

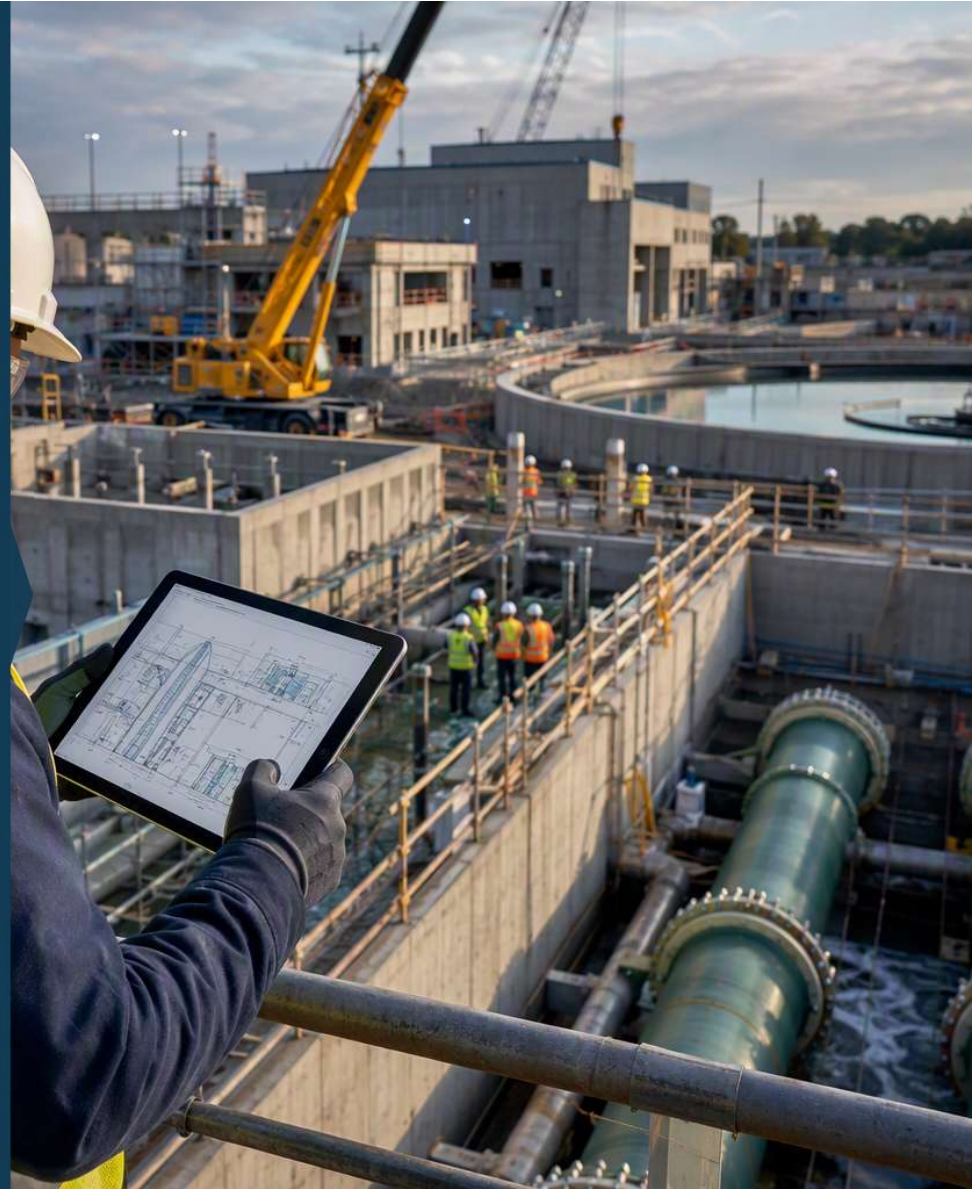
CMAA

Standards of Practice

A practical overview of the 10 categories

Professional construction management from project definition through closeout and operations.

Prepared for construction management leadership and project teams



How the 10 Chapters Work Together

A coordinated management system connects professional conduct, controls, delivery assurance, and continuous improvement.



1. Professional Construction Management

Ethics, competence, and trusted advisory service



CM FOCUS

**Ethics,
competence,
and trusted
advisory service**

Owner value

Establishes the professional behaviors and organizational capabilities that allow a CM to represent the owner objectively.



Core CM Practices

- Define authority, scope, and standard of care
- Maintain ethical conduct and disclose conflicts
- Staff qualified personnel and manage competencies
- Communicate transparently with owner and stakeholders



Municipal Infrastructure Example

Use a project-specific responsibility matrix, delegated authority limits, and escalation protocol before field mobilization.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

2. Project Management

Plan, organize, communicate, and integrate



CM FOCUS

**Plan, organize,
communicate,
and integrate**

Owner value

Provides the integrating framework that aligns scope, stakeholders, resources, decisions, and phase transitions.



Core CM Practices

- Develop the CM management plan
- Establish governance and communication routines
- Coordinate design, procurement, construction, and closeout
- Track decisions, issues, and action ownership



Municipal Infrastructure Example

For a wastewater upgrade, maintain an integrated master action log linking design packages, permits, outages, procurement, and construction milestones.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

3. Cost Management

Forecast, control, and protect the budget



CM FOCUS

**Forecast,
control, and
protect the
budget**

Owner value

Creates reliable cost information for owner decisions from early estimates through final cost reconciliation.



Core CM Practices

- Build the project budget and cost breakdown structure
- Validate estimates and escalation assumptions
- Control commitments, forecasts, and changes
- Report variance and estimate at completion



Municipal Infrastructure Example

Separate authorized budget, commitments, approved changes, pending exposure, and forecast-at-completion in the monthly cost report.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

4. Time Management

Build and maintain a credible path to completion



CM FOCUS

**Build and
maintain a
credible path to
completion**

Owner value

Uses planning, scheduling, progress measurement, and recovery analysis to manage contractual and operational milestones.



Core CM Practices

- Define schedule requirements and coding standards
- Review logic, durations, constraints, and calendars
- Measure actual progress and forecast completion
- Analyze delay, float, and recovery options



Municipal Infrastructure Example

Tie a contractor CPM schedule to permit dates, long-lead equipment, bypass setup, tie-ins, commissioning, and owner operational constraints.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

5. Quality Management

Plan quality, verify compliance, prevent rework



CM FOCUS

**Plan quality,
verify
compliance,
prevent rework**

Owner value

Translates contract requirements into planned reviews, inspections, tests, documentation, and corrective actions.



Core CM Practices

- Prepare the project quality management plan
- Establish submittal, inspection, and test controls
- Track nonconformance and corrective action
- Verify turnover records and acceptance criteria



Municipal Infrastructure Example

Use inspection and test plans for trench support, pipe bedding, liner installation, concrete placement, testing, and restoration.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

6. Contract Administration

Administer obligations consistently and fairly



CM FOCUS

**Administer
obligations
consistently
and fairly**

Owner value

Creates disciplined processes for correspondence, submittals, RFIs, changes, payment, claims prevention, and closeout.



Core CM Practices

- Maintain contract document controls
- Process RFIs, submittals, and payment applications
- Evaluate change entitlement and pricing
- Preserve contemporaneous records and notices



Municipal Infrastructure Example

Route field directives and potential changes through defined workflows so scope, price, time, and authorization are clear before work proceeds.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

7. Safety Management

Support a proactive safety culture



CM FOCUS

**Support a
proactive safety
culture**

Owner value

Clarifies the CM's safety-related services while preserving the contractor's responsibility for means, methods, and site safety.



Core CM Practices

- Define owner and CM safety expectations
- Review plans, metrics, and leading indicators
- Observe, document, and escalate unsafe conditions
- Coordinate high-risk work and interfaces



Municipal Infrastructure Example

Use pre-activity planning for confined space entry, excavation, lifting, traffic control, bypass pumping, and live utility tie-ins.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

8. Risk Management

Identify uncertainty before it becomes impact



CM FOCUS

**Identify
uncertainty
before it
becomes impact**

Owner value

Provides a structured process to identify, analyze, assign, respond to, and monitor threats and opportunities.



Core CM Practices

- Create and maintain the risk register
- Assess probability, impact, proximity, and ownership
- Select avoidance, mitigation, transfer, or acceptance
- Integrate risk into cost and schedule forecasts



Municipal Infrastructure Example

Track utility conflicts, unknown subsurface conditions, permit timing, community impacts, supplier lead times, and operational shutdown windows.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

9. Sustainability

Deliver durable, resilient, life-cycle value



CM FOCUS

**Deliver durable,
resilient, life-
cycle value**

Owner value

Integrates environmental, social, economic, and resilience considerations into owner decisions and project delivery.



Core CM Practices

- Confirm owner sustainability and resilience goals
- Evaluate life-cycle cost and operational performance
- Reduce waste, energy, water, and community impacts
- Document achievement of project objectives



Municipal Infrastructure Example

Compare rehabilitation versus replacement using service life, embodied impacts, maintenance access, energy use, social disruption, and climate resilience.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

10. Building Information Modeling (Bim) & Technology

Govern data, tools, integration, and adoption



CM FOCUS

**Govern data,
tools,
integration, and
adoption**

Owner value

Aligns technology investment with owner needs, project processes, data governance, cybersecurity, and measurable outcomes.



Core CM Practices

- Integrate virtual design & construction (VDC) and building information modeling (BIM) protocols
- Implement management information systems (MIS)
- Leverage lifecycle data



Municipal Infrastructure Example

Connect e-Builder workflows, GIS assets, mobile inspection forms, schedule and cost data, and document control through consistent identifiers and permissions.

STANDARD IN ACTION

Define the process, assign accountability, document decisions, and verify outcomes.

Applying the Standards Across the Project Life Cycle

The chapters overlap. Strong performance comes from deliberate integration rather than separate management silos.

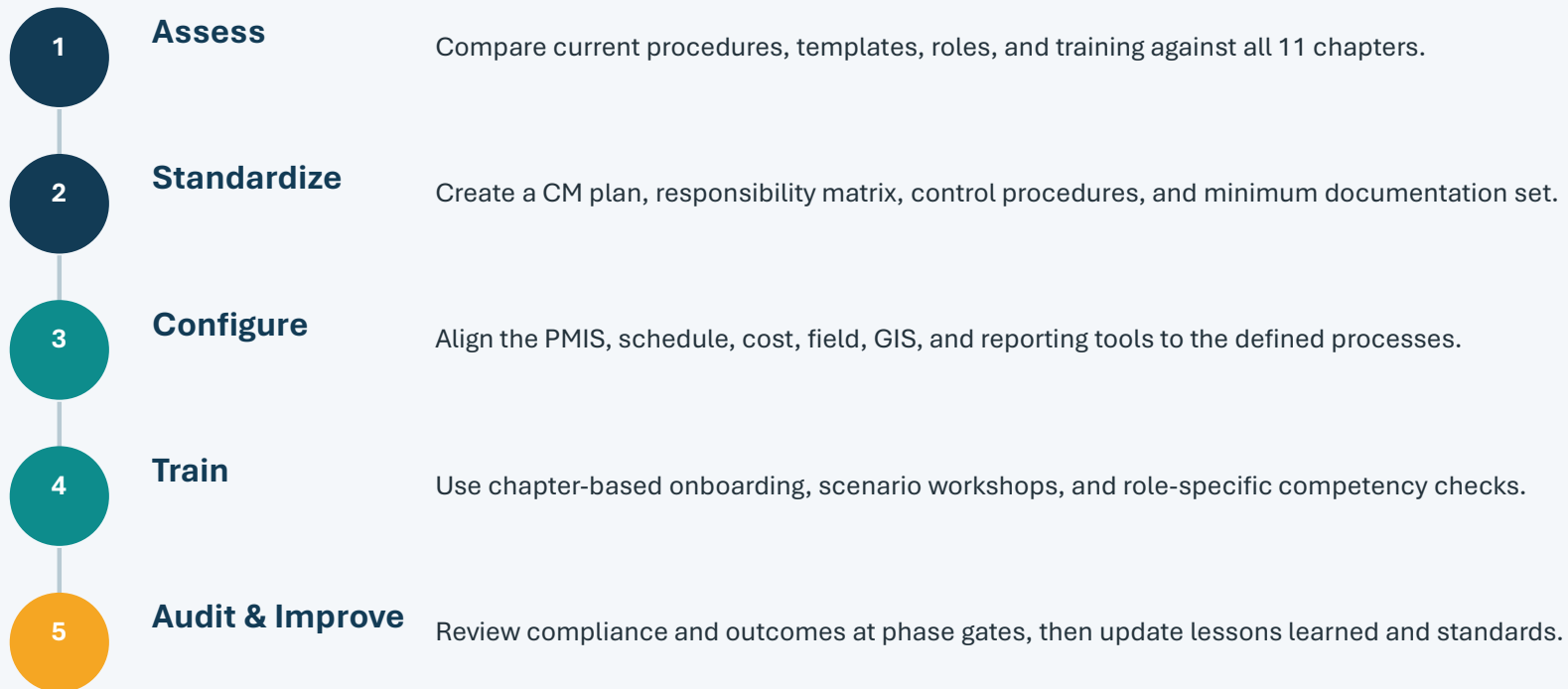
Management domains	Planning	Design	Procurement	Construction	Closeout
Project / Professional	●	●	●	●	●
Cost / Time	●	●	●	●	●
Quality / Safety	○	●	●	●	●
Contract / Risk	●	●	●	●	●
Sustainability	●	●	●	●	○
Technology	●	●	●	●	●

● Primary emphasis ○ Supporting emphasis

Integration test: Can every major decision be traced to scope, cost, time, quality, risk, contract, and owner value?

Putting the Standards into Practice

A simple deployment sequence for an owner or CM organization.



Result: repeatable delivery, clearer accountability, better owner decisions, and stronger project outcomes.