



Differing Site Conditions Can Derail Construction Schedules and Budgets

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“Differing Site Conditions” (DSC) generally refer to “subsurface or latent physical conditions” encountered at a site that “[differ] materially from those indicated in the contract,” or “unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract.”¹

In practical terms, a DSC exists when a contractor encounters a physical condition at a site that was not reasonably anticipated. In many instances, those unexpected conditions affect cost, schedule, or performance.

Two Primary Types of Differing Site Conditions

Many construction contracts distinguish between two types of DSCs:

TYPE I DIFFERING SITE CONDITION

A Type I DSC condition exists when the encountered physical conditions differ materially from the conditions indicated in contract documents that could include plans, specifications, or geotechnical reports.

TYPE II DIFFERING SITE CONDITION

A Type II condition arises when a contractor encounters unusual and/or unknown physical conditions that differ materially from those ordinarily encountered and reasonably anticipated in similar work performed in the same area.

How Experts Evaluate Differing Site Condition Disputes

Technical experts approach DSC claims methodically because it is important to establish whether the unexpected physical condition caused added costs, delays, or other project impacts. The specific steps an expert will take depend on the specific contract, project, and available documentation.

Some example areas that experts look at when assessing DSC claims are:

1. Information Available at the Time of Bid

Experts commonly assess various materials available at the contracting stage of the project:

- Plans, specifications, and drawings

¹ CFR, § 635.109 Standardized changed condition clauses. <https://www.ecfr.gov/current/title-23/chapter-I/subchapter-G/part-635/subpart-A/section-635.109>.

- Geotechnical reports, including boring logs, laboratory test results, etc.
- Environmental assessments
- As built records or prior project documentation
- Permits and regulatory filings
- General disclaimers and “site investigation” clauses

- Loss of productivity analysis (e.g., earned value, measured mile)
- Identification of concurrent delays

2. Evaluation of Encountered Site Conditions

Geotechnical experts assess the conditions that were encountered in the field. Those conditions can be documented in:

- Subsurface profiles (soil, rock, groundwater, obstructions)
- Unanticipated materials (contamination, debris, utilities, voids)
- As built excavation logs, daily reports, photos, and instrumentation data

The analysis often compares the encountered physical conditions with the conditions reasonably expected based on the pre-bid available information to assess:

- How different those conditions were
- Whether the differences were technically material

3. Schedule Impact

Once the condition is established as different and material, construction management experts determine whether the DSC negatively impacted the project schedule. This assessment may include an analysis of:

- Work disruption and loss of productivity
- Changes in equipment, labor, sequencing, or means and methods
- Delays to the critical path
- Assessment of other contributing factors

Once such impacts are determined to exist, the expert will use industry-tested methodologies to quantify the impacts. Such analysis may include:

- Schedule delay analyses (e.g., Time Impact Analysis, Windows, As-Planned versus As-Built, etc.)

4. Damages and Quantum Evaluation

Finally, damages experts assess the cost impacts attributable to the DSC. These costs may include:

- Additional direct costs such as labor, equipment, and subcontractors
- Additional time-related costs, such as extended management or general conditions
- Loss of productivity damages
- Standby or idle time
- Procurement or equipment delays
- Increased material quantities
- Remobilization
- Cost escalation due to extended duration

They may also review the contractor’s cost records to confirm:

- Costs were reasonable and actually incurred
- Costs were directly attributable to the DSC
- Proper cost coding and contemporaneous documentation exist

Quantum experts often coordinate closely with scheduling and technical experts to align causation and cost.

How Secretariat Can Assist

Secretariat’s geotechnical, construction delay, and quantum experts analyze differing site conditions claims in various dispute resolution venues. With decades of both consulting and field experience evaluating subsurface conditions, foundation performance, and site stability, we develop independent, evidence-supported opinions. In collaboration with our delay and quantum experts, Secretariat’s investigations and analysis can assess what went wrong and provide practical solutions for early dispute avoidance.

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