



CITY OF HOUSTON

John Whitmire

Mayor



George Bush Intercontinental ~ William P. Hobby ~ Ellington Airport

Jim Szczesniak
Director of Aviation

August 6, 2025

SUBJECT: Addendum No. 4

REFERENCE: Invitation To Bid (ITB) for the IAH Runway 9-27 Grind and Groove at George Bush Intercontinental Airport (IAH); Solicitation No. H06-IAHRWY-2025-009; Project No. 1073

To: All Prospective Bidders:

This Addendum is being issued for the following reasons:

I. Extend the deadline for questions from August 5, 2025, **to August 12, 2025, by 12:00 P.M. (CT).**

II. Revise the following pages with the attached documents outlined below:

1. Document 00410A and 00410B Bid Form Part A and Bid Form Part B – Revised 08/05/2025
2. Document 00015 List of Drawings
3. Sheet No. G-002
4. Sheet No. GC-201
5. Sheet No. CP-101
6. Sheet No. CP-102
7. Sheet No. CP-103
8. Sheet No. CP-104
9. Sheet No. CP-105
10. Sheet No. CR-504
11. Sheet No. GC-100

III. Add the following pages with the attached document outlined below:

1. Sheet No. EP-101

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IAH Runway 9-27 Grind and Groove at George Bush Intercontinental Airport

Solicitation No. H06-IAHRWY-2025-009

Project No. 1073

IV. Respond to the following questions.

1. **Question:** Can HAS consider extending the contract time from 60 Calendar Days to at a minimum 90 Calendar Days? 120 Calendar Days would be ideal, but we understand the time constraints with the FIFA World Cup starting in June of 2026. Ideally, if this job would be able to start in January or February of 2026 as opposed to March 2026, we believe the May 31st completion date would be more obtainable. If we are constrained to 60 Calendar Days, we feel that any delay in the project would put us over the 60 Days and would potentially put us at risk of not having the runway available and active for the World Cup.

Response: Please refer to Document 00410A and 00410B Bid Form Part A and Bid Form Part B - Revised 08/05/2025, 2.0 Contract Time. Contractor shall achieve Date of Substantial Completion within **90 calendar days** after the Date of Commencement of the Work, subject to adjustments of Contract Time as provided in the Contract.

2. **Question:** During the Asphalt Seal Coat operation, is there any scope of work involving the runway and taxiway edge lights? If so, what is the intended scope of work and what Line Item pays for the intended scope of work?

Response: The Contractor shall protect the lights during the seal coat operation. The payment for protecting the lights is incidental to the seal coat line item.

3. **Question:** Reference Bid Form Item No. 24: In order to correctly price the Temporary Electrical Provisions, can the engineer provide circuitry information for the South Complex taxiways including T/W RA & T/W RB at the intersections with T/W SC & T/W SF?

Response: See plan sheet EP-101 included in Addendum No. 3 for additional circuiting information. See Document 00015 for the updated List of Drawings.

4. **Question:** Please confirm if there are any RWSL fixtures in R/W 9-27. If RWSL fixtures are present in R/W 9-27, please provide details for scope of work involving these fixtures/base cans.

Response: There are no runway status lights on Runway 9-27.

5. **Question:** Reference Drawing E-101: Will Fixture #4SCKCL require a new base can per Keyed Note 2?

Response: Taxiway Centerline Light 4SCKCL will not require a new base can.

6. **Question:** Neither Project Manual Volume 1 or Volume 2 contain any of the FAA Technical Specification. Please provide the Technical Specifications as listed in the Spec. Ref. column of the Bid Form, Part B.

Response: See Addendum No. 3 for Specification Division 02: Project Manual Volume 3.

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7. **Question:** Based on scope and size of project, it is not feasible to complete this project in 60 calendar days. Please consider increasing contract time for 90 calendar days. To accommodate the FIFA world cup timeline, we strongly suggest to conder the NTP in January or February of 2026.

Response: Please refer to Document 00410A and 00410B Bid Form Part A and Bid Form Part B - Revised 08/05/2025, 2.0 Contract Time. Contractor shall achieve Date of Substantial Completion within **90 calendar days** after the Date of Commencement of the Work, subject to adjustments of Contract Time as provided in the Contract.

8. **Question:** Plans says 5 ft mill and pave but pay item is asphalt grinding (item# P101-4). Is this asphalt diamond grinding or regular milling? Please clarify.

Response: See attached G-002 and Document 00410 for quantity updates. See attached CP series for the legend update for clarification.

9. **Question:** The Contract documents have the spall repair listed by the Square Yard, while the drawings have the spall repair listed by the Square Foot, which unit of measure is correct?

Response: See revised Document 00410 for quantity table update. Spall repair is by the square foot.

10. **Question:** Can you provide technical specifications for this project? None have been provided with the project manuals.

Response: See Addendum No. 3 for Specification Division 02: Project Manual Volume 3.

11. **Question:** The plans show a 5' mill & pave item to be performed. At the pre-bid, it was said that this is Grinding of the asphalt shoulder to assist with drainage. Milling and grinding are completely different operations. Can this be clarified? If it is a mill & pave, can a line item be provided for this work?

Response: See attached CP Series for the Legend update for clarification.

12. **Question:** 60 days is an exceedingly aggressive schedule to complete the scope of work on this project. The time allotment for the 8R-26L project previously bid was 95 days for less scope. Can additional days be added to the contract to allow for the complex scope of work required on this project?

Response: Please refer to Document 00410A and 00410B Bid Form Part A and Bid Form Part B - Revised 08/05/2025, 2.0 Contract Time. Contractor shall achieve Date of Substantial Completion within **90 calendar days** after the Date of Commencement of the Work, subject to adjustments of Contract Time as provided in the Contract.

13. **Question:** With the amount of questions and clarifications expected for this project, can the questions deadline be extended to that any response from HAS can be properly understood and further clarified if needed?

Response: Question deadline has been extended until August 12, 2025, by 12:00 P.M. (CT).

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Project No. 1073

14. **Question:** Can HAS please review the runway grooving quantity? The quantity should not include the outer 10' on each side of the runway.

Response: See attached G-002 and Document 00410 for quantity updates. See attached CP series for the legend update for clarification. See attached sheet CR-504 for the grooving detail updates.

15. **Question:** Page GC-201 of the plans shows post-grind profile testing to take place after the grooving. Can this be corrected to indicate that all testing and regrinding must be completed prior to the grooving?

Response: See updated sheet GC-201 attached.

16. **Question:** Will technical specs be added to the documents on the solicitation page?

Response: See Addendum No. 3 for Specification Division 02: Project Manual Volume 3.

17. **Question:** Bid Item # 18 Asphalt Seal Coat, says to utilize the spec and mix of P-629. Do P-608 or P-631 acceptable in lieu of P629? Please clarify.

Response: The Asphalt Seal Coat shall follow the P-629 specifications.

18. **Question:** Is document 600 requirement of the bid documents? Please clarify.

Response: No, Document 600 is not a requirement of the bid documents.

19. **Question:** What is the % materials supplier will be count towards DBE goal?

Response: 60% will be counted towards goal credit.

20. **Question:** If the vendor/supplier only counts for 60% on materials supplies, how to incorporate that \$ value & % into Form 00470D and DBE goal Letter of Intent as DBE goal? Example, if supplier had \$100,000 worth of supplies, do the form 00470D and DBE goal Letter of Intent to include \$100,000 or \$60,000? It looks like these forms requires to add these lines as supplier or as subcontractor so that it would be easier to include them correctly. Or do we specify note 60% rule as supplier and include total value but reflect that into % of goal? Please clarify.

Response: If the supplier's contract amount is \$100,000.00, the full amount will be paid to the supplier. However, only 60% of that amount—i.e., \$60,000.00—will be counted toward the Prime Contractor's participation goal. For this example, please list the full \$100,000.00 on the Form 470D and include the appropriate NAICS code to indicate that the firm is classified as a supplier.

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When issued, Addendum shall automatically become part of the solicitation documents and shall supersede any previous specification(s) and/or provision(s) in conflict with the Addendum. Addendum will be incorporated into the Agreement as applicable. It is the responsibility of the bidder(s) to ensure that it has obtained all such letter(s). By submitting a bid on this project, bidder(s) shall be deemed to have received all Addendum and to have incorporated them into their bid.

If further clarification is needed regarding this solicitation, please contact Senior Procurement Specialist, David Martinez via email at david.martinez@houstontx.gov.

Sincerely,



DocuSigned by:
Cathy Vander Plaats
02232028DE99414...

Cathy Vander Plaats
Aviation Procurement Officer
Houston Airport System

cc: Solicitation file, André Morrow, David Martinez

Attachments:

1. Document 00410A and 00410B Bid Form Part A and Bid Form Part B – Revised 08/05/2025
2. Document 00015 List of Drawings
3. Sheet No. G-002
4. Sheet No. GC-201
5. Sheet No. CP-101
6. Sheet No. CP-102
7. Sheet No. CP-103
8. Sheet No. CP-104
9. Sheet No. CP-105
10. Sheet No. CR-504
11. Sheet No. GC-100
12. Sheet No. EP-101

IAH Runway 9-27 Grind and Groove
 Project No. 1073

**BID FORM
 PART A**

Document 00410A

BID FORM – PART A

To: **The Honorable Mayor and City Council of the City of Houston
 City Hall Annex
 900 Bagby Street
 Houston, Texas 77002**

Project: Runway 9-27 Grind and Groove

Project No.: _____

Bidder: _____

(Print or type full name of business entity, such as corporation, LLC, etc)

1.0 OFFER

- A. Total Bid Price:** Having examined the Project location and all matters referred to in Bid Documents for the Project, we, the undersigned, offer to enter into a Contract to perform the Work for the Total Bid Price shown on the signature page of this Document
- B. Security Deposit:** Included with the Bid is a Security Deposit in the amount of 10 percent of the Total Bid Price subject to terms described in Document 00200 – Instructions to Bidders.
- C. Period for Bid Acceptance:** This offer is open to acceptance and is irrevocable for 180 days from Bid Date. That period may be extended by mutual written agreement of the City and Bidder.
- D. Addenda:** All Addenda have been received. Modifications to Bid Documents have been considered and all related costs are included in the Total Bid Price.
- E. Bid Supplements:** The following documents are attached:
 - Security Deposit (*as defined in Document 00200 – Instructions to Bidders*)
 - Document 00450 - Bidder's Statement of MWSBE Status
 - Document 00454 - Affidavit of Non-interest
 - Document 00455 - Ownership Information Form
 - Document 00456 - Bidder's Certificate of Compliance with Buy American Program (*required for AIP funded project*)
 - Document 00457 – Conflicts of Interest Questionnaire (CIQ)
 - Document 00458 - Bidder's Certificate Regarding Foreign Trade Restriction (*required for AIP funded project*)
 - Document 00459 - Contractor's Statement Regarding Previous Contracts Subject to EEO (*required for AIP funded project*)
 - Document 00460 – Pay or Play Acknowledgement Form (POP 1-A)
 - Document 00461 – Hire Houston First Affidavit
 - Document 00470 – Bidder's MWSBE Participation Plan (*required unless no MWSBE participation goal is provided in Document 00800 (the "Goal")*).
 - Document 00470D - Bidder's DBE Participation Plan (*required for AIP funded project*)

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**BID FORM
PART A**

- Document 00471 – Bidder’s Record of Good Faith Efforts *(required if the goal in Bidder’s Participation Plan–Document 00470 is lower than the Goal).*
- Document 00472 – Bidder’s Goal Deviation Request *(required if the goal in Bidder’s Participation Plan–Document 00470 is lower than the Goal).*
- Document 00480 – Form SCM-1 Reference Verification
- Document 00481 – Non-Collusion Statement
- Document 00842 – Letter of Intent
- Others as listed: _____

2.0 CONTRACT TIME

A. If offer is accepted, Contractor shall achieve Date of Substantial Completion within 90 calendar days after Date of Commencement of the Work, subject to adjustments of Contract Time as provided in the Contract.

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**BID FORM
 PART B**

Document 00410B

BID FORM – PART B

1.0 TOTAL BID PRICE HAS BEEN CALCULATED BY BIDDER, USING THE FOLLOWING COMPONENT PRICES AND PROCESS (PRINT OR TYPE NUMERICAL AMOUNTS):

A. STIPULATED PRICE (HOU): **\$N/A**
 (Total Bid Price; minus Base Unit Prices, Extra Unit Prices, Cash Allowances and All Alternates, if any)

A1. STIPULATED PRICE (IAH): **\$N/A**
 (Total Bid Price; minus Base Unit Prices, Extra Unit Prices, Cash Allowances and All Alternates, if any)

B. BASE UNIT PRICE TABLE:

ITEM NO.	SPEC REF.	ITEM DESCRIPTION	UNIT	ESTIMATED BID QUANTITY	UNIT PRICE	TOTAL IN FIGURES
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1		
2	C-102-1	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	LS	1		
3	C-105-1	MOBILIZATION / DEMOBILIZATION	LS	1		
4	C-105-2	GATE GUARD ESCORT	LS	1		
5	P-101-1	PAVEMENT REMOVAL	SY	125		
6	P-101-2	CONCRETE SPALL REPAIR	SY SF	125		
7	P-101-3	DIAMOND GRINDING	SY	167,090		
8	P-101-4	ASPHALT GRINDING	SY	74,650 <u>12,500</u>		
9	P-501-1	CONCRETE PAVEMENT	SY	125		
10	P-605-1	JOINT SEALING FILLER	LF	237,100		
11	P-620-5.1	SURFACE PREPARATION	LS	1		
12	P-620-5.2a	TAXIWAY MARKING WITH REFLECTIVE BEADS (YELLOW)	SF	4,750		
13	P-620-5.2c	TAXIWAY MARKING WITHOUT REFLECTIVE BEADS (BLACK)	SF	4,750		
14	P-620-5.2d	RUNWAY MARKING WITH REFLECTIVE	SF	271,560		

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**BID FORM
PART B**

		BEADS (WHITE)				
15	P-620-5.2e	RUNWAY MARKING WITHOUT REFLECTIVE BEADS (BLACK)	SF	43,410		
16	P-620-5.4	TEMPORARY TAXIWAY MARKING (INSTALL AND REMOVAL)	SF	3,540		
17	P-621-1	GROOVING	SY	167,090		
18	P-629-1	ASPHALT SEAL COAT	SY	80,300 <u>101,000</u>		
19	L-125-1	REMOVE AND SALVAGE EXISTING IN-PAVEMENT LIGHT FIXTURE, REMOVE TOP SECTION OF BASE CAN.	EA	643		
20	L-125-2	INSTALL SALVAGED IN-PAVEMENT LIGHT FIXTURE OR OWNER PROVIDED LED FIXTURE ON EXISTING BASE CAN	EA	643		
21	L-125-3	INSTALL NEW L-868B BASE CAN TOP SECTION ON EXISTING L-868B BASE CAN BOTTOM SECTION	EA	643		
22	L-125-4	INSTALL SALVAGED IN-PAVEMENT LIGHT FIXTURE OR OWNER PROVIDED LED FIXTURE ON NEW L-868B BASE CAN IN MODIFIED PAVEMENT AREA.	EA	3		
23	L-125-5	REPAIR BROKEN BOLTS AND THREADS AT EXISTING BASE CAN	EA	775		
24	L-125-6	TEMPORARY ELECTRICAL PROVISIONS	LS	1		
<u>TOTAL BASE UNIT PRICES</u>						\$ _____

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**BID FORM
PART B**

C. EXTRA UNIT PRICE TABLE:

Item No.	Spec Ref.	Extra Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in figures
<u>TOTAL EXTRA UNIT PRICES</u>						\$ _____

REST OF PAGE INTENTIONALLY LEFT BLANK

IAH Runway 9-27 Grind and Groove
 Project No. 1073

**BID FORM
 PART B**

CASH ALLOWANCE TABLE:

Item No.	Spec Ref.	Cash Allowance Short Title	Cash Allowance in figures (1)
<u>TOTAL CASH ALLOWANCES</u>			

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IAH Runway 9-27 Grind and Groove
 Project No. 1073

**BID FORM
 PART B**

E. ALTERNATES TABLE:

Item No.	Spec Ref.	Alternate Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total Price for Alternate in figures
<u>TOTAL ALTERNATES</u>						\$ _____

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IAH Runway 9-27 Grind and Groove
Project No. 1073

**BID FORM
PART B**

F. TOTAL BID PRICE (HOU) + (IAH): \$ _____
(Add Totals for Stipulated Price (A + A1), Base Unit Price, Extra Unit Price, Cash Allowance, and All Alternates, if any)

2.0 SIGNATURES: By signing this Document, I agree that I have received and reviewed all Addenda and considered all costs associated with the Addenda in calculating the Total Bid Price.

Bidder: _____
(Print or type full name of your proprietorship, partnership, corporation, or joint venture.*)

**** By:** _____
Signature Date

Name: _____
(Print or type name) Title

Address: _____
(Mailing)

(Street, if different)

Telephone and Fax Number: _____
(Print or type numbers)

* If Bid is a joint venture, add additional Bid Form signature sheets for each member of the joint venture.

** Bidder certifies that the only person or parties interested in this offer as principals are those named above. Bidder has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding.

Note: This document constitutes a government record, as defined by § 37.01 of the Texas Penal Code. Submission of a false government record is punishable as provided in § 37.10 of the Texas Penal Code.

DOCUMENT 00015

LIST OF DRAWINGS

RUNWAY 9-27 GRIND AND GROOVE PLAN:

G-001 COVER SHEET
G-002 INDEX OF DRAWINGS AND SUMMARY OF QUANTITIES
G-003 GENERAL SAFETY SECURITY AND UTILITY NOTES
GC-100 CONSTRUCTION SAFETY & PHASING NOTES AND DETAILS
GC-201 CONSTRUCTION SAFETY PHASING PLAN
CP-101 PROPOSED GRIND AND GROOVE PLAN SHEET 01 OF 05
CP-102 PROPOSED GRIND AND GROOVE PLAN SHEET 02 OF 05
CP-103 PROPOSED GRIND AND GROOVE PLAN SHEET 03 OF 05
CP-104 PROPOSED GRIND AND GROOVE PLAN SHEET 04 OF 05
CP-105 PROPOSED GRIND AND GROOVE PLAN SHEET 05 OF 05
CR-501 PAVEMENT DETAILS SHEET 01 OF 04
CR-502 PAVEMENT DETAILS SHEET 02 OF 04
CR-503 PAVEMENT DETAILS SHEET 03 OF 04
CR-504 PAVEMENT DETAILS SHEET 04 OF 04
CM-101 MARKING PLAN SHEET 01 OF 05
CM-102 MARKING PLAN SHEET 02 OF 05
CM-103 MARKING PLAN SHEET 03 OF 05
CM-104 MARKING PLAN SHEET 04 OF 05
CM-105 MARKING PLAN SHEET 05 OF 05
CM-501 MARKING DETAILS SHEET 01 OF 02
CM-501 MARKING DETAILS SHEET 02 OF 02
E-101 AIRFIELD LIGHTING PLANS 01 OF 09
E-102 AIRFIELD LIGHTING PLANS 02 OF 09
E-103 AIRFIELD LIGHTING PLANS 03 OF 09
E-104 AIRFIELD LIGHTING PLANS 04 OF 09
E-105 AIRFIELD LIGHTING PLANS 05 OF 09
E-106 AIRFIELD LIGHTING PLANS 06 OF 09
E-107 AIRFIELD LIGHTING PLANS 07 OF 09
E-108 AIRFIELD LIGHTING PLANS 08 OF 09
E-109 AIRFIELD LIGHTING PLANS 09 OF 09
E-501 AIRFIELD ELECTRICAL DETAILS
EP-101 TEMPORARY ELECTRICAL PROVISIONS

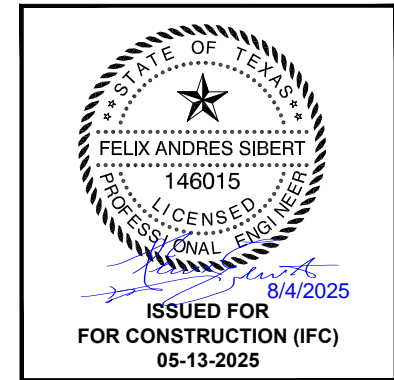
END OF DOCUMENT

REVISIONS

NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
INDEX OF DRAWINGS AND
SUMMARY OF QUANTITIES

PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025



APPROVED BY:

DIRECTOR
 HOUSTON AIRPORT SYSTEM

PROJECT NO.	100116454
A.I.P. NO.	
T.I.P. NO. TIP-25-55-IAH	
C.I.P. NO.	
B.S.G. NO. BSG-2025-118	
H.A.S. NO.	
SHEET NO.	

NO.	SHEET NO	SHEET TITLE
1	G-001	COVER SHEET
2	G-002	INDEX OF DRAWINGS AND SUMMARY OF QUANTITIES
3	G-003	GENERAL SAFETY SECURITY AND UTILITY NOTES
4	GC-100	CONSTRUCTION SAFETY & PHASING NOTES AND DETAILS
5	GC-201	CONSTRUCTION SAFETY PHASING PLAN
NO.	SHEET NO	CIVIL
1	CP-101	PROPOSED GRIND AND GROOVING PLAN SHEET 01 OF 05
2	CP-102	PROPOSED GRIND AND GROOVING PLAN SHEET 02 OF 05
3	CP-103	PROPOSED GRIND AND GROOVING PLAN SHEET 03 OF 05
4	CP-104	PROPOSED GRIND AND GROOVING PLAN SHEET 04 OF 05
5	CP-105	PROPOSED GRIND AND GROOVING PLAN SHEET 05 OF 05
6	CR-501	PAVEMENT DETAILS SHEET 01 OF 04
7	CR-502	PAVEMENT DETAILS SHEET 02 OF 04
8	CR-503	PAVEMENT DETAILS SHEET 03 OF 04
9	CR-504	PAVEMENT DETAILS SHEET 04 OF 04
10	CM-101	MARKING PLAN SHEET 01 OF 05
11	CM-102	MARKING PLAN SHEET 02 OF 05
12	CM-103	MARKING PLAN SHEET 03 OF 05
13	CM-104	MARKING PLAN SHEET 04 OF 05
14	CM-105	MARKING PLAN SHEET 05 OF 05
15	CM-501	MARKING DETAILS SHEET 01 OF 02
16	CM-502	MARKING DETAILS SHEET 02 OF 02
NO.	SHEET NO	ELECTRICAL
1	E-101	AIRFIELD LIGHTING PLANS 01 OF 09
2	E-102	AIRFIELD LIGHTING PLANS 02 OF 09
3	E-103	AIRFIELD LIGHTING PLANS 03 OF 09
4	E-104	AIRFIELD LIGHTING PLANS 04 OF 09
5	E-105	AIRFIELD LIGHTING PLANS 05 OF 09
6	E-106	AIRFIELD LIGHTING PLANS 06 OF 09
7	E-107	AIRFIELD LIGHTING PLANS 07 OF 09
8	E-108	AIRFIELD LIGHTING PLANS 08 OF 09
9	E-109	AIRFIELD LIGHTING PLANS 09 OF 09
10	E-501	AIRFIELD ELECTRICAL DETAILS
11	EP-101	TEMPORARY ELECTRICAL PROVISIONS

ITEM NO.	ITEM DESCRIPTION	UNIT	BASE BID QTY
C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1
C-102-1	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	LS	1
C-105-1	MOBILIZATION / DEMOBILIZATION	LS	1
C-105-2	GATE GUARD ESCORT	LS	1
P-101-1	PAVEMENT REMOVAL	SY	125
P-101-2	CONCRETE SPALL REPAIR	SF	125
P-101-3	PCC DIAMOND GRINDING	SY	167,090
P-101-4	ASPHALT DIAMOND GRINDING	SY	12,500
P-501-1	CONCRETE PAVEMENT	SY	125
P-605-1	JOINT SEALING FILLER	LF	237,100
P-620-5.1	SURFACE PREPARATION	LS	1
P-620-5.2a	TAXIWAY MARKING WITH REFLECTIVE BEADS (YELLOW)	SF	4,750
P-620-5.2c	TAXIWAY MARKING WITHOUT REFLECTIVE BEADS (BLACK)	SF	4,750
P-620-5.2d	RUNWAY MARKING WITH REFLECTIVE BEADS (WHITE)	SF	271,560
P-620-5.2e	RUNWAY MARKING WITHOUT REFLECTIVE BEADS (BLACK)	SF	43,410
P-620-5.2f	CHEVRON MARKING FOR BLAST PAD WITHOUT REFLECTIVE BEADS (YELLOW)	SF	7,668
P-620-5.4	TEMPORARY TAXIWAY MARKING (INSTALL AND REMOVAL)	SF	3,540
P-621-1	GROOVING	SY	167,090
P-629-1	ASPHALT SEAL COAT	SY	101,000
L-125-1	REMOVE AND SALVAGE EXISTING IN-PAVEMENT LIGHT FIXTURE, REMOVE TOP SECTION OF BASE CAN.	EA	645
L-125-2	INSTALL SALVAGED IN-PAVEMENT LIGHT FIXTURE OR OWNER PROVIDED LED FIXTURE ON EXISTING BASE CAN	EA	645
L-125-3	INSTALL NEW L-868B BASE CAN TOP SECTION ON EXISTING L-868B BASE CAN BOTTOM SECTION	EA	645
L-125-4	INSTALL SALVAGED IN-PAVEMENT LIGHT FIXTURE OR OWNER PROVIDED LED FIXTURE ON NEW L-868B BASE CAN IN MODIFIED PAVEMENT AREA	EA	2
L-125-5	LIGHT FIXTURE BLOCKOUT	EA	2
L-125-6	REPAIR BROKEN BOLTS AND THREADS AT EXISTING BASE CAN	EA	775
L-125-7	TEMPORARY ELECTRICAL PROVISIONS	LS	1

CONSTRUCTION PLAN PHASE 1:
PROJECT CONSTRUCTION INCLUDES THE FOLLOWING ITEMS:

1. INSTALL CONSTRUCTION HAUL ROUTE SIGNAGE
2. BLACKOUT TAXIWAY PAINT MARKINGS
3. SETUP BARRICADES.
4. SETUP LIGHTED X RUNWAY CLOSURE MARKERS.
5. REMOVE ALL PAINT MARKINGS WITHIN PROJECT AREA.
6. COVER ELECTRICAL SIGNS.
7. COVER RUNWAY EDGE LIGHTS. GUIDANCE SIGN AND LIGHTING CIRCUITS FOR CLOSED TAXIWAYS AND RWY 9-27 INCLUDING RWY 9 AND 27 THRESHOLD AND APPROACH LIGHTS SHALL BE TURNED OFF AT THE ALCMS.
8. TEST RUN FOR RUNWAY GRINDING.
9. PROFILOGRAPH RUNWAY FOR EXISTING SMOOTHNESS CONDITIONS.

10. REMOVE ELECTRICAL LIGHTS AND MEASURE LIGHT BASE CAN LIDS FOR EXTENSION RING ORDER.
11. CONCRETE SPALL REPAIRS
12. CONCRETE LIGHT BLOCKOUT REPLACEMENTS
13. CAP LIGHT BASE CANS.
14. GRIND RUNWAY
15. PROFILOGRAPH RUNWAY FOR POST-SMOOTHNESS VERIFICATION
16. GROOVE RUNWAY
17. REPLACE ELECTRICAL LIGHTS ON NEW EXTENSION RINGS AND SPACERS
18. SEAL RUNWAY JOINTS
19. APPLY SEAL COAT
20. PAINT RUNWAY MARKINGS
21. PAINT TAXIWAY MARKINGS
22. REMOVE BARRICADES
23. REMOVE LIGHTED X RUNWAY CLOSURE
24. REMOVE SIGN/LIGHT COVERS AND TEMPORARY JUMPERS

CONSTRUCTION TIME RESTRICTIONS:
NONE

CONSTRUCTION DURATION:
60 CALENDAR DAYS

NOTES:

1. TAXIWAY CENTERLINE MARKINGS ARE REMOVED FROM PC/PT OF CURVE TO HOLD POSITION MARKING.
2. SHOULDERS MAY NEED TO BE GROUND.
3. IT IS ANTICIPATED MANY WORK SCOPE ITEMS WILL BE PERFORMED CONCURRENTLY. CONTRACTOR TO PROVIDE WORK SCHEDULE SHOWING OVERLAPPING WORK AREAS FOR REVIEW PRIOR TO MOBILIZING ON SITE.
4. CONTRACTOR SHALL PROVIDE PROFILOGRAPH RESULTS FOR AREAS PRIOR TO GRINDING FOR REVIEW/CONFIRMATION OF EXISTING CONDITIONS AND DETERMINE IF ADDITIONAL GRINDING IS NECESSARY WITHIN THESE AREAS TO CORRECT MINOR GRADE CORRECTIONS ON THE RUNWAY.
5. CONTRACTOR AND HAS SHALL WALK RUNWAY AND MARK ANY SPALLS REQUIRED FOR REPAIR PRIOR TO

GRINDING OPERATIONS.

6. SEE ELECTRICAL SHEETS FOR TEMPORARY LIGHTING AND SIGNAGE REQUIREMENTS

LEGENDS

- RUNWAY CLOSURE AREA PROPOSED 0.25" GRIND AND GROOVE
- CONTRACTOR EMPLOYEE PARKING AND STAGING AREA
- LOW PROFILE BARRICADE
- HAUL ROUTE
- RUNWAY LIGHTED "X"
- REMOVE EXISTING PAVEMENT MARKING
- WORK AREA

Houston Airport System
GEORGE BUSH INTERCONTINENTAL AIRPORT / HOUSTON, TX

AtkinsRéalis

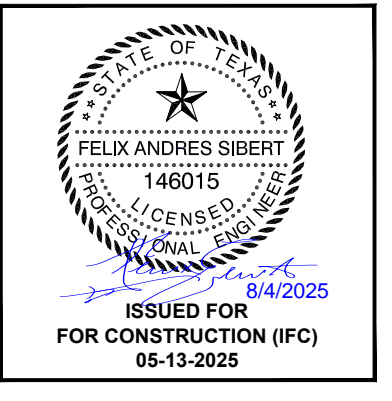
LOCAL OFFICE:
920 MEMORIAL CITY WAY
STE. 400
HOUSTON, TX 77024
TEL: (713) 576-8500
ATKINSREALIS
PE FIRM REG.
#F-000474
WWW.ATKINSREALIS.COM

REVISIONS

NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
CONSTRUCTION SAFETY PHASING PLAN

PROJECT MGR: JLV
 DESIGNER: EM
 DRAWN BY: GM
 CHECK BY: TO
 SCALE:
 DATE: 5/13/2025



APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

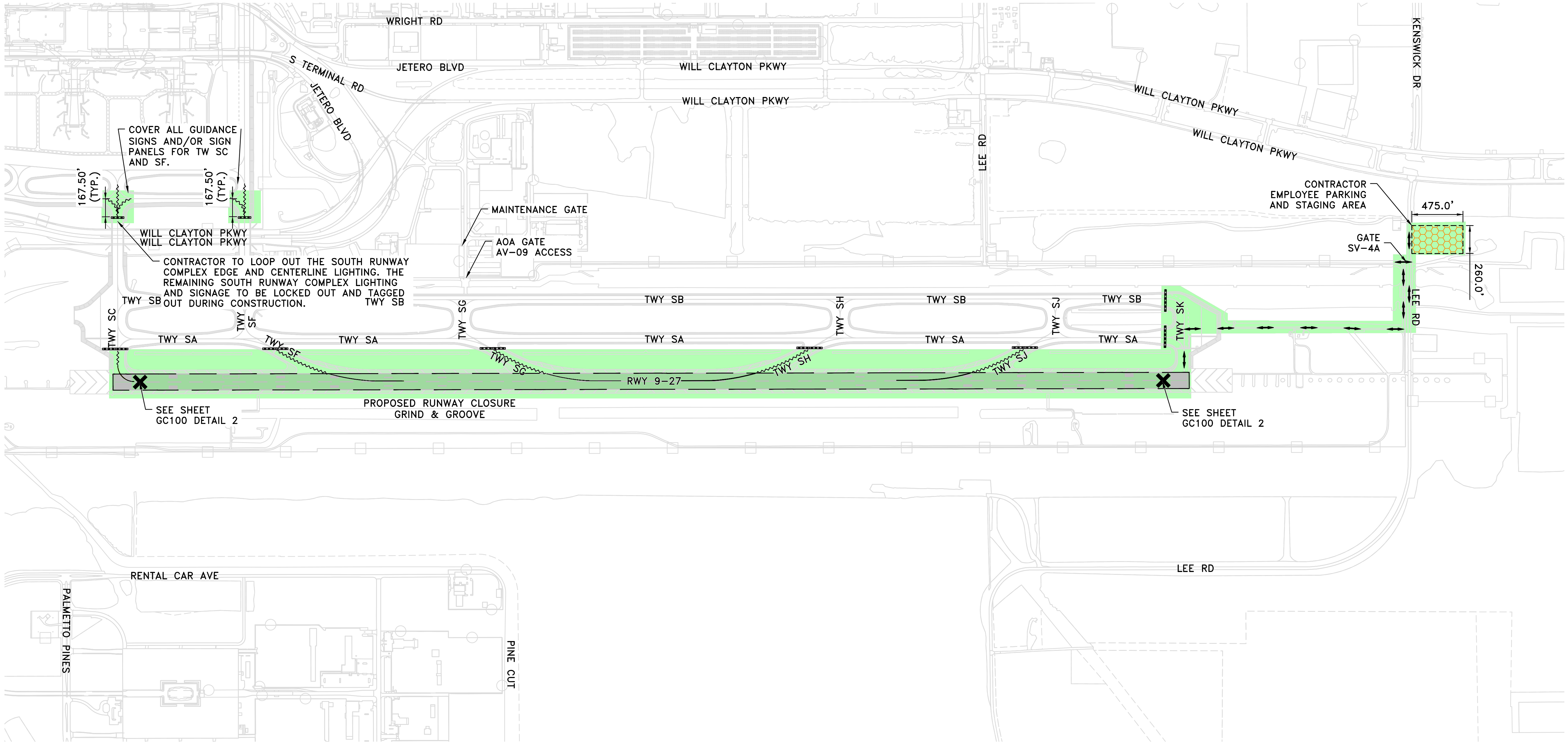
PROJECT NO.
100116454

A.I.P. NO.
T.I.P. NO. TIP-25-55-IAH

C.I.P. NO.
B.S.G. NO. BSG-2025-118

H.A.S. NO.

SHEET NO.



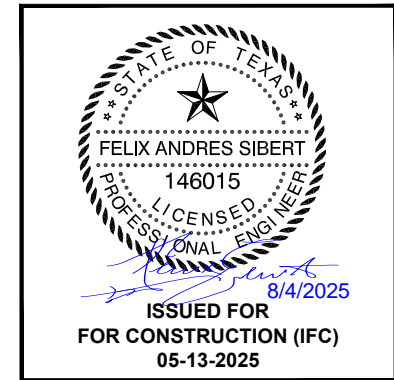
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REVISIONS

NO.	DESCRIPTION	DATE	BY
1	ADDENDUM #4	7/29/25	

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
PROPOSED GRIND AND GROOVE PLAN
SHEET 01 OF 05

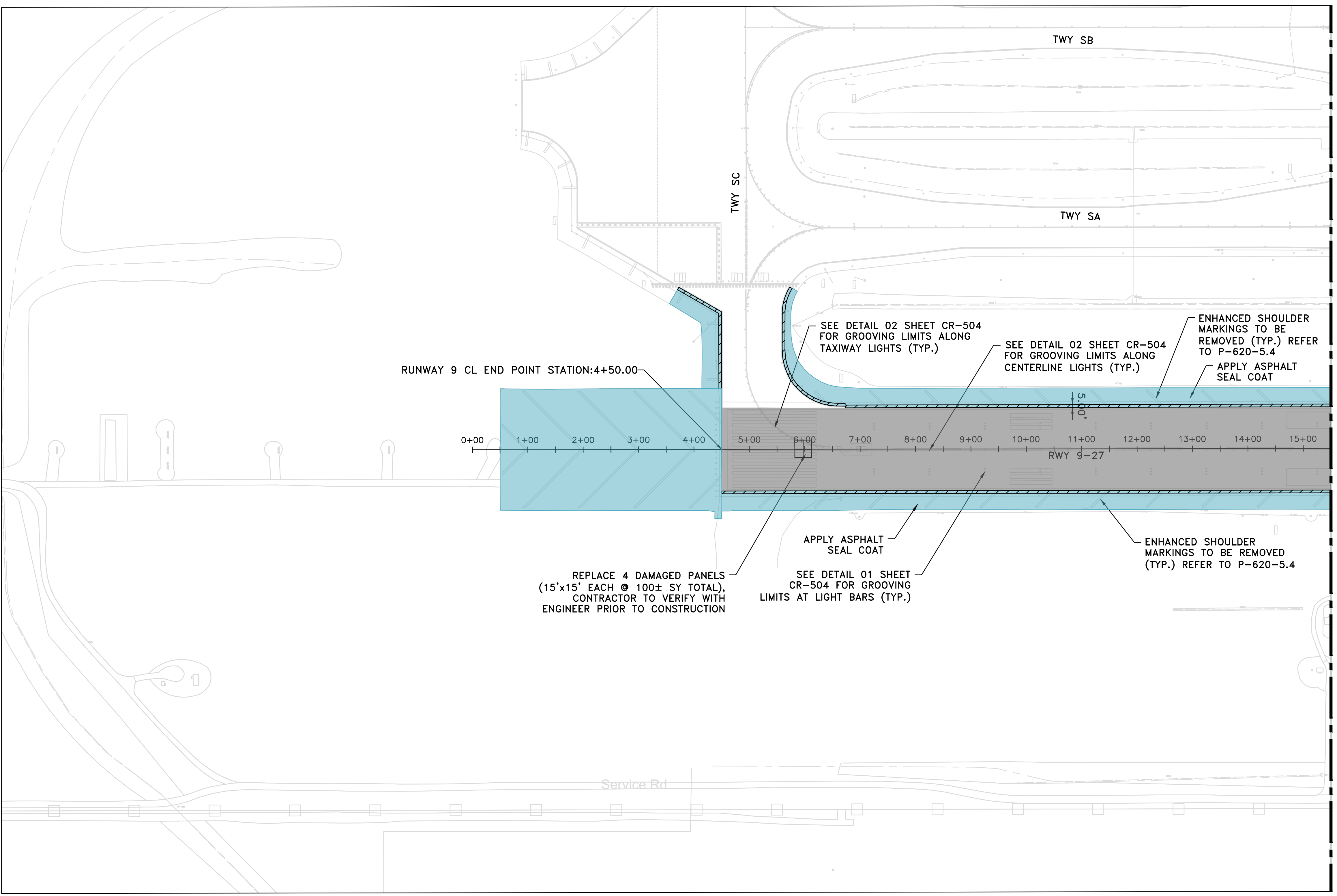
PROJECT MGR: JLJ
DESIGNER: EM
DRAWN BY: GM
CHECK BY: TO
SCALE:
DATE: 5/13/2025



APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

PROJECT NO. 100116454
A.I.P. NO.
T.I.P. NO. TIP-25-55-IAH
C.I.P. NO.
B.S.G. NO. BSG-2025-118
H.A.S. NO.
SHEET NO.



LEGENDS

- PROPOSED 0.25" GRIND AND GROOVE
- 5' WIDE ASPHALT DIAMOND GRINDING
- ASPHALT SEAL COAT

MATCHLINE STA 15+50 - SEE SHEET CP-102

RUNWAY 9 CL END POINT STATION:4+50.00

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00

RWY 9-27

REPLACE 4 DAMAGED PANELS (15'x15' EACH @ 100± SY TOTAL), CONTRACTOR TO VERIFY WITH ENGINEER PRIOR TO CONSTRUCTION

SEE DETAIL 01 SHEET CR-504 FOR GROOVING LIMITS AT LIGHT BARS (TYP.)

APPLY ASPHALT SEAL COAT

SEE DETAIL 02 SHEET CR-504 FOR GROOVING LIMITS ALONG TAXIWAY LIGHTS (TYP.)

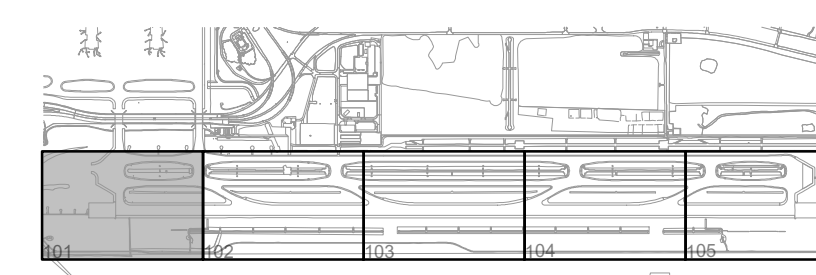
SEE DETAIL 02 SHEET CR-504 FOR GROOVING LIMITS ALONG CENTERLINE LIGHTS (TYP.)

ENHANCED SHOULDER MARKINGS TO BE REMOVED (TYP.) REFER TO P-620-5.4

APPLY ASPHALT SEAL COAT

ENHANCED SHOULDER MARKINGS TO BE REMOVED (TYP.) REFER TO P-620-5.4

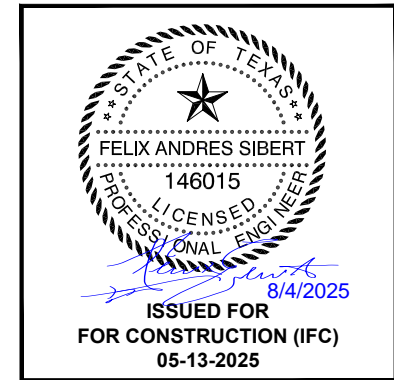
Service Rd



REVISIONS		
NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
**RUNWAY 9-27 GRIND & GROOVE
PROPOSED GRIND AND GROOVE PLAN
SHEET 02 OF 05**


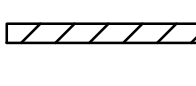
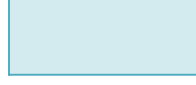
PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025

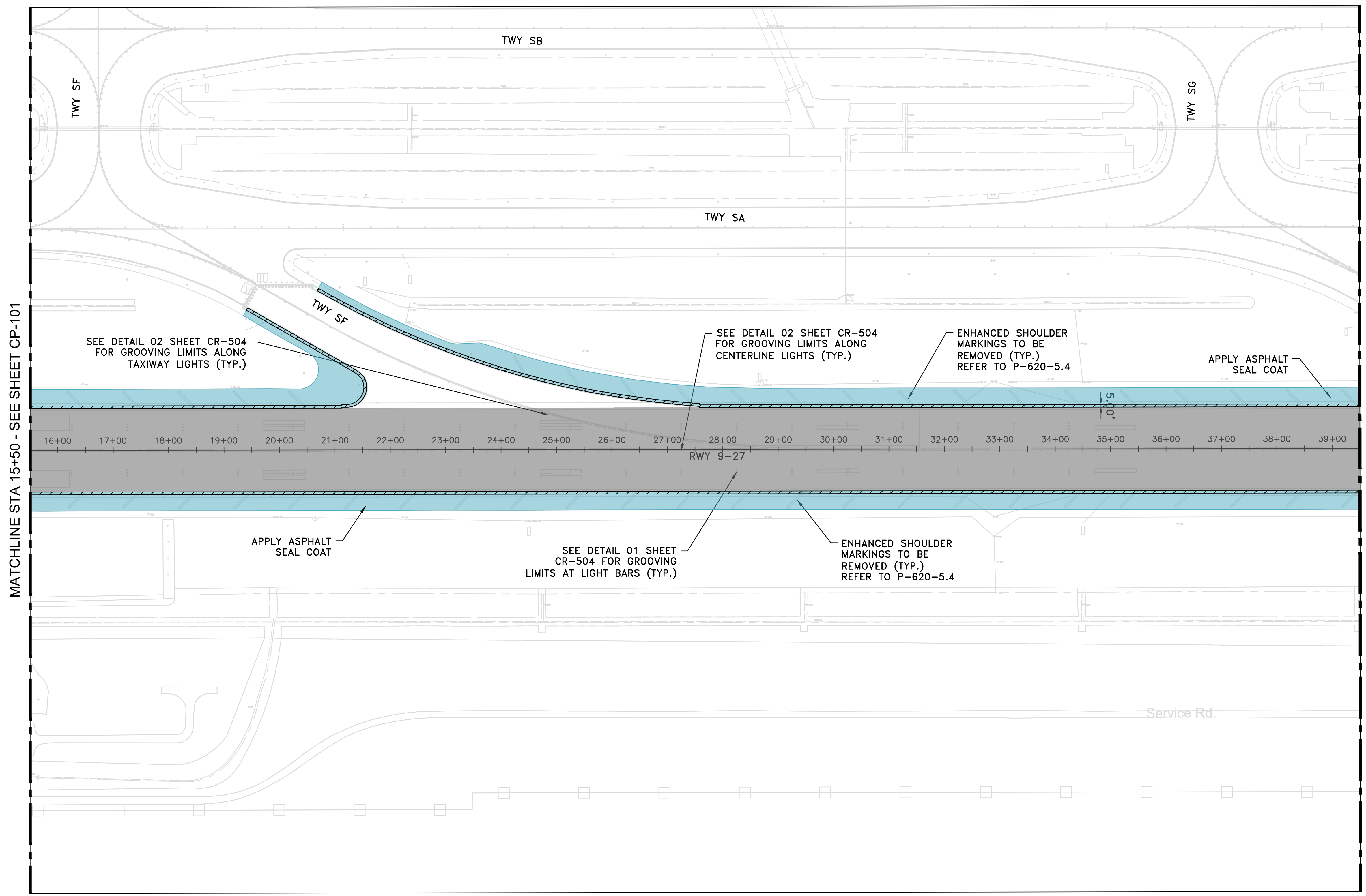


APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

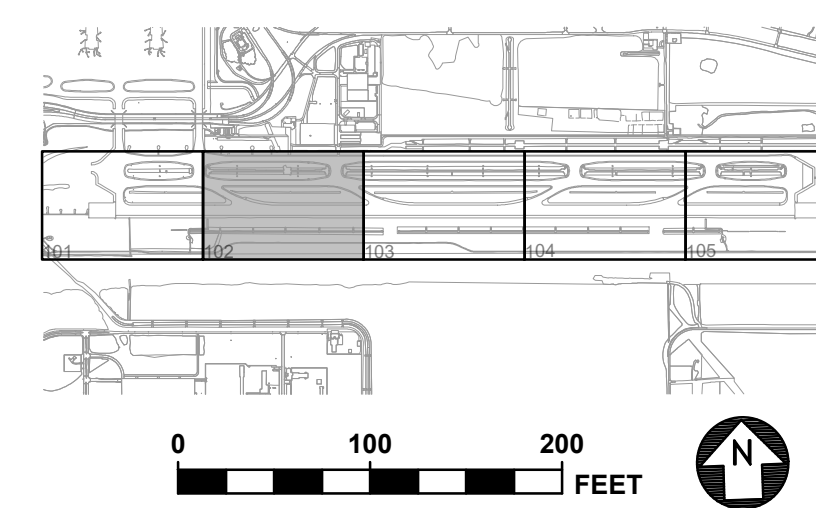
PROJECT NO.	100116454
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B.S.G. NO. BSG-2025-118	
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- LEGENDS**
-  PROPOSED 0.25" GRIND AND GROOVE
 -  5' WIDE ASPHALT DIAMOND GRINDING
 -  ASPHALT SEAL COAT



MATCHLINE STA 15+50 - SEE SHEET CP-101

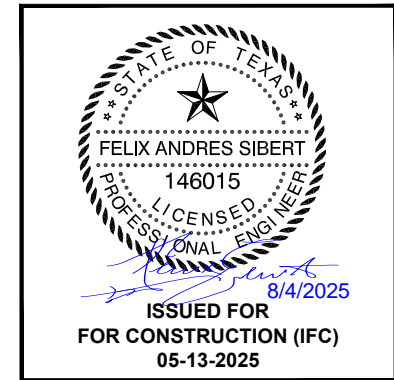
MATCHLINE STA 39+50 - SEE SHEET CP-103



REVISIONS		
NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
PROPOSED GRIND AND GROOVE PLAN
SHEET 03 OF 05

PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025

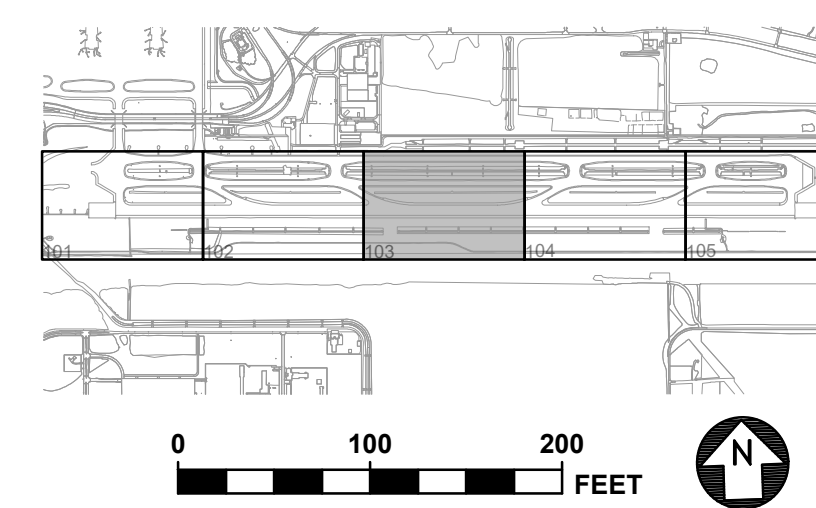
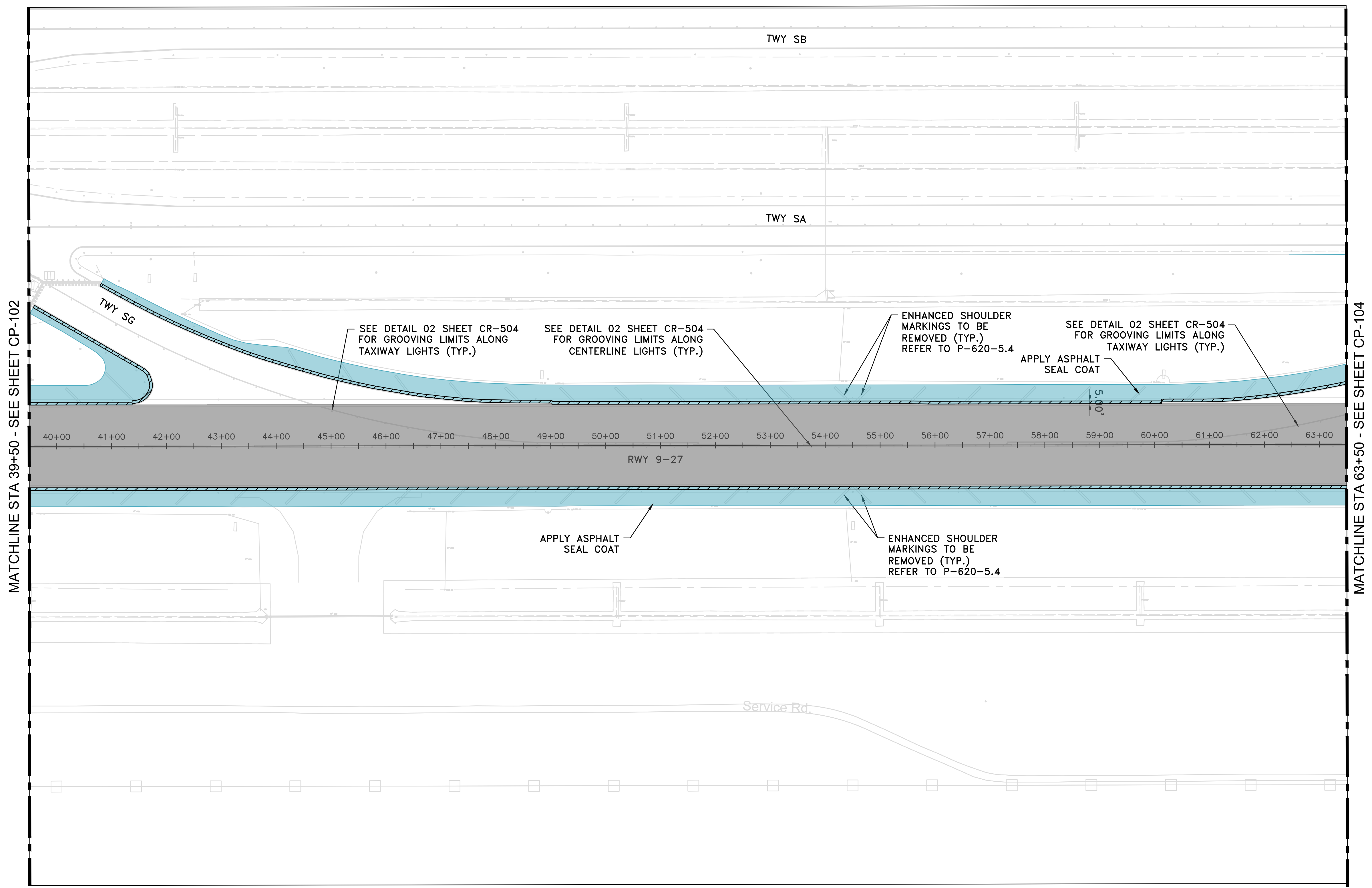


APPROVED BY:

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 HOUSTON AIRPORT SYSTEM

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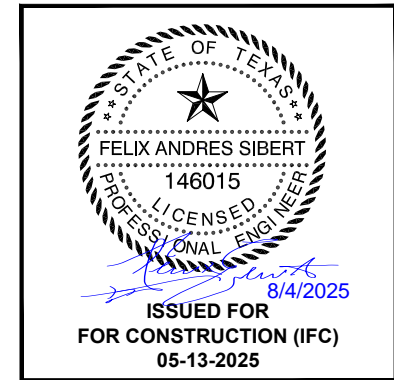
- LEGENDS**
- PROPOSED 0.25" GRIND AND GROOVE
 - 5' WIDE ASPHALT DIAMOND GRINDING
 - ASPHALT SEAL COAT



REVISIONS		
NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
PROPOSED GRIND AND GROOVE PLAN
SHEET 04 OF 05

PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025



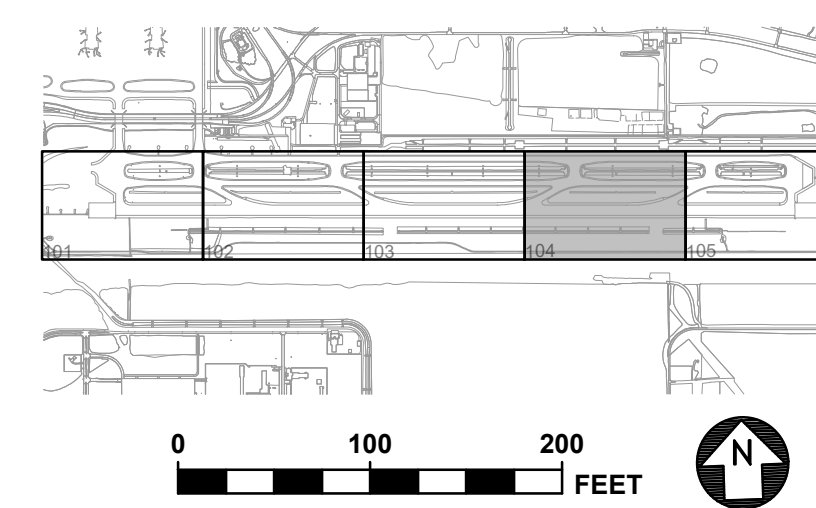
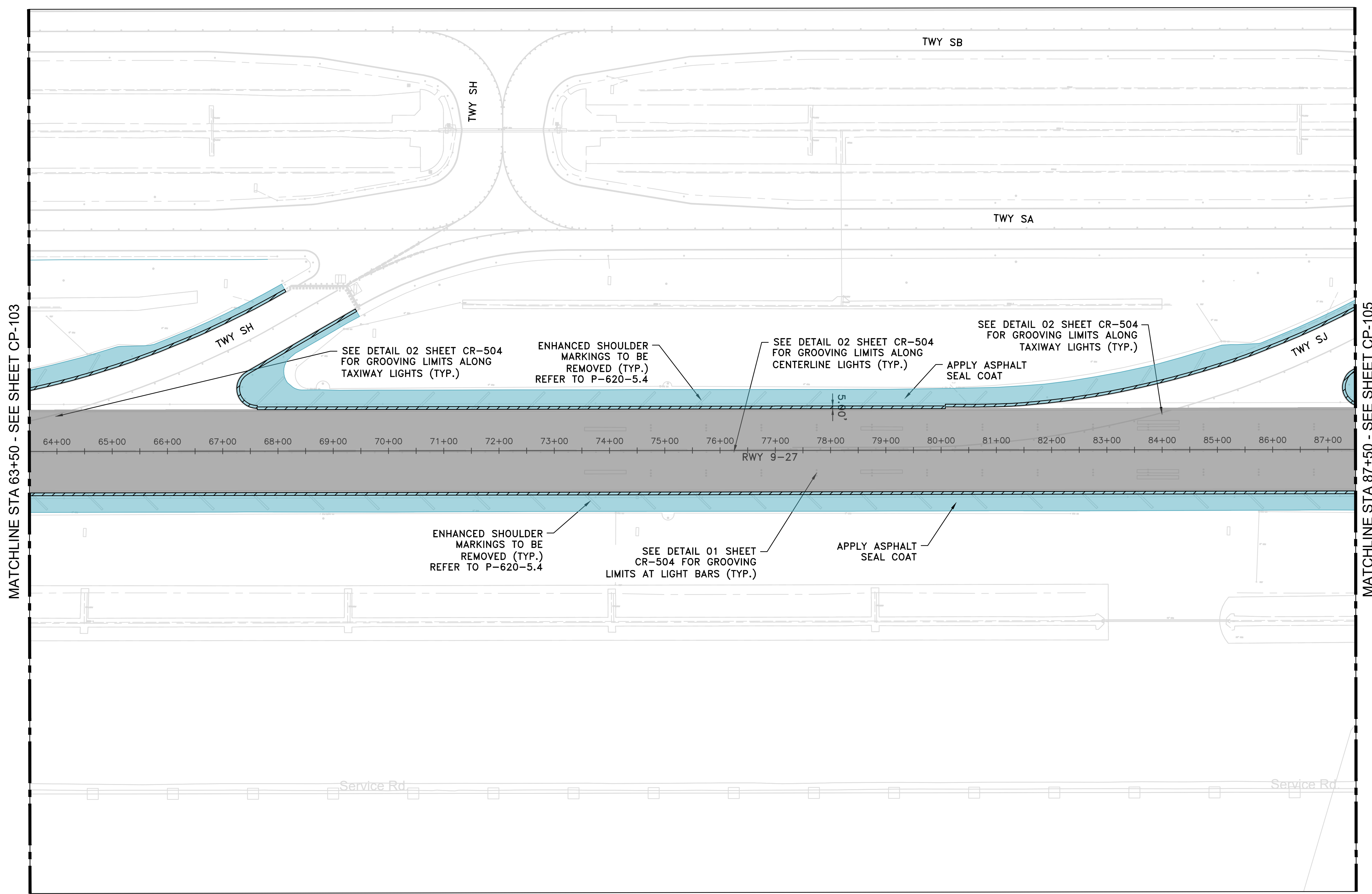
APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

PROJECT NO.	100116454
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C.I.P. NO.	
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H.A.S. NO.	
SHEET NO.	

LEGENDS

- PROPOSED 0.25" GRIND AND GROOVE
- 5' WIDE ASPHALT DIAMOND GRINDING
- ASPHALT SEAL COAT

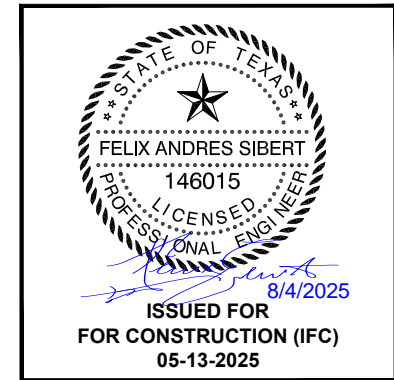


REVISIONS

NO.	DESCRIPTION	DATE	BY
1	ADDENDUM #4	7/29/25	

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
PROPOSED GRIND AND GROOVE PLAN
SHEET 05 OF 05

PROJECT MGR: JLV
DESIGNER: EM
DRAWN BY: GM
CHECK BY: TO
SCALE:
DATE: 5/13/2025



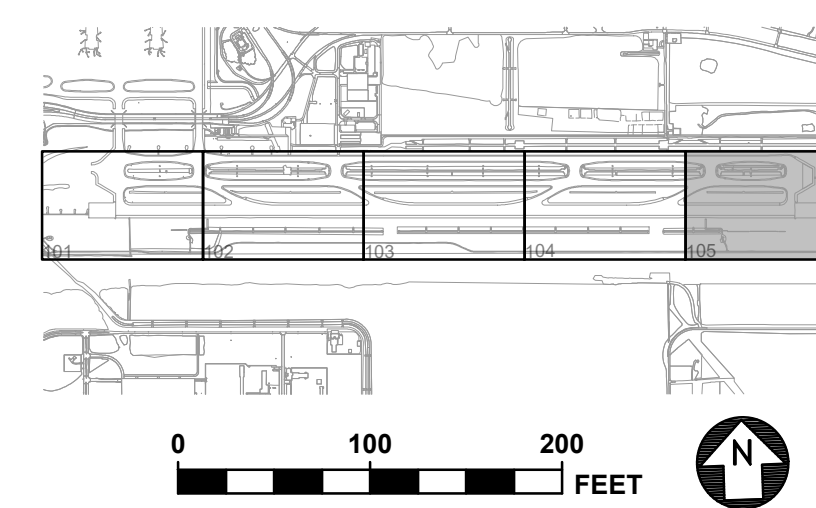
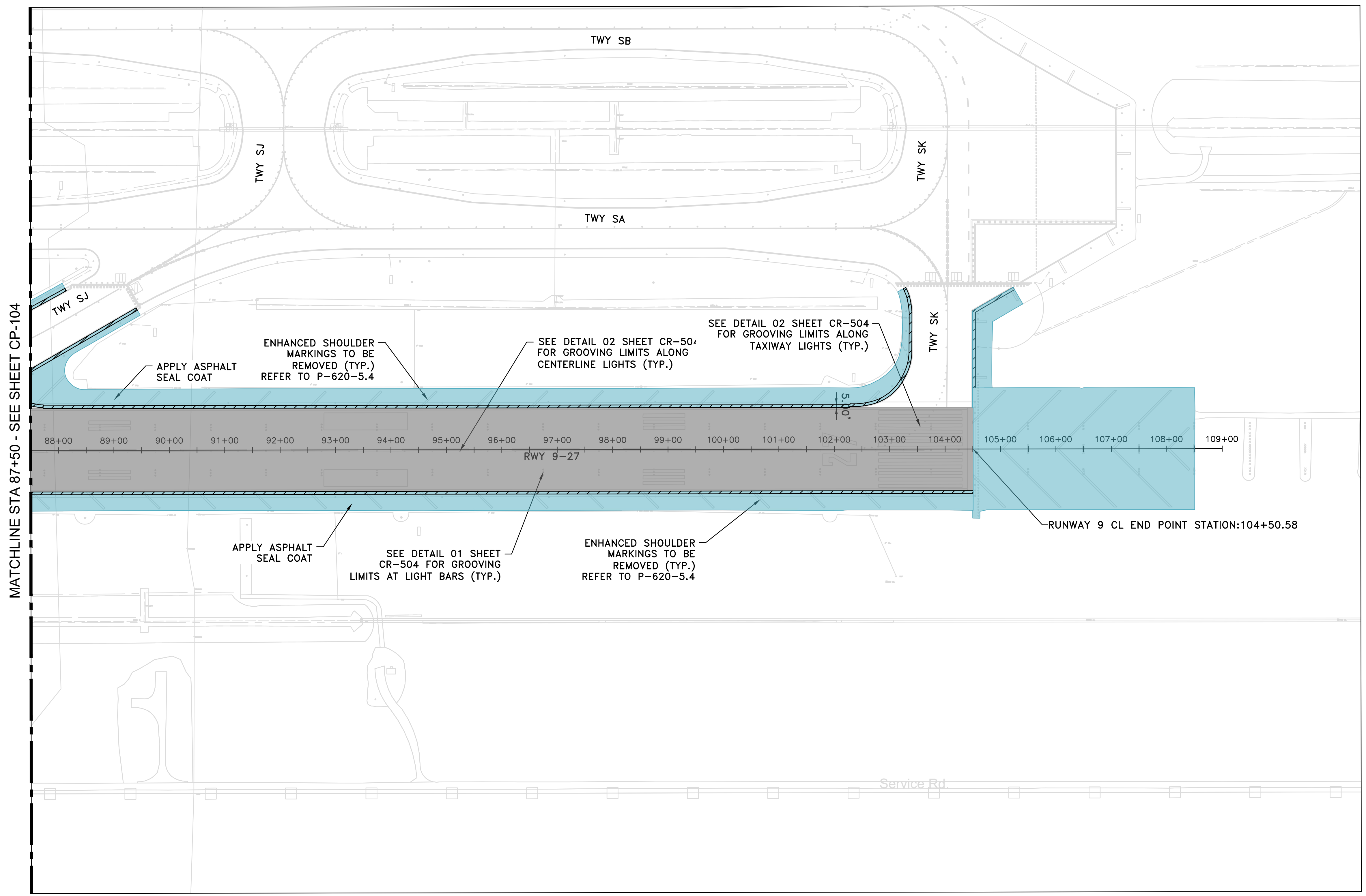
APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

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H.A.S. NO.
SHEET NO.

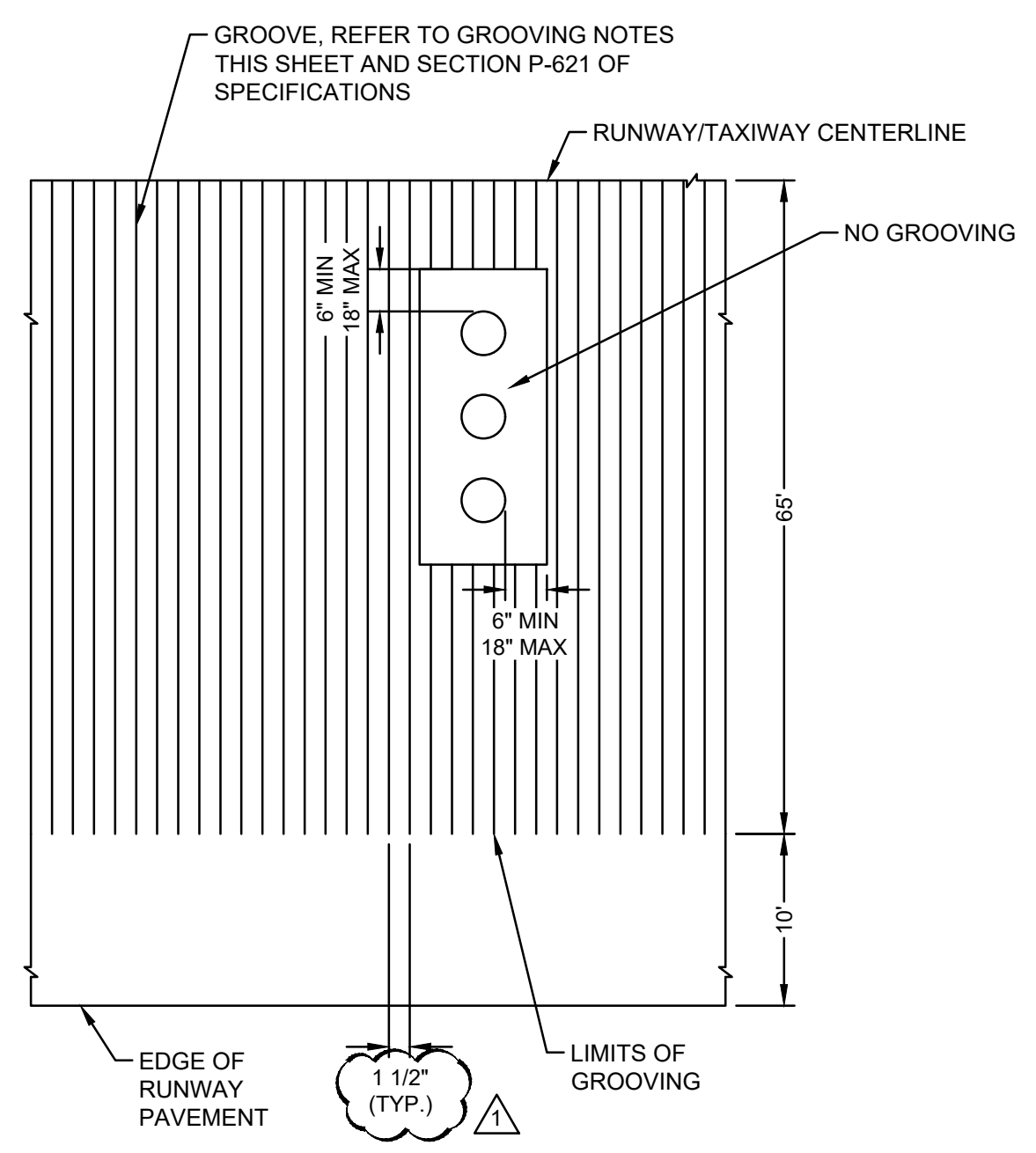
LEGENDS

- PROPOSED 0.25" GRIND AND GROOVE
- 5' WIDE ASPHALT DIAMOND GRINDING
- ASPHALT SEAL COAT

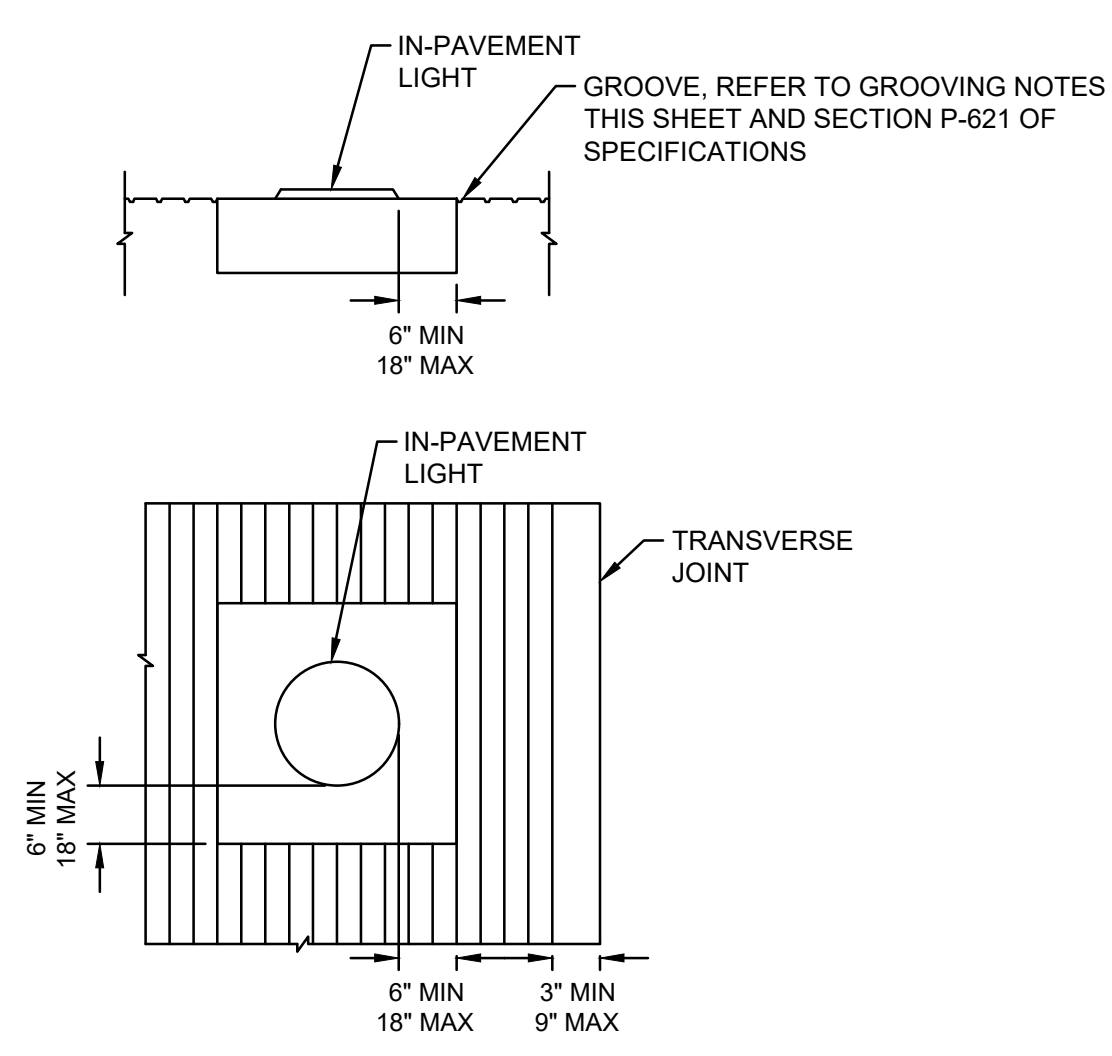


REVISIONS		
NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	7/29/25

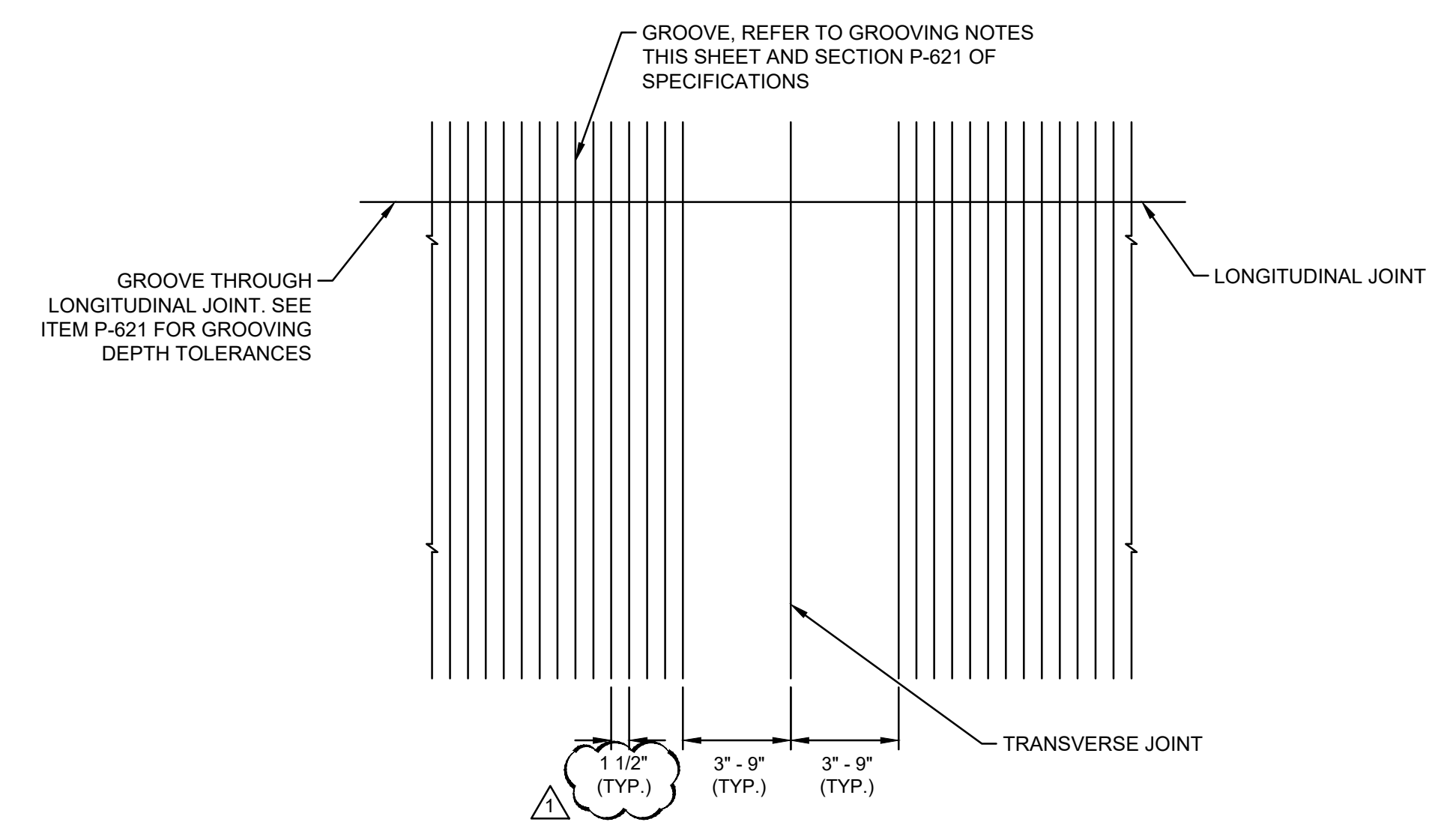
- GROOVING NOTES:**
- EQUIPMENT SHALL HAVE A DRUM NOT LESS THAN 3 FEET WIDE AND HAVE A POSITIVE MEANS OF VACUUMING THE GROOVING SLURRY.
 - A CONTROL STRIP SHALL BE PLACED TO DEMONSTRATE THE PROCEDURES AND QUALITY PRIOR TO FULL PRODUCTION.
 - CHECK SPECIFICATION ITEM P-621 FOR DETAILS REGARDING GROOVING PROCEDURES AND QUALITY CONTROL.



1
TYPICAL GROOVING DETAIL ADJACENT TO TOUCHDOWN ZONE LIGHTS
SCALE: N.T.S.



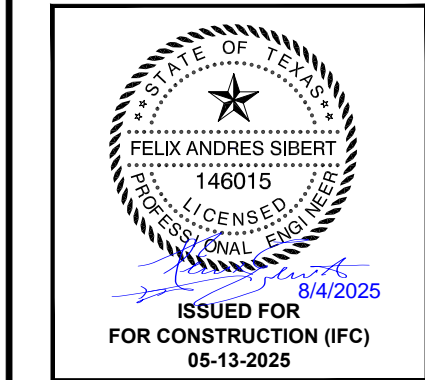
2
TYPICAL GROOVING DETAIL ADJACENT TO IN-PAVEMENT LIGHTS
SCALE: N.T.S.



3
TYPICAL GROOVING DETAIL THROUGH LONGITUDINAL JOINT
SCALE: N.T.S.

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
 PAVEMENT DETAILS SHEET 04 OF 04

PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025

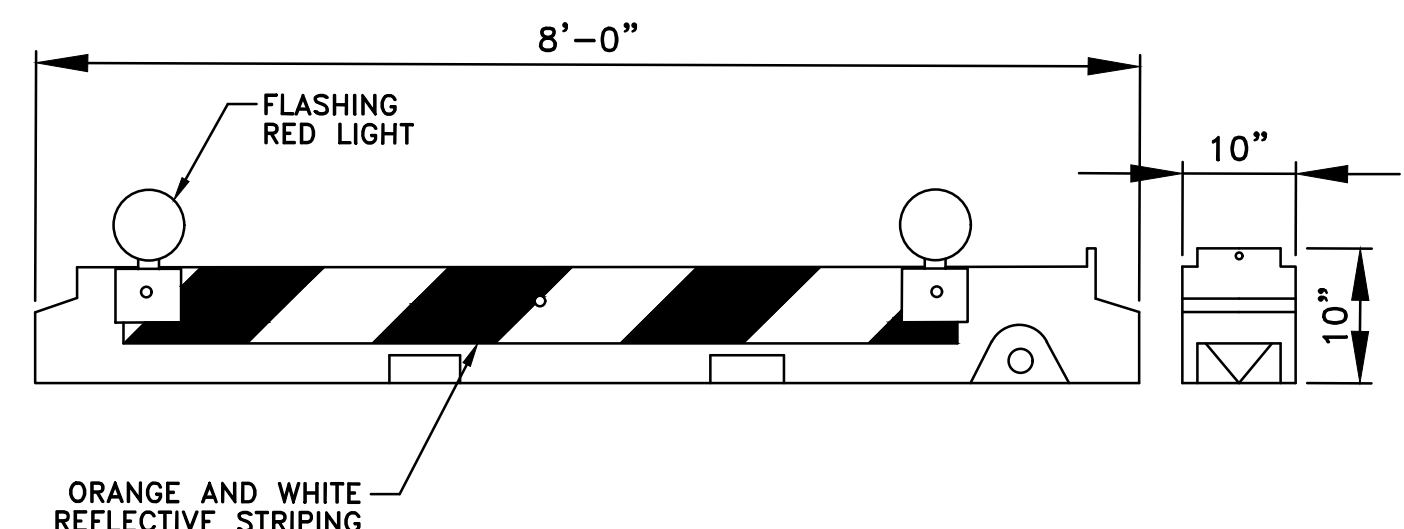


APPROVED BY:

DIRECTOR
HOUSTON AIRPORT SYSTEM

PROJECT NO.	100116454
A.I.P. NO.	
T.I.P. NO. TIP-25-55-IAH	
C.I.P. NO.	
B.S.G. NO. BSG-2025-118	
H.A.S. NO.	
SHEET NO.	

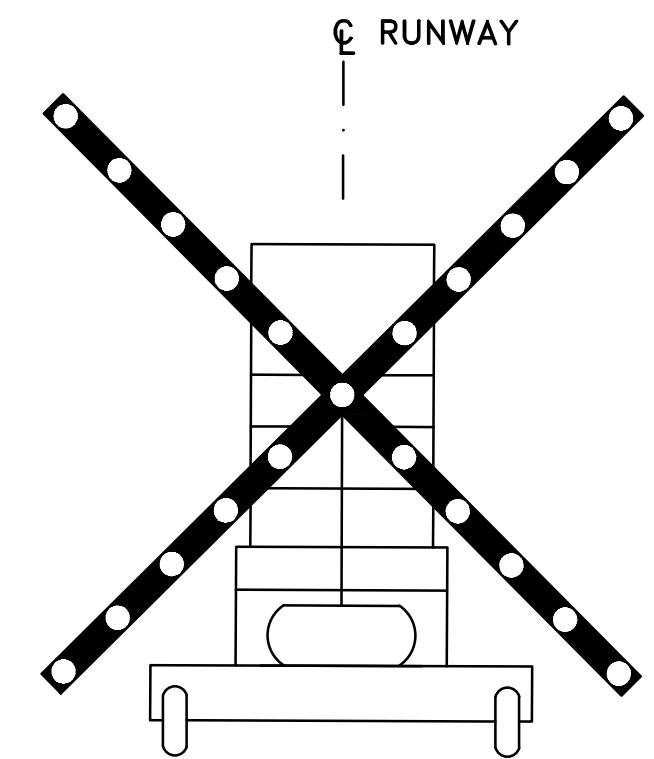
REVISIONS		
NO.	DESCRIPTION	DATE BY
1	ADDENDUM #4	8/6/25



BARRICADE NOTES:

1. LOCATE BARRICADES AS SHOWN ON CONSTRUCTION PHASING PLAN SHEET GC-201 OR AS DIRECTED BY THE AIRPORT'S REPRESENTATIVE. CONTRACTOR SHALL HAVE AVAILABLE AT LEAST 10 BARRICADES BEYOND WHAT IS SHOWN ON THE PHASING PLANS FOR USE AT THE AIRPORT'S DISCRETION.
2. LOW-PROFILE BARRICADES TO BE PLACED CONTINUOUSLY WITH NO GAPS BETWEEN BARRICADES ALONG OPERATIONAL PAVEMENT, ADJACENT TO CONSTRUCTION, OR AS DIRECTED BY THE OAR. BARRICADES SHALL BE PLACED FULL WIDTH ACROSS CLOSED PAVEMENT AREAS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. EACH BARRICADE SHALL BE EQUIPPED WITH TWO STEADY OR FLASHING RED LIGHTS. LIGHTS TO BE OMNI-DIRECTIONAL.
4. BARRICADE RED OBSTRUCTION LIGHTS MUST BE 100% OPERATIONAL AT ALL TIMES.
5. CONTRACTOR SHALL MAINTAIN FRESH BATTERIES IN FLASHERS AT ALL TIMES AND UTILIZE SOLAR PANELS.
6. BARRICADES SHALL COMPLY WITH THE REQUIREMENTS IN ADVISORY CIRCULAR 150/5370-2, CURRENT EDITION, MULTI BARRIER BARRICADE MODEL AR-10X96 OR APPROVED EQUAL.
7. TIMBER BARRICADES SHALL NOT BE ALLOWED.
8. BARRICADES SHALL BE FILLED WITH WATER. CONTRACTOR SHALL CHECK BARRICADES WEEKLY TO ENSURE THEY ARE HOLDING WATER. BARRICADES NOT HOLDING WATER SHALL BE REPAIRED OR REPLACED.
9. CONTRACTOR SHALL PREPARE AND SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH AC 150/5370-2G TO THE AIRPORT FOR APPROVAL

1 LOW-PROFILE BARRICADE
 GC100 SCALE: N.T.S.



LIGHTED CLOSURE MARKER NOTES:

1. CONTRACTOR SHALL SUPPLY 2 TRAILER MOUNTED L-893 LIGHTED RUNWAY CLOSURE MARKERS (RCM) DEVICES MEETING THE REQUIREMENTS OF FAA AC 150/5345-55 (LATEST EDITION) SIMILAR TO ABOVE FOR USE WITH ALL RUNWAY CLOSURES.
2. CONTRACTOR SHALL MAINTAIN RCM'S BY PROVIDING FUEL; MONITOR AND REPLACE ENGINE OIL AND FILTERS AS REQUIRED BY THE MANUFACTURER; AND REPLACE BULBS AS NEEDED FOR BOTH RCM'S DURING USE. CONTRACTOR SHALL ENSURE THAT THE RCM'S REMAIN OPERATIONAL THROUGHOUT THE ENTIRE RUNWAY CLOSURE PERIOD.
3. ALL LIGHTED X'S AND ASSOCIATED ACTIVITIES ARE INCIDENTAL TO MOBILIZATION.
4. A RECEPTACLE WILL BE PLACED UNDER THE RCM'S CAPABLE OF HOLDING SPILLED FUEL AND OIL.
5. CONTRACTOR SHALL LOCATE LIGHTED CLOSURE MARKER ON RUNWAY NUMBER OR AS INSTRUCTED BY OAR.
6. AFTER CONSTRUCTION CONTRACTOR SHALL RETURN CONTRACTOR FURNISHED LIGHTED CLOSURE MARKER TO OWNER.

2 PORTABLE LIGHTED RUNWAY CLOSURE MARKER DETAIL
 GC100 SCALE: N.T.S.

IAH RWY 9-27 GRIND AND GROOVE PROJECT																	
CONSTRUCTION PHASING SCHEDULE																	
PHASE#	PHASE DESCRIPTION	CALENDAR DAYS	0	7	14	21	28	35	42	49	56	63	70	77	84	91	98
PHASE 1	RUNWAY GRIND & GROOVE	90															

3 PHASING SCHEDULE
 GC100 SCALE: N.T.S.

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
CONSTRUCTION SAFETY & PHASING
NOTES AND DETAILS

PROJECT MGR:	JLV
DESIGNER:	EM
DRAWN BY:	GM
CHECK BY:	TO
SCALE:	
DATE:	5/13/2025

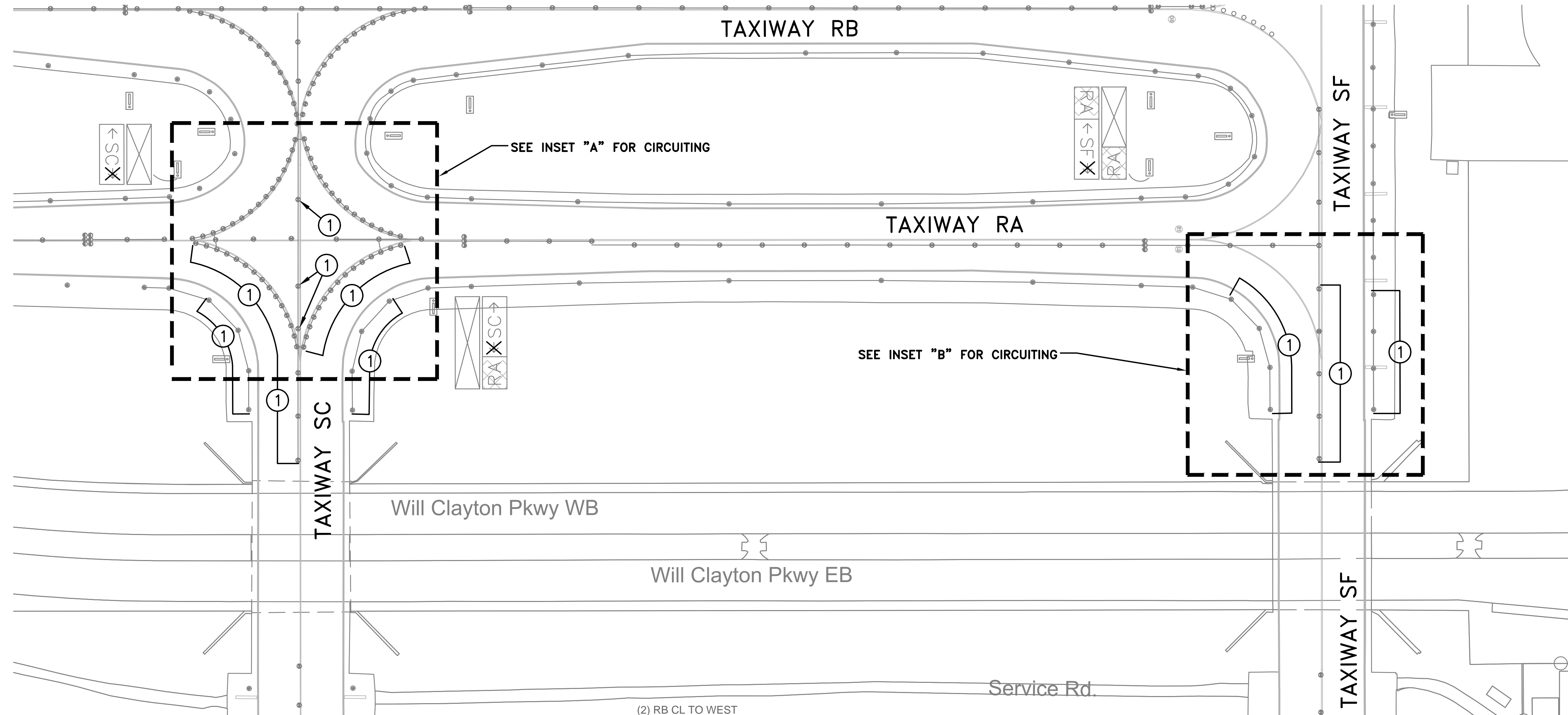
ISSUED FOR
 FOR CONSTRUCTION (IFC)
 05-13-2025

APPROVED BY:

 DIRECTOR
 HOUSTON AIRPORT SYSTEM

PROJECT NO.	100116454
A.I.P. NO.	
T.I.P. NO. TIP-25-55-IAH	
C.I.P. NO.	
B.S.G. NO. BSG-2025-118	
H.A.S. NO.	
SHEET NO.	

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GENERAL NOTES

1. REFER TO GC-201 FOR OVERALL PHASING OUTLINE AND OPERATION IMPACTS OF EACH PHASE.
2. CONTRACTOR TO DE-ENERGIZE CIRCUITS 9-27 EDGE, 9-27 CL, 27 TDZ, SCE, SA EDGE, SB EDGE, SKCL, SBCL, SACL, SHJCL, SFGCL, AND RGL.
3. THE CONTRACTOR SHALL PROVIDE LOCK-OUT PROCEDURES PER NEC TO INSURE SAFETY OF PERSONNEL. REFER TO SECTION L-104.
4. KEYED NOTES ARE TYPICAL FOR ALL SHEETS OF THIS SERIES. ALL LISTED KEYED NOTES FOR A PARTICULAR SHEET MAY NOT APPLY AND THEREFORE THE KEYED NOTE IDENTIFIER WILL NOT BE SHOWN ON THE PLAN PORTION OF THE SHEET.
5. COORDINATE WORK WITH HAS ELECTRIC SHOP, OAR, AND OPERATIONS.

KEYED NOTES

- ① EXISTING LIGHT FIXTURES TO BE TEMPORARILY BLANKED OUT OR DE-ENERGIZED AS REQUIRED DURING THIS PHASE OF CONSTRUCTION. SUBMIT METHOD TO E.O.R. FOR APPROVAL.

Houston Airport System
 GEORGE BUSH INTERCONTINENTAL AIRPORT / HOUSTON, TX

Ferguson Consulting
 Ferguson Consulting Inc.
 10309 Greengate Mill Rd. Ste. #420
 The Woodlands, TX 77380
 (281) 255-9252 Firm No. 6864

REVISIONS

NO.	DESCRIPTION	DATE BY
1	ADDENDUM #3	7/29/25

GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)
RUNWAY 9-27 GRIND & GROOVE
TEMPORARY ELECTRICAL PROVISIONS

PROJECT MGR:	JLV
DESIGNER:	RCF
DRAWN BY:	FR
CHECK BY:	CLF
SCALE:	
DATE:	5/13/2025



APPROVED BY: _____

DIRECTOR
HOUSTON AIRPORT SYSTEM

PROJECT NO.
100116454

A.I.P. NO.

T.I.P. NO. TIP-25-55-IAH

C.I.P. NO.

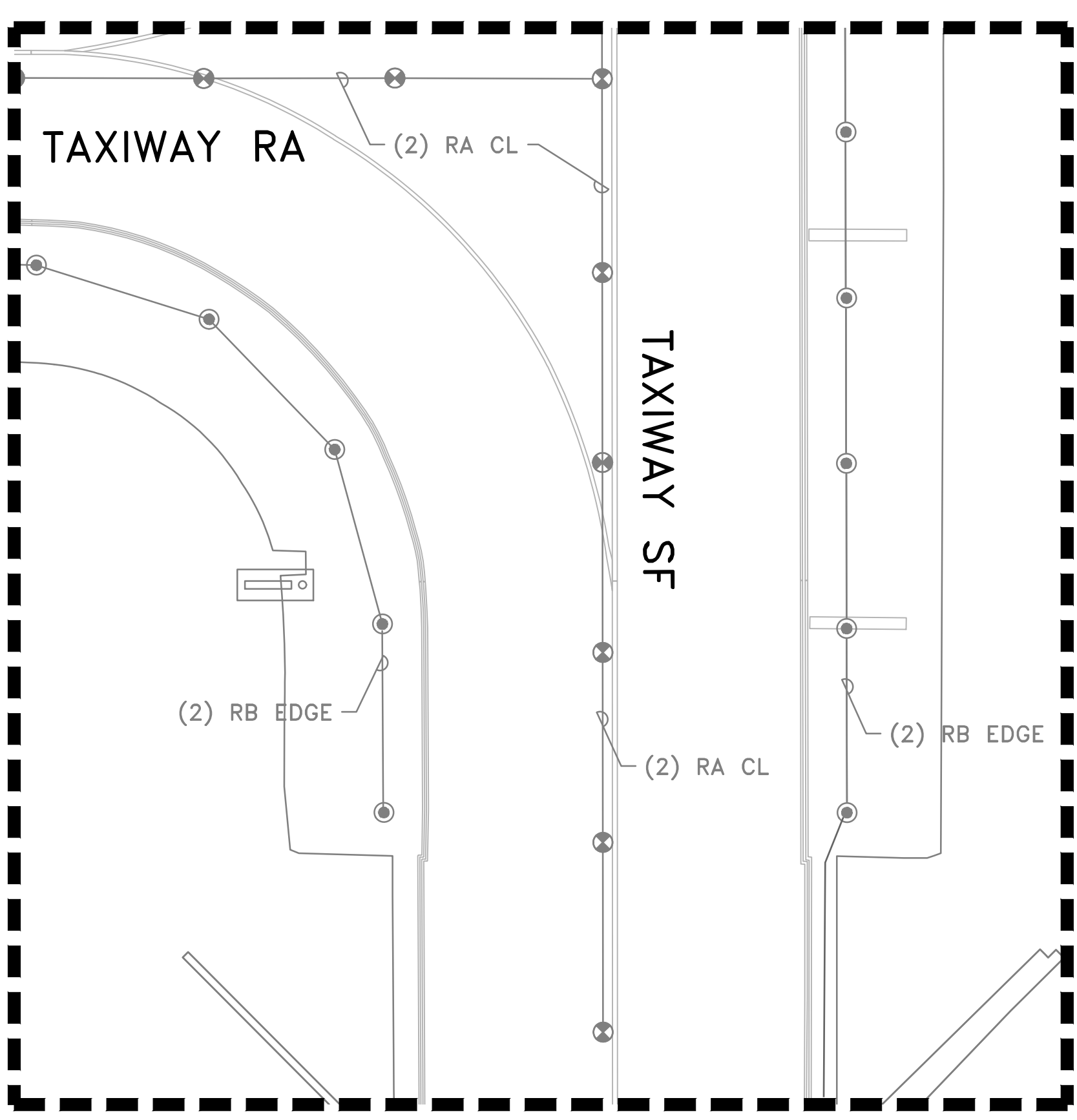
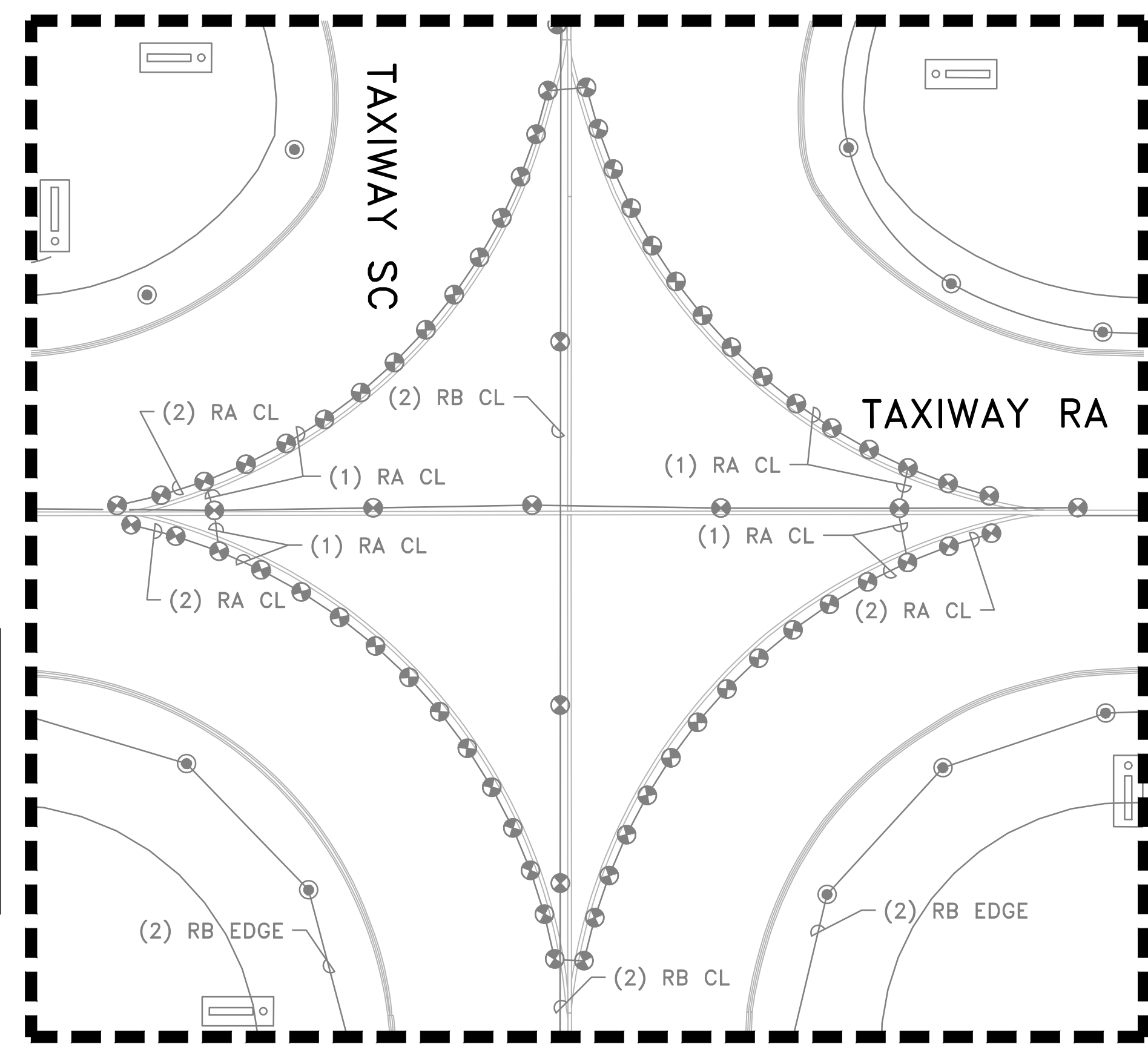
B.S.G. NO. BSG-2025-118

H.A.S. NO.

SHEET NO.

AIRFIELD LIGHTING PHASING LEGEND

TEMPORARILY BLACK OUT EXISTING PORTION OF SIGN LEGEND SHOWN WITH BOLD "X" DURING CONSTRUCTION. SUBMIT METHOD TO E.O.R. FOR APPROVAL.



NEW SHEET