



CMCS INSIGHTS • DISPUTES

Construction Disputes

How disputes really begin, and how disciplined PMIS records keep construction disagreements out of court.

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01 Disputes Do Not Start in Court

Construction Disputes Rarely Start in Court — They Start on Site

How PMWEB Keeps Them From Ever Getting There

Walk onto any construction site in the GCC — a Riyadh giga-project, a Dubai high-rise, a Doha infrastructure programme — and you will find the same thing: thousands of small decisions being made every day. A verbal instruction from a site engineer. A site walk with no minutes. An email that gets lost in a long thread. A variation that was acknowledged in a meeting but never formally approved.

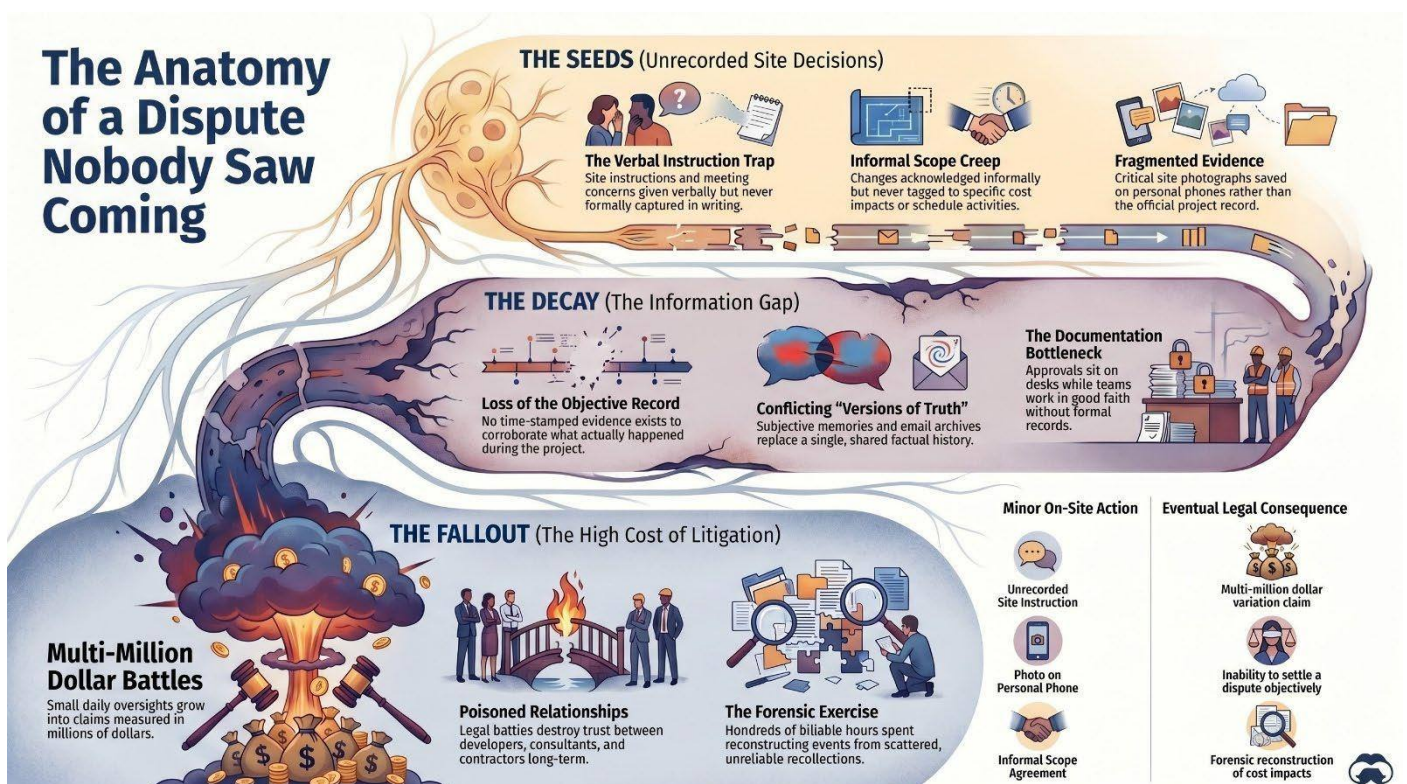
Most of those decisions are fine. Some of them are not. And a handful — sometimes as few as three or four across a two-year project — are the seeds of disputes that will later be measured in millions, decided by lawyers, and that poison relationships between developers, consultants, and contractors long after the last concrete is poured.

The uncomfortable truth every experienced project director already knows: construction disputes rarely start in a courtroom. They start on site, long before anyone is thinking about litigation.

The Anatomy of a Dispute Nobody Saw Coming

Trace any major construction dispute back to its origin and you will find a familiar pattern:

- A site instruction was given verbally but never formally recorded.
- A concern was raised in a progress meeting and never captured in the minutes.
- A change in scope was acknowledged informally but never tagged to a schedule activity or a cost impact.
- An approval sat on someone's desk while the team continued working in good faith.
- A site photograph that would have settled the matter was saved on a personal phone, not the project record.



By the time extension-of-time claims, variation orders, and commercial notices land on the table months later, there is no single, objective, time-stamped record of what actually happened. Everyone has a version of the truth — none of them can be fully corroborated.

What looks like a legal problem at the end is, in almost every case, a **data and communication problem at the beginning**. The courtroom is where the dispute is finally resolved. The site is where it was quietly created, months or years earlier.

This is exactly the gap a modern Project Management Information System is designed to close — and it is the reason PMWEB has become the platform of choice for many of the most demanding capital programmes in the region.

What PMWEB Actually Changes on Site

At CMCS, we have implemented PMWEB as the PMIS backbone for some of the most complex capital programmes in the GCC — from Saudi giga-projects and UAE flagship developments to government programmes overseeing hundreds of concurrent projects. What the platform does is not magic. It is something far more valuable: it makes the act of documenting every project event the natural, frictionless path for everyone involved.

Here is what that looks like in practice.

1. Every project event is captured at the source, in the right structure

PMWEB provides predefined templates for every type of project communication — site instructions, RFIs, transmittals, meeting minutes, daily reports, non-conformance reports, safety observations, and correspondence. Each template enforces exactly the fields that matter: who, what, where, when, referenced drawings, affected activities, and supporting documents.

When a site engineer is using a template that requires the right information to be filled in, “unclear instruction” stops being an available outcome. Data quality is enforced at the point of creation — not reconstructed months later from memory and email archives.

Logged into: All Levels

Need Help?

Forms > Non Compliance Report (NCR) > Manager Page > 2 -

Main Notes Attachments (2) Workflow (1/5)

PMWeb Non Compliance Report (NCR)

Project: RVS0104 - Boston Medical Center ID: 2 Date: 11-Oct-2019 12:00:00 AM

Company: Dexter Concrete Priority: High Location: Basement

Revision: 0 Date: 11-Oct-2019 12:00:00 AM Status: Submitted

REASON FOR ISSUING THE NCR

REASON FOR ISSUING NCR

SELECT	NO.	REASON	PHOTO
☒	1.00	Work that was not built as indicated in the approved Issued for Construction drawings	☐
☐	2.00	Work that fails to meet specified tolerances as established in the project specifications	☐
☐	3.00	Work that is being performed using non-approved methods or standards	☐
☐	4.00	Failure to follow the approved testing and inspection plan	☐
☐	5.00	Testing results demonstrate that the product does not meet established and approved standards	☐
☐	6.00	Material used that has not been approved as a substitute (equal or similar)	☐
☐	7.00	Design is not accurate and does not represent actual field conditions	☐
☐	8.00	Approved procedure was not followed, and quality defects have been identified by the project team	☐

PAGE SIZE: 250 8 items in 1 pages

NCR DETAILS AND CORRECTIVE ACTION STATUS

What is the main reason for the NCR or what went wrong? AAAA BBBB CCCCC DDDD EEEEDD DIA>HLAIDL

Why the work doesn't meet specifications? AAAA BBBB CCCCC DDDD EEEEDD DIA>HLAIDL

What can be done to prevent the problem from happening again? AAAA BBBB CCCCC DDDD EEEEDD DIA>HLAIDL

Explanation of corrective action taken or to be taken AAAA BBBB CCCCC DDDD EEEEDD DIA>HLAIDL

NCR Corrective Action Details Status: Acceptable Date: 11-Oct-2019 12:00:00 AM

2. Adaptive Forms mean the site always has a voice

Construction sites are not office environments. Connectivity drops. Engineers work inside structures, on scaffolding, and in tunnels. PMWEB's Adaptive Forms capability allows site teams to capture instructions, observations, and reports online or offline — with photographs and video attached directly to the record — and synchronise automatically the moment connectivity is restored.

The practical effect is that the gap between “something happened on site” and “it is in the system of record” collapses from days or weeks to minutes. A resident engineer who observes a deviation from approved drawings no longer waits until the evening to write an email. He documents it on the spot, with photographs, against the correct activity, with the right people notified immediately.

The screenshot displays the PMWEB 'Test adaptive' form. The interface is divided into a sidebar and a main content area. The sidebar on the left contains navigation links: 'Estimating_M...', 'Sync', and 'App Settings'. The main content area has a header with 'PMWEB' and 'Test adaptive', and a 'Server Only' button. Below the header, there are tabs for 'Add', 'Delete', and 'Tabs'. The main form area is titled 'Test adaptive' and includes a subtitle 'Subtitle'. The form contains several input fields: 'Level' (with a dropdown menu showing 'GCC_RED_SQ - Souq - Mixed Use Development'), 'Record #' (with a text input '002'), 'Description' (with a text input 'program'), and 'Status' (with a dropdown menu showing 'Draft'). There is also a 'system list' dropdown menu with a 'Select...' option. A 'Next' button is located at the bottom of the form. Below the form, there are sections for 'NOTES' and 'ATTACHMENTS'.

3. Every communication is linked to the schedule — priority becomes objective

One of PMWEB's most underused capabilities is the ability to tag every site instruction, RFI, or issue to the associated schedule activities. This single feature quietly transforms how projects are managed.

Suddenly, “what should we prioritise this week?” is no longer a debate driven by whoever is loudest in the meeting. It becomes a filtered list of open items mapped against critical-path and near-critical activities. Priority becomes an objective function of schedule impact, not a subjective judgment. That alone removes one of the most common sources of friction between developers, consultants, and contractors.

Logged into: All Levels Need Help?

Forms > RFIs > Manager Page > 006 - Banner Pole Assemblies

RV50104 - Boston Medical Center Approved

RFIs: 006 - Banner Pole Assemblies

Main Additional Information Checklists Clauses Notes Attachments **6** Notifications

Header Fields

Project* RVS0104 - Boston Medical Center RFI #* 006 Description Banner Pole Assemblies Phase 4 - Operation -

WBS Reference From Frank Jones (Best Door and Win... To Ann Rockwell (Rockwell Archite...)

Discipline Project Stage CSI Code 13200 Task

RFI Date 22-Sep-2011 12:00:00 tt Date Required 23-Sep-2011 12:00:00 tt Date Answered 30-Sep-2011 12:00:00 tt Task 01 - Notice to proceed Start 15-Jan-2009 12:00:00 tt Finish 04-Feb-2009 12:00:00 tt

Revision 0 User Assigned User Due Date

Change Event ☒ Affects Scope of Work ☐ Affects Cost

User Defined Fields

Tower Floor Room Drawing Ref.

Specification Page and Para BoQ Page and Item Hijra Date Time 0

Cost Location

4. Workflows with delegation of authority — accountability, not bottlenecks

Every process in PMWEB runs on a predefined workflow, configured to mirror the client's actual delegation of authority matrix. An instruction below one threshold is approved by the project manager; above another, by the programme director; above another, by the client's steering committee. Notifications go out automatically. Delayed actions trigger escalation alerts. Every task is time-stamped.

The question *"who is sitting on this?"* suddenly has a real-time answer, visible to everyone with the right access. The single most common claim scenario — *"we waited three weeks for an instruction and it cost us money"* — is either prevented outright, or documented with such precision that the cost and time impact can be calculated objectively rather than argued adversarially.

Logged into: All Levels Need Help?

Workflows > Business Processes > (System)

Roles Business Processes (BPM) Defaults APM Rules

Select Template 01 - WF-000001 Cost Estimate Approval USE VISUAL DESIGNER

BPM ID* 01 Template Name* WF-000001 Cost Estimate Approval

Recalculate Due Dates On Actions ☒ Single "All Must Approve" Email ☐ Associate With Commitments

BPM MANAGERS

OVERDUE ALERT ☐ Alert Active ☐ Days (+/-) 0 Role(s) -- Overdue Approver -- Email Onscreen ☐

ROLES & APM RULES

Roles Branch Rules

☒ -- Document Manager -- ☒ -- Submitter --

☐ admin (QussayPM - Qussay Qumssan) ☐ Aif Contractor (ASKHAN - AS KHANNN) ☐ Aif Designer (aswini - Aswini Nag) ☐ Aif owner (Indhu - Indhu) ☐ Ambika (Ambika - Ambika S)

STEPS

STEP #	TYPE	DESCRIPTION	LEVEL	ACTION	RETURN TO	DELEGATE	DECISION
1	Project Accountant	System	Next Step				
2	Estimate	Branch					
2.1	-- Multiple --	Next Step					
2.2	Project Manager	System	Next Step				
2.3	Aif Contractor	System	Next Step				
2.4	Board Directors	System	Next Step				
3	CEO	System	Next Step	Step 1			
4	Budget Team	System	Next Step				
5	Board Directors	System	Next Step				
6	Consultant	System	Next Step				
7	Pur	System	Next Step				

VISUAL WORKFLOW

☒ SHOW ROLES ☐ SHOW USER NAMES

```

graph LR
    SUBMITTER --> PROJECT_ACCOUNTANT[PROJECT ACCOUNTANT]
    PROJECT_ACCOUNTANT --> ESTIMATE[ESTIMATE]
    ESTIMATE --> CEO[CEO]
    CEO --> BUDGET_TEAM[BUDGET TEAM]
    BUDGET_TEAM --> BOARD_DIRECTORS1[BOARD DIRECTORS]
    BOARD_DIRECTORS1 --> CONSULTANT[CONSULTANT]
    CONSULTANT --> PUR[PUR]
    PUR --> BOARD_DIRECTORS2[BOARD DIRECTORS]
    BOARD_DIRECTORS2 --> FINAL_APPROVE[FINAL APPROVE]
    FINAL_APPROVE --> REJECT[REJECT]
    SUBMITTER --> WITHDRAW[WITHDRAW]
  
```

5. Integration means cost and schedule impact are never hidden

A site instruction is rarely just a site instruction. It has cost consequences. It has schedule consequences. It may trigger a change order, a commitment revision, or a budget transfer.

Because PMWEB is a genuinely integrated platform — not a loose collection of modules — every event flows through to the cost and schedule views automatically. A potential change order raised on site appears in the cost worksheet. An approved variation updates committed values. The earned-value picture reflects reality rather than last month's snapshot. When disputes do arise, the contemporaneous record of cost and time impact is already there. There is nothing to reconstruct.

The screenshot displays the PMWEB interface for a project named 'RV50104 - Boston Medical Center'. The interface is divided into a sidebar on the left and a main content area. The sidebar contains navigation links for Plans, Forms, Costs (highlighted), Schedules, Assets, Workflows, Portfolio, Tools, Recent Records, Search, and PMWEB University. The main content area shows the project details and a table of budget and cost items.

Budget Table:

Line #	Attach...	Status	Item	Description	Currency	Adjust...	Tax	Adjust...	This RF...	This RF...
1	[Q]	Pending		Office Modifications	USD - Dollar (Unite...	\$0.00	\$0.00	\$0.00	\$75,000.00	\$75
2	[Q]	Pending		Ajuste de saldos	USD - Dollar (Unite...	\$0.00	\$0.00	\$0.00	\$-75,000.00	\$-75

Cost Table:

Line #	Status	Linked Bu...	Item	Description	Currency	This ...	Contract ...	Cost Type	Sub Project	WBS
1	Pending	1 - Office Modi...		Painting	USD - Dollar (Unite...	\$30,000.00	002 - Boston ...			
2	Pending	1 - Office Modi...		Carpentry	USD - Dollar (Unite...	\$40,000.00	002 - Boston ...			

6. Time-stamped traceability — the evidentiary backbone

Every workflow action in PMWEB is time-stamped and attributed. Who issued the instruction, when, to whom, when they acknowledged it, when they responded, what attachments were added at each step. This creates what lawyers call a contemporaneous record — and it is the single most valuable asset a project can have the day a dispute is threatened.

In our experience across the GCC, the majority of disputes that would have gone to court, arbitration, or the DAB instead resolve at the negotiation table once one party produces the PMWEB audit trail. The facts stop being in question. Only the commercial answer remains to be agreed.

The screenshot displays the PMWEB application interface. On the left is a dark sidebar with navigation icons and labels: Plans, Forms, Costs (selected), Schedules, Assets, Workflows, Portfolio, Tools, Recent Records, Search, and PMWEB University. At the bottom of the sidebar is an 'Exit PMWEB' button. The main content area has a top header with 'Logged into: All Levels' and a 'Need Help?' button. Below this is a breadcrumb trail: 'Costs > Commitment COs > Manager Page > 001 - Office Modifications'. The main title is 'RV50104 - Boston Medical Center' with a status 'Submitted (Step 5 of 6)'. Action buttons include 'New Record', 'Print', 'Recap', and a menu icon. A tab bar shows 'Main', 'Adjustments', 'Additional Information', 'Checklists', 'Clauses', 'Notes', 'Attachments', 'Workflow' (selected), and 'Notifications'. The 'Workflow' tab shows 'Business Process: T1 - Change Order Approval' and a 'View Workflow' link. Below this is a 'Progress' section with three cards: 'Current Step' (Step 5 of 6, Project Accountant Bassam Samman, Due Date: November 21, 2021), 'Furthest Step' (Step 5 of 6, Project Accountant Bassam Samman, Occurred On: May 11, 2023 (9:17 PM)), and 'Last Activity' (Approved by Bassam Samman (admin), Occurred On: May 11, 2023 (9:17 PM)). At the bottom is a 'Log' section with a table of activities.

Step	Due Date	Role	User	Image	Action ...	Action ...	Signature	Action	Delegate	Team In...
-- Submitter --			Bassam Samman(admin)		Nov-11-2021	08:38 PM		Submit		
4	Nov-16-2021	Superintend...	Bassam Samman(admin)		May-11-2023	09:17 PM		Approve		

At the bottom of the log table, it shows '1 - 2 of 2' and a pagination control with '<<' '<' '1' '>' '>>' and a '250 Rows' dropdown.

Fighting Smarter, Not Harder

A shift is underway across the construction industry, and it is most visible in the mature markets: developers, contractors, and consultants are moving away from all-or-nothing legal battles. Mediation, dispute avoidance boards, structured negotiation, and early neutral evaluation are increasingly replacing the slow grind of formal proceedings.

That shift is only possible when both sides share a common factual record. When they don't, every dispute becomes a forensic exercise — hundreds of billable hours spent reconstructing events from scattered emails, conflicting meeting minutes, and unreliable recollections. When they do — when a PMIS like PMWEB has been the single source of truth throughout the project — disputes compress dramatically. The conversation moves straight from “what happened?” to “what is the fair commercial answer?” That is the conversation every owner, contractor, and consultant would rather be having.

Protecting Relationships, Not Just Rights

The real cost of a construction dispute is rarely the legal bill. It is the relationship — between a developer and a contractor who were meant to deliver the next three projects together, between a consultant and a client with a decade of shared history, between a main contractor and the subcontractors who are the backbone of the next programme.

Every dispute that reaches a courtroom is, in some sense, a failure of the project's ability to resolve issues while the project was still alive. PMWEB does not eliminate disagreements — disagreements are a normal and healthy part of any complex capital project. What it eliminates is the ambiguity, the delay, and the information asymmetry that turn disagreements into disputes, and disputes into litigation.

Projects managed on PMWEB are not conflict-free. They are projects where conflict is resolved early, on the facts, with the relationship between the parties still intact at the end.

The Question Worth Asking

Construction disputes are not inevitable. They are the predictable output of projects run on fragmented information, unclear instructions, and ad-hoc communication. They are also the single largest destroyer of value in the industry — in legal fees, in delayed handovers, in damaged reputations, and in partnerships that never recover.

At CMCS, we have spent years implementing PMWEB as the platform that closes the gap between what happens on site and what is recorded in the system of truth. Not because documentation is glamorous — it isn't — but because, in our experience, the projects that don't end up in a courtroom are the projects where every party trusts the record.

The conversation about PMWEB is not really about software. It is about whether your next project finishes in a **handover ceremony** — or in a **hearing room**. We would welcome the chance to show you how the clients we work with across the UAE, Saudi Arabia, Qatar, and Kuwait have made the first outcome the default.

About PMWEB

PMWEB is an enterprise-class, web-based capital construction project management platform trusted by organisations worldwide including Harvard University, the United Nations, and Atlanta Airport. Built on Microsoft .NET technology, PMWEB manages the entire project lifecycle within a single integrated platform — from portfolio planning and cost management through document control, procurement, scheduling, asset management, and business intelligence. With 150+ pre-configured SSRS reports, drag-and-drop dashboard design, multi-currency support, and open REST/SOAP API integration, PMWEB delivers enterprise capability with implementation timelines measured in months, not years.

About CMCS

CMCS (Collaboration, Management and Control Solutions) is the regional PMWEB implementation partner for the GCC and MENA regions, awarded PMWEB Partner of the Year 2025. CMCS specialises in digital project management solutions for real estate developers, infrastructure owners, and construction companies across the Middle East and North Africa.
