

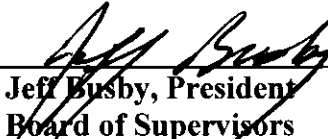
**ORDER: APPROVE 2014 DIGITAL ORTHOPHOTO AGREEMENT WITH  
SURDEX FOR DIGITAL IMAGERY IN THE AMOUNT OF  
\$20,747.00**

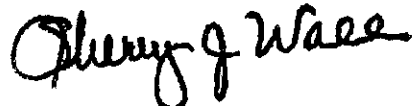
Motion was made by Mike Pickens, duly seconded by Mike Roberts, to approve 2014 Digital Orthophoto agreement with Surdex for digital imagery in the amount of \$20,747.00.

The vote on the motion was as follows:

Supervisor Mike Pickens, voted yes  
Supervisor Jeff Busby, voted yes  
Supervisor Robert Blackmon, voted yes  
Supervisor Chad McLarty, voted yes  
Supervisor Mike Roberts, voted yes

After the vote, President Busby, declared the motion carried, this the 6th day of January, 2014.

  
\_\_\_\_\_  
Jeff Busby, President  
Board of Supervisors

  
\_\_\_\_\_  
Sherry Wall, Chancery Clerk

## 2014 DIGITAL ORTHOPHOTO AGREEMENT

THIS AGREEMENT, made this 16th day of January, 2014 ~~December, 2013~~, by and between BOARD OF SUPERVISORS OF Lafayette County, MS hereinafter referred to as the "County", and Surdex Corporation, whose principal office is at 520 Spirit of St Louis Blvd. Chesterfield, MO 63005, hereinafter referred to as the "Consultant".

### WITNESSETH THAT:

WHEREAS, the County desires to engage the Consultant to render certain professional services and deliver certain materials hereinafter described; and

WHEREAS, the Consultant represents that it is qualified, willing and able to provide the professional services and deliver the requested materials to the County according to the County's specifications and the terms of this Agreement; it is therefore agreed and understood that:

#### I. SCOPE OF AGREEMENT

It is the County's desire to have the Consultant perform aerial imagery and provide digital orthophotos for the entirety of Lafayette County. The detailed scope of work and deliverables to be provided under this contract are described within the RFP, proposal documents and selection process of the twenty MS County consortium entitled NE-MS-2014. All of these RFP/Proposal documents are bound herein as an integral part of this Contract as Exhibits A-1 through A-5. These are listed below in order of priority in the event of any inconsistent or contradictory provisions:

A-1: This contract document executed this \_\_\_\_ day of December, 2013.

A-2: The Consultant's response to NE-MS-2014 technical and administrative questions dated November 22, 2013.

A-3: NE-MS-2014 response to bidder's questions dated October 30, 2013.

A-4: The Consultant's proposal dated November 12, 2013.

A-5: The NE-MS-2014 Request for proposals (RFP) dated October 16, 2013.

All required tasks shall be completed in full and all required data and reports shall be delivered by the Consultant to the County no later than November 18, 2014. Digital orthophotos shall be completed by the end of September 2014 with the 30 day period until October 31, 2014 set aside for final QA/QC and project wrap-up. All documents, source documents, databases, indexes, digital images, digital data, reports, etc. collected and/or used by the Consultant in the development of this project shall be the exclusive property of Lafayette County, and the Consultant shall not distribute, sell or loan any of these materials to any other party without full disclosure and *written consent* of the County Board of Supervisors. All materials and data used in the Orthophotography and GIS data development and processing will be delivered back to the County at the project completion. It is anticipated that the total fee to be paid by the County to the Consultant for this contract will be a Firm Fixed Price of \$20,747.00 as outlined and described in contract Exhibit "C". Map accuracy shall be defined as ASPRS Class 1.

Work shall be completed by the Consultant in the following summarized Phases, all of which are described in greater detail within Contract Exhibits A-2 through A-5.

- A. **Phase I.** The Consultant shall acquire approximate 12 inch pixel digital imagery of the entirety of Lafayette County with a raw exploitation Ground Sampling Distance (GSD) of slightly less than 12 inches using a Leica ADS100 digital sensor. Four bands (each band at 16 bit depth) shall be captured as RGB and NIR. Aerial imagery shall be captured to an extent such that all County tax maps have full coverage and imagery capture that enables 1"=200' Orthophoto imagery development at least 800 feet beyond all adjacent County borders, including those that are a part of the NE-MS-2014 consortium. The flight plan for this imagery capture is attached as Exhibit B-1. Imagery acquisition must be completed in full prior to objectionable deciduous vegetation leafing in the 2014 flight season, and no later than March 21, 2014. Imagery acquisition shall incorporate Airborne GPS (Multi-base solution) and IMU technologies with a report of results provided as a brief narrative and excel spreadsheet of exposure center and attitude results. No individual flight line shall exceed 50 miles in continuously flown length.
- B. **Phase II.** The Consultant shall acquire approximate 6 inch digital imagery of the developed Towns of Lafayette County with a raw exploitation Ground Sampling Distance (GSD) of slightly less than 6 inches using a Leica ADS100 digital sensor. Four bands (each band at 16 bit depth) shall be captured as RGB and NIR. Aerial imagery shall be captured to an extent such that all existing 1"=100' town tax maps have full coverage and imagery capture that enables 1"=100' Orthophoto imagery development at least 300 feet beyond all town map borders. The flight plan for this imagery capture is attached as Exhibit B-2. Imagery acquisition must be completed in full prior to objectionable deciduous vegetation leafing in the 2013 flight season, and no later than March 21, 2014. Imagery acquisition shall incorporate Airborne GPS (multiple base solution) and IMU technologies with a report of results provided as a brief narrative and excel spreadsheet of exposure center and attitude results. No individual flight line shall exceed 50 miles in continuously flown length.
- C. **Phase III.** The Consultant shall provide and utilize pre-paneled or photo ID (PID) ground control points as laid out within Section 7.2.2 of the Consultant's proposal (Exhibit A-4) using the ASPRS Class I accuracy map option.
- D. **Phase IV.** The Consultant shall perform an aero-triangulation (AT) adjustment of all blocks of digital imagery using the ground control points. ABGPS and IMU data as weighted control with a report of results provided as a brief narrative and excel spreadsheet of coordinates, elevations, residuals and statistics. Selected ground control points shall be used as blind check points with residuals calculated and reported. These check points may then be rolled into the final adjustment as primary control.
- E. **Phase V.** The Consultant shall develop a Digital Elevation Model (DEM) suitable to scale and precision to produce digital orthophotos at scales of 1"=100' and 1"=200' at ASPRS Class I accuracy from the digital imagery and AT described in previous Phases and contract Exhibits. This DEM may be developed from existing datasets, auto-correlation from the imagery, existing LiDAR data, stereo compilation or a combination of these methods. The final DEM utilized for Orthophoto rectification shall be delivered to the County as an xyz2 ascii file which can be processed to a geodatabase or shapefile.

F. Phase VI. The **Consultant** shall produce and deliver a County-wide dataset of 1"=200' digital orthophotos having a 12 inch pixel ground resolution. The 16 bit per channel four band digital imagery shall be retained through at least the initial raw exploitation image processing and color balance, with 8 bit imagery output at the end of the process for delivery to the **County**. The orthophoto imagery must be delivered as 5,000' by 5000' tiles with imagery extending at least 800 feet beyond all county borders as described in Phase I, above. The **Consultant** shall produce and deliver a town map dataset of 1"=100' digital orthophotos having a 6 inch pixel ground resolution. The 16 bit per channel four band digital imagery shall be retained through at least the initial raw exploitation image processing and color balance with 8 bit imagery output at the end of the process for delivery to the **County**. The town orthophoto imagery must be delivered as either 2500' by 2500' or 5,000' by 5,000' tiles with imagery extending at least 300 feet beyond all town borders as described in Phase I, above. All final map data must meet ASPRS Class I accuracy standards.

II. COMMENCEMENT AND PROSECUTION OF WORK

Work done by the **Consultant** will commence immediately upon receipt of authorization to proceed, with all required contract work to be completed in full, approved and accepted by the **County** no later than November 18, 2014. It is expected that both parties will carry out their respective responsibilities as diligently and expeditiously as possible. However, in the event that unforeseen circumstances arise that may delay the timely completion of any part of the project, the following provisions will apply:

- A. If the **County** fails to supply the **Consultant** when requested with pertinent and necessary information or materials essential for the progress or completion of any part of the project, then the **Consultant** shall be permitted to effect a temporary suspension of work and make a written request for a contract schedule extension. Whatever time is lost as a result of the **County's** delay in supplying said information or materials will become an extension of the completion date based upon the **County's** concurrence that a reasonable time extension is warranted.
- B. Delays on the part of the **Consultant**, not specifically excused by force majeure, as defined below, may be excused and become an extension of the applicable completion date, if:
  - 1. The **Consultant** has submitted in writing and in advance of the applicable completion date, a request that certain delays of work be excused by the **County**, stating therein explicit reasons which would justify such delays; and
  - 2. The **County** responds in writing, granting to the **Consultant** approval for an extension to the applicable completion date for a specified time limit based upon the **Consultant's** request. The **County** shall have the sole authority to accept and grant, or deny, any schedule extension requests by the **Consultant** within this provision of the contract, and the **County** shall not be required to justify or defend any denial; however, the **Consultant** must provide a detailed explanation as to why the **County** should consider any schedule extension request.

- C. Force Majeure: The **Consultant** shall not be liable for loss or damage due to delay in delivery resulting from any cause beyond **Consultant's** reasonable control that directly cause a project delay from or due to compliance with any regulations, order, acts, instructions or priority requests of any Federal, State or Municipal Government or any department or agency thereof, civil or military authority, acts of God, acts or omissions of the **County**, fires, floods, unusually severe weather, strikes, blackouts, unforeseen factory shutdowns, embargoes, wars, riots, delays or shortages in transportation, inability to obtain labor, manufacturing facilities or material from **Consultant's** usual sources. In the event of such delay, the **County**, upon the written request of the **Consultant**, shall equitably adjust those contractual provisions as may be affected by such a delay. The **County** shall have the sole authority to accept and grant, or deny, any schedule extension requests by the **Consultant** within this provision of the contract, and the **County** shall not be required to justify or defend any denial; however, the **Consultant** must provide a detailed explanation as to why the **County** should consider any schedule extension request.

III. WARRANTY, LIABILITY, AND STANDARD OF CARE

The **Consultant** shall perform services for the **County** in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of competent Consultants practicing in the same profession or a similar locality as the project. The **Consultant** shall warrant that the delivered products meet or exceed the requirements as defined by the scope and exhibits of this contract. In the event any portion of the products or deliverables fails to comply with this warranty obligation and the **Consultant** is promptly notified in writing prior to one year after completion of such portion of the services, the **Consultant** shall promptly re-perform or correct such portion of the services at no additional cost to the **County**.

The warranty provided by the **Consultant** is based on the product conforming to mutually agreeable acceptance criteria, established by the **Consultant** and the **County** defined by the scope and Exhibits of this contract. Regarding review and approval of products and deliverables, all reviews/data inspections are to be performed at the map scale specified for the delivered product. All image quality reviews for purposes of approval are to be performed at not greater than a 2:1 map scale of the specification for the delivered product. The **Consultant** shall not be held responsible for any anomalies or imperfections that may be apparent at higher levels of zoom beyond a review of 1:2:1 times the designated map scale. All alignments, seams, etc. will meet the project specification. Accuracy measurements will conform to the standard as specified for the specific delivered product and conform to the mutually agreed acceptance criteria. Map accuracy requirement shall be as specified by ASPRS Class 1 mapping for 1"=100' scale maps developed with a six inch pixel, 1"=200' scale maps developed with a twelve inch pixel, and 1"=50' scale maps developed with a three inch pixel. Only clearly defined points shall be used for any map scale accuracy checks. This process only applies to unambiguous measurements on clearly defined features. Radiometry/Color balancing is often subjective. The **Consultant** only warrants the imagery will meet the radiometry specification agreed to within a representative land cover Pilot area to be mapped as soon as practical after imagery acquisition and before general map production.

If the **County** believes that a delivered product does not meet the project specifications, and has

evaluated the product against the acceptance criteria the **County** may submit a request for review. A determination should be made of the specific non-compliance by checking the questionable characteristic against the acceptance criteria before submitting a claim against the warranty. Submissions should include complete information, including tile name, location within tile, nature of the problem and the relationship to the acceptance criteria. A screen shot (jpg or bmp) should be provided, if practical. The **Consultant** agrees, repair or replacement will occur within thirty (30) days. If the **Consultant** disagrees, the claim will be returned to the **County** with a request for mediation.

This warranty is in lieu of all other warranties. No other warranty, expressed or implied is made or intended by any proposals submitted pursuant to this Contract.

The **Consultant** will provide to the County a current Certificate of Professional Liability Insurance (E&O: errors and omissions policy for the professional services covered by this contract) to cover the tasks and deliverables of this contract, with a policy amount of at least one million dollars. This Professional Liability Insurance coverage is provided by the **Consultant** as a Professional Services Corporation to ensure the faithful and satisfactory performance of this project and is provided as one means to defend and indemnify the **County**. The **Consultant** shall also provide an Accord type certificate of insurance for all liability and workers compensation coverages, the minimum amounts of which must meet State of Mississippi standards and amounts. All referenced policies must remain in full effect for the full duration of the contract period with the E&O policy remaining in continuous effect for at least one full calendar year after the contract completion date. The E&O accord certificate shall reference the **County** as a certificate holder.

#### IV. PAYMENT TO CONSULTANT

- A. Cash payments of the agreed upon total cost for each task of work will be made by the **County to the Consultant** as the work is completed and described herein within Exhibit C.
- B. The **Consultant** may secure payment for a percentage or the full amount of monies allocated to tasks under each task by submitting to the **County** the following:
  1. All deliverable items or evidence of work-in-progress representing that percentage or the full amount of work for which the **Consultant** is claiming payment; and
  2. A dated invoice showing the amount of the claimed payment; with a brief description of the work done for each separate amount being claimed. Invoices may be submitted monthly based upon work-in-progress and/or deliverables.
  3. The **Consultant** shall provide a written project status report to NE-MS-2014 for all twenty Counties of the consortium; such report shall list individually the status of progress for each **County**. Written status reports shall be submitted once every two weeks for the period of January 1st, 2014 through March 31<sup>st</sup>, 2014 and then monthly thereafter until all Counties within the NE-MS-2014 consortium are 100% finished, delivered and accepted. The **Consultant** shall launch and host a

NE-MS-2014 project website upon which all status reports and other written communications shall be posted and maintained within topic oriented links or folders. Secure logins will be provided to those NE-MS-2014 County and Agency representatives designated by the County Assessor.

- C. The **County** will make prompt payments to the **Consultant** following receipt of the items described in Paragraph IV, A and B, above, subject to formal acceptance by the **County**--as complete, satisfactory and meeting all applicable specifications--of all deliverable items, or evidence of work in progress, representing that percentage of the full amount required to substantiate the claimed payment.
- D. The **County** shall pay within thirty (30) days all payment claims submitted by the **Consultant**, meeting all of the above requirements, and not formally disputed by the **County**. The **County** shall not use the disputation of one payment claim as a reason for disputing or not paying on time any other payment claim.
- E. The **County** may impose and charge Liquidated Damages of \$50 per calendar day for each day that the **Consultant** is late beyond the final completion date of November 18, 2014. Liquidated damages shall be capped at a total of \$10,000 (not to exceed) for this contract. As described in previous Sections II.A,B,C, the **Consultant** may request and the **County** may approve an extension of the final completion date. Any such approved extension will become an automatic extension in regard to initiating liquidated damages. The Liquidated Damages may be charged as actual compensation for losses and do not constitute a penalty or forfeiture. Liquidated Damages may be deducted by the **County** as an offset to invoices from the **Consultant**.

V. WORK-IN-PROGRESS INSPECTIONS

The **Consultant** shall cooperate fully with the **County** or the **County's** representatives in making possible work-in-progress inspections as frequently as desired by the **County**. In the event the **County** or its representatives reasonably find that project work is not being performed in accordance with the applicable specifications, then the **County** shall promptly notify the **Consultant** in writing of the unacceptable work, and the **Consultant** shall take immediate appropriate corrective actions.

VI. OTHER LEGAL RESPONSIBILITIES OF PARTIES

- A. The **Consultant** shall observe and comply with all applicable federal, state, and local laws, ordinances and regulations during its performance under this Agreement.
- B. The **Consultant** shall save harmless the **County** and its representatives from all suits, actions or claims of any kind brought on account of any injuries or damages sustained by any person or property in consequence of any act of omission or negligence by the **Consultant** or its employees or agents, or from any claims or amounts due arising or recovered under the State's Worker's Compensation laws. **Consultant's** indemnity and hold harmless obligation undertaken pursuant to this contract, if any, shall specifically exclude that portion of such obligations which could require **Consultant** to indemnify or hold harmless **County**, its agents, employees, or County Consultants for their own negligence or willful acts or

omissions.

- C. The County agrees to mitigate its damages, should any damages arise in the course of this Agreement, to every extent possible, and to take such reasonable measures to prevent injury or damages within its jurisdiction as any reasonable prudent individual or entity would take.

VII. ASSIGNMENT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Neither party shall assign its rights and/or obligations under this Agreement without the prior written consent of the other party. The RFP by NE-MS-2014 required respondents to identify their entire Team, including major subcontractors. The Consultant identified Digital Aerial Solutions as a major photogrammetry sub-consultant which is herein approved for this contract. Any additional sub-contractors that the Consultant chooses to use in the course of the work shall: 1). be identified in a written request to the County prior to use on this project by the Consultant. Such identification must include a basic qualifications statement as called for in the NE-MS-2014 original RFP with detailed contact information for the requested sub-consultant, and 2). be approved by the County. The County shall have the sole authority to accept and grant, or deny, any sub-contractor requests by the Consultant within this provision of the contract; however, the County shall not withhold such permission unreasonably for any written request that is necessary for the Consultant to execute the work within the project schedule or specifications. The Consultant must provide a detailed explanation as to why the County should consider any sub-consultant and approval must be provided in writing by the County.

VIII. PRICE ESCALATION

The unit rates contained herein shall remain in effect until June 1<sup>st</sup> 2015. In the event the County should cause the project to be delayed beyond June 1<sup>st</sup> 2015, then the unit rates contained herein may be adjusted to reflect any increases in the Producer Price Index (PPI). Any services provided to the County after June 1<sup>st</sup> 2015 may reflect the average annual PPI for the calendar year prior to when the services are actually provided. In no event may the Consultant adjust any unit rates to any greater amount if the performance of work occurs after June 1<sup>st</sup> 2015 and the reason the work occurred after this date is due to any cause directly created by the Consultant. Any increase in any unit rates shall not exceed 6% in any calendar year.

IX. WAIVER, MODIFICATION AND SEVERABILITY CLAUSE

No waiver, modification or cancellation of any term or condition of this Agreement shall be effective unless made in writing and signed by authorized representatives of each party. Nor shall any waivers be deemed to excuse the performance of any act other than those specifically referred to in said written notice of waiver. If any provisions of this Agreement shall be held to be invalid or unenforceable for any reason, the remaining provisions shall continue to be valid and enforceable, but that by limiting such provision it would become valid or enforceable, then such provision shall be deemed to be written, construed, and enforced as so limited.

X. NOTICE PROVISION

Any notice or communication pertaining to this Agreement shall be deemed to have been duly given



by the parties hereto if sent to the other by common courier (i.e. FedEx, UPS) or USPS registered mail with delivery confirmation provided by signature or signed return receipt to the address hereinafter stated, or to such other address as the parties may mutually agree upon.

For the County:

**Lafayette County, MS**

Lafayette County Courthouse  
300 North Lamar, Suite 103  
Oxford, MS 38655

Attn: Sylvia Baker  
Tax Assessor

Phone: (662)234-5562  
Fax: (662)238-7992

[sbaker@lafayettecoms.com](mailto:sbaker@lafayettecoms.com)

For the Consultant:

**Surdex Corporation**

520 Spirit of St Louis Blvd.  
Chesterfield, MO, 63005

Attn: Cornell Rowan, Project Manager  
Phone: (636)368-4460  
[cornellr@surdex.com](mailto:cornellr@surdex.com)

Attn: Rick Wallace, Project Principal  
Phone: (704)397-6373  
[rickw@surdex.com](mailto:rickw@surdex.com)

The Consultant shall not replace either the designated Project Manager or Project Principal without a prior written request to the County and responding written approval from the County.

XI. CONSTRUCTION

This Agreement shall be construed and interpreted in accordance with the laws of the State of Mississippi, exclusive of its rules pertaining to conflict of laws.

XII. DISPUTES

Any dispute arising under this contract which is not settled by agreement of the parties may be litigated in the courts of the state from which the contract is issued, or federal courts. Venue for any legal or equitable action hereunder shall be in Lafayette County, Mississippi.

XIII. ENTIRE AGREEMENT

The terms and conditions of this Agreement and any document specifically incorporated herein by reference, if any, constitute the entire Agreement between the parties. No prior communication, whether written or oral, nor any course of prior dealings between the parties shall be read into such Agreement for purposes of construction, interpretation or any other purposes whatsoever.

IN WITNESS WHEREOF, the parties have caused this instrument, consisting of 9 pages and Exhibits A-2, A-3, A-4, A-5, B-1, B-2 and C to be executed by themselves or their duly authorized officers or agents hereunto the day and year first written above.

Board of County Supervisors  
Lafayette County, MS

Surdex Corporation

By: \_\_\_\_\_

*[Handwritten signature]*

By: \_\_\_\_\_

Ronald C. Hoffmann  
President

Attest: \_\_\_\_\_

*[Handwritten signature: Sherry Wall]*

Attest: \_\_\_\_\_

\_\_\_\_\_

### Contract Exhibit C

The Consultant shall be paid a Firm Fixed Price (FFP) of \$ 20,747.00 (\$18,122 for County-wide 12 inch pixel and \$2,625 for 6 inch pixel mapping of towns) for the digital orthophotography as described in the attached contract and exhibits.

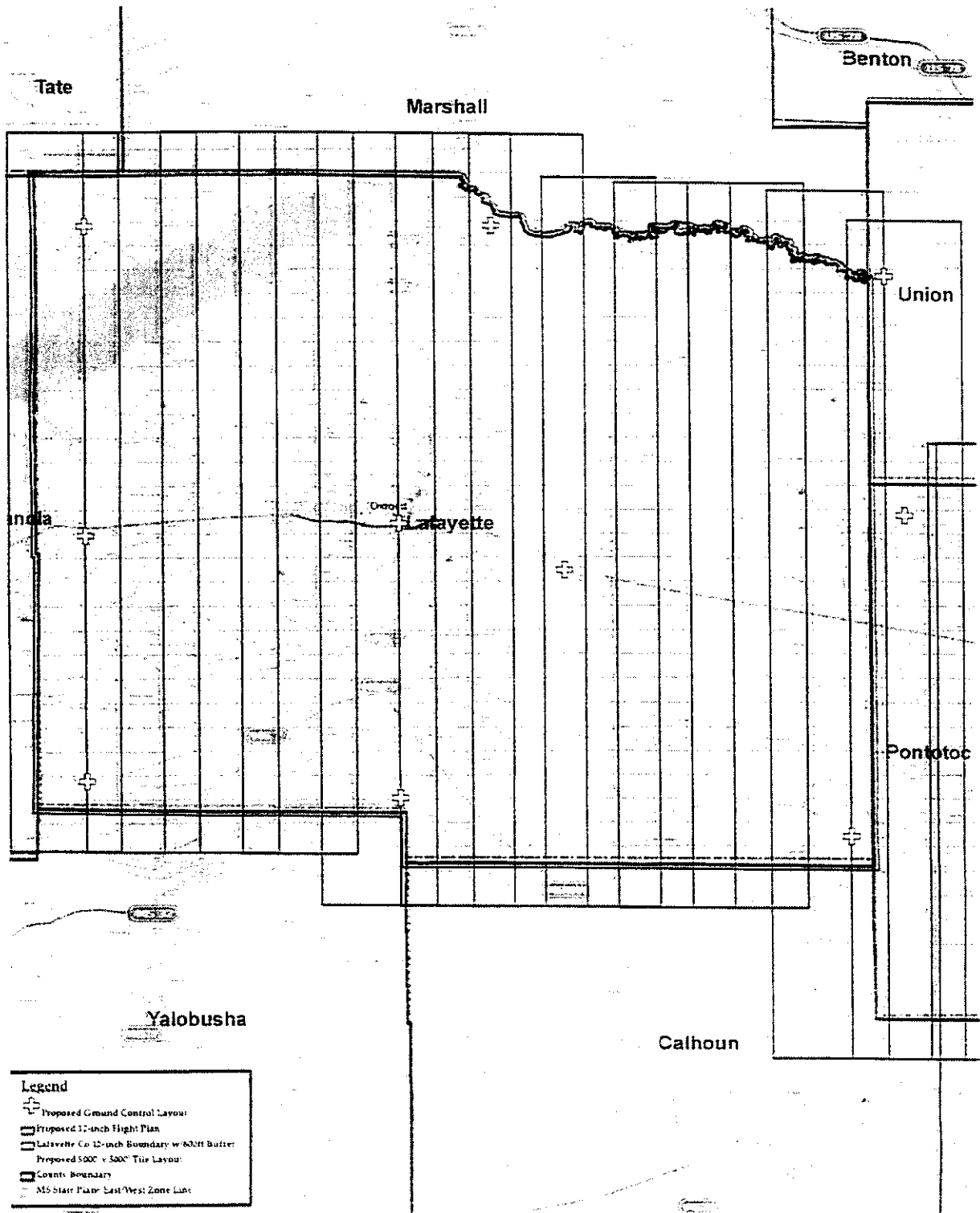
This FFP has been calculated based upon the areas to be mapped at the Ground Sampling Distance (GSD) as described within the contract documents and as graphically shown on the project flight and ground control plans; Exhibit B-1 and B-2.

This FFP has been computed by defining the entire land and water body area within the boundaries of Lafayette County and extending a buffer distance of a minimum of 800 feet beyond all county borders. The resultant total area has been computed as 697 square miles. This minimum area to be mapped has then been multiplied by the contract unit rate for the complete service of digital orthophoto data production and delivery of \$26 per square mile to obtain the resultant FFP of \$18,122. The towns within the County that have traditionally been mapped at 1'=100' are to be mapped with a six inch pixel and extending a buffer distance of a minimum of 300 feet beyond town mapped boundaries. The resultant town area has been computed as 15 square miles. This minimum area to be mapped with a six inch pixel has then been multiplied by the contract unit rate for the complete service of digital orthophoto data production and delivery of \$175 per square mile to obtain the resultant FFP of \$2,625.

The Consultant shall be paid on the basis of monthly work-in-progress invoices as described by contract Section IV. Monthly invoices may be computed a work-in-progress basis using the following percentages times the FFP:

1. 40% for the aerial acquisition phase (\$8,298.80).
2. 10% for the ground control and AT production/report phases (\$2,074.70).
3. 40% for production and delivery of Orthomimagery (\$8,298.80).
4. 10% retainage (\$2,074.70).

The retainage (#4, above) is to be invoiced and paid as one final single payment when the entire project is 100% complete and approved by the County.



NE - MS - 2014 Orthophotography Exhibit B-1  
Lafayette County, MS 12-inch Resolution

