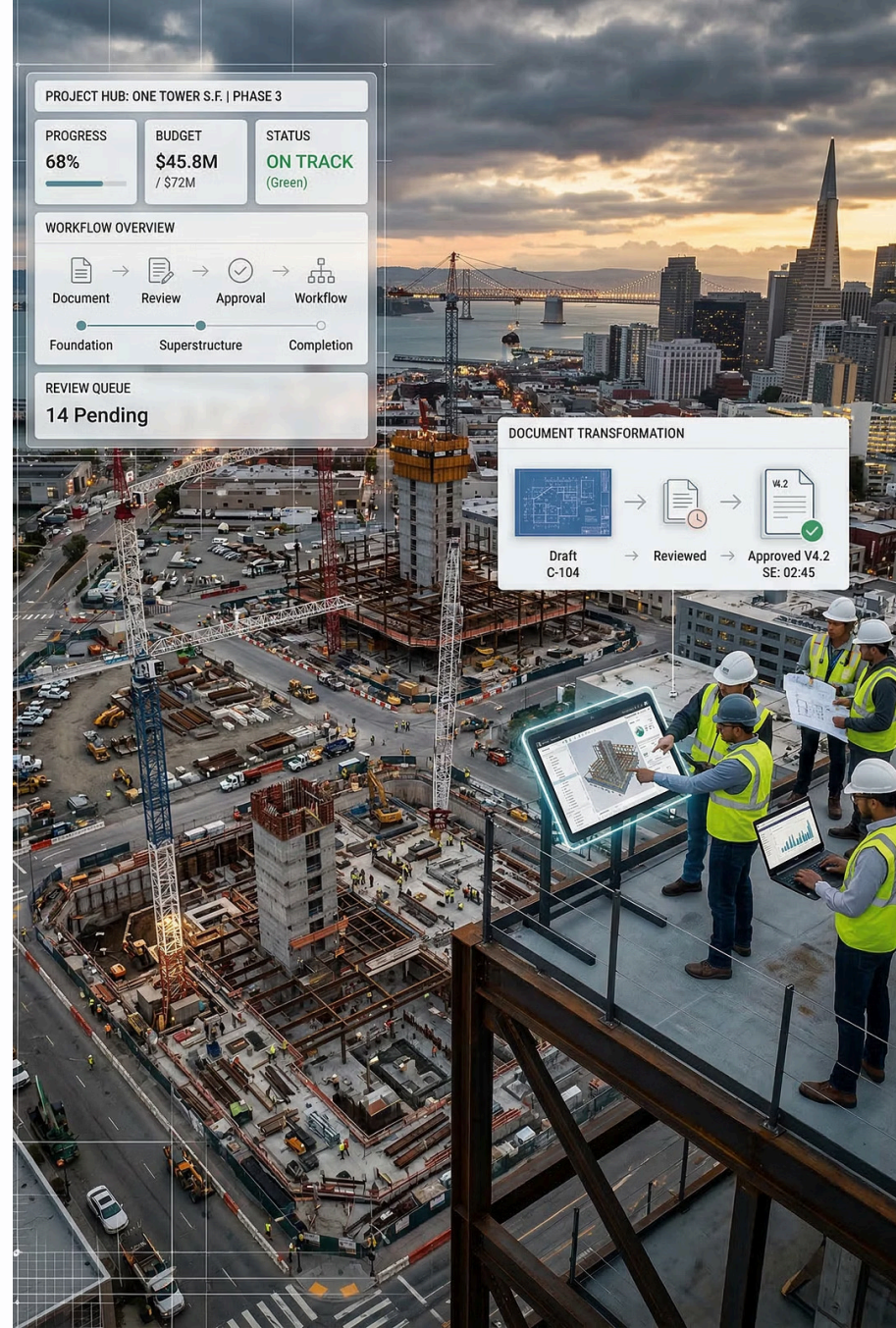


AI 201: The Future of Construction Management

Ryan Tognetti, Independent Consultant | Jennifer Gibb, Vice President BD



Why This Matters Now

- AI is infrastructure
Moving from curiosity to everyday operations
- Already in motion
Clients, teams, and competitors are experimenting now
- The real question
Not "Should we use it?" – but "Where can it improve real CM work?"



The Real Construction Management Problem

Construction management is **overloaded with information** and under-resourced for structured output.

📄 **Bottom line:** Too much information. Not enough structured output.

✉ Emails

📋 Meeting Notes

? RFIs

📊 Logs & Reports

📅 July 17 Schedule Narratives

🏗 Procurement Updates

What AI Is Actually Good At

AI STRENGTHS

Drafting first versions

Structuring messy input

Summarizing long material

Reformatting for audiences

Comparing documents

Repeatable workflows

AI LIMITATIONS

Final judgment

Contract interpretation without review

Technical decisions without validation

Issuing external commitments

The CM AI Maturity Model

1

Level 1 — Ad Hoc Prompting
One-off asks, mixed quality

2

Level 2 — Reusable Prompts
Better consistency

3

Level 3 — Projects + Templates + Role-Based Workflows
Repeatable output

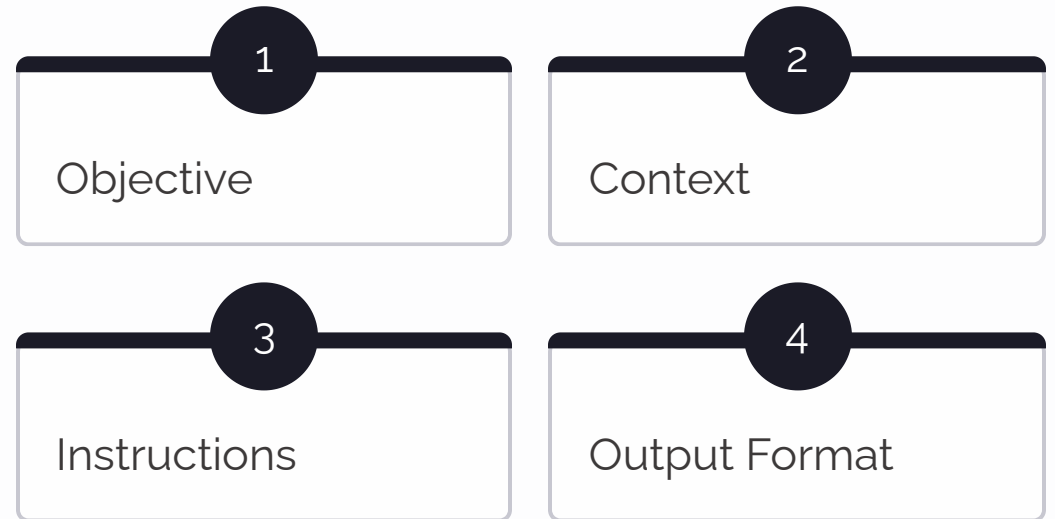
4

Level 4 — Team-Wide AI Operating System
Governed, scalable, reviewable

Start with Clear Prompting Foundations

A strong prompt has four essential parts. Master these and your outputs improve dramatically.

📄 **Prompt Formula:** Role + Task + Context + Constraints + Output



Better Prompts = Better Outputs



Show an Example

Give AI a sample of the output you want



Must-Haves & Exclusions

Tell AI what to include and what to avoid



Set Length & Tone

Specify format, word count, and voice



Ask for Self-Checking

Request a second-pass improvement before final output

ChatGPT: Your Digital Intern... with Guardrails

YOUR AI TEAMMATE CAN

- Work fast and draft endlessly
- Reformat instantly
- Never tire of revisions

YOUR AI TEAMMATE STILL NEEDS

- Clear instructions
- Good source material
- Human review
- Judgment from experienced professionals



Don't just ask AI questions. Build workflows.

Old Way

Prompt → answer
→ start over





Better Way

Inputs → draft →
standards check →
QA review → final
output


Shifting from one-off prompts to repeatable workflows is the single biggest productivity unlock for CM teams.


Best Early Wins for CM Teams


 Meeting Minutes

 Action Logs


 Weekly Owner Updates


 Executive Summaries

 RFIs

 Submittal Comparison


 Schedule Narratives

 Procurement Risk

 Safety Docs

 QA/QC Reports

 Recruiting & Onboarding

 Proposal Writing

Use Case: Meeting Minutes & Action Logs



Why It Works

- High repetition task
- Clear, consistent structure
- Immediate time savings
- Easy for humans to review

Input

Rough notes, transcript, agenda

Output

Formal minutes + action log

Use Case: Weekly Owner Updates

Input

Daily reports, schedule notes, issues log

Output

1-page executive-ready owner update

Include These Sections

01

Overall Progress

02

Key Milestones

03

Current Risks

04

Decisions Needed

05

Next Week Focus

Use Case: RFIs & Field Issue Drafting

AI can help draft clear, professional RFI language – fast.

Neutral Issue Statements

Clarification Requests

Background Summaries

Impact Language

Follow-Up Questions

Use Case: Submittal & Spec Comparison

Input

Spec section + product
submittal





Output

Compliance matrix

Matrix Columns

- Spec requirement
- Submittal response
- Apparent compliance
- Missing information
- Follow-up questions

Use Case: Schedule & Procurement Risk Review

-  Long-Lead Exposure
Flag materials at risk of delay
-  Missing Decisions
Surface unresolved owner choices
-  Procurement Bottlenecks
Identify gaps before they become delays
-  Near-Term Milestone Risk
Highlight narrative inconsistencies



Use Case: Safety, QA/QC & Documentation




Great Documentation Use Cases

 Safety Observations

 Pre-Task Plans

 July 17 Daily Reports

 QA/QC Reports

 Incident Summaries

 Lessons Learned

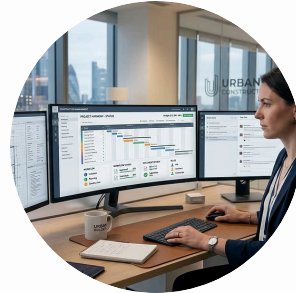
Role-Based Prompting

Same project. Different outputs.



Project Executive

High-level risk & milestone summary



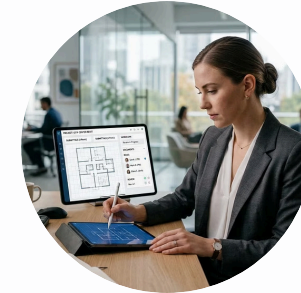
Project Manager

Owner update & schedule narrative



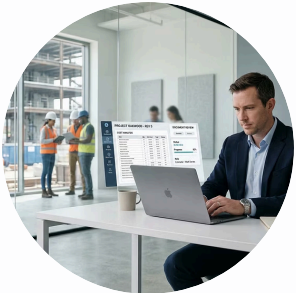
Superintendent

Daily reports & safety documentation



Project Engineer

RFIs, submittals & compliance checks



Estimator

Procurement risk & bid comparison





BD Lead


Proposals & recruiting materials


Projects: Your AI Workspace for Repeatable Work


Use **Projects** in ChatGPT to build a structured, reusable environment – not just a chat window.


 Standard Instructions

 Templates

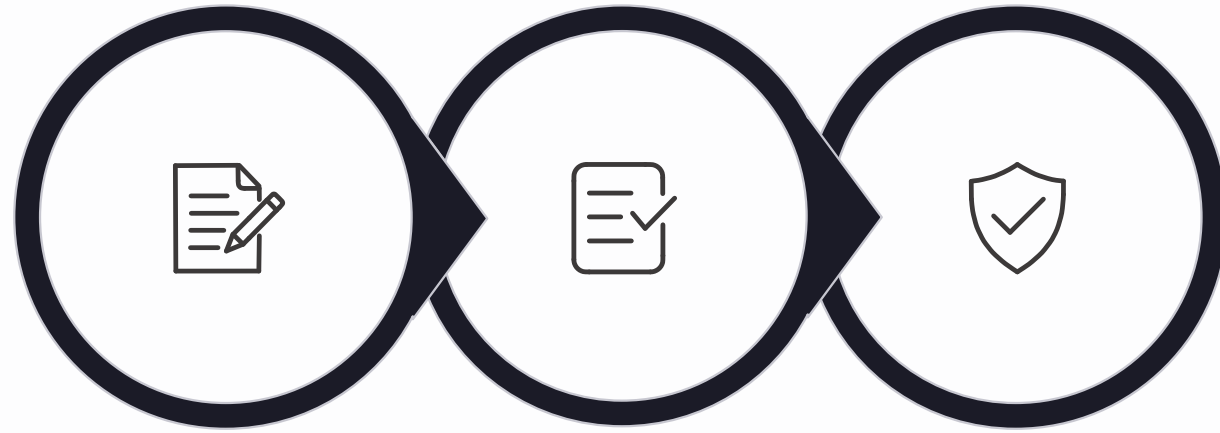
 Sample Outputs

 Uploaded Files

 Recurring Workflows

 Project-Specific Context

Agents / Workflow Roles



Draft Agent

Standards
Agent

QA Agent

Assigning distinct roles to each AI pass ensures consistent quality – from first draft to final output.

Prompt Library: Top 10 Prompts to Save

01

Meeting Minutes

02

Action Log

03

Owner Update

04

Executive Summary

05

RFI Draft

06

Spec/Submittal Comparison

07

Risk Register

08

Interview Guide








09

Onboarding Plan

10

Standards QA Check

CONSTRUCTION PROJECT MANAGEMENT KEY DELIVERABLES

DELIVERABLE	OBJECTIVE	KEY INPUTS	REQUIRED OUTPUT	BIGGEST RISK	BEST QA CHECK
 RFI	Clarify design intent or field conflict	Field issue, drawing refs, trade input, impact area	Subject, references, existing condition, clarification requested, impact	Vague or accusatory wording	Is the question clear and answerable?
 DAILY LOG	Create factual record of site activity	Weather, manpower, work performed, visitors, issues, safety	Date, weather, manpower, work, inspections, deliveries, issues, safety, next day	Missing facts or editorial tone	Are facts separated from assumptions?
 SCHEDULE REVIEW	Summarize changes, risks, and actions	Updated schedule, milestone changes, float, procurement, field constraints	Summary, key changes, critical path, risks, actions, follow-up questions	Calling a delay without support	Are risks clearly separated from actual delay?
 WEEKLY REPORT 	Communicate status, risks, and next steps	Progress, meetings, RFIs, procurement, safety, lookahead	Status summary, completed work, issues/risks, safety/quality, design/procurement status, lookahead, decisions needed	 Burying the real issue 	Would an executive know the top 3 takeaways in 30 seconds?

Governance & Guardrails



Always Review Before External Use

Verify facts

Check tone

Confirm responsibilities


Avoid accidental commitments


Protect confidential data


Keep humans accountable

What Should Never Go Out Unreviewed?


 Owner Commitments


 Budget Claims

 Schedule Claims

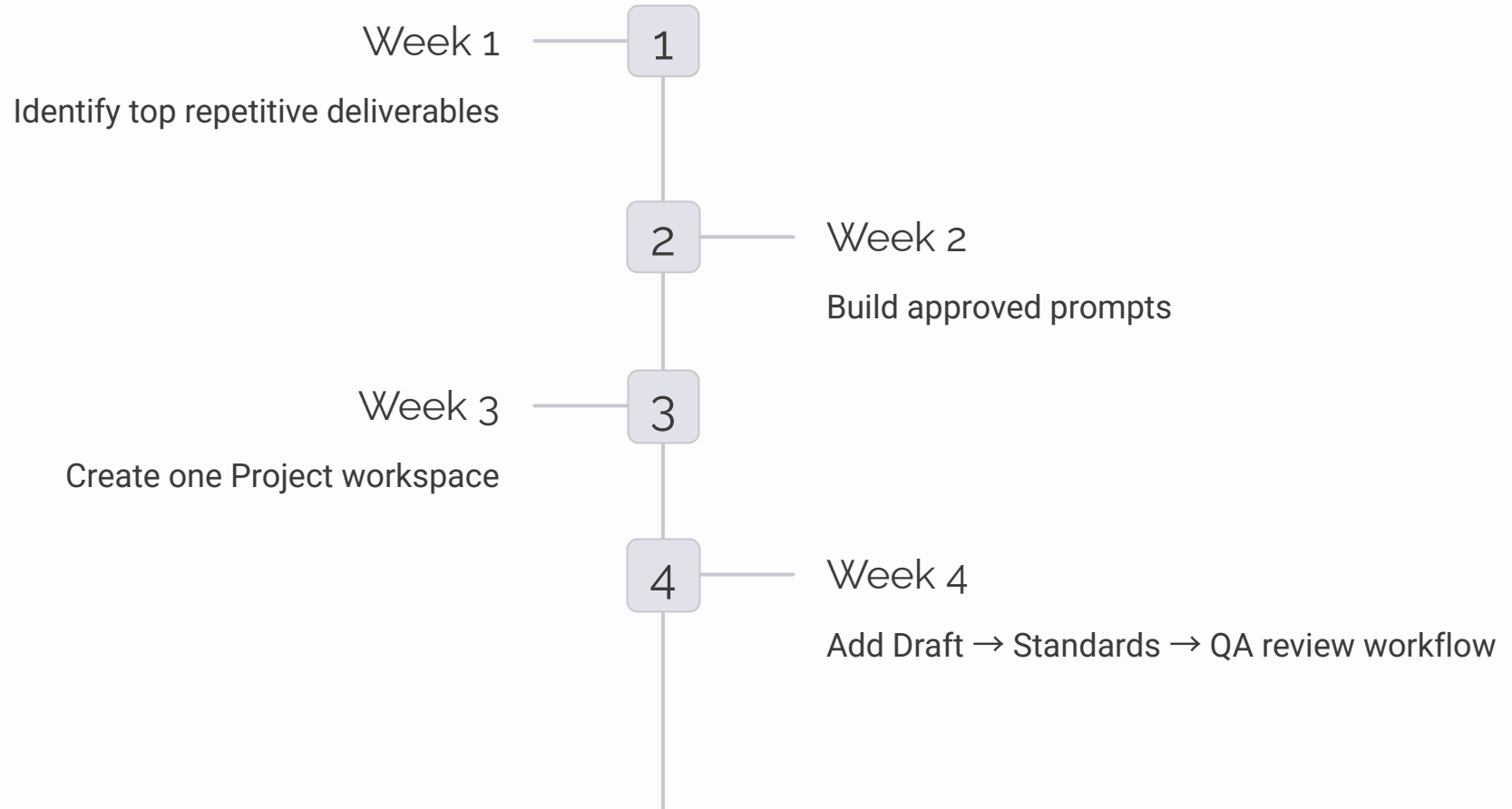
 Contract Interpretation

 Safety Direction

 Technical Conclusions

 Dispute Language

30-Day Adoption Plan



Final Takeaway

Better Inputs + Better Instructions + Better Review = Better Work Product

- ❏ AI does not replace construction judgment. It improves **speed**, **structure**, and **consistency**.

