

Ordinance No. 05-30

**AN ORDINANCE APPROVING AN AGREEMENT WITH  
GIS SOLUTIONS, INC.**

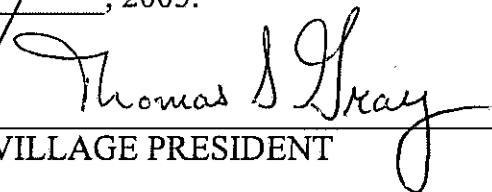
*BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE  
VILLAGE OF CHATHAM, SANGAMON COUNTY, ILLINOIS, AS FOLLOWS:*

**SECTION 1:** That certain Agreement between the Village of Chatham and GIS Solutions, Inc, pertaining to provision of GIS services, a copy of which is attached hereto, is hereby approved.

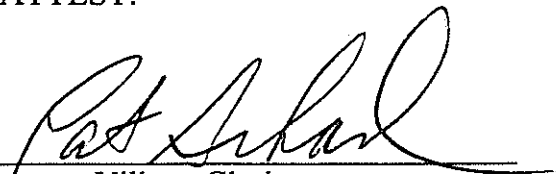
**SECTION 2:** The President is authorized and directed to execute said Agreement on behalf of the Village, and the proper officers of the Village are directed to carry out the Agreement by its terms.

**SECTION 3:** This Ordinance is effective immediately.

PASSED this 12 day of JULY, 2005.

  
\_\_\_\_\_  
VILLAGE PRESIDENT

ATTEST:

  
\_\_\_\_\_  
Village Clerk

AYES: 5 HERR SCHATTEMAN BOYLE M'CARTHY KAUNNACH  
NAYS: 0  
PASSED: 7-12-05  
APPROVED: 7-12-05  
ABSENT: 1 M'CRATH



## AGREEMENT

This Agreement is made this 12 day of July, 2005, by and between GIS Services, Inc. ("Contractor") and the Village of Chatham, an Illinois municipal corporation ("Village").

In consideration of the mutual covenants herein contained, Village and Contractor agree as follows:

1. Description of Work. Contractor agrees to perform certain consulting work as set forth in a Proposal attached hereto as Exhibit A, for a price of \$44,000.00.
2. Time of Commencement and Completion. The work to be performed under this Contract shall be commenced within 5 days of its execution and completed within 90 days from the date of commencement, with reasonable extensions required from time to time by Contractor and agreed by Village.
3. Payment. Contractor shall bill Village monthly as the work progresses. Payment shall be made upon approval by Village's board of trustees after approval by the Public Works Committee on motion made, seconded and passed.
4. Miscellaneous. This Contract shall be governed by Illinois law. This is the entire contract between the parties, and all prior statements and representations are hereby expressly disclaimed. This Contract, and any change orders to the Proposal, shall be modified only in a writing signed by both parties and approved by the corporate authorities of the Village. This Contract shall be effective upon its being signed by the parties and its approval by Ordinance adopted by the corporate authorities of the Village.

AGREED on the date written above:

VILLAGE OF CHATHAM, ILLINOIS

By: Thomas S Gray  
Village President

Attest: Pat Schulz  
Clerk

GIS Solutions, Inc  
Contractor

By: Tim Johnson  
Authorized officer

**Exhibit A**  
**Contractor's proposal**



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## Proposal For Geographic Information System Development : Village of Chatham

### Project Understanding

GIS Solutions, Inc. (GSI) understands that the Village of Chatham is seeking services for the development of a Geographic Information System (GIS). The development of the GIS will include a user needs assessment, a comprehensive GIS Strategic Plan, database design, system architecture design, application development, system documentation and training . Furthermore, GSI understands that the Village of Chatham wishes to take advantage of the substantial work which has been completed by the County in terms of GIS database development and application development. This base of work will be built upon rather than duplicated. The development of the GIS will take into full account the framework of the Sangamon County GIS including the rich data sets available to the village from the County GIS. Finally, the GIS development effort will demonstrate and provide a detailed understanding of the capabilities of GIS software in enterprise and desktop environments.

### Project Approach

GIS Solutions proposes to develop a comprehensive GIS for the Village of Chatham in a systematic, phased approach, beginning with a user needs assessment and comprehensive strategic plan. Based upon the results of these efforts, GIS Solutions will recommend a database and system architecture design suited to meet the specific needs of the village. Data available from the Sangamon County GIS will be migrated into the village database. GSI will work with village GIS staff to develop start-up applications designed to make village staff productive in short order. Furthermore, GSI will provide user training to selected village staff to ensure that key members of the GIS team are well-versed in the operation of the system as well as the database.

This proposal includes an onsite evaluation and delivery of strategic implementation plans for data, hardware, and software that establish an overall vision for scalable enterprise architecture. The GIS Needs Assessment includes a review of user workflow requirements and identifies GIS application and data requirements. The key components and tasks of the proposal are outlined below.

### Task I – User Needs Assessment

- **Assess User Needs.** The assessment is based on meetings with key personnel. The purpose of the meetings is to identify work activities, databases/data sources used,

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data quality, current hardware and software installed as well as the GIS analysis capabilities required to support user activities. Data collected during the interview process will be used to determine database design, GIS data, application and system requirements.

- **Identify and Analyze Data, Applications, System and Organizational Requirements.** Using data collected during the initial meetings, GIS requirements will be determined. Areas that will be examined during this task include:
  - *User tasks and resultant products that the GIS should support*
  - *The geographic data that are used and must be maintained*
  - *The GIS software functions and applications needed to support user tasks*
  - *The general hardware and communications network required to support the GIS*
  
- **Develop a Conceptual Database Model.** The conceptual database model outlines the contents and organization of the GIS database to be developed in accordance with the needs of the Village of Chatham expressed during the interview process. During this phase, the process for modeling existing data sets into the database management system (DBMS) will be examined to identify any data transformation steps required. Future spatial and tabular data modifications will also be taken into account.
  
- **Provide GIS System Design Recommendations.** The system design is based on the size of the database, the number and location of potential users of the system, and the types of applications to be performed. The components of the system design include the architecture to support data storage and functional requirements, data input/output devices, and GIS software requirements and network communications.

### **Task II – Strategic Plan**

The implementation strategy provides a framework for implementing the GIS and a timeline. Implementation tasks include database, system and organizational development. In addition, guidelines are prepared to address the organization and management structure to support the growth of the system and to coordinate internal GIS activities. Also addressed in this phase will be data security/ access issues.

An outline of the Strategic Plan is as follows:

- 
- GIS Usage
  
  - GIS Vision
    - GIS Objectives
    - Vision, Strategic Goals, Key Business Principles
  
  - GIS Strategic Plan
    - Database Development
    - Data Sharing and Cooperative Exchange Framework
    - Application Development and Deployment
    - Staffing
    - System Architecture Deployment Strategies
    - GIS Standards and Policies
  
  - Immediate Benefits/Return on Investment

### **Task III – Database Design**

The Sangamon County GIS collects and maintains a rich set of GIS data in a format which is useable by the Village of Chatham. In building upon the existing foundation laid by the County GIS, GSI will design a geodatabase which is consistent with these data and which allows for seamless import and use of County data by the Village. Furthermore, the geodatabase designed by GIS Solutions will be open and flexible to allow the Village to develop additional GIS data sets specific to the Village of Chatham.

### **Task IV – System Architecture Design**

GIS Solutions will develop a system architecture design and plan suited to the specific needs of the Village. The plan will be based upon information collected during the user needs assessment and strategic planning phase of the project. This design will be suited to not only handle current Village needs with respect to GIS hardware and software requirements, but will be scalable to allow the system to grow in an orderly fashion to meet future needs.

GSI's design plan begins with a review and analysis of the Village's hardware, database system and current business processes which are targeted to benefit from the proposed new application(s). The review and analysis process may consist of on-site meetings with administrators and staff. The goal at the completion of this process is not an exhaustive, detailed analysis of the current system, but merely to familiarize GSI with the existing environment in effort

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to successfully implement the new system. After review completion of the existing system and analysis phase, GSI proposes a detailed system design for the new system. The proposed system design includes but is not limited to:

- Security model
- Conceptual Database Model (CDM)
- Logical Database Model (LDM)
- Physical Database Model (PDM)
- GIS system integration plan and base GIS data requirements.
- Data query requirements
- Data entry/editing requirements
- Map View requirements

#### **Task V – Application Development**

Following the proposed system design, the development phase will begin. Based upon the most critical application needs identified in the user needs assessment, GSI will work with Village GIS staff to develop up to three GIS desktop applications. These applications will be built using data provided by the County GIS system and tools inherent in the desktop GIS software. The purpose of this task is to “jump start” Chatham’s GIS, providing the Village with applications that meet immediate needs and provide high-visibility and high payoff.

#### **Task VI – System Documentation**

System and data documentation, in the form of system architecture design documents, system connections, QA/QC methods, and FGDC-compliant metadata will be maintained and provided to the Village in a clear and easy-to-use format. While documentation is important in all aspects of GIS, it can be argued that the creation of metadata is one of the most important issues surrounding GIS development and implementation. Metadata, or data about data, describes the content, quality, condition, spatial reference, entity and attribute information, and other appropriate characteristics. Metadata maintained by the County GIS will be incorporated into the Chatham system. Metadata for all Chatham-specific data loaded by GSI will be created in the same format as the County metadata for consistency and ease of use.





### **Task VII – Training**

GIS Solutions will conduct training classes for Village staff, related to both the maintenance and administration of the system as well as the use of the GIS software.

- One-day training session for up to three Village staff related to system maintenance and administration
- Three-day training session for up to eight Village staff related to use of the desktop GIS software product.

### **Cost Proposal**

<b>Description</b>	<b>Cost</b>
Task I – Needs Assessment Equipment and Software Analysis Conceptual database and system models	8000
Task II – Strategic Plan Development	8000
Task III - Database Design	8000
Task IV – System Architecture Design	4000
Task V – Application Development	8000
Task VI – System Documentation	4000
Task VII - Training	4000
<b>TOTAL</b>	<b>44000</b>

**ORDINANCE CERTIFICATE**

STATE OF ILLINOIS            )  
  ) SS.  
COUNTY OF SANGAMON        )

I, the undersigned, do hereby certify that I am the duly qualified and acting Village Clerk of the Village of Chatham, Sangamon County, Illinois.

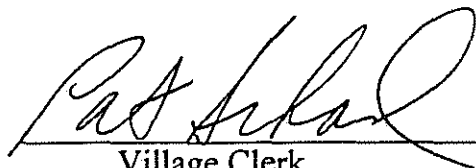
I do further certify that the ordinance attached hereto is a full, true, and exact copy of Ordinance No. 05-30, adopted by the President and Board of Trustees of said Village on the 12 day of JULY, 2005, said Ordinance being entitled:

**AN ORDINANCE APPROVING AN AGREEMENT WITH  
GIS SOLUTIONS, INC.**

I do further certify that prior to the making of this certificate, the said Ordinance was spread at length upon the permanent records of said Village, where it now appears and remains.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Village this 12 day of JULY, 2005.



  
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Village Clerk

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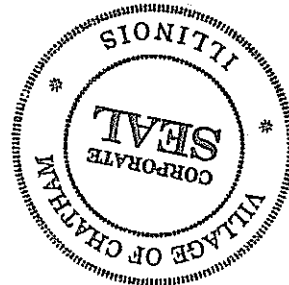
PASSED this 12 day of JULY, 2005.

Thomas D Gray  
VILLAGE PRESIDENT

ATTEST:

[Signature]  
Village Clerk

AYES: 5 HERR SCHATTEMAN BOYLE MCCARTHY KAVANAGH  
NAYS: 0  
PASSED: 7-12-05  
APPROVED: 7-12-05  
ABSENT: 1 McGRATH



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By: Thomas S Gray  
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Attest: Pat Schlar  
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GIS Solutions, Inc  
Contractor

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STATE OF ILLINOIS            )  
  ) SS.  
COUNTY OF SANGAMON        )

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I do further certify that prior to the making of this certificate, the said Ordinance was spread at length upon the permanent records of said Village, where it now appears and remains.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Village this 12 day of July, 2005.



*Pat Schindler*  
\_\_\_\_\_  
Village Clerk