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from the ground UP

News on Land Use Throughout the Region

FALL 2007



The Bulle Rock Resident's Club Raising the Bar - Again

Since Bulle Rock's inception, the golf course and residential community have set new standards for quality in the golf and development industry. Now the Resident's Club raises the bar yet again. Opened Memorial Day weekend, the Club provides residents with a full complement of facilities and activities and has truly become the heart of the community.

The Resident's Club includes a variety of amenities for community residents to enjoy. Inside there is a formal ballroom, an Internet café, reception area, billiards room and bar, card/multi-purpose rooms, fully equipped fitness and aerobics rooms, locker rooms with steam and sauna facilities, and an indoor pool. Outside there is a wonderful pool, cabana, expansive sunbathing deck, tennis courts, putting green, bocce court, and a beautiful terrace capturing the great views of the Bay. Coupled with these facilities is an exceptional staff that has created a variety of resident clubs and events to engage the residents throughout the year.

The quality of the Resident's Club was the result of careful planning, engineering, design, marketing, and a construction process that involved a great team of professionals – most

notably, the Manekin Corporation. The Club was planned at the highest point in the Community, offering spectacular views of the community below and the Chesapeake Bay. To take advantage of this prominent location, the site plan for the Club carefully balanced the proposed building with the required parking, outdoor recreation facilities, and necessary services.

Building on the site plan, the architecture for the Club embraces the community's horse racing theme, perfectly frames the views beyond, and includes the highest level of finishes and interior design possible. Finally, the landscape design enhances the architecture and provides an excellent transition between the primary community entrance, the Club, and the residences. Each of these elements is



critical to success; collectively, they create a memorable place that has set a new standard for residential community centers.

MRA's Laurel, Abingdon, and Towson offices were an integral part of this incredible process and facility. We would enjoy bringing our experience to your community. For additional information please contact Sean Davis at sdavis@mrags.com.

Sean D. Davis, RLA
Principal
MRA Laurel, MD office



Things Will Get Better, They Always Do

By: Anirban Basu
Chairman & CEO
Sage Policy Group, Inc.



Cycles are Inevitable

Economic growth invariably fluctuates from period to period. Though there is a well-established long-term potential gross domestic product (GDP) growth rate of roughly 2.9 percent (Congressional Budget Office) at any given time, it is quite likely that the economy will be expanding either above or below that rate. Alternating cycles of above and below average growth are superimposed upon this long-term growth rate, but over time, the average rate is likely to be generated.

What's more, economic downturns are inevitably followed by periods of robust expansion which eventually give way to the next economic correction. There have been 21 recessions recorded since 1900 (National Bureau of Economic Research) and each time the nation has bounced back to become more prosperous than it had been before the period of economic contraction.

This pattern is also apparent with many key components of the U.S. economy. Housing represents a prime example. Due to shifting factors such as interest rates, the pace of household formation, broader demographics, income growth, expectations, and tastes and preferences, the housing market also tends to experience alternating periods of expansion and contraction.

It is by now well-known that the housing market has been in a period of contraction since mid-2005. Disengaged buyers, sharply diminished capital access among those with (continued on page 2)

Legislative Update: The Maryland Stormwater Management Act of 2007

The Act

Under pressure from a number of environmental organizations, the Maryland legislature adopted a new stormwater management (SWM) act, which was signed into law by Governor O'Malley in April of this year. MRA worked closely with Home Builders Association of Maryland (HBAM), Maryland State Builders Association (MSBA), Maryland Department of the Environment (MDE), and others as this bill was debated in the legislature, and we were successful in getting a number of onerous provisions out of the bill.

What's New

The only significant change mandated in the new law is a requirement that Environmental Site Design (ESD) be applied "to the maximum extent practicable." Historically, ESD (or LID if you prefer) has been voluntary. The Act makes it mandatory.

The greatest impediment to ESD has always been local codes and ordinances. The Act requires MDE to adopt regulations that will require all local governments to adopt ESD and to remove all impediments to ESD from their zoning codes, ordinances, public works policies, and the like.

This is not necessarily a bad thing for the development industry, and could prove to be a very good thing, depending on what local

governments do with it. Not surprisingly, some of the loudest complaints about the Act have come not from the development community, but from local governments. Some jurisdictions will navigate the process without too much difficulty. But for some jurisdictions, compliance with the Act will probably prove to be a long and difficult process, one made all the more difficult by the fact that there is no new funding available to assist local governments with this process.

What's Next

The next step is for MDE to adopt changes in its SWM regulations pursuant to the Act. The Act requires MDE to report its progress to the legislature by December 1, 2007. However, Secretary Wilson has adopted a self-imposed deadline of early December for first publication in the Maryland Register, with a tentative date for final adoption early in 2008.

MDE is committed to getting this unfunded and unwanted legislative mandate behind them as quickly as possible, and MDE has already indicated that they will be making only modest changes to the 2000 Maryland Stormwater Design Manual. The hard work will come after the new regulation is adopted as local governments wrestle with ESD and removing all impediments to ESD – a process that could easily take several months to a year, and maybe longer in some jurisdictions.

Given the time it will likely take for local jurisdictions to adopt new ordinances, plus the application of reasonable transition clauses, it will likely be quite some time before we begin to apply the new Act to our projects.

Stay Involved

There is a "consortium" of environmental organizations that are pushing MDE to place in COMAR a number of onerous provisions that they could not get from the legislature. So far, MDE has resisted this effort and has committed to staying within the language of the new statute. I strongly recommend that everyone stay in close contact with HBAM, MSBA or other organizations and assist MDE in keeping this commitment.

Where to Go for More Information

As always, a good source for updates on this Act and on other issues is this newsletter. And HBAM, MSBA and other organizations remain very much involved in the process and are also good sources. For a copy of the Act and other regulatory updates, I suggest the MDE website:

<http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/index.asp> or, <http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/swm2007.asp>



[Programs / WaterPrograms / SedimentandStormwater / swm2007.asp](http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/swm2007.asp)

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Economic Outlook

(Anirban Basu - continued from pg. 1)



less established credit histories, higher adjustable rates, a rising inventory of unsold homes, heightened mortgage delinquencies and mounting foreclosures all suggest that the housing market will endure further turbulence in the months ahead.

But invariably, recovery shall follow. As a particularly stark example, the housing

downturn that afflicted the Los Angeles area between 1993 and 1998 brought home prices down nearly 20 percent. But that downturn was preceded by a 48 percent expansion in home prices between 1987 and 1990 and was followed by a 35 percent expansion over the period 2000 to 2003. Similar patterns have been evident in much of New England and Texas in recent decades.

Likely Timing of Recovery in Maryland and Beyond

Despite the recent reduction in homebuilding activity, the active inventory of unsold homes has been rising rapidly throughout much of the state. In Harford County, for instance, the active inventory is now 1,994 homes, compared to 853 two years ago. In Baltimore

County, the active inventory rose from 1,632 to 4,388 over that period, while the corresponding figures in Cecil County and Baltimore City are 476 to 1,007 and 2,050 to 5,700, respectively, according to the Maryland Association of Realtors.

The implication is that things will get worse before they get better. Many existing home sellers are just now clueing into the fact that they need to price their homes less aggressively to attract prospective purchasers. While this spreading realization will at some point help to slow the growth in active inventory, it will place downward pressure on the prices that homebuilders can expect to charge.

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Overcoming Vapor Intrusion Concerns

Vapor intrusion is the migration of volatile chemicals from the subsurface into overlying buildings. These chemicals may include volatile organic compounds (e.g., benzene, PCE), select semi-volatile compounds, and some inorganic analytes, such as elemental mercury (the silver liquid we played with as children) and hydrogen sulfide. These chemicals may pose a risk to building occupants and present the developer or builder



View of a synthetic vapor barrier with the application of a spray-on impermeable sealer within a townhome's foundation.

with potential liability. From a regulator's standpoint, contamination that is left on a property can heighten the concern that indoor air may be degraded by potentially dangerous chemical vapors.

In the past, impacted soil and groundwater were the primary concerns from a development standpoint. However, with the wide acceptance of site capping with asphalt and concrete, and implementation of institutional controls (e.g., deed restriction of groundwater use, strict homeowner association bylaw limitations on property use, etc.), vapor intrusion is becoming a common regulatory hurdle for many impacted properties.

Most mid-Atlantic states have adopted some type of formal guidance for evaluating and remediating the risks associated with vapor intrusion. The following is a success story at a residential community impacted with volatile organic compounds (VOCs) that recently obtained closure pursuant to Maryland Department of the Environment's (MDE) Voluntary Cleanup Program. After completion of a Phase I and II Environmental

Site Assessment and "hot spot" remediation of soil and groundwater, the remaining environmental impacts beneath a future 16-unit townhome development were addressed through implementing an MDE approved Response Action Plan (RAP). The RAP specified that the future developments in the contaminated area should be constructed with measures to restrict VOC vapor infiltration and migration originating from the contaminated soil and groundwater. The townhouses were equipped with synthetic vapor barriers and passive vapor mitigation systems to eliminate VOC vapor infiltration into the buildings.

Post-construction confirmatory indoor air samples documented that the vapor remediation systems worked. Impacted soil was addressed using appropriate health and safety measures during the construction of the townhomes and impervious capping to prevent direct contact exposure to future residents. Impacted groundwater was addressed through institutional and engineering controls, including a deed notice to restrict groundwater use at the site, excavation restrictions in the homeowner association's bylaws, and impervious capping to prevent direct contact exposure to future residents.

Many Brownfields/in-fill projects, former industrial sites, and /or properties with historic petroleum use (e.g., underground storage tanks) are prone to potential vapor intrusion issues. These issues need to be characterized during the site investigation phase of the redevelopment to fully understand potential design issues due to vapor intrusion. To learn more about potential vapor intrusion issues or your state's Brownfield program, please contact Paul Hayden at 410-792-9446.

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News Briefs

Awards:

The Residences at Bulle Rock, was recently named "2007 Project of the Year," by the Home Builders Association of Maryland, Land Development Council. MRA and GTA provided land planning, civil and site engineering, landscape architecture, surveying, geotechnical engineering, environmental consulting, construction observation and testing, and homebuilder services for the award-winning project.

New MRA Associate:

MRA has announced the promotion of civil engineer, G. Fred Sheckells, P.E., to Associate.

Economic Outlook

(Anirban Basu - continued from pg. 2)

What's more, homebuilders are not getting much of a break on building costs. Construction materials are often globally traded commodities, and as, such are influenced by nations that have not suffered a construction downturn and where booms continue in place. Moreover, because of anticipated Base Realignment and Closure (BRAC) impacts in Maryland, land prices remain stubbornly high in several key markets, preventing the homebuilding market from equilibrating as rapidly as it otherwise would.

It is likely that substantial BRAC impacts will begin to take place in the midst of ongoing cyclical weakness in the local housing market. Over the period 2009–2012, housing sales are likely to be brisk as elevated supply meets elevated demand. Population expansion will likely be most rapid during this period, with the active inventory trimmed substantially by 2011.

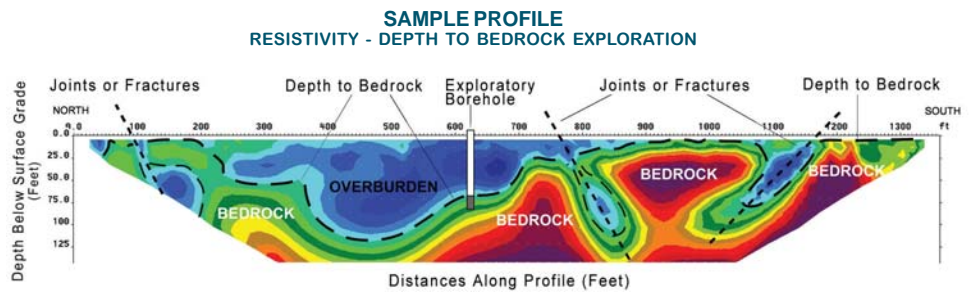
Builders will take this as their cue to reaccelerate activities, with building reaching a peak in 2011–2013, with 2009–2010 being a period heavy with land transfer/purchase and permitting activities. Building activity would be expected to decelerate toward historic norms between the period 2014 through 2017, though of course then existing cyclical factors, including interest rates, will make their impacts felt. Moreover, building activity may remain elevated during this latter period if BRAC has the types of dynamic effects on business formation and innovation that are anticipated.



Geophysical Exploration Techniques Help Reduce Cost & Time Requirements

Significant improvements in the performance of geophysical equipment, as well as computer software, have created a considerable increase in the use of geophysics for the evaluation of subsurface site conditions. Geophysical and remote sensing services, such as those offered by GTA, supplement the more traditional test boring or test pit methods and provide clients with a quick, non-destructive, non-invasive look at subsurface conditions. Geophysics provides valuable information for feasibility studies, depth and rippability of rock, groundwater development, and environmental / geologic hazards, as well as aggregate and rock evaluation for mining.

Typical feasibility studies require gathering as much information as possible regarding issues that could impact the development of a particular site, within a relatively short time period. Geophysics can provide extensive site coverage in a fraction of the time required for traditional test borings. Site conditions, such as shallow rock, clayey soils, high groundwater,



sinkholes, land-filled materials, underground storage tanks, and graves, can be identified with geophysical methods. In addition to these conditions, geophysics can help quantify excavation materials, which is essential for developing construction budgets and project schedules, which can be useful during contract negotiations with the property seller.

Geophysics has also seen a tremendous increase in use for the exploration and development of groundwater supplies. Groundwater concerns have resulted in many jurisdictions requiring developers not only to provide enough water for the proposed project, but also assist with deficits that may exist within the jurisdiction. As such, finding suitable groundwater supplies is essential for site approvals in many instances. Traditional methods for well siting include reviewing aerial photographs and performing a “fracture

trace analysis” to identify linear surface expressions that may indicate a water-bearing fracture set. Geophysics can provide a subsurface confirmation of the potential fractures, increasing the potential for high yielding wells. The result is often a significantly higher total well yield from fewer wells and with fewer “dry” holes.

The geophysics team at GTA is lead by Senior Geophysicist, Mr. W. Konrad Crist, P.G. He has nearly three decades of experience conducting environmental, engineering, mining,



and mineral investigations. He can be contacted by calling (717) 751-6073, or by e-mail to: kcrist@mrags.com.

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