PROJECT

SL-DEMO

2026-06-14

NET DELAY

+15 working days

CRITICAL-PATH ACTIVITIES

76

On the update's critical path · 8 joined · 0 left vs baseline.

COMPLETION MOVEMENT (OBSERVED)

+15 working days

+21 calendar days between baseline and update project finish.

SCOPE CHANGES

1

1 added · 0 removed between baseline and update.

DCMA SCORE

8 / 14

DCMA 14-point checks passed on the update (1 not assessed).

BASELINE FINISH

2028-06-08

UPDATE FINISH

2028-06-29

+21 calendar days vs baseline.

UPDATE DATA DATE

2026-03-06

100 calendar days ago — stale snapshot.

CONTENTS

Schedule Comparison

NARRATIVE

APPENDIX

Full activity listings and the complete delay register are in the accompanying Excel appendix.

DISCLOSURES

Analytical tool output — not expert determination

This report is automatically generated from the uploaded schedule file(s). It is an analytical aid — not an expert determination, legal advice, or a certified forensic delay analysis.
The tool does not perform a full critical-path method recalculation and cannot determine contractual excusability.
Figures should be reviewed by a qualified delay analyst before being relied upon in formal contract correspondence or dispute proceedings. Nothing in this report should be construed as a legal opinion or expert witness statement.

Traced critical path differs from stored flag on 68 activities

An independent forward/backward pass on the update schedule produced a different critical-path set to the file's stored Activity.is_critical flags on 68 activities. Common causes: stale total-float values (schedule not recalculated after the last edit), retained-logic vs progress-override calculation mode, or constraint-driven criticality the V1 trace does not model. The engine used the traced path for every delay attribution downstream of this section — divergences therefore propagate into the delay register, the criticality flags on specific events, and the Time Impact Analysis figures. Review the divergence before relying on the numbers.

Concurrent delay analysed under Society of Construction Law Delay and Disruption Protocol, 2nd Edition (2017)

Where two independent critical delays overlap in time, the longer delay drives the extension of time and the shorter delay is absorbed within the window of concurrency.
This is the widely-accepted methodology in English construction law and is the default applied by this tool.
An alternative methodology is also available — Malmaison 'first in time' approach (Henry Boot v Malmaison [1999] 70 ConLR 32) — and would produce different net delay figures on the same data.
The choice of methodology is a contract interpretation question and the assessing party should confirm which approach is appropriate for the contract in question.

FOR THE PROJECT DIRECTOR

Brief

Severity-coded status headlines, top risks, what to act on.

01 Executive Summary

> The project finish date has moved by 15 working days due to duration increases on critical-path activities, with the observed completion movement confirmed at this duration. This delay is significant and concentrated on key operations, particularly piling and excavation, which together account for the majority of the shift. The schedule's reliability is undermined by critical-path divergence affecting 68 activities and a BEI of 0.92, falling below the DCMA §14 threshold for acceptable scheduling practice. To verify these findings, review the analysis of critical-path activity durations and the flagged discrepancies between traced and stored critical-path data.

This comparison reports three delay figures. They measure different things and are not expected to match:

- **Observed movement (+15 working days)** — what actually happened to the completion date. This is the figure to rely on.
- **Engine-attributed (+15 working days, 4 critical-path changes)** — where the analysis could trace the movement to specific changes. Overlapping causes are counted more than once, so read this as a map of where pressure built up, not as a delay total.
- **Individual impacts added up (+15 working days, 4 changes)** — each change measured on its own. Real delays interact, so the separate pieces are not expected to add up to the whole.

Why this matters: use the observed movement as the bottom line — it is what happened to the finish date. The other two figures help a delay analyst see where and how the change arose, not by how much the project as a whole moved.

02 What happened · Why · Where to investigate

COMPLETION MOVEMENT: **+15 working days** *Three measurements follow — they answer different questions and are not a reconciled figure.*

The project completion date has moved from 8 June 2028 to 29 June 2028, representing a shift of +15 working days, which stands as the authoritative measure of schedule impact. The summed activity-level slip, quantified as +29 working days, reflects the total of all individual activity delays, duration extensions, and added scope, serving as an indicator of schedule churn and structural change rather than direct project impact — a smaller completion movement against a larger summed slip suggests significant internal rescheduling or float absorption. This figure provides a sanity check on the completion movement and forms the denominator for the subsequent breakdown by work package. The "Where to investigate" data identifies locations in the schedule where logic, constraints or calendars were modified, with the Superstructure package being the most affected, indicating where changes to network topology may have influenced critical path flow. These topology edits are directional signals only, as the system does not perform calendar-aware Time Impact Analysis per event to isolate individual working-day impacts.

QUANTIFIED DRIVERS (WORKING DAYS BY CATEGORY)

Category	Events	Working days
Duration changes	3	+15 working days
Added scope (upper bound)	1	+14 working days

TOP 1 WBS PACKAGES FOR TOPOLOGY EDITS

WBS package	Events	Logic	Constraint	Calendar
Superstructure	1	1	0	0

03 Key Milestones

> **MILESTONES COMPARED: 3** *Baseline vs current planned finish for every milestone that exists on both schedules.*

The contractual and progress milestones detected on the two schedules, with the calendar-day variance between their planned finish dates.

Only milestones present on both sides of the comparison are shown — one-sided entries are scope moves that would make the variance column unreadable if included.

Variance is shown in calendar days (consistent with how EOT claims are commonly stated) so the figure matches the way the contract will evaluate it.

KEY MILESTONES — BASELINE VS CURRENT

Milestone	Baseline planned finish	Current planned finish	Current actual finish	Variance	Current float	On critical path
Substructure complete	2026-09-29	2026-10-20	—	+21 days	-15 wd	Yes
Fit-out complete	2028-03-07	2028-03-28	—	+21 days	-15 wd	Yes
Practical Completion	2028-06-08	2028-06-29	—	+21 days	-15 wd	Yes

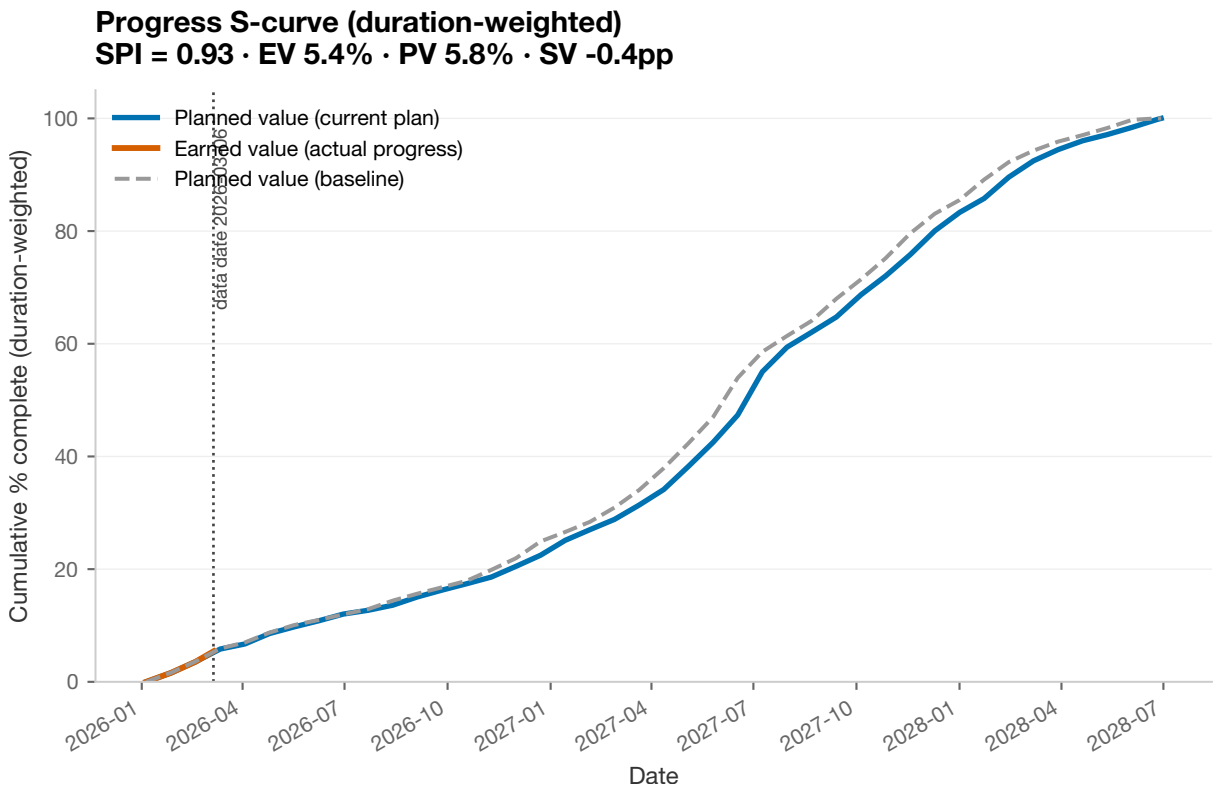
04 Progress curve

Reading this chart. Three cumulative curves over time: the baseline's planned value (dashed grey), the current plan's planned value (solid blue), and the actual earned value on the update (solid red). Gap between the dashed grey and solid blue lines shows re-planning (work pushed into future periods, independent of actual progress). Gap between solid blue and solid red at the data date shows the current execution gap.

Acronyms. PV = Planned Value (share of total scheduled work due by a date). EV = Earned Value (share actually achieved). SV = Schedule Variance = EV − PV, in working-day equivalents. SPI = Schedule Performance Index = EV ÷ PV; < 1.00 ⇒ behind plan. Printed in the chart title at the data date.

Why duration-weighted. Cost-based EVM (AC / CV / CPI) is not computed because P6 exports routinely strip resource and cost tables. Duration-weighting — each activity contributes in proportion to its original working-day duration — is the industry standard fallback per AACE RP 27R-03. Full formula in METHODOLOGY §5d.

DURATION-WEIGHTED PROGRESS S-CURVE



Baseline PV (dashed grey), current plan PV (solid blue), actual EV (solid red). Vertical dotted line marks the data date where SPI is computed.

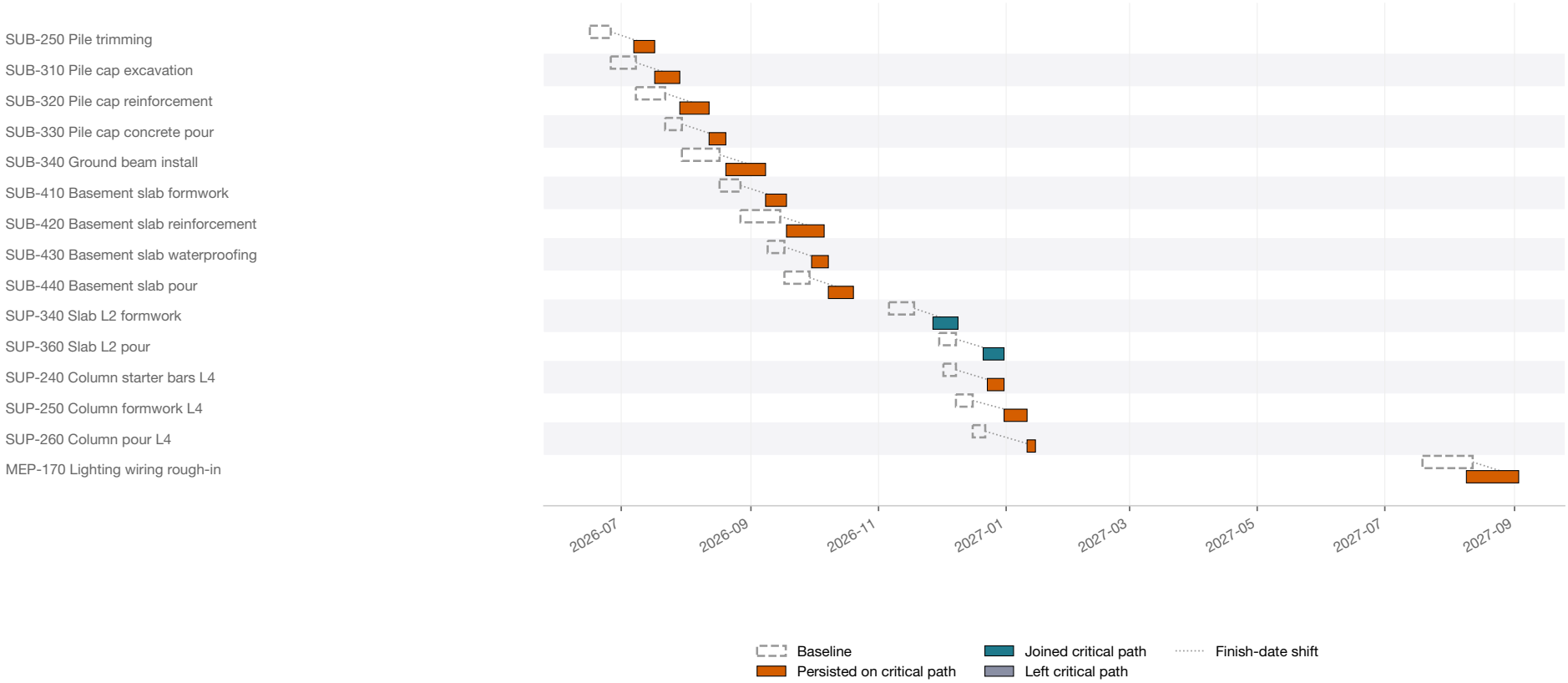
05 Critical path

Activities driving the completion date in each schedule version, sourced from the stored ``is_critical`` flag on each schedule.

Where the critical path has shifted between the baseline and the update, the shift itself is often the single most important finding — it signals that delay or acceleration in one area has re-routed the critical chain through previously non-critical work.

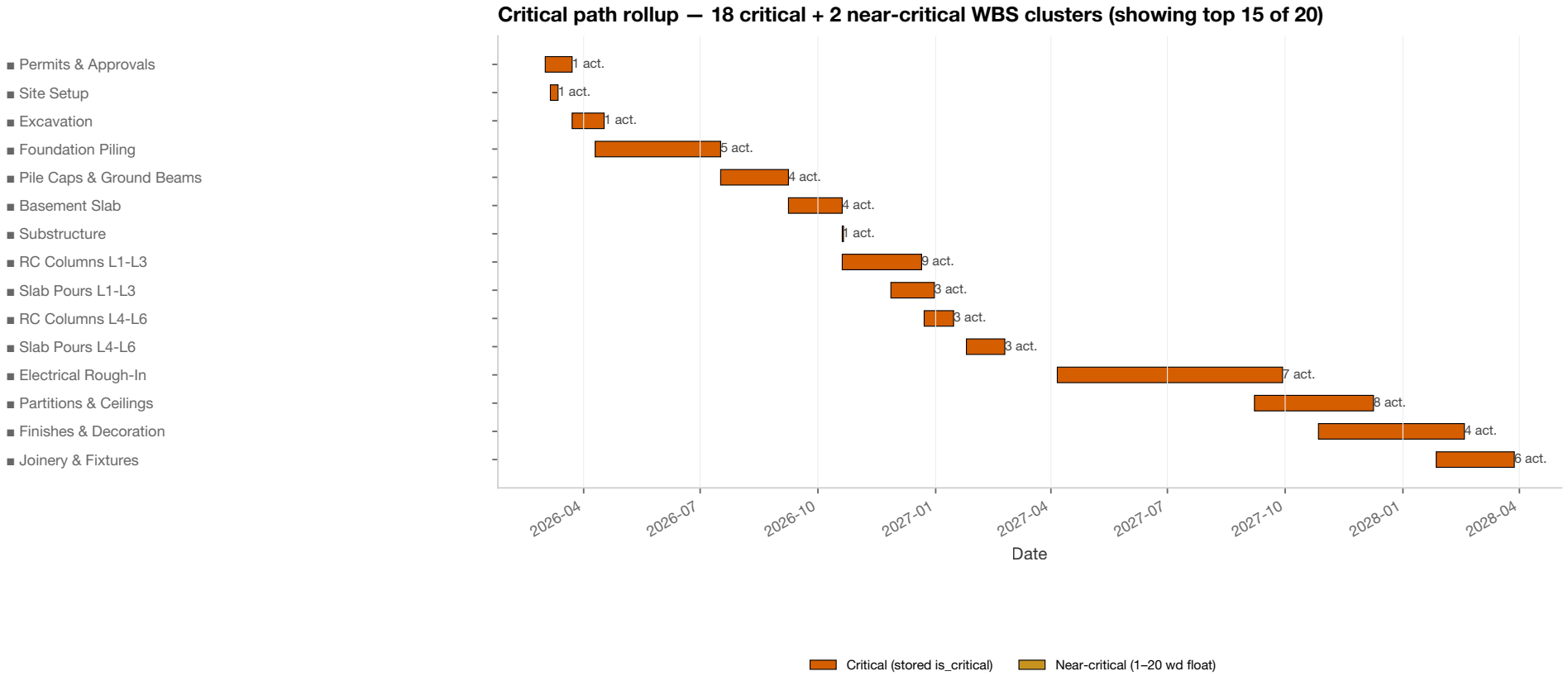
CRITICAL-PATH ACTIVITIES WITH LARGEST BASELINE-VS-UPDATE VARIANCE

Showing 15 of 76 critical-in-either activities — 68 persisted, 8 joined, 0 left. Priority: persisted by float severity then variance, then joined, then left. Full list in the Excel Critical Path Changes tab.



A diagnostic view, not the full critical path. The 15 critical-in-either activities with the largest finish variance are plotted here — the chart surfaces what moved between baseline and update, selected by the priority rule in METHODOLOGY §8 (persisted by float severity, then variance, then joined, then left). For the end-to-end critical chain from data date to project finish see the next chart (critical-path rollup at WBS level) and the full activity list in the Update critical path table below. Each activity appears as two bars: dashed outline for the baseline plan, filled bar for the update. Fill colour encodes membership change — orange for persisted on the critical path, red for joined, grey for left.

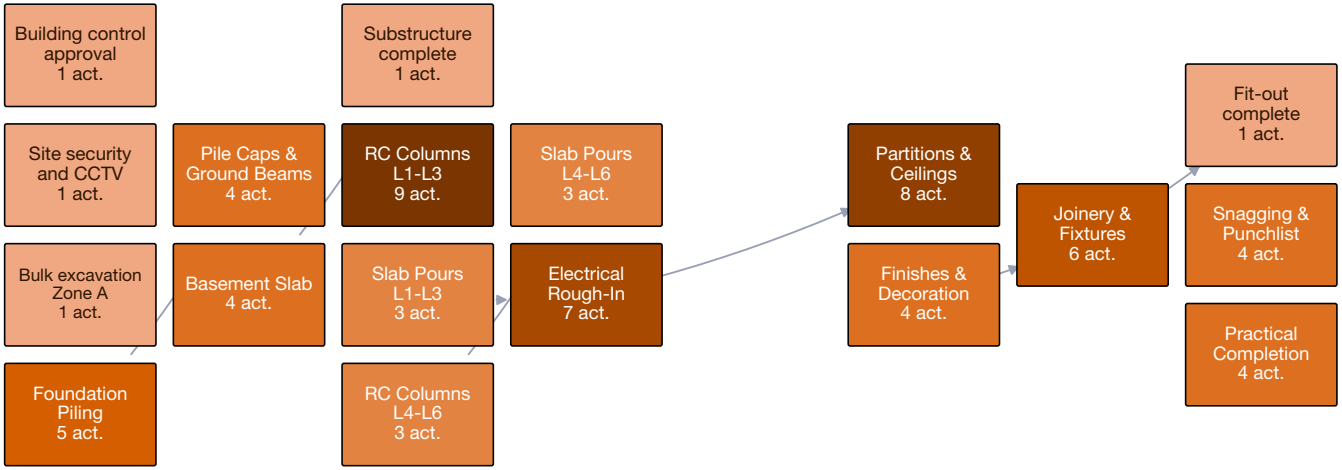
CRITICAL PATH ROLLUP — WBS SUMMARY BARS



Summary-bar view of the update's critical path — one bar per WBS cluster that contains stored-critical activities. Near-critical clusters (1–20 wd float, the schedule's status-cycle threshold) are shown alongside in amber so the reader can see which clusters are one slip from the critical path.

CRITICAL PATH NETWORK — INTER-CLUSTER DEPENDENCIES

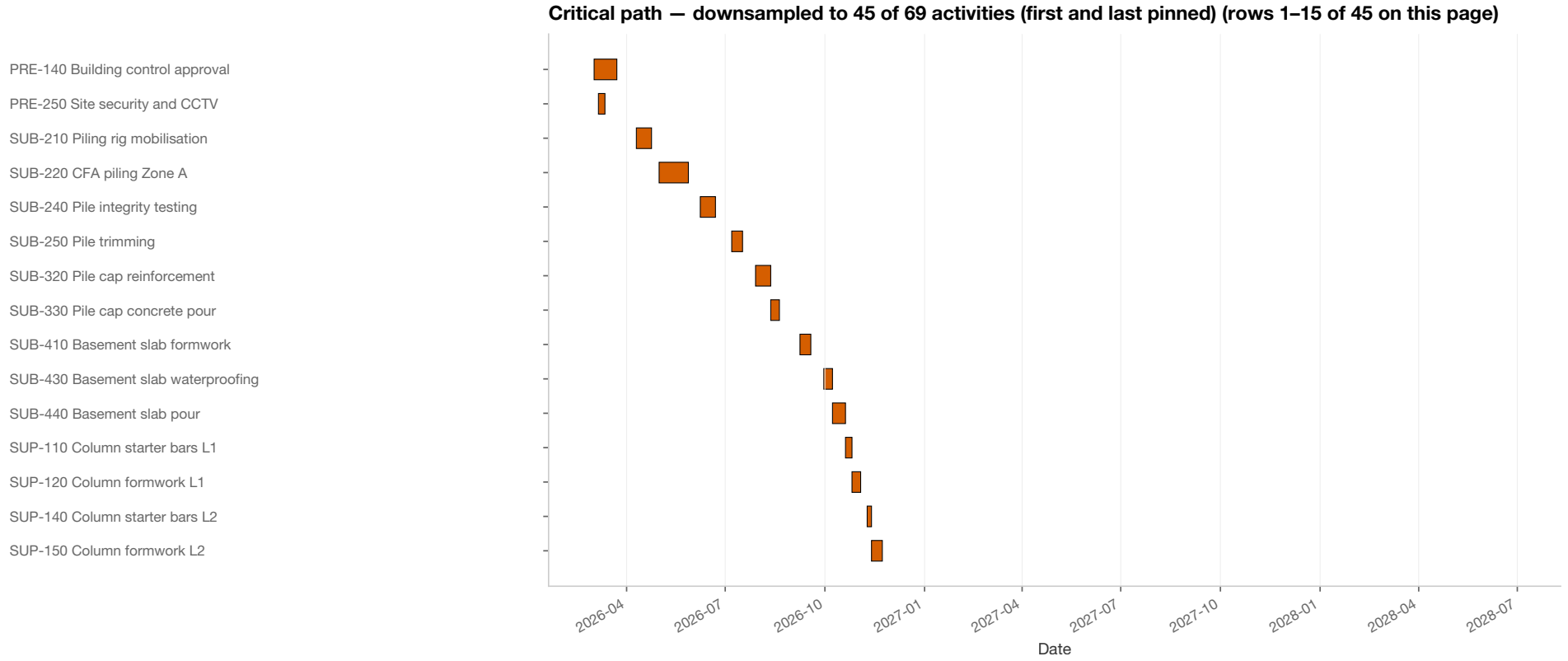
Critical path network — 18 WBS clusters, 18 inter-cluster dependencies



Box shade: darker = more critical activities in the cluster

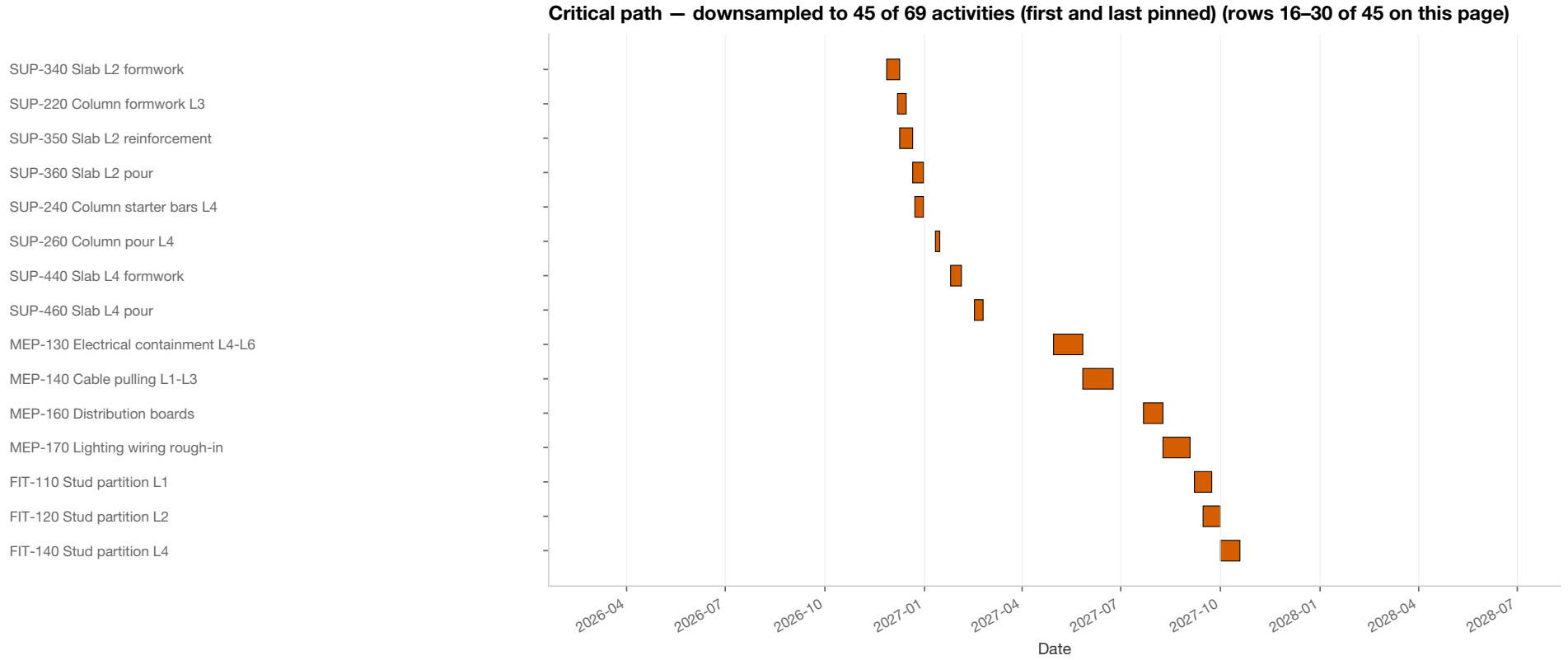
Node-and-arrow diagram of the update's critical WBS clusters and the dependencies between them. Nodes are positioned left-to-right by topological level from project start.

UPDATE CRITICAL PATH TIMELINE (PART 1 OF 3)



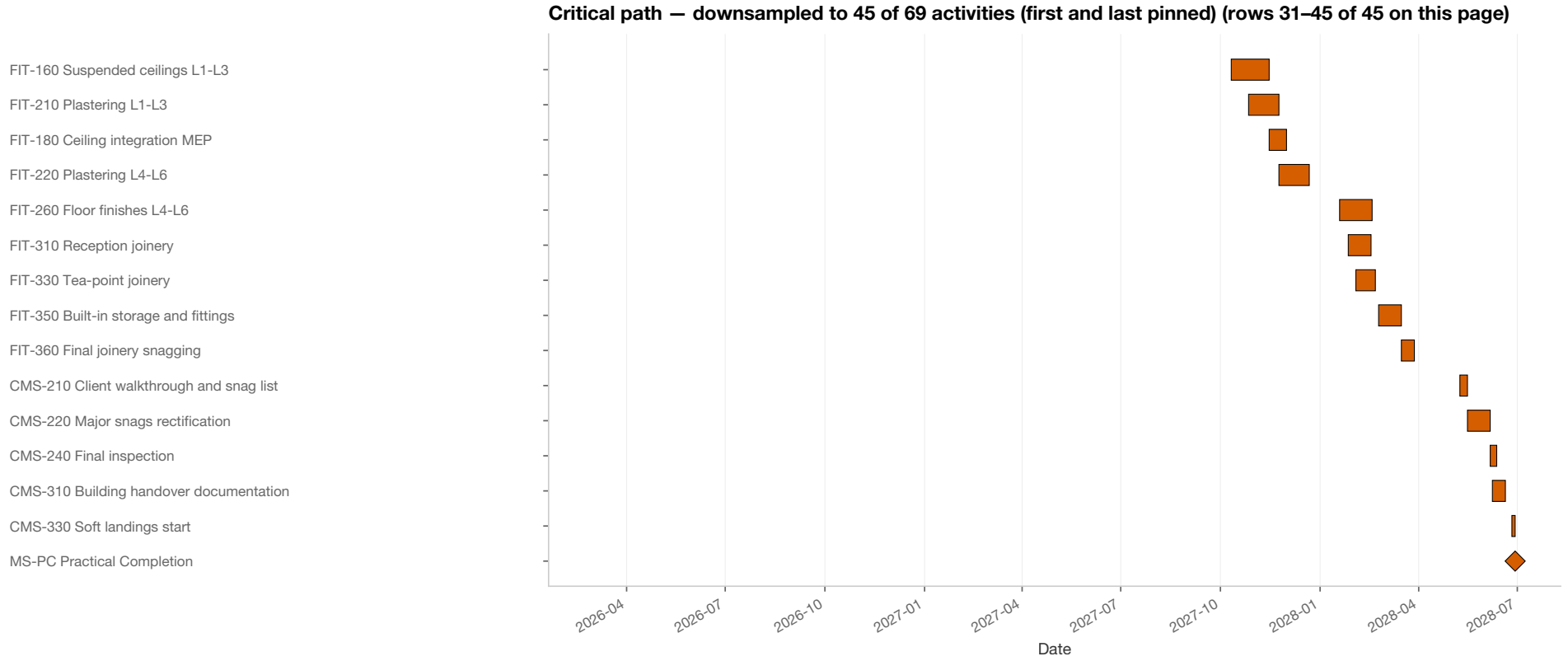
Stored-critical activities on the post-update schedule plotted on the project calendar. Use alongside the table below to see which activities drive the current completion date.

UPDATE CRITICAL PATH TIMELINE (PART 2 OF 3)



Stored-critical activities on the post-update schedule plotted on the project calendar. Use alongside the table below to see which activities drive the current completion date.

UPDATE CRITICAL PATH TIMELINE (PART 3 OF 3)



Stored-critical activities on the post-update schedule plotted on the project calendar. Use alongside the table below to see which activities drive the current completion date.

06 Float-path risk

NEAR-CRITICAL PATHS: **4** *sub-critical or parallel-critical, within 20 working days of the controlling path (primary driving path shown separately as rank 1; full list in the Excel appendix).*

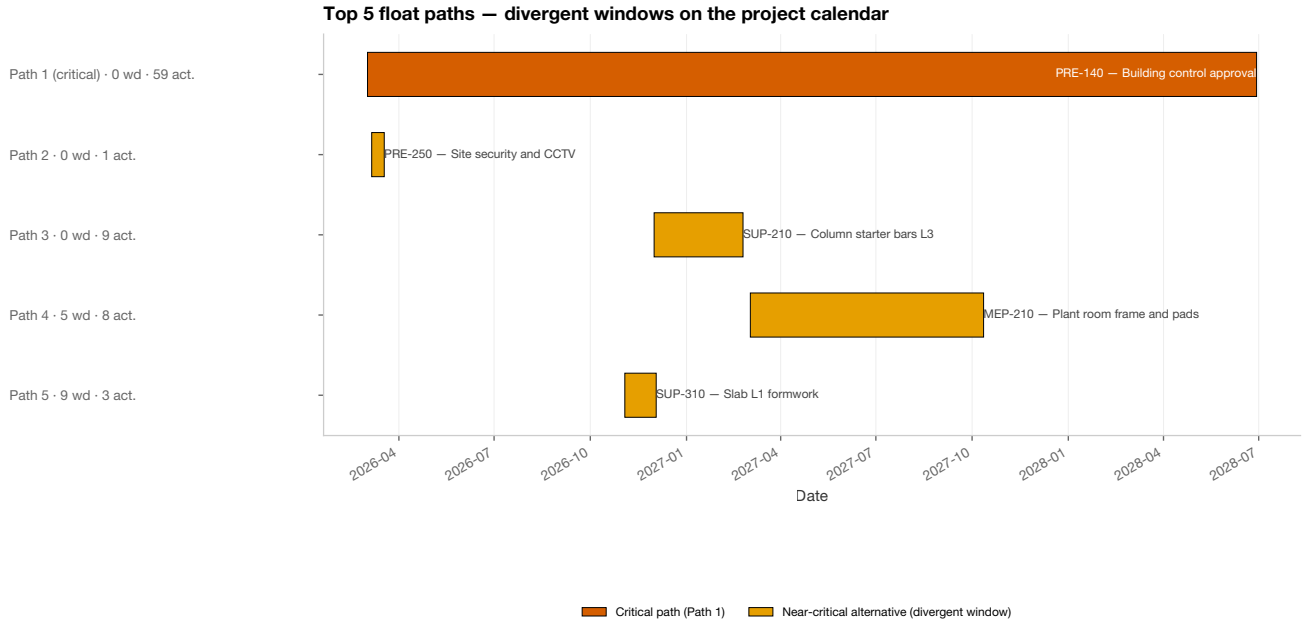
What this section answers: where else forward risk is concentrated besides the controlling chain. Each row is an alternative chain to the project endpoint that's within 20 working days of the critical path; any of them could become controlling with a small slip.

Four float paths fall within twenty working days of the controlling critical path, with three of these chains already at zero float and one at five working days of float. The cluster is dominated by zero-float paths, indicating multiple sequences are already critical and contributing to the project's completion date. Multiple near-critical paths matter because even a small delay in any of them could shift the controlling path and further impact the project finish date.

TOP 5 FLOAT PATHS

#	Float	Activities	Envelope	Driving activity	Branches from
1	0 wd	59	2026-03-02 → 2028-06-29	PRE-140 — Building control approval	—
2	0 wd	59 (1 unique)	2026-03-06 → 2028-06-29	PRE-250 — Site security and CCTV	Path 1 at SUB-110
3	0 wd	42 (9 unique)	2026-12-01 → 2028-06-29	SUP-210 — Column starter bars L3	Path 1 at MEP-130
4	5 wd	30 (8 unique)	2027-03-03 → 2028-06-29	MEP-210 — Plant room frame and pads	Path 1 at FIT-160
5	9 wd	39 (3 unique)	2026-11-03 → 2028-06-29	SUP-310 — Slab L1 formwork	Path 3 at SUP-440

FLOAT-PATH OVERLAY — WHEN EACH NEAR-CRITICAL CHAIN LANDS



One bar per top-5 float path showing its divergent window — the activities unique to this path before it merges into a higher-priority chain. Background shading marks the critical-path envelope. Reads at a glance: are the alternatives spread across the programme or crowded into one window?

07 Completion forecast and PF scenarios

> **EV-IMPLIED FINISH: 2029-01-20**
> *From a linear regression across 3 status periods. Sanity-check only — not a CPM re-calc.*

As of the data date, 23.4% of the project scope has been completed based on earned value. The current earned-value trend implies a completion date later than the stored finish, indicating a delay relative to the original plan. The forecast table presents alternative completion dates under different productivity-factor assumptions, illustrating how sensitive the outcome is to changes in performance efficiency. This panel serves as a high-level sanity check and does not replace a detailed critical-path recalculation.

IMPLIED PC DATES

Scenario	PF	Implied PC	vs stored
Current trajectory	from EV	2029-01-20	+205 days vs stored
Conservative	85%	2028-12-29	+183 days vs stored
Realistic ambition	95%	2028-09-18	+81 days vs stored
Stored (planned)	100%	2028-06-29	matches stored

Indicative only. The PF rows apply the named productivity factor to remaining durations on labour activities (procurement / milestones are not scaled) and re-trace the longest path. They do not re-level resources, re-apply calendars, or re-optimise logic — use alongside a native P6 re-schedule for any contractual decision (METHODOLOGY §5b).

08 DCMA 14-Point compliance

DCMA 14-POINT COMPLIANCE: 8 / 14 — 5 fails, 1 not assessed

DCMA 14-Point Assessment: 8 pass, 5 fail, 1 not assessed.

DCMA 14-POINT ITEMS

Item	Measured	Threshold	Status	Notes
§1 Logic	5.8%	≤5% of incomplete activities	Fail	8 of 138 incomplete activities
§2 Leads	0	0 (none allowed)	Pass	0 negative lag(s)
§3 Lags	5.9%	≤5% of relationships	Fail	10 of 170 relationships
§4 Relationship Types	95.3%	≥90% Finish-Start	Pass	162 of 170 are Finish-Start
§5 Hard Constraints	0.0%	≤5% of incomplete activities	Pass	0 hard constraint(s)
§6 High Float	39.1%	≤5% of incomplete activities	Fail	54 activities with > 44 wd float
§7 Negative Float	76	0 (none allowed)	Fail	76 activities with negative float
§8 High Duration	0.7%	≤5% of incomplete activities	Pass	1 activities longer than 44 wd
§9 Invalid Dates	0	0 (none allowed)	Pass	0 dates inconsistent with data date 2026-03-06
§10 Resources	—		Not assessed	PAM 200.1 §4.10: the IMS DID does not require resource loading, so DCMA publishes no canonical threshold for this item
§11 Missed Tasks	0.0%	≤5% of activities with baseline finish on or before status date	Pass	0 of 11 activities with baseline finish on or before status date finished or forecast to finish late
§12 Critical Path Test	Pass	Pass / Fail	Pass	a continuous critical path was identified
§13 Critical Path Length Index	0.97	≥0.95	Pass	CP length 591 wd, finish float -15 wd
§14 Baseline Execution Index	0.92	≥0.95	Fail	11 of 12 completed by data date (includes 1 activities missing baseline finish dates, per PAM 200.1 §3.1.2.4)

PAM 200.1 COMPANION METRICS

Item	Measured	Threshold	Status	Notes
Hit Task Percentage (PAM 200.1 §3.1.2.4 — BEI companion)	1.00	≥0.95 (informational; PAM publishes no formal threshold)	Pass	11 of 11 activities with baseline finish on or before status date completed on or before baseline

09 SCL Appendix B compliance

SCL Appendix B compliance: 6 present, 0 partial, 1 not assessed.

SCL APPENDIX B ITEMS

Item	Description	Addressed in	Status
App B §1	Milestone scheduled / forecast / actual dates	Key Milestones (Brief)	Present
App B §2	Critical activity identification	Driving path (Brief), Float paths (Brief)	Present
App B §3	Progress against baseline	Schedule comparison (Narrative)	Present
App B §4	Narrative of changes in the period	WBS roll-up (Narrative), Recommendations (Narrative)	Present
App B §5	Period delay enumeration with cause	Delay register (Appendix)	Present
App B §6	Acceleration measures	Acceleration analysis (Appendix)	Present
App B §7	Risk events	—	Not assessed

App B §1 — Milestone scheduled / forecast / actual dates. 8 milestone(s) tracked with planned, forecast, and actual dates.

App B §2 — Critical activity identification. Critical and near-critical paths are identified by an independent longest-path trace alongside the schedule's stored is_critical flags.

App B §3 — Progress against baseline. 148 activities matched between baseline and update.

App B §4 — Narrative of changes in the period. Changes are summarised by WBS package and accompanied by recommended next actions.

App B §5 — Period delay enumeration with cause. 5 delay event(s) itemised; 3 (60%) carry both quantified impact and assigned entitlement classification. The remainder are topology events (direction-of-travel signals not sized without TIA) or events the rule-based classifier could not determine origin for from the description alone.

App B §6 — Acceleration measures. No duration reductions detected; activities were not shortened between baseline and update. The App B §6 answer for this period is 'no acceleration measures.'

App B §7 — Risk events. Not assessed by this engine. App B §7 requires identification of risks materialised in the period and forward-looking risks affecting the schedule, sourced primarily from the project's risk register and Monte Carlo schedule risk analysis (where applicable). Neither input is available to a schedule-only engine — this analysis is based on schedule files alone. The contractor's own risk register and any SRA outputs should be referenced alongside this report to address App B §7.

FOR THE PLANNER OR DELAY ANALYST

Narrative

Supporting analysis, schedule comparison, driving-path detail.

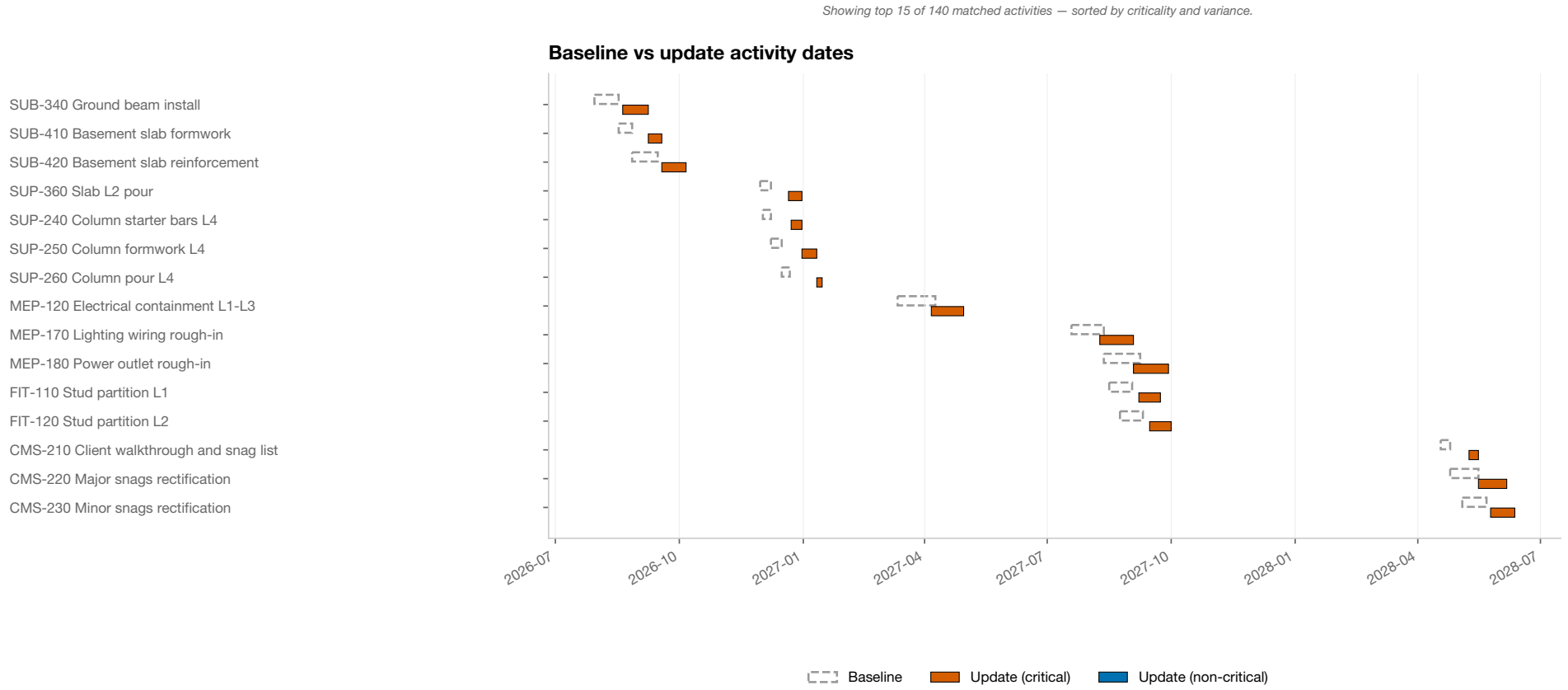
10 Schedule comparison

Side-by-side comparison of baseline and update activity dates.

Start and finish variances are shown in calendar days — positive values mean the update is later than the baseline.

The delay register and concurrent-delay analysis in the sections below derive from these variances.

BASELINE VS UPDATE GANTT OVERLAY



Each activity appears twice: a dashed outline bar for the baseline plan above a filled bar for the update plan. Critical-path activities are shown in red. Rows are sorted by criticality and finish variance — the activities whose dates moved most appear first.

BASELINE VS UPDATE (CRITICAL PATH)

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
SUB-250	Pile trimming	2026-06-16	2026-06-26	2026-07-07	2026-07-17	+21d	+21d	not started	✓	✓

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
SUB-310	Pile cap excavation	2026-06-26	2026-07-08	2026-07-17	2026-07-29	+21d	+21d	not started	✓	✓
SUB-320	Pile cap reinforcement	2026-07-08	2026-07-22	2026-07-29	2026-08-12	+21d	+21d	not started	✓	✓
SUB-330	Pile cap concrete pour	2026-07-22	2026-07-30	2026-08-12	2026-08-20	+21d	+21d	not started	✓	✓
SUB-340	Ground beam install	2026-07-30	2026-08-17	2026-08-20	2026-09-08	+21d	+22d	not started	✓	✓
SUB-410	Basement slab formwork	2026-08-17	2026-08-27	2026-09-08	2026-09-18	+22d	+22d	not started	✓	✓
SUB-420	Basement slab reinforcement	2026-08-27	2026-09-15	2026-09-18	2026-10-06	+22d	+21d	not started	✓	✓
SUB-430	Basement slab waterproofing	2026-09-09	2026-09-17	2026-09-30	2026-10-08	+21d	+21d	not started	✓	✓
SUB-440	Basement slab pour	2026-09-17	2026-09-29	2026-10-08	2026-10-20	+21d	+21d	not started	✓	✓
MS-SUB-END	Substructure complete	2026-09-29	2026-09-29	2026-10-20	2026-10-20	+21d	+21d	not started	✓	✓
SUP-110	Column starter bars L1	2026-09-29	2026-10-05	2026-10-20	2026-10-26	+21d	+21d	not started	✓	✓
SUP-120	Column formwork L1	2026-10-05	2026-10-13	2026-10-26	2026-11-03	+21d	+21d	not started	✓	✓
SUP-360	Slab L2 pour	2026-11-30	2026-12-08	2026-12-21	2026-12-31	+21d	+23d	not started		✓

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
SUP-240	Column starter bars L4	2026-12-02	2026-12-08	2026-12-23	2026-12-31	+21d	+23d	not started	✓	✓
SUP-250	Column formwork L4	2026-12-08	2026-12-16	2026-12-31	2027-01-11	+23d	+26d	not started	✓	✓
SUP-260	Column pour L4	2026-12-16	2026-12-22	2027-01-11	2027-01-15	+26d	+24d	not started	✓	✓
MEP-120	Electrical containment L1-L3	2027-03-12	2027-04-09	2027-04-06	2027-04-30	+25d	+21d	not started		✓
MEP-130	Electrical containment L4-L6	2027-04-09	2027-05-06	2027-04-30	2027-05-27	+21d	+21d	not started	✓	✓
MEP-140	Cable pulling L1-L3	2027-05-06	2027-06-03	2027-05-27	2027-06-24	+21d	+21d	not started	✓	✓
MEP-150	Cable pulling L4-L6	2027-06-03	2027-07-01	2027-06-24	2027-07-22	+21d	+21d	not started	✓	✓
MEP-160	Distribution boards	2027-07-01	2027-07-19	2027-07-22	2027-08-09	+21d	+21d	not started	✓	✓
MEP-170	Lighting wiring rough-in	2027-07-19	2027-08-12	2027-08-09	2027-09-03	+21d	+22d	not started	✓	✓
MEP-180	Power outlet rough-in	2027-08-12	2027-09-08	2027-09-03	2027-09-29	+22d	+21d	not started	✓	✓
FIT-110	Stud partition L1	2027-08-16	2027-09-02	2027-09-07	2027-09-23	+22d	+21d	not started	✓	✓
FIT-120	Stud partition L2	2027-08-24	2027-09-10	2027-09-15	2027-10-01	+22d	+21d	not started	✓	✓

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
FIT-130	Stud partition L3	2027-09-02	2027-09-20	2027-09-23	2027-10-11	+21d	+21d	not started	✓	✓
FIT-140	Stud partition L4	2027-09-10	2027-09-28	2027-10-01	2027-10-19	+21d	+21d	not started	✓	✓
FIT-150	Stud partition L5-L6	2027-09-20	2027-10-14	2027-10-11	2027-11-04	+21d	+21d	not started	✓	✓
FIT-160	Suspended ceilings L1-L3	2027-09-20	2027-10-25	2027-10-11	2027-11-15	+21d	+21d	not started	✓	✓
FIT-210	Plastering L1-L3	2027-10-06	2027-11-03	2027-10-27	2027-11-24	+21d	+21d	not started	✓	✓
FIT-170	Suspended ceilings L4-L6	2027-10-14	2027-11-18	2027-11-04	2027-12-09	+21d	+21d	not started	✓	✓
FIT-180	Ceiling integration MEP	2027-10-25	2027-11-10	2027-11-15	2027-12-01	+21d	+21d	not started	✓	✓
FIT-220	Plastering L4-L6	2027-11-03	2027-12-01	2027-11-24	2027-12-22	+21d	+21d	not started	✓	✓
FIT-240	Painting L4-L6	2027-12-01	2027-12-29	2027-12-22	2028-01-19	+21d	+21d	not started	✓	✓
FIT-260	Floor finishes L4-L6	2027-12-29	2028-01-28	2028-01-19	2028-02-18	+21d	+21d	not started	✓	✓
FIT-310	Reception joinery	2028-01-06	2028-01-27	2028-01-27	2028-02-17	+21d	+21d	not started	✓	✓
FIT-320	Toilet vanity install	2028-01-06	2028-02-01	2028-01-27	2028-02-22	+21d	+21d	not started	✓	✓

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
FIT-330	Tea-point joinery	2028-01-13	2028-01-31	2028-02-03	2028-02-21	+21d	+21d	not started	✓	✓
FIT-340	Meeting room joinery	2028-01-20	2028-02-15	2028-02-10	2028-03-07	+21d	+21d	not started	✓	✓
FIT-350	Built-in storage and fittings	2028-02-03	2028-02-24	2028-02-24	2028-03-16	+21d	+21d	not started	✓	✓
FIT-360	Final joinery snagging	2028-02-24	2028-03-07	2028-03-16	2028-03-28	+21d	+21d	not started	✓	✓
MS-FIT-END	Fit-out complete	2028-03-07	2028-03-07	2028-03-28	2028-03-28	+21d	+21d	not started	✓	✓
CMS-210	Client walkthrough and snag list	2028-04-18	2028-04-25	2028-05-09	2028-05-16	+21d	+21d	not started	✓	✓
CMS-220	Major snags rectification	2028-04-25	2028-05-16	2028-05-16	2028-06-06	+21d	+21d	not started	✓	✓
CMS-230	Minor snags rectification	2028-05-04	2028-05-22	2028-05-25	2028-06-12	+21d	+21d	not started	✓	✓
CMS-240	Final inspection	2028-05-16	2028-05-22	2028-06-06	2028-06-12	+21d	+21d	not started	✓	✓
CMS-310	Building handover documentation	2028-05-18	2028-05-30	2028-06-08	2028-06-20	+21d	+21d	not started	✓	✓
CMS-320	O&M manuals issued	2028-05-30	2028-06-05	2028-06-20	2028-06-26	+21d	+21d	not started	✓	✓
CMS-330	Soft landings start	2028-06-05	2028-06-08	2028-06-26	2028-06-29	+21d	+21d	not started	✓	✓

ID	Name	Baseline start	Baseline finish	Update start	Update finish	Start Δ	Finish Δ	Status	Critical (baseline)	Critical (update)
MS-PC	Practical Completion	2028-06-08	2028-06-08	2028-06-29	2028-06-29	+21d	+21d	not started	✓	✓

Showing the top 50 most-moved critical-path activities of 76 critical and 148 total matched. Selected by absolute start+finish variance, then re-sorted chronologically. Full matched-activity list in the Matched Activities sheet of the Excel appendix.

11 Delay by work package

> **WORK PACKAGES WITH DELAY:** **3** *Top 5 by critical-path delay contribution shown below; full rollup is in the Excel appendix.*

Delay events aggregated by the work breakdown structure node of each affected activity.

Top 5 work packages by critical-path delay contribution:

- Foundation Piling — +10 working days total · +10 working days critical · 2 events (2 critical)
- Excavation — +5 working days total · +5 working days critical · 1 events (1 critical)
- Plumbing & Fire — +14 working days total · 0 working days critical · 1 events (0 critical)

The full rollup — every WBS node with a recorded event — is in the Excel appendix under the Delay Register sheet (filter by WBS column).

12 Scope changes

> **ADDED · REMOVED:** **1 · 0** *Net scope delta: +1 activities.*

Activities that exist in one schedule but not the other. Added activities represent new scope; removed activities represent scope deletion.

- Added activities: 1 (total planned duration 14 working days)
- Removed activities: 0

The activity matching process uses four cascading strategies before an activity falls into these pools:

- Exact ID
- Normalised ID
- Name plus WBS path
- Name-only fallback

Surviving entries are genuine scope changes, not renumbering or WBS-restructuring artefacts.

Full per-activity lists (every added and removed activity) are in the Excel appendix under the Scope Changes tab.

13 Recommendations

ACTIONS IDENTIFIED: 2 *Findings-driven go-forward actions. Each recommendation traces to a specific finding, warning, or metric in this report.*

The largest critical event on this analysis is dur:SUB-210 (SUB-210), a Duration change event with +6 working days of attributed delay. The recommendations below should be applied to this event as a priority before the lower-impact items.

Concrete next actions derived from this analysis. Every recommendation below references a specific number, finding, or warning elsewhere in the report — nothing speculative.

Industry precedent (AACE RP 29R-03 §4.3; CIOB Guide §5.5) treats this section as a required deliverable element of any forensic report.

- Prepare narrative and evidence for the 2 critical events with a material TIA (≥5 working-day isolated impact on the project finish; largest = 6 wd). The TIA column in the delay register carries the per-event figure; for each flagged event the forensic record should document cause, contractual position, and supporting documentation (AACE MIP 3.4, CIOB §5.8.34–5.8.43).
- Review the 1 added activity event(s) flagged 'Not assessed' in the Entitlement column. The classifier could not determine origin from the description alone; these need to be checked against the variation register and contract to assign an Employer risk / Contractor risk classification.

FULL FORENSIC RECORD

Forensic appendix

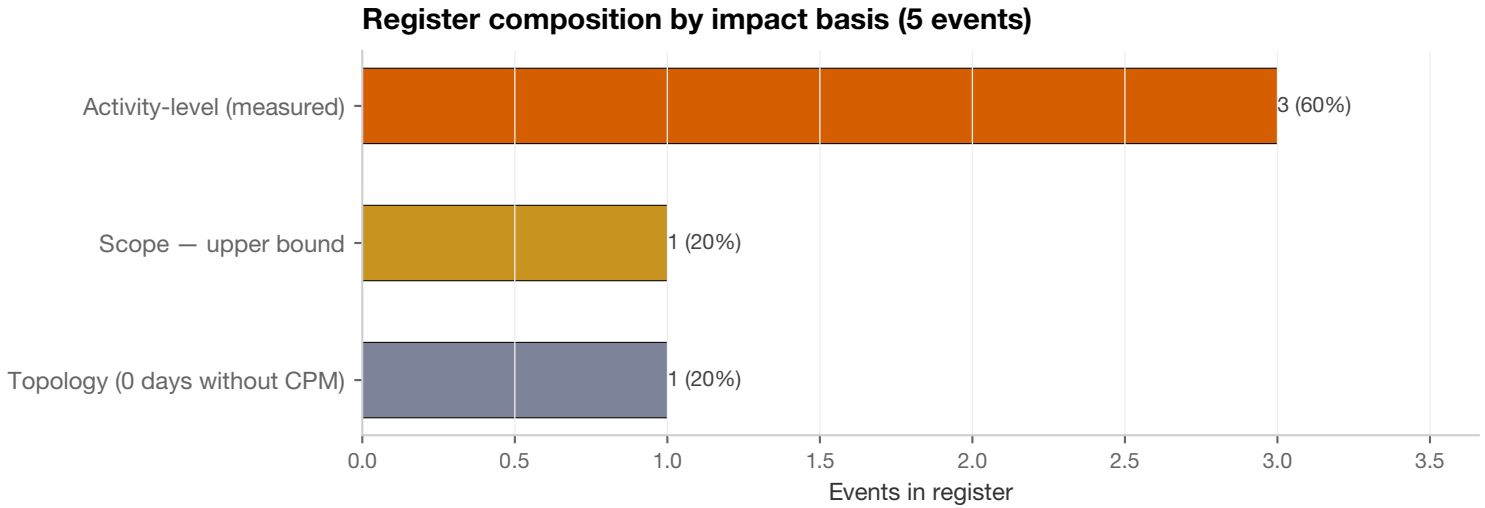
Full evidence, registers, methodology, standards citations.

14 Delay and change register

IDENTIFIED CHANGES: 5

The following table lists all identified events that affected the project schedule, with each row representing a discrete change to an activity or sequence. A positive value indicates a delay to the completion date, while a negative value would indicate acceleration. Certain changes, such as modifications to logic, constraints, or calendars, are recorded with zero days because their impact cannot be fully assessed without a detailed schedule recalculation and should be evaluated by a qualified analyst. The total delay indicated in the register is based on observed schedule changes and is considered the authoritative figure for assessing overall project impact. Note that a divergence exists between the traced critical path and the schedule's flagged critical activities, which may affect the interpretation of event impacts.

REGISTER COMPOSITION



Register split by the three Impact basis buckets defined above — Activity-level (measured), Scope (upper bound), and Topology (0 without CPM). Bar width shows the event count in each bucket; percentages sum to 100 across the register.

DELAY EVENTS (SUMMARY)

Ref	Category	Activity	Delay	Impact basis	TIA (wd)	Critical	Period	Entitlement (prelim.)
DE-001	Duration change	SUB-110	+5 working days	Activity-level	+5 working days	✓	2026-03-23 → 2026-04-17	Contractor risk
DE-002	Duration change	SUB-210	+6 working days	Activity-level	+6 working days	✓	2026-04-10 → 2026-04-24	Contractor risk
DE-003	Duration change	SUB-240	+4 working days	Activity-level	+4 working days	✓	2026-06-08 → 2026-06-22	Contractor risk
DE-004	Logic change	SUP-330, SUP-440	0 working days	Topology	0 working days	✓	2027-01-04 → 2027-01-14	Neutral
DE-005	Added scope	MEP-355	+14 working days	Scope — upper bound	—		2027-06-21 → 2027-07-09	Not assessed

DELAY EVENTS (DETAIL)

Ref	Internal id	Description
DE-001	dur:SUB-110	Activity SUB-110 (Bulk excavation Zone A): duration increased from 12 to 17 working days (+5). Review note. Activity duration extended by 5 working day(s) with no external-cause keyword in the description; default Contractor risk. Check NCRs, resource-histogram variance, and subcontractor correspondence for contributory cause.
DE-002	dur:SUB-210	Activity SUB-210 (Piling rig mobilisation): duration increased from 4 to 10 working days (+6). Review note. Activity duration extended by 6 working day(s) with no external-cause keyword in the description; default Contractor risk. Check NCRs, resource-histogram variance, and subcontractor correspondence for contributory cause.
DE-003	dur:SUB-240	Activity SUB-240 (Pile integrity testing): duration increased from 6 to 10 working days (+4). Review note. Activity duration extended by 4 working day(s) with no external-cause keyword in the description; default Contractor risk. Check NCRs, resource-histogram variance, and subcontractor correspondence for contributory cause.
DE-004	log:SUP-330->SUP-440:added	

Ref	Internal id	Description
		Relationship SUP-330→SUP-440 added (SS with lag +2). Review note. Logic change — the network re-wiring affects critical-path sequencing. A Time Impact Analysis (AACE MIP 3.4) on this specific edit is required to quantify its effect on completion. Investigate who initiated the change and whether it was authorised by the contract.
DE-005	add:MEP-355	Activity MEP-355 (Additional fire-water tank install) added — new scope of 14 working day(s). Delay contribution shown is an upper bound; the true impact depends on whether the activity lies serially on the driving path.

Full description for each event. The internal id links events back to the engine output and is useful when reconciling figures against the underlying analysis data.

CUMULATIVE DELAY BY CATEGORY

Cumulative delay by category

All 15 working days of critical delay come from a single category (Duration change). A breakdown chart is only meaningful when two or more categories contribute.

Stacked contribution of each category to the total engine-attributed delay. Excludes topology events whose impact is not quantified.

15 Concurrent delay

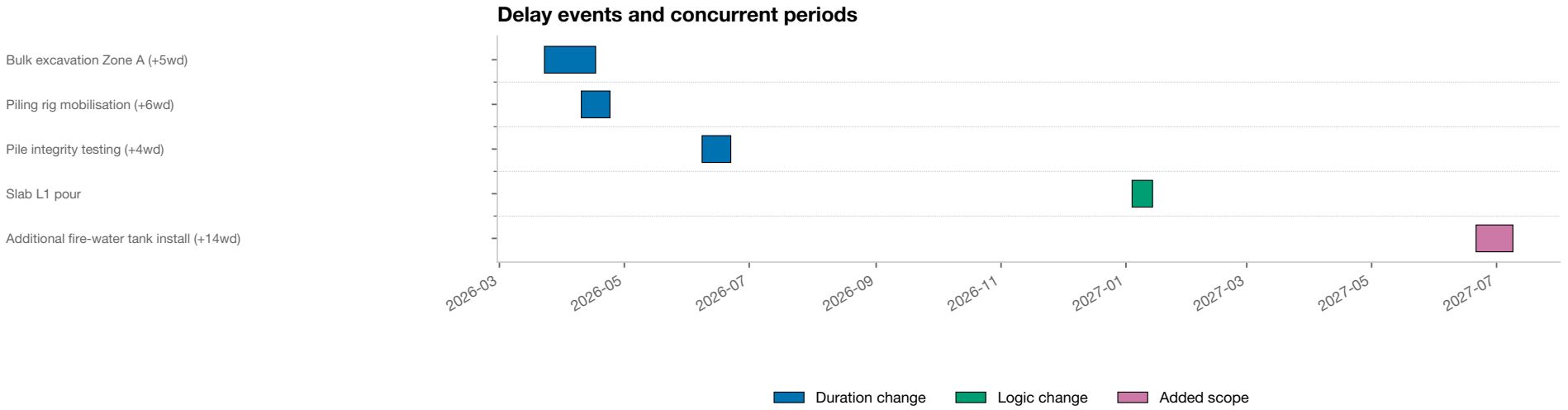
This section lists time windows where two or more independent critical delay events overlap. The "net impact" column shows the delay days that flow through to the project completion date under the methodology named in the disclosure at the top of the report; the "absorbed" column shows delay days that would otherwise have been counted twice and are removed from the total.

The delay register contains 3 measurable critical events. None met the SCL §10.4 independence test for concurrency — the events are either causally linked in the schedule network (one activity is upstream of the other in either the baseline or the update) or their time windows do not overlap. This is a defensible zero, not an absence of analysis: SCL true concurrency requires two or more independent critical chains contending for the finish during the same period. Where a schedule shows a single dominant delay chain — for example a vendor procurement sequence or a commissioning chain — the events on that chain are causally linked and correctly excluded. Where two or more independent chains exist, this section will populate with the windows during which they overlap. Review the delay register and the schedule logic to confirm the chain structure is expected.

16 Delay timeline

Timeline visualisation of delay events plotted against the project schedule. Events are coloured by category; concurrent-delay windows are shaded.

DELAY EVENTS AND CONCURRENT PERIODS



17 Methodology

This report assesses the uploaded schedule against the published industry standards listed below. Each finding traces to a specific rule in one or more of those standards. The analysis is automated and deterministic — the same schedule file will always produce the same findings.

Scope of this analysis. This report is based solely on the schedule file(s) you uploaded. Determinations that — under AACE RP 29R-03, the SCL Delay & Disruption Protocol, or other cited standards — require evidence outside the schedule file have been flagged as candidates rather than concluded. Specifically, the following determinations and analyses require manual verification by a qualified delay analyst before being relied on for contractual purposes:

- **Pacing vs concurrency** — distinguishing contractor pacing (AACE §4.2.F / SCL §10) from independent concurrent delay requires contemporaneous notice, correspondence, and resource records that are outside the scope of schedule-only analysis.
- **Constructive acceleration** — identifying directed or constructive acceleration (AACE §4.4) requires correspondence and contract notices not available to the engine.
- **Contractual classification** — categorising delay events as excusable, compensable, or non-excusable depends on contract terms outside the schedule file.
- **Concurrency during the overlap window** — the SCL §10.4 test asks whether two delays were both critical during their overlap. The engine evaluates this as the union of baseline-side and update-side critical-path membership, which is a snapshot-level approximation of the window-level test. A precise test would require a CPM walk per overlap interval, which is outside V1 scope. The approximation will under-detect concurrency where an activity was on the critical path only during a sub-window of the overlap and not at either snapshot date.
- **As-built critical path** — the report does not produce a stitched as-built critical path across multiple updates. On comparison reports the per-update critical path is shown for each schedule in the comparison (Driving Path section); on series reports an interim methodology paragraph describes the per-period substitute. A V1.1 release will add a cross-period as-built CP synthesis section to the series report Brief layer.
- **Engine-attributed-vs-observed divergence** — the engine's net-delay figure is an attribution of observed completion movement to specific activity-level events. It can diverge from the observed figure in either direction. Undercount divergence (engine attributes less than observed) typically reflects unquantified topology changes, scope absorption, or parallel-path absorption the activity-level formula cannot capture without a CPM recalculation. Overstate divergence (engine attributes more than observed) typically reflects double-counting along a critical chain, scope-add events whose full duration is being counted, or concurrency absorption gaps. In both directions the observed figure is authoritative for the headline; the engine-attributed figure is a subordinate diagnostic surfacing what specific events contributed.

Where the engine raises a candidate flag for any of these determinations, the relevant section explicitly says so. The engine does produce a rule-based first-pass entitlement classification on each delay-register row (Employer risk, Contractor risk, Neutral, Concurrent, or Not Assessed) — this is a preliminary tagging based on activity-description keywords and category defaults, not a contractual determination. The classification is presented as '(prelim.)' in the column header and every row carries a review-note

prompt to verify against the contract, the variation register, NCRs, and documentary evidence before relying on it.

STANDARDS REFERENCED

Short name	Full title	Edition	Sections cited
DCMA 14-Point	DCMA EVMS Program Analysis Pamphlet (PAM) — §4 14 Point Schedule Metrics for IMS Analysis	DCMA-EA PAM 200.1, October 2012	§1, §2, §3, §4, §5, §6, §7, §8, §9, §10, §11, §12, §13, §14
SCL Protocol	SCL Delay & Disruption Protocol, 2nd Edition	2nd Edition (2017)	§1, §8.1, §10, §11, Appendix B
AACE RP 29R-03	AACE Recommended Practice 29R-03 — Forensic Schedule Analysis		§2, §3.3.D, §3.3.E, §4.2, §4.2.A, §4.2.F, §4.3, §4.3.A.2, §4.3.C, §4.3.D.2, §4.3.D.3, §4.4, §4.6, §4.8
PMI Practice Standard	PMI Practice Standard for Scheduling	3rd Edition	§3.1.2.6, §3.2.1.3, §3.2.1.5, §3.4.1, §3.4.2, §3.4.6, §3.4.7, §3.4.8, §3.4.9, §3.4.10, (Schedule Levels)
CIOB Guide	CIOB Guide to Good Practice in the Management of Time	2nd Edition	§1.8, §2.1, §2.10, §4.2, §4.8.4, §4.10, §4.13, §4.19, §4.23.1, §4.25, §4.26, §4.27, §4.28, §4.29, §4.30, §4.30.7.39, §5.5, §5.6, §5.6.1
GAO Schedule Assessment Guide	GAO Schedule Assessment Guide — Best Practices for Project Schedules	GAO-16-89G	Best Practice 1, Best Practice 2, Best Practice 3, Best Practice 4, Best Practice 5, Best Practice 6, Best Practice 7, Best Practice 8, Best Practice 9, Best Practice 10
PMBOK	PMI Body of Knowledge — Schedule Management		§2.3

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Full methodology: schedulelens.com/methodology