

A Guide for Best Soil Management Practices in the Digital Era



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What is Soil Management?

Soil management is the key to success for all soil placements involving multiple stakeholders from source sites, receiving sites, and Qualified Persons (QPs) to third parties like municipalities.

Soil is an important source used in vast proportions commercially. Effectively managing soil placement prevents wastage and is vital for both economic and environmental reasons. The Ministry of the Environment, Conservation and Parks (MOC) also emphasizes the protection and conservation of soil in Ontario to maintain the environment for present and future generations.

Managing soil movements at a vast scale with paper-based methods is cumbersome, complex, and inefficient. Adopting a digital way to manage all soil placement helps meet the growing demand for increased efficiency and reduced costs for soil disposal.

Plan

Quality

Digitization of Soil Management

With the evolving technological developments and businesses around the globe going digital, adopting digitization for soil management is the need of the hour.

Digital transformation in managing soil helps to improve collaboration, prioritize visibility, and share information between different stakeholders. It also helps enhance soil management for building and infrastructure projects from start to finish.

The digital ecosystem for soil management will become the strategic center for greater productivity and improved financial outcomes. Technology will make it easier to monitor and track soil while maintaining a detailed record of who moved it, where it came from, and its destination.

Moving soil comprises of multiple stakeholders from Source Sites to Receiving Sites, along with Qualified Persons (QPs) and haulers. It also requires compliance with the government's policies and regulations, which demands third-party oversight of both municipalities and ministries.

Ensuring an end-to-end process involving multiple stakeholders with just paper-based soil management leads to increased costs and complex operational processes.

Team

Finance

team spirit

Strategy

Digital Way Forward

The paper-based soil management system is not the way forward – instead, a digital method is the preferred option. A digital soil management solution that enables effective communication and soil tracking from a single platform that empowers all entities with increased operational efficiency and compliance with ever-changing government regulations is the future for soil management.

Benefits of Digital Soil Management

Using innovation to adopt digital methods in soil management in a cost-effective way requires a solution that provides economic and environmental advantages while delivering value to your organization and customers.

Some of the key attributes of a soil management solution to digitalize soil management are:

- > Agility
- > Compliance
- > End-to-end Oversight



Agility

Agility, in simple terms, can be defined as getting work done effectively and efficiently. Being agile enables your business to transform into the digital world easily, thus increasing overall rates for deliverables and reeling in the profits achieved by using time more efficiently.

In a world of increasing demands and evolving competition, having a digital edge that helps your business live and breathe agility to speed up processes from the paper-based world cannot be emphasized enough. An agile digital framework focuses on people first rather than getting lost in the tedium of processes. It provides tools to your team that are innovative to help produce higher returns.

If you look at the soil placement process, having an agile environment will help you arrive at the

frontlines before your competitors, granting you first access to the market. For example, for Source Sites, digitization of soil management directories provides easy access to all the Receiving Sites, QPs, and haulers available.

Real-time access to comprehensive data-capturing soil management workflows across the entire process, involving multiple sites and contractors, helps to optimize existing processes and scale businesses with increased insight into soil management.

PATH enables an agility framework by providing access to real-time tracking of soil movement and transparency by generating reports and maintaining digital records about batch details and Excess Soil Vehicle Records for any required date range.



Compliance

Environmental decisions regarding soil movement, reuse, and disposal must be made responsibly, transparently, and in compliance with government regulations. With ever-changing government regulations resulting from increased demand due to rapid infrastructural developments and growing urban centers, ensuring compliance and being up-to-date with the regulatory requirements is mandatory.

The government regulations and regulatory requirements around soil operations can be complicated and difficult to monitor. PATH allows all parties to stay updated with regulations and any changes made through its resource section and increased operational insights into the entire soil movement process.

Receiving Sites are evaluated based on many criteria, including Sodium Adsorption Ratio (SAR)

impact. PATH provides visibility of adequate soil placement based on reports of the soil quality and ensures that it complies with the necessary limits. Full visibility by QP of municipalities allows compliance with another compliance aspect – the dust and debris management that ensures the safety of residents.

Making the process transparent also allows teams and individuals to take ownership, and to have a direct point of contact with every facility with one look at their screen. This enables each party involved to remain updated with complete transparency of soil movements and ensures that regulations have been met at every stage of the soil placement journey.

End-to-End Oversight

The soil placement process generally starts with the Source Site, which needs a request to be approved by the Receiving Site. At the same time, approval from a QP is required, who then generates an Excess Soil Vehicle Record once reviewed and approved. The Source Site also needs to use a hauler to transport the soil from the site to its destination.

This process includes various document approvals and invoice creation between multiple parties, along with the travel of soil from one place to another. Adopting digital transformation to automate this process improves soil management with lower costs, fast and secure deliveries, stakeholder coordination, and greater transparency – resulting in economic and environmental advantages.

PATH's proprietary software offers peace of mind and cradle-to-grave tracking of all soil, including real-time monitoring of approval statuses, loads






received, number of excess soil vehicle records outstanding, and reports satisfying records of site condition or on-site fill management plan criteria. Digital transformation can be daunting, especially when moving from paper forms to a fully customized software solution. But strategy, not technology, drives digital transformation, and that is why companies need to build digital into all aspects of their strategic approach.

Businesses involved in the soil management industry can reap the above-mentioned key benefits of digitalizing soil management along with others.



How PATH Can Help Automate Soil Management

Project Area Tracking Hub (PATH) is a soil management software that enables effective communication and soil tracking – all from a single platform. PATH primarily offers value to your business via:

-  **Real-Time Monitoring:** Soil management involves various stakeholders and having insights into each operation from a single glance at your computer screen is a must-have to operate efficiently, address any issues in real-time, and reduce unnecessary costs. With our propriety software, you can view and receive notifications on approval statuses for all batches.
-  **Reporting:** It is more than just an easy interpretation of data. Reporting helps businesses and key owners to access accurate, real-time representations of complex business processes in a concise and meaningful way. PATH helps generate and maintain digital records about batch details and Excess Soil Vehicle Records easily during a specific date range.
-  **Mobile Application:** Staying connected with the progress of approvals and haulers is important to ensure proper delivery times. The PATH app's unique scanning and tracking feature facilitates on-site tracking of soil movement via mobile devices. Easily stay connected wherever you are.
-  **Third-Party Oversight:** Third-party entities have complete transparency and visibility to ensure regulatory compliance of sites.
-  **End-to-End Soil Management:** An all-in-one solution that covers all the requirements for successful soil movement and tracking at each site.

PATH is a comprehensive tool for soil management that can be used by all the stakeholders involved in an end-to-end soil placement process. It helps simplify everyday intricacies of soil management and works as a matchmaker for soil generators and soil seekers.

It also helps the Source Site by managing excess soil excavation from start to finish in one place and ensures compliance with improved visibility of adequate soil placement by the receiving sites. PATH also enables affiliated QPs and QP firms to operate more efficiently and provide complete transparency of each soil placement from source to destination to third parties like municipalities and ministries.

Conclusion

With increasing demands and inefficient paper-based systems, it is time for businesses involved with soil management to go digital and utilize the power of digitization to improve efficiency, increase transparency, and reduce costs with collaborative coordination amongst all the stakeholders involved.

Digital transformation can be daunting, especially when moving from paper forms. Go digital with PATH and empower all stakeholders involved with increased operational efficiency while ensuring compliance with ever-changing government regulations.

Equip your team with the industry's best, most versatile soil management solution today.

Sign up for a DEMO to learn more about the value PATH can bring to your organization by visiting our website at www.pathub.ca.

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