

Binni Helps the New Nice Middleton Bridge Construction Team Improve Collaboration and Productivity



Highlights

ELIMINATED MANUAL REPORTING, greatly reducing the time spent by the construction inspection team performing this task enabling them to focus on value added activities.

PROVIDED EASY ACCESS TO OPERATING INSIGHTS for concrete logistic and quality data and e-ticketing information, allowing for better insights and streamlined analysis.

CONNECTED ALL PROJECT PARTNERS TO REAL-TIME POUR INFORMATION empowering collaboration amongst the entire construction team and aiding in the management of the challenging concrete placements.

Project Owner

The **MDTA** is responsible for constructing, managing, operating, and improving the State's toll facilities, as well as for financing new revenue producing transportation projects. The MDTA is a customer driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect their customers to life's opportunities.



Builder

The project is being constructed by a joint venture of **Skanska, Corman & Mclean** with Skanska managing the majority of the concrete works. Skanska is one of the largest construction and development companies in the U.S., serving a broad range of clients including those in transportation, power, industrial, water/wastewater, healthcare, education, sports, data centers, government, aviation and commercial.



Project Description

The New Nice Middleton Bridge project, owned by the Maryland Transportation Authority, is being constructed by a joint venture of Skanska/Corman/Mclean. The project will replace an existing bridge that spans the Potomac River, connecting the shores of Maryland and Virginia. Upon its completion, the New Nice Middleton Bridge, which will be constructed using 65K cubic yards of concrete, will be 1.9 miles in length and will reach a height of 135' at its peak.



PLAN



TRACK



REPORT

The Challenge

Before using binni Concrete the MDTA tracked and reported concrete activities using paper reports completed in the field that were compiled and circulated after a pour was completed. Concrete pour information was shared manually between stakeholders, which proved cumbersome and time consuming.

- The specified MDTA reporting for each pour required inspectors and engineers to spend more than 30 hours per week compiling concrete pour information and generating reports.
- Aggregating and analyzing quality control results and other critical pour information is imperative to the success of the project but was a manual process that required project management to spend an inordinate amount of time completing.
- For a project of this nature, it is vital that there is close coordination during concrete pours between all parties (e.g. owner, inspectors, contractors and suppliers). This requires constant communication which can distract from the task at hand resulting in a high potential for errors.

“In my role, cost, quantity management, and invoice approval are critical components. Binni makes it easier to see and digest the information and allows me to focus on analysis. In addition, we are able to monitor pour progress in real-time which allows us to see how the pour is progressing and make adjustments as needed”

Antoinette Maddox | Skanska |
Project Controls Manager

Goals

The MDTA and Skanska were interested in solutions that would help them be more efficient and give time back to project personnel to focus on value-added activities instead of performing data entry, report compilation and required paperwork:

- Streamline how quality and logistical information from concrete pours is captured and reported to increase the effectiveness of personnel and reduce time spent on this task.
- Reduce the risk for errors due to transcription of handwritten reports into digital formats
- Integrate and normalize all information from the data sources and partners involved in the concrete pours to simplify the consumption and analysis of pour information in real-time and after each pour is completed.
- Improve visibility into ongoing concrete placements for all partners on the project to increase awareness and reduce communication time to facilitate quick, informed project decisions.
- Provide a contactless concrete ticket exchange between the contractor and inspector limiting exposure.

“By using binni, our team is available to spend more time focusing on value added activities instead of having to focus on completing tedious paperwork.”

Lee Yowell | RK&K | Director,
Construction Management

The Solution

At the outset of the project, the MDTA and Skanska employed the binni Concrete solution for its ability to provide real-time visibility into concrete operations, the simplicity and convenience of binni’s web and mobile apps for reporting of critical concrete pour information and binni’s capacity to process and make information available so that it can be consumed using the tools of the project team’s choice.

- Using binni’s mobile app, inspectors and engineers captured all pertinent information related to each delivery for every pour including QC results and batch tickets. This saved time in aggregating the information and provided real-time insights into the concrete operations to the project team.

“Binni has reduced the amount of time spent managing the quality related concrete information for each pour. Having the info readily available and easily retrievable on the binni application has been very impactful.”

Brian McGuinness | Skanska |
Quality Manager

- The project team leveraged binni’s open API to easily generate MDTA specified reports and Skanska’s proprietary worksheets with a click of a button. This satisfied the MDTA’s reporting requirements and drastically reduced the amount of time spent daily completing these tasks.
- Binni’s integration with the ready-mix supplier allowed for the batch ticket data to be combined with the other pour information captured in the field. The merged and normalized information was made available to be easily digested and analyzed.
- Binni is built with flexibility in mind and the understanding that each customer project requires unique insights and views. Binni’s extensive knowledge of concrete and concrete construction provided the construction team with a flexible solution designed to meet the needs of the New Nice Middleton Bridge project.

Get Started Risk Free, No Commitment. The First Month Is On US

www.binni.co

The Benefits & Results

The construction team has reported that by using binni Concrete, increased efficiency across multiple processes has been realized by several partners on the project. This increased efficiency has resulted in several benefits including:

- **36+ hours saved per week for the inspectors** and several hours saved for the Skanska construction team
- **Deeper insights** and many hours saved for project management due to simple, streamlined access to pour information without having to manually compile information from disparate sources.
- **Enhanced report quality**; digitization of concrete pour data at the point of placement has reduced data handling and the potential for errors in data input.
- **Increased visibility of information** for on-going concrete pours improving the speed and ability of personnel to react and make decisions about ongoing operations.

About binni

Binni is a construction technology company focused on helping concrete and tunnel construction teams increase productivity. Binni streamlines the capture, digitization, and consumption of operational data. Created by builders for builders, binni brings deep industry knowledge and understanding of the unique pain points that contractors face on a daily basis.

About binni Concrete

Binni Concrete provides a fully integrated environment for construction teams to collaborate throughout the planning, tracking, and reporting of concrete pours. Binni provides a single source view of concrete operations through the capture of information and integration of stakeholders and partners.