



October 13, 2020

Request for Proposal No. 21-0121
Regional Imagery Acquisition

PROPOSALS DUE:

**October 28, 2020
on or before 2:00pm**

SUBMIT PROPOSAL TO:

County of Imperial
Attn: Purchasing Agent
Purchasing Department
1125 Main Street
El Centro, CA 92243

I. NOTICE TO VENDORS CALLING FOR PROPOSALS

NOTICE IS HEREBY GIVEN that the COUNTY OF IMPERIAL, CALIFORNIA, acting by and through its Board of Supervisors, hereinafter referred to as the "COUNTY", will receive up to, but not later than **October 28, 2020, 2:00 p.m. Pacific Standard Time**, sealed Proposals for the award of a contract for the acquisition of aerial digital imagery of the county of Imperial, CA.

The RFP is comprised of the following parts presented herein as Attachments:

Attachment 1 – Submittal Information, Organization, and Content

Attachment 2 – Scope of Work

Attachment 3 – Notice Regarding California Public Records Act Sample Agreement

II.

TIME LINE (Subject to Change)	DATE	TIME <small>(Pacific Standard)</small>
RFP Released	October 13 th , 2020	
Deadline to Submit Questions to the Purchasing Supervisor	October 21 st , 2020	5:00 p.m.
Posting of Answers to Questions (if any)	October 23 rd , 2020	5:00 p.m.
RFP Due Date	October 28 th , 2020	2:00 p.m.

III. SUBMISSION

All interested parties must submit five (5) hard copies (1 original and copies) and 1 USB copy of your response to:

County of Imperial Purchasing Department
Attn: Purchasing Agent
1125 W. Main Street
El Centro CA 92243
Ref: RFP 21-0121 Regional Imagery Acquisition

Proposals sent by regular, overnight mail, or hand delivered must be postmarked by 2:00 pm Pacific Standard Time (PST) on October 28, 2020, to the address above. Late responses will be deemed ineligible for review. **No faxed or emailed proposals will be accepted.**

All submissions are considered a matter of public record.

Note: "proposer," "consultant," and "firm" may be used interchangeably throughout this document.

IV. CONTACT

Debbie S. Wray
1125 W Main Street, El Centro CA 92243
(442) 265-1866

debbiewray@co.imperial.ca.us

The County of Imperial Purchasing Agent is the only person to contact for any questions or concerns during this RFP process.

V. QUESTIONS AND ANSWERS

Questions must be submitted in writing to debbiewray@co.imperial.ca.us referencing the RFP number. Answers to the questions will be posted on the County of Imperial, Purchasing Department website <https://purchasing.imperialcounty.org/>.

VI. COUNTY OF IMPERIAL RIGHTS

1. Communication between the vendor and any member of the evaluation team (Proposal Review Committee) during the process is prohibited. Violation of this restriction is grounds for disqualification or any solicitation process resulting from this RFP.
2. COUNTY OF IMPERIAL reserves the right to:
 - A. Reject any and all submittals that are not in accordance with the required format described in this RFP;
 - B. Reject any and all submittals;
 - C. Request additional information;
 - D. Cancel the entire RFP;
 - E. Issue a subsequent RFP;

SUBMITTAL INFORMATION, ORGANIZATION, AND CONTENT

All submittals should contain the following information, at a minimum:

1. **TITLE PAGE**

Provide the following on the Title Page:

- ✓ RFP Number
- ✓ Title of the Project
- ✓ Name and Address of Firm
- ✓ Phone Number of Firm - **Do not include non-business (personal) phone numbers or address in as this information may become public under the California Public Records Act** (see Attachment 3)
- ✓ Prime Contact Person
- ✓ Email Address of the Prime Contact Person
- ✓ Signature of the Individual Authorized/Obligated to Commit the Firm to this Project

Cover letter should be addressed to the attention of the Purchasing Agent.

2. **TABLE OF CONTENTS**

- ✓ A clear identification of the materials by section and page numbers.

3. **TECHNICAL APPROACH**

- ✓ A statement and discussion of the project objectives, concerns, and key issues.
- ✓ The technical approach for performing the tasks must include a detailed Scope of Work along with the process for executing the requirements and objectives of the project.
- ✓ A discussion of the difficulties expected or anticipated in performing the tasks, along with a discussion of how the firm proposes to overcome or mitigate against those difficulties.
- ✓ An estimated schedule for completion of the work, including performance and delivery schedules indicating phases or segments of the project, milestones, and significant events.
- ✓ A statement of the extent to which the firm's proposed approach and Scope of Work will meet or exceed the stated objectives discussed in this RFP. Furthermore, a discussion of how the firm would modify the project, and/or schedule to better meet these objectives.

4. **PRICE SHEET**

- ✓ Submittals must include a Price Sheet (in United States currency) for the products requested.

5. **PROFILE OF FIRM**

- ✓ A statement indicating if the firm is local or national and a summary of representative experience relevant to the work described in the Scope of Work for this RFP. Firm must also be prepared to sign a final Agreement such as the sample attached.
- ✓ The location and telephone number of the office from which the work is to be done.
- ✓ Identification of the individuals who will perform the work, including officers, project manager and key staff. State the time commitment and include resumes for key individuals. **Do not include social security numbers, non-business (personal) phone numbers or address in a resume as this information may become public under the California Public Records Act** (see Attachment 3).

6. REQUIRED FORMS

- ✓ All firms must fully complete the Notice Regarding California Public Records Act (Attachment 3), regardless of whether the firm is requesting to exempt submittal information from disclosure under the California Public Records Act.

1.1 Purpose

The intent of the County of Imperial (hereinafter “COUNTY” or “COUNTY OF IMPERIAL”) is to award a vendor’s contract to acquire digital aerial imagery over large areas of Imperial County. The COUNTY’s vision is to integrate up-to-date aerial imagery with its geographic information systems to improve planning processes, property appraisal, public safety, and the county and its partner agencies' overall quality of services. The county has partnered with other local jurisdictions, state agencies, and the Southern California Association of Governments (SCAG).

The COUNTY OF IMPERIAL would like to have the imagery flown during the fall of 2020. The geographic area for this RFP covers most of the COUNTY OF IMPERIAL Region. The ultimate project will require aerial imagery at a minimum of three-inch resolution in the urban core and nine-inch resolution in primarily rural areas. COUNTY OF IMPERIAL anticipates updating the orthophotography database every two (2) to four (4) years for the next decade. We welcome offers for options better than the base requirements in terms of area coverage and pixel resolution.

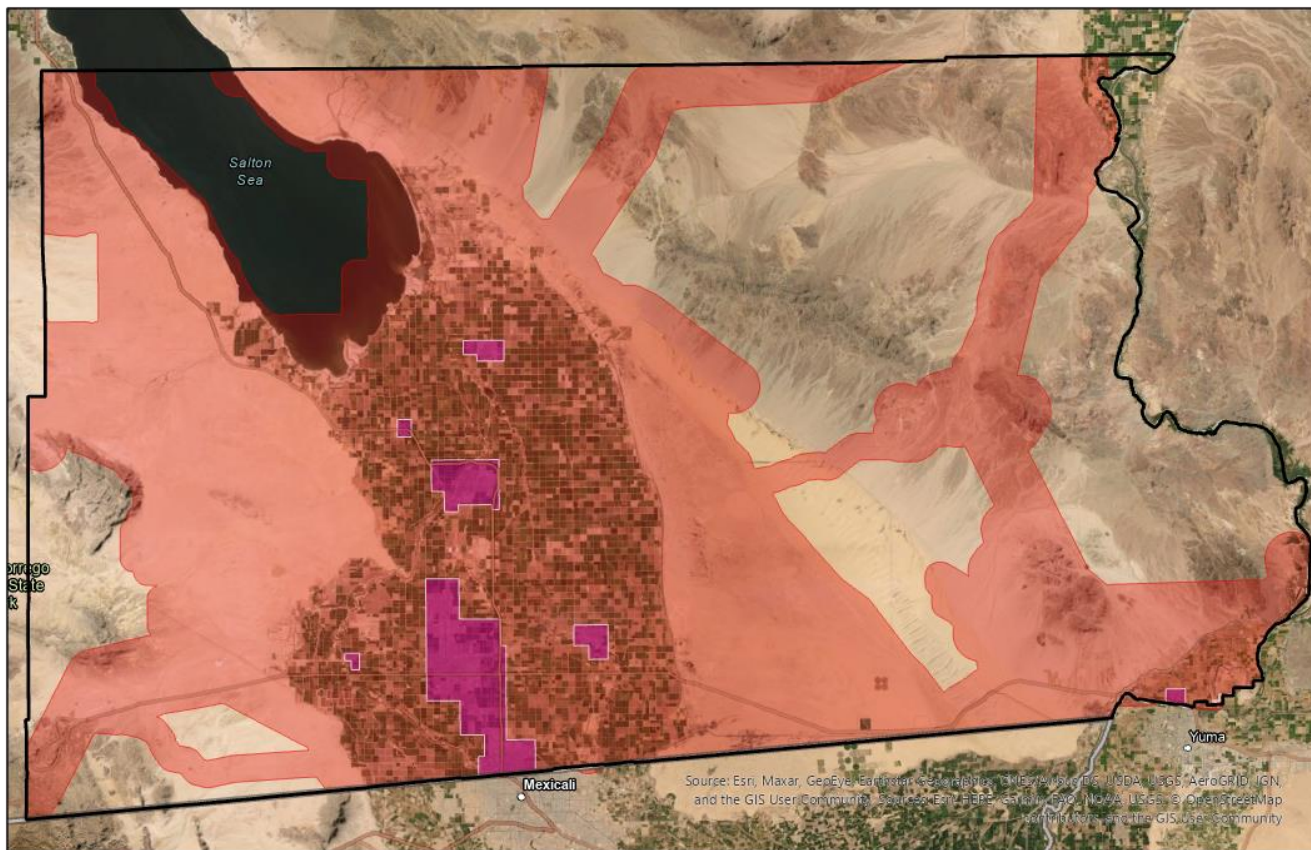
1.2 Project Objectives

This imagery acquisition project will be color and near infrared, high resolution, and spatially accurate aerial imagery to be used by COUNTY OF IMPERIAL and other stakeholders, such as transportation commission, council of governments, and special districts. The main objectives of this project are:

1. to obtain seamless digital orthorectified 4 band (NIR) imagery product for visualization and analytical purposes that can be used in geographic information systems (GIS) and/or computer-aided design (CAD) software;
2. to incorporate data into on-line GIS products for different jurisdictions and stakeholders;
3. to acquire a product to verify and update land use and capital improvement projects. Examples include, but are not limited to, mapping assessor’s properties, mapping public streets, public infrastructure (e.g., power lines, water canals, manholes), mapping various land uses, assets, and general vegetation classifications.
4. to acquire a product that will facilitate identification of changes from previous aerial surveys, and will allow analysis in a digital environment;
5. to acquire a mosaic dataset that references the imagery and identifies metadata (to include pixel storage definitions, geo-referencing, processing, format, and so forth);
6. to obtain a product that will facilitate responding to requests for aerial imagery, and other data that COUNTY OF IMPERIAL intends to provide through interactive web-based applications and enterprise services.
9. to acquire a product that will enable photo draping on terrain models and allow for various terrain analyses;
10. to obtain building representations (building outlines);
11. to obtain oblique images over urbanized areas;
12. to obtain training for the oblique image software and/or other offered products; and
13. to have the option for firm to host the abovementioned data sets.

1.3 Geographic Extents

COUNTY OF IMPERIAL has need for orthographic color and near infrared aerial imagery, obliques, and building outlines. Services shall be performed for an area of approximately 2,952.6 square miles (Displayed in the map under “Ortho Imagery Coverage”. This area includes the areas on the map labeled as “Oblique Imagery Coverage”. The desired coverage for oblique imagery is approximately 92.5 square miles and is defined in the map in a magenta color. The minimum geographical extent of the products requested is as follows:



Map Key

- Imperial County Boundary
- Oblique Imagery Coverage
- Ortho Imagery Coverage

0 10 20 40 Miles



COUNTY OF IMPERIAL requests information for imagery and related products for the COUNTY OF IMPERIAL region that meets the technical specifications in the following pages.

COUNTY OF IMPERIAL and subscribing partners will be funding this project. COUNTY OF IMPERIAL will only pay for data after full quality control and acceptance by COUNTY OF IMPERIAL. Firms should use management methods that shall ensure project schedules are maintained. The successful firm on this project shall use means to identify and resolve production problems early in the project to avoid schedule delays.

1.4 Professional Standards and Practices

The awarded firm for the COUNTY OF IMPERIAL 2020 Aerial Acquisition project will be self-contained firms with turnkey services, experience, aircraft, processing equipment and photogrammetric expertise to ensure that the vendor project team can deliver professional quality products in a timely and cost-effective manner.

1.5 Imagery Acquisition and Related Products

This RFP intends to assist the COUNTY OF IMPERIAL with acquiring digital color imagery with a near-infrared (NIR) band for 2020. The geographic area for this RFP is in the COUNTY OF IMPERIAL Region. The aerial imagery will be acquired (at a minimum) at a three-inch (3”) resolution in urban areas and six-inch (6”) resolution in primarily rural or undeveloped areas. The COUNTY OF IMPERIAL also intends to acquire building representations and oblique images. These products should be itemized separately for the abovementioned area.

2.1 Collection Requirements

The imagery flight should not occur before award of a contract and issuance of a Task. Since cloud free imagery is required, an extension of the flight collection end-date is possible. The imagery shall not be captured when the ground is obscured by other factors such as flooding, excessive haze, excessive heat, smoke, or other obscuring atmospheric conditions. Aerial photography will be conducted between 10:00 AM and 2:00 PM to provide required sun angle to optimize radiometry of imagery (minimum 45 degrees) in order to minimize shadowing. Firms shall use good professional judgment and narrow the collection window, if necessary, to produce optimum results. The flight crew will then acquire the digital images when all the factors are satisfied. All aerial photography conducted for this project will conform to the specifications established by the American Society for Photogrammetry and Remote Sensing (ASPRS) Draft Aerial Photography Standard (1995). Airborne GPS controls will be used in the development of the digital orthophotos.

2.2 Flight Plan and Optional Pilot Phase

2.2.1 Flight Plan

Firms shall submit to the COUNTY OF IMPERIAL Project Manager the proposed flight plan and shall not obtain imagery until the COUNTY OF IMPERIAL Project Manager approves the flight plan. A minimum of 60% end lap and 30% side lap is required. More conservative end lap (e.g. 70%) and side lap (e.g. 40%) may be proposed by the firm. At that time the successful firm should discuss with the COUNTY OF IMPERIAL's Project Manager the availability of the aircraft to perform the image acquisition. The successful firm shall provide a report (often called a Navigation Report) to the COUNTY OF IMPERIAL Project Manager, showing post-processing results and photo capture points.

The successful firm shall obtain all necessary clearances, including military and government (Air Route Traffic Control Center) clearances to conduct the flights. Reflights shall be performed within 10 days

Scope of Work

Attachment 2

(weather permitting) for the purpose of securing replacement images for all which fail to meet the minimum specifications set forth in the contract. The successful firm will conduct a review within 1 week after the original flight to ensure that the imagery meets contract specifications. The COUNTY OF IMPERIAL Project Manager shall have 15 days to review imagery submitted by the firm to identify imagery deficiencies and to notify the Firm of the deficiencies. The successful firm shall have 15 days to correct the imagery or to recollect imagery and resubmit to the COUNTY OF IMPERIAL Project Manager. The COUNTY OF IMPERIAL Project Manager shall be the sole judge as to what constitutes “imagery deficiencies.” There shall be no additional charge for refights and/or imagery correction. Additional quality review will be conducted by the COUNTY OF IMPERIAL’s Project Manager or, if designated, the project team as the georeferenced imagery is delivered to COUNTY OF IMPERIAL.

2.2.2 Optional Pilot Phase and/or Sample Imagery Request

Each firm shall provide samples of similar imagery, specifically the 3-inch/pixel and 6-inch/pixel or better color and, if available, infrared imagery as well. The COUNTY OF IMPERIAL Project Team will utilize these aerials as a pilot survey to perform quality control (QC) regarding the: a) seamlessness, b) accuracy, and c) true color and color balance across image tiles, and to provide feedback to the vendor.

The sample imagery must be included with your submittal. Note that the file cannot exceed 25 Megabytes. Acceptable formats for the sample imagery include any of the following: geotiff. Compressed formats must be at a ratio of 20 to 1 or less. Projection and datum for each file must be specified.

3.1 Sensor Specification and Calibration

Digital

The primary imagery to be acquired shall be RGB Color in the form of three-band geotiffs; where color IR is also requested, the deliverable may be either one four-band geotiff or a set of two three-band geotiffs (one color and one color IR). Firms may also offer both color and IR imagery for each geographic extent as long as the two products are priced separately. COUNTY OF IMPERIAL expects the sensor used by a firm to be able to delineate sharp edges and have high spatial resolution. A copy of the most recent (less than 3 years old) calibration certificate must be supplied. The sensor must be able to acquire blur-free imagery at the proposed resolutions through use of a very fast shutter speed (greater than 1/500th second) or through use of a motion-compensation device. The successful firm shall be liable for ensuring that all photography complies with industry standard tolerances for flight altitude, tip, tilt, side lap, end lap, and crab. In particular, the imagery shall be done with the optical axis of the camera as nearly vertical as possible, always kept below 3 degrees. The tilt between two consecutive exposures shall not exceed 4 degrees. The crab angle shall not exceed 3 degrees. The successful firm will also use automated Aerial Triangulation (AT) using professional Automatic Triangulation software. Exterior Orientation (EO) parameters acquired by Airborne GPS/IMU system will be incorporated into the final solution to increase the accuracy of the automated aerial triangulation (AAT). AT will be performed by a Certified Photogrammetrist.

3.2 Digital Sensor

For each digital camera proposed, COUNTY OF IMPERIAL prefers that a single camera sensor be used to ensure exact band- to-band registration. If a multi-camera sensor is proposed, the submittal should provide specifications regarding the band-to-band registration or discuss how a highly accurate band-to band registration will be ensured. For each digital sensor proposed, the Modulation Transfer Function (MTF) of the sensor should be provided.

3.3 Image Production Process (including Mosaicking and Radiometric Adjustment)

The COUNTY OF IMPERIAL will examine the tiling scheme proposed by the firm to assess its appropriateness. On acceptance of each image-based tile, seamlines shall be created using a combination of automated and manual tools and then inspected by an operator. The tiles shall be mosaicked together along the seamlines to produce the seamless ortho image required. The orthophoto imagery shall conform to the quality standards detailed.

The mosaicked images created shall be inspected for both image quality and consistent radiometric quality. Adjacent image tiles shall also be inspected to ensure the continuity of roads and other features. The successful firm shall adjust the radiometric values of a block of ortho images to ensure a consistency of tonal range. Building rooflines that could otherwise have been located on the edge of butt-joined ortho tiles with different orientations shall not be disturbed.

The final process shall be to cut the continuous seamless image into the delivery tile format approved by COUNTY OF IMPERIAL. These tiles then shall undergo a final QC review prior to shipment.

3.4 Aerial Imagery Specifications – Requirements

Each imagery specification option will be priced separately with any optional elements that the successful firm desires to present. The COUNTY OF IMPERIAL Project Team will require the following in the scope of services at the time of contract award:

- a. The aerial photography for three-inch (3") pixel (GSD = Ground Sample Distance) (1"=50' mapping scale) imagery will be acquired for urbanized areas for a total of approximately 8,000 square miles. The photo scale of 1"=50', for all geographic extents abovementioned. Specifically, the imagery needs to be with a horizontal accuracy to National Map Standards 1"=50' (+/- 1.6 ft) from true location at 90% confidence level.
- b. The aerial photography for six-inch (6") pixel (GSD = Ground Sample Distance) (1"=100' mapping scale) imagery will be acquired for the urban/rural areas for a total of approximately 16,000 square miles. The photo scale of 1"=100', for all geographic extents abovementioned. Specifically, the imagery needs to be with a horizontal accuracy to National Map Standards 1"=100' (+/- 3.3 ft) from true location at 90% confidence level.
- c. Natural Color Imagery (RGB): 24 bit (3 bands x 8 bits/band) digital camera collections will include collection of multi-spectral imagery. This true color imagery will be required in two raster file formats (GEOTIFF and Mr. SID).
- d. As solely determined by the COUNTY OF IMPERIAL Project Manager, images must be free of significant defects or inconsistencies in tone, contrast or color within an individual tile and/or between adjacent image tiles; color and contrast shall be natural – no bias towards a single shade or color; samples from the same sensor proposed for this project shall be provided; image shall be free of striping, banding, washouts, and hot spots. Some allowance for high reflection over water will be made. Feature extraction should be possible in lightly shaded areas.
- e. Cloud free imagery is required. The imagery shall not be captured when the ground is obscured by other factors such as flooding, excessive haze, smoke, extreme heat, or other obscuring atmospheric conditions. Aerial photography shall be conducted between 10:00 AM and 2:00 PM to provide the required sun angle to optimize radiometry of imagery (minimum 45 degrees) to minimize shadowing. Some accommodations can be made on sun angle and time of capture at the vendor's request if there will not be a noticeable impact in quality and clarity.
- f. The spatial resolution will be three-inch resolution in urban core and six-inch resolution in the rest of the desired areas.
- g. The projection required will be California State Plane Coordinate System, Zone 6, US feet, Datum NAD83. The vertical datum needed is North American Vertical Datum of 1988 (NAVD88), US Feet.
- h. The COUNTY OF IMPERIAL Project Team will utilize these aerials as a pilot survey to perform quality control (QC) regarding the: a) seamlessness, b) accuracy, and c) true color and color balance across image tiles, and to provide feedback to the vendor. The successful firm shall provide pilot samples of the captured

imagery on an on-going basis at the end of each flight plan phase and based on these pilot samples will be receiving on-going QC feedback from COUNTY OF IMPERIAL. In the case that COUNTY OF IMPERIAL determines that the aerial imagery does not comply with the agreed specifications, the vendor will be required to take immediate action and bring all captured (up to this point) and future imagery up to standards, e.g., by re-flying these areas, upgrading equipment, enhancing post processing etc.

- i. The successful firm will prepare digital orthophotos set up on the agreed pixel resolutions. The successful firm will then use the COUNTY OF IMPERIAL-provided resolution map to create true digital color orthophotos at the agreed pixel ground resolution over the County of Imperial, with the agreed overlap outside the county boundary.
- j. The successful firm will develop and deliver, together with the aerial imagery, metadata that follows the FGDC metadata standards and describes the: flight date, time, line, area name or grid number, weather conditions, resolution, geographic projection, horizontal and vertical datum accuracy, and photographic equipment that was used for capturing the imagery.
- k. The successful firm will provide the COUNTY OF IMPERIAL Project Manager weekly status reports as detailed below.
- l. The successful firm will derive building representations for the project's urban areas. Details are provided below in 3.7 Building Representations.
- m. The successful firm will create oblique images for the desired areas at a minimum. Details are provided below in 3.8 Oblique Images.
- n. As an optional product to the core deliverable, the successful firm may collect Digital Elevation Data (from LiDAR) for the entire study area. Details are provided below in 3.6 Digital Elevation Model.

3.5 Project Reporting, Quality Assurance and Quality Control

The successful firm shall provide brief weekly email progress reports to the COUNTY OF IMPERIAL Project Manager summarizing the overall status of the project and providing details of the project accomplishments and actions taken for the subject period. The successful firm shall indicate which project milestones have been met and what the next or remaining steps to be taken are. The successful firm shall discuss their quality assurance/quality control plan, outlining the steps taken and the individuals responsible for ensuring the integrity of the final product.

3.6 Digital Elevation Model (DEM) - General Requirements

An optional product. The successful firm shall be responsible for developing a professional, industry standard DEM for the entire study area. The digital elevation data (from LiDAR) or other high-quality options for the study area shall be an optional task order. The deliverable shall be in accordance with the USGS LiDAR Base Specification V1.3, 2018, but other comparable products will be considered. The successful firm shall perform the necessary Ground Survey and other steps necessary to meet the horizontal accuracy and quality of the delivered imagery. Deviations from industry standard procedures must be discussed with the COUNTY OF IMPERIAL Project Team in advance and the successful firm must receive written COUNTY OF IMPERIAL approval for such variations.

3.7 Building Representations - General Requirements

Building representations are planimetric features representing buildings that serve as a primary business government, residential function, and so forth. The following outlines general requirements for these features.

- a. Horizontal accuracy shall be consistent with Second Order, Class I, i.e. ninety-five percent (95%) confidence interval of 2 cm base error and 20 parts per million linear errors.
- b. Data creation shall be constrained to American Society for Photogrammetry and Remote Sensing (ASPRS) accuracy standards for large scale class I maps for 1" = 100'.
- c. Vertical datum shall be NAVD88. All vertical stations set will be tied directly to NGS monuments whose orthometric heights were determined by differential leveling and adjustment by the NGS on or after 1995.
- d. Each enclosed building representation will be a polygon and contain a z value (elevation) at the highest point of the building, but exclude flag poles, chimney, and other feature smaller than 4 feet wide. These representations shall have unique IDs and corresponding parcel numbers.
- e. Building representations shall be created for all buildings larger than 20' X 20' (400 sq ft.).
- f. These data sets shall be in an ArcGIS Pro-compatible format and FGDC compliant with full metadata.
- g. All building representation shall conform to accuracy and quality established by the American Society for Photogrammetry and Remote Sensing (ASPRS) for large scale mapping for 1" = 100'.

There are approximately 86,000 parcels in the COUNTY OF IMPERIAL region.

3.8 Oblique Images - General Requirements

It shall be the responsibility of the successful firm to obtain low oblique aerial photography in the fall of 2020. Photography shall be acquired when skies are clear, free from turbulence, wind shear, and excessive smoke or haze. The ground shall be free from standing water. Photography shall not be flown during overcast sky conditions, nor shall photography contain objectionable shadows caused by clouds, relief, or low solar altitude. Submittals shall include sun angle, weather conditions, ground conditions and any other parameters that will be used as constraints to ensure high quality data is acquired.

3.8.1 Flying Height, Camera Angle, and Ground Sample Distance

Submittals must provide flying heights, camera angle, and ground sample distances (front line, middle line, and back line) that will be used to achieve nominal three-, six-, and nine-inch resolution imagery.

3.8.2 Aircraft/Camera/Sensor System

All photography will be acquired using a tested and calibrated strip or frame-based aerial sensor system with direct 4-band image capture capability mounted in a manned aircraft. The aerial sensor system shall be capable of acquiring five images (nadir, north, south, east, and west) at each exposure station or the equivalent if using a strip-based sensor.

Scope of Work

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Firms must specify, in detail, the brand and specifications of the camera system to be used along with a description of the aircraft, sensor mount, inertial measurement unit (JMU), airborne GPS and antenna, camera/sensor hardware, focal length, the bit depth per color channel captured by the sensor, and a manufacturer's calibration report for the sensor system.

3.8.3 Flight Plan

Flight lines and individual exposure stations shall be spaced to ensure sufficient side and end overlap to provide full coverage of the entire project area. Aircraft operating speeds shall not exceed sensor manufacturer guidelines. Visible image smear is not acceptable.

Firms shall include an Image Collection Plan in their submittal that contains a map of the flight lines and project area and specifies the flying height and speed of the aircraft over the ground, ground sample distance, and image overlap.

3.8.4 Re-flights

Raw imagery shall be reviewed by the successful firm as soon as possible, subsequent to a completed flight mission. Within ten days of a flight mission, the successful firm shall confirm, in written form, compliance with aerial imagery collection specifications in abovementioned section. Imagery that does not meet specifications shall be corrected by the successful firm at no additional cost to COUNTY OF IMPERIAL. Replacement imagery shall be acquired within one week of the original flight (provided environmental conditions exist as specified in Section 3.3), using the same camera/sensor system.

Oblique Images will have clear views of the ground and will be free from obstruction by clouds; however, there may be occasional cloud and other shadows. In controlled airspace, around airports, etc., the image resolutions may vary. Quality of Images will be comparable to image sample provided to COUNTY OF IMPERIAL for approval.

3.8.5 Specifications

Images shall be delivered with a compression ratio of approximately 6:1 and a per image size of approximately 5-7 MB for Oblique Images. Imagery specifications below are from earlier acquisitions and should be used as guidelines for image capture.

a. Community Oblique

Image sensor: 4,872 x 3,250 pixels

Footprint (Nominal):

Front Line: 4,754 feet/1,447 meters

Back Line: 6,682 feet/2,036 meters

Front to Back: 5,932 feet/1,808 meters

Resolution (Nominal):

Front Line: 0.98 feet/pixel

Back Line: 1.37 feet/pixel

b. Neighborhood Oblique

Image sensor: 4,872 x 3,250 pixels

Footprint (Nominal):

Front Line: 1,600 feet/488 meters

Back Line: 2,254 feet/687meters

Front to Back: 2,000 feet/610 meters

Resolution (Nominal):

Front Line: 0.98 feet/pixel

Back Line: 1.37 feet/pixel

2. EXPORT

a. Image Export: JPEG

b. Geo-data Export: ESRI shapefiles

Geo-data may be exported as points, lines, polylines, or polygons to an ESRI shapefile for import into GIS software.

3.8.6 Software, Extension, and API

The successful firm shall provide the latest version of the ESRI ArcGIS Pro or ArcMap Extension Software or equivalent, meeting the specifications so that desktop software accesses oblique imagery meeting the specifications. In addition, the successful firm shall provide software that allows access to the obliques outside ArcGIS and an Application Programming Interface (API), including license, which will allow the stakeholders and/or its agents to access Oblique Images hosted through 3rd party applications. Software shall have the following minimal capabilities:

1. Distance Tool - measure lengths, widths, and perimeters
2. Height Tool - determine the height of any feature
3. Location Tool - obtain geo-coordinates of items in the image
4. Area Tool - Measure acreage or square footage of any area
5. Elevation Tool - Access ground elevation
6. Bearing Tool - Determine directional (from True North) location
7. Select Tool - locate by client-supplied data, such a street address, tax account number, coordinates
8. Link Tool - link an unlimited amount of additional data/text per image
9. Text annotation Tool - describe features within an image
10. Line Drawing Tool - draw straight or free-form lines to highlight a feature
11. Circle Drawing Tool - create circular boundaries/perimeters for specific locations
12. Polygon Tool- create polygon boundaries/perimeters for specific locations
12. Navigate Tool - allows for easy navigation through your image warehouse by opening next adjacent image in approximate scale and same direction
13. Search by Address Tool - ability to search from pre-defined queries of parcel address data
14. Zoom - zoom in and out of all images
15. Search - search GIS data and address information and zoom to features that have been found
16. GIS Data Overlay - display GIS shapefile format data on top of oblique imagery.
17. Swipe tool to view previous epoch data (if data available)
18. Export - export oblique imagery for use for display and other purposes
19. Export to GIS - export orthogonal images with corresponding coordinate mapping files for use with
20. GIS - The successful firm shall make GIS layers provided by COUNTY OF IMPERIAL and Participating stakeholders available in the hosted solution. This will allow participants to view these GIS Layers on top of the Oblique Images hosted by the successful firm. The successful firm shall provide a mechanism for COUNTY OF IMPERIAL and participants to upload and configure their own GIS layers.

3.8.7 Data Hosting

The successful firm shall prepare a recommended hosting and management platform (IaaS/Cloud) and estimate the cost of storage and hosting the regional aerial imagery for **three years**. Please indicate the total cost for this service for the specified term in the pricing sheet.

3.8.8 Technical Support, Documentation, and Training:

The successful firm shall provide technical support to COUNTY OF IMPERIAL and stakeholders via telephone and video conference. The successful firm shall furnish the latest documentation for latest versions of the licensed software and shall update it during the term of the base agreement. The successful firm shall conduct training at a minimum:

- 1) Four (4) 4-hour "End-User" orientation sessions (maximum of 25 attendees per session) via on-line tools such as Zoom or Go To Meeting.
- 2) One (1) 3-hour "Administrator" training to teach COUNTY OF IMPERIAL, Stakeholder and GIS support staff how to install, configure, and support the successful firm's desktop software and hosted solutions via on-line tools such as Zoom or Go To Meeting.
- 3) Four (4) advanced technical training sessions (maximum of 15 attendees per session), using on-line tools such as Zoom or GoToMeeting, that will last three (3) hours each.

SECTION 4 Pricing & Selection Criteria

4.1 Pricing

COUNTY OF IMPERIAL requires firms to price their products separately. Please see "Section 1.3 Geographic Extents" for reference to the areas mentioned below. Any improvements in quality to the base requirements will be considered as value added to THE COUNTY OF IMPERIAL.

- Ortho with Infrared. The desired pixel resolution for which is to be no coarser than 3" (inches) in the "Oblique Imagery Coverage" area and 6" (inches) in the "Ortho Imagery Coverage" area.
- Oblique imagery. The desired pixel resolution for the "Oblique Imagery Coverage" area is of 3" (inches). However, alternative pricing for 6" resolution
- Building outlines,
- User training,
- Data storage and hosting of oblique and ortho imagery for three (3) years.
- Software (if applicable)

4.2 Selection Criteria

Each proposal will be evaluated in a 100-point scale. Points shall be allocated in accordance with the following five (5) categories:

4.2.1 Business Experience

Each Vendor shall be required to identify its name, address, telephone number, and date of establishment, form of entity (i.e., corporation, partnership or limited liability company). Each Vendor shall be evaluated in three (3) primary areas of experience:

- a. Business experience in capturing, processing, and providing ortho and oblique imagery. (10 points)
- b. Business experience in administering aerial imagery capture projects. (5 points)
- c. Business experience in providing training and customer service support. (5 points)

[Total Value: 20 points]

4.2.2 Business Sustainability

Financial stability as determined by a review of the audited financial results of the two (2) previous years of operations. It is understood that each proposing Vendor must submit their (not parent company's) previous two (2) year's audited financials as well as their most current year to date unaudited results. It is understood and agreed by the vendor that the stated financial information will be subject to public disclosure under California Public Records Act set forth under California Government Code §6250 et seq.

(10 points)

[Total Value: 10 points]

4.2.3 Start-up Plan

Each Vendor shall be required to submit a written plan to start up and manage the proposed project. Each Vendor must demonstrate in its plan the ability to capture, process, and provide the products specified. The vendor should include a discussion of issues such as user training, quality control, data hosting, and a timeline for the delivery of all products and services.

(15 points)

[Total Value: 10 points]

4.2.4 References

References will be contacted and rated based upon their satisfaction of services provided by Vendor. Each Vendor shall submit a minimum of three (3) references of existing contracts similar in size and structure to this RFP. A maximum of ten (10) points shall be allocated in accordance with the following:

- a. Has the Vendor for at least two (2) years provided satisfactory products and services? (5 points)
- b. Have the reference(s) renewed or extended their original contract with the Vendor? (5 points)

[Total Value: 10 points]

4.2.5 Overall Cost

The overall cost shall be determined by considering the price in comparison to the quality and quantity of the products and services provided by the vendor.

- a. Price of ortho imagery with infrared (15 points)
- b. Price of oblique imagery (15 points)
- c. Total price of hosting services for ortho and oblique imagery (5 points)
- d. Price of user training, building outlines, and all other products and services (5 points)

[Total Value: 40 points]

4.2.3 Value Added

Please give any additional information that may add value to your proposal for the products and services requested.

(10 points)

[Total Value: 10 points]

SECTION 5 Bid Forms, Modifications, and Agreements

5.1 Preparation of Bid form

The COUNTY invites bids on the form(s) attached to be submitted at such time and placed as is stated in the Notice to Vendors Calling for Proposals. All blanks in the Bid form must be appropriately filled in, and all prices must be stated. All Proposals must include an original (plus five (5) duplicates and one (1) electronic copy) and be submitted in sealed envelopes bearing on the outside the name of the Vendor, its address, and the name of the contract for which the Proposal is submitted. It is the sole responsibility of the Vendor to see that the Proposal is received in proper time. Any Proposal received after the scheduled closing time for receipt of Bids will be returned to the Vendor unopened. NO Bids may be submitted by facsimile, telegraph, electronic mail or any other means other than by personal delivery, United States Mail, or other delivery services such as Federal Express or United Parcel Service.

5.2 Signature

The Bid Submittal and accompanying Bid documents, or any modification thereof must be signed in the name of the Vendor and must bear the original signature of the person or persons duly authorized to sign the Bid.

5.3 Modifications

Changes in or additions to the Bid form, recapitulations of the purchase of the Bid, alternative proposals, or any other modification of the bid form which is not specifically called for in the contract documents may result in the COUNTY's rejection of the Bid as not being responsive to the invitation to Bid.

Any modification of a bid submitted must be in writing and received by COUNTY prior to the closing time for bid. Bid modifications may not be submitted by facsimile, telegraph, electronic mail or any other means other than by personal delivery, United States Mail or other delivery services such as Federal Express or United Parcel Service. Any modification received after the scheduled closing time for receipt of Bids will be returned to the vendor unopened.

5.4 Erasures

The bid submitted must not contain any reassures, interlineations, or other corrections unless each such correction is suitably authenticated by putting in the margin immediately opposite the correction the surname or surnames of the person or persons signing the bid.

5.5 Examination of Contract Documents

Each Vendor shall thoroughly examine and be familiar with the specifications and sample contract document. The failure or omission of any vendor to receive or examine any contract documents, form, instrument, addendum, or other document shall in no way relieve any vendor from obligations with respect to this bid or to the contract. The submission of a bid shall be taken as prima facie evidence of compliance with this section.

5.6 Withdrawal of Bids

Any Vendor may withdraw its Bid either personally or by written request confirmed in the manner specified in **Section 5.1** above at any time prior to the scheduled due date for receipt of Bid.

5.7 Agreements

The Agreement form, which shall govern the acquisition of aerial imagery and which the successful Vendor will be required to execute as part of the Bid proposal is included in the contract documents and should be carefully examined prior to the time of submittal.

Vendors requiring the COUNTY to sign any other special agreements as a condition of their Bid, will be rejected as non-responsive.

5.8 Interpretation of Documents

If any person contemplating submitting a Bid for the proposed contract is in doubt as to the true meaning of any part of the specifications or other contract documents, or finds discrepancies in, or omissions from the specifications, they may submit to the County Purchasing Agent, located at 1125 Main Street, El Centro CA, a written request for interpretation or correction thereof. Any interpretation or correction requests must be received by COUNTY no later than **October 21, 2020 at 12 noon Pacific Standard Time**. Any interpretations or correction of the contract documents will be made only by addendum. A copy of such addendum will be posted on the County of Imperial Purchasing Department's website <http://www.co.imperial.ca.us/Purchasing/> by 5:00 PM Tuesday, October 23, 2020. No oral interpretations of any provision in the contract documents will be made to any Vendor.

5.9 Bid Statement & Contract Acceptance Statement

VENDOR HEREBY SUBMITS THE ATTACHED BID IN RESPONSE TO THE COUNTY OF IMPERIAL'S REQUEST FOR PROPOSAL FOR THE ACQUISITION OF AERIAL DIGITAL IMAGERY OF THE COUNTY OF IMPERIAL, CA.

VENDOR HEREBY REPRESENTS AND WARRANTS THAT THE INDIVIDUAL SIGNING THE BID PROPOSAL IS:

(1) DULY AUTHORIZED TO EXECUTE AND DELIVER THE BID AND EXECUTABLE AGREEMENT ON BEHALF OF VENDOR.

(2) SUCH EXECUTION AND DELIVERY ON BEHALF OF VENDOR IS IN ACCORDANCE WITH THE TERMS OF THE ARTICLES OF INCORPORATED OR PARTNERSHIP, ANY BY-LAWS OR RESOLUTIONS OF VENDOR. VENDOR ALSO HEREBY REPRESENTS AND WARRANTS THAT IF AWARDED IT AGREES TO BE BOUND BY THE CONTACT ATTACHED AS **SECTION 6**.

Print Signatory Name and Title

Signature

Vendor Name

Vendor Address

Vendor Phone Number

Date

SECTION 6 – SAMPLE AGREEMENT

Notice Regarding California Public Records Act

Information submitted in response to this RFI will be subject to public disclosure pursuant to the California Public Records Act, Cal. Gov. Code section 6250 et. seq., (the "Act"). The Act provides generally that all records relating to a public agency's business are open to public inspection and copying, unless specifically exempt from public disclosure under one of several exemptions set forth in the Act. If you believe that any portion of your submittal is exempt from disclosure under the California Public Records Act, **you must:** **1. Mark such portion "TRADE SECRET," "CONFIDENTIAL," or "PROPRIETARY," within you submittal; 2). Complete Section 2 below, and 3). Include this Attachment 3 in your submittal,** or your submittal will be subject to public disclosure under the Act. Submittals marked "TRADE SECRET," "CONFIDENTIAL," OR "PROPRIETARY" in their entirety will not be honored, and COUNTY OF IMPERIAL will not deny public disclosure of submittals so marked. By submitting any information with specific material marked "TRADE SECRET," "CONFIDENTIAL," or "PROPRIETARY," you represent you have a good faith belief that the material is exempt from disclosure under the Act; however, such designations will not necessarily be conclusive. You may be required to further justify in writing why such material should not, upon request, be disclosed by COUNTY OF IMPERIAL under the Act. Fee and pricing are not considered "TRADE SECRETS", "CONFIDENTIAL", or "PROPRIETARY".

If COUNTY OF IMPERIAL denies disclosure, then by submitting your information you agree to reimburse COUNTY OF IMPERIAL for, and to indemnify, defend, and hold harmless COUNTY OF IMPERIAL, its officers, fiduciaries, employees, and agents from and against any and all claims, damages, losses, liabilities, suits, judgments, fines, penalties, costs, and expenses including, without limitation, attorneys' fees, expenses and court costs of any nature whatsoever (collectively, "Claims") arising from, in connection with, or relating to COUNTY OF IMPERIAL's non-disclosure. By submitting your information, you also agree to defend, indemnify, and hold harmless COUNTY OF IMPERIAL from and against any and all Claims arising from, in connection with, or relating to COUNTY OF IMPERIAL's public disclosure of any such designated portions of your submittal if COUNTY OF IMPERIAL reasonably determines disclosure is deemed required by law, or if disclosure is ordered by a court of competent jurisdiction.

Section 2 - Exemption Request

Page Number of Submittal	Brief Explanation for the Exemption Under the Act and any Other Comments

Attach additional pages as necessary

Check here if firm claims no exemption

Signature: _____

Date: _____