

# Spotlight

A publication of Spotts, Stevens and McCoy



SPOTTS | STEVENS | MCCOY

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## Our work touches everyday life.

From the water you drink to the air you breathe to the buildings and communities where you live, work and play.

Spotts, Stevens and McCoy is a family-owned regional engineering, environmental, and surveying firm serving local and global clients. We engineer solutions for a better world. Our work touches everyday life; from the water you drink, to the air you breathe, to the buildings and communities where you live, work and play.

### EXPERTISE

- Building Engineering
- Site and Civil Engineering
- Survey, Data Capture and Modeling
- Water and Wastewater Engineering
- Construction Phase Services



## Welcoming Winter

Shovels: out, hibernation mode: on. Sweater weather: here. As we embark on another annual winter season, we recommend you make time for a few proactive steps that could save you a lot this season. From simple tips like the most environmentally-friendly way to clean up a snowstorm, to the most energy-efficient way to heat your home - we've collected several resources for you for this month's *Spotlight*. Because after all, less time you have to worry about keeping your family safe and warm means more time to enjoy making snowmen and snowballs. (Or cozying up with a blanket and a book).

## Removing Snow and Ice Responsibly

SOURCE: *The Alliance for the Chesapeake Bay*

<https://stormwater.allianceforthebay.org/take-action/habits-to-help/winter-deicing>

Winter weather often leaves us dealing with snow and ice on our sidewalks and driveways. The increased use of salts for deicing over the last 50 years has this country currently using over ten million tons on the roadways annually. However, the salts can be harmful for the environment; as they kill plants, ruin soils and are toxic to many species within stream ecosystems. Homeowners do have some choices when it comes to the kinds of deicing chemicals but the important thing to remember is to choose carefully and use sparingly.

**Shoveling**– Very effective but can be back breaking and is the least damaging to the overall environment.

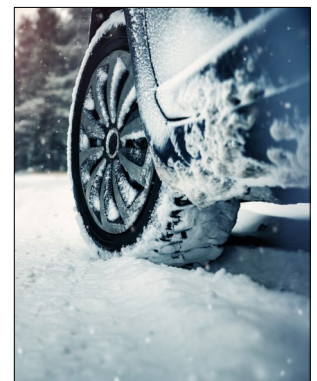
**Snow blower**– Easier on the back. Best if used before any deicers are used so as not to throw the chemical on to plants.

**Sand**– best for traction. Use sand sparingly as it can clog storm drains and choke waterways. Be sure to sweep up excess to minimize the amount of sand that gets into storm drains and waterways.

**Bird seed**– another traction method and it is biodegradable, or – even better, birds will enjoy eating it in the winter months!

**Safe Paw™**– Is not a salt but an amide/glycol mixture that is safe for the environment and is biodegradable.

**Calcium chloride**– works at very low temperatures, and you can use less. It is also easier on vegetation than regular Rock salt (sodium chloride). This is still a salt and can be toxic to waterways. Use properly and SPARINGLY!



# Winter Electrical Safety Tips

When outside temperatures go low, electric bills often go high. Winter is the time of year when electric usage is often at its highest. Electric use increases for many reasons: less natural light coming through the windows, freezing temperature causing heat to turn up, more time being spent indoors, more devices being used! Plus, the winter season poses many unique electrical hazards such as variations in precipitation and higher winds.



## Use space heaters safely - and on their own outlet.

Keep your portable space heaters a minimum of four feet from furniture, drapes or clothing. Refrain from using an extension cord or power strip to plug space heaters into an outlet. Using an extension cord or power strip with the high electric current that a space heater requires could cause your strip to melt, burn, or start a fire. The safest way for you to power your space heater is to use a wall outlet with no other item plugged into that outlet. Don't forget that you should never leave your space heaters unattended.

## Make sure you have carbon monoxide detectors - installed and functional.

It's a good idea to have carbon monoxide detectors on every level of your home. First Alert also recommends in every bedroom, outside every sleeping area, and in common areas such as living rooms. Because heating fuels are used more frequently in winter months - gas, coal, or wood- the opportunity increases for carbon monoxide poisoning to occur in your home. Always test your detectors and don't forget to change the batteries every six months.

## Check and prepare to use your generators.

Make sure that your generators are ready to work before you actually need to use them. If you have a portable generator, make sure it is operating and functional, and you have a plan of action should you need it. You will want to keep your generator as far away from the home as possible to prevent carbon monoxide emissions from entering your home. It's also a good idea to have a dedicated circuit for your portable generator. This way, you do not overload your generator.

## Don't overload your circuits.

### Plus - make sure your outlets and power strips are not a hazard.

It may seem a little darker in your home; but you should still follow the recommended wattage for your light fixtures. Similarly, be mindful of how you are loading your circuits. Try to maintain only one high wattage item per outlet to prevent overloading with too much wattage. Make sure that your cords and power strips are not creating a fire hazard. Running cords under carpets or behind furniture can increase the risk of fraying, which can quickly lead to a fire in the home.

## Do routine checks of your electrical infrastructure, be observant of red flags.

Electrical issues are very dangerous if not addressed, and especially when considering harsh winter elements. Be sure to call a qualified electrician if you notice any loose connections, scorching on outlets, or old electrical outlets. You should also be aware if you notice any flickering lights, frayed wiring, or crackling sounds. Also have an electrician inspect and test your ground fault circuit inceptors (GFCI) outlets. These are a safety system that prevent electrocution and keeping them functional will keep your family safe.

## Be cautious with electric blankets and other warming devices.

Electric blankets are a great tool for keeping warm. But if used improperly, they pose their own set of risks in the home. It is not recommended to sleep with an electric blanket, or to keep it on for extended periods of time or when you leave the room. And, always be diligent about disposing of electrical blankets that have become over-used or are damaged in any way.

## Trust your professionals.

Always remember that electrical safety checks and repairs should be trusted to professional electricians. Avoid doing electrical work on your own in your home as it can be very dangerous. Experienced electricians should be called for any projects relating to electrical safety inspection, rewiring, installation, and more.



## Home Energy Saving Tips for Cold Weather

*SOURCE: American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). More information can be found at [www.ashrae.org](http://www.ashrae.org).*

### Heating Systems

- Set the thermostats at 68 F when the house is occupied during the day and turn it down at night or when you're not at home (60 F is recommended). There are programmable thermostats that you can buy from local hardware and lumber stores that can do this automatically and easily. This would not be recommended for "heat pump" systems if it would cause auxiliary heating to come on.
- Make sure supply and return vents, radiators and baseboard heating units are not obstructed by furniture, appliances or other objects and that air can flow freely to and from them. This will maximize the efficiency of your system and help distribute warm air throughout the room.
- Clean or change furnace filters in forced hot air systems once a month or more often as needed. And, have your heating system maintained and serviced according to manufacturer's instructions (usually once a year). Dirty filters, coils and fans reduce airflow throughout the system, which decreases performance.
- Insulate your hot water tanks with an insulating jacket according to manufacturer recommendations. Some newer tanks already are insulated, so check product literature to determine if insulation is needed. Insulate the first six feet of the hot water pipes connected to the water heater.
- You can turn down the thermostat in rooms that are unoccupied, can be closed off from the rest of the house, or have their own heating zone. However, do not do this if it adversely affects the rest of your system or could lead to freezing water pipes.

### Windows and Doors

- Install caulking, weather stripping or use spray-in foams around exterior windows and doors or those between heated and unheated spaces (garages, basements, crawl spaces, attics, etc.) Read instructions carefully. Expanding foams can exert enough pressure to cause doors and windows to jam or stick.
- During the heating season, keep draperies and shades open during the day on your southern facing walls to allow sunlight to enter. Keep them closed at night to reduce heat loss and the chill or draft you may feel from cold windows.

### Exhaust Fans

- Did you know that your kitchen or bathroom fan can pull out a houseful of heated air in just one hour? Turn off all fans as soon as they have done the job. Consider installing a timer switch instead of a manual switch to limit the unnecessary operation of an exhaust fan.

## DEP announces DC Fast Charging and Hydrogen Fueling Grant Program

The Department of Environmental Protection announced an opportunity to apply for grants offered through the DC Fast Charging and Hydrogen Fueling Grant Program, one of the funding programs under the Driving PA Forward Initiative. This funding is available for light-duty zero emission vehicle supply equipment projects that will improve air quality and protect public health and the environment in this Commonwealth by reducing emissions through expanded use of DC fast charging and hydrogen refueling infrastructures.

**Eligible Projects:** those that will install DC fast charging or hydrogen fueling equipment in community hubs, transportation corridors and destinations, as defined in the Program Guidelines. Funding is available for public and private entities including school districts, municipal authorities, political subdivisions, State and local agencies, tribal governments, nonprofit entities, corporations, limited liability companies, partnerships and sole proprietorships which are incorporated or registered in the State, air quality or transportation organizations and metropolitan or rural planning organizations.

The Program Guidelines and Application Instructions are available on the Department's Driving PA Forward webpage at <https://dep.pa.gov/DrivingPAForward/>.





# EEIF Supports Projects in Delaware

The Department of Natural Resources and Environmental Control (DNREC) provides grants through the Energy Efficiency Investment Fund (EEIF) to help commercial and industrial customers replace aging, inefficient equipment and systems with energy efficient alternatives.

## EEIF GRANTS:

**Energy Assessment Grants** support single purpose (targeted) energy audits and comprehensive energy audits designed to help facilities receive technical evaluations for appropriate, cost-effective energy efficiency improvements, specific to each building's needs.

**Prescriptive Improvement Grants** include two types of applications: prescriptive lighting and heating, which includes natural gas heating and water heating equipment.

**Custom Improvements Grants** apply to more complex or one-of-a-kind measures that go beyond the equipment funded by Prescriptive Improvement Grants. Custom incentives mitigate a significant portion of the project costs for high efficiency equipment. They are based on incremental cost, calculated energy and demand savings of retrofit projects, cost effectiveness, and are limited by total project cost.

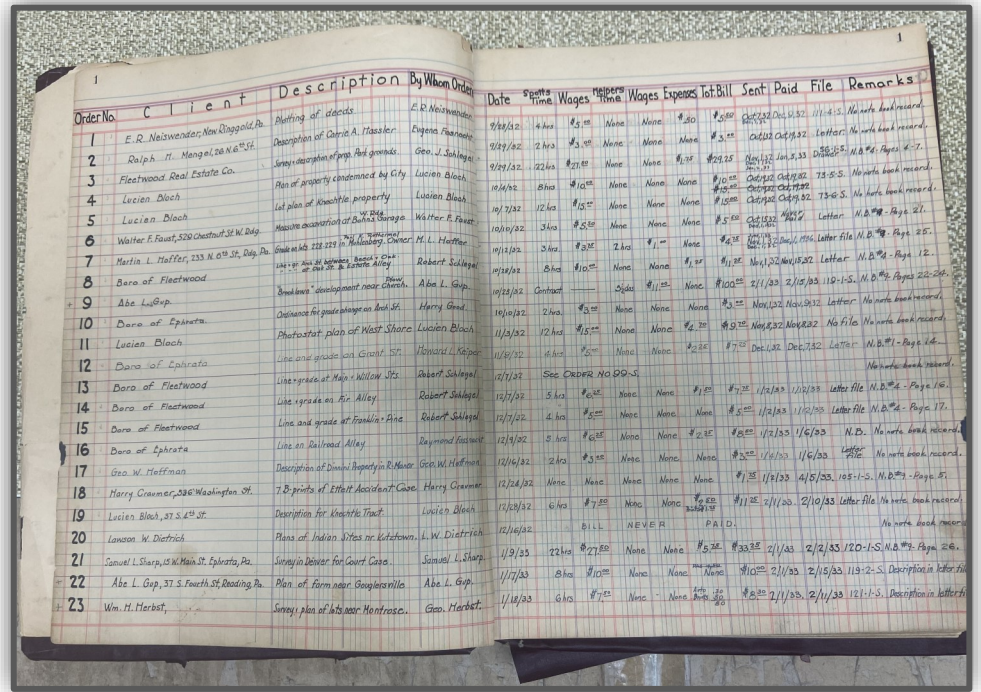
**Combined Heat and Power Grants** include five types of Combined Heat and Power (CHP) systems: microturbines, reciprocating engines, gas turbines, steam turbines, and fuel cells. Systems must meet the minimum 60% annual system efficiency requirement, and produce 1.0 MMbtu/hour of useful thermal output. The CHP pathway is ideal for facilities with high annual hours of operation and a high thermal load.

## FOR MORE INFORMATION:

Website: <https://de.gov/eeif>  
 Application Portal: [https://eeif.smartsimple.com/s\\_Login.jsp](https://eeif.smartsimple.com/s_Login.jsp)  
 ESupplier website for Payment: <https://esupplier.erp.delaware.gov/>

**Does this information speak to you?**  
 Give us a call to get started on acquiring your funding.

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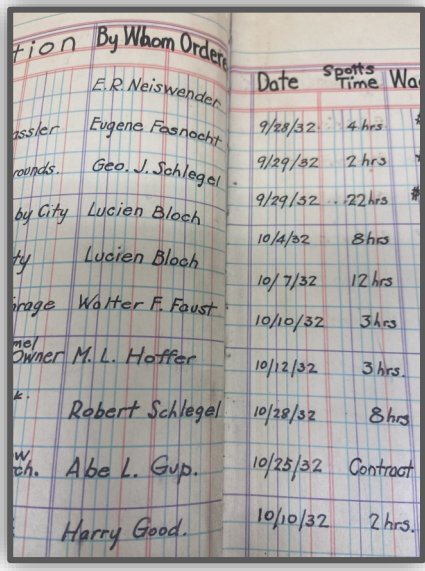
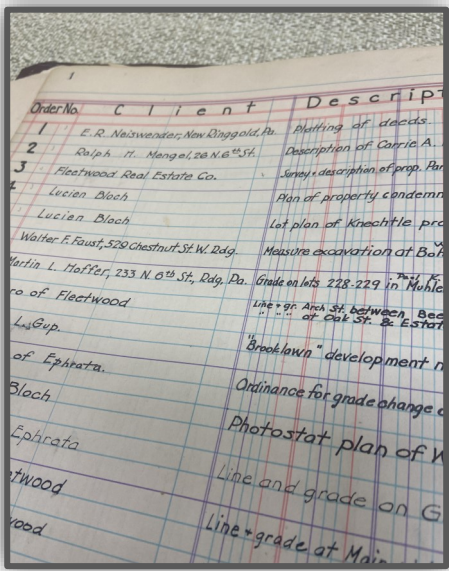


# Celebrating the Stories that Made Us.



This year, SSM celebrates its 90th anniversary in business. Follow along through our newsletter and through social media as we share 90 stories for 90 years. Stories - just like this one - that demonstrate where we came from, and how we got here.

**Story #1 is the story of Order #1 in the SSM books.** Dated September 28th, 1932 the first transaction on the books was for plotting of deeds in New Ringgold, Pennsylvania. The fees were itemized as 4 hours of Spotts time, \$5.00 in wages, and \$0.50 in expenses, for a total fee of \$5.50.



# Opportunities at SSM - join the team!

Visit [ssmgroup.com](http://ssmgroup.com) for more information about these opportunities:

- **Mechanical Engineer** with experience in the design of HVAC, process piping and plumbing systems in industrial, commercial, and R&D type facilities.
- **CAD Designer - Civil Engineering** with responsibilities including design and layout of civil, water, wastewater, and environmental engineering projects.
- **Land Development Project Engineer** with strengths in stormwater management design and permitting; basic AutoCAD Civil3D design capability; and experience presenting plans at public meetings.
- **Senior Municipal Engineer** with experience in municipal engineering and a background in Stormwater management and traffic/transportation.
- **Survey Crew Chief** with technical and crew chief experience to perform all aspects of site and boundary reconnaissance, construction stakeout, and boundary, topographic, roadway and as-built surveys.
- **Survey Technician** to operate all field surveying instruments, as well as downloading field data to be used in preparing AutoCAD drawings in Civil 3D.
- **Senior Systems Administrator** with experience in the IT field to provide high-level, wide-range support of our IT infrastructure.
- **Construction Project Representative** to inspect structures and infrastructure using engineering skills to determine structural soundness and compliance with plans, specification, and regulations.
- **Graduate Water/Wastewater Engineer** to work with a multi-disciplinary team to help local and regional public and private sector clients to solve infrastructure challenges.

## Team News

### Paul Spiegel Named Community Leader Groundbreaker

Congratulations to Paul, Director of Energy and Sustainability Services at SSM, for receiving the Groundbreaker Award from Green Building United. Paul has advanced the adoption of energy-related strategies and is truly a groundbreaker in the field. He has worked with community leaders in over 100 local municipalities and over 75 schools. His public education and outreach has reached thousands of people. And, he has helped save millions of dollars for business owners while significantly reducing environmental impacts.



### Profiles in Leadership

#### Scott T. Miller, RLA | Manager, Land Development Services

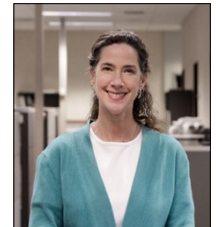
Teamwork. Quality. Pride. These are values that Scott T. Miller demonstrates every day as he helps clients to achieve their goals and make their projects a reality. As Manager, Land Development Services, Scott is responsible for managing all phases of each project's land development process. His team's multi-disciplinary expertise and broad knowledge of municipal and regulatory development procedures provide lasting value to clients. Scott has over 35 years of land planning experience in Berks County and the surrounding region. He is a graduate of the Pennsylvania State University with BS in Landscape Architecture and is a Registered Landscape Architect in Pennsylvania.



*"Experience and teamwork are both key to performing with excellence. When all members of our team combine their individual skills, we give clients a level of experience that goes beyond what any one of us could manage alone."*

#### Carolyn Rodino, PMP | Manager, Water Resources

With a focus on protecting, developing, and managing water resources for future generations, Carolyn Rodino, Manager, Water Resources is passionate about supporting the firm's mission, "Our work touches everyday life". As a leader, she has a gift for providing encouragement and assistance to her team, preparing them for leadership roles in the future. Her ability to unite, inspire, and organize individuals into a successful project team results in projects and ideas moving forward. Her technical experience includes watershed and regulatory assistance to drinking water systems, and development of source water protection plans for water systems across Pennsylvania.



To young leaders, she advises *"Make a difference in your community by volunteering! Working as a volunteer lets you practice leadership skills that you can polish for your work career."*

## Congratulations on your new positions!

