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ENGINEERS & SURVEYORS

Civil Engineering & Land Surveying

Just a few of the frequently asked questions faced everyday

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Q&A

It's never easy to narrow down a short list of frequently asked questions. That's why some web site FAQ pages go on and on and on. This holds true in the world of civil engineering and surveying. There are so many yet a few do stand out as realtors and developers are faced with new projects and opportunities. Here are just three...

Do I need a Phase I Environmental?

The short answer, yes. The more important question is why. In essence, a Phase I Environmental Site Assessment (ESA) is a matter of protection for those buying and/or developing a property. Proper due diligence is always recommended and important to avoid costly, time-consuming issues further along in the process.

Also referred to as a Preliminary Site Assessment or Level One Environmental Site Assessment, this historical and current review of site activities digs deep to identify potential or existing environmental health hazards or liabilities. Such unknown contaminants may include underground storage tanks, asbestos and lead-based paint, to name a few. An ESA is an economical way to protect buyers and limit their liability. This ASTM procedure is also required by lender banks and creditors as it helps determine if there are any environmental risks that could affect the property value or borrower's finances.

What can be built on this site and how big?

"What is a conceptual plan?" A question asked almost every day and probably more than a few times. In essence, a conceptual plan results from the premise of "thinking before acting" and the basic function of management whether a simple grocery list or in the case of real estate, a large development project such as a new mixed use or multi-family site.

First is the question of zoning. Is it zoned Residential, Commercial, Industrial or ? Enlisting the services of a professional civil engineer for what's commonly referred to as a conceptual plan is step one. In general, this begins with a broad evaluation and review as much existing site data as is available, including tax maps and prior surveys that show the property boundaries, topography, wetlands and other such details. Consideration is also given to parking allotment, ingress and egress access, circulation, trash location, utilities and even surrounding properties.

Once complete, the conceptual plan is put to good use by all involved – the development, the township, the architect and especially the commercial real estate professional marketing the property.

What type of survey is required?

While it is taboo to answer a question with another question, when it comes to knowing what type of land survey is needed, it all depends on its purpose. There are a number surveys common in the world of real estate – boundary, topography and ALTA are probably the top three.

A boundary survey, as the name implies, simply defines a property's precise boundary lines and often includes the location of any easements, encroachments or improvements. The addition of topographical data, or the elevations and contours of the land described, complements the boundary detail. The topographic survey highlights any man-made and natural structures on the land. From trees, slopes and streams to buildings, utility poles and manholes, it specifies where different features are located.

Simply defined, an ALTA survey is a boundary survey plus a lot more. It expands beyond a standard state-dictated boundary survey and requires surveyors to collect and document data from a combination of records and fieldwork to support title company and real property insurance requirements. These more detailed survey standards are national and include a multi-part, multi-dimensional process based on a TABLE A.

Since no two “deals” are the same, it can be hard to generalize. Land development most often requires a boundary survey with topography. Subdividing a property generally involves a boundary survey with subdivision plan. For title transfers, a more comprehensive ALTA survey is typically required.

To answer these questions (and any number of others), the best advice is to consult a professional civil engineering land surveying firm

For more information, contact Stout & Caldwell, LLC at 856-786-2202 or djc@stoutcaldwell.com.

About Daniel J. Caldwell

Chief Marketing Officer Member, Stout & Caldwell, LLC

Daniel J. Caldwell is co-founder and principal with Stout & Caldwell, LLC, a leading provider of professional and technical engineering and consulting services in Southern New Jersey. His primary focus is new business development and marketing of the firm, but also assists with office oversight and proposal writing. Dan has more than 20 years experience working in the environmental industry as a NJPDES permit compliance professional for a NJDEP Certified Testing Laboratory and he sat as the Environmental professional for the Mansfield Township Environmental Commission from 2004-2018. With this expertise, Dan also works with the team on Phase I Environmental Assessments and sampling, surveying and soil borings. Some notable client projects include Conifer/MEND Springside School in Burlington Township, NJ, Jewish Community Center Campus in Princeton, NJ, Merion Caterers Facility in Cinnaminson, NJ and Urban Promise Spirit Building in Camden, NJ. Dan is active in the business community. He is a trustee of the foundation board at Rowan at Burlington County College, Past President of Businesses Committed to South Jersey, on the Friends of MEND Board along with many other community service organizations and non-profits.

About Stout & Caldwell, LLC

Stout & Caldwell Engineers is a provider of professional and technical engineering and consulting services to commercial real estate development, affordable housing, residential developers, retail developers, industrial developers, food manufacturers, military contractors, construction firms and non-profit organizations. Founded in 2004, the firm specializes in site plan design, land survey and environmental solutions, including flood elevation certificates in the tri-state area. Stout & Caldwell Engineers serves clients throughout New Jersey, Pennsylvania and Delaware from its headquarters at 705 US Route 130 South in Cinnaminson, NJ. For more information, contact (856) 786-2202 or visit stoutcaldwell.com.