

Member Communication Experience

Any views and opinions expressed in this article may or may not refect the

cmaanet.org

e Insights

NAC Executiv

Managing the Risk of Subsurface Conditions

Key Points

Owners are best capable of assuming the risk of unknown subsurface conditions.

Strong benefits occur to owners who use Differing Site Conditions (DSC) clauses on their construction projects.

It is difficult for an owner to transfer differing site conditions risks through exculpatory clauses.

or that it simply would be unfair for the contractor to bear the loss. Owners may argue that the contract shifts the risk of unexpected site conditions to the contractor, or that the contractor did not properly investigate the site to assess conditions in formulating its bid.

This Executive Insight provides insight into how owners can effectively manage subsurface risk. It starts with a discussion about managing risk through the use of a Differing Site Conditions clause in construction contracts. It will then identify some other contractual and planning tools that owners can use to better understand what site conditions are to be expected and how to best communicate those ether conditions are to be expected and how to best communicate those ether conditions are to be expected and how to best communicate those

The Differing Site Conditions (DSC) Clause³

If contractors are required to take the contractual risk of unforeseen subsurface conditions, they will

materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in this contract. [Emphasis added]

(b) The Contracting Officer shall investigate the site conditions after receiving the written notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or of the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

Purpose of the DSC Clause

The DSC clause has been the subject of substantial case law, 60 0 £00cn then the \$66.7 Td()TjET60 0 612 792 reW*nBT/T

that contractor's pre-bid investigation, it will not be entitled to claim a DSC. It cannot satisfy the test that it reasonably relied upon the owner-supplied information.

The level of investigation required of the contractor in a pre-bid inspection is not excessively burdensome. The contractor is not required to discover latent conditions by performing an investigation that would require more time or expertise than that possessed by a reasonable contractor. It is also important to remember that even though most construction contracts require bidders to investigate the site, their failure to do so will not bar its recovery for a DSC claim if a reasonable site investigation would not have disclosed the condition. For example, if a contractor flew over the site but did not make an on-site inspection, it would likely still win its DSC claim if the on-site inspection would not have disclosed the condition on the project.

The limited nature of the contractor's duty to investigate site conditions goes back to the holding in **Foster**, where the court found the duty to investigate the site must be balanced against the contractor's right to rely on government provided site information:

Faith enFaT10 (ed a)b020 11.04 Tf464.26 5i20 11.04 Tf4664.26 5i20 11.04 Tf4664.26 5i20 11.04 Tf4664.26 5i20 11.04 Tf46665 11.04 Tf46665 11.04 Tf46665 11.04 Tf466665 1

clauses. Generally, these attempts have been unsuccessful particularly when the exculpatory language is in direct conflict with the purpose and broad language of the DSC clause, which expressly puts the risk of unforeseen conditions on the owner.

This subject was directly addressed in **Foster**, which stated:

Even unmistakable contract language in which the government seeks to disclaim responsibility for drill hole data does not lessen the right of reliance. The decisions reject, as in conflict with the changed conditions clause, a 'standard mandatory clause of broad application,' the variety of such disclaimers of responsibility—that the logs are not guaranteed, not representations, that the bidder is urged to draw their own conclusions.¹⁰

Given the strong public policy reasons behind DSC clauses, most courts have been reluctant to enforce disclaimers. Allowing the owner to disclaim validity of its pre-bid information would essentially render the DSC clause meaningless. Given this, a variety of cases have found disclaimers as invalid when they use clauses stating that: (a) geotechnical data is general information and that the contractor has responsibility to conduct its own investigation; and (b) the contractor may encounter poor conditions.

Despite the traditional reluctance of courts to enforce disclaimer language and the strong policy inherent in the DSC clause, some cases do enforce disclaimers. Generally, these situations occur where the disclaimer is very limited and addressing specific and narrow physical conditions, such as rock hardness, rock quality

DRBs are highly regarded for many reasons, particularly for their ability to provide the parties with real-time assessments of their positions and allow the projects to move forward based on those assessments. DRBs can provide an effective way to resolve DSC issues in a cost-effective and timely manner.

Summary and Recommendations

Owners are the parties that are best capable of assuming the risk of unknown geotechnical conditions. They own the project site.

Douglas Gransberg was elected to the National Academy of Construction in 2020. He is the president of Gransberg & Associates, Inc., a Norman, OK-based consulting firm providing alternative delivery, risk analysis and management, and business intelligence services. He received his BS and MS in civil engineering from Oregon State University and his PhD from the University of Colorado-Boulder. Doug has over 45 years of experience, 20 of which was spent with the U.S. Army Corps of Engineers, from which he retired to enter academia. He retired from his academic duties in 2017 where he held the Greenwood Endowed Chair in Construction Engineering at Iowa State University. His firm specializes in structuring scope, schedule and cost risk profiles on infrastructure megaprojects. He is the author of