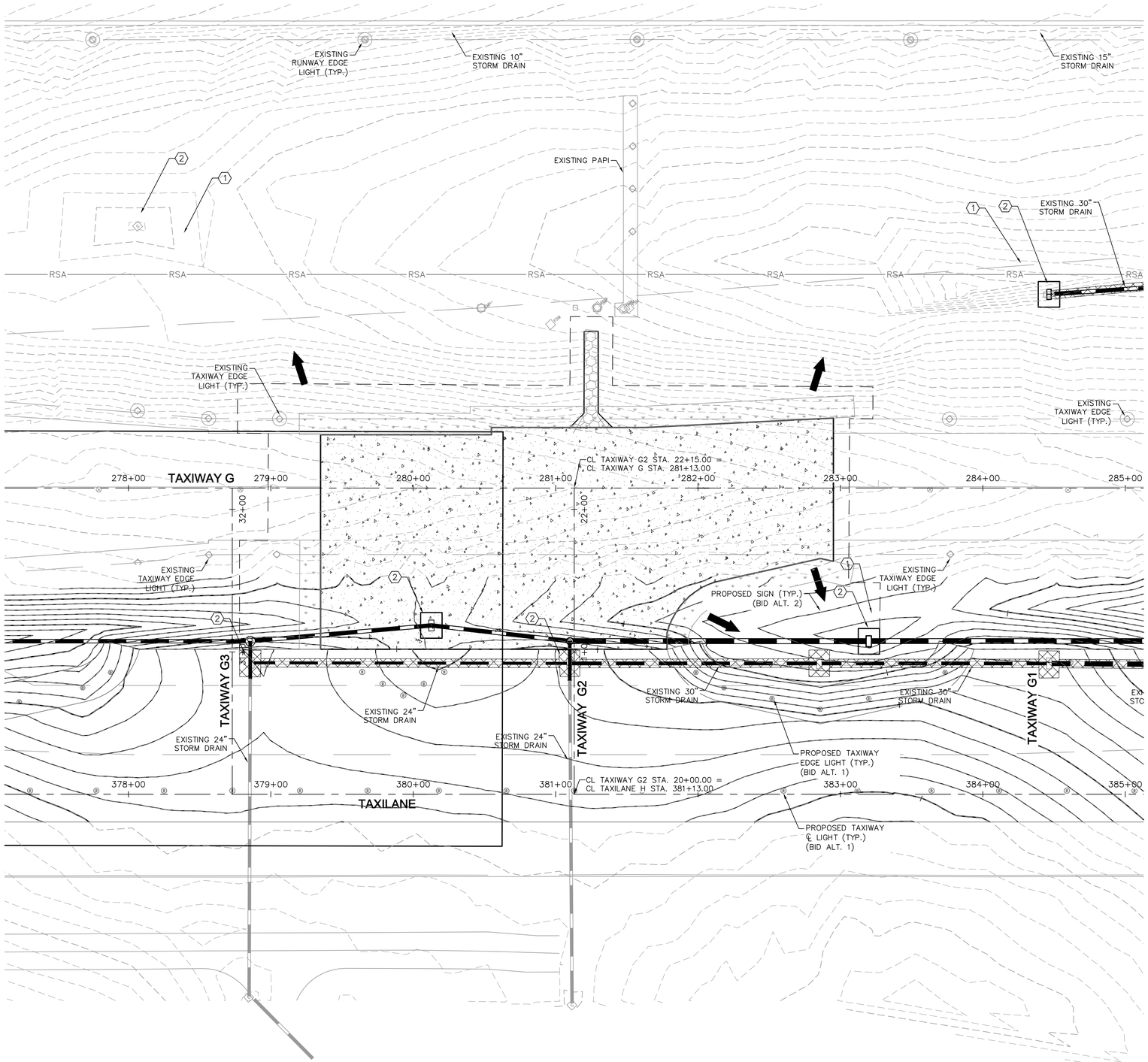


LEGEND

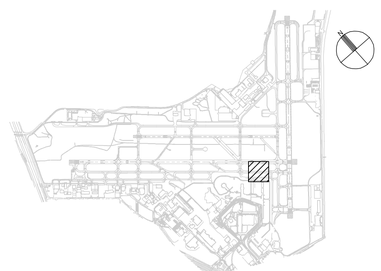
- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- PROPOSED SEEDING AREA
- PROPOSED SOD AREA
- ROCK FILTER DAM
- DRAINAGE INLET PROTECTION
- FLOW DIRECTION ARROW
- GRADING LIMITS
- DRAINAGE TO BE REMOVED
- 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 AN PAID FOR ALL AREAS AFFECTED BY GRADING AND EARTHWORK. OTHER AREAS INCIDENTALLY AFFECTED BY CONSTRUCTION EQUIPMENT SHALL BE RESEEDED 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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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

MICHAEL A. NORBY
87178
REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1CE-401-A02
DRAWN BY:		CAD
CHECKED BY:		MAN
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SHEET TITLE:

STORM WATER POLLUTION PREVENTION PLAN AND SEEDING BID ALT. 2

C13.7

SHEET NO. 131 OF 214

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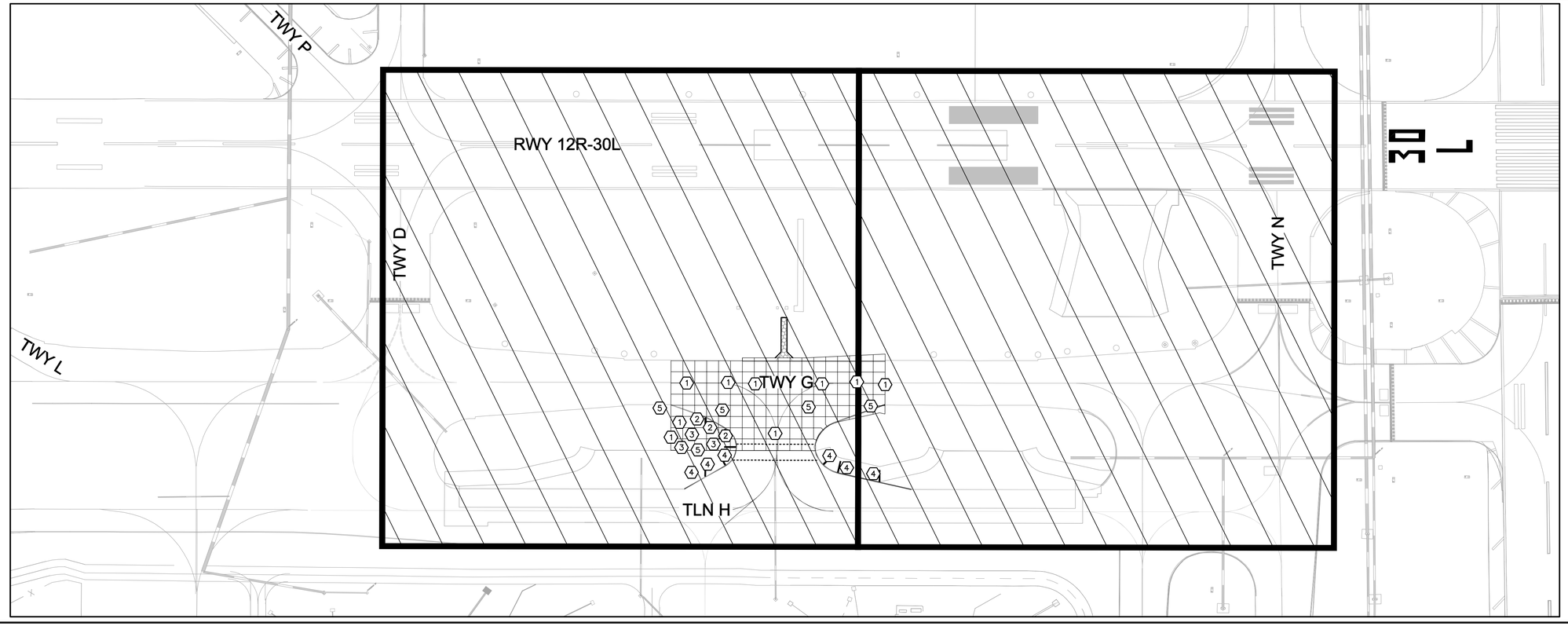
SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS



ELECTRICAL PLANS FOR RUNWAY 12R-30L REHABILITATION AND TERMINAL AREA TAXIWAY IMPROVEMENTS (PACKAGE 1, BID ALT. 2)

PROJECT NOS. 33-00178 AND 33-00193
FAA AIP 3-48-0192-XX-2013

ELECTRICAL SCOPE OF WORK - ADD ALT 2

1. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS AND TOUCH DOWN ZONE (TDZ) LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 12R PAVEMENT REHABILITATION AREA.
2. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON NEW L-867 BASECAN, CONDUIT AND CABLES.
3. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 30L PANEL REPLACEMENT AREA.
4. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON EXISTING BASECAN.
5. INSTALL NEW PRECAST CONCRETE HANDHOLE.

CITY OF SAN ANTONIO AVIATION DEPARTMENT

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Kimley-Horn and Associates, Inc.
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PHONE: (210) 541-9166
TEXAS REGISTERED FIRM, NO. 928

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

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1EC-001-A02
DRAWN BY:		CMP
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SHEET TITLE:

ELECTRICAL SCOPE OF WORK BID ALT. 2

E0.1

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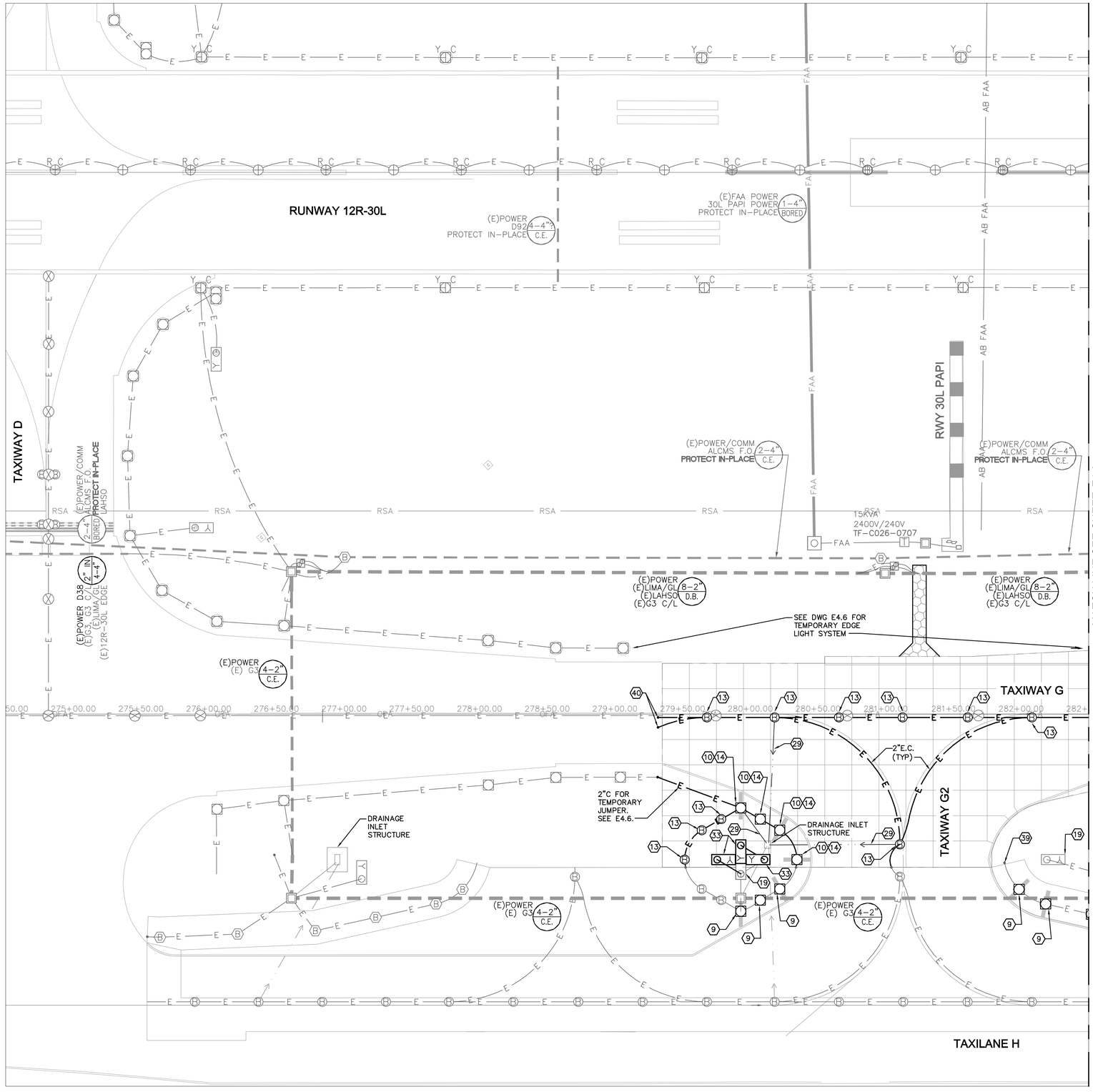


ELECTRICAL CONSTRUCTION NOTES

(9) INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L-867 OR L-868 BASE CAN. REMOVE BLANK COVER IF INSTALLED PER BASECAN INSTALLATION NOTE AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.

(10) INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L-868 BASE CAN. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.

(13) NEW L-868 BASE CAN AND BLANK COVER IN NEW PCC PAVEMENT.

(14) NEW L-868 BASE CAN IN NEW PCC PAVEMENT.

(19) EXISTING SIGN, PROTECT IN PLACE.

(29) INSTALL 2"C (ITEM L-110) TO DRAIN STRUCTURES. COMBINE DRAIN CONDUITS FROM SEPARATE SYSTEMS INTO COMMON TRENCH WHEN POSSIBLE. SEE DETAILS ON E3.11.

(33) NEW SIGN BASE CAN WITH BLANK COVER ONLY ON NEW CONCRETE PAVEMENT. SEE DETAILS ON DRAWINGS E3.2 FOR SIGN CONFIGURATION. SEE E5 SERIES SIGN PLANS FOR SIGN INSTALLATION PHASING.

(39) STUB AND CAP NEW 1-2"C FOR CONNECTION IN BID ALT 3.

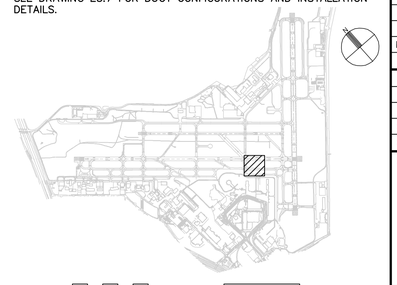
(40) STUB AND CAP NEW 1-2"C FOR CONNECTION IN BID ALT 4.

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.



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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1EE-101-A02
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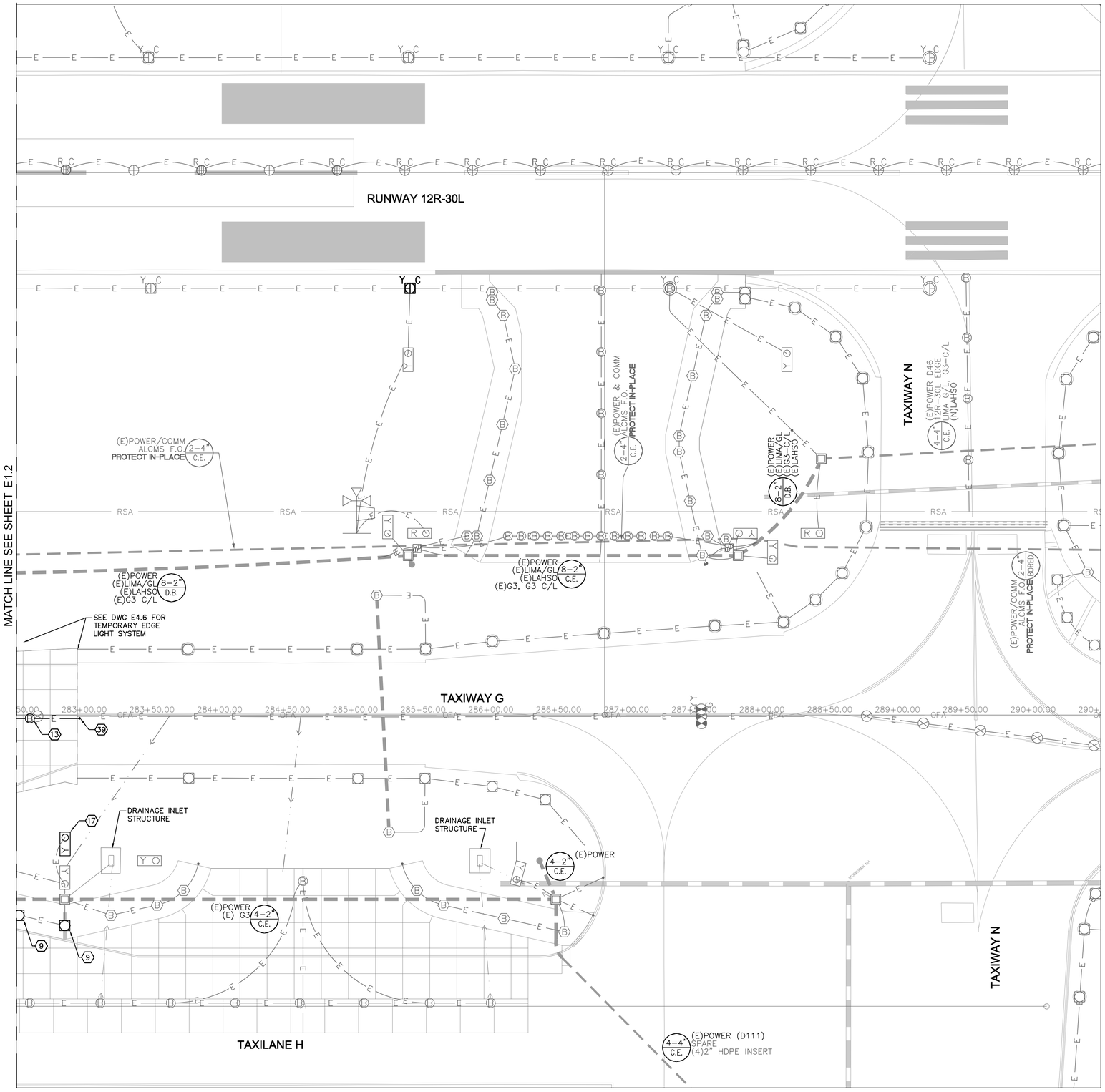
SHEET TITLE:

ELECTRICAL LAYOUT PLAN
BID ALT. 2

E1.2
SHEET NO. 133 OF 214

K:\REN_Aviation\191629001-SAT Rwy & Twy Improvements\05 CAD\ALT 2_33-00193-R1EE-101-A02.dwg Jul 6, 2013 - 3:17PM Peterson, Cory



ELECTRICAL CONSTRUCTION NOTES

(9) INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L-867 OR L-868 BASE CAN. REMOVE BLANK COVER IF INSTALLED PER BASECAN INSTALLATION NOTE AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.

(13) NEW L-868 BASE CAN AND BLANK COVER IN NEW PCC PAVEMENT.

(17) NEW SIGN FOUNDATION FOR SIGN INSTALLATION ON NEW CONCRETE BASE. SEE DETAILS ON DRAWINGS E3.1 FOR SIGN CONFIGURATION. SEE E5 SERIES SIGN PLANS FOR SIGN INSTALLATION PHASING.

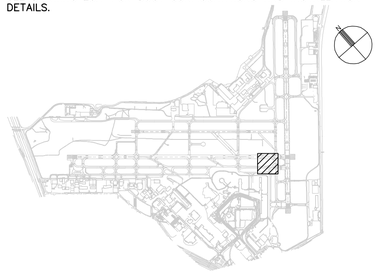
(39) STUB AND CAP NEW 1-2"C FOR CONNECTION IN BID ALT 3.

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 E6.3 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.



CITY OF
SAN ANTONIO
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DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn
and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1EE-101-A02
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SHEET TITLE:

ELECTRICAL LAYOUT
PLAN
BID ALT. 2

E1.3

SHEET NO. 134 OF 214

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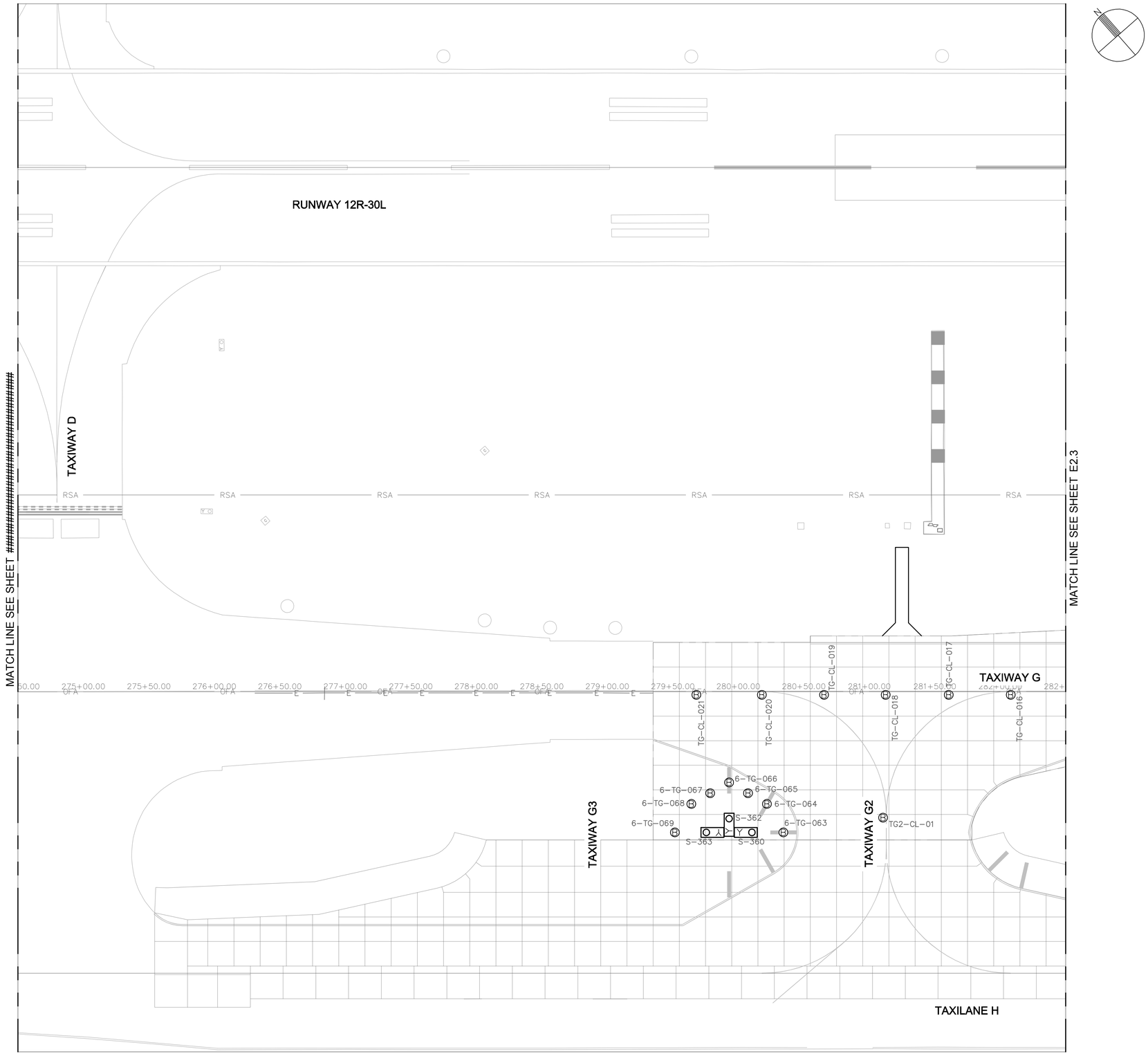


FIELD SURVEY NOTE

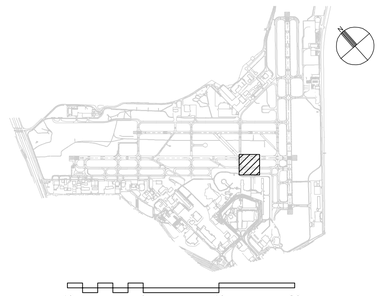
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.2 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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 E2.4 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.



40 0 40 80
SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94061
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		---

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1EE-101-A02
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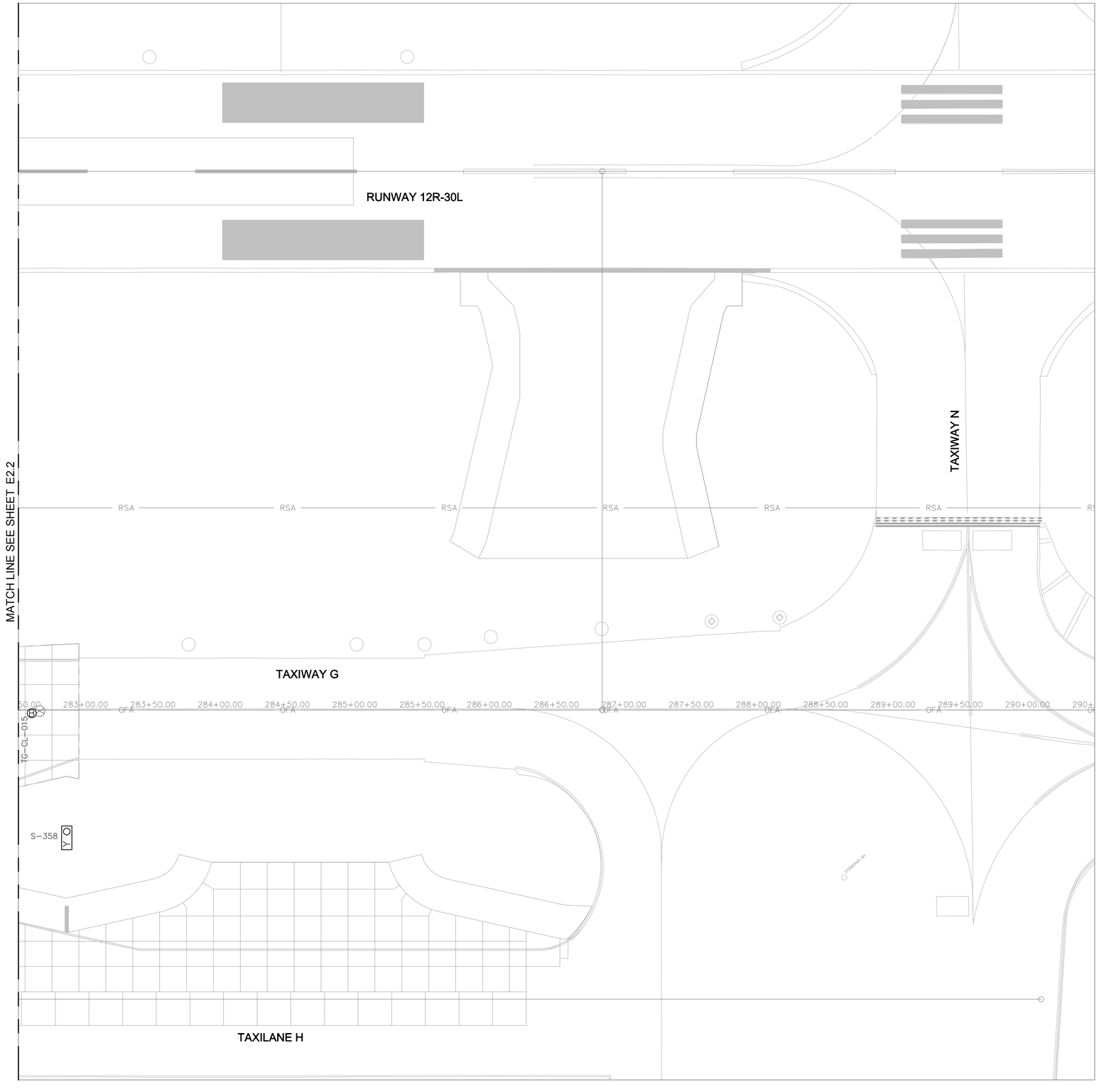
SHEET TITLE:

ELECTRICAL FIXTURE LAYOUT PLAN BID ALT. 2

E2.2

SHEET NO. 135 OF 214

K:\REN_Aviation\191629001-SAT Rwy & Twy Improvements\05 CADD\ALT 2_33-00193-R1EE-101-A02.dwg Jul 6, 2013 - 3:17PM Peterson, Cory



FIELD SURVEY NOTE

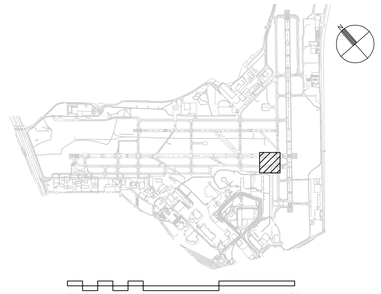
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.3 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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 E2.5 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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Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1EE-101-A02
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ELECTRICAL FIXTURE LAYOUT PLAN BID ALT. 2

E2.3

SHEET NO. 136 OF 214

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L-868 DATA TABLE					
FIXT-NUM	STA	OFF	FAA-TYPE	DETAIL	CIRCUIT
6-TG-063	'Taxiway G' 280+34.42	107.49' RT.	L-868	E3.5 FOR L-861T	
6-TG-064	'Taxiway G' 280+97.50	80.00' RT.	L-868	E3.5 FOR L-861T	
6-TG-065	'Taxiway G' 280+07.41	77.56' RT.	L-868	E3.5 FOR L-861T	
6-TG-066	'Taxiway G' 279+93.00	69.35' RT.	L-868	E3.5 FOR L-861T	
6-TG-067	'Taxiway G' 279+78.59	77.57' RT.	L-868	E3.5 FOR L-861T	
6-TG-068	'Taxiway G' 279+64.19	85.79' RT.	L-868	E3.5 FOR L-861T	
6-TG-069	'Taxiway G' 279+51.58	107.50' RT.	L-868	E3.5 FOR L-861T	
TG2-CL-01	'Taxiway G' 281+10.50	96.25' RT.	L-868	E3.5 BLANK	
TG-CL-015	'Taxiway G' 282+60.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-016	'Taxiway G' 282+08.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-017	'Taxiway G' 281+60.64	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-018	'Taxiway G' 281+12.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-019	'Taxiway G' 280+65.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-020	'Taxiway G' 280+18.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-021	'Taxiway G' 279+68.00	2.50' RT.	L-868	E3.5 FOR L-852	

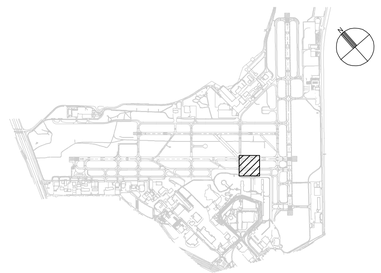
SIGN DATA TABLE						
SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S-363	'Taxiway G' 279+75.58	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S-358	'Taxiway G' 282+86.00	90.41' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S-360	'Taxiway G' 280+10.42	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S-362	'Taxiway G' 279+93.00	96.98' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3

CIRCUIT DESIGNATION SCHEDULE

CIRCUIT NAME	FIELD CIRUIT NUMBER	ALCS NUMBER	REMARKS
WEST VAULT:			
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
EAST VAULT:			
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

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



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
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ELECTRICAL FIXTURE DATA TABLES BID ALT. 2

E2.4

SHEET NO. 137 OF 214

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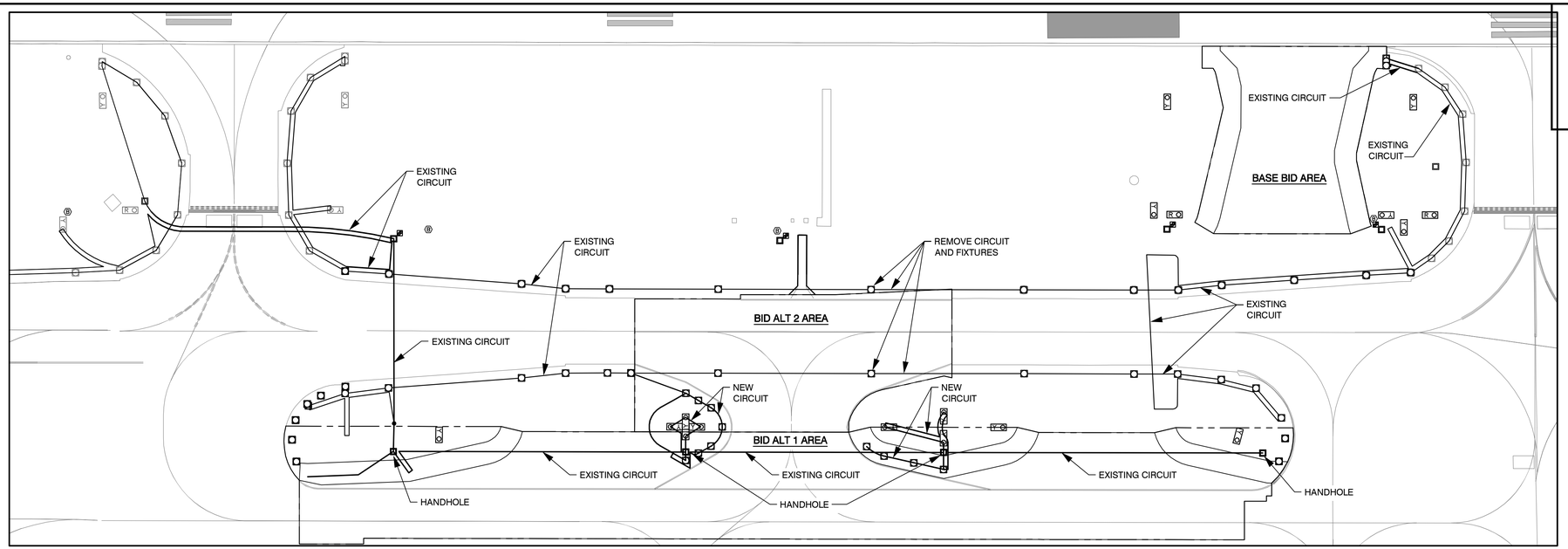


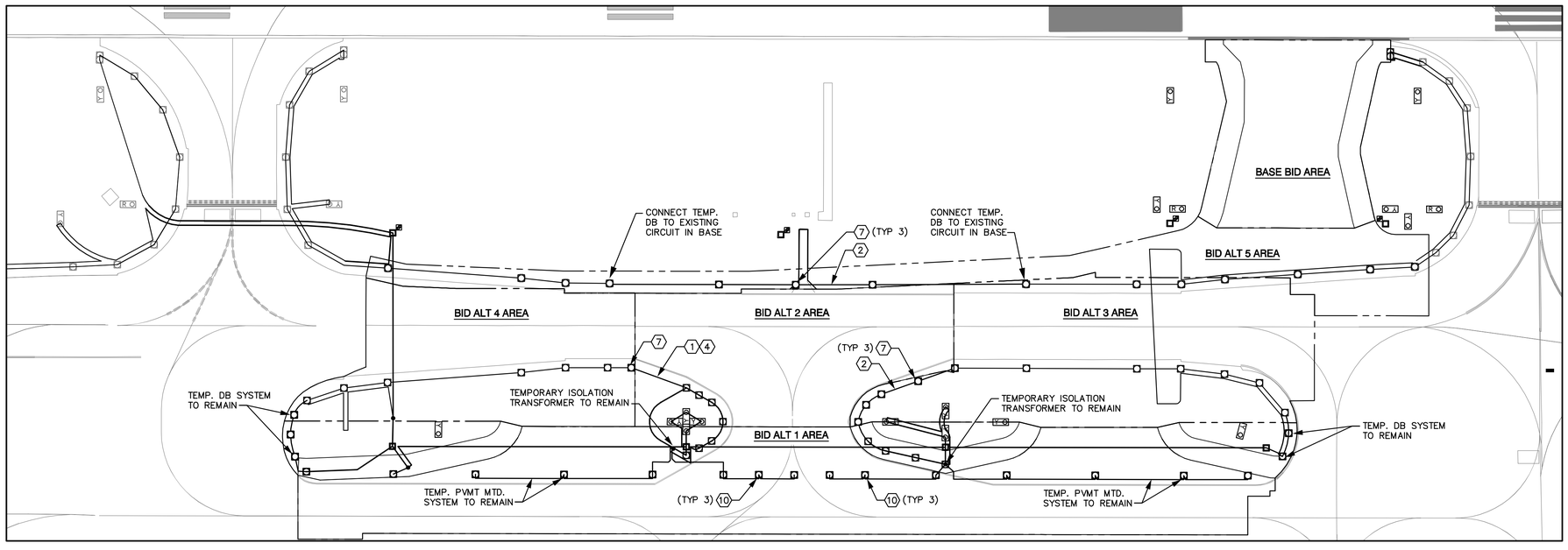
CIRCUIT DEFINITION		
CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108
TOTAL CIRCUIT LENGTH INSTALLED IN BID ALT 2	900	

BID ALT 2 - CIRCUIT INSTALLED IN THIS PHASE

N.T.S.

75 0 75 150

SCALE IN FEET



BID ALT 2 - TEMPORARY FIXTURES, JUMPERS AND CABLES

N.T.S.

SIGN SHEET NOTES

1. TEMPORARY JUMPER, L-824, TYPE C, 1/C #6, 5 KV CABLE IN CONDUIT.
2. LONG TERM TEMPORARY DIRECT BURIED L-824, TYPE C, 1/C #6, 5 KV CABLE.
4. TEMPORARY, SURFACE MOUNTED SINGLE-WAY 2" CONDUIT.
7. INSTALL LONG TERM TEMPORARY STAKE MOUNTED TAXIWAY EDGE. SEE DETAILS E3.13.
10. REMOVE LONG TERM TEMPORARY PAVEMENT MOUNTED TAXIWAY EDGE LIGHT. ABANDON SECONDARY CABLES PER DETAIL ON E3.13.

N

300 0 300 600

SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		---
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1EC-646
DRAWN BY:		CMP
CHECKED BY:		ECL
COPYRIGHT:		2013

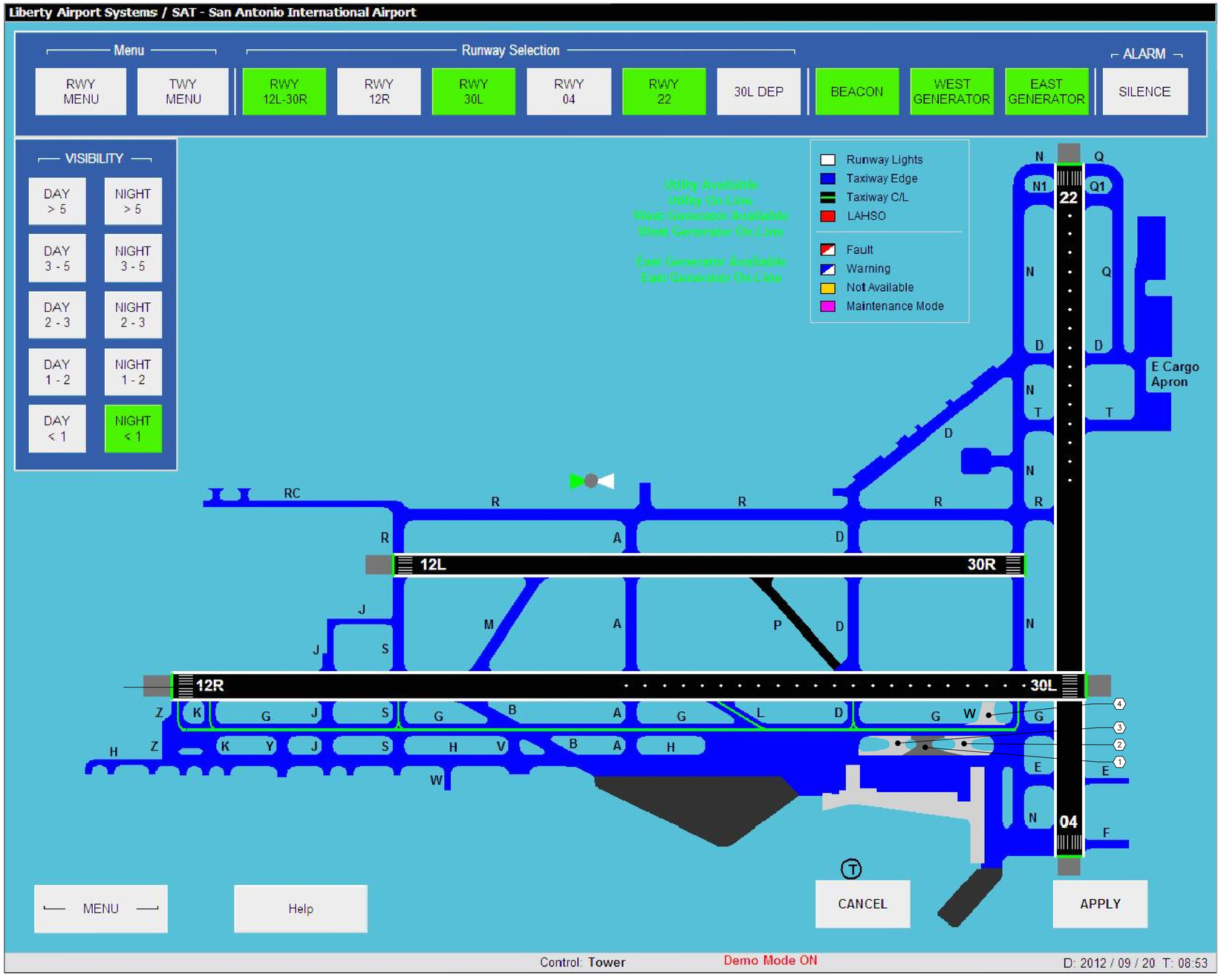
SHEET TITLE:

CIRCUIT MAPS
T/W EDGE G3
(CKT 6)
BID ALT. 2

E4.6

SHEET NO. 138 OF 214

k:\ven_aviation\191629001-sat rwy & twy improvements\05 CADD_33-00193-R1EC-646.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric



ALCMS SHEET NOTES

1. ADD NEW TAXIWAY 'G2' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 2.
2. ADD NEW TAXIWAY 'G3' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 3.
3. ADD NEW TAXIWAY 'G1' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 4.
4. ADD NEW TAXIWAY 'W' PAVEMENT ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 5.

ALCMS GENERAL NOTE

1. THERE ARE NO ALCMS MODIFICATIONS IN EITHER THE BASE BID OR ALTERNATE BID 1.

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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RUNWAY 12R-30L REHABILITATION AND TERMINAL AREA TAXIWAY IMPROVEMENTS (PACKAGE 1)

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1ES-601-A02
DRAWN BY:		CMP
CHECKED BY:		ECL
COPYRIGHT:		2013

SHEET TITLE:

ALCMS MODIFICATIONS BID ALT. 2

E4.8

k:\ven_aviation\191629001-sat rwy & twy improvements\05 CAD\ALT 2_33-00193-R1ES-601-A02.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

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

SIGN DATA TABLE						
SIGN–NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S–357	'Taxilane H' 382+85.78	90.36' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–354	'Taxilane H' 386+19.00	93.52' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–365	'Taxilane H' 377+13.00	93.30' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–361	'Taxilane H' 379+93.00	96.98' LT.	E3.2	RT858Y2M	G3 (6)	MODE 3
S–356	'Taxilane H' 383+52.95	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S–359	'Taxilane H' 382+19.05	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 3

SIGN DATA TABLE						
SIGN–NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S–363	'Taxiway G' 279+75.58	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S–358	'Taxiway G' 282+86.00	90.41' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S–360	'Taxiway G' 280+10.42	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S–362	'Taxiway G' 279+93.00	96.98' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3

SIGN SHEET NOTES

(2) NEW SIGN BASE ASSEMBLY IN NEW PCCP INSTALLED IN THIS PHASE. SEE DETAILS ON E3.2. SEE E2 SERIES DRAWINGS FOR LOCATIONS.

(4) SIGN LEGEND FOR NEW SIGN INSTALLED IN THIS PHASE ON CONCRETE FOUNDATION OR BASE ASSEMBLY.

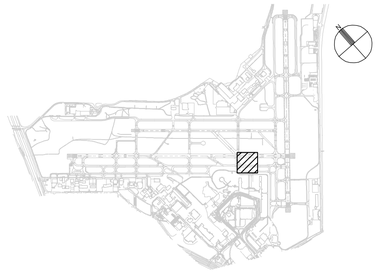
(6) CONCRETE FOUNDATION INSTALLED IN A PREVIOUS PHASE.

(7) SIGN BASE ASSEMBLY INSTALLED IN A PREVIOUS PHASE.

(9) EXISTING SIGN, BASE AND LEGEND TO REMAIN IN THIS PHASE.

GENERAL NOTES

1. SEE E1 SERIES DRAWINGS FOR ELECTRICAL SYSTEM LAYOUT PLANS.
2. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL SIGN LOCATIONS.



40 0 40 80
SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS — ERIC C. LOVEJOY — 94081 — LICENSED — PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		---

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ES-101-A02
DRAWN BY:	CMP
CHECKED BY:	ECL
COPYRIGHT:	2013

SHEET TITLE:

ELECTRICAL SIGN PLAN BID ALT. 2

E5.1

SHEET NO. 140 OF 214

k:\San_aviation\191629001-ast rwy & twy improvements\05 CADD\ALT 2_33-00193-R1ES-101-A02.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

SIGN DATA TABLE

SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
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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
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SIGN DATA TABLE

SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
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S-365	'Taxilane H' 377+13.00	93.30' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S-361	'Taxilane H' 379+93.00	96.98' LT.	E3.2	RT858Y2M	G3 (6)	MODE 3
S-356	'Taxilane H' 383+52.95	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S-359	'Taxilane H' 382+19.05	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 3

SIGN DATA TABLE

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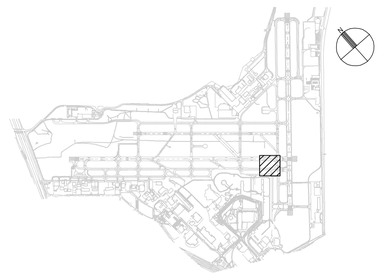
S-362	'Taxiway G' 279+93.00	96.98' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3

SIGN SHEET NOTES

1. NEW CONCRETE FOUNDATION INSTALLED IN THIS PHASE. SEE DETAILS ON E3.1. SEE E2 SERIES DRAWINGS FOR LOCATIONS.
4. SIGN LEGEND FOR NEW SIGN INSTALLED IN THIS PHASE ON CONCRETE FOUNDATION OR BASE ASSEMBLY.
6. CONCRETE FOUNDATION INSTALLED IN A PREVIOUS PHASE.
8. SIGN LEGEND FOR SIGN INSTALLED IN A PREVIOUS PHASE.

GENERAL NOTES

1. SEE E1 SERIES DRAWINGS FOR ELECTRICAL SYSTEM LAYOUT PLANS.
2. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL SIGN LOCATIONS.



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----

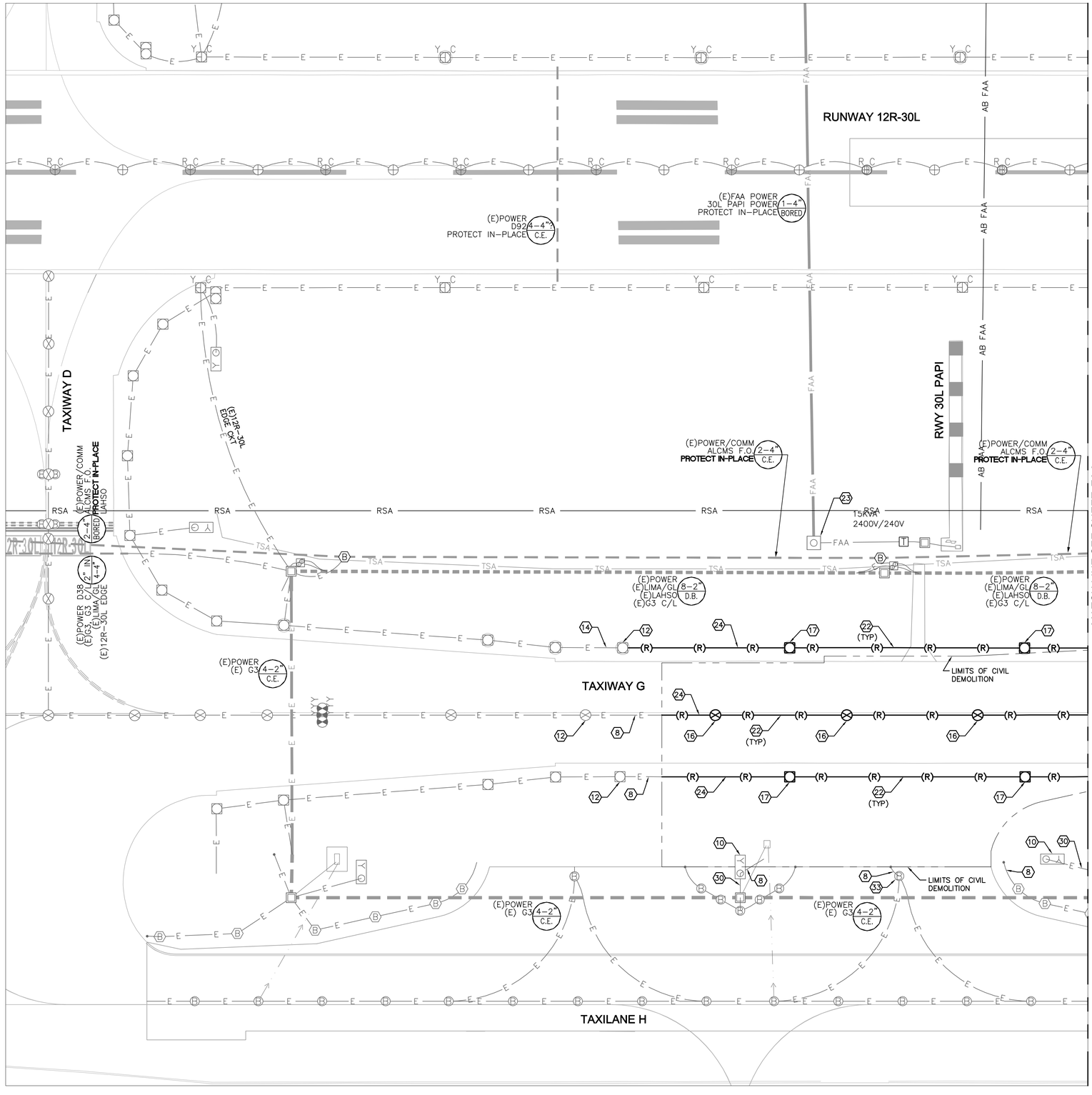
PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ES-101-A02
DRAWN BY:	CMP
CHECKED BY:	ECL
COPYRIGHT:	2013

SHEET TITLE:

ELECTRICAL SIGN PLAN
BID ALT. 2

E5.2

k:\ven_aviation\191629001-sat rwy & twy improvements\05 CADD\ALT 2_33-00193-R1ES-101-A02.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

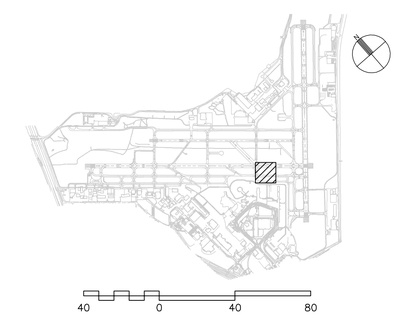


ELECTRICAL DEMOLITION NOTES

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.
12. EXISTING LIGHT TO REMAIN, PROTECT IN PLACE.
14. EXISTING POWER DUCT, PROTECT IN PLACE.
16. SALVAGE EXISTING TAXIWAY CENTERLINE LIGHT FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER.
17. SALVAGE EXISTING TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER TO THE OWNER.
22. REMOVE EXISTING CONDUIT AND CONDUCTORS.
23. EXISTING FAA MANHOLE, PROTECT IN PLACE.
24. REMOVE EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS BACK TO EXISTING FIXTURE OR STRUCTURE TO REMAIN OR AS NOTED.
30. EXISTING CONDUIT TO REMAIN, PROTECT IN PLACE.
33. EXISTING BASE CAN AND BLANK COVER, PROTECT IN PLACE.

GENERAL NOTES

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



CITY OF SAN ANTONIO AVIATION DEPARTMENT

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STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION

ISSUE:	----
PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ED-101-A02
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CHECKED BY:	ECL
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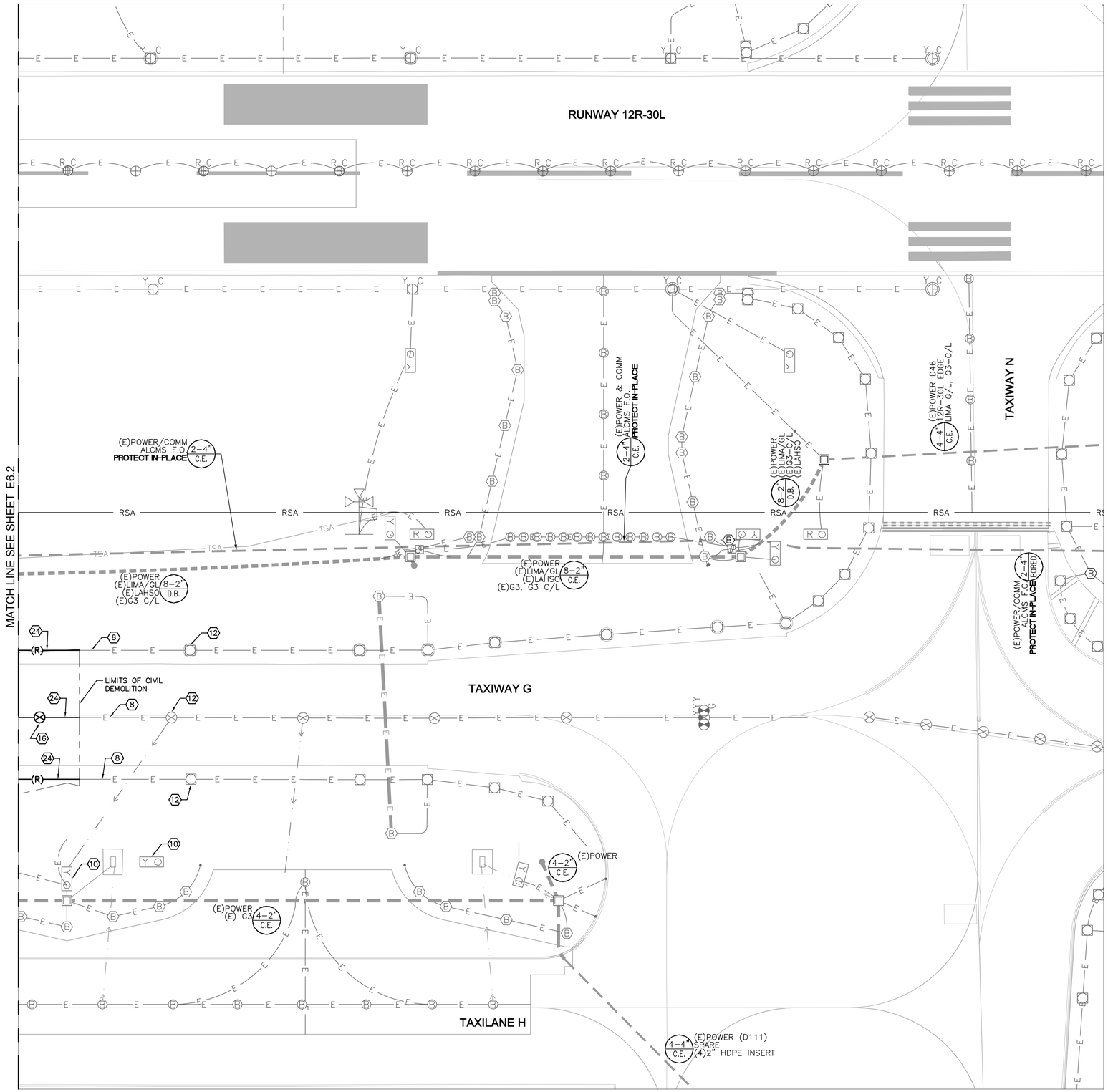
SHEET TITLE:

ELECTRICAL DEMOLITION PLAN BID ALT. 2

E6.2

SHEET NO. 142 OF 214

k:\ren_aviation\191629001-sat rwy & twy improvements\05 CADD\ALT 2_33-00193-R1ED-101-A02.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

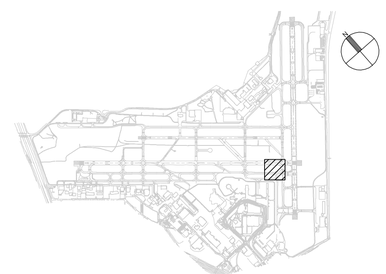


ELECTRICAL DEMOLITION NOTES

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.
12. EXISTING LIGHT TO REMAIN, PROTECT IN PLACE.
16. SALVAGE EXISTING TAXIWAY CENTERLINE LIGHT FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER.
24. REMOVE EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS BACK TO EXISTING FIXTURE OR STRUCTURE TO REMAIN OR AS NOTED.

GENERAL NOTES

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



CITY OF SAN ANTONIO AVIATION DEPARTMENT

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STATE OF TEXAS — ERIC C. LOVEJOY — 84081 — LICENSED PROFESSIONAL ENGINEER

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DRAWN BY:	CMP
CHECKED BY:	ECL
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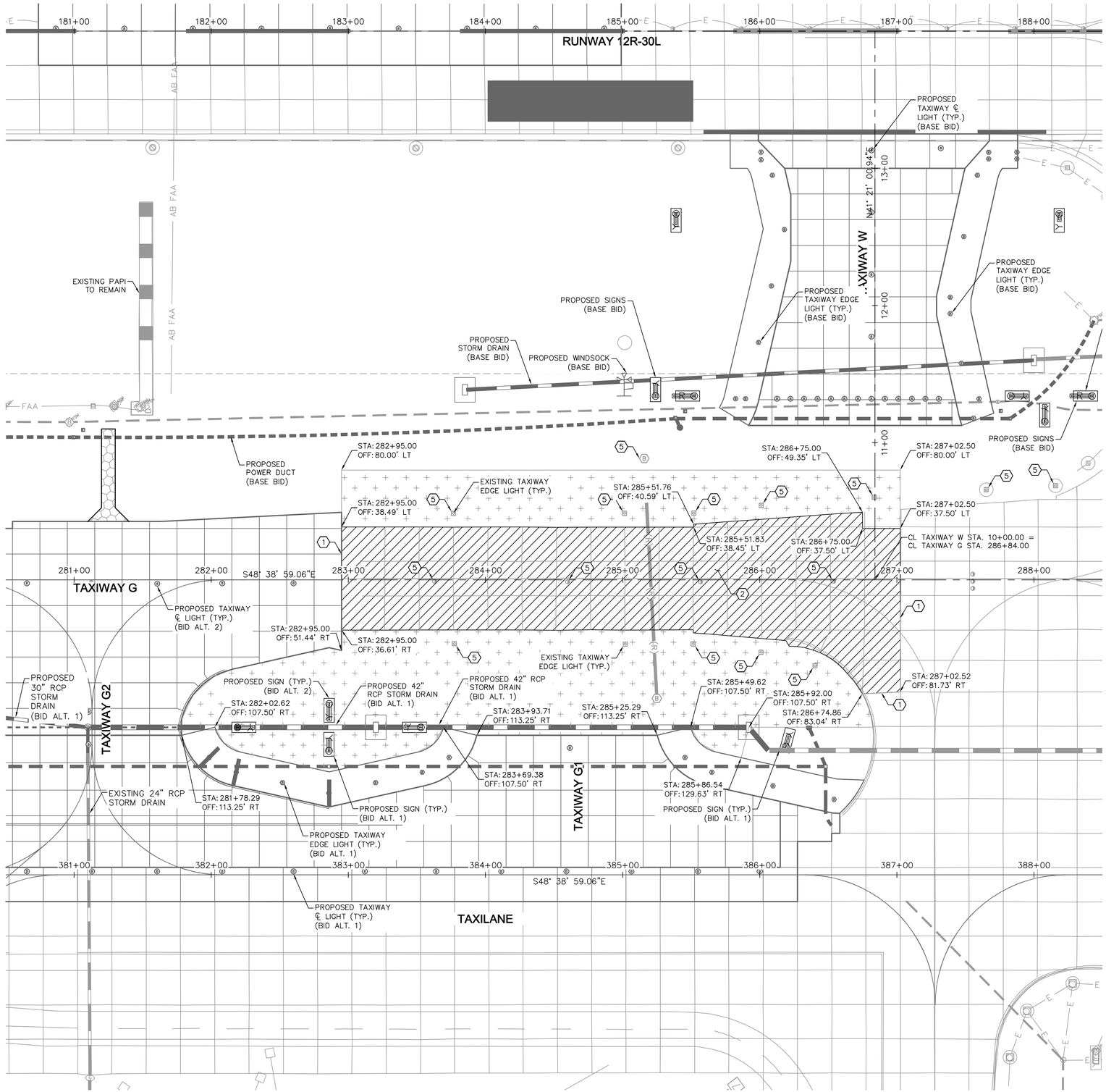
SHEET TITLE:

ELECTRICAL DEMOLITION PLAN BID ALT. 2

E6.3

SHEET NO. 143 OF 214

k:\res_aviation\191629001-rast rwy & twy improvements\05 CADD\ALT 2_33-00193-R1ED-101-A02.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric



LEGEND

PORTLAND CEMENT CONCRETE PAVEMENT REMOVAL

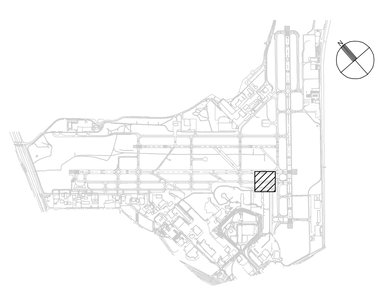
CLEAR AND GRUB (P-101)

GENERAL NOTES

1. EXISTING UTILITY INFORMATION SHOWN ON THE PLANS CONCERNING THE TYPE, SIZE, AND LOCATION WERE COMPILED BASED ON THE UTILITY RECORDS AVAILABLE TO THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A UTILITY LOCATOR AND VERIFY THE ACTUAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES IN PLACE UNLESS NOTED OR SPECIFIED OTHERWISE. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE RESET OR RELOCATED BY THE UTILITY COMPANY CONCERNED UNLESS NOTED OTHERWISE.
2. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
3. REFER TO ELECTRICAL PLANS (SERIES E) FOR ELECTRICAL DEMOLITION.

CONSTRUCTION NOTES

1. SAWCUT EXISTING PCC PAVEMENT – FULL DEPTH
2. REMOVE AND DISPOSE OF EXISTING PCC PAVEMENT OFFSITE
3. REMOVE AND DISPOSE OF EXISTING STORM DRAIN PIPE, LIMITS OF REMOVAL PER PLAN
4. REMOVE AND DISPOSE OF EXISTING DRAINAGE STRUCTURE
5. REFER TO ELECTRICAL PLANS (SERIES E)
6. REMOVE AND DISPOSE OF EXISTING AC PAVEMENT OFFSITE
7. PAVEMENT MARKING TO BE OBLITERATED



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

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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)

MICHAEL A. NORBY 87178 REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION

ISSUE: -

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CD-101-A03
DRAWN BY:	CAD
CHECKED BY:	MAN
COPYRIGHT:	2013

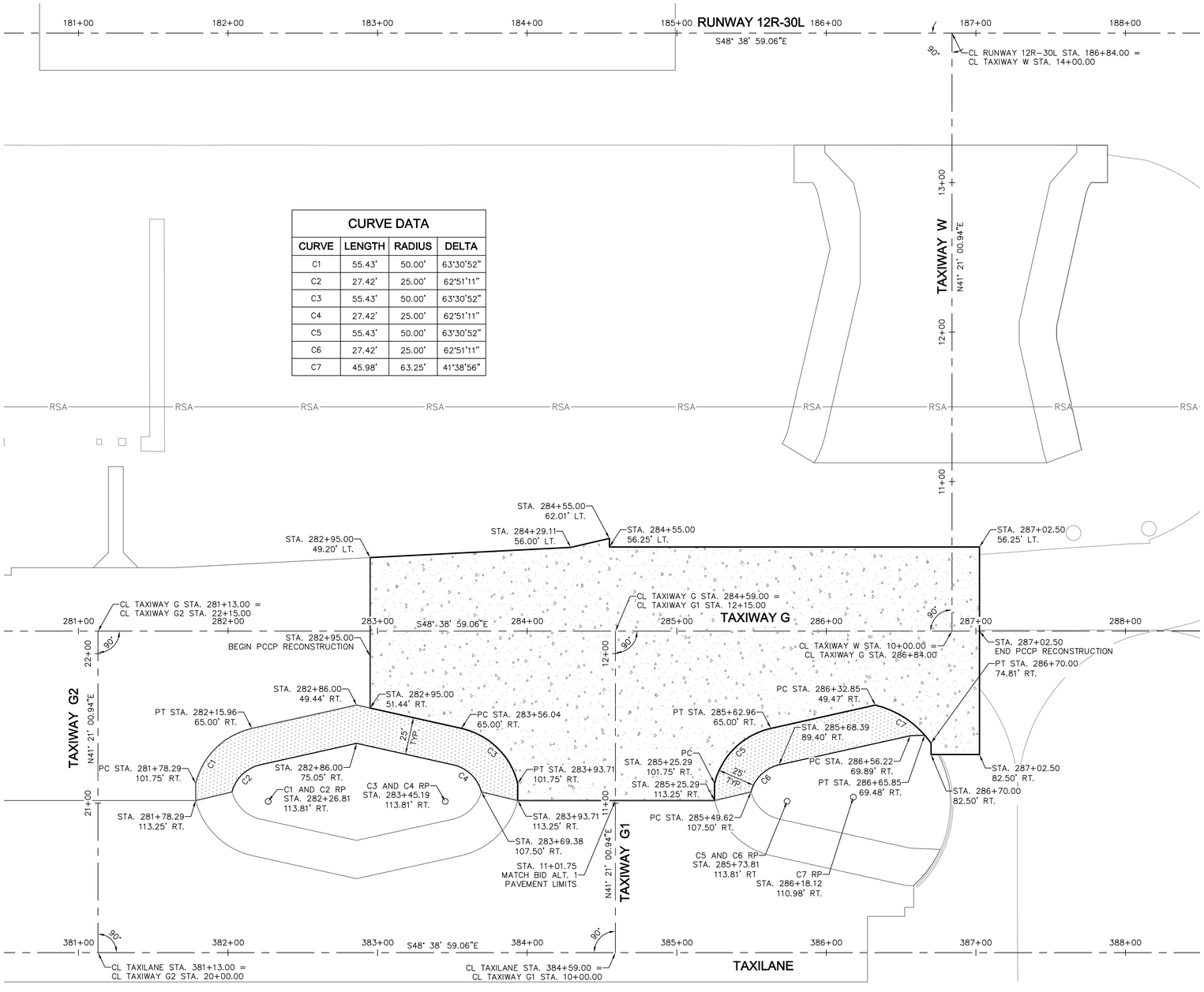
SHEET TITLE:

DEMOLITION PLAN BID ALT. 3

C3.7

SHEET NO. 144 OF 214

K:\PHX_Aviation\191629001 - San Antonio\CADD_33-00193-R1CD-101-A03.dwg Jul 22, 2013 Stauffer, Fred



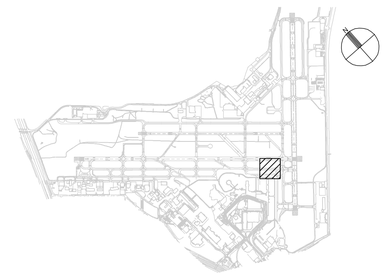
CURVE DATA			
CURVE	LENGTH	RADIUS	DELTA
C1	55.43'	50.00'	63°30'52"
C2	27.42'	25.00'	62°51'11"
C3	55.43'	50.00'	63°30'52"
C4	27.42'	25.00'	62°51'11"
C5	55.43'	50.00'	63°30'52"
C6	27.42'	25.00'	62°51'11"
C7	45.98'	63.25'	41°38'56"

LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

1. REFER TO SHEET C1.12 HORIZONTAL AND VERTICAL CONTROL.
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



40 0 40 80
SCALE IN FEET

CITY OF
SAN ANTONIO
AVIATION
DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

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MICHAEL A. NORBY
87178
REGISTERED
PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CL-101-A03
DRAWN BY:	CAD
CHECKED BY:	MAN
COPYRIGHT:	2013

SHEET TITLE:

GEOMETRIC
LAYOUT PLAN
BID ALT. 3

C5.6
SHEET NO. 145 OF 214

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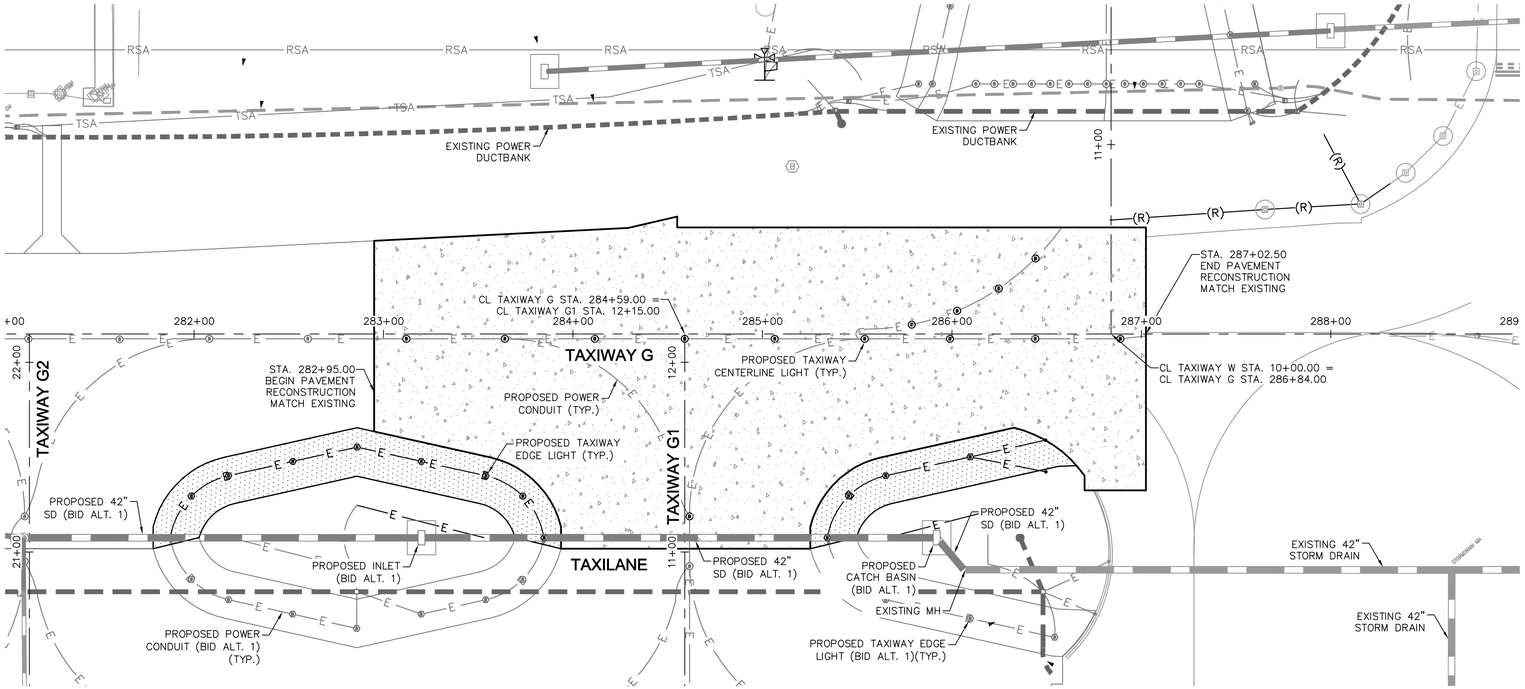
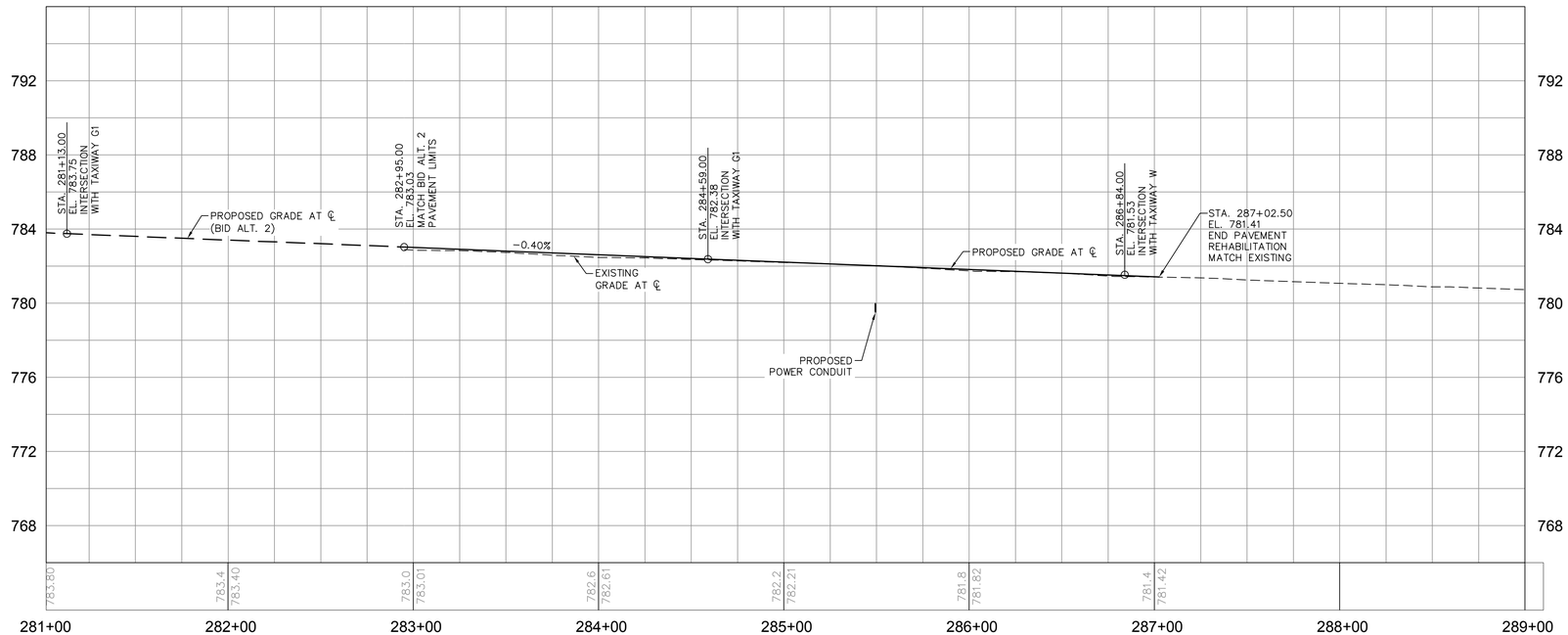


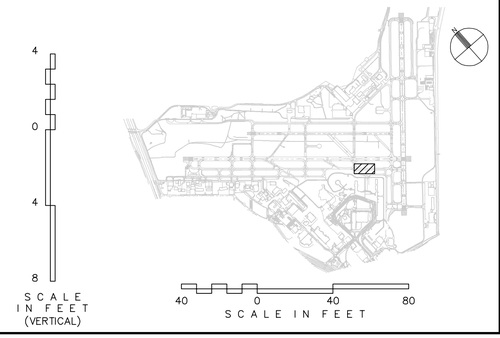


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

1. ALL STATIONS AND OFFSETS REFER TO THE APPROPRIATE RUNWAY OR TAXIWAY STATIONING.
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



CITY OF
SAN ANTONIO
AVIATION
DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn
and Associates, Inc.
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)

MICHAEL A. NORBY
87178
REGISTERED
PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CP-101-A03
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SHEET TITLE:

PLAN AND PROFILE
TAXIWAY G
BID ALT. 3

C6.9
SHEET NO. 146 OF 214

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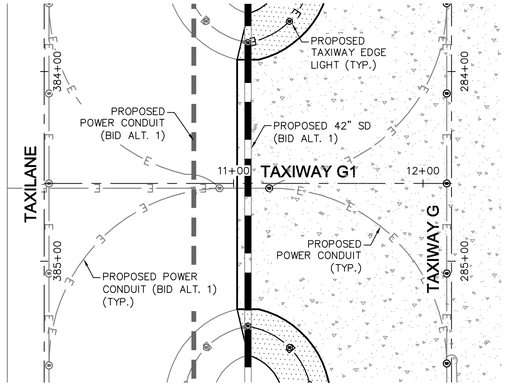

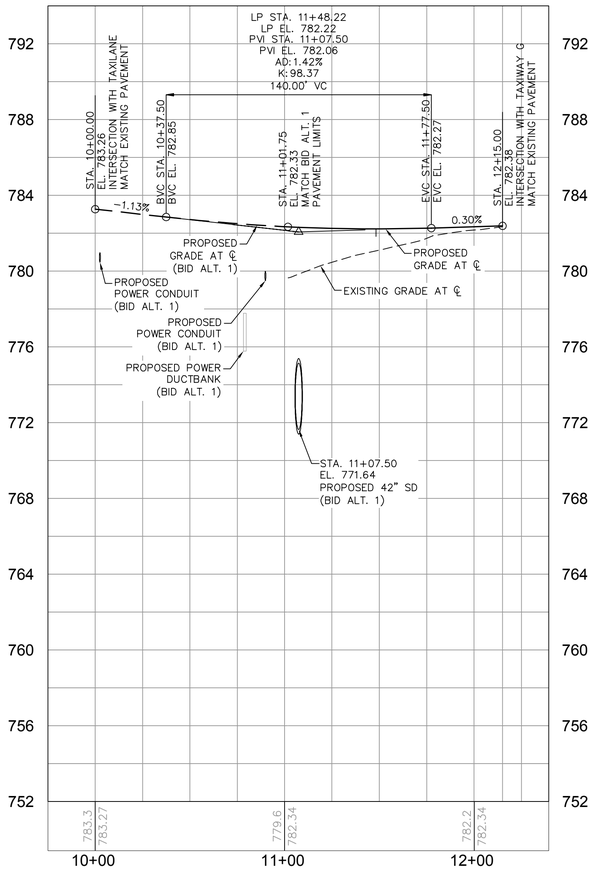

LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

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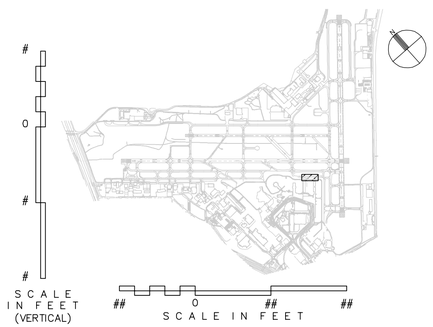
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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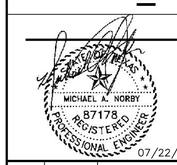

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PLAN AND PROFILE
TAXIWAY G1
BID ALT. 3

C6.10

SHEET NO. 147 OF 214

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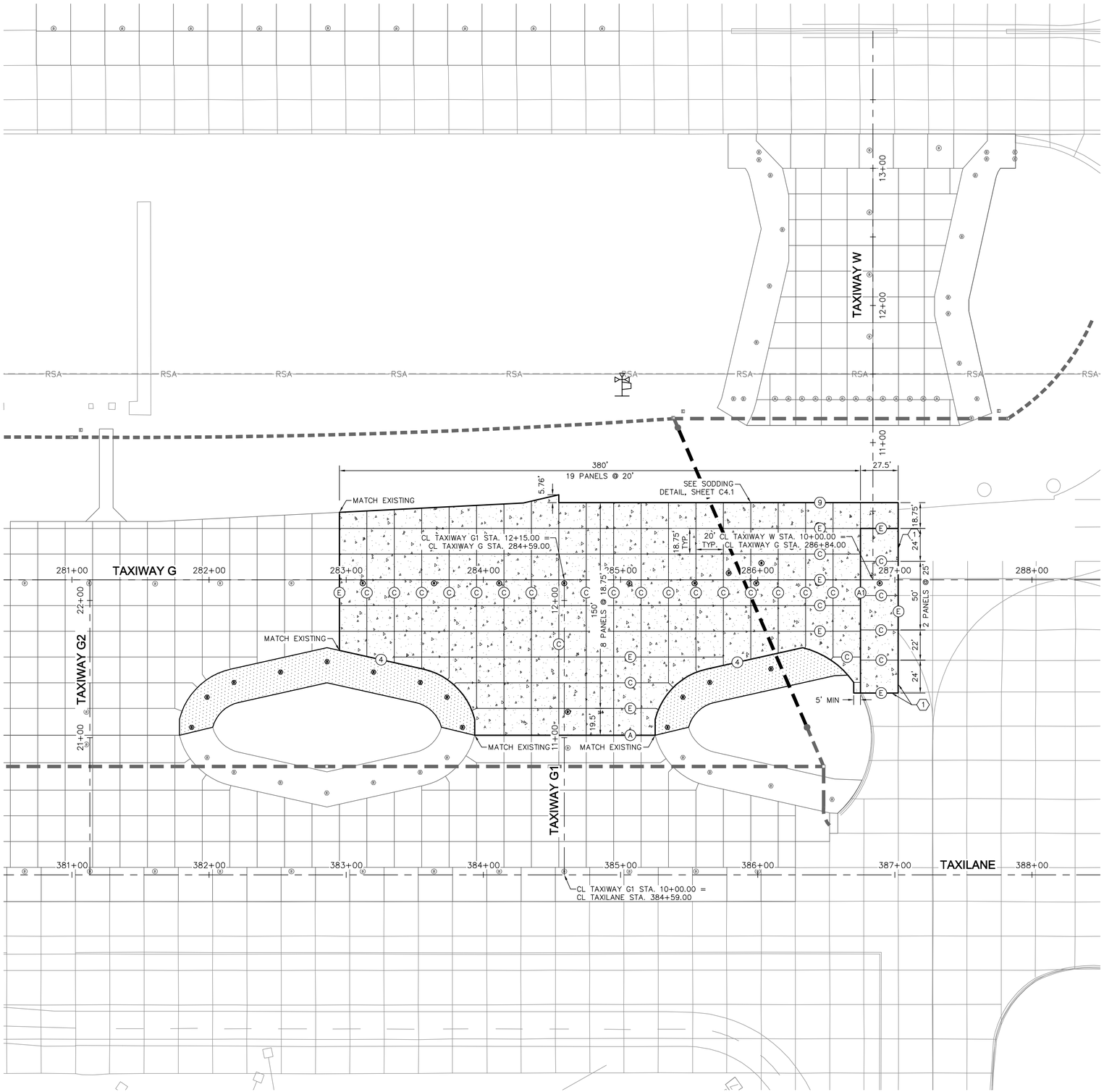


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

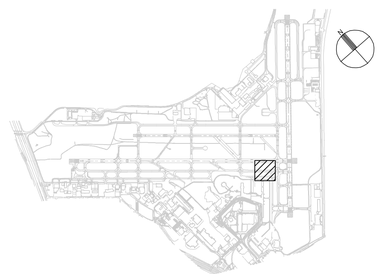
- (A) JOINT TYPE A, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (A1) JOINT TYPE A1, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (C) JOINT TYPE C, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (E) JOINT TYPE E, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (4) EDGE SEAL TYPE 4, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (9) JOINT TYPE 9, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS

GENERAL NOTES

1. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
2. TYPE C AND TYPE E JOINTS MAY BE INTERCHANGED WITH APPROVAL FROM THE ENGINEER.
3. PORTLAND CEMENT CONCRETE PAVEMENT (P-501) JOINTS SHALL NOT VARY MORE THAN 1/2-INCH FROM THEIR DESIGNATED POSITION AND SHALL BE TRUE TO LINE WITH NOT MORE THAN 1/4-INCH VARIATION IN 10-FEET. ANY JOINT(S) THAT ARE NOT PARALLEL OR PERPENDICULAR, OTHER THAN IRREGULAR SLABS, SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COST TO THE AIRPORT.
4. ALL SAWCUT DEBRIS FROM THE WIDENING OF THE JOINTS SHALL BE REMOVED FROM THE CONCRETE SURFACE IMMEDIATELY AFTER SAWCUTTING BY VACUUMING THE SLURRY.
5. DOWEL BARS SHALL NOT VARY IN ALIGNMENT BY MORE THAN TWO-PERCENT (2%) OR 0.40" IN EACH PLANE. MISALIGNED DOWEL BARS BY MORE THAN THE SPECIFIED TOLERANCE SHALL REQUIRE THE PCCP TO BE REMOVED ON EACH SIDE OF THE DOWEL BARS AT NO ADDITIONAL COST TO THE AIRPORT.
6. CONTRACTOR TO COORDINATE WITH THE ENGINEER FOR JOINTING AROUND ELEC./COMM. MANHOLES THAT ARE TO REMAIN IN PLACE.
7. ALL PCCP PANELS ARE REINFORCED PER DETAIL 6, SHEET C7.3

CONSTRUCTION NOTES

1. SAWCUT AND MATCH EXISTING JOINT SPACING AND ELEVATION
2. REFER TO ELECTRICAL PLANS (SERIES E)



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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
MICHAEL A. NORBY
87178
REGISTERED
PROFESSIONAL ENGINEER
07/22/13

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SHEET TITLE:

PAVEMENT JOINT LAYOUT PLAN BID ALT. 3

C7.7

SHEET NO. 148 OF 214

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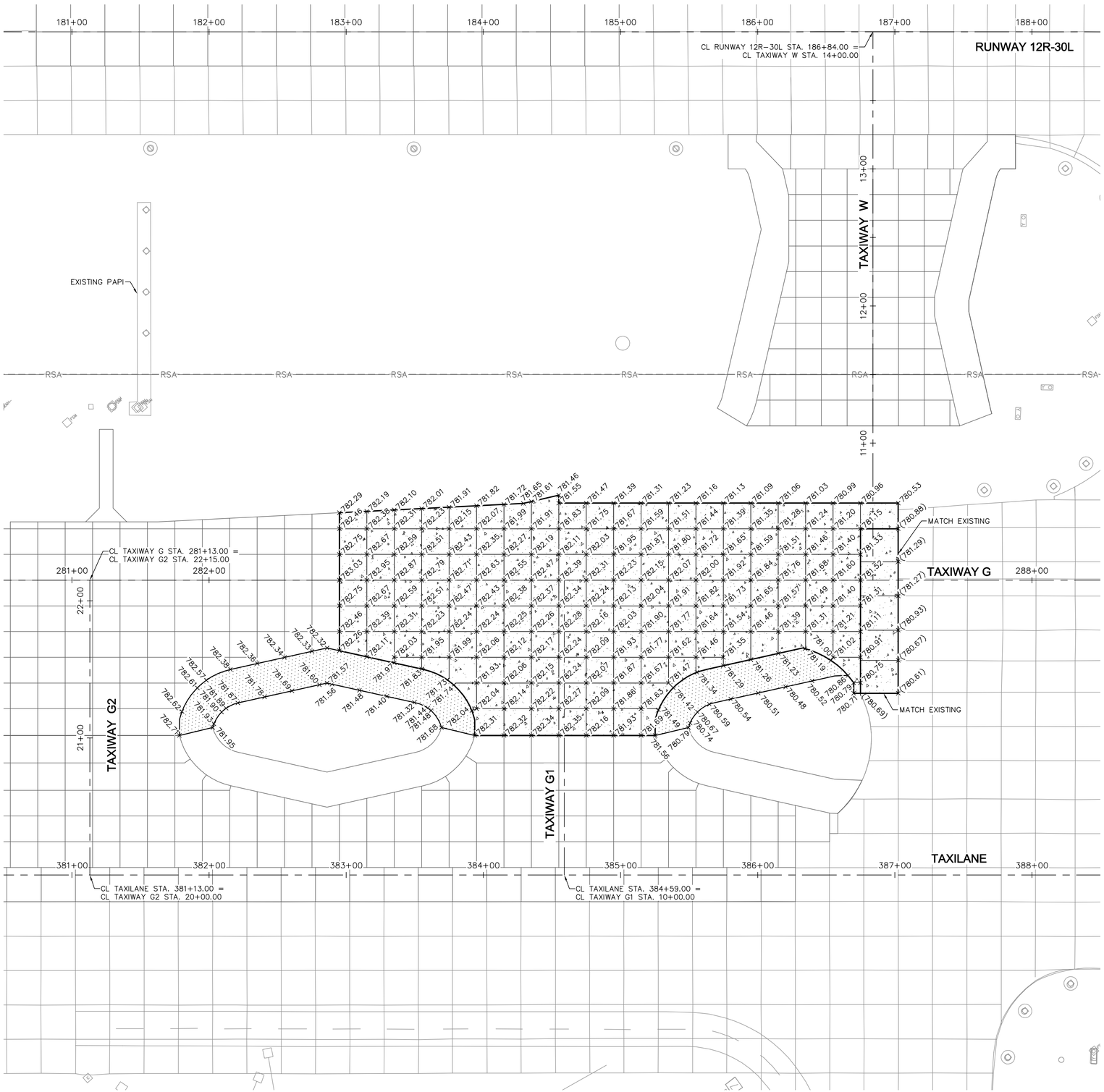
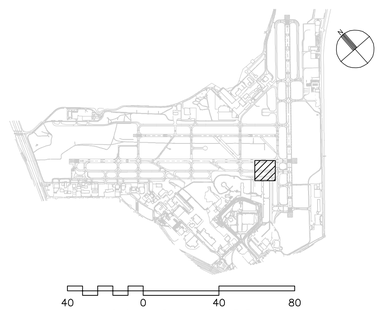


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- +XXX.XX PROPOSED SPOT ELEVATION

GENERAL NOTES

1. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
2. PAVEMENT ELEVATIONS SHOWN ARE BASED ON JOINT LAYOUT, REFER TO PAVEMENT JOINT LAYOUT PLANS (SERIES C7).
3. CONTRACTOR SHALL MATCH EXISTING PAVEMENT ELEVATIONS AS SHOWN ON PLAN. IF EXISTING ELEVATIONS DIFFER FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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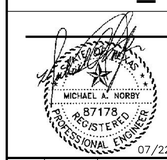

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SHEET TITLE:

PAVING ELEVATIONS PLAN BID ALT. 3

C8.6

SHEET NO. 149 OF 214

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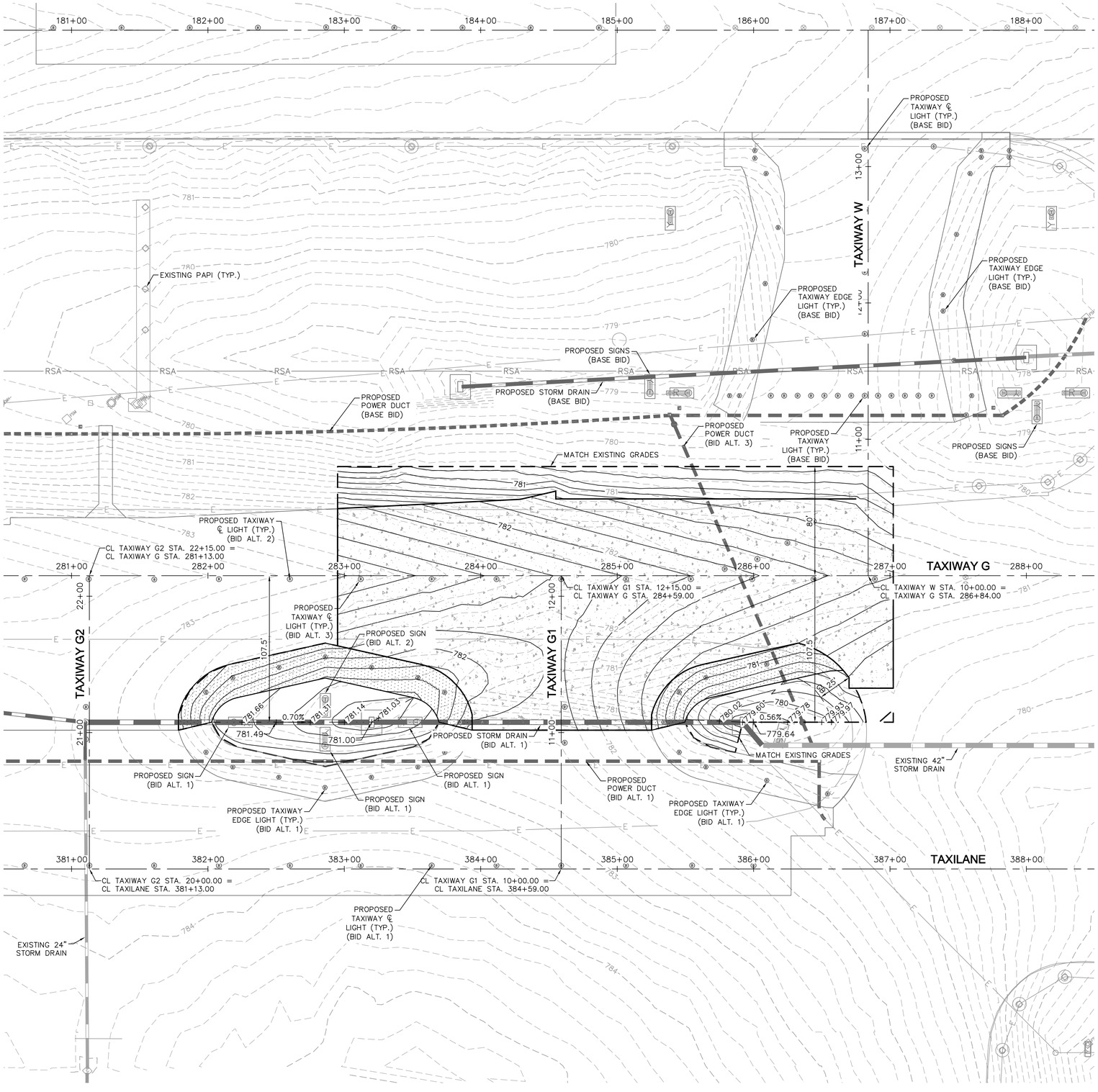
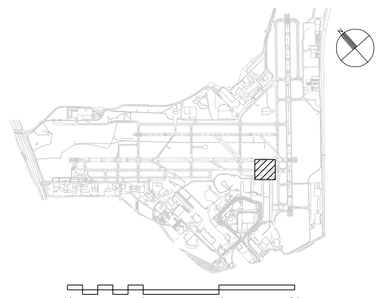


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- GRADING LIMITS
- +XXX.XX PROPOSED SPOT ELEVATION

GENERAL NOTES

1. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK IN ANY AREA.
2. ALL STATIONS AND OFFSETS REFER TO THE APPROPRIATE RUNWAY OR TAXIWAY STATIONING.
3. DESIGN CONTOURS REPRESENT FINISHED GRADE (PAVEMENT AND GRADING). CONTOURS AND PERCENT OF SLOPE ARE APPROXIMATE AND ARE SHOWN AS SUPPLEMENTAL INFORMATION ONLY.
4. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

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601 NW LOOP 410, SUITE 350
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PHONE: (210) 541-9166
TEXAS REGISTERED FIRM, NO. 928

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

MICHAEL A. NORBY
87178
REGISTERED
PROFESSIONAL ENGINEER
07/22/13

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SHEET TITLE:

GRADING AND DRAINAGE PLAN BID ALT. 3

C9.12
SHEET NO. 150 OF 214

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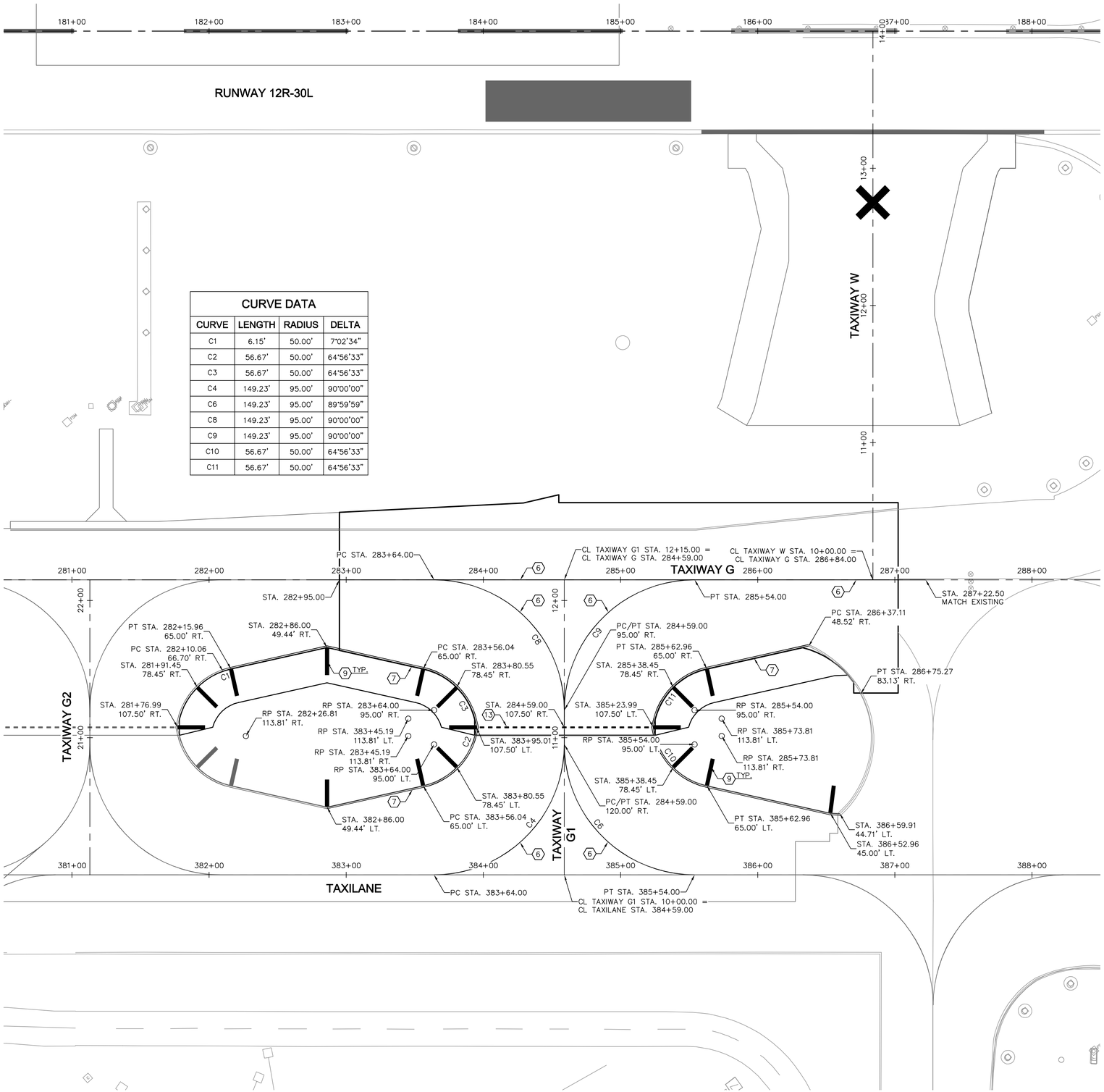


CURVE DATA			
CURVE	LENGTH	RADIUS	DELTA
C1	6.15'	50.00'	7°02'34"
C2	56.67'	50.00'	64°56'33"
C3	56.67'	50.00'	64°56'33"
C4	149.23'	95.00'	90°00'00"
C6	149.23'	95.00'	89°59'59"
C8	149.23'	95.00'	90°00'00"
C9	149.23'	95.00'	90°00'00"
C10	56.67'	50.00'	64°56'33"
C11	56.67'	50.00'	64°56'33"

LEGEND

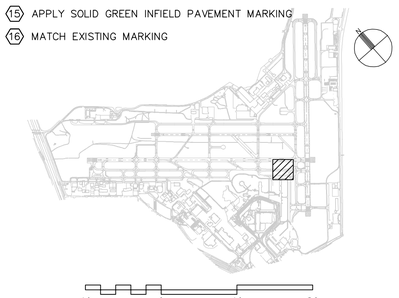
- ⊕ RUNWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊡ RUNWAY EDGE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ◐ RUNWAY TOUCHDOWN ZONE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊕ TAXIWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR 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 SWEPT 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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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

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MICHAEL A. NORBY
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07/22/13

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PAVEMENT MARKING PLAN BID ALT. 3

C12.9

SHEET NO. 151 OF 214

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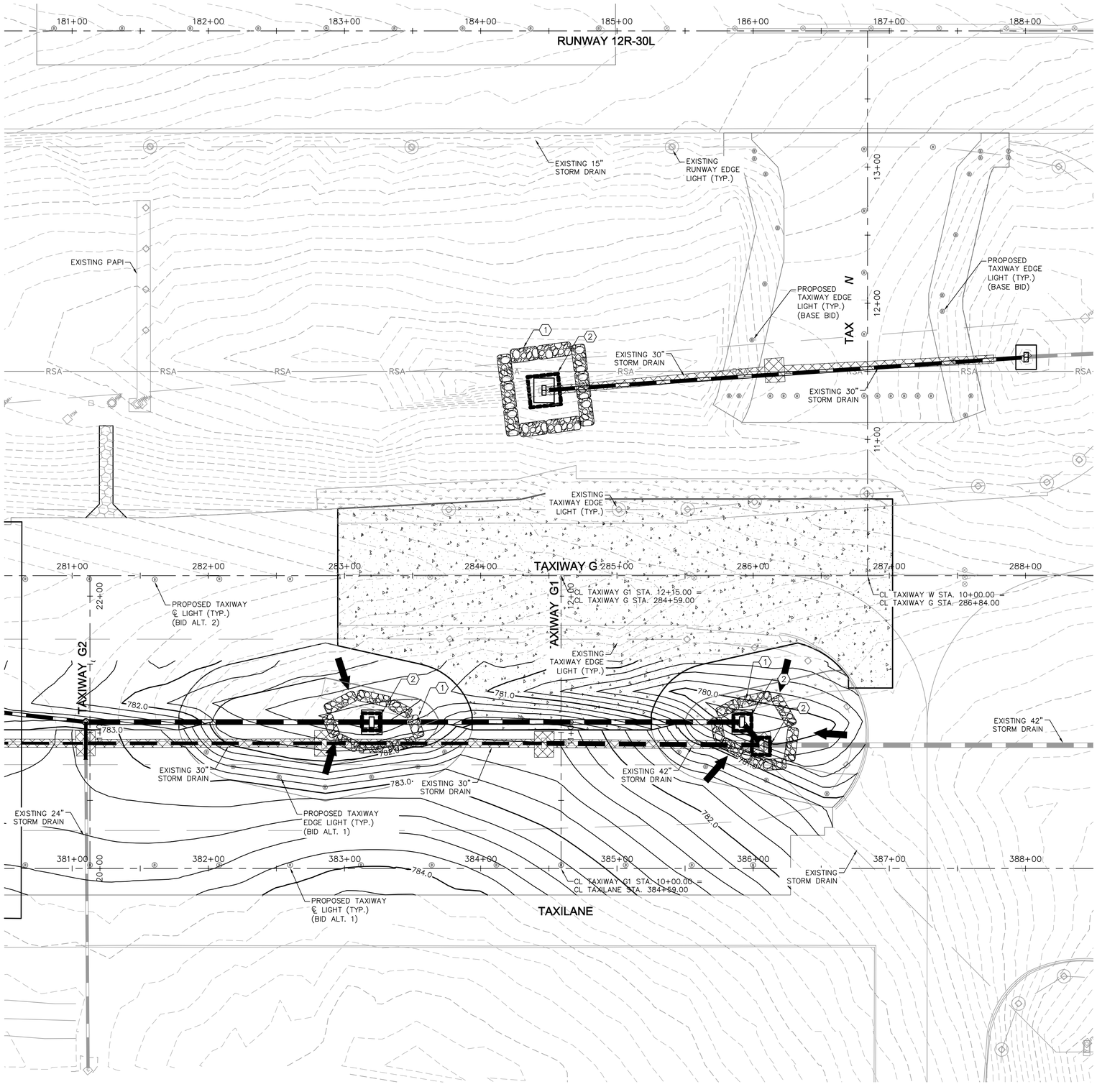


LEGEND

- 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

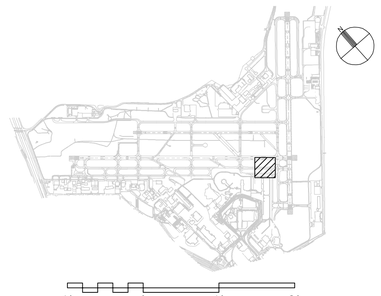
GENERAL NOTES

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 AN PAID FOR ALL AREAS AFFECTED BY GRADING AND EARTHWORK. OTHER AREAS INCIDENTALLY AFFECTED BY CONSTRUCTION EQUIPMENT SHALL BE RESEEDED 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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SHEET TITLE:

STORM WATER POLLUTION PREVENTION PLAN AND SEEDING BID ALT. 3

C13.8

SHEET NO. 152 OF 214

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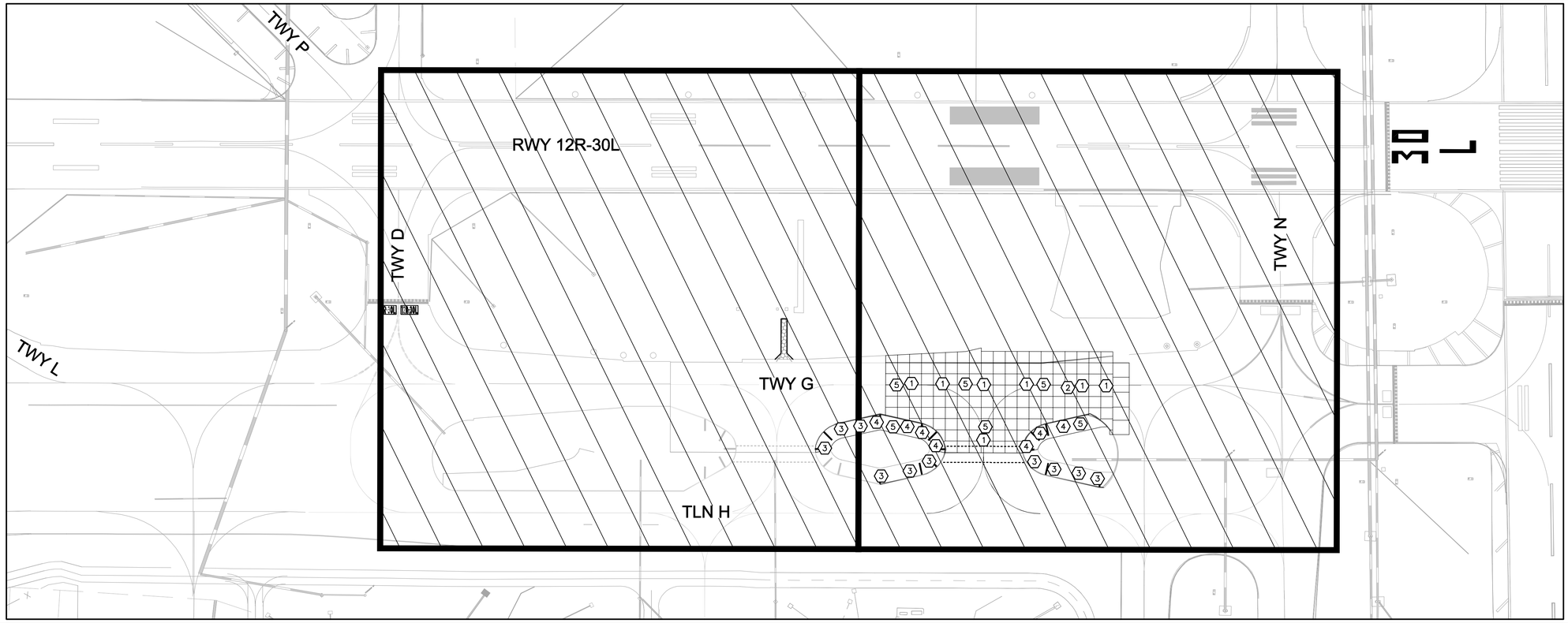
SAN ANTONIO INTERNATIONAL AIRPORT



ELECTRICAL PLANS FOR RUNWAY 12R-30L REHABILITATION AND TERMINAL AREA TAXIWAY IMPROVEMENTS (PACKAGE 1, BID ALT. 3)

PROJECT NOS. 33-00178 AND 33-00193
FAA AIP 3-48-0192-XX-2013

ELECTRICAL SCOPE OF WORK - ADD ALT 3

1. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS AND TOUCH DOWN ZONE (TDZ) LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 12R PAVEMENT REHABILITATION AREA.
2. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON NEW L-867 BASECAN, CONDUIT AND CABLES.
3. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 30L PANEL REPLACEMENT AREA.
4. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON EXISTING BASECAN.
5. INSTALL NEW PRECAST CONCRETE HANDHOLE.

CITY OF SAN ANTONIO AVIATION DEPARTMENT

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1EC-001-A03
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ELECTRICAL SCOPE OF WORK BID ALT. 3

E0.1

SHEET NO. 153 OF 214

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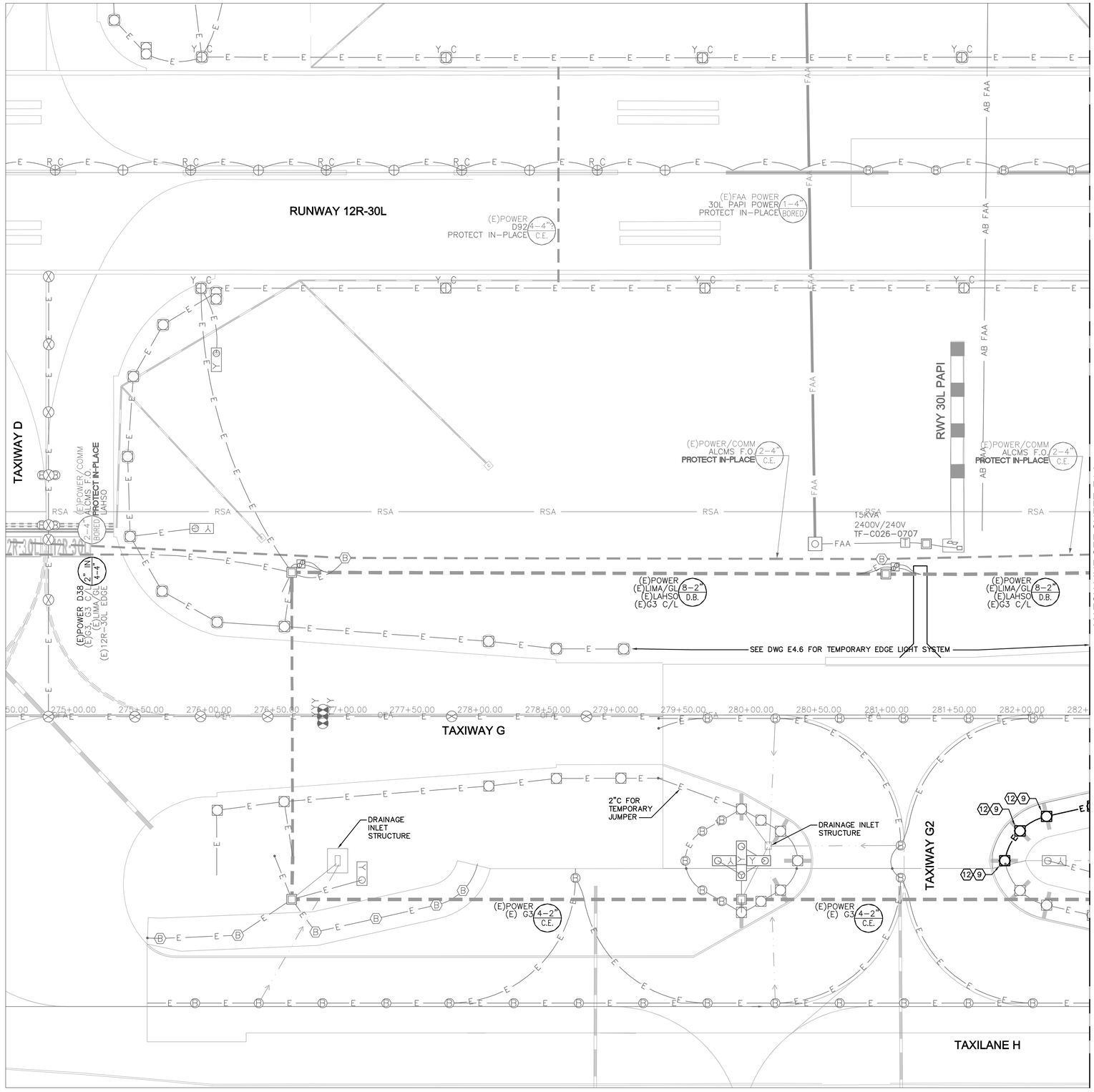


ELECTRICAL CONSTRUCTION NOTES

(9) INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L-867 OR L-868 BASE CAN. REMOVE BLANK COVER IF INSTALLED PER BASECAN INSTALLATION NOTE AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.

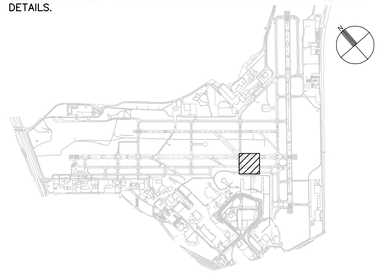
(12) NEW L-867 BASE CAN IN NEW ASPHALT PAVEMENT.

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.



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PHONE: (210) 541-9166

TEXAS REGISTERED FIRM, NO. 928

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

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

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SHEET TITLE:

ELECTRICAL LAYOUT PLAN
BID ALT. 3

E1.2

SHEET NO. 154 OF 214

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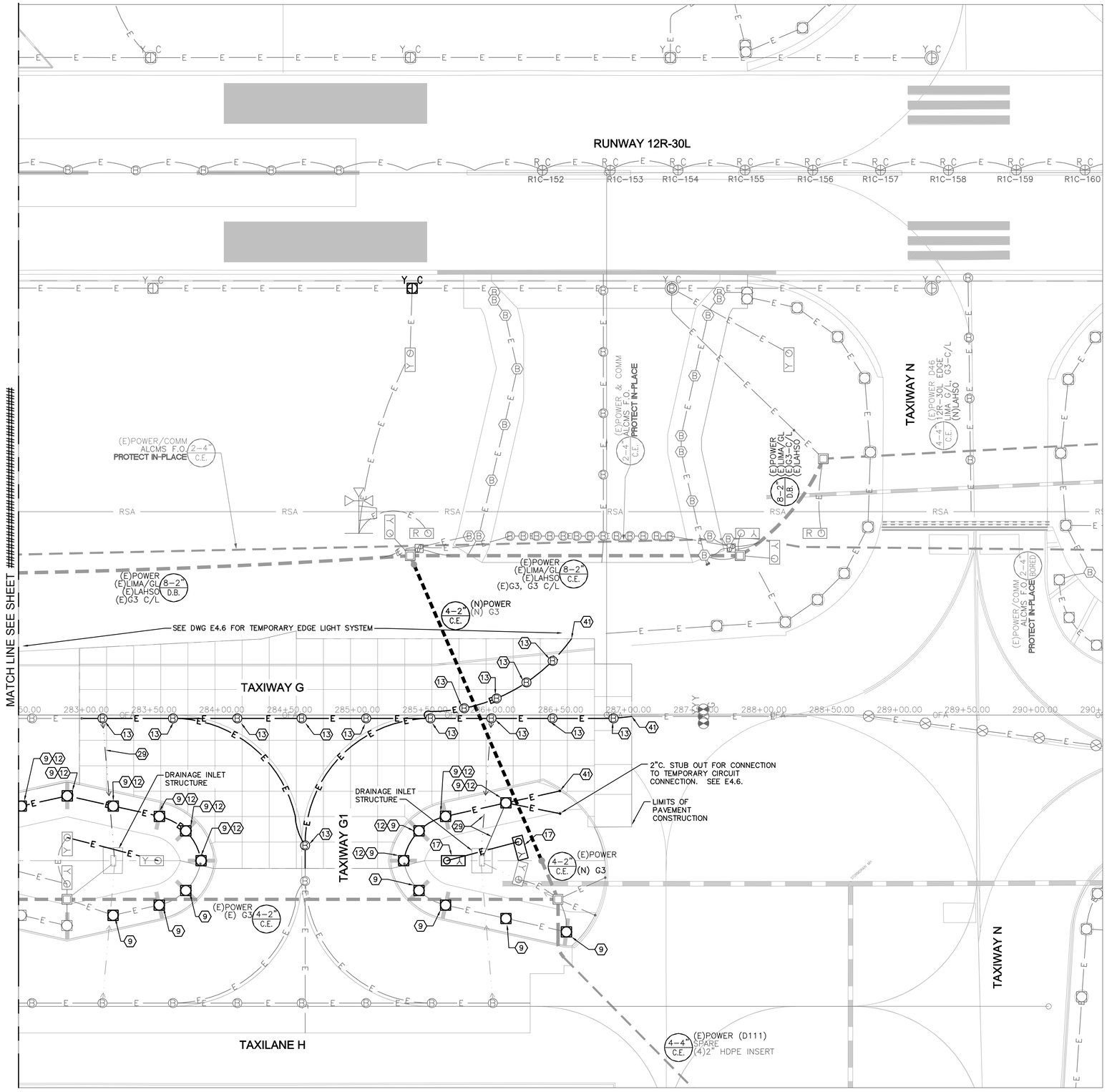


ELECTRICAL CONSTRUCTION NOTES

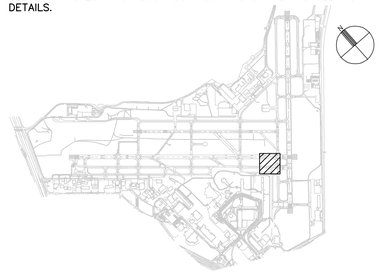
9. INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L–867 OR L–868 BASE CAN. REMOVE BLANK COVER IF INSTALLED PER BASECAN INSTALLATION NOTE AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.
12. NEW L–867 BASE CAN IN NEW ASPHALT PAVEMENT.
13. NEW L–868 BASE CAN AND BLANK COVER IN NEW PCC PAVEMENT.
17. NEW SIGN FOUNDATION FOR SIGN INSTALLATION ON NEW CONCRETE BASE. SEE DETAILS ON DRAWINGS E3.1 FOR SIGN CONFIGURATION. SEE E5 SERIES SIGN PLANS FOR SIGN INSTALLATION PHASING.
29. INSTALL 2"C (ITEM L–110) TO DRAIN STRUCTURES. COMBINE DRAIN CONDUITS FROM SEPARATE SYSTEMS INTO COMMON TRENCH WHEN POSSIBLE. SEE DETAILS ON E3.11.
41. STUB AND CAP NEW 1–2"C FOR CONNECTION IN BID ALT 5.

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 E6.3 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.



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ERIC C. LOVEJOY
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ELECTRICAL LAYOUT PLAN BID ALT. 3

E1.3

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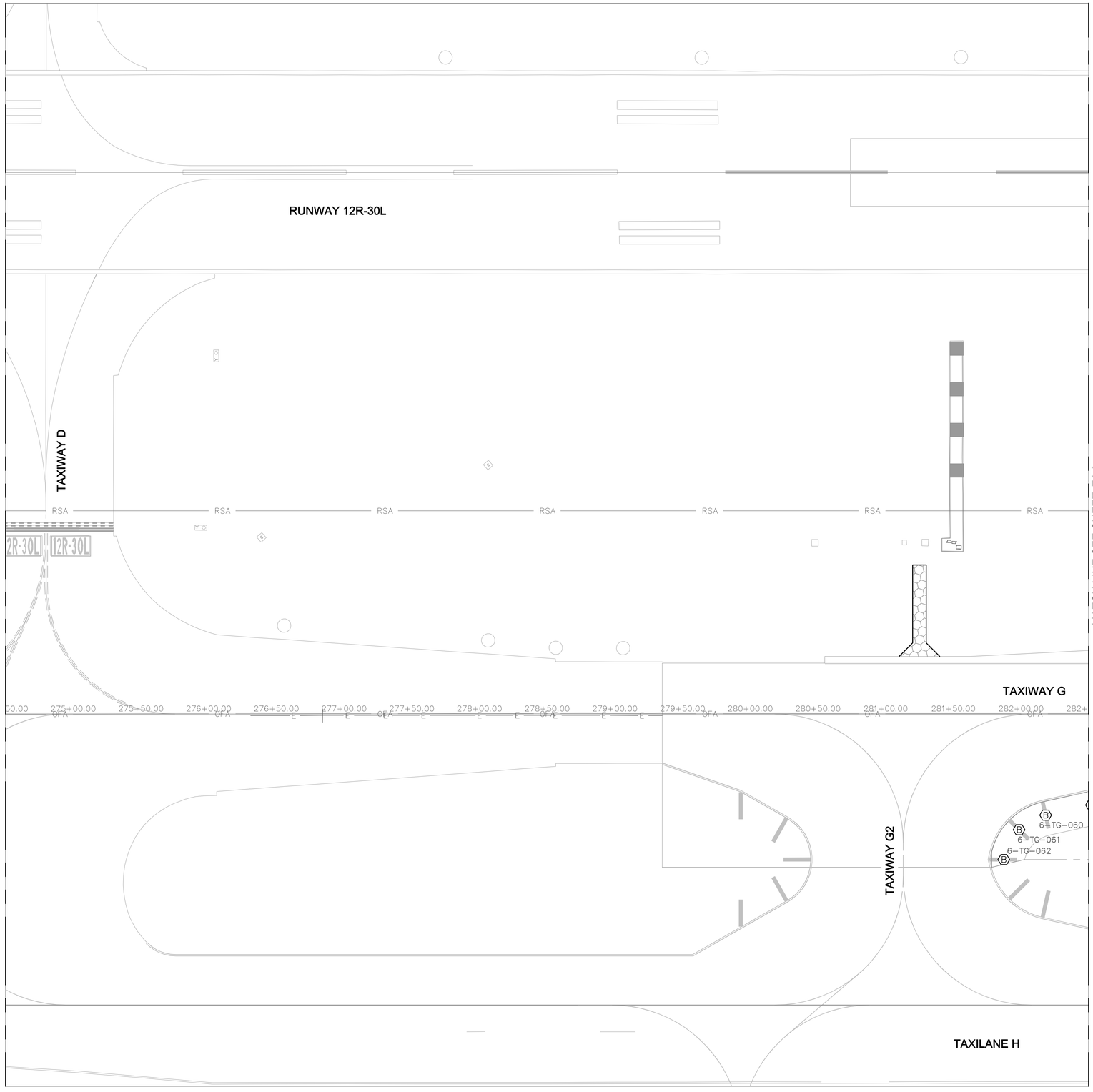


FIELD SURVEY NOTE

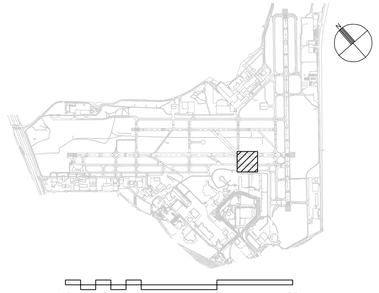
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.2 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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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PHONE: (210) 541-9166

TEXAS REGISTERED FIRM, NO. 928

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

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

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ELECTRICAL FIXTURE LAYOUT PLAN BID ALT. 3

E2.2

SHEET NO. 156 OF 214

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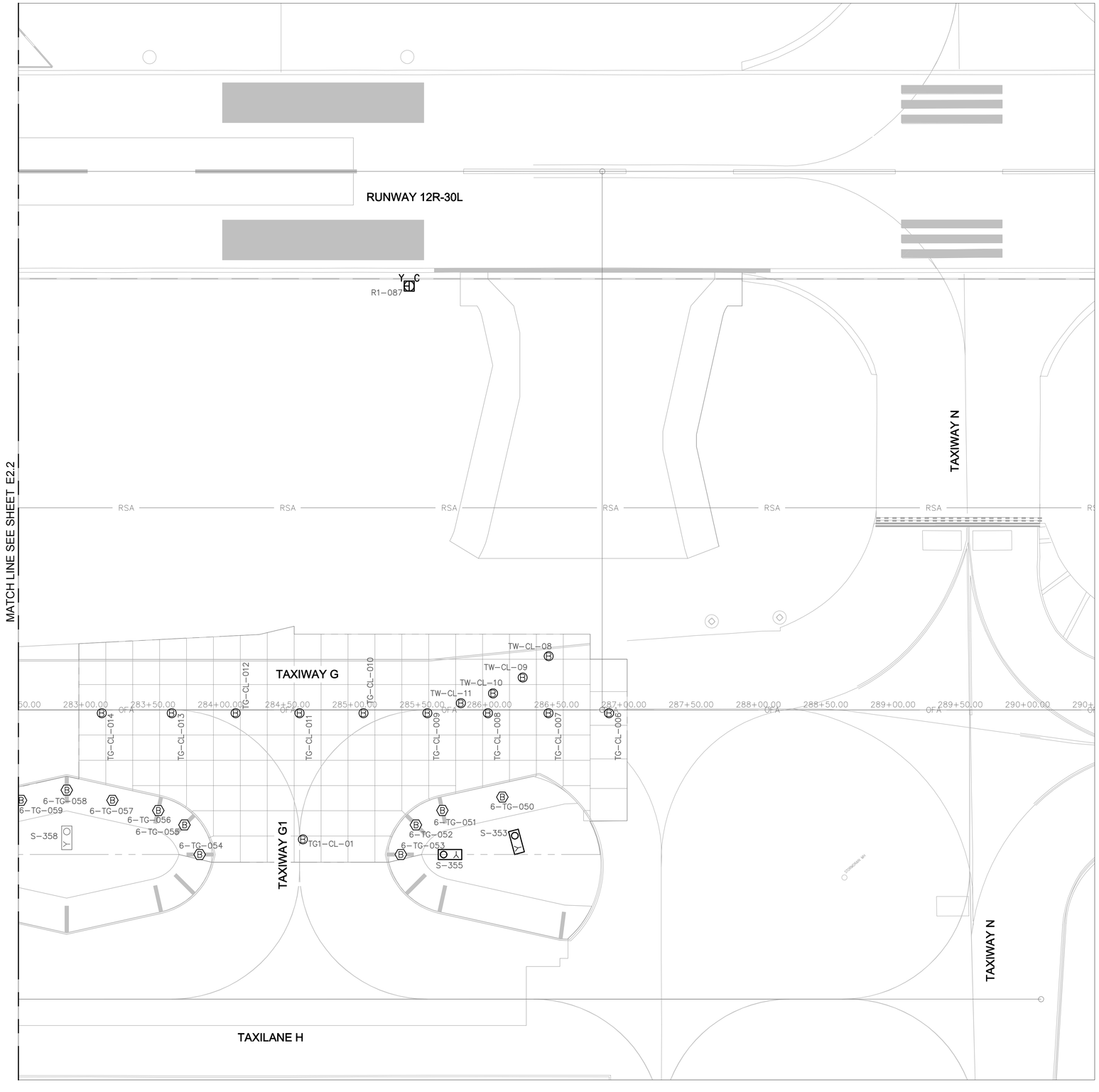


FIELD SURVEY NOTE

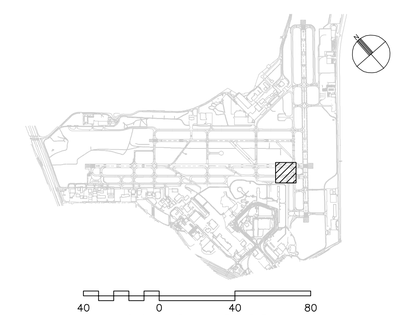
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.3 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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 E2.3A 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.



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STATE OF TEXAS
ERIC C. LOVEJOY
84061
LICENSED
PROFESSIONAL ENGINEER

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ELECTRICAL FIXTURE LAYOUT PLAN BID ALT. 3

E2.3

SHEET NO. 157 OF 214

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L-868 DATA TABLE

FIXT-NUM	STA	OFF	FAA-TYPE	DETAIL	CIRCUIT
TG-CL-006	'Taxiway G' 286+89.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-007	'Taxiway G' 286+44.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-008	'Taxiway G' 285+99.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-009	'Taxiway G' 285+54.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-010	'Taxiway G' 285+06.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-011	'Taxiway G' 284+59.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-012	'Taxiway G' 284+11.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-013	'Taxiway G' 283+64.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-014	'Taxiway G' 283+12.00	2.50' RT.	L-868	E3.5 FOR L-852	
TW-CL-08	'Taxiway W' 10+39.84	39.84' LT.	L-868	E3.5 FOR L-852	
TW-CL-09	'Taxiway W' 10+23.99	59.16' LT.	L-868	E3.5 FOR L-852	
TW-CL-10	'Taxiway W' 10+12.21	81.21' LT.	L-868	E3.5 FOR L-852	
TW-CL-11	'Taxiway W' 10+04.95	105.13' LT.	L-868	E3.5 FOR L-852	

L-867 DATA TABLE

FIXT-NUM	STA	OFF	DETAIL	FAA-TYPE
6-TG-050	'Taxiway G' 286+09.70	64.86' RT.	E3.4 FOR L-861T	L-867B
6-TG-051	'Taxiway G' 285+65.13	74.76' RT.	E3.4 FOR L-861T	L-867B
6-TG-052	'Taxiway G' 285+45.53	85.53' RT.	E3.4 FOR L-861T	L-867B
6-TG-053	'Taxiway G' 285+34.24	107.50' RT.	E3.4 FOR L-861T	L-867B
6-TG-054	'Taxiway G' 283+84.76	107.50' RT.	E3.4 FOR L-861T	L-867B
6-TG-055	'Taxiway G' 283+73.47	85.53' RT.	E3.4 FOR L-861T	L-867B
6-TG-056	'Taxiway G' 283+53.99	74.79' RT.	E3.4 FOR L-861T	L-867B
6-TG-057	'Taxiway G' 283+19.93	67.22' RT.	E3.4 FOR L-861T	L-867B
6-TG-058	'Taxiway G' 282+86.00	59.68' RT.	E3.4 FOR L-861T	L-867B
6-TG-059	'Taxiway G' 282+52.07	67.22' RT.	E3.4 FOR L-861T	L-867B
6-TG-060	'Taxiway G' 282+18.13	74.76' RT.	E3.4 FOR L-861T	L-867B
6-TG-061	'Taxiway G' 281+98.53	85.53' RT.	E3.4 FOR L-861T	L-867B
6-TG-062	'Taxiway G' 281+87.24	107.50' RT.	E3.4 FOR L-861T	L-867B

SIGN DATA TABLE

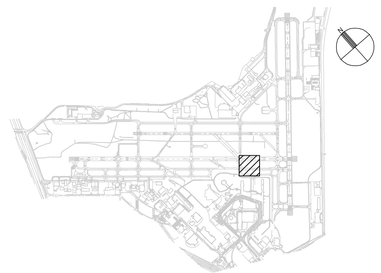
SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S-355	'Taxiway G' 285+66.05	107.50' RT.	E3.1	RT858Y3M	G3 (6)	MODE 3
S-353	'Taxiway G' 286+19.00	93.52' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2

CIRCUIT DESIGNATION SCHEDULE

CIRCUIT NAME	FIELD CIRUIT NUMBER	ALCS NUMBER	REMARKS
WEST VAULT:			
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
EAST VAULT:			
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

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



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STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION

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ELECTRICAL FIXTURE DATA TABLES BID ALT. 3

E2.4

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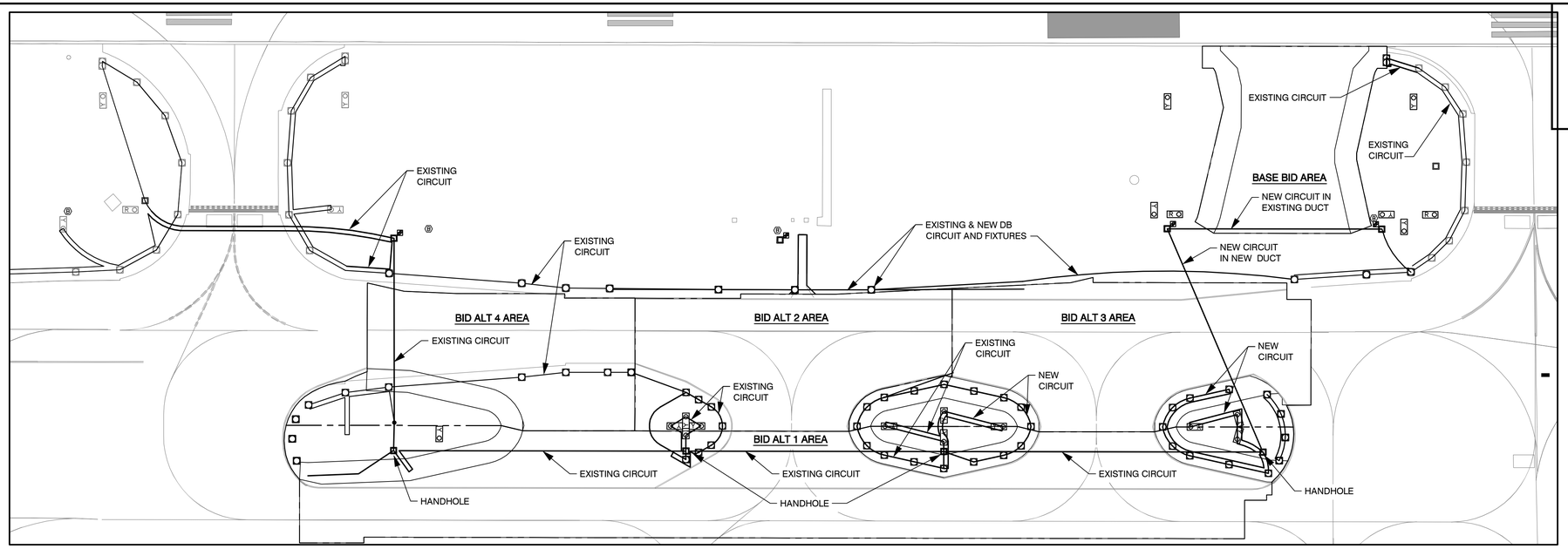


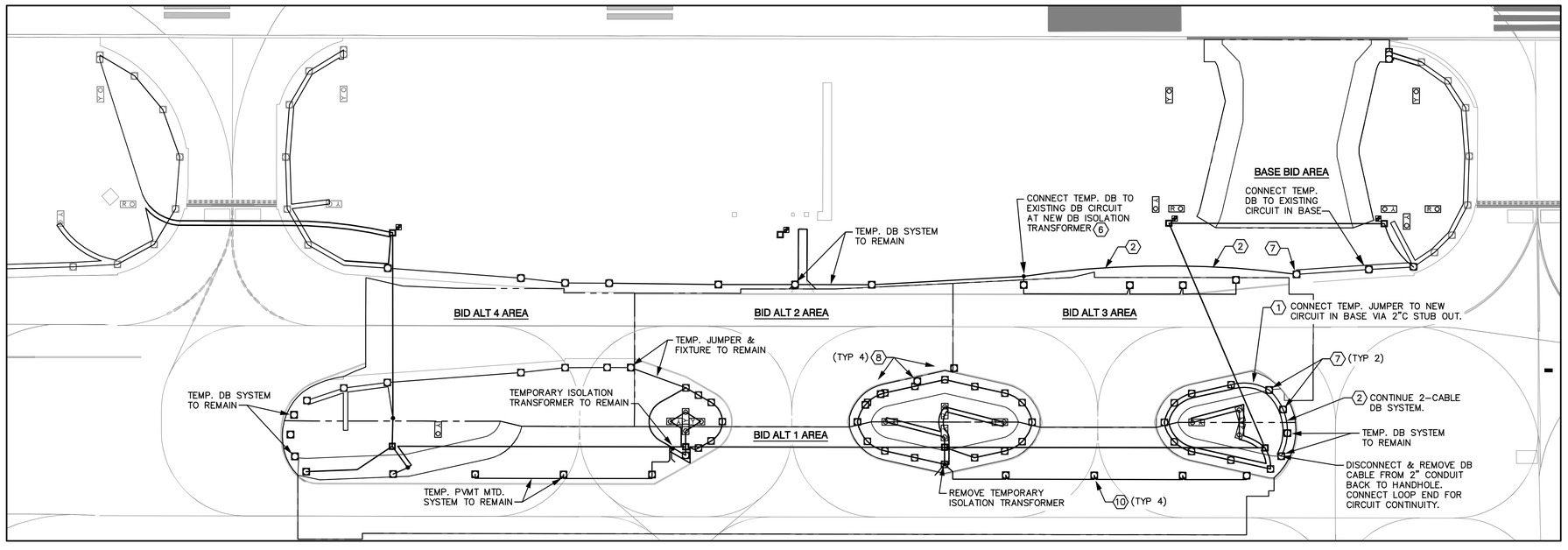
CIRCUIT DEFINITION		
CABLE SIZE	CABLE TYPE	DESCRIPTION
#8	L-824 5kV TYPE C	AIRFIELD LIGHTING PER L-108
TOTAL CIRCUIT LENGTH INSTALLED IN BID ALT 3		2,400

BID ALT 3 - CIRCUIT INSTALLED IN THIS PHASE

N.T.S.

75 0 75 150

SCALE IN FEET



BID ALT 3 - TEMPORARY FIXTURES, JUMPERS AND CABLES

N.T.S.

SIGN SHEET NOTES

1. TEMPORARY JUMPER, L-824, TYPE C, 1/C #6, 5 KV CABLE IN CONDUIT.
2. LONG TERM TEMPORARY DIRECT BURIED L-824, TYPE C, 1/C #6, 5 KV CABLE.
6. INSTALL LONG TERM TEMPORARY ISOLATION TRANSFORMER.
7. INSTALL LONG TERM TEMPORARY STAKE MOUNTED TAXIWAY EDGE. SEE DETAILS E3.13.
8. REMOVE LONG TERM TEMPORARY STAKE MOUNTED TAXIWAY EDGE LIGHT.
10. REMOVE LONG TERM TEMPORARY PAVEMENT MOUNTED TAXIWAY EDGE LIGHT. ABANDON SECONDARY CABLES PER DETAIL ON E3.13.

N

300 0 300 600

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6/7/13

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CIRCUIT MAPS
T/W EDGE G3
(CKT 6)
BID ALT. 3

E4.6

SHEET NO. 159 OF 214

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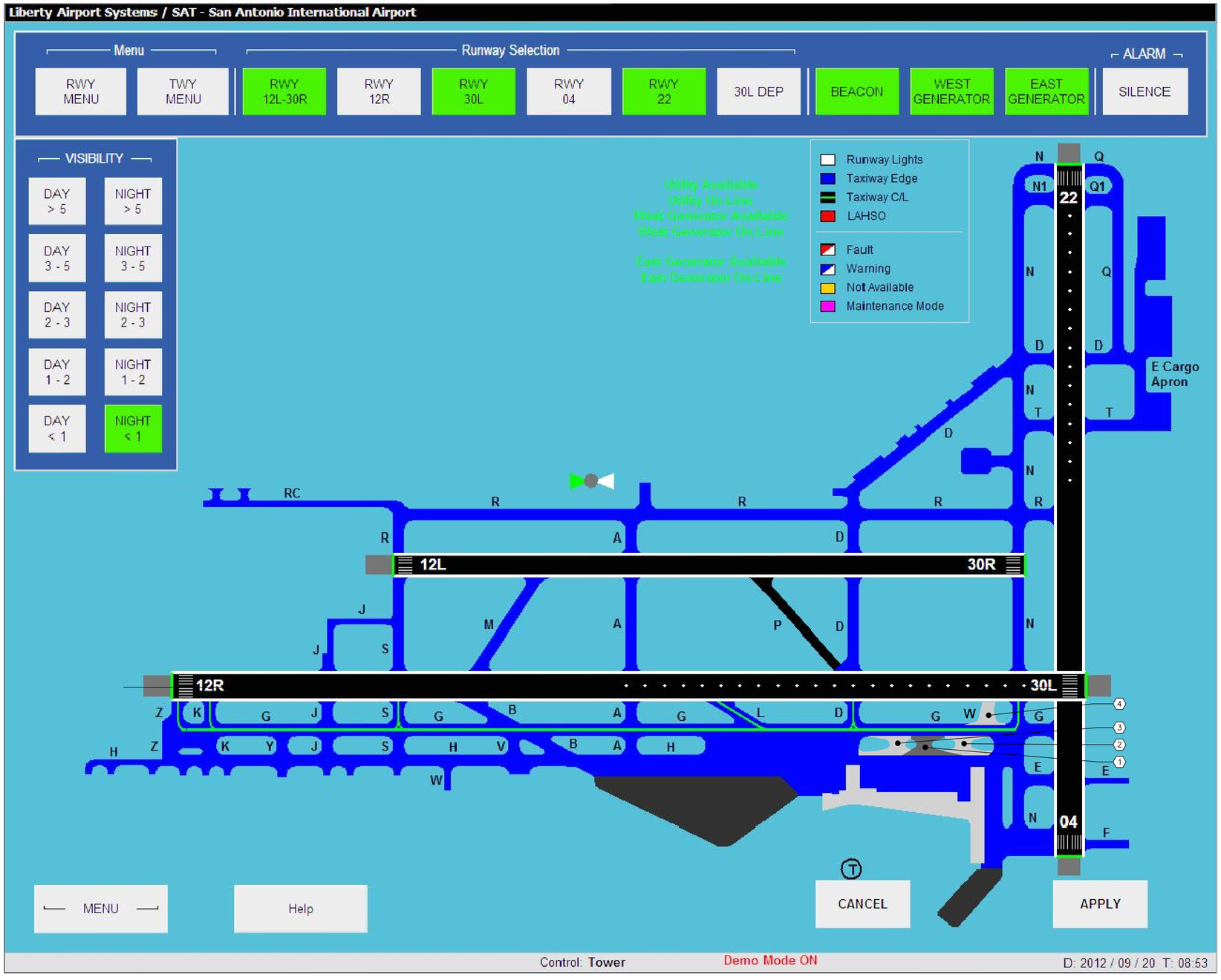

ALCMS SHEET NOTES

1. ADD NEW TAXIWAY 'G2' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 2.
2. ADD NEW TAXIWAY 'G3' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 3.
3. ADD NEW TAXIWAY 'G1' PAVEMENT TO ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 4
4. ADD NEW TAXIWAY 'W' PAVEMENT ALL MONITOR PAGES OF THE ALCMS AS PART OF ALTERNATE 5.

ALCMS GENERAL NOTE

1. THERE ARE NO ALCMS MODIFICATIONS IN EITHER THE BASE BID OR ALTERNATE BID 1.

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1ES-601-A03
DRAWN BY:		CMP
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SHEET TITLE:

ALCMS MODIFICATIONS BID ALT. 3

E4.8

SHEET NO. 160 OF 214

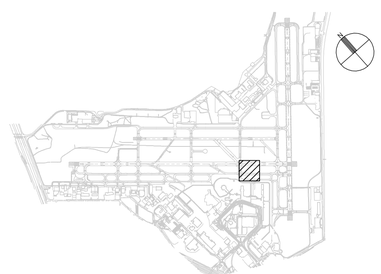
k:\san_aviation\191629001-sat rwy & twy improvements\05 CAD\ALT 3_33-00193-R1ES-601-A03.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

SIGN SHEET NOTES

6. CONCRETE FOUNDATION INSTALLED IN A PREVIOUS PHASE.
7. SIGN BASE ASSEMBLY INSTALLED IN A PREVIOUS PHASE.
8. SIGN LEGEND FOR SIGN INSTALLED IN A PREVIOUS PHASE.
9. EXISTING SIGN, BASE AND LEGEND TO REMAIN IN THIS PHASE.

GENERAL NOTES

1. SEE E1 SERIES DRAWINGS FOR ELECTRICAL SYSTEM LAYOUT PLANS.
2. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL SIGN LOCATIONS.



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PHONE: (210) 541-9166

TEXAS REGISTERED FIRM,
NO. 928

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

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ES-101-A03
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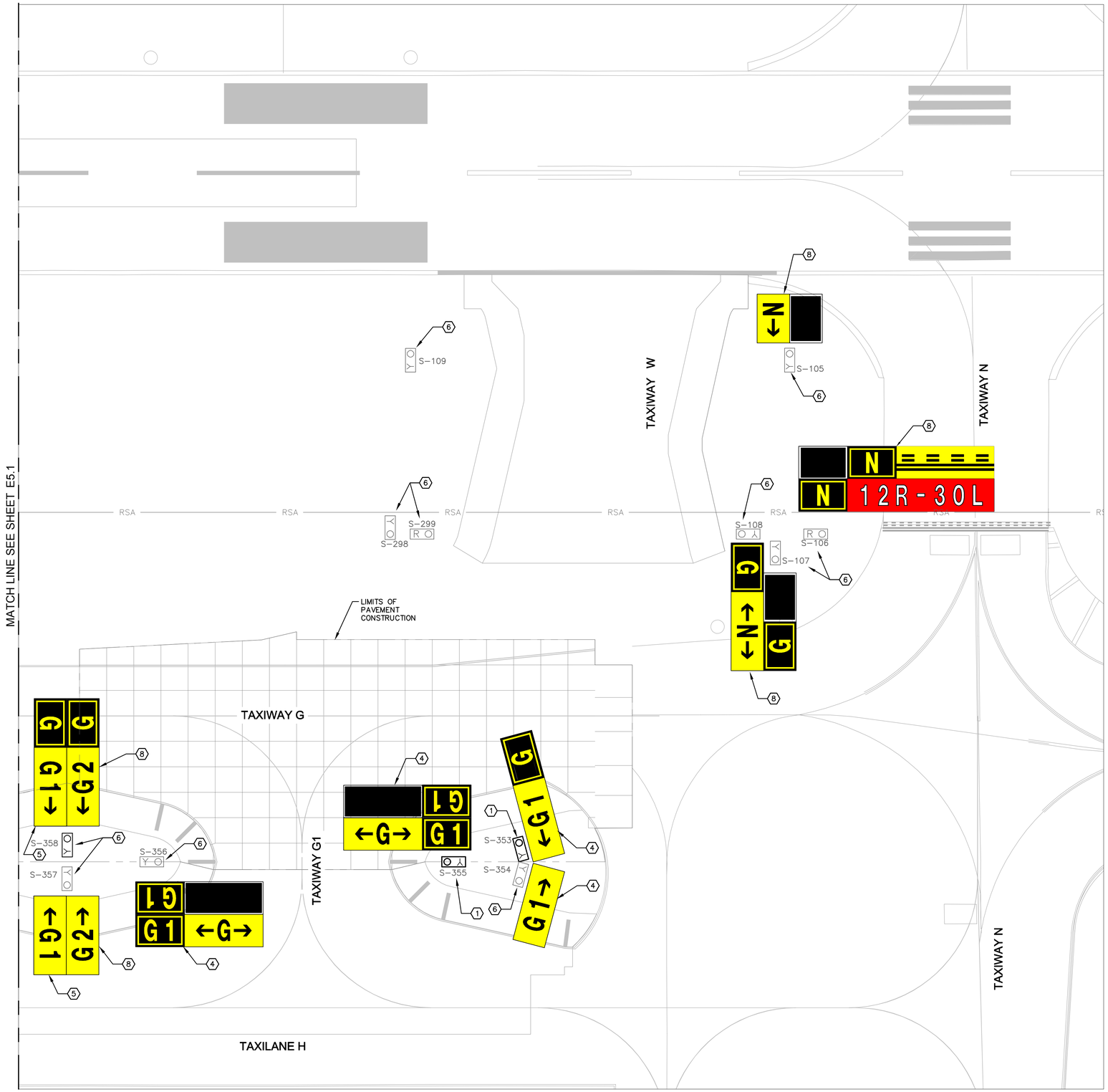
SHEET TITLE:

ELECTRICAL SIGN
PLAN
BID ALT. 3

E5.1

SHEET NO. 161 OF 214

K:\REN_Aviation\19162900-SAT Rwy & Twy Improvements\05 CAD\ALT 3_33-00193-R1ES-101-A03.dwg Jul 6, 2013 - 3:17PM Peterson, Cory

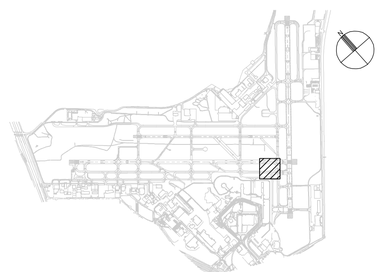


SIGN SHEET NOTES

1. NEW CONCRETE FOUNDATION INSTALLED IN THIS PHASE. SEE DETAILS ON E3.1. SEE E2 SERIES DRAWINGS FOR LOCATIONS.
4. SIGN LEGEND FOR NEW SIGN INSTALLED IN THIS PHASE ON CONCRETE FOUNDATION OR BASE ASSEMBLY.
5. NEW OR ADDITIONAL SIGN LEGEND FOR EXISTING SIGN INSTALLED IN A PREVIOUS PHASE. REMOVE BLANK PANEL AND SALVAGE TO OWNER.
6. CONCRETE FOUNDATION INSTALLED IN A PREVIOUS PHASE.
8. SIGN LEGEND FOR SIGN INSTALLED IN A PREVIOUS PHASE.

GENERAL NOTES

1. SEE E1 SERIES DRAWINGS FOR ELECTRICAL SYSTEM LAYOUT PLANS.
2. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL SIGN LOCATIONS.



40 0 40 80
SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

ERIC C. LOVEJOY 84081 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS

MARK	DATE	DESCRIPTION
ISSUE:		---

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ES-101-A03
DRAWN BY:	CMP
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SHEET TITLE:

ELECTRICAL SIGN PLAN BID ALT. 3

E5.2
SHEET NO. 162 OF 214

K:\REN_Aviation\191629001-SAT Rwy & Twy Improvements\05 CADD\ALT 3_33-00193-R1ES-101-A03.dwg Jul 6, 2013 - 3:17PM Peterson, Cary

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

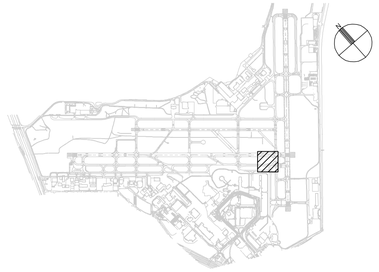
SIGN DATA TABLE						
SIGN–NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S–357	'Taxilane H' 382+85.78	90.36' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–354	'Taxilane H' 386+19.00	93.52' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–365	'Taxilane H' 377+13.00	93.30' LT.	E3.1	RT858Y2M	G3 (6)	MODE 2
S–361	'Taxilane H' 379+93.00	96.98' LT.	E3.2	RT858Y2M	G3 (6)	MODE 3
S–356	'Taxilane H' 383+52.95	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S–359	'Taxilane H' 382+19.05	107.50' LT.	E3.1	RT858Y3M	G3 (6)	MODE 3

SIGN DATA TABLE						
SIGN–NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S–363	'Taxiway G' 279+75.58	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S–358	'Taxiway G' 282+86.00	90.41' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2
S–360	'Taxiway G' 280+10.42	107.50' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3
S–362	'Taxiway G' 279+93.00	96.98' RT.	E3.2	RT858Y3M	G3 (6)	MODE 3

SIGN DATA TABLE						
SIGN–NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S–355	'Taxiway G' 285+66.05	107.50' RT.	E3.1	RT858Y3M	G3 (6)	MODE 3
S–353	'Taxiway G' 286+19.00	93.52' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2

GENERAL NOTES

1. SEE E1 SERIES DRAWINGS FOR ELECTRICAL SYSTEM LAYOUT PLANS.
2. SEE E2 SERIES DRAWINGS FOR NEW ELECTRICAL SIGN LOCATIONS.



CITY OF
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SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn
and Associates, Inc.
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)

ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS

MARK	DATE	DESCRIPTION
ISSUE:		----

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ES-101-A03
DRAWN BY:	CMP
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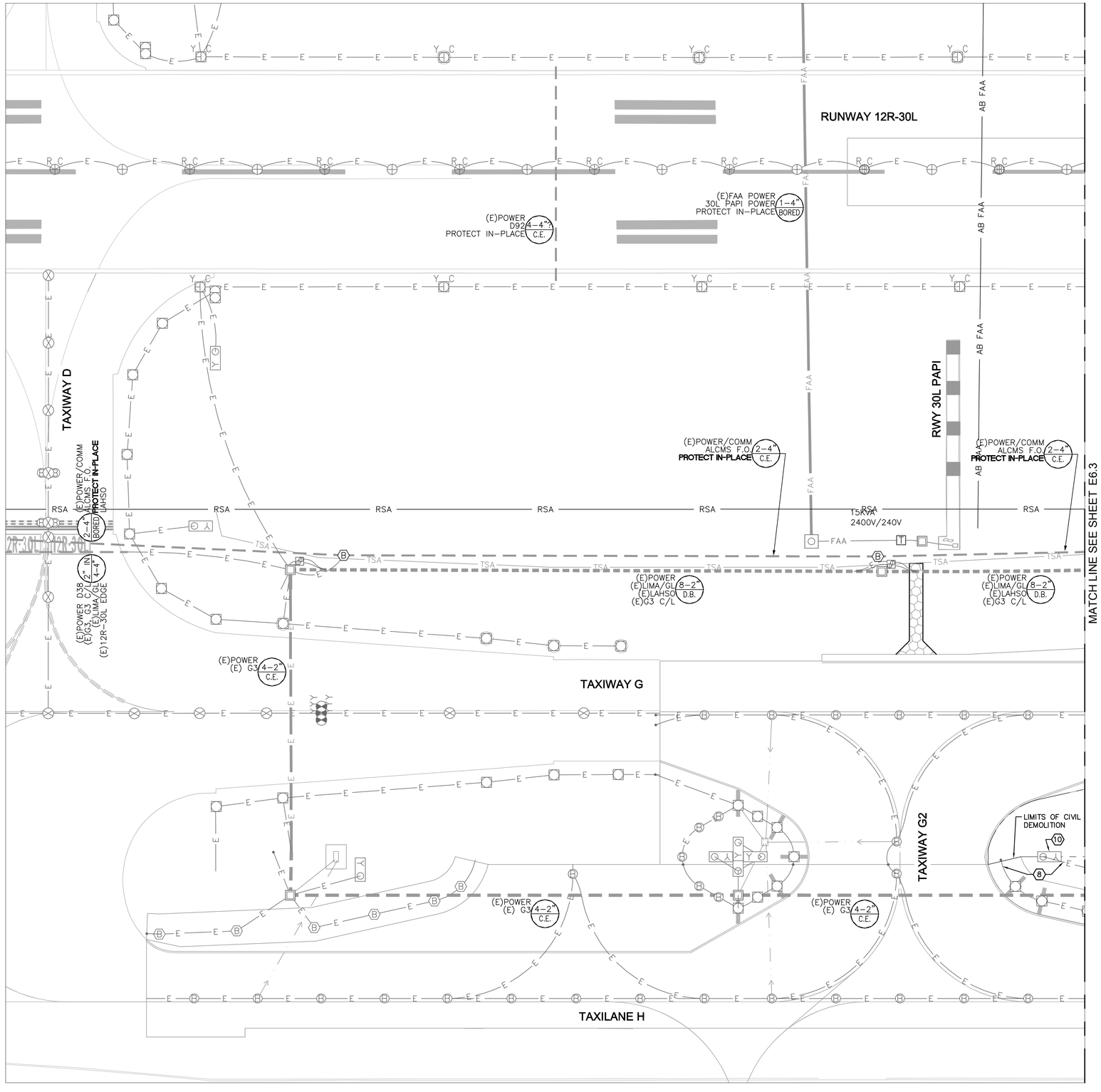
SHEET TITLE:

ELECTRICAL SIGN
PLAN DATA TABLES
BID ALT. 3

E5.3

k:\ven_aviation\191629001-sat rwy & twy improvements\05 CADD\ALT 3_33-00193-R1ES-101-A03.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric



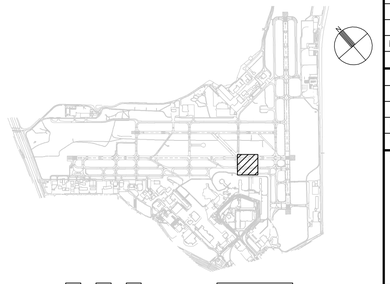
ELECTRICAL DEMOLITION NOTES

(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.

GENERAL NOTES

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



40 0 40 80
SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS
ERIC C. LOVEJOY
94087
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		---

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ED-101-A03
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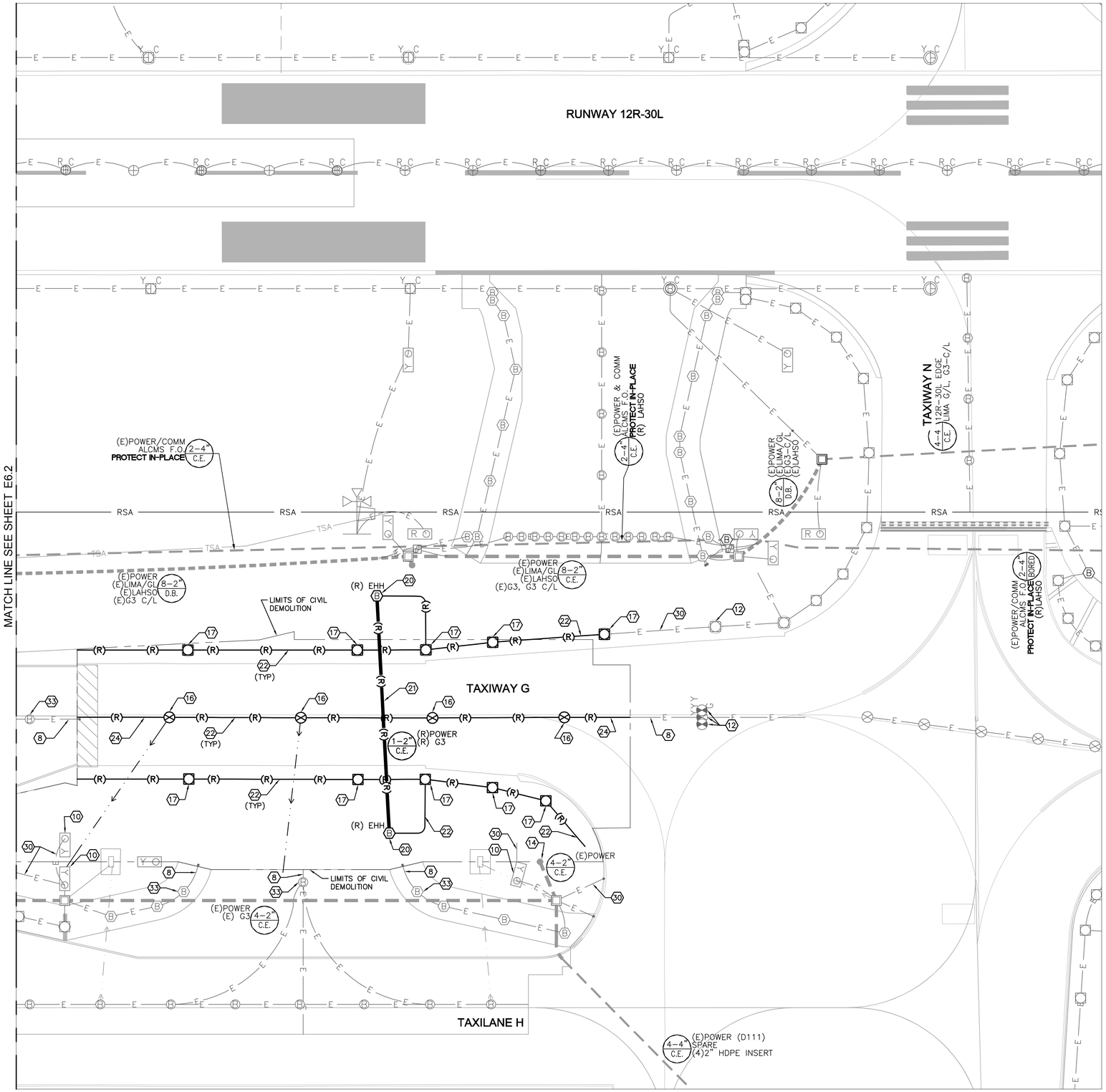
SHEET TITLE:

ELECTRICAL DEMOLITION PLAN BID ALT. 3

E6.2

SHEET NO. 164 OF 214

k:\san_aviation\191629001-east rwy & twy improvements\05 CADD\ALT 3_33-00193-R1ED-101-A03.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric

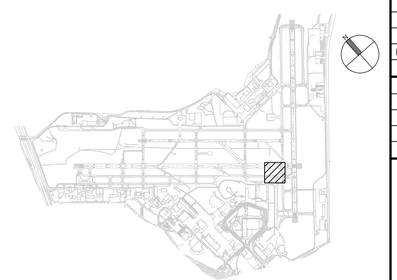


ELECTRICAL DEMOLITION NOTES

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.
12. EXISTING LIGHT TO REMAIN, PROTECT IN PLACE.
14. EXISTING POWER DUCT, PROTECT IN PLACE.
16. SALVAGE EXISTING TAXIWAY CENTERLINE LIGHT FOR REINSTALLATION. SALVAGE ISOLATION TRANSFORMER TO THE OWNER.
17. SALVAGE EXISTING TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER TO THE OWNER.
20. REMOVE EXISTING HANDHOLE.
21. REMOVE EXISTING DUCT. REMOVE EXISTING CONDUCTORS BACK TO EXISTING STRUCTURE TO REMAIN OR AS NOTED. SEE CIRCUIT MAPS ON E4 SERIES DRAWINGS FOR ADDITIONAL INFORMATION.
22. REMOVE EXISTING CONDUIT AND CONDUCTORS.
24. REMOVE EXISTING CONDUIT. REMOVE EXISTING CONDUCTORS BACK TO EXISTING FIXTURE OR STRUCTURE TO REMAIN OR AS NOTED.
30. EXISTING CONDUIT TO REMAIN, PROTECT IN PLACE.
33. EXISTING BASE CAN AND BLANK COVER, PROTECT IN PLACE.

GENERAL NOTES

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



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

STATE OF TEXAS — ERIC C. LONEJOY — 84087 — LICENSED PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		---

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1ED-101-A03
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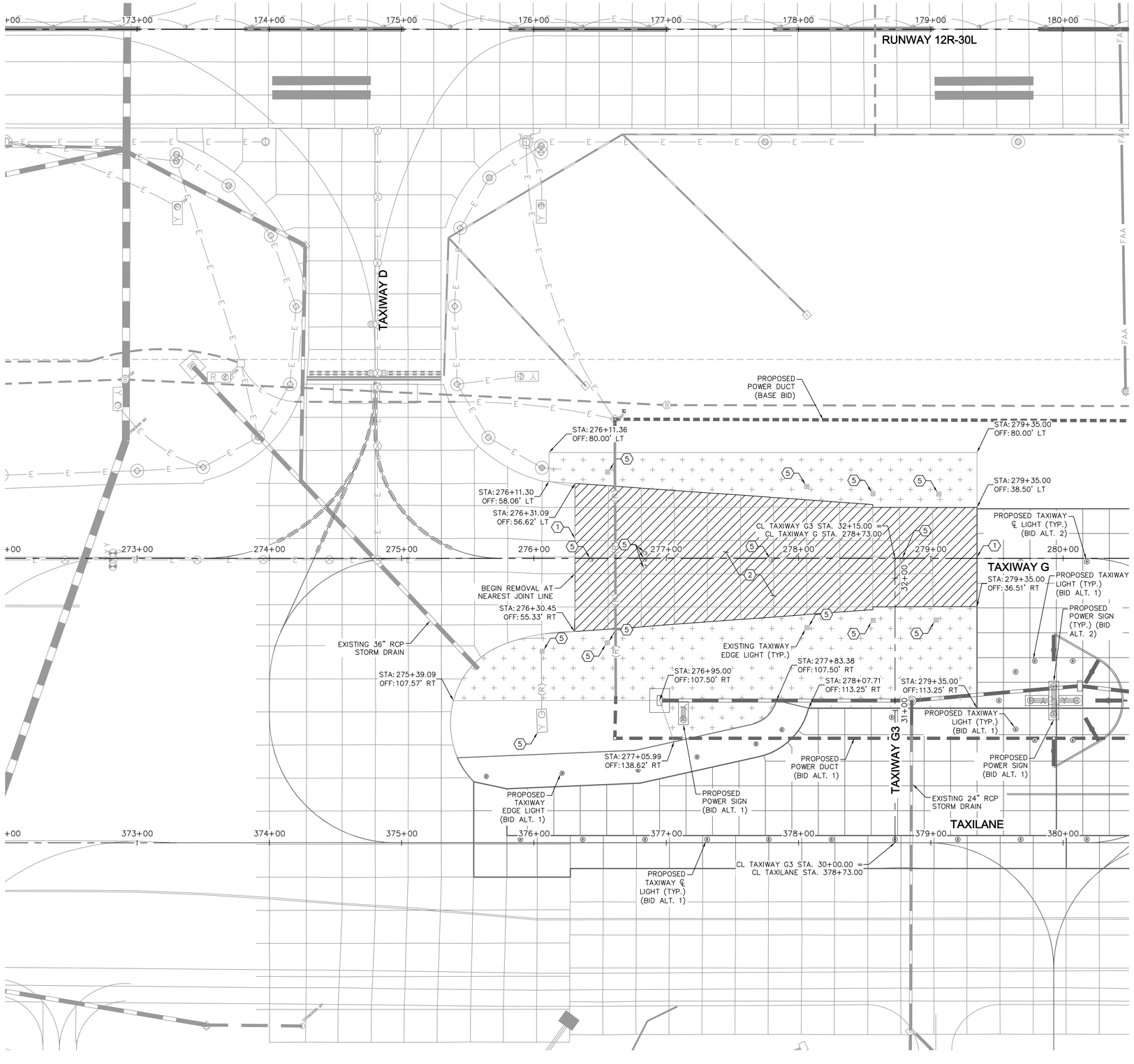
SHEET TITLE:

ELECTRICAL DEMOLITION PLAN BID ALT. 3

E6.3

SHEET NO. 165 OF 214

k:\res_aviation\191629001-rest rwy & twy improvements\05 CADD\ALT 3_33-00193-R1ED-101-A03.dwg Jul 6, 2013 - 3:17PM Lovejoy, Eric



LEGEND

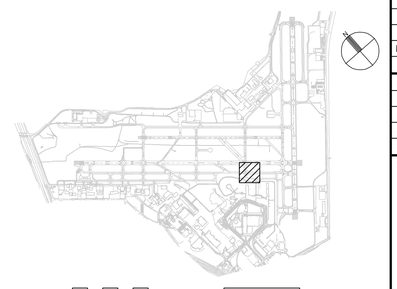
- PORTLAND CEMENT CONCRETE PAVEMENT REMOVAL
- CLEAR AND GRUB (P-101)

GENERAL NOTES

1. EXISTING UTILITY INFORMATION SHOWN ON THE PLANS CONCERNING THE TYPE, SIZE, AND LOCATION WERE COMPILED BASED ON THE UTILITY RECORDS AVAILABLE TO THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A UTILITY LOCATOR AND VERIFY THE ACTUAL LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES IN PLACE UNLESS NOTED OR SPECIFIED OTHERWISE. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. UTILITIES INTERFERING WITH CONSTRUCTION SHALL BE RESET OR RELOCATED BY THE UTILITY COMPANY CONCERNED UNLESS NOTED OTHERWISE.
2. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
3. REFER TO ELECTRICAL PLANS (SERIES E) FOR ELECTRICAL DEMOLITION.

CONSTRUCTION NOTES

1. SAWCUT EXISTING PCC PAVEMENT – FULL DEPTH
2. REMOVE AND DISPOSE OF EXISTING PCC PAVEMENT OFFSITE
3. REMOVE AND DISPOSE OF EXISTING STORM DRAIN PIPE, LIMITS OF REMOVAL PER PLAN
4. REMOVE AND DISPOSE OF EXISTING DRAINAGE STRUCTURE
5. REFER TO ELECTRICAL PLANS (SERIES E)
6. REMOVE AND DISPOSE OF EXISTING AC PAVEMENT OFFSITE
7. PAVEMENT MARKING TO BE OBLITERATED



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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)

MICHAEL A. NORBY 87178 REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CD-101-A04
DRAWN BY:	CAD
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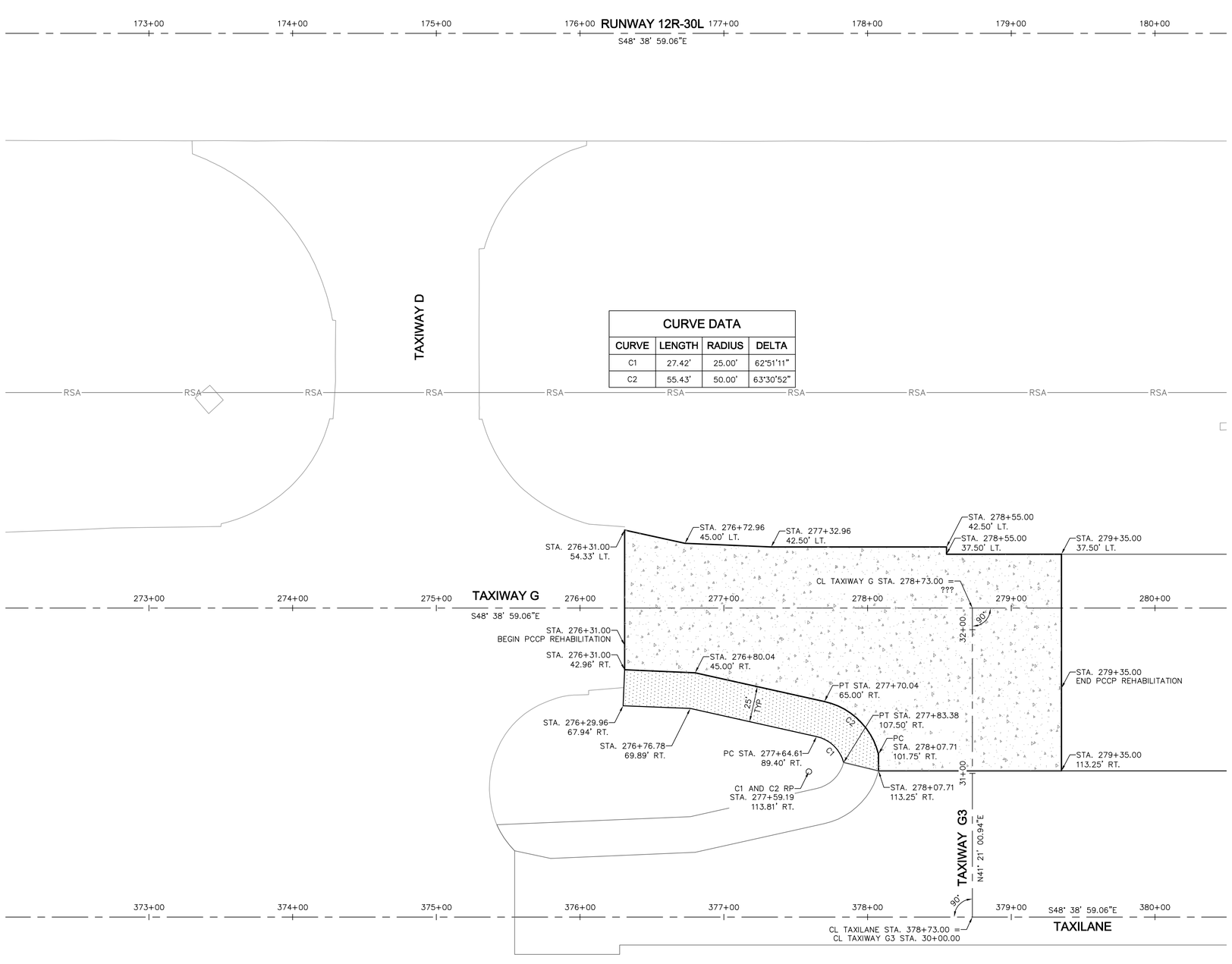
SHEET TITLE:

DEMOLITION PLAN BID ALT. 4

C3.8

SHEET NO. 166 OF 214

K:\PHX_Aviation\191629001- San Antonio\CADD_33-00193-R1CD-101-A04.dwg Jul 22, 2013 Stauffer, Fred

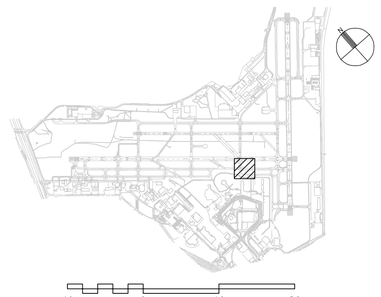


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

1. REFER TO SHEET C1.12 HORIZONTAL AND VERTICAL CONTROL.
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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

MICHAEL A. NORBY
87178
REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CL-101-A04
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SHEET TITLE:

GEOMETRIC LAYOUT PLAN BID ALT. 4

C5.7

SHEET NO. 167 OF 214

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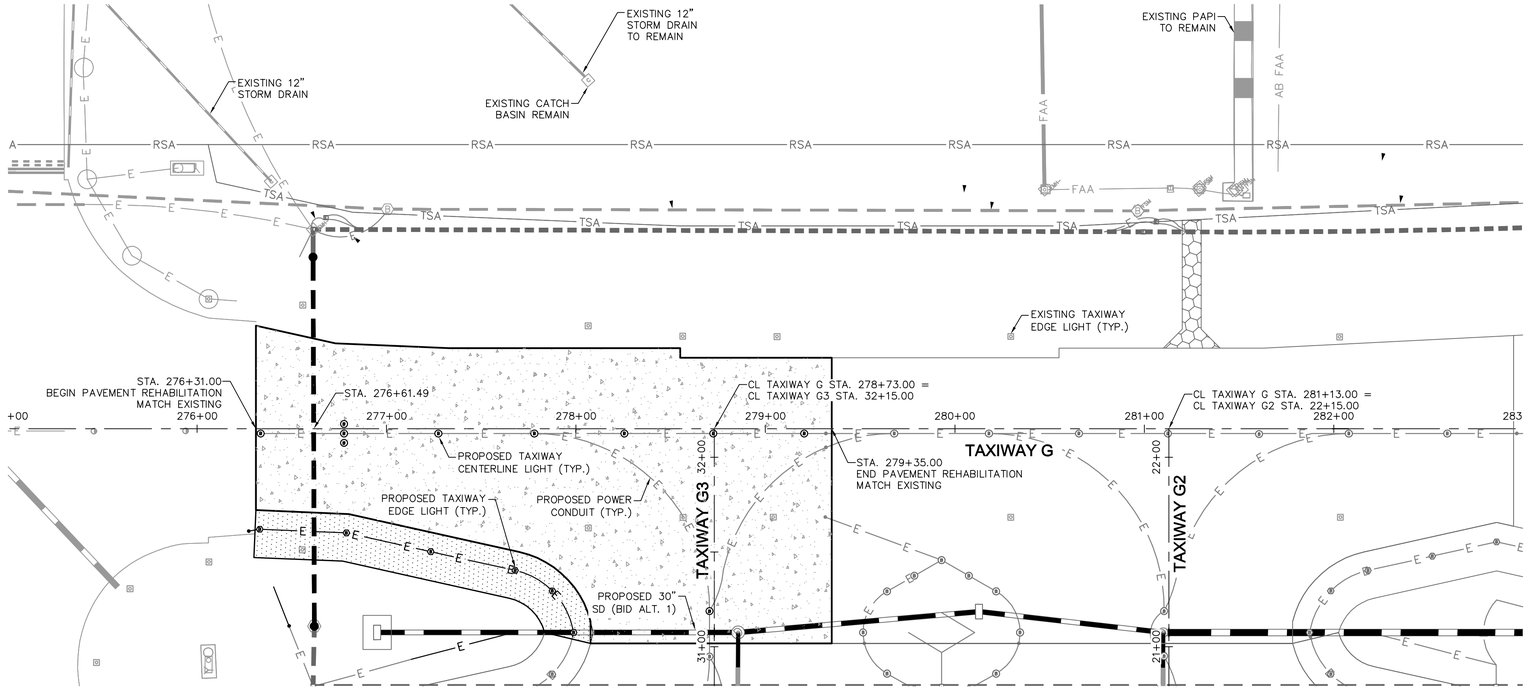
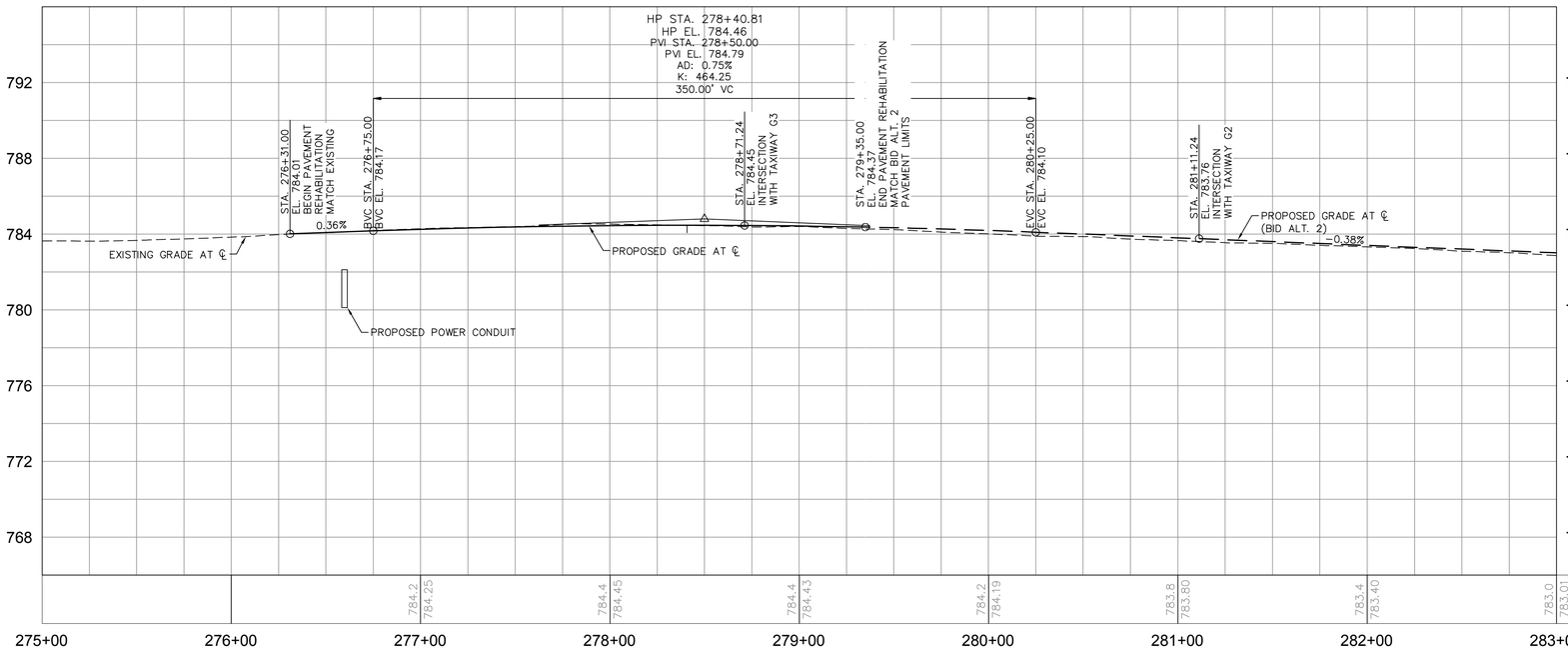




LEGEND

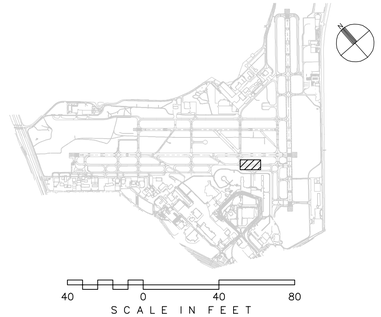
- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

1. ALL STATIONS AND OFFSETS REFER TO THE APPROPRIATE RUNWAY OR TAXIWAY STATIONING.
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.

SCALE IN FEET (VERTICAL)

4 0 4 8



SCALE IN FEET

40 0 40 80

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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SAN ANTONIO, TEXAS 78216
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MICHAEL A. NORBY 87178 REGISTERED PROFESSIONAL ENGINEER

07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CP-101-A04
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SHEET TITLE:

PLAN AND PROFILE
TAXIWAY G
BID ALT. 4

C6.11

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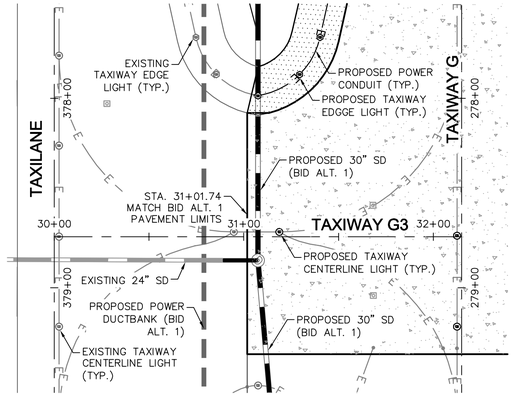
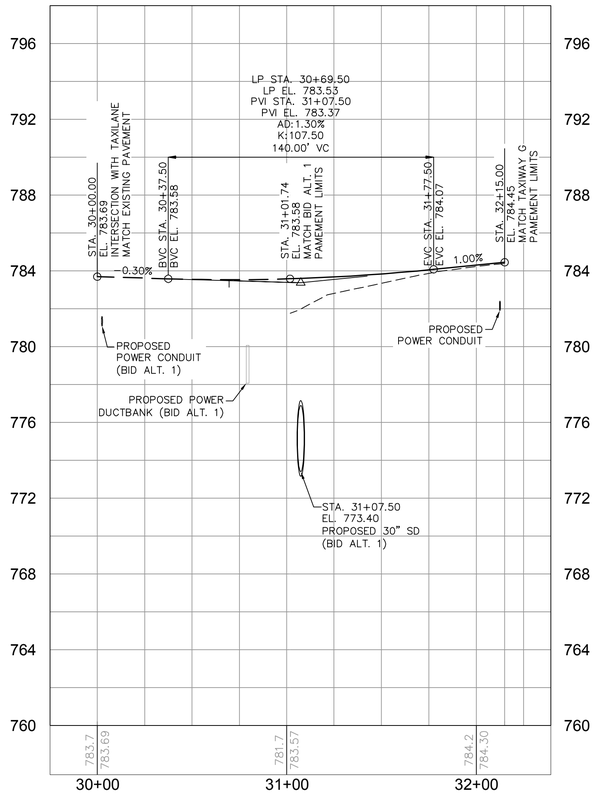


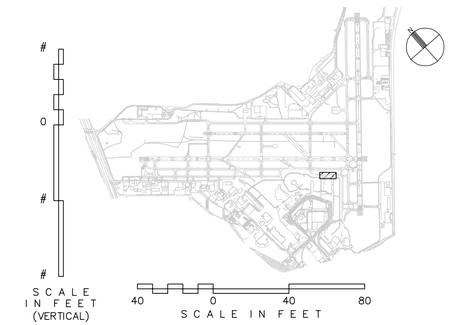


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

GENERAL NOTES

1. ALL STATIONS AND OFFSETS REFER TO THE APPROPRIATE RUNWAY OR TAXIWAY STATIONING.
2. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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)

MICHAEL A. NORBY
87178
REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
ISSUE:		-

PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CP-101-A04
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SHEET TITLE:

PLAN AND PROFILE
TAXIWAY G
BID ALT. 4

C6.12

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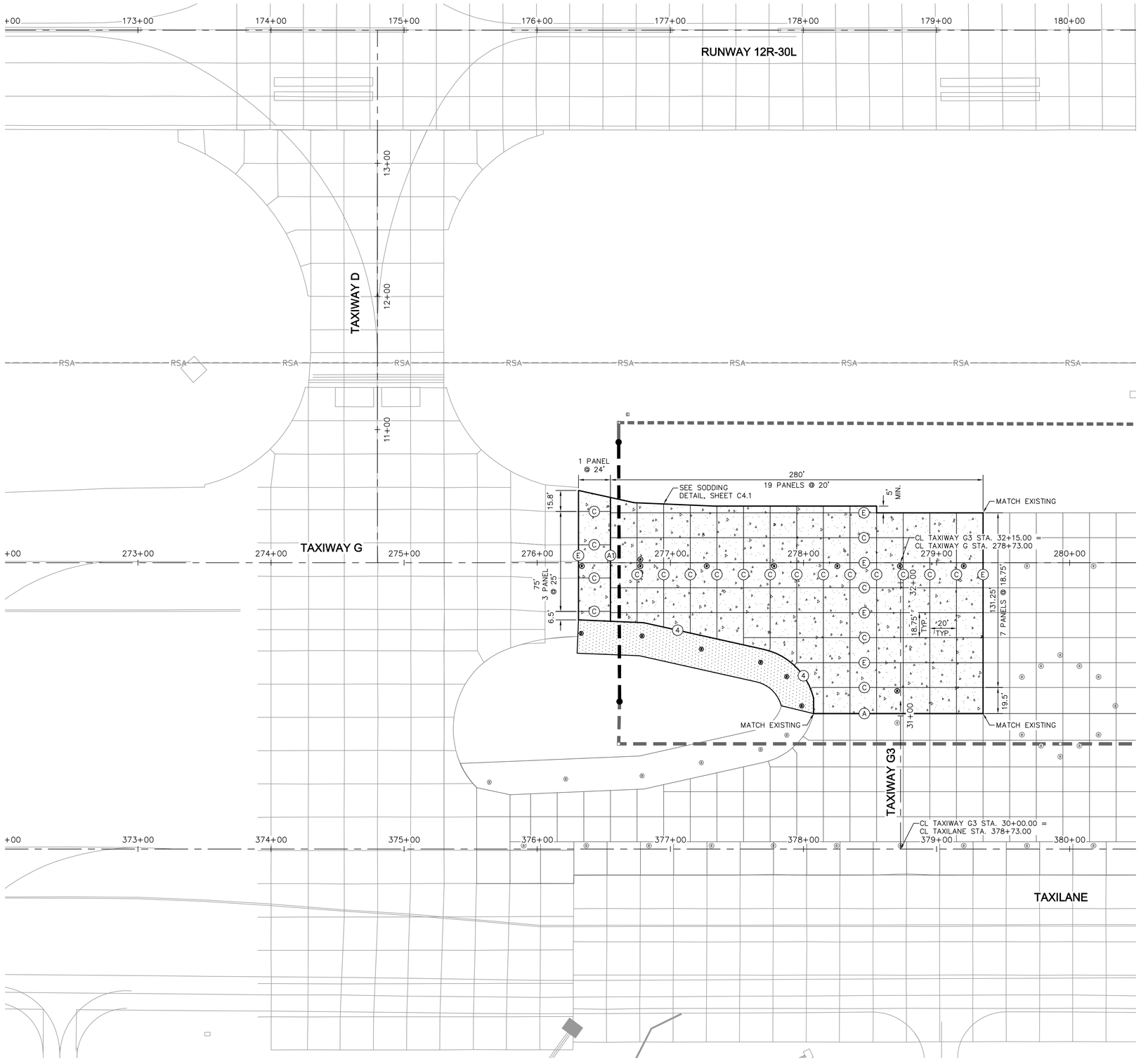


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT

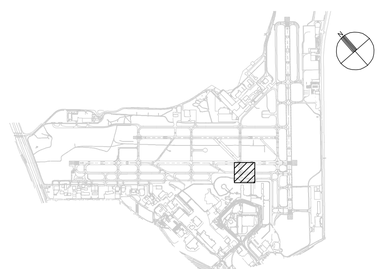
- (A) JOINT TYPE A, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (A1) JOINT TYPE A1, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (C) JOINT TYPE C, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (E) JOINT TYPE E, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (4) EDGE SEAL TYPE 4, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS
- (9) JOINT TYPE 9, REFER TO SHEET C7.3 FOR PAVEMENT JOINT DETAILS

GENERAL NOTES

1. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
2. TYPE C AND TYPE E JOINTS MAY BE INTERCHANGED WITH APPROVAL FROM THE ENGINEER.
3. PORTLAND CEMENT CONCRETE PAVEMENT (P-501) JOINTS SHALL NOT VARY MORE THAN 1/2-INCH FROM THEIR DESIGNATED POSITION AND SHALL BE TRUE TO LINE WITH NOT MORE THAN 1/4-INCH VARIATION IN 10-FEET. ANY JOINT(S) THAT ARE NOT PARALLEL OR PERPENDICULAR, OTHER THAN IRREGULAR SLABS, SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR WITH NO ADDITIONAL COST TO THE AIRPORT.
4. ALL SAWCUT DEBRIS FROM THE WIDENING OF THE JOINTS SHALL BE REMOVED FROM THE CONCRETE SURFACE IMMEDIATELY AFTER SAWCUTTING BY VACUUMING THE SLURRY.
5. DOWEL BARS SHALL NOT VARY IN ALIGNMENT BY MORE THAN TWO-PERCENT (2%) OR 0.40" IN EACH PLANE. MISALIGNED DOWEL BARS BY MORE THAN THE SPECIFIED TOLERANCE SHALL REQUIRE THE PCCP TO BE REMOVED ON EACH SIDE OF THE DOWEL BARS AT NO ADDITIONAL COST TO THE AIRPORT.
6. CONTRACTOR TO COORDINATE WITH THE ENGINEER FOR JOINTING AROUND ELEC./COMM. MANHOLES THAT ARE TO REMAIN IN PLACE.
7. ALL PCCP PANELS ARE REINFORCED PER DETAIL 6, SHEET C7.3

CONSTRUCTION NOTES

1. SAWCUT AND MATCH EXISTING JOINT SPACING AND ELEVATION
2. REFER TO ELECTRICAL PLANS (SERIES E)



CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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PHONE: (210) 541-9166
TEXAS REGISTERED FIRM, NO. 928

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

STATE OF TEXAS
MICHAEL A. NORBY
87178
REGISTERED PROFESSIONAL ENGINEER
07/22/13

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PAVEMENT JOINT LAYOUT PLAN BID ALT. 4

C7.8

SHEET NO. 170 OF 214

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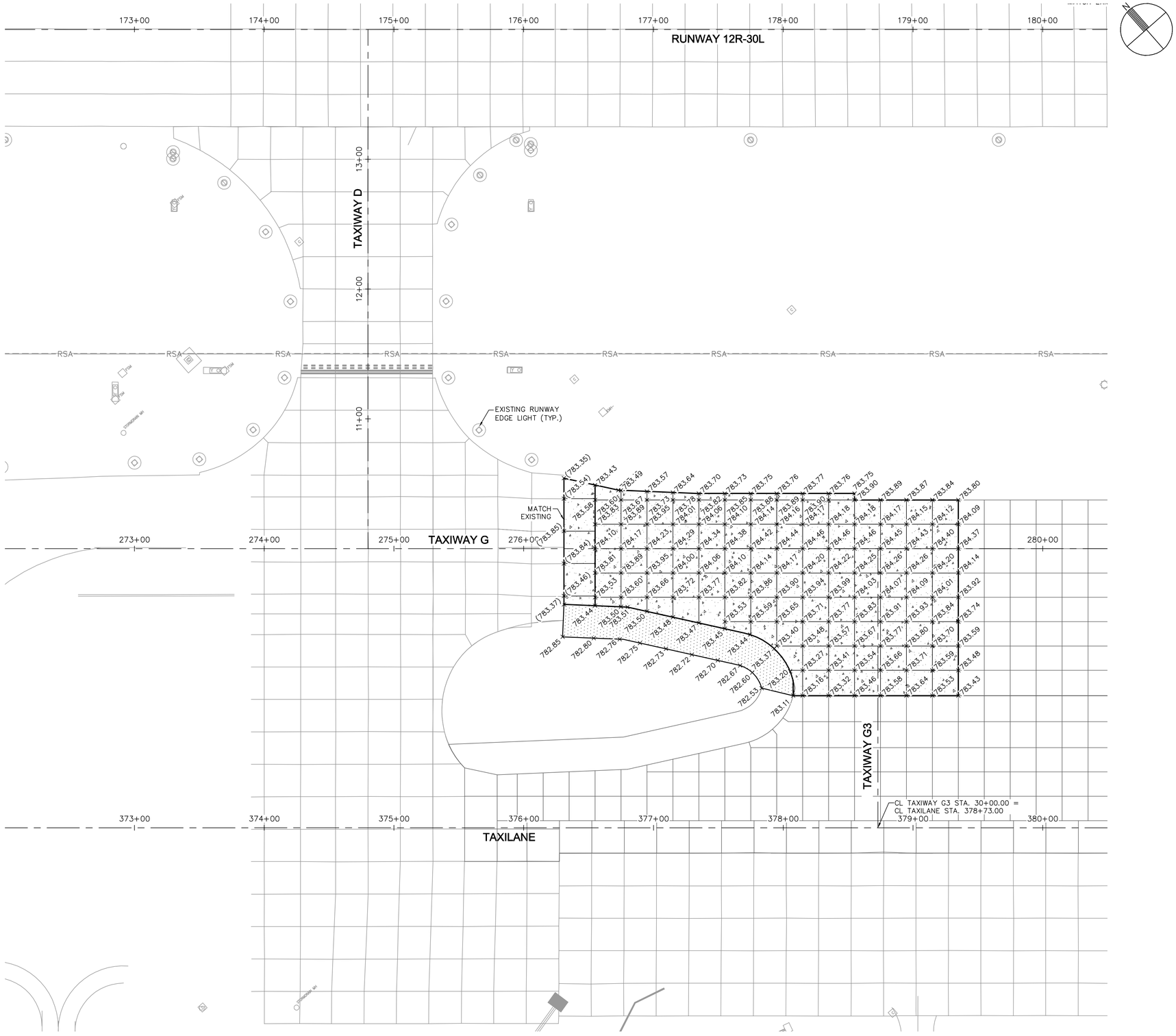
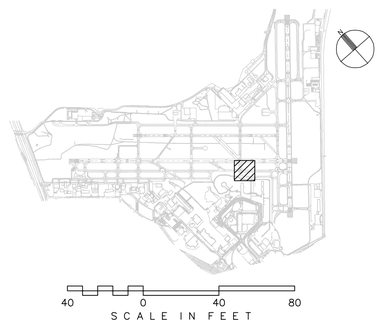


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- +XXX.XX PROPOSED SPOT ELEVATION

GENERAL NOTES

1. REFER TO SHEET C1.12 FOR HORIZONTAL AND VERTICAL CONTROL.
2. PAVEMENT ELEVATIONS SHOWN ARE BASED ON JOINT LAYOUT, REFER TO PAVEMENT JOINT LAYOUT PLANS (SERIES C7).
3. CONTRACTOR SHALL MATCH EXISTING PAVEMENT ELEVATIONS AS SHOWN ON PLAN. IF EXISTING ELEVATIONS DIFFER FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

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MICHAEL A. NORBY
87178
REGISTERED PROFESSIONAL ENGINEER
07/22/13

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SHEET TITLE:

PAVING ELEVATIONS PLAN BID ALT. 4

C8.7

SHEET NO. 171 OF 214

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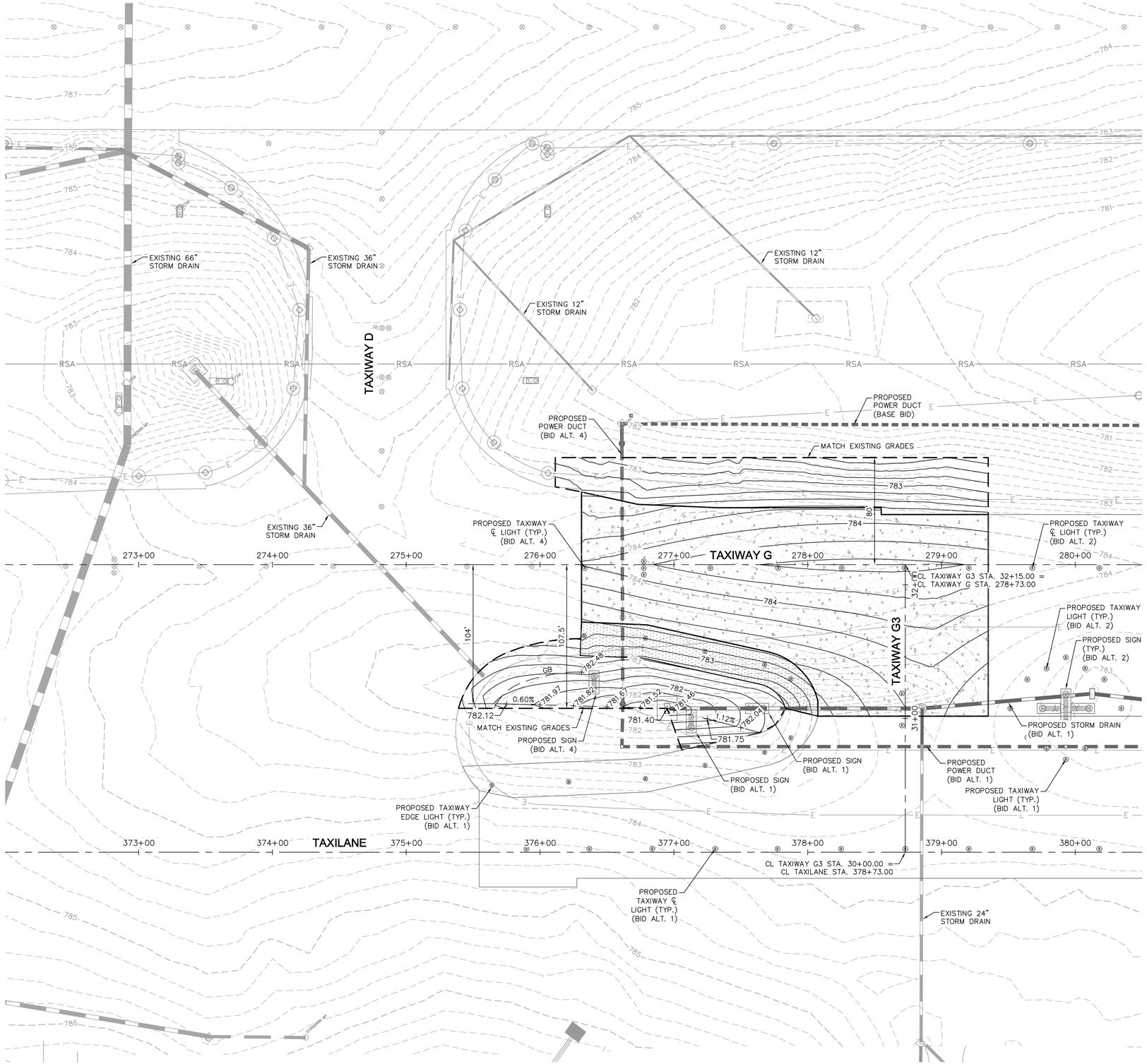
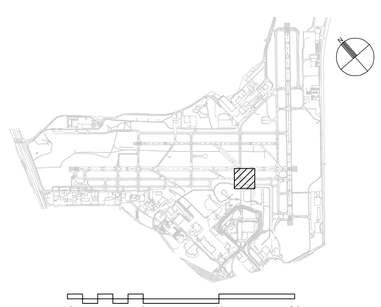


LEGEND

- PORTLAND CEMENT CONCRETE PAVEMENT
- PORTLAND CEMENT CONCRETE TRANSITION
- ASPHALT CONCRETE SHOULDER PAVEMENT
- ASPHALT CONCRETE PAPI ROAD PAVEMENT
- GRADING LIMITS
- +XXX.XX PROPOSED SPOT ELEVATION

GENERAL NOTES

1. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK IN ANY AREA.
2. ALL STATIONS AND OFFSETS REFER TO THE APPROPRIATE RUNWAY OR TAXIWAY STATIONING.
3. DESIGN CONTOURS REPRESENT FINISHED GRADE (PAVEMENT AND GRADING). CONTOURS AND PERCENT OF SLOPE ARE APPROXIMATE AND ARE SHOWN AS SUPPLEMENTAL INFORMATION ONLY.
4. REFER TO ELECTRICAL PLANS (SERIES E) FOR AIRFIELD LIGHTING, SIGNING, AND ELECTRICAL FEATURES.



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

MICHAEL A. NORBY 87178 REGISTERED PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
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FILE NAME:	_33-00193-R1CG-101-A04
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SHEET TITLE:

GRADING AND DRAINAGE PLAN BID ALT. 4

C9.13

SHEET NO. 172 OF 214

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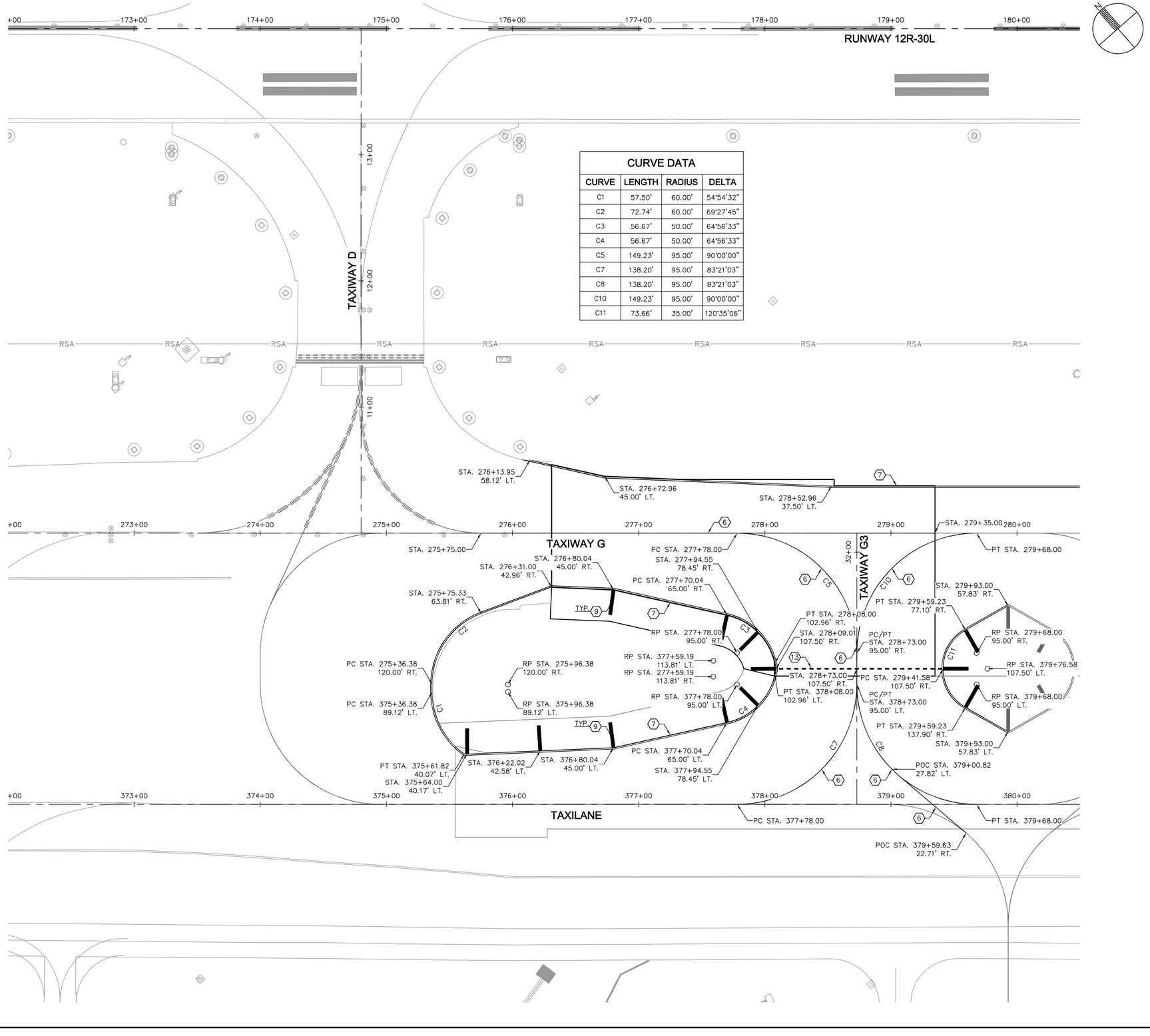


CURVE DATA			
CURVE	LENGTH	RADIUS	DELTA
C1	57.50'	60.00'	54°54'32"
C2	72.74'	60.00'	69°27'45"
C3	56.67'	50.00'	64°56'33"
C4	56.67'	50.00'	64°56'33"
C5	149.23'	95.00'	90°00'00"
C7	138.20'	95.00'	83°21'03"
C8	138.20'	95.00'	83°21'03"
C10	149.23'	95.00'	90°00'00"
C11	73.66'	35.00'	120°35'06"

LEGEND

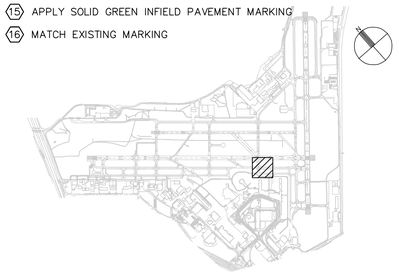
- ⊕ RUNWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊡ RUNWAY EDGE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ◐ RUNWAY TOUCHDOWN ZONE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR DETAILS
- ⊕ TAXIWAY CENTERLINE LIGHT, REFER TO ELECTRICAL PLANS (SERIES E) FOR 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 SWEPT 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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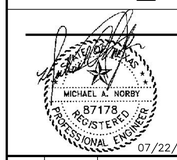
SCALE IN FEET

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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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MARK	DATE	DESCRIPTION
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PROJECT NO:	33-00178 and 33-00193
FILE NAME:	_33-00193-R1CM-101-A04
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PAVEMENT MARKING PLAN BID ALT. 4

C12.10

SHEET NO. 173 OF 214

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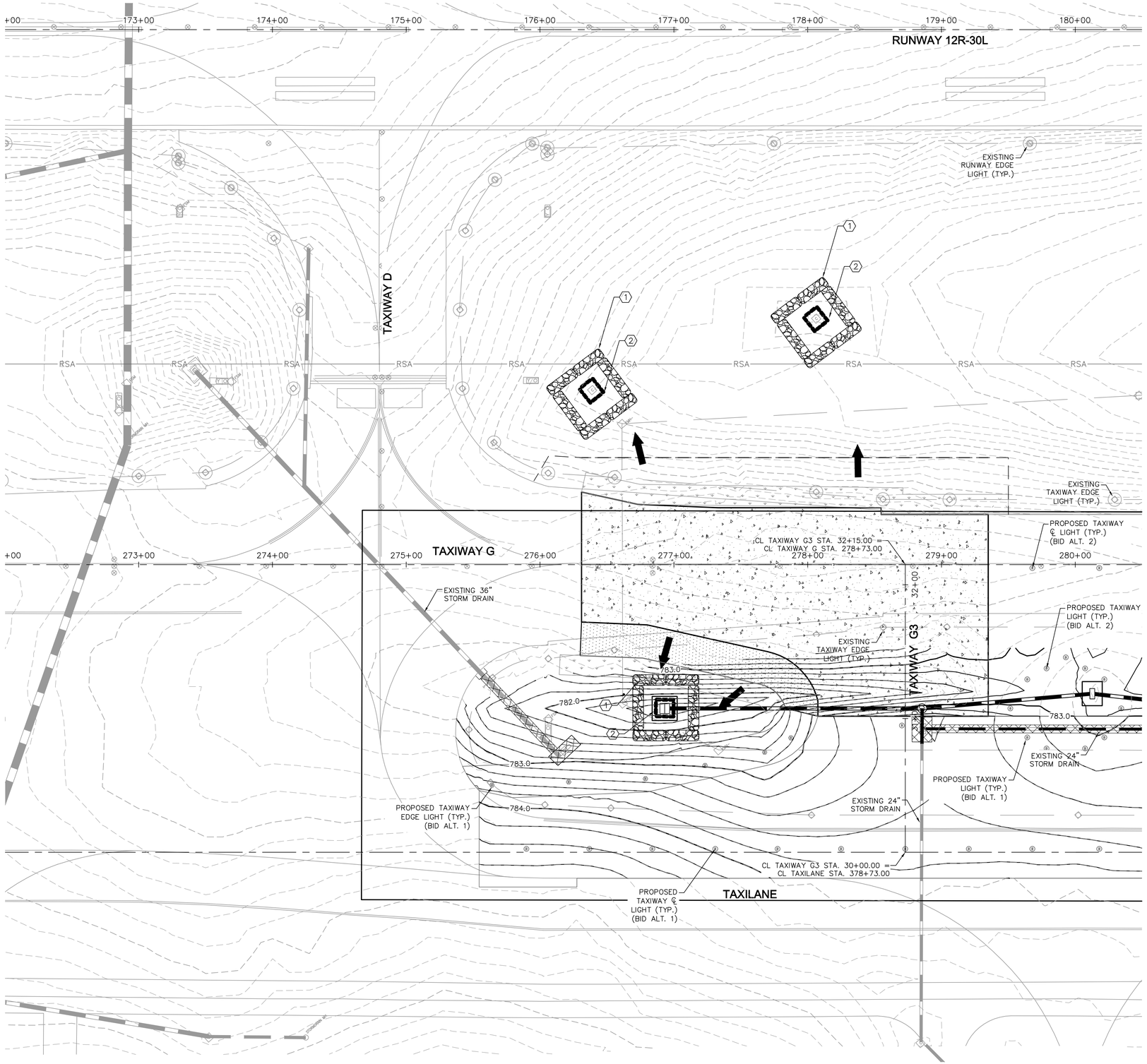


LEGEND

- 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

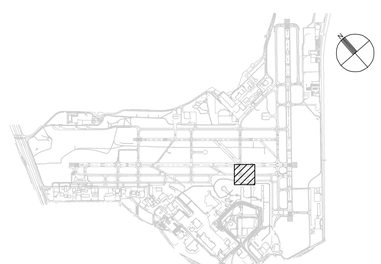
GENERAL NOTES

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 AN PAID FOR ALL AREAS AFFECTED BY GRADING AND EARTHWORK. OTHER AREAS INCIDENTALLY AFFECTED BY CONSTRUCTION EQUIPMENT SHALL BE RESEEDED 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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TEXAS REGISTERED FIRM, NO. 928

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

STATE OF TEXAS
MICHAEL A. NORBY
87178
REGISTERED
PROFESSIONAL ENGINEER
07/22/13

MARK	DATE	DESCRIPTION
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FILE NAME:	_33-00193-R1CE-401-A04
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STORM WATER POLLUTION PREVENTION PLAN AND SEEDING BID ALT. 4

C13.9
SHEET NO. 174 OF 214

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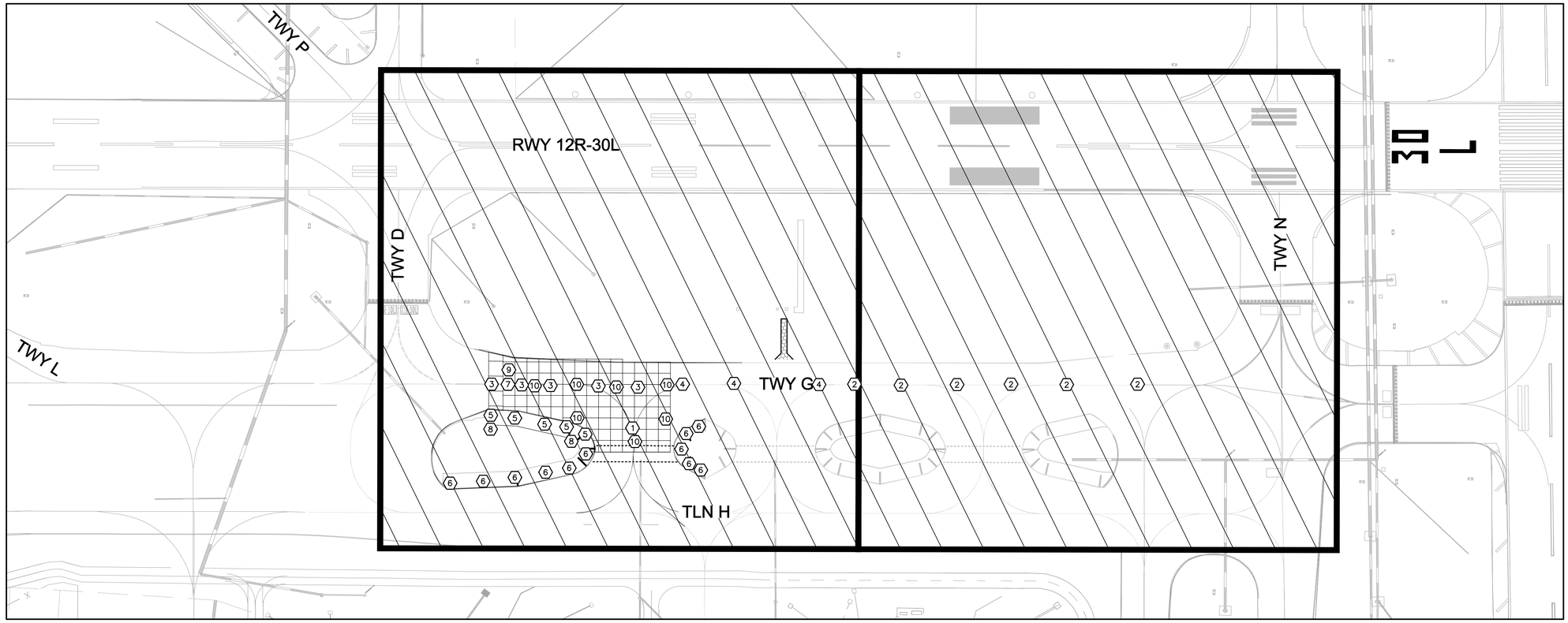
SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS



ELECTRICAL PLANS FOR RUNWAY 12R-30L REHABILITATION AND TERMINAL AREA TAXIWAY IMPROVEMENTS (PACKAGE 1, BID ALT. 4)

PROJECT NOS. 33-00178 AND 33-00193
FAA AIP 3-48-0192-XX-2013

ELECTRICAL SCOPE OF WORK - ADD ALT 4

1. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS AND TOUCH DOWN ZONE (TDZ) LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 12R PAVEMENT REHABILITATION AREA.
2. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON NEW L-867 BASECAN, CONDUIT AND CABLES.
3. SALVAGE AND REINSTALL EXISTING RUNWAY CENTERLINE LIGHTS ON NEW AIRCRAFT LOAD RATED L-868 BASE CANS IN THE RUNWAY 30L PANEL REPLACEMENT AREA.
4. SALVAGE AND REINSTALL EXISTING RUNWAY EDGE LIGHTS ON EXISTING BASECAN.
5. INSTALL NEW PRECAST CONCRETE HANDHOLE.
6. INSTALL NEW JUNCTION CAN PLAZA.
7. INSTALL NEW DIRECT BURY DUCT BANK.
8. INSTALL NEW L-867 BASE CANS IN NEW ASPHALT PAVEMENT.
9. INSTALL NEW L-868 BASE CANS IN NEW PCC PAVEMENT.
10. INSTALL NEW CONCRETE SIGN FOUNDATION FOR SIGN INSTALLATION.

CITY OF SAN ANTONIO AVIATION DEPARTMENT

SAN ANTONIO AIRPORT SYSTEM

Kimley-Horn and Associates, Inc.
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RUNWAY 12R-30L REHABILITATION AND TERMINAL AREA TAXIWAY IMPROVEMENTS (PACKAGE 1)

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

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ELECTRICAL SCOPE OF WORK BID ALT. 4

E0.1

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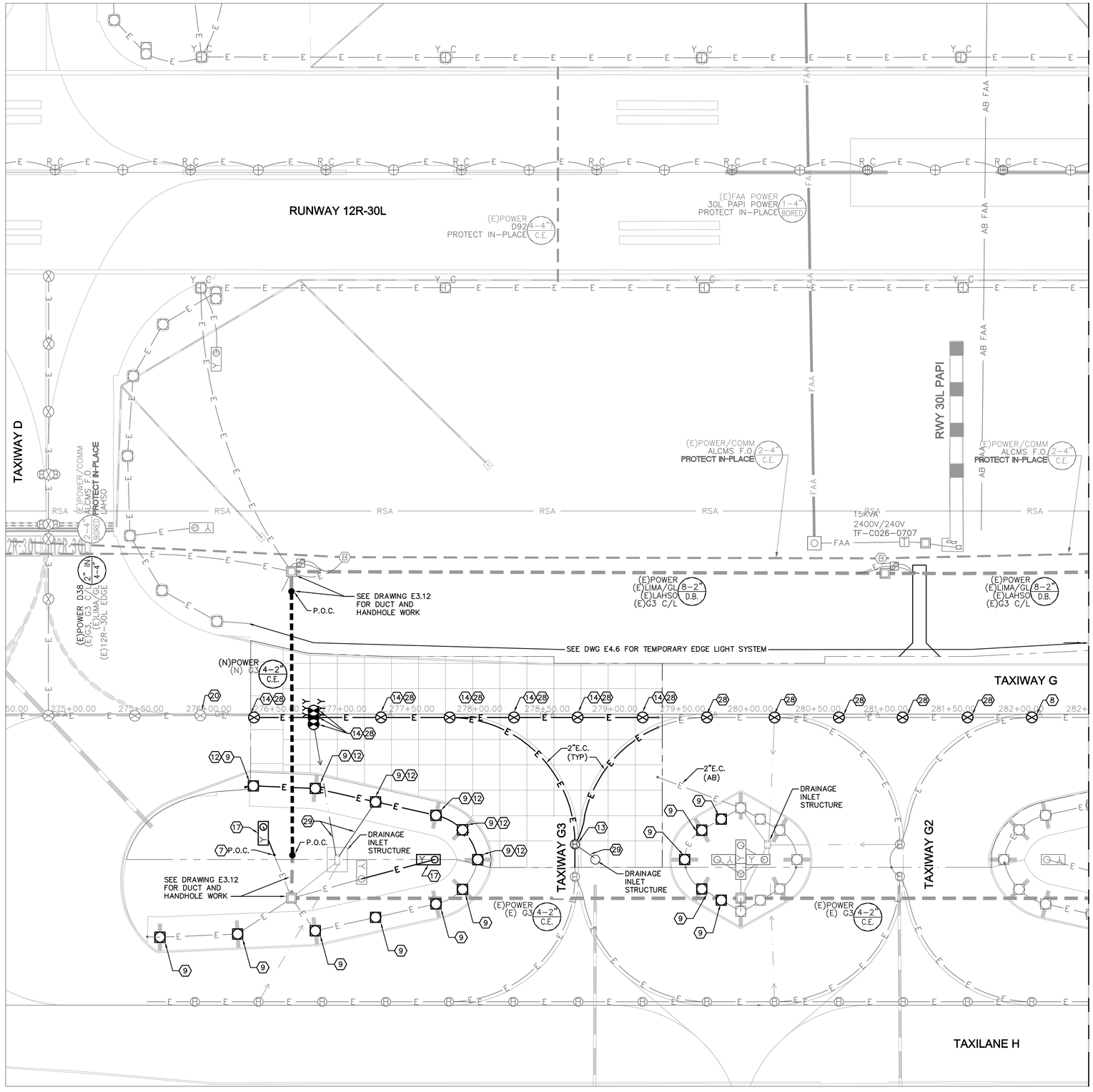


ELECTRICAL CONSTRUCTION NOTES

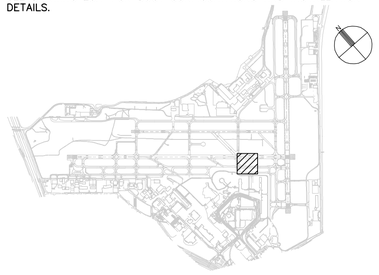
7. CONNECT NEW CONDUIT TO EXISTING CONDUIT. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.
8. INSTALL NEW TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON L-868 BASE CAN. REMOVE BLANK COVER AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.
9. INSTALL NEW ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON L-867 OR L-868 BASE CAN. REMOVE BLANK COVER IF INSTALLED PER BASECAN INSTALLATION NOTE AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.
12. NEW L-867 BASE CAN IN NEW ASPHALT PAVEMENT.
13. NEW L-868 BASE CAN AND BLANK COVER IN NEW PCC PAVEMENT.
14. NEW L-868 BASE CAN IN NEW PCC PAVEMENT.
17. NEW SIGN FOUNDATION FOR SIGN INSTALLATION ON NEW CONCRETE BASE. SEE DETAILS ON DRAWINGS E3.1 FOR SIGN CONFIGURATION. SEE E5 SERIES SIGN PLANS FOR SIGN INSTALLATION PHASING.
20. EXISTING LIGHT, PROTECT IN PLACE.
28. INSTALL NEW LED TAXIWAY EDGE LIGHT WITH NEW ISOLATION TRANSFORMER ON EXISTING BASE CAN.
29. INSTALL 2"C (ITEM L-110) TO DRAIN STRUCTURES. COMBINE DRAIN CONDUITS FROM SEPARATE SYSTEMS INTO COMMON TRENCH WHEN POSSIBLE. SEE DETAILS ON E3.11.

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 E6.1 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.



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

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

STATE OF TEXAS
ERIC C. LOVEJOY
84081
LICENSED
PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION
ISSUE:		----
PROJECT NO:		33-00178 and 33-00193
FILE NAME:		_33-00193-R1EE-101-A04
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SHEET TITLE:

ELECTRICAL LAYOUT PLAN
BID ALT. 4

E1.2
SHEET NO. 176 OF 214

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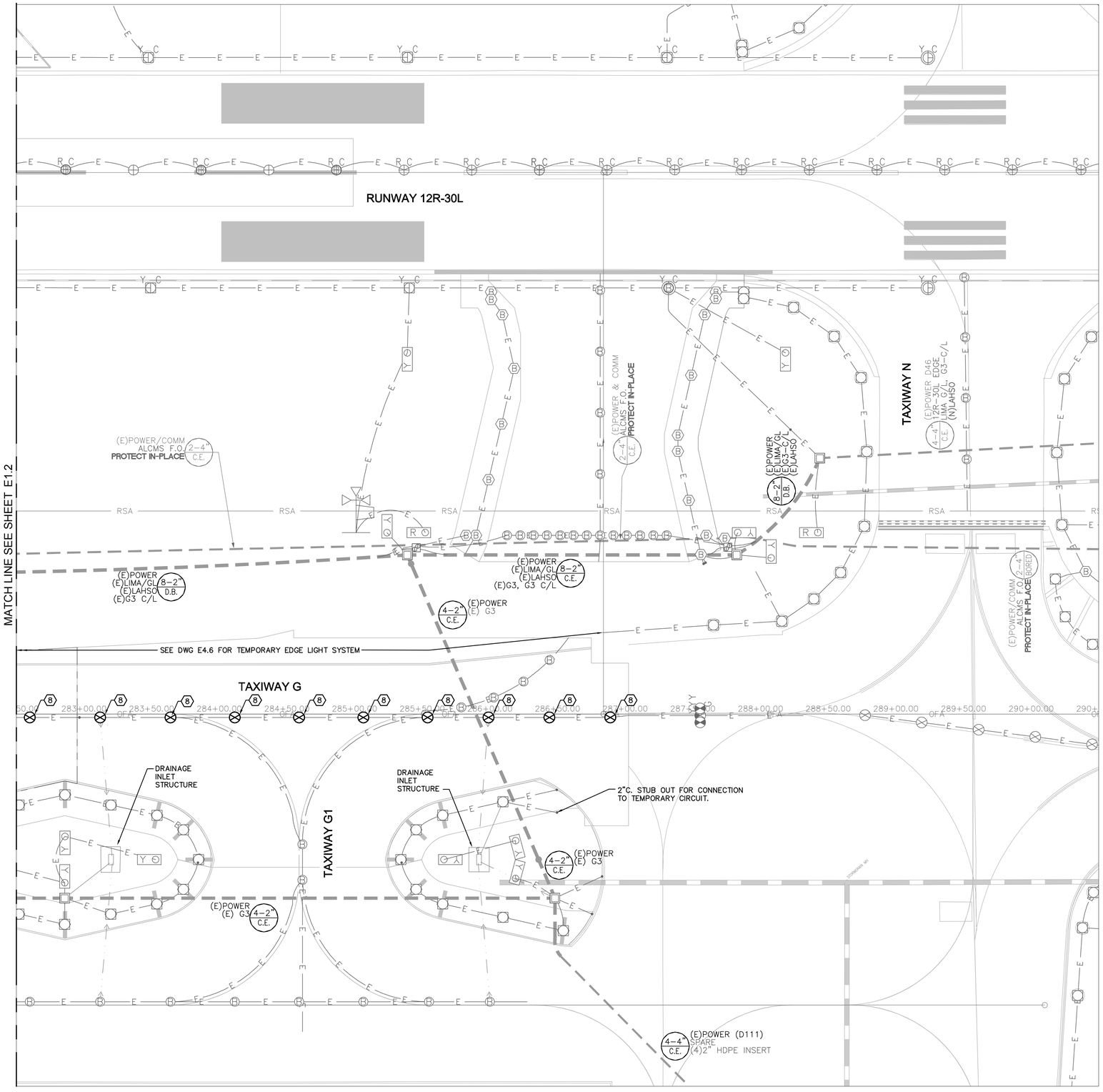

ELECTRICAL CONSTRUCTION NOTES

(8) INSTALL NEW TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON L-868 BASE CAN. REMOVE BLANK COVER AND SALVAGE TO OWNER. INSTALL NEW CONDUCTORS. SEE CIRCUIT MAPS, E4 SERIES DRAWINGS.

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 E6.1 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.
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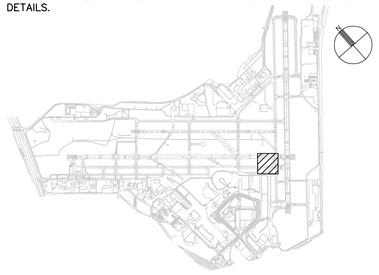
5. SEE DRAWING E3.7 FOR DUCT CONFIGURATIONS AND INSTALLATION DETAILS.



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E1.3

SHEET NO. 177 OF 214

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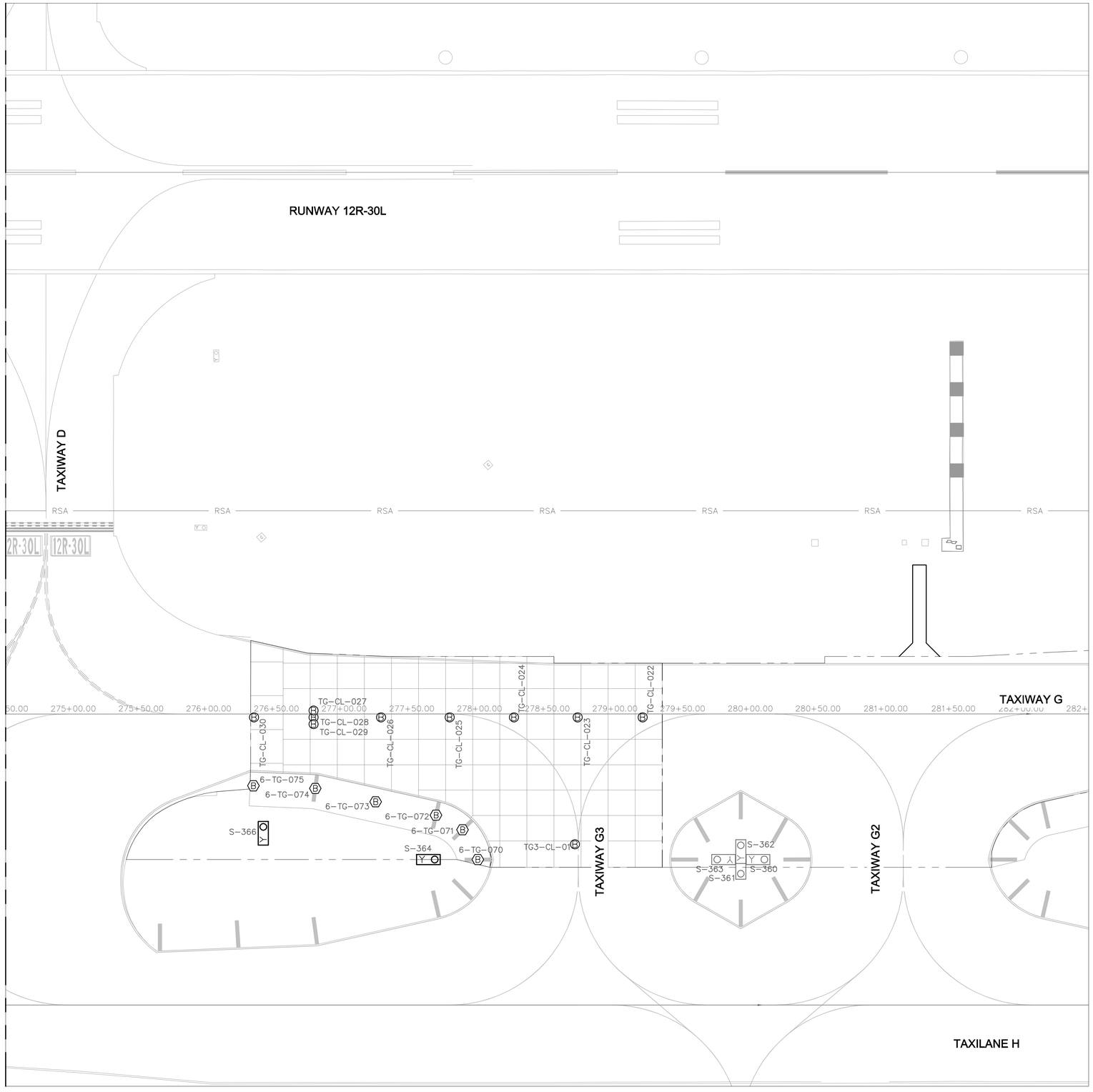


FIELD SURVEY NOTE

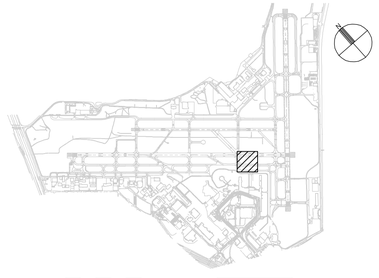
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.2 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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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STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

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ELECTRICAL FIXTURE
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E2.2

SHEET NO. 178 OF 214

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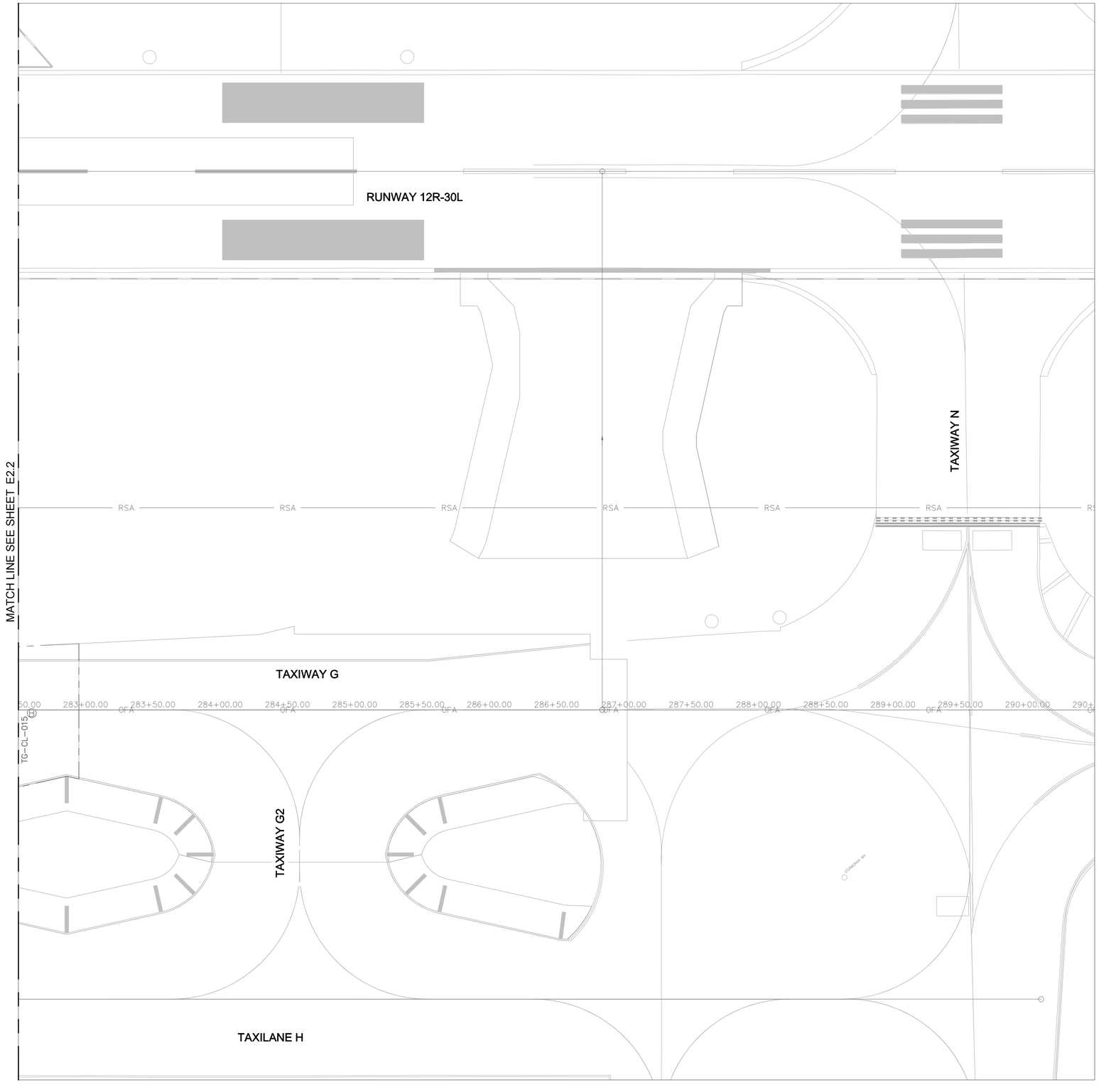


FIELD SURVEY NOTE

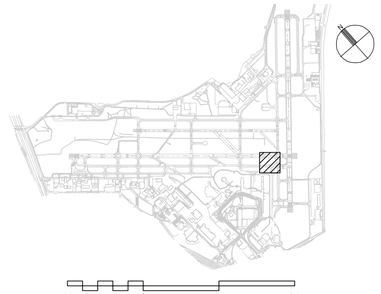
1. THE CONTRACTOR SHALL RELOCATE THE EXISTING RUNWAY LIGHTS TO BE RE-INSTALLED ON NEW BASE CANS SHOWN ON THIS DRAWING AT THE CONTRACTOR'S FIELD SURVEYED LOCATIONS OF THE EXISTING FIXTURES PRIOR TO DEMOLITION. SEE DRAWING E6.3 FOR ELECTRICAL DEMOLITION PLAN OF THIS AREA.

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 E2.3A 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.



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

STATE OF TEXAS
ERIC C. LOVEJOY
94081
LICENSED
PROFESSIONAL ENGINEER

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ELECTRICAL FIXTURE LAYOUT PLAN BID ALT. 4

E2.3

SHEET NO. 179 OF 214

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L-868 DATA TABLE					
FIXT-NUM	STA	OFF	FAA-TYPE	DETAIL	CIRCUIT
TG3-CL-01	'Taxiway G' 278+70.50	96.25' RT.	L-868	E3.5 BLANK	
TG-CL-022	'Taxiway G' 279+20.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-023	'Taxiway G' 278+72.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-024	'Taxiway G' 278+25.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-025	'Taxiway G' 277+78.00	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-026	'Taxiway G' 277+27.33	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-027	'Taxiway G' 276+77.50	2.50' LT.	L-868	E3.5 FOR L-852	
TG-CL-028	'Taxiway G' 276+77.50	2.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-029	'Taxiway G' 276+77.50	7.50' RT.	L-868	E3.5 FOR L-852	
TG-CL-030	'Taxiway G' 276+33.50	2.50' RT.	L-868	E3.5 FOR L-852	

L-867 DATA TABLE				
FIXT-NUM	STA	OFF	FAA-TYPE	DETAIL
6-TG-070	'Taxiway G' 277+98.76	107.50' RT.	L-867B	E3.4 FOR L-861T
6-TG-071	'Taxiway G' 277+87.47	85.53' RT.	L-867B	E3.4 FOR L-861T
6-TG-072	'Taxiway G' 277+67.87	74.76' RT.	L-867B	E3.4 FOR L-861T
6-TG-073	'Taxiway G' 277+23.30	64.86' RT.	L-867B	E3.4 FOR L-861T
6-TG-074	'Taxiway G' 276+78.73	54.95' RT.	L-867B	E3.4 FOR L-861T
6-TG-075	'Taxiway G' 276+33.03	53.05' RT.	L-867B	E3.4 FOR L-861T

SIGN DATA TABLE						
SIGN-NUM	STA	OFF	DETAIL	MODULES	CIRCUIT	MODE
S-364	'Taxiway G' 277+66.95	107.50' RT.	E3.1	RT858Y3M	G3 (6)	MODE 3
S-366	'Taxiway G' 276+40.36	83.38' RT.	E3.1	RT858Y3M	G3 (6)	MODE 2

CIRCUIT DESIGNATION SCHEDULE

CIRCUIT NAME	FIELD CIRUIT NUMBER	ALCS NUMBER	REMARKS
WEST VAULT:			
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
EAST VAULT:			
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

1. SEE E1 SERIES DRAWINGS FOR NEW ELECTRICAL SYSTEM LAYOUT PLANS.
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3. SEE E5 SERIES DRAWINGS FOR AIRFIELD ELECTRICAL SIGN LEGENDS.
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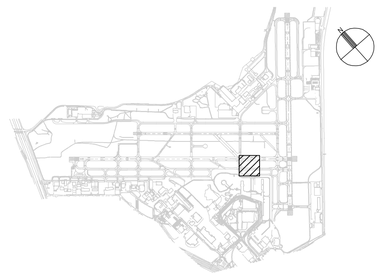

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ELECTRICAL FIXTURE DATA TABLES BID ALT. 4

E2.4

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