



### Scope Creep ...

Structural engineers frequently provide special or extra services without receiving additional compensation. This is known as scope creep.

**Special Services:** These are services which may be foreseen at the beginning of a project, but are not related to the primary structural system and are excluded from a structural engineer's basic scope of work. Such services often include the design of nonstructural elements or their attachment. For example:

- Skylight framing, window walls, curtain walls, exterior cladding, or door systems
- Ceilings or nonloadbearing partition walls
- Anchorages, pads, brackets, or platforms for mechanical and electrical equipment
- Guide systems for elevators or escalators
- Stage equipment or catwalks
- Sculptures, screens, or decorative work
- Retaining walls, fountains, or site work
- Antennas, flagpoles, lighting, or signage

Special services also include certain things that are intentionally excluded from a structural engineer's basic scope of work. For example:

- Coordination of wind or seismic studies
- Preparation of additional documents that enable phased or fast-tracked construction
- Preparation of construction cost estimates or material quantity totals
- Preparation of shop or erection drawings
- Design or review of construction shoring
- Design or review of excavation retention or trench bracing systems
- Preparation of certifications

**Extra Services:** These are services which arise as a result of unforeseen circumstances during the design or construction of a project. For example:

- Revisions to the size or scope of a project
- Changes proposed by the owner, architect, other consultants, or the contractor
- Changes due to undiscovered conditions
- Changes due to revisions in the codes

- Changes necessitated by a construction cost overrun or a value engineering exercise
- Revisions that are inconsistent with prior instructions or approvals
- Services necessitated by deficiencies or delays in the contractor's work
- Representation required at the construction site beyond that previously agreed
- Services as an expert witness in a project-related dispute

On many projects, scope creep erodes the profits that structural engineers were planning to achieve. On some projects, scope creep leads to serious financial losses. Why does scope creep occur? There are two primary reasons.

First, a structural engineer's scope of work is not always clearly defined in a professional services agreement for every project. Many engineers continue to accept assignments based on verbal agreements, or work under the terms of their proposals that were never formally accepted. Other engineers accept agreements that were drafted by their clients, often without their review or input. When the scope of work is not clearly defined up front, an engineer is in a poor position to request additional fees later on.

Second, many structural engineers are reluctant to request additional fees when they are asked to provide special or extra services. They fear that such a request might adversely affect their relationships with their clients or impair their opportunities for future projects. Sadly, these fears are not entirely unfounded. However, additional fees are rarely offered except in response to a request from an engineer.

The solution to scope creep is discipline. Structural engineers must have the discipline to never start a new project without first securing a signed professional services agreement that clearly defines their scope of work and fees. Then, they must have the discipline to never provide any special or extra services without first securing an agreement for appropriate fees.