Sometimes environmental compliance can seem impervious to scientific principles. More water is running off from more surfaces around us – but does that mean it all reaches a stream?

This question bears answering now more than ever as principles of planning-level impervious limitations continue to permeate into various regulatory criteria. The relationship of impervious surfaces to stormwater runoff has been in the forefront of water resource regulation for many years, commonly manifesting itself in local planning-level zoning overlays and environmental guidelines via County/City natural resource inventory/forest stand delineation (NRI/FSD) review processes.

Examples abound at the local and regional levels. Montgomery County imposes controversial impervious caps in its Patuxent Management Area and Special Protection Areas while Charles County continues to deliberate on the merits of impervious criteria in its Mattawoman watershed as the end-all path to stream protection.

Going globally, planning level impervious criteria are also a basis for some of Clean Water Act (CWA) Section 303(d) Total Maximum Daily Load (TMDL) Watershed Implementation Plan (WIP) assumptions, and even CWA Section 402 National Pollutant Discharge Elimination System (NPDES) MS4 conditions in the Maryland Department of Environment permits issued to local jurisdictions.

But should it be without consideration of effective impervious cover (EIC)?

As part of intense and continued deliberation, the Charles County Commissioners had invited Andrew T. Der & Associates, LLC (ATD) to provide expert testimony on the technical merits of such planning criteria. Not long after, ATD also provided testimony to the Montgomery County Council to oppose a Bill that would in the long term result in disincentives for using certain desired contemporary stormwater management (SWM) practices.

The bottom line is traditional water quality research referenced by regulatory agencies shows a correlation... Continued On Page 14
Collaboration: A Buzz Word Or An Integral Part Of Your Business Model

Collaboration actually has been a goal of the construction industry since inception; the action of working with someone to produce or create something. Unfortunately, the lack of technology in the past created barriers to effective and productive collaboration. There are many technologies to consider when evaluating solutions to enhance collaboration as it relates to construction.

Collaboration Solutions to Consider:
As with any solution, it is an evolution. There are constantly new solutions and technologies that are being introduced. The solutions listed below are being successfully used by companies in the construction industry to enhance collaboration.

- **Tablets/Mobile Devices:** Providing tablets to employees increases communication between internal and external teams, allows for the use of PDF formatted documents and creates a vehicle for additional collaboration tools to be used in the field. However, as the use of tablets and mobile devices increases, it is highly recommend that companies consider a mobile device management tool prior to implementing in an effort to minimize risk and maintain control.

- **Bluebeam:** Bluebeam is a PDF editing and creation tools built by AEC for AEC. Bluebeam removes limits that are usually placed on mobile workers. Bluebeam gives users the ability to markup, edit and collaborate on PDF’s from anywhere, anytime. Clink link for success story: [http://www.bluebeam.com/us/solutions/case-studies/parenti.asp](http://www.bluebeam.com/us/solutions/case-studies/parenti.asp)

- **Tele Conferencing:** According to a recent study 80% of communication consists of non-verbal visual cues. (Polycom, Inc., 2013) Decentralized teams working on a construction project, allows for miscommunication, slow communication or at times no communication. When video is added to a meeting, participants are more likely to be focused because they are seen not just heard, expressions and concerns can be addressed leaders to quicker decisions, project completed on time and on budget. Clink link for success story: [http://viewpoint.com/about/customer-success](http://viewpoint.com/about/customer-success)

- **Construction Management Software:** Is a project management tool for construction professionals that addresses all aspects of a construction project. These tools are configurable, comprehensive, and integrated providing firms access real time data at the right time all the time. The ability to access this type of data in the field allows decisions to be made faster resulting in projects being completed on time and within budget. Click link for success story: [http://viewpoint.com/about/customer-success](http://viewpoint.com/about/customer-success)

- **Building Information Modeling (BIM):** BIM offers firms a means to collaborate by developing a single model. Essentially the entire project can be constructed virtually by a team of people working off of the same model. Traditionally designers have operated in their own silo each producing their own design which created barriers for collaboration and led to budget overruns and missing project completion dates. Those firms who have appropriately adopted BIM have increased their ability to collaborate and have created ROI’s for their firms. Click link for success story: [http://static-dc.autodesk.net/content/dam/autodesk/www/products/autodesk-revit-family/docs/pdf/Hoar%20Construction%20Customer%20Success%20Story%20.pdf](http://static-dc.autodesk.net/content/dam/autodesk/www/products/autodesk-revit-family/docs/pdf/Hoar%20Construction%20Customer%20Success%20Story%20.pdf)

Although the list goes on, the above is a high level overview of a few of the solutions that the industry has already adopted which have direct correlation to enhanced collaboration. It is important for any firm before they adopt any technology to make sure they evaluate existing infrastructure and processes against the company’s strategic objectives to make sure that the technologies adopted for collaboration will be a vehicle to deliverable those objectives.

**Jen Dangro**

*Business Information Group*

Incorporated in 1992, Business Information Group (BIG) provides our clients quality services in network design and implementation, virtualization, wireless communication, and custom software development.
MBE Eligibility In Maryland

Q: How does a minority-owned business become eligible for certification as a minority business enterprise (MBE) in the State of Maryland?

A: A minority-owned business seeking certification as an MBE in the State of Maryland must apply to Maryland's Office of Minority Business Enterprise. To be eligible, the MBE must demonstrate it meets certain requirements concerning group membership, business size, ownership and control. The MBE must be able to demonstrate the business is independent and at least 51% owned by a minority. The minority owner must have the power to direct, or cause the direction of, the management and policies of the business and make day to day decisions as well as long term business decisions concerning matters of management, policy and operations. The minority owners must also submit a personal net worth statement.

The MBE must demonstrate that the business is not subject to formal or informal restrictions that limit the customary discretion of the minority owner. The MBE must demonstrate that it is a small business under the federal Small Business Act (SBA). Certification of a minority-owned business as an MBE can be a viable tool for developing and maintaining business relationships. A minority-owned business desiring certification as an MBE in the State of Maryland may want to consider obtaining legal advice concerning eligibility requirements for MBE certification prior to applying for the certification.

James R. Benjamin is a Member with Pessin Katz Law, P.A. (PK law) and is part of the firm's General Litigation Group. Mr. Benjamin has significant experience representing and advising minority-owned and women-owned businesses (MBEs and WBEs) on certification and procurement matters as well as structuring and creating joint ventures and teaming arrangements. Mr. Benjamin can be contacted at 410-339-5787 or jbenjamin@pklaw.com.
Architect’s Corner

Celebrate Maryland Native Plants!

Across the United States, 30 states have native plant specialty license plates, raising awareness for environmental issues and generating funds for conservation, parks and university programs.

Why shouldn’t Maryland do the same?

HB1102: Celebrating Maryland Native Plants and Pollinators License Plate is currently under deliberation by the Maryland General Assembly. This legislation aims to celebrate our biodiversity heritage and support native wildflowers and pollinators that are crucial to our ecosystem through the development of a full background specialty license plate.

The plate design is still undergoing revisions but could potentially portray something like so:

Why native plants? Why should you care?

“Of our 2500 plant species, 710 are now listed as rare, threatened, endangered or extinct.” Nearly all butterflies, including the beautiful local Monarch butterfly, and some native bees require native plants to nourish their young. As native plant populations deteriorate, the insects that feed on them decline. In a harsh downward spiral, we also lose our songbirds, game birds and other species that rely on native plants and insects to survive.

How will this bill help?

“University of Maryland Extension would use funds from this plate to create a statewide education and technical assistance program supporting native plants and pollinators.” The University of Maryland Extension will support Maryland’s nursery industry to meet the demands for native planting by providing marketing material to businesses, educational materials to homeowners, certified seeds and much more. Additionally, efforts will be made to protect the Monarch butterfly. Native milkweed will be made more commercially available to support Monarch caterpillar feeding. Highway departments will have help with their roadside vegetation management needs. More roadside meadows result in less mowing and less taxpayer expense.

Still need convincing?

Maryland’s businesses could generate an additional $159 million per year if they were provided with the resources the University of Maryland Extension plans to deliver. “Maryland’s farmers could earn an additional $10 million per year if we help support the native seed industry.” University of Maryland Extension volunteers currently provide $2.8 million worth of volunteer time every year. This value could grow tremendously if more opportunities for native plant volunteer work arise.

If you would like any more information on House Bill 1102 or pollinator protection and what you can do to help, visit the University of Maryland Extension site or please feel free to contact us: office@intreeguedesigns.com

About the Author:

Colleen Vacelet owns INTREEGUE and teaches landscape architecture at University of MD. She is forest conservation certified, LEED AP, an expert horticulturist, and a beekeeper! For more information, please feel free to contact her at: cvacelet@intreeguedesigns.com

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Four Ways To Lower Your Property & Casualty Insurance Costs

There are a number of ways you can reduce the cost of your corporate property & casualty insurance. Since premium costs are typically a big expense for construction companies, looking at ways to reduce those costs is worth the time invested. Here are four ideas:

**Take Risk**

Insurance premiums are based on the exposures of your business (type of work, where you work, number of employees, etc.), your loss history, and your underwriting profile (credit report, business reputation, safety program, etc.). Insurance carriers have rating and modeling tools that they use to determine at what premium level, if any, they can write your insurance and make a profit.

The amount of risk an insured retains is an important factor in what premium will be charged. The more risk you take, the lower the premium you will pay. Some risk, you may choose to self insure, which means you are not paying premium. You may choose not to buy terrorism insurance if you feel that the exposure is not significant. You may choose to self-insure the comprehensive and collision coverage on older vehicles rather than pay a premium to do so.

Using deductibles is an easy way to take more risk. On coverages like automobile, property, or contractors equipment; you can increase the deductible you are responsible for to pay a lower premium.

You can also take deductibles on casualty insurance. The size of minimum deductible varies depending on the type of coverage.

**Lower Your Experience Modification Rate (EMR)**

It might be simplistic, but any reduction in your EMR will lower your workers’ compensation premium. There are a lot of things that go into an EMR calculation, but every point the EMR comes down equates to lower insurance costs. Since the EMR is published by an independent rating bureau or a State rating bureau, it is one factor that cannot be ignored by an insurance underwriter. They all have to use the same EMR.

A good insurance broker can guide and assist you in reviewing your current EMR and determining what your future EMR’s will be. This will allow putting together a strategy to lower your experience modification. Even when rates and payrolls change, the EMR will be applied year-after-year. Any positive change in this factor will lower your insurance costs.

**Make Sure Your Rating Base Is Correct**

One of the easiest things to overlook when trying to cut insurance costs is the rating base being used. Too many companies submit new payrolls and subcontract costs to their broker to get renewal quotes without making sure the classifications are accurate.

Workers’ Compensation and General Liability classifications are tied to the actual operations that are performed. The rates and premiums charged correspond to the classifications used. If the classifications are incorrect, or the payroll or costs are not being applied to the right classification, you may be paying too much. Operations can change over time and this may also change the rating base being used.

You also need to make sure the values on your equipment and property are correct for the type of insurance you purchase. Many contractor equipment policies provided actual cash value (book value) reimbursement for a claim. A lot of companies pay premiums based on the cost of a new piece of equipment even though they only get paid for what the book value of the equipment is.

Check the garage locations of your vehicles. If you
The Struggle Is Real: Three Tips For Retaining Good Employees In Your Construction Business

Don’t let your best employees jump ship!

With the lowest labor participation rate in 30 years you would think that finding and keeping good employees would not be a big issue for construction companies. But that’s not the case. The struggle to find and retain employees is a real one. This topic always surfaces in industry surveys as a top concern and my construction clients talk about it regularly.

Coupled with a continued economic recovery, albeit modest, employee recruitment and retention woes have created a cannibalization environment where companies just keep stealing employees from each other. This is especially disheartening when you’ve invested significant energy and training costs for a promising employee who jumps ship to a competitor.

Creating and sustaining a culture where employees feel like the company/employee relationship is more than transactional is a key to growing and retaining employees … and ultimately your company’s financial success.

While you can never absolutely prevent a good employee’s departure, since each person is unique and has different motivations, there are some things you can do to protect your investment in your company’s most important asset – its employees.

1. Create a culture of trust.

Perhaps nothing will cause a breakdown of communication, dysfunction in teamwork and disengagement within an organization than a lack of trust.

If this is true, then nothing likely contributes to the bottom line of an organization more than trust. This is the conclusion of Stephen R. Covey’s book, “The Speed of Trust.”

Maintaining integrity is a difficult but important imperative and is always at risk of being lost in a moment. Trust has many facets, but one key idea I have tried to keep in front of me is to not assume the worst motives when it comes to an employee’s actions. Often, someone’s motive is not as bad as we think. My son Henry recently came up with what I thought was a good idea: cars should have an “I am sorry” horn to blow when you accidently cut someone off on the highway. This might reduce road rage, and it would surely let others know that your motive was not malicious.

Honest and consistent feedback – in both directions – within an organization will go a long way to achieving a culture of trust.

2. Communicate your mission or purpose.

I think as human beings we have an innate need to belong to communities. This need to belong goes beyond just matters of personal self-interest, while not denying that they do and should exist. It is incumbent upon the leadership of your company to clearly communicate WHY you exist in words, and consistently model it in actions over time.

An excellent video that gets at the importance of this is Simon Sinek’s TED talk, “Start with the Why.” You can find it online by googling “start with the why.”

If you have not created a true mission or purpose statement, or think it should be given a fresh look, take the time to get it done this year.

3. Establish standards, but allow freedom.

No matter the area of construction you are in, you no doubt require employees to adhere to some universal standards and procedures in order to deliver the service your customers need.
Your ability to maintain these standards while at the same time allowing for the unique talents, creativity and personalities of each employee to shine is a key to helping them succeed within your organization.

If you are my boss and you are a micro-manager and believe that everything depends on your input and your own approach, I would not be inspired to continue working at your company. I would leave.

As you look at the policies and procedures within your organization, ask yourself these questions about each one:

- Is it contributing to my company's highest priorities?
- Will it allow my employees to give their best?
- Does it enable my employees to operate independent of my leadership?

If you operate under the paradigm of “treat everyone the same,” I would ask you to reconsider. People are NOT all the same. It’s true that all employees need to be held accountable and meet clarified expectations. But how you motivate and grow each employee can be very different and will require knowing them as unique individuals. Anyone who has ever coached a team will get this.

The competition for employees will continue to be a major challenge within the construction industry. The business owners who figure out how to motivate and retain quality employees will be the most successful in the long run.

Need Help?

Steve Ball, CPA, CVA, CCFIP, is director of Gross Mendelsohn’s Construction & Real Estate Group. He is passionate about helping contractors succeed in all facets of business. Steve provides audit, review, compilation, tax, business valuation, succession planning and consulting services for contractors. Contact Steve at 410.685.5512 or sball@gma-cpa.com.
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Individual seeking a senior level, executive management role within an organization searching for a seasoned, superior talent excelling at high-end sales, business development, planning, and management.

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The applicant can be contacted via Verna Regler (verna@mdconstructionnet.net) or Rob Bertazon (rob@mdconstructionnet.net) or at Maryland Construction Network (443.982.7329).

Richard Shaw is a Senior Client Executive with RCM&D with over 25 years of experience working with clients to help them manage their risk. You can contact Richard at rshaw@rcmd.com.

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Please direct all inquiries to Verna Regler @ verna@mdconstructionnet.net.
Conferences & Trade Shows Important To Attend

Conferences and trade shows are important to attend, and just as important to deliver a great exhibit, for your firm as well as your employees. We have discussed why networking is vital for your firm’s success and how to present, how to enhance your marketing through social media, and how to maintain your current clientele. Conferences allow you to put all of these components in motion by attending the event, as well as presenting. The tips below discuss how to prospect at a conference, how to be successful when delivering a speech at an event, and some tips to help your firm set up a successful and effective trade show exhibit.

The 6-Step Guide to prospecting at a Conference | HubSpot

Conferences and trade shows provide the opportunity for in-person networking, to make real world connections with people you may know online through social media. In-person, real world connections are what drives AEC businesses – relationships. Here is a 6-step guide that explains how and why you and your employees should prospect at an event.

1. Pick your conference wisely – choosing the conference you attend is similar to choosing the leads you reach out to. Think about where target prospects might be attending.
2. Research attendees ahead of time – many events have the attendee list on the social media accounts associated with the conference, so it is simple enough to obtain this info.
3. Schedule meetings beforehand – prospect in advance!
4. Spend some time building rapport – this is necessary at a conference. There are multiple people selling themselves and their firms, so it is important to stand out.
5. Keep your meeting short – keep it short, sweet and to the point: just enough to get on your prospect’s radar.
6. Respect your prospect’s conference experience – be sure to not interfere with a prospects main reason for attending a conference, which is to learn, present or sell themselves.

While there are multiple ways prospect at a conference or trade show, these tips will help you get your foot in the door and headed in the right direction at your next event.

6 Tips to Effectively Set Up a Booth at an Event | TECHDAY News

- By Ryan Foland

Preparing a booth at an event is an art that you will successfully accomplish with experience. The more you “fail” at boothing, the better you get. It is also important to have the appropriate amount of help, so as not to overwhelm your employees presenting your firm. The above article explains how to present your trade show and conference booths in a way to attract an audience. It is important to come prepared, and overestimate the amount of attendees so as not to run out of supplies.

That's not all! The following articles will provide you with more insight on how to successfully come out on top after attending, presenting, and exhibiting at a conference and trade show:

6 Tips for making the Most Out of Trade Shows and Conferences | PR Toolkit

- By Heather Wied

Insider Tips to Conference Survival in 2015 | Entrepreneur

- By Jeff Sinclair

Carrie Ann Williams, CPSM is the founder of Andana Consulting, a boutique marketing agency for architects, engineers, contractors and environmental professional services firms. We work with each client to help them get noticed in the marketplace. Learn more at www.andanaconsulting.com.
Protecting Workers In Hot Environments

Many workers spend some part of their working day in a hot environment. Workers in foundries, laundries, construction projects, and bakeries - to name a few industries - often face hot conditions which pose special hazards to safety and health.

HEAT STRESS CAUSES BODY REACTIONS

Four environmental factors affect the amount of stress a worker faces in a hot work area: temperature, humidity, radiant heat (such as from the sun or a furnace) and air velocity. Perhaps most important to the level of stress an individual faces are personal characteristics such as age, weight, fitness, medical condition and acclimatization to the heat.

The body reacts to high external temperature by circulating blood to the skin which increases skin temperature and allows the body to give off its excess heat through the skin. However, if the muscles are being used for physical labor, less blood is available to flow to the skin and release the heat.

Sweating is another means the body uses to maintain a stable internal body temperature in the face of heat. However, sweating is effective only if the humidity level is low enough to permit evaporation and if the fluids and salts lost are adequately replaced.

Of course there are many steps a person might choose to take to reduce the risk of heat stress, such as moving to a cooler place, reducing the work pace or load, or removing or loosening some clothing.

But the body cannot dispose of excess heat, it will store it. When this happens, the body’s core temperature rises and the heart rate increases. As the body continues to store heat, the individual begins to lose concentration and has difficulty focusing on a task, may become irritable or sick and often loses the desire to drink. The next stage is most often fainting and death is possible if the person is not removed from the heat stress.

HEAT DISORDERS

Heat rash, also known as prickly heat, may occur in hot and humid environments where sweat is not easily removed from the surface of the skin by evaporation. When extensive or complicated by infection, heat rash can be so uncomfortable that it inhibits sleep and impedes a worker’s performance or even results in temporary total disability. It can be prevented by resting in a cool place and allowing the skin to dry.

Fainting (heat syncope) may be a problem for the worker not acclimatized to a hot environment who simply stands still in the heat. Victims usually recover quickly after a brief period of lying down. Moving around, rather than standing still, will usually reduce the possibility of fainting.

Heat cramps, painful spasms of the muscles, are caused when workers drink large quantities of water but fail to replace their bodies’ salt loss. Tired muscles -- those used for performing the work -- are usually the ones most susceptible to cramps. Cramps may occur during or after working hours and may be relieved by taking liquids by mouth or saline solutions intravenously for quicker relief, if medically determined to be required.

Heat exhaustion results from loss of fluid through sweating when a worker has failed to drink enough fluids or take in enough salt or both. The worker with heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. The skin is clammy and moist, the complexion pale or flushed, and the body temperature normal or slightly higher. Treatment is usually simple: the victim should rest in a cool place and drink an electrolyte solution (a beverage used by athletes to quickly restore potassium, calcium, and magnesium salts). Severe cases involving victims who vomit or lose consciousness may require longer treatment under medical supervision.

Heat stroke, the most serious health problem for workers in hot environments, is caused by the failure of the body’s internal mechanism to regulate its core temperature.
temperature. Sweating stops and the body can no longer rid itself of excess heat. Signs include (1) mental confusion, delirium, loss of consciousness, convulsions or coma; (2) a body temperature of 106 degrees F or higher; and (3) hot dry skin which may be red, mottled, or bluish. Victims of heat stroke will die unless treated promptly. While awaiting medical help, the victim must be removed to a cool area and his or her clothing soaked with cool water. He or she should be fanned vigorously to increase cooling. Prompt first aid can prevent permanent injury to the brain and other vital organs.

PREVENTING HEAT STRESS

Most heat-related health problems can be prevented or the risk of developing them reduced. Following a few basic precautions should lessen heat stress.

1. A variety of engineering controls including general ventilation and spot cooling by local exhaust ventilation at points of high heat production may be helpful. Shielding is required as protection from radiant heat sources. Evaporative cooling and mechanical refrigeration are other ways to reduce heat. Cooling fans can also reduce heat in hot conditions. Eliminating steam leaks will also help. Equipment modifications, the use of power tools to reduce manual labor and personal cooling devices or protective clothing are other ways to reduce the hazards of heat exposure for workers.

2. Work practices such as providing plenty of drinking water -- as much as a quart per worker per hour - at the workplace can help reduce the risk of heat disorders. Training first aid workers to recognize and treat heat stress disorders and making the names of trained staff known to all workers is essential. Employers should also consider an individual worker’s physical condition when determining his or her fitness for working in hot environments. Older workers, obese workers and personnel on some types of medication are at greater risk.

3. Alternating work and rest periods with longer rest periods in a cool area can help workers avoid heat stress. If possible, heavy work should be scheduled during the cooler parts of the day and appropriate protective clothing provided. Supervisors should be trained to detect early signs of heat stress and should permit workers to interrupt their work if they are extremely uncomfortable.

4. Acclimatization to the heat through short exposures followed by longer periods of work in the hot environment can reduce heat stress. New employees and workers returning from an absence of two weeks or more should have a 5-day period of acclimatization. This period should begin with 50 percent of the normal workload and time exposure the first day and gradually building up to 100 percent on the fifth day.

5. Employee education is vital so that workers are aware of the need to replace fluids and salt lost through sweat and can recognize dehydration, exhaustion, fainting, heat cramps, salt deficiency, heat exhaustion, and heat stroke as heat disorders. Workers should also be informed of the importance of daily weighing before and after work to avoid dehydration.

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Should I Go “Pro” With Time & Billing Software?

I visited my attorney’s office the other day. She was raving about all of the bells and whistles of her time and billing software. It got me thinking about my construction company’s invoicing system, which is partly electronic but also still partly paper-based. Would it be worth my while to invest in this technology for my construction business?

Indeed, time and billing software is typically associated with professional services firms such as attorneys and accountants. But it also offers a number of potential benefits for contractors. You’ve just got to know what you really need before spending hard dollars on a solution.

Gathering data
True to its name, time and billing software records the time an employee spends on a given activity and then bills the appropriate amount to an invoice. In doing so, it can allow you to track workers’ hours and very specifically align expenses with projects and clients. Many applications also enable you to run billing cycle reports that conveniently display information such as:

- Hours worked,
- Costs incurred,
- Hours and dollars billed, and
- Dollars remaining owed.

What’s more, most of today’s better time and billing software will integrate with your construction company’s existing payroll and accounting systems. So you can use the data generated by employees to cut paychecks, as well as fulfill your payroll and income tax obligations.

Reaping the benefits
There’s little doubt these applications offer contractors a variety of potential benefits. The right solution should save you time in tracking workers’ hours, and it should reduce inaccuracies that can occur from manual systems or even less sophisticated electronic ones. Plus, many of today’s products are cloud-based, so employees can log hours and job info right from their smartphones or from an on-site laptop.

A well-chosen system could also speed up your accounts receivable. Because everything is automated, you can invoice clients — and hopefully receive their payments — more quickly. Some software even enables you to set up an e-commerce function, whereby clients submit payments via a merchant gateway (such as PayPal).

Naturally, there are risks to too hastily procuring any software. Free or low-cost solutions may provide relatively little functionality and not integrate with your wider systems. Meanwhile, high-end systems may be prohibitively expensive, difficult to implement and too complex for smaller construction companies.

Shopping wisely
Time and billing software is likely a good idea for your construction business — particularly if you’re still partly relying on paper-based documentation. But you’ll need to set a budget, shop carefully and buy only an application that you’ll fully use.

Rivka Bier
Senior Manager
Hertzbach & Company, P.A
410.363.3200

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between increasing levels of impervious cover and decreasing water quality conditions in receiving streams, but this is based on older pre-existing watersheds with little or no SWM of any kind.

Water regulation, in concept, is driven at a fundamental level by the need to protect the receiving stream; therefore what matters is what the stream “sees”. And from that perspective, any proposed impervious surface needs to be described in terms of EIC - or the runoff that actually will reach a stream after setback buffering and environmental site design (ESD) to the maximum extent practicable (MEP) per Maryland’s SWM law.

The presence of new impervious surface in and of itself does not necessarily impact a receiving stream. Today’s rigorously regulated new development has never been more subject to layers of federal, state, and local water quality management criteria effectively disconnecting, buffering, and managing critical flows. Means of compliance can also vary significantly depending on numerous site-specific characteristics such as subsurface soils, topography, vegetative cover, type of project, and location of any impervious cover.

Or put another way, if impervious surface modeling alone is to be considered by some to be conclusive enough to establish policy and regulatory decisions, one then could logically and conversely argue if impervious cover is under any established threshold, then no SWM of any kind is necessary – but we know better.

Another fallacy of a desktop approach is, if a given development plan exceeds an established impervious cover limit determined by a property area percentage, an additional contiguous property or parcel can be acquired to combine with the property. This increases the total project limit acreage and raises the corresponding percentage limit so the same proposed imperviousness is now less than the percent threshold. The impervious area is exactly the same as before but now is considered “safe” – yet the stream does not know the difference.

The effective modeling of impervious surface effects in a watershed cannot be static and must account for numerous other factors such as pre-existing land use and property character, actual applicable watershed boundaries, offsite influences, and master plan goals. Such factors need to be considered in decision making rather than default to the single desktop indicator of existing impervious surface as the primary planning tool.

What should be a science-based process needs constant reminders by the industry and the regulated public to stay on task regarding new regulations and procedures by retaining basic technical principles in deliberative processes. And especially when agencies continuously propose new or different stream buffer setbacks or SWM criteria in the context of Maryland’s stormwater management regulations, Maryland Department of the Environment Tier II sensitive water policies, TMDL WIPs, and NPDES compliance.

Another shortcoming of the desktop approach is, although required for NRI/FSD compliance and encouraged in the first of three SWM plan submissions under current Maryland regulations, stream buffer disconnect is still not fully credited against a SWM burden in the planning stages as an effective component of a SWM or E/S plan. The combination of stream buffer setbacks along with buffer forest retention and planting effectively filters and disconnects new impervious surfaces before even considering any ESD to the MEP practices of the nature required today.

Any proposed development is required to provide ecologically-oriented best management practices emphasizing first flush vegetative and filtration practices to mimic “woods in good condition” in addition to buffer filtering and disconnection. Since, from the perspective of the stream, vegetated buffers already treat stormwater pollutants, a contemporary SWM plan can even achieve a level of redundancy since this further renders surfaces potentially ineffective.

Today’s practices are effective if maintained properly and the generic use of an impervious limit overlay without the above considerations is fundamentally inconsistent - especially if not accounting for the pre-development land condition. Frequently, existing pre-SWM land use, both industrial and agricultural, already contributes to existing degrading water quality.
Therefore, the ultimate outcome is the act of redevelopment under MDE re-development regulations, subject to the additional cumulative stacked benefits above, can even yield a net gain – and is also a significant short coming in projecting Bay TMDL compliance assumptions.

Planning tools such as generic buffer setbacks, impervious surface criteria, and hierarchy of SWM practices are good to have in our toolbox, but should incorporate mechanisms for field refinement and quality control based on actual pre-existing conditions to be effective and practicable.

We have all the new water resource regulations we need. Enough already. Even the Chesapeake Bay Program’s own data show new construction is not the problem. Older “pre-regulation” urban land and agricultural use is, and is what the NPDES MS4 permitting and TMDL WIP goals can address. Let’s help the agencies focus on that to give the Bay what it needs.

Andrew Der is Principal of Andrew T. Der & Associates, LLC practicing in the consulting industry since 2001, previously completing 18 years of service at the Maryland Department of the Environment. He can be reached at 410 491 2808 or AndrewTDer@comcast.net

One can never know for sure what a deserted area looks like.

~ George Carlin
What Can QuickBooks Do For The Contractor?

QuickBooks is an inexpensive but feature rich accounting package that can help contractors manage the financial side of their business. In many cases for less than $1,000 businesses can have a multi-user software package that will handle payroll, payables, billings, collections, job costing, financial reporting and more. QuickBooks has some of the same functionality found in construction software packages costing over $10,000. The drill down capability in QuickBooks is comparable to many of the more expensive construction industry packages.

QuickBooks has numerous features and reports, and can be customized to fit each contractor’s unique situation. Knowing what features are available in QuickBooks and how to use them can make a significant difference towards your success. Many business owners believe that much more expensive solutions are needed because they are not aware of everything that QuickBooks is capable of. Below is an overview of the functionality in QuickBooks that is useful for contractors.

Functionality For Contracting Firms:

- Generate Profit and Loss Statements and Balance Sheets tailored for your business and put you in the best light for banks and sureties
- Extensive reporting on job profitability
  - P & L by job
  - Summary job profitability reports
  - Detail job profitability reports including estimate to actual
- Allow you to prepare detailed estimates for presentation to customers
- Job costing of all elements of cost – payroll, fringes/burden, subcontractors, materials, equipment, insurances and overhead
- Compare actual job costs against estimated costs with variances as jobs progress
- Complete payroll processing (requires a QuickBooks Payroll Subscription)
  - Track/charge employee time to jobs
  - Import time from third party time clock systems
  - Generate paychecks and direct deposits
  - Charge jobs for payroll taxes, fringes, and overhead
  - Tracking of workers compensation – by state and class code
  - Prepare weekly certified payroll reports
  - On line tax filings and payments
  - Emailing or online availability of deposit advices for employees, eliminating the need to hand out paychecks
- Billings to customers and tracking of collections – deposits, progress billings, retention
- Processing purchase orders and paying payables for subcontractors and vendors
- Tracking equipment costs by piece of equipment and allocation of costs to jobs
- For government contractors, create cost “pools” of indirect costs for allocation to jobs
- Tracking the general liability and workers compensation insurance expiration dates of subcontractors
- Inventory of commonly used materials and charge out to jobs
- Generate reports from which percentage completion accounting can be calculated

Craig Kershaw is the managing partner of The CFO Source, a Baltimore based consulting firm that provides part-time controller and CFO services, tax planning and preparation, bookkeeping and payroll services. Craig is the author of “QuickBooks for Contractors” and “Advanced Techniques for QuickBooks Users” and is an instructor of QuickBooks for the Maryland Association of CPAs. For additional information, contact Craig at 443.487.7733 or cmkershaw@cfosource.net.
Crossing State Lines

Know that lien processes, bond claims, and contract clauses are enforced differently, depending on the State.

On any construction project, it is typical to find contractors, subcontractors, and materialmen who travel across state lines to provide labor or materials. But it is important to recognize that the ability to pursue liens, bond claims, and contract claims can be different, depending on the local state laws.

For example, in Maryland, subcontractors may only lien if they have provided notice to the owner of the intent to lien, within 120 days of the last date of work. The Petition to Establish the Lien must be filed within 180 days. And the lien must be enforced within 1 year of the filing of the Petition.

In Pennsylvania, all lien claims must be filed within 6 months of the last date of furnishing labor or materials. This aspect is the same as Maryland’s law. But the notice period is different. A subcontractor must notice its intent to lien 30 days prior to the filing of the lien. Thus, there is a slightly longer period for the subcontractor to first notice the owner, as compared to Maryland. In Pennsylvania, lien claims must be prosecuted to a final judgment within 5 years. From experience, it takes longer to enforce a Pennsylvania mechanics’ lien than in Maryland. There is also a pending statutory amendment to Pennsylvania’s mechanics’ lien law, which will create a directory for all laborers and materialmen to register for a project at the beginning of work, and failure to do so could waive lien rights. This amendment has not gone into effect, but is scheduled to go into effect in 2017.

Most people are aware that the lien processes are different, but they often fail to realize that there are significant differences in bond rights and contract rights, too. By contract, on some projects, Pennsylvania allows the advance waiver of lien rights. Maryland does not allow for advance waivers. And the section of Maryland’s Real Property Code that prohibits advance waivers also states that lien rights and rights to sue on a bond are not affected by “pay-if-paid” clauses. MD Code, Real Property, § 9-113.

A “pay-if-paid” clause provides that a general contractor only owes money to the subcontractor if, and only if, the general contractor is paid by the owner. In Maryland, these “pay-if-paid” clauses are unenforceable against lien claims and bond claims. In other words, a subcontractor does not lose its lien rights, nor does it lose its rights to file a bond claim, even if there is a pay-if-paid clause in the subcontract. MD Code, Real Property, § 9-113.

In Pennsylvania, the rules are much different. Generally, a subcontractor will have the right to lien the property, if it has not been paid. But Pennsylvania statutory law specifically provides that certain claims and bond rights may be lost in certain circumstances. Most of the time, these defenses are most prevalent when defending a claim from a sub-subcontractor on a payment bond issued to the general contractor. 62 Pa.C.S.A. § 3939; 73 P.S. § 516.

Negotiating and litigating payment disputes on bonds and liens is a complicated area of law, and it is best to seek legal advice at the first signs of a payment dispute to ensure that all legal rights are preserved. The author is an attorney licensed to practice in Maryland and Pennsylvania, and practices out of the Lancaster, Pennsylvania office of Harmon & Davies, P.C (www.h-dlaw.com). The content of this article is not legal advice, as legal advice requires an analysis specific to the circumstances.

Whenever somebody comes up with a good idea, there’s somebody else who has never had a good idea in his life who stands up and says, Oh, you can’t do that.

~ Tom Clancy
The Psychology Of Investing

The increased volatility in the market has many investors feeling as though they are on an emotional roller coaster. Investors may think, “The market tanked, I should have seen it coming”, or, “my account is down, but I don’t want to sell at a loss”. These thoughts are from people struggling to separate their emotions from their investment decisions. While overcoming your own thoughts can be difficult, knowing what causes behavioral biases and how they affect your investment decisions can help keep your emotions in check.

Recency Bias
This is when investors believe that current events will last forever and predict the future based on what has recently occurred. If the market is performing poorly, investors might mistakenly believe this will continue forever. Perhaps when the market is doing well, they might forget about the inherent market volatility and believe it will continue to go up. It is important to keep a long-term perspective and remember that changes will occur. Consider this - you wouldn't drive while only looking through the rearview mirror. Investing is much the same, while it may be valuable to look into the rear view every once in a while, you need to keep your eyes on the road ahead to stay on track.

Choice Paralysis
Have you ever caught yourself at a store trying to pick out an item only to find yourself overwhelmed with choices and leaving with nothing but frustration? When investors are offered too many choices, they may feel the same way. This may hinder their ability to make an informed decision and invest. Don't be intimidated by choices! By utilizing proper tools to help screen your choices, you can make an informed decision and invest.

Herding
If your mother was like mine, she may have told you “if all your friends jumped off a cliff, would you follow?” The same statement can be said to investors who are prone to the herding bias. This is the tendency of investors to follow the actions of a larger group. Buying all the same investments and following what everyone else is doing provides us with a sense of safety. By the time most investors meet-up with the herd, the trend could very well be over. Remember the dot-com stock crash in the late 1990’s? Investors were hurt by following the herd.

Loss Aversion
This is when investors are more sensitive to losing money than to gaining money. It is important to understand that with investments come risk. A long-term investor will see the market fluctuate throughout their life – don’t sweat the losses and focus on the future.

Confirmation Bias
This is the tendency to only look for information that supports your ideas. If you think a particular stock is going to do well, you only read articles that reaffirm your ideas. Investors need to look at various sources so they are looking at the whole picture.

Optimism & Overconfidence
When an investor's portfolio is doing well, they might become overconfident and think they are invincible, which may lead to excessive risk taking. Any investment decisions should be analyzed fully to reduce poor investment decisions.

Bias Blind-Spot
Investors believe that none of these behavioral finance biases could happen to them. The reality is, we’re only human! Every investor experiences some, or all, of these biases at some point. Remember, having a sound financial plan, and sticking to it, can help you avoid behaving emotionally and becoming susceptible to investor biases.

Identifying these psychological responses can help you keep your emotions in check - it may even make you a better investor.

If you found this subject interesting, please join us on May 4th for a more in-depth seminar on The Psychology of Investing!

Visit www.prosperityconsult.com/upcoming-events for more details!

Erin M. Ansalvish
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Coaches Vs. Consultants

Great athletes have coaches. So should all CEOs and business owners. We’ll return to coaches in a moment.

People often turn to consultants to help solve a problem. Let’s say your company needs to know if it should invest in a costly piece of equipment. A consultant will investigate, strategize, and provide a solution. There’s no doubt that the consultant’s advice can be invaluable.

But, what happens the next time your company faces a similar question? You’ll be back on the phone hiring another consultant. We don’t learn when someone else is spoon-feeding us the answers.

A coach will ask critical questions to enable you to evaluate how important the equipment is to your company. The coach will help you calculate the return on the investment, giving you the tools to make a decision rather than doing it for you.

A coach will then support the decision, hold you accountable for it, and help you implement it and move forward. The whole idea of a coach is to listen, ask questions, and teach people how to make decisions, to think outside the box, and run and grow their own businesses.

Think about it this way - a football coach can’t go on the field and block a defensive lineman during the game. Take two of the world’s top athletes - Michael Phelps and Tiger Woods. They have coaches, not consultants.

This is your business. You shouldn’t have people telling you how to run it. Instead, you want someone who challenges and pushes you to become a stronger leader and decision maker. Someone who is always in your corner to help you improve your game and your business.
I’ve heard it before…believe me, I have. The statement, “we’ve never had a problem before” has been uttered so often in my conference room that I hear it in my dreams. The speaker is often shaking his head, bewildered, as if shocked that something like this (whatever this is) could ever happen to him.

If you’re one of those who have never suffered through an on-the-job problem or had to settle for less than 100% payment for everything including change orders and extra work, stop reading now. You have better things to do with your time. You should also stop reading if, regardless of what happened in the past, you know for a fact that you’ll never experience such problems in the future.

For the rest of you, see if something like the following sounds familiar:

The project is now 20 days behind schedule, facing liquidated damages of $750 per day, and the progress meetings are getting contentious. You have just received a fax from the owner instructing you to begin work TODAY on what you know would be a $10,000 change order. The owner has provided no acknowledgment that this work would constitute a change order, let alone an agreement as to amount. Begin work or risk default. Paperwork to follow…sometime.

You just learned that the 500 doors you’ve had on site for the past month will not swing closed because the flooring contractor installed carpeting with a pile a bit deeper than that called for in the specs. The GC orders you to either supply different doors or cut down all 500…by tomorrow.

The project has been complete for three months and you still haven’t gotten paid. The owner and the GC are haggling over change orders, back charges and liquidated damages that have nothing to do with you or your work. Worse yet, you know that when the owner gives the GC his inevitable 10% haircut, the GC is going to pass it right through to you. At 8:30 a.m., your phone rings…

Construction is a tough business. Perhaps nowhere else, other than in surgery, is liability measured by how far the finished product is from perfection. While no contract or single piece of legal advice can insulate your company from risk and yield 100% payment on every project, the fact is that business owners who know the following -- rules succeed better and more often than those who don’t.

1. **Read the damn contract.** Most people don’t. Not completely. Now, don’t get me wrong, most people read parts of the contract. They know the scope of work, what they should get paid if everything goes perfectly, and what the specs say, but important clauses like Indemnification is where their eyes glaze over. Not knowing exactly what the fine print says may be a risk worth taking for a small project, but not for a bet-your-company contract.

2. **Never underestimate the power of an asterisk.** Too many companies look at a formal contract, particularly an AIA contract, and assume they have to sign what’s presented. Nothing can be further from the truth. Review your contracts (with or without counsel) and insert terms reflecting your particular agreement. Never assume that someone will act a certain way “regardless of what the contract says.” Get it in writing.

3. **The four magic words.** Paperwork inevitably lags behind demands for action. Fully executed change orders are a rarity in projects under time pressure. Each year, companies lose tens or even hundreds of thousands of dollars because they never committed the four magic words to paper: **This is to confirm…** One fax, directed to the company requesting the work, beginning with the words “this is to confirm” and detailing the work to be done and the associated costs, can be just as effective as a change order when push comes to shove.

4. **Construction Law 101.** Maryland places four very powerful tools in the hands of construction companies: (1) mechanic’s lien actions; (2) the
Prompt Pay Act; and (3) the Maryland Trust Fund Statute; and (4) the Little Miller Act. Each statute provides, and in its own way, serves as a powerful ally against those who would keep your money without your consent. It is worth booking your lawyer to put on a brief workshop for your personnel to understand how and when these tools can be used effectively.

It is the old story of the cobbler’s shoeless children. Too many construction companies spend so much energy, time, and talent building other people’s companies that they have no time to spend on their own. The best advice: Take pride in your craft, protect what you’ve built, and get paid for what you do. And if you find that you fall short of those standards, make correcting that renovation project number one.

Eliot Wagonheim
Wagonheim Law
For more information and tips, follow me on Twitter @Wagonheim
Struggling To Resolve A Problem?

Try “systems thinking:” define all the dots that need to be connected and connect them.

Not too long ago, I was facilitating a discussion in a group of business owners. One person brought up a problem he was wrestling with in making a process in his company more efficient and effective. He was asking if anyone knew of a software program he could buy or have built that would help him resolve the issue. The group asked him a lot of questions to try to understand what the real issue was because they suspected he might be defining the problem too narrowly. One person in the group asked the following question: “Of what system in your business is this issue a part?” But he was not asking just about a technology system. He was asking about all the things that had to be done throughout the owner’s business—whether they were technology based or not—in order for greater efficiency and effectiveness to be accomplished. Almost always when there is dysfunction in an organization’s processes, that dysfunction arises from a broken system. The postscript to this story is that owner went back to his business and formed a group of employees involved in the whole system to better define the problem and come up with a “system” (small ‘s’) solution. In the process they improved the performance of a number of related tasks that were never before consider as part of the original problem.

When you were young, if you enjoyed paying Connect the Dots in your puzzle book, think of the problem solving you do now as adult Connect the Dots. In the puzzle book, all the dots were there. All you had to do is connect them to make the picture. In adult connect the dots, the first task you have to complete is to identify all the dots before you can connect them. This means resisting the temptation to just find a narrow, technology solution instead of analyzing the whole set of processes and procedures of which the potential technology is a part. Let’s say you and your staff have taken a whole system approach and have come up with a solution that involves adjusting people and technology processes. Now what? Does your implementation plan include training all the people affected by the solution on how their part fits into the overall process and how to do their part? Does the plan include the ability to learn the new technology by actually doing it before it becomes live? If you bought software, did you buy a support program that enables users to get questions answered and problems resolved quickly? Is someone monitoring the people, and technology issues for patterns that could turn into enhanced training and technology fixes? The point is that systems thinking is an on-going process, not just a project. Measuring how the systems parts are performing—people and technology—yields facts on which you can act to make improvements in training, technology investments and the overall performance of your company.

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For more Information on this effective and efficient member benefit, contact MGN’s Verna Regier at 443-982-7329 or at verna@mdconstructionnet.net.
Coming Soon

April 21st, 2016 – Blue Book Showcase
FedEx Field - Landover, MD
12:00 – 6:00 p.m.

May 4th, 2016 – Direct Connect Networking & 2016 Construction Industry Survey Results Presentation
Hillendale Country Club - Phoenix, MD
3:30 - 7:30 p.m.

June 7th, 2016 – “The Overwhelming Connection Between Insider Threat And Security Awareness & Training”
Aronson, LLC Office
Rockville, MD
9:00 - 11:00 a.m.

June 8th, 2016 – MCN & Whiting-Turner Project Tour
The Historic Whitehall Mill
Baltimore, MD
3:00 - 6:30 p.m.

July 28th, 2016 - Direct Connect Networking & No Charge Educational Event
Anne Arundel County
3:00 - 7:00 p.m.

September 29th, 2016 - Direct Connect Networking & Developer – Builder Forum
Montgomery County
3:00 – 7:00 p.m.

November 17th, 2016 - Direct Connect Networking & “Where’s The Work” Economic Forecast
Carroll County
3:00 – 7:00 p.m.

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