



# PERSPECTIVES

---

## **Equipment Costs: Civil Construction**

Our perspectives feature the viewpoints of our subject matter experts on current topics and emerging trends.

## OVERVIEW

In an ideal world, the insurer will be notified of a builder's risk loss in a timely manner and prior to completion of repair work. This allows for discussions with the contractor on appropriate methods of tracking incurred repair costs and the documentation that will be required to substantiate their claim.

But what do you do when this does not happen? For example, the equipment claim presented by the contractor is received and it is convoluted and complex.

Contractors may choose to present their equipment claims in different ways:

- They may claim all equipment that is physically on the project during the repair period
- They may approximate costs using historical cost data

- They may submit backup of equipment rental invoices

The problem is that none of these methods represent the actual incurred costs for the equipment required to perform the repair work.

*"A contractor's claimed amount may include a significant amount of equipment sitting in their yard or not performing repair work."*

## CLAIM TYPE EXAMPLES

A large civil project will often buy or rent a fleet of equipment which is kept on or near the project site in a yard. The equipment is then mobilized in and out of the yard to perform work on the project, as needed. Whether or not the equipment is in use, the project may still be incurring a daily ownership or rental cost for that equipment.



**Figure 1**

When a contractor claims all equipment on a project during repair, the claimed amount may include a significant amount of equipment sitting in their yard and/or equipment not performing repair work. When this happens, J.S. Held uses a combination of methods of analysis to reach a more accurate value.

Another way contractors may approximate the value of their equipment claim is to use a historical cost ratio. The ratio of dollars spent on equipment to dollars spent on labor prior to the loss will be applied to claimed repair

labor to calculate the claimed equipment costs. This is an approximation and can be highly inaccurate if the scope of repair work is dissimilar to the original contract work on which the ratio is based on. The pre-loss ratio could also include equipment costs related to prior activities or onetime events that do not apply to the repair work such as equipment repairs, accidents, major maintenance, and setup costs. The ratio could also be inaccurate due to more or less overtime being used for the repair work.

If this is the only method available to approximate equipment costs given the information provided in the claim, we can review the cost data (if provided), remove the non-applicable costs and overtime premiums, and help to make this calculation more representative of actual costs.

A basic way that claims are presented is to provide all invoices for equipment rentals, usually dated during the repair period, but for which there is no documentation tying use of the invoiced equipment to loss related scopes of work. While it is likely that some of these equipment costs are loss related, J.S. Held will use inspection data, industry knowledge, thorough review of timecards, daily reports, project schedules, and progress photos to confirm which of the invoices are relevant to the claim.



Figure 2

Ideally the hours that equipment is used to perform repair work will be tracked on timecards or extra work orders and coded to a loss specific cost code. If the hours are known, contractual or industry standard equipment rates can then be used to calculate the actual incurred costs for the equipment required to perform the repair work. Most contractors have the project controls systems to easily set up detailed tracking of loss specific costs, but any contractor should be able to fill out extra work orders for each crew by hand on a daily basis. The key is to get them to plan for and implement this as soon as repair work begins.

## ADDITIONAL ANALYSIS METHODS

If it appears that the claimed equipment costs are not reflective of the actual repair work, there are methods to estimate and confirm the claim related equipment costs.

**Operator Hours:** One method is to take the operator labor hours, if available, and apply the hourly equipment rate for relevant equipment to the operator hours for that piece of equipment. If operator specific hours are not available, but the quantity of work is available, we can take the crew and equipment required to perform the scope of work from industry knowledge or published estimating sources (RS Means/Costworks) and estimate the claimed costs. We can also create estimates of equipment costs based on site visits to document the equipment in use for loss related work and project schedules to provide durations.

**Equipment Standby:** Costs for equipment that is on standby due to the loss should be segregated from repair equipment when considered in the claim review. Another

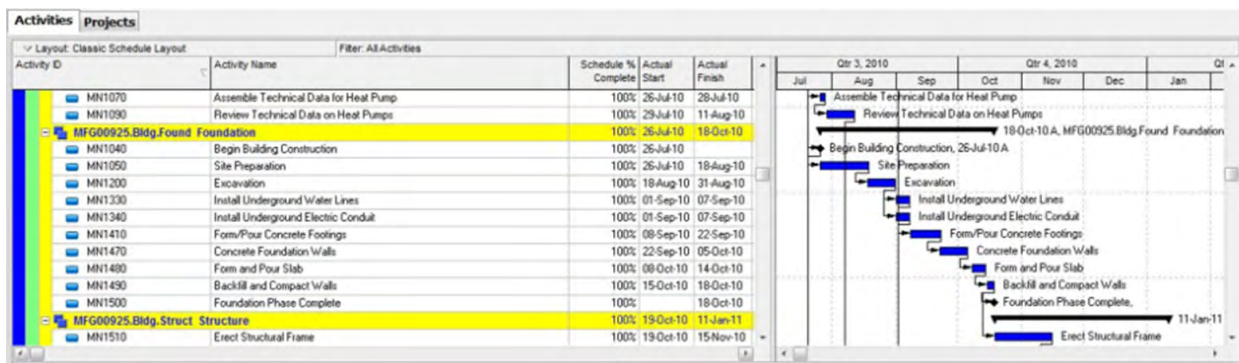


Figure 3 - Example of a project schedule.

consideration is whether demobilizing then remobilizing major pieces of equipment would be less expensive than a sustained rental charge.

**Delay Costs:** If the contractor is claiming a delay and extended equipment costs, we can perform a thorough review of project schedules to confirm the delay time period and then evaluate the delay costs claimed.

Determining the actual incurred equipment costs on a claim can sometimes be difficult, but there are always ways to evaluate claimed costs even when they were not accurately tracked.

Equipment consultants are skilled in evaluating heavy civil equipment claims and are able to validate the reasonableness of claims, whether this is by confirming the as-claimed costs or creating comparison estimates from scratch.

## ACKNOWLEDGMENTS

We would like to thank Granger Stuck for providing insight and expertise that greatly assisted this research.

Granger Stuck is an Executive Managing Director in J.S. Held's Builder's Risk Practice. Mr. Stuck has worked on construction consulting and expert witness assignments throughout the country, as well as Thailand, New Zealand and Australia. Prior to joining J.S. Held, Mr. Stuck was employed by Mortenson Construction and Clark Construction in varying capacities. He has successfully completed more than \$2.0 Billion in projects including one of the world's largest Stadiums, an indoor arena, convention center, library, highway expansion, and office campus for one of the world's largest software developers.

Contact Granger at [gstuck@jsheld.com](mailto:gstuck@jsheld.com) or +1 206 895 9501.

This publication is for educational and general information purposes only. It may contain errors and is provided as is. It is not intended as specific advice, legal or otherwise. Opinions and views are not necessarily those of J.S. Held or its affiliates and it should not be presumed that J.S. Held subscribes to any particular method, interpretation or analysis merely because it appears in this publication. We disclaim any representation and/or warranty regarding the accuracy, timeliness, quality, or applicability of any of the contents. You should not act, or fail to act, in reliance on this publication and we disclaim all liability in respect to such actions or failure to act. We assume no responsibility for information contained in this publication and disclaim all liability and damages in respect to such information. This publication is not a substitute for competent legal advice. The content herein may be updated or otherwise modified without notice.