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VENDOR SELECTION FOR DIGITAL ORTHOPHOTOGRAPHY 2009 – 2013

The Planning and Economic Development Committee recommends the adoption of the recommendations contained in the following report dated January 30, 2009, from the Commissioner of Planning and Development Services.

1. RECOMMENDATIONS

It is recommended that:

1. Regional Council authorize entering into a contract with First Base Solutions Inc. for the provision of Digital Orthophotography for York Region.
2. The term of the contract be for a maximum period of six (6) years, commencing on February 20, 2009, for 2009 and 2011 acquisitions, including the option to accommodate acquisition in 2013 for a maximum total contract value of \$500,000.
3. The Director, Geomatics be authorized to exercise the option for the 2013 acquisition on behalf of the Region, subject to fulfillment of the conditions set out in **Section 4** of this report (**Option for acquisition in 2013 if requirements met in 2009 and 2011**).
4. The Regional Chair and Regional Clerk be authorized to execute the contract, subject to the approval of Legal Services as to form and content.

2. PURPOSE

This report seeks Council authorization to enter into a contract with First Base Solutions Inc. to provide digital Orthophotography and related products to a maximum of \$500,000 for a maximum of six years. First Base Solution Inc. is the vendor of choice selected through a Request for Proposal (RFP) (P-08-79) process and has provided the Region with Orthophotography in previous years. The purchasing by-law (Clause 18.1d) requires that Council authorize this expenditure because it is for a period of longer than three years.

3. BACKGROUND

Updated Digital Orthophotography enables Regional Operations

Digital Orthophotography has become an essential source of information that supports the Region and the YorkInfo Partners operations, programs and strategies. Detailed aerial images and elevations have proved to be a high impact tool that provides rich geographic

context for infrastructure, community and long range planning activities, emergency response, and communication with the public.

Digital Orthophotography was acquired for York Region for 1995, 1999, 2002, 2005 and 2007 to meet Regional growth management needs and operations. The existing contract with J.D. Barnes Limited and its wholly owned subsidiary First Base Solutions Inc. delivered the Orthophotography for 2002, 2005, 2007. That contract expired on July 31, 2008. Additional data was acquired for specific sites or projects in intervening years (e.g. 16th Avenue Sewer Trunk, York Durham Sewer System). 3 Dimensional models have also been acquired for 2007 and 2008 through First Base Solutions Inc. for urban visualization projects.

Request for Proposal developed to meet Regional needs

A Request for Proposal (RFP) was determined to be the best approach to engage a service provider that would be able to meet the requirements. As input to the RFP members of the YorkInfo Partnership (see *Attachment 1*) including local municipalities, conservation authorities and school boards were engaged in discussions in 2007 through to the present to identify their requirements and opportunities for cost sharing to avoid duplication, enable economy of scale and reduce the cost of acquisitions by individual agencies.

Similar to the previous orthophotography initiatives of 2005 (January 26, 2006, Report No. 1 of the Planning and Economic Development Committee – 2005 Digital Orthophotography Project Status) and 2007, an Orthophotography task force was established to participate in the formulation of the RFP and evaluation of submissions. The Orthophotography task force consisted of members from the YorkInfo Partnership represented by staff from the Town of Markham, Town of Richmond Hill, City of Vaughan and Lake Simcoe Region Conservation Authority and York Region Geomatics Branch.

The RFP was designed to address multiple needs: acquisition of up-to-date digital orthophotography, products that are derived from the imagery such as updated terrain (height/elevation) models and 3D models and establish pricing for additional products or services to be required by clients and/or partners. The RFP was determined to be the appropriate process to take advantage of more efficient technologies, innovation potential, lower fuel prices and a highly competitive industry.

4. ANALYSIS AND OPTIONS

Ortho Task Force ranked four proposals on basis of technical (80%) and financial (20%) scoring

The Request for Proposal P-08-79 closed on December 11, 2008. Eleven vendors received the RFP and bids were submitted by four proponents: First Base Solutions Inc., Geosys Technology Solutions Ltd., Mapcon Mapping Ltd. and Northway-Photomap Inc.

Using the Council approved evaluation process, the evaluation criteria assigned an 80% weight to the Technical qualifications and a 20 % weight to the Financial pricing. Financial proposals were opened only after the technical evaluations were completed. Proponents had to attain a minimum technical score of 60% or 48 out of 80, for their financial proposals to be opened. Two proponents scored sufficiently to cross the threshold of the technical evaluation.

Table 1 sets out these final results from the evaluation of the Technical Proposal and Financial Proposal.

Table 1
P-08-79 Evaluation Summary

Name of Company	Technical Score (80%)	Base Financial Score (20%)	Total Score (100%)	Total Base Price Inclusive of GST
First Base Solutions Inc.	68.5	20	88.5	\$181,650
Mapcon Mapping Ltd.	50.0	12.5	62.5	\$291,763

First Base Solutions Inc. proposal featured the highest technical score, the lowest price and the highest overall score

The First Base Solutions Inc. proposal was evaluated as superior in overall content and breadth of the submission. The knowledge and experience was shown in the project references that First Base Solutions Inc. have completed in the past. In comparison, the other proposals provided less detail in the ability to provide services in respect to the project specifications.

One area where First Base Solutions Inc. excels is in their ability to complete this project without the use of subcontractors. First Base Solutions Inc. owns all the technology and infrastructure required for this project from the plane and digital camera. They also operate the "GPS BaseNet" which allows for the collection of accurate positions of the photo centres of the camera when capturing the image. There are five base locations

within the GTA. The “GPS BaseNet” is a permanent network maintained and operated by First Base Solutions Inc.

First Base Solutions Inc. have completed a number of projects in Ontario and with different levels of government. This gave an indication of the depth of their experience in the collection of the orthophotography for a municipality of any size, including York Region, and the local and surrounding municipalities. First Base Solutions Inc. has the experience in delivering multi-year acquisitions: they provided similar orthophotography and derivative products to the Region in the past and their project references shows multi-year acquisitions for other municipalities.

Option for acquisition in 2013 if requirements met in 2009 and 2011

As requested in the RFP, the option for a third collection in 2013 was proposed. The opportunity to include this in the contract is beneficial to stabilize costs, ensure continuity and efficiency, if the 2009 and 2011 product meets all requirements as specified in the RFP. These requirements are

- All the deliverables are complete and on schedule.
- All the deliverables are delivered to the RFP specifications.
- The proposal accuracy of the orthophotography is achieved.
- Geometric errors associated with terrain relief or faulty elevation data area not present.
- Image smears or busts areas not present.
- Building lean is minimal.
- Colour and radiometric balance is established in the whole image without loss in data quality.
- The mosaic images look seamless and the joints are invisible.
- In general, the orthophotography is to be aesthetically pleasing.

Relationship to Vision 2026

Acquiring up-to-date Orthophotography supports the Region towards meeting the goals stated the Vision 2026 includes Enhanced Environment, Heritage and Culture; Managed and Balanced Growth; Infrastructure for a Growing Region; and Engaged Communities and a Responsive Region through infrastructure, planning, heritage and emergency response programs that use Orthophotography.

5. FINANCIAL IMPLICATIONS

Approach is financially favourable to the Region

First Base Solutions Inc. offers considerable financial benefit in several areas. Their approach will provide better quality/higher resolution data for 3 cycles (2009, 2011,

2013) and value-added products may be acquired for a total maximum contract value of \$500,000 compared to only 2 cycles (2005 and 2007) for \$500,000 in the past. The product pricing is specified and stabilized for a six year period for base, value-add and optional products and economies of scale are realized.

First Base Solutions Inc. offers a proposed payment schedule that will allow for each collection year to be paid over a 2 year period, minimizing fluctuation impacts on cash flow and for calendarization across fiscal years 2009 through 2012 and the option for 2013/2014. The proposed payment schedule is similar to the Region's previous maintenance agreement. The funds required for the Orthophotography are budgeted in the annual Operating Budgets for Geomatics and no additional annual amount is required related to this item.

6. LOCAL MUNICIPAL IMPACT

The Geomatics Branch has met with the YorkInfo Partners to discuss their requirements and opportunities for cost sharing and to avoid duplication. The members of the YorkInfo Partnership and their consultants have become reliant on these images to promote and assist them in their daily decision making processes, especially in the areas of planning, engineering and emergency response.

Next steps will include communicating further with the YorkInfo Partners and developing agreements with interested partners that is similar to previous arrangements. The members of the YorkInfo Partnership involved in the Orthophotography task force will evaluate the deliverables and assist in the acceptance of the products.

7. CONCLUSION

The acquisition of future digital Orthophotography for 2009 and 2011 with the option for 2013 will ensure that the Region continues to have the most up-to-date information available to all facets of the organization. This updated information will be essential in dealing with the business requirements of a rapidly growing and continually changing geographic area.

For more information on this report, please contact Susan Chin Snelgrove, Manager, Information Management at (905) 830-4444 Ext. 1564 or Nancy Prout, Director, Geomatics at Ext. 1529.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is included with this report.)