

**DESIGN PROFESSIONAL SERVICES
AMENDMENT NO. 6**

**PROJECT NO. 62190509 – RECONSTRUCT RUNWAY 1L-19R
KANSAS CITY INTERNATIONAL AIRPORT
FAA AIRPORT IMPROVEMENT PROGRAM (AIP) GRANT NO. 3-29-0040-077**

AVIATION DEPARTMENT

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), and HNTB Corporation (Design Professional). The parties amend the Agreement entered into on April 22, 2020 as follows:

A. Part 1, Section 1, Sec. 2, Scope of Services is amended by adding the following new section:

H. Runway 1L-19R High Speed Taxiway Design – This scope of services is for performing design, FAA Reimbursable Agreement (RA) coordination, and bidding services for the reconstruction and realignment of the Runway 1L-19R high speed taxiways.

The Design Professional shall perform the following:

1. Project Management \$189,838.80
 - a. Perform internal contract administration and monthly workplan updates.
 - b. Coordinate work of subconsultants for geotechnical investigation, survey, electrical design, and FAA NAVAIDs. Coordination will include bi-weekly internal project team meetings.
 - c. Coordinate project with the FAA ADO, KCAD, and Stakeholders and conduct interim design milestone meetings with an assumed maximum 10 meetings.
 - d. Coordinate project with additional stakeholders (Airport Operations, Airport Maintenance, FAA ATC, etc.), as required.
2. Design Phase \$1,851,818.96

Conduct project kickoff meeting with stakeholders (FAA, KCAD)

 - a. Coordinate field investigation and necessary airfield closures with the KCAD, FAA ATC, and Airport Operations.
 - b. Perform LiDAR survey on Runway 1L-19R, adjacent exit taxiway connectors (Taxiway A-1 through Taxiway A-11), Taxiway A, and Taxiway B (west of taxiway centerline). Survey to occur following completion of Runway 1L-19R Phase II reconstruction project (estimated December 2022).
 - c. Perform drone orthographic image capture for the project limits/ survey area.
 - d. Perform geotechnical investigation to include:
 - I. 23 taxiway mainline pavement cores, 4 shoulder pavement/ blast pad pavement cores, and 11 soil borings. Investigation to be conducted to determine existing pavement section, underlying properties and subgrade treatment recommendation.

II. Laboratory geotechnical tests will include:

- a) Natural Moisture content of fine-grained samples
- b) Atterberg limits on selected cohesive samples
- c) Unconfined compressive strength of selected cohesive samples
- d) Unit weight of selected cohesive samples
- e) California Bearing Ratio (CBR)

e. Provide subconsultant escorting throughout the field investigation.

f. Conduct preliminary design review meeting (FAA, KCAD).

g. FAA Tech Ops Coordination for Reimbursable Agreement (RA).

I. Conduct project scoping kickoff meeting with stakeholders (FAA, KCAD, FAA Tech Ops).

II. Reimbursable Agreement (RA) coordination shall include the following:

- a) Obtain FAA record drawings for affected facilities.
- b) Evaluate existing approach light plane and system cabling/ ground for compliance with FAA standards.
- c) Coordination of existing system findings for recommendation of design scope extents.
- d) Coordination of Runway Safety Area (RSA) regrading.
- e) Coordination of Runway 1L MALSR and Runway 19R ALSF-2 protection within runway blast pad limits.
- f) Replacement of Runway 1L MALSR and Runway 19R ALSF-2 foundations within runway blast pad limits.
- g) Coordination of FAA utility protection within project limits.

III. Review two (2) iterations of FAA draft Reimbursable Agreement on behalf of KCAD, as required.

h. Perform FAARFIELD pavement design to determine preliminary taxiway and shoulder/ blast pad pavement sections.

i. Develop preliminary base files for pavement limits, demolition, grading, pavement marking, drainage, electrical, and FAA NAVAID/ utilities.

j. Prepare preliminary project plans: cover, general notes, airport site plan, safety and phasing plans, boring and coring plan, typical sections, demolition plans, proposed pavement plan, grading plan, marking plan, electrical plan, and FAA NAVAID/ utilities.

k. Develop project phasing alternatives and durations to review with stakeholders.

l. Prepare project bid alternate options for Phase I.

m. Prepare 30% quantities and cost estimate/ budget and proposed funding division of work.

n. Submit 30% documents to the FAA and KCAD.

- I. Preliminary Project Plans.
- II. List of Technical Specifications.
- III. Engineer's Report.
- IV. Quantities, Cost Estimate/ Budget.

o. Conduct 30% design review meeting (FAA, KCAD).

60% Design:

- a. Review and process LiDAR survey for plan use in AutoCAD Civil 3D.
- b. Perform electrical inventory and survey field check site visit.
- c. Update MCI Circuit Maps based on available as-built information for use in project plans.
- d. Coordinate with KCAD asset management program and conform files, linework, and electrical infrastructure.
- e. Refine project plans/ preliminary 30% design and develop 60% design level.
- f. Develop base files for underdrain system, erosion control, and model of proposed surface/ alignments.
- g. Prepare 60% project plans (in addition to 30% plans): erosion control plans, drainage design, profile plans, joint layout plans, cross sections, and associated details.
- h. Analyze project phasing alternatives and durations to review with stakeholders and refine based on 60% design development.
- i. Refine project bid alternate options for Phase I.
- j. Prepare 60% quantities and cost estimate/ budget and proposed funding division of work.
- k. Submit 60% documents to the FAA and KCAD.

- I. Project Plans.
- II. Construction Safety and Phasing Plan (CSPP).
- III. Engineer's Report.
- IV. Quantities, Cost Estimate/ Budget.

l. Conduct 60% design review meeting (FAA, KCAD).

m. Conduction Construction Impacts SRM Panel (FAA, KCAD, Stakeholders).

90% Design:

- a. Refine base files, plans, and design to develop 90% design level.
- b. Prepare City Front End Specifications.
- c. Prepare Technical Specifications in accordance with the current FAA standards.

- d. Analyze project phasing alternatives and durations to review with stakeholders and refine based on 90% design development.
- e. Refine project bid alternate options for Phase I.
- f. Prepare 90% quantities and cost estimate/ budget and proposed funding division of work.
- g. Submit 90% documents to the FAA and KCAD.
 - I. Project Plans.
 - II. Front End Specifications.
 - III. Technical Specifications.
 - IV. Construction Safety and Phasing Plan (CSPP).
 - V. Engineer's Report
 - VI. Quantities, Cost Estimate/ Budget.
- h. Conduct 90% design review meeting (FAA, KCAD).
- i. Submit FAA Form 5100 – Airport Pavement Design.
- j. Submit Modifications to Construction Standards.

Issued for Bid Submittal:

- a. Update deliverables for Issued for Bid submittal.
- b. Refine project bid alternate options for Phase I.
- c. Prepare Issued for Bid quantities and cost estimate/ budget and proposed funding division of work.
- d. Submit Issued for Bid documents to the FAA and KCAD.
 - I. Project Plans.
 - II. Front End Specifications.
 - III. Technical Specifications.
 - IV. Construction Safety and Phasing Plan (CSPP).
 - V. Engineer's Report
 - VI. Quantities, Cost Estimate/ Budget.
- e. Submit KCAD File Updates to Standard files.

- 3. Bidding Services – Phase I \$89,006.20
 - a. Assist the KCAD with project advertisement.
 - b. Attend pre-bid meeting.
 - c. Respond to Contractor questions.
 - d. Prepare two (2) bidding addenda, as necessary.
 - e. Attend Bid Opening.
 - f. Evaluate bid and prepare bid tabulation.
 - g. Review bid alternate pricing and coordinate with FAA on alternate award.
 - h. Prepare and submit Recommendation of Award to the KCAD.

- i. Assist the KCAD with FAA grant development and submission.
 - j. Assist the KCAD with work delineation of Phase I/ II and bid alternates.
 - k. Prepare Issued for Construction Plans/ Specifications.
4. Design and Bidding Services – Phase II \$283,953.98
- a. Refine project phasing plans based on award of Phase I bid alternates.
 - b. Refine initial bid alternate project plans.
 - c. Refine initial bid alternate technical specifications.
 - d. Refine City Front End specifications.
 - e. Refine initial Construction Safety and Phasing Plan (CSPP).
 - f. Refine design to conform to Phase I bid alternate awards.
 - g. Prepare Issued for Bid quantities and cost estimate/ budget and proposed funding division of work.
 - h. Submit Issued for Bid documents to the FAA and KCAD.
 - I. Project Plans.
 - II. Front End Specifications.
 - III. Technical Specifications.
 - IV. Construction Safety and Phasing Plan (CSPP).
 - V. Engineer’s Report
 - VI. Quantities, Cost Estimate/ Budget.
 - i. Assist the KCAD with project advertisement.
 - j. Attend pre-bid meeting.
 - k. Respond to Contractor questions.
 - l. Prepare two (2) bidding addenda, as necessary.
 - m. Attend Bid Opening.
 - n. Evaluate bid and prepare bid tabulation.
 - o. Review bid alternate pricing and coordinate with FAA on alternate award.
 - p. Prepare and submit Recommendation of Award to the KCAD.
 - q. Assist the KCAD with FAA grant development and submission.
 - r. Assist the KCAD with work delineation of Phase I/ II and bid alternates.
 - s. Prepare Issued for Construction Plans/ Specifications.

Deliverables – The following is a list of submittals that will be delivered to the KCAD as part of the preliminary Runway 1L-19R High Speed Taxiway Reconstruction Project:

- 1. Preliminary design key scope analysis exhibits – hard copies (as needed) and electronic files.

2. 30% preliminary project plans, design report, and cost estimate/ budget – four (4) hard copies of each and electronic files.
3. 60% project plans, design report, and cost estimate/ budget – four (4) hard copies of each and electronic files.
4. 90% project plans, specifications, design report, and cost estimate/ budget – four (4) hard copies of each and electronic files.
5. Issued for Bid Phase I/ II project plans, specifications, design report, and cost estimate/ budget – four (4) hard copies and electronic files.
6. Issued for Construction project plans and specifications for Phase I/ II – four (4) hard copies of each and electronic files.
7. Project design files for KCAD records and use in MCI asset management program.
8. Submit FAA Form 5100 – Airport Pavement Design – electronic file.
9. Submit Modifications to Standards – electronic file.

Assumptions – This scope of services is developed based on the following:

1. Proposed high speed and exit taxiways will be sited per 2020 Runway 1L-19R Exit Taxiway Siting Study developed by HNTB and approved by KCAD and FAA.
2. Project will be bid twice with two schedules for Phase I (FY 2024) and Phase II (FY 2025) with a maximum of four (4) bid alternates in Phase 1 (FY 2024). Project is assumed to bid Phase I in May 2023 and Phase II in May 2024.
3. Reasonable access to Runway 1L-19R and connector taxiways for field investigation work.
4. Project will be environmentally Categorically Excluded (CATEX) by the FAA.
5. Project design criteria will utilize FAA AC 150/5300-13B, Airport Design standards along with all current FAA AC design guidance.
6. The Design Professional shall be entitled to rely on the accuracy and completeness of any data, documents or other materials provided by the City or FAA to the Design Professional.

Exclusions – This scope of services is developed with the following exclusions:

1. Revisions, further analysis, or any changes to the proposed high speed and exit taxiway layout as approved per the 2020 Runway 1L-19R Exit Taxiway Siting Study developed by HNTB.
2. Airfield simulation modeling .
3. On-site construction observation services.
4. Upgrades to approach lighting stations beyond the Runway 1L or 19R blast pads and modifications for LOC, GS, RVR, or PAPI sites.
5. Environmental Services.
6. Stormwater Pollution Prevention Plan (SWPPP).
7. Construction Permits.

B. Sec. 4.A. Compensation and Reimbursables delete and replace with the following sections:

A. The maximum amount that City shall pay Design Professional under this Agreement is \$11,086,342.35 as follows:

1. A not-to-exceed lump sum amount of \$3,578,721.55 for Item A under the Agreement.
2. A not-to-exceed amount of \$2,338,719.85 for Item B under Amendment One (1).
3. A not-to-exceed lump sum amount of \$152,672.62, for Item C, Runway 9-27 Pavement Evaluation (Non-Eligible) under Amendment Two (2).
4. A not-to-exceed lump sum amount of \$119,255.54, for Item D, Taxiway E Pavement Evaluation (Non-Eligible) under Amendment Two (2).
5. A not-to-exceed lump sum amount of \$199,946.71, for Item E, Rehabilitation of Runway 9-27 (Non-Eligible) under Amendment Three (3).
6. A not-to-exceed amount of \$2,119,053.90 for Item F, Reconstruct Runway 1L-19R Phase 2 under Amendment Four (4).
7. A not-to-exceed amount of \$163,354.24 for Item G under amendment Five (5).
8. A not-to-exceed amount of \$2,414,617.94 for Item H under this amendment.

Sec. 2. Sections not Amended. All other sections of the Agreement shall remain in full force and effect.

Sec. 3. Authorization. If the amount of the original Agreement plus the amount of any amendments to the original Agreement total over \$400,000.00, then this amendment requires City Council or Park Board authorization. Notwithstanding the foregoing, City Council or Park Board authorization is not required if (1) the total amount of the original Agreement plus the amount of any amendments to the original Agreement are within ten percent (10%) of the maximum amount authorized by the City Council or the Park Board or (2) a previous ordinance or Resolution authorized amendments without further City Council or Park approval.

Sec. 4. Effectiveness Date. This amendment will become effective when the City's Director of Finance has signed it. The date this amendment is signed by the City's Director of Finance will be deemed the date of this amendment.

Each party is signing this amendment on the date stated opposite that party's signature.

Date: _____

DESIGN PROFESSIONAL

I hereby certify that I have authority to execute this document on behalf of Design Professional

By: _____

Title: _____

Date: _____

KANSAS CITY, MISSOURI

By: _____

Title: Director of Aviation

Approved as to form:

Assistant City Attorney

I hereby certify that there is a balance, otherwise unencumbered, to the credit of the appropriation to which the foregoing expenditure is to be charged, and a cash balance, otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.

Director of Finance

Date