



**McPherson Implementing Local Redevelopment Authority**

March 31, 2017

**REQUEST FOR PROPOSALS FOR GROUND & AERIAL SURVEYING SERVICES**

**ATTENTION RESPONDENTS**

You are hereby invited to submit a proposal to the McPherson Implementing Local Redevelopment Authority (hereafter referred to as "Fort Mac LRA") to provide detailed ground and/or aerial surveying services for the 145 acres owned by Fort Mac LRA (see attached exhibit). A successful Respondent will be selected by Fort Mac LRA based on the Respondent's ability to provide the services described in the Scope of Services (as summarized below), competitive pricing for such services, and other factors herein listed.

Potential Respondents are asked to direct all questions concerning this Request for Proposals (RFP) to Robert Mosby, Senior Accounting Manager, via e-mail at [rmosby@fortmaclra.com](mailto:rmosby@fortmaclra.com) or by phone at (404) 477-6767.

Your complete response(s) to this RFP should be received in the Fort Mac LRA offices at 1794 Walker Avenue, SW, Atlanta, Georgia 30310, **no later than 2:00 pm E.D.T on April 12, 2017.**

Fort Mac LRA reserves the right, in its sole discretion, to reject any submittal it considers to be non-responsive. Fort Mac LRA reserves the right to cancel any and all solicitations and to accept or reject, in whole or in part, any or all submittals when it is in the best interest of Fort Mac LRA. Should Fort Mac LRA fail to reach agreement with any Respondent(s) initially selected, Fort Mac LRA reserves the right to commence negotiations with the next highest ranked Respondent. Fort Mac LRA shall select the Respondent (or Respondent team) it considers best qualified and as providing the best value to Fort Mac LRA in its sole discretion. Fort Mac LRA may select a Respondent without an interview or may choose to interview all or a limited number of Respondents prior to selecting the successful Respondent (or Respondent team). The cost of preparing responses will be the responsibility of each Respondent and will not be reimbursed.

**REQUEST FOR PROPOSALS**

This Request for Proposals for Ground and/or Aerial Surveying Services, hereafter referred to as RFP, is hereby issued by Fort Mac LRA in accordance with applicable law. The Authority anticipates contracting with a contractor that has the experience and skill to provide the services outlined in the Scope of Services listed herein.

## SCOPE OF SERVICES

In general, the Respondent shall perform professional and design services for projects assigned by the Authority. The scope of services for any one project may involve all phases of project development and may include but is not limited to the following:

### **SURVEY REQUIREMENTS for GROUND SURVEY AND UAS AERIAL MAPPING**

#### Needs:

Topographic mapping, boundary survey, surface feature mapping, utility mapping, thermal mapping of buildings, and custom 3D site visualization application

#### Instructions:

Property, surface, topographic, and utility information shall be on the same final drawings prepared by surveyor. Orient north either to the top or the right of sheet. Include legend of symbols and abbreviations.

Ground surveying measurements shall be carefully made and a proper balance maintained between precision of angular and distance measurements. The unadjusted error of closure shall not exceed one part in 10,000 parts. After this precision, has been achieved, adjust results by accepted methods such as compass rule and show as a mathematically exact closure. The survey shall include a statement as to the closure precision of the field survey. State and graphically show the scale on the drawings.

We require a search of County records for appropriate deeds, plats, and any other information concerning boundary lines, public rights-of-way, and easements. A draft survey must be submitted to Fort Mac LRA for review and comment prior to finalizing. The survey is to be prepared in accordance with: 1) the requirements of the State of Georgia and 2) Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys as specified by the American Land Title Association (ALTA) (Class A Survey). Also, include a written legal description of the property.

Unmanned Aerial Systems (UAS) mapping and ground survey work shall conform to all laws and regulations of the State of Georgia and the Federal Aviation Administration (FAA). UAS mapping operators and surveyors shall obtain permissions, passes, etc., as required for property entry. UAS mapping will require a FAA waiver for operation in class B airspace for Hartsfield-Jackson International Airport. Thermal mapping missions will require FAA waivers for night time operations. Ground surveyor must be a registered land surveyor, duly licensed in the State of Georgia. The completed portfolio of survey products must have the surveyor's original signature, the surveyor's registration number, and have the surveyor's seal affixed.

Aerial photography, elevation surfaces, thermal images, and 3D point clouds for full project facility should be collected by UAS for high accuracy image, topographic, and 3D point cloud product development. Photogrammetric and LiDAR based products should be used to generate final elevation surfaces and 3D point clouds. Ground control and check points should be integrated into UAS operations and set by surveyor to establish absolute accuracy measurements. Relative spatial accuracies of sensors should maintain 0.8" – 2.4" for photogrammetric and 1.2" – 1.6" for LiDAR products. Final UAS derived elevation and 3D point clouds must be accompanied by detailed accuracy and error reports.

Upon completion, surveyor will furnish three (3) original reproducible signed and sealed copies, an electronic file (.pdf) of the survey, and the survey in AutoCAD 2013 or higher format. Provide surveyor's seal and signed certification of the registered land surveyor that all information thereon is correct. Include name, address, phone number of surveyor, and date completed. Final UAS mapping products should include 1"-resolution RGB orthomosaic image of entire project area, 8"-resolution thermal orthomosaic image, 3D point cloud in LAS format, and a browser-based 3D visualization of the project site, surface structures, and existing conditions.

It is understood that the owner, or the architect or engineer in his behalf, may reproduce drawings and distribute prints of the survey, imagery, or 3D products in connection with the use or disposition of the property without incurring obligation for further payment.

#### Topographic Survey Requirements:

All benchmarks used shall be field verified by survey crew, using close circuit leveling, and shall be described on plat of survey. Ground surveyor will provide control and check points, along with established benchmarks, for UAS mapping operations. UAS operations will provide ground surface elevations and 3D point clouds of all above ground features on site. A minimum of two survey benchmarks, ten UAS mapping controls points, and ten UAS mapping check points shall be utilized. The survey datum shall be NAD 83 "mean sea level", NAVD88 for vertical, or other acceptable datum (not 0,0,0).

Surveyor will establish two temporary job benchmarks on permanent structures such as building foundations or walls outside the proposed construction area.

Surveyor will provide topography for the entire site and extend the survey area 50 feet beyond property lines and include adjacent roads, using elevation data surfaces developed from UAS operations. Georgia State law prevents the unauthorized collection of data from UAS over private property. UAS operations must coordinate closely with property owners and ground surveyors for the capture of areas adjacent to the site.

Show on plat of survey all measured ground spot elevations, UAS mapping control points, and UAS mapping check points. Measure ground elevations to 0.01 ft. Measure floor elevations of all building door openings to 0.01 feet on site and within 50 feet of the site. Plot one foot interval contours. Plot five-foot interval contours when slope is steeper than 1:1.

Surveyor should note any flood plain (either 100 year or soils) on the property showing panel and sheet numbers or state that no flood plain is located on the property and certify as such.

Surveyor should show water surface elevation of water bodies and streams and date measured. Locate flood control elevation if project lies within an established flood plain.

Surveyor should measure elevations along surfaced roads at 50 foot maximum intervals. Include the centerline and both edges of pavement, tops and gutters of curbs, and on the side adjoining the site provide shoulder line, bottom ditch, top of banks, and right-of-way line. Along railroad tracks include, at 50-foot maximum spacing, the top of rail, edge of slope, bottom of ditch, and exterior top of bank.

Topographic survey must be signed by a Professionally Licensed Surveyor in the State of Georgia.

#### Boundary Survey Requirements:

The survey shall show the location of all benchmarks and elevation markers. All exterior and interior property lines and corners located within the area limits of survey must be specifically identified. The survey shall show the location by courses and distances (to the nearest one-hundredth of a foot) of all boundaries of the land; the relation of the point of beginning of the land to the monument from which it is fixed; and the boundary lines of all streets adjoining the land, the width of said streets, and whether said streets are public or private. Show record and field measured lengths, bearings, and curve data (radius, arc length, central angle, and long chord bearing and distance). Show the north basis of all bearings.

Provide a description of all corner irons and other boundary markers with indication of found or set. List all property points and provide State Plane coordinates for at least two (2) property corners within the area of survey. The number of acres or square feet of land contained in the property shall be shown.

The survey shall show the zoning classifications of the land, and, if more than one classification, the location of each such zoning classification. The survey shall also show the required number of parking spaces needed to satisfy applicable zoning requirements. Provide all established building lines and all buffer zones or other natural preserves in which the construction of buildings or other improvements is prohibited or restricted by any restrictive covenant. Provide land lot, district, and section numbers. The survey shall show all proposed new rights-of-way or proposed widening of any existing rights-of-way.

The survey shall show any encroachments of buildings and of structural appurtenances, such as loading docks, awnings, canopies, and fire escapes, by or on adjoining property, over easements, onto or from abutting streets or alleys, whether surface or subsurface. The extent of such encroachments shall be clearly defined and any known variance granted by governmental authority for such encroachments shall be listed and explained.

All easements affecting the property (including easements on or over other property which benefit the subject property) must be identified by book and page or by document number of the instrument creating the easement. If an easement has been created by or is shown on a recorded plat or map, the surveyor must certify that such easement(s) is the same as that shown on the plat or map.

### Surface Features Mapping Requirements:

The survey shall show all buildings, structures, and other improvements located on the land, including without limitation, all sidewalks, stoops, overhangs, roadways, and parking areas. Label all surface features including buildings (dimension exterior walls), road surfaces, walks, lawns, poles, streams, etc. The survey shall show all pavement striping including the size, type, and location of all parking areas and other paved areas indicating the number of parking spaces. Dimension pavement widths between back of curbs and back of walks. Locate fences near property lines by dimensions and all existing structures such as buildings or bridges within 50 feet of the property. Detail party walls, land walls, and foundations adjacent to lot lines.

The survey shall show the location and direction of flow for all existing streams, rivers, surface drainage facilities, sloughs, springs, filled-in wells or cisterns, and seep holes. The survey shall show all marsh lands and wetlands and a "tree line" indicating the approximate canopy of the branch drip-line.

The survey shall show the location and dimensions of all railroad tracks and sidings, the location of all trash fills, and the location and dimensions of any and all cemeteries or burial sites located on any portion of the land.

Aerial photogrammetry and LiDAR products from UAS mapping operations may be used for surface feature extraction process.

### Utilities Mapping Requirements:

Show all known above ground and underground utilities including, but not limited to, sewer, water, electric, telephone, cable television, natural gas, propane gas, or petroleum and other underground features such as known foundations or basements. Indicate whether each utility line is above or below ground.

Indicate type of overhead lines, poles, and guy wires. Indicate clearance of ground to wire for accessibility. The survey shall show the location of all fire hydrants available. Identify any utility transformers located on or about the property and specifically make reference to those transformers which are labeled as containing PCB's.

Indicate the rim elevation, pipe sizes and materials, and each inflow/outflow invert elevations at culverts, manholes, catch basins, and area drains. Include next adjacent off-site manhole regardless if it is in the indicated survey or not. If sanitary sewer is not available on-site, locate nearest downstream system with manhole elevations and location relative to property.

The survey shall show the direction of flow of all sanitary sewers, combination sewers, storm drains, culverts, and water retention ponds that presently exist on the land.

Call utility “HOT LINE” number for utility companies to ground locate all facilities and show on survey. Compile data from utility companies and other known records supplemented by observed surface features.

Aerial photogrammetry and LiDAR products from UAS mapping operations may be used for feature extraction process.

#### Thermal Mapping Requirements:

Aerial thermal imagery ( $\leq 8''$ -resolution) of entire site should be provided in orthomosaic format. Data should be collected at sunrise to detect heat emitting sources on site. Data should also be collected after dusk to provide inventory of heat retaining features, such as roof-top water leaks, seeps, or structural flaws for surface features on site. Thermal data should contain radiometric values and be delivered in CAD or GIS friendly formats.

#### 3D Visualization Application Requirements:

An interactive, browser-based, 3D viewing application highlighting surface features and topographic site conditions should be developed. The application should render high accuracy 3D mapping and surveyed products at scale and without significant distortion or warping. The application should allow client to explore and share site features and conditions securely or with general public.

#### Deliverables:

##### Survey Deliverables:

- Email file or CD (.pdf of signed and sealed survey – high quality scan)
- Three (3) reproducible copies of the survey signed and sealed by Registered Land Surveyor licensed in Georgia.
- AutoCAD File:
  - ACAD 2013 or higher drawing format.
  - Layer Names based on the 2010 National CAD Standards
  - Survey to be in state plane coordinates, or other acceptable datum, with appropriate vertical datum (i.e., NAD83 State Plane Coordinates, NAVD88 for vertical).
  - A separate ASCII point file in comma delimited (Point Number, Northing, Easting, Elevation, Description)
  - Drawing to be in model space at a scale of 1:1
  - All entities in the drawing to be BYLAYER
  - All symbols or blocks in the drawing should be drawn on Layer 0 with color and line type ‘by layer’
  - Separate layer names should be used for distinct entities. Do not group dissimilar items on a layer.
  - Existing surface 3D TIN surface shall be provided. The contours and DTM shall be the same, meaning the contours created by the DTM shall match the polyline contours in the drawing and what is shown on the signed and sealed survey.
  - Provide font files

- Provide Symbol definitions
- Provide block definitions
- Use Mtext for all text (Use Mleaders if available)
- All lines shall be continuous - meaning a water line shall be a continuous line with appropriate line type, not a line segment, a 'W', then a line segment. This applies to Sewer, OHP, etc.

Aerial Mapping Deliverables:

- 1"-resolution aerial image orthomosaic (CAD & GIS formats)
- 8"-resolution thermal image orthomosaic (CAD & GIS formats)
- Digital Terrain model (1'-resolution)
- Terrain and surface classified 3D Point Cloud (.LAS) (<=3"-inch point spacing, colorized from aerial imagery)
- Hosted and secure web mapping application

**Indemnification and Insurance:**

If selected, the surveying consultant shall be subject to any indemnification obligations under the Master Contract. In any event and regardless of whether the Master Contract contains a lesser indemnity provision, the surveying consultant shall be subject to the following minimum indemnification obligations under this Agreement:

- (a) Professional Liability. The surveying consultant, with respect to professional acts, errors, or omissions, shall indemnify, defend, hold and save harmless the Consultant and the Client, their officers, agents and employees, from liability of any nature or kind, including costs and expenses, for or on account of any or all claims or suits for damages of any character whatsoever arising from negligent or otherwise wrongful acts or omissions of the surveying consultant, its employees and agents, and the surveying consultant's subcontractors, and suppliers, their employees and agents.
- (b) General Liability. The surveying consultant, with respect to all liability other than for professional acts, errors, or omissions, shall indemnify, defend, hold and save harmless the Consultant, and the Client, their officers and employees, from liability of any nature or kind, including costs and expenses, for or on account of any or all claims or suits for damages of any character whatsoever arising from acts, omissions or conduct of the surveying consultant, its employees and agents, and the surveying consultant's subcontractors, and suppliers, their employees and agents.

If selected, the surveying consultant agrees to provide evidence of insurance coverages as listed below. Invoices will not be paid until correct certificates are received.

Type of Insurance	Limits
Workers' Compensation and Occupational Disease Insurance in accordance with applicable laws. Must include Waiver of Subrogation	Statutory
Employer's Liability	\$1,000,000 Each Accident \$1,000,000 Disease – Each Employee \$1,000,000 Disease – Policy Limit
Commercial General Liability – to include: <ul style="list-style-type: none"> <li>• Contractual Liability</li> <li>• Completed Operations/Product <ul style="list-style-type: none"> <li>○ Liability</li> </ul> </li> <li>• Personal &amp; Advertising Injury</li> <li>• Written on a per occurrence basis</li> <li>• Severability of Interests</li> <li>• Additional Insured endorsement</li> </ul>	\$3,000,000 General Aggregate \$3,000,000 Products/Comp/Ops Aggregate \$3,000,000 Personal and Advertising Injury \$3,000,000 Each Occurrence
Automobile Liability/Non-Owned Auto <ul style="list-style-type: none"> <li>• Comprehensive</li> <li>• Any Auto</li> <li>• All Owned Autos</li> <li>• Hired Autos and Non-Owned Autos</li> <li>• Additional Insured endorsement</li> </ul>	\$3,000,000 Combined Single Limit BI/PD
Professional Liability (Error and Omissions Insurance)	\$3,000,000 Per Claim \$3,000,000 Annual Aggregate
Aircraft Insurance (UAS)	\$3,000,000
Cyber Security	\$3,000,000
Other Coverages:	As may be required by Prime Agreement

**Certificate of Insurance Description Box MUST include:**

- All policies except for Workers Compensation and Professional Liability, shall endorse McPherson Implementing LRA as additional insured
- All policies shall include primary/non-contributory endorsement
- Project name and description



## PROPOSAL FORMAT GUIDELINES

Interested Respondents are to provide the Authority with a thorough proposal using the following guidelines:

Proposal shall be typed and must contain no more than 10 typed pages including proposal sections.

A 12-point font size is required for typed portion of the letters and proposal sections except small fonts are allowed for tables, charts and exhibits. The inclusion of 11" by 17" sheets are allowed if folded to fit the proposal.

Each proposal will adhere to the following order and content of sections:

Proposal must be straightforward, concise and provide "layman" explanations of technical terms that are used. Emphasis must be concentrated on conforming to the RFP instructions, responding to the RFP requirements, and on providing a complete and clear description of the offer. Proposals which appear unrealistic in the terms of technical commitments, lack of technical competence, or are indicative of failure to comprehend the complexity and risk of this contract may be rejected.

The following proposal sections are to be included in the Respondent's response:

A. Cover Letter

A cover letter, not to exceed two pages in length, must summarize key elements of the proposal. An individual authorized to bind the Respondent must sign the letter. The letter must stipulate that the proposal price will be valid for a period of at least 90 days from the proposal due date. The cover letter must list the person that will represent the Respondent and include the address and telephone number and email address for that representative.

B. Background and Project Summary Section

The Background and Project Summary Section must describe your understanding of the scope of this RFP, services to be provided, and the objectives to be accomplished. Please provide a company resume of projects completed that are similar in scope to those requested in this RFP.

C. Staffing

Provide a list of individual(s) who will be working on this project and indicate the functions that each will perform. Include a resume for each designated individual and designate a Team Lead for the project.

Upon award and during the contract period, if the Respondent chooses to assign different

Personnel to the project, or replace the team lead, the Respondent must submit their names and qualifications including information listed above to the Authority for approval prior to the commencement of providing services.

D. Reference Projects

The information requested in this section must describe the qualifications of the individual or firm, key staff, and sub-consultants performing projects within the past five years in the State of Georgia, that are similar in size and scope to demonstrate competence to perform these services and all certifications held by the individual, firm, and staff.

Information shall include:

- 1) Description of projects.
- 2) Listing of key personnel that have participated on above named projects and their specific responsibilities.
- 3) Listing of at least three (3) separate references that have received similar services from your firm. **Fort Mac LRA reserves the right to contact any of the organizations or individuals listed.**

E. Project Schedule

The proposal must include a project schedule listing start date, major milestones and completion date. Once the schedule is agreed upon, time is of the essence to meet ALL interim and final deadlines. Respondent should expect contract to address non-performance for late delivery.

F. Pricing

The fee proposal must show a total price for all services required in the Scope of Work. It is recommended the proposal include a breakdown by service type, hourly rates and/or rates for all sub-consultants as deemed appropriate by the respondent.

## PROCESS FOR SUBMITTING PROPOSALS

### Content of Proposal:

The proposal must be submitted using the format as indicated in the proposal format guidelines.

### Preparation of Proposal:

Each proposal shall be prepared simply and economically, avoiding the use of elaborate promotional material beyond those sufficient to provide a complete, accurate, and reliable presentation.

### DBE Participation:

Fort Mac LRA encourages all interested Respondents to promote opportunities for diverse businesses, including Female Business Enterprises (“FBE”), Minority Business Enterprises (“MBE”) and Small Business Enterprises (“SBEs” and together with FBEs and MBEs, “DBEs”) to compete for business as consultants, sub-consultants and/or suppliers. Goals are based on the Scope of Services and general availability of firms with the requisite experience and capacity to perform the services. Consultants are encouraged to involve DBEs in all aspects of the work. All Respondents shall include specific information regarding DBE participation, if any.

## RFP SCHEDULE

It is anticipated that the solicitation and selection process shall be conducted in accordance with the following schedule; however, Fort Mac LRA reserves the right to modify this schedule in its sole discretion.

RFP Invitation:	March 31, 2017
Proposals Due:	April 12, 2017-2:00 p.m. (E.D.T.)
Interviews (Optional)	
Selection	April 18, 2017

## SELECTION PROCESS AND NEGOTIATION

Fort Mac LRA may select one or more Respondents for in-person interviews. The most responsive firm or Respondent will be identified and Fort Mac LRA will proceed to the interview and the negotiation of an agreement process. Selection criteria for the most responsive Respondents are listed below in the section marked “Selection Criteria”. Fort Mac LRA and the successful Respondents would negotiate an agreement promptly following the selection. If a mutually satisfactory contract cannot be reached with the selected Respondents, Fort Mac LRA reserves the right to enter negotiations with the alternative Respondents as determined under the selection criteria.

Selection criteria that will be used to select the successful Respondent are set forth below:

<b>Criteria</b>	<b>Points</b>
<b>Firm Experience</b>	<b>20</b>
<b>Project team Lead Experience</b>	<b>30</b>
<b>Proposed Schedule</b>	<b>15</b>
<b>Pricing</b>	<b>20</b>
<b>DBE</b>	<b>15</b>
<b>Total</b>	<b>100</b>

#### **CONTACT PERSONS**

Questions concerning any aspect of this project, including the submittal process, should be directed to Robert Mosby, Senior Accounting Manager, Fort Mac LRA, 1794 Walker Avenue, SW, Atlanta, Georgia 30310. Suggestions and questions regarding the RFP and the proposed Scope of Services should be made in writing via e-mail to [rmosby@fortmaclra.com](mailto:rmosby@fortmaclra.com) not later than **April 5, 2017 by 2:00 pm E.D.T.** Answers to those questions will be shared with all parties who have expressed interest, by close of business **April 6, 2017.**

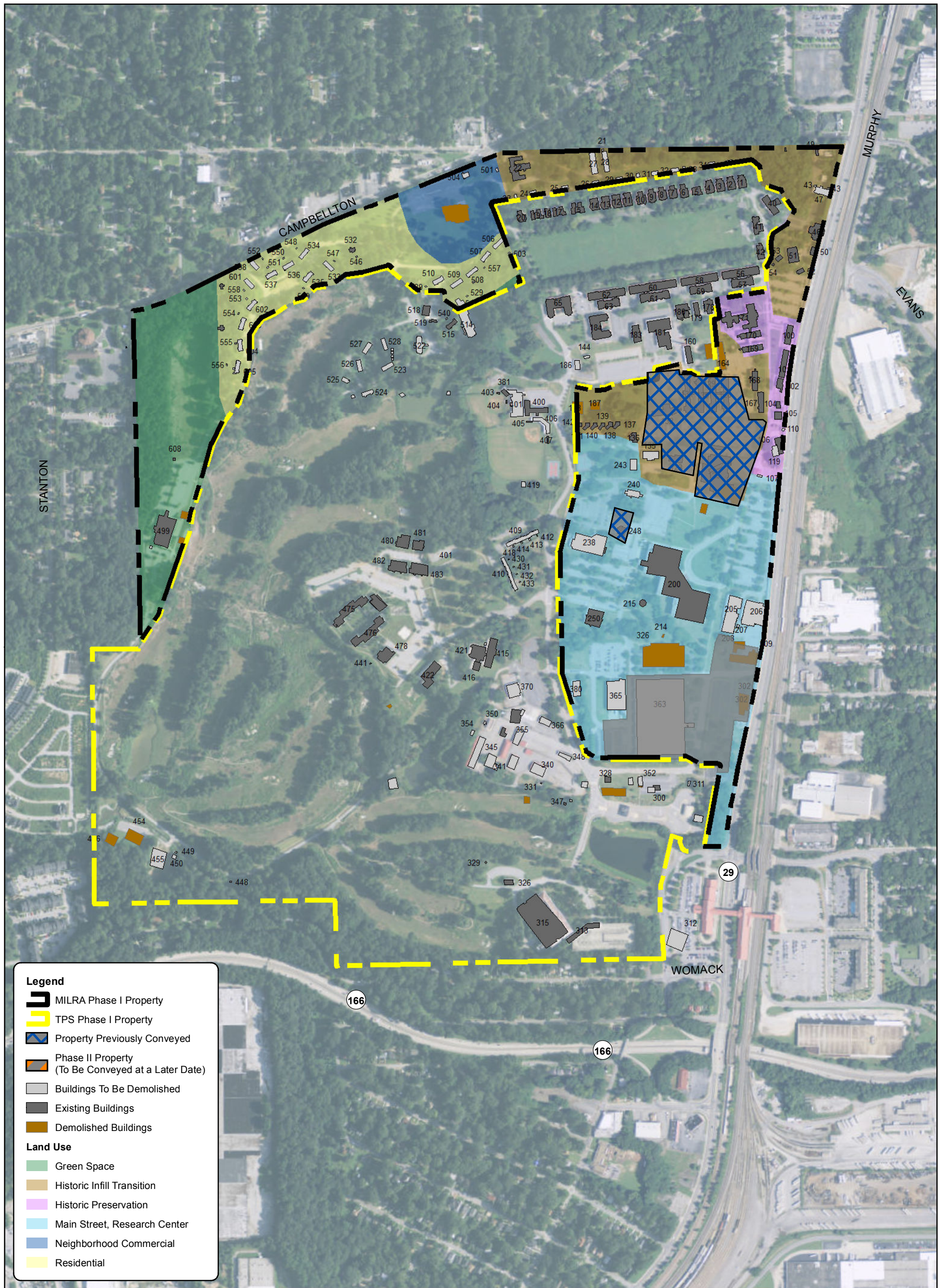
#### **FORT MAC LRA POLICY ON COMMUNICATIONS AND CONTACT**

Respondents are required to conduct the preparation of their applications with professional integrity and free of lobbying activities. Respondents and their respective agents and consultants are not permitted to contact or communicate with, directly or indirectly, any member of the Fort Mac LRA Board regarding the subject matter of this RFP after the issuance date of this RFP, except as specifically permitted herein or approved in advance by Fort Mac LRA. Any verified allegation that a Respondent or team member, or an agent or consultant of the foregoing, has made such contact or attempted to influence the evaluation, ranking, and/or selection of Respondents is cause for Fort Mac LRA to disqualify the Respondent and its team member from further consideration.

## **OPEN GOVERNMENT LAWS**

All Respondents should obtain and thoroughly familiarize themselves with the Georgia Open Records Act (O.C.G.A. S 50-18-70, et seq.) and Georgia Open Meetings Act (O.C.G.A. S 50-14-1, et seq.) (Collectively, the "Open Government Laws") applicable to the issue of confidentiality and public information. Fort Mac LRA will not advise a Respondent(s) as to the nature or content of documents entitled to protection from disclosure under the Open Government Laws, as to the interpretation of such laws, or as to definition of "proprietary." Each Respondent(s) shall be solely responsible for all determinations made by it under applicable laws. Each proposer/Respondent(s) is advised to contact its own legal counsel concerning the effect of applicable Open Government Laws to that Respondent(s)'s own circumstances.





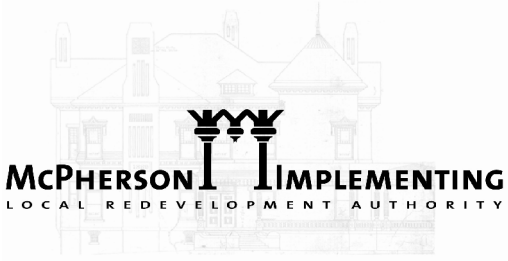
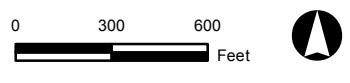
**Legend**

- MILRA Phase I Property
- TPS Phase I Property
- Property Previously Conveyed
- Phase II Property (To Be Conveyed at a Later Date)
- Buildings To Be Demolished
- Existing Buildings
- Demolished Buildings

**Land Use**

- Green Space
- Historic Infill Transition
- Historic Preservation
- Main Street, Research Center
- Neighborhood Commercial
- Residential

**Figure X  
Basemap**



**FORT MCPHERSON  
ATLANTA, GA**



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