Internet CONSTRUCTION

This article describes how to use the Internet in construction solicitation to save money and cut cycle times. It includes technological advancements that allow contractors to view drawings on screen and do estimates on the computer.

By Major Anthony P. Burns, USAF, CPCM

Have you found yourself with too much free time on your hands lately? So much money in your budget that you can't spend it all? Are you the type of individual who doesn't need to make your supervisor happy?

Well, I don't know what your problem is, and I couldn't help you if I wanted to. However, I do have an idea for anyone who insists on mission success and would like to obtain substantial savings at the same time. This idea is really exciting, because it's easy to do and saves all kinds of time and money. The catch is-you are going to have to change the way you do *business.*

Let me show you how your activity and civil engineering can use the Internet to reduce your base printing costs by approximately $100,000 per year, take a huge bite out of your base's mailing costs, and free up some of your staff to work on those important issues you've been wanting to tackle.

The basic concept here is to harness the worldwide access, rapid flow of information, and computational power of your personal computer and the Internet. In the past, we've had to sort through stacks of paperwork; wait for mail to transit America; print, sort, package, and label solicitation packages; and answer countless contractors' calls on the same questions. Soliciting on the Internet reduces what used to be a 25-day process down to less than two days.

Here's how it works. A contractor will access your Web page of business opportunities. There the contractor can look at current opportunities, see who has a bid on specific jobs, and ask questions or read answers on current solicitations. He also can download all the common clauses used at the base in question and access all clauses in full. Finally, this screen will give him access to what he needs to do if this is his first experience on the page.

Let's say the contractor wants to look at solicitation opportunities. He selects a construction job that looks interesting and clicks "GO!". Before he may access the solicitation, he must register on the automated bidders list. This allows us to generate an automated list that is available for subcontractors to contact and provide bids.

See the savings start to add up? That means we don't answer calls and spend time mailing, faxing, typing, and filing the bidders list. We also program the system to generate an e-mail list of bidders per project to use for later communication, resulting in more savings. The contractor can pull down and use a list of previous registrations if he has been here before. He then clicks on the registration button.

Next, the contractor is taken to a screen that lists all the files associated with this solicitation with a short description of the job. Here he can download the main package of specifications, drawings, and solicitations; any amendments that may have occurred; site visit information; name of the apparent low bid/contract award; and the like. If the contractor has questions, he can e-mail the buyer. Instructions on downloading documents and access to free reader programs also are provided. Let's assume he now clicks on the first file. The Web browser package will ask him to save the file; then he will open it by double clicking. After loading the drawing reading program (in this case we are using SourceView), the contractor can view the drawings.

Now here is the big advancement! In the past, we couldn't electronically view the drawings. But now drawing reader programs allow us to overcome that hurdle, and you can see actual computer-designed drawings. You can zoom in, calibrate your computer to the drawings scale, and actually do estimates on

the computer. It's a mini-CAD program! Contractors won't need paper copies! If they insist on paper, the program can print to various scales on regular paper, or even print a E-size drawing (a standard construction drawing that measures 36" x 42"). Blue line drawings are a thing of the past, which means we save on printing and mailing costs and hassles.

This is how the program works. When the contractor loads the drawings, he will see the full view screen. By clicking and dragging the mouse, he can select an area to zoom in on. The first thing he will do is calibrate his measurements by zooming in on the scale on the drawing and entering the scale and type of measurement. A click of the mouse brings up the zoom out, and he can pick an area to measure to do estimates online. This online estimating is similar to what architectural and engineering firms do with their megasystems. The best part is that the contractor doesn't have to pay for the program because the viewer is free. The contractor needs only a computer and access to the Web. He also could buy a printer to print E-size drawings if he believes he needs one. Bottom-line is this is a win/win situation: the government can reduce costs and effort, and the contractor has increased access and reduces his costs.

The benefits are substantial. We estimate about $1,000,000 savings in printing costs alone in Air Force Material Command (AFMC) (for example, Aeronautical Systems Center (ASC), Wright Patterson Air Force Base (WPAFB), saved $125,000 in paper reproduction costs on 14 average-sized construction contracts over a period of six months).

We will put the solicitation on the Web for immediate access when we synopsize, saving around 20 days. Since access is virtually instantaneous, we could cut mailing time built into our minimum time requirements, leading to staffing savings. Another benefit to bidders lists are automatic. Soon we will put all common clauses on the Web just refer to the Web site in the solicitation. We won't use full text clauses because they will be available through the Web (more staffing savings).

These two changes will reduce time and effort in writing solicitations. There won't be any of the printing hassles we currently deal with. The most liberating concept is that we can use the majority of the typical phone calls we get by placing a question and answer page there. We might even reduce the need for modifications later on, because of the ease in asking questions, the right questions could be asked before award.

Several issues are being worked out to make most of those time savings a reality, but the cost savings are real and available today. At AFMC we plan to make it a mandatory program in fiscal year 1999. Meanwhile we are working to spread the concept, train our people and contractors, and work on trial projects to make sure we know what we are doing.

The thing to remember, easy! WPAFB'S ASC saved $125,000 in printing costs on 14 projects. You can do it too. All you need is a Web master, a supervisor that if he will pony up the money you'll give it back in spades, with interest. In today's installation budgets, commanders will appreciate contracting and civil engineering for bringing in these savings.

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