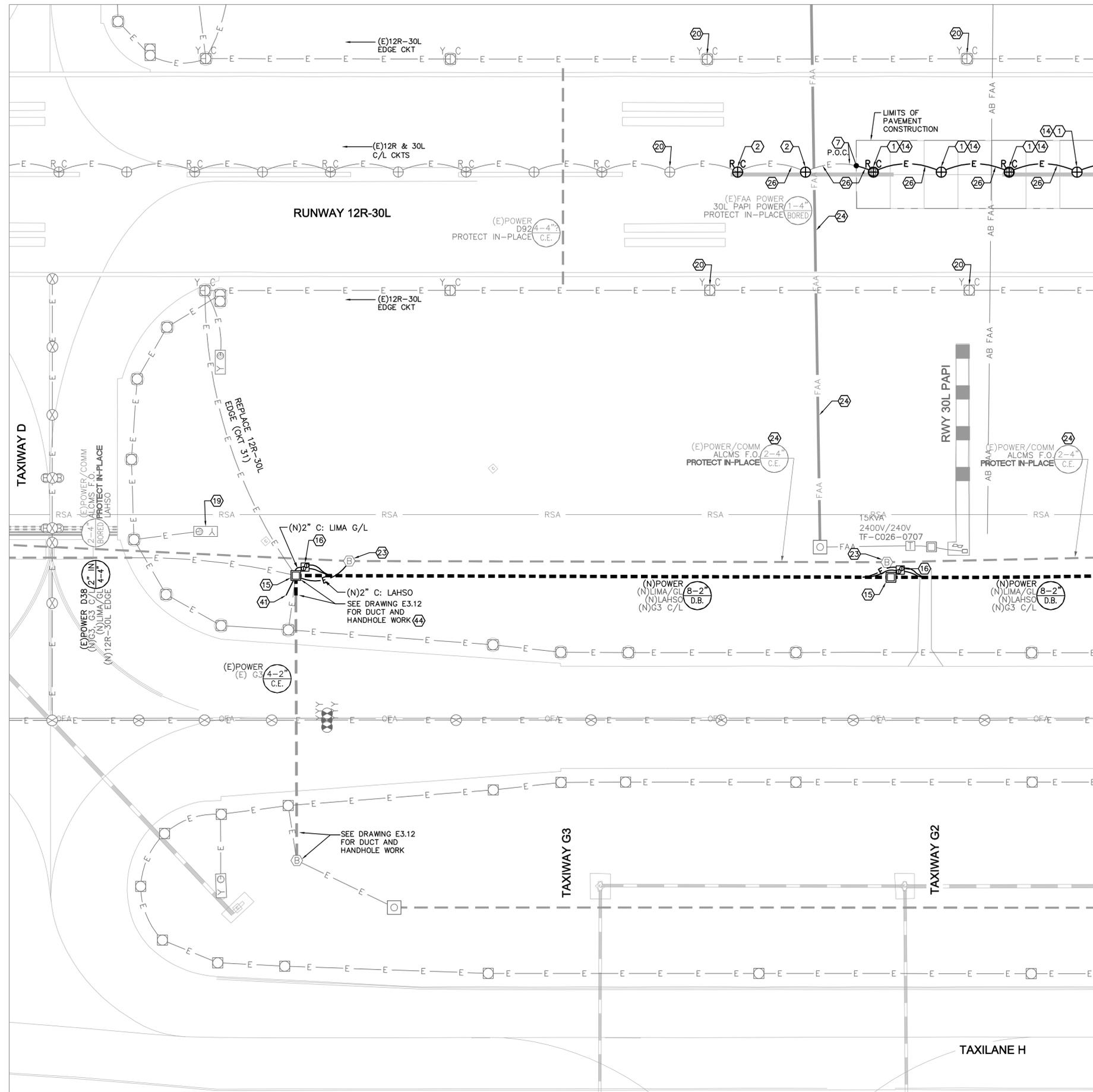








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**ELECTRICAL CONSTRUCTION NOTES**

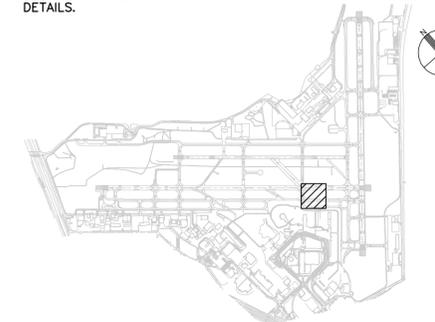
- ① REINSTALL EXISTING RUNWAY CENTERLINE LIGHT WITH (2) NEW 100 W, 20A ISOLATION TRANSFORMERS ON NEW L-868 BASE CAN.
- ② REMOVE BLANK COVER AND SALVAGE TO OWNER. REINSTALL EXISTING RUNWAY CENTERLINE LIGHT WITH (2) NEW 100 W, 20A ISOLATION TRANSFORMERS ON EXISTING BASE CAN.
- ⑦ CONNECT NEW CONDUIT TO EXISTING CONDUIT. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.
- ⑭ NEW L-868 BASE CAN IN NEW PCC PAVEMENT.
- ⑮ NEW PRECAST CONCRETE HANDHOLE, SEE DETAILS ON DRAWING E3.8.
- ⑯ NEW JUNCTION CAN PLAZA, SEE DETAILS ON DRAWING E3.9.
- ⑰ EXISTING SIGN, PROTECT IN PLACE.
- ⑳ EXISTING LIGHT, PROTECT IN PLACE.
- ㉓ EXISTING HANDHOLE, PROTECT IN PLACE.
- ㉔ EXISTING DUCT, PROTECT IN PLACE.
- ㉖ INSTALL NEW 12R AND 30L CENTERLINE LIGHT CIRCUITS. SEE CIRCUIT MAP E4.1 DRAWING.
- ㉗ STUB AND CAP NEW 1-2" C FOR CONNECTION IN BID ALT 5.
- ㉘ STUB AND CAP NEW 4-2" 10- FEET OUTSIDE OF HANDHOLE FOR DUCTBANK CONNECTION IN BID ALT 3 AND BID ALT 4.

**FIELD SURVEY NOTE**

1. THE CONTRACTOR SHALL FIELD SURVEY THE LOCATIONS OF THE TO-BE-REMOVED FIXTURES PRIOR TO DEMOLITION. SALVAGE AND RE-INSTALL THE EXISTING LIGHTS ON NEW BASE CANS LOCATED AT THE EXISTING LOCATIONS. SEE DRAWING E6.2 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

**GENERAL NOTES**

1. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL FIXTURE, HANDHOLE, JUNCTION CAN, BASE CAN, AND SIGN LOCATIONS.
2. SEE CIRCUIT MAPS E4 SERIES DRAWINGS FOR TEMPORARY CIRCUITS AND FIXTURES.
3. SEE E5 SERIES DRAWINGS FOR AIRFIELD ELECTRICAL SIGN LEGENDS.
4. SEE E6 SERIES DRAWINGS FOR ELECTRICAL DEMOLITION PLANS.
5. SEE DRAWING E3.7 FOR DUCT CONFIGURATIONS AND INSTALLATION DETAILS.



**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**



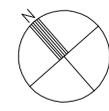
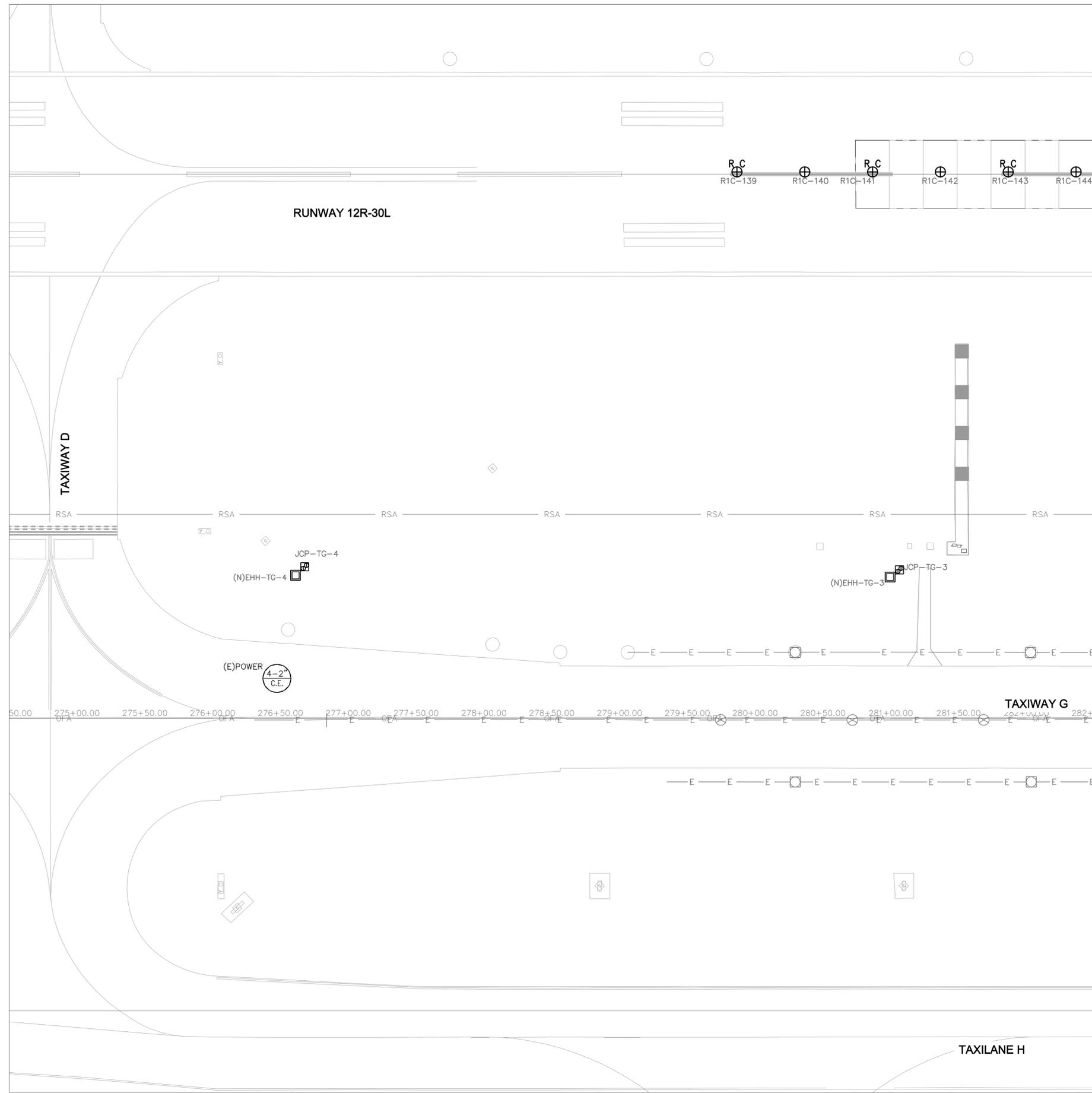
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**ELECTRICAL LAYOUT  
PLAN  
BASE BID**





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**FIELD SURVEY NOTE**

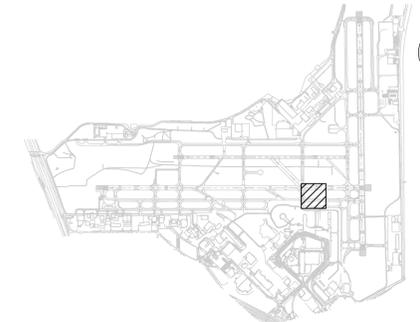
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.2 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

**LIGHT FIXTURE INSTALLATION NOTES**

1. INSTALL IN-PAVEMENT RUNWAY LIGHT FIXTURES IN PCC PER DETAILS ON SHEET E3.5.
2. INSTALL ELEVATED RUNWAY EDGE LIGHTS PER DETAILS ON SHEET E3.4.

**GENERAL NOTES**

1. SEE DATA TABLES ON DRAWING E2.2A FOR LOCATIONS FOR NEW ELECTRICAL FIXTURES, HANDHOLES, JUNCTION CANS, BASE CANS, AND SIGNS SHOWN ON THIS DRAWING.
2. SEE E1 SERIES DRAWINGS FOR NEW ELECTRICAL SYSTEM LAYOUT PLANS.
3. SEE E5 SERIES DRAWINGS FOR AIRFIELD ELECTRICAL SIGN LEGENDS.
4. SEE E6 SERIES DRAWINGS FOR ELECTRICAL DEMOLITION PLANS.



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**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**



MARK	DATE	DESCRIPTION
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**ELECTRICAL FIXTURE  
LAYOUT PLAN  
BASE BID**



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**RUNWAY 12R-30L  
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IMPROVEMENTS (PACKAGE 1)**



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**ELECTRICAL FIXTURE  
LAYOUT PLAN  
BASE BID**

**FIELD SURVEY NOTE**

1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.3 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

**WINDCONE INSTALLATION NOTE**

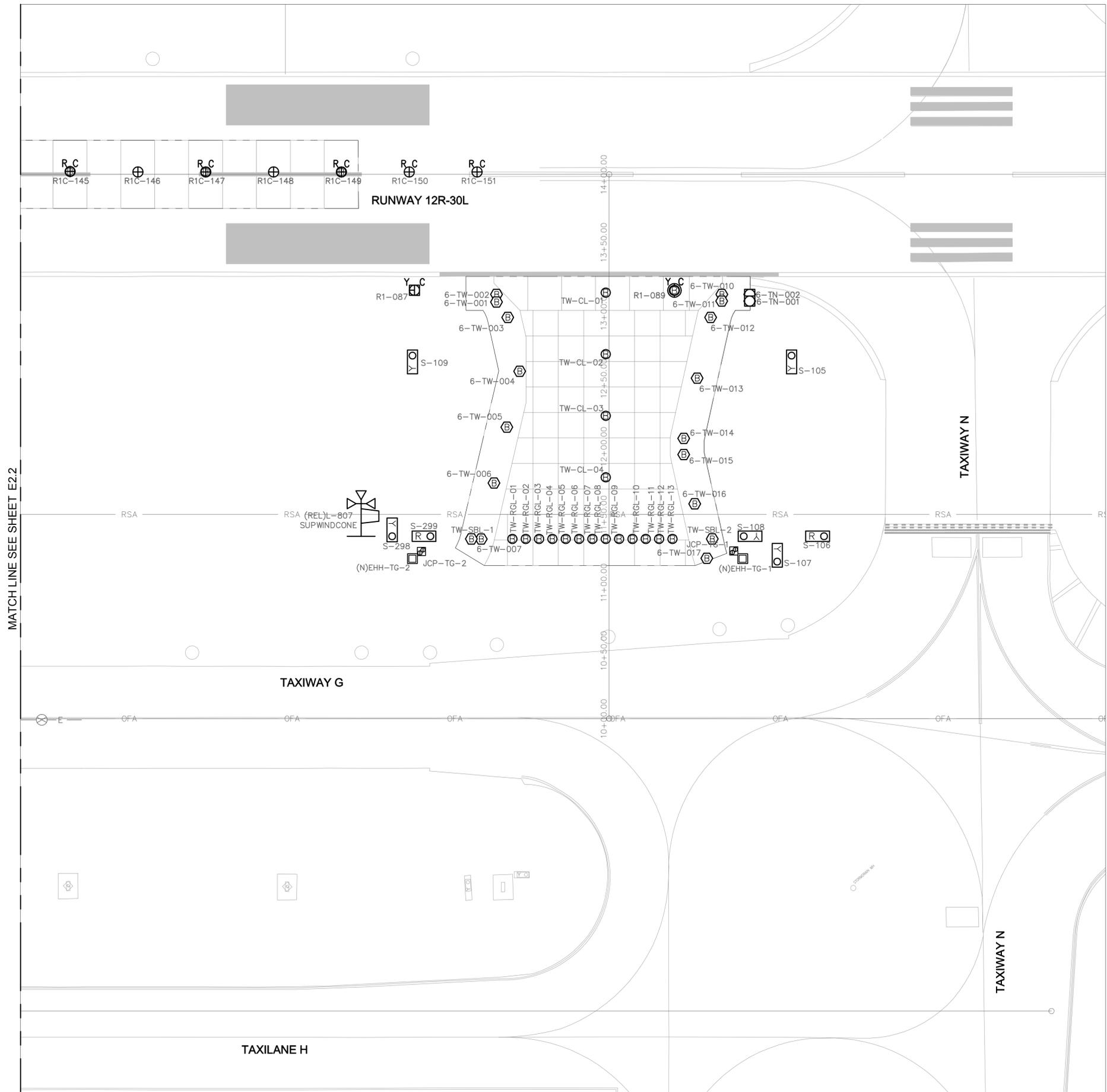
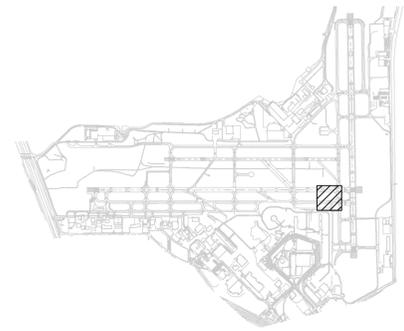
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING WINDCONE AT TAXIWAY 'G' STATION 285+01.12, OFFSET 134.00 LEFT PER THE DETAILS ON SHEET E3.10.

**LIGHT FIXTURE INSTALLATION NOTES**

1. INSTALL IN-PAVEMENT RUNWAY LIGHT FIXTURES IN PCC PER DETAILS ON SHEET E3.5.
2. INSTALL ELEVATED RUNWAY EDGE LIGHTS PER DETAILS ON SHEET E3.4.

**GENERAL NOTES**

1. SEE DATA TABLES ON DRAWING E2.3A FOR LOCATIONS FOR NEW ELECTRICAL FIXTURES, HANDHOLES, JUNCTION CANS, BASE CANS, AND SIGNS SHOWN ON THIS DRAWING.
2. SEE E1 SERIES DRAWINGS FOR NEW ELECTRICAL SYSTEM LAYOUT PLANS.
3. SEE E5 SERIES DRAWINGS FOR AIRFIELD ELECTRICAL SIGN LEGENDS.
4. SEE E6 SERIES DRAWINGS FOR ELECTRICAL DEMOLITION PLANS.



MATCH LINE SEE SHEET E2.2



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**RUNWAY 12R-30L  
REHABILITATION AND  
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IMPROVEMENTS (PACKAGE 1)**

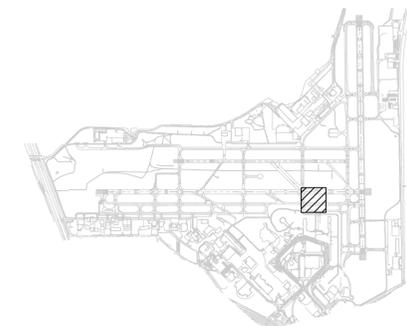


**CIRCUIT DESIGNATION SCHEDULE**

CIRCUIT NAME	FIELD CIRCUIT NUMBER	ALCS NUMBER	REMARKS
<b>WEST VAULT:</b>			
12R-30L EDGE	31	16	MODIFIED CIRCUIT
12R CENTERLINE	30	15	MODIFIED CIRCUIT
30L CENTERLINE	32	17	MODIFIED CIRCUIT
12R TDZ	33	18	MODIFIED CIRCUIT
12L-30R EDGE	35	19	EXISTING CIRCUIT
ALPHA	11	2	EXISTING CIRCUIT
BRAVO	12	1	EXISTING CIRCUIT
G-1	2	12	EXISTING CIRCUIT
G-2	4	7	EXISTING CIRCUIT
G-3	6	8	MODIFIED CIRCUIT
G CENTERLINE WEST	16	13	MODIFIED CIRCUIT
G CENTERLINE EAST	15	14	EXISTING CIRCUIT
G-3 CENTERLINE TO LAHSO	N/A	6	EXISTING CIRCUIT
LAHSO STOP BAR	N/A	27	EXISTING CIRCUIT
H-1 WEST	13	11	EXISTING CIRCUIT
H-2 EAST	14	9	EXISTING CIRCUIT
JULIET	9	3	EXISTING CIRCUIT
LIMA ON 24/7	10	5	EXISTING CIRCUIT
MIKE	7	4	EXISTING CIRCUIT
ROMEO	8	20	EXISTING CIRCUIT
SIERRA R/C	N/A	20	EXISTING CIRCUIT
<b>EAST VAULT:</b>			
4-22 EDGE	N/A	41	EXISTING CIRCUIT
4 CENTERLINE	N/A	43	EXISTING CIRCUIT
22 CENTERLINE	N/A	42	EXISTING CIRCUIT
DELTA	56	35	EXISTING CIRCUIT
FOXTROT	57	34	MODIFIED CIRCUIT
N-1	52	36	EXISTING CIRCUIT
N-2	53	37	EXISTING CIRCUIT
N-3	54	32	EXISTING CIRCUIT
NEW CARGO	51	31	EXISTING CIRCUIT
QUEBEC	55	33	EXISTING CIRCUIT

**GENERAL NOTES**

- SEE E1 SERIES DRAWINGS FOR NEW ELECTRICAL SYSTEM LAYOUT PLANS.
- SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL FIXTURE, HANDHOLE, JUNCTION CAN, BASE CAN, AND SIGN LOCATIONS.
- SEE E5 SERIES DRAWINGS FOR AIRFIELD ELECTRICAL SIGN LEGENDS.
- SEE E6 SERIES DRAWINGS FOR ELECTRICAL DEMOLITION PLANS.



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**ELECTRICAL FIXTURE  
DATA TABLES  
BASE BID**

L-868 DATA TABLE					
FIXT-NUM	STA	OFF	FAA-TYPE	DETAIL	CIRCUIT
12R-TD-049	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-050	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-051	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-052	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-053	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-054	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-055	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-056	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-057	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-058	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-059	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-060	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-061	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-062	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-063	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
12R-TD-065	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-016	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-017	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-018	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-019	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-020	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-021	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-141	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-142	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-143	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-144	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-145	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-146	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-147	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-148	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
R1C-149	EXISTING STA	EXISTING OFFSET	L-868	E3.5	
TW-CL-01	Taxiway W' 13+13.06	2.50' LT.	L-868 BLANK	E3.5	
TW-CL-02	Taxiway W' 12+67.79	2.50' LT.	L-868 BLANK	E3.5	
TW-CL-03	Taxiway W' 12+22.53	2.50' LT.	L-868 BLANK	E3.5	
TW-CL-04	Taxiway W' 11+78.35	2.50' LT.	L-868 BLANK	E3.5	
TW-RGL-01	Taxiway W' 11+33.45	71.33' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-02	Taxiway W' 11+33.45	61.50' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-03	Taxiway W' 11+33.45	51.67' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-04	Taxiway W' 11+33.45	41.83' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-05	Taxiway W' 11+33.45	32.00' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-06	Taxiway W' 11+33.45	22.17' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-07	Taxiway W' 11+33.45	12.33' LT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-08	Taxiway W' 11+33.45	7.33' RT.	L-868 E3.6 ECCENTRIC CORE		
TW-RGL-09	Taxiway W' 11+33.45	7.33' RT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-10	Taxiway W' 11+33.45	17.17' RT.	L-868 BLANK E3.6 DIAMOND		
TW-RGL-11	Taxiway W' 11+33.44	27.00' RT.	L-868 BLANK E3.6 ECCENTRIC CORE		
TW-RGL-12	Taxiway W' 11+33.44	36.83' RT.	L-868 BLANK E3.6 DIAMOND		
TW-RGL-13	Taxiway W' 11+33.44	46.67' RT.	L-868 BLANK E3.6 ECCENTRIC CORE		

L-867 DATA TABLE					
FIXT-NUM	STA	OFF	DETAIL	FAA-TYPE	
6-TN-001	Taxiway W' 13+06.84	103.60' RT.	E3.4 FOR L-861T	L-867B	
6-TN-002	Taxiway W' 13+11.73	103.61' RT.	E3.4 FOR L-861T	L-867B	
6-TW-001	Taxiway W' 13+06.15	83.04' LT.	E3.4 FOR L-861T	L-867B	
6-TW-002	Taxiway W' 13+11.75	83.04' LT.	E3.4 FOR L-861T	L-867B	
6-TW-003	Taxiway W' 12+94.87	74.76' LT.	E3.4 FOR L-861T	L-867B	
6-TW-004	Taxiway W' 12+55.28	65.96' LT.	E3.4 FOR L-861T	L-867B	
6-TW-005	Taxiway W' 12+14.18	75.42' LT.	E3.4 FOR L-861T	L-867B	
6-TW-006	Taxiway W' 11+73.07	84.87' LT.	E3.4 FOR L-861T	L-867B	
6-TW-007	Taxiway W' 11+31.97	94.32' LT.	E3.4 FOR L-861T	L-867B	
6-TW-010	Taxiway W' 13+11.71	83.01' RT.	E3.4 FOR L-861T	L-867B	
6-TW-011	Taxiway W' 13+06.83	83.00' RT.	E3.4 FOR L-861T	L-867B	
6-TW-012	Taxiway W' 12+94.87	74.76' RT.	E3.4 FOR L-861T	L-867B	
6-TW-013	Taxiway W' 12+50.21	64.84' RT.	E3.4 FOR L-861T	L-867B	
6-TW-014	Taxiway W' 12+05.94	55.00' RT.	E3.4 FOR L-861T	L-867B	
6-TW-015	Taxiway W' 11+94.06	55.00' RT.	E3.4 FOR L-861T	L-867B	
6-TW-016	Taxiway W' 11+57.85	63.05' RT.	E3.4 FOR L-861T	L-867B	
6-TW-017	Taxiway W' 11+17.79	71.95' RT.	E3.4 FOR L-861T	L-867B	
R1-017	EXISTING	EXISTING	E3.4 FOR L-862	L-867B	
R1-018	EXISTING	EXISTING	E3.4 FOR L-862	L-867B	
TW-SBL-2	Taxiway W' 11+32.00	75.96' RT.	E3.2 BLANK	L-867B	
TW-SBL-2	Taxiway W' 11+32.00	101.58' LT.	E3.2 BLANK	L-867B	

HANDHOLE DATA TABLE			
HH-NUM	STA	OFF	DETAIL
(N)EHH-TG-1	Taxiway W' 11+13.49	98.45' RT.	E3.5
(N)EHH-TG-2	Taxiway W' 11+11.90	145.00' LT.	E3.5
(N)EHH-TG-3	Taxiway G' 280+99.53	103.93' LT.	E3.5
(N)EHH-TG-4	Taxiway G' 276+61.16	105.20' LT.	E3.5

SIGN DATA TABLE						
SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S-106	Taxiway W' 11+34.00	158.38' RT.	E3.1	RT858R4M	12R-30L EDGE (31)	MODE 2
S-299	Taxiway W' 11+34.00	131.80' LT.	E3.1	RT858R4M	12R-30L EDGE (31)	MODE 2
S-105	Taxiway W' 12+66.76	134.45' RT.	E3.1	RT858Y1M	12R-30L EDGE (31)	MODE 2
S-109	Taxiway W' 12+66.76	145.00' LT.	E3.1	RT858Y2M	12R-30L EDGE (31)	MODE 2
S-298	Taxiway W' 11+33.96	160.00' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S-108	Taxiway W' 11+34.00	99.21' RT.	E3.1	RT858Y3M	G3	MODE 2
S-107	Taxiway W' 11+15.31	123.89' RT.	E3.1	RT858Y3M	G3	MODE 2





























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**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**

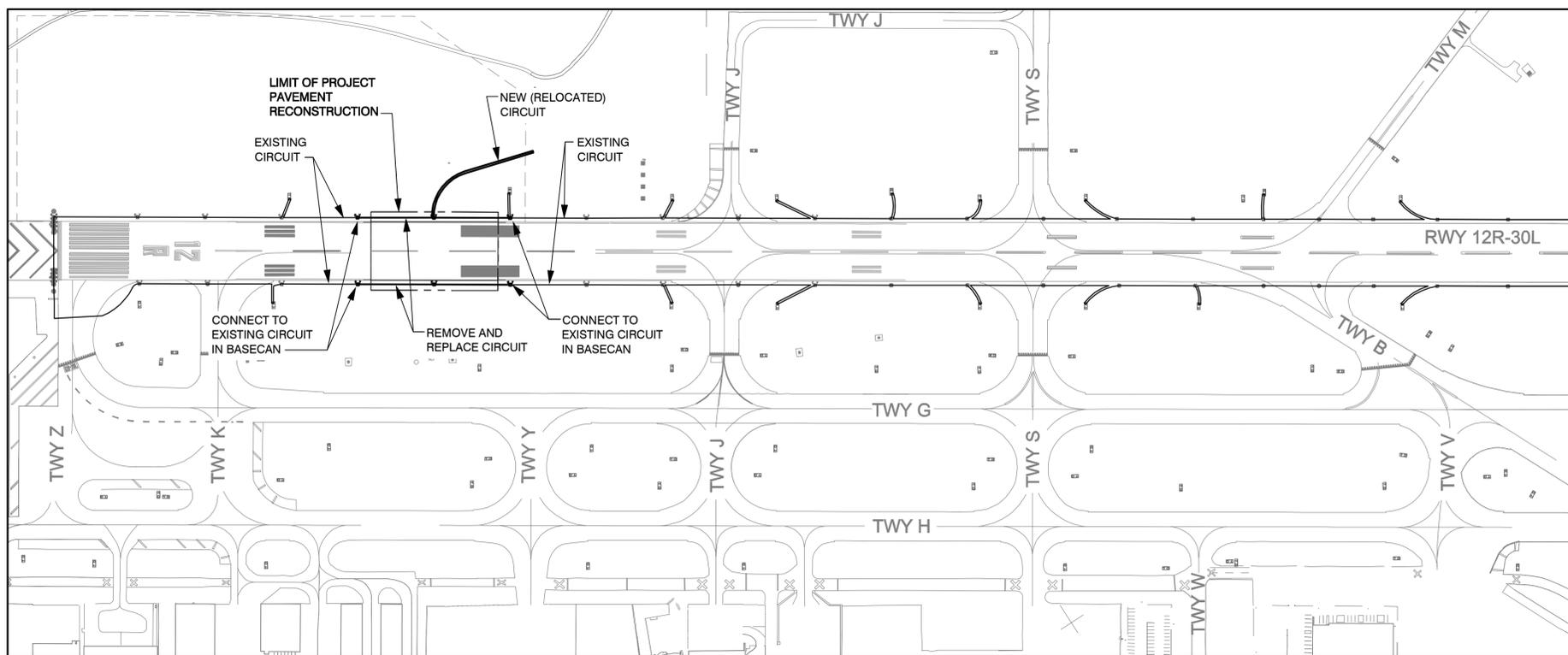
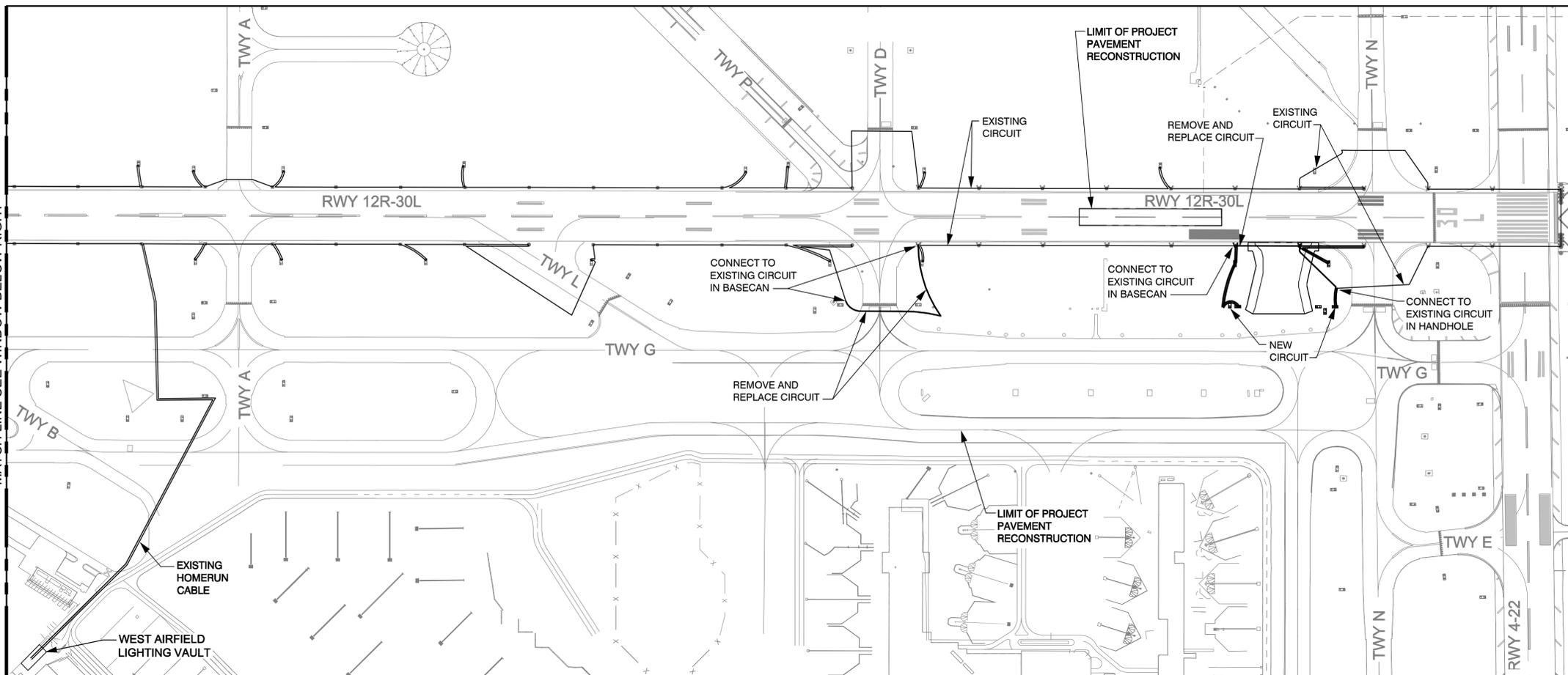


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**CIRCUIT MAP  
12R-30L EDGE  
(CKT 31)  
BASE BID**

E4.1  
SHEET NO. 79 OF 214



**GENERAL NOTES**

- ALL WORK ON THIS DRAWING IS PART OF THE BASE BID.

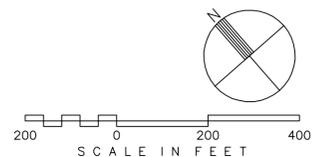
**DATA TABLE - CIRCUIT '12R-30L EDGE' (#31)**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
90	L-862	x 6'	= 540'
20	L-850	x 6'	= 120'
18	SIGNS	x 6'	= 108'
2	WINDCONES	x 6'	= 12'
6	L-867 or L-868	x	= 48'
12	HANDHOLES	x2*12'	= 288'
6	MANHOLES	x2*18'	= 216'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH = 1,284'			
+ PLAN CIRCUIT LENGTH = 28,696'			
= TOTAL CIRCUIT LENGTH = 29,980'			

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#6	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT **3,600'**



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SAN ANTONIO, TEXAS 78216  
PHONE: (210) 541-9166  
TEXAS REGISTERED FIRM,  
NO. 928

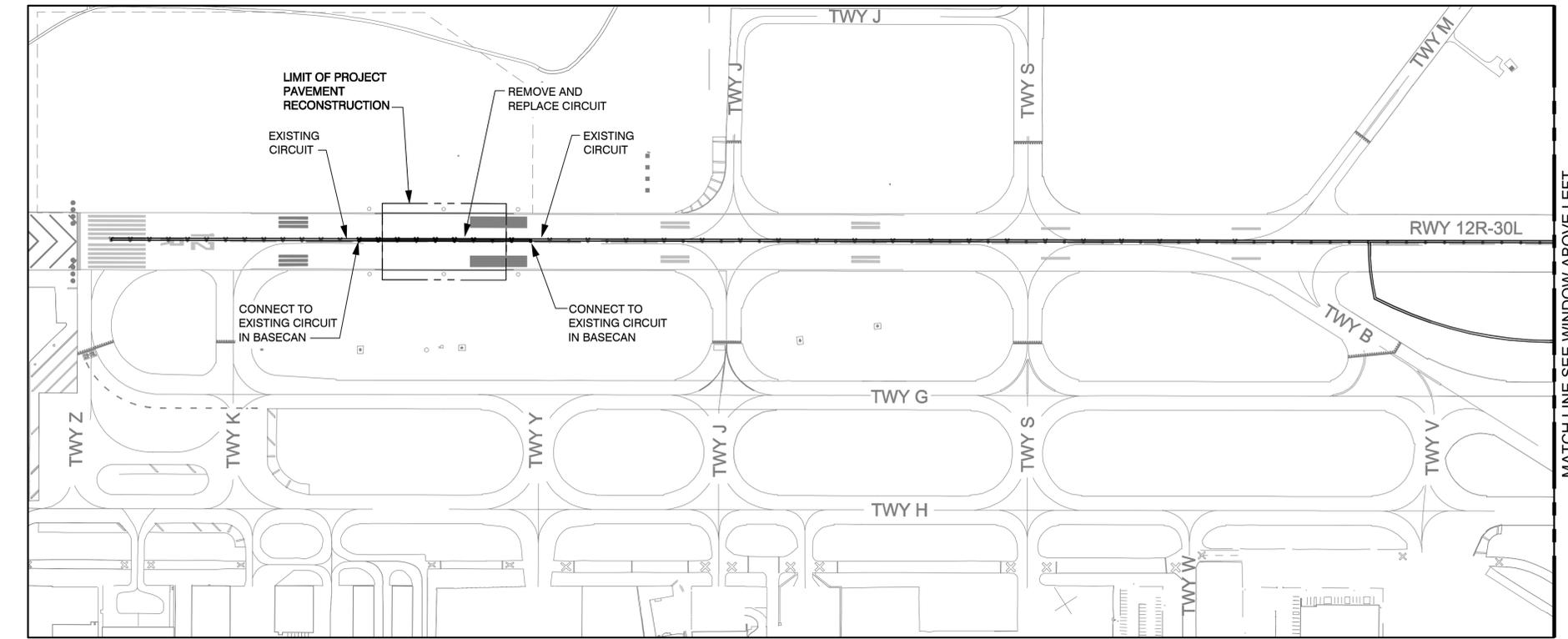
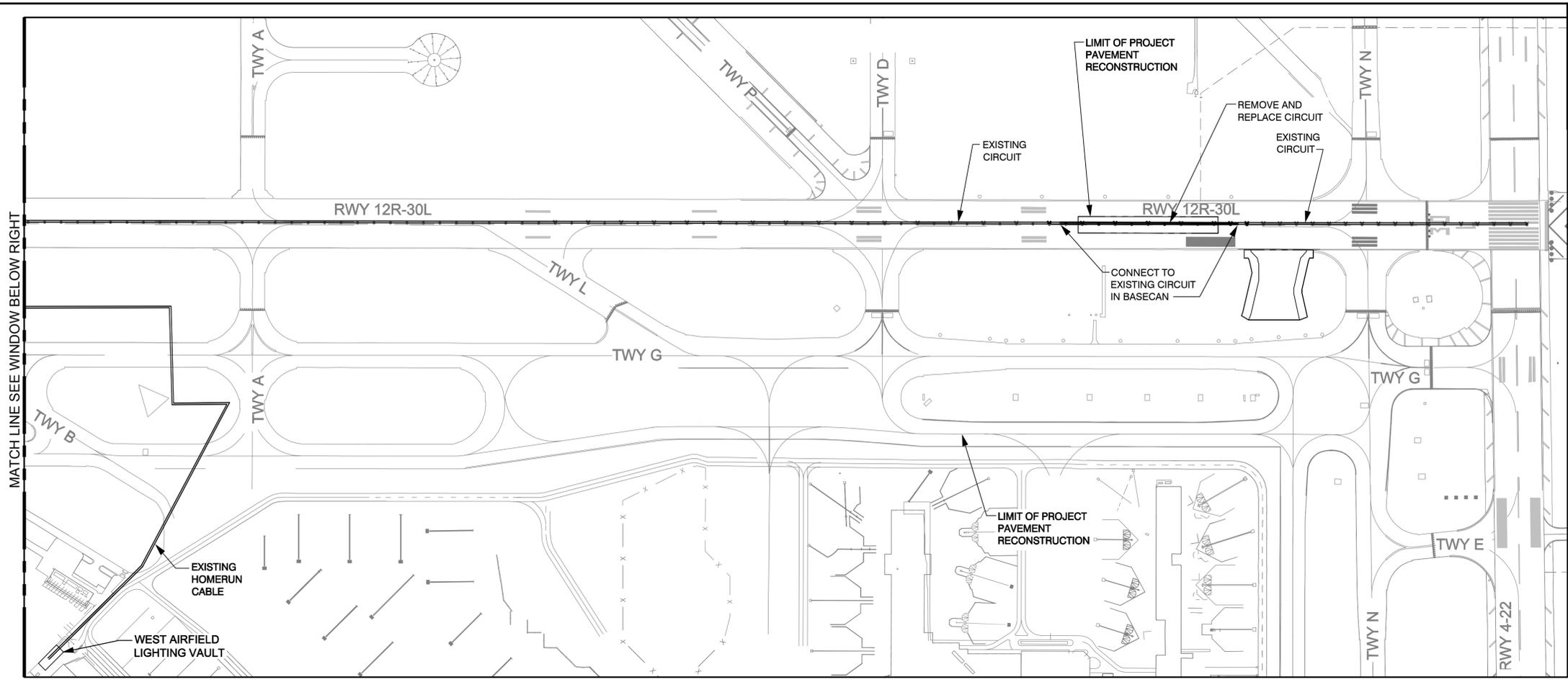
**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**



MARK	DATE	DESCRIPTION

PROJECT NO: 33-00178 and 33-00193  
FILE NAME: \_33-00193-R1EC-601  
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**CIRCUIT MAP  
12R & 30L C/L  
(CKTS 30 & 32)  
BASE BID**



**GENERAL NOTES**

1. ALL WORK ON THIS DRAWING IS PART OF THE BASE BID.

**DATA TABLE - CIRCUIT '12R C/L' (# 30)**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
260	L-850A	x 6'	= 1,560'
		x 6'	=
		x 6'	=
		x 6'	=
		x 2*6'	=
		x 2*12'	=
6	MANHOLES	x 2*18'	= 216'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH =			1,776'
+ PLAN CIRCUIT LENGTH =			21,694'
= TOTAL CIRCUIT LENGTH =			23,470'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#6	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT **2,110'**

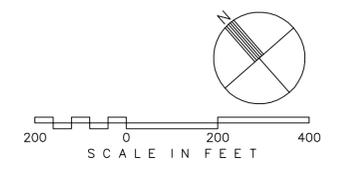
**DATA TABLE - CIRCUIT '30L C/L' (# 32)**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
260	L-850A	x 6'	= 1,560'
		x 6'	=
		x 6'	=
		x 6'	=
		x 2*6'	=
		x 2*12'	=
6	MANHOLES	x 2*18'	= 216'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH =			1,776'
+ PLAN CIRCUIT LENGTH =			21,694'
= TOTAL CIRCUIT LENGTH =			23,470'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#6	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT **2,110'**



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**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXWAY  
IMPROVEMENTS (PACKAGE 1)**

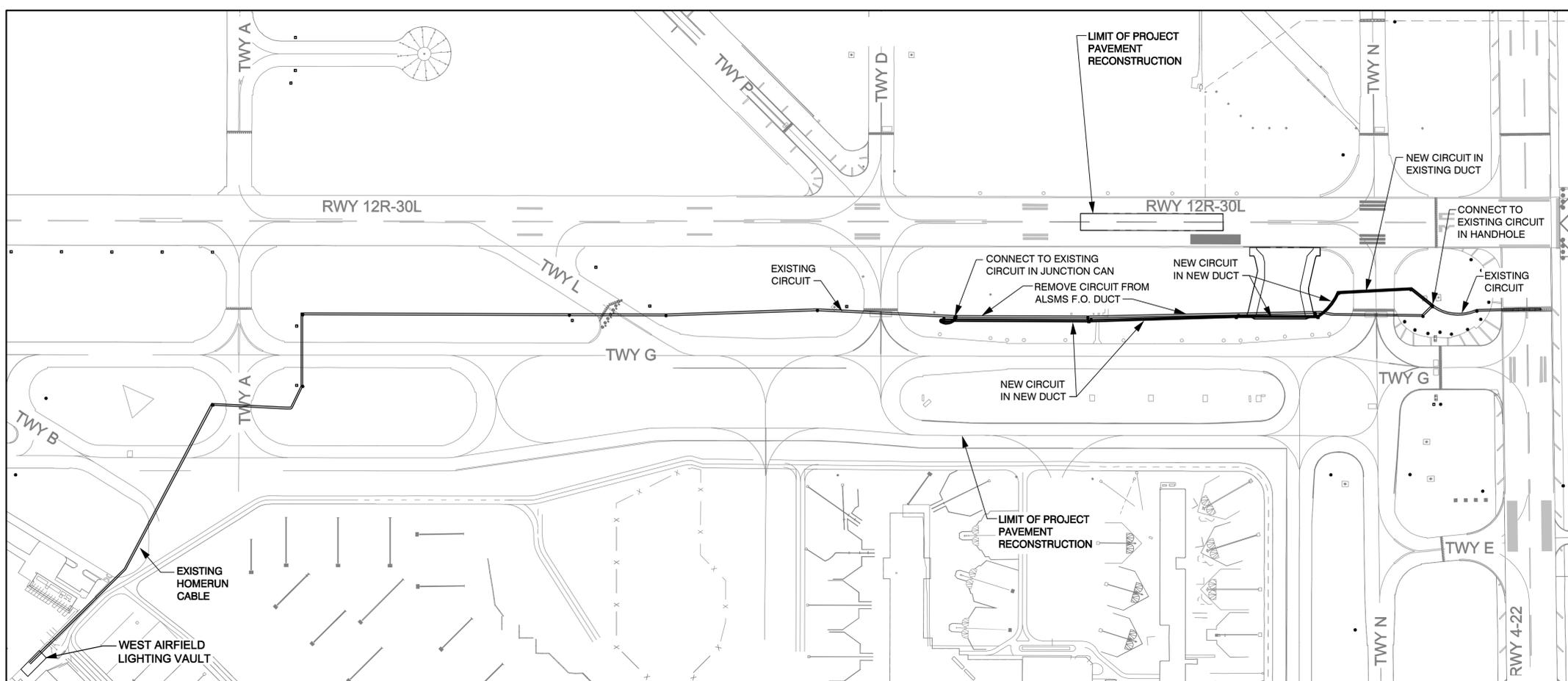


MARK	DATE	DESCRIPTION

ISSUE: \_\_\_\_\_

PROJECT NO: 33-00178 and 33-00193  
FILE NAME: \_33-00193-R1EC-601  
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**CIRCUIT MAPS  
LIMA RGL (CKT 10)  
& LAHSO STOP  
BAR (CKT 31)  
BASE BID**



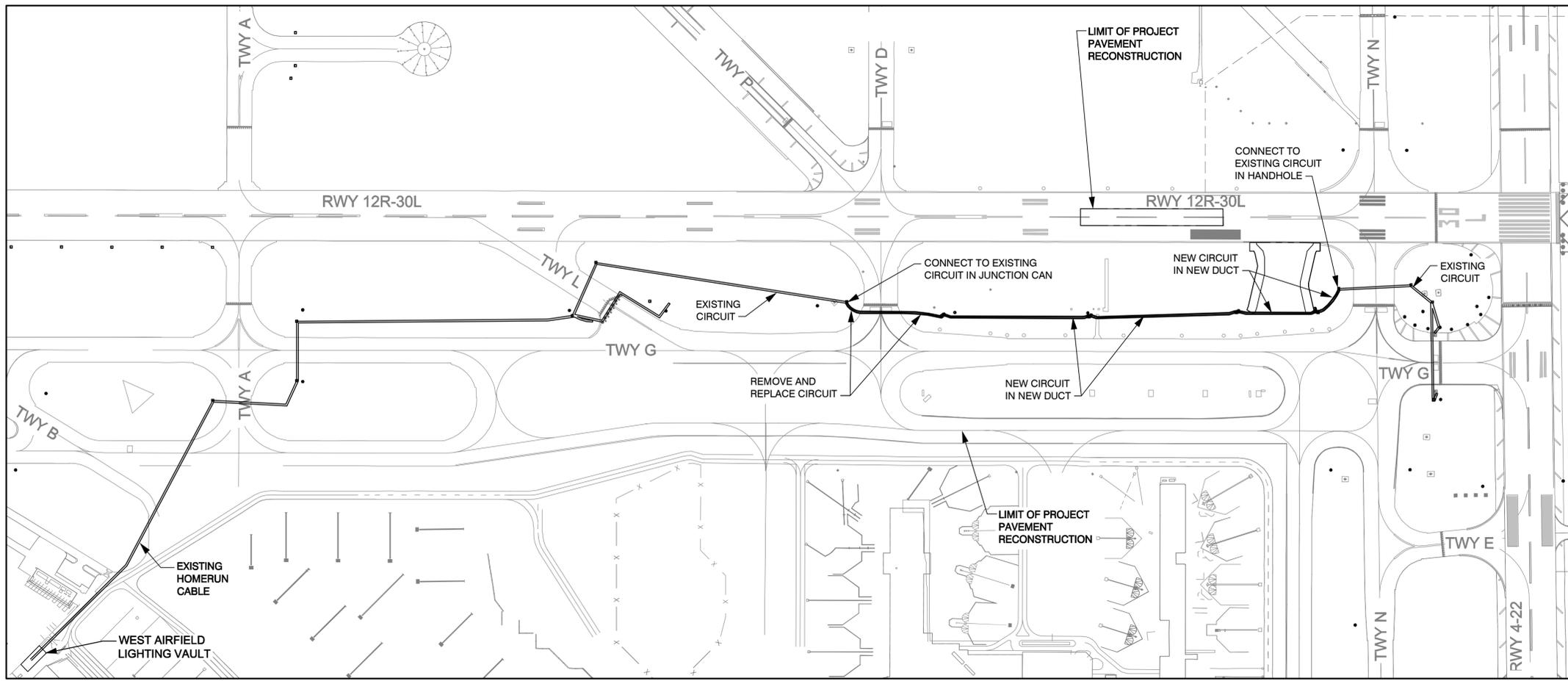
**DATA TABLE - CIRCUIT 'LAHSO STOP BAR'**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
6	L-852	x 6' =	36'
		x 6' =	
		x 6' =	
		x 2*6' =	
11	HANDHOLES	x2*12' =	264'
6	MANHOLES	x2*18' =	216'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH =			516'
+ PLAN CIRCUIT LENGTH =			10,594'
= TOTAL CIRCUIT LENGTH =			11,110'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#6	L-824 5kv TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT 3,200'



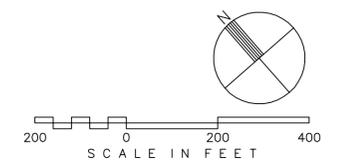
**DATA TABLE - CIRCUIT 'LIMA & RGL' (# 10)**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
2	L-804	x 6' =	12'
8	L-852	x 6' =	48'
2	SIGNS	x 6' =	12'
		x 6' =	
2	L-867 or L-868	x 2*6' =	12'
8	HANDHOLES	x2*12' =	192'
10	MANHOLES	x2*18' =	360'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH =			648'
+ PLAN CIRCUIT LENGTH =			11,667'
= TOTAL CIRCUIT LENGTH =			12,315'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kv TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT 3,200'



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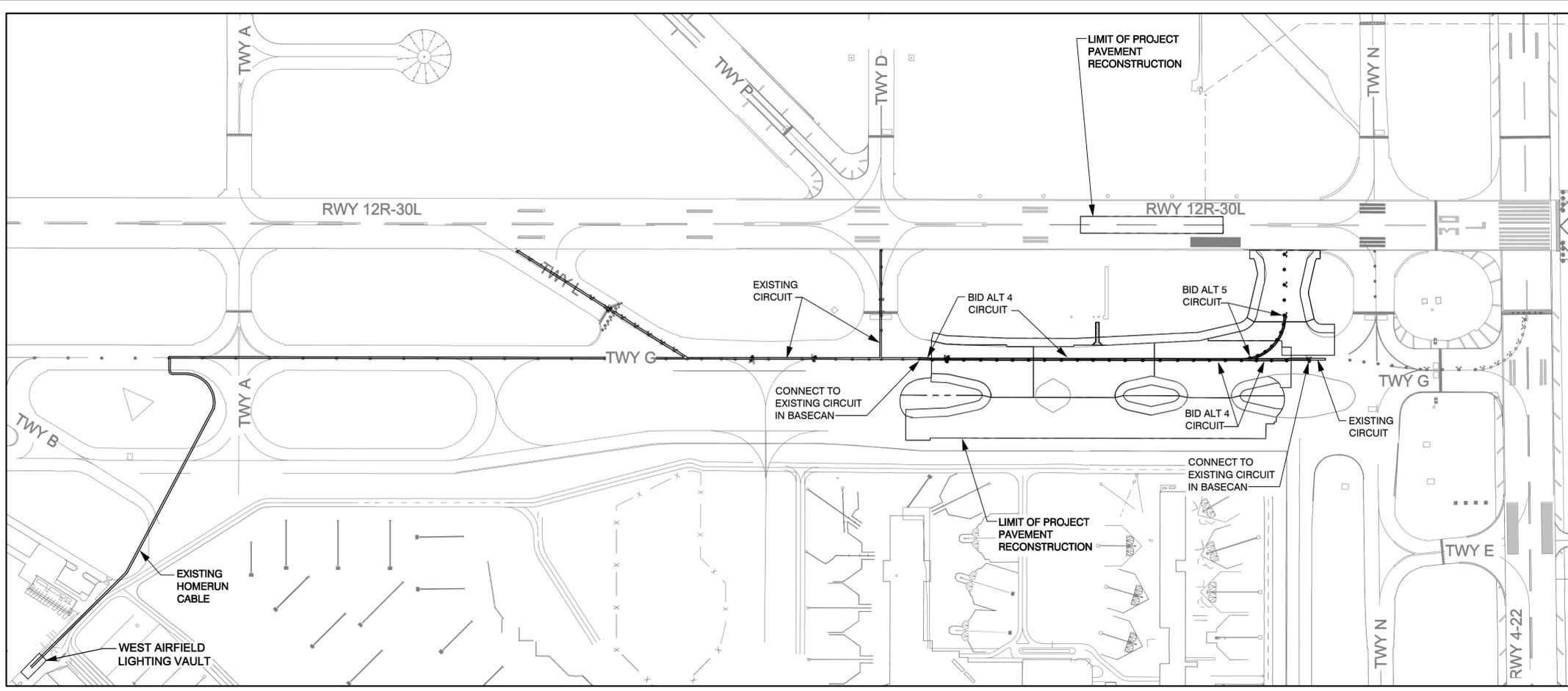
**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXWAY  
IMPROVEMENTS (PACKAGE 1)**



MARK	DATE	DESCRIPTION

PROJECT NO: 33-00178 and 33-00193  
FILE NAME: 33-00193-R1EC-601  
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**CIRCUIT MAPS  
T/W G C/L EAST  
(CKT 15) & T/W  
G3 C/L (N/A)  
BASE BID**



**DATA TABLE - CIRCUIT 'G C/L EAST' (#15)**

QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
103	L-852	x 6'	= 618'
		x 6'	=
		x 6'	=
		x 6'	=
		x 2*6'	=
		x 2*12'	=
2	MANHOLES	x 2*18'	= 72'

\* SLACK CABLE PER SPECS  
ITEM TOTAL LENGTH = 690'  
+ PLAN CIRCUIT LENGTH = 11,430'  
= TOTAL CIRCUIT LENGTH = 12,120'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN ALTERNATE 4 2,550'

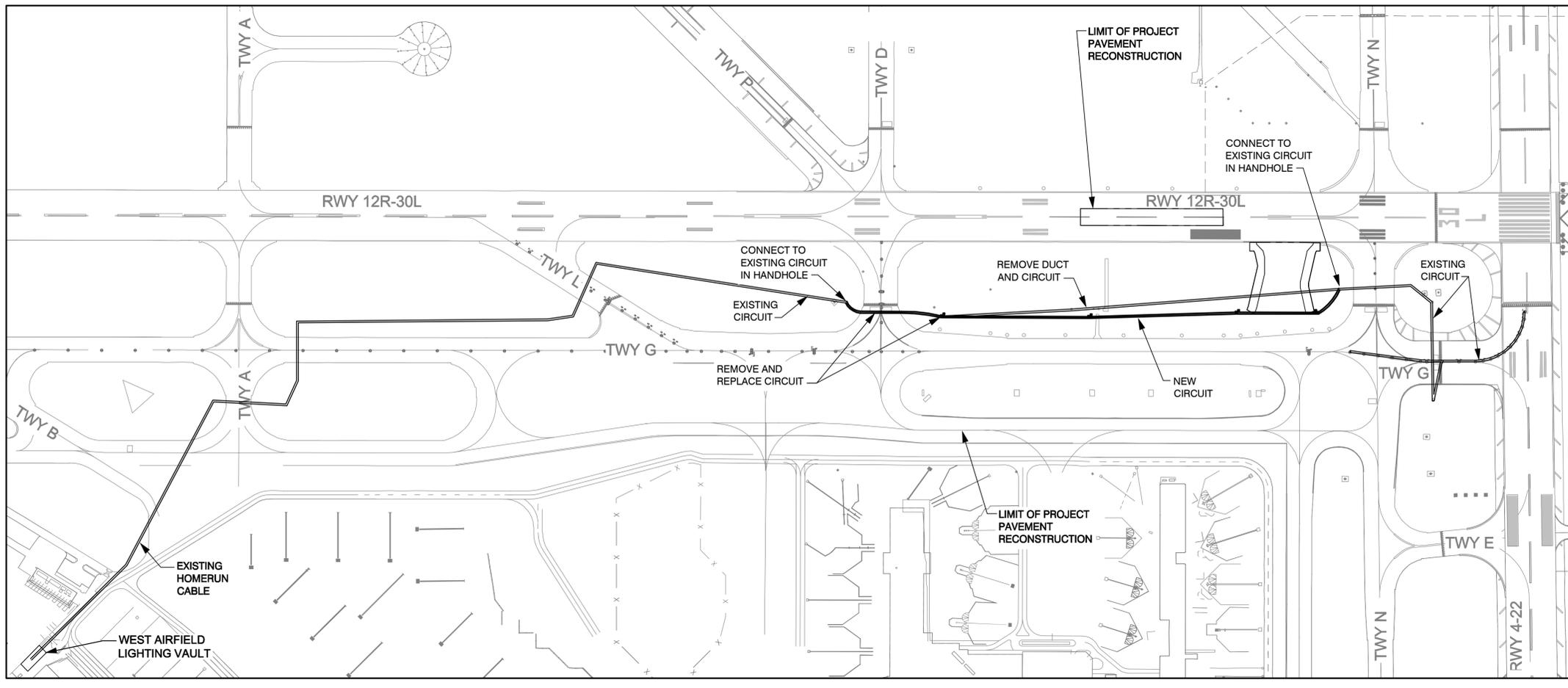
**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN ALTERNATE 5 500'

**'G C/L EAST' NOTE**

- THIS MAP DEPICT THE ENTIRE NEW PORTION OF THE CIRCUIT AND THE END STATE CONDITION. SEE THE SEPARATE ALTERNATE BID DRAWINGS FOR NEW WORK IN EACH PHASE.



**'G-3 C/L' NOTE**

- ALL WORK ON THIS MAP IS PART OF THE BASE BID.

**DATA TABLE - CIRCUIT 'G-3 C/L' (# )**

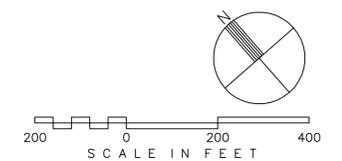
QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
20	L-852	x 6'	= 120'
		x 6'	=
		x 6'	=
		x 6'	=
		x 2*6'	=
		x 2*12'	= 48'
12	MANHOLES	x 2*18'	= 432'

\* SLACK CABLE PER SPECS  
ITEM TOTAL LENGTH = 600'  
+ PLAN CIRCUIT LENGTH = 12,020'  
= TOTAL CIRCUIT LENGTH = 12,620'

**CIRCUIT DEFINITION**

CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108

TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT 3,300'



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**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**

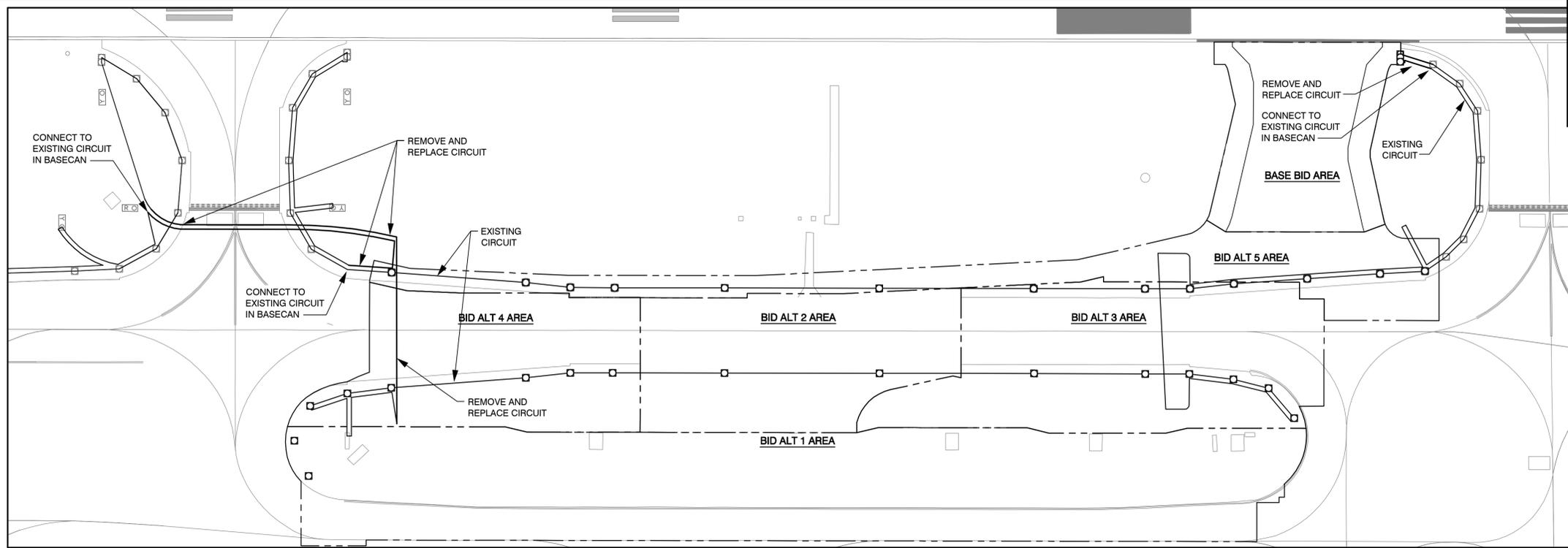


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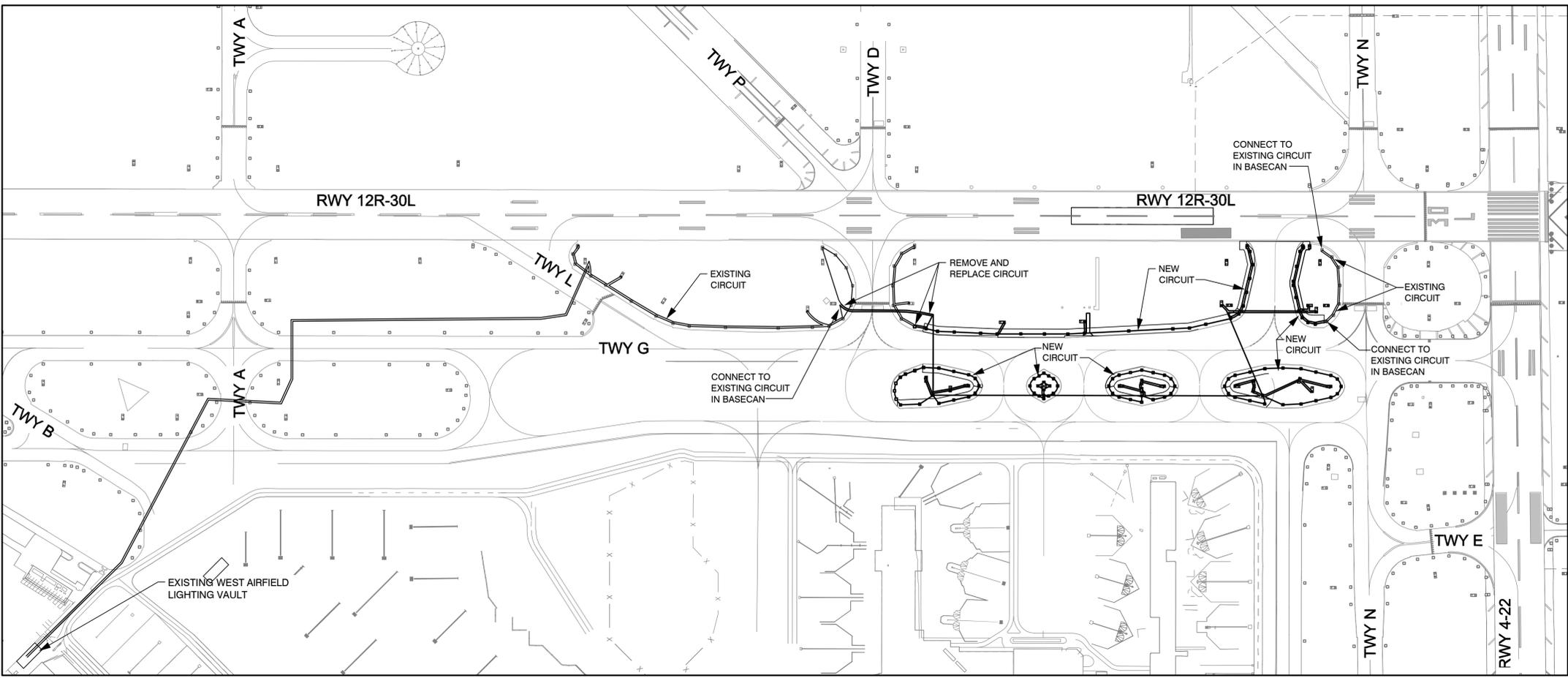
PROJECT NO: 33-00178 and 33-00193  
FILE NAME: \_33-00193-R1EC-646  
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SHEET TITLE:

**CIRCUIT MAPS  
T/W EDGE G3  
(CKT 6)  
BASE BID**



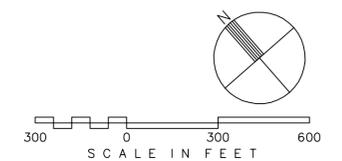
CIRCUIT DEFINITION		
CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108
TOTAL CIRCUIT LENGTH INSTALLED IN BASE BID		1,100'

BID ALT. 1 - CIRCUIT INSTALLED IN THIS PHASE  
N.T.S.



CIRCUIT END-STATE CONDITION			
DATA TABLE - CIRCUIT 'T/W EDGE G-3' (#6)			
QUANTITY	ITEM DESC.	FT./ITEM *	TOTAL LENGTH
35	L-861T	x 6' =	210'
96	L-861T(L)	x 6' =	576'
23	SIGNS	x 6' =	138'
		x 6' =	
		x 2*6' =	
		x2*12' =	
14	MANHOLES	x2*18' =	504'
* SLACK CABLE PER SPECS			
ITEM TOTAL LENGTH = 1,428'			
+ PLAN CIRCUIT LENGTH = 17,762'			
= TOTAL CIRCUIT LENGTH = 19,190'			

CIRCUIT DEFINITION		
CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108
TOTAL CIRCUIT LENGTH INSTALLED IN THIS PROJECT		11,200'



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**RUNWAY 12R-30L  
REHABILITATION AND  
TERMINAL AREA TAXIWAY  
IMPROVEMENTS (PACKAGE 1)**



MARK	DATE	DESCRIPTION

PROJECT NO: 33-00178 and 33-00193  
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**ELECTRICAL  
DEMOLITION PLAN  
BASE BID**

**ELECTRICAL DEMOLITION NOTES**

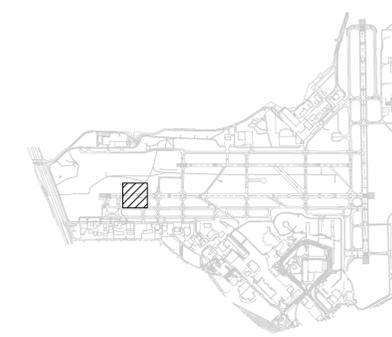
- ① SALVAGE EXISTING RUNWAY CENTERLINE LIGHT WITHIN RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER. SEE E1 SERIES DRAWINGS FOR REINSTALLATION.
- ② SALVAGE EXISTING RUNWAY CENTERLINE LIGHT WITHIN 100 FEET OF RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. INSTALL BLANK COVER ON EXISTING BASE CAN DURING CONSTRUCTION. SEE E1 SERIES DRAWINGS FOR REINSTALLATION.
- ③ SALVAGE EXISTING RUNWAY TOUCH DOWN ZONE (TDZ) LIGHTS WITHIN RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER. SEE E1 SERIES DRAWINGS FOR REINSTALLATION.
- ④ SALVAGE EXISTING RUNWAY TOUCH DOWN ZONE (TDZ) LIGHT WITHIN 100 FEET OF RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER. INSTALL BLANK COVERS ON EXISTING BASE CAN DURING CONSTRUCTION. SEE E1 SERIES DRAWINGS FOR REINSTALLATION.
- ⑤ SALVAGE EXISTING RUNWAY EDGE LIGHT WITHIN RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. SALVAGE EXISTING ISOLATION TRANSFORMER TO THE OWNER. SEE E1 SERIES DRAWINGS FOR REINSTALLATION OF EDGE LIGHT.
- ⑥ SALVAGE EXISTING RUNWAY EDGE LIGHT WITHIN 100 FEET OF RUNWAY PAVEMENT REHABILITATION AREA FOR REINSTALLATION. SALVAGE EXISTING ISOLATION TRANSFORMER TO THE OWNER. INSTALL BLANK COVERS ON EXISTING BASE CAN DURING CONSTRUCTION. SEE E1 SERIES DRAWINGS FOR REINSTALLATION OF EDGE LIGHT.
- ⑦ REMOVE CONDUIT AND CONDUCTORS TO EXTENTS OF RUNWAY PAVEMENT REHABILITATION. PULL CONDUCTORS BACK TO ADJACENT BASE CAN TO REMAIN.
- ⑧ PROTECT EXISTING CONDUIT TO REMAIN OUTSIDE OF AREA OF CIVIL DEMOLITION FOR RECONNECTION TO NEW CONDUIT.
- ⑩ EXISTING SIGN TO REMAIN, PROTECT IN PLACE.
- ⑪ SALVAGE EXISTING LIGHTED WINDCONE AND ISOLATION TRANSFORMER FOR REINSTALLATION. REMOVE CABLE AND CONDUIT. SEE E1 SERIES DRAWINGS FOR REINSTALLATION.
- ⑫ EXISTING LIGHT TO REMAIN, PROTECT IN PLACE.

**FIELD SURVEY NOTE**

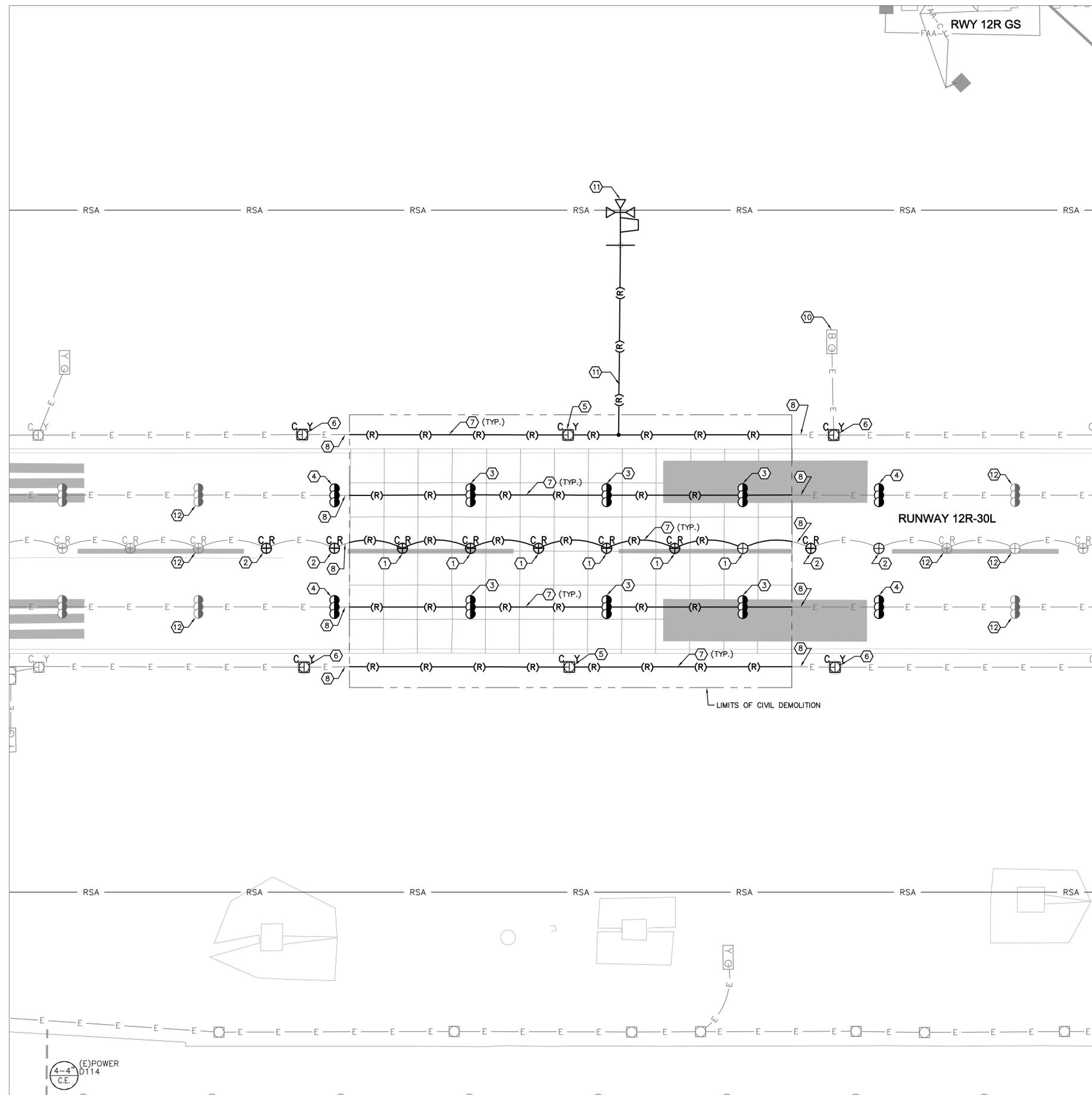
1. PRIOR TO DEMOLITION, THE CONTRACTOR SHALL FIELD SURVEY LOCATIONS OF THE EXISTING RUNWAY FIXTURES TO BE SALVAGED FOR REINSTALLATION ON NEW BASES SO THAT THE FIXTURES MAY BE REINSTALLED IN THE SAME LOCATION.

**GENERAL NOTES**

1. SEE E1 SERIES DRAWINGS FOR NEW ELECTRICAL SYSTEM LAYOUT PLANS.



40 0 40 80  
SCALE IN FEET



(E)POWER  
4-4" D114  
C.E.





