

CONTRACT APPROVAL

SUGGESTED MOTION:

Move to approve the following contracts submitted by respective department head, subject to state's attorney approval, and authorize the chairman to sign.

Received as of December 29, 2015:

- Aero-Graphics, Inc.—digital aerial photography services to update images for the GIS system;
- Children's Consultation Network—screening, assessment and consultation services for children and caregivers referred to Social Services;
- Consortium—education, social support and integration assistance to Social Services clients;
- PATH, Inc.—foster care services including relief care, behavior and crisis planning, crisis intervention, and 24-hour on-call services for families and children;
- North Dakota Department of Human Services—vulnerable adult protective services;
- Network Center Communications—access control for installation of new 10-door control panel and door power supply at the Cass County Law Enforcement Center in the amount of \$10,202.57;
- Network Center Communications—installation of camera system at the Cass County Law Enforcement Center in the amount of \$21,008.45.

RECEIVED

DEC 15 2015

CASS COUNTY COMMISSION

TO: Cass County Commission
FROM: Terry Schmaltz, IT Director
DATE: January 4, 2016
SUBJECT: Consent agenda item for Commission Meeting of January 4, 2016

Dear Commissioners,

In the 2016 final budget, the Commission approved \$150,000 for the Information Technology Department to contract for aerial photography services for updating county images for the GIS system. Internally the GIS system is used by multiple departments including the County Assessor, Auditor, Vector, Weed and Engineering. While many companies such as Google and Bing now offer newer imagery on their sites the quality and resolution is not sufficient for performing some of the tasks that are commonly completed in the County, including:

- Updating of county maintained GIS files such as centerlines, address points and building footprints
- Assessment of land for agricultural assessment
- Measurement from known points on the ground
- Location of building for Assessment purposes
- Location of road alignments for pavement construction and re- construction
- Verification of buildings for 911 addressing purposes
- Verification of flood defenses, such as levees
- Verification of deeds for property splits\combinations\vacations and new subdivision plats
- Locating potential wet sites for mosquito breeding
- Locating weed infestation areas
- Mapping new subdivision growth
- Planning decisions in smaller Cass County cities
- Hard copy map production

The latest aerial imagery for the entire County was flown in 2011.

The County issued an RFP on October 26, 2015. Responses were received from seven vendors. On December 7th the proposals were evaluated by the GIS Selection committee, consisting of:

Cass County GIS Programs Manager
City of Fargo GIS Manager
City of Moorhead GIS Manager
Clay County Information Services Director

The vendors were evaluated on the following criteria:

- Understanding of Project Objectives
- Technical & Management approach
- Past Performance
- Response of references
- Expertise of Staff
- Project cost

The field was narrowed down to three vendors who were interviewed on December 10, 2015: Aero-Graphics, Inc., Fugro Geospatial, Inc. and Sanborn.

With 1 being the highest the results of the ranking were as follows:

Vendor	Rank
Aero-Graphics, Inc.	1
Fugro Geospatial, Inc.	2
Geophex Surveys	7
KBM Inc.	6
Merrick	4
Quantum Geospatial	5
Sanborn	3

The GIS committee evaluated the specifications from all companies and there was a significant difference in the proposed price between the companies with similar specifications (ranging from \$93,500 to \$148,000). The GIS committee selected, Aero-Graphics, Inc. as the preferred vendor.

SUGGESTED MOTION:

Move to authorize the chair to sign a preliminary contract for the Information Technology Department in the amount of \$93,475 for digital aerial services with Aero-Graphics, Inc.

Terry Schmaltz
IT Director



December 14, 2015

Kay Anderson, GIS Programs Manager
Cass County GIS Department
211 9th Street S
Fargo, ND 58103

Subject: 2016 Color Digital Ortho Aerial Photography / Project #GIS2016-01

Dear Ms. Anderson,

First off, thank you for selecting Aero-Graphics for this project. We are all very excited about this opportunity.

I've prepared this brief letter detailing the Photogrammetric Mapping services associated with this project.

SCOPE OF SERVICES

For the 2016 Color Digital Ortho Aerial Photography project, Aero-Graphics will furnish the following services and products to Cass County:

- Aerial target placement and GPS ground control
- Digital (GDB format) and paper copy of ground control report including XYZ data
- Digital aerial photography acquired at 15cm ground sample distance
- Camera calibration report in PDF format
- Final flight line map with photo centers in GDB and KMZ formats
- Digital orthorectified, mosaicked, radiometrically-balanced image tiles with 6" ground sample distance:
 - 3-band spectral (RGB), 8-bit radiometric resolutions
 - Projected in State Plane, North Dakota, South Zone, NAD83/96, US Foot
 - SID/SDW (Gen4) and TIFF/TFW formats
 - Tiled according to client-provided tiling scheme
 - Project-wide mosaic in SID (Gen4) format
 - FDGC compliant metadata in XML file format
- Digital deliverables will be shipped on a portable hard drive, along with backup copies on DVD
- Packing slip with all shipment materials itemized

Project Total.....\$93,475.

Please reference the proposal submitted in response to the RFP for further details.

Terms are Net 30 days with partial invoices submitted monthly.



In the event any party to this Agreement defaults in the performance of any of its obligations and duties hereunder, including without limitation the payment of any fees due hereunder, such defaulting party agrees to pay all costs and expenses, including reasonable attorney's fees and expenses, incurred by the non-defaulting party in exercising, pursuing, or protecting any right or remedy available to it as a result of such default, or in interpreting or enforcing any term of this Agreement, whether such costs and expenses are incurred prior to, during, or subsequent to any arbitration, litigation, bankruptcy, reorganization, receivership, appellate, or other proceeding.

If you are in agreement with this proposal, and would like Aero-Graphics to proceed with this project, please sign and return this proposal, keeping a copy for your records.

Should you have any questions or require further information, please call me at (801) 428-3123.

Yours truly,

AERO-GRAPHICS, INC.



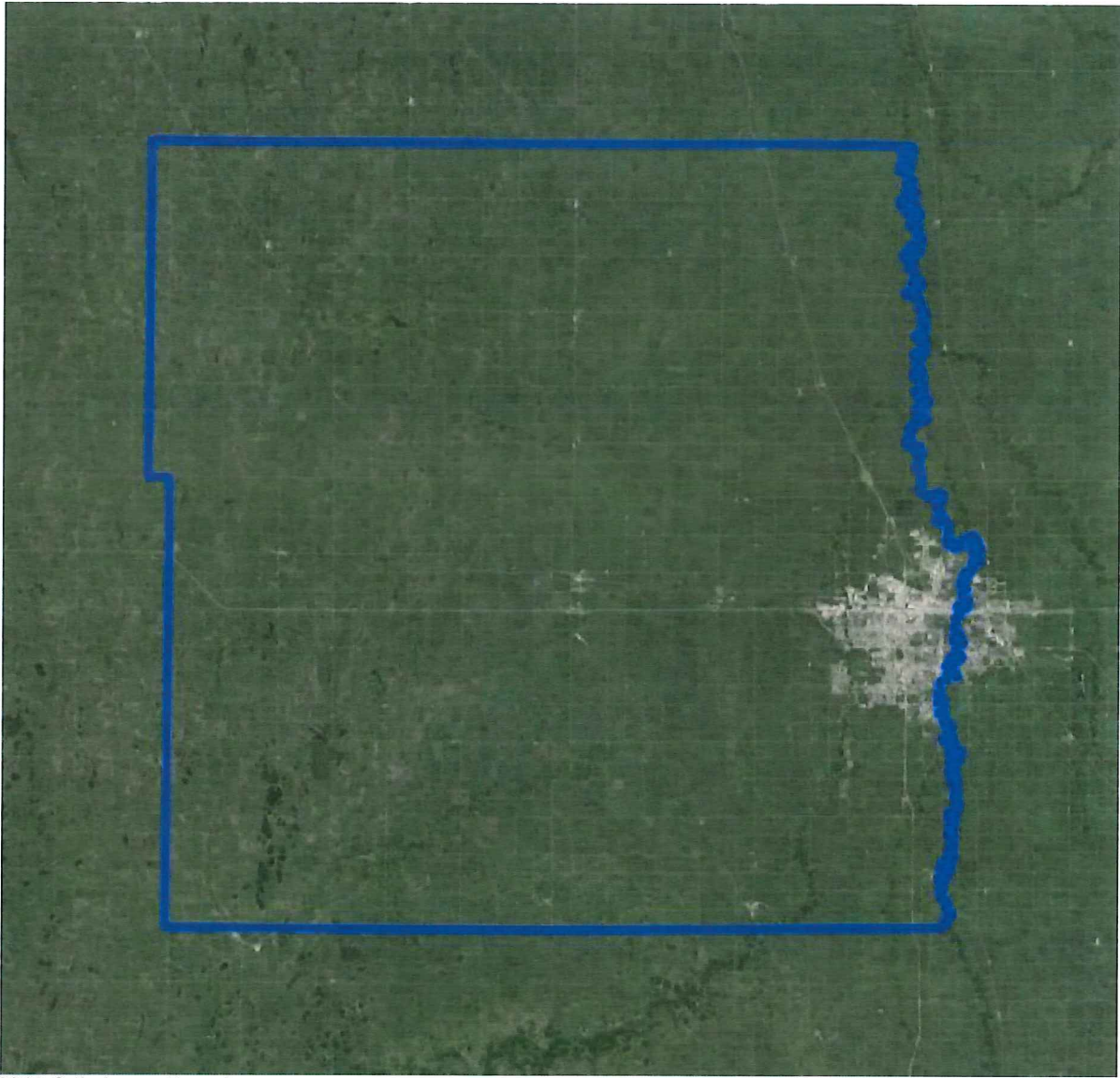
Brad Marz, CP, GISP

Accepted:

Date: _____

By: _____ (Name) _____ (Signature)

PO #: _____



2016 Orthoimage Boundary



November 25, 2015

Kay Anderson, GIS Programs Manager
Cass County GIS Department
211 9th Street S
Fargo, ND 58103

Subject: 2016 Color Digital Ortho Aerial Photography / Project #GIS2016-01

Dear Ms. Anderson,

Aero-Graphics is pleased to respond to this solicitation requesting Digital Aerial Photography and Orthorectified Color Imagery covering approximately 1,767 square miles.

Aero-Graphics understands the requirements of this project and has the capability of completing all tasks associated with this project in-house. As you evaluate our submittal please keep in mind the following strengths that uniquely qualify Aero-Graphics for this project:

- Aero-Graphics is a federally recognized Small Business. Your project will be of the highest importance for our firm. The early release of this solicitation provides ample time to block out and dedicate the necessary resources to acquire, generate, and delivery the requested products.
- Aero-Graphics owns and operates all the equipment necessary to complete this project in house. Our UltraCamEagle digital camera system is regarded as one of the best in the industry. It is also equipped with forward motion compensation (FMC) and an Applanix inertial measurement unit (IMU).
- Our four company-owned aircraft are all available for this project, allowing complete control of our flight schedule. All image post-processing will be performed in-house.
- Aero-Graphics has over 50 years of aerial mapping experience. We have an excellent reputation for providing high-quality imagery, free of seam lines and blurring.

Should you have any questions or require further information, please call me at (801) 428-3123.

Yours truly,

AERO-GRAPHICS, INC.

AERO-GRAPHICS, INC.

Brad Marz, CP, GISP



Introduction – Proven Proficiency

Aero-Graphics, Inc. highly values this opportunity to assist Cass County and its partners with the acquisition and processing of orthorectified imagery for the Cass County area.

Aero-Graphics is well qualified and has demonstrated its proficiency at performing wide-area image acquisition projects on time, on budget, and of the highest quality for numerous County governments, regional consortiums, City governments, and Federal government agencies throughout the United States. We have recently completed large projects over Sublette County (WY), Pitkin County (CO), Kern County (CA), San Bernardino County (CA), the City of Ontario (CA), and the Cities of Logan and Layton (UT). Project success requires a proven firm that employs careful orchestration of acquisition and measured, organized processing that ensures deliverables that meet every specification with exactness. **That firm is Aero-Graphics.**

Our success with quality, budget, and timely delivery hinges on our ability to independently guide our acquisition and production processes. We own and operate a full-time aerial photography service with four (4) aircraft and employ educated, talented in-house production personnel, which allows us **complete control of our flight and production schedules**, without relying on subcontracted assistance. These advantages, coupled with being invested in reliable, state-of-the-art equipment, including an industry-leading Microsoft UltraCam Eagle sensor, **help our schedule to virtually never slip.**

We closely monitor weather and other environmental and ground factors to ensure proper conditions throughout the project area during acquisition. We anticipate a late March/early May acquisition window, but will counsel closely with the County to determine a mutually agreeable date based on optimal ground and river conditions.

At every stage of the project, Aero-Graphics strives to add value above and beyond the minimum requirements. Our **Piper Aztec** and top-of-the-line **Microsoft UltraCam Eagle** digital camera system will be assigned to the Cass County project. Along with its unmatched image quality, the Eagle is the ideal sensor because, compared to all other digital camera models, its large footprint and lower number of required exposures translates into fewer required flightlines and faster acquisition, allowing us to take advantage of critical narrow weather windows. **In addition, its 100mm focal length provides a more nadir angle of incidence across more of the exposure, and thus exhibits less building and tree lean, than competing sensors with 70 mm lenses.** As we were one of the first in the West to acquire an UltraCam system in 2008, we're well-versed in its efficient use.

Radiometric integrity and blending throughout the block is paramount to proper image interpretation and overall aesthetics. We utilize Microsoft UltraMap's excellent raw image processing capabilities, and employ Trimble-Inpho's OrthoMaster and OrthoVista software for orthorectification because it is tested, tried, and proven to deliver superior tile balancing and seamline results.

Above all, Aero-Graphics is recognized for its superior project management and excellent communication. Weekly progress reports with clear visualizations of project



Aero-Graphics, Inc.

Brad Marz, CP, GISP
40 West Oakland Avenue
Salt Lake City, UT 84115
tel: 801.487.3273
fax: 801.487.3313
www.aero-graphics.com

Year Established: 1965

Aero-Graphics is a
Corporation



status are provided in PDF format and can easily be distributed to all project stakeholders.

We are confident these strengths will ensure the success of the Cass County project, as well as the long-term success of the County's and its partners' future projects. Our firm understands that the data we provide for this project will be used internally by County departments, project partners, and citizens to update internal GIS files, for land assessment, 911 address verification, flood preparation, mosquito abatement, weed infestation location, and hard copy production – to name a few.

Our experience in North Dakota extends back many years. For example, in 2008 we flew 355 sq/miles for 0.5' pixel resolution orthos. Again in 2012 we flew 467 sq/miles delivering 0.5' imagery. Both projects were completed on time and within budget.

As technology evolves, Aero-Graphics continues to be committed to embracing new innovations and using them to continually improve the delivery schedule and quality of our clients final deliveries. We look forward to an opportunity to demonstrate our capabilities on this contract.

Authorized Signature

Brad Marz, CP, GISP

November 25, 2015

Date

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Administrative Questions

a) Who will serve as the respondent's authorized negotiator?

Mr. Brad Marz, Project Manager
 Aero-Graphics, Inc.
 40 W. Oakland Ave.
 Salt Lake City, Utah 84115

Phone: 801-487-3273
 Fax: 801-487-3313
 Email: bmarz@aero-graphics.com

www.aero-graphics.com

b) Provide workload and manpower summary to define respondent's ability to meet project timeline.

The Cass County project is being issued at a time of year that will allow Aero-Graphics to dedicate the necessary blocks of time for our equipment and personnel to meet the schedule requirements of this project. Being that this is one of the first projects to be awarded for the 2016 season, you can be assured that the necessary resources will be allocated and set-aside for your project.

Aero-Graphics currently employs over 35 pilots, camera and sensor operators, mapping technicians, professional land surveyors, and office staff. We also use state-of-the-art software and computers to maximize the efficiency of our production staff. The proposed project schedule is provided on page 5 and includes five (5) weeks of contingency for the aerial acquisition. Our schedule will improve if we are able to fly earlier within that window.

Project Time Commitment		Percentage of Time
2016 Color Digital Ortho Aerial Photography 6" GSD Aerial Photography and Orthoimagery		
	Surveyors	100
	POS and AT Technicians	75
	Imagery Processing	100
	Imagery Orthorectification	45
	Imagery Quality Control	50

Technical Process

Project Management. Aero-Graphics' project management team offers over 70 years of combined experience and takes a methodical, deliberate approach to managing complex projects that includes risk mitigation (p.18), quality assurance and control (p.17), and dynamic scheduling (pp. 5, 19-20). These components of our project management approach, along with our deep-seated drive to complete every aspect of a project with exactness, have proven and will continue to prove that Aero-Graphics will complete the project successfully and on time.

As part of our Risk Mitigation System (p.18), **we not only maintain backup aircraft compatible with our digital sensor, but also secure round-the-clock support and replacement service from our sensor manufacturer in Boulder, CO in case either the primary platform or sensor becomes non-operational.**

Client-Consultant communication throughout the project is vital to success. Aero-Graphics embraces this necessity by holding in-person kickoff and debriefing meetings, through regular progress reports, and by being available to discuss any project-related issue at anytime throughout the project.

Our project manager and technical specialists are available 24 hours a day, 7 days a week to support any needs the County may have at any stage, from project planning to execution, all the way through to post-delivery. Aero-Graphics always stands behind its services, whether within contract dates or far beyond.

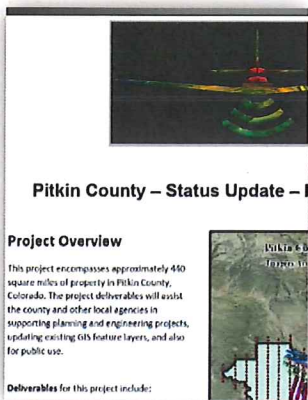
Located in Salt Lake City, Aero-Graphics' base of operations is well situated for the Cass County project, which results in fast acquisition turnarounds. Our 9,000 square foot facility supports all management, administrative, aerial acquisition, surveying, LiDAR processing, ortho processing, and mapping functions. **Aero-Graphics welcomes any member of the County's or its partners' management or staff to visit at any time.** Client visits are educational and help us refine our processes to more efficiently meet the needs of the end users.

Aero-Graphics' proven project management strategy produces accurate, timely deliverables in a cost-effective manner. This strategy includes the following key elements:

- Clearly defined objectives
- Appropriate risk management
- Intelligent mission planning
- Adherence to project milestones
- Effective QA/QC
- Constant communication

These time-tested tenets have created a long tradition of exceeding clients' expectations. We are confident they will ensure the long-term success of your future projects.

Weekly Progress Reports are furnished in PDF format via email for efficient project updates.



Project Area. The imagery for this project will be acquired over Cass County in eastern North Dakota. A depiction of the flight plan can be found on page 9. Aero-Graphics' centralized Intermountain location in Salt Lake City lends itself to efficient acquisition in this area, allowing us to take quick advantage of limited flight windows.

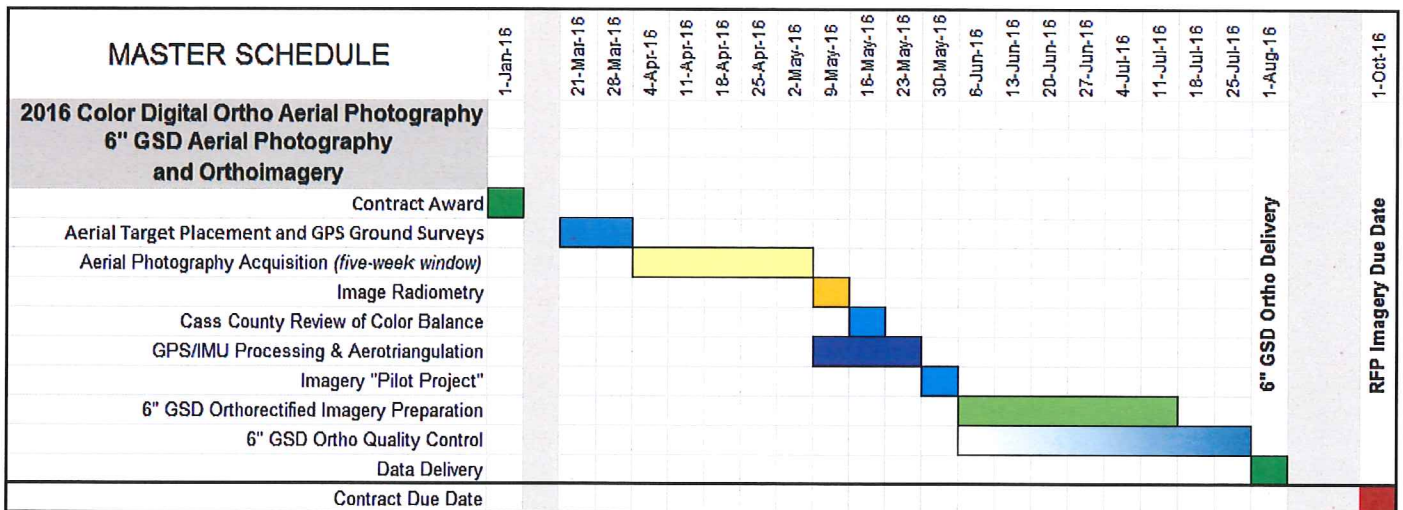
Schedule of Work. Upon NTP, we anticipate a late-March mobilization to Hector International Airport and imagery acquisition beginning the first part of April, weather, ground, and river conditions permitting. To take advantage of the best sun angle, acquisition will spread over approximately three clear days.

As a value-added service, detailed, formal PDF **status reports are provided weekly** that, in addition to acquisition progress, include aerotriangulation and orthorectification progress and other descriptive project notes. The County may simply pass this along to its partners and thus simplify progress reporting.

All 6" GSD orthorectified imagery will be delivered to Cass County the week of **August 1, 2016**. A schedule with individual project components and durations is shown below.

Aero-Graphics acknowledges the importance of timely delivery of photogrammetric materials. Our **Risk Mitigation System (RMS)** helps keep our schedule from slipping through a variety of steps. Three of these are: 1) we own our flying service and can control the flight schedule, 2) we rely on talented in-house production personnel and can control the production schedule from acquisition to processing to delivery (production is not transferred to an offshore location), and 3) we are invested in state-of-the-art equipment, which strengthens reliability and improves turnaround time. Our RMS is explained in full detail on page 18. All work is completed in-house.

Additionally, the Project Manager maintains an **Acquisition Management System (AMS)**, a PostgreSQL-based planning and tracking database that helps visualize acquisition and production progress and enables timely decision-making to keep each delivery on schedule. AMS is explained in detail on page 19.



Technical Approach

Acquisition Equipment | Aircraft. Aero-Graphics owns and operates **four (4)** aircraft, which are based out of our Salt Lake City International headquarters. Our Piper Aztec and UltraCam Eagle digital camera system will be dedicated to the Cass County Project to ensure proper and timely delivery. The UltraCam Eagle is interchangeable between all four aircraft. In the event that the assigned aircraft is unavailable, one of the others can replace it with ease.

Each aircraft is maintained and operated with strict adherence to all FAA regulations. IFR instrumentation and other equipment necessary to operate within Class A airspace is standard on all of our aircraft, and all are equipped with survey-grade GPS for precise acquisition over required areas.

The sensor openings on the underside of each aircraft have been fabricated such that the camera lenses are open to the outside. Metal shields have been installed that protect the camera lenses from outside contamination, while leaving the camera's field of view unobstructed.

As part of Aero-Graphics' **RMS**, every lift requires a pre-flight inspection of the associated aircraft. This includes the following:

- Fuel Level – Instrumental and Visual
- Aileron and Control Surface freedom of movement
- Engine Oil Level
- Propeller Condition
- Landing Gear Condition

Our in-house A&P (airframe & power) mechanic is able to quickly respond to mechanical issues in the field. In addition, both of our annual (major) maintenance providers, TAC Air and Fair Air, have a national footprint with affiliates in many of the airports where we land, and they can also provide mobile repair services in the field as needed. We keep an on-the-shelf inventory of key parts for our aircraft to further improve the speed of necessary repairs.

The Aero-Graphics Fleet	
Cessna 310	Flight Range: 1,140 nm Maximum Cruise Speed: 190 kts FAA Certified Ceiling: 25,000 ft
Piper Aztec	Flight Range: 1,000 nm Maximum Cruise Speed: 170 kts FAA Certified Ceiling: 24,000 ft
Cessna 206 Turbo Stationair	Flight Range: 800 nm Maximum Cruise Speed: 178 kts FAA Certified Ceiling: 25,000 ft
Cessna 206 Turbo Stationair	Flight Range: 800 nm Maximum Cruise Speed: 178 kts FAA Certified Ceiling: 25,000 ft





Digital Camera System. Aero-Graphics' state-of-the-art **Microsoft UltraCam Eagle (UCE)** digital camera is noted as **the finest digital camera system currently available**. It delivers 260 megapixels per image and the widest cross-track image format available in any frame based sensor currently on the market. At a 6" GSD the swath covers nearly two miles. This configuration provides the best image-size to image-number balance, i.e. the larger footprint size allows a smaller number of images to cover the project boundary, which translates into fewer images to process, QC, and perform aerotriangulation, which translates into faster delivery time. The Cass County project will require 2,932 exposures over 35 flightlines for the 6" GSD imagery collection.

The UCE sensor collects visible light and near infrared imagery simultaneously at a 16-bit radiometric resolution, and is equipped with Forward Motion Compensation (FMC). It features automatic exposure control through our flight management system but also allows for manual overrides when necessary.

It is installed in a gyro-stabilized GSM-3000 mount that is regularly maintained according to schedule and passively isolated from aircraft vibration through a series of specially manufactured springs and viscous dampers. In concert with the pilots' extensive training and talent in keeping the plane's attitude as straight as possible, the GSM helps keep roll, pitch and yaw angles true, even in windy or turbulent conditions. It automatically corrects up to 5° roll, 8.4° pitch, and 6.2° yaw in either direction from zero.

The UCE is equipped with a Microsoft UltraNAV flight management system which integrates GPS and IMU into one cooperative unit, allowing image principal point accuracy to 3cm. More details are given for these control procedures in the GPS/IMU Post-Processing section on page 13. However, it is important to note here that each time the sensor is moved to a different aircraft, and before and after large acquisition projects, a **boresight calibration** is systematically performed. This enables us to measure and account for the natural angular misalignments between the camera and IMU, and is imperative to maintaining accuracy.

Our **Quality Delivery System (QDS)** requires on-ground lens cleaning, proper installation and cable/hardware inspections for the UCE and GSM, GPS/IMU statistics analysis, and test exposures before every mission.

Working with Microsoft sensors since 2008, they have functioned exceptional well. In case the UCE ceases to work correctly while performing acquisition on the County's project, we have secured an agreement with Microsoft for a replacement camera to continue the work expeditiously. This replacement is located at Microsoft's lab in Boulder, CO and **can be replaced within a day**. Microsoft's commitment letter can be found on page 31.

Acquisition | Planning Precautions. The most critical components of planning and executing the acquisition are preparing a flight schedule so that all required areas are flown during the correct timeframe when access and weather conditions are acceptable, as well as maintaining flexibility to respond when conditions allow only narrow flight windows in certain areas. Aero-Graphics maintains a vigilant flight management approach as part of our **RMS** that aims to keep these and other factors in check.



First, we utilize historical weather and climatological patterns, as well as current weather forecasts, to facilitate flightline and mobilization planning and day-to-day execution. The flight manager monitors various weather sites throughout the day (and night!), and tends to favor NOAA because of its proven reliability. We also use online satellite imagery resources such as NOAA's HMS Fire and Smoke updates, as well as InciWeb, to monitor fire progression and smoke trajectories. We leverage all available real-time updates, including Twitter and RSS feeds, from these sources. One of our more recent favorites is the NWS' National Snow Analysis 3-D Interface, which displays daily snowpack coverage based on Snow Station data and other local conditions including aspect and temperature. This tool will be used to monitor snow pack melt leading up to the designated flight window. Since aviation weather is updated in the very early AM, our flight managers start their day early to identify and relay any flight changes to the crews. We also leverage pilots' weather reports via radio and our local contacts on the ground in acquisition areas. Each of our flight personnel carries a smartphone and tablet with web access, and this has allowed us to maximize communication and maintain flexibility and efficiency when flight conditions suddenly change.

We also begin coordinating access to restricted airspaces with the appropriate military and/or civilian air traffic control (ATC) agencies immediately upon contract award. We provide them flight plans, estimated access dates, and any other appropriate information they might require. We don't anticipate any conflicts or restricted airspace access issues in Cass County.

To ensure that all areas are acquired according to spec and in the most efficient manner possible, our project manager maintains a Sequel-based tracking database called the **Acquisition Management System (AMS)**, a critical component of **QDS**. It features critical planning and tracking devices such as exposure position, ground elevation, and dynamic sun angle begin/end times. The AMS is explained in detail on pages 19-20.

Planning. Track'Air flight planning software will be used to create the flight plan for each day. This takes into account all project requirements, including boundaries and associated buffers, GSD, fore/sidelap, flightline orientations, etc. The plan is then verified for project conformity by another member of the Aerial Department. Special focus is given here to ensure that all area boundaries and buffers are stereo-covered and that no overlap or sidelap gaps exist. A visual depiction of the flight plan is shown on the following page.



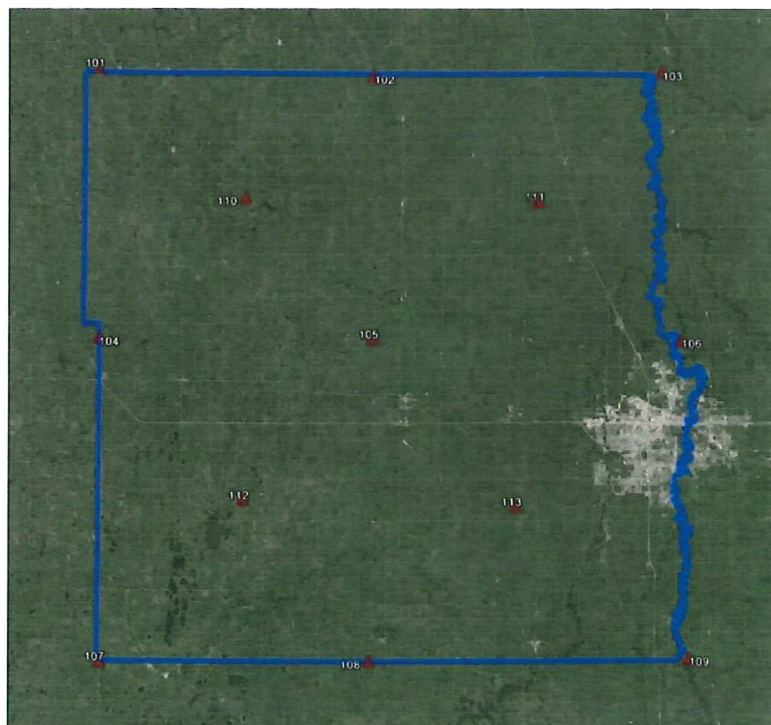
Cass County | 6" GSD:
2932 exposures | 35 flightlines

Locations and flight parameters (initialization, bank angles, etc.) for base stations (IGS, CORS and/or Project Specific-Airport Base) are determined by the level of GPS/IMU data accuracy that is needed and the total area to be covered by the aircraft during that day. More information on our GPS/IMU processing approach and base station configuration can be found in the GPS/IMU Post-Processing section on page 13.

Trimble Planning software is then used to determine the Positional Dilution of Precision (PDOP) for the project location. PDOP is used as a gauge for the overall quality of the GPS signal. A PDOP value under 3.0 is desired for the best accuracy possible, and we strive to fly in PDOP windows below 3.0. In addition, we observe forecasts and always fly with a Kp Index below 4.0 to minimize geomagnetic field disturbances caused by solar particle radiation, which can negatively affect the quality of the GPS signal.

Site Basing. Our aircraft and camera system will be based at Hector International Airport. We expect to complete acquisition over three clear days. The crew will place a GNSS base at the airport as back-up to the MORH CORS base station.

Ground Control. Aero-Graphics will establish thirteen (13) new ground control points. With the use of airborne GPS and IMU technology (which Aero-Graphics employs), we are able to maintain project accuracy with the use of only five (5) control points (one in each corner and one in the center). The additional targeted points will be used for testing the horizontal accuracy of the final ortho. **Additionally, previously set control points will be surveyed for accuracy verification.** To ensure high accuracy, all surveyed point data will be collected using Static GPS methods. Data will be furnished as North Dakota State Plane, South Zone, NAD83 (adjusted in 1996 (NAD83/96). Vertical will be based on NAVD88. Units will be US Foot. All survey work will be supervised and approved by Blaine Comer (North Dakota license LS-7611).



Cass County
Control Layout

Digital images are reviewed in the air as they are collected to assure they meet target project tolerances, enabling immediate reflights if necessary.

Execution. Prior to take-off, a ground verification of all aviation equipment and camera systems is performed to ensure everything is functional and safe. Once in the air, the flight management system (FMS) provides GPS-based guidance information to the first flight line. Calibration of all systems (FMS/GPS/IMU, as appropriate) takes place during a 5-minute initialization period before any exposures are taken.

With the UCE, digital images are reviewed as they are collected to assure they meet target project tolerances (position, ground/river conditions, smoke, clouds, shadows, etc.). Corrections for airplane roll, pitch, and yaw are performed automatically by the gyro-stabilized mount, which is controlled by the IMU and UltraNAV flight management system. All systems are constantly monitored during flight execution. With these QC steps in place, immediate reflights are undertaken if any component falls outside of specifications.

At the end of the day, the camera operator performs a second review of the acquisition data. Once the flight mission is complete, all data storage media and pilot flight logs are returned to Aero-Graphics for processing.

Processing Environment | Production Database. All geospatial work is managed and performed within our enterprise geospatial database. All planning (**RMS, AMS**), tracking (**AMS**), work assignments, quality metrics (**QDS**), production data, performance data, scheduling, error control, government furnished information, and any other data associated with the project is input or generated within the database. This allows for detailed tracking and management of complex projects.

The database has several key components:

- PostgreSQL
- GIS suites and internal web interfaces (ESRI, QGIS, etc.) – all data, including stereo image data, are GIS features.
- Feature Schemas for schedule management, data production, risk mitigation, and quality control. These are robust definitions that use data constraints and triggers to assist with automation, audit, and most importantly, quality control.
- Transaction Management. This allows for multiple users to access and work on a single project simultaneously.



IT Architecture. We employ robust information technology to secure our data, improve processes, and increase the value of our products and services. Our current configuration includes Microsoft Cluster and Isilon systems that have over 200 terabytes of rapid-access storage with **10-Gigabit** LAN connections. Our streamlined system uses efficient hardware and software to integrate our workstations to create a "distributed system" which harnesses the processing power of multiple units. These units consist of powerful 64-bit Dell workstations that optimize full processing and RAM capabilities. Featured stations include:

Five (5) Dedicated AT and Orthoimage processing systems

- Dell Precision T7500 Workstations
- Windows 7 Pro 64-bit OS

- 4-screen display towers
- Intel Xeon 5650 Hex-Core Processor, 2.66GHz
- 12GB RAM
- 2.5GB nVIDIA Quadro 5000 graphics card
- Local 0.5 TB Solid State Hard Drives
- 10 Gigabit LAN connection

One (1) State-of-the-Art, High-Throughput Processing System

- Dell Precision T7600 Workstation
- Windows 7 Pro 64-bit OS
- Dual (2) Intel Xeon E5-2630 Hex-Core Processors, 2.3GHz
- 32GB RAM
- Local 1TB solid state hard drives
- 10 Gigabit LAN connection

Aero-Graphics maintains an **internal Software Development Team** as part of our IT investments. This creates the ability to customize software applications for a variety of mapping, surveying, and engineering products and services.

Network and Backup Procedures. The data production environment runs Windows Server 2012 and Linux on Dell server hardware. Our wired infrastructure consists of 10-Gigabit Ethernet to our systems and servers.

We maintain over 200 terabytes of rapid-access data storage online at all times in our office. The data is backed up incrementally each night and in full each weekend. At the end of each month, the backup tapes are pulled out of the cycle and archived. Data on tape will remain accessible for up to five years.

Post Acquisition Image Inspection. Image inspection is one of the most important parts of our QDS. Each and every image is viewed and graded by a post-flight inspector before insertion into the subsequent photogrammetric workflows. Inspection is conducted against the following parameters:

- Proper project area coverage, buffer, flight direction, and sufficient overlap
- Acceptable atmospheric, ground, and river conditions
- Images well-defined (free from blur)

All results of inspection are retained in the production database.

Digital Image Processing. Microsoft UltraMap is a sophisticated program that we use to facilitate the initial color balancing (radiometry) of digital imagery from the UCE. It utilizes camera calibration, custom dodging, solar adjustment masks, high dynamic range, and location and time of day data to eliminate hot spots and large variations in color and brightness. This is also the vehicle through which the raw, multi-lens imagery (level00) is stitched together, pan-sharpened (at a 1:3 color-to-pan ratio), and converted to useable imagery (level03). Radiometric (bit-depth) resolution is also chosen at this stage.

Each and every image is viewed and graded by a post-flight inspector before insertion into the subsequent photogrammetric workflows.



To facilitate quicker project completion, we will process panchromatic imagery immediately upon inspection and perform AT in parallel with RGB processing and radiometric corrections. Panchromatic imagery requires no color balancing and is also much quicker to process than RGB imagery. The geometry of panchromatic and color-corrected RGB imagery is identical, so the same AT solution derived from panchromatic imagery can be used with the processed RGB imagery without any geometric change. By the time radiometry is complete, AT will be complete as well, and the AT solution can be immediately associated with the color imagery. This parallel processing will significantly increase the speed of our imagery deliverables.

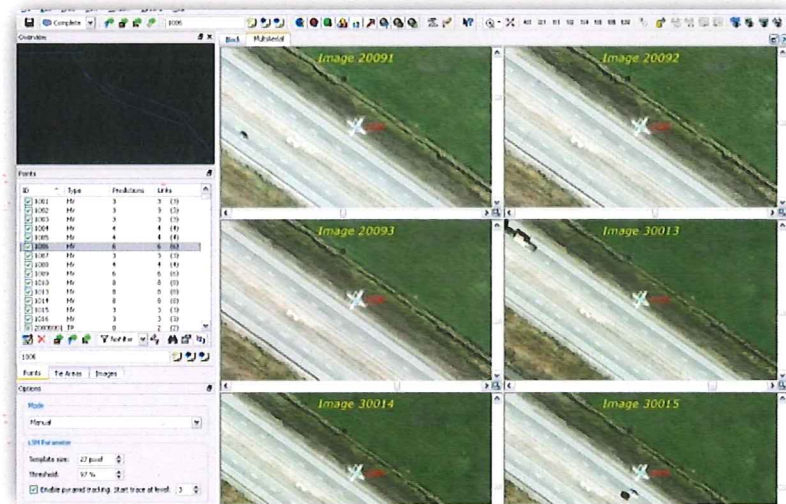
Quality Control. We perform statistical analysis of initial radiometry on at least 20 representative images throughout the block to make sure all terrain types are well balanced. Radiometry is adjusted for certain terrain types if necessary. Preproduction samples representing all specified project land cover types will be furnished to Cass County for approval prior to full-scale production. Correct color balancing of the full image set will be reviewed by our aerotriangulation specialists prior to orthorectification.

Orthophoto Production | GPS/IMU Post Processing. After successful acquisition, and in parallel with image processing, raw GPS/IMU data is processed using Applanix POSPac MMS 7.0. At this stage, our Processing Manager performs QC of flight parameters (initialization, bank angles, proximity to bases, etc.). The process combines the raw trajectory of the aircraft with concurrently-running base stations to refine the photo center (air point) coordinates (XYZ) and angles (Omega, Phi, Kappa, or roll, pitch, and yaw) of the sensor, and delivers up to 3cm accuracy. The base station's received satellite wavelength signals are used to differentially correct the plane's received satellite wavelength signals, improved further by the plane's IMU data at a rate of 200Hz. We will use the MORH CORS base (backed up by an Aero-Graphics crew-placed base at the airport) to process the airborne data for the Cass County project.

Because the integrity and accuracy of our imagery on this project relies heavily on control from ABGPS/IMU, it is extremely important that our Processing Manager, a Licensed Professional Land Surveyor and Certified Photogrammetrist, conducts rigorous QC procedures and generates several reports and charts to verify the quality and accuracy of the data. These include PDOP, number of satellites, positional RMS, roll-pitch-yaw, and several other quality indicators. Omega-Phi-Kappa angles and altitude are checked at this point for conformity with project requirements.

Aero-Graphics has been performing precision ABGPS/IMU processing since 1997. Both our Processing Manager and our AT/Ortho Manager have been formally trained in GPS/IMU processing through in-person Applanix University education from Applanix staff. This combination of experience and training lend strength to the efficiency and accuracy of our results. For example, we can discern which processing mode to use and in what situations it would yield more accurate results to process portions of a block individually rather than all together. **GPS/IMU processing is the backbone of the accuracy for this project. It must be right.**

Analytical Aerotriangulation. Industry-leading Trimble-Inpho Match-AT software is utilized to perform fully analytical digital aerotriangulation for the block. Automatic tie points and refined GPS/IMU exposure centers (air points) extend full control for each stereo model. This project will be controlled by points on the ground as well as by airborne GPS/IMU, which is integrated with the UCE digital camera.

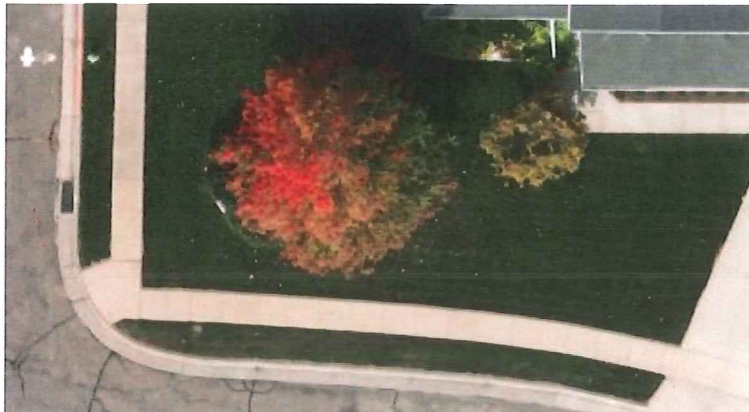


In the AT process we assign each air point to the principal point of its corresponding image, which gives an initial exterior orientation to each of the images. The image block is then stitched together by generating automatic tie points. These points tie each image to its neighbors in the same flightline and also to those in adjacent flightlines. Ground control points are identified and measured, and these along with tie points, images, and air points are then processed together in a final bundle adjustment to refine the air points and provide the best orientation solution that minimizes cumulative error throughout the block.

Our QC procedures are in place to find erroneous points and correct them before the AT results are used in subsequent processes.

Once the AT solution is complete, we use Inpho's DTMaster to check each and every model in stereo. We ensure that all parallax is cleared and that all tie points are on the ground – with no points floating or digging. Every control point must be on the center of the target and fall vertically within one-quarter of the applicable contour interval, based on flight height, of its surveyed position. The AT/Ortho Manager, a Certified Photogrammetrist and GIS Professional (GISP), verifies the integrity of each AT solution before it moves forward in the process. Our QC procedures are in place to find erroneous points and correct them before the AT results are used in subsequent processes.

Orthorectification. Imagery is first processed to RGB, 8-bit depth following the procedures listed in the Digital Image Processing section on page 12. High-end Dell 64-bit workstations are used to process the orthorectified imagery. Aero-Graphics will utilize a new surface for image rectification. This technique bypasses the use of an old



surface that might not produce an ortho meeting project specifications. A part of our new surface generation process includes the removing of points from buildings, generally correcting surface features (such as embankments) that would warp the ortho and adding breaklines where necessary, especially on bridges and overpasses.

Upon completion of the surface modeling, each digital image undergoes automatic orthorectification in a one-step batch process using Inpho's OrthoMaster software. This process moves each pixel into its true geographic location, correcting for terrain relief

displacement and offsets caused by aircraft tip and tilt. We employ Trimble-Inpho's OrthoMaster and OrthoVista software for orthorectification and final tile-to-tile color balancing because it is tested, tried, and proven to deliver superior radiometric and seamline results.

Inpho's distributed processing features allow multiple idle workstations to process ortho tiles simultaneously, greatly expediting turnaround time.

Aero-Graphics takes great advantage of Inpho's parallel processing features. This allows multiple cores to process separate ortho tiles simultaneously, which greatly expedites turnaround time. Orthorectified imagery is manipulated in Inpho's OrthoVista software to compute subtle radiometric adjustments that compensate for visual effects within individual images.

Multiple orthophotos are then combined into one seamless and geometrically-perfect ortho mosaic for the entire project area. The ortho mosaic is then tiled according to the provided County tiling scheme. Unless otherwise required, each tile will butt-match and include no overlap. OrthoVista then performs a tile-wide and project-wide color balance by adjusting adjacent images to match in color and brightness. If a tile covers area beyond the official project area boundary, Aero-Graphics will deliver the partial tile that includes the area inside the boundary. **Before full-scale production begins, a Pilot Project consisting of 4 contiguous sheets will be submitted to the County for approval.**

Ortho tiles will be delivered in North Dakota State Plane, South Zone, NAD83 (adjusted in 1996 (NAD83/96). Vertical will be based on NAVD88. Unit will be US Foot. They will retain their 8-bit, 3-band (RGB) qualities, and be furnished as SID (Gen4) and uncompressed TIF/TFW formats. An overall mosaic will be furnished in SID (Gen4) format. Naming conventions will match the tile names given in the County-provided PLSS tiling scheme, unless otherwise desired.

Quality Control. Aero-Graphics prides itself on rigorous quality control procedures. Orthoimagery and surface data is produced outside the designated digital boundary and then cut back to the boundary to assure thorough coverage of each project area. The orthoimagery is then inspected by a QC Inspector completely removed from the project,

where linear and above-ground features are reviewed to detect misalignment and warping, and where final radiometry conformance is verified. In addition, the AT/Ortho Manager, a Certified Photogrammetrist and GIS Professional (GISP), oversees the compilation process to ensure that the surface collection and orthorectification meet client specifications. The Project Manager and AT/Ortho Manager spot-check all deliverables for correct color balance, accuracy, and data integrity prior to delivery.

Accuracy. Orthorectified imagery will meet or exceed National Map Accuracy Standards associated with 1"=100'.

Pre-Shipment Image Inspection. Our pre-shipment inspectors perform final quality control before materials are shipped to Cass County. This includes verifying correct naming convention, file formatting, georeferencing, correct labeling of delivery media, and packing list accuracy.

Deliverables. For the 2016 Color Digital Ortho Aerial Photography project, Aero-Graphics will furnish the following services and products to Cass County:

- ✦ Aerial target placement and GPS ground control
- ✦ Digital (GDB format) and paper copy of ground control report including XYZ data
- ✦ Digital aerial photography acquired at 15cm ground sample distance
- ✦ Camera calibration report in PDF format
- ✦ Final flight line map with photo centers in GDB and KMZ formats
- ✦ Digital orthorectified, mosaicked, radiometrically-balanced image tiles with 6" ground sample distance:
 - 3-band spectral (RGB), 8-bit radiometric resolutions
 - Projected in State Plane, North Dakota, South Zone, NAD83/96, US Foot
 - SID/SDW (Gen4) and TIFF/TFW formats
 - Tiled according to client-provided tiling scheme
 - Project-wide mosaic in SID (Gen4) format
 - FDGC compliant metadata in XML file format

Digital deliverables will be shipped on a portable hard drive, along with backup copies on DVD.

Packing slip with all shipment materials itemized

All contract deliverables become the property of Cass County without restriction.

Quality Delivery System (QDS). Aero-Graphics is committed to delivering our clients photogrammetric products of the highest caliber. To this end, we adhere to a project-customized Quality Delivery System that is tracked in our Production Database. A specific team member is responsible for each component so that accountability is maintained.

Quality Assurance	Responsible Team Member	Proposal Page #
Acquisition Management System	Flight Manager	19-20
Proper project area coverage, buffer, flight direction, and sufficient overlap	Flight Manager & Operator (Dual Verification)	8
Acceptable atmospheric and ground conditions	Flight Manager & Operator (Dual Verification)	7-8
Correct base stations and flight parameters for GPS/IMU	Flight Manager & Operator (Dual Verification)	10
Pre- and post-project IMU boresighting to maintain IMU-Sensor alignment integrity	Flight Manager & Processing Manager	7
Preflight lens cleaning, power, hardware & cable checks, test exposures, and proper GPS/IMU checks and initializations	Operator	7
Plane OPK angles and altitude within tolerances	Operator & Pilot	11
Lvl03 digital images color balanced correctly; statistical analysis of all terrain types	Digital Image Processing Specialist	12-13
Correct naming convention, file format, georeferencing	Ortho Specialist	15
Correct labeling of delivery media	Ortho Specialist	--
Quality Control		
Preflight verification of flight plan for project conformity	Operator	8
In-air inspection of correct site coverage, buffer, ground & atmosphere conditions, and well-defined (free from blur) images	Operator	11
Proper project area coverage, buffer, flight direction, and sufficient overlap	Post-flight Inspector	12
Acceptable atmospheric and ground conditions	Post-flight Inspector	12
Images well-defined (free from blur)	Post-flight Inspector	12
Correct base stations and flight parameters for GPS/IMU missions	Processing Manager	13
Sensor OPK angles and altitude within tolerances	Processing Manager	13
Verify quality and accuracy of postprocessed GPS/IMU data	Processing Manager	13
Lvl03 digital images color balanced correctly	AT Specialist	13
Verify integrity of AT solution	AT/Ortho Manager	14
Thorough ortho inspection for warping, misalignment and correct radiometry	Ortho Inspector	15-16
Spot ortho inspection for color balance & accuracy	AT/Ortho Manager & Project Manager (Dual Verification)	16
Correct naming convention, file format, georeferencing	Pre-shipment Inspector	16
Correct labeling of delivery media	Pre-shipment Inspector	16
Packing lists included and completed correctly	Pre-shipment Inspector	16

Risk Mitigation System (RMS). Aero-Graphics' 50 years of experience have taught us a great deal about aerial acquisition and photogrammetric processing. We like to think we have refined our procedures to the point that we would always be successful with every mission. However, we realize that mishaps can occur, and therefore follow our Risk Mitigation System, which attempts to eliminate foreseeable problems and build in contingencies for unforeseeable ones. Our RMS has been customized for your project.

Aero-Graphics mitigates project risk through:

- Owning our flying service and thus controlling our own flight schedule (p.1)
- Relying on in-house personnel, as opposed to subcontracting any part of production (p.1)
- Being invested in and strictly maintaining state-of-the-art equipment, which is more reliable and thus improves turnaround time (pp.1,5-7)

- Maintaining four aircraft that are each fitted for our digital camera sensor. In case one becomes inoperable, another can take its place. (p.6)
- Maintaining and operating each aircraft with strict adherence to all FAA regulations (p.6)
- Conducting strict pre-flight aircraft safety inspections (p.6)
- Employing an in-house A&P mechanic that can diagnose and perform repairs in the field (p.6).
- Working with aircraft maintenance providers that maintain services throughout the United States and keep key replacement parts for our aircraft in on-the-shelf inventory (p.6).

- Securing backup
 - Microsoft has committed to 24/7 support and an easily-accessible loaner UCE (Boulder, CO) (pp.7,31)

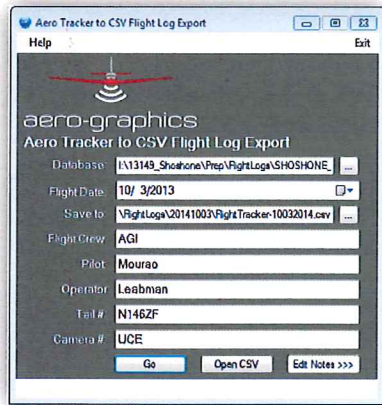
- Vigilant weather condition monitoring (p.8)
- Constant flight team communication (p.8)
- Early restricted/controlled airspace coordination (p.8)

- Redundant data backup procedures (p.12)

Acquisition Management System (AMS). Our AMS is a project-specific, customized, PostgreSQL-based tracking database that enables our Flight Manager to ensure that all exposures are acquired according to spec and in the most efficient manner possible. It is populated with our crew's daily flight log data and includes the following components:

- Scheduled flight date(s)
- Actual flight date(s)
- Exposure time (UTC)
- Internal exposure acceptance
- Pilot Notes
- Inspection Notes
- Acquisition period start/end dates
- Acquisition period modified by Cass County point-of-contact?
- Latitude
- Longitude
- Altitude MSL
- Boundaries
- Buffers
- Flight Direction
- GSD
- Sidelap %
- Overlap %
- Dynamic sun angle begin/end times
- Airspace control/contacts

The following page contains examples of flight log inputs and AMS data visualization for image acquisition.

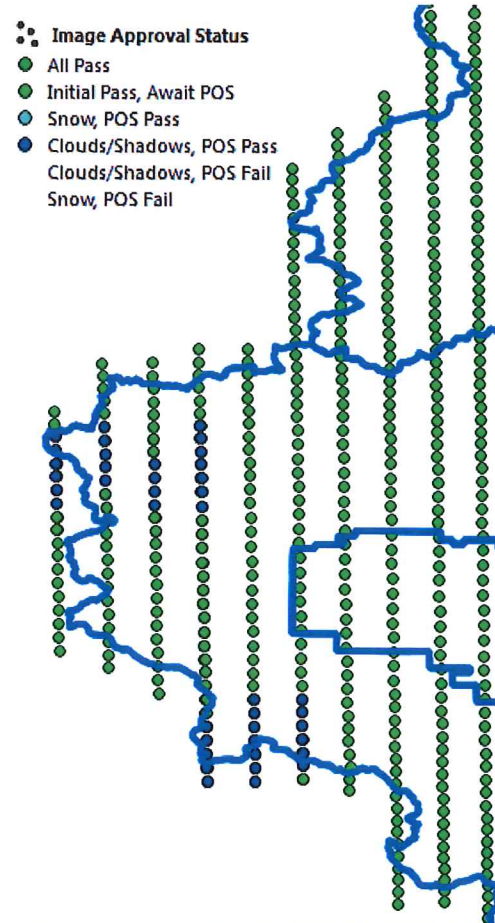
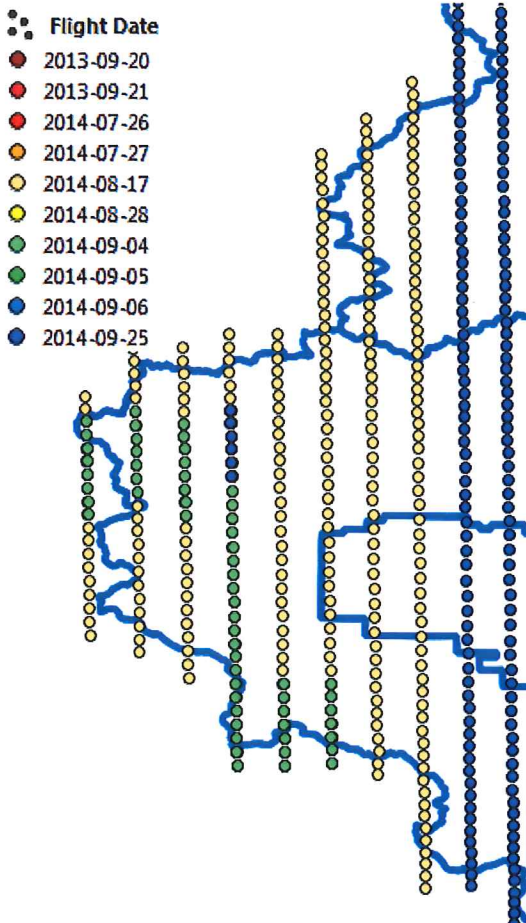


Imagery Progress Reporting and Tracking. Our flight crews are required to submit daily flight logs. Because our crews utilize Track'Air, the acquired metadata is contained in easy-to-parse MDB files. Our software team has created the “Aero-Tracker” program (at left) that quickly parses the needed data from the MDB files into an intuitive flight log that can be automatically ingested into our AMS database.

Once ingested, the attributed exposure data can be analyzed, queried, and visualized with the power of GIS. Image approval status, flight date, and flight crew can all be visualized separately for quick analysis and export of reflights, distribution of acquisition over time, and image responsibility. A couple of examples are shown below.

Daily Image Flight Log

Id	Photo ID	Flight Date	ZULU	Tlr	Run	ID	Exp_Ct	Lat_AcFlown	Lon_AcFlown	Scale	/Alt	Flt	Heading	Flight_Cre	Pilot	Operator	Tail_Num	Cam	SN	Proj	plan_alt	vert_resid	Notes	Pilot
12	0118 0152	9/25/2014	17:32:42	118	4889	43.35242949	-109.7402715	57706	24026	358.1048	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	20.23915						
13	0118 0151	9/25/2014	17:32:52	118	4890	43.36205611	-109.7406683	57706	24025	358.6458	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	20.543953						
14	0118 0150	9/25/2014	17:33:01	118	4891	43.37147333	-109.7409587	57706	24053	359.0668	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	12.00945						
15	0118 0149	9/25/2014	17:33:11	118	4892	43.38092973	-109.7411474	57706	24066	359.4885	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	8.0470015						
16	0118 0148	9/25/2014	17:33:21	118	4893	43.39039954	-109.7413274	57706	24068	359.2662	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	7.4373941						
17	0118 0147	9/25/2014	17:33:31	118	4894	43.40004747	-109.7414968	57706	24080	359.2469	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	3.7797496						
18	0118 0146	9/25/2014	17:33:41	118	4895	43.40982377	-109.7416534	57706	24086	359.1555	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	1.9509273						
19	0118 0145	9/25/2014	17:33:51	118	4896	43.41987684	-109.7419232	57706	24074	359.1382	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	5.6085718						
20	0118 0144	9/25/2014	17:34:02	118	4897	43.43033282	-109.7420794	57706	24076	359.416	Aero-Graç	Mourao	Leabman	N146ZF	UCE	A	7343.453	4.9989644						



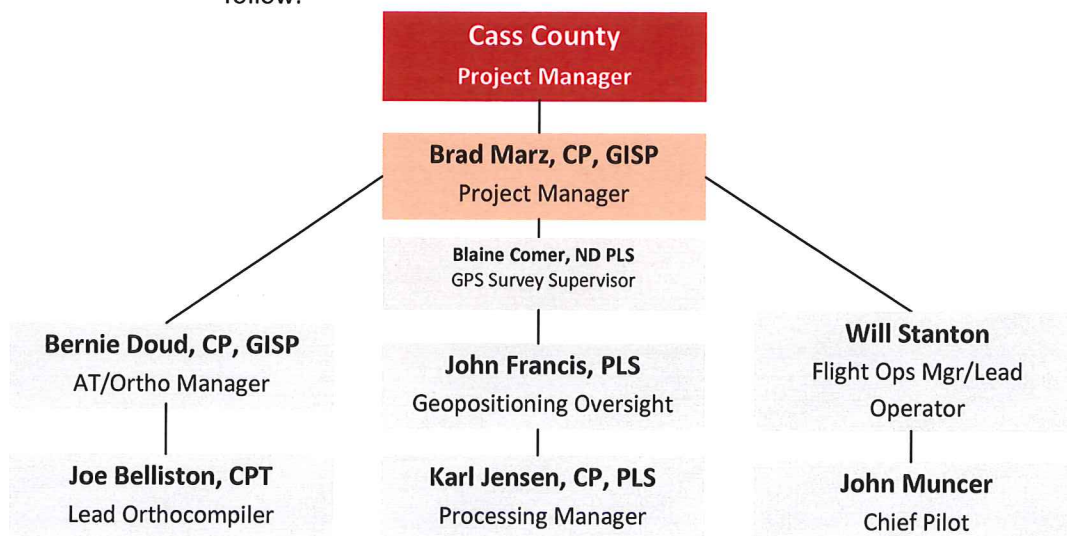
Project Staff - Personnel Qualifications

Aero-Graphics prides itself on employing and maintaining relationships with the most intelligent and skilled people in the geospatial industry, including two (2) GISCI certified GIS Professionals (GISP), two (2) in-house professional land surveyors, one (1) PMI certified PMP, and eight (8) in-house ASPRS certified photogrammetrists (CP). These professionals supervise acquisition and production tasks and ensure that quality standards are met. Our staff exhibit great breadth in their skills throughout the company. **Each position is thoroughly cross-trained, in case illness or other circumstance removes a primary staff member from the County's projects.**

Aero-Graphics' Professional Land Surveyors		
Name	State(s) Registered	Years of Experience
John Francis	NV #17370 UT #368357	33
Karl Jensen	UT #7643406	13

Aero-Graphics' ASPRS Certified Photogrammetrists		
Name	Years of Experience	Certification
Casey Francis	17	#1408
Kelly Francis	19	#1372
Brad Marz	23	#1448
Karl Jensen	13	#1374
Bernie Doud	12	#1449
Bill Nielsen	33	#1565
Kevin Reid	10	#1557
Joe Belliston	5	#1559PT

Aero-Graphics' personnel is committed to the success of the Cass County project. Throughout the project process, if any questions or concerns should arise, Brad Marz, your Project Manager, will involve the person(s) with the best expertise until the issue is resolved. An organizational chart for your project is shown below, and staff resumes follow.



Brad Marz, CP, GISP | Project Manager

Mr. Marz has over 20 years of experience as a project manager . He has successfully managed numerous projects for public sector entities, highway departments, utilities, mining operations, and engineering firms. He has a thorough understanding of photogrammetry concepts and a proven ability to oversee all aspects of a mapping project, from start to finish.

He holds a Bachelor of Science in Geography from the University of Utah and is an ASPRS Certified Photogrammetrist and a GISCI certified GISP.

Mr. Marz has worked with such entities as the USDA/ARS, USGS, Anadarko Petroleum and the USFS-Black Hills NF to design and complete digital and film photography acquisition, recurring survey and photogrammetry updates, volume calculations, contour and DTM mapping, color orthorectified imagery, and LiDAR acquisition & processing projects.

Project Experience:

Civil Science (USACE) – Utah Data Center- National Security Agency. Responsibilities for this contract include cost estimating, proposal generation, and project management for LiDAR mapping services. Deliverables included high-resolution LiDAR data acquisition and processing, digital photography acquisition and 1ft contour/DTM mapping.

City of Aspen/Pitkin County, Colorado. Responsibilities included cost estimating, proposal generation, and project management of high-resolution LiDAR data collection and processing, aerial photography acquisition, 1ft contour/DTM mapping and color orthorectified imagery at 0.25', 0.5', and 1' resolutions.

Questar – ND Bakken Formation. Responsibilities included cost estimating, proposal generation, and project management for a project covering 355 sq/miles in North Dakota. Imagery was flown with an UltraCam. Data was processed and delivered as 0.5' pixel resolution 4-band imagery along with an autocorrelated surface in ASCII format.

USFS Region 2 – Black Hills National Forest. Responsibilities for this contract include cost estimating, proposal generation, and project management for acquiring aerial photography over 2,240 sq/miles bordering Wyoming and South Dakota. Delivery included 16-bit, 30cm 4-band imagery in GeoTIFF format. FGDC compliant metadata was delivered with the image files.

Bernie Doud, CP, GISP | AT/Ortho Manager

Profile. In his role as AT/Ortho/GIS Manager, Mr. Doud is responsible for the training, scheduling, and directing of department staff in the execution of projects. Apart from core image aerotriangulation and ortho production oversight, he directs GIS analysis tasks and the production of GIS and metadata deliverables. In addition, he assists with boresight calibration of the IMU, post processing of raw ABGPS/IMU data, initial digital image processing, and calibration of LiDAR data with Optech LMS.

Education and Certifications. Bernie holds a Bachelor of Science degree in Geographic Information Systems from Brigham Young University, and a Master of Business Administration degree from City University of Seattle. He is a Certified Photogrammetrist with ASPRS and a GISCI Certified GISP.

Experience. Mr. Doud has filled twelve (12) years (6 with Aero-Graphics) of progressively more responsible geospatial roles, including project management, proposal creation, GIS management, airborne GPS/IMU data refinement, analytical aerotriangulation, LiDAR data calibration, and photogrammetric compilation and editing. He has successfully coordinated production tasks for numerous AT and Ortho projects, including the **City of Ontario, San Bernardino County, Aspen/Pitkin County, and Sublette County, WY**. Bernie shows proficiency in mapping and imaging applications such as Inpho, Intergraph, ESRI and ERDAS software suites, and is experienced with 3D terrestrial laser scanning and processing (Leica systems).

Karl Jensen, CP, PLS | Imagery/LiDAR Processing Manager

Profile. Mr. Jensen has over thirteen (13) years of GPS/IMU, LiDAR processing, surveying, and photogrammetry experience (all with Aero-Graphics). He has successfully coordinated production tasks for numerous orthoimagery, LiDAR, surveying, and mapping projects. He has extensive training in Applanix POSPac, POS-GNSS, Microsoft UltraMap, Inpho photogrammetric software suites, TerraSolid, PLS-CADD, and Optech DASHMap, and LiDAR Mapping Suite.

Education and Certifications. Karl holds an Associate of Applied Science degree in Surveying from Salt Lake Community College and a Bachelor of Arts in History from the University of Utah. He is a registered Professional Land Surveyor in the State of Utah (#7643406) and a Certified Photogrammetrist with ASPRS (#1374).

Experience. In his role as Imagery/LiDAR Processing Manager, Mr. Jensen has spent much of his time as production manager, with responsibilities for overseeing image radiometry processing, GPS/IMU processing, analytical aerotriangulation, and other project prepping functions, specifically on the **City of Logan, City of Ontario, Aspen/Pitkin County, San Bernardino County, Teton County, WY, 2014 Coconino USFS Resource Project, 2013 Gila, Shoshone, Bryce Valley, and Tapash Resource Projects, 2012 GMUG Resource Project, 2011 Coronado Resource Project, Black Hills National Forest Orthos**. With the acquisition of the UltraCamX digital camera in 2008 and Optech ALTM Orion LiDAR sensor in 2009, Karl organized and now leads the Processing Department which is responsible for all image, GPS/IMU, and LiDAR calibration and data processing.

John Francis, PLS | Geopositioning Oversight

Profile. Mr. Francis has over 33 years of experience in ground control surveying, airborne GPS/IMU processing, and photogrammetric mapping and drafting. He organized Aero-Graphics' Survey Department in 1993, and has successfully managed the execution of numerous surveying projects throughout the United States.

Education and Certifications. John studied Civil Engineering at the University of Utah, and is registered as a Professional Land Surveyor in Nevada (#017370) and Utah (#368357).

Experience. In his role as Geopositioning Manager, Mr. Francis ensures impeccable accuracy in ground survey control and post-processing of airborne GPS/IMU data. This is critical to ensuring high-quality orthoimagery, LiDAR, and mapping services. **John was on the ground to collect and process survey data for Logan, Ontario, Aspen/Pitkin County, 2012 GMUG Resource Project, San Bernardino County and Teton County, WY.**

Will Stanton | Flight Operations Manager / Lead Operator

Profile. Mr. Stanton is an experienced geospatial professional and valued problem solver. He has over eight years of experience in sensor operation. He is proficient in film, digital and LiDAR sensor operation as well as post-acquisition data processing. This includes image processing, ABGPS/IMU processing, analytical aerotriangulation, ortho imagery generation and LiDAR calibration. Mr. Stanton possesses excellent critical thinking skills which allow him to effectively troubleshoot, rectify issues and produce quality data.

Education and Certifications. Will holds a Bachelor of Arts degree in Photography.

Experience. As Flight Manager at Aero-Graphics, Mr. Stanton manages daily activities within the flight department and assists Project Managers and General Management with flight related questions and planning. He implements acquisition strategy for AGI flight crews by directing day-to-day deployment under the guidance of the Project Manager. He also serves as Lead Operator, training other operators and flying when required. **Will was the main operator for two years in Aspen/Pitkin County and two years in Ontario and San Bernardino County.**

John Muncer | Chief Pilot

Profile. Mr. Muncer is certified as a commercial pilot. He is knowledgeable in all aspects of aviation through work experience as pilot and flight follower for Aero-Graphics. He has had a clean safety record throughout his entire pilot career.

Education. John obtained his pilot training from Phoenix Flyers in Columbus, Ohio and holds an Associate of Applied Science degree in Business Management from Columbus State College.



Experience. As Chief Pilot, Mr. Muncer is pilot-in-command for flight execution of mapping projects in the company's Piper Malibu PA-46, Cessna T206 and Cessna T207. **He flew acquisition for the Ontario, Logan, and Aspen/Pitkin projects.** He operates RC-30 film and Microsoft UltraCam Eagle digital large format cameras along with the accompanying computer flight management systems and inertial measurement unit. He is trained in the use of the software that is utilized in conjunction with these cameras and systems such as POSTrack, ASCOT and FPES.

Prior to Aero-Graphics, Mr. Muncer worked as a pilot for Pictometry Incorporated.

Flying Time	Airplane Types
• 6200 hours Total Time	• Cessna T206H/TU207: 1200 hours
• 5500 hours Pilot in Command (PIC)	• Piper PA-46 Malibu: 700 hours

Joe Belliston, CPT | Lead Orthocompiler

Profile. Mr. Belliston has over six (6) years of ortho production, GIS, editing, and AT experience (all with Aero-Graphics). He has successfully coordinated production tasks for numerous large image orthorectification projects, and has extensive training in Inpho and ESRI mapping software suites.

Education. Joe holds a Bachelor of Science from the University of Utah in Geography and recently received his ASPRS Certified Photogrammetric Technologist certification.

Experience. In his role as Lead Orthocompiler, Mr. Belliston is responsible for quality control, specification compliance and meeting demanding schedule commitments. Mr. Belliston has effectively managed numerous projects of various sizes involving digitally orthorectified imagery yielding high levels of client satisfaction. He has received hands-on training by the German developers of Inpho OrthoMaster, DTMaster, and OrthoVista software, which has greatly advanced the development of the department. **Joe served as Lead Orthocompiler for all ortho projects including Logan City, City of Ontario, Aspen/Pitkin County, and San Bernardino County.**



Past Performance References

Client:	Aspen/Pitkin GIS
Contact:	Mary Lynne Lackner, GIS Manager
Address:	530 E. Main Street, Aspen, CO 81611
Phone:	970.920.5012
Project Name:	Aspen & Pitkin County Orthoimagery Updates
Completion:	October 2010, 2012, 2014
Total Area:	278 mi ²
Pixel Resolution:	3"; 6"; 1' GSD

Aspen/Pitkin GIS hired Aero-Graphics in the spring of 2010, 2012, and 2014 to acquire and produce color orthorectified imagery covering critical portions of Pitkin County, the Elk Mountain Range, and the City of Aspen. The project required careful flight planning to ensure proper stereo side and overlap. At the client's request, Aero-Graphics completed two mobilizations – one in spring for the lower areas, which enabled earlier ortho production, and one in summer to accommodate for snow in the higher areas. The imagery is being used for change detection, resource management, and other GIS analysis.

Scope of Work included:

- Target placement and GPS surveying for 49 control points.
- Digital 4-band aerial photography acquisition at 0.25', 0.5', and 1' GSD
- Sample radiometrically-corrected imagery for initial approval
- Analytical aerotriangulation
- Color mosaicked, orthorectified imagery in TIF/TFW and SID/SDW formats at 0.25', 0.5' and 1' pixel resolutions covering 278 square miles; tiles based on PLSS sections
- Delivered in Colorado State Plane, Central Zone



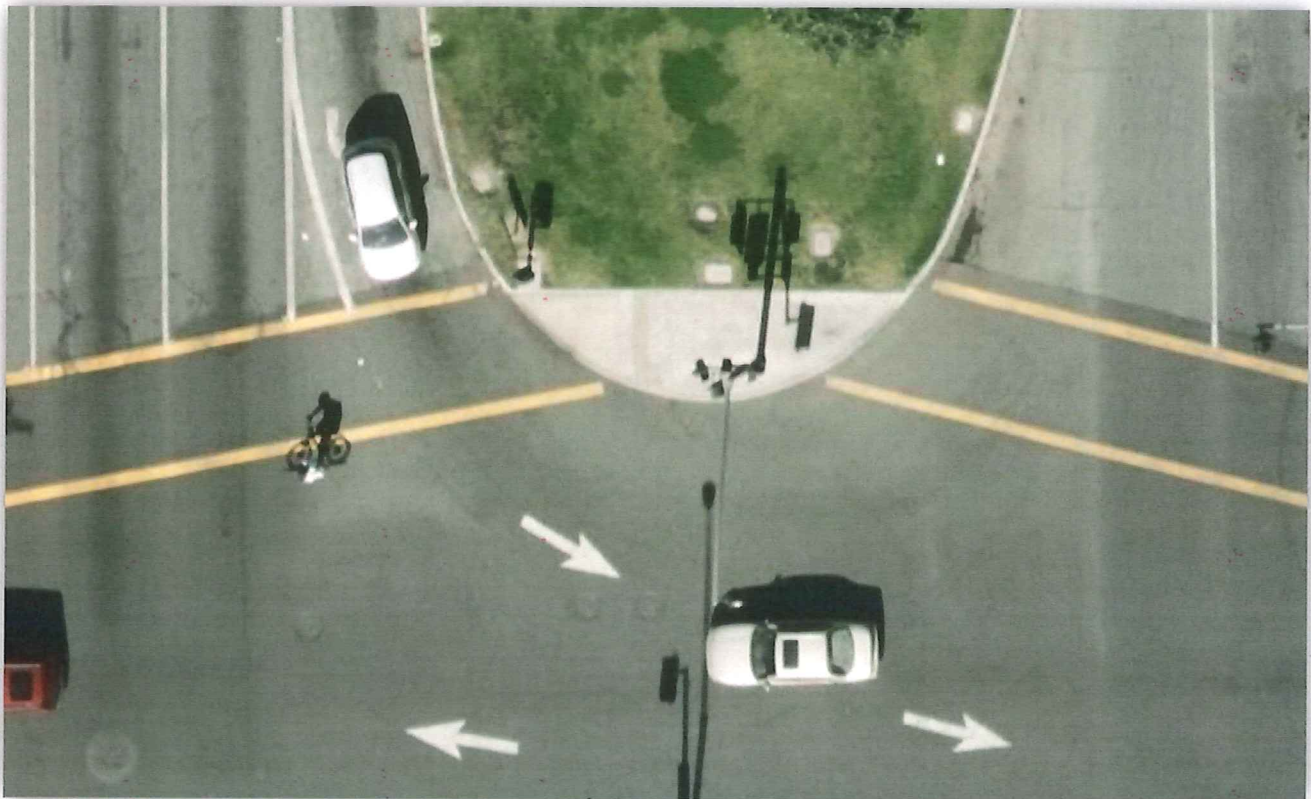


Client:	City of Ontario, California
Contact:	Robert De Casas, Senior System Analyst
Address:	303 East B Street, Ontario, CA 91764
Phone:	909.395.2408
Project Name:	Ontario Orthoimagery Updates
Completion:	March 2012, 2013, 2014, 2015 (<i>delivered ahead of schedule</i>)
Total Area:	50.1 mi ²
Pixel Resolution:	2"; 3"; 6" GSD

For four years running (2012 – 2015), Aero-Graphics has acquired and orthorectified 50 square miles of imagery covering the City of Ontario to support GIS, public works, and other needs throughout the city. Acquisition is always performed in the winter during leaf-off. Spatial resolutions are as follows: **2012** – 6" GSD; **2013** – 3" GSD; **2014/2015** – 2" GSD.

Services and Project Deliverables included:

- Target placement and GPS surveying for seven (7) control points.
- Digital 4-band aerial photography acquisition at varying GSDs, based on acquisition year (see above).
- RGB orthorectified imagery in GeoTIFF format at varying GSDs, tiled according to USGS DOQQ scheme, delivered in California State Plane Zone 5, US Feet.
- Overall ECW and MRSID mosaics
- FGDC-compliant metadata for each ortho tile and mosaic.





Client:	Logan City, Utah
Contact:	Chuck Shaw, GISP; GIS Administrator
Address:	290 North 100 West, Logan, UT 84321
Phone:	435.716.9171
Project Name:	Logan City Orthoimagery Updates
Completion:	May 2010, 2013, 2015 (2015 in progress)
Total Area:	32 mi ²
Pixel Resolution:	0.15' (1.8") GSD

In the spring of 2010, 2013, and 2015, Logan City selected Aero-Graphics to provide high-resolution orthoimagery for the entire 32 square mile City limit. The imagery was always performed during prime leaf-off conditions. In addition, Aero-Graphics acquired and processed QL1 (8ppm²) fully classified LiDAR data throughout the city in 2013 and 2015 to support many analysis efforts.

Services and Project Deliverables included:

- Target placement and GPS surveying for twenty (20) control points.
- Digital 4-band aerial photography acquisition at 5cm GSD.
- RGB orthorectified imagery in GeoTIFF format at 0.15' GSD, tiled according to client-specified scheme, delivered in Utah State Plane, North Zone, US Feet.
- Overall MrSID mosaics.





Proof of Insurance

Aero-Graphics is fully capable of furnishing certificates of insurance to Cass County and will do so at the time of contract award. This statement, in lieu of actual certificates, has been provided per the instructions of Kay Anderson.

Miscellaneous Information

- We are proud to say that there are no claims against current or past work.
- Aero-Graphics is an Equal Opportunity Employer.



Deliverables and Project Pricing

Project Pricing

For the 2016 Color Digital Ortho Aerial Photography project, Aero-Graphics will furnish the following services and products to Cass County:

- ✦ Aerial target placement and GPS ground control
- ✦ Digital (GDB format) and paper copy of ground control report including XYZ data
- ✦ Digital aerial photography acquired at 15cm ground sample distance
- ✦ Camera calibration report in PDF format
- ✦ Final flight line map with photo centers in GDB and KMZ formats
- ✦ Digital orthorectified, mosaicked, radiometrically-balanced image tiles with 6" ground sample distance:
 - 3-band spectral (RGB), 8-bit radiometric resolutions
 - Projected in State Plane, North Dakota, South Zone, NAD83/96, US Foot
 - SID/SDW (Gen4) and TIFF/TFW formats
 - Tiled according to client-provided tiling scheme
 - Project-wide mosaic in SID (Gen4) format
 - FDGC compliant metadata in XML file format

Digital deliverables will be shipped on a portable hard drive, along with backup copies on DVD

Packing slip with all shipment materials itemized

All contract deliverables become the property of Cass County without restriction.

Project Total\$93,475.

Pricing is negotiable should the County and its partner want to review other options.

Attachment 1

Microsoft Corporation
1690 38th Street
Boulder, CO 80301

Tel: 303-546-1301
Fax: 425-936-7329
<http://www.microsoft.com>

Microsoft

January 20, 2015

To Whom It May Concern,

Microsoft prides itself on the reliability of the UltraCam series of digital aerial camera systems. The UltraCam has a long-standing track record for consistent high performance and is a preferred sensor among UltraCam customers. This has never been truer than since the introduction of the UltraCam Eagle ultra-large format system in March 2011. The UltraCam Eagle features several product improvements that translate into a more robust and reliable system including solid state storage units, fewer internal computers, and a high level of integration that reduces the amount of external devices and cables.

Trustworthiness notwithstanding, we recognize the possibility of unforeseen failures and with that the need for vigilant support. With this in mind and in keeping with the Aero-Graphics maintenance contract with Microsoft for its UltraCam Eagle sensor, Microsoft stands ready with round-the-clock telephone assistance as well as loaner UltraCam sensors for Aero-Graphics, Inc., in our Boulder, Colorado facility, should their current sensor require repairs at our facility.

Please do not hesitate to contact me directly should any additional information be needed.

Sincerely,



Jerry Skaw
UltraCam Sales & Marketing Manager, North America
Microsoft Corporation
303-546-1422

Commission Consent Agenda

Social Services – Program Service Agreements

Social Services contracts with the following agencies to complete client services:

- Children's Consultation Network
- Consortium
- PATH
- North Dakota Department of Human Services – Vulnerable Adult Protection

These contracts have been reviewed and approved by Birch Burdick, as well as approved by the Social Services Board.

Proposed Motion:

Move to approve Social Services contracts for Homemaker Services for January 1 – December 31, 2016.

Worden, Heather

From: Kain Varno, Melissa
Sent: Tuesday, December 22, 2015 11:44 AM
To: Worden, Heather
Cc: Ammerman, Chip
Subject: CCSS Contracts - Commission Agenda
Attachments: Proposed Motion- Service Agreements.doc; CCN Agreement.pdf; Consortium Agreement.pdf; NDDHS - APS Contract.pdf; PATH Agreement.pdf

Hi Heather:

Attached is a proposed motion for the last of our contracts for 2016. These have been reviewed and approved by Birch. Please put these on the January 4th commission agenda. Thank you.

Melissa Kain Varno

Administrative Services Manager
Cass County Social Services
701-239-6709

SUBJECT: CONTRACTS

ADOPTED DATE: OCTOBER 2, 2000

PAGE 1 OF 1

All contracts which bind Cass County must contain the signature of the commission chairman. Prior to being placed on the commission agenda, the department head should forward the contract to the state's attorney for review.

A standardized form may be used when presenting contracts to the commission for approval as follows:

COMPANY REQUESTING CONTRACT: Children's Consultation Network

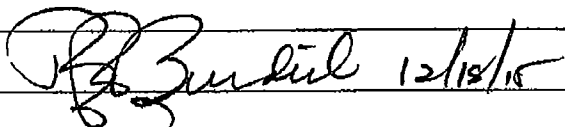
DATE OF REQUEST: 11/23/15 DATE OF EXPECTED RETURN
TO THE COMMISSION OFFICE: _____

DEPARTMENT HEAD RECOMMENDING SIGNATURE: 

STATE'S ATTORNEY SIGNATURE: _____

STATE'S ATTORNEY COMMENTS: _____

APPROVED AS TO FORM. See SUGGESTED CHANGE
WITHIN.

 12/18/15

CHAIRMAN TO SIGN ORIGINAL AGREEMENT

Contracts shall be on a calendar-year basis, whenever possible.

As a part of the consent agenda for each regular commission meeting, the subject of "Contracts" will be automatically included.

Therefore, departments may submit contracts for board approval up to the day of each commission meeting. Contract approval will be subject to state's attorney review within five days after being approved by the county commission.

HISTORICAL REFERENCE DATE: MAY 4, 1992

PURCHASE OF SERVICE AGREEMENT

Children's Consultation Network, 4553 9th Ave. So. Suite 3, Fargo, ND (Vendor), proposes to provide the services identified in the Scope of Service paragraph below to Cass County Social Services (County), 1010 2nd Ave. So. Fargo, ND through the purchase of those services.

The County and Vendor therefore enter into the following:

1. TERM OF THE AGREEMENT

This agreement runs from January 1, 2016, through December 31, 2016. This agreement may be terminated at any time by mutual consent of both parties, or upon 30-days' written notice by either party, with or without cause.

2. SCOPE OF SERVICE

Vendor shall provide screening, assessment and therapeutic consultation services to children, ages 0-8, and their caregivers, that are referred through Cass County Social Services, according to the established program.

3. COMPENSATION

County agrees to pay Vendor \$1875.00 per quarter. Total payment under this agreement may not exceed \$7,500. Vendor shall submit its request for reimbursement to County quarterly. Vendor shall submit its final payment request to County no later than 15 days after the expiration or termination of this agreement.

4. COUNTY'S UNDERSTANDING OF TERM OF FUNDING

Vendor understands that this agreement is a one-time agreement, and acknowledges that it has received no assurances that this agreement may be extended beyond its expiration date.

5. VENDOR ASSURANCES

This agreement will be construed according to the laws of the State of North Dakota. In connection with furnishing supplies or performing work under this agreement, persons who contract with or receive funds to provide services to County are obligated and agree to comply with all local, state, and federal laws, regulations, and executive orders related to the performance of this agreement including the following: Fair Labor Standards Act, Equal Pay Acts of 1963, Titles VI and VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the North Dakota Human Rights Act, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Drug-Free Work Act of 1988, The Americans with Disabilities Act of 1990, Alcohol, Drug Abuse and Mental Health Administration Reorganization Act of 1992 and the Pro-Children Act of 1994.

By signing this agreement Vendor certifies that neither Vendor, Subcontractor, nor their principals, are presently debarred, declared ineligible, or voluntarily excluded from participation in transactions with the State or Federal Government by any Department or Agency of the State or Federal Government.

Vendor must be an approved Vendor with the Office of Management and Budget within the State of North Dakota as required by North Dakota Century Code 54-44.4-09.

6. TERMINATION FOR LACK OF FUNDING OR AUTHORITY

Vendor may terminate this agreement effective upon delivery of written notice to County or on any later date stated in the notice, if:

- A. Funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in indicated quantities or for the indicated term. The agreement may be modified by mutual consent of the parties in writing to accommodate a reduction in funds.
- B. Federal or state laws or rules are modified or interpreted in a way that the services are no longer allowable or appropriate for purchase under this agreement or are no longer eligible for the funding proposed for payments authorized by this agreement.
- C. Any license, permit, or certificate required by law or rule, or by this agreement, is for any reason denied, revoked, suspended, or not renewed.

Any termination of this agreement under this section is without prejudice to any obligation or liabilities of either party already accrued prior to termination.

7. DELAY OR DEFAULT FORCE MAJEURE

Vendor shall not be held responsible for delay or default caused by fire, flood, riot, acts of God or war if the event is beyond Vendor's reasonable control, and Vendor gives notice to County immediately upon occurrence of the event that caused, or is reasonably expected to cause, the delay or default.

8. INDEMNITY

County agrees to defend, indemnify, and hold harmless the Vendor, its agency, officers and employees, from and against claims based on the vicarious liability of the Vendor or its agents, but not against claims based on the Vendor's contributory negligence, comparative and/or contributory negligence or fault, sole negligence, or intentional misconduct. The legal defense provided by County to the Vendor under this provision must be free of any conflicts of interest even if retention of separate legal counsel for the Vendor is necessary. This obligation shall continue after the termination of this agreement.

9. ACCESS TO BOOKS AND RECORDS

Vendor and County and their duly authorized representatives shall provide access to the books, documents, papers, and records of County and Vendor which are pertinent to the services provide under this agreement for the purpose of making an audit or examination, or for making excerpts and transcripts. This documentation must be available for a period of three years from the date of submission of the final expenditures report.

10. NOTICE

Any notice or other communication required under this agreement must be given by registered or certified mail and is complete on the date mailed when addressed to the parties at the following address:

Cass County Social Services
P.O. Box 2986
Fargo, ND 58108-2986

Notice provided under this provision does not meet the notice requirements for monetary claims against State found at North Dakota Century Code § 32-12.2-04.

11. INTEGRATION, MODIFICATION, AND SEVERABILITY

This agreement constitutes the entire agreement between Vendor and County. There are no understandings, agreements, or representations, oral or written, not specified within this agreement.

No alteration, amendment, or modification of this agreement is effective unless it is reduced in writing, signed by the parties, and attached to the agreement. If any term of this agreement is declared by a court having jurisdiction to be illegal or unenforceable, the validity of the remaining terms will not be affected and, if possible, the rights and obligations of the parties are to be construed and enforced as if the agreement does not contain the illegal or unenforceable term.

12. APPLICABLE LAW

This agreement is governed by and construed according to the laws of the State of North Dakota. Any action to enforce this agreement must be adjudicated exclusively in the state District Court of Cass, North Dakota.

13. ASSIGNMENT

Neither party may assign this agreement or the party's rights under this agreement without the written approval of the other party. Approval to assign may not be unreasonably withheld. This agreement is equally binding on the respective parties and their successors and assigns.

14. CONFIDENTIAL INFORMATION

County shall not use or disclose any information it receives from Vendor under this agreement that Vendor has previously identified as confidential or exempt from mandatory public disclosure except as necessary to carry out the purposes of this agreement or as authorized in advance by Vendor or as required by law. Vendor shall not disclose any information it receives from County, that County has previously identified as confidential, and that Vendor determines, in its sole discretion, is protected from mandatory public disclosure under a specific exception to the North Dakota open records law found in North Dakota Century Code § 44-04-18 et. seq. the duty of Vendor and County to maintain confidentiality of information under this section continues beyond the term of this agreement, including any extensions or renewals.

15. WORK PRODUCT, EQUIPMENT, AND MATERIALS

All work product, equipment, and materials created or purchased under this agreement belong to Vendor and must be delivered to Vendor at Vendor's request upon expiration or termination of this agreement. County agrees that all materials prepared under this agreement are "works for hire" within the meaning of copyright laws of the United States and assigns to Vendor all rights and interests County may have in the materials it prepares under this agreement, including documents to enable Vendor to protect its rights under this section. Vendor must provide written approval of County's use of work product or materials for purposes outside the scope of this agreement.

16. COMPLIANCE WITH PUBLIC RECORDS LAW

County understands that, except for disclosures prohibited in this agreement, Vendor must disclose to the public upon request any records it receives from the County. County further understands that any records obtained or generated by County under this agreement, except for records that are defined confidential under this agreement, may be open to the public upon request under certain circumstances under the North Dakota Century Code § 44-04-18 et. seq. County agrees to contact Vendor immediately upon receiving a request for information under the open records law and to discuss with the Vendor its position on the request.

17. NONDISCRIMINATION – COMPLIANCE WITH LAWS

County shall comply with all laws, rules and policies, including those relating to nondiscrimination, accessibility and civil rights. County shall timely file all required reports, make required payroll deductions, and timely pay all taxes and premiums owed, including sales and use taxes, unemployment

compensation, and workers' compensation premiums. County also shall have and keep current at all times during the term of this agreement all licenses and permits required by law.

Chip Ammerman, Executive Director
Cass County Social Services

Date

Arland Rasmussen, Chair
Cass County Social Service Board

Date

Shawna Croaker, Director
Children's Consultation Network

Date

County Federal ID Number

SUBJECT: CONTRACTS

ADOPTED DATE: OCTOBER 2, 2000

PAGE 1 OF 1

All contracts which bind Cass County must contain the signature of the commission chairman. Prior to being placed on the commission agenda, the department head should forward the contract to the state's attorney for review.

A standardized form may be used when presenting contracts to the commission for approval as follows:

COMPANY REQUESTING CONTRACT: Consortium

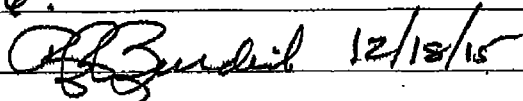
DATE OF REQUEST: 11/23/15 DATE OF EXPECTED RETURN
TO THE COMMISSION OFFICE: _____

DEPARTMENT HEAD RECOMMENDING SIGNATURE: 

STATE'S ATTORNEY SIGNATURE: _____

STATE'S ATTORNEY COMMENTS: ↓

APPROVED AS TO FORM. See SUGGESTED CHANGES
TO A's 8, 14 & 16.

 12/18/15

CHAIRMAN TO SIGN ORIGINAL AGREEMENT

Contracts shall be on a calendar-year basis, whenever possible.

As a part of the consent agenda for each regular commission meeting, the subject of "Contracts" will be automatically included.

Therefore, departments may submit contracts for board approval up to the day of each commission meeting. Contract approval will be subject to state's attorney review within five days after being approved by the county commission.

HISTORICAL REFERENCE DATE: MAY 4, 1992

PURCHASE OF SERVICE AGREEMENT

New American Consortium for Wellness and Empowerment, 15 South 21st Street, Fargo, ND (Vendor), proposes to provide the services identified in the Scope of Service paragraph below to Cass County Social Services (County), 1010 2nd Ave. So. Fargo, ND through the purchase of those services.

The County and Vendor therefore enter into the following:

1. TERM OF THE AGREEMENT

This agreement runs from January 1, 2016, through December 31, 2016. This agreement may be terminated at any time by mutual consent of both parties, or upon 30-days' written notice by either party, with or without cause.

2. SCOPE OF SERVICE

Vendor shall provide services to Social Service clients according to the following:

- Cultural Liaison between Social Services and client when approved by client
- Providing education, social support and integration assistance to Social Service clients in engaging with community resources
- Assist Social Service clients by teaching/educating on daily living skills.

3. COMPENSATION

County agrees to pay Vendor \$1,666.67 per month. Total payment under this agreement may not exceed \$20,000. Vendor shall submit its request for reimbursement to County monthly. Vendor shall submit its final payment request to County no later than 15 days after the expiration or termination of this agreement.

4. COUNTY'S UNDERSTANDING OF TERM OF FUNDING

Vendor understands that this agreement is a one-time agreement, and acknowledges that it has received no assurances that this agreement may be extended beyond its expiration date.

5. VENDOR ASSURANCES

This agreement will be construed according to the laws of the State of North Dakota. In connection with furnishing supplies or performing work under this agreement, persons who contract with or receive funds to provide services to County are obligated and agree to comply with all local, state, and federal laws, regulations, and executive orders related to the performance of this agreement including the following: Fair Labor Standards Act, Equal Pay Act of 1963, Titles VI and VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the North Dakota Human Rights Act, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Drug-Free Work Act of 1988, The Americans with Disabilities Act of 1990, Alcohol, Drug Abuse and Mental Health Administration Reorganization Act of 1992 and the Pro-Children Act of 1994.

By signing this agreement Vendor certifies that neither Vendor, Subcontractor, nor their principals, are presently debarred, declared ineligible, or voluntarily excluded from participation in transactions with the State or Federal Government by any Department or Agency of the State or Federal Government.

Vendor must be an approved Vendor with the Office of Management and Budget within the State of North Dakota as required by North Dakota Century Code 54-44.4-09.

6. TERMINATION FOR LACK OF FUNDING OR AUTHORITY

Vendor may terminate this agreement effective upon delivery of written notice to County or on any later date stated in the notice, if:

- A. Funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in indicated quantities or for the indicated term. The agreement may be modified by mutual consent of the parties in writing to accommodate a reduction in funds.
- B. Federal or state laws or rules are modified or interpreted in a way that the services are no longer allowable or appropriate for purchase under this agreement or are no longer eligible for the funding proposed for payments authorized by this agreement.
- C. Any license, permit, or certificate required by law or rule, or by this agreement, is for any reason denied, revoked, suspended, or not renewed.

Any termination of this agreement under this section is without prejudice to any obligation or liabilities of either party already accrued prior to termination.

7. DELAY OR DEFAULT FORCE MAJEURE

Vendor shall not be held responsible for delay or default caused by fire, flood, riot, acts of God or war if the event is beyond Vendor's reasonable control, and Vendor gives notice to County immediately upon occurrence of the event that caused, or is reasonably expected to cause, the delay or default.

8. INDEMNITY

County agrees to defend, indemnify, and hold harmless the Vendor, its agency, officers and employees, from and against claims based on the vicarious liability of the Vendor or its agents, but not against claims based on the Vendor's contributory negligence, comparative and/or contributory negligence or fault, sole negligence, or intentional misconduct. The legal defense provided by County to the Vendor under this provision must be free of any conflicts of interest even if retention of separate legal counsel for the Vendor is necessary. This obligation shall continue after the termination of this agreement.

9. ACCESS TO BOOKS AND RECORDS

Vendor and County and their duly authorized representatives shall provide access to the books, documents, papers, and records of County and Vendor which are pertinent to the services provide under this agreement for the purpose of making an audit or examination, or for making excerpts and transcripts. This documentation must be available for a period of three years from the date of submission of the final expenditures report.

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Cass County Social Services
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Notice provided under this provision does not meet the notice requirements for monetary claims against State found at North Dakota Century Code § 32-12.2-04.

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This agreement constitutes the entire agreement between Vendor and County. There are no understandings, agreements, or representations, oral or written, not specified within this agreement.

No alteration, amendment, or modification of this agreement is effective unless it is reduced in writing, signed by the parties, and attached to the agreement. If any term of this agreement is declared by a court having jurisdiction to be illegal or unenforceable, the validity of the remaining terms will not be affected and, if possible, the rights and obligations of the parties are to be construed and enforced as if the agreement does not contain the illegal or unenforceable term.

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15. WORK PRODUCT, EQUIPMENT, AND MATERIALS

All work product, equipment, and materials created or purchased under this agreement belong to Vendor and must be delivered to Vendor at Vendor's request upon expiration or termination of this agreement. County agrees that all materials prepared under this agreement are "works for hire" within the meaning of copyright laws of the United States and assigns to Vendor all rights and interests County may have in the materials it prepares under this agreement, including documents to enable Vendor to protect its rights under this section. Vendor must provide written approval of County's use of work product or materials for purposes outside the scope of this agreement.

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17. NONDISCRIMINATION – COMPLIANCE WITH LAWS

County shall comply with all laws, rules and policies, including those relating to nondiscrimination, accessibility and civil rights. County shall timely file all required reports, make required payroll deductions, and timely pay all taxes and premiums owed, including sales and use taxes, unemployment

compensation, and workers' compensation premiums. County also shall have and keep current at all times during the term of this agreement all licenses and permits required by law.

Chip Ammerman, Executive Director
Cass County Social Services

Date

Arland Rasmussen, Chair
Cass County Social Service Board

Date

Director
New American Consortium for Wellness and Empowerment

Date

County Federal ID Number

SUBJECT: CONTRACTS

ADOPTED DATE: OCTOBER 2, 2000

PAGE 1 OF 1

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A standardized form may be used when presenting contracts to the commission for approval as follows:

COMPANY REQUESTING CONTRACT: PATH

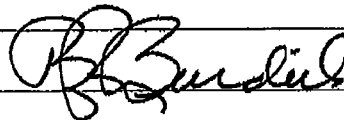
DATE OF REQUEST: 11/23/15 DATE OF EXPECTED RETURN
TO THE COMMISSION OFFICE: _____

DEPARTMENT HEAD RECOMMENDING SIGNATURE: 

STATE'S ATTORNEY SIGNATURE: _____

STATE'S ATTORNEY COMMENTS:

Approved As To Form. See SUGGESTED CHANGES
TO 91's 8, 14 & 16.

 12/18/15

CHAIRMAN TO SIGN ORIGINAL AGREEMENT

Contracts shall be on a calendar-year basis, whenever possible.

As a part of the consent agenda for each regular commission meeting, the subject of "Contracts" will be automatically included.

Therefore, departments may submit contracts for board approval up to the day of each commission meeting. Contract approval will be subject to state's attorney review within five days after being approved by the county commission.

HISTORICAL REFERENCE DATE: MAY 4, 1992

PURCHASE OF SERVICE AGREEMENT

PATH, Inc. (Vendor), 1202 Westrac Drive, Fargo, ND proposes to provide the services identified in the Scope of Service paragraph below to Cass County Social Services (County), 1010 2nd Ave. So. Fargo, ND through the purchase of those services.

The County and Vendor therefore enter into the following:

1. TERM OF THE AGREEMENT

This agreement runs from January 1, 2016, through December 31, 2016. This agreement may be terminated at any time by mutual consent of both parties, or upon 30-days' written notice by either party, with or without cause.

2. SCOPE OF SERVICE

Vendor shall provide services according to the following:

- 4-6 overnights of relief care a month
- Professional case management
- WRAP-Around treatment team approach
- Behavior and crisis planning
- Peer to Peer mentoring to caregivers by highly trained licensed support parent
- Mentoring for child from highly trained licensed support parent
- Crisis intervention
- 24 hour on-call services for families/children involved in this service
- Comprehensive assessments-quarterly CAS11 assessments

3. COMPENSATION

County agrees to pay Vendor \$13,500 per quarter. Total payment under this agreement may not exceed \$54,000. Vendor shall submit its request for reimbursement to County quarterly. Vendor shall submit its final payment request to County no later than 15 days after the expiration or termination of this agreement.

4. COUNTY'S UNDERSTANDING OF TERM OF FUNDING

Vendor understands that this agreement is a one-time agreement, and acknowledges that it has received no assurances that this agreement may be extended beyond its expiration date.

5. VENDOR ASSURANCES

This agreement will be construed according to the laws of the State of North Dakota. In connection with furnishing supplies or performing work under this agreement, persons who contract with or receive funds to provide services to County are obligated and agree to comply with all local, state, and federal laws, regulations, and executive orders related to the performance of this agreement including the following: Fair labor Standards Act, Equal Pay Acts of 1963, Titles VI and VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the North Dakota Human Rights Act, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Drug-Free Work Act of 1988, The Americans with Disabilities Act of 1990, Alcohol, Drug Abuse and Mental Health Administration Reorganization Act of 1992 and the Pro-Children Act of 1994.

By signing this agreement Vendor certifies that neither Vendor, Subcontractor, nor their principals, are presently debarred, declared ineligible, or voluntarily excluded from participation in transactions with the State or Federal Government by any Department or Agency of the State or Federal Government.

Vendor must be an approved Vendor with the Office of Management and Budget within the State of North Dakota as required by North Dakota Century Code 54-44.4-09.

6. TERMINATION FOR LACK OF FUNDING OR AUTHORITY

Vendor may terminate this agreement effective upon delivery of written notice to County or on any later date stated in the notice, if:

- A. Funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in indicated quantities or for the indicated term. The agreement may be modified by mutual consent of the parties in writing to accommodate a reduction in funds.
- B. Federal or state laws or rules are modified or interpreted in a way that the services are no longer allowable or appropriate for purchase under this agreement or are no longer eligible for the funding proposed for payments authorized by this agreement.
- C. Any license, permit, or certificate required by law or rule, or by this agreement, is for any reason denied, revoked, suspended, or not renewed.

Any termination of this agreement under this section is without prejudice to any obligation or liabilities of either party already accrued prior to termination.

7. DELAY OR DEFAULT FORCE MAJEURE

Vendor shall not be held responsible for delay or default caused by fire, flood, riot, acts of God or war if the event is beyond Vendor's reasonable control, and Vendor gives notice to County immediately upon occurrence of the event that caused, or is reasonably expected to cause, the delay or default.

8. INDEMNITY

County agrees to defend, indemnify, and hold harmless the Vendor, its agency, officers and employees, from and against claims based on the vicarious liability of the Vendor or its agents, but not against claims based on the Vendor's contributory negligence, comparative and/or contributory negligence or fault, sole negligence, or intentional misconduct. The legal defense provided by County to the Vendor under this provision must be free of any conflicts of interest even if retention of separate legal counsel for the Vendor is necessary. This obligation shall continue after the termination of this agreement.

9. ACCESS TO BOOKS AND RECORDS

Vendor and County and their duly authorized representatives shall provide access to the books, documents, papers, and records of County and Vendor which are pertinent to the services provide under this agreement for the purpose of making an audit or examination, or for making excerpts and transcripts. This documentation must be available for a period of three years from the date of submission of the final expenditures report.

10. NOTICE

Any notice or other communication required under this agreement must be given by registered or certified mail and is complete on the date mailed when addressed to the parties at the following address:

Cass County Social Services
P.O. Box 2986
Fargo, ND 58108-2986

Notice provided under this provision does not meet the notice requirements for monetary claims against State found at North Dakota Century Code § 32-12.2-04.

11. INTEGRATION, MODIFICATION, AND SEVERABILITY

This agreement constitutes the entire agreement between Vendor and County. There are no understandings, agreements, or representations, oral or written, not specified within this agreement. No alteration, amendment, or modification of this agreement is effective unless it is reduced in writing, signed by the parties, and attached to the agreement. If any term of this agreement is declared by a court having jurisdiction to be illegal or unenforceable, the validity of the remaining terms will not be affected and, if possible, the rights and obligations of the parties are to be construed and enforced as if the agreement does not contain the illegal or unenforceable term.

12. APPLICABLE LAW

This agreement is governed by and construed according to the laws of the State of North Dakota. Any action to enforce this agreement must be adjudicated exclusively in the state District Court of Cass, North Dakota.

13. ASSIGNMENT

Neither party may assign this agreement or the party's rights under this agreement without the written approval of the other party. Approval to assign may not be unreasonably withheld. This agreement is equally binding on the respective parties and their successors and assigns.

14. CONFIDENTIAL INFORMATION

County shall not use or disclose any information it receives from Vendor under this agreement that Vendor has previously identified as confidential or exempt from mandatory public disclosure except as necessary to carry out the purposes of this agreement or as authorized in advance by Vendor or as required by law. Vendor shall not disclose any information it receives from County, that County has previously identified as confidential, and that Vendor determines, in its sole discretion, is protected from mandatory public disclosure under a specific exception to the North Dakota open records law found in North Dakota Century Code § 44-04-18 et. seq. the duty of Vendor and County to maintain confidentiality of information under this section continues beyond the term of this agreement, including any extensions or renewals.

15. WORK PRODUCT, EQUIPMENT, AND MATERIALS

All work product, equipment, and materials created or purchased under this agreement belong to Vendor and must be delivered to Vendor at Vendor's request upon expiration or termination of this agreement. County agrees that all materials prepared under this agreement are "works for hire" within the meaning of copyright laws of the United States and assigns to Vendor all rights and interests County may have in the materials it prepares under this agreement, including documents to enable Vendor to protect its rights under this section. Vendor must provide written approval of County's use of work product or materials for purposes outside the scope of this agreement.

16. COMPLIANCE WITH PUBLIC RECORDS LAW

County understands that, except for disclosures prohibited in this agreement, Vendor must disclose to the public upon request any records it receives from the County. County further understands that any records obtained or generated by County under this agreement, except for records that are defined confidential under this agreement, may be open to the public upon request under certain circumstances under the North Dakota Century Code § 44-04-18 et. seq. County agrees to contact

Vendor immediately upon receiving a request for information under the open records law and to discuss with Vendor its position on the request.

17. NONDISCRIMINATION – COMPLIANCE WITH LAWS

County shall comply with all laws, rules and policies, including those relating to nondiscrimination, accessibility and civil rights. County shall timely file all required reports, make required payroll deductions, and timely pay all taxes and premiums owed, including sales and use taxes, unemployment compensation, and workers' compensation premiums. County also shall have and keep current at all times during the term of this agreement all licenses and permits required by law.

Chip Ammerman, Executive Director
Cass County Social Services

Date

Arland Rasmussen, Chair
Cass County Social Service Board

Date

Director
PATH, INC.

Date

County Federal ID Number

SUBJECT: CONTRACTS

ADOPTED DATE: OCTOBER 2, 2000

PAGE 1 OF 1

All contracts which bind Cass County must contain the signature of the commission chairman. Prior to being placed on the commission agenda, the department head should forward the contract to the state's attorney for review.

A standardized form may be used when presenting contracts to the commission for approval as follows:

COMPANY REQUESTING CONTRACT: NDDHS - Adult Protective Services

DATE OF REQUEST: 12/17/15 DATE OF EXPECTED RETURN
TO THE COMMISSION OFFICE: _____

DEPARTMENT HEAD RECOMMENDING SIGNATURE: 

STATE'S ATTORNEY SIGNATURE: _____

STATE'S ATTORNEY COMMENTS:

APPROVED AS TO FORM. ALTHOUGH TIZI SEEMS TO MAKE
DHS THE DECISION-MAKER AS TO WHETHER SOMETHING IS
CONFIDENTIAL, FROM A PRACTICAL PERSPECTIVE I DON'T SEE
THIS AS AN ISSUE. R. Burdick 12/18/15
CHAIRMAN TO SIGN ORIGINAL AGREEMENT

Contracts shall be on a calendar-year basis, whenever possible.

As a part of the consent agenda for each regular commission meeting, the subject of "Contracts" will be automatically included.

Therefore, departments may submit contracts for board approval up to the day of each commission meeting. Contract approval will be subject to state's attorney review within five days after being approved by the county commission.

HISTORICAL REFERENCE DATE: MAY 4, 1992

PURCHASE OF SERVICE AGREEMENT

The State of North Dakota, acting through its North Dakota Department of Human Services, Aging Services Division (State), has determined the services identified in the Scope of Service paragraph below should be purchased.

Cass County (Vendor), P.O. Box 3106, Fargo, ND 58108-3106, proposes to provide those services.

State and Vendor therefore enter into the following:

1. TERM OF THE AGREEMENT

This agreement runs from July 1, 2015, through June 30, 2017. This agreement will not automatically renew.

2. SCOPE OF SERVICE

Vendor shall provide Vulnerable Adult Protective Services in Region V according to the following:

- A. Vendor shall provide Vulnerable Adult Protective Services throughout Cass, Ransom, Richland, Sargent, Steele, and Traill counties to vulnerable adults who meet program criteria for Vulnerable Adult Protective Services. The program criteria is defined by the North Dakota Department of Human Services Manual, Vulnerable Adult Protective Services Policies and Procedures, (Eligible Clients 690-01-23-01), which is made a part of this agreement by its reference here.
- B. Vendor shall comply with N.D.C.C. Chapter 50-25.2 in providing Vulnerable Adult Protective Services, which is made a part of this agreement by its reference here.
- C. Vendor shall enter information on each client into the Harmony for Adult Protective Services web-based data collection system, which is made a part of this agreement by its reference here.
- D. Vendor shall complete documentation in accordance with the North Dakota Department of Human Services Manual, Vulnerable Adult Protective Services Policies and Procedures, (Program Reporting Requirements 690-01-43).
- E. Vendor shall staff Vulnerable Adult Protective Services cases on at least a quarterly basis with a representative of State.
- F. Vendor shall contact the county social service agencies in Ransom, Richland, Sargent, Steele, and Traill counties on a semi-annual basis, or more frequently if needed, to provide updates on Vulnerable Adult Protective Services policies and cases in their respective region and to request input.

- G. Vendor shall participate in program-related meetings and trainings, including data collection system trainings, as requested by State.
- H. Vendor shall employ a staff person or persons to carry out the vulnerable adult protective services, whose minimum qualifications are a bachelor's degree in criminal justice, social work, nursing, paralegal, or other related field.

3. COMPENSATION

State, upon receipt and approval of SFN 1763 Request for Reimbursement or other form required by the State, agrees to pay Vendor \$82,884 per quarter at the end of September and December, 2015; at the end of March, June, September, and December, 2016; at the end of March, 2017; and a final payment of \$82,899 at the end of June, 2017. Total payment under this agreement may not exceed \$663,087. Vendor shall submit its request for reimbursement to state quarterly. Vendor shall submit its June, 2016, request for reimbursement to State no later than July 15, 2016, and Vendor shall submit its final payment request to State no later than 15 days after the expiration or termination of this agreement.

4. TERMINATION

a. Termination by Mutual Agreement or Notice

This agreement may be terminated at any time by mutual consent of both parties executed in writing, or upon 30-days' written notice by either party, with or without cause.

b. Termination for Lack of Funding or Authority

State may terminate the whole or any part of this agreement, effective upon delivery of written notice to Vendor or on any later date stated in the notice, under any of the following conditions:

- 1) If funding from federal, state, or other sources is not obtained and continued at levels sufficient to allow for purchase of the services or supplies in the indicated quantities or term.
- 2) If federal or state laws or rules are modified or interpreted in a way that the services are no longer allowable or appropriate for purchase under this agreement or are no longer eligible for the funding proposed for payments authorized by this agreement.
- 3) If any license, permit, or certificate required by law or rule, or by the terms of this agreement, is for any reason denied, revoked, suspended, or not renewed.

Termination of this agreement under this subsection is without prejudice to any obligations or liabilities of either party already accrued prior to termination.

c. Termination for Cause

State may terminate this agreement effective upon delivery of written notice to Vendor, or any later date stated in the notice:

- 1) If Vendor fails to provide services required by this agreement within the time specified or any extension agreed to by State; or
- 2) If Vendor fails to perform any of the other provisions of this agreement, or so fails to pursue the work as to endanger performance of this agreement in accordance with its terms.

The rights and remedies of State provided in this subsection are not exclusive and are in addition to any other rights and remedies provided by law or under this agreement.

5. NONPERFORMANCE

Failure by Vendor to perform the terms of this agreement constitutes a breach of contract and will result in the termination of the agreement. If a breach by Vendor renders the agreement impossible of performance by Vendor and is caused by circumstances beyond the control of Vendor, and through no fault of Vendor, the agreement will be terminated and State may set off, against any liability or obligations owed to Vendor under this agreement or otherwise, any amounts paid for individual items of work which are incomplete at the time of the breach.

6. FORCE MAJEURE

Vendor shall not be held responsible for delay or default caused by fire, flood, riot, acts of God or war if the event is beyond Vendor's reasonable control, and Vendor gives notice to State immediately upon occurrence of the event that caused, or is reasonably expected to cause, the delay or default.

7. VENDOR'S UNDERSTANDING OF TERM OF FUNDING

Vendor understands that this agreement is a one-time agreement, and acknowledges that it has received no assurances that this agreement may be extended beyond its expiration date.

8. VENDOR ASSURANCES

This agreement will be construed according to the laws of the State of North Dakota. In connection with furnishing supplies or performing work under this agreement, persons who contract with or receive funds to provide services to State are obligated and agree to comply with all local, state, and federal laws, regulations, and executive orders related to the performance of this agreement including the following: Fair Labor Standards Act, Equal Pay Act of 1963, Titles VI and VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act of 1967, the North Dakota Human Rights Act, the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, the Drug Abuse Prevention, Treatment and Rehabilitation Act of 1970, Section 504 of the

Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Drug-Free Workplace Act of 1988, the Americans with Disabilities Act of 1990, Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act of 1992, and the Pro-Children Act of 1994.

By signing this agreement Vendor certifies that neither Vendor, Subcontractor, nor their principals, are presently debarred, declared ineligible, or voluntarily excluded from participation in transactions with the State or Federal Government by any Department or Agency of the State or Federal Government.

Vendor must be an approved Vendor with the Office of Management and Budget within the State of North Dakota as required by North Dakota Century Code § 54-44.4-09.

9. AUTHORITY TO CONTRACT

Vendor may subcontract with qualified vendors of services, provided that any subcontract acknowledges the binding nature of this agreement, and incorporates this agreement, together with its attachments as appropriate. Vendor is solely responsible for the performance of any subcontractor. Vendor may not contract for or on behalf of or incur obligations on behalf of State. Vendor may not assign or otherwise transfer or delegate any right or duty without State's express written consent.

10. INDEPENDENT ENTITY

Vendor is an independent entity under this agreement. Vendor, its employees, agents, or representatives are not employees of State for any purpose, including the application of the Social Security Act, the Fair Labor Standards Act, the Federal Insurance Contribution Act, the Federal Unemployment Act, the North Dakota Unemployment Compensation Law, and the North Dakota Workforce Safety and Insurance Act. No part of this agreement may be construed to represent the creation of an employer/employee relationship between State and Vendor. Vendor retains sole and absolute discretion in the manner and means of carrying out Vendor's activities and responsibilities under this agreement, except to the extent specified in this agreement.

11. INDEMNITY

The State and Vendor each agree to assume their own liability for any and all claims of any nature including all costs, expenses, and attorneys' fees which may in any manner result from or arise out of this agreement.

12. INSURANCE

Vendor shall secure and keep in force during the term of this agreement, from insurance companies, government self-insurance pools or government self-retention funds, authorized to do business in North Dakota, the following insurance coverages:

- 1) Commercial general liability, including premises or operations, contractual, and products or completed operations coverages (if applicable), with minimum liability limits of \$250,000 per person and \$500,000 per occurrence.
- 2) Automobile liability, including Owned (if any), Hired, and Non-Owned automobiles, with minimum liability limits of \$250,000 per person and \$500,000 per occurrence.
- 3) Workers compensation coverage meeting all statutory requirements.

The insurance coverages listed above must meet the following additional requirements:

- 1) Any deductible or self-insured retention amount or other similar obligation under the policies shall be the sole responsibility of the Vendor. The amount of any deductible or self retention is subject to approval by the State.
- 2) This insurance may be in policy or policies of insurance, primary and excess, including the so-called umbrella or catastrophe form and must be placed with insurers rated "A-" or better by A.M. Best Company, Inc., provided any excess policy follows form for coverage. Less than an "A-" rating must be approved by the State. The policies shall be in form and terms approved by the State.
- 3) The insurance required in this agreement, through a policy or endorsement, shall include a provision that the policy and endorsements may not be canceled or modified without thirty (30) days' prior written notice to the undersigned State representative.
- 4) The Vendor shall furnish a certificate of insurance to the undersigned State representative prior to commencement of this agreement.
- 5) Failure to provide insurance as required in this agreement is a material breach of contract entitling State to terminate this agreement immediately.

13. NOTICE

Any notice or other communication required under this agreement must be given by registered or certified mail and is complete on the date mailed when addressed to the parties at the following addresses:

Cass County
P.O. Box 3106
Fargo, ND 58108-3106

OR

ND Department of Human Services
Aging Services Division
1237 W. Divide Ave., Ste. 6
Bismarck, ND 58501

Notice provided under this provision does not meet the notice requirements for monetary claims against State found at North Dakota Century Code § 32-12.2-04.

14. INTEGRATION, MODIFICATION, AND CONFLICT IN DOCUMENTS

This agreement constitutes the entire agreement between Vendor and State. There are no understandings, agreements, or representations, oral or written, not specified within this agreement. No alteration, amendment, or modification of this agreement is effective unless it is reduced to writing, signed by the parties, and attached to the agreement.

If any inconsistency exists between this agreement and other provisions of collateral contractual agreements which are made a part of this agreement by reference or otherwise, the provisions of this agreement control.

15. SEVERABILITY

If any term of this agreement is declared by a court having jurisdiction to be illegal or unenforceable, the validity of the remaining terms will not be affected and, if possible, the rights and obligations of the parties are to be construed and enforced as if the agreement does not contain the illegal or unenforceable term.

16. APPLICABLE LAW AND VENUE

This agreement is governed by and construed according to the laws of the State of North Dakota. Any action to enforce this agreement must be adjudicated exclusively in the state District Court of Burleigh County, North Dakota. Each party consents to the exclusive jurisdiction of such court and waives any claim of lack of jurisdiction or forum non conveniens.

17. ASSIGNMENT

Neither party may assign this agreement or the party's rights under this agreement without the written approval of the other party. Approval to assign may not be unreasonably withheld. This agreement is equally binding on the respective parties, and their successors and assigns.

18. SPOILIATION – PRESERVATION OF EVIDENCE

Vendor shall promptly notify State of all potential claims that arise or result from this agreement. Vendor shall also take all reasonable steps to preserve all physical evidence and information that may be relevant to the circumstances surrounding a potential claim, while maintaining public safety, and grants to State the opportunity to review and inspect the evidence, including the scene of an accident.

19. WORKS FOR HIRE

Vendor acknowledges that all work(s) under this agreement is "work(s) for hire" within the meaning of the United States Copyright Act (Title 17 United States Code) and hereby assigns to State all rights and interests Vendor may have in the work(s) it prepares under this agreement, including any right to derivative use of the work(s). All software and related materials developed by Vendor in performance of this agreement for State shall be the sole property of State, and Vendor hereby assigns and transfers all its right, title, and interest therein to State. Vendor shall execute all necessary documents to enable State to protect State's intellectual property rights under this section.

20. WORK PRODUCT, EQUIPMENT, AND MATERIALS

All work product, equipment, and materials created for State or purchased by State under this agreement belong to State and must be delivered to State at State's request upon expiration or termination of this agreement.

21. CONFIDENTIAL INFORMATION

Vendor shall not use or disclose any information it receives from State under this agreement that State has previously identified as confidential or exempt from mandatory public disclosure except as necessary to carry out the purposes of this agreement or as authorized in advance by State. State shall not disclose any information it receives from Vendor that Vendor has previously identified as confidential and that State determines, in its sole discretion, is protected from mandatory public disclosure under a specific exception to the North Dakota open records law found in North Dakota Century Code chapter 44-04. The duty of State and Vendor to maintain confidentiality of information under this section continues beyond the term of this agreement, including any extensions or renewals.

22. COMPLIANCE WITH PUBLIC RECORDS LAWS

Vendor understands that, except for disclosures prohibited in this agreement, State must disclose to the public upon request any records it receives from Vendor. Vendor further understands that any records obtained or generated by Vendor under this agreement, except for records that are confidential under this agreement, may be open to the public upon request under certain circumstances under the North Dakota open records law. Vendor agrees to contact State immediately upon receiving a request for information under the open records law and give State the opportunity to present its position on whether the record must be disclosed.

23. ATTORNEY FEES

If a lawsuit is filed by State to obtain performance due under this agreement, and State is the prevailing party, Vendor shall pay State's reasonable attorney fees and costs in connection with the lawsuit, except when prohibited by North Dakota Century Code § 28-26-04.

24. ALTERNATIVE DISPUTE RESOLUTION – JURY TRIAL

State does not agree to any form of binding arbitration, mediation, or other forms of mandatory alternative dispute resolution. The parties may enforce their rights and remedies in judicial proceedings. State does not waive any right to a jury trial.

25. NONDISCRIMINATION AND COMPLIANCE WITH LAWS

Vendor shall comply with all laws, rules, and policies, including those relating to nondiscrimination, accessibility and civil rights. Vendor shall timely file all required reports, make required payroll deductions, and timely pay all taxes and premiums owed, including sales and use taxes, unemployment compensation, and workers' compensation premiums. Vendor also shall have and keep current at all times

during the term of this agreement all licenses and permits required by law.

26. ACCESS TO BOOKS AND RECORDS

Vendor shall provide State, the federal government, and their duly authorized representatives access to the books, documents, papers, and records of Vendor which are pertinent to the services provided under this agreement for the purpose of making an audit or examination, or for making excerpts and transcripts. All records, regardless of physical form, and the accounting practices and procedures of Vendor relevant to this agreement are subject to examination by the North Dakota State Auditor, the Auditor's designee, or Federal auditors. Vendor shall maintain all of these records for at least three (3) years from the date of submission of the final federal expenditures report and be able to provide them at any reasonable time. State, State Auditor, or Auditor's designee shall provide reasonable notice.

Dated this 1st day of July, 2015

CASS COUNTY

By _____

Its _____

45-6002205

Vendor's Federal Taxpayer Identification Number

STATE OF NORTH DAKOTA

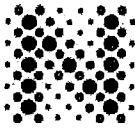
NORTH DAKOTA DEPARTMENT OF HUMAN SERVICES

By _____

MAGGIE D. ANDERSON
EXECUTIVE DIRECTOR

By _____

AMY JANGULA JOHNSON
CONTRACT OFFICER
Approved for form and content



**NETWORK
CENTER
COMMUNICATIONS**

Site Name

Cass County Law Enforcement Center - Hector Field

Contact Name / Phone

Terry Schmaltz / 701-241-5723

Address

211, 9th St S, Fargo, ND 58103

Quote: Access Control - Install a new 10 door control panel and door power supply for the general strikes. The customer is supplying all the door hardware and any special power supplies required, via a subcontractor on the project. This same subcontractor is installing the strikes in the frames and any other door hardware such as the locksets and panic exit devices, RTE's, and any special power supplies required by the hardware. Also any interfaces between the door hardware and tap pads required. If NCC must get involved in installing the door hardware or ancillary equipment above, that labor is not included in this quote and will be negotiated with the customer separately. The customer is installing the cabling between the doors and the panels. NCC will install the card readers and any door position switches and terminate the cabling NCC will configure the panel and program it into the customer's existing Premisys system.

Item	Part #	Qty	Price ea.
Misc terminations	MISC	1	\$ 135.00
HID 5365 or 5395 Prox Reader (as required)	5365 or 5395	10	\$ 168.75
GE Security door position sensor	46188015498	10	\$ 17.55
Large Enclosure	PREM-ENCLG	1	\$ 280.80
PremiSys IP Controller with Two-Reader ports	PREM-CTLR2RDR	1	\$ 1,284.66
PremiSys Two-Reader Board	PREM-BRD2RDR	4	\$ 694.98
Enclosure Lock & Key Set	PREM-ENCLOCK	1	\$ 21.06
3.6 Amp Power Supply	PREM-PS3A	1	\$ 187.58
12 volt battery backup	PREM-12VBKUP	1	\$ 47.25
Altronix Power Supply for Door Strikes - 10AMP 24VDC	DSSMP10PMC24X	1	\$ 348.30

Total Materials **\$6,947.57**

Total Labor and Equipment **\$10,202.57**

This Quote Pricing Is good for 30 Days

Plus Tax

Cable prices however are subject to change without notice.

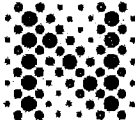
50% Down Payment required upon signing, Balance due upon completion.

Any additional wiring or equipment that is not specified on this contract will be billed on Time and Materials basis unless otherwise specified.

Acceptance signature Date

Marko Petersen 12/12/2015

Submitted By Date



**NETWORK
CENTER
COMMUNICATIONS**

Site Name *Cass County Law Enforcement Center - Hector Field*
Contact Name / Phone *Terry Schmaltz / 701-241-5723*
Address *211, 9th St S, Fargo, ND 58103*

Quote: Camera System - Install an Exacqvision NVR Video Management Recorder. The recorder is expandable to 64 cameras. 8TB of Hard Drive Storage will provide storage for 12 proposed cameras for approximately 60 days. Keyboard and mouse are included. The customer will furnish a monitor if desired. The NVR is a 2U rack mount unit. Install 9 outdoor cameras in weatherproof heated housings. Install 3 indoor dome vandal proof cameras. PoE injectors are included to power all the cameras and housings. The customer will furnish the switch ports and provide 110 volt power for the injectors. Licenses for 12 cameras are included. Software is included. Cabling is being done by the customer. Labor to install the system components and setup and testing of the system are included. The NVR and cameras/housings all have a three-year manufacturers warranty. The NVR is running Windows OS and Exacqvision Camera Software.

Item	Part #	Qty	Price ea.
Scissor Lift	N/S	2	\$ 135.00
Misc terminations	MISC	12	\$ 13.50
SAMSUNG DOME 2 MEGAPIXEL POE INDOOR CAMERA	SNV6013	3	\$ 292.95
SAMSUNG OUTDOOR 5 MEGAPIXEL DOME CAMERA H.264, Wide Dynamic and Remote Focus Enabled. Heated Housing and all PoE powered.	SNV8080	6	\$ 909.90
Samsung Outdoor Protective Shroud	SBP-300HM6	6	\$ 29.70
Samsung Wall Mount	SBP300WM1	6	\$ 47.25
Trendnet 15 watt PoE injector	NA	9	\$ 41.85
SAMSUNG 5 MEGAPIXEL CAMERA H.264, Wide Dynamic - Outfitted with long distance lens. Uses heated housing, all PoE powered	SNB-8000	3	\$ 697.95
Samsung Lens - variable out to 40mm for Driveway Cameras	SLA-E-M1240DN	3	\$ 151.20
Videolarm Fusion Outdoor Heated Housing - all PoE Power. Includes 30 watt PoE injector to power housing and camera	FCH11C8WY	3	\$ 461.70
EXACQ CAMERA SOFTWARE 1 Camera	EVIP-01	8	\$ 126.23
EXACQVISION VIDEO RECORDER 8 TB HDRIVE, FREE CLIENT & SMARTPHONE APPS - 4 PRO LICENSES INCLUDED	IP04-08T-R2A	1	\$ 4,387.50

Total Materials \$16,938.45

Total Labor and Equipment **\$21,008.45**

This Quote Pricing is good for 30 Days Plus Tax
 Cable prices however are subject to change without notice.
 50% Down Payment required upon signing, Balance due upon completion.
 Any additional wiring or equipment that is not specified on this contract will be billed on Time and Materials basis unless otherwise specified.

Acceptance signature _____ Date _____

Marko Petersen 12/12/2015

Submitted By _____ Date _____