

Scott County Addressing Project



REQUEST FOR PROPOSALS FOR E-911/GIS MAPPING AND
DATABASE DEVELOPMENT/INTEGRATION SERVICES

Release Date: 7/31/2009 • Response Deadline: 8/21/2009

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1. General Requirements and Information

1.1 Background

Scott County is located in eastern Iowa along the Mississippi River. It is approximately 180 miles east of Des Moines and 180 miles southwest of Chicago. The county is 468.4 square miles of which 9.4 sq. mi. is covered by the waters of the Mississippi. Scott County is currently the third largest county in Iowa and is home to 164,690 people according to the U.S. Census Bureau's 2008 population estimate. There are 17 incorporated cities within the county. Davenport is the largest, with 100,827 residents (2008 estimate) and is the designated county seat. Bettendorf is the second largest community with 32,584 residents (2008 estimate). Countywide there are approximately 75,000 parcels and 1,800 miles of roads (see § 3.1.3 for more about existing road centerline data).

In September 2003, the Mayors of Davenport, Bettendorf and the Scott County Board Chair established a blue ribbon committee to investigate possible shared public safety services and savings across governmental boundaries. After an independent study was conducted, the blue ribbon committee recommended the implementation of a new consolidated 911 center to serve the needs of all emergency public safety agencies within Scott County. As such, in 2007, Scott County, the City of Davenport, the City of Bettendorf and the Davenport Hospital Ambulance Corporation (MEDIC EMS) entered into an intergovernmental agreement to form the Scott Emergency Communications Center (SECC).

SECC is in the process of selecting a CAD/RMS software vendor to provide new software and implementation services. The new system will require a GIS address database to support dispatch operations.

In addition to the creation of SECC and procurement of new CAD/RMS software, Scott County is currently developing an enterprise GIS system. Development includes data conversion (parcel conversion), hardware/software system design, implementation, and process improvements.

1.2 Introduction

Scott County is soliciting proposals to create accurate digital addressing map layers for the entire county and provide solutions for integration and ongoing maintenance of the data, including creation of an Address Integration and Maintenance Plan. The project includes utilizing all existing addressing data and coordinating all efforts to complete digital centerline mapping, address point placement, synchronization of GIS/MSAG/ALI databases, improved workflows and knowledge transfer of address maintenance tools/practices.

The completed project will provide the address data and process improvements necessary to ensure reliable, high quality support of public safety agencies in providing Computer Aided Dispatch (CAD), emergency response and related services. The addressing information developed is intended to be multi-purposed and will also support geocoding, routing, mailing lists and address validation.

This project requires that the successful Consultant show capabilities in the areas of Global Positioning Systems (GPS), Geographic Information Systems (GIS), NENA addressing standards,

Master Street Address Guide (MSAG), Automatic Location Identification (ALI) and database development and maintenance. It will require excellent project management and communication.

The successful respondent shall demonstrate the capability to work in the demanding area of E911 and experience and knowledge of GPS mapping, addressing and related services. All technical requirements stated within this request are considered to be current standards that meet all state and federal mandates.

Notwithstanding the details presented in this RFP, it is the responsibility of the Consultant to verify the completeness of the materials and the suitability of the requirements to meet the intent of the specifications defined within this RFP. Exceptions to any part of the requirements stated in this request must be clearly identified as such. Alternatives should also be clearly stated at that point in the response, if applicable.

By issuance of this RFP, Scott County assumes no liability for any costs incurred by the Consultant with regard to replying to this Request for Proposal or any subsequent responses.

1.3 Proposed Response Schedule

It is the intention of Scott County to provide Consultants with sufficient time and opportunity to provide a complete and comprehensive response to this RFP. The following project schedule is intended to provide a guideline for the procurement process. Scott County reserves the right to adjust the schedule as necessary.

RFP Release	Friday, July 31 st , 2009
Final Date for Questions	Monday, August 17 th , 2009
Answers Distributed	Tuesday, August 18 st , 2009
Proposals due	Friday, August 21th 2009, 2:30 p.m. CST
RFP Opening	Monday, August 24 th , 2009, 10:00 a.m. CST
Interviews	Wednesday, September 2 nd , 2009
Selection	Friday, September 4 th , 2009

1.4 Proposal Submission Guidelines

Proposals shall be sealed and include one bound, printed copy and one electronic copy in Adobe PDF file format. All bids should be clearly marked "Scott County Addressing Project Proposal" and received by the Scott County Purchasing Agent prior to the Friday, August 21st, 2009, 2:30 p.m. CST deadline.

Send responses to:

Scott County Purchasing
Facility and Support Services Department
600 W 4th St.
Davenport, IA 52801-1030

It will be the sole responsibility of the Consultant to have their bids delivered to Scott County before the closing hour and date. Late bids will not be considered and will be returned unopened to the

sender. Bids having any erasures or corrections must be initialed in ink by the vendor. The proposal must contain the signature of the duly authorized officer of the Consultant and must be signed in ink.

1.5 RFP Preparation Costs

All costs incurred by the vendor in preparing the proposal, or costs incurred in any other manner by the vendor in responding to this proposal will be wholly the responsibility of the vendor. All materials and documents submitted by the vendor in response to this specification become the property of Scott County and will not be returned to the vendor.

1.6 Single Point of Contact

All Consultants are advised that the Scott County GIS Coordinator will serve as the sole point of contact during the response process. The process includes the initial posting for this RFP, clarifications and addendums, review of all responses, and contract negotiations. An Addressing Committee will oversee the project including RFP development, response evaluation and selection recommendations.

Contact information is: Ray Weiser, Scott County GIS Coordinator
Scott County Administrative Center
600 W 4th St
Davenport, IA 52801
gis@scottcountyiowa.com
Office: (563) 328-4137
Cell: (563) 940-5012
Fax: (563) 326-8669

1.7 Modification and Addendums

Any substantive interpretation, correction or change of the RFP shall be made by addendum. Because the RFP is being posted to the Scott County Facilities and Support Services' bid section of the website (<http://www.scottcountyiowa.com/fss/bids.php>), addendums shall also be posted there. Interpretations, corrections or changes of the original documents made in any other manner shall not be binding and the Consultant shall not rely upon such information. Any addendum(s) shall be issued within a reasonable time prior to the proposal deadline.

1.8 Questions and Answers

Questions regarding the RFP or Addressing Project shall be submitted to the Scott County GIS Coordinator via email no later than Monday, August 17th, 2009. Questions submitted by Consultants will be answered as received. A compilation of all questions and answers will be posted to the Scott County website (<http://www.scottcountyiowa.com/fss/bids.php>) on Tuesday, August 18th, 2009.

1.9 Proprietary Statement

Iowa open records laws require that at the conclusion of the selection process, the contents of all proposals shall be placed in the public domain and open to inspection by interested parties. Proprietary information that is recognized as such and protected by law may be withheld if clearly identified in the proposal.

1.10 Postponement and Rejection of Bids

Scott County shall have the right to postpone the bid opening for its own convenience, or to reject any or all bids not accompanied by the required data. Scott County reserves the right to reject a bid which is in any way incomplete or irregular.

1.11 Foreign/Domestic Labor Disclosure

If any part of the project will be completed outside of the United States by either the Consultant or a subcontractor thereof, the Consultant is required to provide a project fee which reflects the cost of the project using domestic labor versus the project costs using foreign labor. The intent of this requirement is to provide the county with a means to compare pricing equitably among firms. A foreign labor component does not disqualify a firm’s response.

The Consultant must indicate their intent to comply with this requirement on “Attachment B - Project Fee Schedule” and will be considered non-responsive should they fail to disclose this information. The Consultant ultimately chosen to work with Scott County will be subject to penalties and/or held in breach of contract if they failed to disclose this information.

1.12 Contract Increase or Decrease

Scott County reserves the right to increase or decrease the scope of services, revise the anticipated working agreement or otherwise modify the working arrangement during the course of the addressing project. Modification of work to be accomplished after a contract is signed with the successful Consultant will be addressed on addenda to the original contract and will become effective only when agreed upon and signed by both parties.

1.13 Objective Evaluation Criteria

The Addressing Committee will review the RFP Response and may also perform additional investigations as deemed necessary to determine the ability of the Consultant to perform the work. The committee reserves the right to recommend or reject any bid, if, in the judgment of the committee, the Consultant is found to be deficient in any of the evaluation criteria. The following areas will be evaluated and scored:

RFP Completeness	5%
Project Scope (§ 4) Response	35%
Address Integration and Maintenance Plan (§ 5)	10%
Price	30%
Project Experience	10%
Implementation schedule	10%

1.14 Successful Vendor Selection

Proposals will be studied by an evaluation committee. Finalists may be invited to an interview. Selection of the successful vendor will be followed by contract negotiations. The evaluation committee's final recommendations will be based upon an analysis of the offering, not just lowest price as indicated.

1.15 Terms and Conditions of Award

The terms and conditions for contract award imposed herein shall govern in all cases and conflicting terms or conditions submitted by the Consultant may constitute sufficient grounds for rejection of the bid.

1.16 Scott County Standard Terms and Conditions

The Consultant must abide by Scott County's general terms and conditions as detailed in "Attachment A – Scott County Requirements".

1.17 Contract Award

The contract for this entire project will be to the Consultant deemed most advantageous as determined by the evaluation criteria as a lump-sum award. Scott County reserves the following rights (in addition to those accorded the County by policy and statutory laws).

- 1.17.1 The right to negotiate with one or more Consultants to arrive at a final selection.
- 1.17.2 The right to negotiate all proposal elements to ensure the best possible consideration be afforded to all parties concerned (this includes the right to approve or disapprove subcontractors proposed after award).
- 1.17.3 The right to reject any and all proposals, to consider alternatives, to waive any minor irregularities and technicalities, and to re-solicit proposals.
- 1.17.4 The right to award the contract to a Consultant who is not the lowest cost Consultant.

1.18 Technical Terms and Definitions

Terms and definitions used throughout this document can be found at the NENA website (www.nena.org) in several documents including:

- 02-010 NENA Standard Formats & Protocols for ALI Data Exchange, ALI Response & GIS Mapping
- 02-014 NENA GIS Data Collection & Maintenance
- 2-001 NENA Synchronizing GIS with MSAG and ALI

These documents set forth NENA standard formats for Automatic Location Identification (ALI) data exchange between Service Providers and Data Base Management System Providers, a GIS data

model, a Data Dictionary, XML schemas, formats for data exchange between the ALI Database and PSAP Controller equipment. They also specify guidelines/accuracy requirements for collecting and maintaining GIS data and database techniques for synchronizing GIS data with existing 9-1-1 databases.

Other pertinent NENA documents and standards may be referenced and incorporated as necessary to fulfill the requirements of the project. The Consultant should be familiar with all applicable standards.

The USPS Publication 28, Postal Addressing Standards may be found online at:
<http://www.usps.com/publications/pubs/welcome.htm>.

2. Proposal Contents

2.1 Letter of Transmittal

A one page letter entitled “Letter of Transmittal” briefly stating the Consultant’s understanding of the scope of services to be provided, under the signature of the appropriate corporate authority. This document should include the company’s Federal Tax Identification Number.

2.2 Table of Contents

Include a table of contents which identifies the material by section, page number and a reference to the following information requested to be contained in the proposal.

2.3 Executive Summary

In brief, concise terms, give a summary of the proposal. Include descriptions the proposed project approach and sequential steps necessary to accomplish the objectives. State briefly the salient features of the proposal and distinctive merits of specific related experiences or projects.

2.4 Scope of Work Response

A major portion of the response will be included in the Scope of Work section. In this area, please provide response to scope items listed in the RFP. For clarity, the response should be organized in outline format corresponding to the main scope sections of the RFP (§ 4).

2.5 Integration and Maintenance Plan

The Consultant should address all salient elements of the Scott County Address Integration and Maintenance Plan listed in § 5.

2.6 Qualifications

2.6.1 Experience and Client List

The Consultant is required to provide a complete list of relevant projects completed within the last three year period. Give the agency or firm name, city and state, and date of the project start and completion. Also provide the name and telephone number of the primary project contact person employed at the agency or firm.

2.6.2 Comparable Projects

The Consultant is required to provide a list of three (3) similar E911 related mapping or addressing projects completed by the Consultant. Briefly describe the similarities and explain some of the specific challenges and significant accomplishments related to the project. Also provide the name and telephone number of a supervisory contact person employed by the agency or firm responsible for the original contract.

2.7 Project Fee Schedule

- 2.7.1 Provide a list of costs associated with the project proposal using the form “Attachment B - Project Fee Schedule” provided. Costs shall be itemized for major scope items as identified on the schedule.
- 2.7.2 In addition to the major scope items, Scott County would like to have the field data collection/verification component for multi-unit structures itemized separately (§ 4.4.1.9).
- 2.7.3 Consultant shall provide a separate detailed description of any optional products or services that might be considered by the county.
- 2.7.4 The Consultant must indicate their intent to comply with the Foreign/Domestic Labor disclosure requirement indicated in § 1.9. There is a place to designate this on the Project Fee Schedule form.

2.8 Project Schedule

Define in detail your project schedule. Incorporate all aspects of the project and estimates of time for all necessary tasks. The Project Schedule should identify all major milestones and indicate primary responsibilities as determined by the Consultant.

Scott County desires to have the street centerline file and Emergency Service Zone layers delivered as soon as possible in order to support initial planning and development of the Scott Emergency Communications Center’s new CAD software implementation. If it is not possible to develop a final street centerline product within a relatively short timeframe, a draft version will suffice.

2.9 Personnel Overview/Subcontractor Disclosure

The Consultant must provide a complete summary of all personnel to be utilized in the Scott County Addressing project. Details regarding the use of subcontractors must be clearly stated.

2.10 Proposal Checklist

In order to assist respondents and the county in verifying that RFP responses are complete, Scott County has included “Attachment C – Proposal Checklist”. Please be sure to include all checklist items in your proposal, and have the personal preparing your proposal initial each item as it is verified. Include a copy of the initialed checklist with your response.

2.11 RFP Response Format & Copies

The Consultant will provide one printed copy and one PDF file of their RFP response.

3. Existing Data Summary

We will provide to the Consultant, all pertinent data developed internally or by others that we are aware of and have access to. The Consultant may acquire other data as required to meet the intent of the specifications defined within this RFP.

Currently available data includes:

3.1 Local GIS Data (Scott County, Davenport, Bettendorf)

3.1.1 Orthophotography

Scott County flew orthophotos in April of 2005 and again in April of 2009.

- 3.1.1.1 Orthophotos flight, 2005: The 2005 orthophotos were delivered in both color and black and white with a combination of 6" and 1 ft. GSD resolution tiles and mosaics. The 6" photos were collected in the urban and developed rural areas and the 1 ft. photos were flown countywide. NSSDA testing on the 1 ft photos reported +/- 3 ft accuracy, with +/- 1 ft accuracy on the 6" photos. Both are available in TIF, MR SID and ESRI file geodatabase formats as tiles and/or mosaics.
- 3.1.1.2 Orthophoto flight, 2009: The 2009 flight is a full color 0.4 ft GSD resolution, countywide orthophoto product. A supplemental 0.25 ft black and white orthophoto will be produced as well. The orthophotos are currently being processed with a delivery schedule of 9/1/09 to 10/15/09 (the flight is a multi-agency project, thus the date range). Draft orthophotos are available in compressed TIF format now, though positional accuracy is +/- 5 ft and images are portioned into 55 north-south flight strips. In our contract for services, the specified accuracy of the final orthophotos is +/- 2 ft, though experience suggests that horizontal accuracy will be better than that. Final formats will include uncompressed TIF, MR SID, ArcSDE geodatabase and will include both tiled and mosaic delivery options.

3.1.2 Parcel Data

- 3.1.2.1 Scott County is currently in the process of developing a land parcel layer via contract with a third party mapping vendor. As of the release of this RFP, nearly all parcels excepting those within the cities of Davenport and Bettendorf have been delivered in either draft or final form. The parcels were built from data extracted in April of 2007. We are in the process of updating the delivered areas with changes that have occurred since 4/2007.
- 3.1.2.2 The cities of Bettendorf and Davenport both maintain parcel data layers independently of Scott County which will be made available to the successful vendor.
- 3.1.2.3 All parcels can be linked to the Scott County tax database in order to link the address information stored therein to each parcel. However, since the parcel features are not in

a final form, a QA/QC process must be implemented to ensure that the address information developed is complete and accurate.

3.1.3 Street Centerline Data

Under the existing Scott County parcel conversion contract, a third party vendor created a base street centerline layer to be used as a starting point for the addressing project. On balance, the resulting centerline file will serve as a useful starting point for the addressing project. However, the file geometry and attributes will need to be scrubbed for completeness and accuracy. There are approximately 1,800 miles of features represented in this database.

- 3.1.3.1 Areas outside of Bettendorf/Davenport: For all areas outside of the cities of Bettendorf and Davenport, the Scott County 2005 Digital Orthophotography was used to photo-interpret the centerline of public and private streets. Newer streets not shown on the photography (entered from newly platted subdivisions) were included and tagged as not visible.

Address ranges were conflated from U.S. Census TIGER files (a revised 2005 version). A comparison between the centerline file and a copy of the Scott County MSAG was performed and any discrepancies noted in an appended quality control field.

- 3.1.3.2 Bettendorf and Davenport: Centerline files created and maintained by each city in GIS format were incorporated into the countywide centerline file. Field mapping and edge matching was performed to ensure that attribute data was preserved and features were properly aligned. A comparison between the centerline file and a copy of the Scott County MSAG was performed and any discrepancies noted in an appended quality control field.

3.1.4 Building Footprint Data

The city of Davenport currently has a building footprint GIS feature class available. However, the 2009 orthophotography contract also includes development of a number of planimetric features for Davenport and Scott County including building footprints for all structures 100 sq ft or larger. Davenport's contract covers all buildings in their city limits and the Scott County contract will include buildings throughout the rest of the county (including all incorporated and unincorporated areas). The planimetric portion of the orthophoto project is scheduled to be completed between 10/1/09 and 12/15/09. However the county may be able to acquire the building footprint layer earlier in incremental delivery areas as they are completed.

3.1.5 Driveway Feature Data

As part of the 2009 county orthophoto/planimetric project, the aerial vendor will provide driveway centerline features in situations where the main structure is located more than 300 feet from the related road segment and in all cases where a driveway serves multiple structures (regardless of distance).

3.1.6 Police/Fire/Ambulance Districts

Scott County has fire and ambulance district layers developed in GIS and available for use in the project and can assist in providing service area information for the Sheriff Department. The city of Davenport has defined police beats, police areas and 'reporting areas' available for use.

3.1.7 Bettendorf/Davenport Address Point Database

The cities of Bettendorf and Davenport both have address information in address point/text format.

3.1.7.1 Bettendorf maintains address features in AutoCAD as placed text (which can be converted to GIS address point features with attributes). The Bettendorf labels are typically placed near the parcel frontage. For multi-address structures, label text may be placed for each unit or represented as an address range for the structure. There are approximately 13,200 address points in the Bettendorf AutoCAD file.

3.1.7.2 Davenport maintains address point data as an ESRI GIS point feature database. Their address points were originally placed at parcel centroids, though some have been repositioned over the building/unit (mainly for multi-unit structures). There are approximately 39,000 address points within the city of Davenport.

3.2 GIS data (External Sources)

3.2.1 U.S. Census TIGER Street Centerline (rev. 2005)

Typically TIGER street centerline files are a resource of last resort due to the relative inaccuracy of the information (compared to local or commercial alternatives). However, the 2005 revision of the standard 2000 TIGER geography significantly improved physical feature placement. While the attributes are still suspect, the characteristic misalignment problems are much improved. They've also added several features including private driveways, access roads to businesses/parking lots, roadways within parks, trails and similar unaddressed, but potentially useful road or road-like elements. In most cases, feature placement is still slightly off and would need to be adjusted or re-digitized to meet Scott County address project requirements. However at a minimum the line work would help identify potential missing features. There are approximately 2,300 miles of features represented in this database.

3.2.2 Iowa DOT GIMS Database

The Iowa Department of Transportation developed a street centerline file and related data to track information about the road characteristics and related structures within the state. Attributes are primarily asset management related, though road classification, some speed limit information for curves and other information of potential relevance to this project is contained in the GIMS database. There is no addressing information present. There are approximately 1,500 miles of features represented in this database.

3.3 E-911 Data

The MSAG and ALI database are maintained and distributed via the newly consolidated local PSAP, Scott Emergency Communications Center (SECC), the incumbent local exchange carrier (ILEC), Qwest Communications Intl. Inc., and third party database provider, Intrado Communications, Inc.

3.3.1 Master Street Address Guide (MSAG)

Scott County receives free quarterly MSAG updates from Qwest, Inc. and will provide the Consultant with the most recent MSAG in MS Excel format. The county will make subsequent quarterly updates available to the Consultant as they are received.

3.3.2 Automatic Location Information (ALI) Database

Scott County will provide the Consultant with an updated ALI database from Qwest. The ALI data is typically available on demand and in incremental deliveries (e.g. quarterly) for a fee. Barring recommendations to the contrary we anticipate providing the Consultant, at Scott County's expense, with one copy of the ALI database at the start of the project and quarterly ALI updates through the remainder of the project.

4. Scott County Addressing Project Scope

4.1 Purpose

The purpose of this section is to provide respondents with sufficient base information to submit proposals meeting minimum requirements, but is not intended to limit a proposal's content or to exclude specific services or capabilities of responding firms. The section covers all major elements of the address data development and coordination scope items. A project planning item, Address Integration and Maintenance Plan is handled separately in § 5 of the RFP.

4.2 Coordination/Project Management

The Consultant will provide coordination to ensure the success of the project. The Consultant will maintain regular contact with the county and prepare periodic progress reports throughout the project and at major milestones. The Consultant will be responsible for making all necessary contacts and arrangements with agencies involved with the addressing project (e.g. local telephone service provider(s), database service provider(s), local governments involved in address assignment or other related agencies).

In addition to any other necessary or suggested coordination/project management services the Consultant will provide:

4.2.1 Single Point of Contact

The Consultant will assign a single point of contact to serve as the primary project manager and coordinate all aspects of the project.

4.2.2 Project Kick off Meeting

Consultant will coordinate a project kick off meeting with all county stakeholders and interested agencies. This shall be held at Scott County facilities and attended by the Consultant in person.

4.2.3 Telco/Database Provider Coordination

Consultant will coordinate with the telephone company/database provider as necessary to synchronize MSAG/ALI/GIS databases, test data transfer solutions and update the ALI/MSAG databases.

4.2.4 Bi-Monthly Progress Reports

Consultant will prepare bi-monthly progress reports to Scott County with project updates, completion statistics, county responsibilities and similar pertinent project information to ensure good communication and adequate project planning/scheduling.

4.2.5 Milestone Reports

The Consultant will prepare milestone reports to accompany significant project deliverables or major tasks elements, which should include a task/deliverable summary, and any applicable quality control metrics or metadata.

4.2.6 Address Integration and Maintenance Plan Site Visit

Site visit to gather data and stakeholder input in support of the Address Integration and Maintenance Plan (\$5), particularly with respect to the task of address assignment and information workflows between Scott County and the various jurisdictions responsible for assigning addresses.

4.2.7 Project Wrap-up/Training/Implementation

The Consultant will conduct a site visit at or near project completion to summarize project results including QA/QC metrics, present recommendations of the Address Implementation and Maintenance Plan and provide any required training and/or implementation services.

4.3 Address Street Centerline Feature

The Consultant will develop a street centerline containing 100% of the existing streets within Scott County. Address attributes will be assigned and verified against MSAG/ALI databases and designed to support geocoding and routing applications. Where appropriate, street centerline features will be coincident with related layers such as the Emergency Service Zones (polygon layer). Quality control procedures will be implemented to ensure a very high degree of accuracy. The County will review deliverables for compliance with project specifications.

4.3.1 Physical Feature Characteristics

- 4.3.1.1 Data delivered as feature class (ESRI v9.3 File GDB format) in Iowa State Plane South, NAD 83 (HARN 96 adjustment) with units in U.S. Feet.
- 4.3.1.2 Road features represent a complete road inventory (regardless of road class).
- 4.3.1.3 Topologically correct features (lines meet exactly, no overshoots/undershoots, no duplicate features, no extraneous nodes, etc).
- 4.3.1.4 Curves are tangent and represented as true arcs.
- 4.3.1.5 Break features at jurisdictional boundaries (municipal boundaries, Emergency Service Zones).
- 4.3.1.6 Addressable street centerlines broken at intersections with other addressable street centerlines.
- 4.3.1.7 Non-addressed street features such as alleys, driveways, commercial access roads, roads in parks or cemeteries, trails and similar minor road class objects will be snapped to vertices at intersection with addressable street centerline features but will NOT force a break.

- 4.3.1.8 Features built to support proper routing (Connectivity considerations for bridges/tunnels, turn-around points on divided highways, etc).
- 4.3.1.9 Streets drawn in direction of increasing address range.
- 4.3.1.10 Features constructed as 3D poly-lines.
- 4.3.1.11 Capture missing road segments via photo interpretation from 2005/2009 orthophotos or GPS according to NENA GIS Data Collection and Maintenance Standards NENA §02-014.

4.3.2 Feature Data Attributes

- 4.3.2.1 Data developed to NENA Standard Data Formats for ALI Data Exchange & GIS Mapping, NENA-§22.3A of 02-010.
- 4.3.2.2 Address ranges developed for both theoretical and physical address ranges.
- 4.3.2.3 Additional data fields: Please see “Attachment D – Street Centerline Sample Data Structure”. The fields displayed in Attachment D contain NENA standard fields and additional data fields to support QA/QC, routing and other county addressing needs. Fields with blue shading are not NENA standard. This is not a mature data model with relationships, behaviors and other advanced features, but does provide a register of attributes required for the Scott County addressing project. The attributes may be subject to change based on Consultant recommendation or further county review.
- 4.3.2.4 Road name alias table or similar solution will be developed and incorporated into the street centerline data model (though this is not represented in Attachment D).
- 4.3.2.5 Where appropriate, default, domain values, split rules or other advanced behaviors will be incorporated into the data model.

4.3.3 Quality Assurance/Quality Control Procedures

The Consultant will implement effective QA/QC procedures to ensure consistent and reliable street centerline address data development and verification. Be sure to describe your particular QA/QC methods with regard to street centerline address feature/attribute development in the RFP response.

- 4.3.3.1 The Consultant’s QA/QC methods will include the use of flag fields containing standard error codes associated with a particular address range or street segment.
- 4.3.3.2 A notes field will be used to capture additional descriptive information on feature issues.
- 4.3.3.3 Measureable QA/QC results should be included with the milestone street centerline report upon delivery of the final street centerline database.

4.4 Address Point Features

The Consultant will deliver an address point database containing all addressable features within Scott County. Unique street level addresses will be represented as individual point features. Point features for multi-unit structures that share a street level address will be resolved to the building level.

Apartments, suites and other sub address information shall be included in a separate table and related to the primary address point feature via a foreign key. Consultant will field verify multi-address structures.

4.4.1 Physical Feature Characteristics

- 4.4.1.1 Data delivered as feature class (ESRI File GDB format) in Iowa State Plane South, NAD 83 (HARN 96 adjustment) with units in U.S. Feet.
- 4.4.1.2 Database contains an address point for every addressable structure or street level address.
- 4.4.1.3 For single address structures, address point is placed on building (using orthophotography and/or building footprint features provided).
- 4.4.1.4 Mobile homes will be individually identified.
- 4.4.1.5 Multi-unit structures
 - 4.4.1.5.1 Where multi-unit structures share same street address (e.g. 1200 Main St, Building A, 1200 Main St., Building B) place address point for each structure.
 - 4.4.1.5.2 Where units within a multi-unit structure are assigned individual street addresses (e.g. a duplex addressed as 1202 Main St and 1204 Main St), place address point at approximate location of access point for each unit, i.e. the door (+/- 10 ft).
- 4.4.1.6 For structures located more than 300' from addressed road segment, place point on structure and at access point (intersection of driveway/access road and main roadway).
- 4.4.1.7 Initial address point locations may be imported/generated from existing Bettendorf, Davenport and/or Scott County address point features, parcel features and/or the ALI database for the Scott Emergency Communications Center PSAP.
- 4.4.1.8 Address point additions or edits will be modified as necessary via photo interpretation from 2009 orthophotos or GPS methods according to NENA GIS Data Collection and Maintenance Standards NENA 02-014. See <http://www.nena.org/technical-standards> § 02-014.
- 4.4.1.9 Consultant will field verify address points for multi-unit structures including multi-unit houses (duplexes, apartments), business parks, office buildings, shopping centers, etc. Field work will be itemized separately on "Attachment B - Project Fee Schedule".

4.4.2 Feature Data Attributes

4.4.2.1 Data developed to NENA Standard Data Formats for ALI Data Exchange & GIS Mapping, NENA-02-010. See <http://www.nena.org/technical-standards § 02-010>.

4.4.2.2 Appropriate ESN codes will be assigned to each address.

4.4.2.3 Additional data fields: Additional data fields: Please see “Attachment E – Address Point Sample Data Structure”. The fields displayed in Attachment E contain NENA standard fields and additional data fields to support QA/QC, routing and other county addressing needs. Fields with blue shading are not NENA standard. This is not a mature data model with relationships, behaviors and other advanced features, but does provide a register of attributes required for the Scott County addressing project. The attributes may be subject to change based on Consultant recommendation or further county review.

4.4.2.4 Create sub-address (apartment/suite/unit) feature database and one-to-many relationship class with address points based on Site Identification Number [SIN] field.

4.4.2.5 Alias name capabilities will be provided via fields, look up tables or some other solution for all addresses associated with a business, school, place of worship, landmark, or similar location with a common reference name. Aliases will also be provided for address point features with multiple street name aliases (e.g. Welcome Way/Harrison Street/Hwy 61). This data requirement is not represented in Attachment E.

4.4.2.6 Where appropriate, default, domain values, split rules or other advanced database behaviors will be incorporated into the data model.

4.4.3 Quality Assurance/Quality Control Procedures

The Consultant will implement effective QA/QC procedures to ensure consistent and reliable address point feature data development and verification. Be sure to describe your particular QA/QC methods with regard to address point features/attribute development in the RFP response.

4.4.3.1 QA/QC processes will be used including the addition of flag fields to capture information about standard errors encountered during address point development.

4.4.3.2 A notes field will be used to capture any additional descriptive information on feature issues.

4.4.3.3 Measureable QA/QC results should be included in a report with delivery of the address point database final deliverable.

4.5 Master Street Address Guide (MSAG), Address Location Identification (ALI) Development/Update

The MSAG (Master Street Address Guide) is the database that is used to route E911 calls to the proper answering point (PSAP) and to determine which emergency service providers are responsible for responding to each address. The MSAG is therefore a critical part of an enhanced E911 call management center.

The Automatic Location Identification (ALI) database provides for an address display of the subscriber calling 911. With ALI, the PSAP receives the ANI display including the subscriber's address, community, state, the associated ESN information (police, fire, rescue), type of service and if a business, the name of the business.

The Consultant is required to update the current MSAG and ALI databases housed by the 911 provider telephone company in a manner considered standard in the industry. This information must meet all requirements as set forth by the National Emergency Number Association (NENA). Updated MSAG and ALI databases will be delivered noting all deletions, additions or modifications made.

The Consultant is expected to communicate and/or coordinate development efforts with the SECC CAD/RMS vendor to be selected in August, 2009, and local Telco or database providers as necessary.

The street centerline and address point features developed in GIS will be synchronized with the MSAG and ALI databases. An Address Integration and Maintenance Plan (§ 5) prepared by the Consultant will outline a methodology, using applicable NENA standards, to keep the databases in synch as changes and updates occur.

4.5.1 Master Street Address Guide (MSAG) Development

- 4.5.1.1 Delivered as a complete database to Scott County.
- 4.5.1.2 Consultant will provide to the County, a digital listing of corrections, additions, and deletions needed to update the existing MSAG. Required modifications shall be appended to the original MSAG with edits clearly identified.
- 4.5.1.3 Development and data exchange delivery of the MSAG updates will be to NENA Data Standards.
- 4.5.1.4 Submit revised MSAG to database provider and confirm acceptance/update status.

4.5.2 Address Location Identification (ALI) Development

- 4.5.2.1 Delivered as a complete database to Scott County.
- 4.5.2.2 Consultant will provide to the County, a digital listing of corrections, additions, and deletions needed to update the existing ALI. Required modifications shall be appended to the original ALI with edits clearly identified.

4.5.2.3 Development and data exchange delivery of the ALI updates will be to NENA Data Standards in order to facilitate automated update.

4.5.2.4 Verify 98% accuracy of records compared to MSAG/GIS database. (See § 4.5.3.4).

4.5.2.5 Submit revised ALI to database provider and confirm acceptance/update status.

4.5.3 Quality Assurance/Quality Control Procedures

The Consultant will implement effective QA/QC procedures to ensure consistent and reliable MSAG/ALI Database data development, synchronization and verification. Be sure to incorporate the QA/QC requirements below and describe any additional QA/QC methods with regard to ALI/MSAG development in the RFP response.

- 4.5.3.1 During development, the Consultant will synchronize GIS/ALI/MSAG databases to ensure that address information is consistent. The Address Integration and Maintenance Plan (\$5) will detail a method of maintaining and synchronizing the MSAG, ALI and GIS address databases in an ongoing maintenance/update environment.
- 4.5.3.2 Consultant will compare GIS/ALI/MSAG databases and incorporate any changes, corrections, deletions encountered during verification. A listing of all address conflicts and resolutions will be provided to the County including any unresolved conflicts.
- 4.5.3.3 As part of the QA/QC process the Consultant will geocode the ALI database against the address point database, street centerline file physical address range and street centerline file theoretical range. An exception report will be provided and resulting XY coordinates stored within the ALI database (WGS84 or NAD83 Longitude/Latitude).
- 4.5.3.4 Pursuant to industry standards, the Consultant shall deliver a countywide MSAG and GIS address database that correctly matches a minimum 98% of the telephone subscriber records (ALI database). See NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI” - NENA 2-001, Version 1, June 6, 2009. This may require several iterations of database comparison and error corrections.
- 4.5.3.5 Consultant will notify the county of all unaddressed structures, landmarks, or other non standard records in the ALI data (e.g. pay phones, special private VOIP records, etc) that require new address assignment or special consideration.

4.6 Supporting Data Layers

The Consultant will provide supporting layers for use with the E911 CAD system. The additional layers include the following features.

4.6.1 Emergency Service Zone (ESZ) – Polygon

- 4.6.1.1 Eliminate null/sliver polygons, features will not overlap.
- 4.6.1.2 Provide relational check of ESZ, Emergency Service Number (ESN) and Emergency Service Agency (ESA) data.
- 4.6.1.3 ESZ Boundaries should be joined to jurisdictional boundaries where appropriate (e.g. roads, rivers, municipality). All coincident boundaries should be exact (joined vertices to vertices).
- 4.6.1.4 Shall be attributed according to section 22.3B of NENA-02-010.

4.6.2 Emergency Service Agency Location Layer – Point

- 4.6.2.1 To be attributed per NENA-02-010 section 22.4A.

4.6.3 Cell Tower Sites – Point

- 4.6.3.1 To be attributed per NENA-02-010 section 22.4B.

4.6.4 Cell Site Coverage - Polygon

- 4.6.4.1 Depicting the area covered by cell towers and service providers, including the sector or omni cell coverage area if this information is available.
- 4.6.4.2 This layer to be attributed per NENA-02-010 section 22.5E.

5. Address Integration and Maintenance Plan

As SECC moves forward with a new CAD software package based on a GIS address database, Scott County will be the agency responsible for updating and maintaining the information. The authority for address assignment however, will remain within the jurisdictions currently responsible for those tasks. Scott County recognizes the need to develop comprehensive workflows, methods and/or tools that will permit centralized address database maintenance, promote inter-agency communication and support, and respect existing addressing authority structures.

As mentioned in § 4.5 of the RFP there is also a need to keep the GIS/ALI and MSAG databases in close agreement/synchronization. NENA currently provides standards for transferring data from one system to another via XML. The Consultant will provide support to properly implement these transfer standards and will coordinate with the local telephone company or other database providers to ensure agreement.

In order to properly plan for and successfully integrate the Scott County address development project with other agencies and databases, the Consultant will prepare an Address Maintenance and Integration Plan which will outline procedures and best practices for address database maintenance and integration from a technical and organizational perspective.

Specifically, the Address Integration and Maintenance Plan should include:

5.1 GIS Data Maintenance

Suggested approach for maintenance of the GIS street centerline and address point features in the ESRI ArcGIS Desktop and/or Arc Server environment.

5.2 Computer Aided Dispatch (CAD) Database Integration/Implementation

Provide consideration for the integration of GIS/ALI/MSAG databases with the SECC CAD software including any import/export routines or practices to support regular (and preferably automated) updates to the CAD software geofiles.

5.3 Data/Address Standardization

Identify address and data standardization best practices, design strategies or tools that will help ensure consistent address quality within and between address databases.

5.4 Custom Solutions (optional)

Describe any optional custom scripts, tools or software provided as part of your plan. Provide necessary reference materials/manuals/installation guides. Training, if warranted will also be provided.

5.5 Database Synchronization/Data Exchange

Identify the maintenance and synchronization procedures for GIS/ALI/MSAG data to ensure that address information is consistent across these databases and the entities that maintain them. It is

Scott County's desire to implement the NENA standards for data exchange detailed in the document, "NENA Standard Data Formats for ALI Data Exchange & GIS Mapping, NENA-02-010".

5.6 Address Assignment and Maintenance

There are numerous jurisdictions responsible for address assignment within Scott County. As a consequence it is challenging to manage and update address data, ensure proper notification and encourage standards. The Consultant will research current address assignment/maintenance and information workflows between Scott County and the various jurisdictions responsible for these tasks and provide recommendations and solutions for improvement.

5.6.1 Inventory/Evaluation

Inventory and report existing county address assignment/maintenance practices as a starting point for evaluation. Chart current workflows.

5.6.2 Address Assignment Planning

With county and other stakeholder input, plan/develop/suggest new processes, tools, etc to improve address assignment and maintenance. Specifically, the county is interested in a solution that will accommodate multiple jurisdictions, leverage current technology, and bring a measure of standardization and verification to the process. Provide recommendations and diagram new workflows.

Attachment A - Scott County Requirements

A. SCOTT COUNTY INSURANCE REQUIREMENTS:

- a. The CONSULTANT shall have in force during the period of this contract, insurance as listed below:
 - i. Workers Compensation and Employers Liability Insurance meeting the requirements of the Iowa Workers Compensation Law covering all the CONSULTANT's employees carrying out the work involved in this contract.
 - ii. General Liability Insurance with limits of at least \$1,000,000 per occurrence for Bodily Injury and Property Damage. Coverage for Premises, Operations, Products and Completed Operations shall be included. This coverage shall protect the public or any person from injury or property damages sustained by reason of the CONSULTANT or its employees carrying out the work involved in this contract.
 - iii. Professional Liability Insurance with 1,000,000 per claim limits is required to cover Consultant's Professional Liability.
 - iv. Subcontractors: In the case of any work sublet, the CONSULTANT shall require subcontractors and independent contractors working under the direction of either the CONSULTANT or a subcontractor to carry and maintain the same workers compensation and liability insurance required of the CONSULTANT and name Scott County as additional insured under the General Liability.
 - v. Qualifying Insurance: Policies shall be issued by insurers authorized to do business in the State of Iowa and currently having an A.M. Best Rating of "A" or better. All policies shall be occurrence form. If Professional Liability coverage is written on a claims made policy form, the certificate of insurance must clearly state coverage is claims made and coverage must remain in effect for at least two years after final payment with the CONSULTANT continuing to furnish the COUNTY certificates of insurance. The CONSULTANT shall be responsible for deductibles and self-insured retentions in the CONSULTANT's insurance policies.
 - vi. Additional Insured: The County of Scott County, its officers and employees shall be named as additional insured on the CONSULTANT's, subcontractor's, and independent contractor's general liability insurance policies. This provision does not apply to workers compensation insurance and professional liability insurance.
- b. Certificate of Insurance Requirements
 - i. The Description area of the certificate should state: Scott County, its officers and employees are named as additional insured. List the (Project of Benefit Consultant) as the scope of services the certificate covers.
 - ii. The minimum liability limits required by the COUNTY are: (\$1,000,000).
 - iii. The following address must appear in the Certificate Holder section:

Scott County
Risk Management Department
600 W. 4th Street
Davenport, IA 52801

iv. Certificates may be sent by e-mail, fax (563-328-3285), mail or delivery to the attention of Rhonda Oostenryk. A certificate of insurance must be provided to the COUNTY prior to selection.

c. Indemnification

i. Vendor will indemnify and hold harmless Scott County against claims, liabilities, injury or damage expenses arising from any negligence or errors or omissions of Vendor.

B. OWNERSHIP OF DATA:

a. All data and other records supplied to the Consultant for this project shall remain the sole property of the County. The Consultant shall not, without written consent, copy or use such records, except to carry out contracted work, and will not transfer such records to any other party not involved in the performance of the Contract pursuant to this RFP.

C. LATE COMPLETION:

a. Should the Consultant selected as a result of this RFP fail to perform the work within the period of time stipulated in the contract, the Contractor shall pay to Scott County \$400.00 as liquidated damages per calendar day from the day of default, unless extensions of time granted by the County specifically provide for the waiving of late completion charges. The liquidated damages represent the amount estimated to be lost as a result of untimely completion.

b. Scott County shall have the right to deduct the late completion charges from any monies in its hands, otherwise due, or to become due, to the Consultant, or to sue for and recover compensation for damages for nonperformance of this contract within the time stipulated.

D. SUBCONTRACTOR:

a. The County reserves the right to approve any subcontractor utilized by the prime Consultant and inclusion of any subcontractor in your proposal shall not be misconstrued as implied consent by the county to use that subcontractor.

If it is your firm's intent to abide by the Scott County project requirements as described, please have an authorized representative sign below.

Consultant Company Name

Authorized Signature

Title

Date

Attachment B - Project Fee Schedule

Fee Description

Coordination/Project Management (§4.2):	\$ _____
Street Centerline Database (§4.3):	\$ _____
Address Point Database (§4.4 <i>without</i> field data collection, §4.4.1.9):	\$ _____
MSAG/ALI Database Development/Update (§4.5):	\$ _____
Supporting Data Layers (§4.6):	\$ _____
Integration/Maintenance Plan (§ 5):	\$ _____
Subtotal	\$ _____
Field Data Collection (§4.4.1.9):	\$ _____

If any part of the project will be completed outside of the United States by either the Consultant or a subcontractor thereof, the Consultant is required to provide a project fee which reflects the cost of the project using domestic labor versus the project costs using foreign labor. The Consultant must indicate their intent to comply with this requirement and will be considered non-responsive should they fail to disclose this information. If no portion of the work is to be performed outside of the United States, please enter "N/A" next to the "Total Project Fee (Foreign)" line item.

TOTAL PROJECT FEE (FOREIGN) \$ _____

TOTAL PROJECT FEE (DOMESTIC) \$ _____

Consultant Company Name

Authorized Signature

Title

Date

Attachment C – Proposal Checklist

Please be sure to include all checklist items in your proposal and have the person preparing your proposal initial each item as it is verified. Include a copy of the initialed checklist with your response.

- _____ Letter of Transmittal
- _____ Table of Contents
- _____ Executive Summary
- _____ Scope of Work Response
- _____ Integration and Maintenance Plan Response
- _____ Qualifications
- _____ Signed Project Fee Schedule
- _____ Project Schedule
- _____ Personnel Overview/Subcontractor Disclosure
- _____ Attachment A – Scott County Requirements (signed)
- _____ Attachment B – Project Fee Schedule (signed)
- _____ Attachment C – Proposal Checklist
- _____ One printed copy and one PDF file of your RFP response

Attachment D – Street Centerline Sample Data Structure

Additional Scott County required fields are shaded blue. Others are NENA standard. (Note that street name alias fields/tables referenced in §4.3.2.4 are not shown).

Name	Label	Field Type	Field Length	Data Description
Segment ID	SGID	Long Integer	10	Unique Road Segment ID number
Left Add Low	LLO	Long Integer	10	Lowest address on left side of street in ascending order, theoretical range
Left Add High	LHI	Long Integer	10	Highest address on left side of street in ascending order, theoretical range
Right Add Low	RLO	Long Integer	10	Lowest address on right side of street in ascending order, theoretical range
Right Add High	RHI	Long Integer	10	Highest address on right side of street in ascending order, theoretical range
Left Add Low Physical	PLLO	Long Integer	10	Lowest address on left side of street in ascending order, physical range
Left Add High Physical	PLHI	Long Integer	10	Highest address on left side of street in ascending order, physical range
Right Add Low Physical	PRLO	Long Integer	10	Lowest address on right side of street in ascending order, physical range
Right Add High Physical	PRHI	Long Integer	10	Highest address on right side of street in ascending order, physical range
Pre Modifier	PRM	Text	12	A word or phrase that precedes all other elements of the street name and modifies it, but is separated from the street name by a street name pre-directional and/or pre-type.
Prefix Directional	PRD	Text	2	Leading street direction prefix.
Street Name	STN	Text	60	Valid street name
Street Suffix	STS	Text	4	Street type as defined by the USPS Publication 28 Appendix C
Post Directional	POD	Text	2	Trailing street direction suffix.
Road Class	ROC	Text	3	Road class; reference standard FCC major categories or similar
One-way	ONW	Text	1	One way road classification.
MSAG Community Name Left	MCL	Text	35	Valid service community name as identified by the MSAG on the left side of the street
MSAG Community Name Right	MCR	Text	35	Valid service community name as identified by the MSAG on the right side of the street
County ID Left	COL	Long Integer	5	County Identification code (FIPS code) on the left side of the street in ascending order.
County ID Right	COR	Long Integer	5	County Identification code (FIPS code) on the right side of the street in ascending order.
Source Agency	SOD	Short Integer	5	Agency that last updated the record
Date Updated	DLU	Date	10	Date of last update; format (CCYY-MM-DD)
ESN left	ESL	Text	5	Emergency Service Number on the left side of the street
ESN right	ESR	Text	5	Emergency Service Number on the right side of the street
ZIP left	ZPL	Long Integer	5	Valid ZIP code on the left side of the street
ZIP right	ZPR	Long Integer	5	Valid ZIP code on the right side of the street
Federal Functional Classification	FED	Short Integer	1	This field indicates the state functional classification of the road segment.
Road exists	RDX	Text	1	Indication of whether road is built (exists) or simply platted
Route Code	RTE	Short Integer	1	This field indicates whether the segment is part of a road system
Speed Limit	MPH	Short Integer	2	Impedence field (speed in MPH) for routing purposes
Elevation From	ELF	Short Integer	1	Elevation value at start of segment (for routing purposes only)
Elevation To	ELT	Short Integer	1	Elevation value at end of segment (for routing purposes only)
Flag	FLAG	Text	10	Identification of addressing issues to be flagged using one or more error codes.
Notes	NOTE	Text	255	Discretionary notes field to store additional special or circumstantial information about the feature.

Attachment E – Address Point Sample Data Structure

Additional Scott County required fields are shaded blue. Others are NENA standard. (Note that street and common name alias fields/tables mentioned in §4.4.2.5 are not shown. Also see sub-address table, Attachment F).

Name	Label	Field Type	Field Length	Data Description
Community ID	CID	Long Integer	10	Community FIPS number
Site ID	SIN	Long Integer	10	Unique Site ID number
Site Address Number	SAN	Long Integer	10	The numeric identifier for a land parcel, house, building or other feature, as defined by the official address authority for the given jurisdiction.
Site Address Number Suffix	SANSUF	Text	8	The non-integer portion of the identifier for the house, building or other feature which follows the address number itself, as defined by the official address authority for the given jurisdiction. (e.g. 1/2, B, etc).
Pre Modifier	PRM	Text	20	A word or phrase that precedes all other elements of the street name and modifies it, but is separated from the street name by a street name pre-directional and/or pre-type.
Prefix Directional	PRD	Text	2	Leading street direction prefix.
Street Name	STN	Text	60	Valid street name
Street Suffix	STS	Text	4	Street type as defined by the USPS Publication 28 Appendix C
Post Directional	POD	Text	2	Trailing street direction suffix.
Post Modifier	POM	Text	20	A word or phrase that follows all other elements of the street name and modifies it, but is separated from the street name by a street name post-directional and/or posttype (e.g. 12th St N Extended , 32nd Ave A , etc).
Street Address	STRADD	Text	126	[PRM] + [PRD] + [SAN] + [SAN2] + [STN] + [STS] + [POD] + [POM]
Zip Code	ZIP	Long Integer	5	Valid Zip Code
Structure ID	STRUCTID	Text	10	Unique structure ID
Building Type	BLDGTYP	Text	20	The type of structure (when several structures are found at the same address). E.g., Building B , Tower 2 , Block 5 , etc.
Building Identifier	BLDGID	Text	10	The letters, numbers, words or combination thereof used to distinguish one structure from another when several occur at the same address (e.g., Building B , Tower 2 , Block 5 , etc).
Occupancy Address	OCCADD	Text	30	[BLDGTYP] + [BLDGID]
ESN	ESN	Text	5	Emergency Service Number associated with this House Number, Street Name and Community Name.
Site Type	STY	Text	2	Type of Structure – Classification Field
Source of Data	SOD	Text	5	Agency that last updated the record
Date Updated	DOL	Date	8	Date of last update. Format: CCYYMMDD
Address Status	STATUS	Text	1	Status of address point feature (active or inactive). E.g. unimproved subdivision lots are inactive, but may be assigned street address.
Flag	FLAG	Text	10	Identification of addressing issues to be flagged using one or more error codes.
Notes	NOTE	Text	255	Discretionary notes field to store additional special or circumstantial information about the feature.

Attachment F – Subaddress Sample Data Structure

Additional Scott County required fields are shaded blue. Others are NENA standard, though NENA keeps all addressing information in one table whereas this is related to the address point feature with a one-to-many relationship on the Site ID field.

Name	Label	Field Type	Field Length	Data Description
Site ID	SIN	Long Integer	10	Unique Site ID number
Floor Type	FLOORTYP	Text	20	The word describing the horizontal division of a building where an address is located (e.g. 2nd Floor, Floor 3, Mezzanine Level 1, etc.)
Floor ID	FLOORID	Text	10	The numbers, letters, words or combination thereof distinguishing one floor from another within a structure (e.g. 2nd Floor, Floor 3, Mezzanine Level 1, etc.)
Unit Type	UNITTYP	Text	20	The word describing the type of occupancy within a building or structure (e.g. Apartment 12C, Suite 4, etc.)
Unit Identifier	UNITID	Text	10	The numbers, letters, words, or combination thereof distinguishing one occupancy from another within a given address (e.g. Apartment 12C, Suite 4, etc.)
Occupancy Address	OCCADD	Text	60	[BLDGTYP] + [BLDGID] + [FLOORTYPE] + [FLOORID] + [UNITTYP] + [UNITID]
Source of Data	SOD	Text	5	Agency that last updated the record
Date Updated	DOL	Date	8	Date of last update. Format: CCYYMMDD
Flag	FLAG	Text	10	Identification of addressing issues to be flagged using one or more error codes.
Notes	NOTE	Text	255	Discretionary notes field to store additional special or circumstantial information about the feature.