



## AGENDA

### REGULAR MEETING OF THE BOARD OF COMMISSIONERS OF ST. LOUIS COUNTY, MINNESOTA

**Tuesday, October 27, 2015, 9:30 A.M.**

**Grand Lake Town Hall  
5297 Highway 53  
Twig, MN**

*(At the intersection of U.S. Highway 53 and County Highway 7/Industrial Road.)*

**PETE STAUBER, Chair  
Fifth District**

**FRANK JEWELL  
First District**

**PATRICK BOYLE  
Second District**

**CHRIS DAHLBERG  
Third District**

**TOM RUKAVINA  
Fourth District**

**KEITH NELSON  
Sixth District**

**STEVE RAUKAR, Vice-Chair  
Seventh District**

County Auditor  
Donald Dicklich

County Administrator  
Kevin Gray

County Attorney  
Mark Rubin

Clerk of the Board  
Phil Chapman

The St. Louis County Board of Commissioners welcomes you to this meeting. This agenda contains a brief description of each item to be considered. The Board encourages your participation. If you wish to speak on an item contained in the agenda, you will be allowed to address the Board when a motion is on the floor. If you wish to speak on a matter that does not appear on the agenda, you may do so during the public comment period at the beginning of the meeting. Except as otherwise provided by the Standing Rules of the County Board, no action shall be taken on any item not appearing in the agenda.

When addressing the Board, please sign in at the podium and state your name and address for the record. Please address the Board as a whole through the Chair. Comments to individual Commissioners or staff are not permitted. The St. Louis County Board promotes adherence to civility in conducting the business of the County. Civility will provide increased opportunities for civil discourse in order to find positive resolutions to the issue before the Board. Tools of civility include: pay attention, listen, be inclusive, do not gossip, show respect, be agreeable, apologize, give constructive criticism and take responsibility [County Board Resolution No. 560, adopted on September 9, 2003]. Speakers will be limited to five (5) minutes.

**\*\*In compliance with the Americans with Disabilities Act, those requiring accommodation for this meeting should notify Property Management 72 hours prior to the meeting at (218)725-5085.\*\***

All supporting documentation is available for public review in the County Auditor's Office, 100 North 5th Avenue West - Room No. 214, St. Louis County Courthouse, Duluth, MN, during regular business hours 8:00 A.M. - 4:30 P.M., Monday through Friday. Agenda is also available on our website at <http://www.stlouiscountymn.gov/GOVERNMENT/BoardofCommissioners.aspx>

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9:30 A.M.      Moment of Silence  
                    Pledge of Allegiance  
                    Roll Call

AT THIS TIME CITIZENS WILL BE ALLOWED TO ADDRESS THE BOARD ON ITEMS NOT ON THE AGENDA. [Speakers will be limited to 5 minutes each.]

FOR ITEMS LISTED ON THE BOARD AGENDA OR COMMITTEE OF THE WHOLE AGENDA, CITIZENS WILL BE ALLOWED TO ADDRESS THE BOARD AT THE TIME A MOTION IS ON THE FLOOR.

**CONSENT AGENDA**

*All matters listed on the consent agenda are considered routine and/or non-controversial and will be enacted by one unanimous motion. If a commissioner requests, or a citizen wishes to speak on an item on the consent agenda, it will be removed and handled separately.*

**REGULAR AGENDA**

**Finance & Budget Committee – Commissioner Nelson, Chair**

1. Contract extension with Pictometry International Corporation, of Rochester, NY, for the purchase of 2016 high resolution aerial photography and related technologies. {15-465}

**Public Safety & Corrections Committee – Commissioner Dahlberg, Chair**

2. Agreement with Courtview Justice Solutions, of Canton, OH, for an upgrade to the SHIELD Record Management System to enable a web-based environment. {15-464}  
[Without recommendation.]

**ADJOURNED:**

# **BOARD LETTER NO. 15 – 465**

## **FINANCE & BUDGET COMMITTEE NO. 1**

### **OCTOBER 27, 2015 BOARD AGENDA NO. 1**

**DATE:** October 13, 2015                      **RE:** Contract Extension for  
Purchase of High Resolution  
Aerial Photography

**FROM:** Kevin Z. Gray  
County Administrator

Barbara Hayden  
Director of Planning

#### **RELATED DEPARTMENT GOAL:**

Provide quality data to policy makers, staff and the public in an accessible format.

#### **ACTION REQUESTED:**

The St. Louis County Board is requested to approve a contract extension with Pictometry International Corporation for the acquisition of a second flight of new oblique and orthogonal aerial photography.

#### **BACKGROUND:**

Aerial photography has become a significant source of information for many St. Louis County departments, particularly those that use Geographic Information Systems (GIS). Aerial photography aids in business operations as the user can better visualize what exists on the ground than with traditional basemaps. St. Louis County has used aerial photography for a wide range of purposes, including 911 and public safety, land and forest management, property valuation and assessment, road construction projects, and land use planning. Additionally, the general public uses aerial photography as a reference layer in the County Land Explorer.

In July 2012, St. Louis County Board authorized an aerial imagery acquisition in 2013 with Pictometry International Corporation, Rochester, NY, which included an option for a second aerial imagery acquisition flight in three years.

The amount of the proposed 2016 pictometry acquisition is \$531,261 which includes the flight, aerial imagery delivered to the county and supporting viewer/analytical technologies for three years. Six departments (Sheriff's/911 Communications, Public Works, Land and Minerals, Planning and Community Development, Public Records and Property Valuation, and Environmental Services) have budgeted funds for a 2016 pictometry imagery acquisition, which will be extended over a three-year period. Each of these departments will contribute approximately \$29,514 per year in 2016, 2017 and 2018.

**RECOMMENDATION:**

It is recommended that the St. Louis County Board authorize a contract extension with Pictometry International Corporation, Rochester, NY, for 2016 aerial photography and related technologies, for an amount of \$531,261. Payment will be made in installments beginning with an initial payment of \$177,371 due upon shipments of the imagery in 2016 payable from Fund 100, Agency 109003, with the remaining balance due on the anniversaries of imagery shipments in 2017 and 2018.

## **Purchase High Resolution Aerial Photography**

BY COMMISSIONER \_\_\_\_\_

WHEREAS, St. Louis County makes extensive use of aerial photography for business operations using Geographical Information Systems (GIS); and

WHEREAS, St. Louis County is in need of an updated high resolution aerial photography product to assist with business operations; and

WHEREAS, The St. Louis County Board authorized an aerial imagery acquisition in 2013 with Pictometry International Corporation which included an option for a second aerial imagery acquisition flight in three years; and

WHEREAS, St. Louis County departments have budgeted the second aerial imagery acquisition in respective 2016, 2017 and 2018 budgets;

THEREFORE, BE IT RESOLVED, That the St. Louis County Board authorizes a contract extension with Pictometry International Corporation, Rochester, NY, for 2016 oblique and orthogonal aerial photography and related technologies in an amount of \$531,261;

RESOLVED FURTHER, That the purchase shall be payable from Fund 100, Agency 109003, Object 629900, with funds transferred from each of the following departments: Sheriff/911 Communications; Public Works; Land and Minerals; Public Records and Property Valuation; Environmental Services; and Planning and Community Development.



# PICTOMETRY AERIAL IMAGERY

## St. Louis County Project Overview

### Oblique "Bird's Eye" Aerial Photography

**About:** Pictometry is a unique type of aerial photography that combines traditional orthographic (from directly above) images with oblique (45 degree angle or "bird's eye") images to produce a set of imagery ideally suited for County GIS and other mapping operations. Pictometry offers a suite of software that integrates well with St. Louis County's GIS and enables users to visualize and measure distances, heights, areas, and other characteristics of buildings and landscapes from as many as 12 different angles.

**Time Period and Coverage of Data Content:** St. Louis County first obtained Pictometry imagery in 2007, and then in 2009, for several municipal area projects. All of St. Louis County was photographed in early May, 2013. This timeframe assured "leaf off" conditions for maximum visibility of features. Most of St. Louis County was captured at a 9-inch pixel resolution, with several areas captured at enhanced 3-inch pixel resolution. The County's Land Records Work Group has recommended funding a Pictometry imagery capture for Spring 2016 that will include enhanced 3-inch imagery in many municipalities and high-density development areas.



**Oblique "Bird's Eye" View (4-Way):** All locations can be viewed at a 45 degree angle from multiple directions. Pictured is Duluth aerial lift bridge (from east).

**Orthographic View:** Traditional "ortho" images depict all areas as seen from directly above. Pictured is Duluth aerial lift bridge from above.

### Imagery Resolution

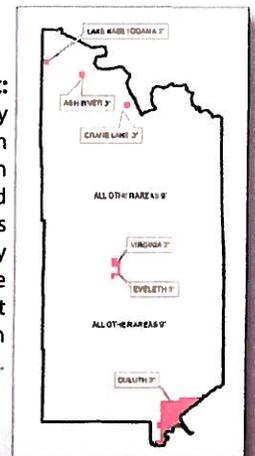


**9-Inch Ortho/Oblique:** 2013 imagery available throughout most areas of St. Louis County.



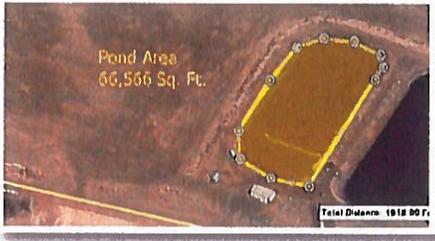
**3-Inch Ortho/Oblique:** 2013 enhanced resolution available in select areas (Duluth, Virginia, Eveleth, Crane Lake, Kabetogama Lake, and Ash River areas).

**2013 Project:** All of St. Louis County captured at 9-inch resolution with select (red shaded areas) municipalities and high-density lakeshore development captured at 3-inch resolution.



# BENEFITS OF PICTOMETRY IMAGERY

## Examples of Pictometry Analytics



MEASURE AREA & DISTANCE



MEASURE HEIGHT



MEASURE ELEVATION, GRADE

Pictometry is used by many departments at St. Louis County, in both the desktop and mobile environments. **Assessment/ Appraisal, Planning/Land Use, Public Safety, Land/Minerals/ Forestry, Septic/Environmental, Property Management** and other key business lines within the county benefit from the quality of decision support resources provided by Pictometry imagery.

### LAND & PROPERTY

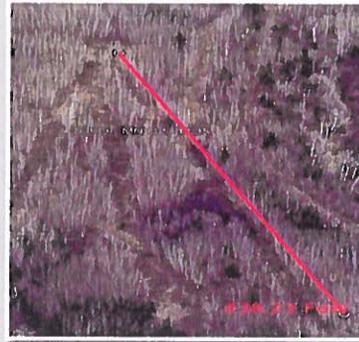
- Finding unpermitted structures, buildings that have not been assessed, or have been taken down
- Viewing appraisal subjects where access is restricted (airport, reservation, etc.) or where entry has been refused
- Reviewing parcels from the air before inspections so staff know where to devote time & attention
- Improved locational awareness -- ability of staff to see what parcel they are on when inspecting properties -- in relation to other parcels
- Verifying wall height changes on large commercial/industrial buildings
- Identifying and measuring cell towers & billboards
- Determining structure use / purpose
- Measuring lake frontage and lot sizes and setback distances
- Determining lot buildable area
- Evaluating property dimensions for septic systems and replacement areas
- Ability to view all sides of a building from different angles
- Locating trails and access routes to remote properties
- Measuring tree heights and evaluating forest health conditions
- Identifying illegal harvest sites, trails, shooting lanes, or other unpermitted activities in forested areas

### PUBLIC SAFETY

- Situational awareness for communication between 911 dispatchers, callers, and responding units
- Identifying accesses/exits, escape routes, obstacles, and neighboring property details for raids or criminal apprehension
- Crime scene reconstruction and pictorial evidence for court presentations
- Search and Rescue operations and coordination
- Pre-planning for emergency response and hazard mitigation

### TRANSPORTATION, ENGINEERING, DEVELOPMENT

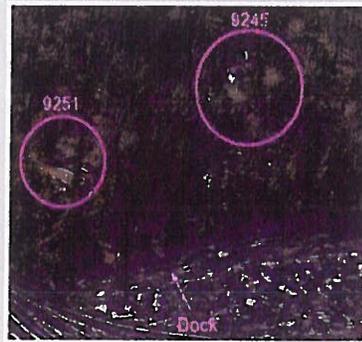
- County facility inventory and management
- Prepare engineering designs and feasibility studies
- Calculate acreage, square footage, elevation, grade and distance
- Locate, inventory, and map utility infrastructure
- Imagery to support environmental impact statements



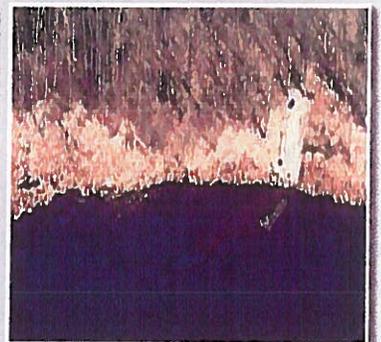
Illegal shooting lanes on tax forfeit lands.



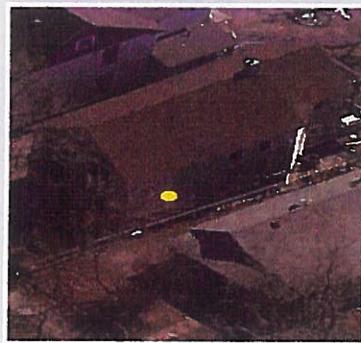
Post-flood damage assessment.



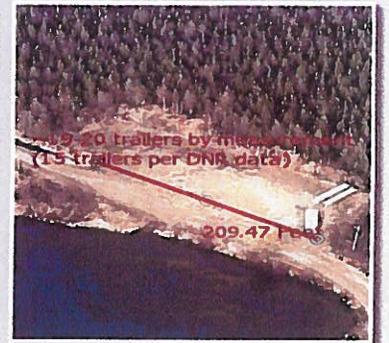
Assignment and verification of addresses at remote properties.



Unpermitted private boat launch w/ evidence of runoff plume.



An armed murder suspect was apprehended in this house. Law enforcement utilized Pictometry to identify locations of doors, windows, fences and other features before entering the property.



Pictometry was used to inventory all 170+ boat accesses in just 2 days. The discovery of 457 previously undocumented trailer parking spaces, along with 5 additional boat accesses may yield up to \$63,000 in future AIS funding cycles.





**RECOMMENDATION:**

It is recommended that the St. Louis County Board authorize an agreement with Courtview Justice Solutions, Canton, OH, for an upgrade to the SHIELD Record Management System to enable a web-based environment in an amount not to exceed \$189,000, payable from:

- \$ 3,402 Account 166, Fund 166001, Object 634800
- \$15,498 Account 168, Fund 168001, Object 634800
- \$75,600 Account 992, Fund 992001, Object 634800
- \$94,500 Account 179, Fund 179001, Object 634800

**SHIELD Record Management System Upgrade  
for Web-Based Environment**

BY COMMISSIONER \_\_\_\_\_

WHEREAS, The St. Louis County Board supports the goals of sharing criminal justice information and communication systems throughout the region; and

WHEREAS, Currently 911 staff use SHIELD to perform searches and receive results from the Record Management System application regarding person cautions, warrants, and protection orders; and

WHEREAS, Courtview Justice Solutions of Canton, OH, has proposed an upgrade project that will migrate SHIELD law enforcement application and related interfaces into a new Oracle environment which will replace client-server technology with new web-based technology; and

WHEREAS, This upgrade will allow access to SHIELD for law enforcement responders in the field for a safer and more rapid response;

THEREFORE, BE IT RESOLVED, That the St. Louis County Board authorizes an agreement with Courtview Justice Solutions, Canton, OH, for an upgrade to the SHIELD Record Management System to enable a web-based environment, in an amount not to exceed \$189,000, payable from:

\$ 3,402 Account 166, Fund 166001, Object 634800  
\$15,498 Account 168, Fund 168001, Object 634800  
\$75,600 Account 992, Fund 992001, Object 634800  
\$94,500 Account 179, Fund 179001, Object 634800

RESOLVED FURTHER, That the appropriate county officials are authorized to execute all agreement and contracts necessary to fulfill the upgrade to SHIELD as approved by the St. Louis County Attorney.