

## GIS: STARTING SMALL IS SOMETIMES THE BEST WAY TO GO

Ever since I learned about Geographic Information Systems (GIS), I have appreciated the value GIS offers my clients and the benefit to managing enormous amounts of data.

Unfortunately, not many consulting firms have figured out how to start small enough for a public entity to afford the start-up yet provide access to enough information to make the effort worthwhile. Many times, firms focus on building the Cadillac first thing, which is often out of reach for most budgets and probably beyond the client's needs.

But Barker Lemar has figured out a way to start small and then grow the system to meet client's needs and budget.

Barker Lemar starts the process by listening to our clients, so we can determine their priorities and needs. For a city, it could be: signage, signals, sewer, water, private utilities, road conditions, complaints, police reports, inspections/permits, maintenance, etc.

Once the needs are determined, Barker Lemar focuses in on the highest priority and works with the client to determine exactly what data they need (elevations, materials, dates, condition, construction data...), why they need it and how they will use it. The result is an affordable and useful tool to assist in managing their community.

### Everything Starts Small

Joe has been the public works manager for two decades and is thinking of retiring in a couple years. The last sewer system map was hand drawn over 25 years ago, and most of the work done since then is sitting in Joe's mind. Therefore, it is decided by the city clerk that it is a good idea to get the sewer system information into a GIS.

Since the city's budget is tight, the city clerk decides it would be best to update the original map electronically with Joe's input. The old map will be used to define the general location of the sewers in relation to the GIS data already available from the county, which has street and parcel data as well. Additional information, such as direction of flow for each segment is indicated along with pipe material, pipe diameter, and other pertinent data that Joe remembers.

The result is an updated sewer map that becomes a

living document. As additions or changes are made to the system, they can easily be made and a new map printed for city staff to use. Not to mention, when Joe retires, everyone can rest assured that they've got the current information in both electronic and hard copy format.

A couple years later, the city may start entering simplified pavement condition information based on "windshield surveys" of their streets, which they use to develop their Capital Improvement Program.

Then years down the road, the fire department decides to work with the water department to update their hydrant map. The water department takes flow and pressure measurements at all the hydrants, has them entered into the GIS, and prints a map for the fire department.

As the city grows, the building department decides it would be helpful to electronically connect their building permits to the county's GIS for the assessor to use. A simple interface is developed to export the information from the city to the county. The result is fewer errors and less staff time needed to prepare reports for the county.

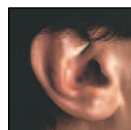
### What next?

Just like any other information system, GIS requires maintenance. Without the proper commitment to maintain information, it becomes obsolete and the system is no longer a tool but a hindrance. That is why Barker Lemar's process of starting small makes it easier to get your feet wet with GIS.

Barker Lemar has developed systems for Dubuque County, Metro Waste Authority, City of Des Moines, and Hy-Vee. (And several of our clients have continued to grow their system after seeing the benefits of GIS.)

For more information on GIS systems please contact Mike Martin, GIS Specialist at 800.707.4248 or [mmartin@barkerleamar.com](mailto:mmartin@barkerleamar.com)

LISTENING ▶ UNDERSTANDING ▶ SOLVING ▶ IMPLEMENTING



# Regulatory Update

## EPA FINALIZES ALL APPROPRIATE INQUIRY (AAI) RULE

On November 1, 2005, the U.S. Environmental Protection Agency (EPA) published a final rule in the Federal Register setting federal standards for the conduct of All Appropriate Inquiries: 40 CFR Part 312 – Standards and Practices for All Appropriate Inquiries. This marks the first time an environmental due diligence has ever been codified in a federal regulation.

### What is an All Appropriate Inquiry ?

An “All Appropriate Inquiry” or AAI is the process of evaluating a property’s environmental condition and assessing potential liability for any contamination.

The purpose of an AAI is to meet one of the requirements that will qualify a buyer for the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). To successfully use the innocent landowner defense, an owner must prove that they “...did not know, and had no reason to know, that any hazardous substance... was disposed of on, in, or at the facility.” To prove that they “had no reason to know”, CERCLA requires that, at the time of acquisition of a site, the purchaser exercised “...all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice...”

### Does it affect me?

The AAI rule affects any party that may potentially claim protection from CERCLA liability as an innocent landowner, a prospective buyer, or a contiguous property owner. All parties who receive grants under EPA’s Brownfield’s Grant program to assess and characterize properties must comply with AAI standards.

This regulation may affect most directly those persons and businesses purchasing commercial property or any property that will be used for commercial or public purposes and who may, after purchasing the property, seek to claim protection from CERCLA liability for releases or threatened releases of hazardous substances.

### How is Barker Lemar equipped to serve you better?

The new final regulation will be effective November 1, 2006 and at Barker Lemar, we are already in the process of modifying our format to meet the new All Appropriate Inquiry requirements. Barker Lemar’s Phase I Site Assessments presently meet or exceed the requirements of ASTM E 1527-00 Standard Practice for Environmental Site Assessments which is the current interim standard established by Congress for all

appropriate inquiries.

The new AAI rule defines the professional qualifications to be met by the environmental professionals overseeing Phase I work and interpreting results. At Barker Lemar, the staff conducting all appropriate inquiries already meets or exceeds those qualifications to ensure that all phases of your project will be handled by qualified environmental professionals.

To get further information on All Appropriate Inquiries / Phase I & II Environmental Site Assessments or to request a proposal, contact Christy Jaworski or Sid Juwarker at 800.707.4248.

### Key Dates for SPCC Rule Compliance

Facilities Operating: (Fixed & Mobile)	Must:
Before 8/16/02:	Amend existing Plan by 2/17/06 and implement Plan by 8/18/06.
Between 8/16/02 and 8/18/06:	Prepare and implement Plan by 8/18/06.
After 8/18/06:	Prepare and implement Plan before starting operations

Additional SPCC compliance information can be found at: [www.epa.gov/oilspill](http://www.epa.gov/oilspill) or by contacting Tom Draur, P.E. at 800.707.4248 or [tdraur@barkerleamar.com](mailto:tdraur@barkerleamar.com)

### EMPLOYEE SPOTLIGHT:

Name: John Franklin, P.E., L.S.

Title: Senior Project Engineer

Technical Expertise: Municipal Engineering and Land Surveying

Professional Goals: To do quality work, to develop loyal and long-term relationships with clients and to produce a work product as efficiently and profitably as possible.

Education: Iowa State University, 1971, B.S., Civil Engineering

Hobbies: Fishing, hunting, buckskinning, canoeing, camping, blacksmithing, fabrication of gold and silver jewelry, rock hunting and prospecting for gold, and preparing stones to use in jewelry.

Family: Wife, Judy of two years, son, Troy (34), daughter Brenda (31), son-in-law Craig and grandson Zane, step-son Matt (30) and step-daughter Jennifer (32)



## BARKER LEMAR CELEBRATES 10TH YEAR IN BUSINESS AND RELOCATION TO NEW CORPORATE OFFICES



### AFTER TEN YEARS IN BUSINESS I KNOW THIS MUCH IS IMPORTANT...

Barker Lemar Engineering Consultants is a typical American business story about two people creating a business from a special interest, prior experience, a lot of hard work and the evolution of a special team of people. July of this year Barker Lemar celebrated its 10th year in business and relocation to new corporate headquarters.

In 1995 Barker Lemar Engineering Consultants was founded as Barker Environmental Services. Our original focus or special interest was on solid waste engineering services. Since that time we have evolved into a full service civil and environmental engineering firm. We have established a benchmark for and a company philosophy that is committed to customer care and the use of leading edge technologies to produce innovative and economically sound solutions for our clients.

Over the past 10 years we have refined our knowledge of state and federal regulations, learned more efficient and economical approaches to design and continuously strengthened our commitment to producing successful outcomes for both our clients and our firm.

Over the past ten years we have enjoyed much suc-

cess at Barker Lemar. The success can be attributed to many people including our clients, vendors and staff. However our long term success is attributed to our corporate culture and we acknowledge and foster it every day.

The center of our culture revolves around trying to do what is best for our clients and staff as a first priority. We fully understand the necessity of profit and work hard to provide a fair profit for the company and its shareholders everyday, but after ten years in business I know this much is important; that no matter how busy you get you must see each client's or staff member's concern as the most important - they do. I have also come to understand that a company's corporate culture is critically important and has to be earned over a long period with consistent and predictable actions.

We also believe our dramatic growth, since 1995, is a direct result of our commitment to the highest standards of quality and professionalism; to a sincere concern for our clients, staff and communities; and to our insatiable desire to always improve. In closing we would again like to thank the hundreds of clients in the industrial, commercial and governmental sectors we have had the privilege to work for and with - we are grateful.

Mike Barker, CEO/President



Merry Christmas  
& Happy New Year  
2006



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ENGINEERING CONSULTANTS  
**BARKER LEMAR**

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## SOLID WASTE COMPREHENSIVE PLAN UPDATES... ...YOU LEARN SOMETHING NEW EVERYDAY

**“The innovative planning tools performed by Barker Lemar identified new solid waste opportunities for our planning area to investigate. Our board greatly appreciated the use of these planning tools.”**  
- David Honkomp, Northwest Iowa Area Landfill Manager.

That is the goal of solid waste planning...to learn how to continue to improve the wide variety of solid waste services Iowa planning areas provide.

Barker Lemar has recently completed and submitted comprehensive plan updates (Plan) for three Iowa solid waste agencies representing eight counties. The Plans are designed to meet the requirements of the recently updated “Solid Waste Comprehensive Planning Requirements” as listed in the IAC Chapter 101. More importantly, Barker Lemar designed the plans to serve as a dynamic waste management planning tool for the solid waste agencies.

Barker Lemar created a Municipal Solid Waste Satisfaction Survey (Survey) and a Vision Casting Session (Session) process to encourage waste agency member communities and the public to participate more actively in solid waste planning. These planning tools help solid waste agencies, member communities, and the public identify and prioritize solid waste service needs. The results of the Surveys and Sessions allow for the development of a comprehensive implementation timeline with clear project objectives and milestones.

For information please contact Jeff Phillips at 800.707.4248 or [jphillips@barkerleamar.com](mailto:jphillips@barkerleamar.com).

## RECREATIONAL TRAIL FUNDS AVAILABLE IN IOWA:

The Iowa Department of Transportation is reactivating the State Recreational Trail Program with applications due January 2, 2006. Funding in the amount of \$700,000 will be available for the development of trails and trail related amenities. The application and program guideline information can be found at the following website: [http://www.sysplan.dot.state.ia.us/fedstate\\_rectrails.htm](http://www.sysplan.dot.state.ia.us/fedstate_rectrails.htm). For this particular round of applications we will be looking for projects that can be constructed in the near future. If you have questions contact me at [steven.bowman@dot.iowa.gov](mailto:steven.bowman@dot.iowa.gov) or (515)239-1337.

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