



**OFFICE OF THE PURCHASING AGENT
COUNTY OF COOK**

118 NORTH CLARK ST. ROOM 1018
CHICAGO, ILLINOIS 60602-1375
(312) 603-5370

THIS PURCHASE ORDER NUMBER
MUST APPEAR ON ALL PACKAGES,
INVOICES, SHIPPING PAPERS AND
DROP SHIPMENTS.

PURCHASE ORDERED ISSUED TO
462219

Merrick & Company
2450 S Peoria St
Aurora CO 80014-5472

DATE
3/3/2010
F.O.B. POINT

PURCHASE ORDER NO.
171711 - 000- OP
REQUISITION NO.
00090171 OC

COOK COUNTY FEIN: 36-6006541
ILLINOIS SALES TAX EXEMPT: E-9998-2013-04
FEDERAL EXCISE TAX EXEMPT CERT: 36-75-D038K

SHIP TO Office Technology Geographical
Information System
69 W Washington St Ste 2700
Chicago IL 60602-1375

DELIVERY INSTRUCTIONS

Mary Jo Horace
312.603.1370

DEPT NO	
5450101	Page 1 of 1

LINE	FURNISH THE FOLLOWING SUPPLIES AND/OR SERVICE	QUANTITY/ UOM	UNIT PRICE	EXTENDED PRICE	ACCOUNT NUMBER
1.00	Aerial Ortholmagery Project 2010 - 2013 AERIAL IMAGERY PROJECT AS PER CONTRACT 10-41-09 AUTHORIZED BY COUNTY BOARD 01/26/2010 CONTRACT PERIOD 03/01/2010 THROUGH 02/28/2013 AMOUNT AUTHORIZED \$3,917,540.39 AMOUNT ENCUMBERED THIS PO \$1,248,358.48 BALANCE TO FOLLOW ON SEPARATE PO REQ05450004 REF RFP09-50-1061P	.00 LO	248,358.480	1,248,358.48	5450101.520835
***** Total Order *****				1,248,358.48	

NOTE: VENDOR AGREES NOT TO EXCEED THE QUANTITY OR DOLLAR AMOUNT OF THIS ORDER WITHOUT WRITTEN AUTHORIZATION FROM THE PURCHASING AGENT

RECEIPT CERTIFICATION (FOR DEPARTMENT USE ONLY)

I hereby certify that I have received the goods/services reflected above and that the items referenced are in full conformity with the purchase order/contract.

I hereby certify that this purchase is in agreement with the requisition on file authorizing the expenditure and is properly approved.

PURCHASING AGENT

Date:

Authorized Signature: _____

Date: _____

Constance Cole
3-3-10

Purchase Requisition
Office of the Purchasing Agent
Cook County of Illinois

2-5-10
11

Purchase Order Number

177711

Requisition # OC 90171 Contract # 10-41-09

Open Date

Ship To: 8001053 Office Technology Geographical Information System
69 W Washington St Ste 27
Chicago IL 60602-1375

Delivery Instructions: Mary Jo Horace
312.603.1370

Supplier: 462219 Merrick & Company
2450 S Peoria St
Aurora CO 80014-5472

Buyer Number 724150 Supervisor 40
Bid/Sole Src Code SSV
Business Unit 5450101
Internal Req Number 05450004
Board Apr Date & Item B.A. 01/28/10
Requisition Date 1/27/2010
Date Needed 1/27/2010

One Time Purchase Yes No Covers Need for months. Specific Period of time thru Prior Contract No. Expiration Date Emergency No.

Line # Commodity Description

Bal. on Hand

Quantity UOM

Est. Unit Cost

Extended Cost

Business Unit and Object Account

1,000 961 Aerial Orthoimagery Project

2010 - 2013

< >

LO

1,248,358.4800

1,248,358.48

5450101.520835

(3) Year project for Cook, DuPage, Kane, Kendall, Lake, McHenry and Will Counties. The seven county project for aerial imagery includes GPS ground control, aerial imagery, triangulation, prepare and update digital elevation model, rectify and mosaic digital ortho imagery, geodatabase design, FGDC metadata and project management. Time sensitive project is performed in the spring under "leaf-off" conditions. Contract period 03/01/10 through 02/28/2013. Amount awarded \$3,917,540.39 - Amount encumbered this PO \$1,248,358.48 and balance to follow separate POs.
REP #09-50-1061P

Total of Items Ordered 1,248,358.48

SOLE SOURCE

DATE TO BUYER/SPEC ENG: 2-5-10

DATE RETURNED TO SUPERVISOR 2-20-10
(S/B RETURNED FOR SIGN OFF BY THIS DATE)

CERTIFICATION

I hereby certify that the items and/or services above are necessary to this department (or institution) and that the dept. no., account & activity numbers indicated above accurately reflect the specific line item budget appropriation approved by the Board of County Commissioners and there is a sufficient unencumbered balance in the account to grant same.

CCA

APPROVED BUDGETARY ACCOUNT

ACCT #

DATE

BY

REQUISITIONER

BUREAU or DEPARTMENT HEAD

A. Barber

Mary Jo Horace

PURCHASING USE ONLY

10 FEB 1 2010

10 FEB 1 2010
PURCHASING USE ONLY
177711
10666
2/3

POST BOARD AGENDA

APPROVED BY THE BOARD OF COOK COUNTY COMMISSIONERS JAN 26 2010
--

BUREAU OF TECHNOLOGY**PROPOSED CONTRACT**

Transmitting a Communication, dated January 4, 2010 from

ANTONIO HYLTON, Chief Information Officer, Bureau of Technology

requesting authorization for the Purchasing Agent to enter into a contract with Merrick & Company, Aurora, Colorado, for an aerial imagery project for Cook, DuPage, Kane, Kendall, Lake, McHenry and Will counties. The seven (7) county project for aerial imagery includes GPS ground control, aerial imagery, triangulation, prepare and update digital elevation model, rectify and mosaic digital ortho imagery, geodatabase design, FGDC metadata and project management. This time sensitive project is performed in the spring under "leaf-off" conditions.

Reason: A regional Request for Proposal (RFP) was jointly developed by Cook, DuPage, Kane, Kendall, Lake, McHenry and Will counties for the selection of a company to perform aerial imagery for data acquisition and sharing at county borders. After the completion of the RFP process, the regional GIS workgroup has recommended Merrick & Company based on its ability to meet all technical specifications of the RFP.

Since Cook County has the largest, most complex territory in the region composing of dense urban areas, airports and shore line environments, it is acting as the lead government project manager for this initiative. Agencies which are able to contribute financially to this project are Cook, DuPage, Kane, Kendall and Lake counties, the Metropolitan Agency for Planning and the United States Geological Survey. Cook County beneficiaries of this project will be Cook County municipalities which provide vital operations involving first responders, emergency planners, remediation experts for homeland security, emergency management and disaster preparedness.

Estimated Fiscal Impact: \$3,917,540.39 (FY2010 - \$1,248,358.48; FY2011 - \$1,304,492.88; and FY2012 - \$1,364,689.03). Contract period: March 1, 2010 through February 28, 2013. (545-260 Account). Requisition No. 05450004.

Sufficient funds are available in the Geographical Information Systems fund.



TODD H. STROGER, PRESIDENT
BOARD OF COUNTY COMMISSIONERS

CARMEN K. TRICHE-COLVIN
PURCHASING AGENT

COUNTY OF COOK
OFFICE OF THE PURCHASING AGENT

118 NORTH CLARK STREET
CHICAGO, ILLINOIS 60602
(312) 603-5370

March 16, 2010

Merrick & Company
2450 S. Peoria Street
Aurora, CO 80014
Attn: Ralph Christie, Jr.

Ref: Contract No: 10-41-09

Enclosed please find your copy of the above referenced contract.

This contract has been approved by the Board of Commissioners and signed by the proper officials on behalf of Cook County.

Cordially,

A handwritten signature in black ink that reads "Carmen K. Triche-Colvin".

Carmen K. Triche-Colvin
Purchasing Agent

CKTC/cm

Enclosure

Cc: Steve Edmonson



CONTRACT FOR SERVICE

DOCUMENT NO. 10-41-09



RECEIVED
PURCHASING
10 FEB 17 11 14 AM

AERIAL IMAGERY PROJECT

FOR

THE BUREAU OF TECHNOLOGY - GIS Department *(CW)*

WITH: MERRICK & COMPANY

APPROVED BY BOARD OF
COOK COUNTY COMMISSIONERS

MAR 02 2010

COM _____

BOARD OF COMMISSIONERS
COUNTY OF COOK
TODD H. STROGER, PRESIDENT

ISSUED BY THE OFFICE OF THE PURCHASING AGENT

012610

REQ# 05450004

0210

2-9-10

CONTRACT FOR SERVICE
PART I

This CONTRACT is made and entered onto by and between the County of Cook, a public body corporate of the State of Illinois, hereinafter the "County" and MERRICK & COMPANY hereinafter the "Contractor", pursuant to authorization by the Cook County Board of Commissioners on the 26th day of January, 2010, as evidenced by the Board authorization letter attached hereto as EXHIBIT "A."

WHEREAS, the County is responsible for procuring services for the BUREAU OF TECHNOLOGY, hereinafter the "Using Department";

WHEREAS, the Using Department requires the following service; AERIAL IMAGERY PROJECT;

WHEREAS, the Contractor is able and willing to provide such services, hereafter referred to as the "Work Program" as required by the County, upon the terms and conditions hereinafter provided and in consideration for the fees set forth herein;

NOW THEREFORE, in consideration of the premises and the mutual undertakings herein set forth, the parties agree as follows:

I. WORK PROGRAM

The Contractor agrees to perform the following services:

AS SET FORTH IN EXHIBIT "B"

II. CONTRACT PERIOD

This contract shall be in effect for thirty-six (36) months after proper execution of the Contract documents by the County.

III. PAYMENT

All charges shall not exceed the amount of \$3,917,540.39 and shall be paid in accordance with Exhibit A. Invoices in triplicate on County Invoice Form 29A shall be submitted by the Contractor to the Using Department when requesting payment. The County shall have the right to examine the books of the Contractor for the purpose of auditing the same with reference to all charges made to the County.

In the event the Contractor receives payment under the Contract, reimbursement for which is later disallowed by the County, the Contractor shall promptly refund the disallowed amount to the County on request, or at the County's option, the County may credit the amount disallowed from the next payment due or to become due to the Contractor under any contract with the County.

IV. GENERAL CONDITIONS

This Contract incorporates and is subject to the provisions attached hereto as Part II, General Conditions, Contract for Service and is incorporated herein by this reference. Contractor's attention is specially directed to GC-02, Subcontracting or Assignment of Contract Funds.

V. EXHIBITS

This Contract incorporates the following Contractor Documentation:

1. EXHIBIT "B"

Notwithstanding such incorporation, none of the terms set forth in any Exhibit ~~which conflicts with the express terms of this Contract or its General~~ Conditions shall be deemed or construed to supersede the terms of this Contract or its General Conditions.

GENERAL CONDITIONS
SUPPLY/SERVICE
SOLE SOURCE

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**GENERAL CONDITIONS
SUPPLY/SERVICE
SOLE SOURCE**

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GC-01 SUBCONTRACTING OR ASSIGNMENT OF CONTRACT OR CONTRACT FUNDS

Once awarded, this Contract shall not be subcontracted or assigned, in whole or in part, without the advance written approval of the Purchasing Agent, which approval shall be granted or withheld at the sole discretion of the Purchasing Agent. In no case, however, shall such approval relieve the Contractor from its obligations or change the terms of the Contract. The Contractor shall not transfer or assign any Contract funds or any interest therein due or to become due without the advance written approval of the Purchasing Agent. The unauthorized subcontracting or assignment of the Contract, in whole or in part, or the unauthorized transfer or assignment of any Contract funds, either in whole or in part, or any interest therein, which shall be due or are to become due the Contractor shall have no effect on the County and are null and void.

Prior to the commencement of the Contract, the Contractor shall identify in writing to the Purchasing Agent the any and all subcontractors it intends to use in the performance of the Contract. The Purchasing Agent shall have the right to disapprove any subcontractor. Identification of subcontractors to the Purchasing Agent shall be in addition to any communications with County offices other than the Purchasing Agent. All subcontractors shall be subject to the terms of this Contract. Contractor shall incorporate into all subcontracts all of the provisions of the Contract which affect such subcontract. Copies of subcontracts shall be provided to the Purchasing Agent upon request.

The Contractor must disclose the name and business address of each subcontractor, attorney, lobbyist, accountant, consultant and any other person or entity whom the Contractor has retained or expects to retain in connection with the Matter, as well as the nature of the relationship, and the total amount of the fees paid or estimated to be paid. The Contractor is not required to disclose employees who are paid or estimated to be paid. The Contractor is not required to disclose employees who are paid solely through the contractor's regular payroll. "Lobbyist" means any person or entity who undertakes to influence any legislation or administrative action on behalf of any person or entity other than: (1) a not-for-profit entity, on an unpaid basis, or (2), himself. "Lobbyist" also means any person or entity any part of whose duties as an employee of another includes undertaking to influence any legislative or administrative action. If the Contractor is uncertain whether a disclosure is required under this Section, the Contractor must either ask the County, whether disclosure is required or make the disclosure.

The County reserves the right to prohibit any person from entering any County facility for any reason. All contractors and subcontractors of the Contractor shall be accountable to the Director of the Using Department or his designee while on any County property and shall abide by all rules and regulations imposed by the County.

GC-02 PERSONNEL

The quality, experience and availability of personnel employed by the Contractor is of the essence. The Contractor shall provide the County with a list of all key personnel to be used on the project and their designated assignment. The list shall include the qualifications of each person named. The County may at any time request, in writing, the Contractor to remove any of the Contractor's assigned personnel for cause and forthwith furnish to the County other acceptable personnel with thirty (30) days of notification. Notwithstanding the County's approval of Contractor's personnel, the Contractor shall be fully responsible to County for all work performed pursuant to this Contract by Contractor's employees, subcontractors or others who may be retained by the Contractor with the approval of the County.

GC-03 INSURANCE

Contractor shall purchase and maintain at all times during the term of this Contract insurance coverage which is satisfactory to the County and will satisfactorily insure the Contractor against claims and liabilities which arise or could arise because of the performance or nonperformance of the Contract. All insurance required hereunder shall meet the requirements of the County's Department of Risk Management and shall name the County as an additional insured unless such designation is unavailable due to commercial practices in the insurance industry as to a particular type of coverage. With the exception of certificates required to be submitted with the Proposal, Contractor shall deliver to the County satisfactory certificates evidencing compliance with this insurance provision prior to commencing performance under the Contract.

GC-04 INSPECTION AND RESPONSIBILITY

At any and at all times during the term of the Contract and at any location where the Contract is performed, the County shall have a right to inspect any Deliverables provided in carrying out this Contract. The Contractor shall be solely responsible for the quality and standards of all Deliverables furnished under this Contract. Deliverables may be rejected by the Purchasing Agent and/or the Director of the Using Department if they fail to meet Contract requirements or are provided in a manner which does not meet Contract requirements. In the event of such rejection, Deliverables shall be replaced and/or re-performed by the Contractor promptly and at no additional cost to the County. Any Deliverables rejected shall be removed within a reasonable time from the premises of the County at the entire expense of the Contractor, after notice has been given by the County to the Contractor that such Deliverables have been rejected.

GC-05 INDEMNIFICATION

The Contractor covenants and agrees to indemnify and save harmless the County and its commissioners, officials, employees, agents and representatives, and their respective heirs, successors and assigns, from and against any and all costs, expenses, attorney's fees, losses, damages and liabilities incurred or suffered directly or indirectly from or attributable to any claims arising out of or incident to the performance or nonperformance of the Contract by the Contractor, or the acts or omissions of the officers, agents, employees, contractors, subcontractors, licensees or invitees of the Contractor. The Contractor expressly understands and agrees that any Performance Bond or insurance protection required of the Contractor, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify the County as hereinabove provided.

GC-06 PAYMENT

All invoices submitted by the Contractor shall be in accordance with the cost provisions contained in the Contract Documents and shall contain a detailed description of the Deliverables for which payment is requested. All invoices shall reflect the amounts invoiced by and the amounts paid to the Contractor as of the date of the invoice, and shall be submitted together with a properly completed County Voucher form (29A). Invoices for new charges shall not include "past due" amounts, if any, which amounts must be set forth on a separate invoice. No payments shall be made with respect to invoices which do not include the County Voucher form or which otherwise fail to comply with the requirements of this paragraph. Contractor shall not be entitled to invoice the County for any late fees or other penalties.

GC-07 PREPAID FEES

In the event this Contract is terminated by either party, for cause or otherwise, and the County has prepaid for any Deliverables, Contractor shall refund to the County, on a prorated basis to the effective date of termination, all amounts prepaid for Deliverables not actually provided as of the effective date of the termination. The refund shall be made within fourteen (14) days of the effective date of termination.

GC-08 TAXES

Federal Excise Tax does not apply to materials purchased by the County by virtue of Exemption Certificate No. 36-75-0038K. Illinois Retailers' Occupation Tax, Use Tax and Municipal Retailers' Occupation Tax do not apply to deliverables, materials or services purchased by the County by virtue of statute. The price or prices quoted herein shall include any and all other federal and/or state, direct and/or indirect taxes which apply to this Contract. The County's State of Illinois Sales Tax Exemption Identification No. is E-9998-2013-05.

GC-09 PRICE REDUCTION

If at any time after the contract award, Contractor makes a general price reduction in the price of any of the Deliverables, the equivalent price reduction based on similar quantities and/or considerations shall apply to this Contract for the duration of the Contract period. For purposes of this Section GC-09, Price Reduction, a general price reduction shall include reductions in the effective price charged by Contractor by reason of rebates, financial incentives, discounts, value points or other benefits with respect to the purchase of the Deliverables. Such price reductions shall be effective at the same time and in the same manner as the reduction Contractor makes in the price of the Deliverables to its prospective customers generally.

GC-10 CONTRACTOR CREDITS

To the extent the Contractor gives credits toward future purchases of goods or services, financial incentives, discounts, value points or other benefits based on the purchase of the materials or services provided for under this Contract, such credits belong to the County and not any specific using department. Contractor shall reflect any such credits on its invoices and in the amounts it invoices the County.

GC-11 DISPUTES

Any dispute arising under the Contract between the County and Contractor shall be decided by the Purchasing Agent. The complaining party shall submit a written statement detailing the dispute and specifying the specific relevant Contract provision(s) to the Purchasing Agent. Upon request of the Purchasing Agent, the party complained against shall respond to the complaint in writing within five days of such request. The Purchasing Agent will reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor and the Director of the Using Department. The decision of the Purchasing Agent will be final and binding. Dispute resolution as provided herein shall be a condition precedent to any other action at law or in equity. However, unless a notice is issued by the Purchasing Agent indicating that additional time is required to review a dispute, the parties may exercise their contractual remedies, if any, if no decision is made within sixty (60) days following notification to the Purchasing Agent of a dispute. No inference shall be drawn from the absence of a decision by the Purchasing Agent. Notwithstanding a dispute, Contractor shall continue to discharge all its obligations, duties and responsibilities set forth in the Contract during any dispute resolution proceeding unless otherwise agreed to by the County in writing.

GC-12 DEFAULT

Contractor shall be in default hereunder in the event of a material breach by Contractor of any term or condition of this Contract including, but not limited to, a representation or warranty, where Contractor has failed to cure such breach within ten (10) days after written notice of breach is given to Contractor by the County, setting forth the nature of such breach.

In the event Contractor shall breach any material terms or conditions of this Contract on more than one occasion during any twelve month period during the term hereof, or in the event Contractor expresses an unwillingness or inability to continue performing the Contract in accordance with its terms, the County may, at its option, declare the Contractor to be in default and the County shall be entitled to exercise all available remedies including, but not limited to, termination of the Contract, without affording the Contractor further opportunity to cure such breach. Failure of County to give written notice of breach to the Contractor shall not be deemed to be a waiver of the County's right to assert such breach at a later time, should the Contractor commit a subsequent breach of this Contract.

County shall be in default hereunder if any material breach of the Contract by County occurs which is not cured by the County within ninety (90) days after written notice has been given by Contractor to the County, setting forth the nature of such breach.

GC-13 COUNTY'S REMEDIES

Following notice of material breach to Contractor, the County reserves the right to withhold payments otherwise owed to Contractor until such time as Contractor has cured the breach.

If the Contractor fails to remedy a material breach during the ten (10) day cure period pursuant to General Condition GC-12, Default, or if Contractor commits a subsequent material breach within a twelve month period or expresses an unwillingness or inability to continue performing the Contract in accordance with its terms, the County shall have the right to terminate this Contract upon written notice to the Contractor which shall set forth the effective date of such termination.

In addition, the County shall have the right to pursue all remedies in law or equity.

GC-14 CONTRACTOR'S REMEDIES

If the County has been notified of breach and fails to remedy the breach during the ninety(90) day cure period pursuant to General Condition GC-12, Default, the Contractor shall have the right to terminate this Contract upon not less than thirty (30) days prior written notice to the County, which notice shall set forth the effective date of termination.

Contractor shall have the right to pursue all remedies available in law or equity. In all cases the Contractor's damages shall be those actual provable damages not to exceed the amount of the Contract as awarded by the Cook County Board of Commissioners less all amounts paid to Contractor. In no event shall Contractor be entitled to any consequential damages. Irrespective of the exercise of remedies hereunder, Contractor shall not disrupt the County's operations or repossess any component thereof.

GC-15 DELAYS

Contractor agrees that no charges or claims for damages shall be made by Contractor for any delays or hindrances from any cause whatsoever during the progress of any portion of this Contract.

GC-16 MODIFICATIONS AND AMENDMENTS

The parties may from time to time during the term of the Contract make modifications and amendments to the Contract but only as provided in this section. Such modifications and amendments shall only be made by mutual agreement in writing. Modifications and amendments which individually or cumulatively result in additional cost of \$1,000.00 or greater or which extend the term of the Contract by thirty (30) days or more shall not be deemed as authorized without the approval of the Cook County Board of Commissioners. Modifications and amendments which increase cost by less than \$1,000.00 or which do not extend the term of the Contract by more than thirty (30) days may only be made with the written approval of the Purchasing Agent.

Subject to the foregoing, the Director of the Using Department may, by written order, make changes with respect to the dates of delivery and places of performance of the Contract, provided that any such changes shall not increase the Contract price or the time required for Contract performance.

Contractor is hereby notified that, except for modifications and amendments which are made in accordance with this Section GC-16, Modifications and Amendments, no County department or employee thereof has authority to make any modification or amendment to this Contract.

GC-17 PATENTS, COPYRIGHTS AND LICENSES

Contractor shall furnish the Director of the Using Department with all licenses required for the County to utilize any software, including firmware or middleware, provided by Contractor as part of the Deliverables. Such licenses shall be clearly marked with a reference to the number of this County Contract. Contractor shall also furnish a copy of such licenses to the Purchasing Agent. Unless otherwise stated in these Contract documents, such licenses shall be perpetual and shall not limit the number of persons who may utilize the software on behalf of the County.

Contractor agrees to hold harmless and indemnify the County, its officers, agents, employees and affiliates from and defend, at its own expense (including reasonable attorneys', accountants' and consultants' fees), any suit or proceeding brought against County based upon a claim that the ownership and/or use of equipment, hardware and software or any part thereof provided to the County or utilized in performing Contractor's services constitutes an infringement of any patent, copyright or license or any other property right.

In the event the use of any equipment, hardware or software or any part thereof is enjoined, Contractor with all reasonable speed and due diligence shall provide or otherwise secure for County, at the Contractor's election, one of the following: the right to continue use of the equipment, hardware or software; an equivalent system having the Specifications as provided in this Contract; or Contractor shall modify the system or its component parts so that they become non-infringing while performing in a substantially similar manner to the original system, meeting the requirements of this Contract.

GC-18 COMPLIANCE WITH THE LAWS

The Contractor shall observe and comply with the laws, ordinances, regulations and codes of the Federal, State, County and other local government agencies which may in any manner affect the performance of the Contract including, but not limited to, those County Ordinances set forth in the Certifications attached hereto and incorporated herein. Assurance of compliance with this requirement by the Contractor's employees, agents or subcontractors shall be the responsibility of the Contractor.

The Contractor shall secure and pay for all federal, state and local licenses, permits and fees required hereunder.

GC-19 MINORITY AND WOMEN BUSINESS ENTERPRISES
COOK COUNTY ORDINANCE CHAPTER 10-43.7 PROFESSIONAL AND CONSULTING
SERVICE AND SOLE SOURCE

I. POLICY AND GOALS

- A. It is the policy of the County of Cook to prevent discrimination in the award of or participation in the County contracts and to eliminate arbitrary barriers for participation, as both prime and subcontractors, in such contracts by local businesses certified as Minority Business Enterprises (MBE) and Women-Owned Business Enterprises (WBE). In furtherance of this policy, the Cook County Board of Commissioners has adopted a Minority-and-Women-Owned Business Enterprise Ordinance (the "Ordinance") which establishes a "best efforts" goal of awarding not less than thirty-five percent (35%) of the annual total dollar amount of professional, consulting service and sole source contracts and agreements to certified MBEs and WBEs.
- B. A Proposer may achieve the MBE/WBE participation goals by its status as a MBE or WBE; by entering into a joint venture with one or more MBEs and/or WBEs; by subcontracting a portion of the work to one or more MBEs or WBEs; by entering into a Mentor-Protégé Agreement with a MBE or WBE; by the indirect participation of MBEs or WBEs in other aspects of the Proposer's business; or by a combination of the foregoing.
- C. A Waiver Request must be submitted with the Proposal, documenting the inability of the Proposer to meet the goals, and providing written evidence of "Good Faith Efforts," to obtain goals.
- D. A Proposer's failure to carry out its MBE/WBE commitments in the course of performance on a contract shall constitute a material breach of the contract, and if such breach is not appropriately cured, may result in the termination of the contract or such other remedies authorized by the Ordinance as the County deems appropriate.

II. REQUIRED SUBMITTALS

To be considered responsive to the requirements of the Ordinance, a Proposer shall submit Items A, B and C listed below. All documentation submitted shall be reviewed by the Contract Compliance Administrator. Failure to submit one of the items required shall be cause to consider a contract non-responsive to the Ordinance goals and may be rejected.

A. MBE/WBE Participation Documentation

Each Proposer shall submit supporting documentation which evidences efforts taken to achieve the County's "best efforts" MBE/WBE participation goals. Such documentation shall include:

1. A Utilization Plan identifying all firms intended to be utilized to fulfill the goals; the MBE/WBE status of each firm; the name, address, e-mail address and telephone number of the contact person for each MBE/WBE firm; the dollar value of the goods and services to be provided by the MBE/WBE firm; and the dollar value expressed as a percentage (%) of the total value of the purposed contract. (See Section I)

GC-19 MINORITY AND WOMEN BUSINESS ENTERPRISES
COOK COUNTY ORDINANCE CHAPTER 10-43.7 PROFESSIONAL AND CONSULTING
SERVICE AND SOLE SOURCE (CON'T.)

2. A Letter of Intent for each MBE/WBE containing specific information regarding goods to be provided or services to be performed by the MBE/WBE; the dollar value of the goods or services, the percentage (%) of the dollar value; and the original signatures of the appropriate officer for both the Proposer and the MBE/WBE. (See Exhibit II)
3. Current Letter of Certification for each MBE/WBE firm. Acceptable certifying agencies are: Cook County, Illinois Unified Certification Program (IUCP) and U. S. Small Business Administration. (SBA) (8A) or any other governmental body or agency approved by the Contract Compliance Administrator as applying certification standards substantially similar to those applied by the County of Cook may also be accepted.
4. Waiver/Goal Reduction Petition must be included at the time of the submission of the Proposal document. Where the Proposer does not include all documentation in support of the Petition at the time of submission, such documentation must be submitted to the Office of Contract Compliance not less than three (3) business days after the submission date.

The Contract Compliance Administrator retains the right to reject the certification of any MBE or WBE on the ground that it does not meet the County's definition of a MBE or WBE.

B. Use of MBE/WBE Professionals

Each Proposer shall submit with its proposal, a statement which discloses how it intends to maximize the use of minority and women professionals in the course of performing the contract.

C. Affirmative Action Plan

Each Proposer shall submit a copy of its current EEO-1 Report and a copy of its current Letter of Compliance from the United States Department of Labor, Office of Federal Contract Compliance Programs. Absent a Letter from OFCCP, the Proposer shall submit a written report of the inclusion of minority and women professional in the workforce of their company.

III. NON-COMPLIANCE

Where the County of Cook determines that the Proposer has failed to comply with its contractual commitments or any portion of the Ordinance, it will notify the contractor of such non-compliance and may take any and all appropriate actions as set forth within the Ordinance.

GC-19 MINORITY AND WOMEN BUSINESS ENTERPRISES
COOK COUNTY ORDINANCE CHAPTER 10-43.7 PROFESSIONAL AND CONSULTING
SERVICE AND SOLE SOURCE (CONT.)

IV. REPORTING/RECORD KEEPING REQUIREMENTS

~~The Proposer is required to comply with the reporting and record-keeping requirements as set forth in the Ordinance and as established by the Contract Compliance Administrator. Upon award of a contract, The Proposer is responsible for acquiring all necessary Office of Contract Compliance reporting and record-keeping forms as made available in the Office of Contract Compliance~~

The Office of Contract Compliance will notify each Contractor and Sub-Contractor upon award of a contract of their reporting obligations (Vendor Notification Letter)

The Office of Contract Compliance will notify each MBE/WBE Sub-Contractor of the award of a contract to a Prime Contractor, the MBE/WBE dollar amount of participation and the percentage (%) amount of participation. The Sub-Contractors will be required to submit on a timely basis, Sub-Contractors Payment Affidavits (see forms section) with proof of payment or money paid to them by the Prime Contractor.

The Office of Contract Compliance requests payment affidavits and proof of payment to MBE/WBE Sub-Contractors as follows:

1. **Annual Contracts:** monthly reporting from both Prime and Sub-Contractors.
2. **Multi Year Contracts:** quarterly reporting from both Prime and Sub-Contractors including proof of payments.
3. **One time purchases** require verification of proof of payment immediately.

Failure to comply with this section will be reviewed as non-compliance as stated under Section III. Non-Compliance.

V. EQUAL EMPLOYMENT OPPORTUNITY

Compliance with MBE and WBE requirements will not diminish or supplant Equal Employment Opportunity and Civil Rights provisions as otherwise required by law as they relate to contractor and subcontractor obligations.

Any questions regarding this document should be directed to:

Betty Hancock Perry
Administrator
Cook County Office of Contract Compliance
118 N. Clark Street - Room 1020
Chicago, Illinois 60602
(312)603-5502

GC-20 MATERIAL DATA SAFETY SHEET

Where required under the Illinois "Toxic Substance Disclosure To Employees Act", Illinois Compiled Statutes, 2002, 820 ILCS 255/1, Contractor shall submit with each delivery of Deliverables, a Material Safety Data Sheet.

GC-21 CONDUCT OF THE CONTRACTOR

The Contractor agrees to inform the County on a timely basis of all of the Contractor's interests, if any, which are or which the Contractor reasonably believes may be incompatible with any interest of the County. The Contractor shall take notice of and comply with the Cook County Lobbyist Registration Ordinance (No. 93-0-22, 6-22-93). Neither the Contractor nor any of its employees, agents or subcontractors shall use for business or personal gain, or make other improper use of, confidential information which is acquired in connection with the Contract. To the extent Contractor will have access to the County's protected health information in performing its responsibilities under this Contract, Contractor shall contact the Chief Privacy Officer for the Using Department(s) and shall execute the County's business associate agreement prior to performing any responsibilities which involve access to protected health information.

GC-22 ACCIDENT REPORTS

Contractor shall provide the Purchasing Agent and the Director of the Using Department with prompt written notification (no later than twenty-four (24) hours) of any occurrence, on County premises or otherwise, which pertains in any way to this Contract and which results in either bodily injury to employees or third parties or property damage. The report shall include the name of person(s) injured, if any; name of the injured person's employer, if any; the date, time and location of the occurrence; description of the extent of injury and/or damage; the name(s) of witnesses; the names of any providers known to have provided treatment for injuries sustained; and such other information as may be required by the County. The Contractor shall notify the local police regarding any occurrence requiring an official police record. The report submitted to the County should indicate whether the police were notified and, if so, the number of the police report.

GC-23 USE OF COUNTY PREMISES AND RESOURCES

Contractor shall confer with the Director of the Using Department to ascertain full knowledge of all rules and regulations of the County facilities relative to this Contract and shall cause all of its employees, agents and subcontractors to comply therewith. The Contractor shall confine the operations of its employees, agents and subcontractors on County premises to the performance of the Contract consistent with limits indicated by laws, ordinances, permits and/or direction of the Director of the Using Department and shall not encumber the premises with materials or debris. In performing the Contract, the Contractor shall not cause or permit a condition that endangers the safety of others and shall not load or permit any part of a structure to be loaded with a weight that will endanger the safety of the structure or any persons.

GC-24 TERMINATION FOR CONVENIENCE AND SUSPENSION OF CONTRACT

The County may terminate this Contract, or any portion, at any time by notice in writing from the County to the Contractor. Unless otherwise stated in the notice, the effective date of such termination shall be three business days after the date the notice of termination is mailed by the County. If the County elects to terminate the Contract in full, unless otherwise specified in the notice of termination, the Contractor shall immediately cease performance and shall promptly tender to the County all Deliverables, whether completed or in process. If the County elects to terminate the Contract in part, unless otherwise specified in the notice of partial termination, the Contractor shall immediately cease performance of those portions of the Contract which are terminated and shall promptly tender to the County all Deliverables relating to said portions of the Contract, whether completed or in process. Contractor shall refrain from incurring any further costs with respect to portions of the Contract which are terminated except as specifically approved by the Purchasing Agent.

GC-25 GENERAL NOTICE

All notices required pursuant to this Contract shall be in writing and addressed to the parties at their respective addresses set forth below. All such notices shall be deemed duly given if hand delivered or if deposited in the United States mail, postage prepaid, registered or certified, return receipt requested. Notice as provided herein does not waive service of summons or process.

TO THE COUNTY:

COOK COUNTY PURCHASING AGENT
118 North Clark Street, Room 1018
Chicago, Illinois 60602
(Include County Contract Number in all notices)

TO THE CONTRACTOR:

At address provided on the Execution Pages or as otherwise indicated in writing to County Purchasing Agent in a written document which, in bold face type, references the name of the Contractor, the County Contract Number and states "NOTIFICATION OF CHANGE IN ADDRESS."

GC-26 GUARANTEES AND WARRANTIES

The Contractor shall furnish all guarantees and warranties applicable to the Deliverables to the Director of the Using Department prior to or at the time of delivery. All Deliverables shall be covered by the most favorable commercial warranties and guarantees the Contractor gives to any customer for the same or substantially similar Deliverables or Services. The rights and remedies so provided shall be in addition to and shall not limit any rights afforded to County under this Contract.

To the extent Contractor provides Deliverables manufactured by another entity, Contractor shall transfer original product warranty and any rights to manufacturer's related services to the County and shall submit all appropriate documentation of said transfer to the Director of the Using Department prior to or at the time the Contractor tenders the Deliverables.

GC-27 STANDARD OF DELIVERABLES

Except as may be expressly stated in the Special Conditions or Specifications of this Contract, only new, originally manufactured Deliverables will be accepted by the County. The County will not accept any Deliverables that have been refurbished, rebuilt, restored or renovated in any manner. In addition, experimental materials will not be acceptable. Deliverables not produced by regular production methods and/or which have not been offered for sale to the public through accepted industry trade channels for a reasonable period of time prior to the commencement of the Contract will be considered experimental.

GC-28 DELIVERY

All Contract Goods shipped to the County shall be shipped F.O.B., DESTINATION, FREIGHT PREPAID. Arrangements shall be made in advance by the Contractor in order that the County may arrange for receipt of the materials.

Truck deliveries will be accepted before 3:00 P.M. on weekdays only. No deliveries will be accepted on Saturdays, Sundays or County Holidays. ~~The County is not responsible for delivery delays due to waiting times for loading and unloading at dock locations.~~

The quantity of Contract Goods delivered by truck will be ascertained from a weight certificate issued by a duly licensed Public Weight-Master. In the case of delivery by rail, weight will be ascertained from bill of lading from originating line, but the County reserves the right to re-weigh at the nearest available railroad scale.

The County reserves the right to add new delivery locations or delete previously listed delivery locations as required during the Contract period. The only restriction regarding the County's right to add new delivery locations shall be that any new or additional location shall be within the geographical boundaries of the County of Cook.

GC-29 QUANTITIES

Any quantities of indicated in the Proposal Pages for the performance of the Contract are estimates for the purpose of determining an approximate total Contract amount and may not be the actual quantities required by the County during the term of the Contract. The County reserves the right to increase or decrease such quantities at the Contract price to correspond to the actual needs of the County. If the County increases the quantities required, any such increase shall be subject to an agreed written amendment in the Contract Amount. The County will be obligated to order and pay for only such quantities as are from time to time ordered, delivered, and accepted on purchase orders issued by the Purchasing Agent.

GC-30 CONTRACT INTERPRETATION

Whenever the singular is used herein, the masculine, feminine and neuter gender shall be deemed to include the others. The headings of articles, paragraphs and sections in this Contract are included for convenience only and shall not be considered by either party in construing the meaning of this Contract. If any provision or clause of this Contract shall be held to be invalid, such provision or clause shall be deleted from the Contract and the Contract shall be construed to give effect to the remaining portions thereof.

This Contract shall be interpreted and construed based upon the following order of precedence of component parts. Such order of precedence shall govern to resolve all cases of conflict, ambiguity or inconsistency.

1. Addenda, if any.
2. Execution Forms
3. Specification.
4. Special Conditions.
5. General Conditions.
6. Instruction to Bidders.
7. Legal Advertisement.
8. Bid Proposal.

GC-31 CONFIDENTIALITY AND OWNERSHIP OF DOCUMENTS

Contractor acknowledges and agrees that information regarding this Contract is confidential and shall not be disclosed, directly, indirectly or by implication, or be used by Contractor in any way, whether during the term of this Contract or at any time thereafter, except solely as required in the course of Contractor's performance hereunder. Contractor shall comply with the applicable privacy laws and regulations affecting County and will not disclose any of County's records, materials, or other data to any third party. Contractor shall not have the right to compile and distribute statistical analyses and reports utilizing data derived from information or data obtained from County without the prior written approval of County. In the event such approval is given, any such reports published and distributed by Contractor shall be furnished to County without charge.

All documents, data, studies, reports, work product or product created as a result of the performance of the Contract (the "Documents") shall be included in the Deliverables and shall be the property of the County of Cook. It shall be a breach of this Contract for the Contractor to reproduce or use any documents, data, studies, reports, work product or product obtained from the County of Cook or any Documents created hereby, whether such reproduction or use is for Contractor's own purposes or for those of any third party. During the performance of the Contract Contractor shall be responsible of any loss or damage to the Documents while they are in Contractor's possession, and any such loss or damage shall be restored at the expense of the Contractor. The County and its designees shall be afforded full access to the Documents and the work at all times.

GC-32 AUDIT; EXAMINATION OF RECORDS

The Contractor agrees that the Cook County Auditor or any of its duly authorized representatives shall, until expiration of three (3) years after the final payment under the Contract, have access and the right to examine any books, documents, papers, canceled checks, bank statements, purveyor's and other invoices, and records of the Contractor related to the Contract, or to Contractor's compliance with any term, condition or provision thereof. The Contractor shall be responsible for establishing and maintaining records sufficient to document the costs associated with performance under the terms of this Contract.

The Contractor further agrees that it shall include in all of its subcontracts hereunder a provision to the effect that the subcontractor agrees that the Cook County Auditor or any of its duly authorized representatives shall, until expiration of three (3) years after final payment under the subcontract, have access and the right to examine any books, documents, papers, canceled checks, bank statements, purveyor's and other invoices and records of such subcontractor involving transactions relating to the subcontract, or to such subcontractor's compliance with any term, condition or provision thereunder or under the Contract.

In the event the Contractor receives payment under the Contract, reimbursement for which is later disallowed by the County, the Contractor shall promptly refund the disallowed amount to the County on request, or at the County's option, the County may credit the amount disallowed from the next payment due or to become due to the Contractor under any contract with the County.

GC-32 AUDIT; EXAMINATION OF RECORDS (CON'T.)

To the extent this Contract pertains to Deliverables which may be reimbursable under the Medicaid or Medicare Programs, Contractor shall retain and make available upon request, for a period of four (4) years after furnishing services pursuant to this Agreement, the contract, books, documents and records which are necessary to certify the nature and extent of the costs of such services if requested by the Secretary of Health and Human Services or the Comptroller General of the United States or any of their ~~duly authorized representatives. If Contractor carries out any of its duties under the Agreement through a~~ subcontract with a related organization involving a value of cost of \$10,000.00 or more over a 12 month period, Contractor will cause such subcontract to contain a clause to the effect that, until the expiration of four years after the furnishing of any service pursuant to said subcontract, the related organization will make available upon request of the Secretary of Health and Human Services or the Comptroller General of the United States or any of their duty authorized representatives, copies of said subcontract and any books, documents, records and other data of said related organization that are necessary to certify the nature and extent of such costs. This paragraph relating to the retention and production of documents is included because of possible application of Section 1861(v)(1)(I) of the Social Security Act to this Agreement; if this Section should be found to be inapplicable, then this paragraph shall be deemed inoperative and without force and effect.

GC-33 GOVERNING LAW

This Contract shall be governed by and construed under the laws of the State of Illinois. The Contractor irrevocably agrees that, subject to the County's sole and absolute election to the contrary, any action or proceeding in any way, manner or respect arising out of the Contract, or arising from any dispute or controversy arising in connection with or related to the Contract, shall be litigated only in courts within the Circuit Court of Cook County in the City of Chicago, County of Cook, State of Illinois, and the Contractor consents and submits to the jurisdiction thereof. In accordance with these provisions, Contractor waives any right it may have to transfer or change the venue of any litigation brought against it by the County pursuant to this Contract.

GC-34 WAIVER

No term or provision of this Contract shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. The waiver of any such provision shall be strictly limited to the identified provision.

GC-35 ENTIRE CONTRACT

It is expressly agreed that the provisions set forth in this Contract constitute all the understandings and agreements between the parties. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Contract are of no force and effect.

GC-36 FORCE MAJEURE OR UNAVOIDABLE DELAYS

Neither Contractor nor County shall be liable for failing to fulfill any obligation under this Contract if such failure is caused by an event beyond such party's reasonable control which is not caused by such party's fault or negligence. Such events shall be limited to acts of God, acts of war, fires, lightning, floods, epidemics, or riots.

GC-37 INDEPENDENT CONTRACTOR STATUS; NO THIRD PARTY BENEFICIARIES

The Contractor and its employees, agents and subcontractors are, for all purposes arising out of the Contract, independent contractors and not employees of the County. It is expressly understood and agreed that neither the Contractor nor Contractor's employees, agents or subcontractors shall be entitled to any benefit to which County employees may be entitled including, but not limited to, overtime or unemployment compensation, insurance or retirement benefits, workers' compensation or occupational disease benefits or other compensation or leave arrangements.

Nothing contained herein shall be deemed or construed by the parties hereto, or by any third party, as creating the relationship or principal and agent or of partnership or of joint venturer or any relationship between the parties hereto other than that of independent contractors. Nothing herein shall be construed to confer upon any third parties the status of third party beneficiary.

GC-38 COOPERATION WITH INSPECTOR GENERAL

Persons or businesses seeking County contracts are required to abide by all of the applicable provisions of the Office of the Independent Inspector General Ordinance (Section 2-281 et. seq. of the Cook County Code of Ordinances). Failure to cooperate as required may result in monetary and/or other penalties.

Contractors, subcontractors, licensees, grantees or persons or businesses who have a County contract, grant, license, or certification of eligibility for County contracts shall abide by all of the applicable provisions of the Office of the Independent Inspector General Ordinance. Failure to cooperate as required may result in monetary and/or other penalties.

END OF SECTION

SPECIFICATIONS AND AGREEMENT

The undersigned declares that he has carefully examined the Agreement Form, General and Special Conditions and Specifications identified as Contract Document Number 10-41-09 AERIAL IMAGERY PROJECT for the BUREAU OF TECHNOLOGY, as prepared by Cook County, and that he has familiarized himself with all of the conditions under which it must be carried out and understands that by this agreement he waives all right to plead any misunderstanding regarding the same.

<u>ITEM NO.</u>	<u>UNIT OF MEASURE</u>	<u>QTY</u>	<u>DESCRIPTION</u>
1.	JOB	1	AERIAL IMAGERY PROJECT , AS PER EXHIBIT "B" HEREIN.
			<u>\$3,917,540.39/JOB</u>
			<u>\$3,917,540.39/TOTAL</u>

GRAND TOTAL

NOT TO EXCEED: \$3,917,540.39

NOTE: DO NOT SERVICE UNTIL NOTIFIED BY DEPARTMENT.

CONTRACT PERIOD: MARCH 01, 2010 THROUGH FEBRUARY 28, 2013

CONTRACT 10-41-09

EXHIBIT "A"

POST BOARD AGENDA

APPROVED
BY THE BOARD OF COOK COUNTY COMMISSIONERS
JAN 26 2010

BUREAU OF TECHNOLOGY**PROPOSED CONTRACT**

Transmitting a Communication, dated January 4, 2010 from

ANTONIO HYLTON, Chief Information Officer, Bureau of Technology

requesting authorization for the Purchasing Agent to enter into a contract with Merrick & Company, Aurora, Colorado, for an aerial imagery project for Cook, DuPage, Kane, Kendall, Lake, McHenry and Will counties. The seven (7) county project for aerial imagery includes GPS ground control, aerial imagery, triangulation, prepare and update digital elevation model, rectify and mosaic digital ortho imagery, geodatabase design, FGDC metadata and project management. This time sensitive project is performed in the spring under "leaf-off" conditions.

Reason: A regional Request for Proposal (RFP) was jointly developed by Cook, DuPage, Kane, Kendall, Lake, McHenry and Will counties for the selection of a company to perform aerial imagery for data acquisition and sharing at county borders. After the completion of the RFP process, the regional GIS workgroup has recommended Merrick & Company based on its ability to meet all technical specifications of the RFP.

Since Cook County has the largest, most complex territory in the region composing of dense urban areas, airports and shore line environments, it is acting as the lead government project manager for this initiative. Agencies which are able to contribute financially to this project are Cook, DuPage, Kane, Kendall and Lake counties, the Metropolitan Agency for Planning and the United States Geological Survey. Cook County beneficiaries of this project will be Cook County municipalities which provide vital operations involving first responders, emergency planners, remediation experts for homeland security, emergency management and disaster preparedness.

Estimated Fiscal Impact: \$3,917,540.39 (FY2010 - \$1,248,358.48; FY2011 - \$1,304,492.88; and FY2012 - \$1,364,689.03). Contract period: March 1, 2010 through February 28, 2013. (545-260 Account). Requisition No. 05450004.

Sufficient funds are available in the Geographical Information Systems fund.

CONTRACT 10-41-09

EXHIBIT "B"



SECTION 6: COST PROPOSAL

Request for Proposal No. 09-50-1061P

ATTACHMENT D: COST PROPOSAL FORM

The Proposer declares that it has carefully examined the Request for Proposal documents, the Proposal Forms, General and Special Conditions and Specifications for **ORTHO AERIAL 2010-12 -IMAGERY PROJECT** as prepared by Cook County and has become familiar with all of the conditions under which it must be carried out and understands that by submitting proposed pricing on these pages, Proposer waives all right to plead any misunderstanding regarding the same.

Project Management (Including, if any, site visits, data handling, overhead, etc.	\$ 55,915.29	\$ 58,341.01	\$ 60,888.02	\$ 175,144.32
Control Survey	\$ 96,996.00	\$ 99,938.31	\$ 102,970.43	\$ 299,904.74
Aerial Source Imagery	\$ 411,093.44	\$ 435,682.01	\$ 461,744.25	\$ 1,308,519.71
Aerotriangulation	\$ 85,250.91	\$ 90,332.71	\$ 95,719.25	\$ 271,302.87
Orthorectified Imagery, DEM	\$ 595,403.86	\$ 616,370.28	\$ 638,117.28	\$ 1,849,891.43
Geodatabase Design	\$ 1,948.69	\$ 2,044.32	\$ 2,144.73	\$ 6,137.74
Metadata	\$ 1,750.27	\$ 1,784.24	\$ 3,105.07	\$ 6,639.58
Grand Total	\$ 1,248,358.48	\$ 1,304,492.88	\$ 1,364,689.03	\$ 3,917,540.39

DELIVERY/SERVICE DATE: Approximately 365 calendar days
 (NUMBER OF CALENDAR DAYS AFTER AWARD OF RFP)

All fees are listed should be considered Lump Sum (fixed fee), and are based on domestic pricing.

Merrick would invoice Cook County on a monthly basis based on a percent complete for each required task.



SECTION 3: PROPOSED SOLUTION

The following outline provides a description of the significant procedures/milestones that will occur throughout the project.

3.1 Phase One: Project Initiation

3.1.1 Project Implementation

A project kick-off meeting will be held between Cook County and Merrick & Company (Merrick) to review all technical and administrative aspects of the project. We recommend that the format of this meeting be a "hands-on" workshop environment to facilitate the exchange of quality information. To assist Cook County, Merrick will present data from a similar GIS project.

Prior to the kick-off meeting, Cook County will be provided an agenda for the meeting. The specific topics to be addressed include:

- Review the proposed flight and ground control scheme and modify as necessary to meet project requirements
- Brief Cook County on digital aerial imagery acquisition issues such as flight plan, safety, accuracy, etc.
- Discuss TRACON coordination plans
- Discuss/review tiling requirements
- Review accuracy requirements
- Review project control items such as projection, datums and units
- Review Merrick's QA/QC procedures
- Define the location of the pilot project area
- Determine acceptance criteria for all deliverable products
- Identify points of contact and develop communication protocol
- Develop Project Status Report requirements
- Review invoicing procedures (e.g., Voucher Form 29A)

Following the kick-off meeting, a detailed memorandum will be forwarded to the Cook County project manager to clarify and document the decisions and discussion items of the kick-off meeting.

Following the technical section, there are also additional sections that outline Merrick's specific quality control procedures, project management philosophy, project deliverables, and client-provided products for this project.

3.1.1.1 Project Setup

In order to prepare the initial start-up documentation, all of the items discussed during the kick-off meeting will be resolved.

Merrick's project manager will develop internal, project-specific documentation as a reference for the production staff. This Project Summary outlines the scope of work, project specifications, deliverables, project schedule, technical procedures, and the quality assurance plan.

A kick-off meeting with Merrick's project manager and key production staff is held to review all aspects of the project.



Merrick prepares its production facility for the project. The primary tasks that are integrated in preparation of beginning the project are:

- Scheduling of resources (equipment and personnel)
- Customizing in-house software tools, as necessary
- Customizing QC checklists for each department specific to this project

A project of this magnitude requires a start-up period of approximately two (2) weeks. Once the information is gathered and/or tested, the team is ready to begin the next step of the project.

Ground Control

Merrick will establish one hundred sixty (160) new control points throughout the project area. These ground control points, in conjunction with Airborne GPS control, will support the accuracy requirements of the project. See Figure 1 for the extent of the approximate 4,160 square mile project area (including a 300' buffer).

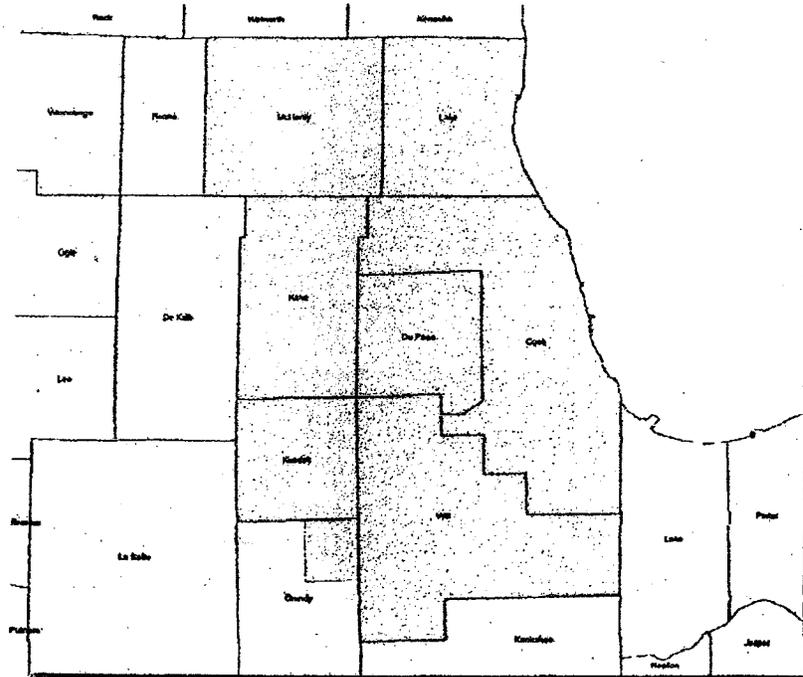


Figure 1. Ground Control Points Project Area

Merrick proposes to use photo identification techniques to obtain ground control. This is a methodology where physically identifiable ground features (i.e., manholes, sidewalk intersections, etc.) are coordinated with x, y, and z values. We propose this methodology to save time and cost, while achieving the same accuracies as through new or existing monuments. Savings are achieved through the elimination of paneling material, panel maintenance, and post-flight panel removal. Regardless of maintenance efforts, vinyl panels can



be destroyed before flight, thus requiring additional photo identification points after the photography has been acquired.

Photo-id control points need to be located in open and flat areas (e.g., roads, clearings, etc.), and would be placed / spaced consistently throughout the project area. Photo-id control points must be on the ground (ground / orthometric elevations) – NO above ground features. Additionally the photo-id control points would be physically tied to base stations used in support of the imagery acquisition.

American Surveying & Engineering, P.C. (ASE) of Chicago, IL will provide the ground surveying services for Merrick.

These photo-id control points will validate the accuracy requirements of the project as well as ensure meeting National Standard for Spatial Data Accuracy (NSSDA) requirements for this project and deliverable products.

Global Positioning System (GPS) techniques will be used to establish the photo-id control locations. Static, Rapid Static, and Kinematic GPS techniques shall be incorporated for the points required to complete the mapping.

The horizontal accuracy shall be Second Order, Class II, GPS. The vertical accuracy will meet Third Order specifications.

All horizontal control will be initially referenced to the Illinois State Plane Coordinate System (SPCS), East Zone (Zone 3776, FIPS 1201), North American Datum of 1983 (NAD 83), National Spatial Reference System of 2007 (NSRS 2007). Final coordinates will be provided in U.S. Survey Feet. The project vertical control datum will be based on the North American Vertical Datum of 1988 (NAVD 88).

ASE (under the direction of Merrick) will generate the "Control Report," which documents the results of the GPS survey. This report will include a brief narrative of all aspects of the GPS data collection process.

Acquire Aerial Photography

Merrick will use MJ Harden Associates, Inc. (MJH) of Mission, KS (i.e., Kansas City) to perform the aerial imagery acquisition.

Merrick / MJH propose using up to three (3) Zeiss/Intergraph (Z/I) Digital Mapping Cameras (DMCs) on the project in an effort to dramatically decrease the timeframe to collect the aerial photography. MJH will be responsible for all of the aircraft and equipment needed to complete this procedure.

The benefit for Cook County is the photography will be collected much faster and will have less tonal difference caused by photography being spread over a longer period of time (with a single aircraft).

The following DMC parameters are estimated for this project:

AGL:	4,800'
Focal Length:	0.120000 m
Photo Format:	0.165890 m
Photo Scale:	1:12,192
Forward Overlap:	77.770 %
Side Overlap:	26.000 %



Flight Heading:	88.400 (East – West)
Lowest path flight altitude (MSL):	5,400'
Highest path flight altitude (MSL):	5,700'
Trigger point count:	16,344
Model count (Approx):	16,253
Flight line count:	91

See Figure 2 for a preliminary DMC flight plan for the six-inch (0.5') pixel lines required for the "special considerations" area.

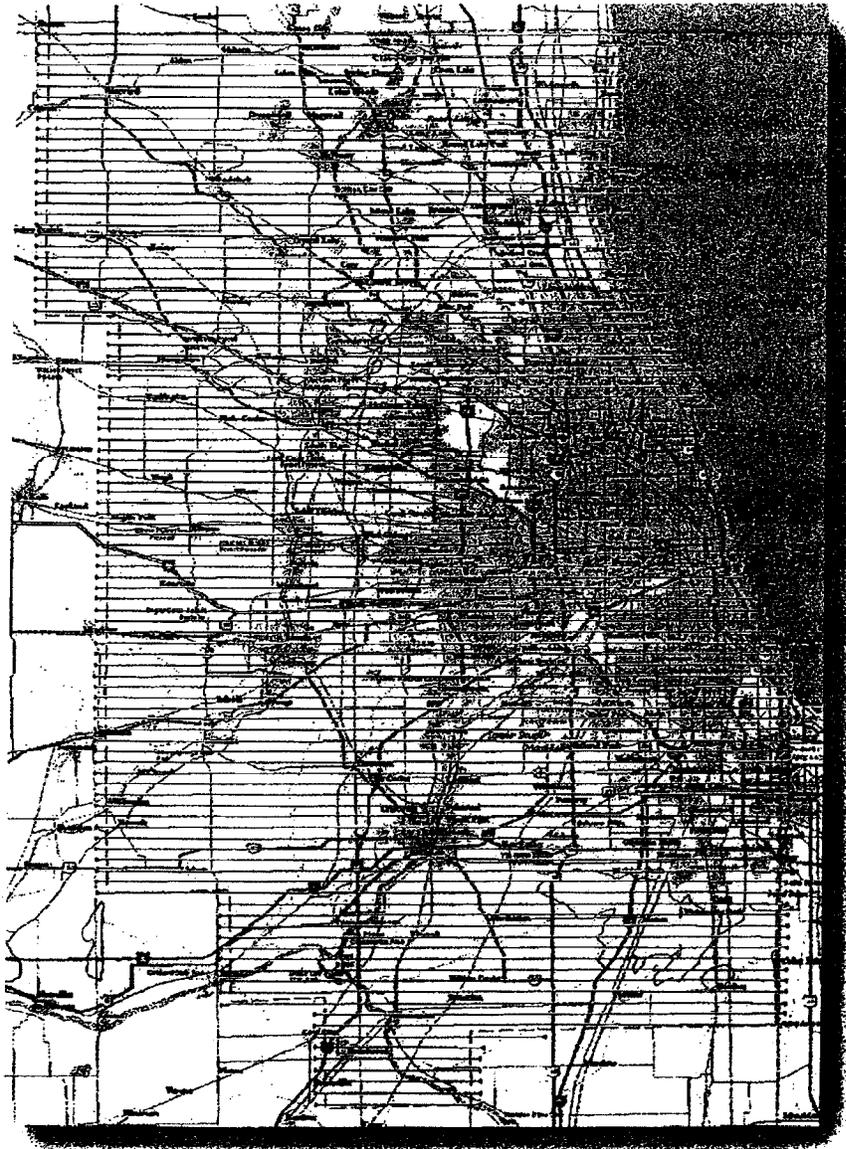


Figure 2. Preliminary DMC Flight Plan



O'Hare Traffic Control Coordination

Merrick's team will meet with O'Hare Traffic Control (TRACON) immediately after receiving a notice to proceed. The focus of this meeting is to brief the TRACON staff on the aerial mission and flight plans.

Merrick held a similar meeting with TRACON prior to beginning the aerial photography for the 1997, 2003 and 2009 imagery acquisition projects as well as the fall 2008 LiDAR project. As the County is aware, the coordination with TRACON for those missions went very well.

The meeting will be held at TRACON's headquarters at:

1100 Bowes Road
 Suite 245
 NATCA Way
 Elgin, IL 60123
 Phone: 847-608-5631
 Fax: 847-608-5628

Prior to the meeting, Merrick recommends that a letter be sent to the Director of TRACON from the highest-ranking County Administrator. The intent of the letter is to confirm that Merrick is authorized to work for the County. Additionally, this letter will confirm the importance of the project for the good of the regional community.

We are very confident that Merrick will have reasonable success working with TRACON. We have flown missions in areas surrounding and in Cook County within the past several years.

Figure 3 represents the preliminary flight plan that has been customized to greatly enhance the success of acquiring the digital imagery in and around O'Hare International Airport eastward towards greater downtown Chicago.

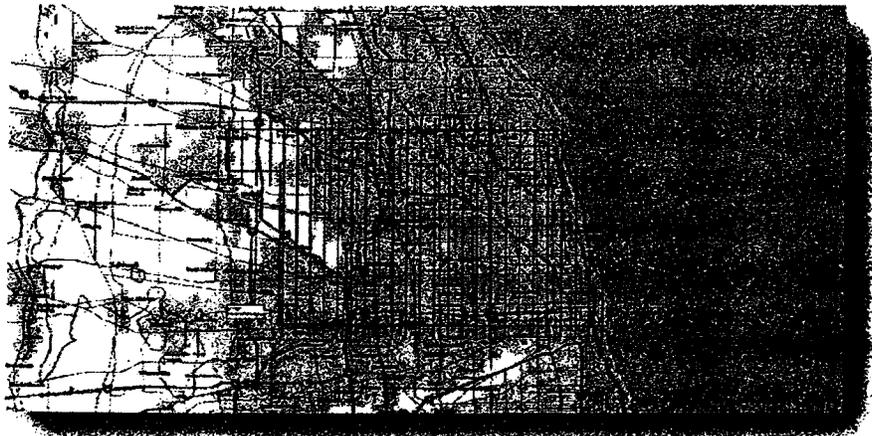


Figure 3. Preliminary Flight Plan for Acquiring Digital Imagery

The following DMC parameters are estimated for the flight plan represented in Figure 3:



AGL:	4,80	0'
Focal Length:		0.120000 m
Photo Format:		0.165890 m
Photo Scale:		1:12,193
Forward Overlap:		77.770 %
Side Overlap:		30.000 %
Flight Heading:		0.0 (North - South)
Lowest path flight altitude (MSL):	5,400'	
Highest path flight altitude (MSL):	5,600'	
Trigger point count:	1,219	
Model count (Approx):	1,191	
Flight line count:	28	

Lastly, an independent flight plan was developed to address the true ortho requirements for the area designated to mitigate building lean / radial displacement. Figure 4 depicts the flight plan designed for the "special consideration" area.

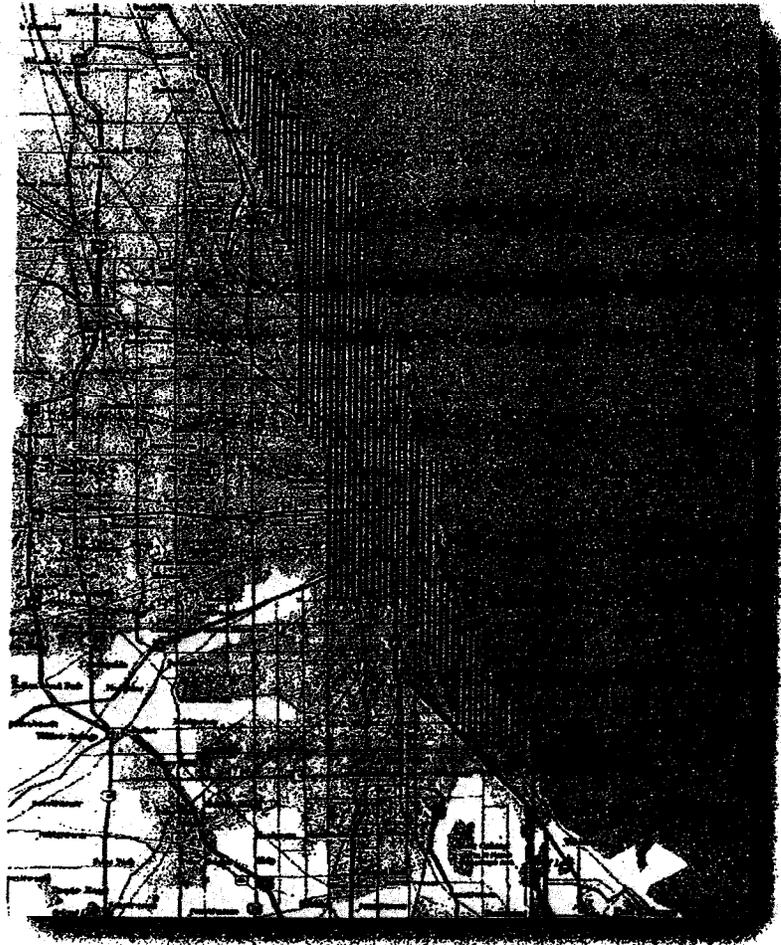


Figure 4. Special Consideration Area Flight Plan



The following DMC parameters are estimated for the flight plan represented in Figure 4:

AGL: 4,80	0'
Focal Length:	0.120000 m
Photo Format:	0.165890 m
Photo Scale:	1:12,193
Forward Overlap:	88.880 %
Side Overlap:	80.000 %
Flight Heading:	0.0 (North – South)
Lowest path flight altitude (MSL):	5,400'
Highest path flight altitude (MSL):	5,500'
Trigger point count:	2,733
Model count (Approx):	2,680
Flight line count:	53

The aerial photography shall be flown on, or near, the agreed date by Merrick and the Cook County project manager, weather permitting. Merrick recognizes that Cook County prefers to have the mission completed during the spring (late winter), when the minimum solar (sun) angle exceeds thirty degrees (30°), when leaf-off conditions exist, and the project site is free of snow cover. Based on the aforementioned criteria, Merrick anticipates that the aerial photography phase can be initiated in mid-February of each calendar year. This timeframe allows for a minimum of two (2) hours of flight time.

Digital Mapping Camera (DMC)

MJH will use the Zeiss/Intergraph Digital Mapping Camera (DMC), for aerial image acquisition as shown in Figure 5. MJH has been operating the DMC since 2004 and has completed successfully hundreds of projects covering thousands of square miles of imagery.

MJH spent considerable time and expense evaluating different airborne imaging systems to determine which one best suited the needs of their clients. MJH selected the DMC due to its superior accuracy, image clarity, and versatility.

The DMC system is a complete end-to-end digital imaging system. It has an integrated workflow, from mission planning and preparation to the creation of deliverable products. During a flight mission, a Global Positioning System (GPS)-supported navigation system interfaces with the camera control software, differential-GPS, and inertial measurement unit (IMU) sensors to capture data to the accuracy required for the project.

The DMC captures imagery suitable for engineering-level planimetric and topographic mapping as well as superior ortho image products and it has been documented that the DMC's accuracy and image quality exceeds other digital imaging systems.

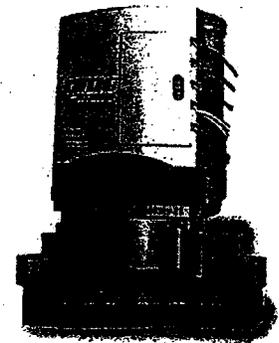


Figure 5. The Digital Mapping Camera (DMC) enables capabilities and quality beyond other digital or film-based camera.



Design of the Z/I Digital Mapping Camera (DMC)

The DMC captures 4,096 levels of gray compared to 256 levels captured using film.

The DMC imaging system was designed to replace film-based photogrammetric mapping cameras. Its large format frame-based digital stereo imaging system has a standard perspective geometry, which allows it to be used with existing mapping applications. It simultaneously captures all airborne GPS (ABGPS), IMU, and imagery data including 12-bit panchromatic and multi-band color imagery.

The DMC has 4 panchromatic and 4 multi-spectral sensors. Four panchromatic 4k x 7k images are collected while the multi-band data, red-green-blue (R,G,B), and/or color-infrared images are collected at a lower resolution (2k x 3k). The color and color-infrared bands of information with lower resolution are resampled to the same higher resolution panchromatic bands of information by using the sensor geometric transformation parameters defined by the manufacturer's calibration parameters. This color image processing, where higher resolution panchromatic data is used as the geometric resolution input, is referred to as pan-sharpening.

Samples of gray scale, color, and color infrared images are shown in Figure 6 below.

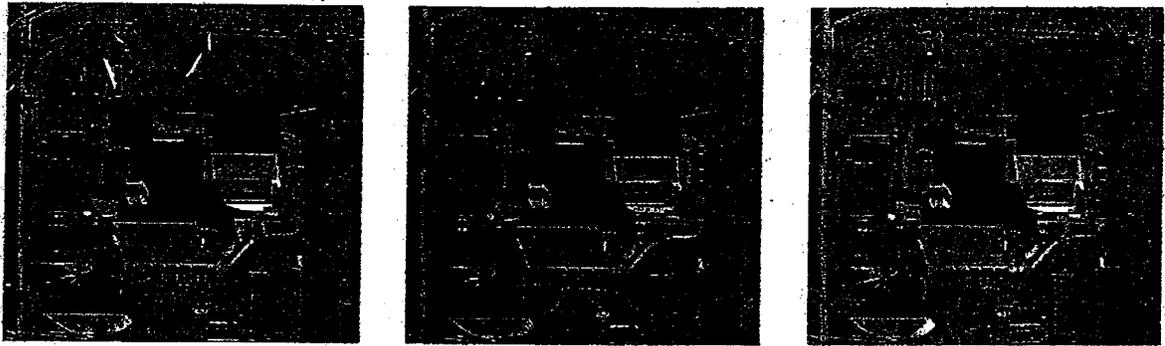


Figure 6. Sample Panchromatic (Grayscale), Natural Color (RGB), and Color Infrared (CIR) Images
 The DMC collects panchromatic, color and color IR information in a single pass. Because these bands of information are available for processing without re-flying, there is a savings of time and cost.

Spectral Signatures

The DMC captures full spectrum data with no breaks.

The visible light spectrum ranges from 400–700 nanometers (nm). The DMC captures image data well beyond the visible light spectrum, from 400–900nm, with no gaps in the spectrum data. Figure 7 below shows the continuous spectral range of data captured in each band by the DMC (in nanometers), and Figure 8 shows the spectral range of the DMC compared to the ADS40.

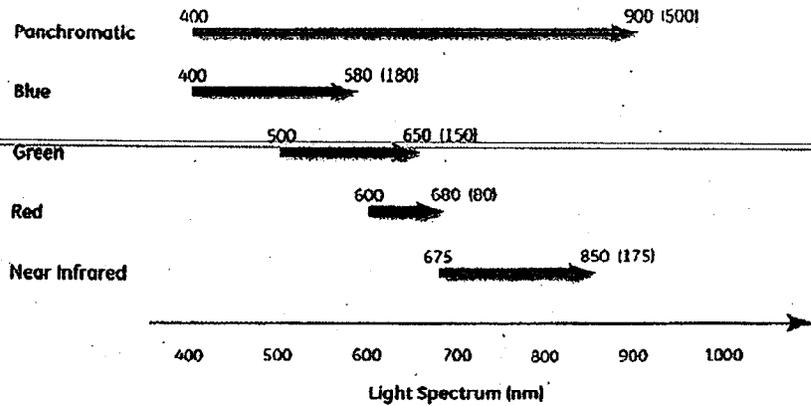


Figure 7. Spectral Data Range Captured by DMC (In Nanometers)
 The DMC collects continuous full spectrum data.

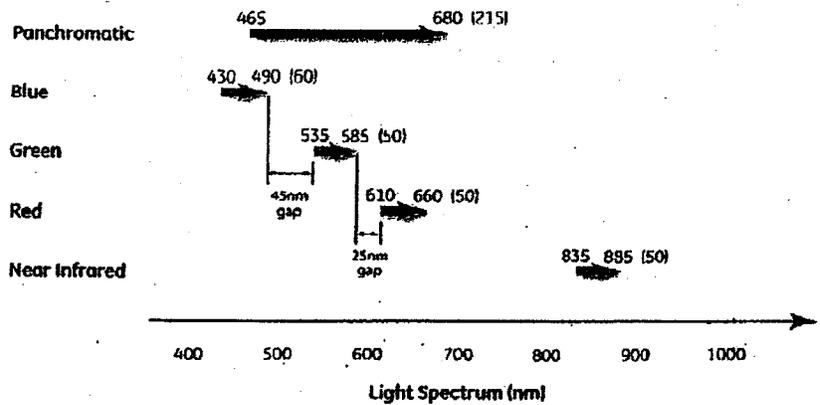


Figure 8. Spectral Ranges Captured by ADS40 (In Nanometers)
 The ADS40 has gaps in spectrum range.

Other line-scan imaging systems were designed for remote sensing applications. Although these systems capture 12-bit panchromatic, color (R,G,B) and Near Infrared (NIR) imagery, they do not capture the full spectrum of visible light. The gaps between the spectrums of light are notable. These (indicated in light gray) are "interpolated" in post-processing to give the appearance of a full spectrum color photograph.

3.1.1.2 Project Planning

The team will deploy multiple aircraft with digital sensors to accomplish the aerial acquisition requirements for the Cook County project. The team has planned to fly at a height of 4,800' a.m.t to collect imagery that will yield a 6" ground sample distance (GSD).

Our available aerial acquisition resources are shown in the following table:



COMPANY	AVAILABLE	COMMITTED	SENSOR
MJH	2	1	DMC
Richard Crouse	2	1	DMC
Aerial Surveys	2	1	DMC
TOTALS	6	3	

All aircraft are equipped with a combination of computer-controlled navigational equipment and sensors that allow flight lines and photo centers to be pre-computed and programmed to GPS coordinates and altitude. The ABGPS control system consists of on-board single- and dual-frequency receivers. The quality and accuracy of imagery that is collected provides the secure foundation for all subsequent mapping processes and products. The image capture and in-flight quality control systems integrated with digital sensors provide that foundation to ensure superior image quality.

Multiple components interface with the plane's Aerial Sensor Management System (ASMS) that coordinate and record digital imagery and flight data. The ASMS includes:

- **GPS** – records time stamps of the flight paths and camera position at each exposure
- **Video System** – allows the camera operator to monitor image quality in real time
- **Camera Interface** – maintains camera level via stabilized gyro mount
- **Pilot Display** – allows the pilot to quality control both the flight plan and flight line in real time
- **IMU** – is mounted directly above the camera lens and records the azimuth (tip, tilt, rotation). The IMU captures the camera's position at each exposure, streamlining the acrotriangulation process.

Flight operations continually monitor weather conditions across the project area and deploy aircraft to those areas where optimal flying conditions occur. When forecasts are favorable, flight crews typically remain on-site to maximize every opportunity to capture imagery. Final flight lines are scheduled in advance whenever possible and confirmed based on weather conditions, prior to takeoff each morning.

- **Preflight Communication** – The flight operations manager coordinates area assignments, evaluates weather conditions, and prepares assignments accordingly.

During the aerial acquisition, the onboard system displays a low-resolution image of each exposure that is monitored and reviewed by the camera operator. If there are data or image capture issues, such as unpredictable clouds, that particular area can be flagged for a re-flight.

- **Status Reporting** – Crews provide flight reports to the flight operations manager each evening via email, fax, or phone. The data is entered into the flight database to update acquisition status.



To avoid costly redeployment, due to seasonal weather conditions and restricted air space requirements, care is taken to schedule adequate time for data acquisition.

Digital aerial imagery is typically captured on days and at times:

- When leaves are off deciduous trees
- When the sun angle is 30 degrees or greater from the horizon
- When the ground is not obscured by snow, haze, fog, dust or other environmental factors
- When streams are within their normal banks
- When clouds and/or shadows of clouds will not appear in imagery
- When GPS constellation is operating for commercial and public use

To analyze and mitigate the risk of seasonal and weather constraints, our Flight Operations Manager first determines the number of flying hours required to complete image acquisition at the client's location. Databases of solar and historical seasonal/meteorological conditions are reviewed to determine the average number of flying days and hours normally available. The Flight Operations Manager uses this information to efficiently plan flight teams and missions. The chief Pilot and Flight operations Manager thoroughly review the flight requirements to determine if and where possible flight restrictions may occur. Careful preplanning and coordination with the appropriate FAA departments will ensure an efficient image acquisition mission.

3.1.1.3 Digital Aerial Imaging, GPS/ABGPS/IMU

Flight Planning

Flight lines are generated through our flight planning software and the start and stop points of each line are placed in a digital file that is used to navigate the aircraft. The lines are generated such that the principle points of the first two and last two exposures of each line will fall outside the boundaries of the area to be imaged.

A summary of typical considerations for flight planning include:

- Flight line spacing at 30% side overlap
- Exposure spacing at 60% forward overlap
- Required ground resolution
- Vertical accuracy requirement for contour generation
- Horizontal accuracy requirements

Our manager of flight operations continually monitors weather conditions across the project area and deploys aircraft to those areas where optimal flying conditions occur. When forecasts are favorable, flight crews typically remain on-site to maximize every opportunity to capture imagery. Any aerial imagery that does not meet the job specifications will be re-flown at no additional cost. To achieve timely re-flights, image processing and inspection will occur no more than 7 days from the date of the original photography. We will document questionable and rejected frames and every effort will be made to complete any necessary re-flights as soon as possible.



Survey Preparation and Establishing GPS Base Station

Ground GPS base stations will be used to collect accurate horizontal and vertical control data for later use in the photogrammetric imaging/mapping processes.

The following data is collected with the Airborne Global Positioning System (ABGPS):

- Exposures are time tagged to accommodate post processing with the ABGPS data resulting in X,Y,Z of photo centers
- X,Y,Z coordinates are collected at 1 second intervals via the ABGPS unit for post processing
- X,Y,Z coordinates at the base station is collected for post processing and differential correction
- Kappa, Phi, Omega from the inertial measurement units (IMUs) at each image exposure to record the position of the camera to account for the attitude of the aircraft.
- Accelerometer data from the IMU that documents the aircraft's velocity.

The Merrick team uses an integrated GPS/ABGPS/IMU system illustrated in Figure 9 to acquire horizontal, vertical, and altitude values for every image. Empirical evidence shows that ABGPS/differential GPS does not compromise the accuracy of the final mapping data.

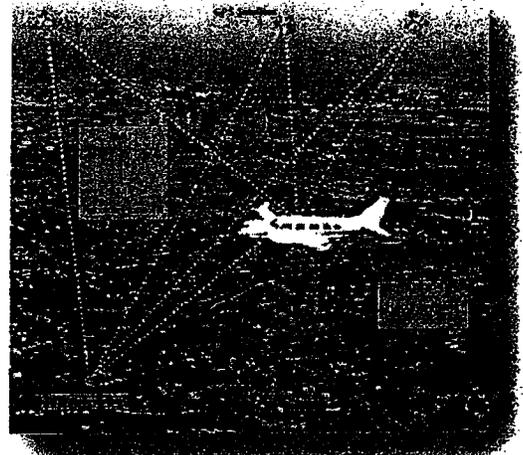


Figure 9. ABGPS/GPS/IMU
 Our Aerial Sensor Management System (ASMS) records all survey data and digital images simultaneously.

In-flight Airborne GPS/IMU Collecting

In-flight ABGPS and IMU data are recorded on a "ruggedized" laptop computer. Data files are delivered to the aerial flight manager to track aerial progress and provide post processing with the aerial image data.

GPS Equipment – Each aircraft is equipped with a GPS antenna that has been integrated into the imaging system. Dual frequency, multi-channel receivers are placed onboard the aircraft to collect data for post processing with ground base station data. Base stations are used during flight operations to provide the differential signal required for accurate positioning calculations of the aircraft's antenna during aerial image capture. The receivers record the GPS (dual frequency - L1/L2) satellite signals of all satellites available in view, to ensure project accuracy standards are met.



GPS Navigation – In-flight navigation along flight lines is provided using the GPS navigation module. An on-board GPS unit receives satellite signals and continually updates the aircraft's position in real time on a pilot display. Preprogrammed exposure data coordinates are sent to the camera via the ASMS providing accurate image acquisition. Every time the DMC captures an image, a signal is sent to the laptop computer and the position of the aircraft at the time of exposure is determined and logged.

Airborne GPS - Differential ABGPS is used during the acquisition of aerial imagery. The major advantage of using differential ABGPS is that it provides accurate positioning, thereby drastically reducing the number of ground control points normally required for producing mapping documents.

Airborne GPS collection procedures are as follows:

- Dual-frequency survey-grade receivers are used for ground and camera stations.
- The collection rate is 1 second and is matched in both ground and airborne receivers.
- The elevation mask is set to 0°.
- Minimum number of satellites required: 5
- The Merrick team initializes GPS data collection by running both stations 5 minutes prior to takeoff with the aircraft stationary.
- GPS data collection is continued during fuel stops (if necessary).
- Maximum bank angle is 25° or the maximum possible bank without loss of lock. If a loss of lock is observed during a turn, the approach to the next line is extended to allow 20-30 seconds to give the position calculations time to stabilize.
- Data collection is continued after the mission until the aircraft is stationary for a minimum of two minutes.

IMU – The IMU system is a fully integrated position and orientation system that generates stable, reliable, and repeatable positioning solutions. Accurate position and orientation information is generated continuously under the most difficult conditions.

Transfer of Imagery to Production Network

Captured imagery is recorded on removable Flight Data Storage (FDS) units in the aircraft. After each day of data acquisition, the data is copied to high-capacity removable hard drives and returned to our production center. Data is copied from the hard drives to our production shared network drives. The data is post-processed and reviewed for quality. Then, it is both archived and prepared for production.

Processing Raw Imagery

Analyst post processes raw imagery in two steps (see Figure 10 below). First, the radiometric correction (which compensates for temperature, aperture effects, etc.) is accomplished using a set of parameters entered into the post-processing software. After this is completed, files are written to intermediate RAID storage on the server. Then, the images are geometrically corrected for lens distortion and tilt using post-processing software. The processed information is then transferred to a data management system for distribution.

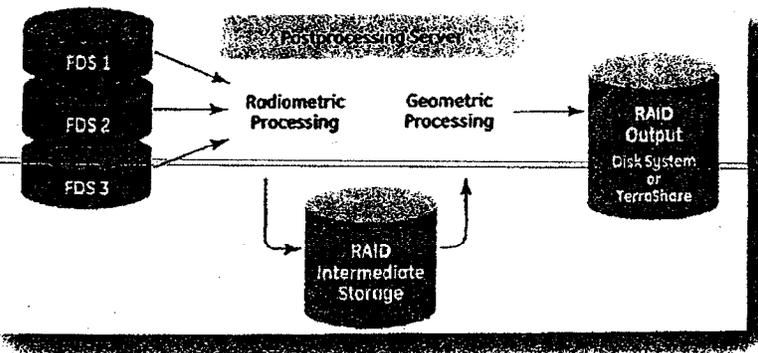


Figure 10. Raw Image Processing
 Radiometric and geometric corrections are conducted on the raw digital imagery to ensure distortions are removed from the imagery prior to the extraction of information.

QC GPS Time Exposure and Imagery

Applanix software utilities are utilized to ensure the exposure time tags are validated. Stereo models are reviewed to validate horizontal and vertical accuracy before the raw data is archived.

Analytical Aerotriangulation

The analytical aerotriangulation (AT) process is illustrated in Figure 11.

Image Station Automatic Triangulation (ISAT) for our AT process are utilized. During this process, image coordinates of all tie, control, and check points in the imagery are measured and a "least squares bundle adjustment" is performed. This process yields exterior orientation parameters for all imagery and three-dimensional object coordinates for all measured image points. AT will be used to ensure 1"=100' scale mapping.

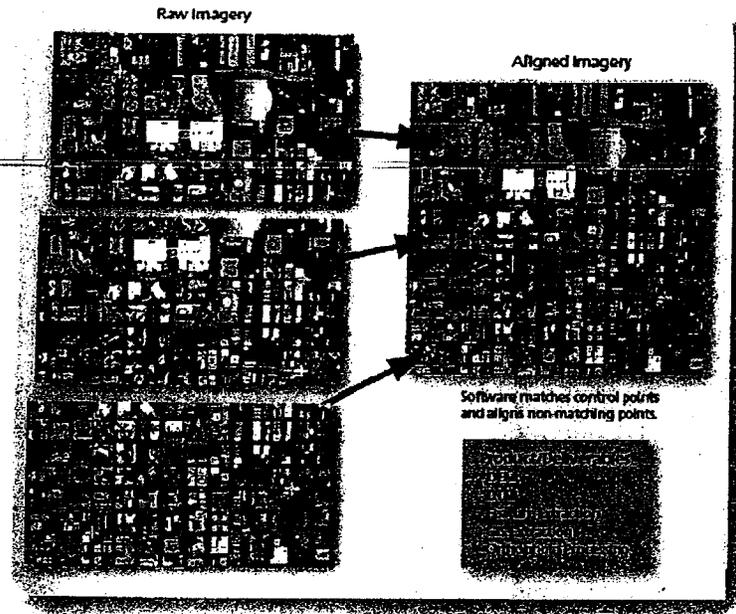
Digital Imagery and Control Data Comparison

The approach combines aerial photo mission data and GPS base station data session as input into the automatic aerial triangulation process. Independent DMC imagery block measurements and adjustments are performed, as well as overall project block measurements. Reports are generated and the data is readied for the next step of the compilation process.

Analytical Aerotriangulation



Figure 11. Analytical Aerotriangulation



Measure Control Points Using Auto-Correlation

Digital photogrammetry utilizes an application that applies image-matching techniques to automate the point transfer and the point mensuration procedures to automatically extract tie points. Figure 13 presents a screen shot of the software used in this process:

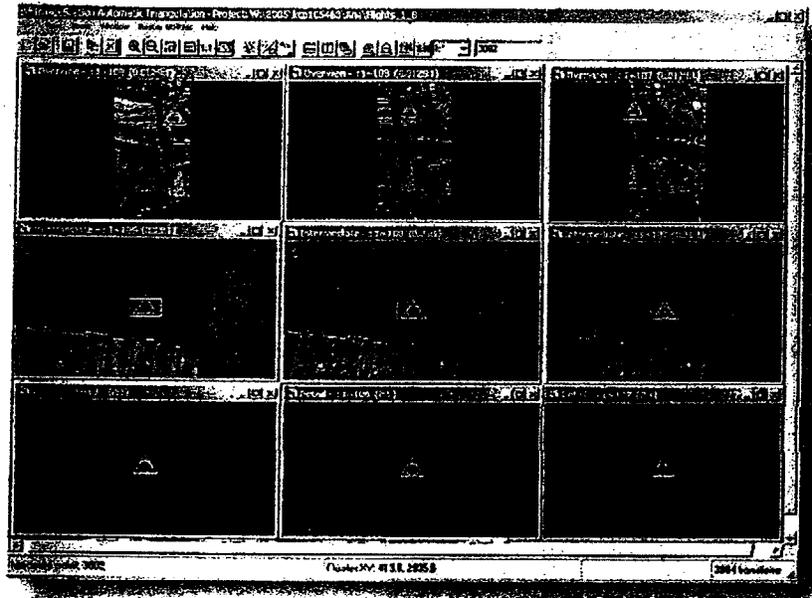


Figure 13. Screen Shot of Tie Points

Tie points are meticulously captured for each image to ensure the position of the images accurately matches the ground.



Review Residuals of Image Coordinates and Bundle Adjustments

Measurements created by the aerial triangulation software are analyzed by matching coordinates in each image. If any high residual errors occur, they are either taken out or measured and resolved. The image and ground coordinates for a group of photographs are adjusted to fit a mathematical model within specified project tolerance limits.

To ensure consistent results, a second iteration of the residuals for the control and image points is reviewed. Control points are then introduced into the solution to analyze how the image points tie together.

Aerotriangulation Report

Upon completion of all aerial triangulation work, a formal aerial triangulation report will be prepared and delivered to the County as specified below:

- Summary of aerial triangulation results
- Descriptions of laboratory equipment, procedures, and computer software used
- Summary of RMS errors for bundle adjustment, photographic measurement residuals, or strip tie point residuals, or strip tie point residuals and misclosures at control/check points.
- Significant misfits encountered at control points and procedures taken to analyze and rectify such misfits.
- A listing of all misclosures at ground control points with and without use of checkpoints.
- Computer printout of the final, adjusted analytical triangulation solution to horizontal and vertical ground control. The printout will contain the final State Plane coordinates for all ground control points, passpoints, and checkpoints.
- Identification of all points that were included in the initial solution and subsequently discarded, with an explanation of the reasons for being discarded.
- Identification of the weighting factors applied to all points used in the final solution.
- Disc with an ASCII file containing the coordinate data.

3.2 Phase Two: Pilot Project for Major Tasks

3.2.1 Pilot Project

Once the initial acquisition tasks have been completed, Merrick recommends a pilot project. This will allow Cook County to visualize all the deliverable products requested in the RFP for a sample portion of the project. Completing the pilot project ensures that both parties have a clear understanding of all project products and specifications. We believe we understand the complexity of this project and therefore do not anticipate major modifications in our procedures as a result of the pilot project.

Merrick proposes that a formal Pilot Project Review Meeting is held at Cook County's offices. Alternatively, Merrick can host the meeting if Cook County would like to tour our facilities in Colorado. Cook County project team will



have an opportunity to review the pilot project data prior to the review meeting. We recommend a review period of two (2) weeks by Cook County.

The pilot project will be a representative sub-set of the entire project. It is important to obtain a large enough sample of the project to ensure most database situations and anomalies are reviewed. Merrick and Cook County will mutually designate the pilot project area, and said area should encompass all unique project characteristics that may exist.

Specifically, the objectives of the pilot project are:

- Produce a working model of the deliverable products being generated and verify that the data will meet Cook County's expectations. This data may be used by Cook County to demonstrate and communicate the purpose of the project to consortium management and administrators.
- Refine communication protocol and response time expectations for resolving project issues.
- Establish and strengthen the working relationships between Merrick and Cook County.
- Modify in-house project quality control processes, as necessary, to remain compliant with project accuracies and specifications.
- Modify and customize existing routines and in-house programs to conform to the unique characteristics of the project.

Once all pilot project issues have been resolved, Cook County would then provide Merrick authorization to proceed on project-wide production.

3.3 Phase Three: Countywide Production

3.3.1 Digital Elevation Model (DEM) Data

Merrick proposes to utilize the existing DEM compiled by the USGS (Aero Metric) from its 2008 flight, which encompasses the entire study area - assuming it meets the accuracy requirements needed for the ortho imagery rectification. This project-wide DEM would be current and consistent, and would offer significant cost savings over developing a new DEM. This DEM was highly successful in rectifying the 2009 imagery.

3.3.1.1 Downtown Areas

Likewise, Merrick will use the detailed DSM (Digital Surface Model) developed for the 2009 rectification of the true ortho, or "special consideration" area.

Radial displacement / building lean will be addressed as described, and will be contained to the specific areas defined by Cook County. See Figure 14 for this "special considerations" area.

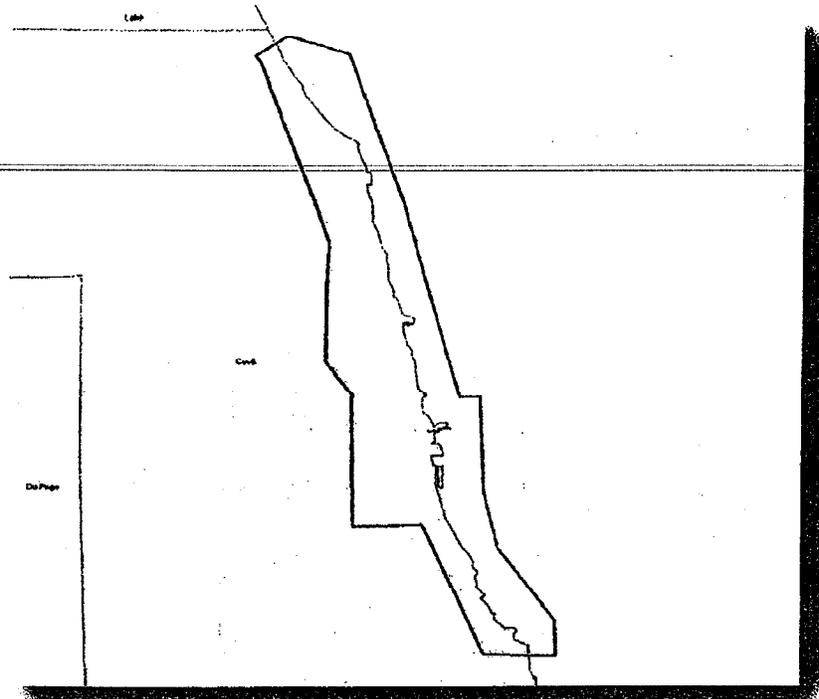


Figure 14. DEM – Special Considerations Area

Should Merrick encounter any required areas of change in the DEM necessary to support a accurate rectification of the ortho imagery, these cases will be addressed on an as-needed basis. These modifications to the DEM would be reflected in the DEM feature class.

3.3.2 Digital Orthophoto Generation

Merrick and MJH both have extensive experience in producing digital orthophotography for our clients.

The algorithms used to rectify imagery are static within the industry. Regardless of whether individual vendors use off-the-shelf or customized software and all inputs being equal, the positional accuracy characteristics of the final orthos will be essentially the same. Therefore, our focus is on image quality, production efficiencies, and customer support.

The following sections provide an overview of the process by which Merrick and MJH creates digital orthophoto images.



3.3.2.1 Orthophoto Image Processing

Our orthophoto processing workflow is presented in Figure 15.

Orthorectification

Merrick uses the INPHO suite of OrthoMaster and OrthoVista for the development of digital ortho-image map documents. MJH uses Intergraph's OrthoPro. Both systems / processes use the same basic condition to identify an image pixel of a ground point on the digital terrain surface and then "project" it to its true orthographic position. This process requires the ability to efficiently process large quantities of data. Merrick and MJH both use high-speed workstations for this process. As previously alluded to, even though differing software is being used by both firms, the end results will be seamless.

Digital imagery is loaded and oriented on digital image workstations. Then, a complete differential rectification is then performed using a specifically developed set of algorithms that remove image displacement due to topographic relief and camera tip/tilt. This allows every pixel in the image to be repositioned into its correct horizontal ground location. A rectified image file is produced in which each pixel represents a specific X-Y coordinate value on the ground. Note that all ortho rectification tasks are performed to 4-band (R,G,B,NIR) imagery simultaneously. This is the most cost-effective and efficient method of producing 4-band ortho imagery.

QC Ortho Images with DEM

Once the ortho-rectification process is completed, another quality control check is performed to visually verify the newly generated orthophotos for completeness, cleanliness and overall image quality. The matrix of mass points and breaklines is used in orthophoto generation to meet the required horizontal map accuracy specifications.

Tone/Color Balance

Our process allows any combination of image files to be merged, viewed, and plotted without noticeable tone variations between images.

Ortho Image Processing

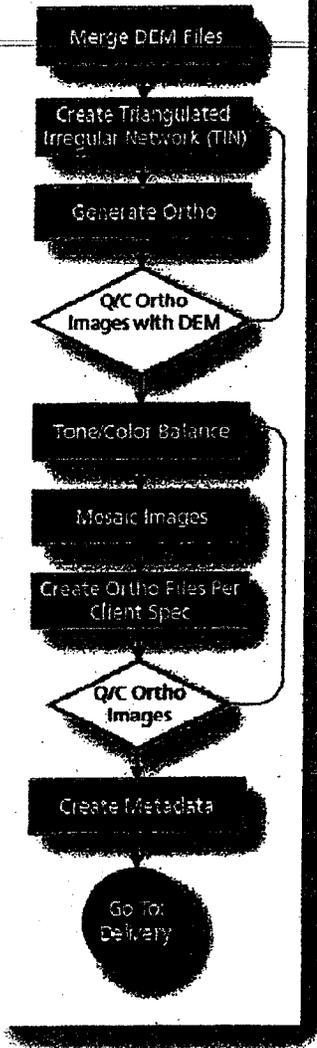


Figure 15. Ortho Image Processing



Radiometric variation can be caused by terrain changes and sun angle captured during the photo mission. The tones and color balances of images are adjusted to minimize radiometric changes. Histograms are used to analyze and adjust the images as necessary.

Merrick / MJH understand that final orthophoto image files should have consistent tonal balance. The process used allows any combination of image files to be merged and viewed without noticeable tone variations. A histogram and tonal match evaluation is part of our standard digital orthophoto processing routine. Histogram enhancements include linear contrast stretch, user selected contrast stretch, histogram normalization, and histogram clipping.

The ability to acquire and process image files to a near perfect tonal match depends on many factors, some of which are beyond the control of the photogrammetrist. Ideally, all the imagery should be acquired at nearly the same time of day, on consecutive days, and under the same atmospheric conditions.

OrthoVista (Merrick) and OrthoPro (MJH) software is used for radiometric tone matching, cropping, and feathering to create a seamless image mosaic with invisible joint lines. Localized adjustments are compared to a reference ortho to ensure consistent brightness and tonal consistency. All algorithms used to apply radiometric enhancements to images have been specifically designed to not affect geometric accuracy.

Mosaic Process

Both OrthoVista (Merrick) and OrthoPro (MJH) uses an auto-dodging utility, when creating mosaics of imagery. These software applications do an excellent job of matching the tonal values within the images as well as between adjacent flight lines. Again, it is important to note that all mosaicking tasks are performed to 4-band imagery simultaneously.

Metadata Creation

After the ortho rectification process is complete, images are extracted into the client's tiling scheme as defined in the project specifications.

Images are then radiometrically adjusted and quality reviewed to ensure there are no coverage gaps, seams, etc. The images are then stored in a directory structure for data download to the proper delivery medium. An XML format copy of Federal Geographic Data Committee (FGDC) compliant metadata is prepared that includes the following:

- Identification Information
- Data quality Information
- Spatial data organization Information
- Spatial reference information
- Entity and attribute information
- Distribution Information
- Metadata reference information

Further details regarding metadata follows later in this document.



Quality Control (QC) of Orthophoto Images

Merrick / MJH use a rigorous quality control process for each project prior to delivery

The orthoimagery passes through the following quality control process prior to delivery:

- File header check for incorrect or missing information
- Visual pan t hrough image at t wice t he client-spe cified zoo m level to identify:
 - Error pixels
 - Evident mosaic lines
 - Overly bright areas
 - Areas of too much shadow
 - Excessive building lean
 - Warped bridges or overpasses
 - Edge match with adjacent sheets must be within a t olerance ratio of 1/40 in relation to the proj ect scale. (Example: If project scale is 1" = 40' the allowable shift is 40×0.025 which equals 1'.)
 - Tone and contrast. A tonal difference between adjacent images of >5% is unaccepta ble. If tone discrepancy arises, the affected ar eas are measured and compared based on radiometric pixel values.

Note that all QC and i mage edit task s are perfor med to the 4-band imagery simultaneously.

Image Characteristics

Merrick reco gnizes that the quality of orthophoto imagery can be subjective. Imagery that may look good to one person may not to someone else. For this reason, Merrick will work closely with Cook County during the start-up and prototype processe s to develop image ry th at is suitable for all users. Our philosophy is that we are working as a team with Cook County to achieve the desired results for their intended applications.

The following outlines potential orthophoto qual it y issues that may arise on any given project and Merrick's solutions to these issues.

Image Clarity

The clarity of the im age can be significantly affected by atmospheric haze and dust. Thus, aerial photography will be taken in accordance with ASPRS Standards for Aerial Photograph y wh ereby the "photograp h y shall not be secured when the ground is obscured by haze, snow, smoke, dust, flood waters, or environm ental factors that m ay obscure gro und detail." The aerial photography is thoroughly reviewed for compliance with this standard.

Brightness/Contrast

Brightness and contrast c an be contro lled during the initial digital imagery processing, and orthophoto processing phases. The best way to achieve th e proper brightness and contrast is through proper digi tal imagery selection and processing. Although t hese factors can be controll ed so mewhat during t he ortho rectification phases, the extent to which they can be controlled is



primarily dependent on the quality of the digital imagery. Merrick completes a histogram analysis of the imagery to analyze and adjust the dynamic range of gray scale values for brightness and contrast. Brightness and contrast can also be further adjusted on a project-wide basis during the mosaicking process.

~~We recognize that acceptable brightness and contrast of the ortho imagery is subjective and varies. In an effort to determine the optimum image quality parameters at the onset of the project, Merrick will:~~

- review the contrast and brightness of a sample set of imagery during the prototype review meeting

Shadows

The extent to which shadows impact the imagery is a direct result of the time of year and time of day that the photography was flown. Longer shadows will give an overall appearance of darker imagery in heavily shadowed areas even though a histogram analysis may show that the imagery is similar. Regardless of the time of year/day flown, you should be able to identify at least some, and preferably all, detail in shadow areas.

Mosaicking

Mosaicking is completed as a standard process to minimize the effect of inherent tonal variations from photo to photo. Our ortho technicians will review and modify seam lines so that they are placed in areas of consistent tonal balance and between buildings or bridges. A dynamic range adjustment is completed across the entire block of images to provide a tonally balanced product. The mosaicking parameters can be carried from block to block to ensure the entire project area has consistent tonal qualities.

Radial Displacement (Buildings)

Due to the radial properties of the aerial camera, buildings will "lean" outward from the center of each exposure. The extent to which a building leans is a function of the height of the building and the distance from the nadir of the photo. This can be detrimental to ortho imagery since the leaning buildings will obscure otherwise visible features. Radial displacement / building lean will be addressed as previously described, and will be contained to the specific areas defined by Cook County.

Radial Displacement (Bridges and Overpasses)

In the case of bridges and multi-level overpasses, the orientation of the bridge in relation to the principle point of the photograph plays a large part in the output appearance of that bridge. If the bridge is oriented close to the photo center, very little modification, if any, may be required for that bridge. If the bridge is located to the edge of the photo center, a marked degree of modification can occur to that structure, such as warping, ribboning, melting, etc. Merrick will make every attempt to rectify bridges and overpasses using portions of the imagery that are closest to the center of each exposure, thus minimizing the lean of these features.



Positional Accuracy

The best way to internally validate that the final ortho products meet the required accuracy standard is by measuring control points on the final ortho photos and comparing the values with the survey control coordinates.

Final Digital Ortho Formatting

The block of imagery is cut to individual delivery tiles. For this project, the tiling characteristics for ortho imagery include:

ORTHO SCALE	TILE SIZE	NUMBER OF TILES	PIXEL RESOLUTION	FILE SIZE
1"=100'	2,500' x 2,500'	18,905	0.5' (6")	100mb (4-band)/ 25mb (panchromatic)

See Figure 16 for the estimated 2,500' x 2,500' ortho tile layout, which was estimated at a total of 18,905 tiles.

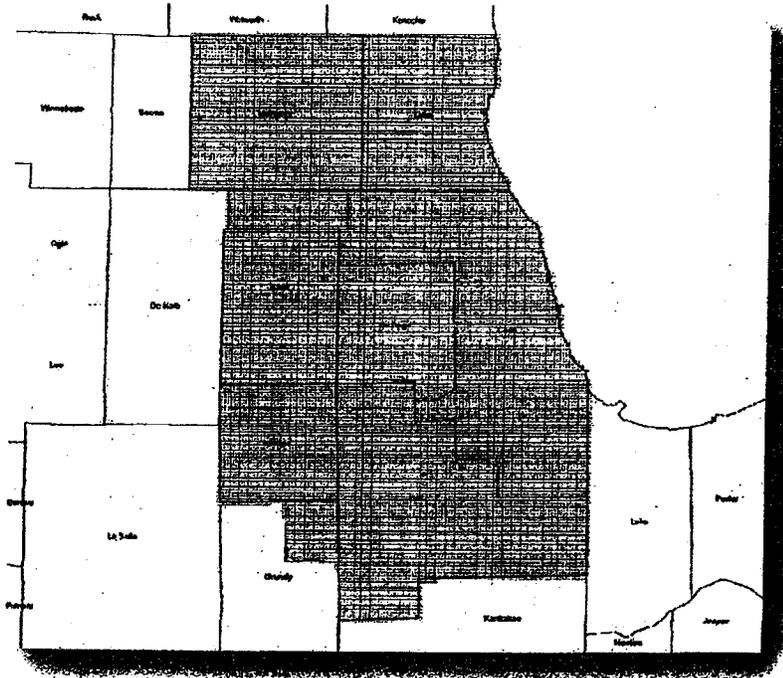


Figure 16. Estimated Ortho Tile Layout

Final image quality and geometric fit is reviewed before translation to the client-specific file format. Once translation has occurred, the translated images are displayed to ensure no errors have occurred in translation. The images are then written to the specified media for delivery to the client, and are backed up with all related project data to assure data recovery for future operations.

For this project, we anticipate that all 4-band imagery will be output as uncompressed GeoTIFF files (.tif) with no internal tiling or overviews. This format is readable by ArcInfo and other GIS packages.



Panchromatic imagery will be derived from the final 4-band ortho imagery.

Each GeoTIFF file will contain the following tags and keys:

- ModelTiepointTag
- ModelPixelScaleTag
- GTModelTypeGeoKey
- GTRasterTypeGeoKey
- ProjectedCSTypeGeoKey
- PCSCitationGeoKey
- ProjLinearUnitsGeoKey

3.3.2.2 Acceptance Criteria

Cook County understands that the quality of ortho imagery is subjective to each user and quantifying the acceptability of ortho imagery, in specific terms, is not a goal of this project. Due to inherent anomalies in aerial photography, Cook County accepts that there will be minor variations in brightness, contrast and color tone in the ortho imagery throughout the project area. The following will be used as a guideline for acceptance of the digital orthophotography. These anomalies must be apparent when viewing at the intended mapping scale (i.e., 1"=100' [1:1,200]).

Contrast

- **Accepted** – Contrast is the same or very similar to agreed to prototype.
- **Accepted with Rework** - Contrast is significantly different than agreed to prototype.

Radiometry / Seamlines

- **Accepted** - Only minor variations between tiles or flight strips when viewed in conjunction with surrounding tiles or across project/delivery area. Seamlines between individual source photos are nearly or completely invisible. Obvious attempts have been made to "feather" seamlines and they have been placed primarily in monotone or inconspicuous areas.
- **Accepted with Rework** - Significant variations are apparent between tiles or flight strips when viewed in conjunction with surrounding tiles or across project/delivery area. Obvious seam lines exist between source photos with no apparent attempt to correct. Seam lines have been placed through buildings when other routes could have been used.

Clarity

- **Accepted** - Image is clear and primarily free of blurred areas within the limitations of mosaicking and the source aerial photography. Pixel resolution is correct as per specifications. All image pixels exist.
- **Accepted with Rework** – Image is not clear or has numerous areas blurring that can be attributed to factors outside the source aerial photography. Pixel resolution is greater than defined by specifications. Image pixels have dropped out.

Warping / Stretching

- **Accepted** – Imagery is free of warped or stretched areas.



- **Accepted with Rework** – Image has warped or stretched area that cannot be attributed to extremely steep terrain.

Edge Matching

- **Accepted** – Ortho tiles edge match within the tolerances of accuracy requirements.
- **Accepted with Rework** – Ortho tiles do not edge match within a accuracy specifications.

Positional Accuracy

- **Accepted** – Ortho imagery matches planimetric data within the tolerance of accuracy specifications. {+/- calculations on control and/or check points} are within accuracy specifications.
- **Accepted with Rework** – Ortho imagery does not match planimetric data within the tolerance of accuracy specifications. {+/- calculations on control and/or check points} are not within accuracy specifications.

3.3.3 Metadata

Metadata for the contour geodatabase will conform to the Federal Geographic Data Committee's (FGDC) Content Standard for digital geospatial metadata and be performed by Merrick. ASE will employ Mr. Mike Hoather to review and comment on the metadata. Mr. Hoather was the foremost author for the metadata documents Merrick submitted for the 2003, 2005, 2008, and 2009 contracts / deliverables. All delivered metadata will pass compliancy tests.

In general, Mr. Hoather will prepare each metadata record from relevant reports, samples of digital files, data dictionaries, and design documents.

For select fields in the metadata record, Merrick / ASE will contact Cook County directly.

Once drafts of metadata records are prepared, they will be sent electronically to Cook County for review of select fields, especially process steps, abstracts, and data dictionaries. Once returned, Merrick will compile comments, corrections, and updates into a final metadata record. If additional revision is needed, Mr. Hoather / ASE will accommodate that.

The final metadata record will be post-processed by software that checks for compliancy and formats metadata into a variety of formats suitable for posting on FGDC clearinghouses and storing within ArcGIS 9.2 environments.

Metadata reports will be prepared for the following GIS datasets:

- Control Survey (Point Feature Class)
- 4-band Aerial Imagery (Raster)
- 4-band Ortho-Imagery (Raster)
- DEM (Point Feature Class or TIN)
- Flight Lines (Polyline Feature Class)
- Photo Centers (Point Feature Class)
- Tile Scheme (Polygon Feature Class)
- Model Limits (Polygon Feature Class)



3.3.4 Geodatabase Design

Merrick will prepare draft and final versions of a version 9.2 geodatabase design for use for this project. Feature classes will include the following:

- DEM (Point Feature Class or TIN)
- Control Survey (Point Feature Class)
- Flight Lines (Polyline Feature Class)
- Photo Centers (Point Feature Class)
- Tile Scheme (Polygon Feature Class)
- Model Limits (Polygon Feature Class)

Merrick anticipates a similar document, structure, and content as developed for the products required for the 2003, 2005, 2008 and 2009 contracts. The final document will be mutually agreed upon by Cook County and Merrick.

3.4 Deliverables

Merrick understands that the following deliverables will be provided to Cook County for this project, and are that Cook County will maintain sole ownership of such:

3.4.1 Ground Control Products

1. ASCII Coordinate listing of all existing and new (temporary) GPS checkpoints.
2. Geodatabase point feature class of the checkpoints.
3. Final control / GPS report including narrative, field notes, sketches, etc. (hard copy and digital [soft] copy of the report).
4. FGDC compliant metadata in HTML, XML and TXT formats.

3.4.2 Aerial Imagery Products

1. Preliminary flight line / control diagram(s).
2. One (1) set of original, unprocessed DMC images.*
3. Geodatabase line feature class of the flight lines.
4. Geodatabase point feature class of the photocenters.
5. Valid USGS Camera Calibration Report(s).
6. FGDC compliant metadata in HTML, XML and TXT formats.

* Unprocessed DMC imagery is not in GeoTIFF format.

3.4.3 Analytical Aerotriangulation (AT) Products

1. AT results report and computations (include ABGPS derived photocenters, IMU and ground control coordinates).
2. Geodatabase polygon feature class of the stereo-model limits.
3. FGDC compliant metadata in HTML, XML and TXT formats (i.e., stereo-models).

3.4.4 DEM Products

1. Geodatabase point feature class of the photocenters.
2. FGDC compliant metadata in HTML, XML and TXT formats.



3.4.5 Digital Ortho Imagery Products

1. One (1) set of half-foot (0.5') / six-inch (6") pixel resolution uncompressed 4-band stack (R,G,B,IR), 32-bit digital orthophotography in GeoTIFF format (.tif).
2. One (1) set of half-foot (0.5') / six-inch (6") pixel resolution black and white (panchromatic) digital orthophotography in GeoTIFF format (.tif).
3. FGDC compliant metadata in HTML, XML and TXT formats.

3.4.6 Geodatabase Design

1. Preliminary and final version 9.2 geodatabase design documentation in PDF format.

3.4.7 Cook County Support / Assistance / Responsibility

1. Assistance with TRACON Coordination.
2. Dedicating the appropriate project management resources to this project.
3. Access to existing Cook County materials and/or data.
4. Assistance with ESRI shapefiles of the project boundary(s) and various tile layouts with attributes.
5. Timely and thorough review, feedback, and acceptance of deliverable products.

3.5 Schedule

The Gantt chart on the following page outlines the proposed schedule for the Cook County 2010 Aerial Imagery Mission. The proposed schedule for calendar years 2011 and 2012 will be similar to the aforementioned Gantt chart.



Cook County, Illinois, Bureau of Technology, Department of Geographic Information Systems
 Proposal for Ortho Aerial 2010-2012 Imagery Project
 RFP No. 09-50-1061P

ID	Task Name	Duration	Start	Finish
1	COOK COUNTY BUREAU OF TECHNOLOGY DEPARTMENT OF GEOGRAPHIC INFORMATION SYSTEMS	382 days	Tue 12/04/09	Fri 02/07/11
2	Due Date for Proposal	8 days	Tue 12/08/09	Tue 12/08/09
3	Evaluation of Proposals	2 days	Wed 12/09/09	Wed 12/09/09
4	Selection	2 days	Thu 12/10/09	Fri 12/11/09
5	Project Award Contract Order Doc	14 days	Mon 01/19/10	Thu 02/04/10
6	Board Certification of Contract Executive	68 days	Fri 01/15/10	Thu 03/18/10
7	Phase One: Project Initiation	81 days	Fri 01/15/10	Fri 03/19/10
8	Survey Tracks - American Geophysical & Engineering, P.C.	41 days	Fri 01/15/10	Fri 02/26/10
9	Proposal Award Contract - Phase One	21 days	Fri 02/05/10	Fri 02/26/10
10	Phase One: Project Initiation	20 days	Mon 02/01/10	Fri 02/26/10
11	Phase One: Project Initiation	41 days	Fri 02/05/10	Fri 03/19/10
12	Phase One: Project Initiation	30 days	Mon 02/01/10	Fri 02/26/10
13	Phase Two: Field Project	48 days	Mon 02/01/10	Fri 03/19/10
14	Phase Two: Field Project	16 days	Wed 02/03/10	Thu 02/11/10
15	Phase Two: Field Project	32 days	Mon 02/08/10	Fri 02/26/10
16	Phase Two: Field Project	16 days	Mon 02/08/10	Fri 02/26/10
17	Phase Two: Field Project	16 days	Mon 02/08/10	Fri 02/26/10
18	Phase Two: Field Project	16 days	Mon 02/08/10	Fri 02/26/10
19	Phase Two: Field Project	16 days	Mon 02/08/10	Fri 02/26/10
20	Phase Two: Field Project	16 days	Mon 02/08/10	Fri 02/26/10
21	Phase Three: Geospatial Production	218 days	Mon 02/15/10	Fri 04/23/11
22	Phase Three: Geospatial Production	23 days	Mon 02/15/10	Fri 02/26/10
23	Phase Three: Geospatial Production	41 days	Mon 02/15/10	Fri 03/19/10
24	Phase Three: Geospatial Production	100 days	Mon 02/15/10	Fri 04/23/11
25	Phase Three: Geospatial Production	132 days	Mon 02/15/10	Fri 04/23/11
26	Phase Three: Geospatial Production	118 days	Mon 02/15/10	Fri 04/23/11
27	Phase Three: Geospatial Production	0 days	Fri 12/01/10	Fri 12/01/10
28	Phase Three: Geospatial Production	0 days	Fri 07/11/11	Fri 07/11/11
29	Phase Three: Geospatial Production	0 days	Fri 07/11/11	Fri 07/11/11
30	Phase Three: Geospatial Production	0 days	Fri 07/11/11	Fri 07/11/11
31	Phase Three: Geospatial Production	0 days	Fri 07/11/11	Fri 07/11/11
32	Phase Three: Geospatial Production	0 days	Fri 07/11/11	Fri 07/11/11
33	Phase Three: Geospatial Production	168 days	Mon 10/10/10	Fri 02/26/11

Submitted by: **MERRICK & COMPANY**
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MERRICK & COMPANY



3.6 Quality Assurance / Quality Control

It is imperative on any project to develop quality control policies and procedures suitable for efficiently evaluating and ensuring the quality and integrity of the map products and digital databases. Merrick fully understands that the cost of ensuring quality at the onset is considerably less than the cost of rework. Poor quality work also bears opportunity cost in schedule impacts (rework vs. new work) and future references. But most of all, providing high quality data to our clients is just the right thing to do! Therefore, at Merrick, our goal is to ensure that all QC steps are in place at the onset of the project and that the highest quality products are delivered the first time. Merrick takes full responsibility for the work of all subcontractors and for their adherence to this same policy.

Since the company's inception in 1955, Merrick & Company has successfully completed literally thousands of architectural / engineering / surveying / GIS projects. With this extensive experience we recognize that it is not realistic to expect that every project will unfold exactly as planned. Issues may arise and problems may occur within the span of this contract. Although we do not anticipate problems on this project, we will adhere to a basic and cooperative plan should they occur. It is Merrick's policy, and firm commitment to:

- Identify problems at an early stage
- Engage in honest and open communication with Cook County about problems
- Resolve all problems in a professional, timely and courteous manner

3.6.1 Overview of QA/QC

Merrick employs numerous QC checks throughout the entire mapping process. However, we place our greatest concentration on the initial photogrammetric processes – aerial photography, control (AGPS and ground GPS), and aerotriangulation, as these tasks form the basis of final product quality and accuracy. Once these processes have been completed, any additional errors that are introduced to the process tend to be random and not systematic in nature.

We also place significant emphasis on the final processing of the digital imagery. Our goal is to provide seamless, tonally-balanced imagery that supports our clients' aesthetic requirements. One of the greatest challenges of producing digital orthophotography is defining, with quantifiable criteria, the acceptability of imagery. What looks good to one end user may not to another. Thus, review of sample imagery and the prototype project are critical facets to this project. Cook County's challenge will be to achieve consensus with all users. We will assist in guiding any discussions concerning the imagery during the prototype review meeting.

3.6.2 Aerial Photography QA/QC

The flight plan is prepared and checked by the project manager to ensure proper photo coverage, flight height, and overlap. A copy of the recommended flight plan is submitted to Cook County for review and approval prior to the flight mission.



The film is processed and edited to verify that maximum allowable tolerances for crab, tip, and tilt have not been exceeded, and that optimum overlap has been maintained. The film review is completed by both MJH and Merrick. The film is also reviewed by Merrick's digital orthophotography specialists for clarity, contrast and potential anomalies.

Merrick feels that the use of a subcontractor helps ensure quality film products. Merrick has significant experience reviewing film products and believes this component critical to the overall quality of any produced imagery. As such, we are extremely thorough in our review and acceptance of photography. It is our ability to reject film that empowers us to obtain the highest quality film products. Film collection is an expensive portion of the project and Merrick's subcontract agreements specifically address that the film will be re-collected (if not accepted) at no cost to Merrick or our client. This "second" review (Merrick and our client) is not subject to any internal pressures to save cost by utilizing marginal products as may be encountered by those whom both acquire photography and perform professional mapping services.

3.6.3 Airborne GPS QA/QC

- All AGPS projects are flown with at least two (2) ground stations. All ground stations are set up at pre-determined, multi-path free locations. Multiple ground stations provide data redundancy, which allows processing from one ground station to the other.
- During the flight, all ground stations are monitored. Any interruption in operation can be conveyed to the flight crew via radio.
- In the aircraft, GPS lock is monitored on the Trimble survey controller. All end-turns are kept to a 20-degree bank or less to reduce the risk of losing initialization.
- At the end of the day's mission, all data is copied onto laptops creating multiple copies.
- Post processing is done with a 15-degree mask angle, using the best satellite configuration for that day. The final submitted post processed file is the combined product of forward and reverse processing.

3.6.4 GPS Ground Control Surveying QA/QC

- Several GPS receivers, observing simultaneously, will be used in a "leap frog" approach to GPS observations.
- All antenna heights will be measured in both meters and feet to guarantee and verify an accurate receiver setup. Survey data collected from the field by receivers will be checked daily by reviewing processed raw data and running loop closure checks.
- Loop closure tests of the ground control GPS observations will be performed to validate the integrity of the data. Closures on the GPS network show the resulting precision ratio in parts per million (PPM). Results are shown for each day of observations and for the entire project. Coordinates are referenced to latitude and longitude, while height is an ellipsoid value. The total distance traveled along the traverse is displayed together with the accuracy in parts per million (PPM). Also, the misclosure by the difference in X, Y and Z Cartesian coordinates (dx, dy, dz) is shown. Loop closures are done before any adjustment and before any



constraint of the GPS network. The latitude and longitude coordinates and ellipsoid heights from loop closures are not to be used as final coordinates.

- An error ellipse is used to show each point's expected horizontal coordinate standard error. The scale of the plots is shown by the bar ticks running through the ellipses and by the tag at the bottom of the page of the display indicating the bar scale tick value. The scale is the same for all pages of the displayed ellipses. The point name is shown at the lower left of each ellipse and the angle (measured counter-clockwise from the positive east bar scale) made by the major ellipse axis is shown at the lower right. The sigma scalar shows the ellipses in the 95% confidence region.

3.6.5 Digital Orthophoto Image QA/QC

- The DEM data is evaluated using various isometric views to check for any "spikes."
- The DEM data is merged for a given block and the elevation data is graphically displayed relative to the project boundary to ensure that all areas will be correctly rectified.
- Ortho technicians validate that the DEM blocks overlap to ensure that there are no data gaps between blocks of imagery.
- Ortho technicians review the location of sea m lines and manually modify them to avoid height objects and to place them in monotone areas (through open field, along road centerlines, etc.).
- Ortho Technicians review the block-wide image characteristics and modifies a histogram as necessary to adjust the overall tonal balance.
- Tonal balancing on a project-wide basis is reviewed to ensure consistent imagery and to specifically identify any breaks or processing failures.
- A final visual inspection of each tile is completed for aesthetics and anomalies (smears, building and bridge lean, etc.)
- Visible control points are measured on the final orthophotos and are compared against the values of the survey control coordinates. An RMSE is calculated for all measured control points and compared against the accuracy standards for the project.

3.7 Project Management and Coordination

3.7.1 Project Management Overview

Merrick fully understands the complexities involved with the management of GIS contracts and the associated challenges involved with them. Merrick has a wealth of experience managing a variety of GIS contracts. The Merrick team of professionals will operate on a project team-based concept. The project manager will assemble and direct the various activities of the project team throughout the duration of the project and has complete responsibility for the overall project budget, quality, and schedule.

3.7.2 Communication Protocol

Communication with Cook County will be through the project principal/contract manager and project manager. Merrick's project principal/contract manager is Mr. Brian Raber, CMS, GIS, Vice President. Merrick's project manager is Mr. Doug Jacoby, CMS, GIS. Mr. Raber will be the Point



of Contact (POC) for all contractual issues and negotiations and Mr. Jacoby will be responsible for all day-to-day project management duties. It is assumed that Cook County will designate the appropriate contract and/or technical project manager(s) to this project. Efficient and accurate communications between Cook County and Merrick are critical to the success of this project. Merrick's communication protocol will be the procedure to document the results of discussions and the decisions made because of the communication between project team members. Key telephone conversations and minutes of meetings will be summarized and submitted to the each key team member to guarantee an understanding of the conversations. E-mail regarding significant project issues will be forwarded to all affected parties by Merrick's project manager.

3.7.3 Status Reporting

A Project Status Report will be used to formally communicate the overall project status and issues. The Report will be provided by Merrick's project manager every four weeks and reflect project status as of the end of the period. The Status Report will be e-mailed to Cook County and all associated subcontractors. At a minimum, Status Reports will contain:

- Percent complete of major tasks
- Activities completed within the reporting period
- Activities planned for the next reporting period
- Summary of any technical issues
- Summary of administrative issues
- Meetings held, planned, or needed
- Cook County, Merrick, and subcontractor action items

3.7.4 Kick-off Meeting(s)

Merrick believes client interaction early in the process is critical and necessary for a successful project implementation. Therefore, a meeting at Cook County's offices will take place immediately after the contract is awarded. Merrick and Cook County will review all aspects of work to be performed in order to finalize project scope. The purpose of this meeting is to guarantee that all members of Cook County's project team and Merrick are in agreement regarding all project-specific tasks.

3.7.5 Prototype Evaluation Meeting

A meeting will take place to critique products and assess procedures for all prototype products. The location of this meeting will be determined at the kick-off meeting.

3.7.6 Change Control

Cook County and Merrick recognize the dynamic nature of the project to be contracted. We believe it is the responsibility of both parties to fairly negotiate changes in scope that significantly impact costs, whether it is an increase or decrease. Merrick formally documents all changes in scope (regardless of whether or not there is a cost impact), to ensure that our clients receive products that meet their satisfaction. Our change control process will include:



- Identification of the Change (requested by Cook County or proposed by the Merrick Team)
- Formal documentation of the Change by Merrick's project manager (Change Form)
- Fee negotiation (if necessary)
- Revise and document Change procedures
- Change implementation

3.7.7 Schedule Controls

Merrick understands that timely deliveries of data are critical to our clients. A clearly defined scope of work establishes client expectations, and identifies the events and activities needed to construct a schedule. Therefore, we closely monitor resources in order to maintain adequate levels of staffing and equipment to meet and exceed project schedules. Project backlog is tracked by Discipline and a 15-month, forward-looking review of resources is completed on a monthly basis. Shortfalls in resources are met with new hires, cross-training and new equipment purchases well in advance of the need for those resources. Microsoft Project[®] software is utilized for project scheduling and Merrick can optionally provide an .mpp file along with the Status Report to graphically show schedule progress.

3.7.8 Cost Controls

Merrick's ability to control project costs is derived from several factors, including:

- A corporate commitment to cost control
- Accurate cost proposal procedures
- Trained and experienced project managers
- Timely cost reporting for budget tracking

Our corporate commitment begins with a philosophy that in order to be efficient and cost competitive, we must maintain a "lean staff," that is, the staff must be engaged in productive work for our clients. Also, it is our policy to maintain salaries that are commensurate with abilities and consistent within the industry.

Our cost estimating for survey and mapping is based on years of experience and project histories. Time estimates are maintained for different scales of photography, detail of map requirements, accuracy requirements, etc. All of our project managers have transitioned from technical positions to technical/management positions and therefore understand the level of effort required to complete specific tasks. In-house training teaches the specifics of Merrick's scheduling, budgeting, and accounting systems. Project reports are provided to the project managers on a weekly basis, showing labor hours and expenses. These are summarized on a project phase basis, showing weekly, monthly and job-to-date totals.

**ECONOMIC DISCLOSURE STATEMENT
AND EXECUTION DOCUMENT
INDEX**

Section	Description	Pages
Instructions	Instructions for Completion of EDS	EDS i - ii
1	MBE/WBE Utilization Plan	EDS 1,2
2	Letter of Intent	EDS 3, 4
3	Petition for Reduction/Waiver of MBE/WBE Participation Goals	EDS 5, 6
4	Certifications	EDS 7, 8
5	Economic and Other Disclosures, Affidavit of Child Support Obligations and Disclosure of Ownership Interest	EDS 9 - 13
6	Sole Proprietor Signature Page	EDS 14a/b/c
7	Partnership Signature Page	EDS 15a/b/c
8	Corporation Signature Page	EDS 16a/b/c
9	Cook County Signature Page	EDS 17

**INSTRUCTIONS FOR COMPLETION OF
ECONOMIC DISCLOSURE STATEMENT AND EXECUTION DOCUMENT**

This Economic Disclosure Statement and Execution Document ("EDS") is to be completed and executed by every Bidder on a County contract, every party responding to a Request for Proposals or Request for Qualifications ("Proposer"), and others as required by the Purchasing Agent. If the Undersigned is awarded a contract pursuant to the procurement process for which this EDS was submitted (the "Contract"), this Economic Disclosure Statement and Execution Document shall stand as the Undersigned's execution of the Contract.

Definitions. Capitalized terms used in this EDS and not otherwise defined herein shall have the meanings given to such terms in the Instructions to Bidders, General Conditions, Request for Proposals, Request for Qualifications, or other documents, as applicable.

"Affiliated Entity" means a person or entity that, directly or indirectly, controls the Bidder, is controlled by the Bidder, or is, with the Bidder, under common control of another person or entity. Indicia of control include, without limitation, interlocking management or ownership; identity of interests among family members; shared facilities and equipment; common use of employees; and organization of a business entity following the ineligibility of a business entity to do business with the County under the standards set forth in the Certifications included in this EDS, using substantially the same management, ownership or principals as the ineligible entity.

"Bidder," "Proposer," "Undersigned," or "Applicant," is the person or entity executing this EDS. Upon award and execution of a Contract by the County, the Bidder, Proposer, Undersigned or Applicant, as the case may be, shall become the Contractor or Contracting Party.

"Proposal," for purposes of this EDS, is the Undersigned's complete response to an RFP/RFQ, or if no RFQ/RFP was issued by the County, the "Proposal" is such other proposal, quote or offer submitted by the Undersigned, and in any event a "Proposal" includes this EDS.

"Code" means the Code of Ordinances, Cook County, Illinois available through the Cook County Clerk's Office website (<http://www.cookcyclerk.com/sub/ordinances.asp>). This page can also be accessed by going to www.cookcyclerk.com, clicking on the tab labeled "County Board Proceedings," and then clicking on the link to "Cook County Ordinances."

"Contractor" or "Contracting Party" means the Bidder, Proposer or Applicant with whom the County has entered into a Contract.

"EDS" means this complete Economic Disclosure Statement and Execution Document, including all sections listed in the Index and any attachments.

"Lobby" or "lobbying" means to, for compensation, attempt to influence a County official or County employee with respect to any County matter.

"Lobbyist" means any person or entity who lobbies.

"Prohibited Acts" means any of the actions or occurrences which form the basis for disqualification under the Code, or under the Certifications hereinafter set forth.

Sections 1 through 3: MBE/WBE Documentation. Sections 1 and 2 must be completed in order to satisfy the requirements of the County's MBE/WBE Ordinance, as set forth in the Contract Documents, if applicable. If the Undersigned believes a waiver is appropriate and necessary, Section 3, the Petition for Waiver of MBE/WBE Participation must be completed.

Section 4: Certifications. Section 4 sets forth certifications that are required for contracting parties under the Code. Execution of this EDS constitutes a warranty that all the statements and certifications contained, and all the facts stated, in the Certifications are true, correct and complete as of the date of execution.

Section 5: Economic and Other Disclosures Statement. Section 5 is the County's required Economic and Other Disclosures Statement form. Execution of this EDS constitutes a warranty that all the information provided in the EDS is true, correct and complete as of the date of execution, and binds the Undersigned to the warranties, representations, agreements and acknowledgements contained therein.

Sections 6, 7, & Execution Forms. The Bidder executes this EDS, and the Contract, by completing and signing three copies of the appropriate Signature Page. Section 6 is the form for a sole proprietor, Section 7 is the form for a partnership or joint venture, and Section 8 is the form for a corporation. Proper execution requires **THREE ORIGINALS**; therefore, the appropriate Signature Page must be filled in, three copies made, and all three copies must be properly signed, notarized and submitted. The forms may be printed and completed by typing or hand writing the information required. The County is in the process of converting these forms into a format that may be downloaded and completed on the user's computer. Once this feature is available, those having the necessary software may follow the instructions set forth below under the heading "Instructions for Completing PDF Forms."

Required Updates. The information provided in this EDS will be kept current. In the event of any change in any information provided, including but not limited to any change which would render inaccurate or incomplete any certification or statement made in this EDS, the Undersigned will supplement this EDS up to the time the County takes action, by filing an amended EDS or such other documentation as is requested.

Additional Information. The County's Governmental Ethics and Campaign Financing Ordinances, impose certain duties and obligations on persons or entities seeking County contracts, work, business, or transactions. For further information please contact the Director of Ethics at (312) 603-4304 (69 W. Washington St Suite 3040, Chicago, IL 60602) or visit our web-site at www.cookcountygov.com and go to the Ethics Department link. The Bidder must comply fully with the applicable ordinances.

MBE/WBE UTILIZATION PLAN

Section 1

BIDDER/PROPOSER HEREBY STATES that all MBE/WBE firms included in this Plan are certified MBEs/WBEs by at least one of the entities listed in the General Conditions.

I. BIDDER/PROPOSER MBE/WBE STATUS: (check the appropriate line)

_____ Bidder/Proposer is a certified MBE or WBE firm. (If so, attach copy of appropriate Letter of Certification.)

_____ Bidder/Proposer is a Joint Venture and one or more Joint Venture partners are certified MBEs or WBEs, (If so, attach copies of Letter(s) of Certification, a copy of Joint Venture Agreement clearly describing the role of the MBE/WBE firm(s) and its ownership interest in the Joint Venture and a completed Joint Venture Affidavit – available from the Office of Contract Compliance.)

 X Bidder/Proposer is not a certified MBE or WBE firm, nor a Joint Venture with MBE/WBE partners, but will utilize MBE and WBE firms either Directly or Indirectly in the performance of the Contract. (If so, complete Sections II and III).

II. Direct Participation of MBE/WBE Firms

MBEs/WBEs will perform as subcontractors/suppliers/consultants include the following:

MBE/WBE Firm: American Surveying & Engineering

Address: 8604 W. Catalpa Ave., Ste. 912, Chicago, IL 60656

E-mail: c.fidis@americansurvey.com

Contact Person: Coventine Fidis Phone: (773) 444-0800

Dollar Amount Participation: \$ 279,290.00

Percent Amount of Participation: 7.13 %

*Letter of Intent attached? Yes X No _____

*Letter of Certification attached? Yes X No _____

MBE/WBE Firm: Pinnacle Mapping Technologies, Inc.

Address: 8021 Knue Road, Suite 113, Indianapolis, IN 46250

E-mail: www.pinnaclemapping.com

Contact Person: Ryan King Phone: (371) 585-2011

Dollar Amount Participation: \$ 512,760.00

Percent Amount of Participation: 13.08 %

*Letter of Intent attached? Yes X No _____

*Letter of Certification attached? Yes X No _____

Attach additional sheets as needed. Certified by the Illinois Unified Certification Program.

*Where goals have not been achieved through Direct Participation, Bidder/Proposer shall include documentation outlining efforts to achieve Direct Participation at the time of Bid/Proposal submission.

II. Indirect Participation of MBE/WBE Firms

NOTE: This section need not be completed if the MBE/WBE goals have been met through Direct Participation. However, Indirect Participation will only be considered after all efforts to achieve Direct Participation have been exhausted. Only after written documentation of Good Faith Efforts is received will Indirect Participation be considered.

MBEs/WBEs will perform as subcontractors/suppliers/consultants include the following:

MBEWBE Firm: Aero Systems, Inc.

Address: 2580 South Main St., Erie, CO 80516

E-mail: kdavalos@asicolorado.com

Contact Person: Kim Davalos Phone: 303-665-6367

Dollar Amount Participation: \$ 822,000

Percent Amount of Participation: 21 %

*Letter of Intent attached? Yes X No _____

*Letter of Certification attached? Yes X No _____

MBEWBE Firm: _____

Address: _____

E-mail: _____

Contact Person: _____ Phone: _____

Dollar Amount Participation: \$ _____

Percent Amount of Participation: _____ %

*Letter of Intent attached? Yes X No _____

*Letter of Certification attached? Yes X No _____

Attach additional sheets as needed.

*All Letters of Intent, Letters of Certification and documentation of Good Faith Efforts omitted from this bid/proposal must be submitted to the Office of Contract Compliance so as to assure receipt by the Contract Compliance Administrator not later than three (3) business days after bid opening or proposal due date.

COOK COUNTY LETTER OF INTENT
(Section 2)

FROM MBE/WBE TO PERFORM AS SUBCONTRACTOR, SUPPLIER AND/OR CONSULTANT

Contract Title & Number: Ortho Aerial Imagery Project / 09-50-1061P

From: American Surveying & Engineering, P.C.
(MBE/WBE Firm)

To: Merrick & Company and the County of Cook
(Bidder/Proposer Firm)

The Undersigned is prepared to provide the following services, supplies and project in connection with the above named contract (the "Contract"):

Each service performed and /or item supplied will be detailed under Description of Service/Supply and Project with all services/items totaled under Fee/Cost to equal the full dollar amount of the Letter of Intent. **All services performed and/or supplies provided must be directly related to this specific Cook County contract and must not include any services/supplies related to any other government contract.**

Description of Service/Supply/Project	Fee/Cost
1. <u>Ground Survey Support</u>	<u>\$ 279,290 7.13 %</u>
2. _____	<u>\$ _____ %</u>
3. _____	<u>\$ _____ %</u>
4. _____	<u>\$ _____ %</u>
Total:	<u>\$ 279,290 7.13 %</u>

THE UNDERSIGNED PARTIES AGREE that this Letter of Intent will become a binding Subcontract Agreement conditioned upon the Bidder/Proposer's receipt of a signed contract from the County of Cook. The Undersigned Parties do also certify that they did not affix their signatures to this document until all areas under Description of Service/Supply and Fee/Cost were completed.

Upon Penalty of perjury, I Coventine Fidis (print name)
the President/CEO (title) and duly authorized representative
of the American Surveying & Engineering, P.C. (MBE/WBE firm) affirm

that the foregoing information is true and correct and the services, supplies, and/or project indicated above will be supplies/performed for the above indicated total dollar amount \$ _____ which represents the above indicated total percentage _____ % for the contract amount \$ _____.

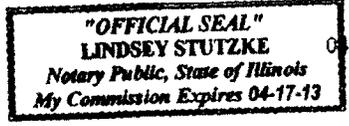
etc.

(Signature of affiant) 11 / 23 / 09
(Date)

Subscribed and sworn to before me this 23rd day of November, 2009

Lindsey Stutzke
(Notary's Signature)

(Notary Seal)



COOK COUNTY LETTER OF INTENT
FROM BIDDER OR PROPOSER TO COOK COUNTY

Upon penalty of perjury, Gary Outlaw, GISP (print name),
the Vice President, Merrick & Company (title) and duly authorized
representative of American Surveying & Engineering (Bidder Proposer firm).

affirm that the foregoing information is true and correct and the services, supplies, and/or project indicated above will
be supplied/performed for the above indicated total dollar amount \$ 279,290.00, which represents the

above indicated total percentage 7.13 % for the contract amount \$ 3,917,540.39

John D. Outlaw
(Signature of affiant)

12, 4, 09
(Date)

Subscribed and sworn to before me this 4TH day of DECEMBER, 20 09

Phyllis J. Weiss
(Notary's Signature)

MY COMMISSION EXPIRES 11/25/2011
(Notary Seal)



COOK COUNTY LETTER OF INTENT
(Section 2)

FROM MBE/WBE TO PERFORM AS SUBCONTRACTOR, SUPPLIER AND/OR CONSULTANT

Contract Title & Number: _____

From: Pinnacle Mapping Technologies, Inc.
(MBE/WBE Firm)

To: Merrick : COMPANY and the County of Cook
(Bidder/Propose Firm)

The Undersigned is prepared to provide the following services, supplies and project in connection with the above named contract (the "Contract"):

Each service performed and /or item supplied will be detailed under Description of Service/Supply and Project with all services/items totaled under Fee/Cost to equal the full dollar amount of the Letter of Intent. *All services performed and/or supplies provided must be directly related to this specific Cook County contract and must not include any services/supplies related to any other government contract.*

Description of Service/Supply/Project	Fee/Cost
1. Digital Ortho Support	\$ 512 760 13.08 %
2. _____	\$ _____ %
3. _____	\$ _____ %
4. _____	\$ _____ %
Total: \$ 512 760 13.08 %	

THE UNDERSIGNED PARTIES AGREE that this Letter of Intent will become a binding Subcontract Agreement conditioned upon the Bidder/Proposer's receipt of a signed contract from the County of Cook. The Undersigned Parties do also certify that they did not affix their signatures to this document until all areas under Description of Service/Supply and Fee/Cost were completed.

Upon Penalty of perjury, I BRENDA R. KING (print name)

the PRESIDENT / OWNER (title) and duly authorized representative

of the Pinnacle Mapping Technologies, Inc. (MBE/WBE firm) affirm

that the foregoing information is true and correct and the services, supplies, and/or project indicated above will be supplies/performed for the above indicated total dollar amount \$ _____ which represents the above indicated total percentage _____ % for the contract amount \$ _____

Brenda R. King
(Signature of affiant)

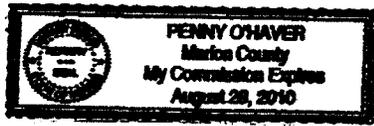
12 / 1 / 09
(Date)

Subscribed and sworn to before me this 1st day of DECEMBER, 2009

Penny O'Haaver
(Notary's Signature)

(Notary Seal)

EDS -



04.09

COOK COUNTY LETTER OF INTENT
FROM BIDDER OR PROPOSER TO COOK COUNTY

Upon penalty of perjury, Gary Outlaw, GISP (print name),
the Vice President, Merrick & Company (title) and duly authorized
representative of Pinnacle Mapping Technologies (Bidder Proposer firm),

affirm that the foregoing information is true and correct and the services, supplies, and/or project indicated above will
be supplied/performed for the above indicated total dollar amount \$ 512,760.00 which represents the
above indicated total percentage 13.08 % for the contract amount \$ 3,917,540.39.

Gary D. Outlaw
(Signature of affiant)

12, 04, 09
(Date)

Subscribed and sworn to before me this 4TH day of DECEMBER, 20 09.

Ann J. Wilson
(Notary's Signature)

[Faint Notary Seal]
(Notary Seal)

COOK COUNTY LETTER OF INTENT
(Section 2)

FROM MBE/WBE TO PERFORM AS SUBCONTRACTOR, SUPPLIER AND/OR CONSULTANT

Contract Title & Number: Ortho Aerial 2010-2012 / RFP 09-50-1061P

From: Aero Systems, Inc.
(MBE/WBE Firm)

To: Merrick & Company and the County of Cook
(Bidder/Proposer Firm)

The Undersigned is prepared to provide the following services, supplies and project in connection with the above named contract (the "Contract"):

Each service performed and/or item supplied will be detailed under Description of Service/Supply and Project with all services/items totaled under Fee/Cost to equal the full dollar amount of the Letter of Intent. All services performed and/or supplies provided must be directly related to this specific Cook County contract and must not include any services/supplies related to any other government contract.

Description of Service/Supply/Project	Fee/Cost
1. <u>Aircraft Lease and Maintenance</u>	<u>\$ 822,000 21 %</u>
2. _____	<u>\$ _____ %</u>
3. _____	<u>\$ _____ %</u>
4. _____	<u>\$ _____ %</u>
Total:	<u>\$ 822,000 21 %</u>

THE UNDERSIGNED PARTIES AGREE that this Letter of Intent will become a binding Subcontract Agreement conditioned upon the Bidder/Proposer's receipt of a signed contract from the County of Cook. The Undersigned Parties do also certify that they did not affix their signatures to this document until all areas under Description of Service/Supply and Fee/Cost were completed.

Upon Penalty of perjury, I Kimberly Jo Davalos (print name)

the President (title) and duly authorized representative

of the Aero Systems, Incorporated (MBE/WBE Firm) affirm

that the foregoing information is true and correct and the services, supplies, and/or project indicated above will be supplies/performed for the above indicated total dollar amount \$ 822,000 which represents the

above indicated total percentage 22 % for the contract amount \$ 3,917,540.39

Kimberly Jo Davalos (Signature of affiant) 12 / 3 / 09 (Date)

Subscribed and sworn to before me this 3rd day of December, 2009

Melissa S. Martineau (Notary's Signature)

MELISSA S. MARTINEAU
NOTARY PUBLIC, STATE OF COLORADO

My Comm. Expires March 17, 2012

COOK COUNTY LETTER OF INTENT
FROM BIDDER OR PROPOSER TO COOK COUNTY

Upon penalty of perjury, Gary Outlaw, GISP (print name),
the Vice President, Merrick & Company (title) and duly authorized
representative of Aero Systems, Inc. (Bidder Proposer firm),

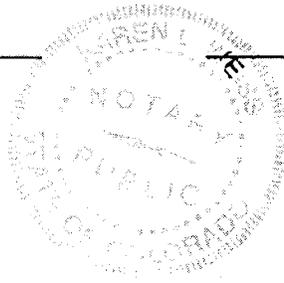
affirm that the foregoing information is true and correct and the services, supplies, and/or project indicated above will
be supplied/performed for the above indicated total dollar amount \$ 822,000.00, which represents the
above indicated total percentage 21 % for the contract amount \$ 3,917,540.39.

John D. OrPan
(Signature of affiant)

12, 4, 09
(Date)

Subscribed and sworn to before me this 4TH day of DECEMBER, 2009.

Armin J. Weiss
(Notary's Signature)



12/23/2011
(Notary Seal)

THE BOARD OF COMMISSIONERS

TODD H. STROGER

PRESIDENT

EARLEAN COLLINS	1st Dist.	PETER R. SILVESTRI	9th Dist.
ROBERT STEELE	2nd Dist.	MINE OUNLEY	10th Dist.
JERRY BUTLER	3rd Dist.	JOHN P. BAILEY	11th Dist.
WILLIAM M. BEAVERS	4th Dist.	FORREST CLAYPOOL	12th Dist.
BENJAMIN SIMS	5th Dist.	LARRY SUFFREDIN	13th Dist.
JOAN PATRICIA MURPHY	6th Dist.	GREGG GOSLIN	14th Dist.
JOSEPH MARIO MORENO	7th Dist.	TIMOTHY O. SCHNEIDER	15th Dist.
ROBERTO MALDONADO	8th Dist.	ANTHONY J. PERANCA	16th Dist.
		ELIZABETH ANN DOODY GORMAN	17th Dist.



COOK COUNTY
OFFICE OF CONTRACT COMPLIANCE

BETTY HANCOCK PERRY
DIRECTOR

118 North Clark Street, Room 1020
Chicago, Illinois 60602-1304
E-MAIL: bhperry@cookcountygov.com
TEL (312) 603-5502
FAX (312) 603-4547

March 9, 2009

Mr. Covertine Fidis, President
American Surveying & Engineering, P.C.
8604 W. Catalpa Avenue, Suite 912
Chicago, IL 60656

Annual Certification Expires: May 8, 2010

Dear Mr. Fidis:

Congratulations on your continued eligibility for Certification as an MBE (9) by Cook County Government. This MBE (9) Certification is valid until May 8, 2011; however your firm must be revalidated annually. Your firm's next annual validation is required by May 8, 2010.

As a condition of continued Certification during this three (3) year period, you must file a "No Change Affidavit" within sixty (60) business days prior to the date of annual expiration. Failure to file this Affidavit shall result in the termination of your Certification. You must notify Cook County Government's Office of Contract Compliance, of any change in ownership or control of your firm or any other matters or facts affecting your firm's eligibility for Certification.

Cook County Government may commence action to remove your firm as an MBE (9) vendor if you fail to notify us of any changes of facts affecting your firm's Certification, or if your firm otherwise fails to cooperate with the County in any inquiry or investigation. Removal of your status may also be commenced if your firm is found to be involved in bidding or contractual irregularities.

Your firm's name will be listed in Cook County's Directory of Minority Business Enterprises and Women Business Enterprises in the area(s) of specialty:

Professional Surveying and Engineering Services

Your firm's participation on Cook County contracts will be credited toward MBE (9) goals in your area(s) of specialty. While your participation on Cook County contracts is not limited to your specialty, credit toward MBE (9) goals will be given only for work done in the specialty category.

Thank you for your continued interest in Cook County Government's Minority and Women Business Enterprise Programs.

Sincerely,

Betty Hancock Perry

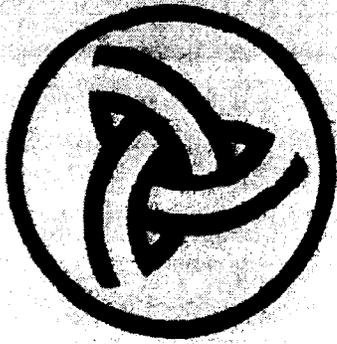
Director

BHP/es

Enclosed: No Change Affidavit



Printed on Recycled Paper



Illinois Department of Transportation

Pinnacle Mapping Technologies, Inc.

is hereby certified as a

Disadvantaged Business Enterprise

This certificate is valid under current firm ownership and operational control only and supercedes any authorization or listing previously issued.

Timothy W. Martin
Secretary,
Illinois Department of Transportation

Carol Lyle
Bureau Chief,
Small Business Enterprises

Issued: June 21, 2005

Expires: July 1, 2010

OFFICE OF THE SECRETARY OF STATE
OF THE STATE OF COLORADO

CERTIFICATE

I, Bernie Buescher, as the Secretary of State of the State of Colorado, hereby certify that, according to the records of this office,

AERO SYSTEMS, INC.

is a **Corporation** formed or registered on 04/09/1976 under the law of Colorado, has complied with all applicable requirements of this office, and is in good standing with this office. This entity has been assigned entity identification number 19871301524.

This certificate reflects facts established or disclosed by documents delivered to this office on paper through 12/01/2009 that have been posted, and by documents delivered to this office electronically through 12/03/2009 @ 15:43:02.

I have affixed hereto the Great Seal of the State of Colorado and duly generated, executed, authenticated, issued, delivered and communicated this official certificate at Denver, Colorado on 12/03/2009 @ 15:43:02 pursuant to and in accordance with applicable law. This certificate is assigned Confirmation Number 7517979.



Bernie Buescher

Secretary of State of the State of Colorado

*****End of Certificate*****

Notice: A certificate issued electronically from the Colorado Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Confirmation Page of the Secretary of State's Web site, <http://www.sos.state.co.us/biz/CertificateSearchCriteria.do> entering the certificate's confirmation number displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate. For more information, visit our Web site, <http://www.sos.state.co.us/> click Business Center and select "Frequently Asked Questions."

**PETITION FOR WAIVER OF MBE/WBE PARTICIPATION
(SECTION 3)**

A. BIDDER/PROPOSER HEREBY REQUESTS

- FULL MBE WAIVER
- FULL WBE WAIVER
- REDUCTION (PARTIAL MBE and/or WBE PARTICIPATION)
- 59 % of Reduction for MBE Participation
- 25 % of Reduction for WBE Participation

B. REASON FOR FULL/REDUCTION WAIVER REQUEST

Bidder/Proposer shall check each item applicable to its reason for a waiver request. Additionally, supporting documentation shall be submitted with this request. If such supporting documentation cannot be submitted with bid/proposal/quotation, such documentation shall be submitted directly to the Office of Contract Compliance no later than three (3) days from the date of submission date.

- 1) lack of sufficient qualified MBEs and/or WBEs capable of providing the goods or services required by the contract (please explain)
- 2) the specifications and necessary requirements for performing the Contract make it impossible or economically infeasible to divide the Contract to enable the contractor to utilize MBEs and/or WBEs in accordance with the applicable participation (please explain)
- See below.
- 3) price(s) quoted by potential MBEs and/or WBEs are above competitive levels and increase cost of doing business and would make acceptance of such MBE and/or WBE bid economically impracticable, taking into consideration the percentage of total contract price represented by such MBE and/or WBE bid (please explain)
- 4) there are other relevant factors making it impossible or economically infeasible to utilize MBE and/or WBE firms (please explain)

The technical requirements for this program require the use of a large format Digital Mapping Camera (DMC) that is owned by only a handful of firms in the United States. This camera has specific workflows that support the development of the desired end-product and this knowledge is also limited.

The following describes the task identified in the cost proposal form and associated firm handling the service:

Task	Firm	MBE/WBE Status
Project Management	Merrick & Company	N/A
Control Survey	American Surveying	MBE
Aerial Source Imagery*	MJ Harden	N/A
Aerotriangulation*	MJ Harden	N/A
Orthorectified Imagery, DEM**	Pinnacle Mapping	WBE
	MJ Harden	N/A
	Merrick & Company	N/A
Geodatabase Design***	Merrick & Company	N/A
Metadata	American Surveying	MBE

*Both the aerial source imagery and aerotriangulation is technically specialized and Merrick exhausted efforts (see EDS-6) to locate MBE/WBE firms listed with Cook County.

** Specialized work processes only allow a portion of this work to go to the WBE.

*** The Geodatabase Design has been created by Merrick from the previous project and involves small changes.

04.09

C. GOOD FAITH EFFORTS TO OBTAIN MBE/WBE PARTICIPATION

Bidder/Proposer shall check each item applicable to its reason for a waiver request. **Additionally, supporting documentation shall be submitted with this request. If such supporting documentation cannot be submitted with bid/proposal/quotation, such documentation shall be submitted directly to the Office of Contract Compliance no later than three (3) days from the date of submission date.**

- 1) Made timely written solicitation to identified MBEs and WBEs for utilization of goods and/or services; and provided MBEs and WBEs with a timely opportunity to review and obtain relevant specifications, terms and conditions of the proposal to enable MBEs and WBEs to prepare an informed response to solicitation (please attach)
- 2) Followed up initial solicitation of MBEs and WBEs to determine if firms are interested in doing business (please attach)
- 3) Advertised in a timely manner in one or more daily newspapers and/or trade publication for MBEs and WBEs for supply of goods and services (please attach)
- 4) Use the services and assistance of the Office of Contract Compliance Staff (please explain)
- 5) Engaged MBEs & WBEs for indirect participation (please explain)

D. OTHER RELEVANT INFORMATION

Attach any other documentation relative to Good Faith Efforts in complying with MBE/WBE participation.

Merrick utilized the resources of the Cook County Office of Contract Compliance website listing of approved MBE/WBE firms. Searches were performed under the headings of "Surveyors & Cartographers", along with "Surveying & Mapping Technicians". Based on those search results and the task item of aerial source collection and aerotriangulation, an email was sent to the listed representatives from each firm to gauge their technical capability to support those task.

The following five firms were contacted via email.

- Accurate Group, Inc. (MBE) – Response attached. – NO RESPONSE...
- American Surveying & Engineering (MBE) – Already on our team.
- DB Sterlin Associates (MBE) – Response attached.
- Dynasty Group, Inc. (MBE) – Response attached. NO RESPONSE...
- Pro-West & Associates (WBE) – Response attached.
- Triangle Aerial Surveys (MBE) – Response attached.

There were no MBE/WBE firms that possessed this technical capability (emails attached).

From: Gary Outlaw
Sent: Tuesday, November 24, 2009 1:49 PM
To: 'syedh@accurategroupinc.com'
Subject: Cook County Ortho Imagery Project

Dear Mr. Hussaini:

Merrick & Company intends on submitting a proposal to Cook County for the 2010 – 2012 Imagery Project and is looking to increase our MBE/WBE participation goals. Your firm is listed as a MBE/WBE firm by the Cook County Office of Contract Compliance.

The task of aerial source imagery and aerotriangulation is a possibility of increasing our participation goals. This task will need to be performed with a large format digital mapping camera (DMC) manufactured by Intergraph.

Can you please let me know if you own and operate a DMC camera in order to receive additional details to provide a cost for this task.

Sincerely,

Gary Outlaw

Vice President - Business Development

GeoSpatial Solutions

Merrick & Company

2450 S. Peoria Street

Aurora, Colorado 80014-5475

Direct: 303-353-3901 Cell: 303-520-4719

Main: 303-751-0741 Fax: 303-745-0964

www.merrick.com

Engineering | Architecture | Design-Build | Surveying | GeoSpatial Solutions

From: Reynold Sterlin [rsterlin@dbsterlin.com]
Sent: Wednesday, November 25, 2009 3:05 PM
To: Gary Outlaw
Subject: RE: Cook County Ortho Imagery Project

We do not own and operate a DMC camera.

Rey Sterlin

From: Gary Outlaw [mailto:gary.outlaw@merrick.com]
Sent: Tuesday, November 24, 2009 2:50 PM
To: Reynold Sterlin
Subject: Cook County Ortho Imagery Project

Dear Mr. Sterlin:

Merrick & Company intends on submitting a proposal to Cook County for the 2010 – 2012 Imagery Project and is looking to increase our MBE/WBE participation goals. Your firm is listed as a MBE/WBE firm by the Cook County Office of Contract Compliance.

The task of aerial source imagery and aerotriangulation is a possibility of increasing our participation goals. This task will need to be performed with a large format digital mapping camera (DMC) manufactured by Intergraph.

Can you please let me know if you own and operate a DMC camera in order to receive additional details to provide a cost for this task.

Sincerely,

Gary Outlaw
Vice President - Business Development
GeoSpatial Solutions
Merrick & Company
2450 S. Peoria Street
Aurora, Colorado 80014-5475
Direct: 303-353-3901 Cell: 303-520-4719
Main: 303-751-0741 Fax: 303-745-0964
www.merrick.com

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From: Gary Outlaw
Sent: Tuesday, November 24, 2009 1:18 PM
To: 'zchen@dynastygrp.com'
Subject: Cook County Ortho Aerial Project

Dear Mr. Chen:

Merrick & Company intends on submitting a proposal to Cook County for the 2010 – 2012 Imagery Project and is looking to increase our MBE/WBE participation goals. Your firm is listed as a MBE/WBE firm by the Cook County Office of Contract Compliance.

The task of aerial source imagery and aerotriangulation is a possibility of increasing our participation goals. This task will need to be performed with a large format digital mapping camera (DMC) manufactured by Intergraph.

Can you please let me know if you own and operate a DMC camera in order to receive additional details to provide a cost for this task.

Sincerely,

Gary Outlaw

Vice President - Business Development

GeoSpatial Solutions

Merrick & Company

2450 S. Peoria Street

Aurora, Colorado 80014-5475

Direct: 303-353-3901 Cell: 303-520-4719

Main: 303-751-0741 Fax: 303-745-0964

www.merrick.com

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From: Greg Proper [gproper@prowestgis.com]
Sent: Tuesday, November 24, 2009 1:28 PM
To: Gary Outlaw
Subject: Re: Cook County Ortho Aerial Project

Dear Mr. Outlaw:

Thank you for the opportunity to work with Merrick & Company on this project. Unfortunately the work described is not one of our core competencies and thus we are unable to help fulfill your WBE requirements for this project.

We look forward to the opportunity to work with Merrick on other projects.

Sincerely,

Greg P. Proper, P.E.

Systems Design and Research
Pro-West & Associates, Inc.

8239 State 371 NW
PO Box 812
Walker, MN 56484

Phone: (218) 547-3374 ext 111
Fax: (218) 547-3375
Email: gproper@prowestgis.com
Web: www.prowestgis.com

----- Original Message -----

From: Gary Outlaw
To: Greg Proper (gproper@prowestgis.com)
Sent: Tuesday, November 24, 2009 2:16 PM
Subject: Cook County Ortho Aerial Project

Dear Mr. Proper:

Merrick & Company intends on submitting a proposal to Cook County for the 2010 – 2012 Imagery Project and is looking to increase our MBE/WBE participation goals. Your firm is listed as a MBE/WBE firm by the Cook County Office of Contract Compliance.

The task of aerial source imagery and aerotriangulation is a possibility of increasing our participation goals. This task will need to be performed with a large format digital mapping camera (DMC) manufactured by Intergraph.

Can you please let me know if you own and operate a DMC camera in order to receive additional details to provide a cost for this task.

Sincerely,

Gary Outlaw

Vice President - Business Development
GeoSpatial Solutions
Merrick & Company
2450 S. Peoria Street
Aurora, Colorado 80014-5475
Direct: 303-353-3901 Cell: 303-520-4719
Main: 303-751-0741 Fax: 303-745-0964
www.merrick.com

Engineering | Architecture | Design-Build | Surveying | GeoSpatial Solutions

From: Gary Outlaw
Sent: Wednesday, November 25, 2009 8:42 AM
To: 'Al Bolivar'
Subject: RE: Cook County Ortho Imagery Project

Hi Al,

Thanks for getting back to me. The MBE/WBE participation for Cook County needs to be direct participation. I'll keep you in mind for other projects to work on building a relationship for other government opportunities.

I believe we met at a MAPPS meeting in the past.

Gary Outlaw
Vice President
Merrick & Company
Direct: 303-353-3901
www.merrick.com

-----Original Message-----

From: Al Bolivar [mailto:al@triaerial.com]
Sent: Wednesday, November 25, 2009 7:24 AM
To: Gary Outlaw
Subject: Re: Cook County Ortho Imagery Project

Gary,

Thank you for the opportunity to team up with your company. Presently we do not own a digital cameras. Normally we subcontract this type of services. We are very familiar with the DMC digital camera and many of our projects are flown with this type of camera. If there is a anyway that we can be of service to you, please let us know. We are, for your information, an 8(a) company. Please, check our website for more information about our company and services.

<http://www.Triangle-Aerial-Surveys.com>

If you need additional information, please let us know. We look forward to working with your company.

Thank you,

Al

Gary Outlaw wrote:

Al Bolivar PE, PLS, CP
President
Triangle Aerial Surveys Inc.
7718 Six Forks Road ,Suite 200
Raleigh, NC 27615
Phone: 919-787-8654
Fax: 919-787-7690

Dear Mr. Bolivar:

Merrick & Company intends on submitting a proposal to Cook County for the 2010 - 2012 Imagery Project and is looking to increase our MBE/WBE participation goals. Your firm is listed as a MBE/WBE firm by the Cook County Office of Contract Compliance.

The task of aerial source imagery and aerotriangulation is a possibility of increasing our participation goals. This task will need to be performed with a large format digital mapping camera (DMC) manufactured by Intergraph.

Can you please let me know if you own and operate a DMC camera in order to receive additional details to provide a cost for this task.

Sincerely,

Gary Outlaw
Vice President - Business Development
GeoSpatial Solutions
Merrick & Company
2450 S. Peoria Street
Aurora, Colorado 80014-5475
Direct: 303-353-3901 Cell: 303-520-4719
Main: 303-751-0741 Fax: 303-745-0964
www.merrick.com<<http://www.merrick.com/>>

**REQUIRED DISCLOSURES
(SECTION 5)**

1. DISCLOSURE OF LOBBYIST CONTACTS

List all persons or entities that have made lobbying contacts on your behalf with respect to this contract:

Name	Address
None	
<hr/>	
<hr/>	
<hr/>	

2. LOCAL BUSINESS PREFERENCE DISCLOSURE; CODE, CHAPTER 34, SECTION 34-151(p);

"Local Business" shall mean a person authorized to transact business in this State and having a bona fide establishment for transacting business located within Cook County at which it was actually transacting business on the date when any competitive solicitation for a public contract is first advertised or announced and further which employs the majority of its regular, full time work force within Cook County, including a foreign corporation duly authorized to transact business in this State and which has a bona fide establishment for transacting business located within Cook County at which it was actually transacting business on the date when any competitive solicitation for a public contract is first advertised or announced and further which employs the majority of its regular, full time work force within Cook County.

a) Is Bidder a "Local Business" as defined above?

Yes: _____ No: X

b) If yes, list business address(es) within Cook County:

c) Does Bidder employ the majority of its regular full-time workforce within Cook County?

Yes: _____ No: X

3. THE CHILD SUPPORT ENFORCEMENT ORDINANCE (PREFERENCE (CODE, CHAPTER 34, SECTION 34-366)

Every Applicant for a County Privilege shall be in full compliance with any child support order before such Applicant is entitled to receive or renew a County Privilege. When delinquent child support exists, the County shall not issue or renew any County Privilege, and may revoke any County Privilege. All Applicants are required to review the Cook County Affidavit of Child Support Obligations attached to this EDS and complete the following, based upon the definitions and other information included in such Affidavit:

 X Applicant has no "Substantial Owner."

OR

_____ The Cook County Affidavit of Child Support Obligations has been completed by all "Substantial Owners" and is attached to this EDS.

4. REAL ESTATE OWNERSHIP DISCLOSURES.

The Undersigned must indicate by checking the appropriate provision below and providing all required information that either:

- a) The following is a complete list of all real estate owned by the Undersigned in Cook County:

PERMANENT INDEX NUMBER(S): None

(ATTACH SHEET IF NECESSARY TO LIST ADDITIONAL INDEX NUMBERS)

OR:

- b) The Undersigned owns no real estate in Cook County.

5. EXCEPTIONS TO CERTIFICATIONS OR DISCLOSURES.

If the Undersigned is unable to certify to any of the Certifications or any other statements contained in this EDS and not explained elsewhere in this EDS, the Undersigned must explain below:

If the letters, "NA", the word "None" or "No Response" appears above, or if the space is left blank, it will be conclusively presumed that the Undersigned certified to all Certifications and other statements contained in this EDS.

COOK COUNTY DISCLOSURE OF OWNERSHIP INTEREST STATEMENT

The Cook County Code of Ordinances (§2-610 *et seq.*) requires that any Applicant for any County Action must disclose information concerning ownership interests in the Applicant. This Disclosure of Ownership Interest Statement must be completed with all information current as of the date this Statement is signed. Furthermore, this Statement must be kept current, by filing an amended Statement, until such time as the County Board or County Agency shall take action on the application. The information contained in this Statement will be maintained in a database and made available for public viewing.

If you are asked to list names, but there are no applicable names to list, you must state NONE. An incomplete Statement will be returned and any action regarding this contract will be delayed. A failure to fully comply with the ordinance may result in the action taken by the County Board or County Agency being voided.

"Applicant" means any Entity or person making an application to the County for any County Action.

"County Action" means any action by a County Agency, a County Department, or the County Board regarding an ordinance or ordinance amendment, a County Board approval, or other County agency approval, with respect to contracts, leases, or sale or purchase of real estate.

"Entity" or "Legal Entity" means a sole proprietorship, corporation, partnership, association, business trust, estate, two or more persons having a joint or common interest, trustee of a land trust, other commercial or legal entity or any beneficiary or beneficiaries thereof.

This Disclosure of Ownership Interest Statement must be submitted by :

1. An Applicant for County Action and
2. An individual or Legal Entity that holds stock or a beneficial interest in the Applicant and is listed on the Applicant's Statement (a "Holder") must file a Statement and complete #1 only under Ownership Interest Declaration.

Please print or type responses clearly and legibly. Add additional pages if needed, being careful to identify each portion of the form to which each additional page refers.

This Statement is being made by the Applicant or Stock/Beneficial Interest Holder

This Statement is an: Original Statement or Amended Statement

Identifying Information:

Name Merrick & Company D/B/A: _____ EIN NO: 84-0499702

Street Address: 2450 S. Peoria St.

City: Aurora State: CO Zip Code: 80014-5475

Phone No.: 303-751-0741

Form of Legal Entity:

Sole Proprietor Partnership Corporation Trustee of Land Trust

Business Trust Estate Association Joint Venture

Other (describe) _____

Ownership Interest Declaration:

1. List the name(s), address, and percent ownership of each individual and each Entity having a legal or beneficial interest (including ownership) of more than five percent (5%) in the Applicant/Holder.

Name	Address	Percentage Interest in Applicant/Holder
None		

2. If the interest of any individual or any Entity listed in (1) above is held as an agent or agents, or a nominee or nominees, list the name and address of the principal on whose behalf the interest is held.

Name of Agent/Nominee	Name of Principal	Principal's Address
None		

3. Is the Applicant constructively controlled by another person or Legal Entity? Yes No
If yes, state the name, address and percentage of beneficial interest of such person or legal entity, and the relationship under which such control is being or may be exercised.

Name	Address	Percentage of Beneficial Interest	Relationship
None			

Declaration (check the applicable box):

- I state under oath that the Applicant has withheld no disclosure as to ownership interest in the Applicant nor reserved any information, data or plan as to the intended use or purpose for which the Applicant seeks County Board or other County Agency action.
- I state under oath that the Holder has withheld no disclosure as to ownership interest nor reserved any information required to be disclosed.

Gary Outlaw, GISP
Name of Authorized Applicant/Holder Representative (please print or type)

Gary D. Outlaw
Signature

gary.outlaw@merrick.com
E-mail address

Vice President
Title

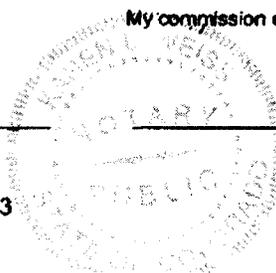
12-4-09
Date

303-751-0741
Phone Number

Subscribed to and sworn before me
this 4th day of Dec, 2009

My commission expires: 11-26-2011

X *Heather L. Weiss*
Notary Public Signature



Notary Seal
04.09

SIGNATURE BY A CORPORATION
(SECTION 8)

The Undersigned hereby certifies and warrants: that all of the statements, certifications, and representations set forth in this EDS are true, complete and correct; that the Undersigned is in full compliance and will continue to be in compliance throughout the term of the Contract or County Privilege issued to the Undersigned with all the policies and requirements set forth in this EDS; and that all of the facts and information provided by the Undersigned in this EDS are true, complete and correct. The Undersigned agrees to inform the Purchasing Agent in writing if any of such statements, certifications, representations, facts or information becomes or is found to be untrue, incomplete or incorrect during the term of the Contract or County Privilege.

BUSINESS NAME: Merrick & Company

BUSINESS ADDRESS: 2450 S. Peoria St., Aurora, Colorado 80014-5475

BUSINESS TELEPHONE: 303-751-0741 FAX NUMBER: 303-745-0964

CONTACT PERSON: Gary Outlaw, GISP (Vice President)

FEIN: 84-0499702 *IL CORPORATE FILE NUMBER: 6164-555-1

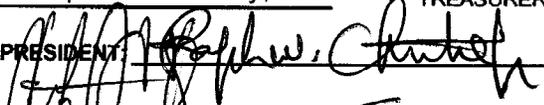
LIST THE FOLLOWING CORPORATE OFFICERS:

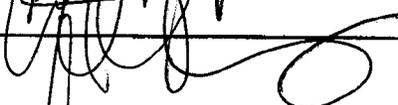
PRESIDENT: Ralph W. Christie, Jr., PE

VICE PRESIDENT: Brian R. Raber, CMS, GLS, GISP

SECRETARY: Christopher C. Sherry, PE

TREASURER: Mark W. Henline

**SIGNATURE OF PRESIDENT: 

ATTEST:  (CORPORATE SECRETARY)

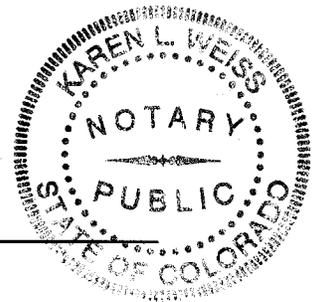
Subscribed and sworn to before me this

16TH day of FEBRUARY, 2010.

My commission expires: 11-26-2011

x 
Notary Public Signature

Notary Seal



* If the corporation is not registered in the State of Illinois, a copy of the Certificate of Good Standing from the state of incorporation must be submitted with this Signature Page.

** In the event that this Signature Page is signed by any persons than the President and Secretary, attach either a certified copy of the corporate by-laws, resolution or other authorization by the corporation, authorizing such persons to sign the Signature Page on behalf of the corporation.

COOK COUNTY SIGNATURE PAGE
(SECTION 9)

ON BEHALF OF THE COUNTY OF COOK, A BODY POLITIC AND CORPORATE OF THE STATE OF ILLINOIS, THIS CONTRACT IS HEREBY EXECUTED BY:

Todd A. Shroy

PRESIDENT, COOK COUNTY BOARD OF COMMISSIONERS

Carmen K. Trinke-Cobrin

COOK COUNTY PURCHASING AGENT

Cristina M. Klautz

COOK COUNTY COMPTROLLER

DATED AT CHICAGO, ILLINOIS THIS 26th DAY OF January, 2010

IN THE CASE OF A ~~RFP~~ PROPOSAL, THE COUNTY HEREBY ACCEPTS:

THE FOREGOING ~~RFP~~ PROPOSAL AS IDENTIFIED IN THE CONTRACT DOCUMENTS FOR CONTRACT NUMBER

10-41-09

OR

ITEM(S), SECTION(S), PART(S): _____

TOTAL AMOUNT OF CONTRACT: \$ 3,917,540.39
(DOLLARS AND CENTS)

FUND CHARGEABLE: _____

APPROVED BY BOARD OF
COOK COUNTY COMMISSIONERS

MAR 02 2010

APPROVED AS TO FORM:

Gelia C. Sumner
ASSISTANT STATES ATTORNEY

COM _____