SAN ANTONIO INTERNATIONAL AIRPORT

SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

RS&H PROJECT NUMBER 223-3267-004
CITY PROJECT #33-00050

VICINITY MAP

DRAWINGS PREPARED BY:

RS&H, Inc.
13750 SAN PEDRO, SUITE 300
SAN ANTONIO, TEXAS 78232
PH. (210) 224-2800 FAX (210) 545-3103
www.rsandh.com
REGISTERED FIRM NO. F-3401

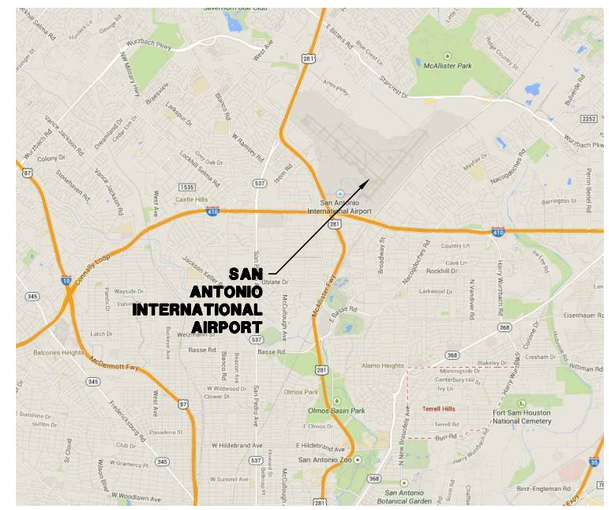
JULY 25, 2014

BID DOCUMENTS

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF BID REVIEW UNDER THE AUTHORITY OF JOHN HIPPCHEN P.E. 113967 IN JULY 2014. IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES

IN ASSOCIATION WITH:

GONZALEZ DE LA GARZA AND ASSOCIATES
SAN ANTONIO, TEXAS



LOCATION MAP

CIVIL

ELECTRICAL

DRAINAGE

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JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED: JULY 2014
REVIEWED BY: NGS
DRAWN BY: ALL
DESIGNED BY: JEH

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SHEET TITLE

INDEX OF DRAWINGS

SHEET NUMBER

C001

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SUMMARY OF QUANTITIES

ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	BID QUANTITY	UNIT COST	TOTAL COST	RECORD QUANTITY
1	P-102-10.1	SAFETY AND SECURITY	LS	1			
2	P-103-4.1	ENGINEERS FIELD OFFICE	LS	1			
3	P-104-5.1	PROJECT SURVEY AND STAKEOUT	LS	1			
4	P-105-5.1	TEMPORARY CONSTRUCTION ITEMS/TRAFFIC CONTROL	LS	1			
5	P-106-5.1	PAINTED PAVEMENT MARKING REMOVAL	SF	3,676			
6	P-107-4.1	CONCRETE PAVEMENT REMOVAL FULL DEPTH	SY	2,400			
7	P-107-4.2	ASPHALTIC CONCRETE PAVEMENT REMOVAL FULL DEPTH	SY	620			
8	P-107-4.3	CEMENT TREATED BASE REMOVAL FULL DEPTH	SY	1,032			
9	P-107-4.4	REMOVE CONCRETE OIL/WATER SEPARATOR FULL DEPTH	LS	1			
10	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	5,900			
11	P-155-8.1	LIME TREATED SUBGRADE	SY	1,621			
12	P-156-5.1	EROSION AND SEDIMENTATION CONTROL	LS	1			
13	P-156-5.2	EROSION CONTROL LOGS	LF	120			
14	P-156-5.3	INLET AND OUTLET PROTECTION	EA	9			
15	P-156-5.4	CONSTRUCTION ENTRANCE/EXIT	SY	358			
16	P-209-5.1	CRUSHED AGGREGATE BASE COURSE 6"	CY	1,244			
17	P-304-8.1	CEMENT TREATED BASE 10"	SY	7,402			
18	P-403-8.1A	BITUMINOUS SURFACE COURSE	TON	35			
19	F-162-5.1	FENCE REMOVAL	LF	250			
20	F-162-5.4	TEMPORARY FENCE 6' CHAIN LINK FENCE	LF	600			
21	F-162-5.5	TEMPORARY 16' VEHICULAR GATE	EA	1			
22	P-501-8.1	PORTLAND CEMENT CONCRETE 8"	SY	1,300			
23	P-501-8.2	PORTLAND CEMENT CONCRETE 12"	SY	7,486			
24	P-620-5.1	PAVEMENT MARKING (YELLLOW) WITH REFLECTIVE BEADS	SF	2,048			
25	P-620-5.2	PAVEMENT MARKING (WHITE) WITH REFLECTIVE BEADS	SF	118			
26	P-620-5.3	PAVEMENT MARKING (BLACK) WITHOUT REFLECTIVE BEADS	SF	2,709			
27	D-701-5.1	18" DIAMETER RCP CLASS V	LF	60			
28	D-701-5.2	24" DIAMETER RCP CLASS V	LF	424			
29	D-701-5.3	30" DIAMETER RCP CLASS V	LF	65			
30	D-751-5.2	4'X4' GRATE INLET W/MANHOLE TOP	EA	2			
31	D-751-5.3	5'X5' GRATE INLET W/MANHOLE TOP	EA	2			
32	D-751-5.5	4'X4' JUNCTION BOX W/MANHOLE TOP	EA	1			
33	D-751-5.6	6'X6' JUNCTION BOX W/MANHOLE TOP	EA	1			
34	D-751-5.7	10'X10' JUNCTION BOX W/MANHOLE TOP	EA	1			
35	T-901-5.1	HYDRO-MULCH SEEDING	ACRE	2			
36	T-904-5.1	SODDING	SY	5,500			
37	T-905-5.1	TOPSOILING	CY	611			
38	L-108-5.1	1/C NO. 8 AWG, 5KV, TYPE L-824 CABLE	LF	2,240			
39	L-108-5.2	1/C NO. 6 AWG COUNTERPOISE INCLUDING GROUND RODS	LF	1,430			
40	L-110-5.1	ELECTRICAL CONDUIT, 1-2" SCHEDULE 40 PVC	LF	2,240			
41	L-110-5.2	ELECTRICAL DUCT BANK, 4-4" SCHEDULE 40 PVC	LF	82			
42	L-112-4.1	DIRECTIONAL DRILL 1-2" CONDUIT, SCHEDULE 80	LF	150			
43	L-125-5.1	L-861T TAXIWAY EDGE LIGHT	EA	7			
44	L-125-5.2	L-861T (L) TAXIWAY EDGE LIGHT	EA	15			
45	L-125-5.3	L-858 (L) GUIDANCE SIGN, SIZE 3, STYLE 2, CLASS 1	EA	4			
46	L-125-5.4	REMOVE AIRFIELD LIGHT	EA	6			
47	L-125-5.5	MAINTENANCE OF AIRPORT LIGHTING SYSTEM DURING CONSTRUCTION	LS	1			
48	L-125-5.6	REMOVE CONDUIT AND CABLE	LS	1			
49	L-125-5.7	L-852(L) STYLE 3 TAXIWAY EDGE LIGHT - IN PAVEMENT	EA	2			
50	L-127-5.1	MODIFICATIONS OF ALCS	LS	1			
51	100.1	MOBILIZATION AND GENERAL CONDITIONS	LS	1			
52	100.2	INSURANCE AND BONDS	LS	1			
53	101.1	PREPARING RIGHT OF WAY	LS	1			
54	530.1	BARRICADES, SIGNS AND TRAFFIC HANDLING	LS	1			
55	TX 247	FLEX BASE COURSE	CY	484			
56	531.4	INSTALL R1-2 YIELD AIRCRAFT SIGN	EA	2			
57	TX 672	TYPE II-A-A RAISED PAVEMENT MARKERS	EA	16			
58	L-853	TYPE I SEMIFLUSH MARKER FOR CENTERLINE MARKING	EA	9			

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DESIGNED BY: JEH

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SHEET TITLE

SUMMARY OF QUANTITIES

SHEET NUMBER

C002

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CONTRACTOR'S SAFETY AND SECURITY REQUIREMENTS

SAFETY

1. GENERAL INTENT. THE CONTRACTOR SHALL CONFORM WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS AND GUIDELINES AS SET FORTH IN FEDERAL AVIATION ADMINISTRATION (FAA) AC NO. 150/5370-2 SERIES, ALONG WITH THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL DESIGNATE TO THE RPR, AIRPORT CONSTRUCTION MANAGER AND AIRPORT OPERATIONS, IN WRITING, THE NAME OF HIS "CONTRACTOR SAFETY/SECURITY OFFICER (CSSO)." THE CSSO SHALL REPRESENT THE CONTRACTOR ON SAFETY REQUIREMENTS FOR THE CONTRACT. THE CONTRACTOR OR CSSO SHALL THOROUGHLY ACQUAINT ALL SUPERVISORS AND EMPLOYEES WORKING AT THE AIRPORT ON THE IMPORTANCE OF FOLLOWING ESTABLISHED SAFETY AND SECURITY PROCEDURES THAT ARE INHERENT TO THIS ACTIVE AIR CARRIER AIRPORT. ADDITIONALLY, THE CONTRACTOR SHALL CONDUCT THE CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES ON SAFETY AS SPECIFIED IN PARAGRAPH NUMBER 9 BELOW.

2. CONTRACTOR VEHICLES. ALL CONTRACTOR AND SUBCONTRACTOR VEHICLES THAT ARE AUTHORIZED TO OPERATE ON THE PROJECT SHALL BE REQUIRED TO HAVE THEIR COMPANY LOGO OR NAME (12" MIN. LOGO/6" MIN LETTERS) ON BOTH SIDES OF THE VEHICLE AND A FLASHING AMBER LIGHT OR A 3' X 3' ORANGE AND WHITE CHECKERBOARD FLAG, EACH CHECKERBOARD COLOR BEING 1-FOOT SQUARE. ALL VEHICLES SHALL HAVE AIRPORT-ISSUED VEHICLE IDENTIFICATION PRIOR TO ENTERING THE AIR OPERATIONS AREA. ANY VEHICLE OPERATOR THAT DOES NOT HAVE AN AIRPORT BADGE THAT INDICATES THE VEHICLE OPERATOR IS AN "AUTHORIZED AIRPORT DRIVER" SHALL, AT ALL TIMES, STAY WITHIN THE CLOSED AIR OPERATIONS AREA (AOA) PROJECT LIMITS FOR EACH CONSTRUCTION PHASE OR BE ESCORTED UNDER THE CONTROL OF A RADIO EQUIPPED CONTRACTOR VEHICLE OR A RADIO EQUIPPED SUB-CONTRACTOR VEHICLE WHILE IN THE (AOA). ANY VEHICLE OPERATING ON THE PROJECT DURING THE HOURS OF DARKNESS SHALL UTILIZE ITS FLASHING AMBER LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES. 1) CONSTRUCTION EQUIPMENT AND VEHICLES SHALL NOT EXCEED 15 MPH ON THE HAUL ROUTES, RAMPS, TENANT CROSSINGS, ARFF CROSSING WITHIN THE AOA WITH CAUTIONS AND CANNOT EXCEED 25 MPH ON THE PERIMETER ROAD. THE DRIVERS HAVE TO REDUCE THE SPEED TO 15 MPH OR LESS BEFORE REACHING TO THE CURVE AND/OR THE TURN TO PREVENT ANY VEHICLE ACCIDENT. CONSTRUCTION EQUIPMENT AND VEHICLES WITHIN THE LIMITS OF CONSTRUCTION SHALL NOT EXCEED 10 MPH AT ALL TIMES. THIS INCLUDES THE CONSTRUCTION EQUIPMENT AND VEHICLES USING THE TEMPORARY PERIMETER ROAD DURING CONSTRUCTION.

   ALL NON-RADIO EQUIPPED CONTRACTOR VEHICLES THAT ARE REQUIRED TO OPERATE ON OR ACROSS ACTIVE RUNWAYS, TAXIWAYS, OR APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A RADIO EQUIPPED ESCORT VEHICLE OPERATED BY BADGED PERSONNEL ONLY. ESCORT VEHICLES SHALL BE MARKED AND LIGHTED AS DESCRIBED ABOVE. VEHICLES OPERATING ON AN ACTIVE RUNWAY OR TAXIWAY, OR WITHIN 125 FEET OF A RUNWAY CENTERLINE, SHALL BE EQUIPPED WITH AN APPROVED CONTRACTOR PROVIDED AVIATION BAND RADIO. RADIO EQUIPPED VEHICLES OPERATING ON ACTIVE RUNWAYS OR TAXIWAYS SHALL CONTINUOUSLY MONITOR GROUND CONTROL FREQUENCY 121.9 OR 348.6 MHZ. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME WILL WORKERS BE PERMITTED TO WALK ACROSS OPERATIONS AREAS ON THE AIRPORT.

3. COORDINATION OF WORK AREA CLOSURES. NO RUNWAY, TAXIWAY, APRON OR AIRPORT ROADWAY SHALL BE CLOSED WITHOUT WRITTEN APPROVAL OF AIRPORT OPERATIONS. TO ENABLE NECESSARY "NOTICES TO AIRMEN" (NOTAM) OR ADVISORIES TO AIRPORT SERVICES OR TENANTS, A MINIMUM OF 48 HOURS WRITTEN NOTICE REQUESTING CLOSING SHALL BE DIRECTED TO AIRPORT OPERATIONS, WHO WILL COORDINATE THE REQUEST.

   ANY CONSTRUCTION ACTIVITY WITHIN A TAXIWAY OBJECT FREE AREA, OR OPEN EXCAVATIONS IN EXCESS OF THREE INCHES DEEP WITHIN THE ABOVE AREAS, WILL REQUIRE CLOSURE OF THE AFFECTED TAXIWAY, UNLESS OTHERWISE APPROVED IN WRITING BY AIRPORT OPERATIONS.

4. COORDINATION OF WELDING AND TORCH CUTTING. OPEN FLAME WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED IN THIS PROJECT.

5. STOCKPILED MATERIALS. STOCKPILED MATERIAL WITHIN THE AOA SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST, PROPELLERS OR WIND CONDITIONS IN EXCESS OF TEN KNOTS. STOCKPILE HEIGHT SHALL BE LESS THAN 15 FEET AND BE LOCATED IN AN AIRPORT APPROVED LOCATION.

6. OPEN TRENCHES. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH BARRICADES, FLAGS AND LIGHTED BY APPROVED RED LIGHTS UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY AND DARKNESS.

7. FOREIGN OBJECT DEBRIS (FOD). DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEARS, PROPELLERS OR BEING INGESTED IN JET ENGINES SHALL BE PROPERLY CONTROLLED AND PICKED UP AT ALL TIMES. IF THESE MATERIALS ARE OBSERVED, THE CONTRACTOR SHALL REMOVE THEM IMMEDIATELY. THE CONTRACTOR SHALL PROVIDE WET/DRY VACUUM SWEEPERS CAPABLE OF MAINTAINING ALL HAUL ROUTES, APRONS, TAXIWAYS AND WORK AREAS FREE OF DEBRIS AND FOD AT ALL TIMES. THE AREAS SHALL BE KEPT CLEAN AND FREE TAXIWAYS OF DEBRIS AND FOD TO THE SATISFACTION OF THE AIRPORT AND TO THE RPR. DUST AND DEBRIS CONTROL IS SUBSIDIARY TO THE WORK AND IS NOT MEASURED FOR SEPARATE PAYMENT.

8. INSPECTION OF WORK AREAS. PRIOR TO OPENING ANY WORK AREA FOR AIRCRAFT OPERATIONS, THE CONSTRUCTION MANAGER WILL ARRANGE FOR INSPECTION BY THE RPR AND AIRPORT OPERATIONS. THE WORK AREAS INCLUDE BUT ARE NOT LIMITED TO THE CONSTRUCTION AREA AND ANY AREA THAT HAS BEEN CLOSED FOR WORK OR THAT HAS BEEN USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR. THESE AREAS MUST COMPLY WITH THE SAFETY REQUIREMENTS DEFINED FEDERAL AVIATION REGULATIONS (FAR) PART 139, AND INTERPRETED BY THE DESIGNATED OPERATION'S INSPECTOR, BEFORE PERMISSION WILL BE GRANTED FOR THE CONTRACTOR'S WORK CREW TO DEPART THE AREA.

9. FAA ADVISORY CIRCULARS. THE CONTRACTOR IS DIRECTED TO COMPLY WITH AND ACQUAINT HIS/HER EMPLOYEES WITH THE FOLLOWING SAFETY GUIDELINES, RELATED MATERIALS AND FAA ADVISORY CIRCULARS:

150/5200-18, LATEST EDITION	"AIRPORT SAFETY-SELF INSPECTION"
150/5210-5, LATEST EDITION	"PAINTING, MARKING OR LIGHTING OF VEHICLES USED ON AN AIRPORT"
150/5370-2, LATEST EDITION	"OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION"

   COPIES OF THESE DOCUMENTS ARE AVAILABLE AT THE FOLLOWING WEBSITE:

   WWW.FAA.GOV/AIRPORTS_AIRTRAFFIC/AIRPORTS/RESOURCES/ADVISORY_CIRCULARS

   CONTRACTOR RESPONSIBLE FOR STAYING UP-TO-DATE WITH ANY UPDATES OR REVISIONS TO THE ADVISORY CIRCULARS LISTED ABOVE.

10. AIRFIELD LIGHTING AND SIGNS. WORK CLOSING RUNWAYS OR TAXIWAYS WILL REQUIRE THE CONTRACTOR TO COVER THE APPROPRIATE SIGN PANELS WITH GEOTEXTILE FABRIC OR EQUAL PRODUCT AND SECURED WITH RATCHET STRAPS TO BLOCK THE SIGN FROM VIEW. NO TAPE WILL BE PERMITTED. COVER THE APPROPRIATE AIRFIELD LIGHTING WITH ALUMINUM FOIL TO SHOW THAT THEY ARE NOT AVAILABLE FOR USE. AIRPORT PERSONNEL WILL ASSIST AND SHOW THE CONTRACTOR WHICH SIGNS AND AIRFIELD LIGHTING ARE AFFECTED.

SECURITY

1. GENERAL INTENT: IT IS INTENDED THAT THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE AIRPORT SECURITY PLAN AND WITH THE SECURITY REQUIREMENTS SPECIFIED HEREIN BY AIRPORT OPERATIONS. THE CONTRACTOR SHALL DESIGNATE TO THE RPR AND AIRPORT OPERATIONS, IN WRITING, THE NAME OF HIS "CONTRACTOR SAFETY/SECURITY OFFICER (CSSO)." THE CSSO SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS FOR THE CONTRACT.

2. CONTRACTOR PERSONNEL SECURITY ORIENTATION: THE CSSO SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR AND SUB-CONTRACTOR PERSONNEL ON SECURITY REQUIREMENTS. ALL NEW CONTRACTOR EMPLOYEES SHALL BE BRIEFED ON SECURITY REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREA.

3. ACCESS TO THE SITE: CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON THE PLANS. NO OTHER ACCESS POINTS SHALL BE ALLOWED UNLESS APPROVED BY AIRPORT OPERATIONS. ALL CONTRACTOR TRAFFIC AUTHORIZED TO ENTER THE SITE SHALL BE EXPERIENCED IN THE ROUTE OR GUIDED BY EXPERIENCED CONTRACTOR PERSONNEL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE, AND FOR OPERATION AND SECURITY OF THE ACCESS GATE TO THE SITE. A CONTRACTOR'S FLAGMAN OR TRAFFIC CONTROL PERSON SHALL MONITOR AND COORDINATE ALL CONTRACTOR TRAFFIC AT ANY AOA ACCESS GATE WITH SECURITY. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. ACCESS GATES TO THE AOA SHALL BE LOCKED AND SECURED AT ALL TIMES WHEN NOT ATTENDED BY THE CONTRACTOR. IF THE CONTRACTOR CHOOSES TO LEAVE ANY ACCESS GATE OPEN, IT SHALL BE ATTENDED BY CONTRACTOR PERSONNEL WHO ARE FAMILIAR WITH THE REQUIREMENTS OF THE AIRPORT OPERATIONS SECURITY PROGRAM. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEANUP OF ANY DEBRIS DEPOSITED ALONG THE ACCESS ROUTE AS A RESULT OF HIS CONSTRUCTION TRAFFIC. DIRECTIONAL SIGNAGE FROM THE ACCESS GATE ALONG THE DELIVERY ROUTE TO THE STORAGE AREA, PLANT SITE OR WORK SITE SHALL BE AS DIRECTED BY AIRPORT OPERATIONS.

4. MATERIALS DELIVERY TO THE SITE: ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE WORK SITE WILL USE A DELIVERY ADDRESS, THE STREET NAME ASSIGNED TO THE ACCESS POINT AT THE CONTRACTOR'S STAGING SITE AT THE AIRPORT. THE NAME "SAN ANTONIO INTERNATIONAL AIRPORT" SHALL NOT BE USED IN THE DELIVERY ADDRESS AT ANY TIME. THIS WILL PRECLUDE DELIVERY TRUCKS FROM ENTERING INTO THE TERMINAL COMPLEX, OR TAKING SHORT CUTS THROUGH THE PERIMETER GATES AND ENTERING INTO AIRCRAFT OPERATIONS AREAS INAPPROPRIATELY.

5. CONSTRUCTION AREA LIMITS: THE LIMITS OF CONSTRUCTION, MATERIAL STORAGE AREAS, PLANT SITE, EQUIPMENT STORAGE AREA, PARKING AREA AND OTHER AREAS DEFINED AS REQUIRED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION SHALL BE MARKED BY THE CONTRACTOR. THE CONTRACTOR SHALL ERECT AND MAINTAIN AROUND THE PERIMETER OF THESE AREAS SUITABLE FENCING, MARKING AND/ OR WARNING DEVICES VISIBLE FOR DAY/NIGHT USE AT THE LOCATIONS SHOWN IN THE PLANS. TEMPORARY BARRICADES, FLAGGING AND FLASHING WARNING LIGHTS WILL BE REQUIRED AT CRITICAL ACCESS POINTS. TYPE OF MARKING AND WARNING DEVICES SHALL BE APPROVED BY AIRPORT OPERATIONS.

6. SECURITY IDENTIFICATION: ALL EMPLOYEES, AGENTS, VENDORS, INVITEES, ETC. OF THE CONTRACTOR OR SUBCONTRACTORS REQUIRING ACCESS TO THE AOA SHALL BE IN ACCORDANCE WITH THE AIRPORT SECURITY PROGRAM.

7. DRIVER TRAINING: ANY CONTRACTOR EMPLOYEE THAT WILL BE OPERATING A VEHICLE OR EQUIPMENT ON THE AIRFIELD WILL BE REQUIRED TO ATTEND AN AIRFIELD DRIVER TRAINING COURSE OFFERED BY AIRPORT OPERATIONS.

8. VEHICLE PARKING: CONTRACTOR EMPLOYEE VEHICLES SHALL BE RESTRICTED TO THE CONTRACTOR'S EMPLOYEE PARKING AREA IDENTIFIED ON THE PLANS AND ARE NOT ALLOWED OUTSIDE THE DESIGNATED AREA AT ANY TIME. CONTRACTOR TO PERFORM AT NO ADDITIONAL COST TO THE CITY LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT TESTING BEFORE USE OF AIRPORT PROPERTY. NO MAINTENANCE ON EQUIPMENT IS PERMITTED ON AIRPORT PROPERTY.

9. FINES: PAYMENT OF ALL FINES ASSESSED TO SAN ANTONIO INTERNATIONAL AIRPORT DUE TO VIOLATIONS BY THE CONTRACTOR OF FEDERAL AVIATION ADMINISTRATION (FAA) SECURITY OR SAFETY REQUIREMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

CONTACT INFORMATION:

EMERGENCIES: 210-207-3433

GENERAL SAFETY AND SECURITY NOTES

1. SAFETY IS PARAMOUNT. IF ANY OF THE CONTRACTOR'S PERSONNEL OR A MEMBER OF THE AIRPORT STAFF SEES AN UNSAFE SITUATION ON THE PROJECT, THEY ARE OBLIGATED TO STOP THE WORK, RESTORE A SAFE CONDITION AND NOTIFY A SUPERVISOR OF THE PROBLEM. AT THAT POINT THE RPR, AIRPORT REPRESENTATIVE AND THE CONTRACTOR WILL MEET, RESOLVE THE SITUATION AND CONTINUE THE EFFORT.

2. COMMUNICATIONS. PROPER COMMUNICATIONS IS ESSENTIAL TO THE SUCCESS OF THE PROJECT. ALL COMMUNICATIONS WILL BE HANDLED IN THE FOLLOWING MANNER. A REQUEST FROM A SUBCONTRACTOR WILL BE GIVEN TO THE CONTRACTOR. HE WILL EVALUATE IT AND DETERMINE IF THE OWNER NEEDS TO BE RESPONSIVE. IF SO HE WILL GIVE IT TO THE RPR WHO WILL GIVE IT TO AIRPORT OPERATIONS, WHO WILL DISSEMINATE IT TO THE APPROPRIATE AIRPORT DIVISION FOR A RESPONSE. THE RETURN INFORMATION WILL FOLLOW DOWN THE SYSTEM TO THE CONTRACTOR FOR HIS ACTION. EXCEPTION: IN CASE OF AN EMERGENCY, DIRECT COMMUNICATION IS AUTHORIZED TO QUICKLY RESOLVE THE SITUATION. ONCE STABILIZED, THE CONSTRUCTION TEAM (CONTRACTOR AND OWNER) WILL BE NOTIFIED OF THE SITUATION AND WHAT ACTIONS HAVE BEEN TAKEN.

3. CHANGES. ONLY ENGINEER APPROVAL IS AUTHORIZED TO MAKE CHANGES IN THE CONTRACT THAT WILL AFFECT THE CONTRACT AMOUNT AND THOSE REQUESTS MUST BE DONE THROUGH THE CHANGE ORDER SYSTEM.

4. CONSTRUCTION SAFETY PHASING PLAN COMPLIANCE. THE CONTRACTOR SHALL PROVIDE A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) THAT OUTLINES HOW THE CONTRACTOR WILL COMPLY WITH THE REQUIREMENTS OF THE CONSTRUCTION SAFETY PHASING PLAN (CSPP). THIS REQUIREMENT IS DETAILED IN THE PROJECT SPECIFICATIONS SECTION P-102, SAFETY AND SECURITY.

SAFETY PLAN COMPLIANCE DOCUMENT (SPCD)

THE SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) SHOULD INCLUDE A GENERAL STATEMENT BY THE CONSTRUCTION CONTRACTOR THAT HE/SHE HAS READ AND WILL ABIDE BY THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). IN ADDITION, THE SPCD MUST INCLUDE ALL SUPPLEMENTAL INFORMATION THAT COULD NOT BE INCLUDED IN THE CSPP PRIOR TO THE CONTRACT AWARD. THE CONTRACTOR STATEMENT SHOULD INCLUDE THE NAME OF THE CONTRACTOR, THE TITLE OF THE PROJECT OF CSPP. THE APPROVAL DATE OF CSPP, AND A REFERENCE TO ANY SUPPLEMENTAL INFORMATION (THAT IS "I, NAME OF THE CONTRACTOR, HAVE READ THE TITLE OF PROJECT CSPP, APPROVED ON DATE, AND WILL ABIDE BY IT AS WRITTEN AND WITH THE FOLLOWING ADDITIONAL AS NOTED:"). THE SUPPLEMENTAL INFORMATION IN THE SPCD SHOULD BE WRITTEN TO MATCH THE FORMAT OF THE CSPP INDICATING EACH SUBJECT BY CORRESPONDING CSPP SUBJECT NUMBER AND TITLE. IF NO SUPPLEMENTAL INFORMATION IS NECESSARY FOR ANY SPECIFIC SUBJECT, THE STATEMENT, "NO SUPPLEMENTAL INFORMATION", SHOULD BE WRITTEN AFTER THE CORRESPONDING SUBJECT TITLE. THE SPCD SHOULD NOT DUPLICATE INFORMATION IN THE CSPP:

COORDINATION: DISCUSS DETAILS OF PROPOSED SAFETY MEETING WITH THE AIRPORT OPERATOR AND WITH CONTRACTOR EMPLOYEES AND SUBCONTRACTORS.

1. PHASING: DISCUSS PROPOSED CONSTRUCTION SCHEDULE ELEMENTS, INCLUDING:
   A. DURATION OF EACH PHASE.
   B. DAILY START AND FINISH CONSTRUCTION, INCLUDING "NIGHT ONLY" CONSTRUCTION.
   C. DURATION OF CONSTRUCTION ACTIVITIES DURING:
      I. NORMAL RUNWAY OPERATIONS.
      II. CLOSED RUNWAY OPERATION.
      III. MODIFIED RUNWAY "AIRCRAFT REFERENCE CODE" USAGE.
3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY: THESE AREAS AND OPERATIONS SHOULD BE IDENTIFIED IN THE CSPP AND SHOULD NOT REQUIRE AN ENTRY IN THE SPCD.
4. CONTRACTOR ACCESS:
   PROVIDE THE FOLLOWING:
   A. DETAILS ON HOW THE CONTRACTOR WILL MAINTAIN THE INTEGRITY OF THE AIRPORT SECURITY FENCE (GATE GUARDS, DAILY LOG OF CONSTRUCTION PERSONNEL, AND OTHER).
   B. LISTING OF INDIVIDUALS REQUIRING DRIVING TRAINING (FOR CERTIFICATED AIRPORTS AND AS REQUESTED).
   C. RADIO COMMUNICATIONS.
      I. TYPES OF RADIOS AND BACKUP CAPABILITIES.
      II. WHO WILL BE MONITORING RADIOS.
      III. WHOM TO CONTACT IF THE ATCT CANNOT REACH THE CONTRACTOR'S DESIGNATED PERSON BY RADIO.
   D. DETAILS ON HOW THE CONTRACTOR WILL ESCORT MATERIAL DELIVERY VEHICLES.
5. WILDLIFE MANAGEMENT: DISCUSS THE FOLLOWING:
   A. METHODS AND PROCEDURES TO PREVENT WILDLIFE ATTRACTION.
   B. WILDLIFE REPORTING PROCEDURES.
6. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT: DISCUSS EQUIPMENT AND METHODS FOR CONTROL OF FOD, INCLUDING CONSTRUCTION DEBRIS AND DUST.
7. HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT: DISCUSS EQUIPMENT AND METHODS FOR RESPONDING TO HAZARDOUS SPILLS.
8. NOTIFICATION OF CONSTRUCTION ACTIVITIES:
   PROVIDE THE FOLLOWING:
   A. CONTRACTOR POINTS OF CONTACT.
   B. CONTRACTOR EMERGENCY CONTACT.
   C. LIST OF TALL OR OTHER REQUIRED EQUIPMENT FOR USE ON THE AIRPORT AND THE TIMEFRAME FOR SUBMITTING FAA FORM 7460-1 FORMS NOT PREVIOUS SUBMITTED BY THE AIRPORT OPERATOR OR THE DESIGN CONSULTANT.
   D. BATCH PLANT DETAILS, INCLUDING FAA FORM 7460-1 SUBMITTAL.
9. INSPECTION REQUIREMENTS: DISCUSS DAILY (OR MORE FREQUENT) INSPECTIONS AND SPECIAL INSPECTION PROCEDURES.
10. UNDERGROUND UTILITIES: DISCUSS PROPOSED METHODS OF IDENTIFYING AND PROTECTING UNDERGROUND UTILITIES.
11. PENALTIES: PENALTIES SHOULD BE IDENTIFIED IN THE CSPP AND SHOULD NOT REQUIRED AN ENTRY IN THE SPCD.
12. SPECIAL CONDITIONS: DISCUSS PROPOSED ACTIONS FOR EACH SPECIAL CONDITION IDENTIFIED IN THE CSPP.
13. RUNWAY AND TAXIWAY VISUAL AIDS, INCLUDING MARKING, LIGHTING , SIGNS AND VISUAL NAVAIDS: DISCUSS PROPOSED VISUAL AIDS INCLUDING THE FOLLOWING:
   A. EQUIPMENT AND METHODS FOR COVERING SIGNAGE AND AIRFIELD LIGHTS.
   B. EQUIPMENT AND METHODS FOR TEMPORARY CLOSURE MARKINGS (PAINT, FABRIC OR OTHER).
   C. TYPE OF TEMPORARY VISUAL GUIDANCE SLOPE INDICATION (VGSI).
14. MARKING AND SIGNS FOR ACCESS ROUTES. DISCUSS PROPOSED METHODS OF DEMARCATING ACCESS ROUTES FOR VEHICLE DRIVERS.
15. HAZARD MARKING AND LIGHTING: DISCUSS PROPOSED EQUIPMENT AND METHODS FOR IDENTIFYING EXCAVATION AREAS.
16. PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS, INCLUDING OBJECT FREE AREAS, OBSTACLE FREE ZONES, AND APPROACH/DEPARTURE SURFACES: DISCUSS PROPOSED METHODS OF IDENTIFYING, DEMARCATING AND PROTECTING AIRPORT SURFACES INCLUDES:
   A. EQUIPMENT AND METHODS FOR MAINTAINING TAXIWAY SAFETY AREA STANDARDS.
   B. EQUIPMENT AND METHODS FOR SEPARATION OF CONSTRUCTION OPERATIONS FROM AIRCRAFT OPERATIONS, INCLUDING, DETAILS OF BARRICADES.
17. FAA AC 150/5370-2F OR LATEST EDITION, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION LIST ALL REQUIREMENTS OF THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP).

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
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JOHN E. HIPPCHEN
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DESIGNED BY:	JEH

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SHEET TITLE

SAFETY AND SECURITY NOTES

SHEET NUMBER

C003

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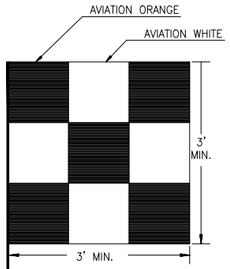


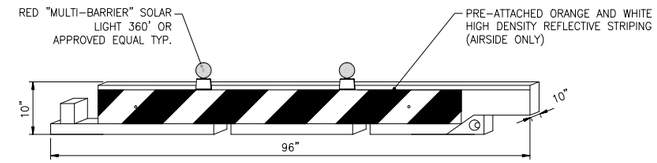
NOTE: SAFETY FLAG SHALL BE PROMINENTLY DISPLAYED ON CONSTRUCTION EQUIPMENT. (SEE NOTE 2 UNDER SAFETY, C003)

1 / C004 CONSTRUCTION SAFETY FLAG

SCALE: N.T.S.

GENERAL NOTE:

1. TEMPORARY CONSTRUCTION ITEMS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE END OF CONSTRUCTION.

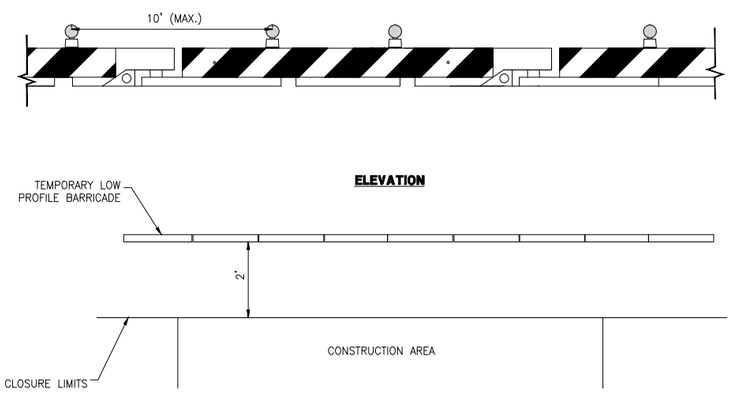


2 / C004 LOW PROFILE BARRICADE

SCALE: N.T.S.

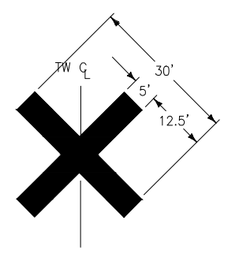
LOW PROFILE BARRICADE NOTES:

1. LOW LEVEL LIGHTED BARRICADES SHALL BE PLACED AROUND ALL OPEN EXCAVATIONS, HOLES, TRENCHES, PAVEMENT DROP OFFS, AND AREAS IDENTIFIED ON THE PHASING PLANS.
2. BARRICADES SHALL BE SHERWIN INDUSTRIES LOW-PROFILE BARRICADES MODEL AR-10X96 OR APPROVED EQUAL.
3. A MINIMUM OF 192 BARRICADES ARE ANTICIPATED FOR THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING TOTAL NUMBER OF NECESSARY BARRICADES FOR INTENDED CONSTRUCTION OPERATIONS, AND SHALL PROVIDE ADEQUATE NUMBER TO ENSURE REQUIRED SAFETY. FOLLOWING PROJECT COMPLETION, THE CONTRACTOR SHALL REMOVE ALL THE BARRICADES FROM AIRPORT PROPERTY.
4. AT A MINIMUM, BARRICADES SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS. THE PHASES DURING WHICH EACH BARRICADE IS TO REMAIN IN PLACE IS INDICATED ON THE PHASING PLANS. BARRICADES SHALL BE INSTALLED AT THE BEGINNING OF EACH PHASE AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. IF THE CONTRACTOR MUST TEMPORARILY REMOVE ANY OF THE BARRICADES (TO ALLOW CONSTRUCTION TRAFFIC TO TRAVEL INTO OR OUT OF THE CONSTRUCTION AREA, OR TO COMPLETE CONSTRUCTION AT THE PHASE BOUNDARY), THE CONTRACTOR SHALL PROVIDE FLAGMAN TO PREVENT AIRCRAFT FROM INADVERTENTLY TRAVELING INTO THE CONSTRUCTION AREA UNTIL THE BARRICADE IS REPLACED TO ITS ORIGINAL POSITION.
5. BARRICADES SHALL CONFORM TO THE LOW LEVEL BARRICADE DETAILS AS SHOWN ON THIS SHEET AND IN THE PLANS. THE CONTRACTOR SHALL MAINTAIN, MOVE AND REMOVE (AS DIRECTED) CONSTRUCTION BARRICADES AS SHOWN ON THE PLANS TO DELINEATE AREAS CLOSED TO AIRCRAFT TRAFFIC. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE BARRICADES AT ALL TIMES. ANY DAMAGED BARRICADES OR NONE WORKING LAMPS, SHALL BE REPLACED IMMEDIATELY.
6. LIGHTS MUST BE MOUNTED ON BARRICADES AND SPACED AT NO MORE THAN 10 FT.



3 / C004 LINKED LOW PROFILE BARRICADE LAYOUT

SCALE: N.T.S.

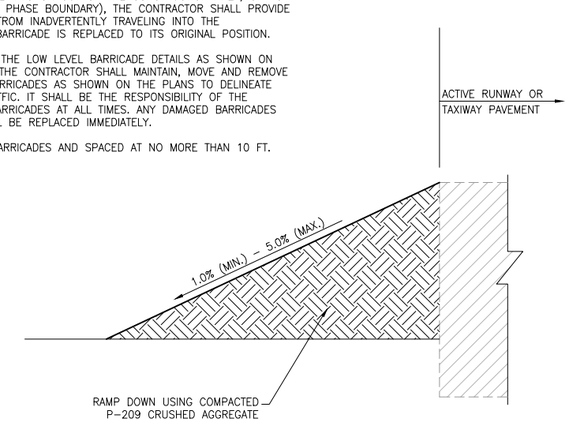


4 / C004 UNLIT TAXIWAY CLOSURE MARKER

SCALE: N.T.S.

UNLIT TAXIWAY CLOSURE MARKER NOTES:

1. CONTRACTOR SHALL PROVIDE TWO UNLIT TAXIWAY CLOSURE MARKERS FOR DAYTIME IDENTIFICATION. LOCATIONS OF THE UNLIT TAXIWAY MARKERS SHALL BE COORDINATED WITH THE AIRPORT PRIOR TO TAXIWAY CLOSURE.
2. UNLIT TAXIWAY CLOSURE MARKER SHALL BE YELLOW AND PROPERLY WEIGHTED TO THE PAVEMENT TO PREVENT DISLOCATION FROM WIND OR JETBLAST.
3. UNLIT TAXIWAY CLOSURE MARKER SHALL BE PLACED OVER TAXIWAY CENTERLINE AT THE TAXIWAY ENTRANCE WHENEVER A TAXIWAY IS CLOSED FOR CONSTRUCTION.
4. PAYMENT FOR UNLIT TAXIWAY CLOSURE MARKER PLACEMENT SHALL BE INCLUDED IN THE P-105-5.1 TEMPORARY CONSTRUCTION ITEMS PAY ITEM.



5 / C004 TYPICAL SAFETY AREA RAMP DOWN DETAIL

SCALE: N.T.S.

SAFETY AREA RAMP DOWN NOTES:

1. OPEN EXCAVATIONS GREATER THAN 3 INCHES IN DEPTH ARE NOT ALLOWED WITHIN ANY ACTIVE RUNWAY OR TAXIWAY SAFETY AREA.
2. CONTRACTOR SHALL RAMP DOWN ANY OPEN ACTIVE CONSTRUCTION AREAS WITHIN THE TAXIWAY SAFETY AREA PRIOR TO OPENING THE RESPECTIVE AIRFIELD PAVEMENT TO AIRCRAFT OPERATIONS.
3. SAFETY AREA RAMP DOWNS SHALL BE INSTALLED OUT TO THE LIMITS OF THE RUNWAY OR TAXIWAY SAFETY AREA AT A MINIMUM SLOPE OF 1.0% AND A MAXIMUM SLOPE OF 5.0% USING COMPACTED SOIL CONFORMING TO THE P-152 SPECIFICATION, CRUSHED AGGREGATE MATERIAL CONFORMING TO THE P-209 SPECIFICATION, OR ANOTHER MATERIAL APPROVED BY THE ENGINEER.
4. ALL COSTS ASSOCIATED WITH THE MATERIALS, LABOR, INSTALLATION AND REMOVAL OF SAFETY AREA RAMP DOWNS SHALL BE INCIDENTAL TO THE P-102-10.1 SAFETY AND SECURITY BID ITEM.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
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DESIGNED BY: JEH

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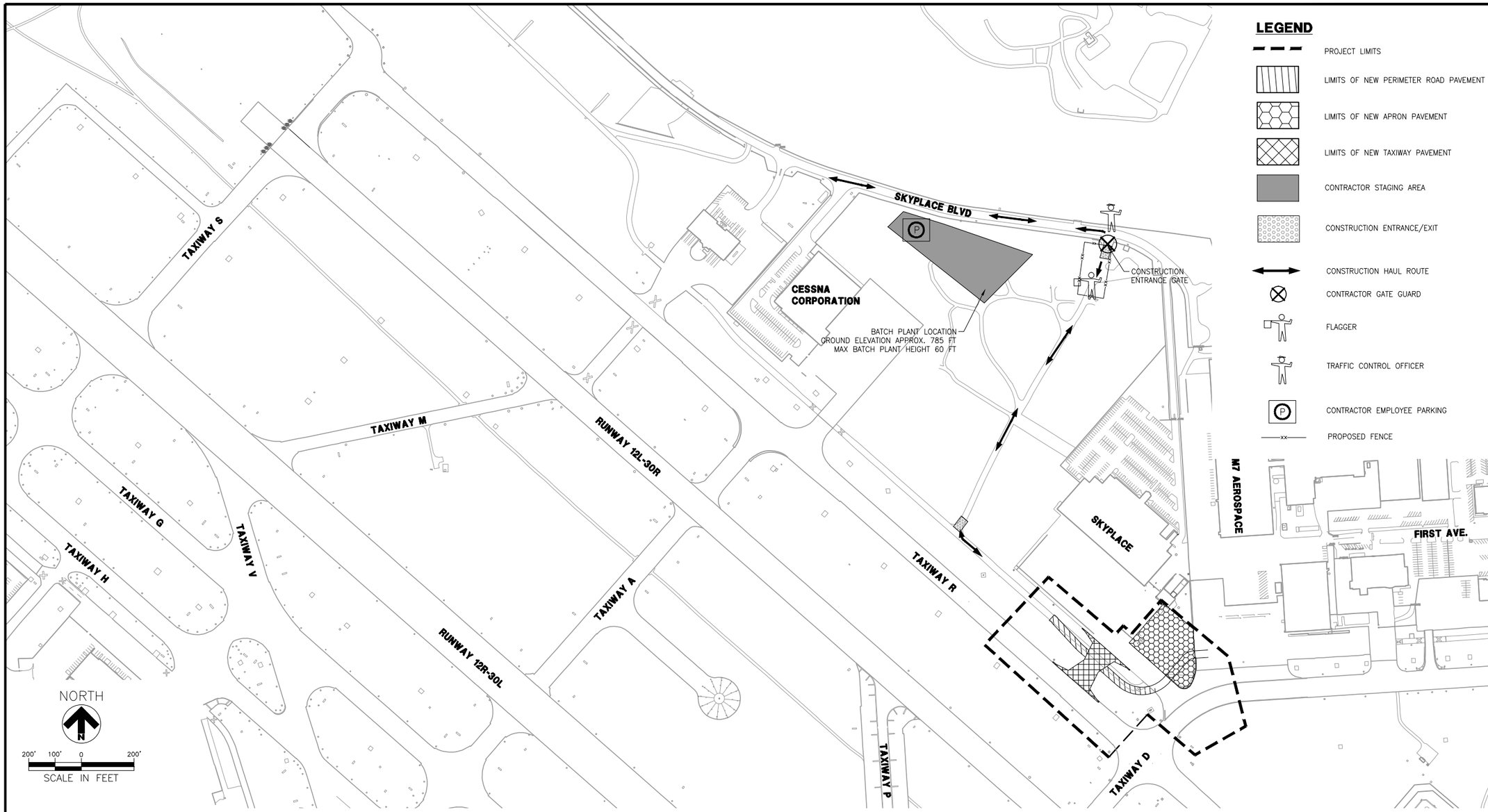

LEGEND

- PROJECT LIMITS
- LIMITS OF NEW PERIMETER ROAD PAVEMENT
- LIMITS OF NEW APRON PAVEMENT
- LIMITS OF NEW TAXIWAY PAVEMENT
- CONTRACTOR STAGING AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONSTRUCTION HAUL ROUTE
- CONTRACTOR GATE GUARD
- FLAGGER
- TRAFFIC CONTROL OFFICER
- CONTRACTOR EMPLOYEE PARKING
- PROPOSED FENCE

GENERAL CONTRACT NOTES

1. THE PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS. THE PROJECT IS SUBJECT TO REVIEW BY REPRESENTATIVES OF THE CITY OF SAN ANTONIO, AVIATION DEPARTMENT. THE PROGRAM MANAGER/CONSTRUCTION MANAGER (PM/CM), THE ENGINEER, THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE TRANSPORTATION SAFETY AGENCY (TSA). THE CONTRACTOR SHALL PROVIDE UNRESTRICTED ACCESS TO THE SITE FOR INSPECTION PURPOSES DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL CONTRACTOR PERSONNEL AGENTS, SUBCONTRACTORS, SUPPLIERS, VEHICLES, EQUIPMENT AND MATERIALS SHALL REMAIN WITHIN THE LIMITS OF THE PROJECT AND WITHIN THE SITE ACCESS, THE APPROVED AOA ACCESS GATES AND HAUL ROUTES ON THE PLANS.
3. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION WITH THE CM PRIOR TO COMMENCING WORK.
4. THE AIR OPERATIONS AREA (AOA) IS DEFINED AS PAVED AND UNPAVED AREAS OF THE AIRPORT INSIDE THE PERIMETER SECURITY FENCE AND INCLUDES BUT IS NOT LIMITED TO APRONS, TAXIWAYS. RUNWAYS AND RUNWAY/TAXIWAY SAFETY AREAS. NO VEHICLE OR EQUIPMENT SHALL MOVE UPON THE AOA UNLESS THE VEHICLES IS IDENTIFIED BY COMPANY LOGO OR NAME (12" MIN. LOGO/6" MIN. LETTERS) ON EACH SIDE OF THE VEHICLE. THE APPROPRIATE FLAG OR FLASHING AMBER LIGHT (FLAG OR LIGHT FOR DAYTIME ACTIVITIES AND LIGHT FOR NIGHTTIME ACTIVITY) AND IS MONITORING THE APPROPRIATE RADIO FREQUENCY OR IS UNDER THE ESCORT OF A VEHICLE MONITORING THE APPROPRIATE RADIO FREQUENCY. THE CONTRACTOR SHALL PROVIDE THE NECESSARY NUMBER OF RADIOS FOR THE VEHICLES AND EQUIPMENT.
5. MONITOR SAN ANTONIO GROUND CONTROL FOR 121.9 OR AS ASSIGNED BY THE AIR TRAFFIC CONTROL TOWER (ATCT) AT ALL TIMES.
6. CONTRACTOR FLAG MEN OR ESCORTS WILL BE REQUIRED TO DIRECT THE CONTRACTOR'S TRUCKS AND EQUIPMENT WHICH ARE OPERATING ON ACTIVE AREAS OF THE AOA IF NOT IN RADIO CONTACT WITH THE TOWER.
7. IT IS THE INTENT OF THESE PLANS TO MINIMIZE INTERFERENCE TO AIRCRAFT MOVEMENTS; THEREFORE, IN AREAS OF THE AOA, AIRCRAFT MOVEMENT SHALL HAVE THE RIGHT-OF-WAY.
8. CONTRACTOR SHALL OBTAIN ALL DEVELOPMENT AND CONSTRUCTION PERMITS REQUIRED AT THE CONTRACTOR'S EXPENSE.
9. THE PROJECT PAY ITEMS ARE APPROVED TO BE INCLUSIVE OF ALL WORK TO BE PERFORMED AS SHOWN IN THESE PLANS. ALL WORK NOT IDENTIFIED WITH A SPECIFIC PAY ITEM IS TO BE CONSIDERED REQUIRED/INCIDENTAL WORK TO COMPLETE THE PROJECT AND IS TO BE INCLUDED IN THE COST OF THE PROJECT PAY ITEMS PROVIDED.
10. THE CONTRACTOR SHALL HAVE SUFFICIENT EQUIPMENT AND PERSONNEL ON SITE TO ACCOMPLISH EFFICIENT AND PROMPT CONSTRUCTION OF THE VARIOUS WORK ITEMS, INCLUDING WORK ON MORE THAN ONE WORK ITEM SIMULTANEOUSLY.
11. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND LOCATE ALL SERVICES A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK IN THE AREA. IN THE EVENT OF DAMAGE TO UNDERGROUND UTILITIES, AIRPORT OR FAA POWER AND/OR COMMUNICATION LINES, WHETHER SHOWN ON THE DRAWINGS OR NOT, THE CONTRACTOR SHALL MAKE AND EXPEDITE REPAIRS TO REPLACE THE UTILITY LINE BACK IN FULL SERVICE AT NO INCREASE IN COST TO THE PROJECT. EXISTING UNDERGROUND UTILITIES ARE SHOWN FROM AVAILABLE UTILITY RECORDS AND OBSERVABLE SURFACE FEATURES. ACTUAL LOCATIONS MAY VARY AND UTILITIES NOT SHOWN ON THESE PLANS MAY EXIST. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANIES AND AIRPORT MAINTENANCE PERSONNEL FOR ASSISTANCE IN LOCATING ALL UNDERGROUND FACILITIES IN THE PROJECT AREA PRIOR TO CONSTRUCTION.

UTILITY SERVICE	CONTACT	PHONE NUMBER
SAN ANTONIO WATER SERVICES	GOVERNMENTAL RELOCATION	210-233-3466 210-233-3705
CPS ENERGY (CITY OF SAN ANTONIO PROJECTS)	JOHN OFFER	210-353-2012
CPS ENERGY (PROJECTS OTHER THAN CITY PROJECTS)	RICHARD RODRIGUEZ	210-353-2226
ATT	SANTIAGO PRINCE (LONG DISTANCE) THOMAS HAPPER (LOCAL)	210-471-0022 210-283-1990
TIME WARNER	STEPHEN ROBERTSON	210-382-4306
MCI/VERIZON	JERRY REEVES	214-674-0555
VIA	ERNEST SWEET	210-362-4816
TXDOT	CURTIS RABENALDT (SIGNALS) BRAD ADAMI (TRANSGUIDE)	210-207-7765 210-731-5109
COSA TRAFFIC	ADRIAN OLGUIN	210-207-7769

12. UTILITIES SHALL BE LOCATED BY CALLING 1-800-DIG-TESS. THE FAA AND THE CONTRACTOR SHALL UNCOVER ALL EXISTING UTILITIES AND VERIFY EXISTING ELEVATIONS OF SAME AT ALL UTILITY CROSSINGS BEFORE COMMENCING OTHER WORK. CONFLICTS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
13. EACH CONSTRUCTION AREA SHALL BE SHAPED TO ALLOW SURFACE RUNOFF OR GROUND WATER TO FLOW AWAY FROM THE PROJECT SITE DURING EACH WORK OPERATION. IF NECESSARY, SURFACE OR GROUNDWATER SHALL BE PUMPED IMMEDIATELY FROM EACH CONSTRUCTION AREA IN COMPLIANCE WITH THE EPA OR TCEQ REGULATIONS. THE COST OF DEWATERING SHALL BE SUBSIDIARY TO THE CONSTRUCTION.
14. CONTRACTOR SHALL MAKE ALL PROVISIONS, INCLUDING UTILITIES TO ESTABLISH THE CONTRACTOR'S STAGING AREA.

    THE CONTRACTOR SHALL PROVIDE A SECURITY FENCE AROUND THE UTILIZED STAGING AREA. THIS SECURITY FENCE SHALL INCLUDE VISUAL SCREENING FROM PUBLIC AREAS, TENANT AREAS, TERMINAL BUILDINGS OR AIRFIELD AREAS. WITHIN TWO WEEKS FROM THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL RESTORE THE STAGING AREA TO ITS ORIGINAL CONDITION AND APPROVAL BY THE AVIATION DEPARTMENT. THERE IS NO SEPARATE PAY ITEM FOR THE WORK ASSOCIATED WITH ESTABLISHING AND RESTORING THE CONTRACTOR STAGING AREA. THE REQUIRED WORK AND MATERIAL WILL BE ONE PART OF INCIDENTAL TO ITEM 100, MOBILIZATION AND ITEM 101, PREPARING RIGHT OF WAY.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND ACQUIRING AN ACCEPTABLE WATER SOURCE, PORT-O-POTTY AND POWER AS NECESSARY FOR CONSTRUCTION.
16. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL HORIZONTAL AND VERTICAL CONSTRUCTION STAKING AS REQUIRED FOR THE PROJECT DEVELOPMENT.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
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SHEET TITLE

CONTRACT LAYOUT PLAN AND GENERAL CONTRACT NOTES

SHEET NUMBER

C005

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GENERAL CONTRACT NOTES (CONT.)

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS/HER OWN PROJECT OFFICE AND COMPLETE UTILITY SERVICES. THE AIRPORT WILL NOT PROVIDE FACILITIES AND SERVICES TO THE CONTRACTOR DURING CONSTRUCTION. THE CONTRACTOR'S PERSONNEL ARE PROHIBITED FROM UTILIZING THE AIRPORT TERMINALS OR ANY TENANT FACILITIES.

18. THE CONTRACTOR SHALL VIDEO TAPE THE ENTIRE WORK AREA AFTER THE PRE-CONSTRUCTION MEETING AND PRIOR TO MOBILIZATION OF PERSONNEL AND EQUIPMENT. IN AREAS WHERE CONSTRUCTION EQUIPMENT CROSSES EXISTING PAVEMENTS, THE CONTRACTOR SHALL TAKE PICTURES OR VIDEO THE PAVEMENT PRIOR TO COMMENCING OPERATIONS. THE CONTRACTOR SHALL INCLUDE TWO COPIES OF ALL VIDEO AND/OR PHOTOGRAPHS TO THE CONSTRUCTION MANAGER AT THE ATTACHMENTS FOR THE FIRST INVOICE REQUEST (ONE FOR THE ENGINEER AND THE OTHER ONE FOR THE AIRPORT). THIS DOCUMENTATION SHALL BE USED TO DETERMINE THE AMOUNT OF DAMAGE, IF ANY, CAUSED TO THE PAVEMENTS AND SURROUNDING FACILITIES BY THE CONSTRUCTION EQUIPMENT AND THE QUALITY OF CONSTRUCTION WHICH SHALL BE REQUIRED FOR THE REPAIRS, IF ANY.

19. ALL SAWCUTTING SHALL BE SUBSIDIARY TO THE VARIOUS BID ITEMS IN THE CONTRACT.

20. WEEKLY PROGRESS MEETINGS ARE MANDATORY. THE DAY OF THE WEEK FOR THESE MEETING WILL BE DETERMINED BY AGREEMENT BETWEEN THE AIRPORT MANAGEMENT, THE CONSTRUCTION MANAGER AND THE CONTRACTOR. AT A MINIMUM, THE MEETING WILL BE ATTENDED BY THE PROJECT SUPERINTENDENT, CONSTRUCTING SUPERINTENDENT, FOREMEN OF ACTIVE WORK, (INCLUDING SUBS) AND THE CONTRACTOR'S QC REPRESENTATIVE.

21. THE CONTRACTOR SHALL SUBMIT HIS/HER CONSTRUCTION WORK SCHEDULE TO THE CONSTRUCTION MANAGER AND THE RESIDENT PROJECT REPRESENTATIVE (RPR) EACH WEEK PROJECTING UPCOMING WORK FOR THE NEXT THREE WEEKS.

22. THE CONTRACTOR'S PROJECT SUPERINTENDENT SHALL PARTICIPATE IN ALL COORDINATION MEETINGS AND SHALL BE ON SITE DURING ALL ACTIVITIES.

23. HAUL TRUCKS TRANSPORTING LOOSE MATERIALS SHALL USE LOAD COVERS AND SHALL BE LOADED SUCH THAT NO SPILLAGE OCCURS DURING TRANSIT ON THE STATE, MUNICIPAL, OR AIRPORT ROADWAYS, TAXIWAYS OR APRONS. ALL CONTRACTOR EQUIPMENT MUST BE MAINTAINED IN GOOD WORKING CONDITION WITHOUT ANY LEAKING. CONTRACTOR VEHICLES THAT LEAK OR DRIP OIL AND/OR FLUIDS ONTO ANY APRON, RAMP, TAXIWAYS, RUNWAYS OR ANY STREET PAVEMENT MUST BE REMOVED FROM THE PROJECT FOR REPAIR AT NO COSTS TO THE OWNER.

24. THE CONTRACTOR SHALL USE THE AVIATION DEPARTMENT SOIL MANAGEMENT PLAN AT NO ADDITIONAL COST TO THE CITY TO HANDLE ALL CONSTRUCTION ACTIVITIES FOR THE AIRPORT PROJECTS. THE SOIL MANAGEMENT PLAN CAN BE DOWNLOADED FROM THE AVIATION WEBSITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITIES TO COORDINATE ALL OFF-AIRPORT ROUTES WITH APPROPRIATE AUTHORITIES. PROVIDE COPIES OF ALL APPROVALS TO THE OWNER. ON-AIPORT HAULING SHALL BE COORDINATED WITH CM AND APPROVED IN ADVANCE TO MINIMIZE IMPACT TO AIRPORT.

25. CONTRACTOR EQUIPMENT AND VEHICLES SHALL TRAVEL A MINIMUM AMOUNT ON NEWLY CONSTRUCTED PAVEMENTS SO THAT THESE AREAS WILL NOT BE DAMAGED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE TO THE NEWLY CONSTRUCTED PAVEMENTS AT THE CONTRACTOR'S EXPENSE. DAMAGE TO EXISTING PAVEMENT OR PAVEMENT MARKING SHALL BE REPAIRED AT ORIGINAL OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EFFORT AND COST OF IMMEDIATE CLEANING OF EARTH TRACKING AND SPILLS ON PAVED SURFACES RESULTING FROM THE CONTRACTOR'S OPERATIONS. BECAUSE OF THE POTENTIAL FOR EXTREME DAMAGE TO AIRCRAFT ENGINES BY INGESTION OF FOREIGN OBJECTS, THE CONTRACTOR SHALL OPERATE AND MAINTAIN MECHANICAL VACUUM SWEEPER (WET/DRY) EQUIPMENT COMPLETE WITH OPERATIONS ON THE PROJECT DURING ANY HAULING OR OTHER OPERATIONS ACROSS TAXIWAYS, TAXILANES OR APRONS. AT A MINIMUM, TWO VAC TRUCKS PER EACH PROJECT ARE REQUIRED, IF THE PROJECT COSTS ARE OVER 5 MILLION DOLLARS, ONE VAC PER CROSSING OF ACTIVE TAXIWAYS, RUNWAYS, PERIMETER ROAD STREETS, AND/OR RAMPS IS REQUIRED. THE VAC OPERATORS CANNOT HAVE OTHER DUTY AT THE SAME TIME.

27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE REPAIR OF ANY DAMAGE TO AIRPORT/AIRLINE FACILITIES, INCLUDING BUT NOT LIMITED TO EXISTING PAVEMENTS, UNDERGROUND CABLES, LIGHTS, SIGNS, BUILDINGS, FENCES, EQUIPMENTS, ETC., CAUSED DURING CONSTRUCTION. ALL REPAIRS MUST BE MADE IN ACCORDANCE WITH THE CM AND EQUAL OR BETTER QUALITY AND IN COMPLIANCE WITH AIRPORT AND/OR FAA REQUIREMENTS. ALL REPAIR AND REPLACEMENT COSTS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

28. ALL MATERIAL SUBMITTALS FOR ITEMS TO BE USED IN CONSTRUCTION OF THE PROJECT SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER FOR REVIEW AND APPROVAL. A MINIMUM OF 10 DAYS PRIOR TO COMMENCEMENT OF THE ASSOCIATED WORK.

29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL WASTE MATERIAL GENERATED DURING CONSTRUCTION. WASTE MATERIAL MUST BE REMOVED FROM THE WORK SITE AND DISPOSED OF IN SUCH A MANNER AS TO NOT DAMAGE THE OWNER'S OR OTHER PERSON'S PROPERTY. (NO SEPARATE PAY FOR THE ITEM).

30. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SECURITY TO PROTECT HIS OWN PROPERTY, EQUIPMENT, AND WORK IN PROGRESS.

31. VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE COMMENCING ANY WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPORT ANY DISCREPANCIES TO THE OWNER IN A TIMELY MANNER.

32. THE DRAWINGS SHOW AS MUCH INFORMATION AS CAN BE REASONABLY OBTAINED FROM THE FIELD OBSERVATION, SURVEY AND EXISTING CONSTRUCTION DRAWINGS REGARDING THE TOPOGRAPHIC FEATURES, AND ELEVATIONS, AS WELL AS THE LOCATION AND NATURE OF PIPELINES, UNDERGROUND CABLES, UTILITIES, ETC., HOWEVER, THE ACCURACY OF COMPLETENESS OF SUCH INFORMATION IS NOT GUARANTEED.

33. NO OPEN TRENCHES OR DROP OFFS ARE PERMITTED, AREA NEEDS TO BE FENCED OFF WITH REFLECTIVE SAFETY FENCE, LIGHTED LOW PROFILE BARRICADES AND/OR STEEL PLATES MAY NEED TO BE USED AT NO COSTS TO THE OWNER.

34. HORIZONTAL CONTROL MONUMENTS ARE SHOWN ON THE PLANS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONSTRUCTION LAYOUTS, AND GRADE CONTROL SURVEYING FOR CONSTRUCTION OF THE PROJECT.

35. CONTRACTOR SHALL BE RESPONSIBLE FOR PERMANENT SERVICE TERMINATION ASSOCIATED WITH UTILITY LINES TO BE REMOVED AND ABANDONED.

36. CONTRACTOR SHALL MAINTAIN A COPY OF ALL PERMITS ON THE JOBSITE.

37. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ROCK AND ALL OTHER MATERIALS ENCOUNTERED REGARDLESS OF THEIR NATURE OR THE MANNER IN WHICH THEY ARE REMOVED.

38. WHERE FINISHED CONTOURS ARE SHOWN TO MATCH EXISTING CONTOURS ON THE GRADING PLANS. NO GRADE SEPARATION IS ALLOWABLE. CONTRACTOR SHALL ADJUST GRADING AS NECESSARY TO ACCOMPLISH THIS REQUIREMENT.

39. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACTOR DOCUMENTS.

39. (CONT.) THE CONTRACTORS IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS COVERING THE PRESENCE AND ACTIVITY OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

40. CONTRACTOR SHALL FURNISH THE ENGINEER WITH AS-BUILT PLANS INDICATING THE ACTUAL MEASUREMENTS, LOCATIONS OF UTILITY LINES AND SITE IMPROVEMENTS, INCLUDING FAA SYSTEMS, INSTALLED OR ENCOUNTERED. THE AS-BUILT DRAWINGS HAVE TO BE PROVIDED TO THE ENGINEER WITHIN TWO WEEKS FROM THE FINAL ACCEPTANCE OF THE CONSTRUCTIONS.

41. CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING SANITARY SEWERS AT ALL TIMES DURING CONSTRUCTION.

42. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CITY PUBLIC SERVICE ENERGY MUST MAINTAIN ACCESS TO GAS VALES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND GAS VALVES THAT ARE IN THE PROJECT AREAS.

43. NO EXTRA PAYMENT WILL BE MADE FOR INCIDENTAL WORK OR MATERIALS REQUIRED TO COMPLETE A CONTRACT PAY ITEM. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.

44. WHENEVER POWER POLES ARE ADJACENT TO THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PROPER SHORING, BRACING, AND/OR OTHER SUITABLE SUPPORT FOR THE POLES DURING CONSTRUCTION (NO SEPARATE PAY ITEM).

45. OVERHEAD POWER LINES EXIST IN THE AREA OF THE PROJECT OR HAUL ROUTES. TEXAS LAW ARTICLE 1436C, PROHIBITS ALL ACTIVITIES IN WHICH PERSONS OR EQUIPMENT MAY COME WITHIN SIX (6) FEET OF ENERGIZED OVERHEAD POWER LINES, AND FEDERAL REGULATIONS, TITLE 29, PART 1910.180(I) AND PART (1926.550(A) (15) REQUIRE A MINIMUM OF TEN (10) FEET FROM THESE FACILITIES WHERE CONTRACTOR MUST WORK NEAR OVERHEAD POWER LINES, CALL 210-353-2012 FOR THE LINES TO BE DE-ENERGIZED AND/OR MOVED AT CONTRACTOR'S EXPENSE. REGARDING THE NOTIFICATION, THE CONTRACTOR NEEDS TO PROVIDE A TECH OPS AND THE AVIATION DEPARTMENT AIRFIELD FACILITIES SEVEN (7) BUSINESS DAYS IN ADVANCE, AND 1.5 MONTHS FOR CPS ENERGY.

46. BLASTING IS NOT ALLOWED.

47. WATER LINE CROSSING: WHERE THE MINIMUM 9 FEET SEPARATION DISTANCE BETWEEN SEWER LINES AND WATER LINES/MAIN CANNOT BE MAINTAINED, INSTALLATION OF WATER AND SEWER LINE SHALL BE IN STRICT ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (30 TAC 290.44(E) AND 317.13 APPENDIX E.)

48. EROSION AND SEDIMENTATION CONTROL: STORMWATER POLLUTION PREVENTION PLANS AND PROCEDURES SHALL BE IMPLEMENTED ACCORDING TO TCEQ AND EPA REGULATIONS FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE ATTACHED SW3P PLAN AND THESE REGULATIONS.FINAL PROJECT ACCEPTANCE SHALL NOT BE GRANTED UNTIL ALL PERMANENT STABILIZATION MEASURES HAVE BEEN ESTABLISHED. FURTHER INFORMATION REGARDING SAN ANTONIO AIRPORT SYSTEM'S SW3P, SOIL MANAGEMENT PLAN, F FUEL SPILL RESPONSE PLAN, AND NOISE MANAGEMENT PROGRAM CAN BE FOUND AT AVIATION DEPARTMENT WEBSITE UNDER ENVIRONMENTAL STEWARDSHIP: HTTP://WWW.SANANTONIO.GOV/AVIATION/.

49. CONSTRUCTION PERSONNEL WILL NOT BE ALLOWED TO OPERATE VEHICLES OR EQUIPMENT IN THE AOA UNTIL THEY HAVE SUCCESSFULLY COMPLETED THE AIRPORT AOA DRIVING SAFETY COURSES.

50. DURING THE PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE OR AS OTHERWISE NOTED IN THE PLANS. AIRCRAFT USE OF AREAS NEAR THE CONTRACTOR'S WORK AREA WILL BE CONTROLLED BY ATCT GROUND CONTROL, AIRPORT OPERATIONS AND THE AIRLINES TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW HIS/HER EMPLOYEES, SUBCONTRACTORS, AND SUPPLIERS TO ENTER OR TO REMAIN IN ANY PART OF THE AIRPORT WHICH COULD BE HAZARDOUS TO PERSONS OR AIRCRAFT OPERATIONS. WHENEVER AIRCRAFT OPERATIONS REQUIRE, THE CONSTRUCTION MANAGER MAY ORDER THE CONTRACTOR TO SUSPEND OPERATIONS, MOVE PLANT, PERSONNEL, EQUIPMENT, AND MATERIALS TO A SAFE LOCATION AND STAND BY UNTIL AIRCRAFT USE IS COMPLETED.

51. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL SHEETING AND BRACING AS NECESSARY TO SUPPORT THE SIDES OF ALL TRENCHES AND OTHER EXCAVATIONS AS REQUIRED BY CURRENT OSHA REGULATIONS. COSTS OF SHEETING AND BRACING SHALL BE SUBSIDIARY TO THE CONSTRUCTION.

52. THE CONTRACTOR SHALL PROVIDE ONE OR MORE MOTORIZED MECHANICAL VACUUM SWEEPER PLUS AT LEAST ONE OPERATIONAL SPARE, ALONG WITH A "FOREIGN OBJECTS DAMAGE" (FOD) PLAN PRIOR TO BEGINNING WORK. THE FOD PLAN AND DAILY ACTIVITIES SHALL BE PRESENTED BY THE CONTRACTOR PRIOR TO INITIATION OF WORK. THE FOD PLAN IS SUBJECT TO ADVANCE APPROVAL BY THE CONSTRUCTION MANAGER. THE MECHANICAL SWEEPER/VACUUM WILL REMAIN ON SITE AND OPERATIONAL FULL TIME AS LONG AS THAT WORK CONTINUES INSIDE AOA AREA, INCLUDING PERIMETER ROADS, VEHICLE LANES, TENANT ENTRANCE CROSSINGS, TERMINAL RAMPS, TAXIWAYS AND RUNWAYS.

53. WORK SHALL NOT COMMENCE UNTIL:
    - A. SUFFICIENT LIGHTED BARRICADES ARE IN PLACE TO CONFINE THE WORK AREA AND TO CREATE A BARRIER TO SEPARATE THE CONSTRUCTION AREA FROM THE NON-CONSTRUCTION AREAS.
    - B. ALL SAFETY EQUIPMENT FOR PERSONNEL AND CONSTRUCTION EQUIPMENT IS IN PLACE AND OPERABLE.
    - C. ALL PERSONNEL WORKING WITH THE AOA HAVE BEEN PROPERLY TRAINED AND BADGED BY THE AIRPORT SECURITY DIVISION AND OPERATIONS DIVISION TO WORK WITHIN THE AOA.
    - D. THE CONTRACTOR HAS FAMILIARIZED HIS/HER PERSONNEL WITH THE HORIZONTAL AND VERTICAL CLEARANCE NEEDED TO PROVIDE FOR SAFE CONSTRUCTION OPERATIONS ADJACENT TO ACTIVE TAXIWAYS AND TAXILANES.
    - E. THE CONTRACTOR HAS TO DEVELOP, SUBMIT HIS/HER QUALITY CONTROL, SITE SAFETY AND FOD PLANS TO THE OWNER FOR APPROVAL.

54. THE CONTRACTOR SHALL PROVIDE A FULL TIME SAFETY PROFESSIONAL TO MANAGE THE CONTRACTOR'S SAFETY PLAN.

55. THE MAXIMUM HEIGHT OF CONSTRUCTION EQUIPMENT SHALL NOT EXCEED 25' WITHOUT APPROVAL IN ADVANCE.

56. ALL CONSTRUCTION EQUIPMENT MUST BE KEPT AT A DISTANCE GREATER THAN 25' FROM THE WINGTIPS OF AIRCRAFT.

57. THE CONTRACTOR SHALL MAKE PROVISIONS SUCH THAT HINDRANCE TO SERVICING OPERATIONS AT THE AIRCRAFT GATES ADJACENT TO CONSTRUCTION ARE KEPT TO A MINIMUM.

58. ANY FINE ASSESSED TO THE SAN ANTONIO AVIATION DEPARTMENT DUE TO VIOLATION BY THE CONTRACTOR OF FAA SECURITY REQUIREMENTS AND/OR TSA SECURITY REQUIREMENTS WILL BE PASSED ON TO THE CONTRACTOR.

59. ALL ACCESS ROADS TO MARSHALLING AREAS AND/OR WORK AREAS ARE TO BE DEVELOPED AND/OR MAINTAINED BY THE CONTRACTOR. THESE ROADS ARE TO BE RETURNED TO THEIR ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT.

60. THE CONTRACTOR SHALL PROVIDE A TRAINED UNIFORMED EMPLOYEE ACCEPTABLE TO THE AIRPORT SECURITY DIVISION, AND TSA, AND A FUNCTIONING TELEPHONE AT EACH AOA GATE AT ALL TIMES THAT SUCH A GATE IS UNLOCKED. ALL PERSONNEL AND VEHICLES REQUIRED ACCESS TO THE AOA SHALL COMPLY WITH ALL REQUIREMENTS OF THE AIRPORT SECURITY AND TSA. THE CONTRACTOR SHALL RECORD ALL NAMES AND VEHICLES ENTERING THE AOA GATE CONTROLLED BY THE CONTRACTOR.

61. ALL TEMPORARY MARKING AND SIGNS FOR THE PERIMETER ROAD AND/OR ACCESS ROUTES SHALL MEET AC 150/5340-18 STANDARDS FOR AIRPORT SIGN SYSTEMS AND FEDERAL HIGHWAY ADMINISTRATION PUBLICATION, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS.

62. SIGNS FOR VEHICLE OPERATORS SHALL CONFORM TO THE STANDARDS IN THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) PUBLICATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS.

63. BATCH PLANTS ARE PERMITTED AT THE DESIGNATED LOCATION STATED ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL APPLICABLE PERMITS. EACH BATCH PLANT MUST BE LIT WITH AN OBSTRUCTION LIGHT MEETING FAA CRITERIA FOR OBSTRUCTION LIGHTING. CONTRACTOR SHALL SUBMIT HEIGHT AND LOCATION OF BATCH PLANT TO FAA FOR REVIEW VIA FAA 7460 FORM.

64. TRAFFIC CONTROL OFFICER SHALL BE LOCATED ON SKYPLACE BLVD. DURING HIGH VOLUME HAULING OPERATIONS. TO BE PAID UNDER ITEM 530.1.

CONSTRUCTION NOTES

1. SANITARY FACILITIES ARE TO BE SUPPLIED BY THE CONTRACTOR AND CAN ONLY BE LOCATED WITHIN SECURED CONSTRUCTION AREAS.
2. ALL ACCESS ROADS TO STORAGE AREAS AND/OR WORK AREAS ARE TO BE DEVELOPED AND MAINTAINED BY THE CONTRACTOR. THESE ROADS ARE TO BE RETURNED TO THEIR ORIGINAL OR BETTER CONDITION BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR'S JOB SUPERINTENDENT IS TO MEET WITH RESIDENT PROJECT ENGINEER (RPR) PRIOR TO THE START OF EACH WORKING DAY TO COORDINATE DAILY CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR IS TO COORDINATE WITH THE RESIDENT PROJECT REPRESENTATIVE (RPR) AND THE AVIATION DEPARTMENT CONCERNING SAFETY IN ASSURING THAT POWER IS OFF IN THE SYSTEM WHILE THE ELECTRICAL WORK IS UNDERWAY. SPECIFICALLY, THEY ARE TO AGREE ON A CONTROL AND CHECK PROCEDURE TO PREVENT ACCIDENTAL POWER RECONNECTION. THESE AGREED UPON PROCEDURES ARE TO BE DOCUMENTED IN A WRITTEN OUTLINE, SIGNED BY BOTH GROUPS AND A COPY ON FILE WITH THE RESIDENT PROJECT ENGINEER (RPR), AND THE AVIATION DEPARTMENT BEFORE ANY SUCH WORK IS UNDERTAKEN.
5. CONTRACTOR SHALL VERIFY THE SIZE OF EXISTING CABLES WHERE SPLICES AND CONNECTORS OCCUR IN ORDER TO PROVIDE THE PROPER SPLICE CONNECTOR KITS.
6. AT NO TIME SHALL ANY EXCAVATION AREAS BE LEFT UNATTENDED UNLESS APPROPRIATE MARKING AND B BARRICADING IS EMPLOYED TO SATISFY THE OWNER AT NO ADDITIONAL COSTS TO THE OWNER.
7. DEMOLITION AND EXCAVATION SOILS:
    - A. BUILDING MATERIALS, UNCLASSIFIED DEMOLITION SOILS AND FENCING SHALL BE LEGALLY DISPOSED OF OUTSIDE AIRPORT PROPERTY.
    - B. CONTAMINATED SOILS, IF ENCOUNTERED, SHALL BE STOCKPILED AND COVERED WITH 10 MIL VISQUINE TO PREVENT RAINWATER CONTAMINATION AND UNCONTROLLED VAPOR EMISSIONS. ASK FOR PERMISSION BEFORE REMOVING THE CONTAMINATED MATERIAL OUT OFF THE AIRPORT PROPERTY.
    - C. CONCRETE RUBBLE, CEMENT STABILIZED BASE, REINFORCING STEEL AND ASPHALT SHALL BE LEGALLY DISPOSED OF OUTSIDE AIRPORT PROPERTY.
    - D. UNCONTAMINATED SOILS SHALL BE STOCKPILED WITHIN THE PHASING AREAS, INCLUDING HEIGHT RESTRICTION UNTIL SUCH TIME THAT THEY ARE USED OR REMOVED FROM THE AIRPORT.
8. SEE STORM WATER POLLUTION PREVENTION PLAN FOR TURF REQUIREMENTS.
9. ALL CONCRETE FOR STRUCTURES, CURBS, RIPRAP, ETC, SHALL CONFORM TO FAA SPECIFICATION P-610.
10. ALL CONCRETE AND TAXIWAY CONCRETE SHALL CONFORM TO FAA SPECIFICATION P-501.
11. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL UTILITIES IN THE PROJECT AREA UNDER DEMOLITION AND CONSTRUCTION.
12. RESTRICTED AIRPORT AREA MUST REMAIN SECURE AT ALL TIMES. TEMPORARY FENCE ADEQUATE FOR THIS PURPOSE SHALL BE ERECTED PRIOR TO DEMOLITION AND ERECTION OF PERMANENT SECURITY FENCE. NO SEPARATE PAY ITEM FOR TEMPORARY FENCES.
13. EMPLOYEE PARKING WILL NOT BE PROVIDED BY OWNER. CONTRACTOR SHALL ARRANGE FOR OFF-SITE PARKING AND TRANSPORTATION TO JOB SITE.
14. ALL PERSONNEL OPERATING VEHICLE IN THE AOA MUST HAVE RECEIVED TRAINING AND HAVE A TEXAS DRIVERS LICENSE AND AN AIRPORT DRIVING LICENSE.

MATERIAL SAFETY DATA SHEETS (MSDS):

1. SUBCONTRACTORS ARE REQUIRED TO BRING COPIES OF MSDS'S FOR ALL HAZARDOUS CHEMICALS BROUGHT INTO THE AIRPORT PROPERTY, PROJECT SITES AND/OR THE STAGING AREAS OUTSIDE AIR OPERATIONS AREA. THESE WILL BE RETAINED BY THE MSDS COORDINATOR AND WILL BE ACCESSIBLE TO ALL EMPLOYEES.
2. EACH SUBCONTRACTOR MUST BRING ITS SPECIFIC HAZARDOUS COMMUNICATION PROGRAM AND MSDS' IN A BINDER LABELED WITH THE CONTRACTOR'S NAME AND IDENTIFIED AS A HAZARDOUS COMMUNICATION PROGRAM. UPON LEAVING THE SITE, AND THE REMOVAL OF ALL HAZARDOUS MATERIALS, THE BINDER WILL BE RETURNED TO THE SUBCONTRACTORS INVOLVED.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED:	JULY 2014
REVIEWED BY:	NGS
DRAWN BY:	ALL
DESIGNED BY:	JEH

RS&H PROJECT NUMBER
223-3267-004

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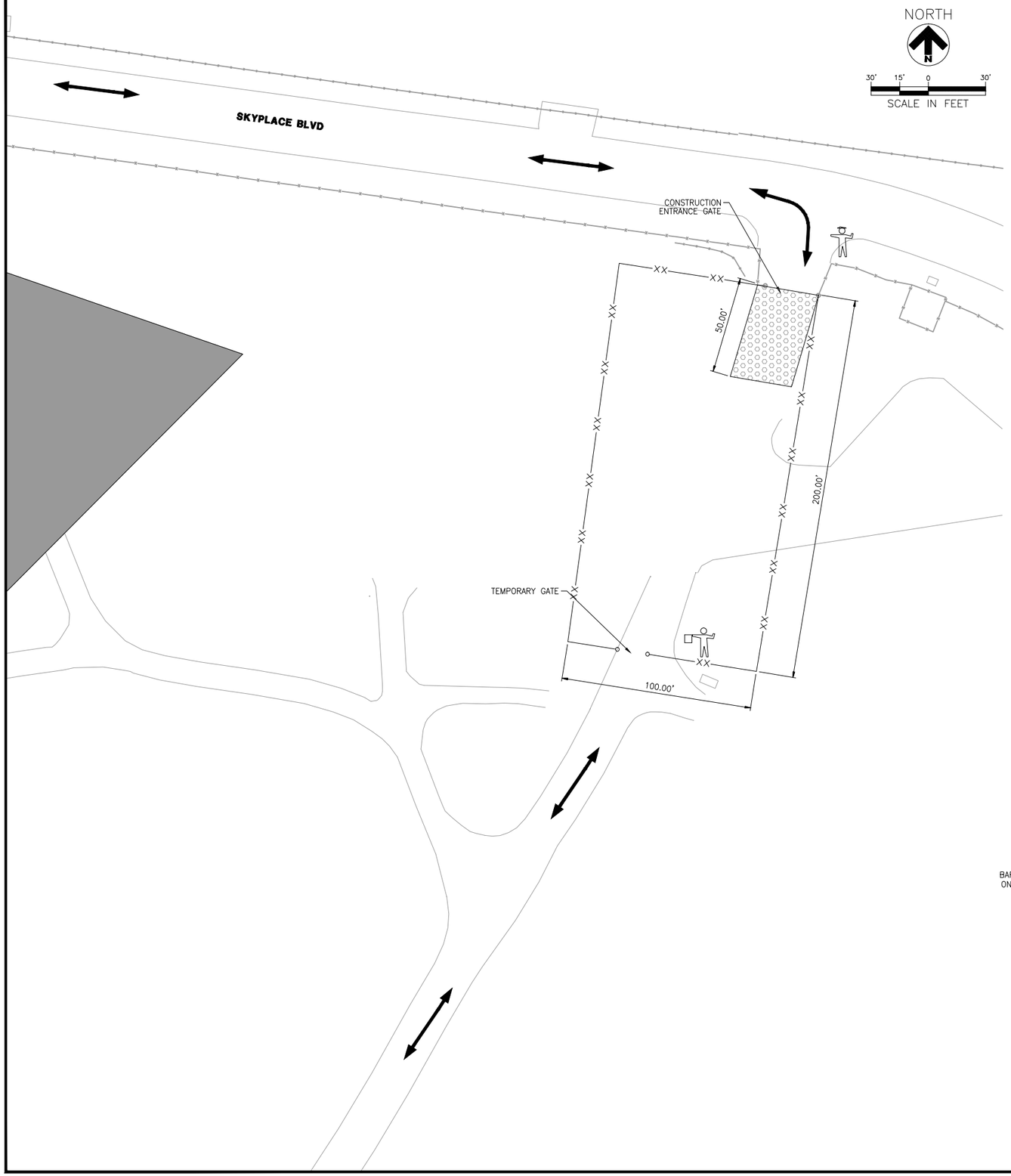
SHEET TITLE

GENERAL CONTRACT NOTES

SHEET NUMBER

C006

ISSUED FOR BID
NOT FOR CONSTRUCTION

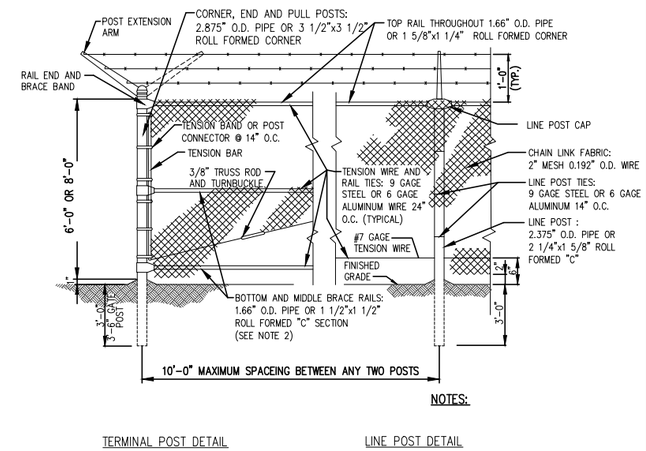


LEGEND

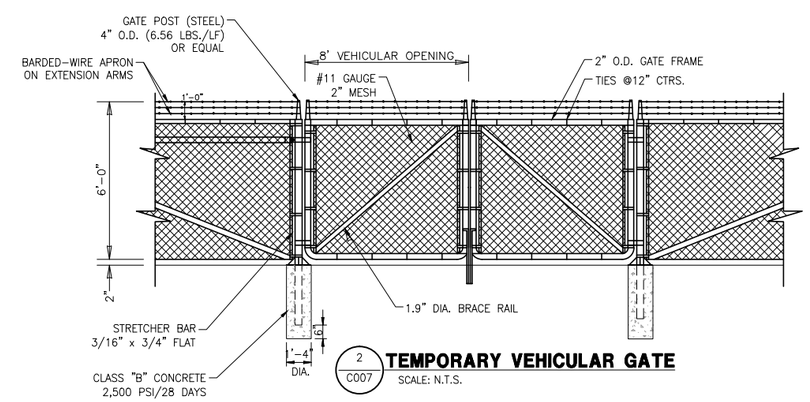
- CONTRACTOR STAGING AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONSTRUCTION HAUL ROUTE
- FLAGGER
- TRAFFIC CONTROL OFFICER
- EXISTING FENCE
- PROPOSED TEMPORARY FENCE

NOTES

1. SUBMIT SHOP DRAWING OF CHAIN LINK FENCE ON TOP OF TEMPORARY PRECAST CONC. BARRIER FOR APPROVAL BY THE ENGINEER. THE SHOP DRAWING SHALL INCLUDE BUT NOT BE LIMITED TO THE METHOD OF SECURING THE FENCE POSTS TO THE CONCRETE BARRIERS.
2. REMOVAL OF TEMPORARY FENCE IS INCIDENTAL TO PAY ITEM F-162-5.1.



1 / C007 **TEMPORARY METALLIC COATED STEEL CHAIN LINK FENCE**
SCALE: N.T.S.



2 / C007 **TEMPORARY VEHICULAR GATE**
SCALE: N.T.S.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED: JULY 2014
REVIEWED BY: NGS
DRAWN BY: ALL
DESIGNED BY: JEH

RS&H PROJECT NUMBER
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SHEET TITLE

TEMPORARY FENCE LAYOUT PLAN AND DETAILS

SHEET NUMBER

C007

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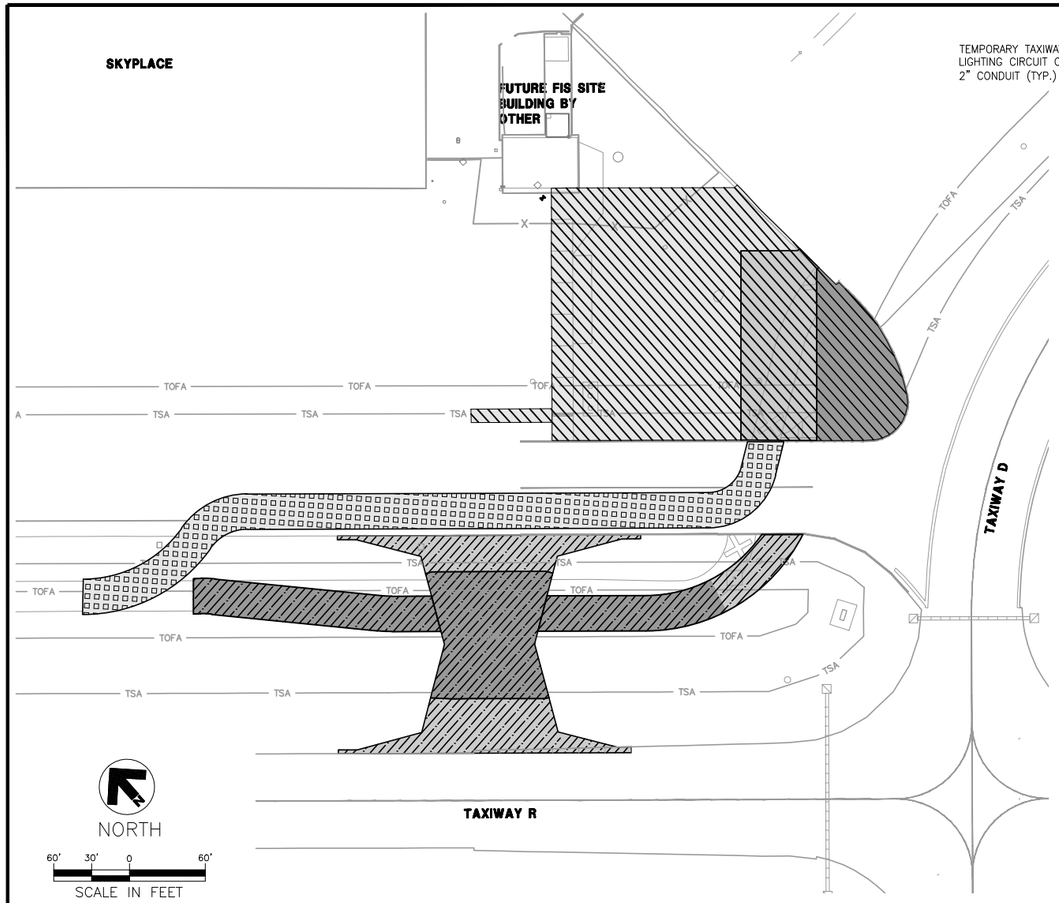
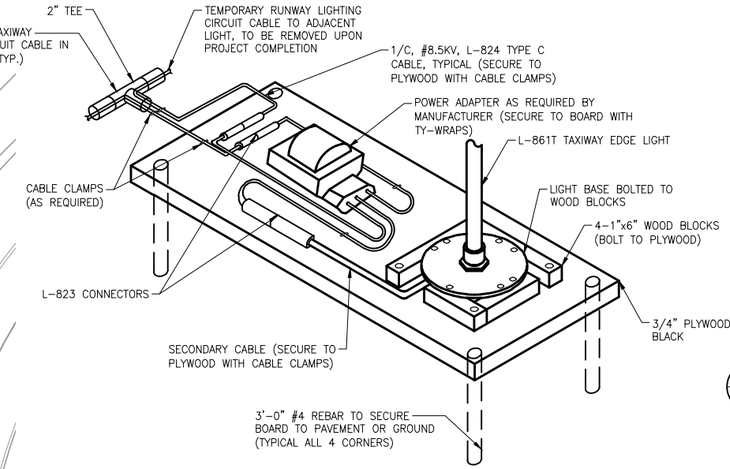
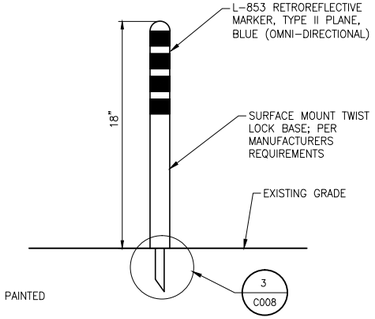




1 C008 **TEMPORARY TAXIWAY EDGE LIGHT**
SCALE: N.T.S

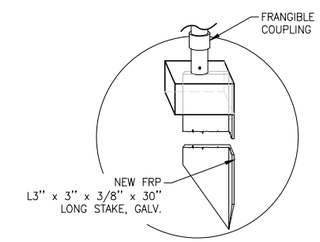


2 C008 **L-853 RETROREFLECTIVE MARKER INSTALLATION DETAIL**
SCALE: N.T.S

NOTE:
RETROREFLECTIVE MARKERS SHALL BE PLACED 10' OFF THE EDGE OF PAVEMENT.

LEGEND

- PHASE 1 (157 CALENDAR DAYS)
- PHASE 1A MOBILIZATION AND BADGING (28 CALENDAR DAYS)
- PHASE 1B (5 CALENDAR DAYS)
- PHASE 1C (56 CALENDAR NIGHTS)
- PHASE 1D (38 CALENDAR DAYS)
- PHASE 1E (30 CALENDAR DAYS)
- PHASE 2 (185 CALENDAR DAYS)
- PHASE 2A (57 CALENDAR DAYS)
- PHASE 2B (41 CALENDAR DAYS)
- PHASE 2C (57 CALENDAR DAYS)
- PHASE 2D (30 CALENDAR DAYS)

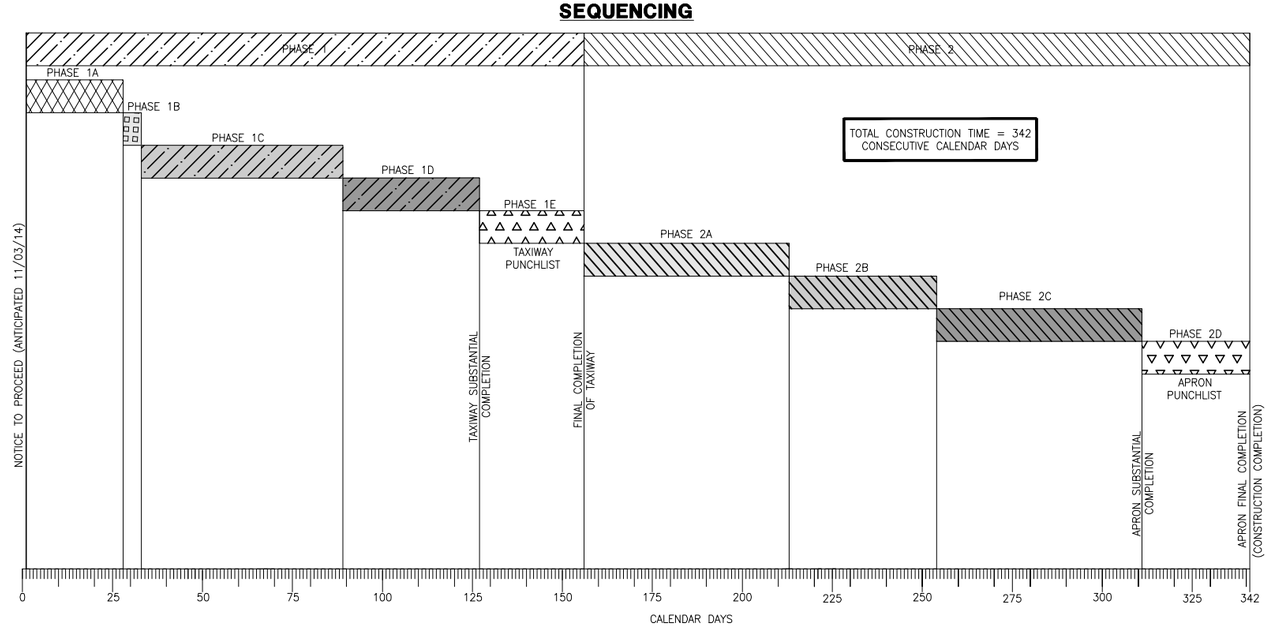


3 C008 **STAKE DETAIL**
SCALE: NTS

SAFETY AND PHASING NOTES:

1. THE CONTRACTOR SHALL PROVIDE SUFFICIENT MEN AND EQUIPMENT TO COMPLETE WORK IN THE TIME ALLOTTED FOR EACH PHASE. NO WORK SHALL COMMENCE UNTIL PROPER NOTIFICATION HAS BEEN GIVEN TO THE AIRLINES AND TENANTS.
2. THE CONTRACTOR SHALL GIVE CONSTANT ATTENTION TO THE WORK TO FACILITATE THE PROGRESS THEREOF THEY SHALL COOPERATE WITH THE RESIDENT ENGINEER, AIRPORT OPERATIONS AND AIRPORT PERSONNEL.
3. ANY SITUATION THAT, IN THE OPINION OF THE AIRPORT OPERATIONS OR AIRPORT PERSONNEL, CONSTITUTES A HAZARD TO OPERATIONS OF THE AIRPORT WILL IMMEDIATELY CAUSE WORK AND ACTIVITY TO CEASE UNTIL THE SITUATION IS RECTIFIED. NO ADDITIONAL COMPENSATION WILL BE CONSIDERED IF THE CONTRACTOR NEEDS TO ADJUST OR CHANGE HIS WORK SCHEDULE TO ACCOMMODATE AIRPORT OPERATIONS.
4. THE CONTRACTOR WILL PROTECT THE WORK AREA AT ALL TIMES. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING, PLACING AND MAINTAINING LOW PROFILE BARRICADES AS SHOWN AND AS DIRECTED. THIS INCLUDES BUT IS NOT LIMITED TO ALL WORK AREAS. THE COST FOR THIS WILL BE PAID UNDER THE ITEM, "TEMPORARY CONSTRUCTION ITEMS/TRAFFIC CONTROL".
5. THE CONTRACTOR SHALL CONTROL THE SPREAD OF SLURRY DURING SAW CUTTING OPERATIONS AND SHALL KEEP THE AREA CLEAN AT ALL TIMES, FREE OF SLURRY AND TRACKING, AS THE WORK PROCEEDS.
6. SECURITY AND SAFETY ON THE AIRPORT WILL BE MONITORED AT ALL TIMES BY THE AIRPORT OPERATIONS. REPEATED VIOLATIONS COULD RESULT IN TERMINATION OF THE EMPLOYEE WORKING AT THE AIRPORT OR IN SEVERE CASES TERMINATION OF THE CONTRACT.
7. PHASING IS SUBJECT TO CHANGE BASED ON AIRLINE/AIPORT OPERATIONS AND OTHER CONSTRUCTION PROJECTS AT THE AIRPORT.
8. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN LOW PROFILE BARRICADES, LIGHTS AND FLAGS FOR TAXIWAY CLOSURES AS INDICATED ON THE CONSTRUCTION PHASING PLANS, SHEETS C008-C014. THE CONTRACTOR SHALL PLACE THE LOW PROFILE BARRICADES AS SHOWN ON EACH PHASING PLAN OR AS DIRECTED BY THE SAT OPERATIONS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER POSITIONING OF LOW PROFILE BARRICADES THROUGHOUT THE DURATION OF THE PROJECT.
9. THE CONTRACTOR SHALL COORDINATE WITH OPERATIONS AND MAINTENANCE STAFF TO COVER AND PROTECT ANY EXISTING GUIDANCE SIGNS AND EDGE LIGHTS ASSOCIATED WITH CLOSED TAXIWAYS. DAMAGE TO SIGNS AND EDGE LIGHTS SHALL BE REPLACED AT THE CONTRACTOR EXPENSE.
10. THE CONTRACTOR SHALL REMOVE THE LOW PROFILE BARRICADES AND UNCOVER THE GUIDANCE SIGNS AND EDGE LIGHTS UPON COMPLETION OF THE PROJECT. DAMAGE TO SIGNS AND EDGE LIGHTS SHALL BE REPLACED AT THE CONTRACTOR EXPENSE
11. CONTRACTOR SHALL STAY WITHIN THE AREA OF LIMITS OF WORK. CONTRACTOR'S STAGING AREA AND EQUIPMENT SHALL BE MAINTAINED OUTSIDE THE TAXIWAY OBJECT FREE AREA WHEN NOT IN OPERATION.
12. THE CONTRACTOR WILL NOT BE ALLOWED TO WORK THE WEEK OF THANKSGIVING. ANTICIPATED START OF PHASE 1B WILL BE DECEMBER 1.

SCHEMATIC CONSTRUCTION SEQUENCING



RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS JOHN E. HIPPCHEN 113667 LICENSED PROFESSIONAL ENGINEER
7/25/14

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SHEET TITLE

OVERALL PHASING PLAN AND GENERAL PHASING NOTES

SHEET NUMBER

C008

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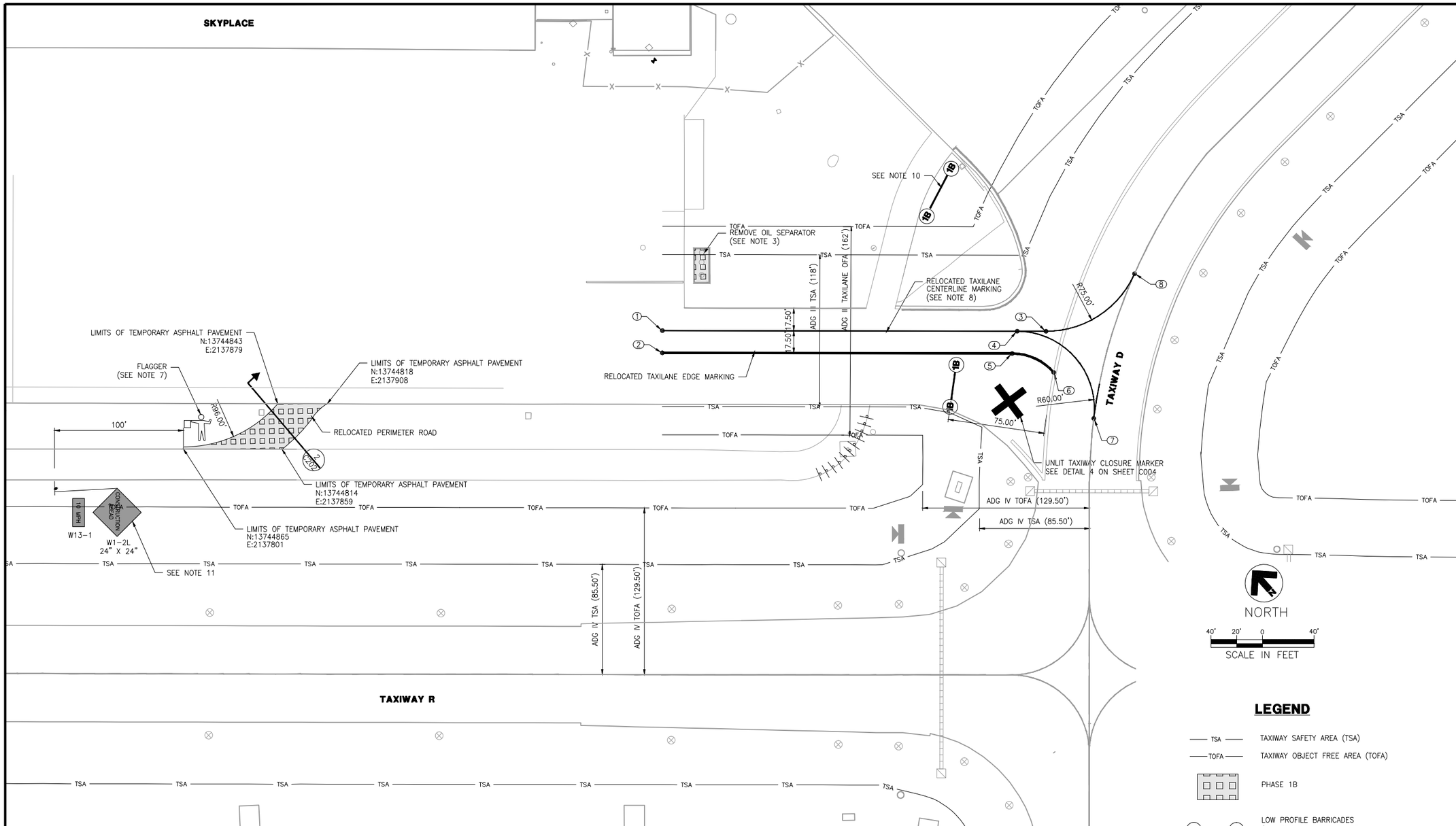

PHASE 1 - 129 DAYS

TAXIWAY AND PERIMETER ROAD PAVING

PHASE 1B- 5 DAYS

THIS PHASE SHALL CONSIST OF THE CONSTRUCTION OF A TEMPORARY CONNECTION TO THE EXISTING APRON AND RELOCATION OF PERIMETER ROAD TRAFFIC. THE EXISTING PERIMETER ROAD WILL NEED TO BE MAINTAINED TO ALLOW VEHICLE TRAFFIC UNTIL THIS PHASE IS COMPLETE. THE WORK SHALL ALSO INCLUDE THE STRIPING OF THE RELOCATED TAXILANE CENTERLINE AND RELOCATED TAXILANE EDGE MARKING. THIS STRIPPING SHALL BE TEMPORARY UNTIL THE PROJECT IS COMPLETED. ONCE THE PROJECT IS COMPLETED, ALL TEMPORARY MARKING SHALL BE REMOVED AND PAINTED AS SHOWN ON THIS SHEET.

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:
1. GRADING
2. DRAINAGE
3. ASPHALT PAVING
4. PERIMETER ROAD RELOCATION
5. PAVEMENT MARKING REMOVAL
6. PAVEMENT MARKING INSTALLATION

PHASE 1B NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTOR'S GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE CONTRACT LAYOUT PLAN.
3. REMOVE OIL SEPARATOR BEFORE RELOCATING TAXILANE CENTERLINE.
4. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS
5. RELOCATED TAXILANE CENTERLINE AND PAVEMENT EDGE MARKING SHALL BE PAINTED BEFORE THE TAXILANE CAN BE OPENED FOR USE. SEE DETAILS ON SHEET C701.
6. THE CONTRACTOR SHALL CLEAN ALL PAVEMENT SURFACES TO THE SATISFACTION OF THE AIRPORT OPERATIONS PRIOR TO OPENING FOR AIRCRAFT USE.
7. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. PAYMENT SHALL BE PAID UNDER PAY ITEM P-102, SAFETY AND SECURITY.
8. PAVEMENT MARKINGS WITHIN TAXIWAY D OBJECT FREE AREA SHALL BE DONE ON A PULL BACK BASIS. CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS PRIOR TO INSTALLATION OF PAVEMENT MARKINGS.
9. ANY PAVEMENT REMOVED AREAS THAT WILL NOT BE PAVED DURING THIS PHASE SHALL NEED TO BE COVERED AND PROTECTED AT ALL TIMES.
10. NO PARKING OR STAGING WITHIN TAXIWAY D ADG V OBJECT FREE AREA.
11. TEMPORARY CONSTRUCTION SIGN TO BE PAID UNDER PAY ITEM P-105-5.1.

TEMPORARY PAVEMENT MARKING POINTS

POINT NO.	NORTHING	EASTING	MARKING TYPE
1	13744688.89	2138141.16	TAXILANE CENTERLINE
2	13744675.94	2138129.76	TAXILANE EDGE LINE
3	13744492.03	2138364.66	TAXILANE CENTERLINE PT
4	13744506.79	2138347.91	TAXILANE CENTERLINE PT
5	13744496.38	2138333.55	TAXILANE EDGE LINE PT
6	13744464.11	2138348.08	TAXILANE EDGE LINE PT
7	13744416.71	2138347.88	TAXILANE CENTERLINE PT
8	13744480.28	2138445.80	TAXILANE CENTERLINE PT

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 1B
- 1B — 1B — LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL 2 ON SHEET C004)
- UNLIT TAXIWAY CLOSURE MARKER
- FLAGGER
- EXISTING GUIDANCE SIGN
- EXISTING TAXIWAY EDGE LIGHT

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
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SHEET TITLE

PHASING PLAN
PHASE
1B

SHEET NUMBER

C009

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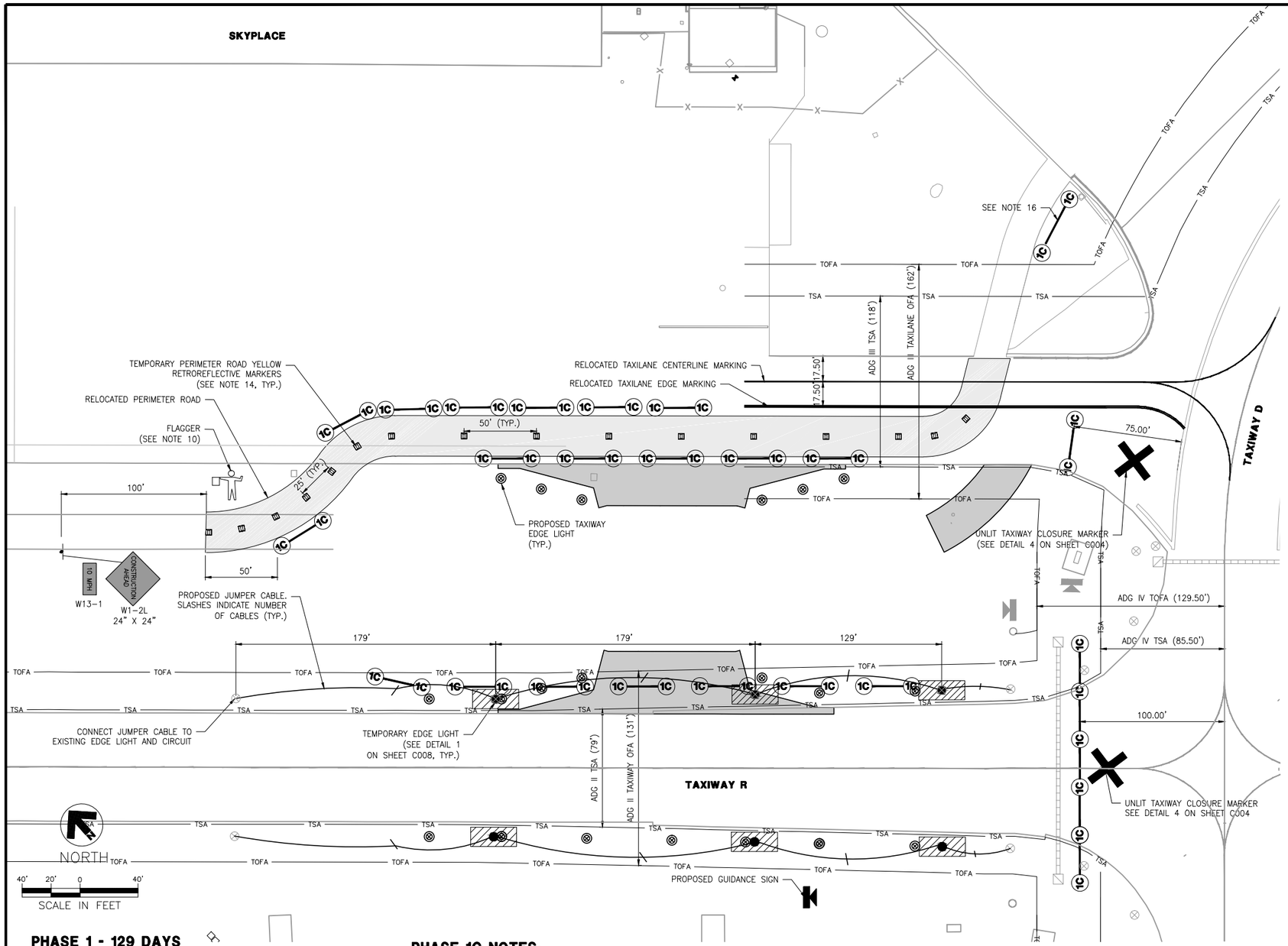

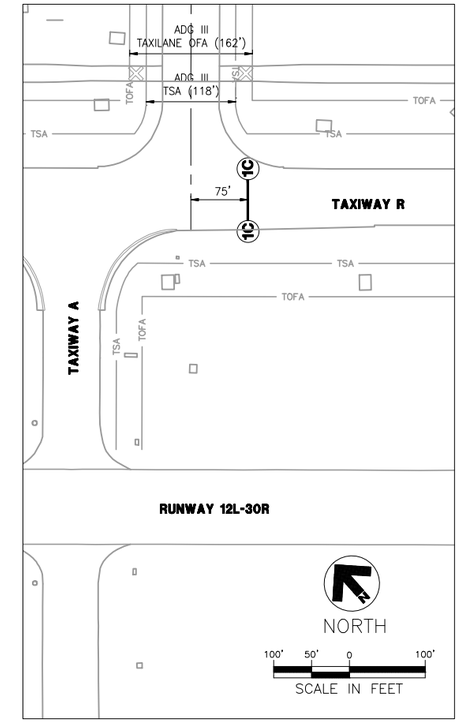

BARRICADE PLACEMENT

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 1C
- 1C—1C LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL ON 2 SHEET C004)
- TEMPORARY TAXIWAY EDGE LIGHT
- UNLIT TAXIWAY CLOSURE MARKER
- FLAGGER
- EXISTING GUIDANCE SIGN
- EXISTING TAXIWAY EDGE LIGHT

PHASE 1 - 129 DAYS

TAXIWAY AND PERIMETER ROAD CONSTRUCTION

PHASE 1C - 56 DAYS

PHASE 1C SHALL CONSIST OF CONSTRUCTION OF TAXIWAY LIGHTING, TAXIWAY GUIDANCE SIGNS, PAVEMENT AND DRAINAGE WORK WITHIN THE TAXILANE AND TAXIWAY SAFETY AREA (TSA) AND TAXIWAY OBJECT FREE AREA (TOFA). THIS WORK SHALL BE COMPLETED DURING THE HOURS OF 10:00 PM AND 5:00 AM WHILE TAXIWAY R IS CLOSED. TAXIWAY R SHALL BE CLOSED BETWEEN TAXIWAY D AND TAXIWAY A DURING THESE HOURS OF OPERATION TO ALLOW WORK DURING THIS PHASE.

SAFETY AREAS WILL NEED TO BE FULLY RESTORED TO PART 139 STANDARDS 1 HOUR BEFORE REOPENING TAXIWAY R TO TRAFFIC EACH MORNING. ONE HOUR PRIOR TO REOPENING AIRPORT OPERATIONS WILL INSPECT THE CONSTRUCTION SITE TO DETERMINE IF PART 139 STANDARDS HAVE BEEN MET. CONTRACTOR WILL REWORK AS NECESSARY TO ENSURE TAXIWAY IS ABLE TO BE REOPENED NO LATER THAN 5:00 AM.

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:
1. PAVEMENT AND AIRFIELD LIGHTING REMOVAL
2. GRADING
3. DRAINAGE
4. AIRFIELD ELECTRICAL
5. SUBGRADE PREPARATION (CEMENT TREATED BASE)
6. P-209 INSTALLATION
7. CONCRETE PAVING

PHASE 1C NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTORS GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE CONTRACT LAYOUT PLAN.
3. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES. BARRICADES USED FOR TAXIWAY R CLOSURE SHALL BE REMOVED IN THE MORNING WHEN TAXIWAY R IS OPEN FOR OPERATIONS. ALL REMAINING BARRICADES SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
4. THE CONTRACTOR SHALL PROVIDE JUMPER CABLES FOR ALL AIRFIELD ELECTRICAL CIRCUITS BEING AFFECTED IN ORDER TO MAINTAIN ACTIVE CIRCUIT OPERATIONS DURING CONSTRUCTION. WHEN TAXIWAY R IS CLOSED DURING NIGHT OPERATION, THE CONTRACTOR SHALL DE-ENERGIZE OR COVER TAXIWAY EDGE LIGHTS AND ALL GUIDANCE SIGNS THAT LEAD AND DIRECT AIRCRAFT TO THE CLOSED PORTION OF TAXIWAY R OR WITHIN THE PROJECT LIMITS. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
5. TAXIWAY GUIDANCE SIGNS THAT WILL NEED TO BE COVERED, SHALL BE COVERED WITH GEOTEXTILE FABRIC OR EQUAL PRODUCT AND SECURED WITH RATCHET STRAPS TO BLOCK THE SIGN FROM VIEW. BLACK PLASTIC SHALL NOT BE USED TO COVER THE SIGNS. NO DUCT TAPE OR ADHESIVE SHALL CONTACT THE SIGN OR SIGN PANELS. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
6. THE PROPOSED AIRFIELD "JUMPER" CABLE LAYOUT IS SCHEMATIC ONLY AND SHOWN TO ASSIST THE CONTRACTOR. EXACT ROUTING OF TEMPORARY CABLING SHALL BE FIELD DETERMINED/VERIFIED. THE PROPOSED JUMPER CABLES SHALL BE #8 AWG, L-824 5KV CABLE AND BE INSTALLED IN 2" CONDUIT LAID ON THE GROUND AND ADEQUATELY ANCHORED FROM MOVEMENT BY WIRE TIED TO BARRICADES OR SANDBAGS IN OFF PAVEMENT AREAS. DUCT USED FOR JUMPERS MAY NOT BE REUSED FOR ANY DUCT INSTALLED IN THIS PROJECT. SUFFICIENT SLACK SHALL BE PROVIDED SO AS TO REDUCE THE POTENTIAL FOR SPLICES IN THE TEMPORARY JUMPER TO PULL APART AND ARC. TO BE PAID UNDER ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
7. ALL CABLE SPLICES SHALL BE L-823 CONNECTORS AS SHOWN ON SHEET E101.
8. THE CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS PRIOR TO INSTALLATION OF THE JUMPER AND REDUCE THE AMOUNT OF TIME THIS CIRCUIT IS OUT OF OPERATION AS MUCH AS IS FEASIBLY POSSIBLE.
9. THE CONTRACTOR SHALL CLEAN ALL PAVEMENT SURFACES TO THE SATISFACTION OF THE AIRPORT OPERATIONS PRIOR TO OPENING FOR AIRCRAFT USE.
10. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. TO BE PAID UNDER PAY ITEM P-102. TO BE PAID UNDER PAY ITEM P-102-10.1, SAFETY AND SECURITY.
11. THE EXISTING EDGE LIGHTS ON TAXIWAY R SOUTH, SHALL BE REMOVED TO ALLOW INSTALLATION OF THE PROPOSED CIRCUIT CONNECTION AND PROPOSED TAXIWAY EDGE LIGHTS. RETROREFLECTIVE MARKERS SHALL BE USED WHEN NEEDED WHILE REMOVAL AND INSTALLATION OF TAXIWAY EDGE LIGHTS. THE CIRCUIT AND TAXIWAY EDGE LIGHTS ON TAXIWAY R SOUTH SHALL BE FULLY OPERATIONAL BEFORE PHASE 1C IS COMPLETE.
12. THE PROPOSED GUIDANCE SIGN INSTALLED DURING PHASE 1C SHALL NOT BE POWERED AND SHALL NOT BE IN OPERATION UNTIL PHASE 1D IS COMPLETE.
13. THE TEMPORARY EDGE LIGHT AND JUMPER CABLES ON TAXIWAY R NORTH SHALL STAY IN OPERATION UNTIL PHASE 1C IS COMPLETE. THE PROPOSED TAXIWAY EDGE LIGHTS INSTALLED ON TAXIWAY R NORTH SHALL STAY DE-ENERGIZED UNTIL PHASE 1C IS COMPLETE.
14. REMOVE AND REALIGN TEMPORARY RETROREFLECTIVE MARKERS WITH THE PERIMETER ROAD AS NEEDED PER PHASE. THE RETROREFLECTIVE MARKERS SHALL BE SPACED AT 25' INCREMENTS ON CURVES AND 50' INCREMENTS ON STRAIGHT SECTIONS.
15. TAXIWAY R SHALL REMAIN CLOSE FOR 72 HOURS AFTER ALL CONCRETE PAVEMENT WITHIN TAXIWAY R SAFETY AREA IS COMPLETE. ALL PAVING IN SAFETY AREA SHALL BE COMPLETED IN ONE NIGHT.
16. NO PARKING OR STAGING WITHIN TAXIWAY D ADG V OBJECT FREE AREA.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

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DESIGNED BY: JEH

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SHEET TITLE

PHASING PLAN PHASE 1C

SHEET NUMBER

C010

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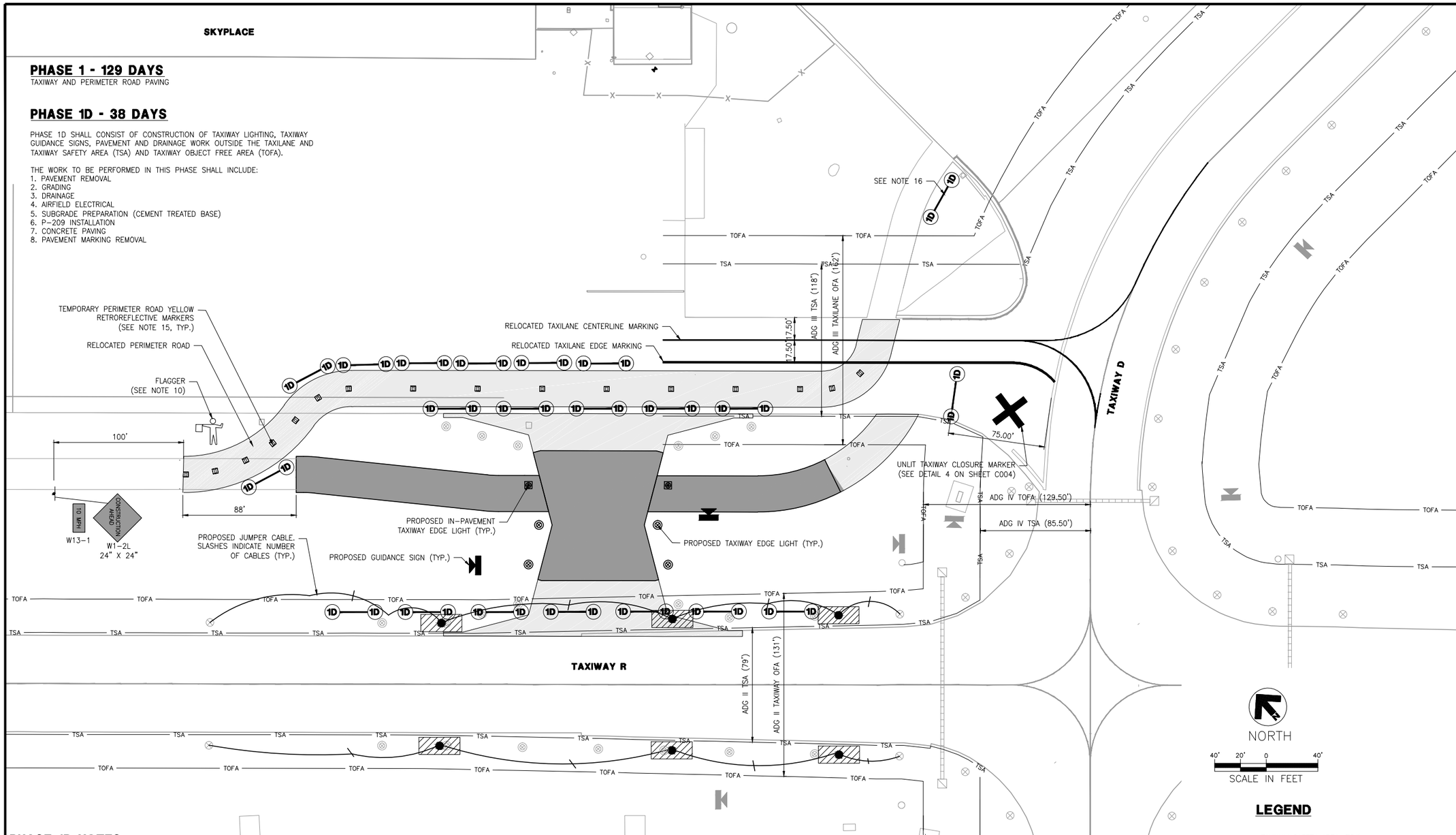
PHASE 1 - 129 DAYS

TAXIWAY AND PERIMETER ROAD PAVING

PHASE 1D - 38 DAYS

PHASE 1D SHALL CONSIST OF CONSTRUCTION OF TAXIWAY LIGHTING, TAXIWAY GUIDANCE SIGNS, PAVEMENT AND DRAINAGE WORK OUTSIDE THE TAXILANE AND TAXIWAY SAFETY AREA (TSA) AND TAXIWAY OBJECT FREE AREA (TOFA).

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:
1. PAVEMENT REMOVAL
2. GRADING
3. DRAINAGE
4. AIRFIELD ELECTRICAL
5. SUBGRADE PREPARATION (CEMENT TREATED BASE)
6. P-209 INSTALLATION
7. CONCRETE PAVING
8. PAVEMENT MARKING REMOVAL



PHASE 1D NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTORS GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE OVERALL PHASING PLAN.
3. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
4. THE CONTRACTOR SHALL PROVIDE JUMPER CABLES FOR ALL AIRFIELD ELECTRICAL CIRCUITS BEING AFFECTED IN ORDER TO MAINTAIN ACTIVE CIRCUIT OPERATIONS DURING CONSTRUCTION. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
5. TAXIWAY GUIDANCE SIGNS THAT WILL NEED TO BE COVERED SHALL BE COVERED WITH GEOTEXTILE FABRIC OR EQUAL PRODUCT TO BLOCK THE SIGN FROM VIEW. BLACK PLASTIC SHALL NOT BE USED TO COVER SIGNS. NO DUCT TAPE OR ADHESIVE SHALL CONTACT THE SIGN OR SIGN PANELS. TO BE PAID UNDER ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
6. THE PROPOSED AIRFIELD "JUMPER" CABLE LAYOUT IS SCHEMATIC ONLY AND SHOWN TO ASSIST THE CONTRACTOR. EXACT ROUTING OF TEMPORARY CABLING SHALL BE FIELD DETERMINED/VERIFIED. THE PROPOSED JUMPER CABLES SHALL BE #8 AWG, L-824 5KV CABLE AND BE INSTALLED IN 2" CONDUIT LAID ON THE GROUND AND ADEQUATELY ANCHORED FROM MOVEMENT BY WIRE TIED TO BARRICADES OR SANDBAGS IN OFF PAVEMENT AREAS. DUCT USED FOR JUMPERS MAY NOT BE REUSED FOR ANY DUCT INSTALLED IN THIS PROJECT. SUFFICIENT SLACK SHALL BE PROVIDED SO AS TO REDUCE THE POTENTIAL FOR SPLICES IN THE TEMPORARY JUMPER TO PULL APART AND ARC. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
7. ALL CABLE SPLICES SHALL BE L-823 CONNECTORS AS SHOWN ON SHEET E209.
8. THE CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS PRIOR TO INSTALLATION OF THE JUMPER AND REDUCE THE AMOUNT OF TIME THIS CIRCUIT IS OUT OF OPERATION AS MUCH AS IS FEASIBLY POSSIBLE.
9. THE CONTRACTOR SHALL CLEAN ALL PAVEMENT SURFACES TO THE SATISFACTION OF THE AIRPORT OPERATIONS PRIOR TO OPENING FOR AIRCRAFT USE.
10. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. TO BE PAID UNDER PAY ITEM P-102, SAFETY AND SECURITY.
11. THE PROPOSED GUIDANCE SIGNS INSTALLED DURING PHASE 1C & ID SHALL NOT BE POWERED AND SHALL NOT BE IN OPERATION UNTIL PHASE 1D IS COMPLETE.
12. THE TAXIWAY EDGE LIGHT CIRCUIT FOR TAXIWAY R NORTH AND FOR THE TAXIWAY CONNECTOR SHALL NOT BE POWERED UNTIL PHASE 1D IS COMPLETE.
13. THE TEMPORARY EDGE LIGHTS AND JUMPER CABLES ON TAXIWAY R NORTH SHALL BE REMOVED WHEN PHASE 1D IS COMPLETE AND THE TAXIWAY CONNECTOR IS READY TO BE OPEN AND AT THIS TIME THE TAXIWAY CONNECTOR EDGE LIGHTING SYSTEM SHALL BE FULLY OPERATIONAL.
14. BEFORE PHASE 1D WORK IS COMPLETE THE RELOCATED TAXILANE CENTERLINE AND TAXILANE EDGE MARKING SHALL BE REMOVED. THIS WORK SHALL BE DONE BEFORE PHASE 2A CAN BEGIN. EXISTING PAVEMENT SHALL BE PROTECTED AT ALL TIMES WHEN PAVEMENT MARKING IS REMOVED.
15. REMOVE AND REALIGN TEMPORARY RETROREFLECTIVE MARKERS WITH THE PERIMETER ROAD AS NEEDED PER PHASE. THE RETROREFLECTIVE MARKERS SHALL BE SPACED AT 25' INCREMENTS ON CURVES AND 50' INCREMENTS ON STRAIGHT SECTIONS.
16. NO PARKING OR STAGING WITHIN TAXIWAY D ADG V OBJECT FREE AREA.

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 1D
- 1D—1D — LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL 2 ON SHEET C004)
- TEMPORARY TAXIWAY EDGE LIGHT (SEE DETAIL 1 ON SHEET C008)
- UNLIT TAXIWAY CLOSURE MARKER
- EXISTING TAXIWAY EDGE LIGHT

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

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SHEET TITLE

PHASING PLAN PHASE 1D

SHEET NUMBER

C011

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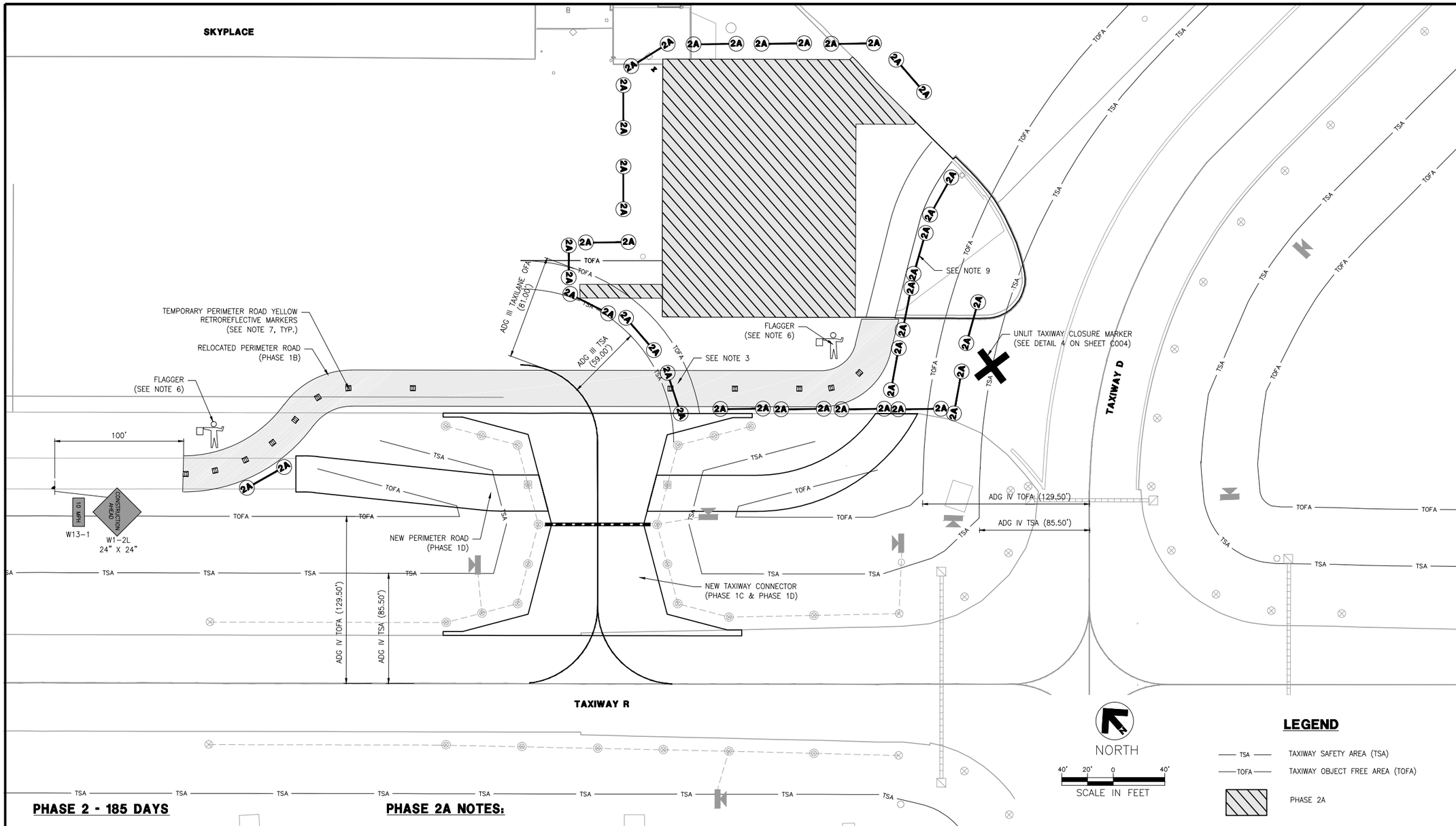

PHASE 2 - 185 DAYS

APRON PAVING

PHASE 2A - 57 DAYS

THIS PHASE SHALL CONSIST OF THE CONSTRUCTION OF THE APRON SECTION AS INDICATED IN THE PLANS. THE NEWLY CONSTRUCTED TAXIWAY SHALL BE STRIPED AND OPEN TO TRAFFIC ONLY AS INDICATED FOR THIS PHASE. THE TEMPORARY PERIMETER ROAD SHALL REMAIN OPEN TO ARFF VEHICLES AT ALL TIMES. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED DURING THIS PHASE.

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:

1. PAVEMENT REMOVAL
2. PAVEMENT MARKING REMOVAL
3. DRAINAGE
4. PAVEMENT MARKING INSTALLATION
5. CONCRETE PAVING

PHASE 2A NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTORS GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE CONTRACT LAYOUT PLAN.
3. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
4. CONTRACTOR SHALL PROVIDE ACCESS THROUGH BARRICADES FOR ARFF VEHICLES AT ALL TIMES.
5. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED TO TRAFFIC AT ALL TIMES DURING THIS PHASE.
6. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. TO BE PAID UNDER PAY ITEM P-102, SECURITY AND SAFETY.
7. REMOVE AND REALIGN TEMPORARY RETROREFLECTIVE MARKERS WITH THE PERIMETER ROAD AS NEEDED PER PHASE. THE RETROREFLECTIVE MARKERS SHALL BE SPACED AT 25' INCREMENTS ON CURVES AND 50' INCREMENTS ON STRAIGHT SECTIONS.
8. ANY WORK WITHIN THE TAXIWAY OBJECT FREE AREA WHILE THE TAXIWAY IS OPEN TO TRAFFIC SHALL BE DONE ON A PULL BACK BASIS.
9. NO PARKING OR STAGING WITHIN TAXIWAY D ADG V OBJECT FREE AREA.

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 2A
- 2A—2A — LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL 2 ON SHEET C004)
- UNLIT TAXIWAY CLOSURE MARKER
- FLAGGER

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
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JOHN E. HIPPCHEN
113667
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SHEET TITLE

PHASING PLAN PHASE 2A

SHEET NUMBER

C012

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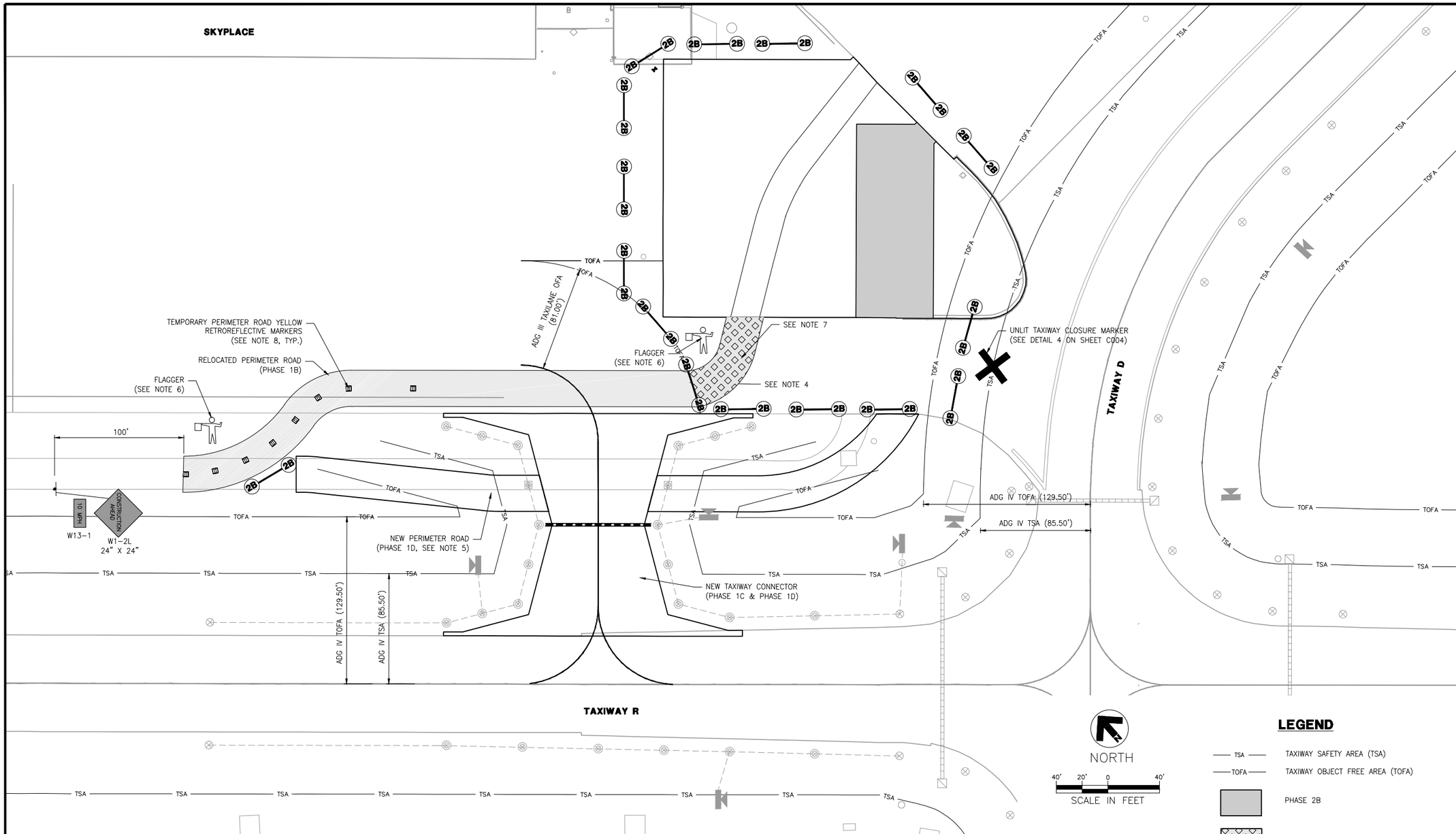

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 2B
- RELOCATED TEMPORARY PERIMETER ROAD
- 2B — 2B LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL 2 ON SHEET C004)
- UNLIT TAXIWAY CLOSURE MARKER
- FLAGGER

PHASE 2 - 185 DAYS

APRON PAVING

PHASE 2B - 41 DAYS

THIS PHASE SHALL CONSIST OF THE CONSTRUCTION OF THE APRON SECTION AS INDICATED IN THE PLANS. THE NEWLY CONSTRUCTED TAXIWAY SHALL BE STRIPPED AND OPEN TO TRAFFIC ONLY AS INDICATED FOR THIS PHASE. THE TEMPORARY PERIMETER ROAD SHALL REMAIN OPEN TO ARFF VEHICLES AT ALL TIMES. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED DURING THIS PHASE.

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:

1. PAVEMENT REMOVAL
2. DRAINAGE
3. PAVEMENT MARKING INSTALLATION
4. CONCRETE PAVING

PHASE 2B NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTORS GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE OVERALL PHASING PLAN.
3. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
4. CONTRACTOR SHALL PROVIDE ACCESS THROUGH BARRICADES FOR ARFF VEHICLES AT ALL TIMES.
5. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED TO TRAFFIC AT ALL TIMES DURING THIS PHASE.
6. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. TO BE PAID UNDER PAY ITEM P-102, SAFETY AND SECURITY.
7. CONTRACTOR SHALL RELOCATE THE PERIMETER ROAD ENTRANCE/EXIT TO ACCOMMODATE PAVING OPERATION.
8. REMOVE AND REALIGN TEMPORARY RETROREFLECTIVE MARKERS WITH THE PERIMETER ROAD AS NEEDED PER PHASE. THE RETROREFLECTIVE MARKERS SHALL BE SPACED AT 25' INCREMENTS ON CURVES AND 50' INCREMENTS ON STRAIGHT SECTIONS.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED: JULY 2014
REVIEWED BY: NSG
DRAWN BY: ALL
DESIGNED BY: JEH

RS&H PROJECT NUMBER
223-3267-004

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SHEET TITLE

PHASING PLAN PHASE 2B

SHEET NUMBER

C013

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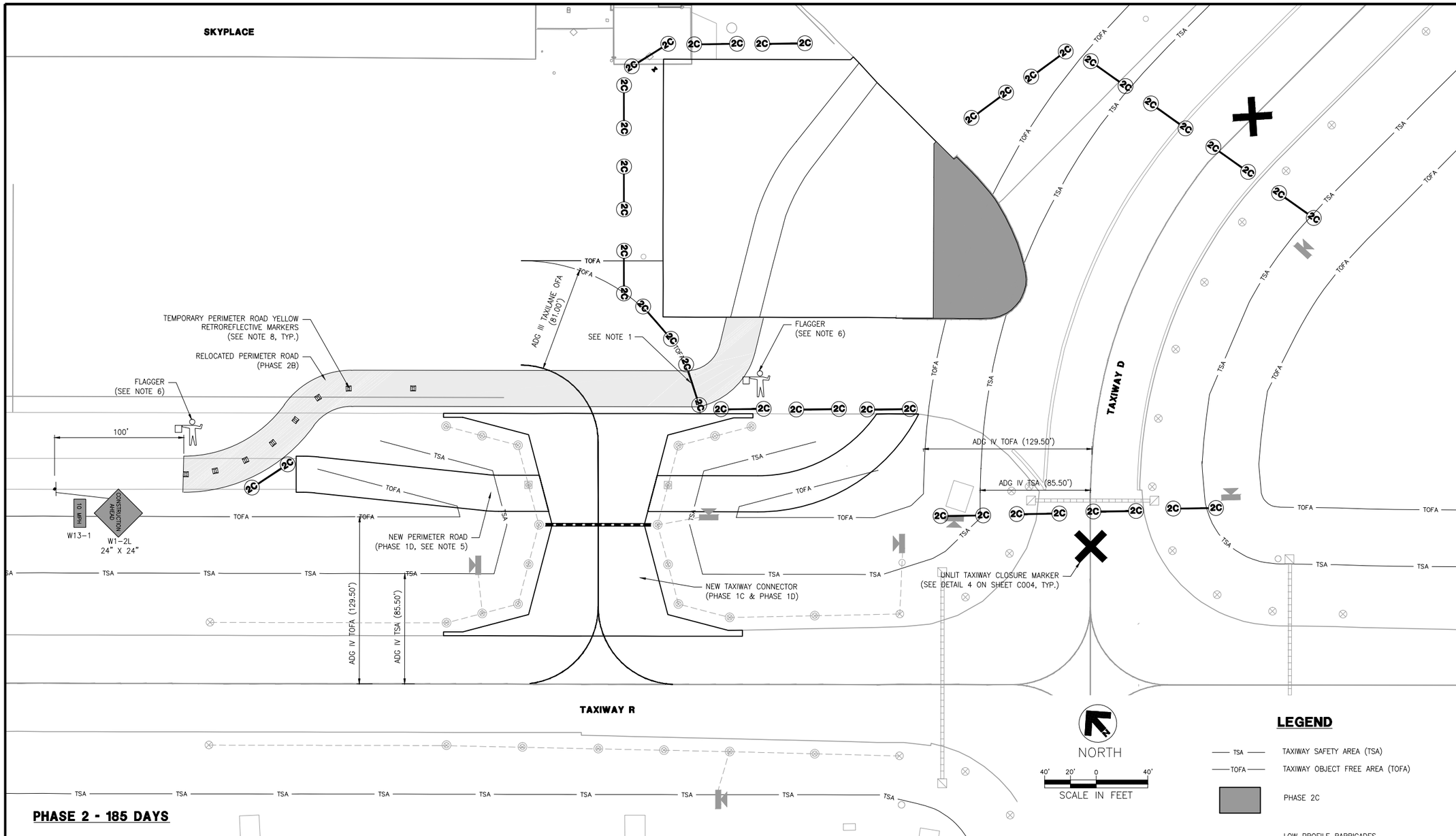

LEGEND

- TSA — TAXIWAY SAFETY AREA (TSA)
- TOFA — TAXIWAY OBJECT FREE AREA (TOFA)
- PHASE 2C
- 2C—2C LOW PROFILE BARRICADES (NUMBER INDICATES PHASE, SEE DETAIL 2 ON SHEET C004)
- UNLIT TAXIWAY CLOSURE MARKER
- FLAGGER

PHASE 2 - 185 DAYS

APRON PAVING

PHASE 2C - 57 DAYS

THIS PHASE SHALL CONSIST OF THE CONSTRUCTION OF THE APRON SECTION AS INDICATED IN THE PLANS. THE NEWLY CONSTRUCTED TAXIWAY SHALL BE STRIPPED AND OPEN TO TRAFFIC ONLY AS INDICATED FOR THIS PHASE. THE TEMPORARY PERIMETER ROAD SHALL REMAIN OPEN FOR ARFF VEHICLES AT ALL TIMES. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED DURING THIS PHASE. THIS WORK SHALL BE COMPLETED DURING NIGHT WORK, DURING THE HOURS OF 9:30 PM AND 5:00 AM WHILE TAXIWAY D IS CLOSED. TAXIWAY D SHALL BE CLOSED AS INDICATED ON THE PLANS DURING THESE HOURS OF OPERATION TO ALLOW WORK DURING THIS PHASE.

SAFETY AREAS WILL NEED TO BE FULLY RESTORED TO PART 139 STANDARDS 1 HOUR BEFORE REOPENING TAXIWAY R TO TRAFFIC EACH MORNING. ONE HOUR PRIOR TO REOPENING AIRPORT OPERATIONS WILL INSPECT THE CONSTRUCTION SITE TO DETERMINE IF PART 139 STANDARDS HAVE BEEN MET. CONTRACTOR WILL REWORK AS NECESSARY TO ENSURE TAXIWAY IS ABLE TO BE REOPENED NO LATER THAN 5:00 AM.

THE WORK TO BE PERFORMED IN THIS PHASE SHALL INCLUDE:

1. PAVEMENT REMOVAL
2. DRAINAGE
3. CONCRETE PAVING
4. PAVEMENT MARKING INSTALLATION

PHASE 2C NOTES:

1. WORK ITEMS DESCRIBED ARE A SUMMARY FOR THE CONTRACTORS GENERAL INFORMATION ONLY. ALL WORK ITEMS NECESSARY AND SPECIFIED TO BE COMPLETED ARE REQUIRED PER THE CONTRACT.
2. ACCESS TO THE WORK AREA IS SHOWN ON THE CONTRACT LAYOUT PLAN.
3. THE BARRICADES SHALL BE CONTINUOUSLY LINKED AND PLACED AT THE BEGINNING OF EACH PHASE WITH THE TYPE AND LOCATIONS INDICATED ON THE PLANES AND SHALL REMAIN IN PLACE THROUGHOUT THE PHASE. TO BE PAID UNDER PAY ITEM P-105, TEMPORARY CONSTRUCTION ITEMS.
4. CONTRACTOR SHALL PROVIDE ACCESS THROUGH BARRICADES FOR ARFF VEHICLES AT ALL TIMES.
5. THE NEWLY CONSTRUCTED PERIMETER ROAD SHALL BE CLOSED TO TRAFFIC AT ALL TIMES DURING THIS PHASE.
6. CONTRACTOR SHALL PROVIDE A FLAGGER TO ASSIST WITH VEHICULAR TRAFFIC AT ALL TIMES DURING THIS PHASE. TO BE PAID UNDER PAY ITEM P-102, SAFETY AND SECURITY.
7. THE CONTRACTOR SHALL CLEAN ALL PAVEMENT SURFACES TO THE SATISFACTION OF THE AIRPORT OPERATIONS PRIOR TO OPENING FOR AIRCRAFT USE.
8. REMOVE AND REALIGN TEMPORARY RETROREFLECTIVE MARKERS WITH THE PERIMETER ROAD AS NEEDED PER PHASE. THE RETROREFLECTIVE MARKERS SHALL BE SPACED AT 25' INCREMENTS ON CURVES AND 50' INCREMENTS ON STRAIGHT SECTIONS.
9. TAXIWAY D SHALL REMAIN CLOSE FOR 72 HOURS AFTER ALL CONCRETE PAVEMENT WITHIN TAXIWAY D SAFETY AREA IS COMPLETE. ALL PAVING IN SAFETY AREA SHALL BE COMPLETED IN ONE NIGHT.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED:	JULY 2014
REVIEWED BY:	NSG
DRAWN BY:	ALL
DESIGNED BY:	JEH

RS&H PROJECT NUMBER
223-3267-004

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SHEET TITLE

PHASING PLAN PHASE 2C

SHEET NUMBER

C014

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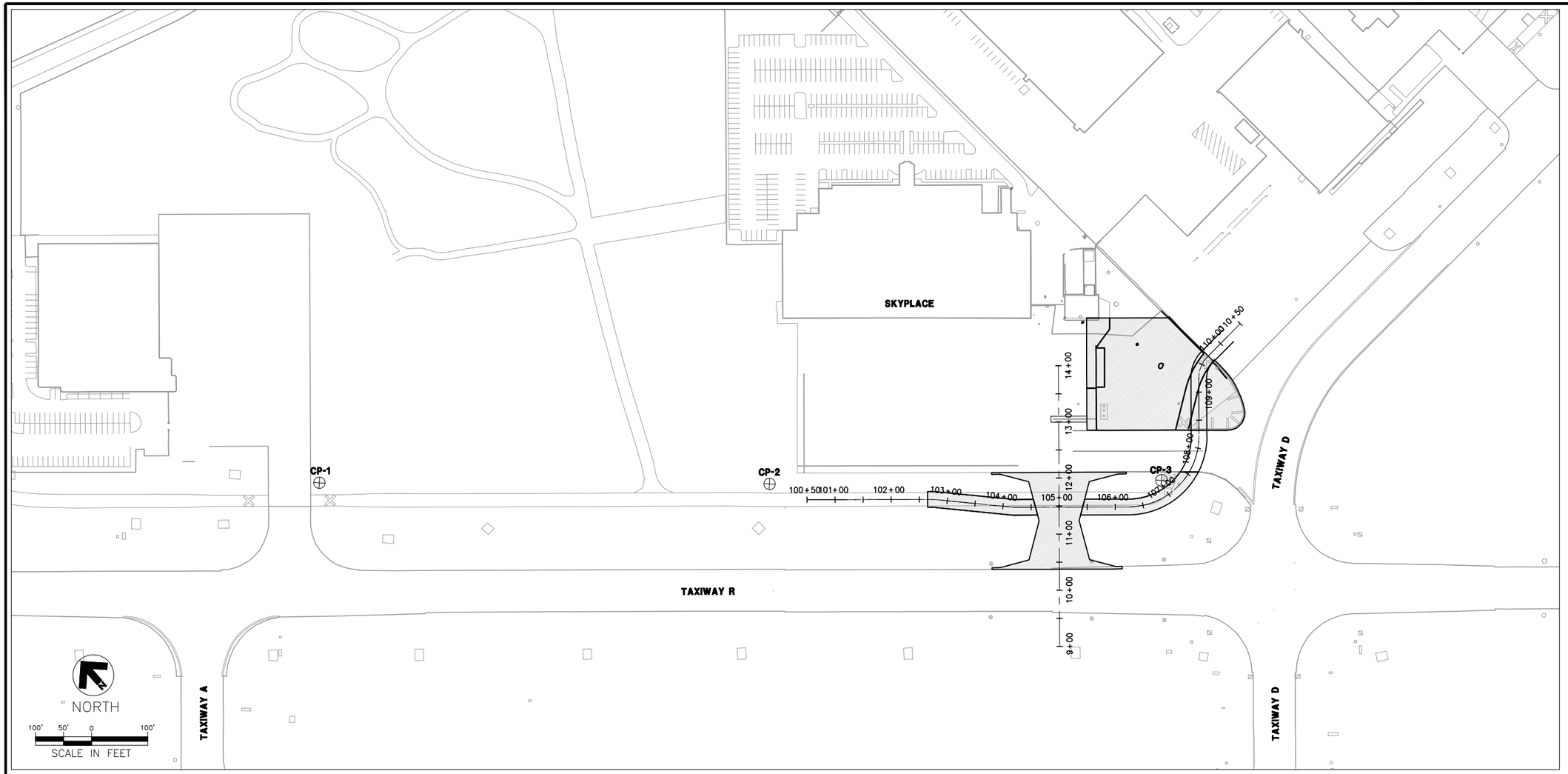

HORIZONTAL & VERTICAL CONTROL PLAN NOTES:

1. HORIZONTAL AND VERTICAL CONTROL POINT IDENTIFICATION, EXISTING OFF-PAVEMENT TOPOGRAPHY, ELEVATIONS, CONTROL POINTS, UTILITY INFORMATION, AND BOUNDARY INFORMATION WERE TAKEN FROM A SURVEY BY:
   VICKREY & ASSOCIATES, INC.
2. COORDINATES CITED IN THIS DESCRIPTION ARE BASED ON TEXAS STATE PLANE COORDINATE SYSTEM NAD 83 SOUTH CENTRAL ZONE GRID, WITH DISTANCES CITED IN SURFACE USING A COMBINED SCALE FACTOR OF 1.00016428.
3. THE VERTICAL DATUM FOR THIS SURVEY IS NAVD88.
4. THE CONTRACTOR SHALL VERIFY WITH A LICENSED STATE LAND SURVEYOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, ANY CONTROL POINTS TO BE USED FOR CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
5. CONTROL POINTS ARE LOCATED WITHIN THE AIRPORT OPERATIONS AREA (AOA). THE CONTRACTOR SHALL OBTAIN AUTHORIZATION OF THE ENGINEER AND AIRPORT PRIOR TO ACCESSING THE CONTROL POINTS OUTSIDE OF THE DESIGNATED WORK AREAS.

POINT NO.	NORTHING	EASTING	EXISTING ELEVATION	DESCRIPTION
CP-1	13745539.24	2137066.39	786.17'	IRON ROD FND 5/8"
CP-2	13745005.69	2137665.69	780.47'	IRON ROD FND 5/8"
CP-3	13744547.03	2138193.04	779.06'	IRON ROD FND 5/8"

LEGEND

⊕ CONTROL POINT LOCATION

▭ PROPOSED PCC PAVEMENT

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
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SHEET TITLE

HORIZONTAL AND VERTICAL CONTROL PLAN

SHEET NUMBER

C015

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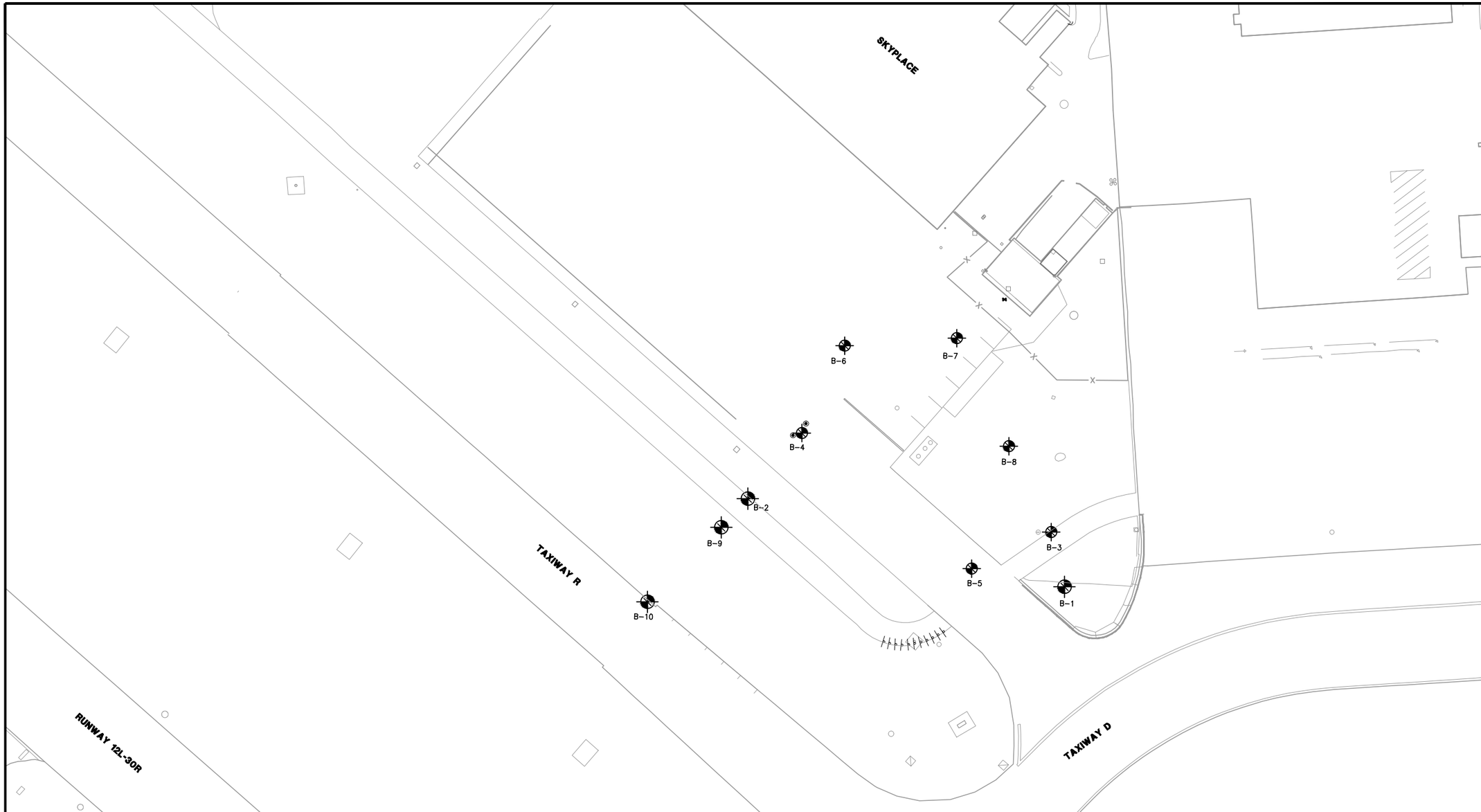

GEOTECHNICAL BORING PLAN NOTES:

1. REFER TO SHEET C016 TO C017 FOR GEOTECHNICAL BORING LOGS.
2. BORING LOGS AND INFORMATION TAKEN FROM A GEOTECHNICAL DATA STUDY DATED FEBRUARY 27, 2014 AND FROM MARCH 2, 2014 BY ARIAS & ASSOCIATES, INC, SAN ANTONIO, TX.

GEOTHECNICAL BORING TABLE

BORING #	NORTHING	EASTING
B-1	13744576.79	2138331.87
B-2	13744660.90	2138029.97
B-3	13744628.97	2138319.15
B-4	13744723.32	2138081.50
B-5	13744594.14	2138243.39
B-6	13744806.69	2138122.34
B-7	13744813.80	2138229.23
B-8	13744710.83	2138278.77
B-9	13744633.46	2138004.72
B-10	13744562.43	2137934.38

LEGEND

GEOTECHNICAL BORING LOCATION

NORTH

50' 25' 0 50'

SCALE IN FEET

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
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SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

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JOHN E. HIPPCHEN
113967
LICENSED
PROFESSIONAL ENGINEER
7/25/14

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DATE ISSUED: JULY 2014
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RS&H PROJECT NUMBER
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SHEET TITLE

GEOTECHNICAL BORING PLAN

SHEET NUMBER

C016

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Boring Log No. B-1

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 2/27/14
Coordinates: N29°32'4.8" W98°28'1.2"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
4" ASPHALT								
12" CEMENT TREATED BASE								
FAT CLAY (CH), stiff, dark brown	2	SS	36				8	
-very stiff below 4'	4	SS	21	18	64	46	22	87
-light brown, hard, with sand, below 6'	6	SS	19				34	
	8	SS	21	15	50	35	33	78
Borehole terminated at 10 feet	10							

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster and R. Gonzales
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 10 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

Boring Log No. B-2

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 2/27/14
Coordinates: N29°32'5.6" W98°28'4.6"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
7.5" CONCRETE								
CLAYEY GRAVEL with Sand (GC), dense, light brown	2	SS	10	18	55	37	34	22
-tan below 2'								
-very dense below 3'		SS	4				50/6"	
GRAVELLY LEAN CLAY with Sand (CL), very hard, brown and tan	4	SS	11	14	32	18	50/2"	61
CLAYEY GRAVEL (GC), very dense, tan	6	SS	3				**50/5"	
	8	SS	5				**50/5"	
Borehole terminated at 8.9 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster and R. Gonzales
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 8.9 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
** = Blow Counts During Seating Penetration
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

Boring Log No. B-3

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 2/27/14
Coordinates: N29°32'5.3" W98°28'1.4"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
6" CONCRETE								
FAT CLAY (CH), stiff, dark brown	2	SS	38				7	
-brown, hard, with sand below 4'	4	SS	32	22	83	61	14	93
CLAYEY GRAVEL with Sand (GC), very dense, tan and light brown	6	SS	21	18	63	45	29	82
	8	SS	11				51	
	10	SS	12	11	30	19	57	38
Borehole terminated at 10 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster and R. Gonzales
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 10 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

Boring Log No. B-4

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 3/2/14
Coordinates: N29°32'6.2" W98°28'4"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
10.25" CONCRETE								
13.75" BASE	2	GB	17					
CLAYEY GRAVEL with Sand (GC), dense, tan	4	SS	8				46	
-very dense below 5'	6	SS	10	14	32	18	50/6"	28
CLAYEY SAND with Gravel (SC), very dense, tan	8	SS	8				50/6"	
		SS	7	13	38	25	**50/5"	28
Borehole terminated at 8.9 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 8.9 ft

Nomenclature Used on Boring Log
Grab Sample (GB)
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
** = Blow Counts During Seating Penetration
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

Boring Log No. B-5

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 3/2/14
Coordinates: N29°32'4.9" W98°28'2.2"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
11.25" CONCRETE								
12.75" BASE	2	SS	21				16	
FILL: CLAYEY GRAVEL with Sand (GC), medium dense, tan	4	SS	9	16	58	42	11	31
SANDY FAT CLAY with Gravel (CH), firm to stiff, tan, (possibly fill)	6	SS	15				16	
	8	GB	19	16	66	50	9	55
	10	SS	12				5	
Borehole terminated at 10 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 10 ft

Nomenclature Used on Boring Log
Split Spoon (SS)
Grab Sample (GB)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

Boring Log No. B-6

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Sampling Date: 3/2/14
Coordinates: N29°32'7" W98°28'3.6"
Location: See Boring Location Plan
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
9.75" CONCRETE								
10.25" BASE	2	SS	16				32	
FAT CLAY (CH), hard, dark brown	4	SS	33	24	76	52	55	
CLAYEY SAND (SC) with gravel and calcareous deposits, very dense, tan	6	SS	8				77	
	8	SS	8	12	35	23	90/11"	44
		SS	8				50/5"	
Borehole terminated at 9.4 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 9.4 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count
-200 = % Passing #200 Sieve

Arias & Associates, Inc. Job No.: 2014-31

2014-31.GPJ 3/26/14 (BORING) LOG 8x11-02 ARIAS8x11-01 (2017) LIBRARY(2015-01 GLB)

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
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SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

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JOHN E. HIPPCHEN
113667
LICENSED
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7/25/14

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DATE ISSUED: JULY 2014
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DRAWN BY: ALL
DESIGNED BY: JEH

RS&H PROJECT NUMBER
223-3267-004

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SHEET TITLE

GEOTECHNICAL BORING LOGS (1 OF 2)

SHEET NUMBER

C017

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Boring Log No. B-7

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Location: See Boring Location Plan
Sampling Date: 3/2/14
Coordinates: N29°32'7.1" W98°28'2.4"
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
10" CONCRETE								
14" BASE	2	SS	8				50/6"	
FAT CLAY (CH), hard, dark brown	4	SS	29	20	84	64	31	88
	6	SS	18				63	
CLAYEY GRAVEL with Sand (GC), very dense, tan, calcareous deposits	8	SS	16	17	54	37	84/11"	48
		SS					**50/5"	
Borehole terminated at 8.9 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 8.9 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count

** = Blow Counts During Seating Penetration
-200 = % Passing #200 Sieve

Arias & Associates, Inc.
Job No.: 2014-31

2014-31.GPJ 3/28/14 GEOTECH LOG BATCH.GDT ARIAS03A 3-31-14.GDT J:\ARIAS\FY2013\2014-31\B-7.DWG

Boring Log No. B-8

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Location: See Boring Location Plan
Sampling Date: 3/2/14
Coordinates: N29°32'6" W98°28'1.8"
Backfill: Cuttings

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
FILL: CLAYEY GRAVEL (GC), very dense, dark brown		SS	7	17	52	35	25	26
FAT CLAY with Gravel (CH), hard, dark brown	2	SS	23	20	83	63	27	74
GRAVELLY LEAN CLAY with Sand (CL), very hard, reddish brown	4	SS	13				57	
	6	SS	17	13	39	26	50/4"	63
	8	SS					**50/6"	
Borehole terminated at 9 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 9 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count

** = Blow Counts During Seating Penetration
-200 = % Passing #200 Sieve

Arias & Associates, Inc.
Job No.: 2014-31

2014-31.GPJ 3/28/14 GEOTECH LOG BATCH.GDT ARIAS03A 3-31-14.GDT J:\ARIAS\FY2013\2014-31\B-8.DWG

Boring Log No. B-9

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Location: See Boring Location Plan
Sampling Date: 2/27/14
Coordinates: N29°32'5.3" W98°28'4.9"
Backfill: Cuttings

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
GRAVELLY FAT CLAY (CH) with sand, very stiff, dark brown		SS	23	19	80	61	38	58
CLAYEY GRAVEL with Sand (GC), very dense, brown	2	SS	8	17	66	49	77	42
	4	SS	9				80	
SANDY LEAN CLAY (CL) with gravel, very hard, tan	6	SS	11	14	26	12	94/10"	67
	8	SS	11				50/4"	
Borehole terminated at 9.3 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster and R. Gonzales
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 9.3 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count

-200 = % Passing #200 Sieve

Arias & Associates, Inc.
Job No.: 2014-31

2014-31.GPJ 3/28/14 GEOTECH LOG BATCH.GDT ARIAS03A 5-21-2014.GDT J:\ARIAS\FY2013\2014-31\B-9.DWG

Boring Log No. B-10

Project: **FIS - Apron and Connector Taxiway Improvements**
San Antonio International Airport
San Antonio, Texas
Location: See Boring Location Plan
Sampling Date: 2/27/14
Coordinates: N29°32'4.6" W98°28'5.7"
Backfill: Cuttings and patched

Soil Description	Depth (ft)	SN	WC	PL	LL	PI	N	-200
16 1/4" CONCRETE								
10" CEMENT TREATED BASE	2							
CLAYEY SAND (SC) with gravel, dense, brown	4	SS	14	22	48	26	46	15
tan, very dense below 5'	6	SS	9	14	38	24	87/9"	25
	8	SS	8				**50/6"	
LEAN CLAY (CL), very hard, tan and gray	10	SS	13	14	41	27	53	
Borehole terminated at 10 feet								

Groundwater Data:
During drilling: Not encountered

Field Drilling Data:
Coordinates: Hand-held GPS Unit
Logged By: A. Sangster and R. Gonzales
Driller: Eagle Drilling, Inc.
Equipment: Truck-mounted drill rig

Single flight auger: 0 - 10 ft

Nomenclature Used on Boring Log
Split Spoon (SS)

WC = Water Content (%)
PL = Plastic Limit
LL = Liquid Limit
PI = Plasticity Index
N = SPT Blow Count

** = Blow Counts During Seating Penetration
-200 = % Passing #200 Sieve

Arias & Associates, Inc.
Job No.: 2014-31

2014-31.GPJ 3/28/14 GEOTECH LOG BATCH.GDT ARIAS03A 5-21-2014.GDT J:\ARIAS\FY2013\2014-31\B-10.DWG

KEY TO CLASSIFICATION SYMBOLS USED ON BORING LOGS

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE-GRAINED SOILS (More Than Half of Material LARGER Than No. 200 Sieve size)	GRAVELS (More Than Half of Coarse Fraction is LARGER Than No. 4 Sieve Size)	Clean Gravels (Little or no Fines)	GW	Well-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines
			GP	Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines
		Gravels With Fines (Appreciable Amount of Fines)	GM	Silty Gravels, Gravel-Sand-Silt Mixtures
			GC	Clayey Gravels, Gravel-Sand-Clay Mixtures
	SANDS (More Than Half of Coarse Fraction is SMALLER Than No. 4 Sieve Size)	Clean Sands (Little or no Fines)	SW	Well-Graded Sands, Gravelly Sands, Little or no Fines
			SP	Poorly-Graded Sands, Gravelly Sands, Little or no Fines
		Sands With Fines (Appreciable Amount of Fines)	SM	Silty Sands, Sand-Silt Mixtures
			SC	Clayey Sands, Sand-Clay Mixtures
FINE-GRAINED SOILS (More Than Half of Material is SMALLER Than No. 200 Sieve Size)	SILTS & CLAYS	Liquid Limit Less Than 50	ML	Inorganic Silts & Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity
			CL	Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays
	SILTS & CLAYS	Liquid Limit Greater Than 50	MH	Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils, Elastic Silts
			CH	Inorganic Clays of High Plasticity, Fat Clays
FORMATIONAL MATERIALS	SANDSTONE			Massive Sandstones, Sandstones with Gravel Clasts
	MARLSTONE			Indurated Argillaceous Limestones
	LIMESTONE			Massive or Weakly Bedded Limestones
	CLAYSTONE			Mudstone or Massive Claystones
	CHALK			Massive or Poorly Bedded Chalk Deposits
	MARINE CLAYS			Cretaceous Clay Deposits
	GROUNDWATER			Indicates Final Observed Groundwater Level
				Indicates Initial Observed Groundwater Location

Arias & Associates, Inc.

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED: JULY 2014
REVIEWED BY: NGS
DRAWN BY: ALL
DESIGNED BY: JEH

RS&H PROJECT NUMBER
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SHEET TITLE

GEOTECHNICAL BORING LOGS (2 OF 2)

SHEET NUMBER

C018

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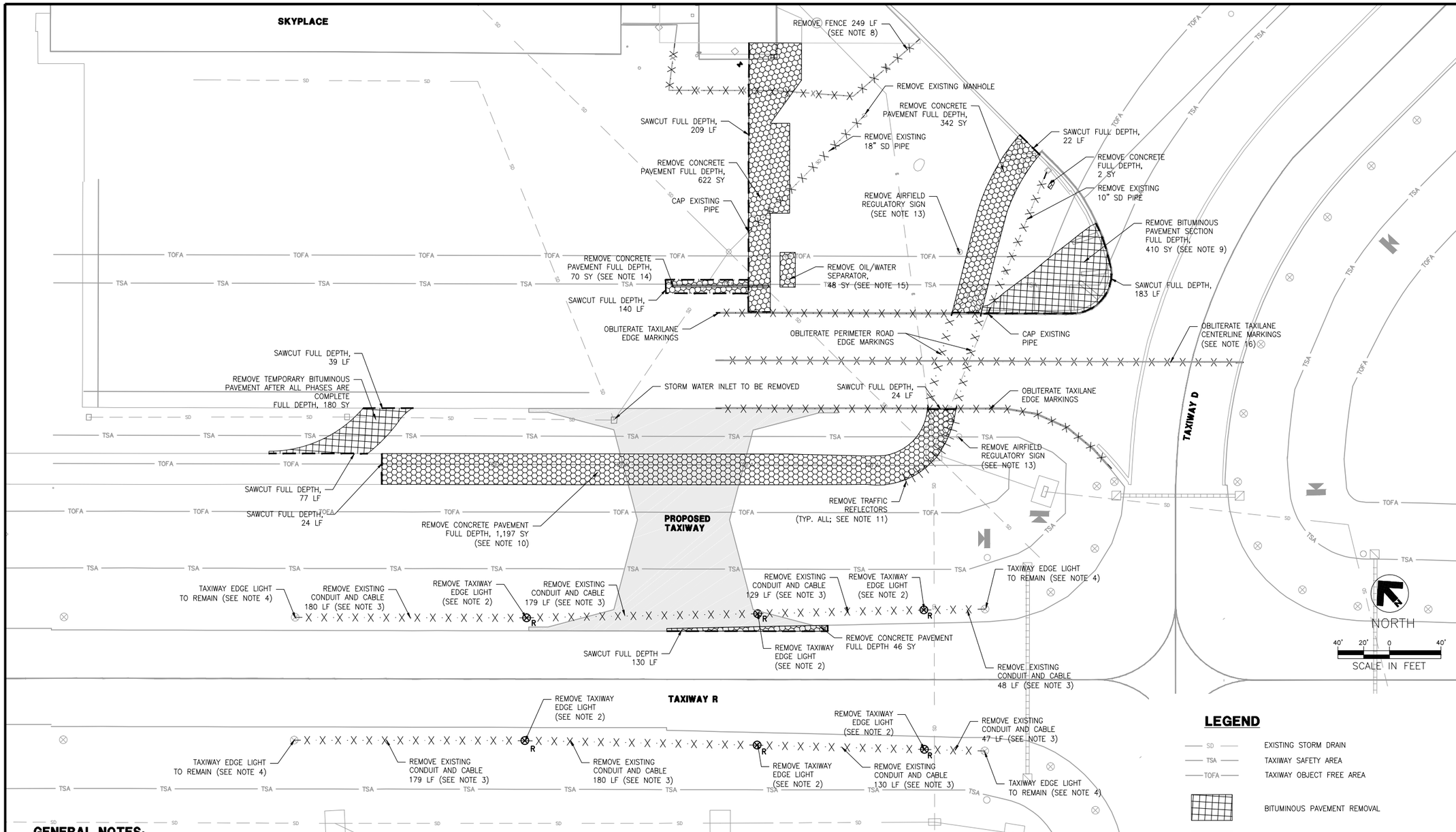

GENERAL NOTES:

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. EXISTING ELEVATED EDGE LIGHT AND ISOLATION TRANSFORMER TO BE REMOVED. EXISTING LIGHT BASE TO BE REMOVED AND DISPOSED OFF OF AIRPORT PROPERTY. COST OF REMOVAL SHALL BE PAID FOR UNDER TEM L-125-5.4.
3. EXISTING CIRCUIT AND CONDUIT TO BE REMOVED. COST OF REMOVAL SHALL BE PAID FOR UNDER ITEM L-125-5.6.
4. EXISTING TAXIWAY ELEVATED FIXTURE AND EXISTING LIGHT BASE TO BE PROTECTED AT ALL TIMES.
5. ALL REMOVED FIXTURES, SIGNS AND TRANSFORMERS SHALL REMAIN THE PROPERTY OF THE AIRPORT.
6. ANY ITEM NOT LISTED AS TO BE REMOVED SHALL BE PROTECTED FROM DAMAGE. ANY RESULTING DAMAGE FROM CONSTRUCTION ACTIVITIES SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
7. AT LOCATIONS NOTED ON PLANS, CONTRACTOR SHALL PROVIDE A FULL DEPTH SAWCUT, TO PROVIDE A PLUMB, CLEAN VERTICAL FACE FOR PROPOSED PAVEMENT.
8. FENCE REMOVAL SHALL BE COORDINATED WITH BUILDING CONTRACTOR. FENCE CANNOT BE REMOVED UNTIL NEW PERIMETER FENCE IS INSTALLED BY OTHERS.
9. REMOVAL SHALL INCLUDE 4" OF ASPHALT AND 12" OF CEMENT TREATED BASE. SHALL BE PAID FOR UNDER ITEM P-107.
10. REMOVAL SHALL INCLUDE 8" OF CONCRETE. SHALL BE PAID FOR UNDER P-107.
11. REMOVAL OF TRAFFIC REFLECTORS WILL BE INCIDENTAL TO THE PAVEMENT REMOVAL.
12. SAWCUTTING INCIDENTAL TO PAY ITEM P-107.
13. REMOVE AIRFIELD REGULATORY SIGN AND SIGN FOUNDATION COMPLETELY. SHALL BE PAID FOR UNDER ITEM 101.
14. REMOVAL OF METAL GRATE IS INCIDENTAL TO CONCRETE REMOVAL.
15. APPROXIMATE WIDTH, DEPTH AND HEIGHT OF OIL WATER SEPARATOR IS 16'X11.5'X27'. REMOVAL SHALL BE PAID UNDER PAY ITEM P-107-4.4. LINE ITEM INCLUDES DISPOSAL OF STRUCTURE AS WELL AS ANY LIQUID AND/OR SOLID WASTE WITHIN THE STRUCTURE. WASTE IS ASSUMED TO BE NON-HAZARDOUS INDUSTRIAL WASTE CLASS I AND/OR CLASS II. ALL SAMPLING REQUIRED BY DISPOSAL FACILITY IS RESPONSIBILITY OF THE CONTRACTOR. ALL PERMITTING REQUIRED TO HAUL AND DISPOSE OF THIS TYPE OF MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. COPIES OF ALL DISPOSAL MANIFESTS SHALL BE PROVIDED TO THE CITY.
16. OBLITERATION OF PAVEMENT MARKINGS WITHIN TAXIWAY D OBJECT FREE AREAS SHALL BE DONE ON A PULL BACK BASIS. CONTRACTOR SHALL COORDINATE WITH AIRPORT OPERATIONS PRIOR TO COMMENCING WORK.
17. REFER TO THE PHASING PLANS, WHICH OUTLINE THE DEMOLITION WORK TO BE PERFORMED. EACH PHASE INCLUDES AN OUTLINED DESCRIPTION OF THE WORK TO BE PERFORMED DURING EACH PHASE. REFER TO THE PHASING PLANS (SHEET C007 TO SHEET C013) FOR A DETAILED DESCRIPTION.

LEGEND

SD	EXISTING STORM DRAIN
TSA	TAXIWAY SAFETY AREA
TOFA	TAXIWAY OBJECT FREE AREA
	BITUMINOUS PAVEMENT REMOVAL
	CONCRETE PAVEMENT REMOVAL
	PROPOSED FIS TAXIWAY
	SAWCUT CONCRETE PAVEMENT FULL DEPTH
-X·X·X·X-	ITEM TO BE REMOVED
R	TAXIWAY EDGE LIGHT TO BE REMOVED
	EXISTING GUIDANCE SIGN

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

REVISIONS

DATE ISSUED: JULY 2014
REVIEWED BY: JEH
DRAWN BY: ALL
DESIGNED BY: RS

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SHEET TITLE

DEMOLITION PLAN

SHEET NUMBER

C100

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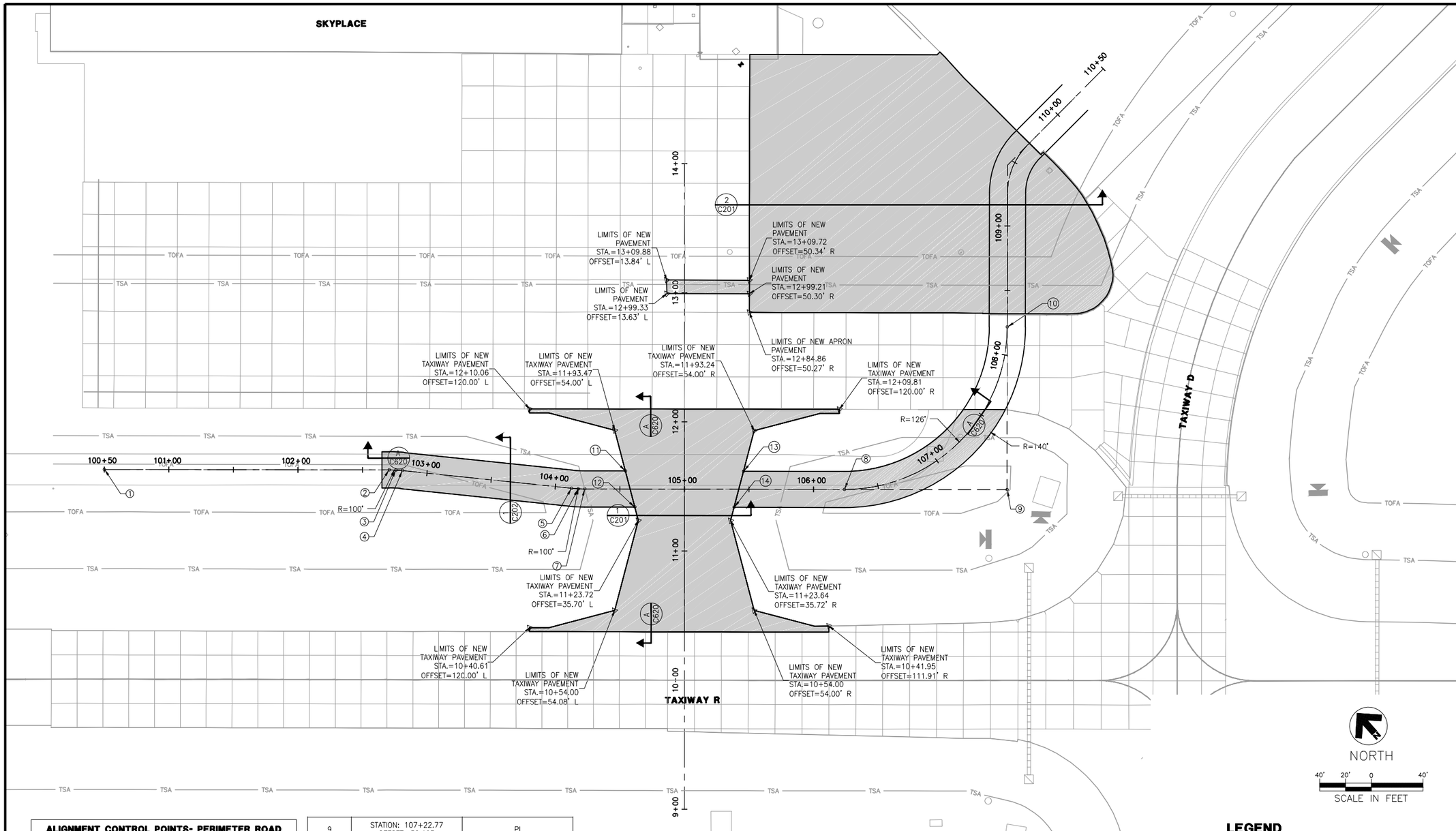

ALIGNMENT CONTROL POINTS- PERIMETER ROAD		
POINT	STATION/OFFSET	DESCRIPTION
1	STATION: 100+50.00 OFFSET: 0.00	START
2	STATION: 102+70.67 OFFSET: 0.00	PC
3	STATION: 102+75.77 OFFSET: 0.00	PI
4	STATION: 102+80.87 OFFSET: 0.00	PT
5	STATION: 104+12.57 OFFSET: 0.00	PC
6	STATION: 104+17.72 OFFSET: 0.14R	PI
7	STATION: 104+22.77 OFFSET: 0.00	PT
8	STATION: 106+23.81 OFFSET: 0.00	PC
9	STATION: 107+22.77 OFFSET: 52.19R	PI
10	STATION: 108+21.73 OFFSET: 0.00	PT
11	STATION: 104+54.23 OFFSET: 14.00L	LIMITS OF PERIMETER ROAD
12	STATION: 104+61.63 OFFSET: 14.00R	LIMITS OF PERIMETER ROAD
13	STATION: 105+45.73 OFFSET: 14.00L	LIMITS OF PERIMETER ROAD
14	STATION: 105+38.43 OFFSET: 14.00R	LIMITS OF PERIMETER ROAD

LEGEND

NEW PCC PAVEMENT

SECTION/JUNCTURE DETAIL (SEE SHEETS C201–202)

RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
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SHEET TITLE

GEOMETRY PLAN

SHEET NUMBER

C200

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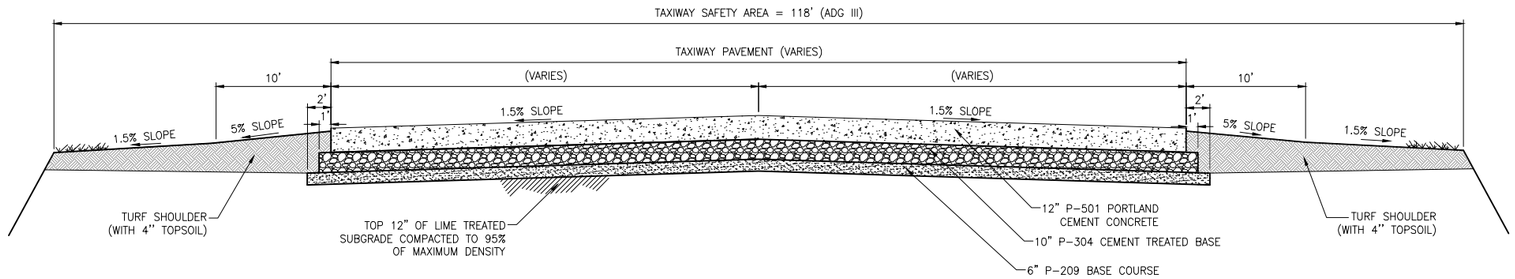
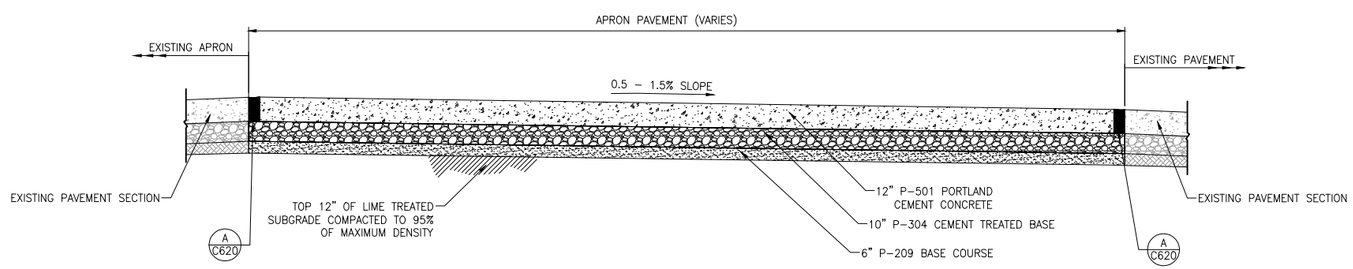


1 / C201 **TYPICAL TAXIWAY PAVEMENT SECTION**
SCALE: N.T.S.



2 / C201 **TYPICAL APRON PAVEMENT SECTION**
SCALE: N.T.S.

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RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

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JOHN E. HIPPCHEN
113667
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PROFESSIONAL ENGINEER
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SHEET TITLE

TYPICAL PAVEMENT SECTIONS (1 OF 2)

SHEET NUMBER

C201

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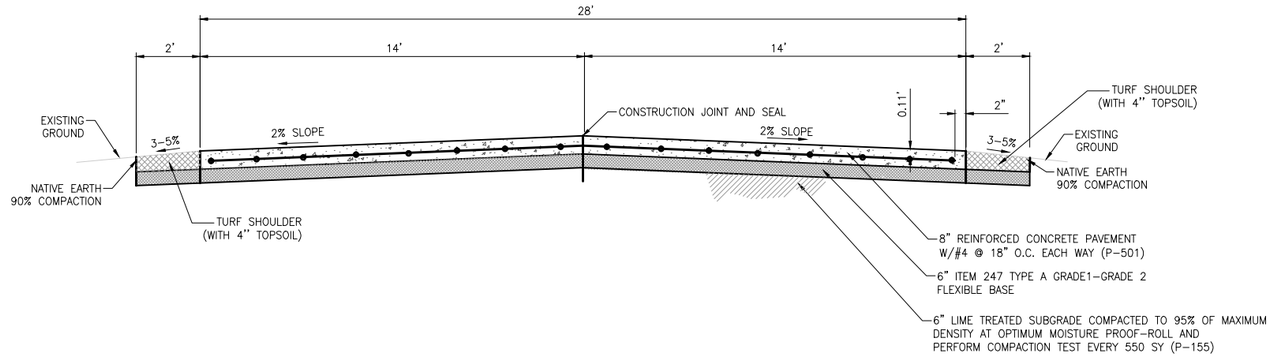
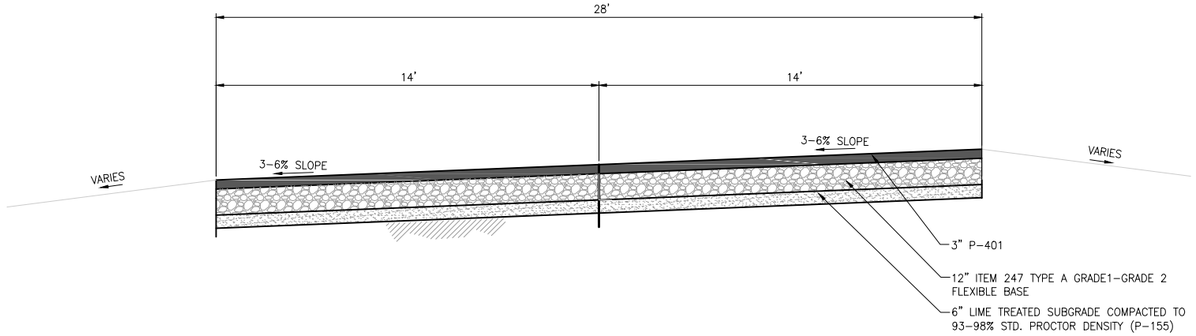


1 / C202 **TYPICAL PERIMETER ROAD SECTION**
SCALE: N.T.S.



2 / C202 **TYPICAL TEMPORARY PERIMETER ROAD SECTION**
SCALE: N.T.S.

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RS&H, Inc.
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SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
7/25/14

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SHEET TITLE

TYPICAL PAVEMENT SECTIONS (2 OF 2)

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C202

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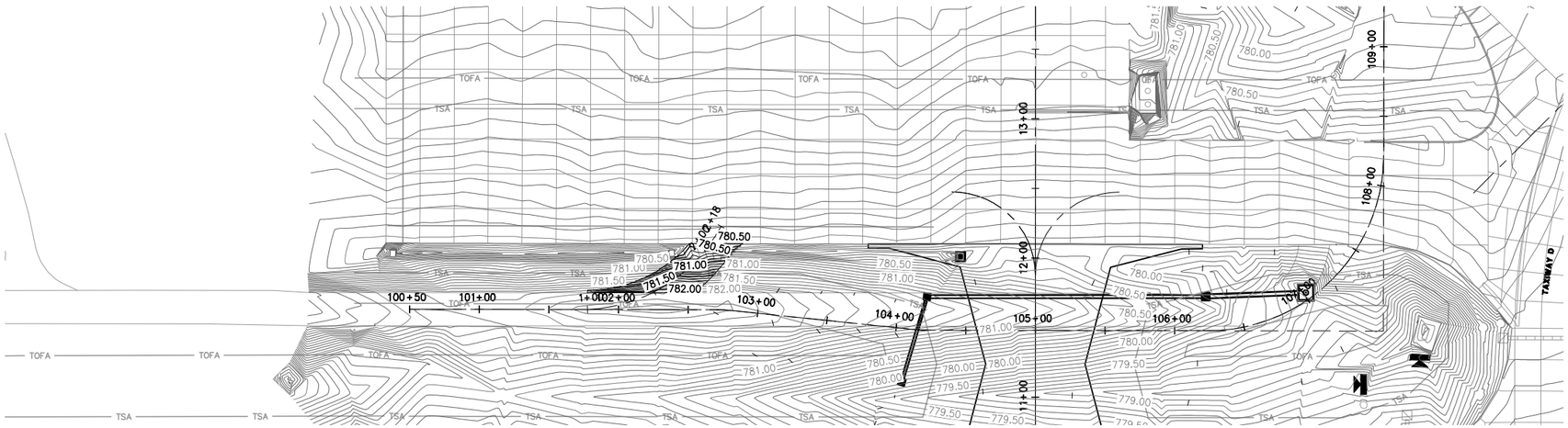
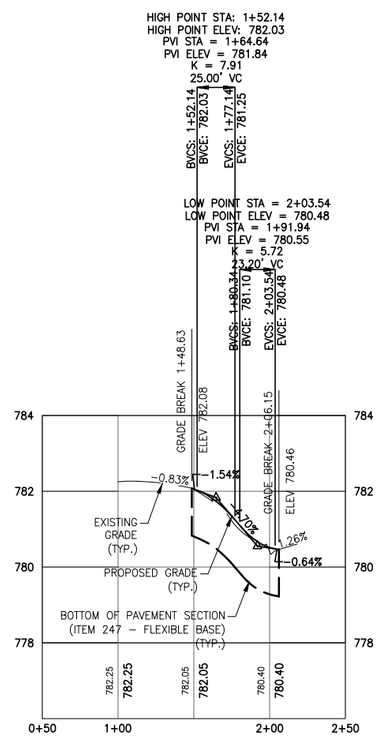
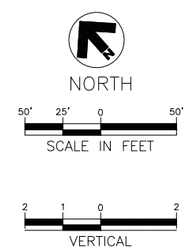




PERIMETER ROAD PROFILE



RS&H

RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
WWW.RSANDH.COM
REGISTERED FIRM NO: F-3401

SAN ANTONIO INTERNATIONAL AIRPORT
SAN ANTONIO, TEXAS

SAN ANTONIO INTERNATIONAL AIRPORT

GA FIS TAXIWAY AND APRON IMPROVEMENTS

STATE OF TEXAS
JOHN E. HIPPCHEN
113667
LICENSED
PROFESSIONAL ENGINEER
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SHEET TITLE

TEMPORARY PERIMETER ROAD PROFILE

SHEET NUMBER

C300

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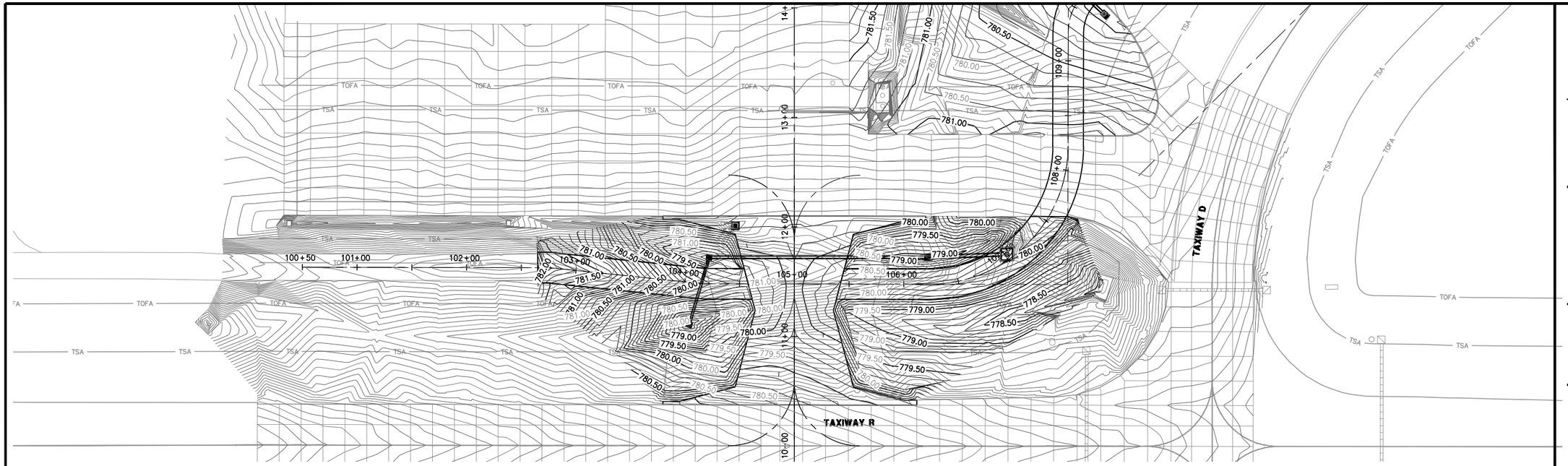
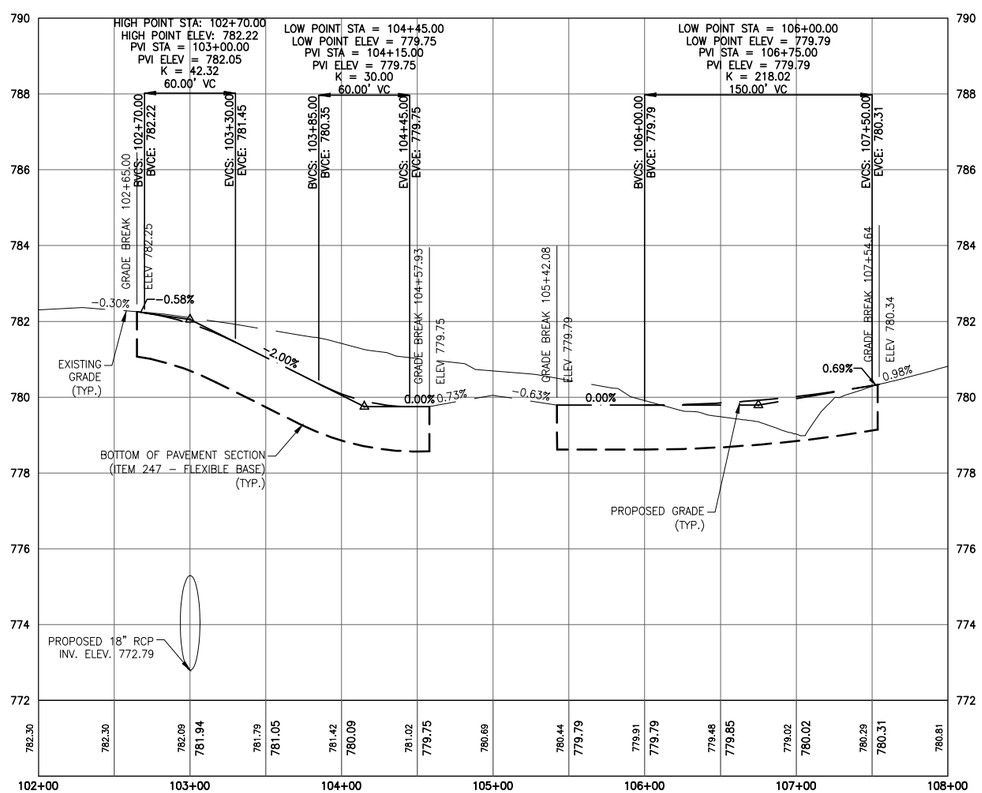
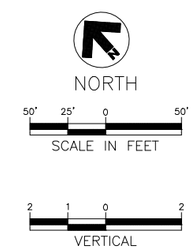




PERIMETER ROAD PROFILE



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RS&H, Inc.
13750 SAN PEDRO AVE, SUITE 300
SAN ANTONIO, TX 78232
(210) 224-2800 FAX (210) 545-3103
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SHEET TITLE

PERIMETER ROAD PROFILE

SHEET NUMBER

C301

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