

**DESIGN PROFESSIONAL SERVICES
AMENDMENT NO. 4
PROJECT NO. 62200528 – LANDSIDE PAVEMENT DESIGN
KANSAS CITY INTERNATIONAL AIRPORT
AVIATION DEPARTMENT**

This amendment is between KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation (City), Crawford, Murphy & Tilly (Design Professional). The parties amend the Agreement entered into on August 3, 2020, as follows:

Sec. 1. Sections Amended. The Agreement is amended as follows:

A. Sec. 2, Paragraph A, Scope of Services, **add** the following sections:

15. KCI Landscaping Improvements

A. KCI LANDSCAPING IMPROVEMENTS OVERVIEW

1. This contract will consist of conceptual, design and bidding phase services for the development of Landscaping Improvements at Kansas City International Airport, from the New Terminal to I-29 along Cookingham Drive to include landscaping, signage, fencing and bridge aesthetics in order to create a uniform and exciting image at the new terminal, utilizing the new KCI brand provided by KCAD.

B. KCI LANDSCAPING IMPROVEMENTS CONCEPTUAL PHASE SERVICES

1. The intent of the Landscaping Improvements Concept Phase is to provide the Kansas City Aviation Department an overall Master Plan for the KCAD grounds, which shows the landscaping improvements and compliments the new terminal. The master plan will include concepts for roadways, bridges, access points and open space as determined by KCAD.

The following is a summary of the major components to be included as part of the conceptual phase:

I. Team Meetings

a. Up to 3 team meetings will be held with key personnel of the design team to imitate the project, review progress and coordinate project deliverables and deadlines

II. Client Meetings

a. CMT/Vireo will facilitate (2) four-hour design workshops with KCAD to discuss their vision and generate ideas and preferences for bridge treatments, fencing, hardscaping, art and landscaping to build consensus among airport leadership

III. Drawings

a. Concept Phase shall consist of development of an overall master plan for KCAD grounds, which includes concepts for roadways, bridges, access points and open space. Particular areas of focus may include:

i. Cookingham Drive (I-29 flyover to Paris St.)

- ii. Unsightly areas beneath Bern and Paris bridges along bridge transitions – solutions will be low maintenance and match the overall aesthetic of the new terminal landscaping
 - iii. Economy Parking Lot
 - iv. Develop aesthetically pleasing landscape options for the old circle lots as you exit the terminal on the new road so that it matches that of the terminal entrance
- b. Fencing: CMT/Vireo will develop options for both barrier fencing and blast fencing along the existing Terminal B and C on Bond Circle Drive as you are leaving the new terminal
- c. Bridge Aesthetics and Art: CMT/Vireo will enhance the aesthetics of the roadway and existing bridges with improved railings, lighting, graphics and art
- d. Signage: It is understood that when the new terminal opens signage will need to be in place in order to direct people to and from the terminal, parking and rental cars. Vireo will review the current sign inventory, add new signage to the inventory where required, and review with KCAD
 - i. Using the inventory, Vireo will develop a typology of signs and create a concept for each. Reskinning to upgrade existing signs will also be considered. Vireo will work with KCAD to ensure that new airport branding is incorporated and drives the creative process. Building interior and pedestrian level signs are not included.
 - ii. Potential Sign Typology:
 - 1. Monument sign (Cookingham Drive)
 - 2. Secondary monument sign (Mexico City Ave.)
 - 3. Vehicular Directional Signs
 - 4. Regulatory/Informational Signs
 - 5. Digital Boards

It is assumed that the existing economy parking entry sign will remain
 - iii. Vireo will develop a sign plan showing the location of proposed signs.
- e. Electrical and Lighting: CMT will develop options for lighting improvements to aid the aesthetic improvements developed as part of this program
 - i. Site visit and data gathering
 - ii. Perform lighting photometrics and renderings
 - iii. Coordinate with landscape architects and lighting suppliers
 - iv. Coordinate with local utilities and KCAD on existing power sources
 - v. Develop concept design phase exhibits and cost estimates
- f. Structural Concept Design: CMT will develop conceptual level structural sketches to determine feasibility of existing improvements, (emphasis on security considerations for both barrier fencing and blast fencing between existing Terminal B and C and develop preliminary cost estimates for concept level OPCC's.

IV. Opinion of Probable Construction Costs

- a. CMT will work with Vireo to develop an opinion of probable costs for these improvements

C. KCI LANDSCAPING IMPROVEMENTS DESIGN PHASE SERVICES

- 1. The intent of the Landscaping Improvements Design Phase is to provide the Kansas City Aviation Department a set of Contract Documents including Project Manual and Plan Sheets for bidding purposes. The following is a summary of the major design phase components to be included as part of the design:

The following is a summary of the major components to be included as part of the conceptual phase:

I. Team Meetings

- a. Up to 6 team meetings will be held with key personnel of the design team to imitate the project, review progress and coordinate project deliverables and deadlines

II. Client Meetings

- a. CMT/Vireo will facilitate (2) four-hour design workshops with KCAD to discuss their vision and generate ideas and preferences for bridge treatments, fencing, hardscaping, art and landscaping to build consensus among airport leadership
- b. CMT/Vireo will facilitate (4) two-hour meetings with KCAD to review 30, 60 and 90% deliverables prior to bidding

III. Site Investigation and Coordination

- a. Following approval of the concept designs, CMT will conduct site investigations and utility coordination in the all areas where improvements are intended:
 - i. Utility coordination to include locates from local utility companies, private locator to detect private electrical
 - ii. Potholing of existing utilities within vicinity of new improvements
 - iii. Geotechnical investigation in areas expected for proposed improvements to aid structural designs
 - iv. Topographical surveys in areas expected for proposed improvements to aid utility clearance and civil grading design (as necessary)

IV. Drawings

- a. Following approval of the concept designs, CMT/Vireo will prepare design level drawings showing the design intent which may include:
 - i. Hardscape plans and details including bridge, art and fence improvements
 - ii. Landscape plans, details and schedules
 - iii. Sign plans, elevations and sections showing dimensions, materials, colors graphics, text styles and layout, etc.
 - iv. Civil design to include grading alterations to support improvements as necessary, utilities avoidance as necessary
 - v. Lighting and electrical design for bridge, art and sign components

1. Includes detailed designs for local lighting features (photometrics and renderings)
 2. Includes design of circuitry/cable housing for power and communication line tie-ins to existing power sources
- vi. Structural details for hardscape improvements, AOA fencing, signage, etc.
- V. Specifications
- a. CMT and Vireo will develop all necessary technical specifications
- VI. Opinion of Probable Construction Costs
- a. CMT will work with Vireo to develop an opinion of probable costs for these improvements

D. KCI LANDSCAPING IMPROVEMENTS BIDDING PHASE SERVICES

1. Specific tasks for the Landscaping Improvements Bidding Phase include the following:
 - I. Attend the Pre-Bid Meeting and record Minutes.
 - II. Respond to contractor questions, requests for information and requests for clarification as necessary pertaining to the Construction Plans and Contract Document/Technical Specifications during the Bidding Phase.
 - III. Prepare and distribute contract Addenda as necessary
 - IV. Review contractor's qualifications and make recommendation of contract award to Sponsor.

E. KCI LANDSCAPING IMPROVEMENTS CONSTRUCTION PHASE SERVICES

1. This Scope of Services does not include construction phase services. We recommend developing the scope for construction phase services once the timeline of construction and complete construction phase scope of work is fully realized following the design phase services.

16. LANDSIDE STRUCTURAL BID PACKAGE #2

A. LANDSIDE STRUCTURAL REHABILITATION PROJECT OVERVIEW

1. This supplement to the original contract executed on January 28, 2021 is to provide additional engineering, repair plans and specifications for Beirut Circle Entrance (Terminal C) bridge over Bonn Circle. The site assessment performed March 9, 2021 found the north end of the voided slab bridge to be in worse condition than assumed based on the previous biennial bridge inspection reports requiring additional analysis and repairs beyond the original scope. In addition, additional engineering, management, and construction observation will be needed to separate the rehabilitation plans into two bid packages instead of one. The first bid package is scheduled to be let in Fall 2021 with construction scheduled for 2022 and the second package is scheduled to be let in 2022 with construction scheduled for 2023 after the new terminal is in service.

I. Task 1: Project Design, Plans, Estimate, Specifications and Management

- a. Additional services to complete the bridge repairs and prepare additional construction documents at both Rome Circle and Beirut Circle bridges are noted below. Additional sheets are needed to separate the plan sets into two bid packages and provide additional repairs to Beirut Circle Entrance bridge. All plan sheets for Package 1 were included in the original scope of services.

i. Rome Circle Entrance Bridge:

Separate the repair plans into two packages. Package 1 will contain substructure repairs, superstructure repairs below the deck, barrier repairs on the outside of the bridge, coating the abutments and the sides of the bridge. Package 2 will contain deck repair plans, expansion joint replacement plans, roadway face of barrier repairs and partial recoating details.

Additional Sheets for Package 2 covered by this supplement:

1. General Notes, Quantities and Typical Section
2. Barrier Repairs and Partial Recoating Details
3. Approach Slab Repairs

Other Sheets for Package 2 from original scope of service not covered by this supplement:

1. Deck Repair Details
2. Staging Details
3. Strip Seal Expansion Joint Details
4. Traffic Control (2 sheets)

ii. Rome Circle Exit Bridge

Separate the repair plans into two packages. Package 1 will contain substructure repairs, superstructure repairs below the deck, barrier repairs on the outside of the bridge, coating the abutments and the sides of the bridge. Package 2 will contain deck repair plans, expansion joint replacement plans, roadway face of barrier repairs and partial recoating details.

Additional Sheets for Package 2 covered by this supplement:

1. General Notes, Quantities and Typical Section
2. Barrier Repairs and Partial Recoating Details
3. Approach Slab Repairs

Other Sheets for Package 2 from original scope of service not covered by this supplement:

1. Deck Repair Details
2. Staging Details
3. Strip Seal Expansion Joint Details
4. Traffic Control (2 sheets)

iii. Beirut Circle Entrance Bridge

Separate the repair plans into two packages. Package 1 will contain substructure repairs, superstructure repairs below the deck, barrier repairs on the outside of the bridge, coating the abutments and the sides of the bridge. Package 2 will contain deck repair plans, expansion joint replacement plans, roadway face of barrier repairs, partial recoating details and partial removal and replacement of the north end of the voided slab and the upper portion of the north abutment.

Additional Sheets for Package 2 covered by this supplement:

1. General Notes, Quantities and Typical Section
2. Barrier Curb Repairs and Partial Recoating Details
3. Removal Details
4. North Abutment Details
5. Plan of Slab
6. Typical Section (Replacement Slab)
7. Slab Curve Ordinates
8. Approach Slab Details
9. Bill of Reinforcing

Other Sheets for Package 2 from original scope of service not covered by this supplement:

1. Deck Repair Details
2. Staging Details
3. Strip Seal Expansion Joint Details
4. Traffic Control (2 sheets)

iv. Beirut Circle Exit Bridge

Separate the repair plans into two packages. Package 1 will contain substructure repairs, superstructure repairs below the deck, barrier repairs on the outside of the bridge, coating the abutments and the sides of the bridge. Package 2 will contain deck repair plans, expansion joint replacement plans, roadway face of barrier repairs and partial recoating details.

Additional Sheets for Package 2 covered by this supplement:

1. General Notes, Quantities and Typical Section
2. Barrier Curb Repairs and Partial Recoating Details
3. Approach Slab Repairs

Other Sheets for Package 2 from original scope of service not covered by this supplement:

1. Deck Repair Details

2. Staging Details
 3. Strip Seal Expansion Joint Details
 4. Traffic Control (2 sheets)
 - v. Preparation of Technical Specifications/Special Provisions
Develop technical specifications/special provisions for pay items included in the Package 2 bridge plans sufficient to clarify construction requirements, materials, measurement and payment of the pay items. No other specifications are included in HDR's scope of services.
Front end specifications will be prepared by CMT with assistance from HDR.
 - vi. Preparation of Engineer's Opinion of Probable Construction Cost
Develop Engineer's Opinion of Probable Construction Cost for scope of construction and pay items included in Package 2. Recent bids and unit prices in the region will be utilized as the basis of the estimate without material, labor, profit, overhead and insurance markup considerations. HDR has no control of the bidding environment and cost of materials and labor at the time of bid and makes no warranties or guarantees regarding that bids will be at or below the Engineer's Opinion of Probable Construction Cost.
 - vii. Quality Control and Quality Assurance
Calculations and plan sheets for Package 2 will go thru a detail checking process by an engineer for accuracy and meeting design criteria established for the project. Deliverables for the project will be QC'd by a Senior Engineer familiar with plan deliverable requirements for KCAD, KCMO and MoDOT Bridge Standards. The Project Manager will confirm QC comments have been resolved and the HDR Quality process followed and documented.
 - viii. Project Management
The scope includes project management time for additional monitoring of project budget and schedule for the Project Manager and the project accountant. Invoices will be prepared and submitted to CMT for each month with project charges. The scope of services assumes an additional 3 months of design schedule in Fall of 2021 and an additional construction season to be completed by December 2023.
- II. Task 2: Bidding Phase
- a. The bidding phase services for Package 2 include attending pre-bid meeting, answering up to 5 bidding phase RFI's, attending the bid opening and compiling bid tabulation.
- III. Task 3: Construction Phase Services
- a. Design Services During Construction

The construction phase services will include the following design services by the design professional: Attending the preconstruction meeting, review of shop drawings, answering up to 6 construction phase RFI's or questions from the contractor. The scope of services also includes a final walk through meeting. No as-builts, design professional attendance at progress meetings, revised plans, change order processing, or pay applications are included.

b. Construction Observation (To be performed by HG Consult)

Part time on-site construction observation services are included in this scope of services. The part-time observation is assumed to cover a construction schedule of up to 4 months, assuming a total of 70 hours per month for the construction observation engineer. The 70 hours per month will include the construction engineer attendance at progress meetings and onsite observation during key construction activities up to a maximum average of 70 hours/month for 3 months. Construction Observation will be fully contracted and administered between CMT and HG Consult.

B. LANDSIDE STRUCTURAL REHABILITATION ESTIMATED SCHEDULE

Assumed Notice to Proceed.....	December 3, 2021
Package 2 - 60% Plans Submittal.....	February 25, 2022
Package 2 - 100% Plans Submittal.....	April 1, 2022
Assumed Beginning of Construction.....	June 3, 2022
Assumed Completion of Construction.....	September 30, 2022

C. LANDSIDE STRUCTURAL REHAB EXCLUSIONS

1. The following list of services are excluded from this scope of services. Items not listed in the exclusions listed below are not included in the scope of services. This list of exclusions is not intended as a complete list of exclusions but is intended to clarify roles and responsibilities.

- I. No sidewalk design or ADA considerations.
- II. No aesthetics on the bridge barriers.
- III. Not removing any portion of the abutments, other than partial removal and replacement at Beirut Circle Entrance.
- IV. No materials sampling or testing services included.

17. BERLIN RESERVOIR DAM AND SPILLWAY REPAIR

A. BERLIN RESERVOIR DAM AND SPILLWAY REPAIR PROJECT OVERVIEW

1. This supplement to the original contract executed on January 28, 2021 is to provide engineering services to prepare plans and specifications to repair

the Berlin Basin dam and outfall structure. Limited bid phase services and construction observation are also included.

B. PROJECT MANAGEMENT

2. This task includes formulating a safety plan and schedule, along with project management tasks for this supplement. The scope includes project management time for project set up and monthly monitoring of budget and schedule for this supplement. Invoices will be prepared and submitted each month. The scope of services assumes a 6-month total schedule from Notice to Proceed of this supplement.

C. STRUCTURAL REHABILITATION DESIGN AND PLANS

1. HDR will design repairs of the deteriorated concrete following recommendations of the US Army Corps of Engineers, American Concrete Institute, and HDR's past practice. The design package will include defect repair detail drawings of the dam, spillway and stilling basin, identified by priority. HDR has assumed up to seven (7) drawings total:

- I. Cover Sheet
- II. General notes and quantity summary
- III. Spillway structure plan and elevation
- IV. Embankment Repair Details
- V. Concrete Repair Details (2 sheets)
- VI. Access stair repairs

Repair areas will be approximate since the concrete condition below the surface cannot be accessed. The specifications will include allowances for increases or decreases in quantities based on field conditions.

D. ASSUMPTIONS

1. HDR has budgeted for one round of reviews of documents by Crawford, Murphy & Tilly and the Kansas City Aviation Department. Should multiple individuals review the documents, a single set of consolidated comments with conflicts resolved will be provided.

E. TERMS AND CONDITIONS FOR FLOODPLAIN DAMS AND LEVEE PROFESSIONAL SERVICES

1. Activities associated with this scope of work will agree with the HDR Engineering, Inc. Terms and Conditions for Floodplain, Dams and Levee Professional Services. Standard terms and conditions are attached to this scope of services document.

F. PREPARATION OF TECHNICAL SPECIFICATIONS / SPECIAL PROVISIONS

1. HDR will only provide technical Specifications / Special Provisions for the rehabilitation work provided.

Front end specifications will be prepared by CMT with assistance from HDR.

G. PREPARATION OF ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST

1. Develop Engineer's Opinion of Probable Construction Cost for scope of construction and pay items included in this scope of services. Recent bids and unit prices in the region will be utilized as the basis of the estimate without material, labor, profit, overhead and insurance markup considerations. HDR has no control of the bidding environment and cost of materials and labor at the time of bid and makes no warranties or guarantees regarding that bids will be at or below the Engineer's Opinion of Probable Construction Cost.

H. QUALITY CONTROL AND QUALITY ASSURANCE

1. Calculations and plan sheets will go thru a detail checking process by an engineer for accuracy and meeting design criteria mentioned in Structural Rehabilitation Design and Plans. Deliverables for the project will be QC'd by a Senior Engineer familiar with plan deliverable requirements for KCAD, KCMO and USACE Standards. The Project Manager will confirm QC comments have been resolved and the HDR Quality process followed and documented.

I. BIDDING PHASE

1. The bidding phase services include attending pre-bid meeting by remote access only, answering up to 5 bidding phase RFI's, attending the bid opening by remote access and compiling bid tabulation.

J. CONSTRUCTION PHASE SERVICES

1. Design Services During Construction

- I. The construction phase services will include the following design services by the HDR design professional: Attending preconstruction meeting, answering up to 5 construction phase RFI's or questions from the contractor. The scope of services also includes a final walk-through meeting on site. No as-builts, revised plans, change order processing, or pay applications are included.

2. Construction Observation

- I. Part time on-site construction observation services are included in this scope of services. The part-time observation is assumed to cover a construction schedule of up to 2 months, assuming a total of 55 hours per month for the construction observation engineer. The 55 hours per month will include the construction engineer attendance at progress meetings and onsite observation during key construction activities.

K. ESTIMATED SCHEDULE

1. The schedule below will be adjusted based on the actual Notice to Proceed after execution of this supplement. This schedule assumes a two-week review period by CMT and / or KCAD staff for the 90% plans. Final plans

will be submitted two weeks after receipt of the comments or notice of completed review.

Assumed Notice to Proceed.....January 3, 2022
 90% Plans Submittal.....March 7, 2022
 Final Plans Submittal.....April 4, 2022
 Assumed Letting.....June 2022
 Assumed Construction Start.....August 1, 2022
 Assumed Completion of Construction.....October 1, 2022

L. EXCLUSIONS

1. The following list of services are excluded from this scope of services. Items not listed in the exclusions listed below are not included in the scope of services. This list of exclusions is not intended as a complete list of exclusions but is intended to clarify roles and responsibilities.

- I. No sidewalk design or ADA considerations.
- II. No aesthetics on the outfall structure
- III. No materials sampling or testing services included.

18. ECONOMY LOT B REHABILITATION

A. ECONOMY LOT B REHABILITATION PROJECT OVERVIEW

1. This contract will consist of construction phase services for the project to rehabilitate Economy Lot B at Kansas City International Airport. CMT already has an active contract for the design and bidding phases for this project.

B. ECONOMY LOT B REHABILITATION CONSTRUCTION PHASE SERVICES

1. Kickoff

- I. Conduct preconstruction conference, including agenda and minutes
- II. Review contractor shop drawings
- III. Prepare Construction Observation Program (COP)

2. Part-Time Construction Observation (Est. 140 Calendar Days)

- I. Coordinate contractor schedule access and pavement closures
- II. Review Pay Applications (Est. 6 pay apps)
- III. Change Order Preparation (Est. 3 Change Orders)
- IV. Conduct Site Visits (Est. 1 per week)
- V. Conduct bi-weekly Construction Progress Meetings (Est. 10 Meetings)
- VI. Conduct Pre-Paving Meetings

- VII. Respond to Field Issues throughout duration of project
 - VIII. Conduct final inspection meeting, assemble punchlist
 - IX. Verify completion of punchlist
 - X. Construction Materials Testing (TSi)
 - 3. Full-Time Construction Observation (Est. 5 weeks)
 - I. On-Site Observation for critical work items (HG Consult Est. 5 weeks)
 - 4. Project Closeout
 - I. Prepare, print and deliver project record drawings
- B. Sec. 4, Paragraph A, Compensation and Reimbursables, delete and replace the following section:
- A. The maximum amount that City shall pay Design Professional under this Agreement is \$1,973,766.33, as follows:
- 1. \$282,506.33 for the services performed by Design Professional under original Agreement.
 - 2. \$854,030.00 for the services performed by Design Professional under Amendment One.
 - 3. \$837,230.00 for the services performed by Design Professional under this Amendment Four.

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: January 10, 2022

DESIGN PROFESSIONAL

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

By: Brenda M. Henton

Title: SR. VICE PRESIDENT

1/18/2022

Date: _____

KANSAS CITY, MISSOURI

By: Patrick Klein

Title: Director of Aviation

Approved as to form:

DocuSigned by:
Charlotte Ferns
19200C227622419

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.

DocuSigned by: Theresa Danielson 1/24/2022
Director of Finance Date

