

Construction

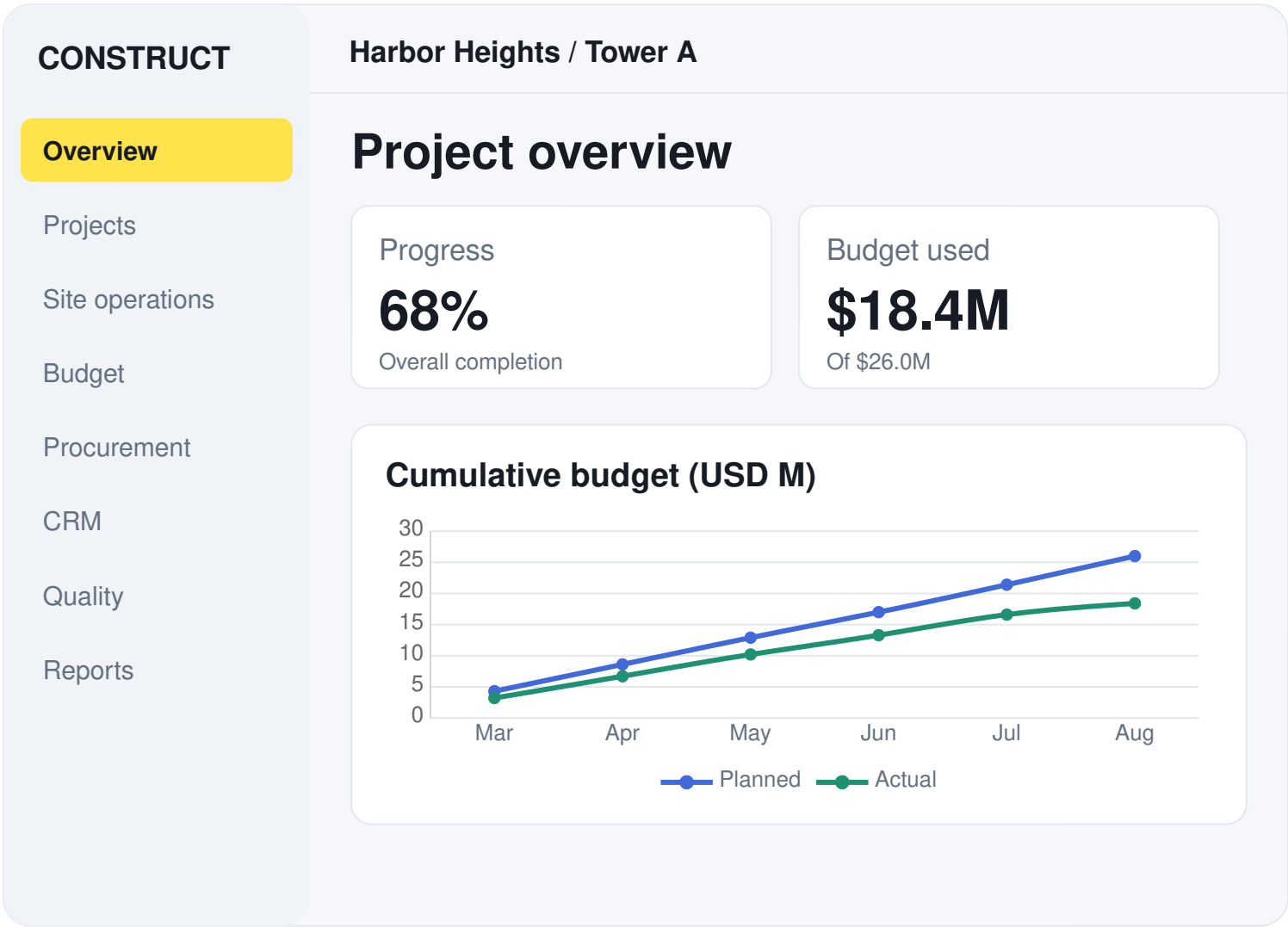
ERP / CRM

Digital solution

Connecting the office
with the construction site

UX/UI design by Martin-John Challita

Original project with new dashboard concepts



Dashboard refresh and concept extensions

Project context

A shared workspace for the people managing a construction project

Design objective

Bring project status, field activity and quality records into one interface so each team can see what needs attention.

My contribution

Construction ERP / CRM interface design, with desktop and mobile workflows shown in the supplied screens.

Area	Case-study scope
Original design	Project overview, site operations, mobile dashboard, inspections and defect reporting
Dashboard refresh	Clearer hierarchy, consistent status labels and focused task panels
New concepts	Finance, procurement, CRM pipeline and quality analytics
Evidence	Five supplied screens. No measured business outcomes supplied.

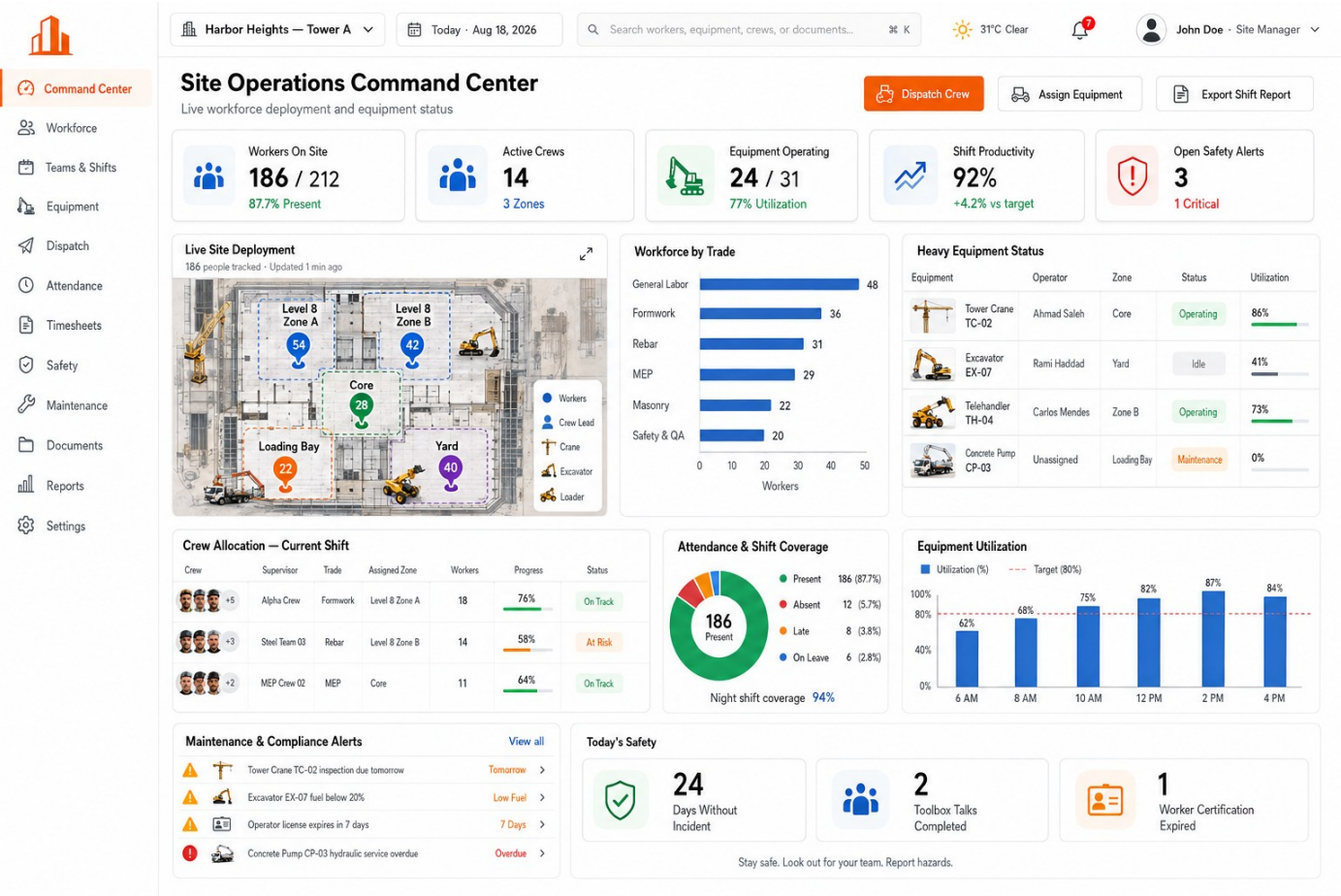
New dashboard concepts extend the portfolio story and do not imply shipped functionality.

Original design foundation

The supplied screens establish the project overview and field operations workflows



Project command center



Site operations command center

Original interfaces by Martin-John Challita. Figures represent screen content, not verified results.

A workspace organized around responsibility

Each role starts with the information and actions relevant to its work

Role	Primary view	Typical action
Project manager	Progress, milestones, cost exposure and alerts	Review a delay and open its project record
Site manager	Crew deployment, attendance and equipment	Assign a crew or review an equipment issue
Finance / procurement	Budget, commitments and delivery status	Review an invoice or approve a purchase request
Quality engineer	Inspections, defects and corrective actions	Assign a correction and request verification
Business development	Opportunities, proposals and client history	Follow up on a tender or update a client record

Shared project context

Project, location, responsible person, due date, evidence and activity history

Project overview dashboard

A focused starting point for progress, budget and immediate exceptions

CONSTRUCT

Overview

Projects

Site operations

Budget

Procurement

CRM

Quality

Reports

Harbor Heights / Tower A

Aug 2026 / Project manager

Refreshed design

Overall progress

68%

Weighted project progress

Budget used

\$18.4M

71% of \$26.0M budget

Schedule variance

+4 days

Behind current baseline

Open priorities

3

Action required today

Phase completion (%)

Interior	31
Facade	44
MEP	57
Structure	82
Foundation	100

Cumulative spending (USD M)

Month	Planned	Actual
Mar	4	3
Apr	9	7
May	13	10
Jun	17	13
Jul	21	17
Aug	26	19

Needs attention

Concrete delivery delayed

South slab pour at risk

RFI #248 awaiting response

Electrical room layout

Illustrative UI data. Spending below plan alone does not establish cost efficiency.

Finance and cost control

Budget owners can compare cost categories and review pending approvals

CONSTRUCT

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Harbor Heights / Tower A

Aug 2026 / Project manager

New concept / Illustrative data

Approved budget

\$26.0M

Project baseline

Actual spend

\$18.4M

Recorded to date

Open commitments

\$5.2M

Not yet in actual spend

Forecast at completion

\$26.8M

+\$0.8M versus budget

Cost by category (USD M)

Category	Budget	Actual to date
Structure	9.0	7.2
MEP	6.0	4.0
Facade	4.0	2.5
Interior	4.0	2.2
Other	3.0	1.8

Approval queue

Request	Amount	Status
Concrete variation	\$84,000	Review
MEP invoice	\$126,000	Approval
Crane rental	\$32,000	Review

Illustrative data. Actual spend, commitments and forecast remain distinct to avoid misleading comparisons.

CONSTRUCTION ERP / CRM

06

Site operations dashboard

Workforce and equipment views support daily allocation decisions

CONSTRUCT

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Harbor Heights / Tower A

Aug 2026 / Project manager

Refreshed design

Workers on site

186 / 212

87.7% present

Active crews

14

Across 3 work zones

Equipment operating

24 / 31

77% operating

Safety alerts

3

1 critical alert

Workforce by trade (workers)

Safety / QA	20
Masonry	22
MEP	29
Rebar	31
Formwork	36
Labor	48

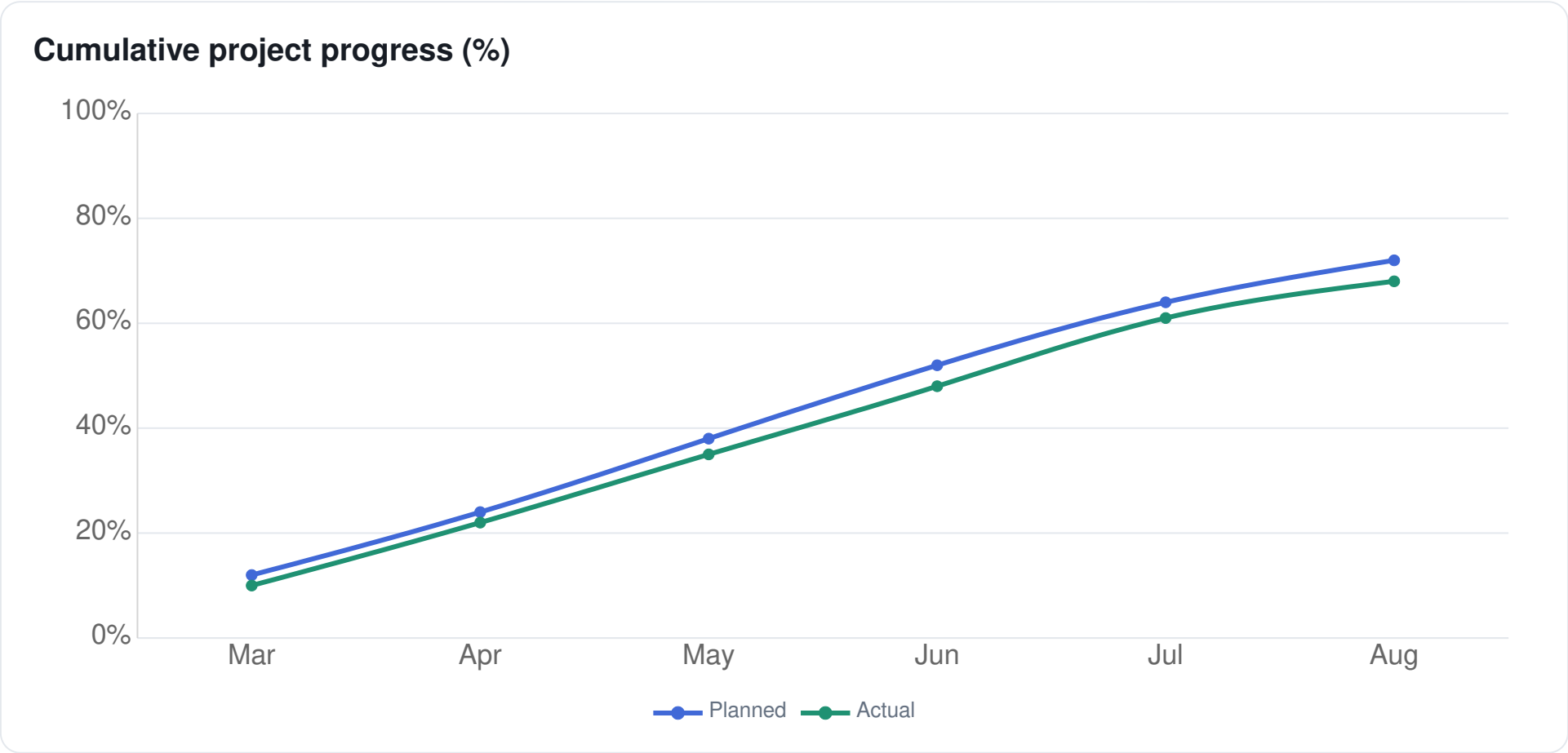
Equipment and exceptions

Equipment	Zone	Status	Utilization
Tower crane TC-02	Core	Operating	86%
Excavator EX-07	Yard	Idle	41%
Telehandler TH-04	Zone B	Operating	73%
Concrete pump CP-03	Loading bay	Maintenance	0%

Illustrative screen data. A status label accompanies every exception so color carries no meaning alone.

Schedule and progress analytics

A progress comparison makes the gap to the current plan visible



August progress gap

-4 points

68% actual / 72% planned

The decision

Review the delayed work package, its dependencies and the responsible subcontractor before changing the baseline.

Illustrative scenario. Percentage-point progress variance and day-based schedule variance are different measures.

Procurement dashboard

Delivery status and critical packages support material planning

CONSTRUCT

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Harbor Heights / Tower A

Aug 2026 / Project manager

New concept / Illustrative data

Procurement overview

Tracked items

312

Across procurement packages

Delivered

148

47.4% of tracked items

In transit

72

Expected deliveries

Delayed

30

Exception follow-up

Item status distribution



Critical package tracking

Package	Required on site	Status	Next action
Concrete / south slab	18 Aug	Delayed	Confirm new slot
Facade glazing	28 Aug	In transit	Check arrival
MEP sleeves	20 Aug	Approval	Review submittal

Illustrative UI data. Counts show procurement items and do not represent spend or physical volume.

CONSTRUCTION ERP / CRM

09

CRM and opportunity management

Client relationships connect with proposals and the project handoff

CONSTRUCT

Overview

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Harbor Heights / Tower A

Aug 2026 / Project manager

New concept / Illustrative data

Client and opportunity overview

Active opportunities

31

Across the current pipeline

Pipeline value

\$12.5M

Unweighted opportunity value

Proposals in review

6

Client response pending

Follow-ups due

4

Assigned to account owners

Opportunity value by stage (USD M)

Stage	Value (USD M)
Qualified	2.1
Tender	4.2
Proposal	3.8
Negotiation	2.4

Priority opportunities

Opportunity	Value	Stage	Next action
Cedar Residences	\$1.8M	Tender	Site meeting
Marina Offices	\$2.4M	Negotiation	Review terms
North Clinic	\$0.9M	Proposal	Client follow-up

Illustrative CRM extension. Pipeline value represents opportunities, not booked revenue.

Quality analytics dashboard

Inspection status and defect categories help engineers prioritize follow-up

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Harbor Heights / Tower A

Aug 2026 / Project manager

New concept / Illustrative data

Quality overview

Inspections this month

120

Completed inspection records

First inspection pass

85%

102 / 120 inspections

Open defects

18

Assigned corrective actions

Overdue actions

4

Past the assigned due date

Open defects by category (records)

Facade

2

Finishes

4

MEP

5

Concrete

7

Corrective action queue

Record	Location	Severity	Status
NCR-0087	Column C14	Major	Correction
NCR-0091	Level 12 / B	Major	Verification
NCR-0094	Level 6 / A	Minor	Assigned

Illustrative quality data. Record counts and pass rate describe different parts of the quality workflow.

CONSTRUCTION ERP / CRM

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Mobile inspection workflow

The engineer can record a failed check and assign a correction in the same task

A focused field task

The original flow connects checklist results with measured values, photo evidence and an overall inspection result.

Design refinement

Keep the project and location visible. Group checks by section. Surface the failed item before submission.

Pre-pour slab inspection

Level 12 / Zone B / Grid B4-F8

Checklist / Step 2 of 4

Structural check	Result
Formwork alignment	Pass
Rebar spacing	Pass
Concrete cover	Fail
Lap splice length	Pass
Embedded MEP sleeves	Pass
Surface cleanliness	N/A

Checklist results / 6 items

Concrete cover exception

Required / measured
40 / 32 mm
8 mm below required cover

Corrective action

Adjust cover blocks and request re-inspection before concrete pour.

Assigned: Structural subcontractor

Overall result: FAIL

Illustrative screen content from the original inspection. The case study demonstrates interface behavior.

Defect reporting and verification

Evidence stays attached to the responsible party and the next required action



Original defect evidence

Column C14 / Major defect

The source flow requires correction, re-inspection and approval before related work continues.

NCR-2026-0087

Level 8 / Column C14

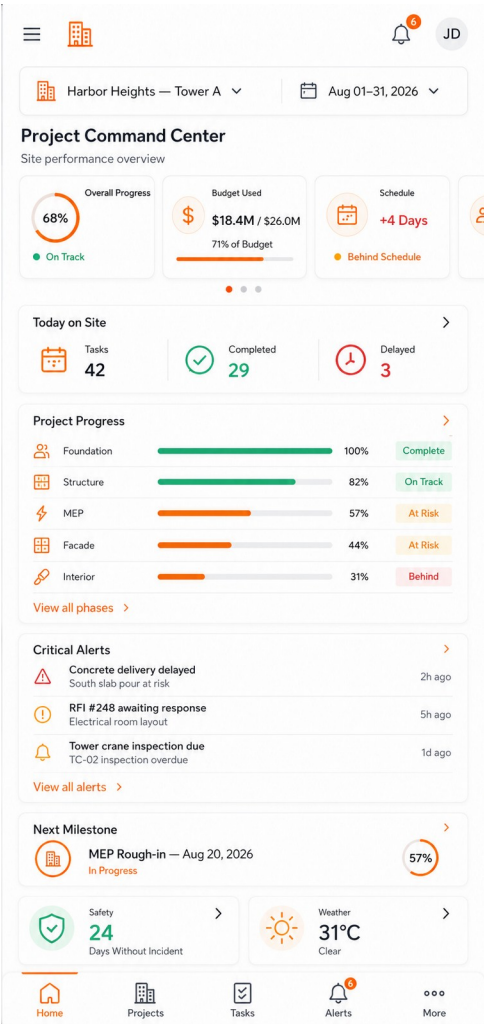
Field	Record
Fault	Honeycombing / exposed rebar
Responsible company	Prime Concrete LLC
Assigned to	Site supervisor
Due	19 Aug / 2:00 PM
Verification	Re-inspection required

Work blocked pending verified correction

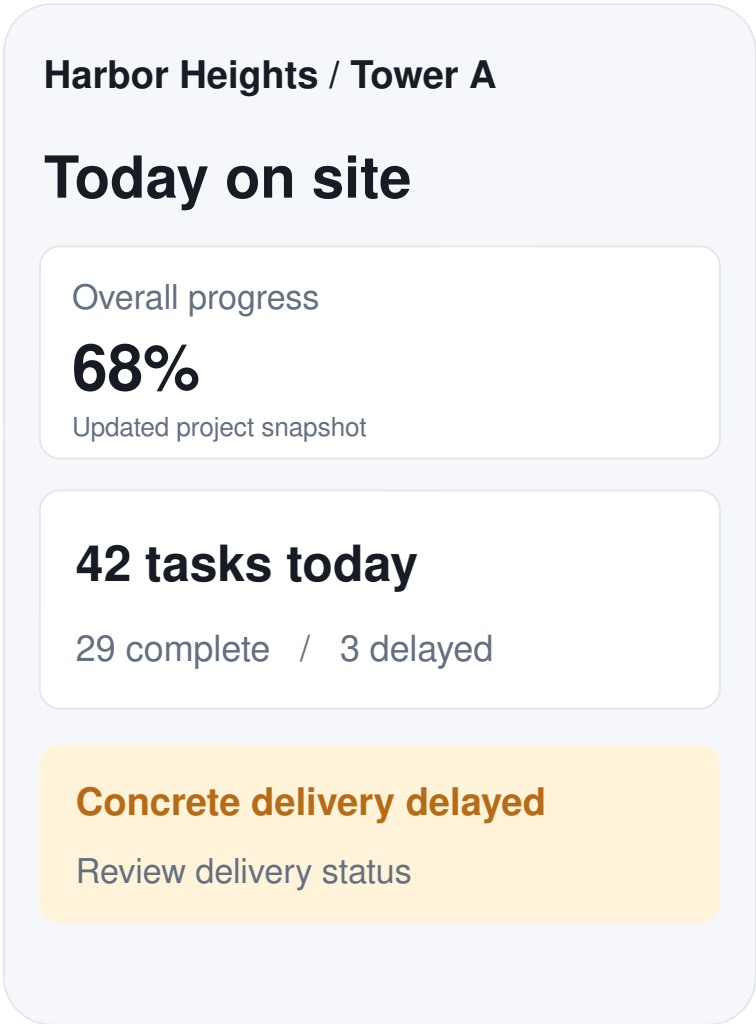
Workflow refinement based on the supplied defect-reporting screen. Company and record details are sample UI content.

Responsive access for field teams

The mobile dashboard prioritizes today’s actions and clear status summaries



Original



Refreshed concept

Mobile priorities

Design choice	Purpose
Persistent project context	Reduce updates to the wrong project
Task summary first	Help the user plan the current shift
Visible exception label	Show the next item requiring attention
Direct record access	Continue from summary to the task
Short field forms	Support inspection work on site

Operational value and measurement

The design targets clearer decisions and less manual coordination

Intended benefit	Design mechanism	Measure after rollout
Faster project review	Progress, cost and exceptions in one overview	Time to identify and open a priority issue
Less reporting duplication	Shared project and activity records	Time spent preparing the weekly report
Clearer accountability	Owner, due date and status on corrective actions	Percentage of actions with an owner and due date
Faster defect follow-up	Photo evidence and verification in the same record	Median time from defect report to verified closure
Stronger client continuity	Opportunity history and project handoff in CRM	Completeness of client handoff records

These are intended benefits and proposed measurement criteria. No quantitative improvement is claimed.

Construction operations in one connected workspace

Project visibility for the office.
Focused workflows for the field.

Martin-John Challita

UX/UI & Branding Expert

smartindesign.design