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Provision

The Scope Gap Playbook

How great GCs write subcontractor scopes that survive the project.

Based on **200+ general contractor interviews** across North America.

A FIELD GUIDE FOR ESTIMATORS, PROJECT MANAGERS,
AND PRE-CONSTRUCTION LEADERS

First edition · 2026

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Industry statistics are cited inline against their original sources (FMI, Arcadis, McKinsey, AGC, KPMG) and reproduced for editorial commentary under fair use.

Nothing in this book constitutes legal advice. The contract language chapter is meant to orient estimators and project managers to clauses that interact with scope; consult counsel for any specific contract drafting decision.

Provision is the AI platform behind the practices in this playbook. Learn more at provision.com.

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EXECUTIVE SUMMARY

Executive summary

Five habits that separate GCs whose scopes survive the project from those whose scopes get rewritten under stress at buyout.

Across more than fifty in-depth interviews (drawn from over 200 GC conversations across North America), the same pattern surfaced again and again: scope gaps are not random accidents. They are produced by a small set of habits, some good and some bad, that compound across the bid, buyout, and field. The firms with the best margins, the cleanest closeouts, and the longest sub relationships do five things consistently.

1. They start every scope from the drawings and specs of the current job, not from last project's template. Templates are a floor, never a ceiling.
2. They name what is included, not just what is excluded. "Clarifications" do more legal and operational work than "exclusions" ever will.
3. They reference specific sheet numbers, detail callouts, and spec sections, so a junior PM, twenty-four hours into the job, can resolve a dispute by reading the subcontract.
4. They treat the pre-issue scope review as a discrete checkpoint with a named owner. Two senior pairs of eyes, page by page, before bids go out.
5. They run a real scope conversation with each shortlisted sub during buyout. Not a perfunctory call, but a line-by-line reconciliation of what the sub assumed against what the documents say.

The cost of getting it wrong

The industry numbers track what the operators describe. The average U.S. construction dispute now exceeds \$60 million in value and takes more than a year to resolve. Arcadis has identified "errors and omissions in contract documents" as the leading cause of North American construction disputes in six of the last nine years. FMI estimates rework caused by miscommunication and inaccurate information costs the U.S. industry roughly \$31 billion annually. Change orders on commercial work typically run eight to fourteen percent of project value, and on projects with weak scope definition they routinely exceed twenty-five percent. None of those numbers are abstractions to a GC team, they are the difference between fee earned and fee burned.

What this playbook gives you

- A concrete vocabulary for what a great scope of work looks like, and a side-by-side comparison with the bad ones.
- Eight habits practiced consistently by the best estimators we interviewed, with the trade-offs and the failure modes.
- A field catalog of the most common trade-specific gaps, organized by division.
- Templates, checklists, and a library of strong-versus-weak exclusion language you can adopt verbatim.

CHAPTER 01

The scope gap and what it actually costs

The \$60M dispute, the \$31B in annual rework, and the operator numbers (\$200K wood floors, \$300K lead-lined glass, \$400K roof cover board) that show up in interview after interview.

A scope gap is the work that falls between two subcontractor packages, or out of every package, because no scope sheet ever named it. Sometimes it is a missing line item, like the gas line for the gas fireplace nobody routed to. Sometimes it is an interface, like the flashing between the masonry and the storefront that both subs assumed the other carried. Sometimes it is a substitution: cast iron specified, plastic priced, and a GC who finds out at first inspection. The shape changes; the consequence is the same. Once a gap is exposed, somebody has to pay for it, and the negotiation only goes one direction.

The chain of consequences

Scope gaps do not stay scope gaps for long. A Pre-Construction Lead at a Top-ENR Canadian GC describes the typical lifecycle in a single line: “if you miss anything, they'll bill it.” What follows is the well-worn sequence. The sub raises a change order, the GC's project manager pushes back, the work continues under protest, the dispute lands on the owner's desk, and if the contract has any “readily inferable” language at all, the owner refuses to pay, and the GC eats it. That last step is so common that one Senior PM at a Canadian ICI GC calls the readily-inferable clause “one of the worst clauses in a construction contract.”

The financial cost is visible. The relationship cost is worse. A VP of Pre-Construction at a Mid-Market US Commercial GC put it plainly: a building project is a “two- to two-and-a-half-year relationship that you either battle constantly, or you've decided up front who's going to be responsible for what.” Subs remember which GCs surfaced ambiguity at bid time and which GCs let them eat it after award. The next time the same sub gets a bid invitation, the markup goes up. Scope gaps compound across projects in a way line-item disputes do not.

The numbers the industry reports

Across the public benchmarks, scope and contract-document errors are the leading driver of construction disputes.

- Arcadis's 2025 Global Construction Disputes Report puts the average U.S. construction dispute value at \$60.1 million in 2024, with a 12.5-month average resolution time in North America. It identifies “errors and omissions in contract documents” as the top cause in six of the last nine years.

- FMI's *Construction Disconnected* study estimates that rework caused by miscommunication and inaccurate project data costs the U.S. industry approximately \$31 billion annually, with 26% of rework attributed to communication breakdowns and 22% to bad project data.
- Navigant's analysis of change orders, widely cited and re-published by the AIA, finds change orders typically running 8–14% of project cost on commercial work, and routinely above 25% on projects with weak scope definition. A/E errors and omissions alone account for 3–5% of total construction budget on average.
- McKinsey's research on construction productivity finds large projects running 20% longer and up to 80% over budget; 98% of megaprojects suffer cost overruns of more than 30%.
- The AGC/FMI Risk Management Survey ranks contract language alongside labor shortage and subcontractor default as a top-three risk identified by best-in-class contractors.

The numbers the operators report

The interview transcripts pile concrete dollar figures on top of the industry stats.

Six representative examples, anonymized:

\$200K

Wood-flooring scope gap on a luxury condo

OWNER-BUILDER PRINCIPAL, SMALL NYC DEVELOPER-GC

\$300K

Lead-lined glass omitted from a hospital diagnostic imaging suite, absorbed under “readily inferable”

SENIOR PM, MID-MARKET CANADIAN ICI GC

\$400K

Missed roof cover board on a \$50M project, recovered only through a relational concession

CHIEF STRATEGY OFFICER, SMALL HARD-BID GC

\$45K

Stone-depth mismatch between civil/structural and architectural drawings on a single slab

CHIEF STRATEGY OFFICER, SMALL HARD-BID GC

\$10K

Glulam beam destroyed in a lay-down yard; no clause required material protection

PRE-CONSTRUCTION LEAD, TOP-ENR CANADIAN GC

Millions

In disputed generator field-conditioning costs, recurring across projects

VP OF OPERATIONS, TOP-ENR CANADIAN GC

We have less subs who just kind of a gentleman's agreement, "we're going to bid and give you everything you want, don't worry about it." They've become more quick to clarify that we're not including that one piece of scope because it's not in our wheelhouse.

ESTIMATING MANAGER AT A CANADIAN ICI GC

The thesis of this book is straightforward. Scope gaps are caused, not random. They are caused by specific habits, some unconscious, some deliberate, all changeable. The chapters that follow are organized around the habits that produce a scope of work the field can actually live with, and the habits that produce the gaps.

KEY TAKEAWAYS

1. Scope gaps are caused by habits, not random. And they compound across projects.
2. The average U.S. construction dispute is now \$60.1M (Arcadis 2025), and “errors and omissions in contract documents” has been the #1 cause six of the last nine years.
3. Operator-cited examples cluster between \$10K and \$400K per gap; “millions” when the gap is systemic.
4. The relationship cost is worse than the financial cost. Subs price the next bid higher.

CHAPTER 02

The anatomy of a great scope vs. a bad scope

Two documents, two audiences. Four sections, one job: make every clause point to a drawing and a detail so a PM can hold the line in the field.

Before we get to the habits, we need a shared definition. “Scope of work” means different things in different shops, and one of the first failure modes is that pre-con and operations use the same words to mean different documents. A Director of Pre-Construction at a Mid-Market Southeast GC named the confusion directly: “Pre-con is working in the scope sheet world and project management is working in the scopes of work.”

Two documents, two audiences

The best teams maintain two artifacts. They look similar but they do different jobs.

- **The scope register** (estimator-facing). Organized by trade and assembly, with takeoff quantities baked in, used to level apples-to-apples between bidders at bid close. A Pre-Construction Manager at a Canadian ICI GC: “An estimator has no use with those spec sections while putting together scopes of work. He's just going to see drywall.”
- **The scope of work** (subcontract-facing). Generalized, often a couple of sentences per item, attached to the subcontract as Exhibit A. A PM at a Mid-Market Self-Perform GC: “Our scope of work basically becomes the Exhibit A of their subcontract.”

Treat them as one document and you will either overshare your takeoff with subs (which they will use against you on changes) or undershare your structure with bid leveling (which costs you accuracy). The structure we recommend for the subcontract-facing artifact is laid out in our [scope of work template](#).

The four sections of a strong scope sheet

The teams whose scopes hold up the longest tend to structure them in four named sections. The labels vary; the substance does not.

- **Explicit scope.** The items pulled directly from the drawings and specs: sheet numbers and detail references when possible.
- **Inferred scope.** The items every competent sub in the trade should know are required but might leave out if the documents don't say so explicitly. Concrete pumping. Grouting of base plates. Hoisting and rigging for an erection package. Material protection on a mass-timber site.

- **Coordination scope.** The interfaces. Who does the flashing at the masonry-storefront junction. Who excavates the conduit trench. Where the plumber stops and the site servicing sub picks up. These are the line items where two subs both think the other is covering it, and the line items where the GC eats it if the scope is silent.
- **General requirements.** The flow-downs from the prime contract: working hours, security, safety policies, billing format, site rules. The best practice here is to consolidate every prime-contract flow-down into a dated, version-controlled appendix so the same boilerplate doesn't get “two on top, ten on the bottom, mix and match and mingle” across sub packages (VP of Operations at a Top-ENR Canadian GC).

The peanut-butter test

How specific is specific enough? A Pre-Construction Lead at a Top-ENR Canadian GC offered the cleanest test we heard:

It's descriptive. Bread, put it on a plate, use the open jar, use a knife, scoop out the peanut butter, spread evenly. Wipe knife off. Open jar of jam. You have to get to that level of detail or else they'll just be like, “you didn't tell us that.”

PRE-CONSTRUCTION LEAD AT A TOP-ENR CANADIAN GC

The point is not that every scope sheet needs to read like a recipe. The point is that ambiguity creates leverage, and the leverage flows to whichever party can interpret the document in their favor. That is almost never the GC.

Strong language vs. weak language

WEAK LANGUAGE (CREATES ROOM TO MANEUVER)	STRONG LANGUAGE (CLOSES THE GAP)
Scope: per plans and specs.	Scope: per Drawings A2.01 through A2.07, Specification 09 21 16, and Addendum 03. Quantities below are takeoff reference, not bid quantities.
Exclusion: weather-related delays.	Exclusion: removal of snow, ice, and standing water from substrate prior to roof membrane installation; this work is included in CM-funded site mitigation, GC-directed.
Exclusion: items not shown.	Clarification: contractor is responsible for grouting of base plates, hoisting and rigging for steel erection, and material protection on site. These are included even if not explicitly drawn.
Coordinate with other trades.	Coordinate excavation of mechanical conduit and backfill (sheets M-401, M-402) with Sub-XX (sitework); backfill spoils removed by Sub-XX.
Toilet fixtures per spec.	Plumbing fixtures T1, T2, T3 per Specification 22 40 00. Basis of design: Manufacturer X, models as scheduled on A8.01. Substitutions require written approval per General Conditions Article 4.2.
Bidder to verify all dimensions.	Bidder to confirm acknowledgment of revisions through Addendum 04, dated 2026-03-12. Bid is based on drawings dated 2026-03-01, REV 2.

The “PM” test

A Chief Estimator at a Mid-Market Southeast GC summarized the working test he applies to every scope his team issues: would a PM twenty-four months out of school be able to use this document to resolve a dispute on the jobsite? An Owner at a Small/Mid-Market Quebec GC put the same standard in operational terms: “The guys that we have running our job sites generally have maybe 24 to 48 hours to familiarize themselves with the project before they're on the site. So having subcontracts highly detailed if a dispute comes up, it's not only who's

responsible for this, this is the drawing and this is the detail where you're going to find that information.” Every clause references a drawing and a detail number. That is the standard.

KEY TAKEAWAYS

1. Maintain two documents: a scope register (estimator-facing, with takeoff) and a scope of work (subcontract-facing, brief).
2. Structure scope sheets in four named sections: explicit, inferred, coordination, and general requirements.
3. Every clause should pass the “PM” test: referenceable to a drawing and a detail.
4. “Per plans and specs” is the canonical weak language; replace with cited sheet numbers, spec sections, and addenda dates.

CHAPTER 03

Eight habits of GCs whose scopes hold up

Drawings-first thinking, specific document references, front-loaded buyout conversations, and five more behaviors named unprompted by every estimator we interviewed.

These habits are not theoretical. Every one of them was named, unprompted, by multiple estimators and pre-construction leaders across the interviews. They are the behaviors that separate the firms whose scopes survive two years on site from the firms whose scopes are rewritten under stress at buyout.

1 Drawings-first, not boilerplate-first

The first habit is also the most consistently violated. The best teams start every scope from the drawings of the current project; they refuse to copy the previous job's scope sheet into the new project and edit from there. The reason is operational, not philosophical.

When we started on the precon side, we tend to start with a blank page. We put the documents out, we get bids back. In the meantime, we're developing and creating that scope of work from scratch, versus trying to copy and paste, copy and paste. At some point it just doesn't apply to a specific job anymore.

SENIOR PRECONSTRUCTION MANAGER AT A MID-MARKET MULTIFAMILY GC

Templates have a role, but only as a checklist of items to confirm against the current drawings, not as a starting body of text. A Pre-Construction Lead at a Top-ENR Canadian GC frames it as “process of elimination instead of trying to create it. Because I'll never know. I'm not a mass timber expert. I'm not a door expert.” A checklist of 80-plus line items per trade lets him be “95% confident” he caught everything in four hours.

2 Specific document references, not generic incorporation

Every clause in a great scope of work points to the document where the work is defined. Sheet number. Detail callout. Spec section. Addendum number and date. The reasons for this are belt-and-suspenders.

- It collapses the time to resolve a field dispute from days (junior PM hunts through 1,200 pages) to minutes (junior PM opens to the cited sheet).

- It survives the addendum cycle. When drawing A2.04 is reissued, the team knows every scope clause that referenced it.
- It eliminates the “we didn't see it on our set” dispute. The set is named.

An Owner at a Small/Mid-Market Quebec GC: “We go into the mechanical drawings. Changes in ductwork require blocking of through-wall openings in demising walls where ducts are removed. We'll highlight those to the drywall contractor who would never look at the mechanical drawings, would never pick this stuff up.” Every cross-discipline scope item is cited.

3 Front-load the buyout conversations

Scope gaps surface no matter what; the question is whether they surface during the bid window, when the GC has leverage, or after award, when the GC has none. The best teams treat the scope sheet as a tool for forcing ambiguity to the surface before the bid closes, not as a passive document mailed alongside the drawings.

- **Pre-bid phone calls to shortlisted subs.** “We will call them ahead of time. ‘Do you have R1? Do you have R2? Do you have the flashings?’ And they might be like, ‘oh, we have flashings up to this point but not this point’” (Pre-Con Lead, Top-ENR Canadian GC).
- **Yes/no checklist scopes returned signed.** “We used to do more of a written scope. People would submit a bid and may or may not make markups, and later on there can be arguments. That's why we switched to the checklist. Because you've done that, there's no question” (Director of Pre-Construction at a Mid-Market Canadian Self-Perform GC).
- **Time-stamped internal interpretation calls.** When language is ambiguous, the estimator adds a documented allowance, writes the assumption into an internal email, and uses that record to negotiate with the owner later. “It's pretty easy to say it's excluded if it's time-stamped” (Director of Pre-Construction at a Mid-Market US GC).

4 Templates as a floor, not a ceiling

Nearly every well-run team we spoke with maintains a master scope library by trade. The library is built from lessons learned: items missed on previous jobs, recurring trade exclusions, gaps that bit the team once and were not allowed to bite a second time. A Senior PM/Estimator at a Mid-Market Canadian GC describes it: “We’ve got a library of master scope of work lists for each trade division. That’s been made up of things that we’ve come up with over the years, lessons learned, things that were missed that we don’t want to miss again. We copy it into the job and then edit it, customize it to match the drawings and the specs.”

The discipline is in the editing. A generic inferred-scope laundry list, applied to a project it doesn’t fit, is worse than no template at all. A PM at a Canadian ICI GC: “One thing to just have all these kind of catch-all statements, but if they don’t even apply, it doesn’t add much weight to the job.” Subs learn to ignore boilerplate the second they spot an item that obviously doesn’t apply. The library is a starting point; the project-specific edit is the work.

5 The pre-bid walk is a scoping tool, not a courtesy

The walk is where coordination scope is discovered. The skinniest scope sheets we saw all had one thing in common: their authors had walked the building, read the geotech, and called the architect with three specific questions before they wrote a line. Two patterns repeat.

- **Read the geotech before the drawings.** A PM at a Mid-Market Self-Perform GC: “Sometimes it’s buried in there. There’s usually a lot of juicy information in those geotechs that we need to kind of ferret out.” Compaction percentages, lift requirements, bearing assumptions: most of it lives in the geotech report and never makes the drawings.
- **Index the drawing set page-by-page. Do not trust the cover sheet.** “Architects will often put the drawing list on the cover, but it’s extremely rare that it actually matches what’s in the set. I’ve actually had projects where they were trying to hold us contractually to revision 2 which had all this extra

landscaping stuff on it when really all we had was revision 1” (Senior Estimator at a Mid-Market Canadian ICI GC).

6 Sub-specific tailoring: sophistication matters

A scope written for an MEP sub does not read like a scope written for a flooring sub. A Director of Pre-Construction at a Mid-Market Canadian Self-Perform GC: “There's the general and there's the detail. Mechanical or electrical subcontractors are highly sophisticated. When you're dealing with the flooring guy, he just lays down floor. The things you need to say and specify are different.”

The implication is operational. A standard scope template treated as one-size-fits-all will be too thin for the trades that need detail (MEP, curtainwall, elevators) and too thick for the trades that don't (flooring, painting, basic finishes). The estimators who manage this best calibrate the level of detail to the bid-package risk.

7 Clarifications, not just exclusions

Exclusions are defensive language: “we are not responsible for X.” Clarifications are affirmative language: “this contractor is responsible for X, including Y.”

Affirmative language does more work on three fronts: it survives boilerplate exclusions sent back by the sub, it prevents two trades from both excluding the same line, and it gives the field super a clear basis for resolving a dispute on the spot.

A Senior Estimator at a Mid-Market Canadian ICI GC: “We do not incorporate those lead letters into the contracts. Ultimately the lead letter or the quote gets set aside and what's written on that scope of work becomes the Bible for the job.” Lead-letter exclusions only survive if they get migrated into the scope sheet itself.

8 The pre-issue scope review checkpoint

Every well-run team described some form of structured pre-issue review: a checkpoint with a named owner, completed before the bid invitation goes out. The form varies; the discipline is the same.

- **Two senior reviewers, page by page.** “When the two of us review subcontracts, we go through them top to bottom, page by page. Make sure it's structured properly, everything is in the right order, and drill into the trade-specific scope of work” (VP of Operations at a Top-ENR Canadian GC).
- **PM sign-off before contract issue.** “The people who are building the job are always going to need to sign off on this” (Construction Manager at a Top-ENR Canadian GC). Pre-con may write the scope; the PM who has to live with it for two years has to bless it.
- **100% coverage check by elimination.** Assign every captured line item to a sub. Whatever remains unassigned is the gap list. This single discipline catches more orphan scope than any template review.

There is just no world in which we could issue a contract out to a subcontractor without understanding every single line and detail and making sure we're not assigning the same scope of work to two subs and we're not assigning no scope of work to a sub.

PROJECT SPECIALIST AT A LARGE CANADIAN GC

KEY TAKEAWAYS

1. Drawings-first, not boilerplate-first. Start every scope from the current job's documents, never last project's template.
2. Cite sheet numbers, detail callouts, spec sections, and addendum dates in every clause.
3. Force ambiguity to the surface during the bid window. Pre-bid phone calls, yes/no checklist scopes, time-stamped assumption emails.
4. Use clarifications (“contractor is responsible for X”), not just exclusions (“not responsible for Y”).
5. Pre-issue scope review is a discrete checkpoint with a named owner. Never optional, never skipped under deadline pressure.

Anti-patterns: how the worst scopes get written

“As per plans and specs.” Copy-paste from last year’s job. The five-minutes-before-bid review. Ten everyday shortcuts that compound into seven-figure exposure.

Every habit in the previous chapter has a mirror image. The interviews surfaced a remarkably consistent set of anti-patterns, not exotic failures, but the every-day shortcuts that compound into seven-figure exposure over a project. We list them not to shame anyone (most of these have been done by every estimator who has ever worked under deadline pressure) but because naming them is the first step to designing them out of a team's process.

“As per plans and specs.”

The single most-cited anti-pattern across every firm size and geography we interviewed. A blanket “as per plans and specs” clause does no scoping work. It tells the sub to figure out the scope themselves and binds them to nothing the documents don't already say. A Senior Estimator at a Mid-Market Commercial GC: “There's people that take that route. It just opens you up for a lot of potential future disagreements, especially when you consider the amount of potentially discrepancies in a set of plans and specs or missing information or conflicting information.” A Canadian ICI Estimating Manager called the competitors who scope this way “just kind of a very lazy way of compiling scopes because at the end of the day you assume the market's going to pick up most of the scope and hopefully there's not too many anomalies.” A related failure mode is leaving addendum tracking informal. We expand on that one in [Addendum tracking and the bid-day scope misses it causes](#).

Copy-paste from the previous similar job

The second most-cited anti-pattern. The pattern is comforting: “we just built one of these last year, let's start with that scope sheet.” The pattern's consequence is the same comfort applied four projects later, when half the boilerplate doesn't match the drawings and nobody on the team knows which half.

If they continue to reuse scopes of work from a previous job... at some point it just doesn't apply to a specific job anymore. They've got scope gaps, or they've got double-up scopes between trades.

SENIOR PRECONSTRUCTION MANAGER AT A MID-MARKET MULTIFAMILY GC

Letting PMs draft contract terms inside the scope sheet

A VP of Operations at a Top-ENR Canadian GC named this one with the most colorful phrasing in any of our interviews. The pattern is that PMs, under pressure, pull legal-sounding language from previous contracts into the body of the scope sheet, sometimes a flow-down clause they admire, sometimes a “get out of jail free” clause they remember saving a previous project. The result is contracts where, in his words, PMs “pick up stuff from previous contracts, drop it in, and it starts to include a lot of weasel clause language,” sometimes contradicting clauses already in the prime contract. The fix is structural: consolidate every prime-contract flow-down into a single dated appendix and lock the scope sheet to project-specific scope only.

Junior estimators stuffing previous scopes verbatim

A Construction Manager at a Top-ENR Canadian GC described what happens when scope writing is delegated without a checkpoint:

You typically have a junior guy that gets given scopes of work from three other projects. There's no idea what's applicable or not. He hasn't read the drawings yet, and what he'll do is just stuff everything in there and remove them as he goes, but he might miss a whole bunch and you might have some in there that aren't applicable.

CONSTRUCTION MANAGER AT A TOP-ENR CANADIAN GC

Templates without a senior reviewer produce scope sheets that are simultaneously bloated and incomplete. The worst combination.

Generic inferred-scope laundry lists

“Elevator divider beam coordination” on a project with no elevator. “Dewatering during mass-timber installation” on a job with no water table issue. Catch-all clauses pulled forward from previous scopes train subs to ignore your inferred-

scope section. A PM at a Canadian ICI GC: “One thing to just have like all these kind of catch-all statements, but if they don't even apply, it doesn't add much weight to the job.” On a mass-timber package one estimator described, a boiler-plate “dewatering” line item pulled from a different trade made the sub conclude the entire scope was sloppy: “You guys are idiots. I'm mass timber. Why would I dewater my mass timber?”

The five-minutes-before-bid review

Bids arrive the day of close. The estimator has hours, sometimes minutes, to compare three to five sub bids across thirty-three CSI divisions for exclusions, clarifications, and substitutions. A Senior Estimator at a Mid-Market Canadian GC: “We send the drawings, we get the price. We have five minutes before the closing. You have 33 divisions to close. How quick can you review five if you have just two people reviewing the whole job?” Under those conditions, exclusions are not analyzed, they are tolerated. The cost shows up at buyout.

Trusting subs on a gentleman's agreement

In a tighter market, subs who used to confirm scope verbally now exclude in writing. An Estimating Manager at a Canadian ICI GC: subs “have become more quick to clarify that ‘we've included this type because that type's not available’ or ‘hey, we're not including that one piece of scope because it's not in our wheel-house.’” Treating a verbal “we got it” as binding is increasingly a trap. The scope sheet is the only document that survives a personnel turnover or a dispute.

“Just send the bid docs.”

The thinnest scope of all: emailing a sub the drawings and the spec book with the subject line “bid the electrical.” A Pre-Con Leader at a Small US Specialty GC named the pattern with unusual candor:

The truth is, we don't really write a comprehensive scope. Many times we just send the bid documents to them and say "bid the electrical." We're shortcutting it. We're not being thorough in our subcontractor management. We're basically treating the subs the same way the owners are treating us.

PRE-CON LEADER AT A SMALL US SPECIALTY GC

The same speaker noted the predictable consequence: three subs receive the same package and return three wildly different numbers because they interpreted the gaps differently. The leveling work that should have happened in the scope sheet at issue now has to happen at bid open, on the clock.

Discovering scope gaps after handoff to operations

Several teams confessed that they only learn about scope gaps after the project is on site. A PM at a Mid-Market Self-Perform GC, asked how they track scope gaps: "I don't think we track them by any means. It's just, it happens. We deal with it and we move on." Without measurement, the same gap appears on the next job, and the next.

The shortcut that has a name: "readily inferable"

Owners and CMs increasingly push design completeness risk onto the GC through "readily inferable" contract language. A Senior PM at a Canadian ICI GC: "Our construction management clients expect us to find the scope gaps in the design too now. They expect us to be designers and engineers." Signing those contracts without a corresponding contingency or design-review allowance is itself an anti-pattern. The clause is enforceable; the price needs to reflect that.

KEY TAKEAWAYS

1. The blanket “as per plans and specs” clause does no scoping work. It binds the sub to nothing the documents don’t already say.
2. Copy-pasting scope sheets from previous similar jobs compounds gaps across projects.
3. PMs drafting contract terms inside the scope sheet contaminates with weasel-clause language that can contradict the prime contract.
4. Generic inferred-scope laundry lists train subs to ignore your boilerplate. Keep templates project-specific.
5. “Readily inferable” contracts require a corresponding design-review allowance in the bid, or the GC absorbs every architectural gap.

Trade-specific scoping: where the gaps hide

A field catalog by trade family: the canonical orphans, interface gaps, and supply-responsibility wars from sitework through specialty equipment.

Every trade has its canonical gaps. Estimators who have written a hundred concrete scopes know what concrete subs habitually exclude; estimators who have written one or two do not. The remainder of this chapter is a field catalog of the gaps mentioned most often across the interviews, organized by trade family. None of this is exhaustive. It is the starting checklist. Trade-by-trade scope templates and division-level reference notes for each of the families below live in our [scope-of-work template library](#).

Site and earthwork

- Geotech compaction percentages and lift requirements live in the geotech report, not the drawings. If the estimator works from the drawings only, they will be missed. Always upload the geotech.
 - Tree protection, clearing and grubbing, erosion and sediment control. Frequently in notes pages, easy to drop in revised drawing sets.
 - The five-foot transition. Where does the site-servicing contractor stop and where does the plumber pick up? “Five feet outside the building” is the canonical answer in many markets; spell it out anyway.
 - Excavator unit-rate exploitation. A Top-ENR Pre-Con Lead described a \$5/m³ excavation quote that did not include trucking of unsuitable material. On a 10,000 m³ site this was a cripple-the-job miss. State explicitly that the unit rate includes trucking and dumping of all material types.
 - Granular base under slab. Often weeping tile is excluded by civil and assumed by Division 3. Define it.
-

Concrete and cast-in-place

- Grouting under base plates. The canonical orphan. Formworker excludes (“he’ll come back later”), steel erector excludes, GC self-performs by default. Name it in one scope or the other.
- Housekeeping pads, equipment pads, transformer pads. Frequently shown only on architectural or mechanical, not structural. Capture them anyway.
- Slab assembly conflicts. Architectural says 6” stone + 4” concrete; civil/structural says 4” + 4”. Across 300,000 sq ft this is a \$45K decision.

Resolve at RFI, not at award.

- Building concrete vs. site concrete. In some markets one sub, in others two. Match your package structure to the local market.
 - Sealers, hardeners, oil-float finishes shown on the room-finish schedule. Live in the finish schedule, not the structural set. Add them inferentially.
 - Concrete pumping and hoisting. Inferred; often missed.
-

Structural steel and miscellaneous metals

- Embeds, anchor bolts, leveling plates. Whose scope: steel, concrete, precast? Spell out supplier and installer for each.
 - Hoisting, rigging, manlifts for erection. Inferred. Always state.
 - Miscellaneous metals scatter. “Misc metals got the most particular items scattered through the entire disciplines of drawings from the site works to the architectural, to the structural, to the electrical and the process” (Director at a Canadian Industrial/Process GC). Bollards, lintels, ladders, stanchions, pipe supports, dock ramps, generator yard platforms, UPS room railings.
 - Stainless steel railings, glass balustrades. Often defaulted to misc metals but specced for glazing. Decide early.
 - Pre-fabricated steel structures (e.g., press boxes). Goes to the modular sub, not the steel sub. Easy mis-allocation.
-

Mechanical, electrical, plumbing, fire protection

- The trench. Subsurface piping and conduit. Earth-worker assumes mechanical/electrical carries excavation and backfill; mechanical/electrical assumes earth-worker does. Mentioned in three separate interviews as the single most common interface gap.
- Generator field conditioning. The recurring multi-million-dollar gap. Some specs say mechanical does initial commissioning and electrical does top of; some say electrical does initial and owner does top of. Resolve per project.

- Motor starters. Chronic supply-responsibility war between electrical and mechanical. Sub will arrive at post-tender meeting and disclaim it. Name it in one scope.
- Heat tracing. Almost never on drawings. Experience-only. Add to your inferred scope library.
- Cast iron vs. PVC, copper vs. PEX. Subs substitute by market habit regardless of spec. Pin down per package or eat the credit at the close.
- Fire-rated louvers. Long lead. If the low bidder misses one, the GC may eat the schedule: \$10,000/day in LDs against a \$100 per-piece premium.
- Lighting control systems. Spec/drawing conflict is the norm: spec says “by owner,” drawing says “by electrical contractor.” RFI before bid.
- Owner-supplied gear and sole-source distributors (OFE/OFCL/CFOI). Read the spec for sole-source designations. Drawings may show install-only items as supply-and-install.
- BAS and low-voltage demarcation. Building automation, security, fire alarm subs all prefer to do their own low-voltage wiring. The scope matrix needs to say who pulls, who terminates, who commissions.
- Plumbing fixtures. Itemize by tag (T1/T2/T3 with basis-of-design manufacturer), not “toilets per spec.” Otherwise substitutions become disputes.
- Water-heated baseboards. Plumbing, electrical, and mechanical all duck this in residential. Assign explicitly.
- Painting of exposed conduit and electrical boxes. Lives in an electrical keynote; belongs to the painter. Move it before bid.

Drywall, framing, and interiors

- Wall blocking. Architectural shows blocking for cabinetry, TVs, toilet accessories, wood door frames; structural rarely details it. A perennial cross-trade scope gap.
- Insulation inside drywall scopes. Division 7 often missed under drywall packages. “The drywaller doesn't see insulation on it, he's not going to

confirm that he has it or not, and that's a gap" (Pre-Con Manager, Canadian ICI GC).

- Hollow metal door frames. Drywaller often installs but the door sub also prices it. State "frames installed by drywall contractor; doors and hardware by Sub Z" in both scopes.
- Gypcrete naming collision. "Gypcrete" (poured underlayment) is a concrete-finisher scope, not drywall. Naming similarity is how this gets mis-allocated.
- Bulkhead/ceiling transitions. Acoustic tile to gypsum board junctures. Drywallers look at floor and ceiling plans, not special detail sheets. Cite the detail.
- Wood-frame vs. metal-stud assumptions. On a wood-frame multifamily, don't let a metal-stud coordination note from a previous job default into the drywaller package.

Thermal, moisture, and the building envelope

- Roof cover board. The most-cited high-dollar scope gap in our interviews. Always explicitly listed.
- Flashings at masonry-storefront transitions. Both subs exclude. Carry it yourself or assign explicitly.
- Snow, ice, and standing water removal from roof substrate. Roofer will exclude as "weather dependent." Add explicitly.
- Ductwork insulation at the exterior envelope. Mechanical carries interior; the exterior-wall portion (e.g., 10 ft of rigid inside the wall box) is the orphan.
- Caulking. Exterior vs. interior is the perennial split. "You're responsible for caulking the exterior but not the interior." Name it; don't quote the spec, point to the detail.
- Fire-stopping. Choose: hire a single fire-stopping sub for all penetrations, or each trade does its own. Write the choice consistently across every trade scope so two subs don't both exclude.

Specialty equipment, finishes, and one-offs

- Elevators. State number of stops, travel distance, cab finishes, finish allowance, cab dimensions, type, basis-of-design manufacturer, and acceptable alternates. Anything less is a substitution trap.
- Curtainwall and exterior mock-ups. “It’ll say please provide mock-up of this. Doesn’t show on the drawings anywhere. That’s a very expensive thing to build” (Senior Estimator, Canadian ICI GC).
- Lead-lined glass in medical imaging. \$300K gap on a hospital we interviewed. Surface in the door and glazing scopes.
- Countertops. Tagged Division 12 by CSI; usually delivered by Division 6 millwork. Match scope to who actually builds it.
- Mass timber. Material protection on site is the canonical gap (the \$10K glulam). “Include for protection of all materials delivered to site and while on site” must be in the scope.
- Mock-ups, RF-shielded rooms, atrium scaffolding. Frequency low, dollar impact high. Pull from spec and confirm with the sub at pre-bid.

KEY TAKEAWAYS

1. Always upload the geotech. Compaction percentages, lift requirements, and bearing values are buried there, not on the drawings.
2. The canonical orphans: grouting under base plates, generator field conditioning, roof cover board, masonry-to-storefront flashings.
3. MEP interface gaps (the trench, motor starters, heat tracing, low-voltage demarcation) were mentioned in nearly every interview.
4. Specialty/niche packages (lead-lined glass, mock-ups, RF-shielded rooms) have low frequency but high dollar impact. Pull them from spec early.

CHAPTER 06

From scope to buy-out to field

The three handoffs a scope sheet has to survive. And the 24-hour test the field super uses to know whether it made the trip.

A great scope at bid time is necessary but not sufficient. The scope has to survive three handoffs: from estimating to buyout, from buyout to the operations team, and from the project team to the field super who has to enforce it. Each handoff is a place where good scope work goes to die.

Estimating to buyout: the fresh-eyes pass

The best teams treat buyout as a second scope review, with the explicit assumption that something was missed at bid. A Senior Estimator at a Mid-Market Commercial GC: “Treat this as if the estimator screwed something up. What did the estimator miss? What did the bidders collectively miss? Go back through, have conversations with the low bidder, but also the high bidder. Pick their brain on why they might have been so much higher. Sometimes they’ll say, ‘oh, did you see that all this piping needs to be cast iron and everybody bid it as plastic?’”

The high bidder is data. They saw something. The buyout meeting is where that something gets surfaced. Not at the next coordination meeting on site.

The post-tender review meeting

A Senior PM at a Canadian ICI GC describes the post-tender review meeting as “the sub’s formal opportunity to push back on what we wrote down.” Line by line. The point is to surface every assumption the sub built into their bid (unloading expectations, material protection, what they did and didn’t include in their unit rates) before the subcontract is executed, not after. “What’s written on that scope of work becomes the Bible for the job. We do not incorporate those lead letters into the contracts.” Lead-letter exclusions only survive if they make it into the scope sheet itself.

Buyout to the field: a 24-hour test

An Owner at a Small/Mid-Market Quebec GC frames the standard he holds his team to: the field super reads the subcontract scope sheet for the first time twenty-four to forty-eight hours before they arrive at the site. If the document is not detailed enough, if it doesn’t tell the super which drawing and which detail to point to when a dispute comes up, it has failed. The remedy is operational, not aspirational. Every clause references a drawing and a detail.

Addenda discipline

Addenda are the silent gap factory. A drawing is reissued; the change does not make it back into the scope sheets that referenced it; a sub bids the old set; nobody reconciles until the field finds the mismatch. A Director at a Canadian industrial/process GC flagged addenda re-ingestion as a constant scope-of-work integrity problem. Best practice is a deliberate re-process step on every addendum, with a record of which scope sheets were touched and what the deltas were. We walk through the operational anatomy of this failure in [Addendum tracking and the bid-day scope misses it causes](#). And when the field reconciliation surfaces a gap, the RFI is the legal-of-record mechanism for resolving it. See [What is an RFI in construction?](#) for the discipline around the request itself.

Tracking gaps as a metric

Most teams do not track scope gaps as a recurring metric. Several of the firms we interviewed confessed this openly: “it just happens. We deal with it and we move on.” The teams that do track gaps share a few practices: a post-project debrief on every major scope miss, a master scope library updated with the lesson learned, and (in one case) a postmortem on every loss including half-a-point losses on competitively scored bids. “Half a point. We lost a couple of jobs in the last month over a half a point out of 100.” The team forces a postmortem to find the one thing that swung the score.

If we could catch three scope gaps or three missed items on every scope of work, then this thing pays for itself.

SENIOR PM (OWNER'S REP) AT A TORONTO MID-MARKET DEVELOPER

KEY TAKEAWAYS

1. Treat buyout as a second scope review. Assume the estimator missed something at bid.
2. Pick the high bidder's brain at buyout; they saw something the low bidder missed.
3. Every clause should help the field super resolve a dispute within 24-48 hours of arrival on site.
4. Addenda are the silent gap factory. Re-process every reissue against the scope sheets that referenced the old document.
5. Track scope gaps as a recurring metric, not as "it just happens."

CHAPTER 07

Contract language that earns its keep

AIA A401 vs. ConsensusDocs 750. The order-of-precedence gap. Pay-if-paid. “Readily inferable.” The clauses every estimator should know exist.

This chapter is not legal advice. It is a plain-English tour of the small number of contract clauses that interact most directly with scope, the ones every estimator and PM should know exist, even if drafting them is counsel's job. The goal is to make the financial cost of weak contract language as visible as the financial cost of a weak scope of work.

Flow-down: AIA A401 and ConsensusDocs 750

Both AIA A401-2017 (Standard Form of Agreement Between Contractor and Subcontractor) and ConsensusDocs 750 (Standard Constructor and Subcontractor Agreement, Long Form) use a flow-down structure: prime-contract obligations bind the subcontractor through the subcontract. AIA A401 incorporates the AIA A201 General Conditions by reference; ConsensusDocs 750 integrates general terms and the agreement into a single document. The structures are slightly different; the practical effect is similar.

The implication for scope: anything you have committed to the owner in the prime contract that you want the sub to be responsible for needs a flow-down clause to survive at the sub level. Working hours. Site security. Indigenous-hire mandates. Additional BIM requirements. Site-specific safety policies. The most-organized teams consolidate every prime-contract flow-down into a single dated, version-controlled appendix ("Appendix X" in one VP's vocabulary) attached to every subcontract package. The body of the scope sheet stays project-specific. The flow-downs stay in their own document.

Order of precedence: a critical gap in unmodified AIA

AIA A201-2017 does not include an order-of-precedence clause for interpreting contract documents. The AGC's own commentary on A201 calls this out: "The A201 does not include an order of precedence for interpreting contract documents. Failure to include such a provision leads to needless uncertainty and litigation costs." ConsensusDocs forms include an order-of-precedence framework by default.

For GCs working with AIA: this is a critical drafting gap to address in Supplementary Conditions, in the subcontract itself, or both. When the architectural drawings say one thing and the structural drawings say another (see the

\$45K stone-depth example in Chapter 1), the order-of-precedence clause is what determines who pays. Without one, the answer is litigation.

Pay-if-paid vs. pay-when-paid

Pay-if-paid clauses make owner payment a condition precedent to subcontractor payment; pay-when-paid clauses are generally a timing mechanism. Pay-if-paid clauses are unenforceable as contrary to public policy in New York and California; South Carolina has a similar statutory bar; most other states enforce them only with clear and specific language. This matters for scope disputes because contested scope items often surface as withheld payment. The sub claims the scope was extra, the GC withholds, the owner withholds the GC, and the cascade begins.

“Readily inferable”

The clause that animated the strongest reactions in our interviews. A Senior PM at a Canadian ICI GC: “The whole project design contingency or readily inferable thing is really a terrible clause in a contract. Our construction management clients expect us to find the scope gaps in the design too now. They expect us to be designers and engineers.” The clause is enforceable. The defensive response is operational: when the GC signs a contract with readily-inferable language, they need a corresponding design-review allowance in their bid, and they need to pass the same flow-down to every sub. Otherwise the GC is single-handedly absorbing every gap in the architect's drawings.

Time-stamped emails as evidence

A Director of Pre-Construction at a Mid-Market US GC offered one of the most practical pieces of contract-adjacent advice we heard: when bid documents are ambiguous and the team adds an allowance based on an internal interpretation, document the assumption in a time-stamped internal email. “An email is a legal binding document in court. It's pretty easy to say it's excluded if it's time-stamped.” The same discipline applies to addenda: every reissue gets a documented re-scope pass with a date, not informal note-taking.

The scope of work as Exhibit A

The principle that ties this chapter to the rest of the book: the scope of work is most powerful when it is incorporated directly into the subcontract as Exhibit A. A PM at a Mid-Market Self-Perform GC: “Our scope of work basically becomes the Exhibit A of their subcontract.” Lead-letter exclusions get migrated into the scope sheet. The scope sheet becomes the binding document. The subcontract references it directly. There is no daylight between what the sub priced and what the GC bought.

We built [Provision Risk Review](#) to flag the clauses in this chapter automatically: order-of-precedence gaps in unmodified AIA, pay-if-paid language in jurisdictions where it is unenforceable, “readily inferable” language without a design-review allowance, and flow-down obligations that the subcontract failed to incorporate.

KEY TAKEAWAYS

1. AIA A401 and ConsensusDocs 750 both use flow-down. Consolidate prime-contract obligations into a dated appendix attached to every subcontract.
2. AIA A201-2017 has no order-of-precedence clause. Address it in Supplementary Conditions or in the subcontract itself.
3. Pay-if-paid clauses are unenforceable in New York and California; verify state-by-state before drafting.
4. “Readily inferable” language requires a corresponding design-review allowance in the bid, flowed down to every sub.
5. The scope of work belongs in the subcontract as Exhibit A. Lead-letter exclusions don’t bind unless migrated into the scope sheet.

Tools, templates & checklists

Five checklists: pre-bid walk, twelve-question scope review, buyout meeting agenda, strong vs. weak exclusion language, and the “did we miss something?” final review.

The remainder of the book is operational. The checklists below are drawn directly from the practices the best teams described, normalized to a vendor-neutral form. Adapt them to your firm's vocabulary and divisional structure; the value is in the discipline of working through them, not in the specific wording. Editable templates for the scope sheet structure described in Chapter 2 and the trade-by-trade reference notes from Chapter 5 live in our [guides and templates library](#).

A The pre-bid walk

- Confirm drawing list. Index every drawing in the set by number, name, revision, and date. Do not trust the cover sheet.
 - Read the geotech report. Pull compaction percentages, bearing values, lift requirements into the earthwork scope before drafting.
 - Walk the site (or remote-walk) and photograph constructability issues not visible in the drawings: atrium access, lay-down constraints, neighboring buildings.
 - Identify niche packages on otherwise generic projects: auditorium rigging, RF-shielded rooms, lead-lined glass, mock-ups.
 - Call the architect with three specific drawing or spec questions before issuing the bid invitation.
 - Surface any spec/drawing conflict as an RFI before bid. Do not let the scope sheet pick one.
-

B The twelve-question pre-issue scope review

1. Is every clause tied to a specific drawing, detail callout, addendum, or spec section?
2. Have we cited the basis-of-design manufacturer and an acceptable alternates list for every spec'ed product?
3. Does every coordination scope item name both subs by trade and identify the interface drawing?

4. Have we explicitly excluded items assigned to another trade, with the assignment named?
 5. Have we explicitly included inferred items the sub might leave out (grouting, pumping, hoisting, material protection)?
 6. Have we addressed the canonical interface gaps for this trade? (See Chapter 5.)
 7. Have we incorporated takeoff quantities for bid leveling purposes (with a clear note that they are reference, not bid quantities)?
 8. Have we cited the geotech and reference specs separately from the project spec?
 9. Have we consolidated prime-contract flow-downs into a single dated appendix rather than scattering them through the scope?
 10. Has a second senior reviewer reviewed the document end to end?
 11. Has the PM who will run the job signed off on the scope?
 12. Has every line item been assigned to one and only one subcontractor in the trade matrix?
-

C The buyout meeting agenda

- Walk the scope sheet line by line. The sub confirms yes/no on every line; ambiguous answers are clarified in writing.
- Reconcile lead-letter exclusions. Anything that should bind the contract is migrated into the scope sheet. The lead letter itself is not incorporated.
- Confirm basis-of-design and any substitutions. Substitutions require written approval per the General Conditions.
- Pick the high bidder's brain. Where did the high bidder include scope the low bidder did not? Validate the delta.
- Confirm addenda. Bidder acknowledges the current addendum number and date.
- Confirm coordination interfaces. Each interface gets explicitly named with the counterparty trade.

- PM and superintendent sign off before the subcontract is executed.

D Strong vs. weak exclusion language

WEAK LANGUAGE (VAGUE, BROAD, DEFENSIBLE)	STRONG LANGUAGE (SPECIFIC, CITED, ENFORCEABLE)
Work not shown.	Excluded: pile driving and rock excavation below elevation 122.5 per Geotechnical Report dated 2026-01-15. Included: excavation and backfill of all subsurface mechanical and electrical conduit per sheets M-401, E-401, including disposal of unsuitable spoils.
Coordinate with other trades.	Coordinate the masonry-to-storefront flashing detail at grid-line 4/B per detail 7/A-501. Flashing supplied and installed by this contractor; sealant by this contractor; backing rod supplied and installed by sealant contractor.
Standard manufacturer warranty.	Manufacturer warranty per Specification 07 54 23, with 20-year material and 5-year labor warranty. Warranty documentation submitted at closeout per Specification 01 78 00.
Permits as required.	Excluded: building permit fee and demolition permit. Included: all trade-specific permits required for execution of this scope, including electrical permit and Authority Having Jurisdiction inspections.

E The “did we miss something?” final review

- **Trade matrix coverage.** Every line in the captured scope is assigned to exactly one sub. The unassigned residual is your gap list, addressed before bid.
- **Cross-discipline scan.** Architectural shows blocking; structural does not. Mechanical shows conduit; civil does not. Each cross-discipline mismatch is a likely gap.

- **Spec-drawing conflict scan.** Spec says “by owner,” drawing says “by contractor.” RFI before bid; do not let the scope pick one.
- **Owner-supplied / sole-source scan.** Search the spec for sole-source manufacturer names and OFE/OFCI/CFOI designations.
- **Niche-package scan.** Auditorium rigging, lead-lined glass, RF-shielding, mock-ups, RF rooms, fire shutters. The Top-ENR Pre-Con Lead's observation: “Their eyes are just more programmed to look for the little squiggly line.” Reach out to specialty subs early enough to get a real takeoff.
- **Addendum reconciliation.** Every addendum was re-processed against the scope; the deltas are documented.

KEY TAKEAWAYS

1. Checklist B (the twelve-question pre-issue review) is the highest-leverage single artifact in this book. Adopt it verbatim if you don't have one.
2. Strong language cites sources (sheet, detail, spec section, addendum date); weak language defers to “as required” or “per spec.”
3. The buyout meeting line-by-line walkthrough is non-negotiable. The sub confirms yes/no on every clause, in writing.
4. The unassigned residual in your trade matrix IS your gap list. Address it before bid, not after award.

References & further reading

Industry data sources, contract frameworks, and further practitioner reading behind the figures in this playbook.

This playbook is grounded primarily in interviews with general contractors across North America. The following industry sources are referenced where external data appears in the text. We have not cited every quoted operator individually; their roles and firm segments appear inline.

Industry data on scope, rework, and disputes

Arcadis. *Global Construction Disputes Report*. 13th Annual (2023), 14th Annual (2024), 15th Annual “Construction Disputes in Motion” (2025).

FMI Corporation and PlanGrid (Autodesk). *Construction Disconnected: The High Cost of Poor Communication and Bad Project Data* (2018).

Get It Right Initiative (GIRI). Updated rework cost analysis as cited in industry coverage, 2022.

AGC of America and FMI Corporation. *Risk Management Survey*.

McKinsey & Company. *Reinventing Construction Through a Productivity Revolution* (2017) and *The Construction Productivity Imperative*.

KPMG International. *Climbing the Curve: Global Construction Survey* (2015) and 2023 Global Construction Survey.

AIA Contracts. *The Truth About Change Orders* (2023). Navigant Construction Forum change-order analysis is widely cited; refer to the original Navigant white paper for primary citation.

Contract frameworks

American Institute of Architects. *A401-2017 Standard Form of Agreement Between Contractor and Subcontractor*.

American Institute of Architects. *A201-2017 General Conditions of the Contract for Construction*.

AGC of America. *Commentary on the AIA A201-2017 General Terms and Conditions* (2017). See AGC's note that A201-2017 does not include an order-of-precedence clause.

ConsensusDocs. *750 Constructor and Subcontractor Agreement (Long Form)*, with 2017 Guidebook.

Pay-if-paid vs. pay-when-paid analyses: Norris McLaughlin (New York), Bradley LLP, Levelset.

Further practitioner reading

CSI MasterFormat and the AIA project delivery method library are useful complements to a firm-specific scope template structure.

Lean Construction Institute. *Last Planner System* and *Target Value Delivery* materials. Useful for tying scope discipline to schedule and cost discipline.

AGC of America. *Subcontracting and Procurement Forum* materials; subcontractor default insurance (SDI) primers.

From the Provision library

Companion long-form articles on themes from this playbook: bid-day mechanics, dispute economics, and the operational anatomy of an RFI.

- [Addendum tracking and the bid-day scope misses it causes](#). Operational follow-on to Chapters 4 and 6.
- [The true cost of change orders driven by scope gaps](#). Companion to Chapter 1.
- [One \\$340K scope-gap change order, line-by-line](#). Concrete case study for the operator-cited dollar examples in Chapter 1.
- [How GC scope packages reduce subcontractor disputes and RFIs](#). Companion to Chapter 6.
- [What is an RFI in construction?](#). Reference for the RFI discipline referenced throughout.
- [Scope-of-work templates and trade reference notes](#). The trade-by-trade complement to Chapter 5.



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