MID-AMERICA REGIONAL COUNCIL

2026 Regional Imagery Project

Request for Proposals

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A. PURPOSE AND INTRODUCTION

The Mid-America Regional Council (MARC) is seeking proposals from qualified firms to acquire color, six-inch, digital orthophotography imagery for a portion of Greater Kansas City during late winter 2025 – early spring 2026. An estimated project area file may be obtained here: MARC 2026 Imagery Vendors.

MARC is the federally designated Metropolitan Planning Organization (MPO) for the Greater Kansas City urbanized area. MARC is also the designated Council of Governments for a contiguous nine-county region consisting of Leavenworth, Johnson, Miami and Wyandotte counties in Kansas; and Cass, Clay, Jackson, Platte and Ray counties in Missouri.

KC Metro GIS is a MARC committee made up of GIS professionals from local governments within the MARC region. KC Metro GIS concentrates on collaborative GIS efforts and information sharing between participating jurisdictions and agencies.

Working on behalf of KC Metro GIS, MARC has previously coordinated nine regional collections of high-resolution, ortho-corrected imagery for jurisdictions within the nine-county region. For the 2026 project, KC Metro GIS plans to collect roughly between 1,000 and 2,000 square miles of mostly six-inch orthoimagery.

The contract for the 2026 imagery will be an agreement between MARC and the consultant. MARC, in turn, will operate on behalf of regional participants seeking imagery through this project. The regional participants will retain full ownership of their respective imagery and associated products.

This Request for Proposals (RFP) provides background on MARC's ongoing imagery program, an overview of the project task areas, current imagery specifications, and the information required to respond to this RFP.

This RFP in no way commits MARC to contracting for services. Funding commitments from local participants may not be confirmed until MARC can provide actual price proposals to its partners.

While cost is extremely important, the consultant's qualifications, experience and proposed solutions for producing the required products will also be considered.

B. BACKGROUND

KC Metro GIS, recognizing the importance of imagery to all its members and the potential cost savings of regional coordination, facilitates a consortium for purchasing imagery for the region through a single contract.

The consortium has completed a regional acquisition of imagery on even numbered years since 2006. Participating jurisdictions realize significant cost and time savings compared to purchasing

imagery on their own. Smaller municipalities historically have struggled to afford orthoimagery but are now able to buy in at reasonable rates. In the past federal and state agencies have also been welcomed to participate.

The contract for services for previous projects was between MARC and a consultant. MARC enters a formal Memorandum of Understanding (MOU) with each participating jurisdiction or agency outlined in the terms of the agreement with MARC and the estimated not-to-exceed cost for that jurisdiction's portion of the imagery. This approach to contracting and cost selection will be repeated for the 2026 project.

C. PROJECT AREA

The 6" orthoimagery project area for the 2026 flight is currently estimated between 1,000 and 2,000 square miles and includes all or portions of the following counties: Cass, Clay, Jackson, and Platte counties in Missouri; and Wyandotte county in Kansas. A map of the current estimated project area is contained within Attachment A of this RFP.

We are reasonably certain the extent of the acquisition area for this project will not change; however, it is possible that some jurisdictions currently planning to participate may opt out due to budget constraints. Consultants are requested to provide cost proposals on a per-square -mile basis to accommodate this uncertainty. The final extent of the project will be determined during the contracting phase.

D. PROJECT MANAGEMENT AND THE AERIALS WORKGROUP

A MARC GIS staff member will function as the client-side project manager and primary point of contact for the consultant. In turn, the consultant will appoint a qualified project manager to act as the point of contact for MARC.

Due to the technical nature of the project and the number of parties involved, KC Metro GIS has designated a 2026 Aerials Workgroup (the Aerials Workgroup) from its members to act on its behalf as an advisory committee regarding proposal review, consultant selection, contracting, technical assistance and project management. The consultant may at times during the project be required to meet directly with the Aerials Workgroup to discuss project status and project issues; however, day-to-day project communications will occur between MARC's project manager and the consultant's project manager.

Rigorous project management is key to the overall project success and participant satisfaction. Proposals should clearly describe the consultant's approach to project management and how it will benefit the project.

E. SCOPE OF SERVICES

The selected contractor shall provide orthoimagery at six-inch (or better) resolution collected at a flight height between 4,800 - 15,000 feet above mean terrain (AMT), depending on camera technology for the estimated acquisition area contained in Attachment A. The orthoimagery must meet or exceed the ASPRS Class I Accuracy Standard for maps at 1" = 100' for 6-inch imagery.

The Aerials Workgroup currently plans to acquire the entire project area as a six-inch product; however, some participants may opt for the acquisition of a one-foot product in areas outside the core flight area. Some participants may also be interested in an oblique product or three-inch product as well.

Imagery shall be captured with a digital camera, processed, and delivered as true-color 24-bit RGB or 4-band with RGB plus near infrared in a tiled GeoTiff format. Imagery tiling scheme and naming convention will be the 5,000' by 5,000' grid system currently used for the region.

Imagery shall be captured during the leaf-off season when sun angle is most favorable — between mid-February and mid-March 2026. Final deliverables will be due by September 15, 2026 for all participants within the nine-county MARC membership area. The contract for services will include a twenty-four-month warranty period on defective products. In the event of a natural or man-made disaster, consultant agrees to make their best effort to re-fly affected / damaged areas for a period of up to twelve months from original acquisition.

Contractors may also be required to re-tile some imagery into Public Land Survey System (PLSS) Sections and create MrSID mosaics for participants. MARC requests that costs for these services be provided on a per-tile or per-square mile rate, and presented as a separate cost item within the proposals.

Project deliverables shall include the final digital orthophotography products delivered in the specified tiling scheme and naming convention, a flight map, a survey control report (including an airborne GPS report), elevation and terrain model, metadata files meeting the Federal Geographic Data Committee (FGDC) standard delivered in XML format readable by ArcCatalog versions 10.6 or ArcPro 3.2 and above.

Preference will be given to contractors providing online QC tools and image services as soon as possible after acquisition.

The contractor will be responsible for delivering each participating county its final orthoimagery and associated products. MARC will receive the complete set of imagery collected for the project directly from the consultant.

Timely completion is an imperative aspect of this project. Damages resulting from the contractor's failure to complete and deliver the specified products to MARC in a timely manner would be impracticable and damaging to our ongoing cooperative. To help ensure on-time project completion, MARC plans to employ a liquidated damages clause within the contract. The contract language for liquidated damages can be reviewed within the "Time of Performance" section of Attachment G: Professional Services Agreement.

F. PROJECT TASKS

This section contains a broad overview of the major tasks associated with this project. It is not an exhaustive list, nor does it necessarily imply the order of the tasks. While several project specifications are presented here, the complete set of specifications for this project is presented in the following section.

Task 1: Ground Control and Flight Planning

The consultant shall be responsible for establishing sufficient ground control to perform the required digital orthophoto processing. The control survey shall be completed in accordance with accepted industry practices. Global Positioning Systems (GPS) surveys shall be conducted in conformance with the most current Federal Geodetic Control standards.

Proposers should examine existing ground control and terrain models to determine if current data is suitable for completing the scope-of-work and meeting the quality requirements of this project. Proposals should include an evaluation of this data, identify additional data requirements, and propose a solution for collecting additional data and the associated costs. MARC will provide the DEMs used for the 2024 project to prospective consultants through online download.

Proposals should include a proposed flight and control plan. The planning map shall be of a known, even engineering scale, and shall indicate the proposed control locations, stereo model layout and flight plan, including flying height during the collection. The mapping limit line shall also be plotted on the planning map. The mapping limit includes the proposed project areas shown in Attachment A.

All labor and materials related to the ground control survey, including research and permits, shall be the responsibility of the consultant.

Task 2: Imagery Capture

Imagery shall be acquired using a digital camera system capable of capturing imagery to the specifications required by the project. Proposals should fully describe and provide specifications on proposed camera systems and their advantages to this project.

Imagery shall be captured between mid-February and mid-March 2026, during the period when deciduous trees are barren (leaf-off). Imagery shall be collected between 10:00 a.m. and 2:00 p.m., local time, when the sun angle is not less than 30°. In areas where there is significant urban development with buildings five stories or taller acquisition of photography shall be made between the optimal 10:00 a.m. and 2:00 p.m. time frame.

Imagery shall not be captured when the ground is obscured by snow, haze, fog, smoke, or dust, or when streams are not within their normal banks. Clouds and/or cloud shadows shall not appear in imagery. Imagery should also not be captured when high wind conditions cause excessive white caps on water features, or reduced visibility from windblown dust.

Building lean within the orthoimagery is a concern within the urban core. Proposals should include alternative options with examples and associated pricing for correcting lean of buildings over three stories. These price options should be provided on a per -square-mile basis.

During the acquisition phase, the consultant will provide MARC's project manager with, at a minimum, weekly status reports indicating the flight lines captured, the dates flown and the percentage of the acquisition process completed. For days during the acquisition phase when imagery was not captured, the weekly status report will report why imagery was not collected.

The Workgroup is especially interested in solutions which allow stakeholders to see raw imagery shortly after capture, as well as tools for communicating daily flight status.

Task 3: Analytical Aerotriangulation

The Aerials Workgroup encourages the use of analytical aerotriangulation to reduce field control costs and to verify the integrity of the survey. Best available technology shall be utilized for aerotriangulation. The use of softcopy analytical triangulation or digital aerotriangulation is acceptable. The consultant shall document the process and methods used.

The consultant shall deliver a bound copy of the analytical aerotriangulation results. Coordinates and residual values shall be reported for all points. RMS values and ground elevation accuracy shall be completed and reported for the final adjustment. Discarded points shall be noted and discussed.

Task 4: Creation of Digital Orthophotography

Digital orthophotography shall be produced using digital elevation models, control data, sensor calibration data and raw imagery. The rectification process shall involve the solution of the appropriate photogrammetric equations for each pixel in the output image.

Digital orthophotography shall be created as color GeoTiff files. Capture and processing of imagery will produce a six-inch ortho-product, and, where required, a one-foot ortho-product, both meeting the accuracy specifications defined for the project. The six-inch imagery will be tiled into the same 5,000 by 5,000 foot scheme used in the previous projects and use the same naming convention. The one-foot imagery will also conform to a 5,000 by 5,000 foot tiling scheme derived from the six-inch tile boundaries and naming convention. MARC will provide these tiling schemes and naming conventions to prospective consultants through online download.

Partial tiles are not acceptable within this project. All tiles must be fully filled with imagery and delivered without "no-data" areas.

All final orthoimagery should be consistent in contrast, color and brightness. Image consistency should be maximized not only within each participating county but also across the extent of the project area. The Aerial Workgroup will look for proposals with innovative and/or effective

approaches to developing a methodology to select a target range for overall image quality (color, brightness, contrast, etc.) and delivering imagery that falls within the chosen parameters.

Along with the six-inch and one foot imagery product specified for this project, the Aerials Workgroup seeks costs for the following derivative products and/or services:

- Retiling imagery to PLSS Sections.
- Generation of MrSid mosaics for each county or city.
- Touch up services for water bodies so that they have a consistent look across the entire water features, especially along seam lines.
- Capture and processing of 4-band color IR.
- Capture and processing of oblique imagery.
- Capture and processing of LiDar
- Capture and processing of three-inch imagery.

Prospective consultants should provide prices for the above-mentioned derivatives on a per-tile, or per-square-mile basis within the proposal's cost summary.

Task 5: Quality Assurance and Quality Control

An overall quality-assurance program and associated quality-control measures shall be part of all project phases. As was done in the previous imagery project, a set of acceptance criteria based on the final imagery specifications will be employed by the participants for use within their respective quality control processes.

Consultants shall describe within their proposals planned approaches for quality assurance (QA) and control (QC). Consultants shall explain their overall methodology for QA, and where, when, and how QC is applied within the overall project workflow.

The back-and-forth between the consultant and the participants for imagery QC is a known bottleneck within imagery projects. For the 2026 project, the Aerials Workgroup is particularly interested in QA/QC solutions which consultants can demonstrate as effective and efficient methodologies for relieving this constraint.

Task 6: Product Delivery

Delivery of final imagery products will be made to each participating county and MARC. Each participating county will receive the final imagery products for the county, along with the county DEM, project level and imagery metadata, and shapefiles representing the tile scheme, flight lines, and mosaic seam lines used for the project.

Metadata will be compliant with the Federal Geographic Data Committee standard and delivered in an XML format readable by ArcGIS Desktop 10.8 and ArcPro 3.2 above. Project level metadata is required. Metadata XML files in FGDC form are also required for individual imagery tiles but auto-generation from a standard template is acceptable.

Metadata defining the date and time of imagery capture is critical. To handle this, the consultant can either encode the tile-based metadata files with a date and time stamp or provide a shapefile containing flight lines (or points along the flight lines) attributed with date and time stamps.

The consultant will also deliver a copy of all the imagery and associated DEMs, metadata, tiling schemes, and mosaic seam lines to MARC.

The consultant shall include delivery of all digital products on exchangeable and high transfer rate USB external hard drives. All imagery shall be priced as a load-and-leave event.

Prospective consultants should be aware that all imagery (raw and processed), DEMs, aerial triangulations and other derivatives products are the sole property of each participating agency and that this condition will be fully expressed within the contract. During the project and after its completion the consultant shall not be permitted to redistribute or resell these products without written consent of the affected participant.

G. SPECIFICATIONS

The specifications used for the previous projects are included below and are expected to become the basis for the overall specifications in the 2026 project. Some of this content has already been mentioned within previous sections; however, prospective consultants should thoroughly review the detailed specs contained herein.

Where appropriate, the Aerials Workgroup is open to alternative specifications, if the consultant can adequately demonstrate that its alternative will produce a product meeting or exceeding accuracy requirement without increasing costs.

G.1 Imagery Capture

G.1.1 General

MARC will only accept proposals that are direct-to-digital image capture. This means the aerial photography may not be captured on film and scanned.

G.1.2 Project Area

The acquisition area for the 2026 flight is currently estimated between 1,000 and 2,000 square miles and includes all or portions of the following counties: Cass, Clay, Jackson and Platte counties in Missouri; and Wyandotte and Atchison counties in Kansas.

See Attachment A for the current project area. The final extent of the project area is subject to change prior to contracting for services.

G.1.3 Flight Conditions

Imagery shall be captured between mid-February and late March 2026, during the period when deciduous trees are barren. The majority of the project area will be collected between 10:00 a.m.

and 2:00 p.m., local time, when the sun angle is not less than 30°. In areas where there is significant urban development with buildings three stories or taller, every effort should be made to acquire the photography between the optimal 10:00 a.m. and 2:00 p.m. time frame.

Aerial photography shall not be acquired when the ground is obscured by snow, haze, smoke, fog or dust, or when streams are not within their normal banks. Clouds and/or cloud shadows shall not appear in the photograph. The photographs shall not contain objectionable shadows caused by relief or low solar altitude. The photographs shall also not contain distortions caused by high wind conditions such as excessive white caps on water bodies, or ground obstructions from blowing dust. Photographs shall have a uniform tone and contrast.

G.1.4 Flight Plan

The contractor shall prepare a flight plan on a base map of known scale. Flight lines shall be flown in a north-south direction continuously across the region without interruption. The principal points of the first three and the last three exposures of all flight lines shall fall outside the boundaries of the project area. All side boundary areas shall be covered by a minimum 30 percent of photo image format.

All final accepted flight plans to be developed after contract award shall be submitted to MARC upon completion of the photographic missions. These plans shall be detailed to show the number of flight lines, the spacing between successive exposures, the focal length of the camera used for each strip and the time of capture for each image.

G.1.5 Scale of Imagery

The digital orthophotos for this project will be generated using the flying altitudes specified for each of the scales below. Departure from the stated altitude above mean terrain in excess of 5 percent in one or more exposures may be cause for rejection of said exposures.

- 1"=100' at 4,800 (6,150 allowed with ADS 100) foot above ground datum
- 1"=400' at 9,600 foot above ground datum

G.1.6 Forward Overlap

Overlapping photographs in each flight line shall provide full stereoscopic coverage of the area to be mapped. Consecutive photos in each flight line shall have an average forward overlap of 60 percent (+/- 2 percent). Overlap of less than 55 percent or more than 65 percent in one or more exposures may be cause for rejection of the flight strip, or a portion thereof.

G.1.7 Sidelap

Sidelap between adjacent parallel flight lines shall average 30 percent (±5 percent). Any parallel flight lines having sidelap of less than 25 percent or greater than 35 percent will be rejected and reflown.

G.1.8 Crab

Crab in excess of three degrees (3°) measured with respect to both lines of flight may be cause for rejection of a flight strip or any portion thereof in which the excess crab occurs. This includes relative crab between any two successive exposures.

G.1.9 Tilt

Tilt of the camera from vertical at the instant of exposure shall not exceed three degrees (3°), nor shall it exceed five degrees (5°) between successive exposure stations. Average tilt over the entire project shall not exceed one degree (1°).

G.1.10 Flight Height

The departure above or below the required flying height shall not exceed five percent.

G.1.11 Reflights

The contractor, at no additional cost to MARC, shall refly unacceptable aerial photography, with the reflight coverage overlapping the accepted photography by at least two stereomodels.

G.1.12 Aircraft

The aircraft to be used shall be equipped with all essential navigational and photographic instruments and shall be operated by a well-trained and experienced crew. The aircraft shall be equipped with Global Positioning System (GPS) enhanced navigational systems. Performance of the aircraft shall be adequate to complete the project in accordance with the technical specifications.

Respondents shall submit, in response to these technical specifications, appropriate Federal Aviation Administration documentation indicating that the aircraft is within current requirements and operating specifications.

It shall be the responsibility of the contractor to secure all licenses and authorizations for overflights of the project sites. The contractor shall notify MARC as soon as possible if difficulties in obtaining the appropriate authorizations are encountered.

The contractor shall be responsible for operating and maintaining the aircraft in accordance with the regulations of the Federal Aviation Administration and the Civil Aeronautics Board.

The design of the aircraft shall be such that, when the camera is mounted with all its parts above the outer structure, an unobstructed view is obtained, shielded from exhaust gases, oil, effluence and air turbulence. No window of glass or other material shall be interposed between the camera and the ground to be photographed. The aircraft shall have a proven services ceiling with operating load of not less than 5 percent above the highest altitude requirements to secure the specified photography.

G.1.13 Flight Data

Images should have recorded the information below. This information should be provided as a final delivery in digital format (such as text files):

- Flight line and exposure number
- Date of exposure
- Time of day clock, set in either standard or daylight savings time, as appropriate
- Altimeter reading in feet or meters above mean sea level.

G.2. CONTROL SPECIFICATIONS

G.2.1 General

The primary purpose of the required survey control for this project is to produce an aerotriangulation solution accurate enough for orthoimage production and/or topographic mapping. The contractor will be required to tie into existing control networks whenever possible for the duration of this project, and any ground control established for this project must meet minimum accuracy requirements and reporting requirements set forth here.

MARC will allow airborne GPS (AGPS) techniques to be used for control purposes, although they are not strictly required. Specifications for AGPS are included below.

G.2.2 Field Surveys

Field Surveys shall be required for two purposes:

- To establish horizontal and/or vertical control for the aerial photography
- To act as check points for airborne GPS solutions, if utilized.

G.2.2.1 Control Surveys to Support Imagery Acquisition

Any ground control surveys done to support the adjustment of the photography shall comply with National Geodetic Survey (NGS) horizontal standards for Second Order, Class II surveys. Vertical control surveys to support the optional 2' contouring will be accurate to within 1/10 of the contour interval.

Additional requirements, including documentation, are described below. All horizontal control points shall be targeted prior to flight.

G.2.2.2 Airborne GPS Support

To support AGPS, the contractor shall be required to set and panel supplemental ground control points located near the corner of each airborne photogrammetric block. Each of these points shall require GPS-derived horizontal and vertical coordinates meeting the accuracy requirements set forth above. Each location shall be marked with a PK nail or rebar and shall be paneled prior to flight.

Existing control points may be used provided the contractor can verify that they are visible from the air and have both horizontal and vertical values that meet or exceed the accuracy requirements above. The contractor shall be responsible for making the final determination on check point location in consultation with MARC. All of these points should be targeted. Targets

are to be painted, with a PK nail or rebar with cap placed at their centers and removed upon completion of flights. This will require landowner notification and permission.

Additional requirements for AGPS, including documentation, are described below.

G.2.3 Ground Coordinate Systems

Horizontally, all coordinates shall be tied to the appropriate state plane coordinate system.

G.2.4 General Horizontal Control Standards

The contractor shall specify the GPS ground observation methods that will be used to establish GPS ground control points where necessary. The number of GPS units involved should be indicated, as well as the length of observation time planned for each station. The Federal Geodetic Control Subcommittee's most current document entitled "Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning Techniques" shall apply where appropriate.

At a minimum, all new horizontal control established through ground GPS observations and/or conventional methods shall be to an accuracy level of NGS Second Order Class II or better. FGCS (formerly FGCC) standards for instrumentation, field observations and data reduction shall be followed as applicable to the order and class of survey. All new horizontal points must be marked with a PK nail or some other acceptable type of semi-permanent marker.

All horizontal points, existing or new, must be targeted prior to flight. The contractor shall compute, adjust and furnish the applicable Kansas or Missouri State Plane Coordinates and shall prepare complete descriptions, including location diagrams, for all horizontal control stations.

G.2.5 Ground Survey Report

Three (3) hard copies and two (2) digital (ASCII) files of a survey report are required. The report shall outline results of the ground GPS observations and contain all items listed in the following subsections of this section. The survey report shall be delivered to MARC's project manager for approval.

G.2.5.1 Observation Summary

The summary shall contain a discussion of the results of the ground GPS survey, including accuracies achieved, problems encountered and a statement of the overall quality of the survey in terms of its use with Airborne GPS.

G.2.5.2 Control Diagram

The contractor shall furnish a schematic control diagram of the survey records on a map for all basic horizontal control pertinent to this project. The schematic diagram shall show all existing and established control points properly identified in their approximate location. It shall also show all observed baselines with their designations to include the beginning and ending points.

G.2.5.3 Computations

The contractor shall provide Least Squares adjustments of all horizontal control data. Adjustment output for both unconstrained and constrained adjustments shall contain the following information referenced to observed stations:

- a) Fixed coordinates (Northings and Eastings) in international feet and meters
- b) Adjusted coordinates (Northings and Eastings) in international feet and meters
- c) Station error ellipse values (semi-major and semi-minor axis values) in meters
- d) Relative (baseline) error ellipse values (semi-major and semi-minor axis values) in meters
- e) Precision (ppm) of observed baselines
- f) Number of Degrees of Freedom (Redundancy).

The information shall be referenced to the field notebooks by book and page number. All field records and computations, and all results shall be delivered to the MARC project manager with the control data upon completion of the work. Computations must be made in accordance with the published standards of the FGCS.

G.2.5.4 Control Data

The contractor shall furnish the project manager with complete information as listed below on all control points established and/or recovered by the contractor:

- a) Designation of station and sequential number.
- b) Establishing agency (name of contractor and of subcontractor who established the control point).
- c) Date of establishment.
- d) Horizontal and/or vertical control data. Horizontal data shall be in NAD 83/97 latitude and longitude, meters, and in U.S. Survey feet.
- e) A complete description of the nature and location of the point to include a "to reach" description referenced to nearby landmarks and identified by field survey ties to two or more definable photo image points in the immediate vicinity.
- f) The location of each marked horizontal control point, symbolized on the schematic control diagram map.

G.2.5.5 Field Notes and Observation Logs

Field notes and observation logs shall be carefully and neatly prepared, indexed and preserved. All data regarding the establishment and extension of horizontal control, including descriptions of all established and recovered monuments, shall be recorded. Where existing control points are recovered by the contractor in extending the supplemental control, the field notes shall contain the following: (1) information as to the general condition of the recovered mark; (2) the original description; (3) exact letter and numbers stamped (not cast in) on the mark and amended description, if applicable; (4) additional tie data; and (5) a key plan of the location as appropriate to facilitate future recovery.

Observation logs shall contain the following:

- a) Monument name and location
- b) Name, title of the observer
- c) Time of arrival at monument

- d) Height of instrument at beginning of observation (in feet and meters)
- e) Type and serial number of the GPS receiver
- f) Type and serial number of the Tribrach
- g) Observation period (indicate if programmed)
- h) Epoch rate
- i) Satellites observed
- i) Height of instrument at end of observation (in feet and meters)
- k) Additional notes describing problems encountered during the observation period.

An additional sheet containing an obstruction diagram shall be provided for each existing and/or new monument observed. Each baseline shall be identified by number and brief description in the field notes. If the field notes are electronically recorded, printouts of the electronically recorded field notes shall be provided.

G.2.6 General Airborne GPS Specifications

G.2.6.1 General

Airborne GPS solutions shall be required to utilize dual-frequency GPS systems during the aerial photography missions. The contractor shall post-process the airborne GPS data relative to simultaneous observations collected at fixed land-based reference stations. Geodetic positions corresponding to the photo centers at the instant of exposure shall be calculated and later combined with existing control point values in an analytical aerotriangulation solution.

G.2.6.2 Accuracy

Camera perspective centers must be accurate to within .10m in X, Y and Z. The contractor must clearly confirm in the proposal whether or not the estimated accuracies for the positions determined at each instance of camera exposure meet the accuracy requirements for this project. GPS antenna positions shall be accurate to within .05m.

G.2.6.3 Ground Stations

The contractor shall have a minimum of two GPS ground stations active during the flight missions. These stations shall be located within the project area at a specified distance of the flight mission for the day.

G.2.6.4 Satellite Geometry

The Positional Dilution of Precision (PDOP) or the Geometrical Dilution of Precision (GDOP) shall not be greater than three (3) for 90 percent of the flight lines and not greater than five (5) for the remaining 10 percent.

G.2.6.5 Post Processing Software

The GPS post-processing software must be capable of backward and forward processing.

G.2.6.6 Reporting

At the conclusion of Airborne GPS collection, the contractor shall be required to submit a report of GPS observations and results data, observation logs, and data analysis and adjustments. This report shall be kept for reference.

G.3 AEROTRIANGULATION SPECIFICATIONS

G.3.1 General

The contractor should include in the response a description for the proposed method of aerotriangulation. The appropriate triangulation specification will be chosen based on the project requirements, accuracy standards and recommendations made by contractor. General specifications are included below; any recommended variations should include a justification of the alternate approach.

G.3.2 Area to be Triangulated

At a minimum, data should be triangulated into one simultaneous block adjustment for each county. Blocks of larger areas may be acceptable.

G.3.3 Standards

The positional accuracy (vector of both Northing and Easting coordinate errors) of pass points established by aerial triangulation shall be sufficient to support the production of digital orthophotos and digital photogrammetric mapping to meet the accuracy standards contained herein.

At a minimum, the positional accuracy of pass points and tie points established through aerotriangulation shall meet or exceed each of the following conditions:

- Root mean square error of the final block adjustment at all control points and check points shall not exceed 1/7,500 of the flight height.
- The maximum allowable error of any point shall not exceed \pm 1/5,000 of the flight height.

G.3.4 Coordinate System

All horizontal ground positions determined by aerotriangulation shall be in the appropriate State Plan Coordinate System:

- Kansas State Plane Coordinate System (North Zone) NAD 1983/97 Adjustment.
- Missouri State Plane Coordinate System (West Zone) NAD 1983/97 Adjustment.

All vertical positions shall be referenced to NAVD 1988. All final values will be in feet.

G.3.5 Aerial Triangulation Report

Immediately upon completion of all aerial triangulation work, the contractor will prepare a formal aerial triangulation report for submission to MARC. The report will include, but not necessarily be limited to, the following:

G.3.5.1 Control and Flight Line Indexes

- 1. Flight lines
- 2. Exposure stations or model layout
- 3. All control points appropriately labeled with station designations, computer designations (if any), agency responsible for establishing the stations, orders of accuracy, and an indication of whether individual points were targeted or photo-identifiable.

G.3.5.2 Aerial Triangulation Results

- 1. Surveyed values for all input ground control points. The contractor shall be responsible for verifying that the values of all control points are the original adjusted survey values, and not values calculated through an earlier aerotriangulation process.
- 2. All misclosures at ground control points with and without use of checkpoints.
- 3. Computer printout of the final adjusted aerotriangulation solution to horizontal and vertical ground control. The printout should contain the final State Plane Coordinates for all ground control points, pass points and check points.
- 4. Identification of all points which were included in the initial solution and subsequently discarded, with an explanation of the reasons for being discarded.
- 5. Identification of the weighting factors applied to all points used in the final solution.
- 6. Removable flash drive containing the coordinate data in ASCII format.

G.3.5.3 Narrative

The report shall include a brief narrative tying together aerotriangulation specifications as well as descriptions of laboratory equipment, procedures and computer programs used. Root-mean-square (RMS) error summaries will be given for bundle adjustment photographic measurement residuals or strip tie point residuals and misclosures at control/check points. In addition, significant misfits encountered at control points, and steps taken to analyze such misfits and to rectify the discrepancies, will be fully described.

G.4. DIGITAL ORTHOPHOTO SPECIFICATIONS

G.4.1 General

MARC requires digital orthophotos (orthoimages) to cover a portion of the project area (tiling to the described section tiling scheme). Raw aerial imagery shall be digitally rectified to an orthographic projection on a pixel-by-pixel basis. Source materials for digital orthophotos will be the previously mentioned aerial photographs, aerotriangulation data and existing digital elevation models updated as necessary.

MARC requires that digital orthophotos be created using a direct-to-digital approach.

G.4.2 Equipment and Production Specifications

Respondents shall discuss the production procedures and equipment that will be used to produce the digital orthophotos. In particular, the rectification procedures to be used shall be discussed. In formulating the technical plan, the following production specifications shall be adhered to.

G.4.2.1 DEM Data Collection

Photogrammetric elevation data used as input in the rectification process shall be existing elevation data updated as needed. The updated elevation data should consist of points spaced at regular intervals along a grid and shall be supplemented by breaklines at all significant terrain breaks, including the street centerline.

The DEM or DTM must be generated at a density level necessary to support the accuracy specifications listed in this document.

Respondents shall describe the approach to be used in generating the DEM and DTM. They shall specifically describe the spacing and the locations at which breaklines will be captured to support orthophoto production as well as for contour generation.

G.4.2.2 Processing

Creation of the digital orthophoto shall utilize several types of inputs. These inputs shall include:

- 1. The unrectified raster image file of the aerial photography
- 2. A digital elevation model
- 3. Ground control and pass points.

These three input sources shall be used to register the raw image file mathematically to the data to determine the location of the pixels with respect to the ground and to remove relief displacement from the image file.

Second generation orthorectification is not preferred; please indicate if your firm sees a benefit for this process in any part of the project area.

G.4.2.3 Ground Resolution

Digital orthophotos will be delivered at a resolution of 0.5' or 1.0' as determined by the final contract.

G.4.2.4 Image Radiometry

Image shall be represented as True Color 24 Bit RGB or 4-band RGB plus near infrared. Images shall have consistent tone and contrast across entire image set or it will be cause for rejection.

G.4.2.5 Image Mosaicing

Where two or more digital orthophoto images are mosaiced, the image judged to have the best contrast shall be used as the reference image. All other images shall have their brightness values adjusted to that of the reference image. MARC will work with the contractor in the early stages to determine the reference image.

Join lines between overlapping images shall be chosen so as to minimize tonal variations. Localized adjustment of the brightness values shall be performed to minimize tonal differences between join areas.

G.4.2.6 Image Quality

Orthophotos shall not contain defects such as out-of-focus imagery, dust marks, scratches, or inconsistencies in tone and density between individual orthophotos and/or adjacent sheets.

The contractor shall correct distortions caused by elevated or depressed structures such as bridges, rail beds, overpasses and steep terrain. MARC shall reject any image that contains these types of distortions. The images should also have consistent contrast across mosaiced images. This may require radiometric correction of delivered digital images.

G.5 BUY-UP DELIVERABLES:

G.5.1

The contractor shall be required to provide the products and/or services described herein; however, it shall be the agency's sole discretion to acquire such products/services.

G.5.2

If requested by an agency, the contractor shall deliver imagery that may be used for stereo coverage of a specified project area.

G.5.3

Buy-ups shall be defined as improvements over the standard base product that may be purchased by an agency.

- a. File naming for higher resolution buy up areas shall be determined by the requesting agency or organization.
- b. If requested by a state agency, the contractor shall deliver three-inch pixel resolution imagery meeting the requirements contained in the Performance Requirements section of this contract.
 - i. The three-inch imagery shall meet accuracy specifications for 1"=25' mapping with a RMSE of 0.5 feet using ASPRS Accuracy Standard for Large Scale Maps, Class 1 Map Accuracy.

G.5.4

Improved Elevation Data: If requested by an agency, the contractor shall deliver any improved elevation model information collected for the buy-up project area. Any such adjusted elevation models delivered shall be public domain. If specified by the ordering entity, the contractor shall provide an elevation model with the level of detail required for submission to the USGS National Elevation Dataset. At the sole option of the ordering entity, the ordering entity shall be responsible for submission of the elevation model to the USGS National Elevation Dataset as well as to the Missouri Spatial Data Information Service or the Kansas Data Access and Support Center. The contractor shall not be required to submit elevation models to the USGS National Elevation Dataset or the Missouri Spatial Data Information Service or the Kansas Data Access and Support Center.

H. PROPOSAL SUBMITTAL REQUIREMENTS

To be eligible for consideration, **one paper** copy and **one digital** copy (<u>jgoldman@marc.org</u>) of the response to the RFP must be received by MARC no later than **5:00 p.m.** Central Daylight Savings Time, **September 1, 2025**. Late submittals will not be considered and will be returned to submitter unopened. The envelope package should be marked:

MARC 2026 Regional Imagery Project

Mid-America Regional Council Attn. Jakob Goldman 600 Broadway Blvd., Suite 200 Kansas City, MO 64105–1659 The following items must be addressed in all proposals:

H.1. SCOPE OF WORK

MARC has developed a general outline of work tasks associated with the scope of work. The contractor will be required to recommend and expand and/or revise upon this project's scope of work. Contractor recommendations will demonstrate and propose strategies that exemplify best practices associated with imagery projects of this sort.

Respondents must provide a detailed scope of work including specific methodologies and/or approaches that will be used to develop **The MARC 2026 Regional Imagery Project**. Innovative approaches for completion of the scope of work are encouraged. The contractor should also include within the scope of work:

- **H.1.1.** The name and address of the contracting firm, together with the name, telephone and fax number, and e-mail address of the primary contact person for purposes of this proposal.
- H.1.2. A listing of all proposed subcontractors, if any.

H.2. COSTS

Contractors shall provide a total cost to complete and meet the project tasks and specifications described in Sections A through G of this RFP for the project area defined in Attachment A. Please provide a cost sheet in a separate sealed envelope, and NOT part of the main RFP response.

Because the project area is subject to change prior to contracting, proposals shall also provide the costs to provide services to the defined specifications at a per-square-mile basis for both six-inch and one-foot imagery products. Establishment of ground control should be included within the cost, but costs to produce imagery with and without additional DEM updates should be clearly broken out. Contractors may also provide alternative solutions and costs for reducing building lean in Kansas City's urban core.

Costs for alternative solutions which go outside the specifications defined in this RFP may be provided in addition to the costs for specified products and services outlined in Sections A through G of this proposal.

Attachment B lists the services and products for which this RFP is requesting cost bids.

H.3. QUALIFICATIONS

Proposals should indicate general and specific qualifications of the proposer in the fields of remote sensing, photogrammetry, surveying, engineering and/or other related disciplines. A brief narrative (four pages maximum) regarding the firm's capabilities to carry out this project, including special assets, areas of expertise, analytical tools, and data sources, etc., to which the firm may have access should be provided. Proposals shall also include:

- **H.3.1.** A list and written samples of similar projects undertaken within the last five (5) years, by proposing firm and/or its subcontractors, showing contract amounts, description of work performed, client contact persons, phone numbers, and e-mail addresses.
- **H.3.2.** Resumes of professional staff who will be assigned to this project.
- **H.3.3.** Description of the workload of individuals assigned to this project during the period of this study. Any reassignment of designated key staff will not occur without mutual consultation and consent by MARC and the Aerial Workgroup.
- H.3.4. Firm and subcontractor, if any, annual current Statement of Qualification.
- H.3.5. References.

H.4. DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS AND PARTICIPATION

MARC's policy requires that qualified women and minority firms be afforded an equitable opportunity to participate in MARC contracting opportunities. Proposers are encouraged to involve these firms as subcontractors or joint ventures. MARC will help facilitate minority firm participation when we can assist.

DBE proposers should submit, with their proposals, "Intent to Perform as a Disadvantaged Business Enterprise (DBE)," Attachment F, for each proposed DBE contractor, subcontractor, or joint venture. Certification of DBEs will be made in accordance with MARC's Disadvantaged Business Enterprise Program.

H.5. AFFIRMATIVE ACTION CHECKLIST

If applicable, proposers must complete and enclose with the proposal their company's Affirmative Action Plan (see Attachment C: Affirmative Action Checklist).

H.6. CERTIFICATION REGARDING DEBARMENT

Each proposing firm is required to certify that it is not on the U.S. Comptroller General's Consolidated Lists of Persons or Firms Currently Debarred for Violations of Various Contracts Incorporating Labor Standards Provisions by signing the "Certification Regarding Debarment, Suspension, and Other Ineligibility and Voluntary Exclusion" (Attachment D).

H.7. CERTIFICATION REGARDING LOBBYING

See Attachment E.

I. SELECTION PROCEDURE

A short list of no less than three (3) proposers and/or proposer teams will be selected on or about October 10, 2025 by the Aerials Workgroup, after MARC and the workgroup analyze all proposal information. Short-list proposers should be available for interviews and/or presentations prior to the selection of a contractor. The final selection of a contractor shall occur on or about October 21, 2025 (contingent upon approval by MARC's Board of Directors). MARC reserves the right to negotiate a contract, including a scope of work, and contract price, with any proposers or other qualified party.

This Request for Proposal does not commit MARC to award a contract, to pay any cost incurred in preparation of a response to this request, or to procure or contract for services or supplies. MARC reserves the right to accept or reject any and all responses received as a result of this request or cancel this request in part or in its entirety if it is in the best interests of MARC to do so. Proposers shall not offer any gratuities, favors or anything of monetary value to any officer, employee, agent or director of MARC for the purpose of influencing favorable disposition toward either their proposal or any other proposal submitted as a result of the Request for Proposal.

MARC reserves the right to suggest to any or all proposers to the Request for Proposals that such proposers form into teams of consulting firms or organizations deemed to be advantageous to MARC in performing the scope of work. MARC will suggest such formation when such relationships appear to offer combinations of expertise or abilities not otherwise available. Proposers have the right to refuse to enter into any suggested relationships.

All proposals submitted hereunder become the exclusive property of MARC.

J. PROPOSAL EVALUATION CRITERIA

A proposal review panel made up MARC staff and members of the Aerials Workgroup will evaluate all proposals. Proposers may be telephoned and asked for further information, if necessary, and may be expected to appear for oral interviews. Previous clients may also be called. The panel will make recommendations to the MARC Board of Directors on the basis of the proposal, oral interview and reference check. MARC reserves the right to select a consultant based solely on written proposals and not convene oral interviews.

Upon receipt of the proposals, a technical evaluation will be performed. Each of the major sections of the proposal will be reviewed and evaluated with criteria designed to help judge the quality of the proposal. The same criteria will be used to evaluate all proposals and will include such considerations as:

- Understanding of the background and requirements of the project.
- The overall and technical approaches to be followed and the tasks to be performed, including detailed steps and resources required and the proposed project schedule.

- The relative allocation of resources, in terms of quality and quantity, to key tasks, including the time and skills of personnel assigned to the tasks and consultant's approach to managing resources and project output.
- The proposing contractor's proven ability to finish products on time and to specification.
- Cost analysis and justification.
- Education and experience of proposed personnel (preferably at least five years of experience)
- Review of available terrain models and delineation of where updates to them are required.

K. ON-SITE PRESENTATIONS

The project selection team may require oral presentations by those firms identified on the proposer's short list. Presentations will be held at MARC or a site designated by MARC.

L. CONTRACT AWARD

MARC will notify the selected candidate by telephone, e-mail and in writing. Following verbal notification, MARC will negotiate a standard professional service agreement with the selected candidate (see Attachment G "Contracting Agreement"). The selected candidate's proposal will be incorporated by reference in the contract. Additionally, MARC will notify in writing all candidates who are not selected.

M. PROTEST PROCEDURES

In the course of this solicitation for proposals and the selection process, a proposer (bidder of offer or whose direct economic interest would be affected by the award of the contract) may file a protest when in the proposer's opinion, actions were taken by MARC staff and /or the selection committee which could unfairly affect the outcome of the selection procedure. All protest should be in writing and directed to Mr. David Warm, Executive Director, Mid-America Regional Council, 600 Broadway, Suite 200, Kansas City, MO 64105. Protest should be made immediately upon the occurrence of the incident in question but no later than three (3) days after the proposer receives notification of the outcome of the section procedure. The protest should clearly state the grounds for such a protest.

Upon receipt of the protest, MARC's executive director will review the actual procedures followed during the selection process and the documentation available. If it is determined the action(s) unfairly changed the outcome of the process, negotiations with the selected proposer will cease until the matter is resolved.

N. PROCUREMENT SCHEDULE

The following is a tentative schedule for the contractor selection process:

Activities	Schedule
RFP issued	July 22, 2025
Proposals due	September 1, 2025
Short list announced	October 10, 2025
7	0 1 11 20 202
Interviews (if needed)	October 11-20, 2025
C. 1. d' MARCR. 1. 1.	0 + 1 21 2025
Selection/MARC Board approval	October 21, 2025
Contract execution/ Notice to proceed	TBD after contract negotiation
1	
Project completion	TBD after contract negotiation

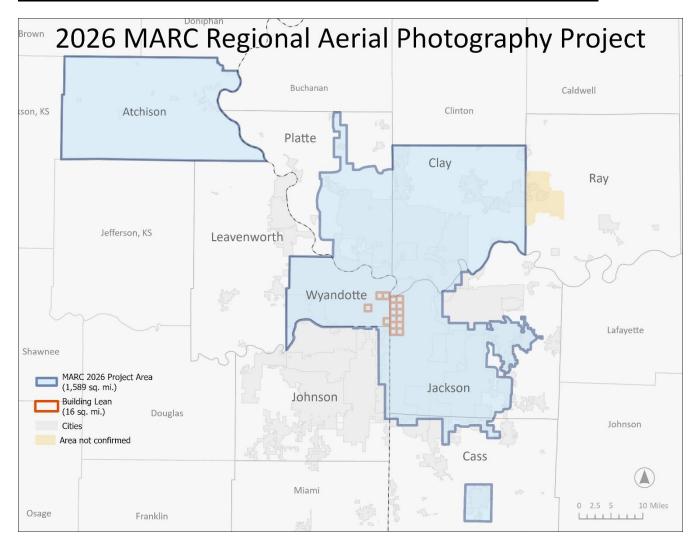
O. ATTACHMENTS

The following attachments provide additional information about the project scope and costs as well as forms and requirements for contracting with MARC. Attachments contained within this section include:

- ATTACHMENT A: ESTIMATED 6" ORTHOIMAGERY PROJECT AREA This is the current known and expected total extent of the 6" orthoimagery project. It is subject to change.
- ATTACHMENT B: REQUESTED COSTS A simple table that outlines the services and products for which this RFP is requesting costs. Please provide cost response in a separate sealed envelope.
- ATTACHMENT C: AFFIRMATIVE ACTION CHECKLIST Proposing contractors must include a signed copy of this form within their proposal.
- ATTACHMENT D: CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION Proposing contractors must sign, complete and include this form within their proposals.
- ATTACHMENT E: CERTIFICATION REGARDING LOBBYING Proposing contractors must include a signed copy of this form within their proposal.
- ATTACHMENT F: INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE (DBE) Contractors electing to perform as a DBE should fill out and include this form within their proposal.

• ATTACHMENT G: CONTRACTOR SERVICES AGREEMENT — A sample of the standard contracting template used by MARC, which will also be used as the base contract template between MARC and the selected contractor.

ATTACHMENT A: ESTIMATED 6" ORTHOPHOTOGRAPHY PROJECT AREA



ATTACHMENT B: REQUESTED COSTS

The table in this attachment lists the services and products for which costs are being requested. All costs for services and products reported in this section should account for the project requirements, tasks and specifications as described in Sections A through G of this proposal.

Consultants, in addition to reporting the required costs, may also report costs for any alternative options which may have been presented within their proposals.

As noted earlier in this RFP, it is the contractor's responsibility to review the DEM currently available for this project and define where, if any, additional DEM work is required for the project.

Note: Please provide cost response in a separate sealed envelope.

Cost are Requested for the following Services and/or Products

Total combined cost for six-inch (or better) imagery defined in Attachment A.

Per-square-mile cost for six-inch (or better) imagery with no additional DEM/DTM work required.

Per-square-mile cost for six-inch (or better) imagery with additional DEM/DTM work required.

Per-square-mile cost for capture of 4-band color IR.

Per-square-mile cost for capture and processing of 4-band color IR at the same time as the RGB bands.*

Per-square-mile cost for processing files with 4-band color IR at a later date, after all the RGB imagery is completed.

Cost for services to convert imagery into PLSS Sections.

Cost for services to compress imagery into MrSid mosaics or tiles.

Costs for alternative options for reducing building lean in the urban core.

Per-square-mile cost for capture and processing of oblique imagery.

Per-square-mile cost for capture and processing of one-foot imagery.

Per-square-mile cost for capture and processing of three-inch imagery.

Per-square-mile cost for capture and processing of Lidar.

Touch up services for water bodies so that they have a consistent look across the entire water features, especially along seam lines.

Costs for alternative services and\or products.**

*Please inform MARC of the degree to which processing the CIR band would add to the delivery times if processed at the same time as the RGB bands.

**This is a catch-all placeholder for contractors offering alternative services. Proposing alternative solutions and their associated costs is optional under this RFP.

Please note: While contractors are welcome to offer alternative solutions and their associated costs, proposals must include costs for all other services and products listed in this table and the required services and products defined in Sections A through F of this proposal which also meet the specifications defined in Section G.

ATTACHMENT C: AFFIRMATIVE ACTION CHECKLIST

Federal regulations require that any firm with 50 or more employees soliciting an assisted federally funded contract must have an affirmative action program. If applicable, please provide a brief response to the following items that would typically be covered in any such program. You may provide a copy of your program and reference appropriate pages.

- 1. Date plan was adopted
- 2. Name of Affirmative Action Officer
- 3. Statement of commitment to affirmative action by the chief executive officer
- 4. Designation of an affirmative action officer, of assignment of specific responsibilities and to whom the officer reports
- 5. Outreach recruitment
- 6. Job analysis and restructuring to meet affirmative action goals
- 7. Validation and revision of examinations, educational requirements, and any other screening requirements
- 8. Upgrading and training programs
- 9. Internal complaint procedure
- 10. Initiating and insuring supervisory compliance with affirmative action program
- 11. Survey and analysis of entire staff by department and job classification and progress report system
- 12. Recruitment and promotion plans (including goals and timetables)

ATTACHMENT D: CERTIFICATION REGARDING DEBARMENT

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

This Certification is required by the regulation implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The Regulations are published as Part II of the June 1985, Federal Register (pages 33, 036-33, 043)

Read instructions for Certification below prior to completing this certification.

- 1. The prospective proposer certifies, by submission of this proposal that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this transaction by any Federal department or agency.

Instructions for Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion:

- 1. By signing and submitting this agreement, the proposer is providing the certification as set below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered. If it is later determined that the proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

ATTACHMENT E: CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person influencing or attempting to influence an officer or employee of a federal agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for attempting to influence an officer or employee of any federal agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal or Federally assisted contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 3 The undersigned shall require that the language of this certification be included in the award documents of all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 32,US Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(Name of Entity)	
(Name and Title of Authorized Official)	
(Signature of above Official)	(Date)

ATTACHMENT F: INTENT TO PERFORM AS A DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Project Title and Description:	
The undersigned intends to perform w	vork in connection with the above project as (check one):
Prime Contractor	Subcontractor
Joint Venture	Other (please specify)
If applicable name of prime contractor	r or joint venture partner:
The DBE status of the undersigned is (please provide copy of current Certif	confirmed by a DBE Certification from one or all of the following ication Certificate):
MRCC (Missouri Regional Cert	ification Committee)
KDOT	
MoDOT	
City of Kansas City Missouri	
Kansas City Area Transportation	n Agency (KCATA)
Other (please specify)	
(MARC may require additional certification)	cation documentation)
The undersigned is prepared to perfor project (attach additional sheet in need	m the following described work in connection with the above ded),
at the following price	
Date	Name of DBE Firm
	By:
	(Please Also Print Names of Authorized Representative)

ATTACHMENT G: PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") is by and betwee Regional Council, hereinafter referred to as "MARC," and [n Mid-America], hereinafter 20
WITNESSETH:	
WHEREAS, MARC desires to retain CONSULTANT to [referred to as the "Project;" and], hereinafter
WHEREAS, CONSULTANT represents that it has the personnel with tecl experience and knowledge to perform such work for MARC;	hnical expertise,
NOW, THEREFORE, in consideration of the mutual covenants contain parties agree as follows:	ined herein, the
SCOPE OF SERVICES CONSULTANT shall perform and accomplish in a manner satisfactory tasks described in Exhibit A (the "Services"), which are incorporated here. The CONSULTANT shall exercise the same degree of care, skill and performance of the Services as is ordinarily possessed and exercised by a same profession who is currently practicing under similar circumstances.	ein by reference. diligence in the
TIME OF PERFORMANCE Term - CONSULTANT shall begin performing the Services [on or prior 20_] or [upon the issuance of a written Notice to Proceed by Mawork diligently to complete the Project to the satisfaction of MARC with the terms provided herein [by, 20].	ARC], and shall
Extension of Term - The time frame for the completion of the Project under may be extended at MARC's sole discretion upon request by the C Any request for an extension of time to complete the Project sl writing to MARC. The CONSULTANT shall provide to MARC documentation to substantiate the justification for additional complete the Project. MARC shall provide the CONSULTANT wir of its decision within fifteen (15) days of the date that MARC rece extension request.	CONSULTANT. hall be made in C, upon request, time needed to th written notice
Liquidated Damages for Delay - Timely delivery of specified imagery and digital products is an imperative aspect of this project and Agreem to title 48 of the Federal Acquisition Regulations, subpart 52.211-1 fails to deliver or perform the services within the time specified in Agreement, Contractor shall, in place of actual damages for delay, liquidated damages as follows for each calendar day of delay beyo Delivery Date (as specified in the attached Schedule) that Contract deliver the products as specified in the Scope of Work: (a) Days or	ent. Pursuant 11, if Contractor this pay MARC and the Final tor does not

fifteen (15): one percent of total contract amount per day; (b) Days sixteen (16) through thirty (30): two percent of total contract amount per day; (c) Days thirty one (31) through forty-five (45): three percent of total contract price per day. MARC may withhold the foregoing liquidated damages for delay from sums due to Contractor by MARC hereunder. Contractor acknowledges and agrees (i) that the work performed under this Agreement is for the benefit of multiple public agencies participating in KC Metro GIS cooperative, (ii) that damages resulting from Contractor's failure to complete and deliver the specified products to MARC in a timely manner would be impracticable or extremely difficult to ascertain, and that the foregoing liquidated damages are a reasonable estimate thereof.

COMPENSATION

Maximum Obligation - During the term of this Agreement, the compensation paid by MARC to CONSULTANT for all Services specified herein relating to the Project shall not exceed \$______. ATTACHMENT G to this Agreement provides an itemized list of the relevant compensation for each type of Service provided hereunder. MARC shall be entitled to deduct and setoff against all compensation that may otherwise become due under this Agreement the sums paid by MARC to cure or correct any of CONSULTANT's defaults.

Method and Time of Payment - Payment shall be made in the following manner:

CONSULTANT shall submit monthly invoices to MARC for work completed to date. All such invoices shall (a) provide an itemization of Services performed during the previous month, (b) indicate the percentage of each Service that has been completed by CONSULTANT as of the date of the invoice, (c) indicate the total amount charged for each Service during the previous month, (d) indicate the time spent by each of the CONSULTANT's employees and approved subcontractors assigned to the Project during the previous month, and (e) provide a summary of all other direct and indirect costs incurred by CONSULTANT during the previous month that pass to MARC pursuant to the terms of this Agreement. All such invoices will be based on actual cost incurred.

MARC shall reimburse CONSULTANT within thirty (30) calendar days after the receipt of each invoice.

CONSULTANT shall maintain complete records of all costs incurred under this Agreement. All such records shall be maintained on a generally accepted accounting basis for a minimum period of five (5) years after final payment is made under this Agreement and shall be clearly identifiable and readily accessible to authorized representatives of MARC for inspection and audit.

MARC may withhold [__ percent (__%)] <u>or</u> [the greater of \$__ or __ percent (__%)] from the final invoice provided by CONSULTANT. Such amount shall be paid to CONSULTANT within thirty (30) days of the date that (a)

CONSULTANT has completed all of the Services contemplated herein to the sole satisfaction of MARC, and (b) MARC has accepted the final work product of CONSULTANT.

The CONSULTANT shall provide MARC with a copy of its drug-free workplace policy statement prior to MARC processing the first invoice for Services under this Agreement.

Compensation After Termination - In the event that this Agreement is terminated as provided below, the CONSULTANT shall be compensated for all hours worked and other expenses incurred under this Agreement prior to the date of receipt of the termination notice or other termination date specified in such notice. The CONSULTANT and any of its subcontractors, agents and legal representatives agrees to accept this amount of compensation in full satisfaction of all claims for compensation under this Agreement.

CHANGES AND ADDITIONAL SERVICES

This Agreement constitutes the entire agreement between MARC and CONSULTANT and it may not be amended or altered in any way except by a written amendment signed by both parties to this Agreement; provided, however, that at any time during the term of this Agreement MARC, by written notice to CONSULTANT, may modify the scope of the Services to be furnished by CONSULTANT under this Agreement. If such modification causes an increase or decrease in the amount of Services to be provided by CONSULTANT or in the amount of time required for their performance, equitable adjustment shall be made to the provisions of this Agreement for payments to CONSULTANT.

TERMINATION

MARC reserves the right to terminate this Agreement at any time with or without cause by giving CONSULTANT advance written notice of such termination.

In the event of any such termination, the CONSULTANT shall deliver to MARC, as the property of MARC, all designs, reports, drawings, studies, estimates, computations, memoranda, documents, and other papers or materials either furnished by MARC or prepared by or for the CONSULTANT under this Agreement.

COPYRIGHT AND OWNERSHIP OF DOCUMENTS

No reports, maps or other documents produced in whole or in part under this Agreement shall be the subject of an application for copyright by or on behalf of CONSULTANT. Ownership of all designs, reports, drawings, studies, estimates, models, computations, and other related items prepared under this Agreement shall vest in MARC upon payment to the CONSULTANT for all Services rendered herein through the date of the expiration or termination of this Agreement.

ASSIGNMENT

The CONSULTANT's rights, obligations and duties under this Agreement shall not be assigned in whole or in part without the prior written consent of MARC. However, claims for money due to the CONSULTANT from MARC under the terms of this Agreement may

be assigned to a bank, trust company or other such financial institution, provided that prompt written notice of such an assignment is given to MARC. None of the Services covered by this Agreement shall be subcontracted without the prior written approval of MARC.

INDEPENDENT CONTRACTOR

CONSULTANT will act as an independent contractor in the performance of the Services under this Agreement. Accordingly, CONSULTANT shall be responsible for the payment of all required business license fees and all taxes including Federal, State and local taxes arising from CONSULTANT'S activities under the terms of this Agreement.

PROHIBITED INTERESTS

No officer, member or employee of MARC, no member of MARC's governing body and no other public official of the locality or localities in which the Project is being carried out who exercises any functions or responsibilities in the review and approval of this Project shall participate in any decision related to this Agreement affecting, either directly or indirectly, his or her own personal interest. No member of or delegate to the Kansas Legislature, the Missouri General Assembly or the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefit arising from it.

CONFLICTS OF INTEREST

CONSULTANT hereby certifies that the company and any personnel assigned to work for MARC under this Agreement are not involved in other community projects that would pose a conflict to the CONSULTANT's ability to successfully carry out the responsibilities of this Agreement. If potential conflicts arise during the term of this Agreement, the CONSULTANT agrees to notify MARC immediately in writing and discuss the potential issues and work with MARC to address any potential issues arising from the situation.

The CONSULTANT covenants that it presently has no known personal or pecuniary interest and shall not knowingly acquire such interest, directly or indirectly, which could conflict in any manner with the performance of Services under this Agreement, including the submission of impartial reports and recommendations.

INSURANCE

The CONSULTANT shall maintain commercial general liability, automobile liability, worker's compensation and employer's liability insurance in full force and effect to protect the CONSULTANT from claims under Worker's Compensation Acts, claims for damages for personal injury or death, and for damages to property arising from the negligent acts, errors, or omissions of the CONSULTANT and its employees, agents, and subconsultants in the performance of the Services covered by this Agreement, including, without limitation, risks insured against in commercial general liability policies.

The CONSULTANT shall also maintain professional liability insurance to protect the CONSULTANT against the negligent acts, errors, or omissions of the CONSULTANT and those for whom it is legally responsible, arising out of the performance of the Services under this Agreement.

The CONSULTANT's insurance coverage shall be for not less than the following limits of liability:

- (i) Commercial General Liability: \$500,000.00 per claim up to \$2,000,000.00 per occurrence;
- (ii) Automobile Liability: \$100,000.00 per claim up to \$2,000,000.00 per occurrence;
- (iii) Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000.00; and
- (iv) Professional Liability (Errors and Omissions): \$1,000,000.00, each claim and in the annual aggregate.

The CONSULTANT shall, upon request at any time, provide MARC with certificates of insurance evidencing such policies and confirming that they are all in full force and effect as required by this Agreement. All such policies shall name MARC as an additional insured.

Any insurance policy required hereunder shall be written by a company which is incorporated in the United States of America or is based in the United States of America. Each insurance policy must be issued by a company authorized to issue such insurance in the State of Missouri.

As between CONSULTANT and MARC, the parties waive any and all rights against each other, including their rights of subrogation, for damages covered by property insurance during and after the completion of Services under this Agreement.

FEDERAL TERMS AND CONDITIONS

This Agreement shall be subject to all applicable Federal Terms and Conditions provided in Exhibit B attached hereto and incorporated herein by reference.

INDEMNIFICATION

CONSULTANT expressly agrees to hold and save harmless and indemnify MARC, its officers, agents and employees for liability of any nature (including, without limitation, reasonable attorneys' fees) related to a breach of this Agreement by CONSULTANT, the Services provided under this Agreement by CONSULTANT or arising from any act or omission of CONSULTANT or of any employee or agent of CONSULTANT.

CERTIFICATE REGARDING DEBARMENT AND SUSPENSION

MARC, as a non-federal entity utilizing federal funds, is prohibited from contracting with or making subawards under covered transactions to parties that are suspended, debarred or otherwise excluded from, or ineligible for, participation in Federal assistance programs or activities, or whose principals are suspended, debarred or otherwise excluded from, or ineligible for, participation in Federal assistance programs or activities. Covered transactions include procurement contracts for goods or services equal to or in excess of \$100,000 (e.g., subawards to subrecipients). CONSULTANT hereby agrees to provide

MARC with a copy of the signed Certificate Regarding Debarment and Suspension, attached hereto as <u>Attachment D</u> and incorporated herein by reference, to ensure that these federal rules are followed.

CONFIDENTIALITY

- A. Except as is necessary in the performance of this Agreement, or as authorized in writing by the other party, the parties shall not disclose to any person, institution, entity, company, or other third party any information directly or indirectly related to the parties that the other party (or its employees, agents and contractors) receives as a result of performing its obligations under this Agreement, or of which it is otherwise aware.
- B. The parties (and their employees, agents and contractors) shall not disclose, except to each other, any proprietary information, professional secrets or other information, records, data and data elements (including, but not limited to, protected health information) collected and maintained in the course of carrying out the responsibilities under this Agreement, unless such party receives prior written authorization to do so from the other party or as required by law.
- C. All confidential obligations contained herein (including those pertaining to information transmitted orally) shall survive the termination of this Agreement. The parties shall ensure that their respective employees, agents and contractors are aware of and shall comply with the obligations.

DEFAULT

In the event there is a default with respect to any of the provisions of this Agreement or its obligations under it, the non-defaulting party shall give the defaulting party written notice of such default. After receipt of such written notice, the defaulting party shall have fifteen (15) days in which to cure any monetary default and thirty (30) days in which to cure any non-monetary default, provided the defaulting party shall have such extended period as may be required beyond the thirty (30) days if the nature of the cure is such that it reasonably requires more than thirty (30) days and the defaulting party commences the cure within the thirty (30) day period and thereafter continuously and diligently pursues the cure to completion. The non-defaulting party may not maintain any action or effect any remedies for default against the defaulting party unless and until the defaulting party has failed to cure the same within the time periods provided in this paragraph.

GOVERNING LAW

This Agreement shall be interpreted under and governed by the laws of the State of Missouri. Whenever there is no applicable state statute or decisional precedent governing the interpretation of this Agreement, then federal common law shall govern.

NOT

"MARC"

Director, or such other person as MARC to CONSULTANT. All compensation	ement may be taken by David A. Warm, Executive C may designate for such purpose by written notice and written notices to CONSULTANT shall be led, delivered in person, emailed or transmitted by
All invoices, written reports and written if mailed, delivered in person, or emailed	n notices given to MARC shall be sufficiently given ed to:
Attn: Jakob Gold Mid-America Re 600 Broadway B Kansas City, Mis Email: <u>jgoldman</u>	egional Council elvd., Suite 200 ssouri 64105-1659
understandings, representations, warran	ersedes all previous discussions, negotiations, nties and agreements, written or oral, relating to the discontains the entire understanding of the parties
to be an original and all of which const	y number of counterparts, each of which is deemed titute one agreement that is binding upon all of the parties are not signatories to the same counterpart.
IN WITNESS WHEREOF, the parties hereto below.	have signed this Agreement on the dates set forth
MID-AMERICA REGIONAL COUNCIL	[]
By: David A. Warm Executive Director	By: [Fill in name] [Fill in title]

Date: ______ "CONSULTANT"

Exhibit A

Scope of Services

Exhibit B

Federal Terms and Conditions

NONDISCRIMINATION (49 CFR Part 21). During the performance of this Agreement, the CONSULTANT, for itself, its assignees, and successors in interest, agrees as follows:

CONSULTANT shall comply with the regulations relative to nondiscrimination in federally assisted programs of the United States Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the "Regulations"), which are hereby incorporated by reference and made a part of this Agreement.

CONSULTANT, with regard to the Services performed by it during the term of this Agreement, shall not discriminate on the grounds of age, race, color, sex or national origin in the selection or retention of subconsultants, including procurement of materials and leases of equipment. CONSULTANT shall not participate, either directly or indirectly, in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Agreement covers a program set forth in Appendix "B" of the Regulations.

In all solicitations, whether by competitive bidding or negotiation, made by the CONSULTANT for services to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the CONSULTANT of the CONSULTANT's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of age, race, color, sex or national origin.

The CONSULTANT shall provide all information and reports required under the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, and other sources of information, and its facilities as may be determined by MARC to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information is required, or such information is in the exclusive possession of another that fails or refuses to furnish this information, the CONSULTANT shall so certify to MARC, and shall set forth what efforts it has made to obtain the information.

In the event of the CONSULTANT's noncompliance with the nondiscrimination provisions of this Agreement, MARC shall impose such contract sanctions as it may determine to be appropriate, including, but not limited to: (i) Withholding of payments to the CONSULTANT under the Agreement until the CONSULTANT complies; and/or (ii) Cancellation, termination, or suspension of the Agreement, in whole or in part.

The CONSULTANT shall include the provisions of Paragraphs A through E above in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The CONSULTANT shall take such action with respect to any subcontract or procurement as MARC may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the CONSULTANT becomes involved in or is threatened with litigation with a subcontractor or supplier as a result of such direction, the CONSULTANT may request MARC to enter into such litigation to protect the interests of MARC.

AMERICANS WITH DISABILITIES ACT. CONSULTANT shall comply with applicable provisions of the Americans with Disabilities Act of 1991, as amended. In particular, CONSULTANT shall assist MARC in compliance by including appropriate language in all public documents and reports notifying persons with disabilities of MARC's policy of providing accommodations (i.e. interpreter, large print, reader and hearing assistance) to persons who need such assistance to participate in the Project.

AFFIRMATIVE ACTION IN EMPLOYMENT. The CONSULTANT shall comply with the provisions of Section 503 of the Rehabilitation Act of 1973, as amended (the "Act"), and also agrees as follows:

The CONSULTANT will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The CONSULTANT agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other form of a, and selection for training, including apprenticeship.

The CONSULTANT agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor pursuant to the Act.

In the event of the CONSULTANT's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor pursuant to the Act.

The CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the director, provided by or through the contracting officer. Such notices shall state the CONSULTANT's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

The CONSULTANT will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the CONSULTANT is bound by the terms of the Act, and is committed to take affirmative action to employ and advance in employment physically and mentally disabled individuals.

The CONSULTANT will include the provisions of Paragraphs A through E above in every subcontract or purchase order of \$2,500.00 or more unless exempted by rules, regulations or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding on each subcontractor or vendor. The CONSULTANT will take such action with respect to any subcontract or purchase order as the director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance (41 CFR 60-741.4.4).

EQUAL EMPLOYMENT OPPORTUNITY (41 CFR Part 60-1.4(b)). During the performance of this Agreement, the CONSULTANT agrees as follows:

The CONSULTANT will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The CONSULTANT will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The CONSULTANT agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

The CONSULTANT will, in all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

The CONSULTANT will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the CONSULTANT's commitments under this Section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The CONSULTANT shall comply with all provisions of Executive Order 11246 of September 24, 1965, and by rules, regulations, and relevant orders of the Secretary of Labor.

The CONSULTANT will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by MARC and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

In the event of the CONSULTANT's noncompliance with the nondiscrimination clauses of this Agreement or with any of the said rules, regulations, or orders, this Agreement may be canceled, terminated or suspended in whole or in part and the CONSULTANT may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

The CONSULTANT will include the portion of the sentence immediately preceding Paragraph A and the provisions of Paragraphs A through G in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The CONSULTANT will take such action with respect to any subcontract or purchase order as MARC may direct as a means of enforcing such provision, including sanctions for noncompliance, provided, however, that in the event the CONSULTANT becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the CONSULTANT may request MARC to enter into such litigation to protect the interests of MARC.

PROHIBITION AGAINST SUBSTANCE ABUSE. The CONSULTANT shall comply with the requirements of the Omnibus Drug Initiative Act of 1988 (Public Law 100-690), as amended, and certify to MARC that it will provide a drug-free workplace.

LOBBYING. The CONSULTANT hereby certifies that the federal funds provided under the terms of this Agreement will not be paid, by or on behalf of the CONSULTANT, to any person to influence an officer or employee of any federal agency or federal elected official. The CONSULTANT will provide full disclosure of any non-federal resources expended to lobby any federal official in connection with the Project.