

# THE CONSTRUCTION **AI** FIELD GUIDE

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*Practical Guidance for Using AI in Construction Work*

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Getting Started with AI in Construction

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# The Construction AI Field Guide

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*Practical Guidance for Using AI in Construction Work*  
*Getting Started with AI in Construction*

For Construction Professionals, Project Teams, and Leaders

Construction AI Lab | An initiative of sudycó® | First Edition 2026

## **The Construction AI Field Guide**

Practical Guidance for Using AI in Construction Work

First Edition

Getting Started with AI in Construction

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Construction AI Lab exists to help the industry learn together. We encourage you to use, share, discuss, teach, adapt, and build upon these ideas within your projects, organizations, associations, communities, and professional work.

**To see our Growing Body of Knowledge Please Visit**

**[www.ConstructionAllab.ai](http://www.ConstructionAllab.ai)**

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# The Two Rules

*Everything in this guide supports these two principles.*

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## Rule 1

### **Use a paid, business-level version of the tool when working with project information.**

Free versions are for learning and experimenting. When project information is involved, use a business-grade environment where your data is not used to train the model.

Always follow what is allowed by your organization.

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## Rule 2

### **Treat everything the AI produces as a draft that requires your review, editing, and judgment.**

AI can write quickly and convincingly. That does not mean it is accurate. You are responsible for the message, the accuracy, and the final output.

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***Construction projects are still built by people.***

# Table of Contents

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|                                                                   |    |
|-------------------------------------------------------------------|----|
| How to Use This Guide.....                                        | 5  |
| Introduction .....                                                | 6  |
| Section 1 – Start Here: The Two Rules.....                        | 9  |
| Quick Start: Your First 10 Minutes with AI .....                  | 12 |
| Section 2 – What You Need to Know First.....                      | 14 |
| Section 3 – What Happens to Your Data .....                       | 16 |
| Section 4 – Understanding the Common Tools.....                   | 18 |
| Section 5 – Working Effectively with AI in Real Project Work..... | 21 |
| Section 6 – What You Can and Can't Share .....                    | 24 |
| Section 7 – Using AI with Full Project Documents .....            | 27 |
| Section 8 – Common Mistakes to Avoid .....                        | 31 |
| Section 9 – Quick AI Check Prompts .....                          | 35 |
| Section 10 – Where to Go From Here .....                          | 37 |
| A Final Thought .....                                             | 39 |
| <br>                                                              |    |
| Appendix A – The Two Rules Quick Reference .....                  | 40 |
| Appendix B – Quick Reference: Improving AI Conversations .....    | 42 |
| Appendix C – Glossary .....                                       | 45 |
| About the Author .....                                            | 47 |
| About Construction AI Lab.....                                    | 48 |

# How to Use This Guide

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This guide is designed to work for different readers at different stages. You do not need to read it cover to cover. Start where it makes sense for you.

**If you have never used AI before:**

Start with Section 1 to understand the Two Rules, then go directly to the Quick Start section and spend 10 minutes experimenting. Return to the rest of the guide from there.

**If you are already using AI and want to use it more effectively:**

Section 5 (Working Effectively) and Section 7 (Full Project Documents) are the richest sections for experienced users. Section 9 (Quick AI Check Prompts) is a practical reference you will return to often.

**If you are a project leader or manager evaluating AI adoption:**

The Introduction, Section 1, and Section 3 (What Happens to Your Data) address the questions most leaders have. Section 8 (Common Mistakes) is particularly useful for setting expectations with your team.

**If you want a quick reference:**

Appendix A (The Two Rules Quick Reference) and Appendix B (Improving AI Conversations) are designed to be used on the job. Print them, bookmark them, or keep them open alongside your work.

**A Note on the Graphics**

Throughout this guide you will find visual summaries, checklists, comparison tables, and scenario boxes. Each graphic captures the essential point of the surrounding content — you can read the graphic and move on, or use it as a prompt to read the full section.

**One Last Thing**

The best way to learn AI is to use it. Reading this guide is a starting point. The experience you build through practice is what will make the difference.

# AI Is Already on Your Project

*Whether or not it's been formally adopted, AI is showing up on construction projects. This guide is here to help you use it well.*

AI is starting to show up on construction projects—whether it's been formally adopted or not. Project managers are using tools like ChatGPT to draft RFIs. Engineers are using them to think through technical problems. Field teams are experimenting with them to organize notes, communicate more clearly, and work through project challenges.

In many cases, it's already being used quietly, without much direction.

At the same time, there's real uncertainty. People are hearing things like:

- “Be careful what you put into it”
- “Your data could be at risk”
- “You shouldn't use it on real projects”

But very little of that guidance explains what it actually means—or what you're supposed to do differently.

This guide is meant to clear that up.

## What This Guide Addresses

This guide focuses on tools like ChatGPT, Claude, and Copilot—tools that help with writing, thinking, and working through project information. Not drones, robotics, or scheduling systems. Just the tools people are already using in their daily work.

| WHAT THIS GUIDE IS                                  | WHAT THIS GUIDE IS NOT                          |
|-----------------------------------------------------|-------------------------------------------------|
| ✓ Practical guidance for daily project work         | X Legal advice or compliance guidance           |
| ✓ Focused on construction professionals             | X A technical AI training course                |
| ✓ Built around human judgment and experience        | X Software documentation                        |
| ✓ Grounded in real project situations and scenarios | X About drones, robotics, or scheduling systems |
| ✓ A practical framework, not a rulebook             | X A substitute for your organization's policies |



The goal is to show you how to use these tools in a way that:

- fits into how construction projects already operate
- doesn't create confusion or unnecessary concern
- and actually improves the quality of your work

This is not a technical guide. It's not legal guidance. And it's not a set of complicated rules. It's a practical framework for using these tools responsibly and effectively.

## The Opportunity

For construction professionals, the opportunity is straightforward: AI can help reduce administrative burden, improve access to information, support better communication, and help people work more effectively with the growing volume of information on modern construction projects.

For construction leaders, the opportunity is equally important: AI has the potential to improve productivity, documentation, communication, learning, and decision support across project teams—when used responsibly and with appropriate oversight.

Many people begin by using AI to draft emails or summarize meetings. They often discover it can also help them organize information, research unfamiliar topics, prepare for meetings, and think through increasingly complex project challenges.

***Drafting and summarizing are often where people start. They are rarely where they stop.***

As experience grows, many users discover that AI can become a valuable research and thinking partner—helping them understand information, identify risks, explore possibilities, and make better-informed decisions.

## What AI Does Not Replace

AI does not replace project experience. It does not replace professional judgment. And it does not replace leadership.

Construction projects are still built by people. Relationships still matter. Communication still matters. Judgment still matters.

The goal is not to replace people with AI. The goal is to help people work more effectively with information—so they can make better-informed decisions, communicate more clearly, and spend more time on the work that matters most.

## How to Use This Guide

Different readers will approach this guide differently. If you are new to AI, the Quick Start section (immediately after Section 1) is designed to help you have a first useful conversation within

minutes. If you are already using AI and want to use it more effectively, Section 7 and Section 9 are the richest sections for experienced users.

The two rules that open Section 1 appear throughout the guide because they are genuinely foundational. Every other section supports, explains, or applies those two ideas.

The question isn't whether you should use these tools. The question is how to use them in a way that makes sense for the work you're doing. That's what this guide is here to help with.

## SECTION 1

# Start Here: The Two Rules

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*Two principles will keep you on solid ground in almost every situation. Everything else in this guide explains and applies them.*

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If you take nothing else from this guide, take this.

There are two simple rules that will keep you on solid ground when using tools like ChatGPT, Claude, or Copilot on construction work. Everything else in this guide supports these two ideas.

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### Rule 1

#### **Use a paid version of the tool—not a free one.**

If you're working with real project information, don't use a free AI account. Use a paid, business-level version. That puts you in an environment where your data is not used to train the model, and where the tool is designed for real work—not casual personal use.

In some tools, that may mean setting up a small team subscription, even if it's just a couple of users. That's fine. The important part is that you're not operating in a free, personal environment when working on project-related information.

This isn't about fear or risk. It's about matching the tool to the type of work you're doing. Construction projects operate in controlled environments. Your tools should reflect that.

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### Rule 2

#### **AI can write the draft—you are responsible for editing it, the message, and the accuracy.**

AI can generate writing that looks complete and ready to send. That's part of what makes it useful. But what it produces should always be treated as a draft—not final work.

Before anything goes out, it needs to be reviewed, edited, and adjusted to reflect the actual situation. You are responsible for what the message says, whether it's accurate, and whether it should be sent at all. If you treat the output as finished work without editing it, that's where the real risk lies.

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## What These Rules Look Like in Real Work

Three examples show how quickly things can go wrong without them:

### RFI Wording

You ask AI to draft an RFI about a grading discrepancy. It produces a clean, well-written request—but it assumes the condition is a design issue, or frames it more definitively than you intended. If you send that without editing it, you may have misstated the situation or taken a position you didn't mean to take.

### Email Communication

You ask AI to draft an email about a delay. It writes something that sounds professional—but the tone is more formal or firm than you would normally use, or it implies responsibility in a way you didn't intend. Sent as-is, it can create confusion or shift how your message is interpreted.

### Meeting Summary

You ask AI to summarize meeting notes. It fills in gaps and organizes the information—but it may simplify something that was unresolved, or present something as agreed that was still under discussion. Relying on that summary without checking it can create an inaccurate project record.

In each case, the issue isn't that AI was used. It's that the output wasn't reviewed and adjusted before it became part of the project.

## How the Two Rules Work Together

The first rule sets the environment. The second rule sets your responsibility. If you follow both, you are using AI in a way that fits construction work.

You don't need to overcomplicate it. You don't need to memorize how every tool works. You don't need to keep up with every change. Start with the right version of the tool. Then apply the same judgment you already use on your projects.

Everything else in this guide will help you understand why these rules matter and how to apply them in different situations. But if you stay grounded in these two ideas, you'll be on the right track.

## QUICK REFERENCE *The Two Rules*

### **Rule 1**

**Use a paid, business-level version of the tool when working with project information.**

*Free tools are for learning. Business-grade tools are for project work.*

### **Rule 2**

**Treat everything the AI produces as a draft that requires your review, editing, and judgment.**

*You are responsible for the message, the accuracy, and the final output.*

## QUICK START

# Your First 10 Minutes with AI

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*You don't need to read this entire guide before getting started. The best way to understand AI is to use it.*

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If you have never used AI before, this section is for you. Many people find it helpful to spend a few minutes experimenting first and then return to the rest of the guide with that experience in mind.

## Step 1: Choose a Business Version of an AI Tool

If you are working with project-related information, use a paid business version of ChatGPT, Claude, Copilot, or another approved organizational tool. The reason for this is explained in Section 2. For now, simply remember: use a business version when working with project information.

## Step 2: Pick a Real Work Situation

Do not start with a hypothetical example. Choose something real. Examples might include:

- drafting an email
- preparing for a meeting
- understanding a specification requirement
- organizing project notes
- researching an unfamiliar topic
- thinking through a project issue

The more relevant the situation is to your work, the more useful the experience will be.

## Step 3: Describe the Situation

AI is not a mind reader. It needs information to understand what you are trying to accomplish. The more clearly you explain the situation, the better the response is likely to be. For example:

*"I am a project engineer working on a roadway project. A utility relocation is three weeks behind schedule. The paving operation is planned to begin in four weeks. If the utility work is not completed, the paving crews will have insufficient work areas and we may experience standby costs, schedule impacts, and potential temperature-related paving restrictions. Help me identify risks and possible mitigation strategies."*

Notice that the AI is given information about the project, the situation, the potential consequences, and the specific help being requested. That gives the AI enough to begin helping.

### **Step 4: Review the Response Critically**

Do not assume the response is correct. Read it carefully. Ask yourself:

- What seems useful?
- What information might be missing?
- What should be verified?
- What additional questions should be asked?

Remember that AI is helping you think through the situation. It is not making the decision for you.

### **Step 5: Continue the Conversation**

One of the most powerful aspects of AI is that you can continue asking questions. For example:

- What else should I consider?
- What assumptions are you making?
- What risks might have been overlooked?
- How would an owner view this situation?
- What information would help improve your recommendations?

Each question helps deepen the conversation and often improves the quality of the response.

### **Step 6: Remember the Two Rules**

Rule 1: Use a paid, business-level version of the tool when working with project information. Make sure your company allows its use.

Rule 2: Treat everything the AI produces as a draft that requires your review, editing, and judgment.

These two rules will help you avoid many of the most common mistakes people make when first using AI.

***The best way to learn AI is through experience. Experiment. Ask questions. Learn what works.***

If you have completed the steps above, you have already done something many construction professionals have not yet done. You have started. The rest of this guide will help you build on that experience.

## SECTION 2

# What You Need to Know First

*Context, Tools, and the Right Environment*

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*Much of the concern about using AI on construction projects is based on how these tools worked early on—not how they operate today. This section puts that context in place and helps you identify the right tool.*

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## What This Guide Covers (and What It Doesn't)

This guide is focused on a very specific type of AI: tools like ChatGPT, Claude, and Copilot—tools that help with writing, thinking, and working through project information.

It is not about all AI in construction. It's not about drones, robotics, scheduling systems, or advanced analytics platforms. Those are important, but they're outside the scope of this guide.

This guide is also not legal guidance, not a technical manual, and not a set of rigid rules. Construction work requires judgment. Every project is different. What this guide provides is a practical way to approach these tools so they fit into how construction work already happens.

## What's Changed (and Why People Are Still Confused)

A lot of the concern around using AI on construction projects is real. But much of it is based on how these tools worked earlier—not how they operate today.

When tools like ChatGPT first became widely available, there were valid questions about data handling. There was less clarity, fewer controls, and very little guidance on how these tools should be used in a work environment. At the same time, adoption happened quickly—people started experimenting before clear standards were in place. That combination created a gap between tools evolving rapidly and understanding lagging behind.

That gap still exists today. You'll still hear things like "Don't put anything sensitive into it" or "You shouldn't use it for real work." Those statements come from a real place—but they often don't reflect how business-grade tools are designed and used today.

## What's Actually Different Now

Three things have meaningfully changed:

### 1. More Control Over How Data Is Handled

Business-level versions of tools like ChatGPT and Claude are designed for work environments. Your data is not used to train the model. Your information is handled within a more controlled environment intended for real project work.



## 2. A Clear Separation Between Free and Business Use

There is now a clear difference between free, personal use and paid, business-level use. That difference matters when you're working with project-related information.

## 3. A Better Understanding of How to Use These Tools

Early on, people were experimenting without much structure. Now there is a clearer understanding of where these tools are useful, where judgment is required, and how they fit into existing workflows.

What hasn't changed: you are still responsible for your communication, your decisions, and your project outcomes. Construction projects still operate within contracts, expectations, and controlled environments. AI doesn't change that.

## Choosing the Right Tool

The question is not which AI tool is "best." The question is whether you are using a tool that fits the type of work you're doing.

The practical guidance is simple: **don't use free AI tools for project-related information.** Free tools can be useful for learning, experimenting, and general questions. But once you're working with real project communication, documentation, or anything tied to a project, use a paid, business-level version.

A business-level tool doesn't mean a large company rollout. In many cases, it simply means a paid subscription—often a team or business account—designed for professional use. The important part is the environment, not the label.

## Tools Like ChatGPT, Claude, and Copilot Are All Capable

Tools like ChatGPT, Claude, and Copilot are all capable of supporting the type of work described in this guide. What matters more than which tool you use is that you're using the right version of it and applying the same approach to how you use the output.

If you're not sure whether you're in the right environment, use the simple check below:

**Am I using a paid version of the tool?**

**Is it intended for business or professional use?**

If the answer to both is yes, you're in the right place.

In many organizations, you don't choose the tool—you use what your company provides, often Copilot within Microsoft tools. That's fine. The principles in this guide still apply regardless of which tool you're using.

***The shift to understand: the question isn't 'Is this tool safe or unsafe?' The better question is: 'How am I using it, and does that fit the work I'm doing?'***

## SECTION 3

# What Happens to Your Data

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*When people talk about using AI on construction projects, the underlying concern is usually about data. This section answers that question directly.*

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## Start with the Environment You're Working In

If you're using a paid, business-level version of a tool like ChatGPT, Claude, or Copilot, your data is handled differently than in free versions. In these environments:

- what you enter is used to generate a response for you
- your data is not used to train the model
- the tool is designed to be used for real work

In practical terms: what you enter stays within that interaction and is not fed back into the system to improve how it behaves for other users. This is one of the key reasons this guide recommends using a paid, business-grade version for project work—it puts you in a more controlled environment that aligns with how construction projects are expected to operate.

## What “Training the Model” Actually Means

In some versions of these tools—especially free or personal accounts—your input may be used to improve how the system works over time. This is what people mean when they say “your data is used to train the model.”

What that actually means (and what it doesn't):

Training does **not** mean your exact message is stored for others to find, your project information is searchable, or another user can access what you entered. Instead, it means your input may be used in aggregate to help the system get better over time. It does not expose your specific project data to others.

## Can Someone Find or Use My Data Later?

This is the question most people have, even if they don't say it out loud. The short answer is no.

These tools are not set up so that other users, bots, or systems can search or access what you've entered. Your inputs are not publicly stored, not searchable by others, and not shared across users. What you enter is used in the moment to generate a response. Depending on the version, it may be stored temporarily, and in free versions may be used to improve the system—but it is not something that other people or systems can retrieve.

## **What This Means in Practice**

The concern around data isn't about someone finding your exact project information later. It's about understanding what version of the tool you're using, how that version handles data, and whether that matches the type of work you're doing.

Understanding what happens to your data removes uncertainty. But it doesn't replace your responsibility. AI doesn't change how project information is managed. It just changes how quickly you can work with it. The tool matters—but how you use it matters more.

## SECTION 4

# Understanding the Common Tools

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*You don't need to become an expert in AI tools. But it helps to have a basic understanding of the ones you're most likely to encounter.*

---

The tools referenced in this guide—ChatGPT, Claude, and Copilot—are often referred to as LLMs (Large Language Models). That simply means they are systems designed to understand and generate language. In practical terms, they are AI assistants that help you write, think through problems, organize information, research unfamiliar topics, and work more efficiently.

While they are built by different companies and have different features, they are more similar than they are different for the type of work described in this guide.

## ChatGPT

ChatGPT is one of the most widely used AI tools, commonly used for drafting emails and RFIs, summarizing information, thinking through project issues, and organizing ideas. It offers both free and paid versions. For project-related work, the paid version provides a more appropriate environment, as discussed in Section 2.

## Claude

Claude is another widely used tool, often preferred for working with longer documents, reviewing and summarizing detailed information, and structured writing. Like ChatGPT, it offers both free and paid versions with business-level options designed for professional use.

## Copilot

Copilot is integrated into Microsoft tools like Outlook, Word, Excel, and Teams. Because of that, it is often used directly within existing workflows—drafting emails in Outlook, summarizing documents in Word, analyzing information in Excel. This can make it feel more embedded in day-to-day work compared to standalone tools.

## What They Have in Common

Across all of these tools, the core capabilities are similar. They can:

- generate writing
- help you think through situations
- summarize and organize information

- help you explore and understand unfamiliar topics
- help you get up to speed quickly on an unfamiliar issue

Like everything else in this guide, the output should be reviewed and verified before it's used in real work.

## You May Not Have a Choice—and That's Okay

In many organizations, you don't choose the tool. You use what your company provides—often Copilot within Microsoft tools. That's fine. The principles in this guide apply regardless of which tool you're using. The key is not the specific tool. It's the environment you're working in, how the tool handles your data, and how you use the output.

## What About Different Models?

You may notice that tools like ChatGPT and Claude refer to different “models”—different versions of the underlying system. In most cases, you don't need to worry about this. The default or “auto” setting is typically designed to give you the best overall experience for general work. For the type of work described in this guide, what matters more is using a business-level version of the tool and applying consistent judgment to the output.

## At a Glance: ChatGPT, Claude, and Copilot

|                          | ChatGPT                                        | Claude                                                | Copilot                                             |
|--------------------------|------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------|
| Best used for            | Drafting, summarizing, brainstorming, research | Long documents, structured writing, detailed analysis | Email, documents, spreadsheets within Microsoft 365 |
| Document & file handling | Upload PDFs, images, files for review          | Strong with long documents; large context window      | Works directly with Word, Excel, Outlook files      |
| Microsoft integration    | Standalone; some Microsoft plugins available   | Standalone; API integrations available                | Built into Microsoft 365 apps                       |
| How you access it        | chat.openai.com or API                         | claude.ai or API                                      | Microsoft 365 apps (if licensed)                    |
| Typical construction use | RFIs, emails, meeting prep, research           | Spec review, contract review, long-form drafting      | Outlook emails, Word documents, Excel summaries     |

*All three support the work described in this guide. The tool matters less than the version you use and how you apply judgment to the output.*

## **Three Settings That Actually Matter**

### **1. What Version of the Tool You Are Using**

The most important “setting” isn’t really a setting—it’s the version of the tool you’re in. Are you using a free version or a paid, business-level version? This matters because it affects how your data is handled and whether it’s being used to train the model. If you’re working on project-related information, you should be in a paid, business-level environment.

### **2. Data Usage / Training Settings**

Some tools allow you to turn off whether your data is used to improve the system. If that option is available, it’s a good idea to turn it off. But as discussed in Section 3: turning off that setting is not the same as being in a business-level environment. It’s a helpful step—but it doesn’t replace using the right version of the tool.

### **3. Where You Are Using the Tool**

Some tools are standalone (like ChatGPT or Claude). Others are built into systems you already use (like Copilot in Outlook or Word). This matters because the tool may be operating within your company’s data environment and aligned with internal policies. If you’re using a tool provided by your company, it may already be configured appropriately. If you’re unsure, it’s worth checking.

## SECTION 5

# Working Effectively with AI in Real Project Work

*Using AI effectively in construction work is not about learning a new system. It's about using a powerful tool in a way that fits how you already work.*

## A Simple Approach That Works

You don't need a complex process. A simple three-step approach works:

1. **Use AI to think through the issue**
2. **Use it to generate a draft**
3. **Review, edit, and finalize it in your own system**

This applies to RFIs, emails, meeting summaries, project notes, and other day-to-day communication.

| HOW IT WORKS <i>The Three-Step Workflow</i>           |          |                                                                                                   |
|-------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------|
| STEP                                                  |          | WHAT TO DO                                                                                        |
| 1                                                     | THINK    | Describe the situation. Ask AI to help you understand it, identify risks, and explore approaches. |
| ↓                                                     |          |                                                                                                   |
| 2                                                     | DRAFT    | Ask AI to generate a draft — structure, language, a starting point.                               |
| ↓                                                     |          |                                                                                                   |
| 3                                                     | FINALIZE | Edit, verify, and adjust. Apply your judgment. This is where your experience takes over.          |
| Output is always a draft. You are always responsible. |          |                                                                                                   |

## Use AI to Think, Not Just Write

One of the most valuable uses of AI is helping you think through a situation before you communicate. You can outline an issue, ask for different ways to approach it, or explore how

something might be interpreted. This helps you clarify your thinking—and often improves the quality of everything that comes after.

## **Then Use It to Draft**

Once you understand what you want to say, use AI to create a draft. That draft should give you structure, clarity, and a starting point. But remember: everything it produces is a draft.

## **Bring It Into Your System and Finalize It**

After the draft is created, bring it into your normal tools and workflow—your email system, your project management platform, or your document system. From there: edit the language, adjust for accuracy, confirm the message, and finalize it. That step is critical. That's where your judgment comes in.

## **Keep Your Work Organized**

AI tools typically work through conversations (sometimes called chats or threads). Each conversation builds context based on what you've entered. For project work, it helps to:

- keep related topics in the same conversation
- avoid mixing unrelated projects in one thread
- start a new conversation when the topic changes

This makes the output more accurate, more relevant, and easier to follow.

## **Working with AI Over Time**

AI tools are very useful—but they don't behave like a person working with you over time. Understanding a few patterns will help you avoid frustration and get better results.

### **It doesn't reliably remember everything**

AI works within the conversation you're in. Over time, details can be used less accurately, and starting a new conversation resets the context.

### **Don't rely on the chat to store your work**

If you create something you want to keep, don't leave it in the chat. Have the AI generate it as a document (for example, a DOCX), save it to your computer or shared drive, and store it where your project information normally lives.

### **It may repeat or recreate instead of moving forward**

If you continue working in the same conversation, the AI may repeat earlier ideas or go in circles. When that happens, save what you want to keep, start a new conversation, and bring back only the key information you need.



### **It will often summarize or neutralize your thinking**

By default, AI tends to simplify, summarize, or make things sound more neutral. That can be helpful—but not always, especially if you’re taking a position or trying to communicate something specific. In those cases, be direct: tell it “Don’t summarize this,” “Keep my original intent and tone,” or “Refine this without changing the meaning.”

### **Bringing It Back to Your Role**

AI is a powerful drafting tool. But it is still a draft. You are responsible for the message, the accuracy, and the final output. The tool can help you think, structure, and write faster. But you are still the one doing the work.

---

#### **FIELD SCENARIO**

##### **The Rebar Conflict**

A superintendent on a cast-in-place concrete structure project discovers a conflict between the structural drawings and the rebar shop drawings two days before a major foundation pour. The placement crew is scheduled. The concrete is ordered. He needs to communicate the issue clearly, document it, and get direction—fast.

Here is how the three-step approach applies:

Step 1 — Think: He describes the conflict to AI in plain language—the drawing numbers, the discrepancy in bar spacing, the pour schedule, and what happens if the crew proceeds without direction. He asks AI to help him identify the risks, what information he needs from the engineer of record, and what options exist if a response doesn’t come in time.

Step 2 — Draft: He asks AI to draft a concise RFI that describes the conflict without assigning fault, requests a response by end of day, and notes the schedule impact. The draft takes 90 seconds to produce.

Step 3 — Finalize: He reads the draft carefully. AI got the general framing right but used the wrong drawing revision number—something only he would know. He corrects it, adjusts the tone, adds the specific bar sizes, and issues the RFI through the project management system.

*The entire process—thinking, drafting, and finalizing—takes less than 15 minutes. The RFI is clear, professional, and accurate. The drawing revision error that AI introduced was caught because he reviewed the output before sending it.*

---

# What You Can and Can't Share

*Using AI doesn't change the judgment you already apply to information every day. It just changes where you're thinking and drafting before something becomes final.*

## Start With How You Already Work

Before AI, you were already making decisions about information every day: what goes in an email, what gets documented, what stays internal, what is shared externally. Using AI doesn't change that. It just changes where you are thinking and drafting before something becomes final.

Think of AI as a place where you are working through ideas, creating a draft, and preparing communication—not finalizing project records, issuing official documents, or storing project information. That distinction matters.

| INFORMATION DECISION GUIDE <i>Apply the same judgment you use every day</i> |                                                 |
|-----------------------------------------------------------------------------|-------------------------------------------------|
| GENERALLY OKAY TO SHARE                                                     | PAUSE AND CONSIDER                              |
| General description of the situation                                        | Detailed cost or pricing information            |
| Type of issue you're dealing with                                           | Sensitive contract language or claims positions |
| Your thinking about how to approach it                                      | Internal disputes or legal strategy             |
| Draft versions of communication                                             | Proprietary methods or approaches               |
| Document types and general requirements                                     | Documents meant to stay in controlled systems   |

*Ask yourself: Would I put this in an email or external system without thinking about it? If not, be more cautious.*

## What Is Generally Okay to Share

In most cases, it is appropriate to share:

- general descriptions of a situation
- the type of issue you're dealing with

- your thinking about how to approach it
- draft versions of communication

For example: “We have a grading issue where field conditions don’t match the plans...” or “I need to respond to a delay notice...” or “Help me structure an RFI about...”

## **What Requires More Judgment**

There are situations where you should pause and think before sharing—not because it is automatically wrong, but because it depends on your environment and your organization’s policies. Examples include:

- detailed cost or pricing information
- sensitive contract language
- internal disputes or claims positions
- proprietary methods or approaches
- documents that are meant to stay within a controlled system

In these cases, ask yourself: “Would I normally put this into an email or external system without thinking about it?” If the answer is no, take a more cautious approach.

## **A Practical Way to Use AI Without Overexposing Information**

A simple and effective approach:

4. Use AI to create a draft using general language
5. Bring that draft into your own system
6. Add the specific project details yourself
7. Review and finalize before sending

This gives you the benefit of speed and structure without putting detailed project information into the tool.

## **If You’re Unsure**

Check your company’s policies, consider the environment you’re working in, and use your judgment. You don’t need to avoid using AI. You don’t need to strip out all useful context. You just need to use the same judgment you already apply in your work. That’s enough.

## FIELD SCENARIO

### The Delay Notice Response

A project manager on a highway project receives a delay notice from the owner citing late submittals as the cause of a three-week schedule impact. She knows the real picture is more complicated—the owner’s reviewer held two submittals beyond the contract review period, and one of the ‘late’ submittals was actually resubmitted after an owner-requested scope change.

She needs to respond—but she’s not sure how much of the internal picture to put in writing yet, or how to frame it without escalating the situation unnecessarily.

Here is how she approaches it:

What she gives AI: She describes the general situation in plain terms—a delay notice received, a need to respond professionally, and a desire to preserve the relationship while protecting the company’s position. She does not include the specific contract language, the internal claims analysis, or the names of the reviewers involved.

What AI produces: A professionally framed response that acknowledges receipt of the notice, requests a joint review of the submittal log, and reserves the company’s rights pending that review. The tone is calm and collaborative.

What she adds herself: She brings the draft into the project management system and adds the specific submittal numbers, the contract review period language, and a reference to the scope change that triggered the resubmittal. These details were never in the AI tool.

*The result is a response that is professionally structured by AI and factually accurate and legally grounded by her. The sensitive details stayed where they belonged—in her hands, not in the tool.*

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# Using AI with Full Project Documents

*Construction projects generate enormous amounts of information. This is where many professionals discover some of the most valuable uses of AI.*

## Moving Beyond Simple Prompts

Many people start by asking AI simple questions or using it to draft emails. Those are useful starting points. But construction projects generate large amounts of information—specifications, contracts, RFIs, submittals, meeting minutes, schedules, email chains, daily reports, and project records. AI can help you work through this information much more quickly than traditional approaches. The key is helping the AI understand the situation you are dealing with.

## AI Is Not a Mind Reader

One of the most important things to understand is that AI only knows what you tell it. If important information remains in your head, the AI cannot consider it. For example, you may know:

- why a utility relocation is delayed
- that the activity is on the critical path
- that paving must occur before temperatures drop
- that lane closure restrictions are approaching
- that the owner has milestone requirements
- that a subcontractor is already committed elsewhere

The AI knows none of that unless you provide it. The quality of the assistance you receive is directly related to how well you help the AI understand the situation.

| BEFORE & AFTER <i>How Context Changes Everything</i> |                                                                                                             |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| WITHOUT<br>CONTEXT                                   | "Utility work is delayed. What should I do?"                                                                |
| RESULT                                               | Generic response. The AI doesn't know the project, the schedule, the stakes, or what kind of help you need. |

|                     |                                                                                                                                                                                                                                                                       |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>WITH CONTEXT</b> | "I am the project manager on a highway widening project. A utility subcontractor is 14 days behind schedule. The work is on the critical path. Paving starts in three weeks. Help me identify risks, recovery options, and questions I should ask the subcontractor." |
| <b>RESULT</b>       | Targeted analysis. The AI can identify specific risks, explore recovery paths, and help you prepare for the right conversations.                                                                                                                                      |

*The more clearly you explain the situation, the more useful the response.*

## Help the AI Understand the Problem

Many people make the mistake of asking AI for help before explaining the situation. For example:

*"Utility work is delayed. What should I do?"*

The AI may provide a response, but it is likely to be generic. A more effective approach:

*"I am the project manager on a highway widening project. Our company is the prime contractor and self-performs grading, paving, and traffic control. A utility subcontractor relocating a 24-inch waterline is currently 14 days behind schedule due to utility conflicts, groundwater conditions, and delays in obtaining revised utility approvals. The utility work is on the critical path. Paving is scheduled to begin in three weeks. If the utility work is not completed, paving operations may be delayed and we may also run into paving temperature restrictions later in the season. Review this situation and help me identify key project risks, assumptions that should be validated, recovery options, questions we should ask the utility subcontractor, and issues that should be discussed with the owner."*

Now the AI has a much better understanding of the situation and can provide more useful assistance.

## Working with Specifications

Specifications are often one of the easiest places to begin. AI can help you summarize requirements, identify testing and submittal requirements, identify responsibilities, and locate sections that deserve additional review. For example: "Review this specification section and summarize the requirements that affect field operations, testing, acceptance, and documentation." This can help you quickly understand what is important before performing a deeper review yourself.

## Working with Contracts

Contracts often contain large amounts of information that can be difficult to navigate quickly. AI can help you summarize provisions, identify responsibilities, organize requirements, and identify questions for further review. However, contract interpretation remains a responsibility of the project team and legal advisors. AI can help you understand contract language more efficiently, but it should not replace professional judgment.

## Working with RFIs, Submittals, and Correspondence

Construction projects generate thousands of communications. AI can help organize and understand those communications by summarizing discussions, identifying unresolved issues and action items, organizing project history, and drafting responses for review. This can be particularly valuable when reviewing long email chains or correspondence that has evolved over weeks or months.

## Working with Meeting Minutes

Meeting minutes often contain large amounts of information spread across multiple meetings. AI can help identify commitments, action items, and unresolved issues; summarize discussion history; and prepare for upcoming meetings. This can save considerable time when preparing for project coordination meetings, progress meetings, partnering sessions, and executive reviews.

## AI Helps You Understand Documents—It Does Not Replace Judgment

AI can help you organize information, summarize information, identify questions, compare documents, and explore possible approaches. But it is important to remember that AI is not making project decisions. AI may misunderstand information. AI may miss information. AI may make assumptions that are not correct. And AI only knows what it has been told.

Your responsibility is to determine whether the output is accurate, complete, and appropriate for the project.

## Using AI as a Research and Thinking Partner

As people gain experience with AI, many discover that it can do much more than draft documents. AI can help you research unfamiliar topics, identify questions worth investigating, explore alternative approaches, organize complex information, prepare for important discussions, and think through project challenges.

For example, a project manager might ask: “Review the information below and identify risks, stakeholder concerns, unanswered questions, and possible approaches the team should consider before making a decision.” In situations like this, AI is acting less like a writing tool and more like a research and thinking partner. That does not mean the AI is making decisions. It means the AI is helping you explore information, identify possibilities, and think more systematically about the situation.

***Drafting and summarizing are often where people start. They are rarely where they stop.***

## COLLABORATIVE INTELLIGENCE *What AI Does / What You Do*

| AI                                     | YOU                               |
|----------------------------------------|-----------------------------------|
| Organizes and summarizes information   | Understands the project context   |
| Identifies questions and possibilities | Exercises judgment and experience |
| Generates drafts quickly               | Makes the decisions               |
| Explores alternatives                  | Owens the outcomes                |
| Helps you think through the problem    | Leads the project                 |

**Construction projects are still built by people.**

### Bringing It Back to Your Role

AI can help you understand information more quickly. It can help you organize large amounts of project information. It can help you identify questions, explore alternatives, and think through challenges. But it does not replace your experience, judgment, or responsibility.

Construction projects are still led by people. The most effective use of AI is not allowing it to make decisions for you. It is using it to help you make better-informed decisions yourself.



# Common Mistakes to Avoid

*Most problems people experience with AI are not caused by the technology itself. They are caused by how the technology is being used.*

The good news is that most of the most common mistakes are easy to avoid once you know what to look for.

| AT A GLANCE 10 Common Mistakes |                                            |
|--------------------------------|--------------------------------------------|
| 1                              | Treating output as finished work           |
| 2                              | Not providing enough information           |
| 3                              | Assuming AI understands your project       |
| 4                              | Asking AI to make decisions                |
| 5                              | Trusting every answer                      |
| 6                              | Relying on chat to store important work    |
| 7                              | Mixing too many topics in one conversation |
| 8                              | Using AI only for writing                  |
| 9                              | Chasing every new tool                     |
| 10                             | Forgetting that you are responsible        |

*Most AI mistakes are not technology problems. They are judgment problems — and construction professionals are already expert at applying judgment.*

## Mistake 1: Treating AI Output as Finished Work

One of the most common mistakes is assuming that because something sounds professional, it must be correct. AI can produce writing that appears complete and convincing. That does not

mean it is accurate. Everything produced by AI should be treated as a draft. Review it. Edit it. Verify it. Then decide whether it is appropriate for your project.

## **Mistake 2: Not Providing Enough Information**

AI is not a mind reader. It only knows what you tell it. When people receive weak or generic responses, it is often because the AI does not have enough information to understand the situation. The more clearly you explain the problem and provide relevant background information, the more useful the output is likely to become.

## **Mistake 3: Assuming AI Understands Your Project**

AI does not know your project history. It does not know your team. It does not know conversations that happened in the field, commitments made in meetings, or information that exists only in someone's head. Even when reviewing project documents, AI only sees the information you provide. Never assume it understands more than it has been told.

## **Mistake 4: Asking AI to Make Decisions**

AI can help you organize information, identify questions, explore alternatives, and evaluate possible approaches. But project decisions remain the responsibility of the project team. Use AI to support decision-making. Do not use it to replace decision-making.

## **Mistake 5: Trusting Every Answer**

AI sometimes makes mistakes. It may misunderstand information, make assumptions, overlook important details, or provide information that sounds correct but is not. Healthy skepticism is part of using AI effectively. Verify important information before relying on it.

## **Mistake 6: Relying on the Chat to Store Important Work**

Many people assume they can always find information later inside an AI conversation. That is not a good project management practice. If something is important: save it, export it, store it in your normal project systems. The AI conversation is not the project record.

## **Mistake 7: Mixing Too Many Topics in One Conversation**

AI conversations work best when they stay focused. When multiple projects, issues, and topics become mixed together, the quality of the output often declines. Keeping conversations organized helps the AI stay aligned with the work you are performing.

## **Mistake 8: Using AI Only for Writing**

Many people start by using AI to draft emails and documents. That is a good place to begin. But AI can also help with research, organization, meeting preparation, identifying questions, exploring alternatives, and thinking through project challenges. Some of the most valuable uses of AI extend well beyond writing.

### **Mistake 9: Chasing Every New Tool**

The AI marketplace changes rapidly. New tools appear constantly. Most construction professionals do not need to learn every new platform. Focus on learning how to work effectively with the tools you already have. The skills you develop will often transfer across different systems.

### **Mistake 10: Forgetting That You Are Responsible**

This may be the most important point in the entire guide. AI can assist you. AI can accelerate your work. AI can help you explore information and generate ideas. But you remain responsible for the communication, the decisions, the documentation, and the outcomes. The most successful users understand this clearly. They use AI as a tool. They do not hand over responsibility to it.

***Most AI mistakes are not technology problems. They are judgment problems.***

The good news is that construction professionals already use judgment every day. The same judgment that helps you manage projects, evaluate information, and make decisions is the same judgment that helps you use AI effectively. The technology is new. The need for judgment is not.

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#### **FIELD SCENARIO**

##### **What Happens When You Don't Review the Output**

A field engineer on a commercial building project has been managing a difficult subcontractor performance issue over the past three weeks. There have been multiple conversations—some heated—about missed milestones, crew size, and quality of work. Most of it happened in emails and on-site discussions.

The owner's rep asks for a summary of the issue to date. The field engineer pastes three weeks of email correspondence into AI and asks for a summary of the key events and current status.

AI produces a clean, organized summary. It looks professional. He forwards it to the owner's rep without reading it carefully.

**Three problems surface within 24 hours:**

The summary described a field conversation as a “formal written warning”—it was not. It was an informal discussion. Now the owner’s rep is treating it as a documented milestone in a potential default process. (Mistake 1 and Mistake 3)

The summary omitted a key detail: the subcontractor had flagged a site access issue that contributed to two of the delays. AI didn’t include it because it appeared in a verbal update captured in handwritten notes—not in the emails. AI only knew what it was given. (Mistake 3)

The summary was never saved to the project management system. It exists only in the email sent to the owner’s rep and in an AI chat window that the field engineer has since closed. (Mistake 6)

*None of these problems were caused by the AI tool. They were caused by how it was used. A careful review before sending—five minutes of reading—would have caught all three.*

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## SECTION 9

# Quick AI Check Prompts

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*You do not need to become an expert prompt writer to use AI effectively. Simple, clear instructions work well.*

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The prompts below can help you better understand how the AI is responding, improve the quality of the output, and reduce misunderstandings. Think of them as tools you can use whenever you are unsure whether the AI understands the situation.

### When You Want the AI to Ask Questions Before Responding

*Before providing an answer, ask me any questions you need in order to better understand the situation.*

Useful for project issues, RFIs, contract questions, schedule concerns, and complex project decisions.

### When You Want the AI to Identify Missing Information

*Review the information below and tell me what additional information would help you better understand the situation.*

### When You Want the AI to Challenge Your Thinking

*Review the information below and identify assumptions, risks, or issues that may have been overlooked.*

### When You Want Another Perspective

*Review the information below and provide alternative viewpoints or interpretations that should be considered.*

### When You Want the AI to Explain Its Reasoning

*Explain how you reached this conclusion and identify the information that influenced your response.*

### When You Want to Verify Understanding

*Before responding, summarize your understanding of the situation so I can confirm that you are interpreting it correctly.*

## When You Want a Construction-Oriented Response

*Respond as an experienced construction project manager reviewing this situation.*

*Respond as an experienced superintendent reviewing this situation.*

*Respond as an owner's representative reviewing this situation.*

## When You Want to Improve a Draft

*Review this draft and improve clarity, organization, and professionalism without changing the meaning or intent.*

## When You Do Not Want the AI to Summarize

*Refine this document without summarizing it. Preserve the original meaning, intent, and level of detail.*

## When You Want to Explore a Problem More Deeply

*Review the information below and identify: risks, assumptions, stakeholder concerns, possible approaches, and unanswered questions.*

**THE MOST IMPORTANT PROMPT** *Use this at every stage of a conversation*

### ***“What else should I consider?”***

Ask this after every AI response. It consistently reveals assumptions, risks, missing information, and possibilities that weren't visible at first.

*Experienced users ask this question repeatedly. It is one of the simplest and most powerful things you can do.*

## Keep It Simple

You do not need complicated prompts to get value from AI. The most effective prompts are often clear, direct descriptions of the situation, the information available, the problem you are trying to solve, and the type of help you are looking for. The goal is not to become an expert prompt writer. The goal is to help the AI understand the situation well enough to provide useful assistance.

## Where to Go From Here

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*If you have read this guide, you already know enough to begin. The best way to learn AI is to use it.*

---

You do not need to become a technical expert. You do not need to understand how the models are built. And you do not need to wait until you have everything figured out.

### Start Small

Many people begin with simple tasks such as drafting emails, organizing notes, summarizing meetings, or reviewing project documents. Those are excellent places to start. Choose one task that consumes time and attention and begin experimenting. You do not need to transform your entire workflow overnight. Small improvements add up over time.

### Practice Matters More Than Reading

Reading about AI can be helpful. Using AI is what builds understanding. Like any tool, confidence develops through experience. The more situations you work through, the better you will understand what AI does well, where judgment is still required, how to provide information effectively, and how to get better results.

### Expect Your Use to Evolve

Most people begin by using AI as a writing tool. Over time, many discover that it can also help them organize information, prepare for meetings, research unfamiliar topics, identify questions, explore alternatives, and think through challenges. Your use of AI will likely evolve as your experience grows. That is normal. In many ways, learning AI is less about mastering software and more about discovering new ways to work with information.

### Stay Curious

The technology will continue to change. New tools will appear. Existing tools will improve. Features will come and go. Do not worry about keeping up with every development. Focus on learning principles rather than features. The ability to think clearly, ask good questions, evaluate information, and exercise judgment will remain valuable regardless of how the technology changes.

## **Remember the Two Rules**

If you remember nothing else from this guide, remember the two rules from Section 1. Use the right environment for project work. Treat everything the AI produces as a draft that requires your review, editing, and judgment. Those two ideas will continue to serve you well regardless of which AI tool you use.

## **The Bigger Opportunity**

The purpose of AI is not to replace people. The purpose is to help people work more effectively. Construction projects are still built by people. Relationships still matter. Communication still matters. Judgment still matters. Leadership still matters. AI simply gives us another tool that can help us think, learn, communicate, and solve problems more effectively. How that tool is used will always matter more than the tool itself.

Construction AI Lab exists to help construction professionals navigate this change—practically, responsibly, and together. To learn more about CAL’s resources, working groups, and ongoing research, visit [www.ConstructionAILab.ai](http://www.ConstructionAILab.ai).



## A Final Thought

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Artificial Intelligence is still new to many people in construction. Some are excited about it. Some are skeptical. Many are simply trying to determine where it fits into their work. That is completely normal. Every significant change in our industry has gone through a similar process.

What matters is not whether you become an expert overnight. What matters is that you begin learning.

The purpose of this guide was never to convince you that AI is the answer to every problem. It was to help you understand what these tools are, how they can be used responsibly, and where they may provide value.

No guide can teach everything there is to know about AI. The technology will continue to evolve. New tools will emerge. Existing tools will improve. New opportunities will appear that we cannot yet predict.

The most important thing you can do is remain curious. Experiment. Learn. Ask questions. Discover what works in your environment and what doesn't.

Most importantly, remember that AI is a tool. Like every tool that has come before it, its value depends on how it is used.

Construction projects are still built by people.

Trust still matters.

Communication still matters.

Relationships still matter.

Leadership still matters.

Professional judgment still matters.

AI does not replace those things. If used thoughtfully, it can help strengthen them.

The future of AI in construction will not be determined by software developers, technology companies, or the technology itself. It will be shaped by project teams, field leaders, engineers, inspectors, designers, contractors, owners, and construction professionals who decide how these tools are used in the real world.

***That future is already beginning. The next step is yours.***

## The Two Rules Quick Reference

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If you remember nothing else from this guide, remember these two rules. Together, they provide the foundation for responsible and effective use of AI in construction work.

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### Rule 1

#### **Use a Paid, Business-Level Version of the Tool When Working with Project Information**

When project information is involved, use a paid business version of ChatGPT, Claude, Copilot, or another approved organizational tool. Business versions generally provide stronger privacy controls, security features, administrative controls, and contractual protections than consumer versions. Before using AI, always follow your organization's policies and requirements. When in doubt, ask.

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### Rule 2

#### **Treat Everything the AI Produces as a Draft**

AI can help organize information, identify questions, explore alternatives, summarize content, and generate drafts. However, AI can also misunderstand information, make incorrect assumptions, miss important details, provide incomplete recommendations, and generate inaccurate content.

You remain responsible for reviewing the output, verifying accuracy, exercising professional judgment, making project decisions, and approving final communications and documents. AI can assist the process. It does not replace responsibility.

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### **Before You Use AI**

- ✓ Am I using the right version of the tool?
- ✓ Am I following my organization's policies?
- ✓ Have I provided enough information for the AI to understand the situation?

- ✓ Have I protected information that should not be shared?
- ✓ Am I prepared to review and verify the response?

## Before You Use the Output

### **CHECKLIST** *Before You Use the Output*

- ☐ Does this make sense given what I know about the project?
- ☐ Is it accurate? Have I verified the facts and details?
- ☐ What assumptions is the AI making that I haven't confirmed?
- ☐ Does this reflect the actual situation — or a simplified version of it?
- ☐ Would I be comfortable attaching my name to this?
- ☐ Would I send, submit, or rely on this without additional review?

**If the answer to any of these is no — keep refining, reviewing, and verifying.**

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## The Bottom Line

AI can help you think, learn, organize information, communicate more effectively, and work more efficiently. But construction projects are still built by people. Human judgment remains essential. Use AI as a tool. Not as a substitute for responsibility.

## Quick Reference: Improving AI Conversations

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One of the easiest ways to improve the quality of AI responses is to ask better follow-up questions. Many people stop after the first response. Experienced users continue the conversation. The prompts below can help you think more critically, identify missing information, and improve the quality of the output. Use them as needed.

### Understanding the Situation

- What information appears to be missing?
- What assumptions are you making?
- What questions should be answered before moving forward?
- Summarize your understanding of the situation before responding.
- What additional context would improve your recommendations?

### Identifying Risks

- What risks should I be considering?
- What could go wrong with this approach?
- What unintended consequences might occur?
- What risks might be overlooked by someone focused only on schedule, cost, or technical issues?
- What would concern an experienced project manager?

### Exploring Alternatives

- What are three alternative approaches?
- What other options should be considered?
- What are the advantages and disadvantages of each option?
- If this approach fails, what would be a reasonable backup plan?
- How might another stakeholder view this situation?

### Improving Communication

- Improve this draft without changing its meaning.
- Make this clearer and easier to understand.

- Rewrite this for a project owner.
- Rewrite this for a contractor.
- Rewrite this for a field audience.
- Identify any language that could be misunderstood.

## **Preparing for Meetings**

- What questions should I ask during this meeting?
- What issues may require clarification?
- What decisions should be made before the meeting ends?
- What concerns might different stakeholders raise?
- What follow-up actions should be discussed?

## **Reviewing Documents**

- Summarize the key points.
- Identify any potential concerns or conflicts.
- What questions should be asked about this document?
- What information may require verification?
- What sections deserve closer review?

## **Thinking Through Problems**

- Help me think through this situation.
- What factors should influence this decision?
- What information would help improve the analysis?
- What perspectives may not be represented?
- What am I not considering?

## **Learning and Research**

- Explain this in plain language.
- Help me understand this topic.
- What are the key concepts I should know?
- What should I learn next?
- What additional resources would help me better understand this subject?

***AI is most valuable when used as part of a conversation. The first response is often only the starting point.***

Ask questions. Provide additional information. Challenge assumptions. Explore alternatives. The quality of the conversation often determines the quality of the result.

## Glossary

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The following terms appear throughout this guide. Definitions are written for construction professionals, not technologists.

### **AI (Artificial Intelligence)**

In this guide, AI refers to tools like ChatGPT, Claude, and Copilot that can understand and generate language. They help with writing, thinking, organizing information, and working through project challenges.

### **Business-grade / Business-level version**

A paid subscription to an AI tool designed for professional or organizational use. In business-grade environments, your data is not used to train the model, and the tool is intended for real work rather than casual personal use.

### **Context window**

The amount of information an AI tool can hold and work with at one time within a single conversation. Longer conversations or larger documents may approach or exceed this limit, which can affect the quality of the response.

### **Draft**

Any output produced by AI should be treated as a draft — a starting point that requires your review, editing, and judgment before it becomes final. This is one of the two foundational rules in this guide.

### **Free version**

Consumer-facing versions of AI tools available at no cost. In free versions, your inputs may be used to improve the model over time. This guide recommends against using free versions for project-related work.

### **Hallucination**

When an AI tool produces information that sounds confident and authoritative but is incorrect, incomplete, or fabricated. This is one of the key reasons all AI output should be reviewed before use.

### **LLM (Large Language Model)**

The underlying technology behind tools like ChatGPT, Claude, and Copilot. LLMs are trained on large amounts of text and can understand and generate human language. You do not need to understand how they work to use them effectively.

### **Prompt**

The instruction or question you give to an AI tool. The quality of your prompt — how clearly you describe the situation, the context, and what you need — directly affects the quality of the response.

### **Training the model**

The process by which AI systems learn and improve over time using data. In free versions, your inputs may be used in this process. In business-grade versions, your data is not used to train the model.



## About the Author

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Sue Dyer is the Founder of sudyco® and Construction AI Lab and has spent more than 45 years helping improve the performance of construction projects, teams, organizations, and industry groups.

Throughout her career, Sue has worked with thousands of construction projects involving public agencies, contractors, designers, construction managers, and project teams across North America. Her work has focused on helping people communicate more effectively, build trust, align around common goals, and improve project outcomes through collaboration, leadership, and organizational change.

Sue is widely recognized as a pioneer in the fields of construction partnering, collaborative leadership, and dispute prevention. She is a Wall Street Journal bestselling author and has served as Executive Director of multiple construction industry associations, developing frameworks, assessments, training programs, and facilitation processes that have been adopted throughout the construction industry.

Today, Sue's work focuses on helping construction professionals, project teams, organizations, and industry leaders understand and navigate the opportunities and challenges created by artificial intelligence. Through Construction AI Lab, she is exploring practical ways people and AI can work together to improve communication, coordination, decision-making, learning, and project performance.

Construction AI Lab is a labor of love for an industry Sue has spent her career serving. She created the Lab to help construction professionals explore AI thoughtfully, practically, and responsibly while keeping people, relationships, judgment, and project success at the center of the conversation.

Sue believes that the future of construction will not be determined by technology alone, but by how people, teams, organizations, and AI learn to work together to create better projects and better outcomes.

To learn more, visit:

[www.ConstructionAILab.ai](http://www.ConstructionAILab.ai)  
[www.sudyco.com](http://www.sudyco.com)

# About Construction AI Lab

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Construction AI Lab exists because the best questions come from the field.

Construction professionals are being asked to navigate one of the most significant technological shifts in decades. Yet many of the questions they face are practical, immediate, and specific to the realities of construction projects and organizations.

The Lab begins with those questions. The answers are not assumed. They are explored through collaborative learning, action research, experimentation, and real-world application.

Construction professionals bring real challenges, opportunities, concerns, and ideas from the field—from foremen to executives, project teams to organizational leaders. The Lab explores those questions through research, experimentation, discussion, and practical application, then shares what is learned with the broader industry.

Construction AI Lab serves as a collaborative learning and action research initiative for the construction industry. The goal is not to predict the future or promote specific technologies. The goal is to help construction professionals better understand what is possible, what is practical, what is working, what is not yet ready, and how people and AI can work together to produce better results.

## Resources

The Lab develops and shares resources including:

- AI Readiness Assessments
- White Papers and Research Publications
- The Construction AI Field Guide Series
- The Collaborative Intelligence Framework™
- Articles, Briefings, and Educational Resources
- Collaborative Roundtables and Industry Learning Initiatives

These resources are provided as part of the Lab's commitment to supporting industry learning and exploration. Participation in the Lab and access to its educational resources are provided at no cost to construction professionals and organizations.

The future of construction will not be determined by technology alone. It will be shaped by how people, teams, organizations, and AI learn to work together to improve communication, coordination, decision-making, and project performance.

## AI is already on your project.

Project managers are drafting RFIs with it. Engineers are using it to work through technical questions. Field teams are experimenting with it to organize information and communicate more clearly.

Most are figuring it out on their own—without much direction.

The Construction AI Field Guide changes that.

Written specifically for construction professionals, project teams, and leaders, this practical guide explains how to use AI responsibly and effectively within the realities of construction projects and organizations.

It answers the questions people are actually asking:

- Which tools are appropriate for project work?
- What information can be shared—and what requires more caution?
- How do I get better results from AI?
- What are the most common mistakes—and how do I avoid them?
- Where do I start?

Rather than focusing on technology for its own sake, the guide focuses on helping people understand how AI can support better communication, better decisions, better learning, and better project outcomes.

Whether you are just getting started or already experimenting with AI, this guide provides practical, field-tested guidance for navigating one of the most significant changes facing the construction industry today.

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**Human Judgment. Better Information. Better Decisions.**

[www.ConstructionAILab.ai](http://www.ConstructionAILab.ai)

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# THE CONSTRUCTION **AI** FIELD GUIDE

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