



IMPLEMENTATION SUMMARY

Questions?

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LRRB PROJECT COST:

\$42,615



Bridge deck pour on the TH 53 relocation project over the Rouchleau Pit in Virginia, MN



Putting Research Into Practice: Mitigating Projects Missing Deadlines

What Was the Need?

Research by the Lean Construction Institute claims that 70% of all construction projects are over budget and delivered late. Construction projects are increasing in complexity, size, cost, and constraints. Therefore, something must be done to tip the scales the other way. There are so many factors that can negatively impact schedule, and it's easy to feel defeated and helpless when challenged by things that are out of our control such as weather, utilities, traffic, and supply chain issues. This document aims to turn your attention to the things that ARE in your control and remind you that effective management of those things will put you in control. As the saying goes, failing to plan is planning to fail.

All construction contracts specify a deadline, either a specific date or a length of time. Construction schedules are compressed to meet deadlines and avoiding delays is crucial to delivering a project on time.

The purpose of this research was to produce guidance for local agencies to help reduce the probability of a construction project finishing late. There is only so much an agency can control to prevent a project from finishing later than allowable by contract. The agency and contractor need to work together to mitigate these items that come up during construction.

What Was Our Goal?

The objective of this study was to produce an educational guide on contract language and processes that when used will improve the likelihood of delivering a construction project on time.

What Did We Do?

Researchers reviewed current industry standards and literature related to contract time, contract type and disputes and claims, investigated current contract language producing successful contract completion and mitigation of project delays, and the effects of administering liquidated damages for projects finishing late. To gain input from local agencies on the topic, we sent out a survey related to projects finishing late to understand our audience and how they deal with projects that finish late.

What Did We Learn?

Of the local agencies that replied to our survey, 34% of respondents said that between 20-40% of their projects finish later than planned. When projects do finish later than planned, 67% of the agencies are not afraid to assess liquidated damages, but it's also mutually beneficial to maintain partnerships and avoid conflict and not assess liquidated damages.

Mitigation Efforts During Design and Construction

There are a wide range of ways construction delays can present themselves during the project lifecycle. If action is not taken, these delays will impact the overall project duration. Proper coordination, planning and communication can help mitigate project delays and lead to a project completing on time.

Early Material Procurement (Agency) – If agencies know there are specific materials that require long lead times, agencies can procure the materials prior to the advertisement of the construction project.

Agency Let Early Material Procurement Contract – If agencies know there are specific materials that require long lead times, create separate material procurement contracts. If this is an option, the special provisions need to be modified to include the coordination of delivery with

“With current staffing shortages, material delays and a short construction season, contractors failing to meet deadlines is a common problem for agencies.”

–Michael Flaagan,
County Engineer,
Pennington County

“This project highlighted contract language and gave practical examples to help reduce the risk of a project within the timelines outlined in the contract documents”

–Justin Bossert,
Project Controls and
Scheduling Manager,
WSB & Associates, Inc.



Concrete paving on TH 52 Cannon Falls to Zumbrota design-build

the prime contractor of the future contract and the fabrication completion date.

Accuracy of Contract Time – During the 30, 60, 90% design milestones, contract time needs to be determined/evaluated. This can be done by creating a detailed Critical Path Method schedule or by reviewing estimated quantities by stage and assigning a production rate to determine duration. If contract time is underestimated, the contractor is already trying to catch up at the beginning of the project.

Improved Utility Coordination – Designers need to meet with affected utility companies and fully understand the effort for proposed relocations. Once a contract has been awarded, the prime contractor needs to get involved in these discussions so all parties can understand their role in the process and effort required to keep the project on schedule.

Liquidated Damages

Regarding the assessment of liquidated damages, 67% of the agencies surveyed responded saying that assessing liquidated damages conflicts with their effort to maintain partnerships with their contractors. Unless there is a contract revision as defined in MnDOT Specification 1402 – Contract Revisions, liquidated damages must be withheld in accordance with contract documents. Most, if not all, contracts include a clause related to liquidated damages like MnDOT specification 1807.1 Assessment of Liquidated Damages. The Department will deduct liquidated damages from money due to the contractor for each calendar day that the work remains incomplete after the contract time expires.

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