THE COMPLETE REFERENCE FOR CPM SCHEDULING AND SCHEDULE VERIFICATION

CPMForge User Guide

Plan · Schedule · Update · Verify · Report

Every menu, button, screen and report — with step-by-step workflows and a complete worked example



Eng. Ahmad Safi, MS, PE, PMP

Version 1.1 · 2026

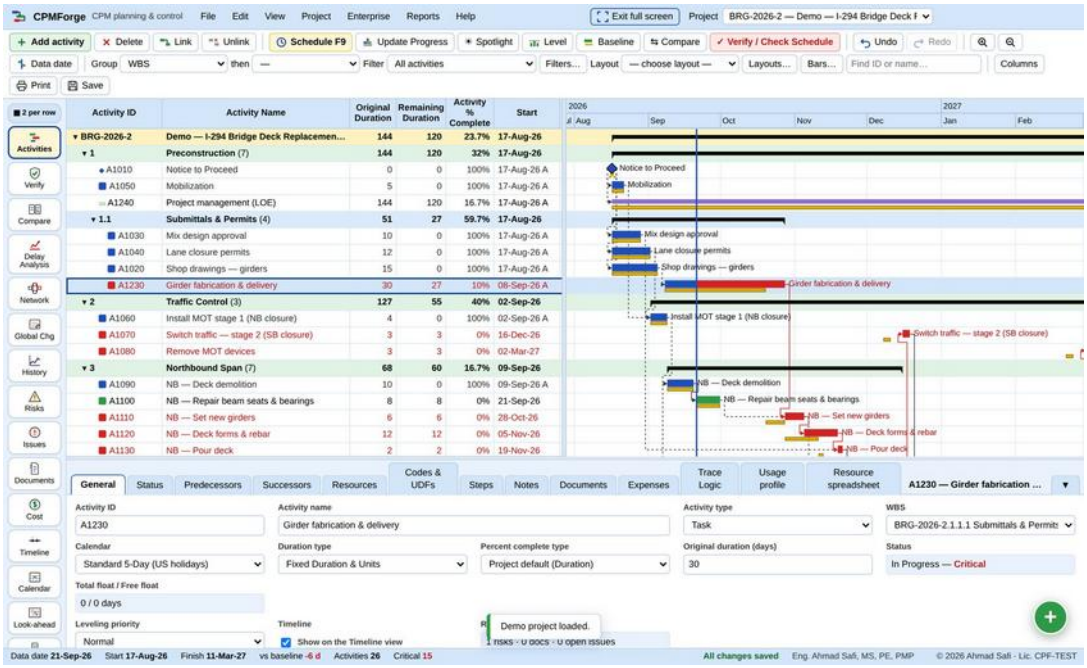
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CPMForge

CPM Planning, Scheduling & Schedule Verification

USER GUIDE

Every menu, button, screen and report — with step-by-step workflows and a complete worked example



Version 1.1 · September 2026

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CPMForge User Guide

Version 1.1 — September 2026

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The software assists qualified professionals. Its results, checks, agency profiles and reports do not replace professional judgment and are not official standards of any agency. Contract documents always govern.

Screens in this guide use the built-in demo project (I-294 Bridge Deck Replacement) and the worked-example project (CUL-101 Culvert Replacement). Your screens may differ slightly with your data, settings and screen size.

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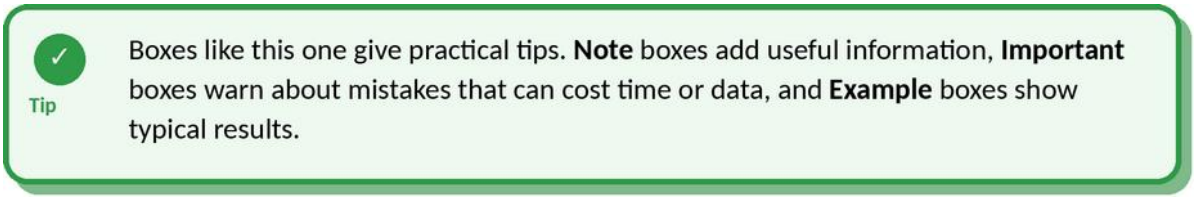
Revision history

Version	Date	Changes
1.0	September 2026	First edition.
1.1	September 2026	Product name CPMForge. New chapters: worked example, account and license, import details, agency profiles, reports in detail, column and schedule-options references, mouse actions, frequently asked questions, known limitations, support and contact, index. Corrected details-panel figures.

How to use this guide

- **New users:** read Part I and follow Chapter 4 and the worked example in Chapter 5.
- **Contractors and schedulers:** Parts II–V build, update and report a schedule.
- **Construction managers, owners and QA reviewers:** Part VI (verification and analysis), Part VII (every report explained) and Chapter 38.
- **Experienced Primavera P6 or Microsoft Project users:** start with Chapter 51.
- **Looking for one command, column or report?** Part IX and the index at the back.

Menu paths are written like this: **Project → Schedule options**. Keys look like this: `F9`, `Ctrl+S`. Figures are numbered by chapter (Figure 3-1 is the first figure of Chapter 3).



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Part I — Getting Started

What CPMForge is, how to open it, and the main screen

CHAPTER 1

Introduction to CPMForge

CPMForge is professional critical path method (CPM) scheduling software that runs in your web browser. In one program it lets you **build** schedules, **update** them, **verify** their quality, **analyze** delays and **explain** them in professional reports and narratives — the complete scheduling cycle for construction projects.

Who should use CPMForge

User	What CPMForge does for them
Contractors and project schedulers	Build CPM schedules from scratch or from P6 / MS Project files, update monthly progress, check quality before submitting, and produce the narrative and reports the owner requires.
Construction managers (CM) and resident engineers	Open any contractor XER, verify it in one click against 96 checks and agency requirements, compare it with the previous update, and issue QA reports and comment logs.
Owners and agencies	See the project status in plain English (Executive Summary, GREEN / AMBER / RED), track milestones and delays, and document acceptance or rejection.
Schedule QA and claims specialists	DCMA 14-point assessment, windows delay analysis, time-impact analysis, float trends and a complete audit trail of updates.

Main capabilities

- **Scheduling:** full CPM engine with all standard relationship types, lags, constraints, calendars (daily and hourly/shift), float paths, resource leveling and earned value.
- **Updating:** data date, actual dates, % complete, Apply Actuals, Progress Spotlight, Excel progress sheets and stored update history.
- **Verification:** 96 built-in checks, DCMA 14-point, agency profiles (IDOT, Illinois Tollway, CDOT, county), custom rules, plain-English explanations.
- **Analysis:** critical and near-critical paths, compare updates, windows delay analysis, time-impact analysis (TIA), risk and issue registers.
- **Reporting:** 20+ reports, QA reports, Executive Summary, professional 15-section narrative, look-ahead grids, Word / PDF / Excel output.
- **Exchange:** Primavera P6 XER and XML, Microsoft Project XML, Excel, CSV and backup files.

CPM in one page

A CPM schedule is a network of **activities** (work items with durations) connected by **relationships** (logic). CPMForge calculates for each activity the **early dates** (as soon as logic allows) and **late dates** (as late as possible without delaying completion). The difference is **total float**. Activities with the least float form the **critical path** — any delay to them delays the project. The **data date** separates actual progress (before it) from the forecast (after it).

Contractor and CM workflows

Contractors use CPMForge to **create and maintain** the schedule; construction managers and owners use it to **review** the schedule the contractor submits. Both can use the same features — Chapters 37 to 41 give step-by-step workflows for each role.

Supported files

File type	Import	Export
Primavera P6 XER	Yes	Yes
Primavera P6 XML	Yes	Yes
Microsoft Project XML	Yes	Yes
Microsoft Project .mpp	Save as XML in MS Project, then import	—
Excel activities (template)	Yes	Activity table
Excel progress update sheet	Yes	Yes
CSV	Yes	Yes
CPMForge backup (JSON)	Yes	Yes
PDF / Word reports	—	Yes

Where your data is stored

CPMForge stores projects **on your own computer**, inside the web browser, and saves every change automatically. Your schedules are never uploaded to our server — the website only checks your account and license. Because the data is local, **keep regular backup files** (Chapters 7 and 52).

CPMForge, Primavera P6 and Microsoft Project

CPMForge reads and writes P6 and MS Project files, uses familiar screens and terms, and adds tools those programs do not include — one-click verification with agency profiles, plain-English QA reports, automatic narratives, delay analysis and look-ahead grids. Chapter 51 lists equivalent terms and commands.

CHAPTER 2

Opening CPMForge, account and license

Two ways to use CPMForge

- **Website:** go to **cpmforge.com** and click **Sign in**. This is the normal way to use CPMForge; the latest version is always loaded.
- **Desktop file:** a licensed CPMForge.html file opened in Chrome or Edge on your computer.

System requirements

Item	Requirement
Browser	Current Google Chrome or Microsoft Edge (recommended); current Firefox or Safari.
Operating system	Windows 10 / 11, macOS, Linux or ChromeOS. Tablets supported; phones show the Mobile look-ahead.
Screen	1366 × 768 or larger; 1920 × 1080 or two monitors recommended for large schedules.
Memory	8 GB recommended for schedules of 5,000+ activities.
Internet	Needed to sign in and at least once every 7 days to confirm the license; all scheduling works offline.
Printing	Any printer or PDF printer; Letter, Legal, 11×17 / Tabloid, A4, A3 and larger plotter sizes.
Other software	None required. Primavera P6 or Microsoft Project are only needed if you exchange files with their users. Excel or a compatible program opens the Excel outputs.

License agreement (first start)

The first time CPMForge opens, it shows the Copyright Notice and End-User License Agreement. The program cannot be used until you accept it.

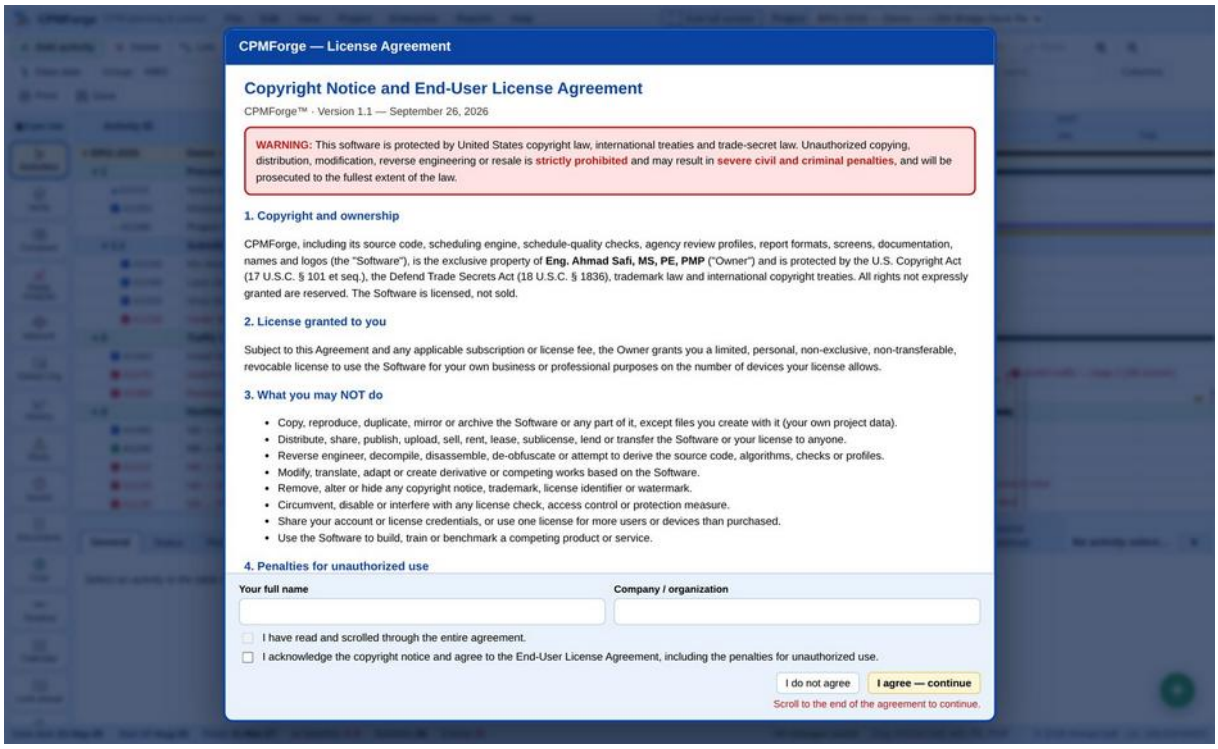


Figure 2-1. License agreement shown at first start

1. Read and **scroll to the end** of the agreement — the Agree button stays disabled until you do.
2. Type your **full name** (company is optional).
3. Tick **"I acknowledge the copyright notice and agree…"**.
4. Click **I agree — continue**. Your acceptance, date and license ID are recorded (Help → License agreement & copyright).

Your account

1. On the sign-in screen click **Create account** and enter your name, company, e-mail and a password of at least 8 characters.
2. Next time, sign in with your e-mail and password.
3. Forgot the password? Click **Forgot password?** — a reset link is e-mailed to you. The link works for one hour.
4. Open **Help → Account** at any time to see your account, license ID, the devices you use, and to sign out.

How the license is checked

- CPMForge confirms your license when it opens and every few hours while you work.
- It keeps working **offline for up to 7 days**; connect to the internet at least once a week.
- Each account can be used on **2 devices** (computers or browsers). To use a new computer, remove an old device in **Help → Account → Devices**, or sign out on the old computer.
- If the license is not active, CPMForge opens in **read-only mode**: you can still open, view, print and export your projects, but you cannot edit them until the license is active again. Your data is never deleted.

> **Note**
> Your schedules stay on your computer. The license check sends only your account token and a device identifier — never your project data.

Full screen

CPMForge works in full screen by default: it goes full screen at your first click and stays in full screen until you click **Exit full screen** at the top of the window (or press `F11`). If the browser leaves full screen (for example after `Esc` or a file window), it returns at your next click. Click **Full screen** to turn it back on after exiting.

> **Tip**
> The top-right corner of the title bar is kept clear so your window's minimize, maximize and close buttons stay visible.

CHAPTER 3

The main screen

The main screen follows the layout familiar to Primavera P6 users: menus and toolbar at the top, navigation on the left, the activity table and Gantt chart in the middle, and the details panel at the bottom.

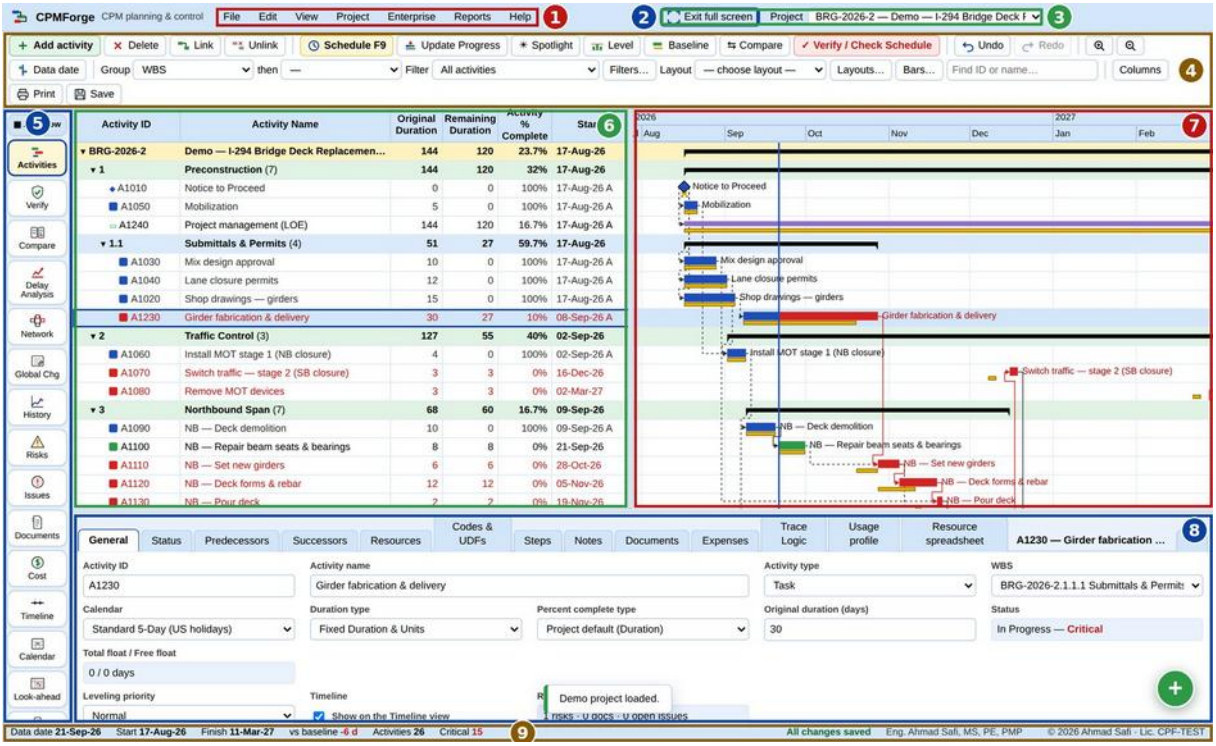


Figure 3-1. The CPMForge main screen

#	Area	What it does
1	Menu bar	File, Edit, View, Project, Enterprise, Reports and Help menus (Part IX lists every command).
2	Full screen	Exit full screen / Full screen. CPMForge stays in full screen until you exit.
3	Project selector	Shows the open project; pick another project to switch.
4	Toolbar	One-click commands (Add activity, Link, Schedule F9, Update Progress, Verify…), the data date, grouping, filter, layout, find box, columns, print and save.
5	Navigation panel	Buttons for every screen: Activities, Verify, Compare, Delay Analysis, Network, Reports, Narrative and more. Switch between 1 and 2 buttons per row at the top.
6	Activity table	Activities grouped by WBS with columns you choose. Click a cell to edit it. Critical activities are red.
7	Gantt chart	Bars on a time scale, relationship lines, baseline bars, the data date line and milestones. Drag bars with the mouse.
8	Details panel	Tabs for the selected activity: General, Status, Predecessors, Successors, Resources, Codes & UDFs, Steps, Notes, Documents, Expenses, Trace Logic, Usage profile and Resource spreadsheet.

#	Area	What it does
9	Status bar	Data date, project start and finish, variance to baseline, number of activities and critical activities, save status and license.

The green + button

The round green **+** button at the bottom right adds the most useful item for the screen you are on — an activity in the Activities view, a risk in the Risk register, a resource in Resources, and so on. The `Insert` key does the same.

Selecting, editing and the mouse

- Click a row to select it; `Ctrl`+click or `Shift`+click to select several.
- Click a cell to edit it; press `Enter` to save, `Esc` to cancel. Copy and paste cells to and from Excel.
- Right-click a row or a bar for a context menu.
- In the Gantt chart: drag a bar to move it (sets a start-no-earlier-than date), drag its end to change the duration, drag the timescale to zoom, drag the empty chart to scroll.
- Drag the splitter bars to resize the table, chart and details panel.

Left menu — layout and customizing

The navigation menu on the left shows **2 items per row** by default. The small buttons at its top change the layout at any time; the choice is saved and used every time CPMForge opens.

Button	What it does
1 · 2 · 3	Show 1, 2 or 3 menu items per row (default 2). One per row gives larger labels; three per row fits more items on small screens.
A	Switch the item size between **Small** (default) and **Tiny**. Tiny makes the menu narrower and leaves more room for the activity table and Gantt chart.
⚙️	Open **Customize the left menu** (also **View → Customize left menu…**).



Figure 3-2. Left menu, 2 per row, with the layout buttons at the top

Customize the left menu

1. Click ⚙️ at the top of the menu, or **View → Customize left menu…**.
2. **Show or hide** an item with its tick box. Activities always stays visible.
3. **Change the order** with ▲▼.
4. **Add a shortcut** to any command: choose it in **Add a command shortcut** (for example *Reports → Schedule log*), type a short label if you like, and click **Add to menu**. Remove a shortcut with its **Remove** button.
5. Choose **Items per row** (1, 2, 3) and **Size** (Small or Tiny) in the same window.
6. **Reset to default** returns to 2 per row, Small, all items in the standard order and no shortcuts. Click **Done** to close.

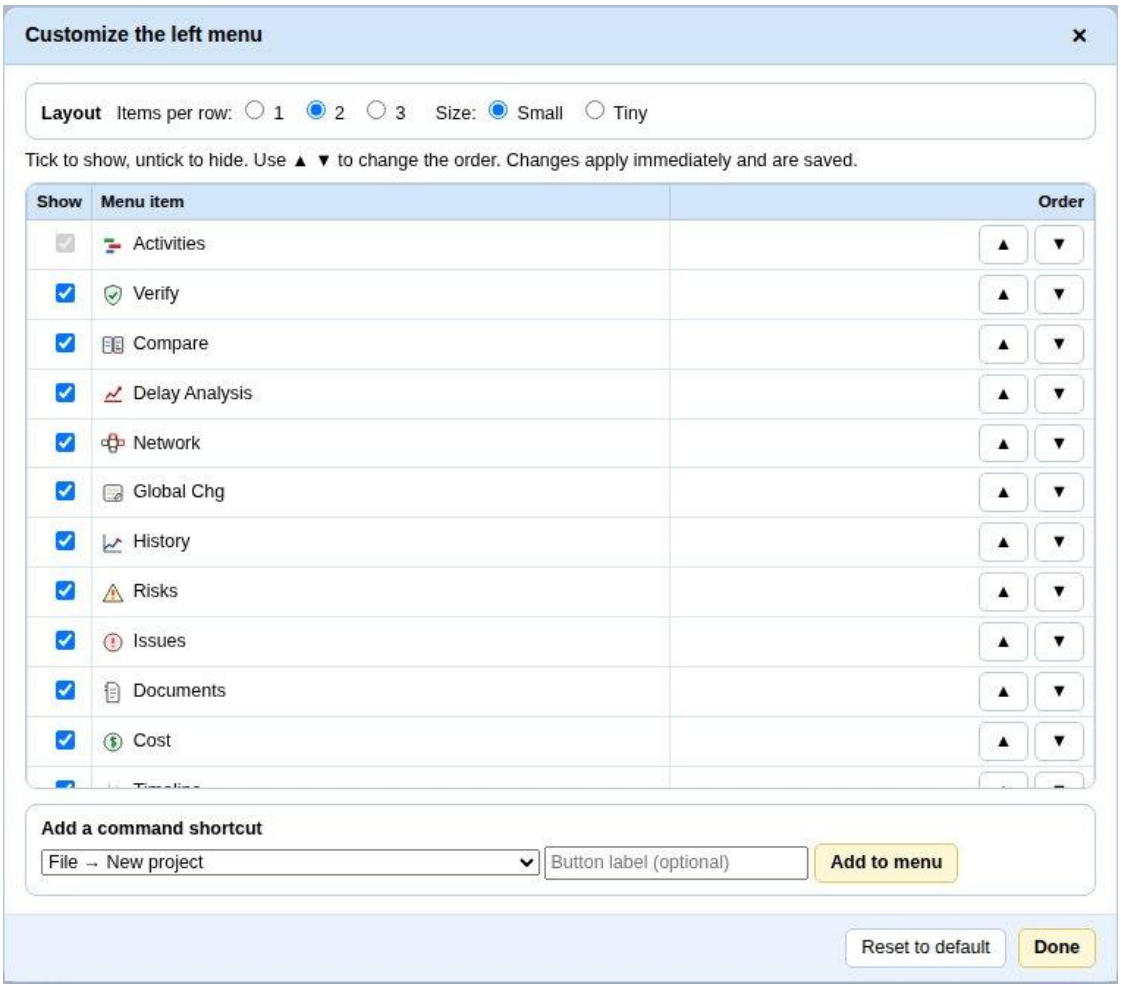


Figure 3-3. Customize the left menu

> **Tip** Hide the screens you never use and add shortcuts for the commands you use every day — for example Update Progress, Verify and Batch reports — so your monthly routine is one click each.

Right-click menus

Right-click an activity row or its bar to open the context menu:

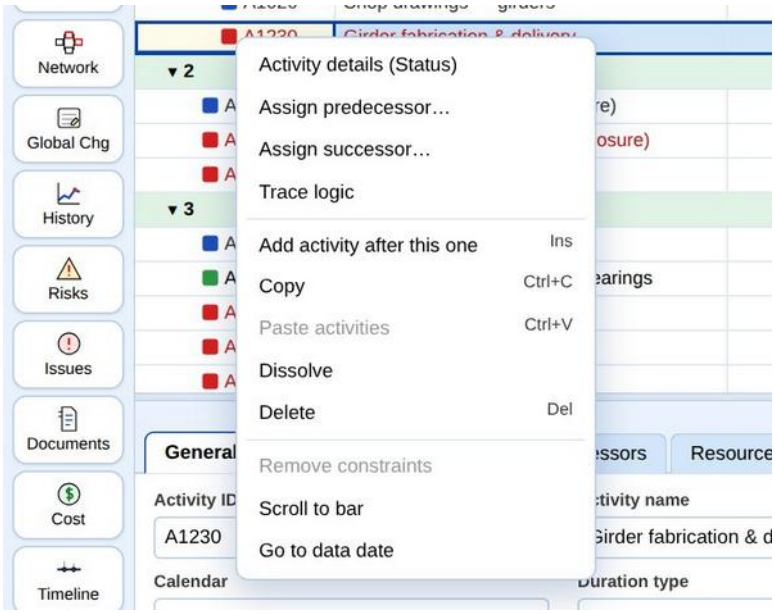


Figure 3-4. Right-click menu of an activity

Command	What it does
Activity details (Status)	Opens the Status tab of the activity.
Assign predecessor / successor	Adds a relationship to another activity.
Trace logic	Shows the logic around the activity.
Add activity after this one	Inserts a new activity below (Insert).
Copy / Paste activities	Copies and pastes activities (Ctrl+C / Ctrl+V).
Dissolve	Removes the activity and keeps the logic.
Delete	Deletes the activity (Delete).
Remove constraints	Clears primary and secondary constraints.
Scroll to bar / Go to data date	Moves the Gantt chart to the bar or the data date.

Right-clicking the empty Gantt chart offers zoom in, zoom out, fit the whole project on screen, go to project start, data date or finish, and timescale choices. All mouse actions are listed in Chapter 48.

Customizing the left menu

The left menu opens with **2 items per row** in the **Small** size. The small buttons at its top change the layout, and every choice is saved automatically:

Button	What it does
1, **2**, **3**	Show 1, 2 or 3 menu items per row (default 2). More per row makes the menu wider and shorter.
A / **a**	Switch the size between **Small** (default, the normal look) and **Tiny** (smaller buttons and text, for small screens).
⚙	Open **Customize the left menu**. The same window is in **View → Customize left menu…**.



Figure 3-5. Left menu — 2 per row, Small (default)

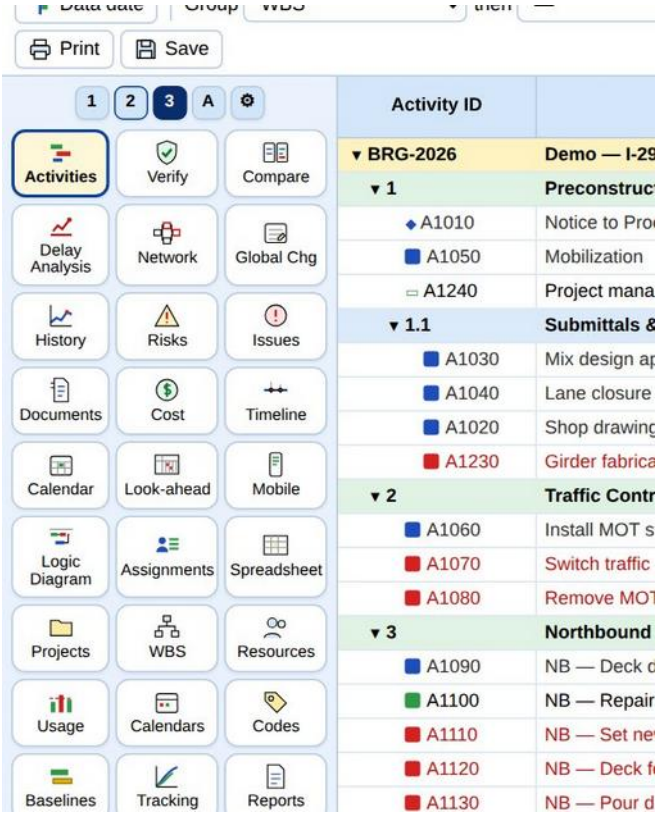


Figure 3-6. Left menu — 3 per row



Figure 3-7. Left menu — Tiny size, 2 per row

Customize the left menu

1. Click ⚙ at the top of the left menu (or **View → Customize left menu…**).
2. **Layout:** choose 1, 2 or 3 items per row and Small or Tiny.
3. **Show or hide:** tick an item to show it, untick to hide it. Activities is always shown.
4. **Order:** use ▲ and ▼ to move an item up or down the menu.
5. **Add a command shortcut:** choose any menu command (for example Schedule, Maintain baseline, Print / PDF, Verify), type a label if you like, and click **Add to menu**. It becomes its own button in the left menu. **Remove** takes it off again.
6. **Reset to default** returns to 2 per row, Small, and the original items and order. Click **Done** when finished.

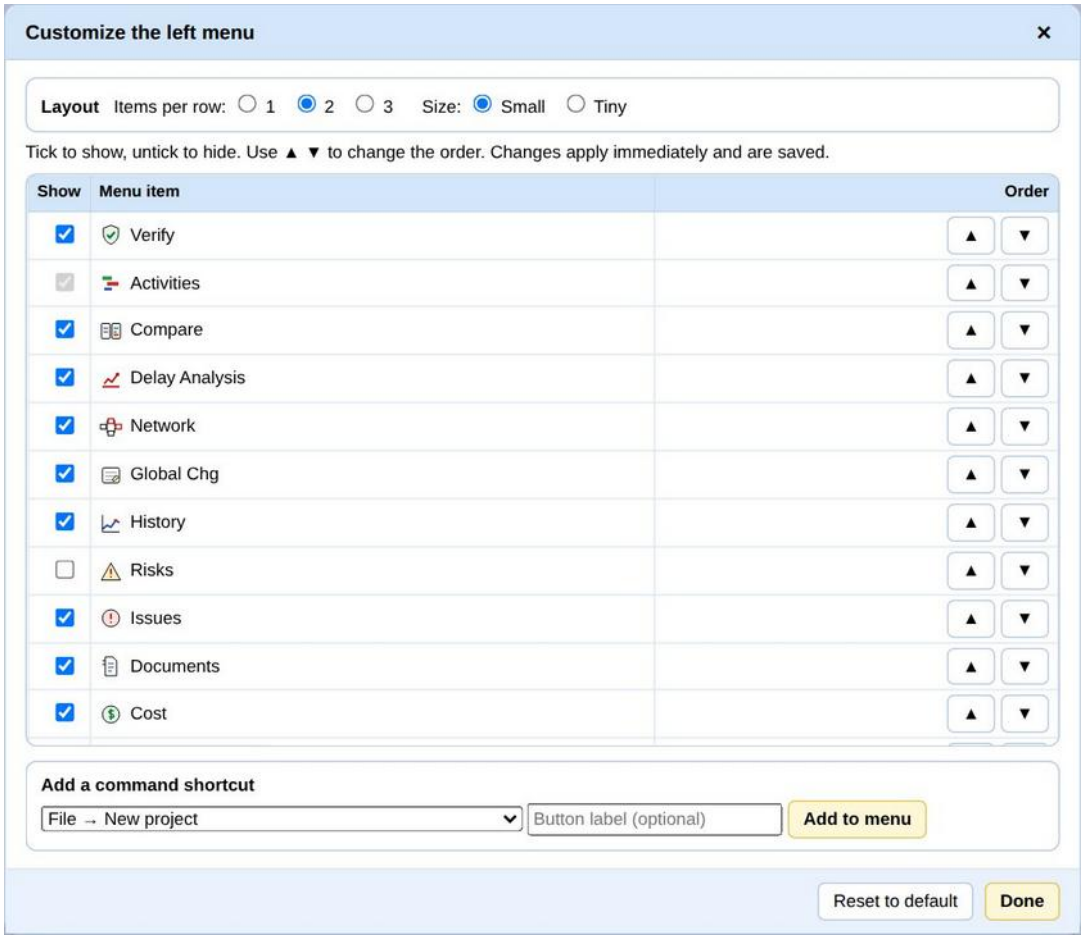


Figure 3-8. Customize the left menu

> **Tip** Put the commands you use every day — Schedule, Update Progress, Verify, Print — on the left menu as shortcuts, and hide screens you never use. Your menu is saved in this browser with your other preferences.

CHAPTER 4

Your first schedule in 15 minutes

This tutorial builds a small schedule from scratch. Load the demo project (File → Load demo project) at any time to see a complete example.

1. **File → New project.** Enter a project ID (e.g. BR-101), a name, the start date and choose the calendar. Click **Create**.
2. Click **Add activity** (or press `Insert`). Type the activity ID, name and original duration in the table. Repeat for each activity.
3. Create milestones: in the details panel **General** tab set the **Activity type** to Start milestone or Finish milestone.
4. Organize work with a WBS: open the **WBS** screen, add elements, then use **Edit → Assign WBS to selected**.
5. Link activities: select two or more activities in order and click **Link** (finish-to-start), or add relationships in the **Predecessors** tab.
6. Press F9 (**Schedule**). CPMForge calculates dates, float and the critical path (red).
7. Click ✓ **Verify / Check Schedule** and fix any FAIL items (open ends, missing logic, long durations…).
8. Create a baseline: **Project → Maintain / create baseline**.
9. Print: **File → Print / PDF** or open **Reports**.
10. Save a backup file: **File → Save as**.

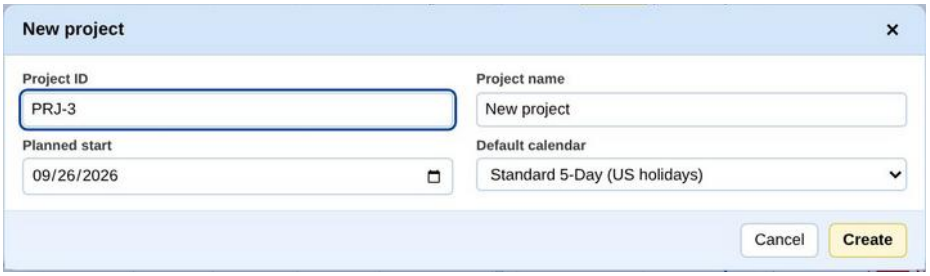


Figure 4-1. New project dialog

CHAPTER 5

Worked example: a complete project from start to finish

This chapter follows one small project — **CUL-101 Culvert Replacement, Route 30** — from a new, empty project through the baseline, a monthly update, the comparison, the look-ahead, the narrative and the reports. Every screen shown is from CPMForge.

Step 1 — Create the project

File → New project. Enter the project ID, the name, the planned start (notice to proceed) and the default calendar, then click **Create**. CPMForge adds a start milestone automatically.

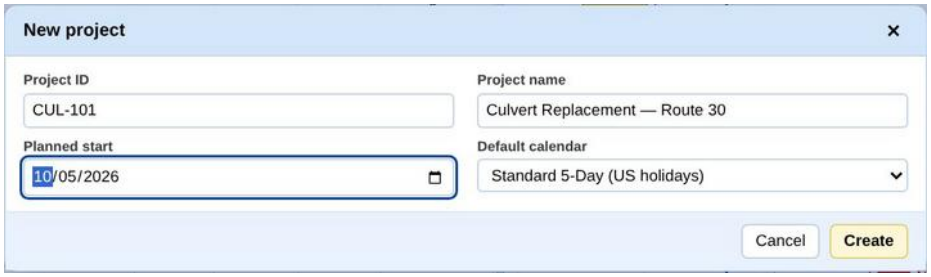


Figure 5-1. New project for the worked example

Next open **Project → Project & company information** and **Project → Schedule options**: enter the contract number, owner, contractor, scheduler and the contract completion date (Must finish by: 18-Dec-26).

Step 2 — Build the WBS and add activities

Create three WBS elements (Preconstruction, Culvert Construction, Closeout) on the WBS screen, then add the activities with their original durations. At this stage the activities have no logic, so they all start on the project start date.

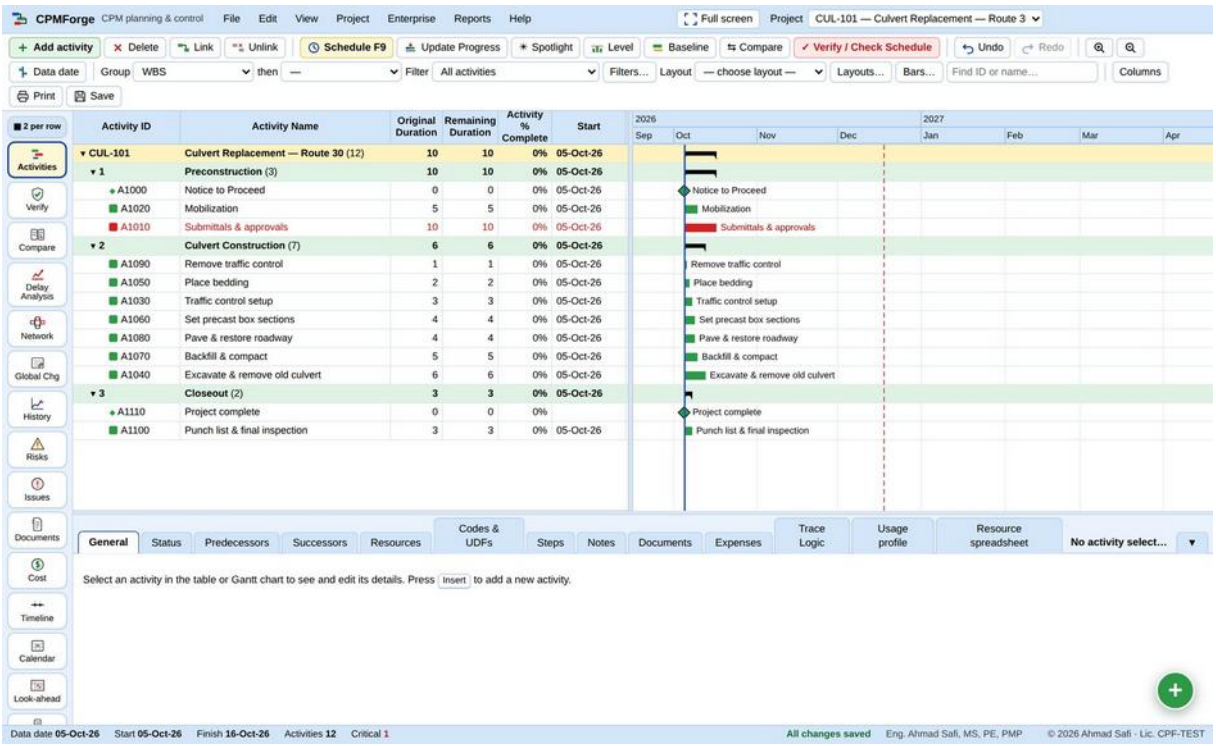


Figure 5-2. Activities entered, before logic

Step 3 — Add logic and schedule

Link the activities in their construction sequence (select in order and click **Link**, or use the Predecessors tab), then press F9. The Gantt chart now shows the sequence, the critical path in red and the forecast finish in the status bar.

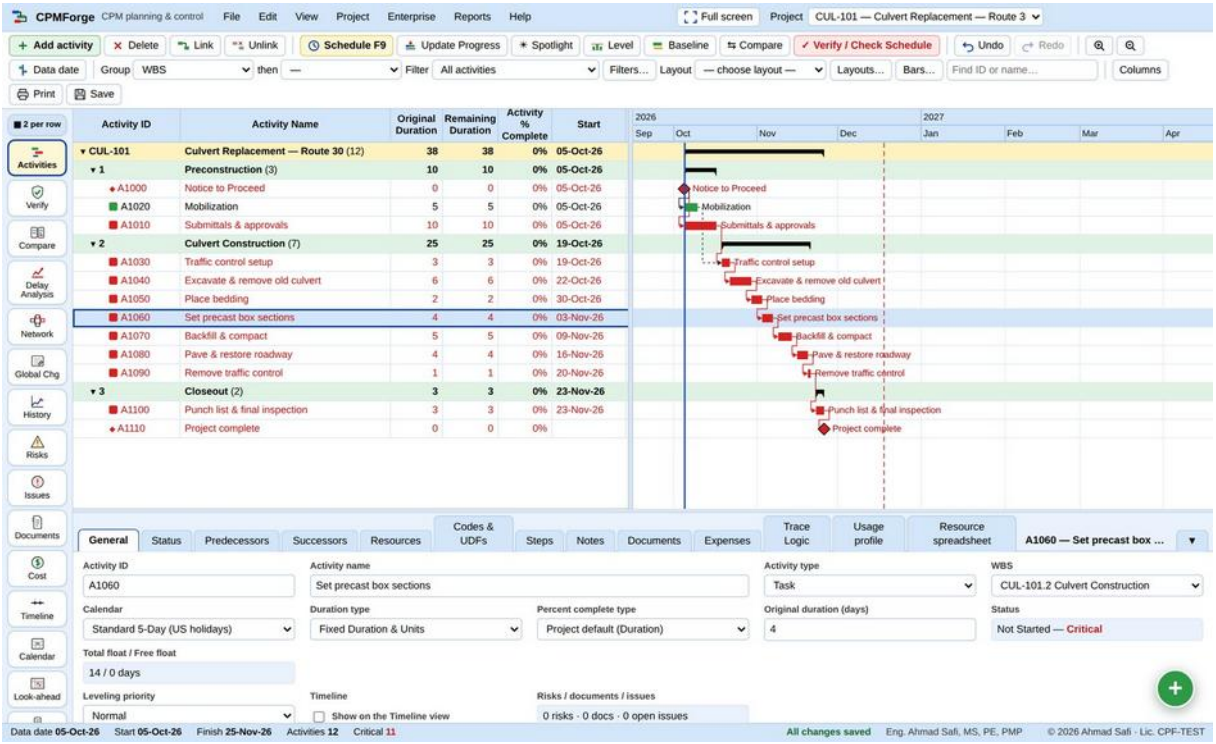


Figure 5-3. Schedule calculated — critical path in red



Figure 5-4. Predecessors of "Set precast box sections"

> **Tip**
>
> Check the status bar after every **F9**: forecast finish, variance to the baseline and the number of critical activities.

Step 4 — Verify before submitting

Click ✓ **Verify / Check Schedule**. Review every FAIL — open ends, missing logic, long durations, constraints — and correct the schedule until no High findings remain.

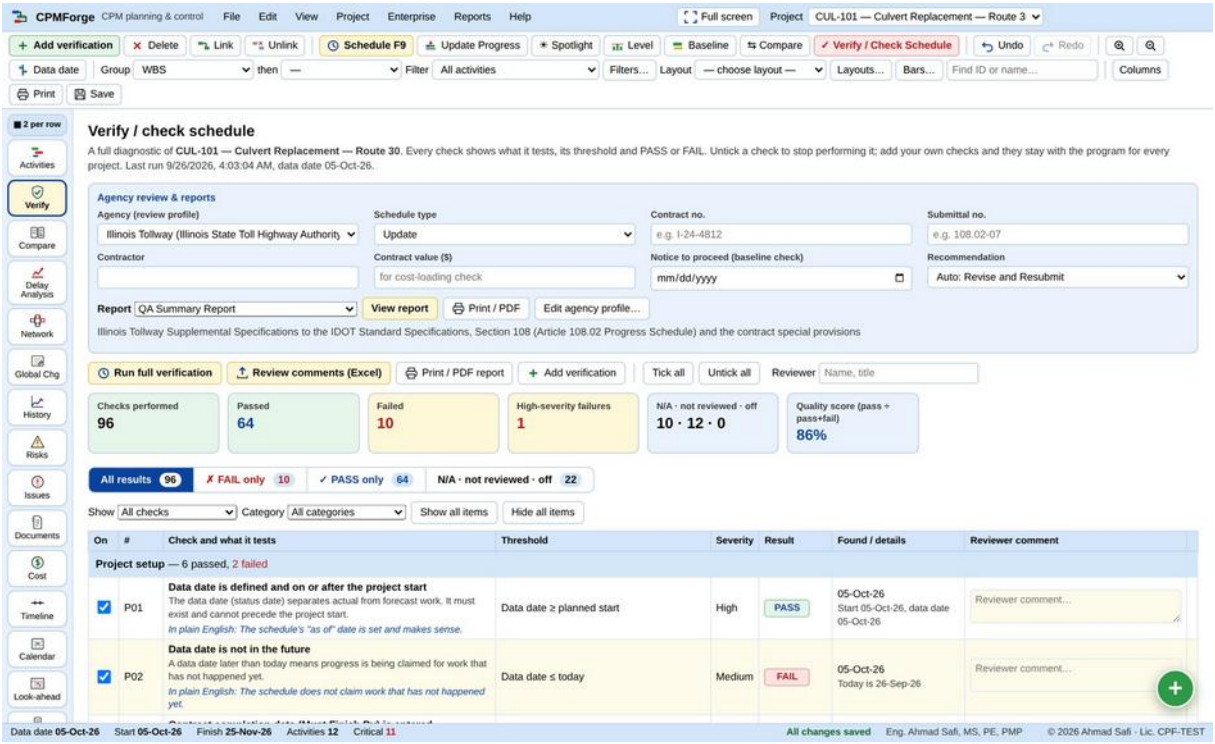


Figure 5-5. Verification of the new schedule

Step 5 — Create the baseline

When the schedule is approved, create the baseline: **Project → Maintain / create baseline**. Baseline bars (yellow) appear under the current bars.

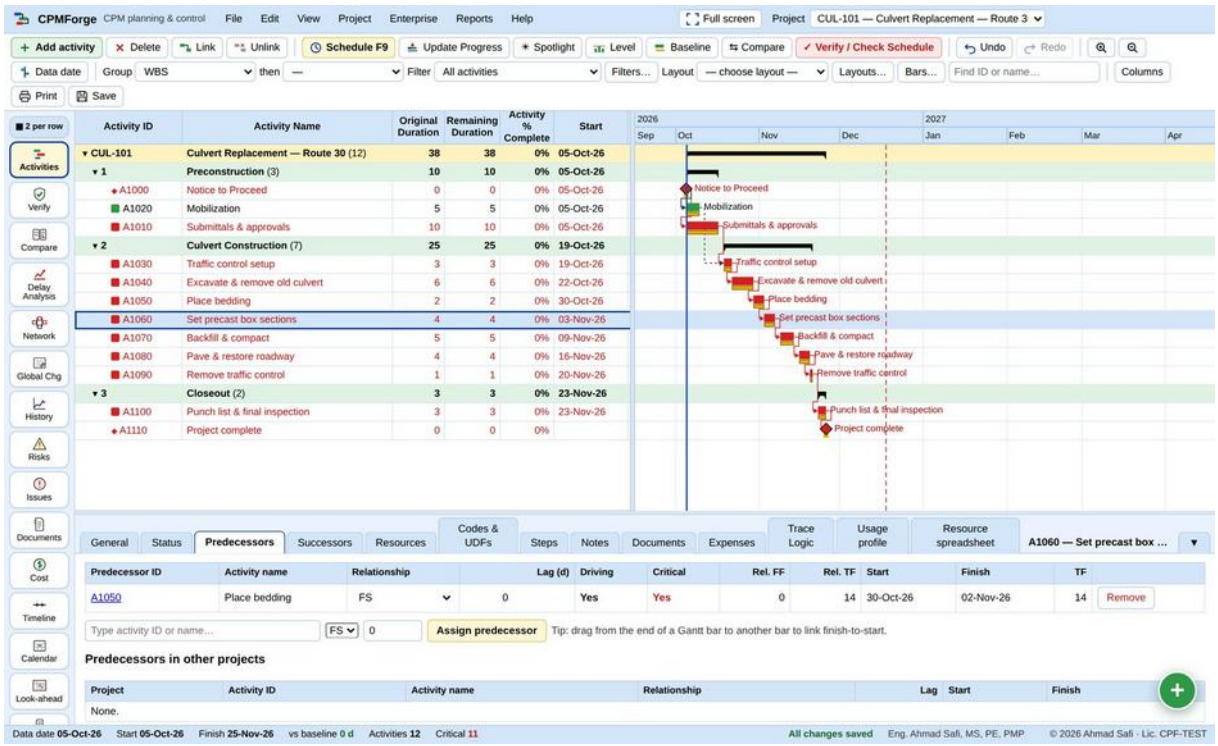


Figure 5-6. Baseline bars shown under the current schedule

Step 6 — Monthly update

At the end of the month click **Update Progress**, set the new data date, and enter the actual dates, % complete and remaining durations. Store the period (**Project → Store period performance**) so the update is kept for history, trends and delay analysis.

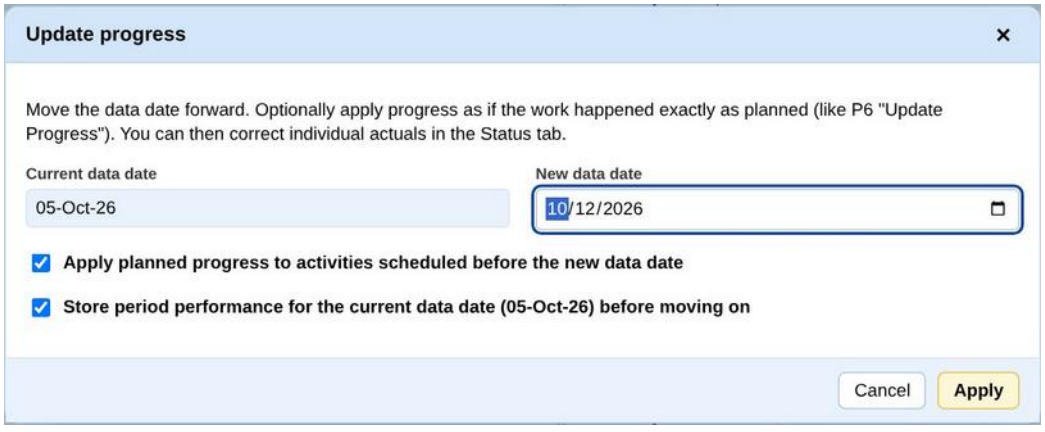


Figure 5-7. Update progress dialog

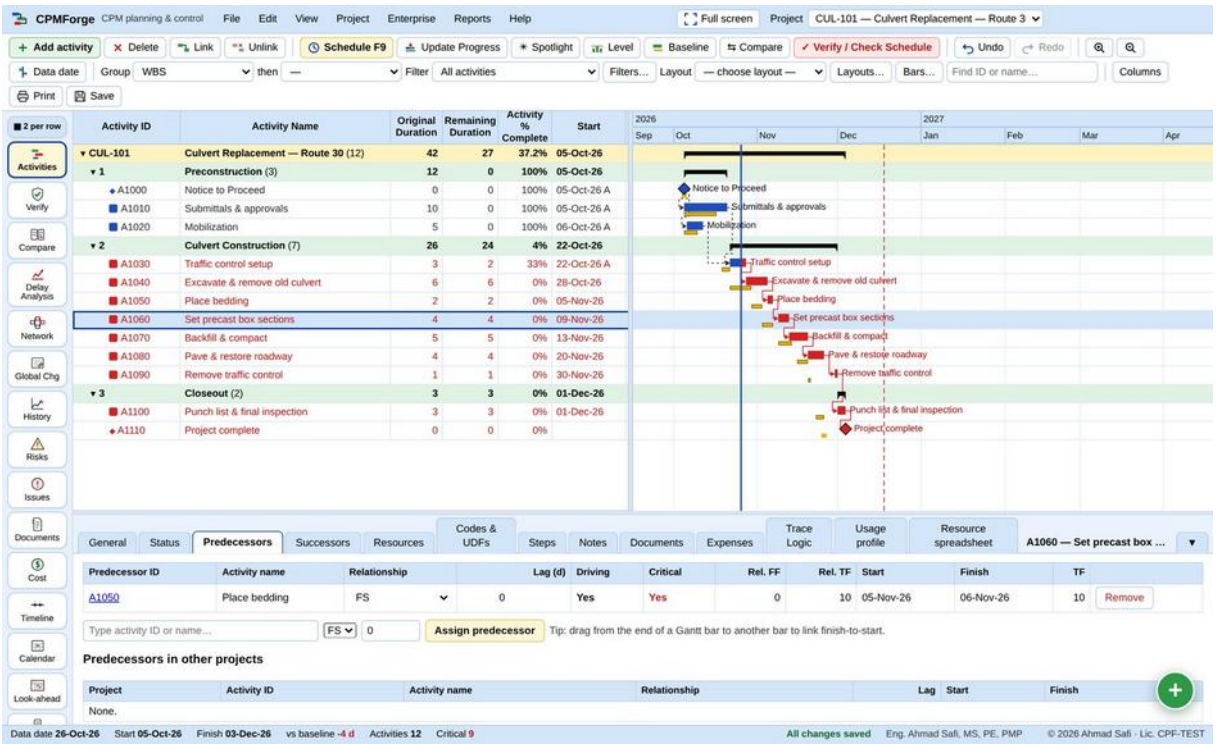


Figure 5-8. Schedule after the first update — actual dates marked "A"

Step 7 — Compare with the previous update

Open **Compare**, choose the previous update and click **Compare**. CPMForge lists every change — progress, dates, durations, logic — with red flags for anything suspicious, and summarizes the forecast finish movement.

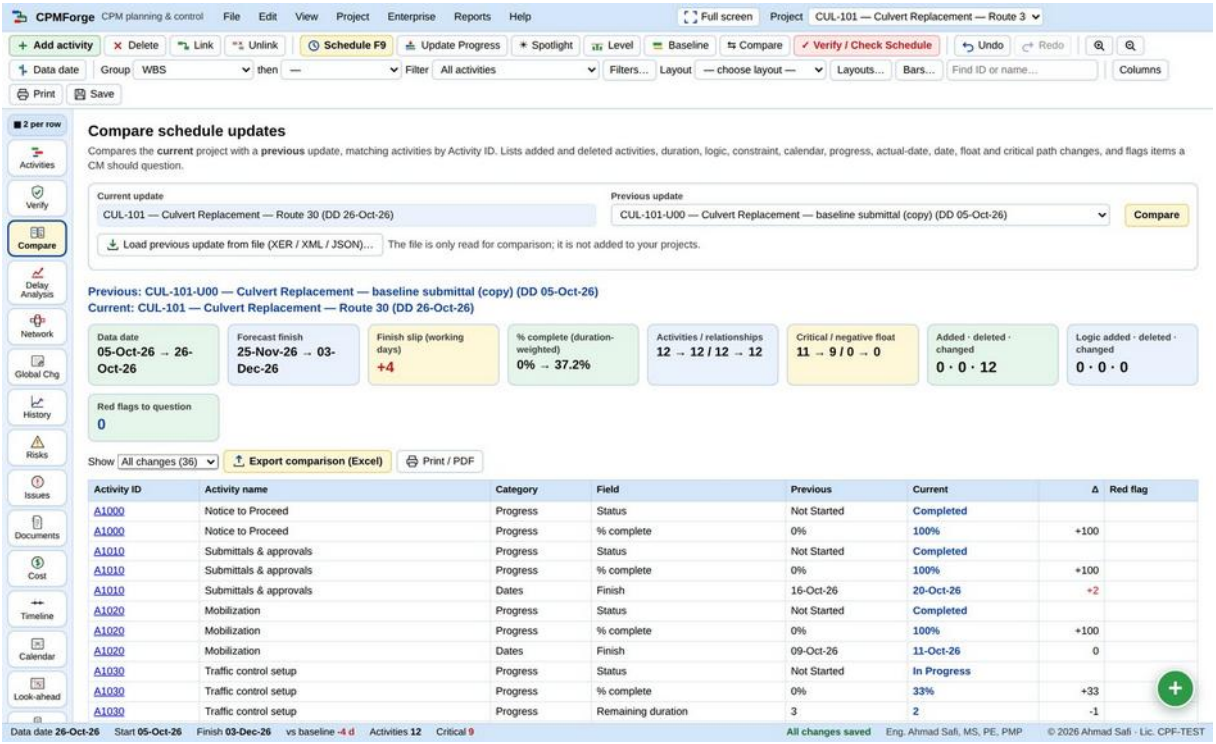


Figure 5-9. Comparison with the previous update

Step 8 — History and trends

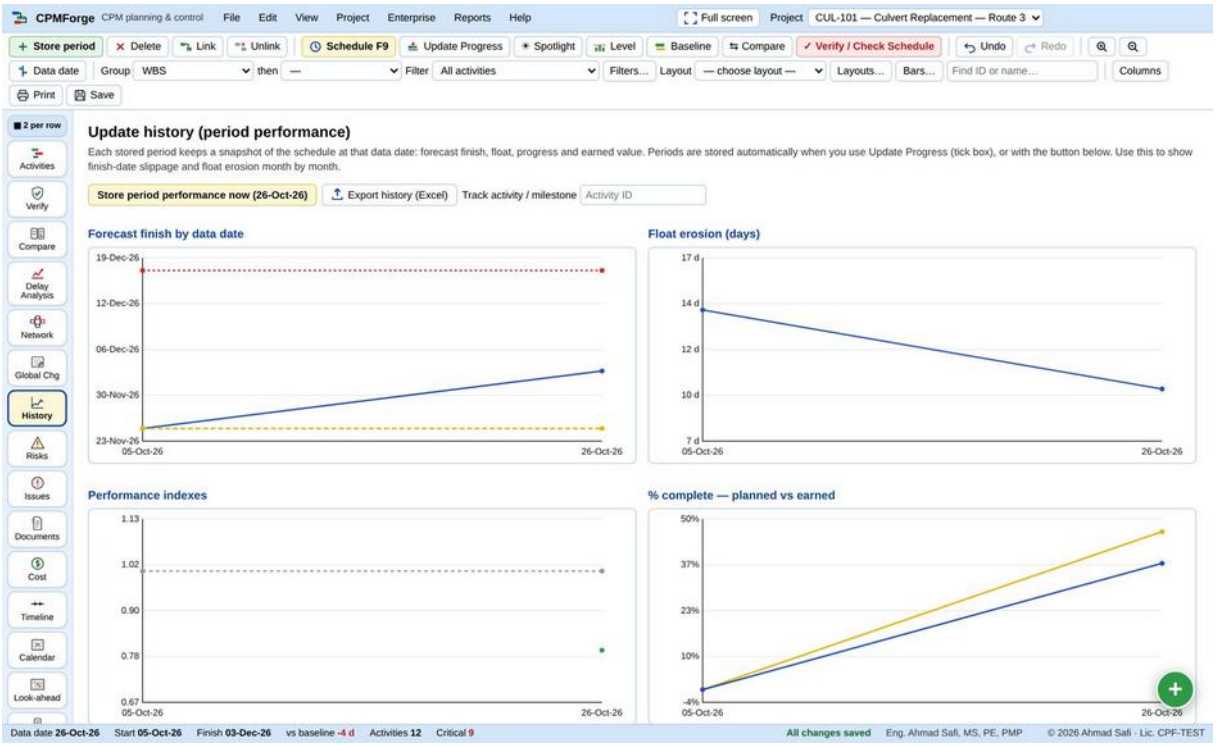


Figure 5-10. History and trend charts after the update

Step 9 — Look-ahead for the progress meeting

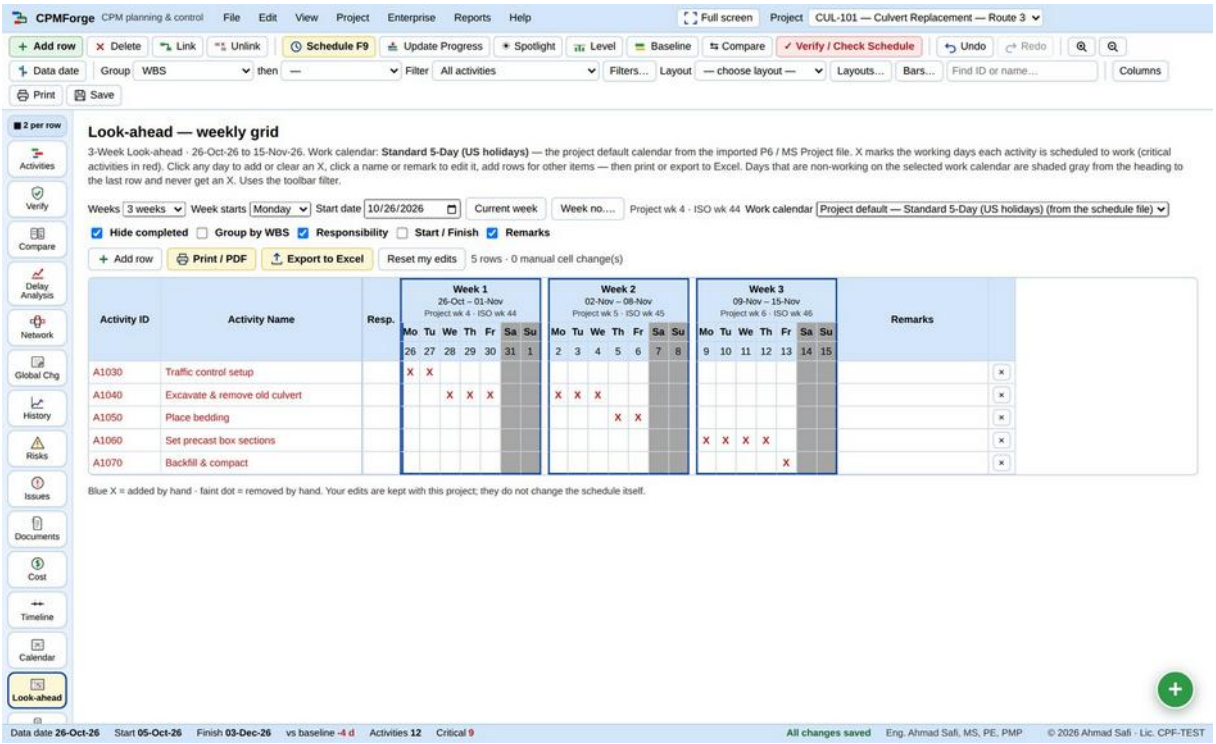


Figure 5-11. Three-week look-ahead from the data date

Step 10 — Narrative and reports

Open **Narrative**, choose Contractor submittal, type the update number and your explanations, then print or download Word. Finally print the report package from **Reports** or **Batch reports**.

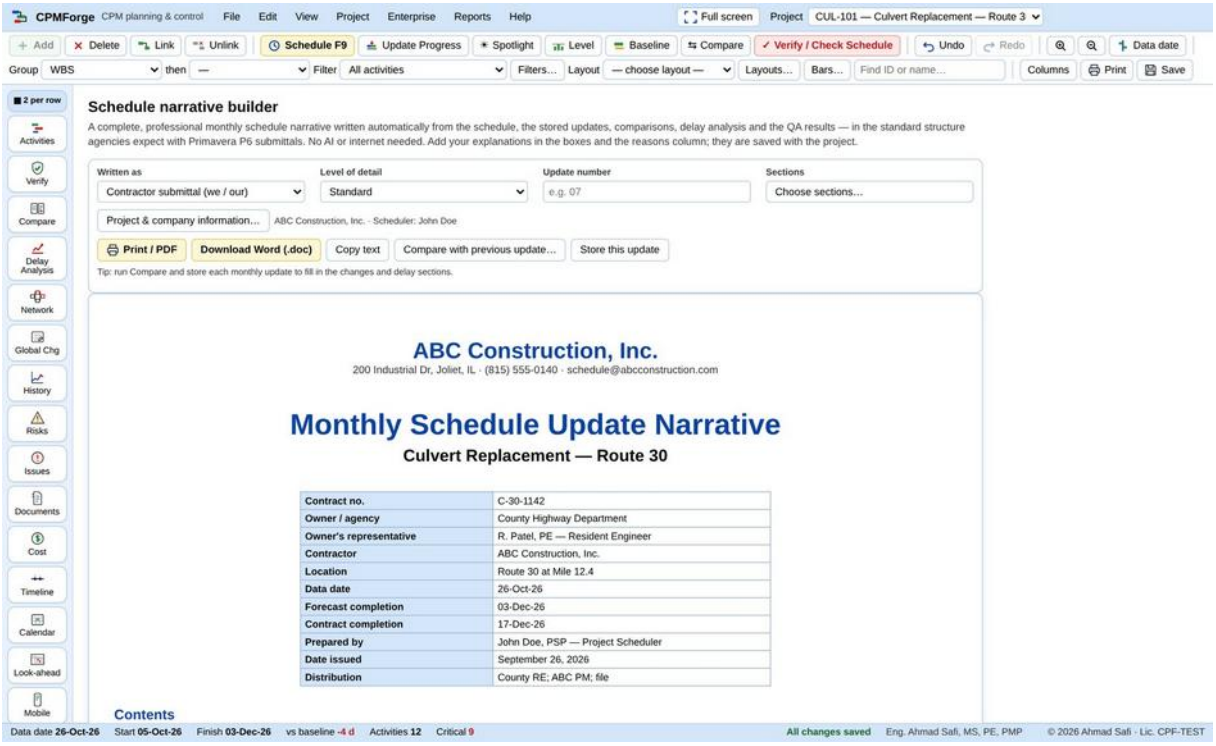


Figure 5-12. Narrative builder for the worked example

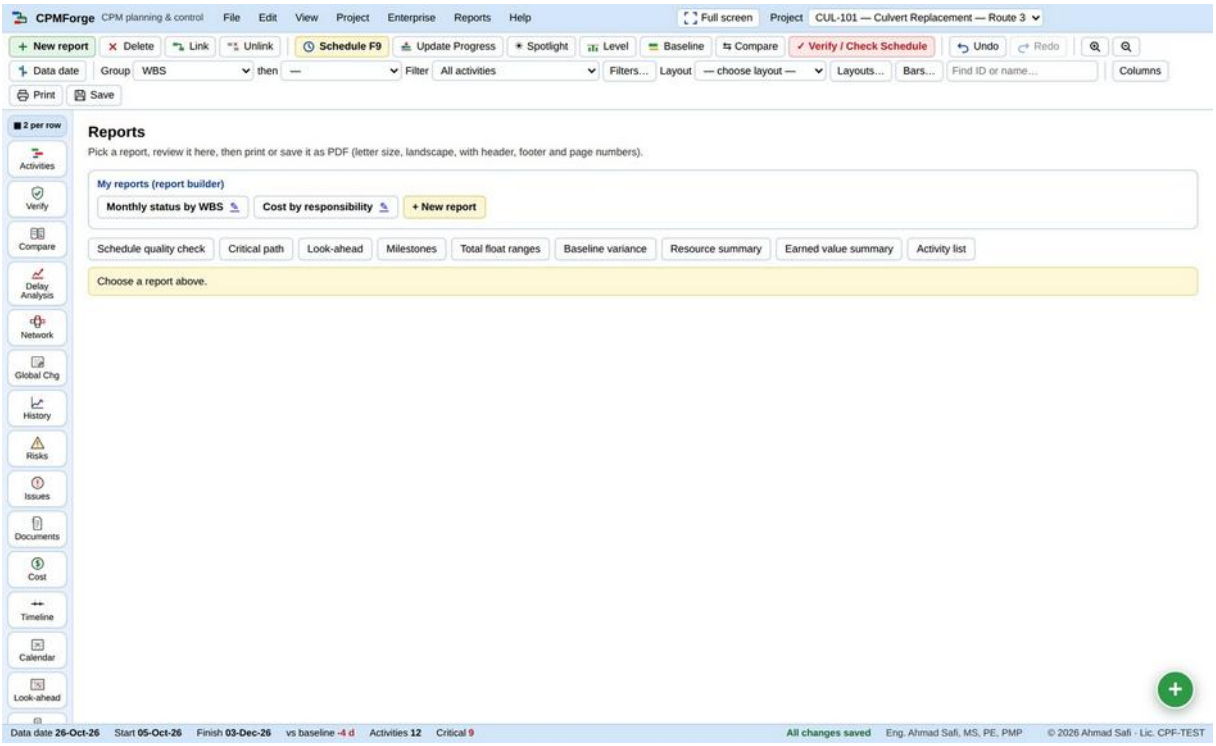


Figure 5-13. Reports screen

» Example

The whole cycle — update, verify, compare, look-ahead, narrative and reports — typically takes less than an hour for a project of this size once the field progress is collected.

Part II — Projects and Files

Creating projects, importing and exporting, printing

CHAPTER 6

Projects and project setup

Creating and opening projects

Use **File → New project** to start a project, and **File → Open project** (the Projects screen) to open, copy, rename, close or delete projects. The project selector at the top switches between open projects.

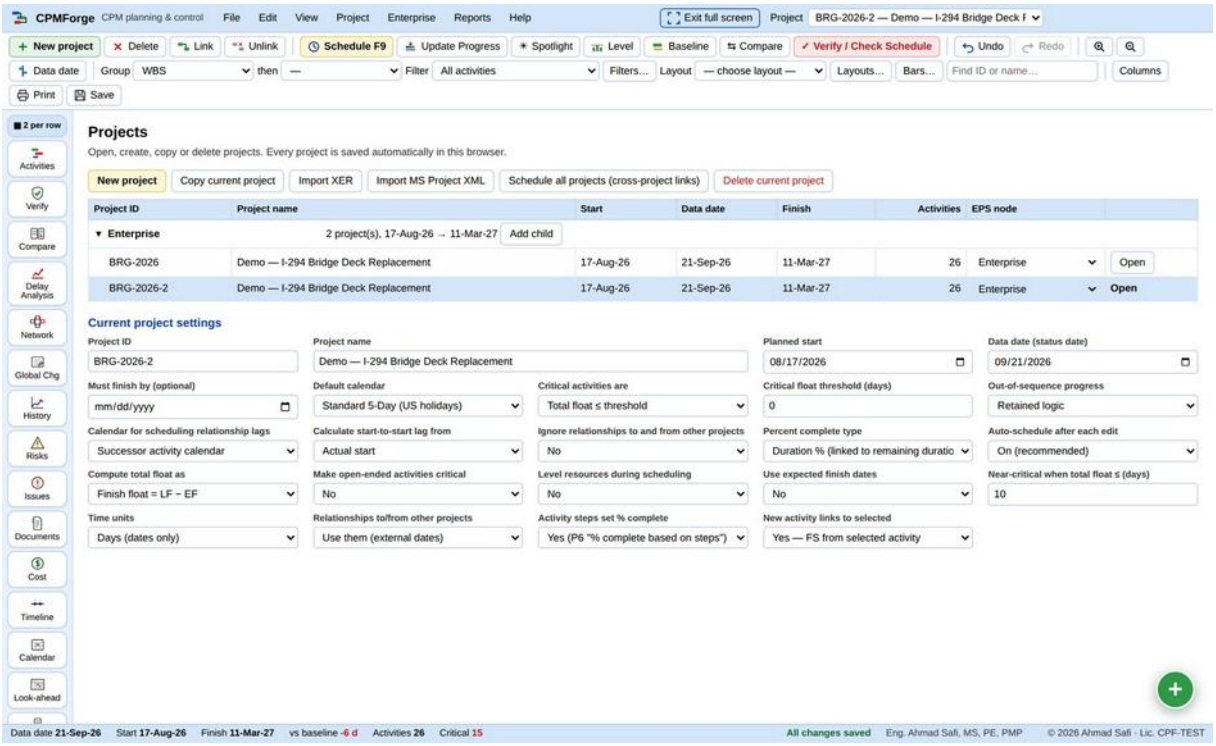


Figure 6-1. Projects & EPS screen

Schedule options & project settings

Project → Schedule options & project settings controls how the project is calculated. The main options are:

Setting	Meaning
Data date	The date that separates actuals from the forecast.
Must finish by	Contract completion date; float is calculated to it.
Default calendar	Calendar used by new activities.
Out-of-sequence progress	Retained logic (remaining work waits for predecessors) or progress override.
Total float calculation	Finish float, start float, or the smaller of the two.
Critical activities	Total float ≤ a value, or the longest path.
Lag calendar	Calendar used for lags (predecessor, successor, 24-hour or project default).
Near-critical threshold	Float limit for near-critical reporting (default 10 days).

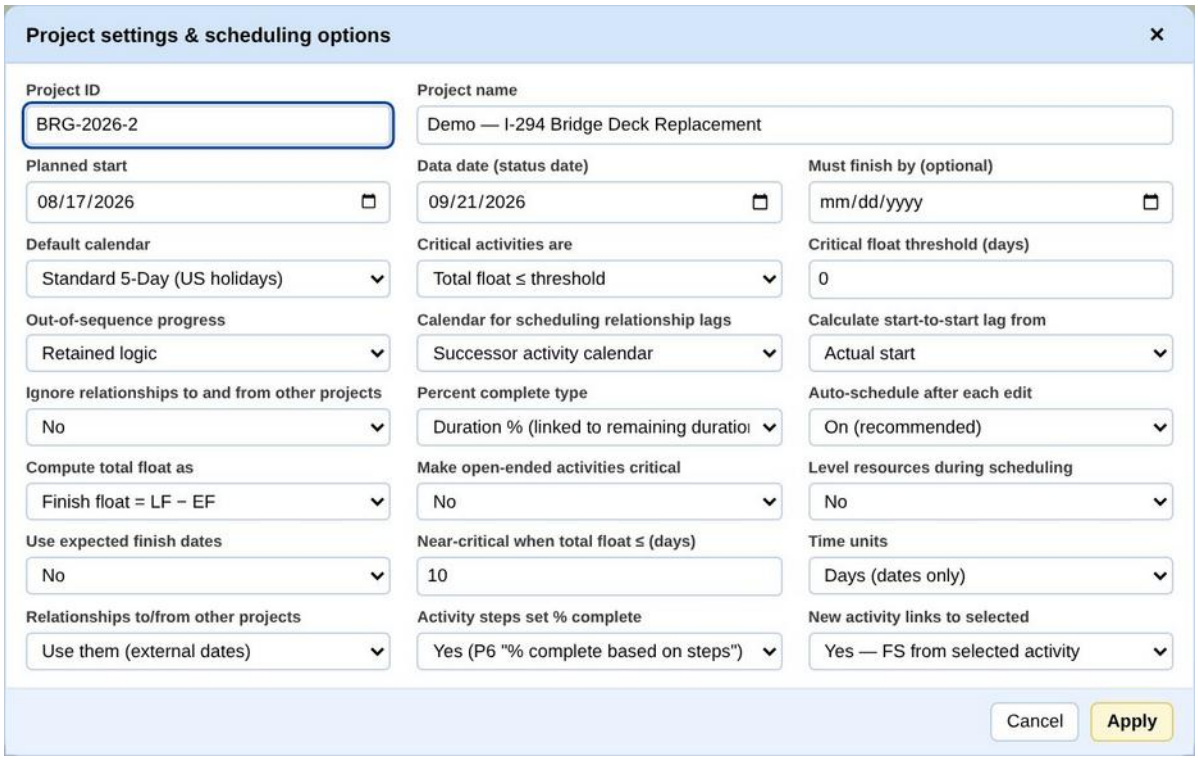


Figure 6-2. Schedule options & project settings

Every option is explained in Chapter 47.

Project & company information

Project → Project & company information stores your company name, address and contacts (shared by all projects), and for each project the contract number, owner, owner's representative, contractor, location, description, baseline approval date, scheduler, project manager and distribution list. These details appear on narrative cover pages, report headers, the print title block and signature lines — like project details and print headers in P6.

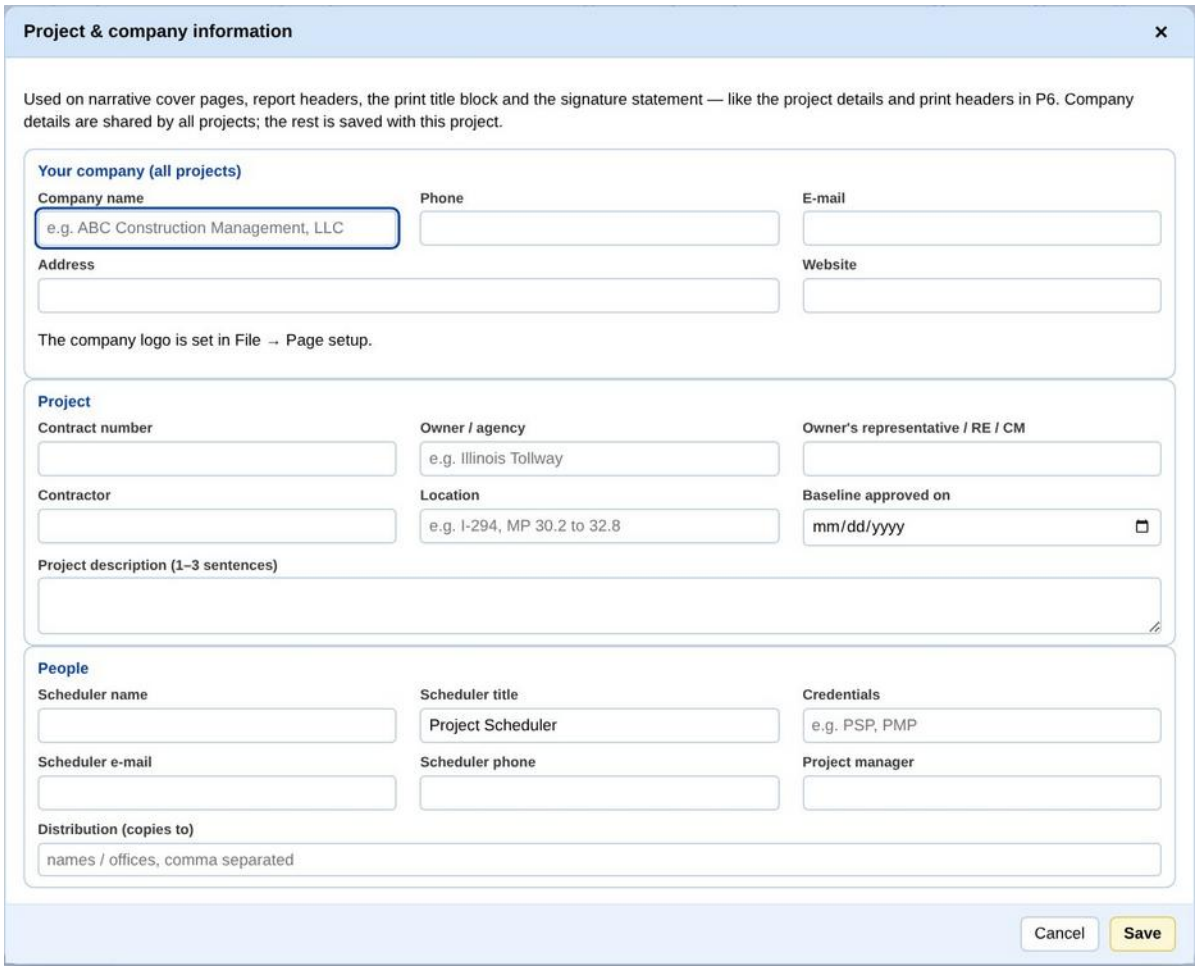


Figure 6-3. Project & company information

Enterprise project structure, reflections and cross-project links

- **Projects & EPS** organizes projects in folders (enterprise project structure).
- **Enterprise → Create reflection** makes a what-if copy; **Merge reflection into source** brings the tested changes back after showing each one.
- **Schedule all projects** calculates open projects together using cross-project relationships.

CHAPTER 7

File menu — import, export, save and backup

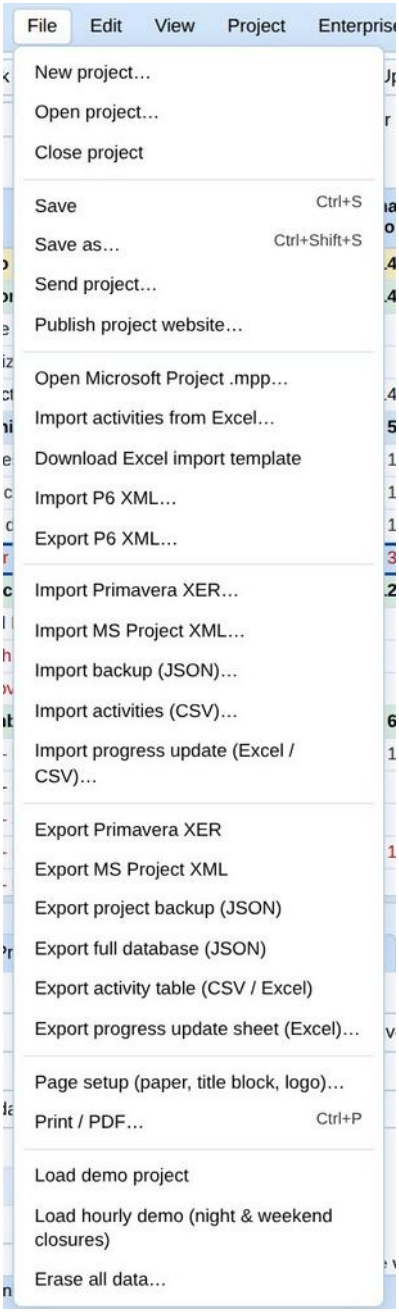


Figure 7-1. File menu

Command	What it does
New project	Creates a new, empty project. Enter the project ID, name, start date, calendar and (optionally) the contract completion date.
Open project	Opens the Projects & EPS screen, where you open, copy, rename, close or delete projects and organize them in an enterprise project structure.

Command	What it does
Close project	Closes the current project. Your data stays saved; reopen it from File → Open project.
Save	Saves the project to the file on your computer that it is linked to (Ctrl+S). The first time, it asks where to save.
Save as	Saves a copy of the project (or all projects) to a new file, and optionally creates a copy inside CPMForge (Ctrl+Shift+S).
Send project	Prepares the project as XER, P6 XML, CPMForge or MS Project XML and opens your e-mail or share options to send it.
Publish project website	Creates a single HTML web page of the project (Gantt picture, key tables, milestones) you can e-mail or post for people without CPMForge.
Open Microsoft Project .mpp	Explains how to bring in a Microsoft Project .mpp file: save it as XML in Microsoft Project, then import the XML. Your data never leaves your computer.
Import activities from Excel	Imports activities (IDs, names, durations, WBS, predecessors, dates) from an Excel sheet made with the CPMForge template.
Download Excel import template	Downloads the Excel template for importing activities, with the required column headings and an example.
Import P6 XML	Imports a Primavera P6 XML file (projects, WBS, activities, relationships, calendars, resources and progress).
Export P6 XML	Exports the project as Primavera P6 XML, for P6 users who prefer XML over XER.
Import Primavera XER	Imports a Primavera P6 .XER file — the most common way to receive a contractor schedule. Activities, WBS, relationships, calendars, codes, UDFs, resources, steps and progress are brought in.
Import MS Project XML	Imports a Microsoft Project XML file (saved from MS Project with File → Save As → XML).
Import backup (JSON)	Imports a CPMForge backup file (single project or full database).
Import activities (CSV)	Imports a simple activity list from a CSV file.
Import progress update (Excel / CSV)	Imports the progress update sheet (Excel or CSV) that the field or contractor filled in: actual dates, % complete and remaining durations.
Export Primavera XER	Exports the project as a Primavera P6 XER file that P6 users can import.
Export MS Project XML	Exports the project as Microsoft Project XML.
Export project backup (JSON)	Exports a backup file of the current project.
Export full database (JSON)	Exports a backup of all projects, calendars, resources, codes and settings — use it for monthly backups.
Export activity table (CSV / Excel)	Exports the activity table exactly as displayed (columns, grouping and filter) to CSV or Excel.
Export progress update sheet (Excel)	Creates an Excel progress update sheet for the field or contractor to fill in, to be imported back with “Import progress update”.
Page setup (paper, title block, logo)	Sets paper size and orientation, margins, title block, company name, logo, revision box and signature names used on printouts.
Print / PDF	Opens the print preview of the current view (Gantt, table, report). Print or save as PDF from there.

Command	What it does
Load demo project	Loads the demo bridge project (I-294 Bridge Deck Replacement) to explore every feature safely.
Load hourly demo (night & weekend closures)	Loads an hourly demo with night work and weekend closures, showing shift calendars.
Erase all data	Erases all projects and settings from this browser. Export a full database backup first.

Importing a contractor XER

1. **File → Import Primavera XER** and pick the .xer file.
2. If the file contains several projects, choose which to import.
3. CPMForge imports the activities, WBS, relationships, calendars, codes, UDFs, resources, steps and progress, then calculates the schedule.
4. Click ✓ **Verify** to check it (Chapter 26).

What is imported from each file type

Data	P6 XER	P6 XML	MS Project XML	Excel template
Projects (several per file)	Yes	Yes	One	One
WBS	Yes	Yes	Outline / summary tasks	WBS code column
Activities, types, durations	Yes	Yes	Yes	Yes
Relationships and lags	Yes (all types)	Yes	Yes	Predecessor column (e.g. A1010FS+2)
Calendars, holidays, work hours	Yes	Yes	Yes	Project calendar
Constraints	Yes (primary and secondary)	Yes	Yes	Constraint columns
Actual dates, % complete, remaining	Yes	Yes	Yes	Yes
Activity codes and UDFs	Yes	Yes	Custom fields (text)	—
Resources, roles, assignments	Yes	Yes	Yes	—
Costs and expenses	Yes	Yes	Costs	—
Steps, notebook notes	Yes	Yes	Notes	—
Baselines	Stored project baselines when included	Yes	Baseline fields	—
Suspend / resume, duration types	Yes	Yes	—	—
Relationships to other projects	Yes	Yes	—	—

Not imported

- Layouts, filters and print settings of P6 or MS Project (use CPMForge layouts).
- User accounts, security profiles, timesheets and portfolios.
- Microsoft Project .mpp files directly — save them as XML in Microsoft Project first.

Excel activity template columns

Column	Content	Example
Activity ID	Required. Existing IDs are updated, new IDs are added.	A1010
Activity Name	Description	Mobilization
WBS	Dotted WBS code; missing WBS elements are created.	2.1
Original Duration	Working days	5
Type	Task, Start Milestone, Finish Milestone, Level of Effort	Task
Predecessors	IDs with optional type and lag, separated by commas	A1000, A1010FS+2
Calendar	Calendar name (optional)	Standard 5-Day
Notes	Optional text	Lag example: FS+2

> ✓ Tip
>
> Download the template from **File → Download Excel import template** so the headings are exactly right.

Save, Save as and backups

CPMForge saves every change automatically in the browser. **Save** (`Ctrl+S`) also writes the project to a file on your computer, and **Save as** (`Ctrl+Shift+S`) chooses a new file. Use **Export full database** once a month to keep a complete backup of all projects.

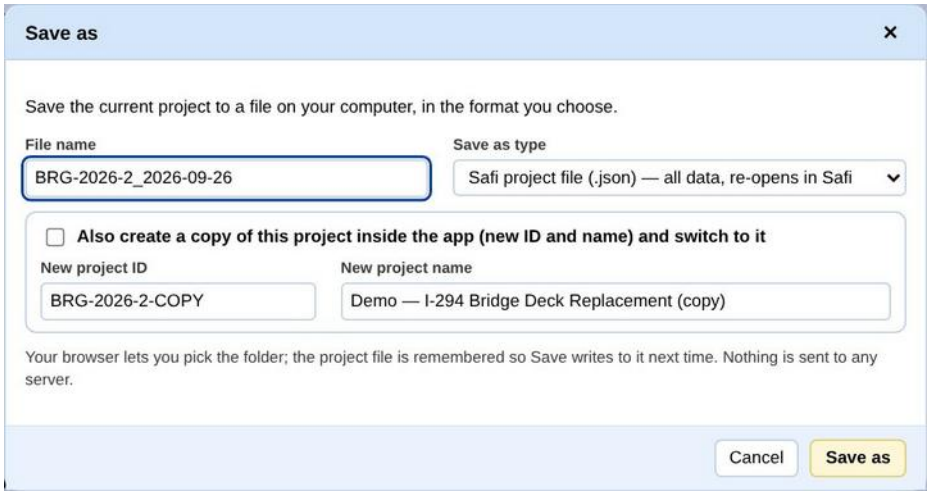


Figure 7-2. Save as

> **Important** Clearing your browser data erases projects stored in the browser. Always keep backup files on your computer, company drive or OneDrive.

Sending and publishing

Send project prepares the schedule as XER, P6 XML, CPMForge or MS Project XML and opens your e-mail or share options. **Publish project website** creates one HTML page with the Gantt picture and key tables for people without CPMForge.

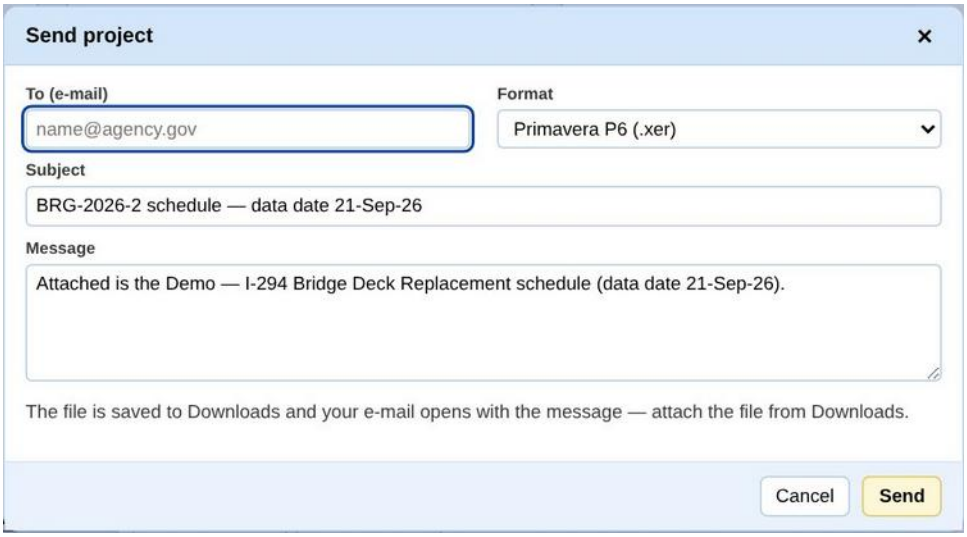


Figure 7-3. Send project

CHAPTER 8

Printing, page setup and print preview

File → Page setup defines the paper (Letter, Legal, 11×17, A4, A3…), orientation, margins, title block, company name, logo, revision box and signature names. **File → Print / PDF** opens the print preview of the current view, similar to P6: choose pages wide, timescale start and end, columns and whether to repeat columns on every page, then print or save as PDF.

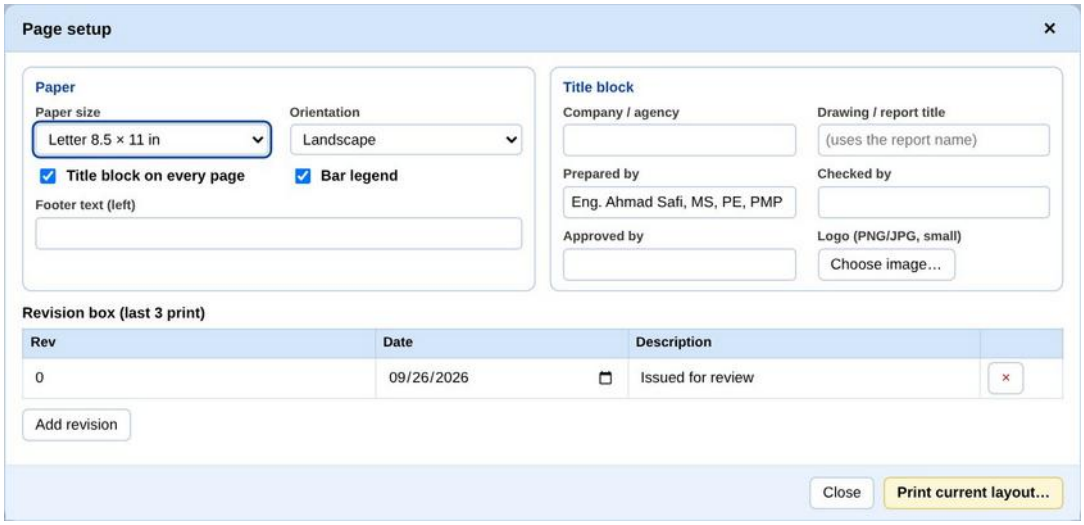


Figure 8-1. Page setup

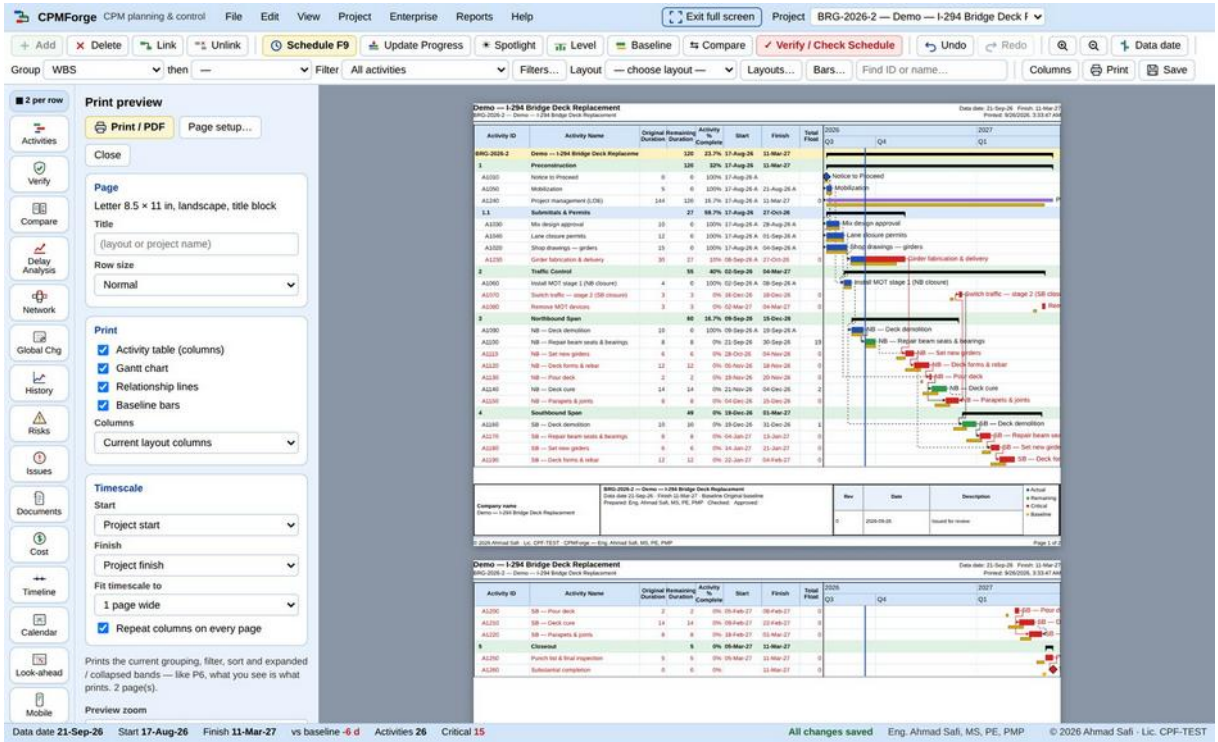


Figure 8-2. Print preview

Tip

For 11×17 schedule submittals choose Tabloid / 11×17 landscape in Page setup and set pages wide to 1 or 2.

Part III — Building the Schedule

Activities, WBS, logic, calendars, scheduling, resources and cost

CHAPTER 9

The activities workspace

The activity table lists every activity grouped by WBS. Each row shows the columns of the current layout; the Gantt chart to the right shows the same activities on a time scale.

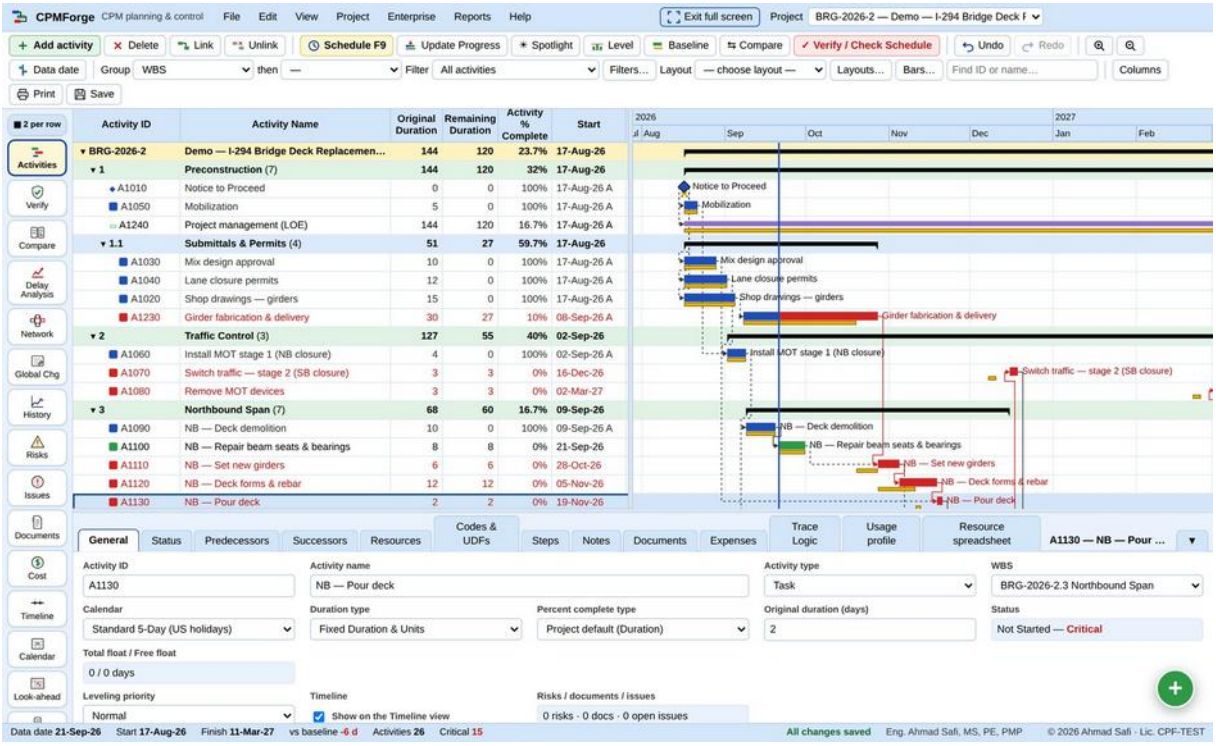


Figure 9-1. Activities workspace

Common columns

Column	Meaning
Activity ID	Unique code of the activity.
Activity Name	Description of the work.
Original Duration	Planned working days (or hours).
Remaining Duration	Working time left from the data date.
Activity % Complete	Progress according to the % complete type.
Start / Finish	Forecast dates; “A” after a date means actual.
Total Float	Days the activity can slip without delaying completion.
Free Float	Days it can slip without delaying any successor.
BL Start / BL Finish	Baseline dates.
Variance	Difference between forecast and baseline.

About 90 columns are available in **View → Columns**, including codes, UDFs, resources, costs, earned value and constraint fields.

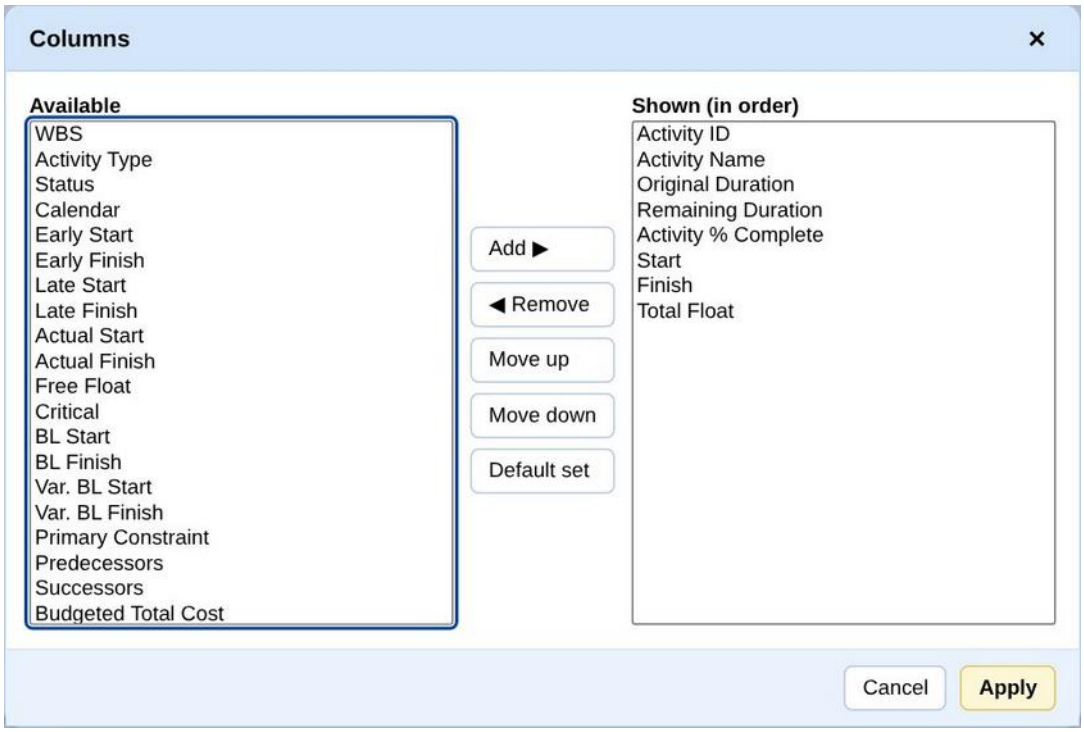


Figure 9-2. Columns dialog

Colors and symbols

- Red names and bars — critical activities.
- Blue bars — non-critical remaining work; green — completed or in progress; yellow — baseline bars.
- Diamonds — milestones. Black summary bars — WBS groups.
- The vertical blue line — the data date.

CHAPTER 10

Creating, editing and deleting activities

Adding activities

- Toolbar **Add activity**, the green **+** button or the `Insert` key adds an activity below the selected one.
- **Edit → Duplicate activity** copies an activity with a new ID.
- **Copy / Paste** (`Ctrl+C`, `Ctrl+V`) works with activities and with cells from Excel.
- **File → Import activities from Excel** loads many activities at once from the template.

Activity types

Type	Use
Task	Normal work with a duration.
Start milestone / Finish milestone	Zero-duration events such as Notice to Proceed or Substantial Completion.
Level of effort	Ongoing support work that spans other activities (e.g. project management).
WBS summary	Summarizes the activities of a WBS element.
Resource dependent	Duration follows the resource calendar and availability.

The General tab

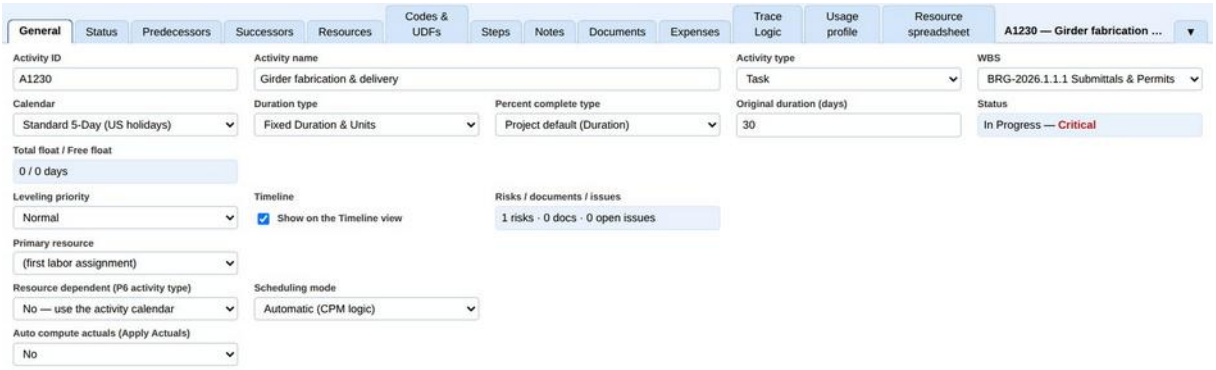


Figure 10-1. Details panel — General tab

Activity ID, name, type (task, milestone, level of effort, WBS summary, resource dependent), WBS, calendar, duration type, % complete type, durations, float, leveling priority.

Deleting and dissolving

Delete removes activities and their relationships. **Dissolve** removes an activity but links its predecessors directly to its successors, keeping the logic intact.

Find and replace, Global Change

Edit → Find and replace (`Ctrl+H`) changes text in IDs, names or any text column. **Global Change** changes any field of many activities at once, using conditions — for example, add two days to every paving activity in Stage 2, or set a calendar for all night-work activities.



Figure 10-2. Find and replace

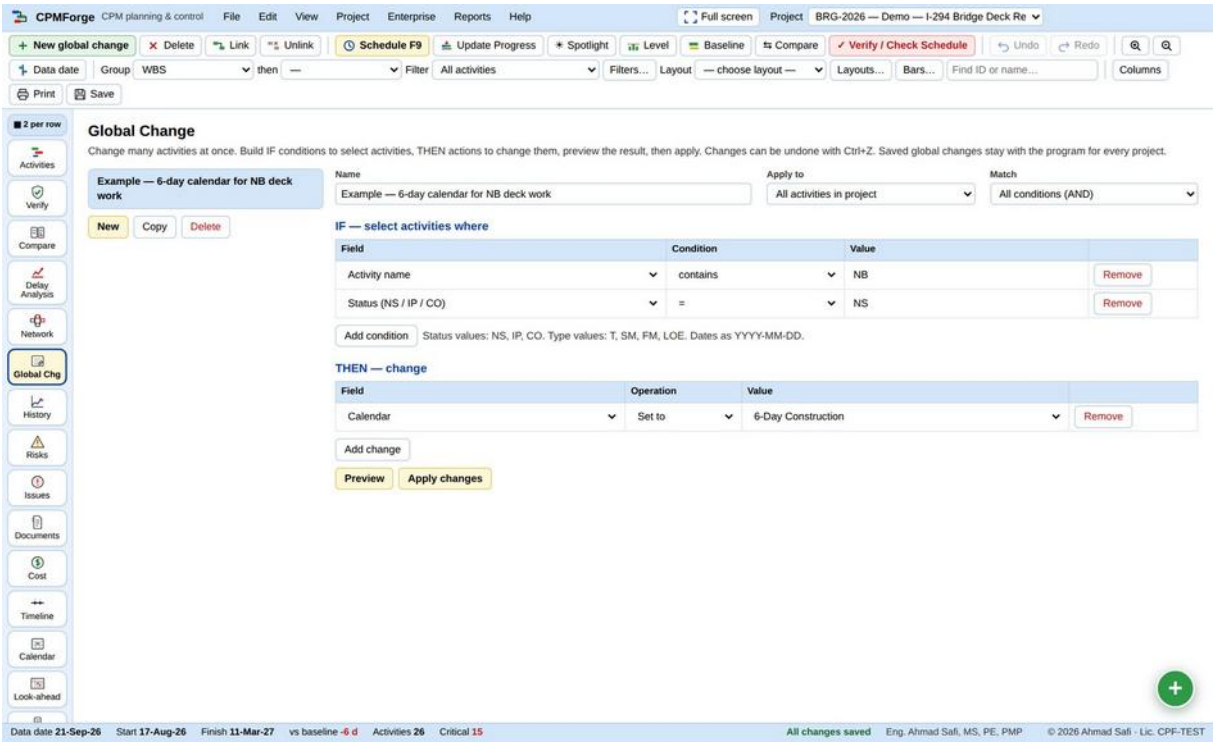


Figure 10-3. Global Change

> **Tip** Use clear names: verb + object + location (e.g. “Pour deck — Span 2 NB”). Keep durations under 20 working days where possible — the verification flags longer ones.

CHAPTER 11

Work breakdown structure (WBS)

The WBS organizes activities into phases, areas or stages. Open the **WBS** screen to add, rename, move and reorder elements; assign activities with **Edit → Assign WBS to selected** or the WBS field in the General tab. The activity table groups by WBS by default, with collapsible summaries and totals.

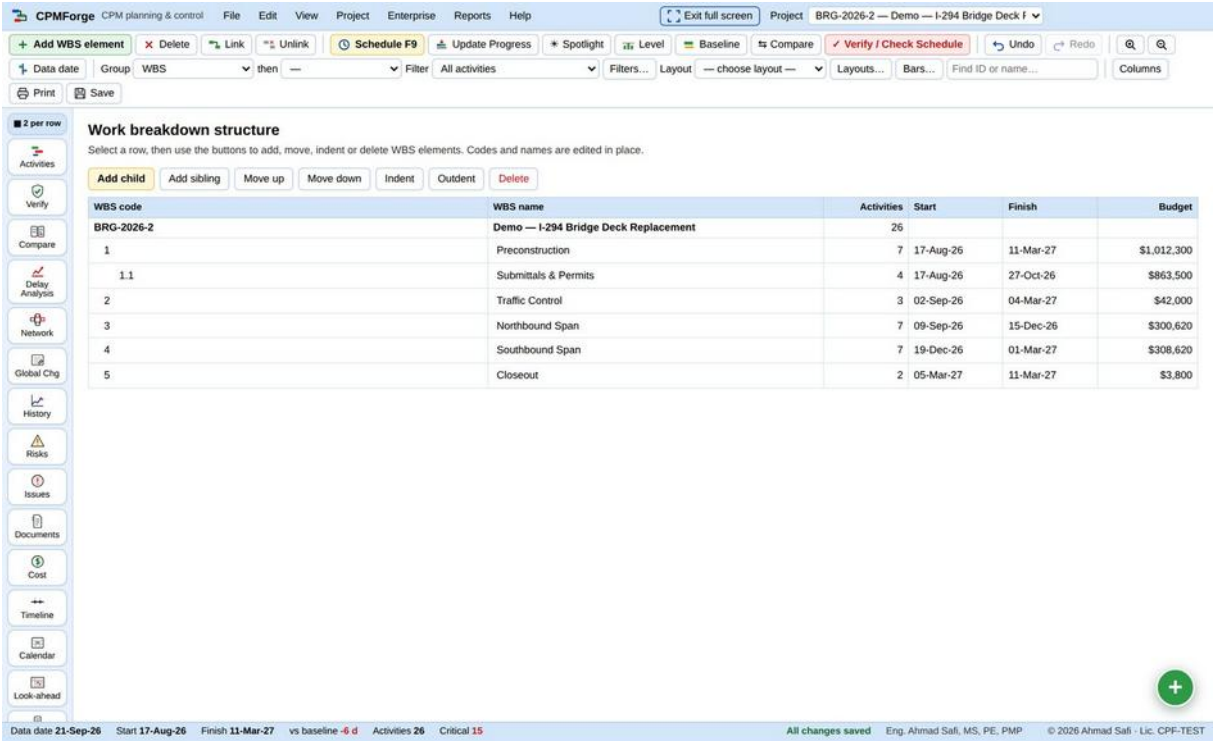


Figure 11-1. WBS screen

- Use **View → Expand all / Collapse all** to open or close all groups.
- The **Group** and **then** boxes on the toolbar add a second grouping level (e.g. WBS then Responsibility).
- Earned value can be set per WBS element (Chapter 17).

CHAPTER 12

Relationships and logic

Relationships (logic) connect activities. CPMForge supports all four types, with positive or negative lag.

Type	Meaning	Example
FS — finish to start	Successor starts after the predecessor finishes.	Pour deck → Cure deck
SS — start to start	Successor starts after the predecessor starts (+ lag).	Excavation SS+2 → Pipe laying
FF — finish to finish	Successor finishes after the predecessor finishes.	Pipe laying FF+1 → Backfill
SF — start to finish	Rare; successor finishes after predecessor starts.	Shift handover

Creating relationships

1. Select activities in order (`Ctrl`+click) and click **Link** for finish-to-start links; or
2. Open the **Predecessors** or **Successors** tab, click Add, choose the activity, the type and the lag.



Figure 12-1. Predecessors tab

Tracing and viewing logic

- **Trace Logic** (details tab or View menu) shows predecessors and successors several levels deep.
- **Network** shows a logic diagram; **Logic Diagram** (time-scaled) shows activities on a time scale with every relationship line.

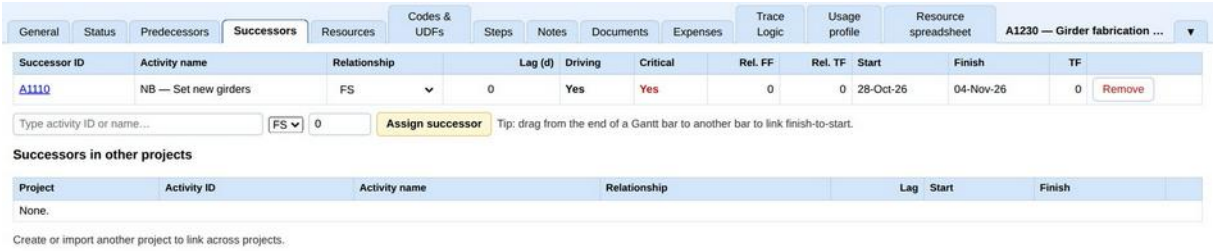


Figure 12-2. Successors tab

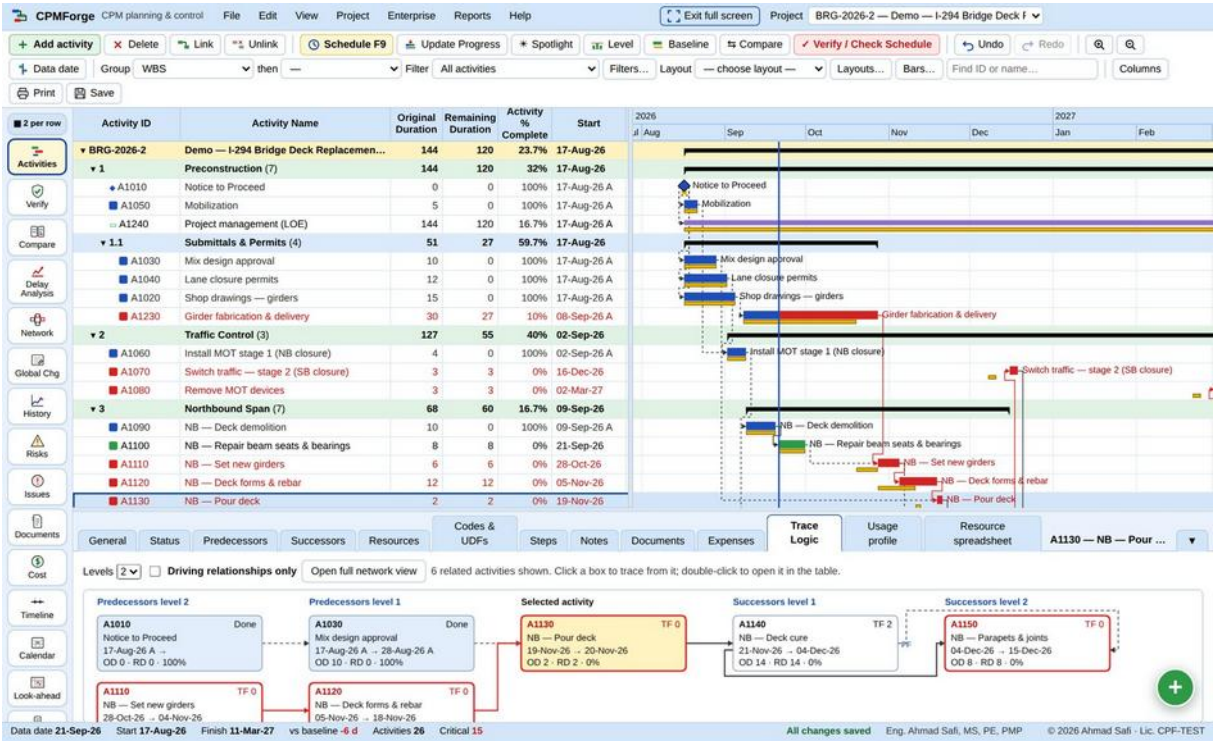


Figure 12-3. Trace logic of a selected activity

> **Tip**
>
> Every activity except the first and last should have at least one predecessor and one successor. Avoid negative lags (leads) and long lags; use activities instead.

CHAPTER 13

Calendars and work periods

Calendars define working days, working hours, holidays and exceptions. Open the **Calendars** screen to create or edit them; assign a calendar to the project (default) and to individual activities.

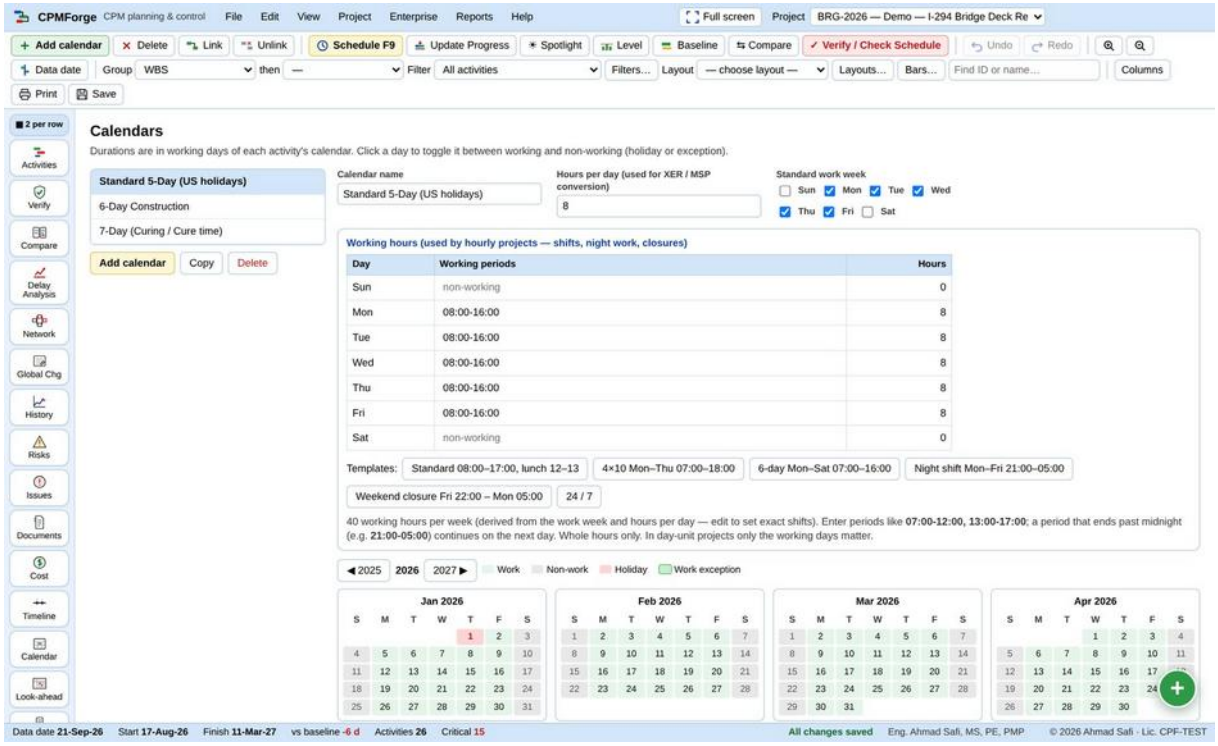


Figure 13-1. Calendars screen

- Typical calendars: 5-day, 6-day, 7-day (curing), winter shutdown, night work.
- Add holidays and exceptions (non-work days or extra work days) by date.
- Hourly calendars and shift templates (day, evening, night) support lane closures and night work — try File → Load hourly demo.
- Resources can have their own calendars.

> **Important** Wrong calendars are a common cause of unexpected dates. Check activity calendars when a date looks wrong, and use the verification checks on calendars.

CHAPTER 14

Scheduling and the critical path

Press F9 or click **Schedule F9** to calculate. CPMForge performs the forward pass (early dates), the backward pass (late dates), calculates total and free float, and marks the critical path. With **Auto-schedule** on, it recalculates after every change.

Results to review

- **Forecast finish** in the status bar and against the contract date.
- **Critical path** (red) — should be continuous from the data date to completion.
- **Negative float** — the forecast is later than a constraint or the contract date.
- **Schedule log** (Project → Schedule log) — open ends, constraints, out-of-sequence progress and warnings.

Multiple float paths

Project → Multiple float paths finds the driving path and the next paths to a chosen end activity, numbering them 1, 2, 3… as in P6.

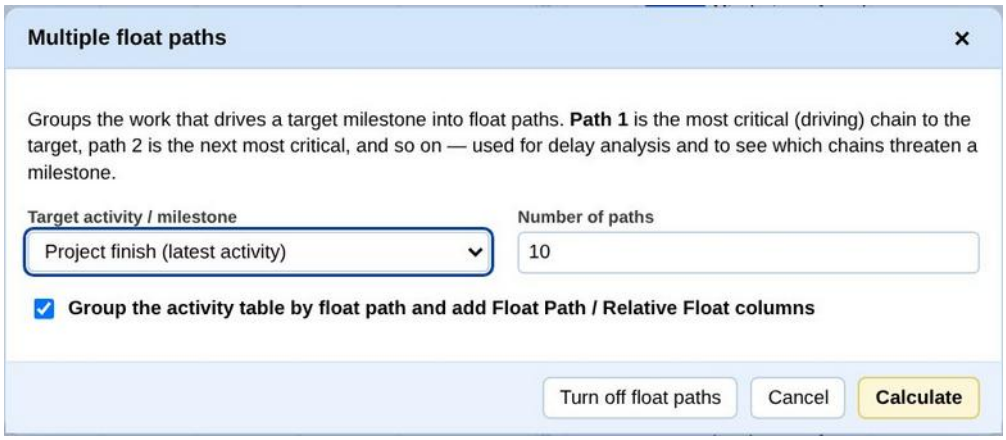


Figure 14-1. Multiple float paths

Constraints

Constraints (Status tab) fix dates: start on or after, finish on or before, must start / finish on, as late as possible, mandatory start / finish. Use them only for contract dates and outside commitments — the verification counts and flags them.

CHAPTER 15

Codes, UDFs, steps, notes and documents

Activity codes and user-defined fields

Activity codes classify activities (responsibility, area, phase, crew, stage…) and can be hierarchical. UDFs add your own fields (text, number, date, cost). Define them on the **Codes** screen; assign values in the **Codes & UDFs** tab. Group, filter and report by any code.

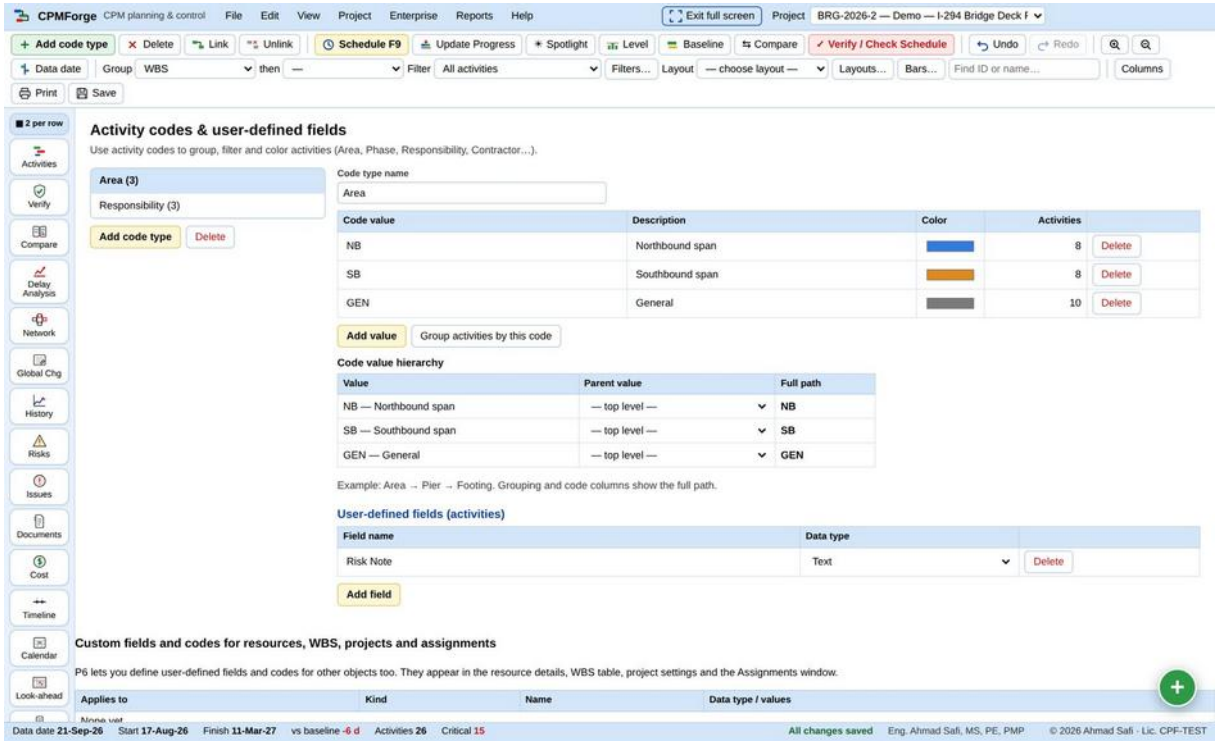


Figure 15-1. Activity codes & UDFs

> **Tip** Create a “Responsibility” code (e.g. GC, SUB, OWN, UTIL). The look-ahead, narrative and delay analysis use it to show who is responsible.

Steps, notes and documents

- **Steps** divide an activity into weighted sub-tasks; completing steps updates physical % complete.
- **Notes** store notebook text for the activity.
- **Documents** link drawings, submittals, RFIs and files to activities (also the Documents screen).

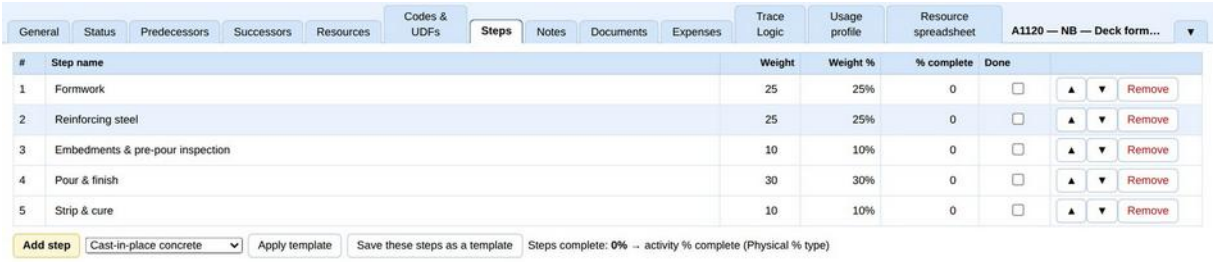


Figure 15-2. Steps tab



Figure 15-3. Notes tab with notebook topics

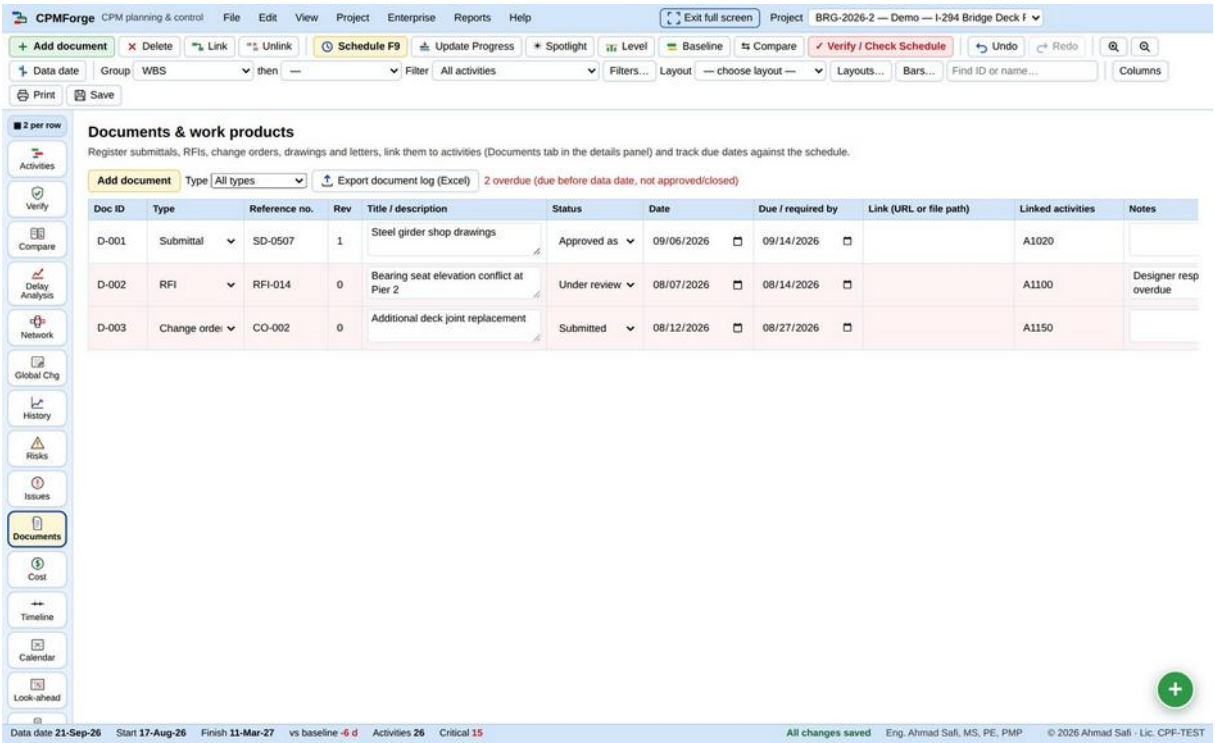


Figure 15-4. Documents register

CHAPTER 16

Resources, roles and leveling

Resources (labor, equipment, material) and roles are defined on the **Resources** screen with price types, overtime factor, calendars, shifts and dated maximum units. Assign them in the **Resources** tab of an activity.

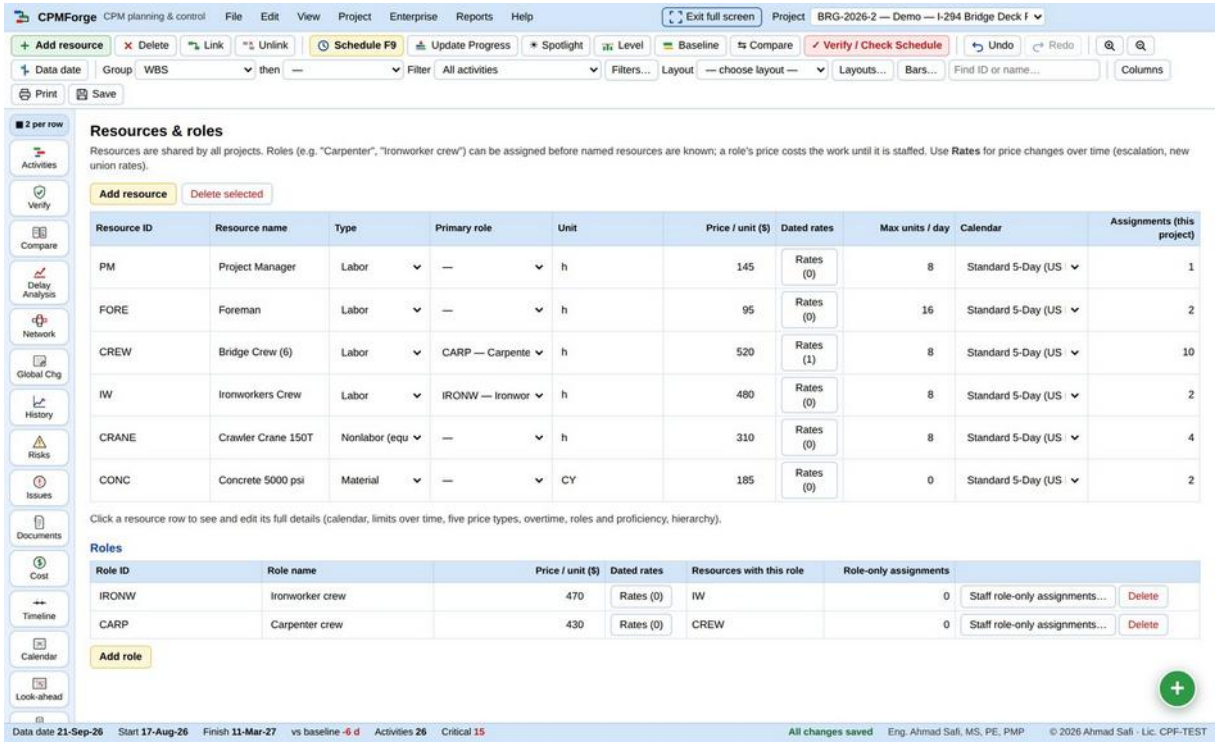


Figure 16-1. Resources screen

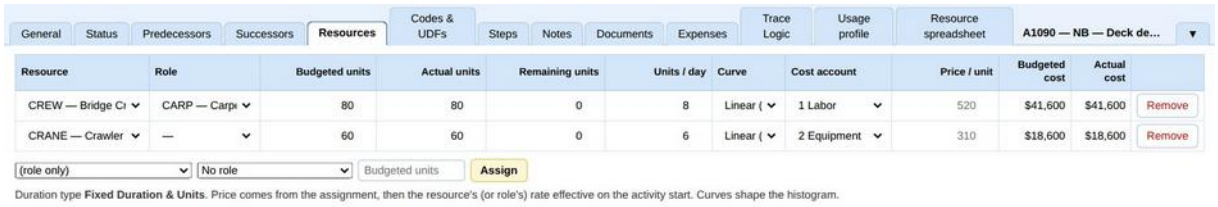


Figure 16-2. Resources tab of an activity

Usage, assignments and spreadsheets

- **Usage** — histogram of demand against availability by resource.
- **Assignments** — all assignments in one window with price type, units, curve and lag.
- **Spreadsheet** — units or cost by week or month.

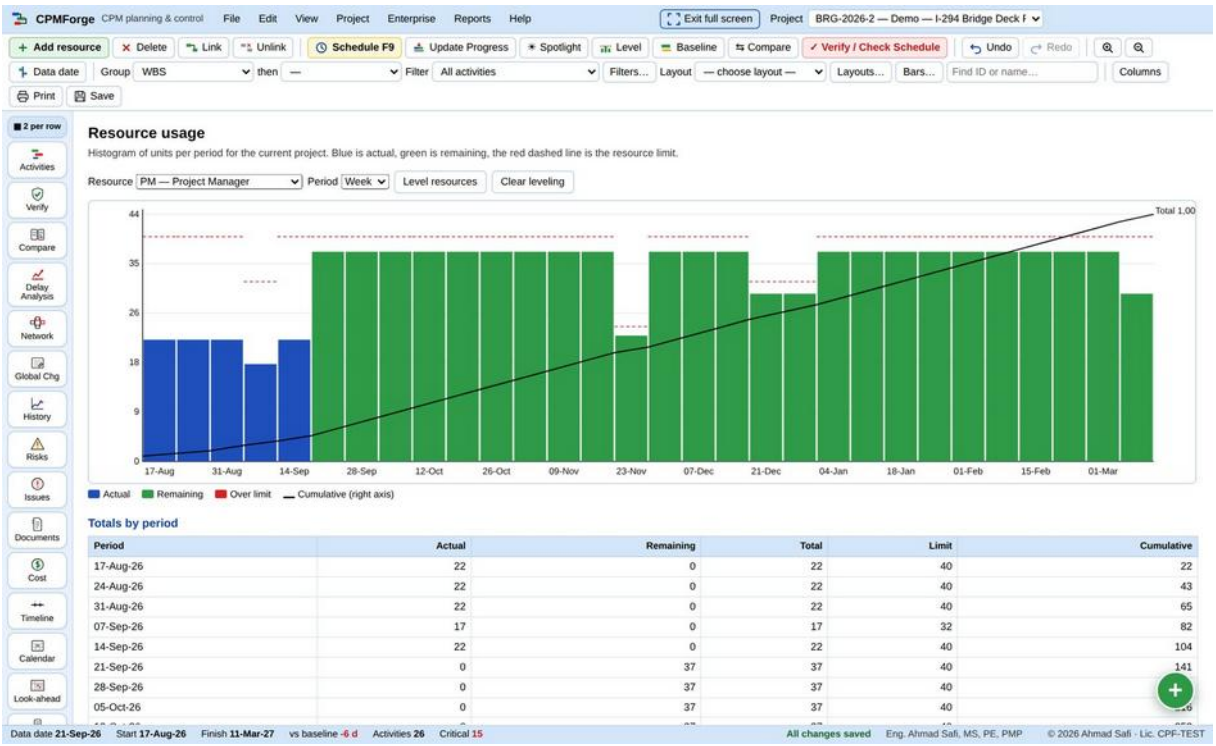


Figure 16-3. Resource usage histogram

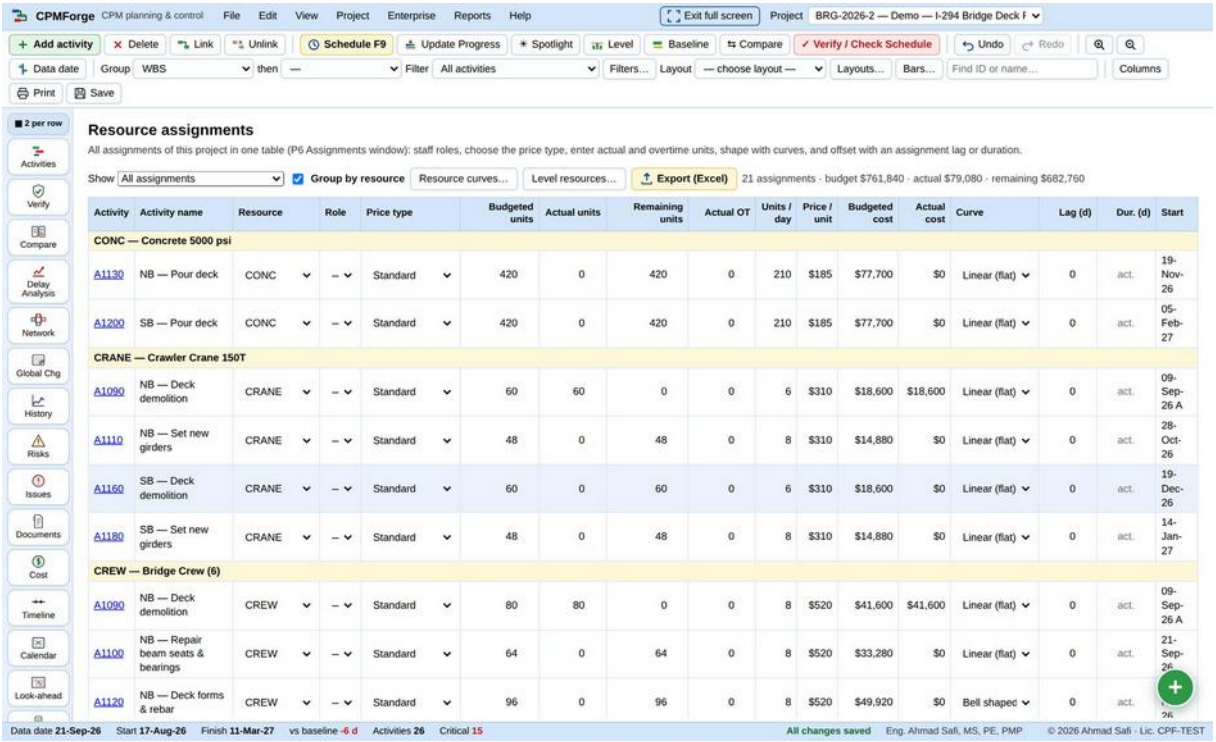


Figure 16-4. Assignments window

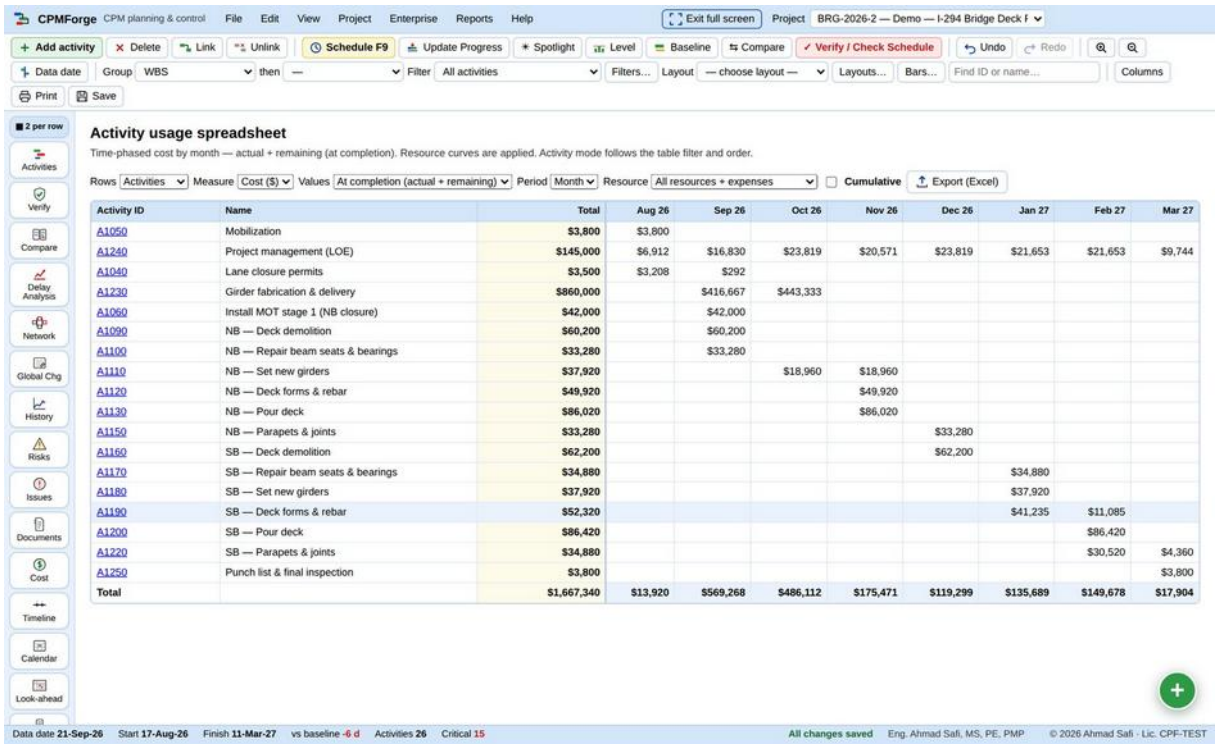


Figure 16-5. Usage spreadsheet

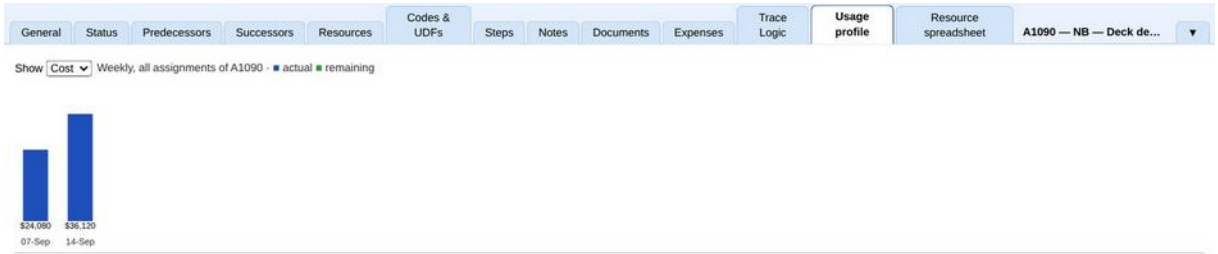


Figure 16-6. Usage profile tab of an activity

Leveling

Project → Level resources delays activities within their float (or beyond, if allowed) so resources are not over-allocated, using leveling priorities. **Clear leveling** removes the delays.

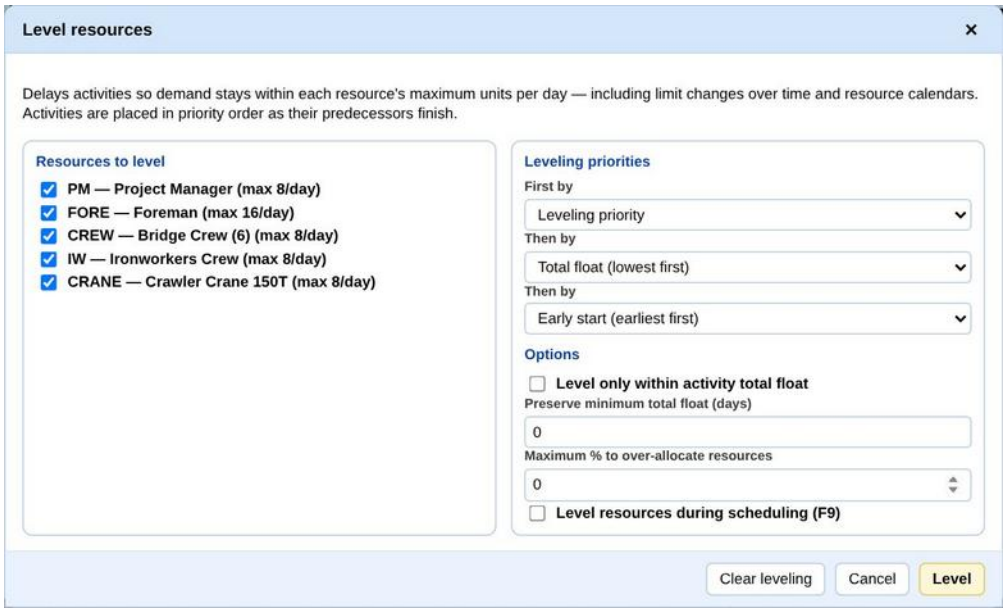


Figure 16-7. Leveling options

CHAPTER 17

Cost, expenses and earned value

Costs come from resource assignments and expenses. The **Cost** screen holds cost accounts, funding and the budget summary. **Tracking / Earned value** shows planned value, earned value, actual cost, SPI, CPI, five estimates at completion, earned schedule and S-curves, by project, WBS or period.

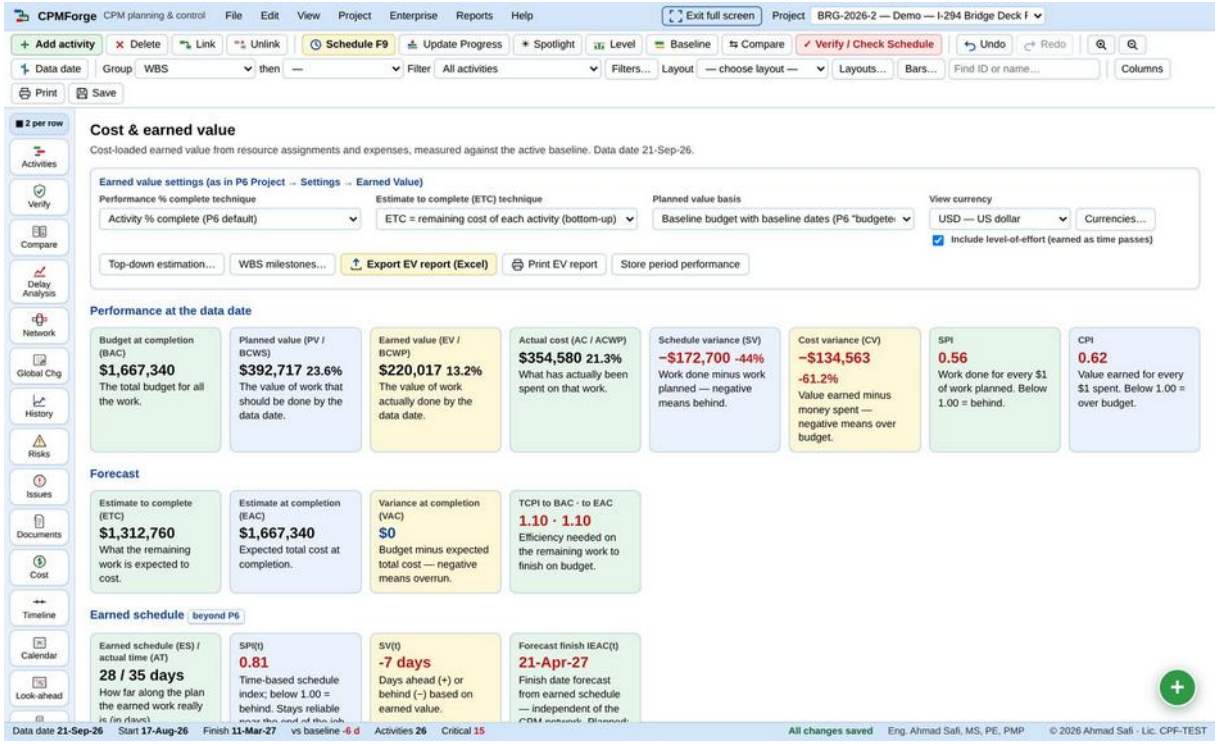


Figure 17-1. Tracking and earned value

- Six earned-value techniques (activity %, 0/100, 50/50, custom, WBS milestones, units), set per project or per WBS.
- Financial periods (pay-period cut-off, weekly, 4-4-5) and past period actuals.
- Currencies and exchange rates; top-down estimation.

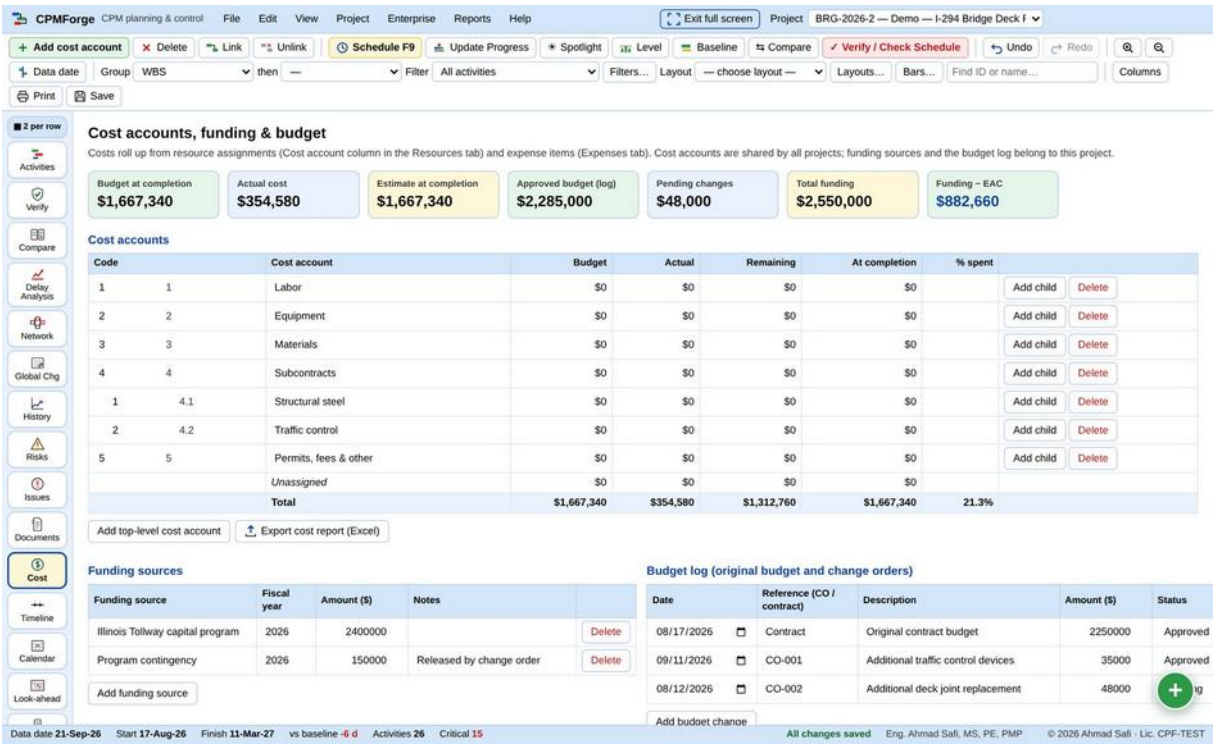


Figure 17-2. Cost accounts, funding and budget

Part IV — Viewing the Schedule

Gantt chart, filters, layouts and other views

CHAPTER 18

Gantt chart and bars

- **Zoom** with the toolbar magnifiers or by dragging the timescale; **View → Go to data date** scrolls to the data date.
- **Bar styles** (View → Bar styles) set colors for critical, remaining, actual, baseline and float bars.
- Toggle relationship lines, baseline bars, float bars, labels and the details panel from the View menu.
- Drag a bar to move it (sets a start-no-earlier-than constraint), drag its end to change the duration; right-click a bar for more options.

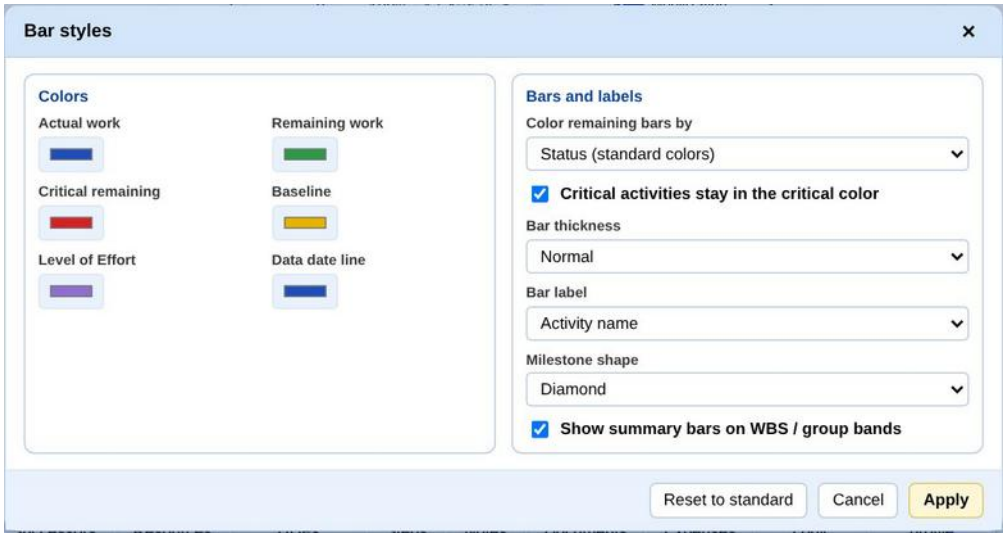


Figure 18-1. Bar styles

CHAPTER 19

Filters, grouping, sorting and layouts

- **Filter** box on the toolbar — quick filters (critical, near-critical, not started, in progress, milestones…).
- **Filters…** — build your own with AND / OR conditions on any column.
- **Group / then** — group by WBS, codes, calendar, responsibility, with subtotals.
- Click a column heading to sort.
- **Find** box — type an ID or name to jump to it.
- **Layouts** save columns, grouping, sorting, filters and bars under a name; export and import layouts to share them.

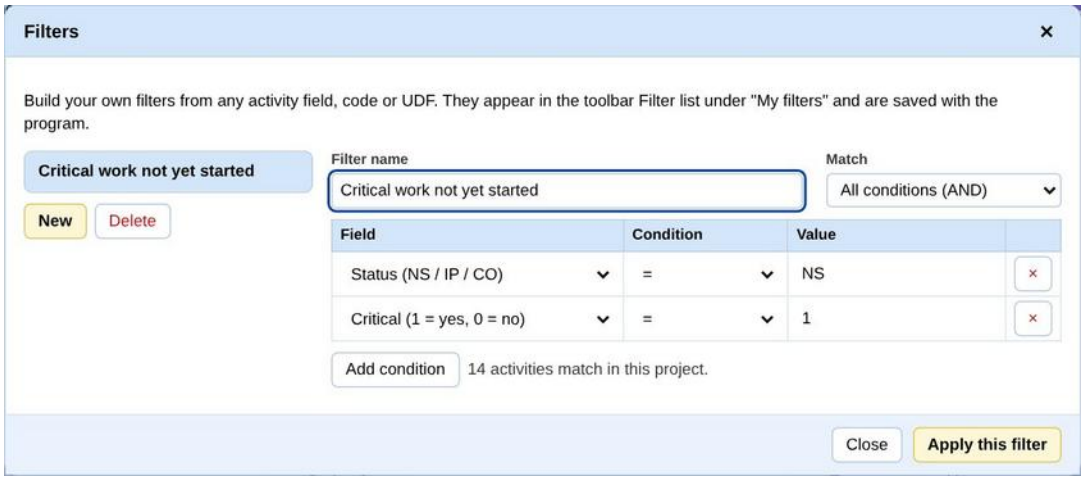


Figure 19-1. Filters

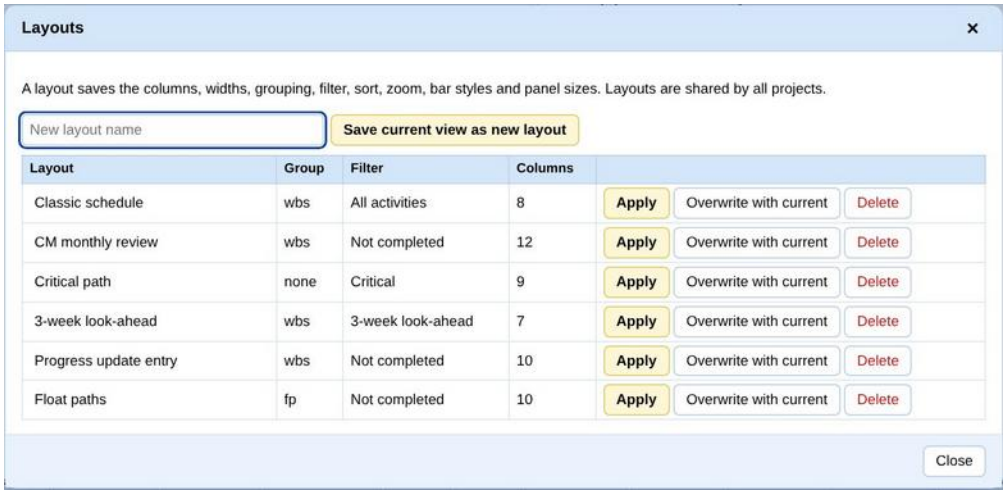


Figure 19-2. Layouts

User preferences and toolbar

Edit → User preferences sets the date format, row height, font size and duration units. **View → Customize toolbar** chooses toolbar buttons.

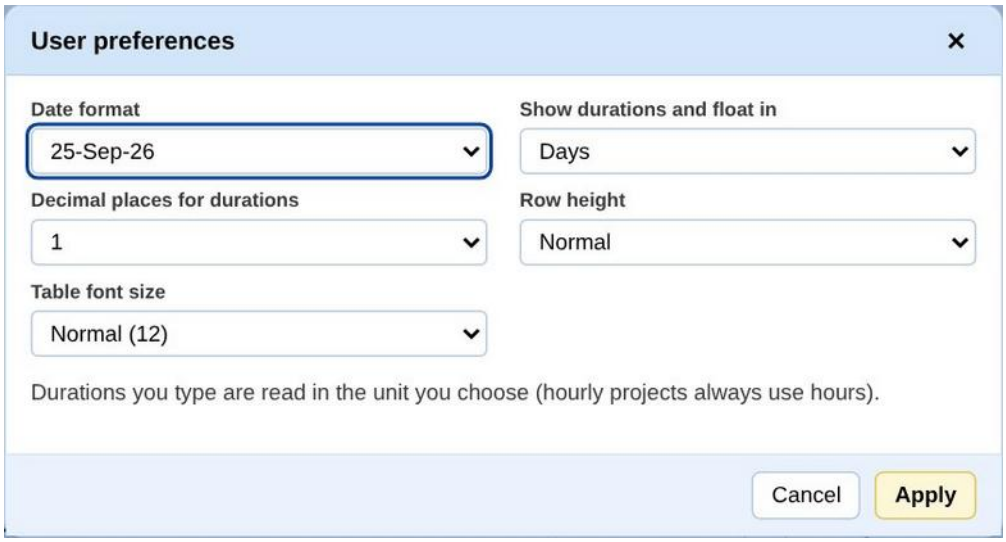


Figure 19-3. User preferences

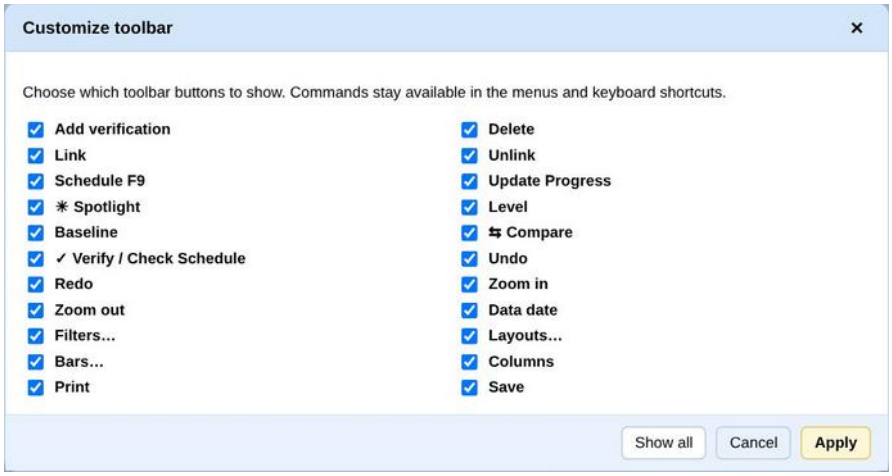


Figure 19-4. Customize toolbar

CHAPTER 20

Other views

Network logic diagram

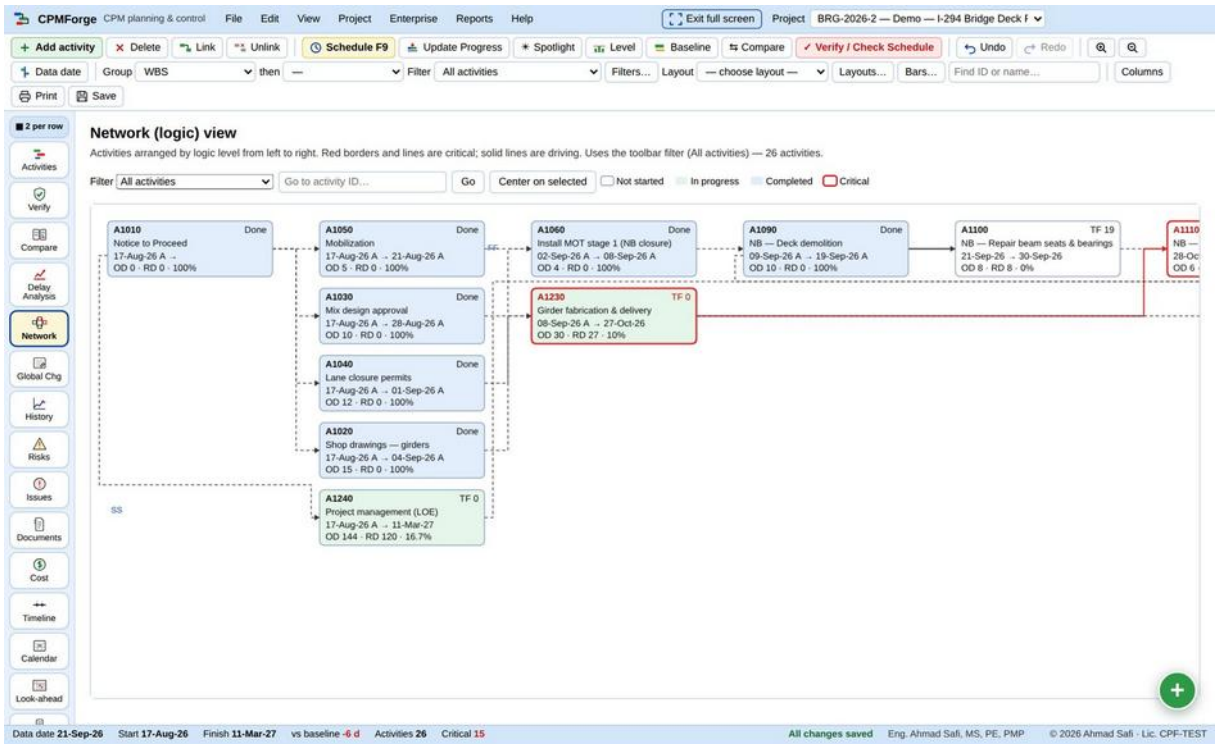


Figure 20-1. Network view

Time-scaled logic diagram

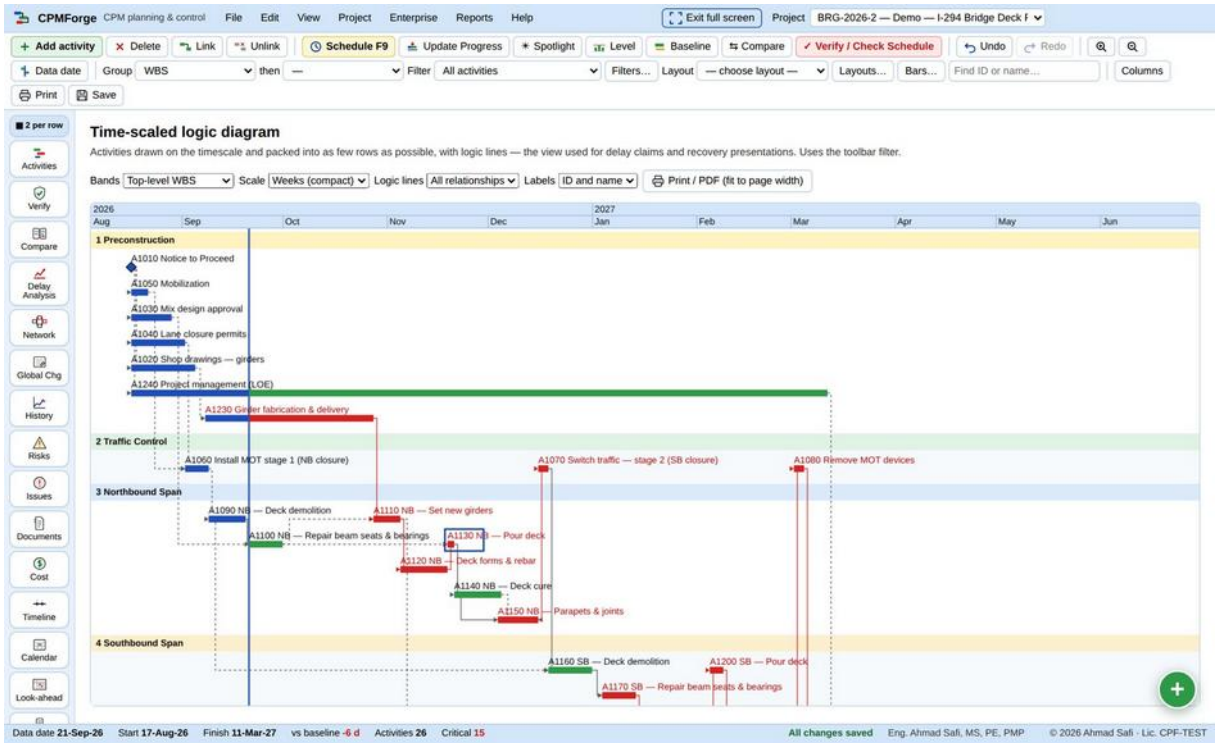


Figure 20-2. Time-scaled logic diagram

Timeline

Milestones and key dates on one line — useful for executive presentations.

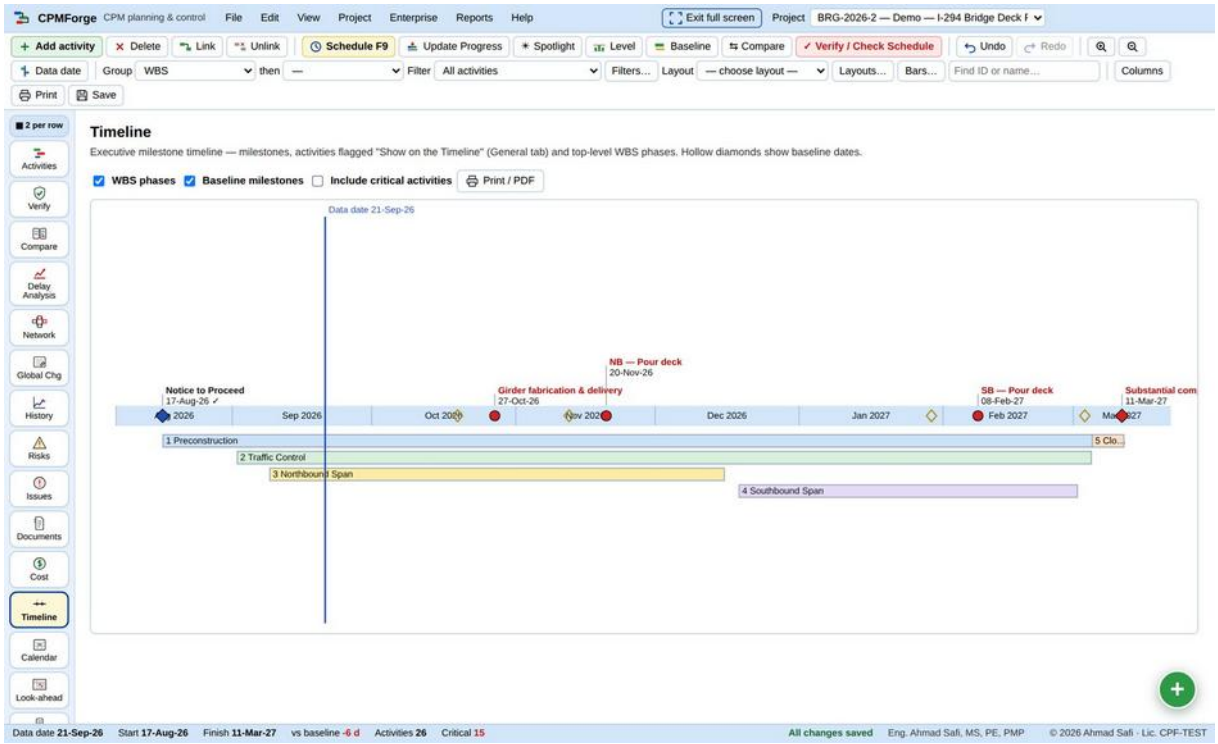


Figure 20-3. Timeline

Calendar view

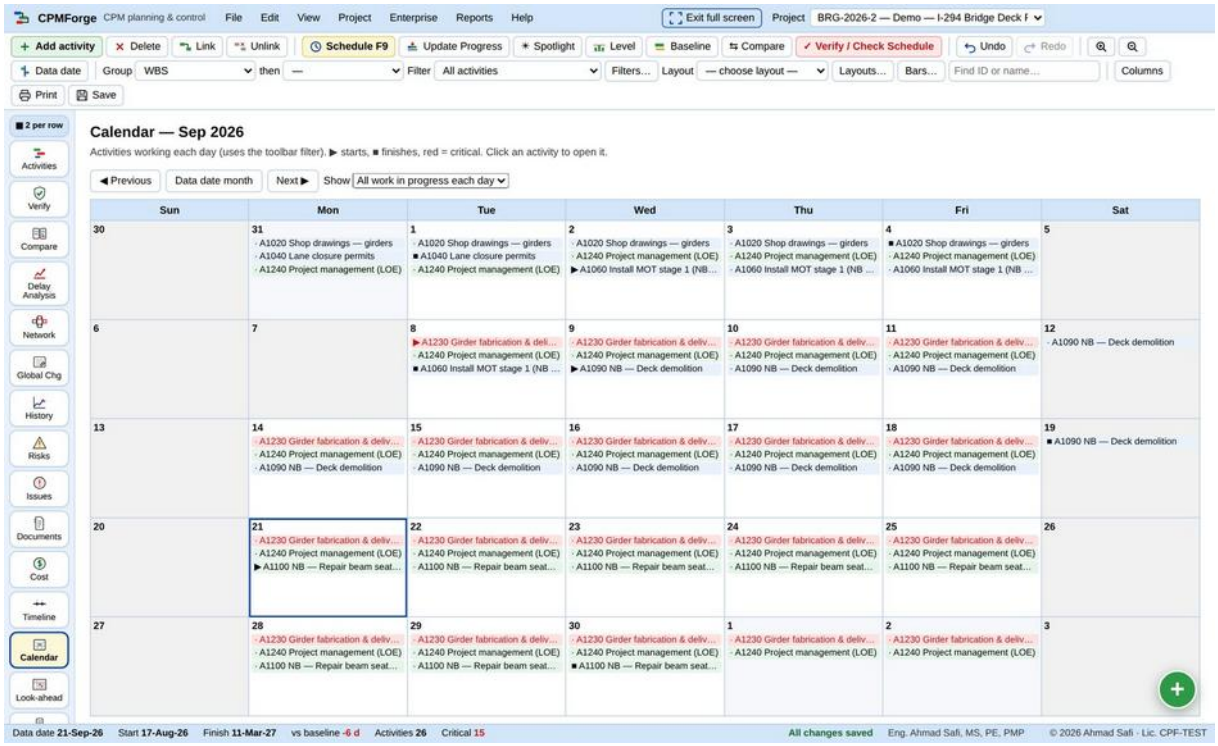


Figure 20-4. Calendar view

Mobile look-ahead

On a phone CPMForge opens a card view of the look-ahead: one card per activity per week, Mo–Su boxes with X on working days, gray non-working days, a responsibility filter and week buttons.

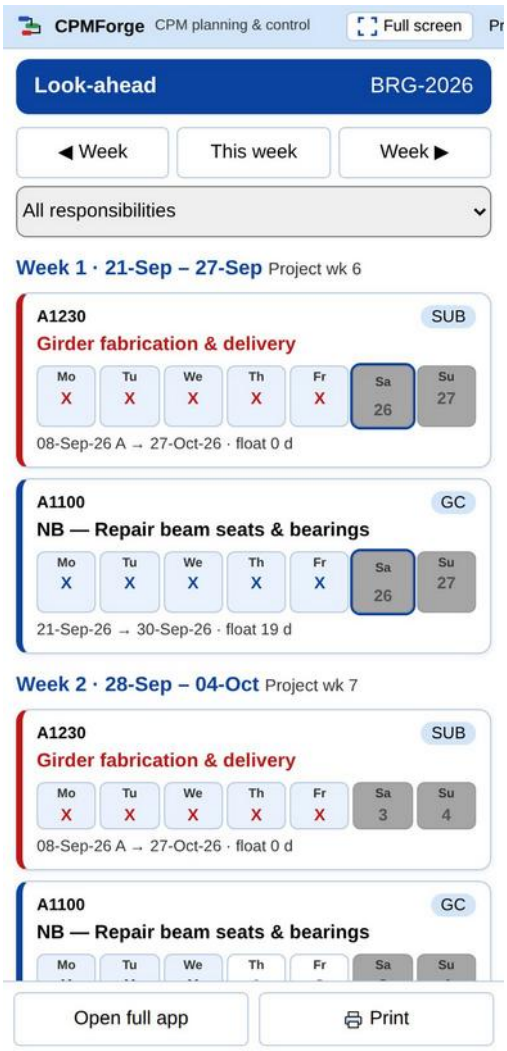


Figure 20-5. Mobile look-ahead on a phone

Part V — Updating the Schedule

Baselines, progress, history, comparison and look-ahead

CHAPTER 21

Baselines

A baseline is a saved copy of the approved schedule used to measure variance. Create one with **Project → Maintain / create baseline**; manage them on the **Baselines** screen. Up to three baselines can be shown on the Gantt, and baselines can be updated for added activities.

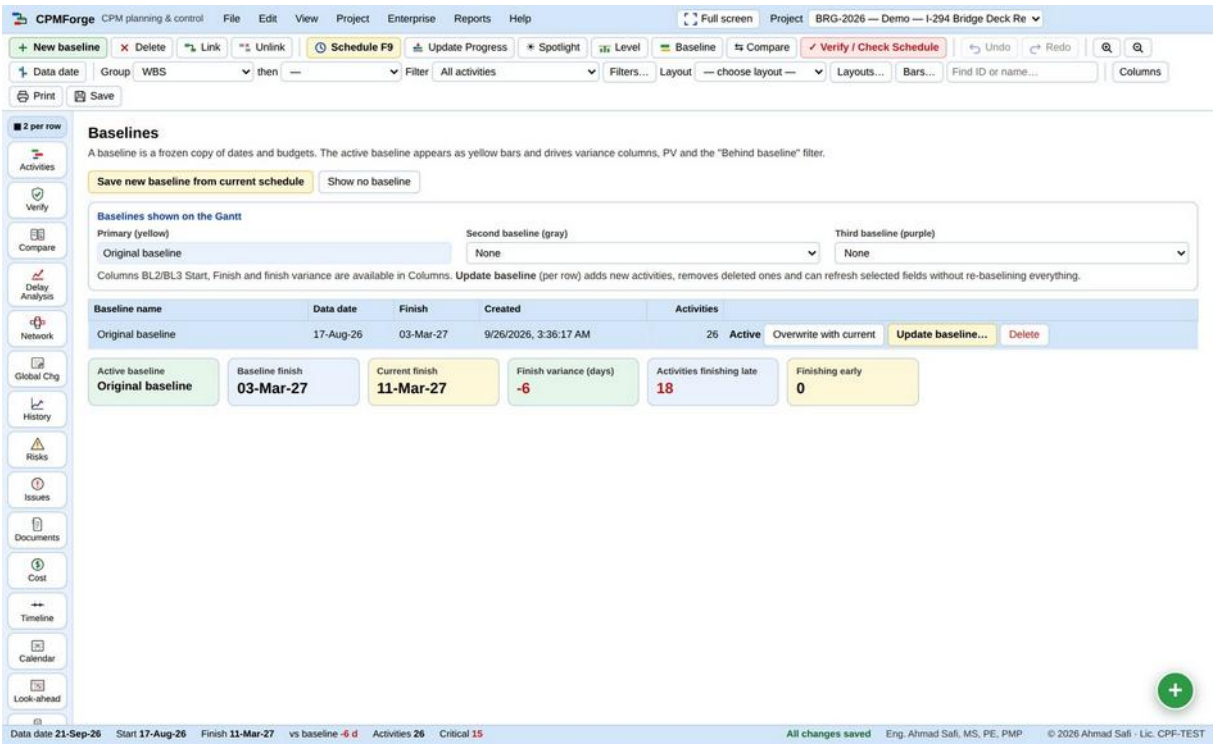


Figure 21-1. Baselines screen

CHAPTER 22

Updating progress

Monthly update steps

1. Optional: **File → Export progress update sheet (Excel)** and send it to the field or contractor.
2. Click **Update Progress**: set the new data date.
3. Enter actual start and finish dates, % complete and remaining durations in the table or the **Status** tab — or import the filled-in sheet (**File → Import progress update**).
4. Or use **Project → Apply actuals** to give actual dates to activities that went as planned.
5. Turn on ❋ **Spotlight** to highlight the activities that should have been updated this period.
6. Press F9, then **Verify** and **Compare**.
7. **Project → Store period performance** to record the update for history, trends and delay analysis.

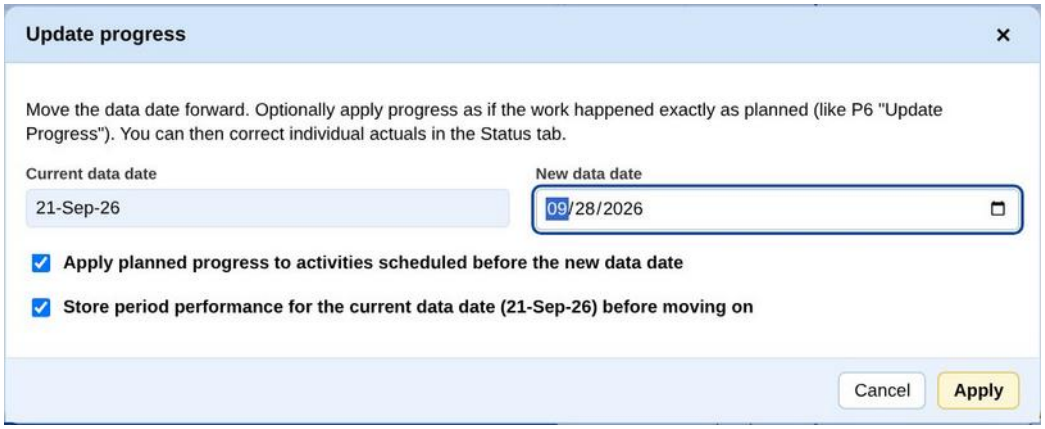


Figure 22-1. Update progress

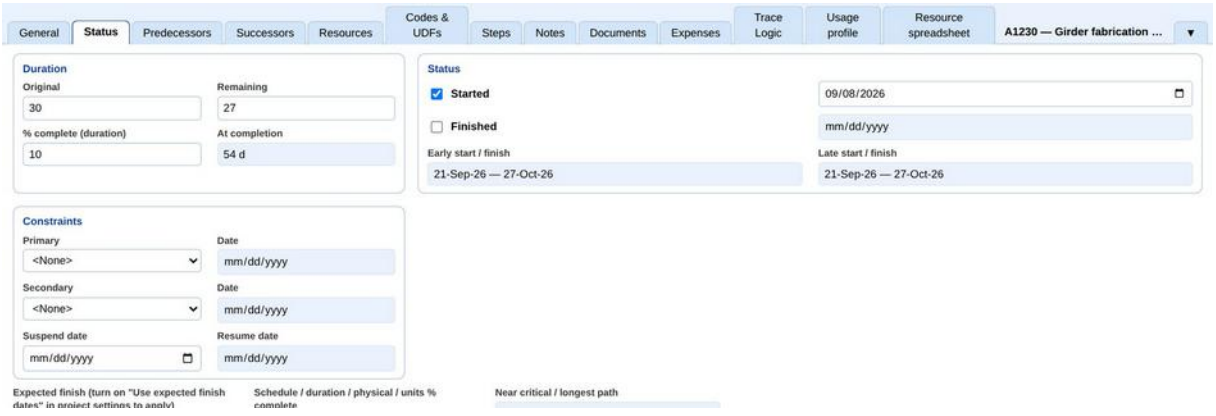


Figure 22-2. Status tab

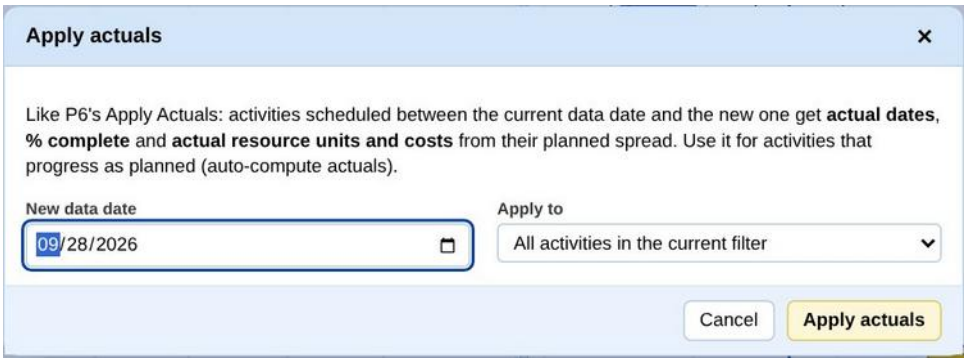


Figure 22-3. Apply actuals

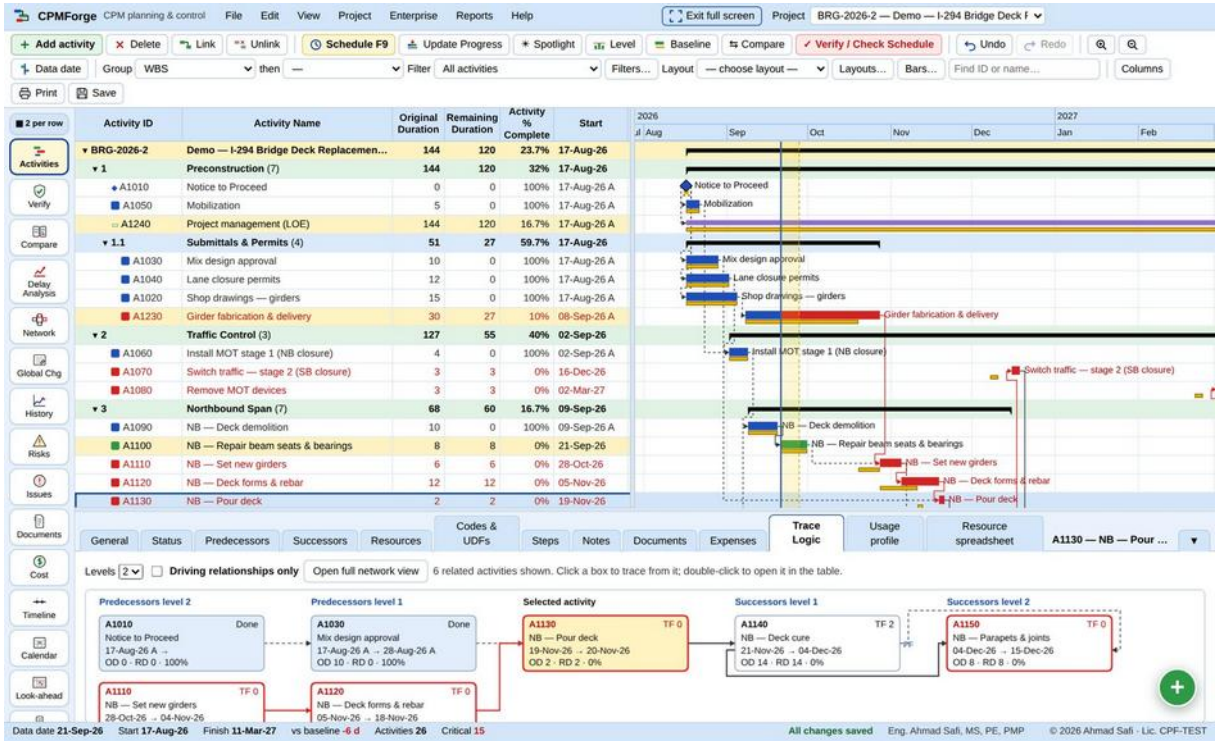


Figure 22-4. Progress spotlight

> **Note**
>
> Suspend and resume dates, expected finish dates, duration types and % complete types (duration, physical, units) are set in the Status and General tabs, as in P6.

CHAPTER 23

History and trends

Each stored update keeps the dates, float and status of every activity. The **History** screen charts the forecast finish, % complete and float over time and lists each period. These records drive the delay analysis and the narrative.

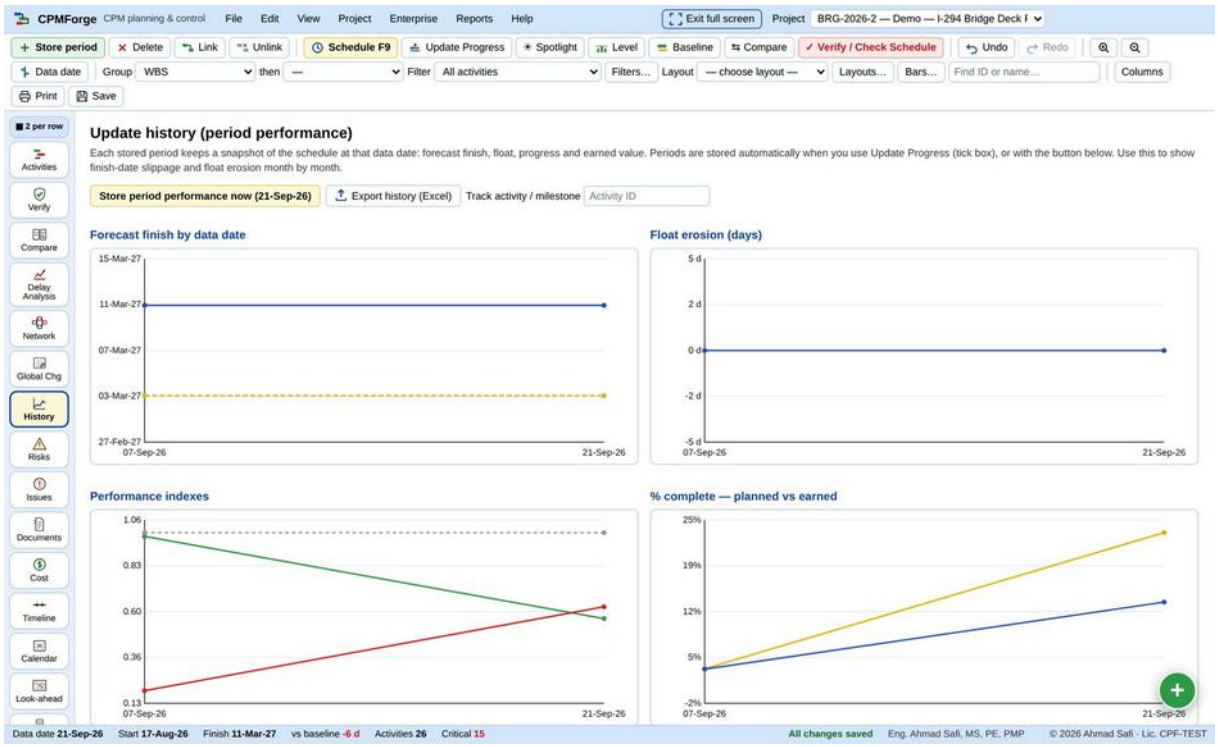


Figure 23-1. History and trends

CHAPTER 24

Comparing updates

Compare (toolbar or Reports → Compare schedule updates) compares the current schedule with a previous update, a baseline or another project: added and deleted activities, changes to durations, logic, constraints, calendars, dates and float, with red flags for suspicious changes.

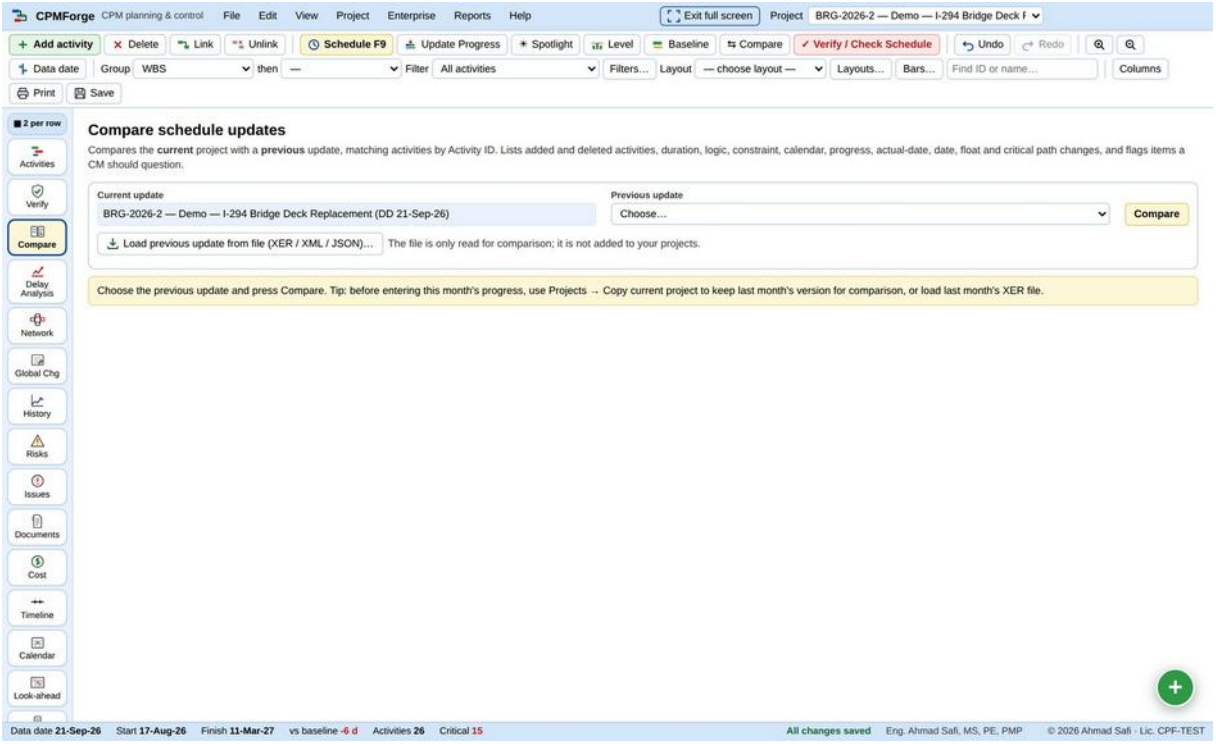


Figure 24-1. Compare updates

CHAPTER 25

Look-ahead scheduling

The **Look-ahead** grid shows the next weeks as Monday–Sunday columns with an X on each working day of each activity — the chart used in weekly progress meetings.

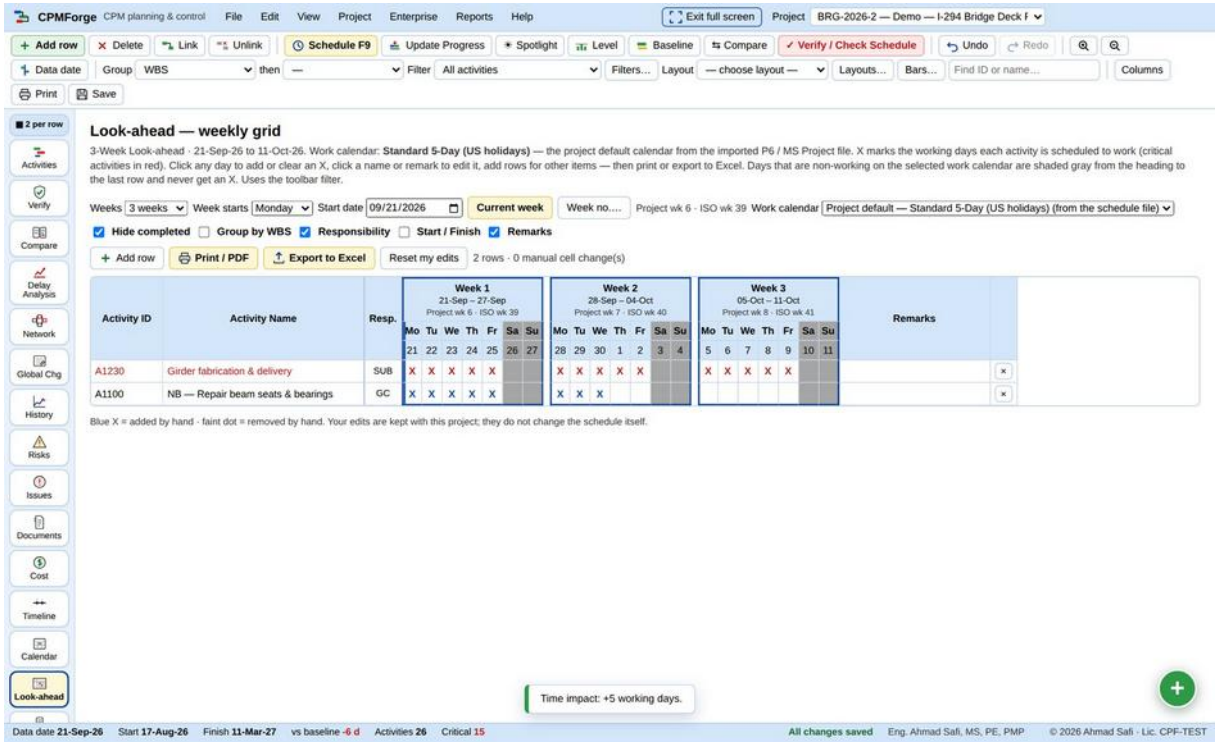


Figure 25-1. Look-ahead weekly grid

- Starts on the **current week**; choose another **Start date**, **Current week**, or **Week no.** (project or ISO week) at the right of the bar.
- Non-working days of the work calendar are shaded gray down the whole column and never get an X.
- Each week is boxed separately; click a cell to add or remove an X, click a name or remark to edit it, add rows for other items.
- Group by WBS, show responsibility, start/finish and remarks; **Print / PDF** or **Export to Excel**.

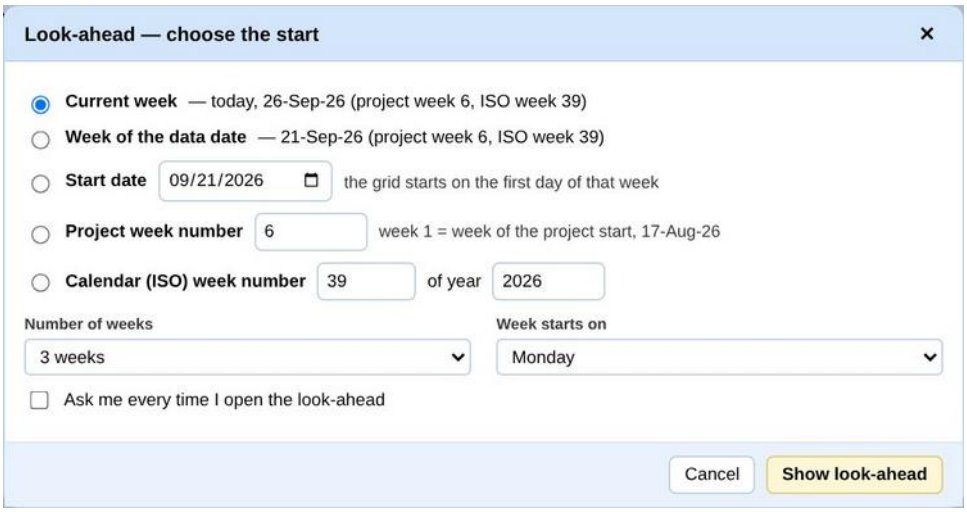


Figure 25-2. Choosing the look-ahead start

Part VI — Verification and Analysis

Schedule QA, DCMA, critical path, delay analysis, risks

CHAPTER 26

Verifying the schedule (one click)

Click ✓ **Verify / Check Schedule**. CPMForge runs 96 built-in checks plus the checks of the selected agency profile and your custom rules, and shows PASS / FAIL with the measured value, severity, a plain-English explanation and what to do.

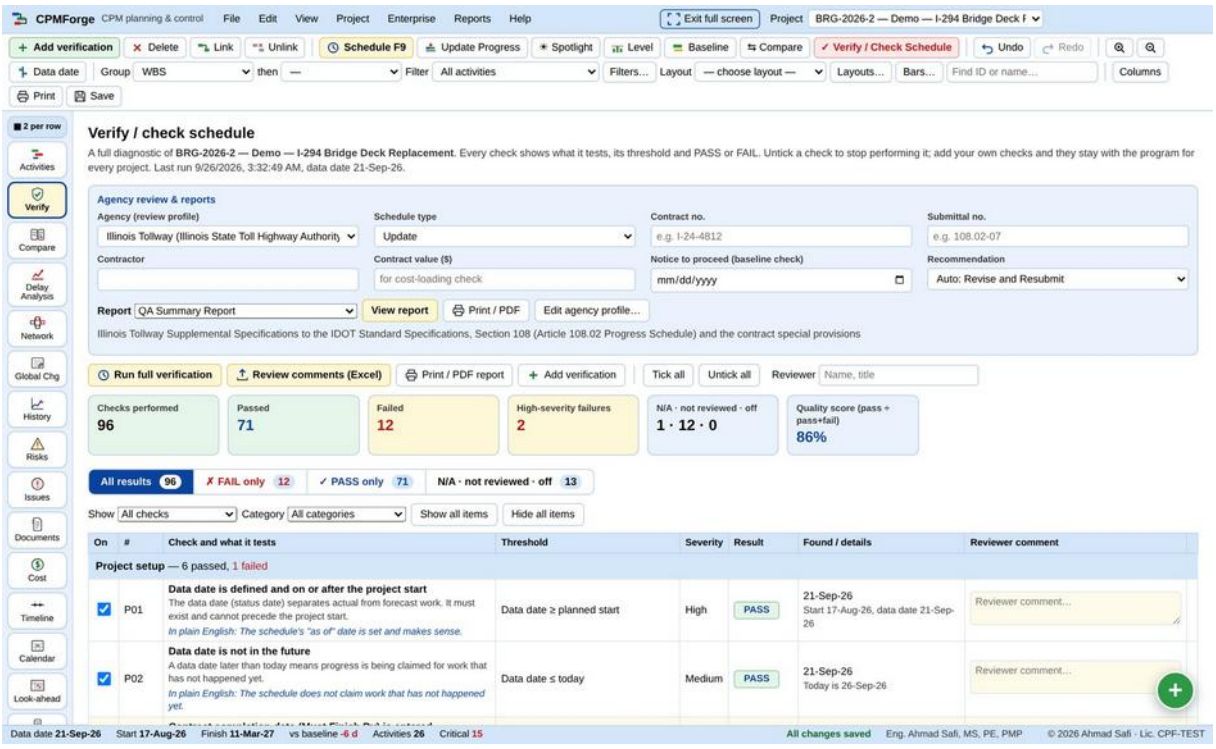


Figure 26-1. Verify screen

- Pick the **agency profile** (IDOT, Illinois Tollway, CDOT, county or general) — thresholds and checklists are editable.
- Show **only FAIL** items or all; hover over a FAIL for a pop-up explanation.
- Open the list of activities behind each finding and fix them directly.
- Type your reviewer comments; they flow into the QA reports.

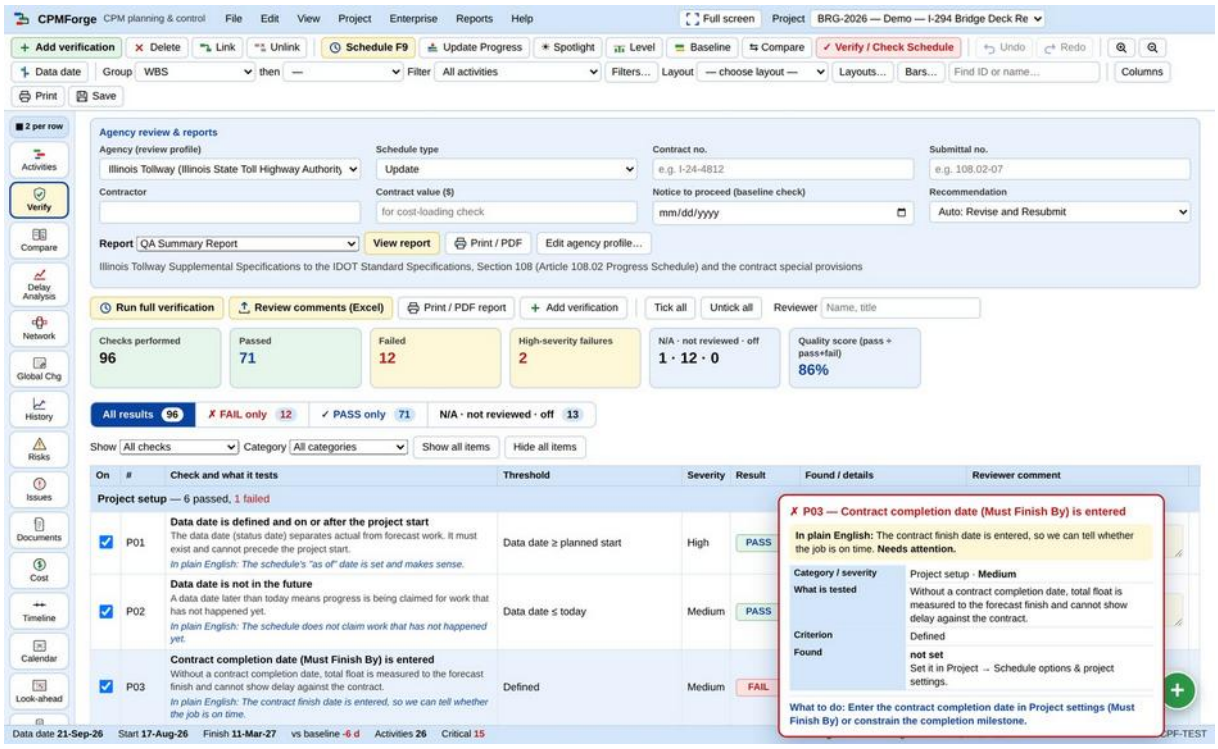


Figure 26-2. Plain-English pop-up for a failed check

DCMA 14-point assessment

The DCMA 14-point checks (logic, leads, lags, relationship types, hard constraints, high float, negative float, high duration, invalid dates, resources, missed tasks, critical path test, critical path length index and baseline execution index) are included and printed as their own report. Appendix A lists every check.

Custom checks

Reports → Add a custom verification creates your own rule — a field, a condition and a threshold, with severity — for company or contract requirements.

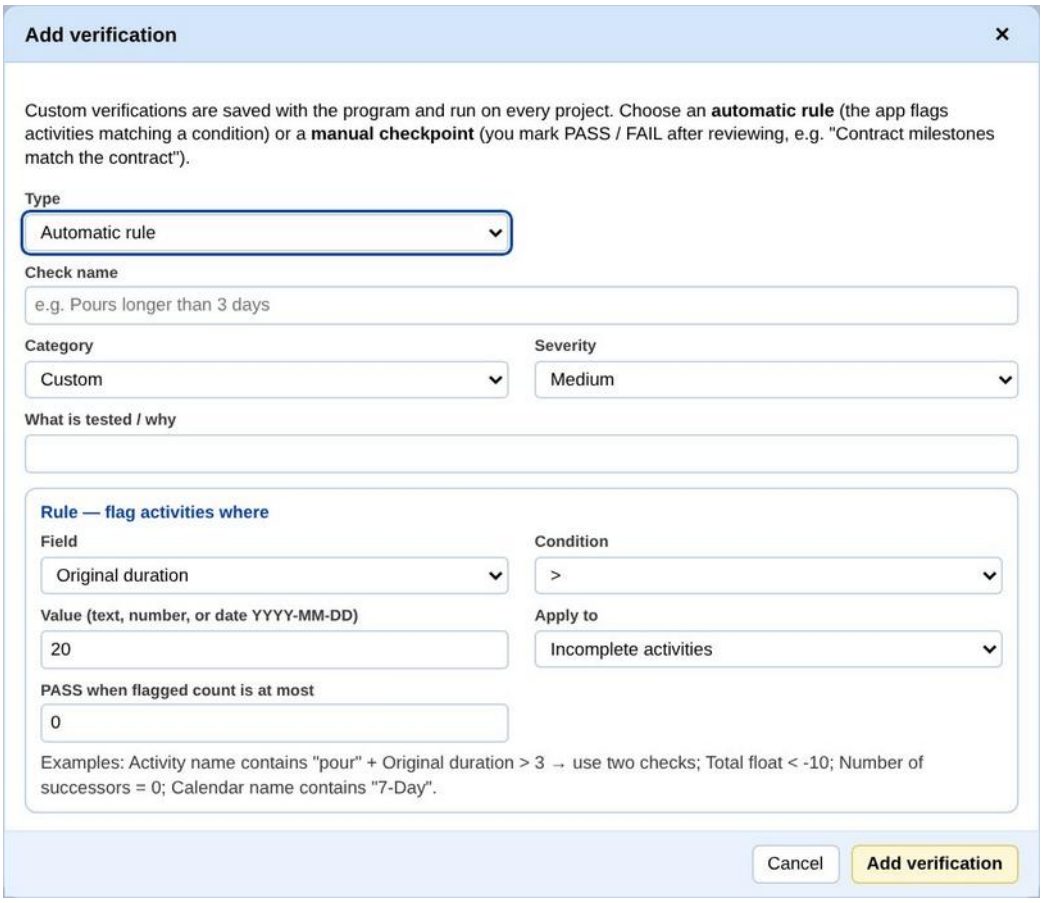


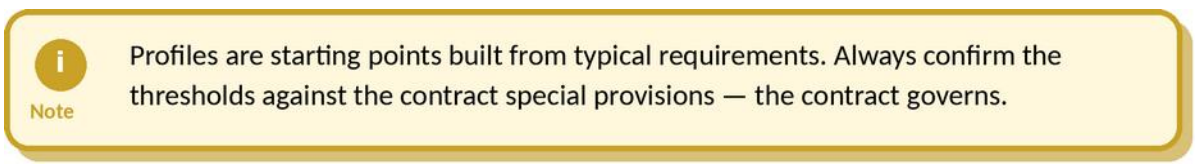
Figure 26-3. Add a custom verification

CHAPTER 27

Agency profiles and review thresholds

An agency profile adapts the verification to an owner's schedule specification: thresholds (maximum durations, lags, calendars, minimum milestones), required activity codes, settings the owner expects (retained logic, total-float calculation), required maintenance-of-traffic and utility activities, and a submittal checklist. Choose the profile on the Verify screen; every threshold and checklist item can be edited to match your contract special provisions.

Setting	IDOT	Illinois Tollway	Chicago DOT	County
Specification basis	IDOT Standard Specifications for Road and Bridge Construction, Section 108 (Article 108....	Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Sectio...	City of Chicago Department of Transportation construction specifications and the contrac...	County contract provisions; the IDOT Standard Specifications (Section 108) apply to stat...
Maximum activity duration (working days)	20	20	20	20
Maximum lag (working days)	10	10	10	15
Minimum number of milestones	2	3	2	1
Maximum number of calendars	5	5	5	4
Cost-loaded schedule required	No	No	No	No
Out-of-sequence setting expected	Retained logic	Retained logic	Retained logic	Retained logic
Total float calculated as	Finish float	Finish float	Finish float	Finish float
Maintenance-of-traffic stages required	Yes	Yes	Yes	Yes
Utility activities with responsibility required	No	Yes	Yes	No
Required activity codes	Stage, Location, Responsibility	Stage, Location, Responsibility	Stage, Location, Responsibility	Stage, Location



IDOT — Illinois Department of Transportation — submittal checklist

- Transmittal letter identifying the submittal number and contents
- Native Primavera P6 file (.XER) that opens without errors

- PDF Gantt chart organized by WBS / stage, showing the data date and critical path
- Narrative report: progress this period, critical path discussion, delays and causes, changes since last submittal, work planned next period
- Longest path / critical path report
- Contract completion date and interim completion dates shown as milestones
- Staging and traffic control sequence matches the plans and Traffic Control special provisions
- Working-day calendars reflect seasonal restrictions and lane-closure hours
- Updates submitted at the required interval (monthly or as specified, e.g. 25 / 50 / 75 % completion points)
- Recovery schedule and narrative submitted when the forecast completion is late
- Baseline changes approved by the Engineer before they appear in updates

Illinois Tollway (Illinois State Toll Highway Authority) — submittal checklist

- Transmittal letter identifying the submittal number and contents
- Native Primavera P6 file (.XER) that opens without errors
- PDF Gantt chart organized by WBS / stage, showing the data date and critical path
- Narrative report: progress this period, critical path discussion, delays and causes, changes since last submittal, work planned next period
- Longest path / critical path report
- Contract completion date and interim completion dates shown as milestones
- Schedule comparison with the previous update, with every logic, duration and constraint change explained
- Tollway lane-closure windows and maintenance of traffic stages reflected in calendars and logic
- Interfaces with adjacent Tollway / IDOT contracts shown as milestones (critical items and completion dates listed in the special provisions)
- Utility relocation and permit activities shown with responsible party
- Monthly update submitted with the pay estimate
- Recovery schedule when the forecast shows a late completion or interim milestone

CDOT — Chicago Department of Transportation — submittal checklist

- Transmittal letter identifying the submittal number and contents
- Native Primavera P6 file (.XER) that opens without errors
- PDF Gantt chart organized by WBS / stage, showing the data date and critical path
- Narrative report: progress this period, critical path discussion, delays and causes, changes since last submittal, work planned next period
- Longest path / critical path report
- Contract completion date and interim completion dates shown as milestones
- Utility coordination (OUC) and utility relocation activities shown with the utility owner as responsible party
- Public way work permits, street closure and parking restriction activities included
- Special event, holiday and construction moratorium periods reflected in calendars

- CTA / Metra / railroad and adjacent-agency coordination activities shown where applicable
- Restoration, punch list and final inspection activities included

County / Local Public Agency (county highway department) — submittal checklist

- Transmittal letter
- Schedule file (.XER or agreed format) and PDF bar chart
- Narrative: progress, critical work, delays, next-period work
- Contract completion date and any interim dates shown
- Traffic control stages match the plans
- Updates submitted at the interval required by the contract

Editing a profile

1. Open **Verify** and choose the agency profile.
2. Click **Edit agency profile…** and change any value — for example a 15-day maximum duration.
3. Edit, add or remove checklist items.
4. Run **Verify** again; the reports show the profile name and thresholds used.

CHAPTER 28

Critical path and near-critical analysis

The **Critical path** report lists the longest path from the data date to completion. Use **Multiple float paths**, **Trace Logic** and the near-critical threshold (Schedule options) to study the paths that could become critical. Compare critical paths between updates in **Compare** and **History**.

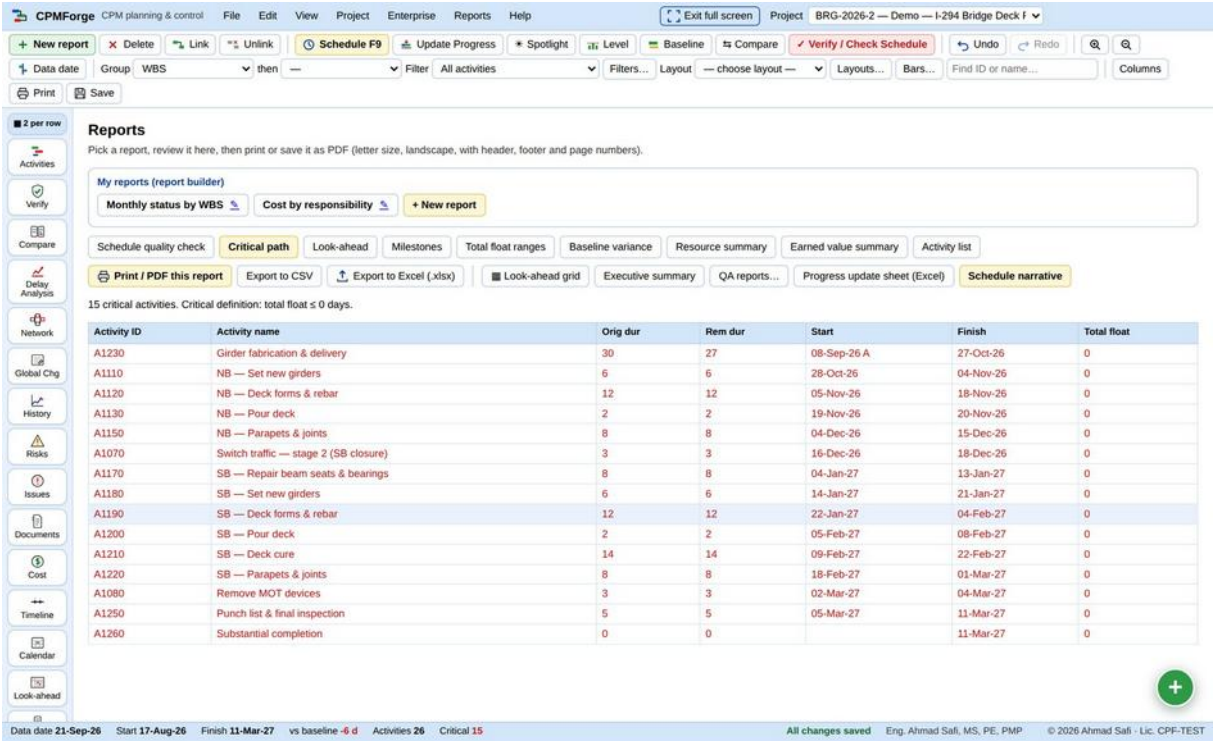


Figure 28-1. Critical path report

CHAPTER 29

Delay analysis

Windows analysis

Each window runs from one stored update to the next and shows how far the forecast completion moved, the critical-path activities that drove it, missed activities and the responsible party (suggested from the Responsibility code). Totals by party, a chart, a printed report and Excel export are provided.

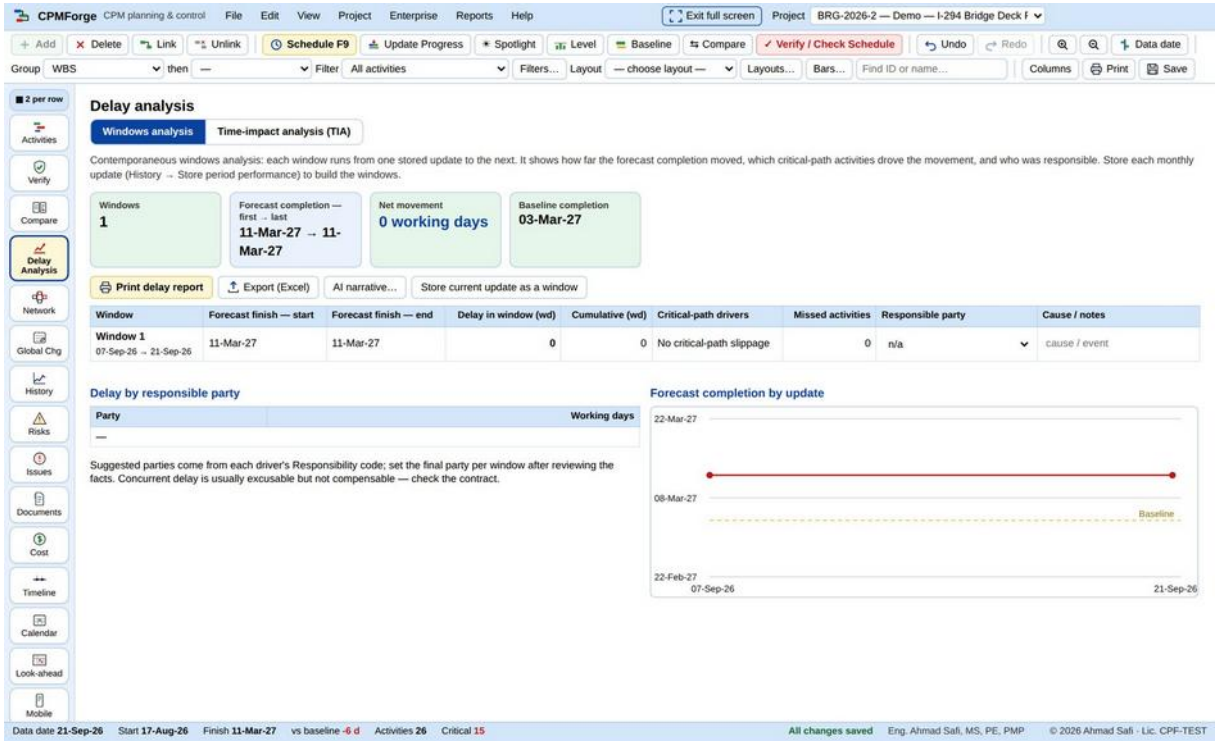


Figure 29-1. Windows analysis

Time-impact analysis (TIA)

1. Open **Delay Analysis → Time-impact analysis** and click **New delay event**.
2. Enter the event name, responsible party, notice date and reference.
3. Build the **fragnet**: the activities representing the delay, with durations, predecessors and successors in the current schedule.
4. Click **Run time-impact analysis**. A copy of the schedule is recalculated; your schedule is not changed.
5. Review the impact on completion and milestones; print the TIA report. Optionally insert the fragnet into the schedule.

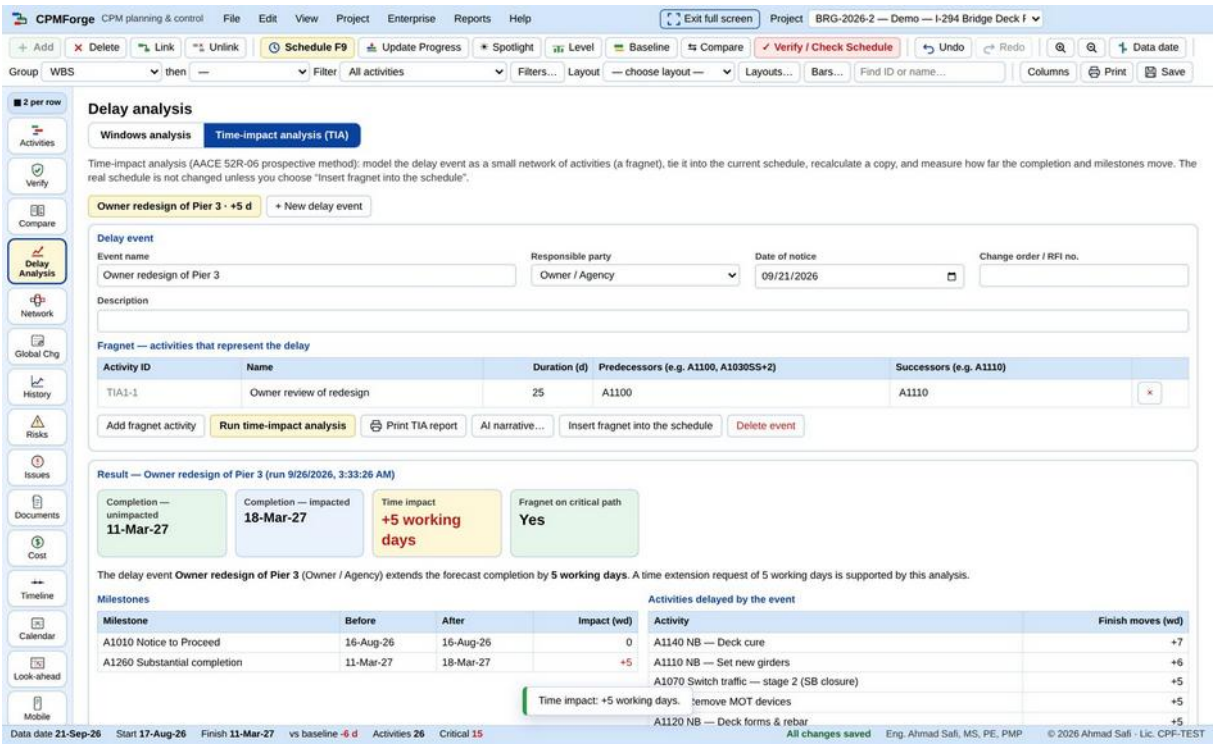


Figure 29-2. Time-impact analysis

> **Important** Delay analysis results support, but do not replace, the contract's time-extension procedures and professional judgment.

CHAPTER 30

Risks and issues

The **Risk register** records probability, impact, score, owner, response and linked activities, with a heat map. **Issues** tracks open problems and thresholds. Both feed the narrative and executive summary.

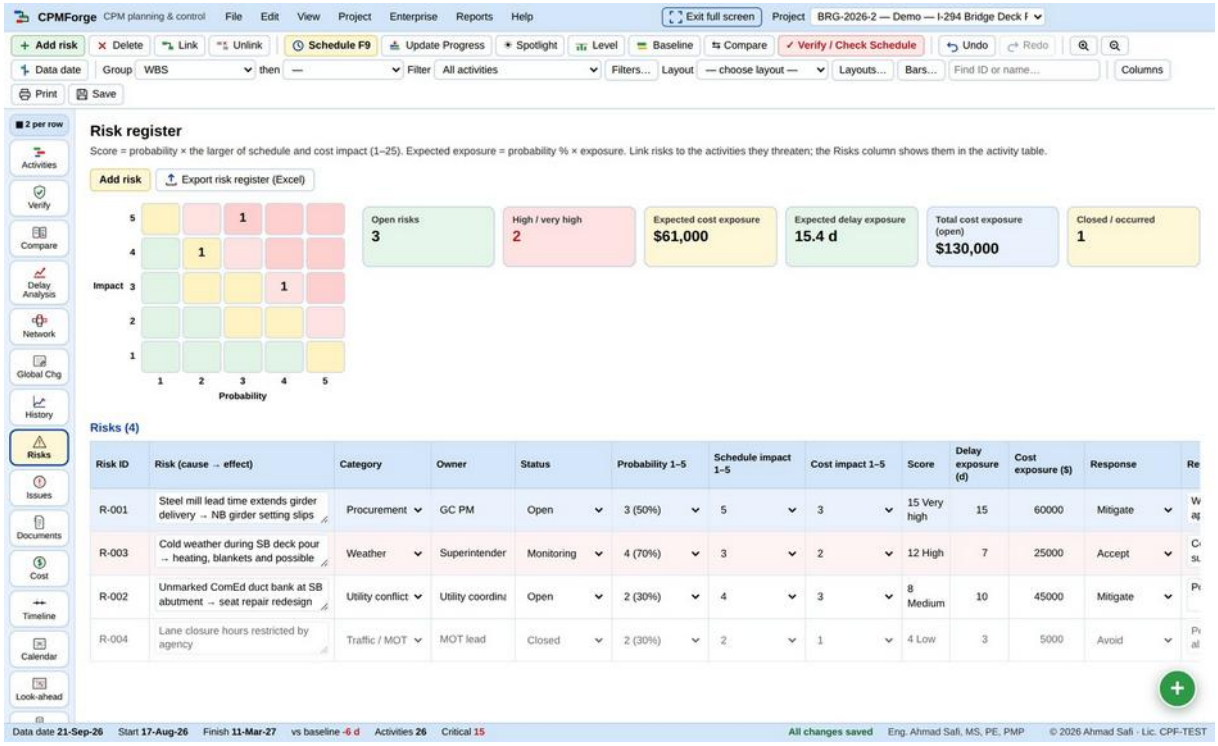
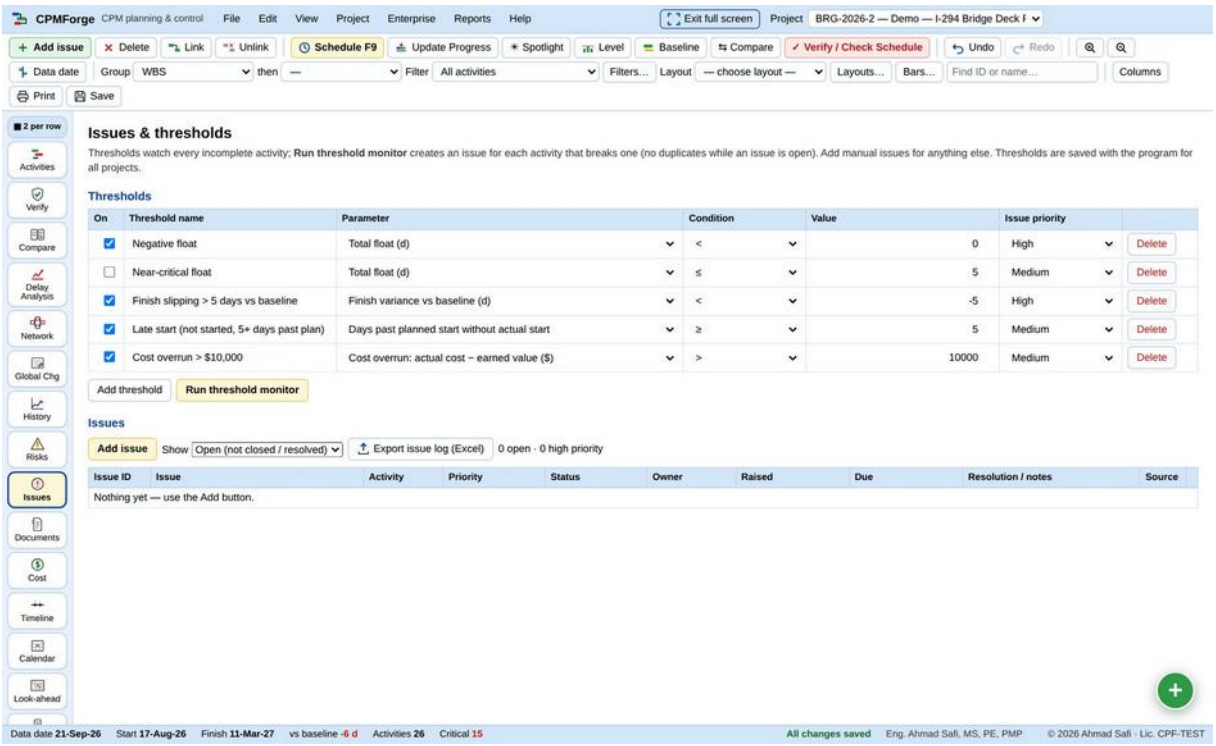


Figure 30-1. Risk register



On	Threshold name	Parameter	Condition	Value	Issue priority	
☑	Negative float	Total float (d)	<	0	High	Delete
☐	Near-critical float	Total float (d)	≤	5	Medium	Delete
☑	Finish slipping > 5 days vs baseline	Finish variance vs baseline (d)	<	-5	High	Delete
☑	Late start (not started, 5+ days past plan)	Days past planned start without actual start	≥	5	Medium	Delete
☑	Cost overrun > $10,000	Cost overrun: actual cost − earned value ($)	>	10000	Medium	Delete

Issue ID	Issue	Activity	Priority	Status	Owner	Raised	Due	Resolution / notes	Source

Figure 30-2. Issues

Part VII — Reports and Narratives

Every report explained: schedule reports, QA reports, narratives, analysis reports and Excel outputs

CHAPTER 31

How reports work in CPMForge

CPMForge turns schedule data into four kinds of deliverables. This part of the guide describes every report: how to open it, what it is for, what it contains, its options and its output formats.

Kind	Where	Examples
Schedule reports	Reports screen	Critical path, look-ahead, milestones, float ranges, baseline variance, resources, earned value, activity list, schedule quality.
QA reports	Verify screen → Report	Executive Summary, QA Summary, QA Full, Deficiency List, Transmittal Letter, Submittal Checklist, DCMA, narratives.
Analysis reports	Delay Analysis, Look-ahead, Tracking, Narrative screens	Windows analysis, time-impact analysis, weekly grid, earned value, professional narrative.
Excel workbooks	Buttons on each screen	Review comments workbook, look-ahead grid, progress update sheet, activity table, comparison, delay windows.

Output formats

- **Print / PDF** — every report prints with the page setup title block, company name and logo, header, footer and page numbers. Choose “Save as PDF” as the printer for a PDF file.
- **Word (.doc)** — QA reports and narratives download as Word documents you can edit before sending.
- **Excel (.xlsx)** — formatted workbooks with frozen headings and print titles.
- **CSV** — plain data for other programs.

Before you print a report

1. Calculate the schedule (F9) so dates and float are current.
2. Check **Page setup**: paper, orientation, company name, logo, signature names.
3. For QA reports choose the agency profile and type your reviewer summary on the Verify screen.
4. For the narrative, delay and changes sections, store each update and run **Compare** first.

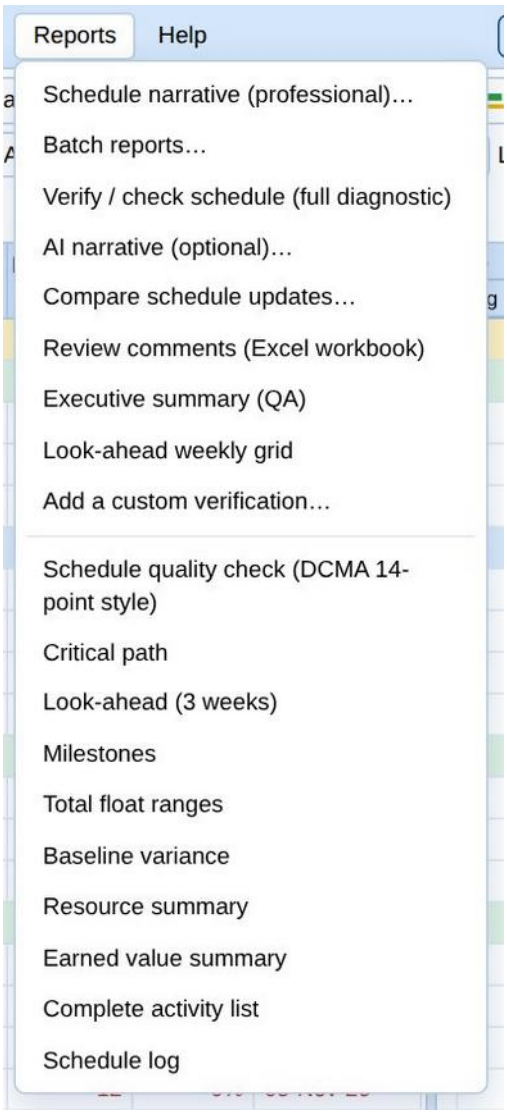


Figure 31-1. Reports menu

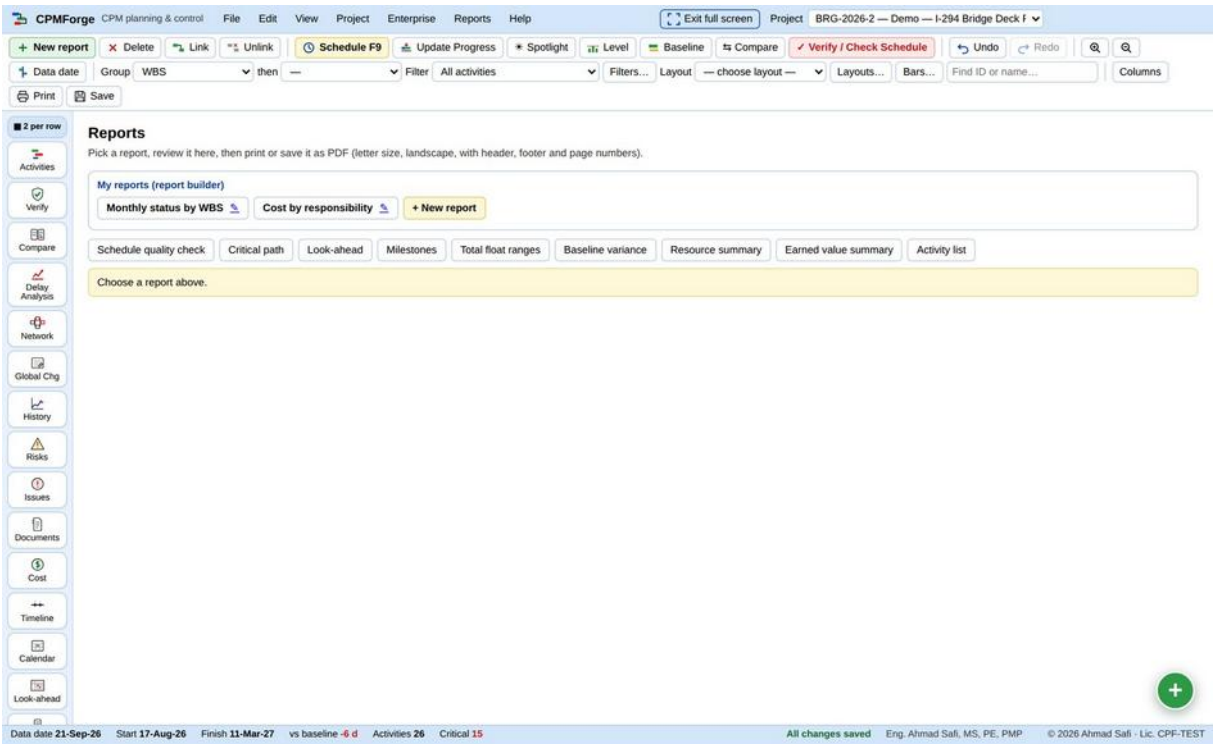


Figure 31-2. Reports screen

Tip

Use **Reports → Batch reports** to print the whole monthly package — narrative, critical path, look-ahead, milestones and QA summary — in one step.

CHAPTER 32

Schedule reports (Reports screen)

Open **Reports** in the navigation panel, click a report button, review the preview and use **Print / PDF this report**, **Export to CSV** or **Export to Excel (.xlsx)**. Grouping and filters of the activity table do not change these reports unless stated.

Schedule quality check (DCMA 14-point style)

Item	Details
Open it	Reports → Schedule quality check, or Reports screen → Schedule quality check.
Purpose	Quick quality score of the schedule using the DCMA 14-point tests.
Contents	Each test with its threshold, the measured value, PASS / FAIL and the number of activities affected.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Schedulers before submitting; CMs for a first look at a contractor schedule.

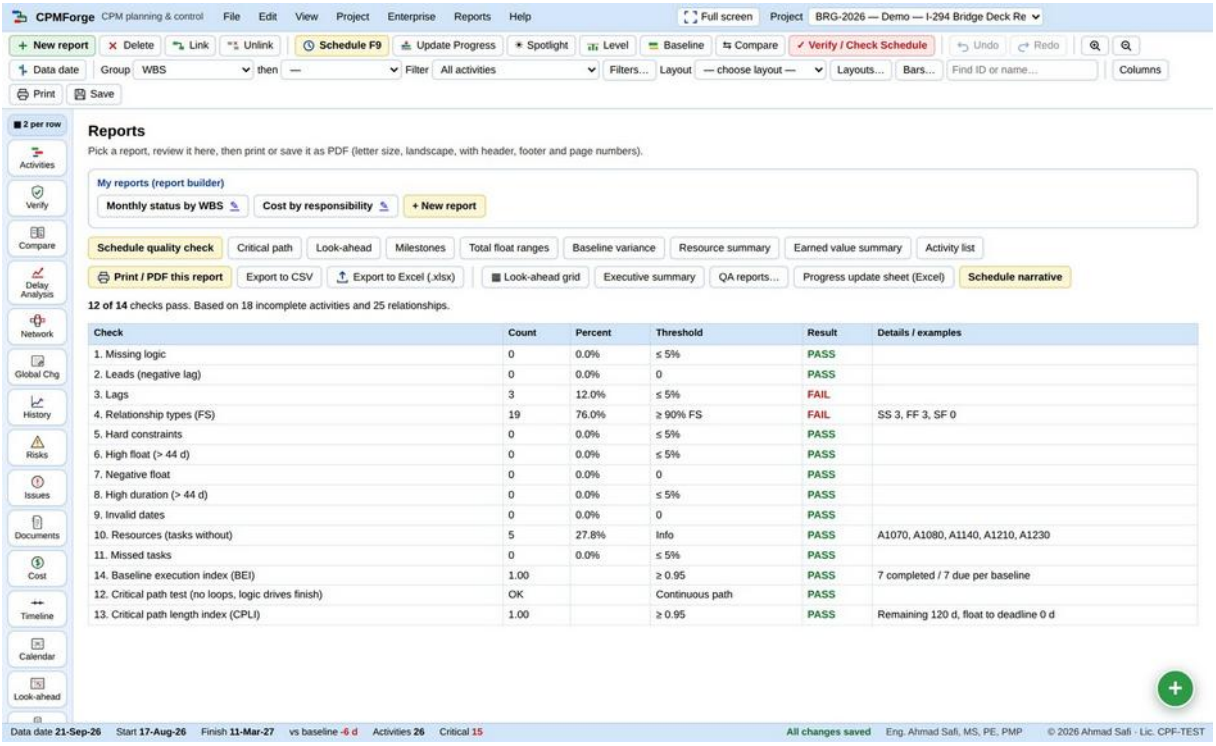


Figure 32-1. Schedule quality check (DCMA 14-point style)

> **Tip**
>
> For the full diagnostic with 96 checks, plain-English explanations and agency requirements, use Verify (Chapter 26).

Critical path

Item	Details
Open it	Reports → Critical path.
Purpose	Lists the activities that control the forecast completion.
Contents	Activity ID, name, original and remaining duration, start, finish, total float, status and responsibility / codes — in date order along the longest path.
Options	Critical definition (total float or longest path) and near-critical threshold in Schedule options.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Monthly reports, progress meetings, delay discussions.

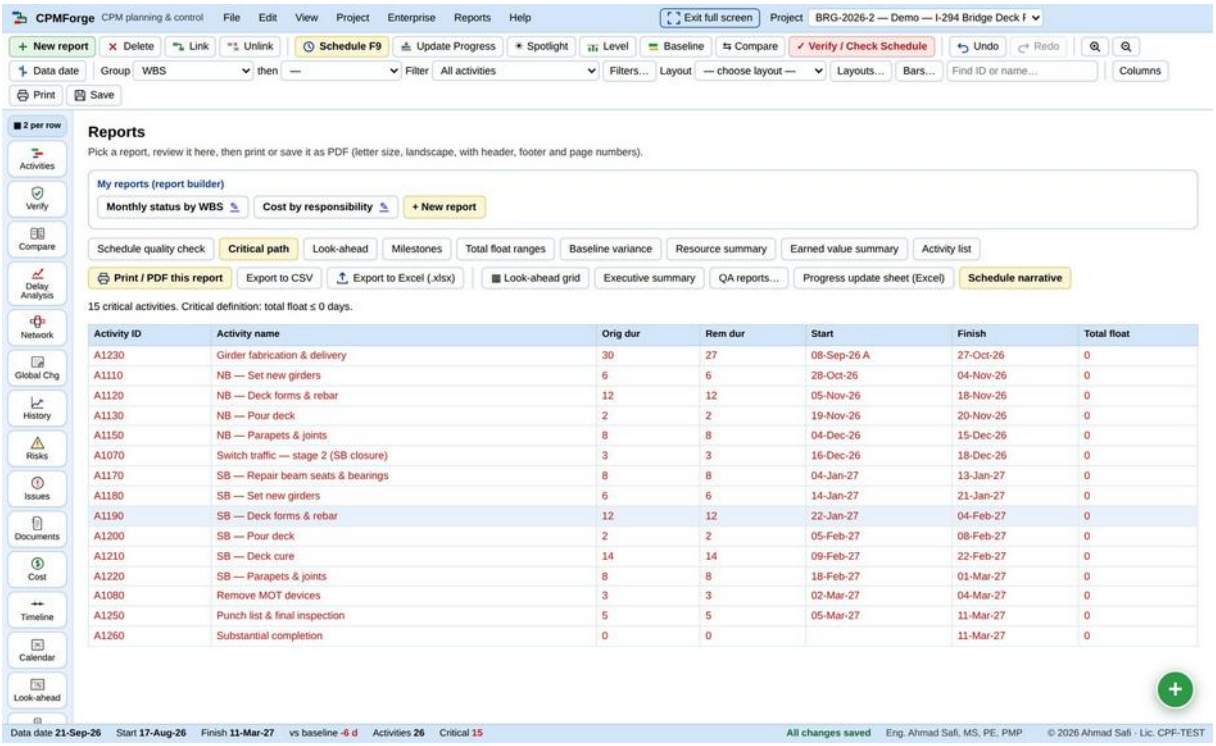


Figure 32-2. Critical path

Look-ahead (3 weeks)

Item	Details
Open it	Reports → Look-ahead (3 weeks).
Purpose	Work planned for the coming weeks, for field planning and progress meetings.
Contents	Activities that start, continue or finish in the period, with dates, float and responsibility; critical work highlighted.
Options	**Weeks ahead** box, **Start date**, **Current week**, and **Week no.** (project or ISO week) at the right of the bar. Opens the weekly grid with **Open weekly grid**.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Superintendents, foremen, weekly meetings.

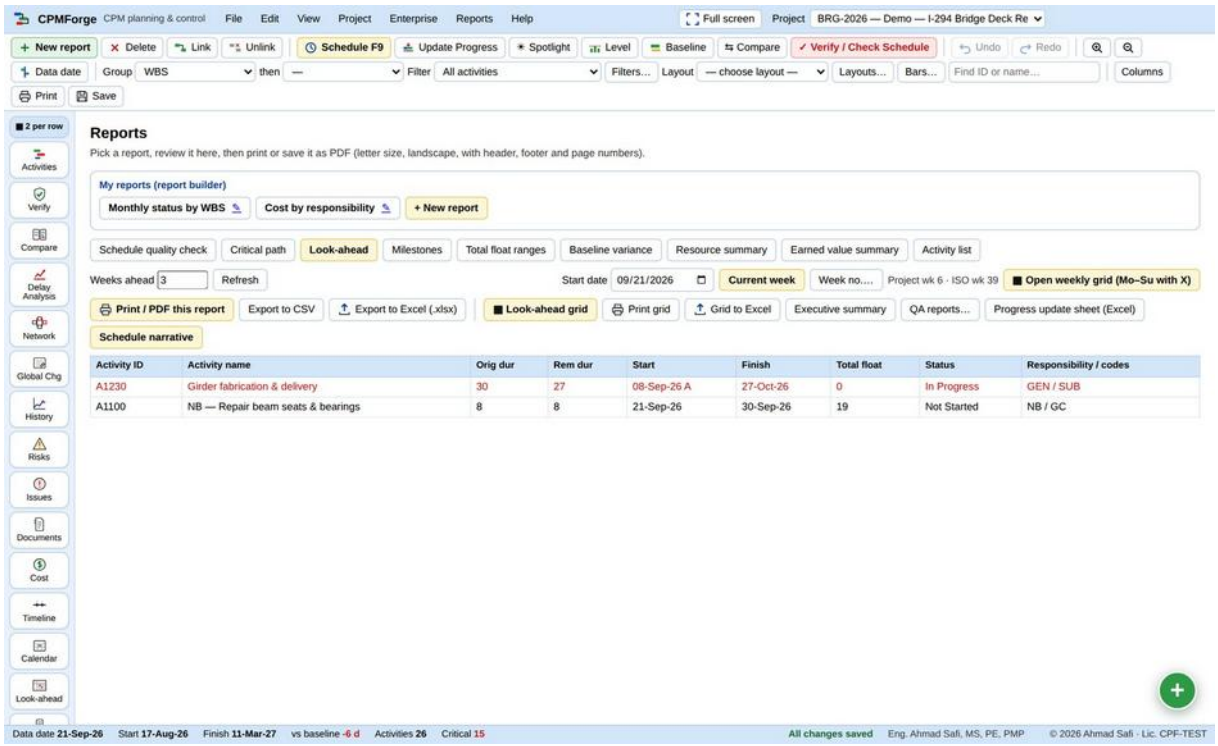


Figure 32-3. Look-ahead (3 weeks)

Milestones

Item	Details
Open it	Reports → Milestones.
Purpose	Status of contract and interim milestones.
Contents	Milestone, constraint, forecast or actual date, baseline date, variance and float.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Owners, executives, monthly reports.

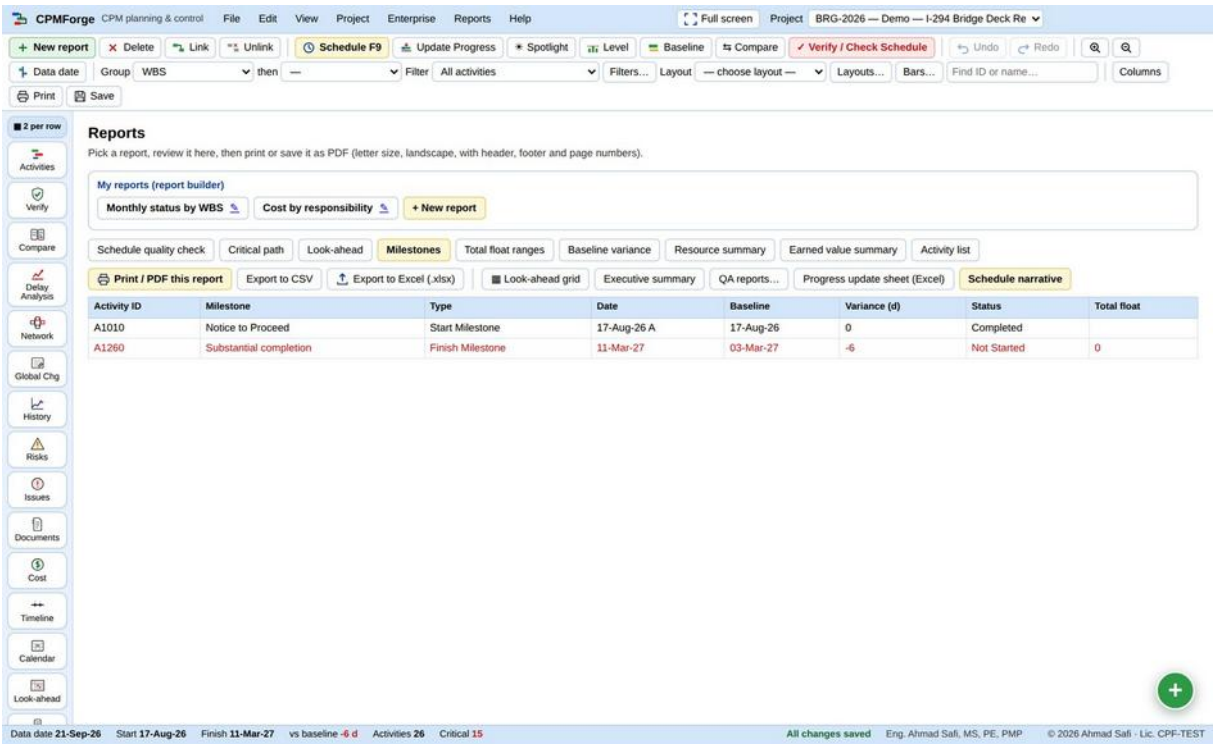


Figure 32-4. Milestones

Total float ranges

Item	Details
Open it	Reports → Total float ranges.
Purpose	Shows how much float the remaining work has.
Contents	Activities grouped by float range: negative, critical, 1–5, 6–10, 11–20, 21–44 and 45+ days, with counts.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Risk review — many near-critical activities mean a fragile schedule.

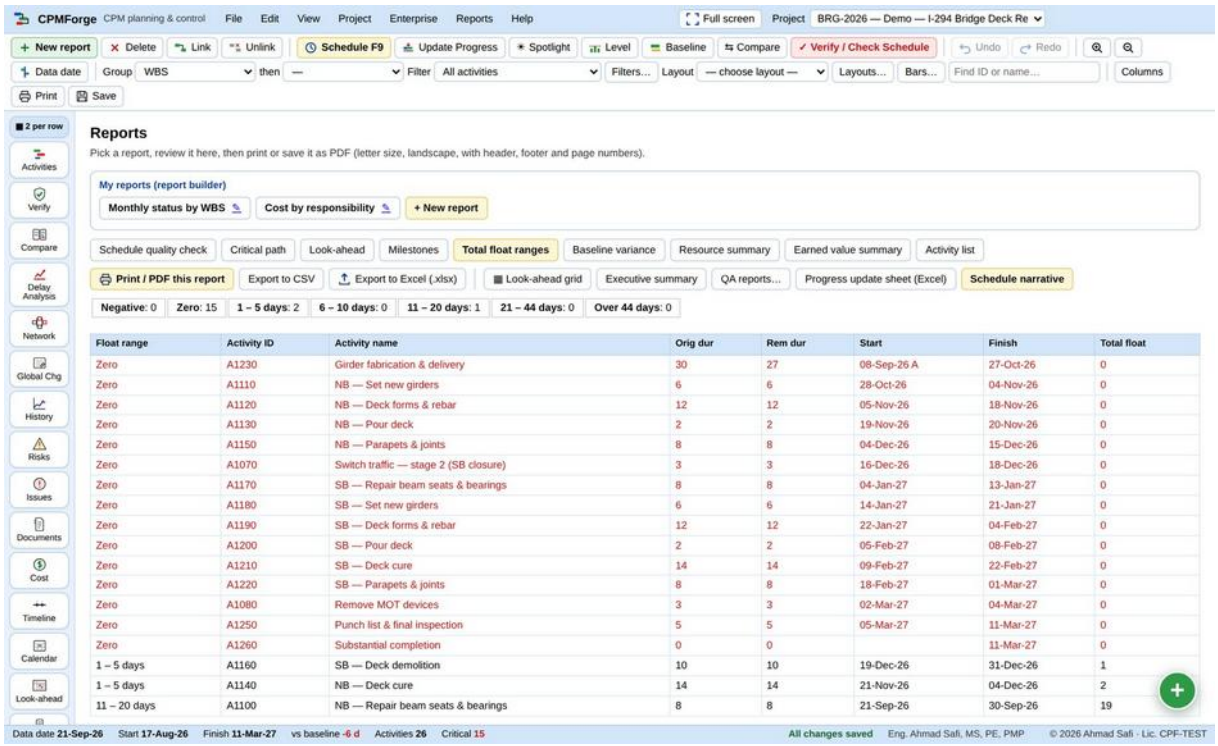


Figure 32-5. Total float ranges

Baseline variance

Item	Details
Open it	Reports → Baseline variance.
Purpose	Compares current dates with the baseline.
Contents	Baseline start and finish, current start and finish, start and finish variance in working days.
Options	Choose the project baseline on the Baselines screen.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Monthly reports; identifying slipping work.

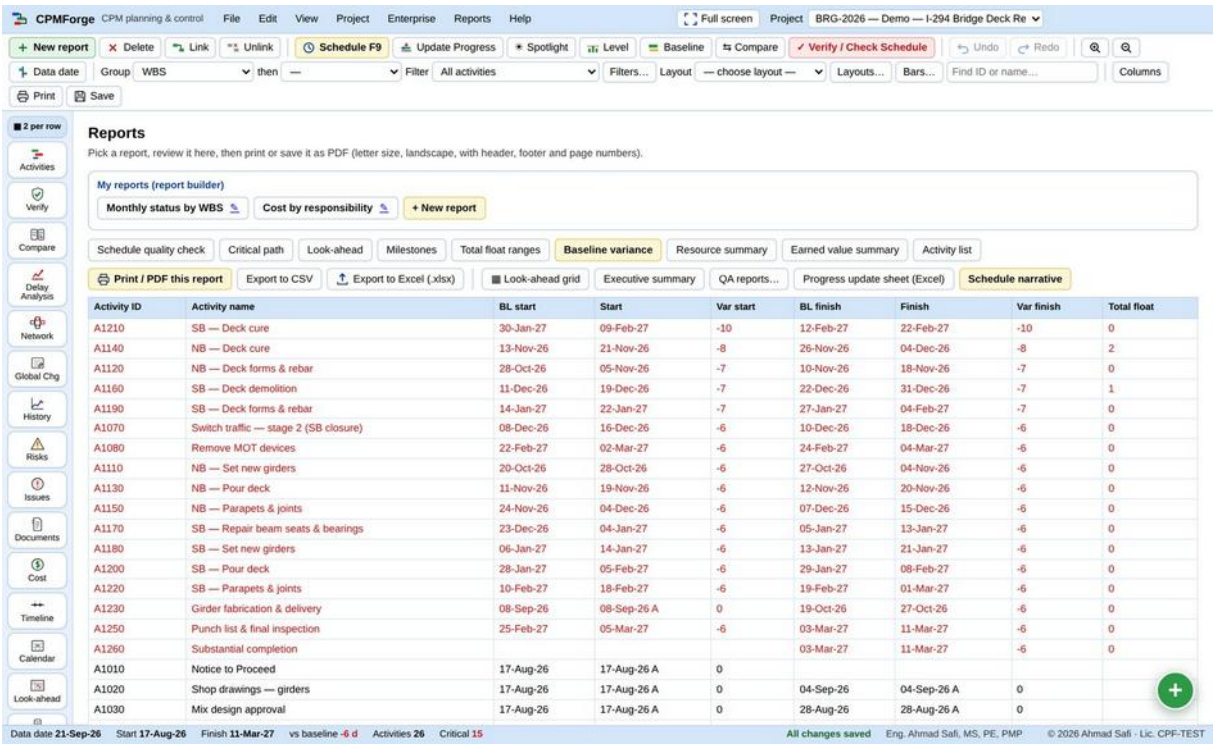


Figure 32-6. Baseline variance

Resource summary

Item	Details
Open it	Reports → Resource summary.
Purpose	Totals of resource units and cost.
Contents	Each resource with budgeted, actual and remaining units and cost, peak demand and over-allocation.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Resource-loaded schedules; staffing reviews.

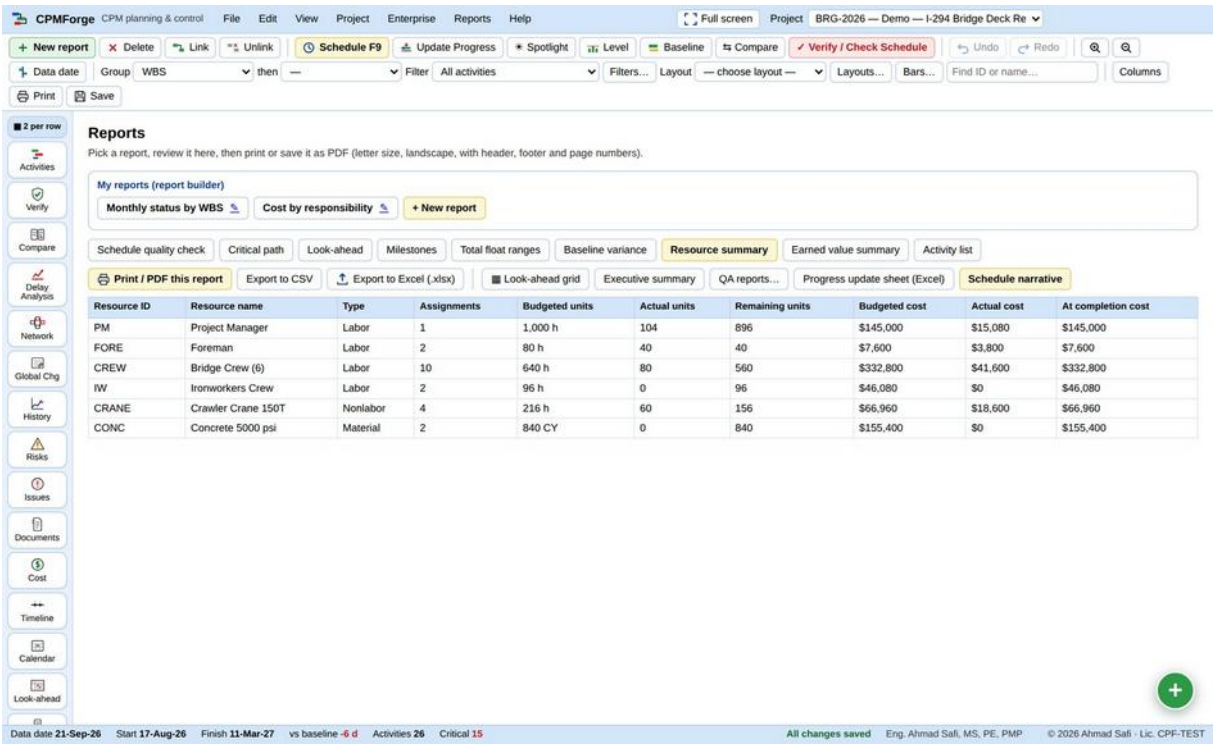


Figure 32-7. Resource summary

Earned value summary

Item	Details
Open it	Reports → Earned value summary.
Purpose	Cost and schedule performance of a cost-loaded schedule.
Contents	BAC, PV, EV, AC, SV, CV, SPI, CPI, estimates at completion and to-complete performance, by project and WBS.
Options	Earned value technique, ETC method and period settings (Tracking / Earned value).
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Owners and project controls.

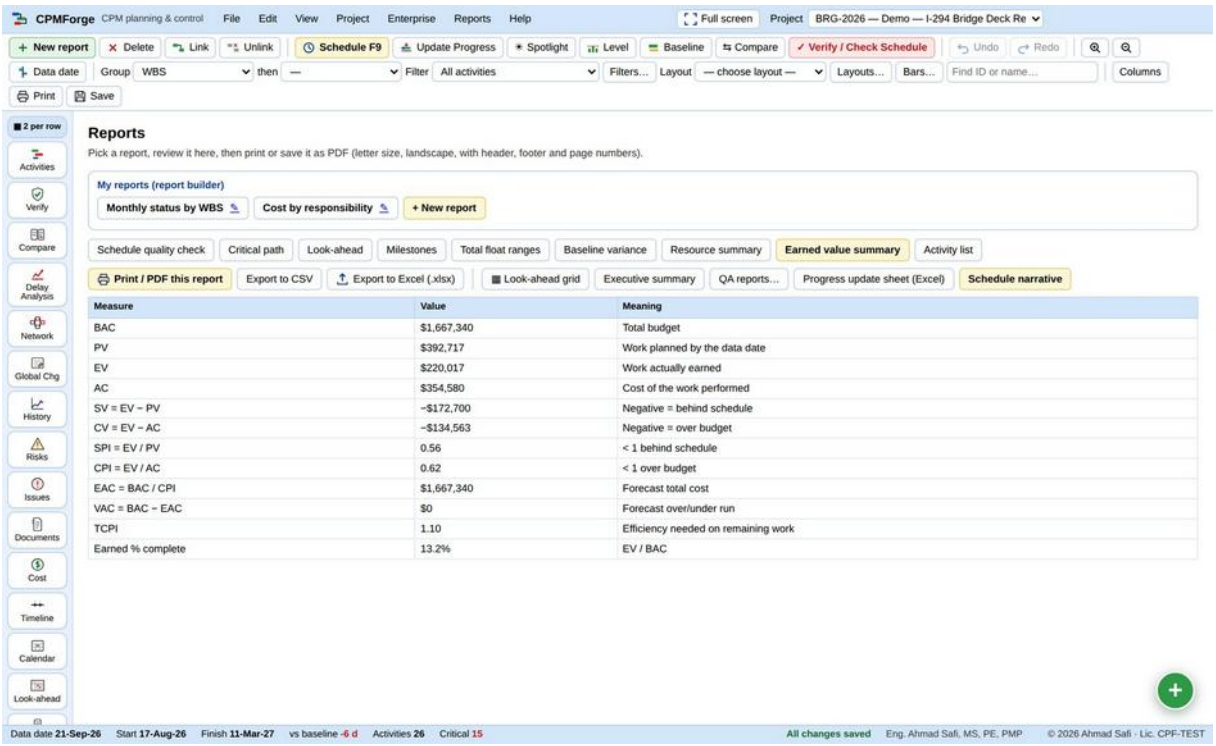


Figure 32-8. Earned value summary

Complete activity list

Item	Details
Open it	Reports → Complete activity list.
Purpose	Full list of activities for records or checking.
Contents	Every activity with ID, name, WBS, durations, dates, float, status and % complete.
Output	Print / PDF, Export to CSV, Export to Excel.
Best for	Archives and detailed checking.

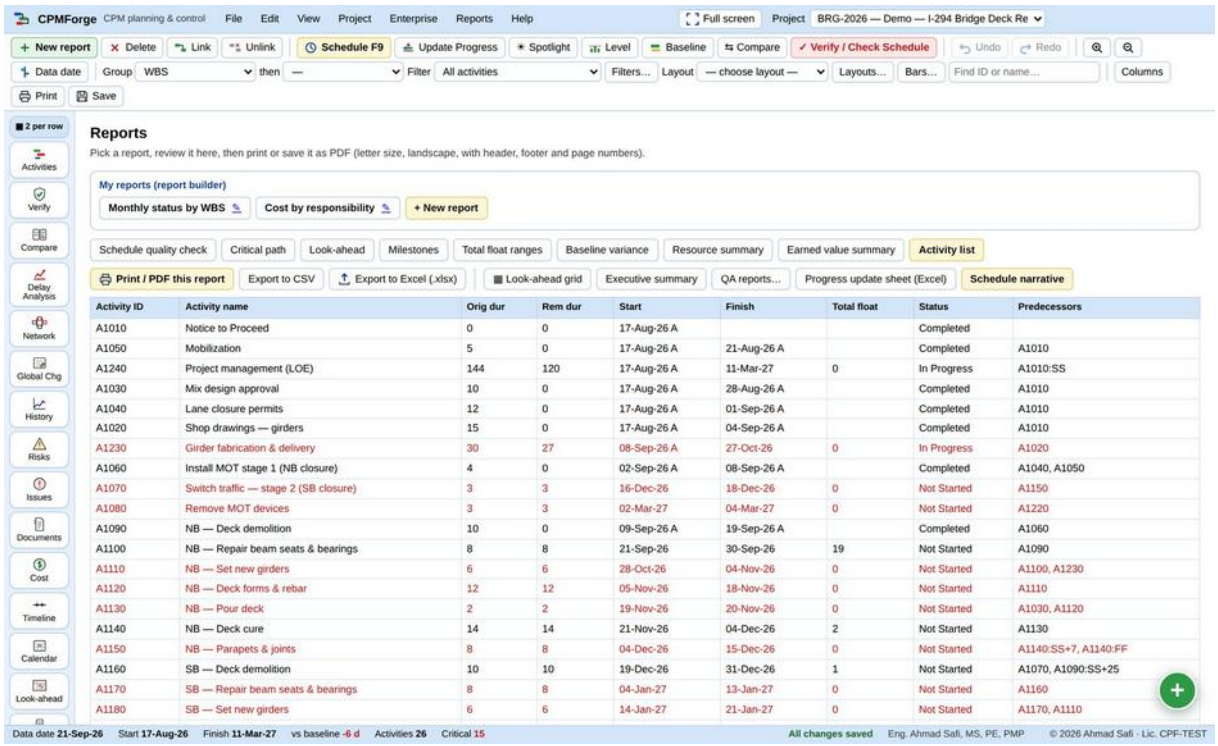


Figure 32-9. Complete activity list

Schedule log

Item	Details
Open it	Project → Schedule log, or Reports → Schedule log.
Purpose	Explains the last calculation.
Contents	Settings used, open ends, constraints applied, out-of-sequence progress, activities without logic, warnings and errors.
Output	Screen, print and copy.
Best for	Checking why dates look wrong.

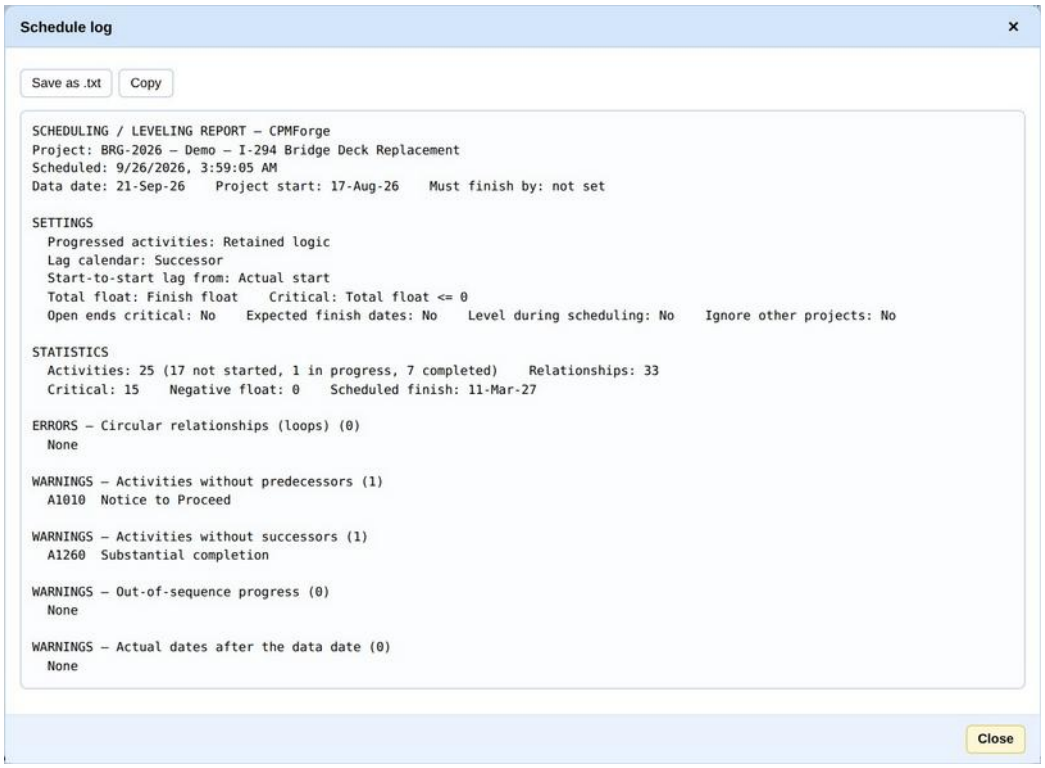


Figure 32-10. Schedule log

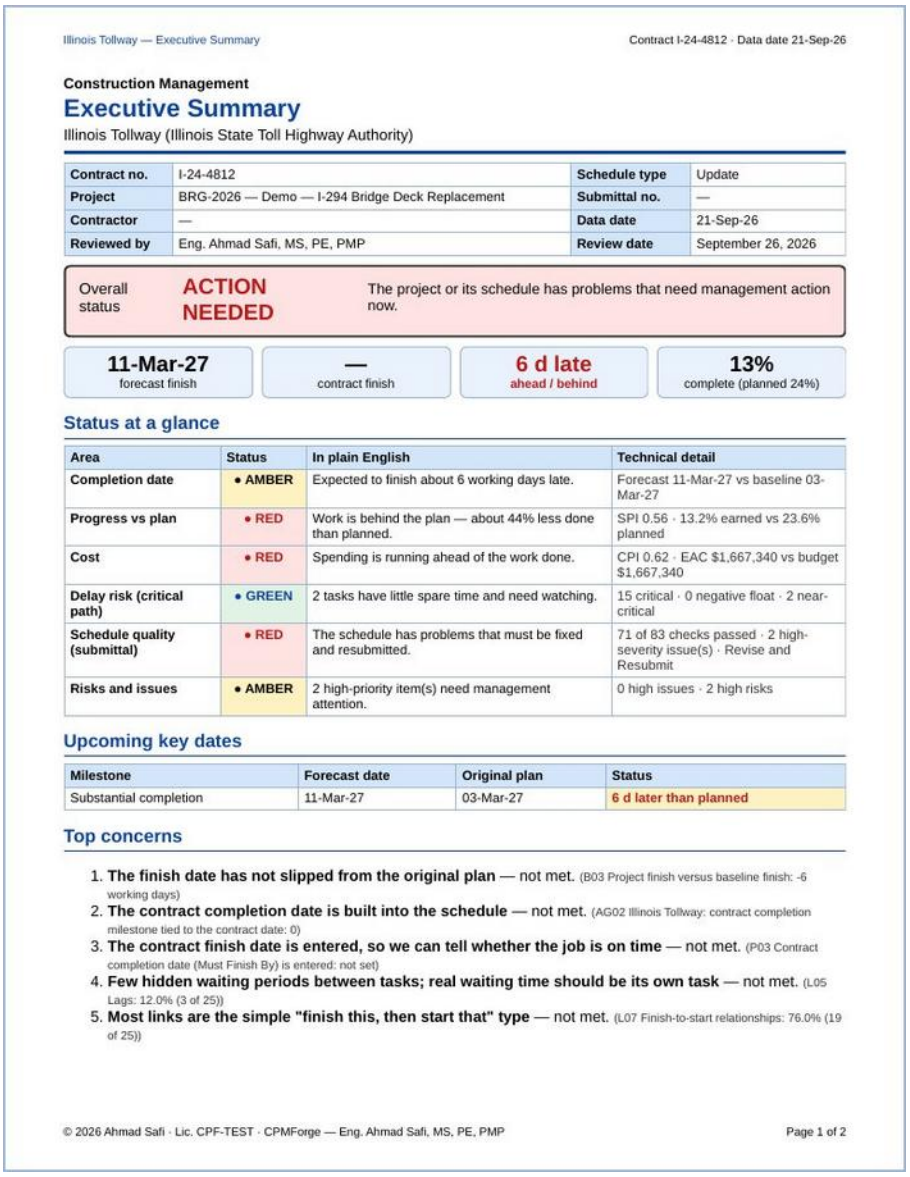
CHAPTER 33

QA reports (Verify screen)

QA reports present the verification results as formal documents for submittals and reviews. Open **Verify**, choose the agency profile, type your reviewer summary and comments, pick a report in the **Report** list and click **Preview**, **Print / PDF** or **Download Word**. All QA reports carry the contract information, the reviewer name and dates, page numbers and signature lines.

Executive Summary (high level)

Item	Details
Open it	Verify → Report: Executive Summary (high level) → Preview / Print / Download Word.
Purpose	Owners, executives, program managers.
Contents	One page for managers: overall status (GREEN / AMBER / RED) and recommendation, forecast finish against the contract date, days ahead or behind, percent complete, status by area, milestones and the top concerns with decisions needed.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Executive Summary — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Executive Summary

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

Overall status **ACTION NEEDED** — The project or its schedule has problems that need management action now.

11-Mar-27	—	6 d late	13%
forecast finish	contract finish	ahead / behind	complete (planned 24%)

Status at a glance

Area	Status	In plain English	Technical detail
Completion date	• AMBER	Expected to finish about 6 working days late.	Forecast 11-Mar-27 vs baseline 03-Mar-27
Progress vs plan	• RED	Work is behind the plan — about 44% less done than planned.	SPI 0.56 · 13.2% earned vs 23.6% planned
Cost	• RED	Spending is running ahead of the work done.	CPI 0.62 · EAC $1,667,340 vs budget $1,667,340
Delay risk (critical path)	• GREEN	2 tasks have little spare time and need watching.	15 critical · 0 negative float · 2 near-critical
Schedule quality (submittal)	• RED	The schedule has problems that must be fixed and resubmitted.	71 of 83 checks passed · 2 high-severity issue(s) · Revise and Resubmit
Risks and issues	• AMBER	2 high-priority item(s) need management attention.	0 high issues · 2 high risks

Upcoming key dates

Milestone	Forecast date	Original plan	Status
Substantial completion	11-Mar-27	03-Mar-27	6 d later than planned

Top concerns

1. **The finish date has not slipped from the original plan** — not met. (B03 Project finish versus baseline finish: -6 working days)
2. **The contract completion date is built into the schedule** — not met. (AG02 Illinois Tollway: contract completion milestone tied to the contract date: 0)
3. **The contract finish date is entered, so we can tell whether the job is on time** — not met. (P03 Contract completion date (Must Finish By) is entered: not set)
4. **Few hidden waiting periods between tasks; real waiting time should be its own task** — not met. (L05 Lags: 12.0% (3 of 25))
5. **Most links are the simple "finish this, then start that" type** — not met. (L07 Finish-to-start relationships: 76.0% (19 of 25))

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Figure 33-1. Executive Summary (high level)

Schedule Narrative (professional, full)

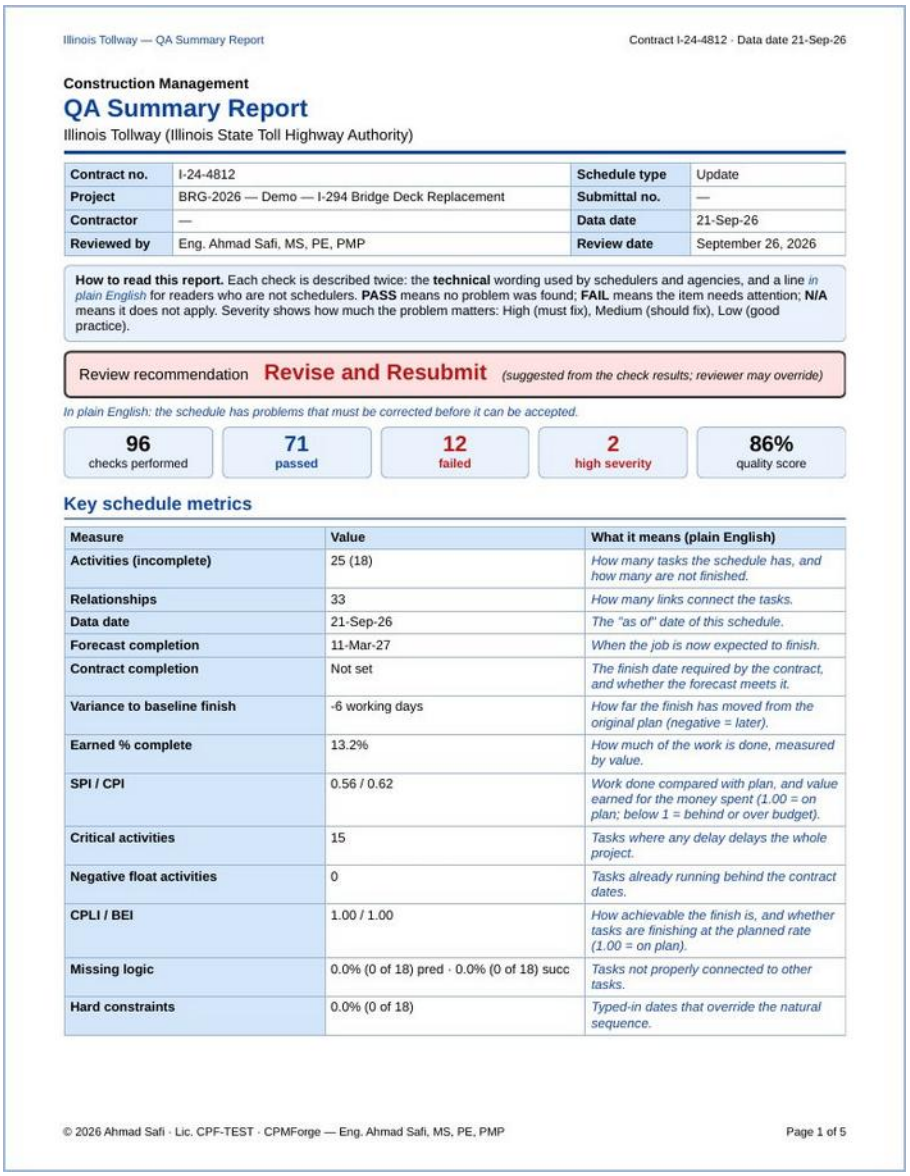
Item	Details
Open it	Verify → Report: Schedule Narrative (professional, full) → Preview / Print / Download Word.
Purpose	Monthly submittals and review packages.
Contents	The full professional narrative (Chapter 34): cover, contents and 15 sections.
Output	Print / PDF, Word (.doc).



Figure 33-2. Schedule Narrative (professional, full)

QA Summary Report

Item	Details
Open it	Verify → Report: QA Summary Report → Preview / Print / Download Word.
Purpose	The standard QA document sent with the review.
Contents	Contract information, review recommendation (accept, accept as noted, revise and resubmit, reject), counts of passed and failed checks by severity, key metrics with plain-English meaning, and the findings list.
Output	Print / PDF, Word (.doc).



Illinois Tollway — QA Summary Report — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

QA Summary Report

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

How to read this report. Each check is described twice: the **technical** wording used by schedulers and agencies, and a line *in plain English* for readers who are not schedulers. **PASS** means no problem was found; **FAIL** means the item needs attention; **N/A** means it does not apply. Severity shows how much the problem matters: High (must fix), Medium (should fix), Low (good practice).

Review recommendation **Revise and Resubmit** *(suggested from the check results; reviewer may override)*

In plain English: the schedule has problems that must be corrected before it can be accepted.

96	71	12	2	86%
checks performed	passed	failed	high severity	quality score

Key schedule metrics

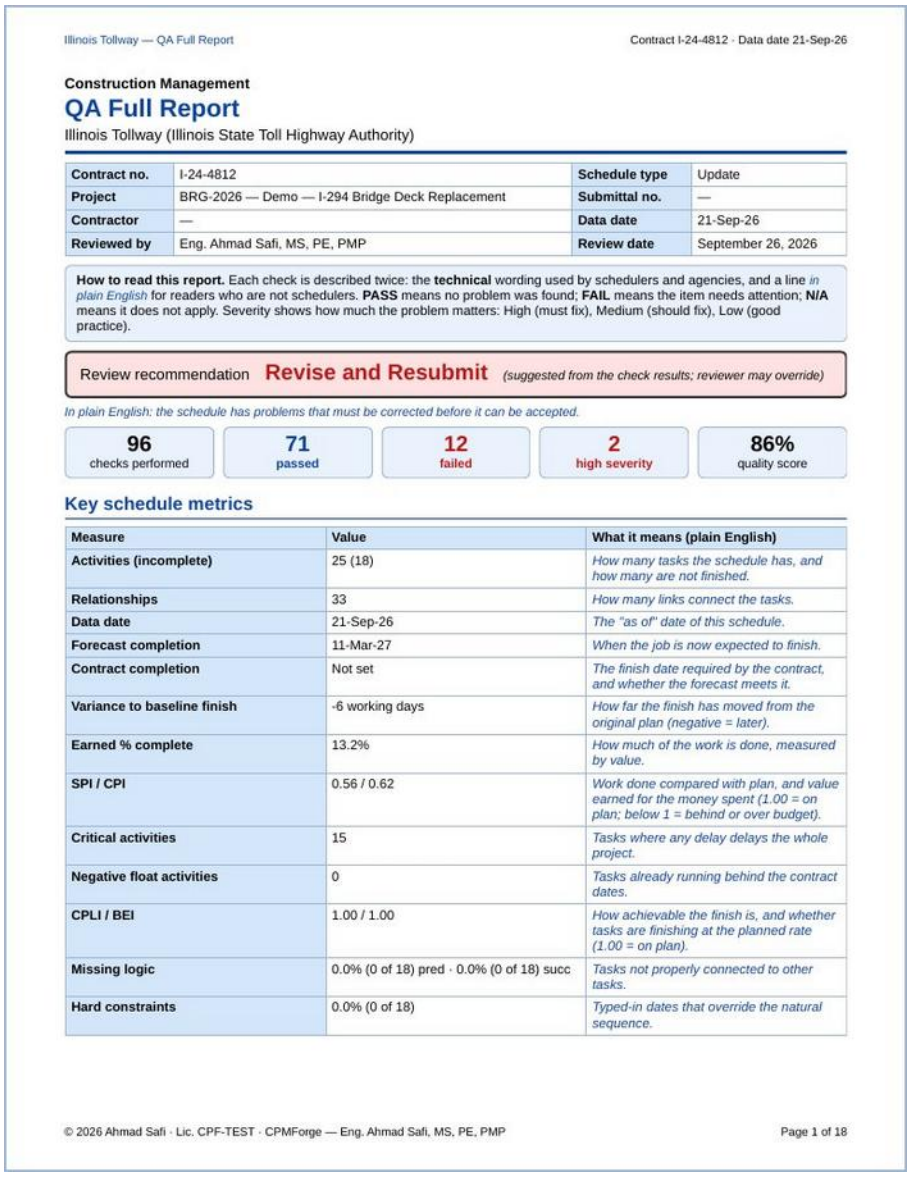
Measure	Value	What it means (plain English)
Activities (incomplete)	25 (18)	*How many tasks the schedule has, and how many are not finished.*
Relationships	33	*How many links connect the tasks.*
Data date	21-Sep-26	*The "as of" date of this schedule.*
Forecast completion	11-Mar-27	*When the job is now expected to finish.*
Contract completion	Not set	*The finish date required by the contract, and whether the forecast meets it.*
Variance to baseline finish	-6 working days	*How far the finish has moved from the original plan (negative = later).*
Earned % complete	13.2%	*How much of the work is done, measured by value.*
SPI / CPI	0.56 / 0.62	*Work done compared with plan, and value earned for the money spent (1.00 = on plan; below 1 = behind or over budget).*
Critical activities	15	*Tasks where any delay delays the whole project.*
Negative float activities	0	*Tasks already running behind the contract dates.*
CPLI / BEI	1.00 / 1.00	*How achievable the finish is, and whether tasks are finishing at the planned rate (1.00 = on plan).*
Missing logic	0.0% (0 of 18) pred · 0.0% (0 of 18) succ	*Tasks not properly connected to other tasks.*
Hard constraints	0.0% (0 of 18)	*Typed-in dates that override the natural sequence.*

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Figure 33-3. QA Summary Report

QA Full Report

Item	Details
Open it	Verify → Report: QA Full Report → Preview / Print / Download Word.
Purpose	Detailed reviews, audits and records.
Contents	Every check grouped by category with threshold, measured value, result, affected activities, the plain-English explanation, required action and reviewer comments.
Output	Print / PDF, Word (.doc).



Illinois Tollway — QA Full Report — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

QA Full Report

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

How to read this report. Each check is described twice: the **technical** wording used by schedulers and agencies, and a line *in plain English* for readers who are not schedulers. **PASS** means no problem was found; **FAIL** means the item needs attention; **N/A** means it does not apply. Severity shows how much the problem matters: High (must fix), Medium (should fix), Low (good practice).

Review recommendation **Revise and Resubmit** *(suggested from the check results; reviewer may override)*

In plain English: the schedule has problems that must be corrected before it can be accepted.

96	71	12	2	86%
checks performed	passed	failed	high severity	quality score

Key schedule metrics

Measure	Value	What it means (plain English)
Activities (incomplete)	25 (18)	*How many tasks the schedule has, and how many are not finished.*
Relationships	33	*How many links connect the tasks.*
Data date	21-Sep-26	*The "as of" date of this schedule.*
Forecast completion	11-Mar-27	*When the job is now expected to finish.*
Contract completion	Not set	*The finish date required by the contract, and whether the forecast meets it.*
Variance to baseline finish	-6 working days	*How far the finish has moved from the original plan (negative = later).*
Earned % complete	13.2%	*How much of the work is done, measured by value.*
SPI / CPI	0.56 / 0.62	*Work done compared with plan, and value earned for the money spent (1.00 = on plan; below 1 = behind or over budget).*
Critical activities	15	*Tasks where any delay delays the whole project.*
Negative float activities	0	*Tasks already running behind the contract dates.*
CPLI / BEI	1.00 / 1.00	*How achievable the finish is, and whether tasks are finishing at the planned rate (1.00 = on plan).*
Missing logic	0.0% (0 of 18) pred · 0.0% (0 of 18) succ	*Tasks not properly connected to other tasks.*
Hard constraints	0.0% (0 of 18)	*Typed-in dates that override the natural sequence.*

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Figure 33-4. QA Full Report

Deficiency List & Comment Response Form

Item	Details
Open it	Verify → Report: Deficiency List & Comment Response Form → Preview / Print / Download Word.
Purpose	Formal comment-and-response cycles.
Contents	Numbered deficiencies with severity, explanation, affected activities, required action, and empty columns for the contractor's response and the reviewer's disposition.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Deficiency List & Comment Response Form — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Deficiency List & Comment Response Form

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

The following items must be corrected or justified in the next submittal. Enter the contractor response and return this form with the resubmittal.

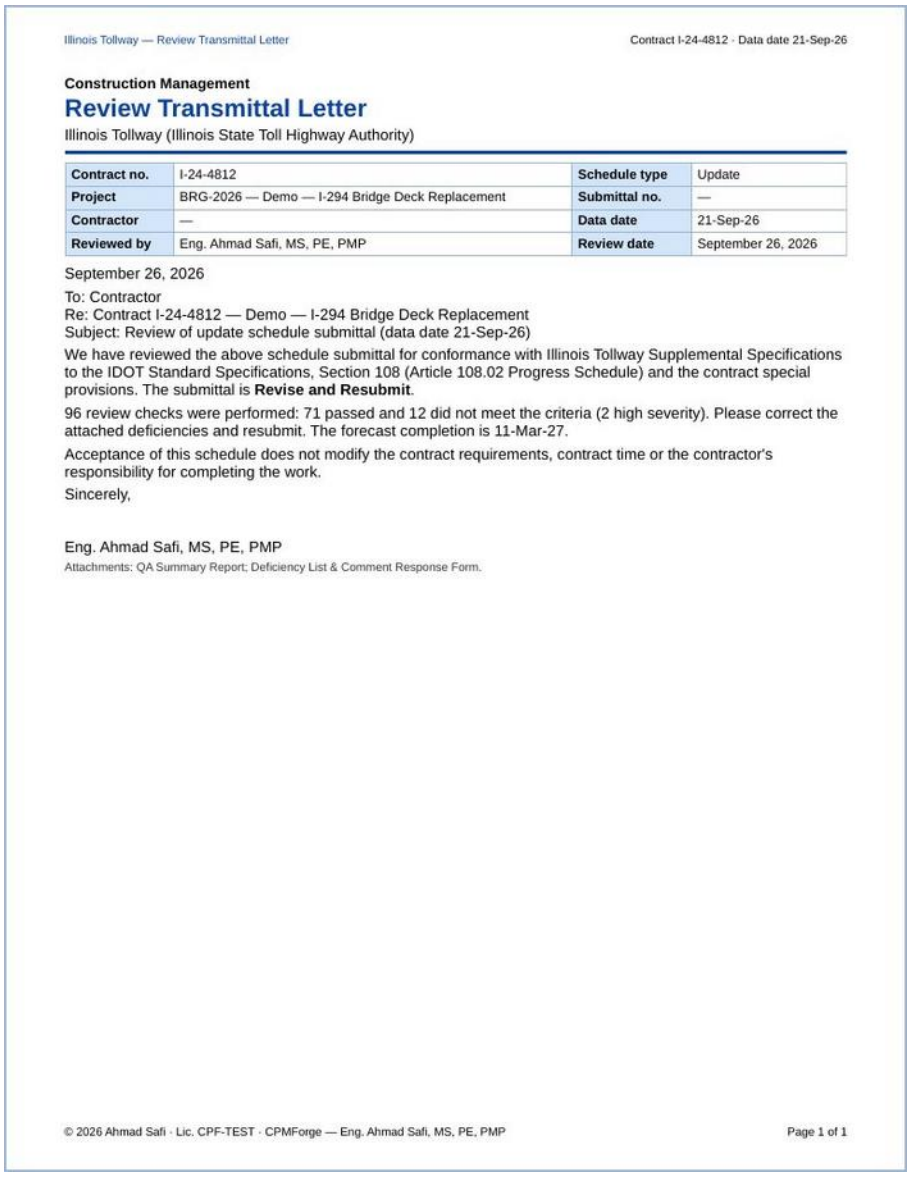
No.	Ref.	Severity	Deficiency (technical and plain English)	Found / affected activities	Required action	Contractor response	Disposition
1	B03	High	**Project finish versus baseline finish** Criterion: No slip *In plain English: The finish date has not slipped from the original plan.*	-6 working days	Explain the completion slip and submit a recovery plan.		
2	AG02	High	**Illinois Tollway: contract completion milestone tied to the contract date** Criterion: Finish milestone with Finish On or Before, or project Must Finish By *In plain English: The contract completion date is built into the schedule.*	0	Add a completion milestone constrained to the contract completion date.		
3	P03	Medium	**Contract completion date (Must Finish By) is entered** Criterion: Defined *In plain English: The contract finish date is entered, so we can tell whether the job is on time.*	not set	Enter the contract completion date in Project settings (Must Finish By) or constrain the completion milestone.		
4	L05	Medium	**Lags** Criterion: ≤ 5% of relationships *In plain English: Few hidden waiting periods between tasks; real waiting time should be its own task.*	12.0% (3 of 25) A1150, A1160, A1220	Replace lags with activities that describe the waiting time (cure, review, lead time).		
5	L07	Medium	**Finish-to-start relationships** Criterion: ≥ 90% FS *In plain English: Most links are the simple "finish this, then start that" type.*	76.0% (19 of 25)	Correct and resubmit, or justify in the narrative.		

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Figure 33-5. Deficiency List & Comment Response Form

Review Transmittal Letter

Item	Details
Open it	Verify → Report: Review Transmittal Letter → Preview / Print / Download Word.
Purpose	Sending the review officially.
Contents	Transmittal letter to the contractor with the submittal number, the review result, the main deficiencies and the resubmittal date.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Review Transmittal Letter — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Review Transmittal Letter

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

September 26, 2026

To: Contractor
Re: Contract I-24-4812 — Demo — I-294 Bridge Deck Replacement
Subject: Review of update schedule submittal (data date 21-Sep-26)

We have reviewed the above schedule submittal for conformance with Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Section 108 (Article 108.02 Progress Schedule) and the contract special provisions. The submittal is **Revise and Resubmit**.

96 review checks were performed: 71 passed and 12 did not meet the criteria (2 high severity). Please correct the attached deficiencies and resubmit. The forecast completion is 11-Mar-27.

Acceptance of this schedule does not modify the contract requirements, contract time or the contractor's responsibility for completing the work.

Sincerely,

Eng. Ahmad Safi, MS, PE, PMP

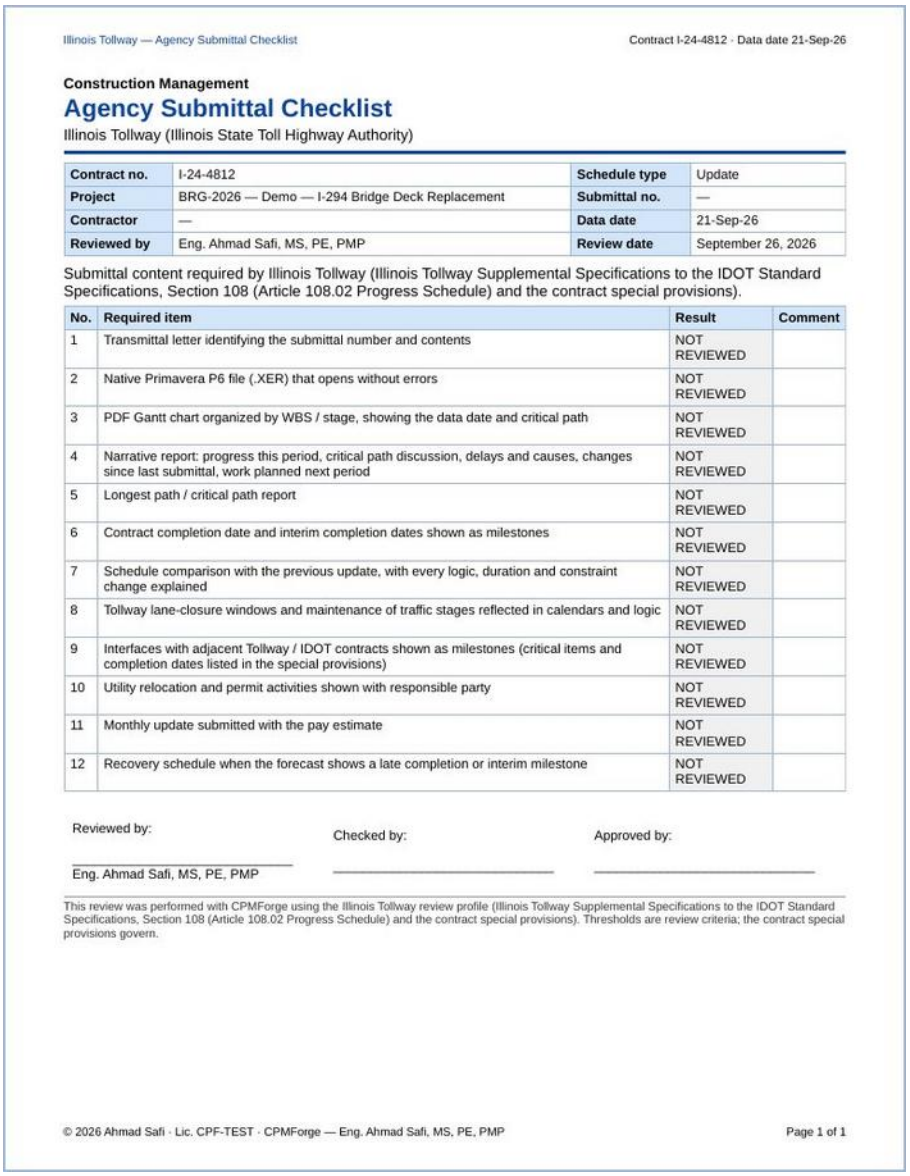
Attachments: QA Summary Report; Deficiency List & Comment Response Form.

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Figure 33-6. Review Transmittal Letter

Agency Submittal Checklist

Item	Details
Open it	Verify → Report: Agency Submittal Checklist → Preview / Print / Download Word.
Purpose	Checking submittal completeness.
Contents	The agency submittal checklist with the status of each required item (XER, PDF Gantt, narrative, codes, stages, utility activities…).
Output	Print / PDF, Word (.doc).



Illinois Tollway — Agency Submittal Checklist — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Agency Submittal Checklist

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

Submittal content required by Illinois Tollway (Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Section 108 (Article 108.02 Progress Schedule) and the contract special provisions).

No.	Required item	Result	Comment
1	Transmittal letter identifying the submittal number and contents	NOT REVIEWED	
2	Native Primavera P6 file (.XER) that opens without errors	NOT REVIEWED	
3	PDF Gantt chart organized by WBS / stage, showing the data date and critical path	NOT REVIEWED	
4	Narrative report: progress this period, critical path discussion, delays and causes, changes since last submittal, work planned next period	NOT REVIEWED	
5	Longest path / critical path report	NOT REVIEWED	
6	Contract completion date and interim completion dates shown as milestones	NOT REVIEWED	
7	Schedule comparison with the previous update, with every logic, duration and constraint change explained	NOT REVIEWED	
8	Tollway lane-closure windows and maintenance of traffic stages reflected in calendars and logic	NOT REVIEWED	
9	Interfaces with adjacent Tollway / IDOT contracts shown as milestones (critical items and completion dates listed in the special provisions)	NOT REVIEWED	
10	Utility relocation and permit activities shown with responsible party	NOT REVIEWED	
11	Monthly update submitted with the pay estimate	NOT REVIEWED	
12	Recovery schedule when the forecast shows a late completion or interim milestone	NOT REVIEWED	

Reviewed by: Eng. Ahmad Safi, MS, PE, PMP

Checked by:

Approved by:

This review was performed with CPMForge using the Illinois Tollway review profile (Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Section 108 (Article 108.02 Progress Schedule) and the contract special provisions). Thresholds are review criteria; the contract special provisions govern.

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Figure 33-7. Agency Submittal Checklist

Critical / Longest Path Report

Item	Details
Open it	Verify → Report: Critical / Longest Path Report → Preview / Print / Download Word.
Purpose	Critical path review.
Contents	The critical / longest path with dates, durations, float and driving relationships, plus near-critical activities.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Critical / Longest Path Report — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Critical / Longest Path Report

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

17 activities on the longest path to 11-Mar-27. Critical definition: total float ≤ 0.

Activity ID	Activity name	Orig. dur.	Rem. dur.	Start	Finish	Total float	Predecessors
A1230	Girder fabrication & delivery	30	27	08-Sep-26 A	27-Oct-26	0	A1020
A1110	NB — Set new girders	6	6	28-Oct-26	04-Nov-26	0	A1100, A1230
A1120	NB — Deck forms & rebar	12	12	05-Nov-26	18-Nov-26	0	A1110
A1130	NB — Pour deck	2	2	19-Nov-26	20-Nov-26	0	A1030, A1120
A1140	NB — Deck cure	14	14	21-Nov-26	04-Dec-26	2	A1130
A1150	NB — Parapets & joints	8	8	04-Dec-26	15-Dec-26	0	A1140:SS+7, A1140:FF
A1070	Switch traffic — stage 2 (SB closure)	3	3	16-Dec-26	18-Dec-26	0	A1150
A1160	SB — Deck demolition	10	10	19-Dec-26	31-Dec-26	1	A1070, A1090:SS+25
A1170	SB — Repair beam seats & bearings	8	8	04-Jan-27	13-Jan-27	0	A1160
A1180	SB — Set new girders	6	6	14-Jan-27	21-Jan-27	0	A1170, A1110
A1190	SB — Deck forms & rebar	12	12	22-Jan-27	04-Feb-27	0	A1180
A1200	SB — Pour deck	2	2	05-Feb-27	08-Feb-27	0	A1190
A1210	SB — Deck cure	14	14	09-Feb-27	22-Feb-27	0	A1200
A1220	SB — Parapets & joints	8	8	18-Feb-27	01-Mar-27	0	A1210:SS+7, A1210:FF
A1080	Remove MOT devices	3	3	02-Mar-27	04-Mar-27	0	A1220
A1250	Punch list & final inspection	5	5	05-Mar-27	11-Mar-27	0	A1080
A1260	Substantial completion	0	0		11-Mar-27	0	A1250, A1240:FF

Other critical activities

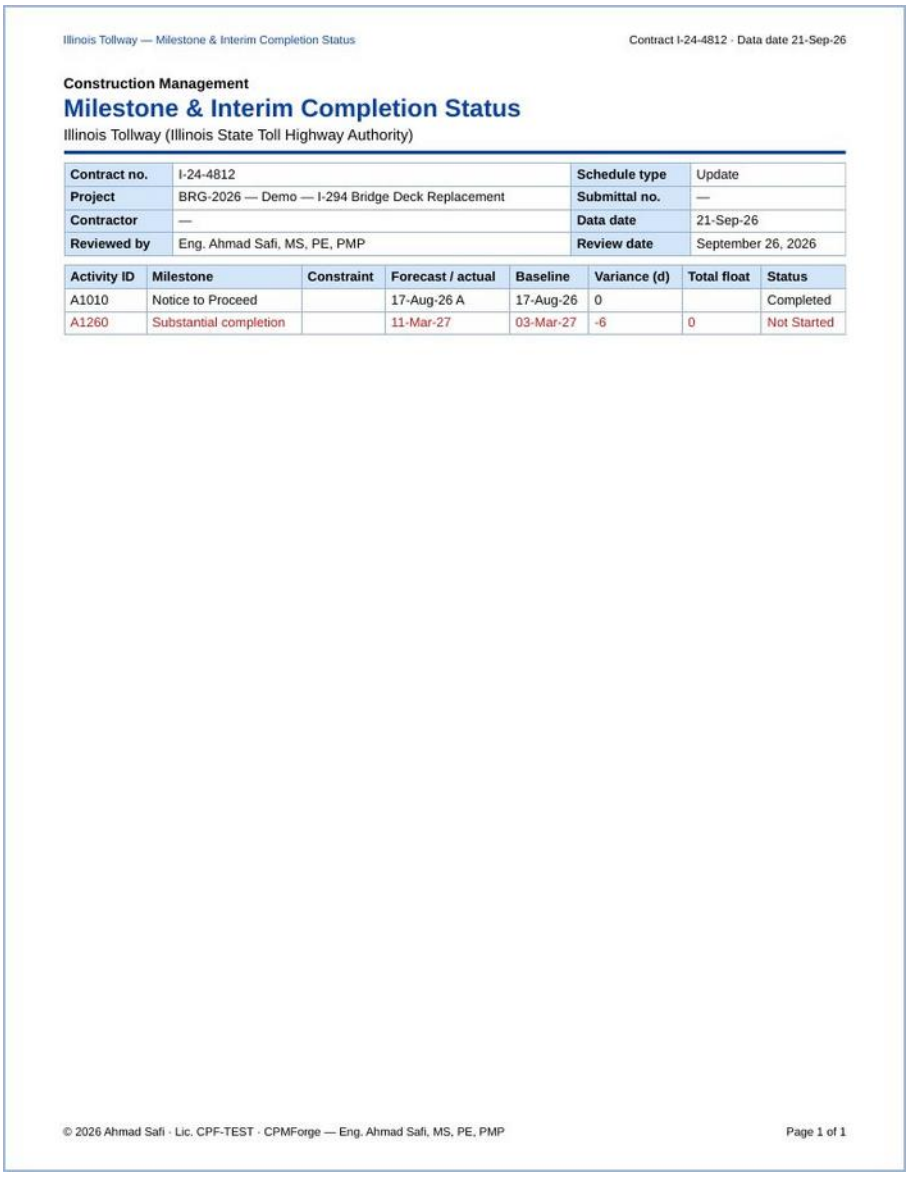
Activity ID	Activity name	Orig. dur.	Rem. dur.	Start	Finish	Total float
None.						

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Figure 33-8. Critical / Longest Path Report

Milestone & Interim Completion Status

Item	Details
Open it	Verify → Report: Milestone & Interim Completion Status → Preview / Print / Download Word.
Purpose	Milestone tracking and liquidated-damages exposure.
Contents	Contract and interim milestones with constraints, forecast, baseline, variance and status.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Milestone & Interim Completion Status — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Milestone & Interim Completion Status

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

Activity ID	Milestone	Constraint	Forecast / actual	Baseline	Variance (d)	Total float	Status
A1010	Notice to Proceed		17-Aug-26 A	17-Aug-26	0		Completed
A1260	Substantial completion		11-Mar-27	03-Mar-27	-6	0	Not Started

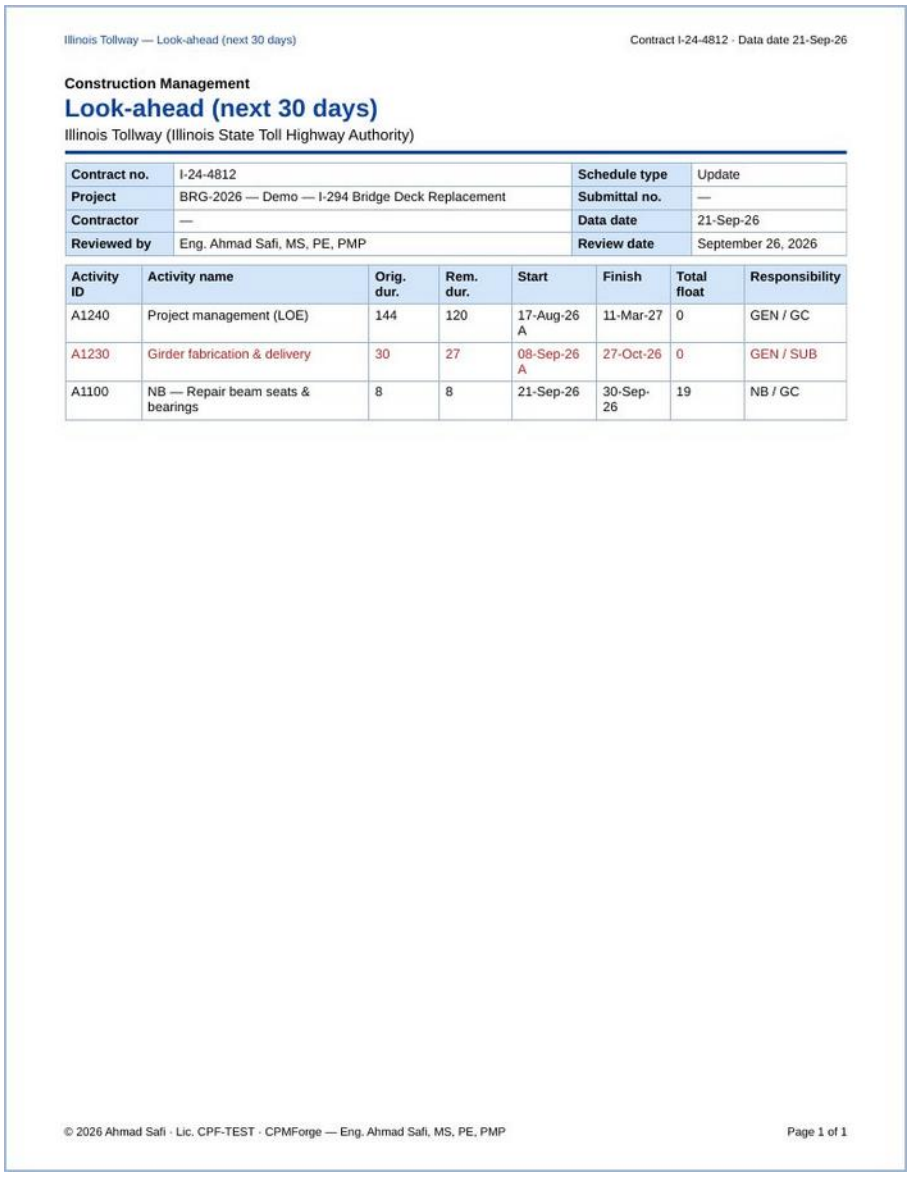
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Figure 33-9. Milestone & Interim Completion Status

Look-ahead (next 30 days)

Item	Details
Open it	Verify → Report: Look-ahead (next 30 days) → Preview / Print / Download Word.
Purpose	Coordination with the field.
Contents	Work in the next 30 days, critical first, with responsibility.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Look-ahead (next 30 days) Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Look-ahead (next 30 days)

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

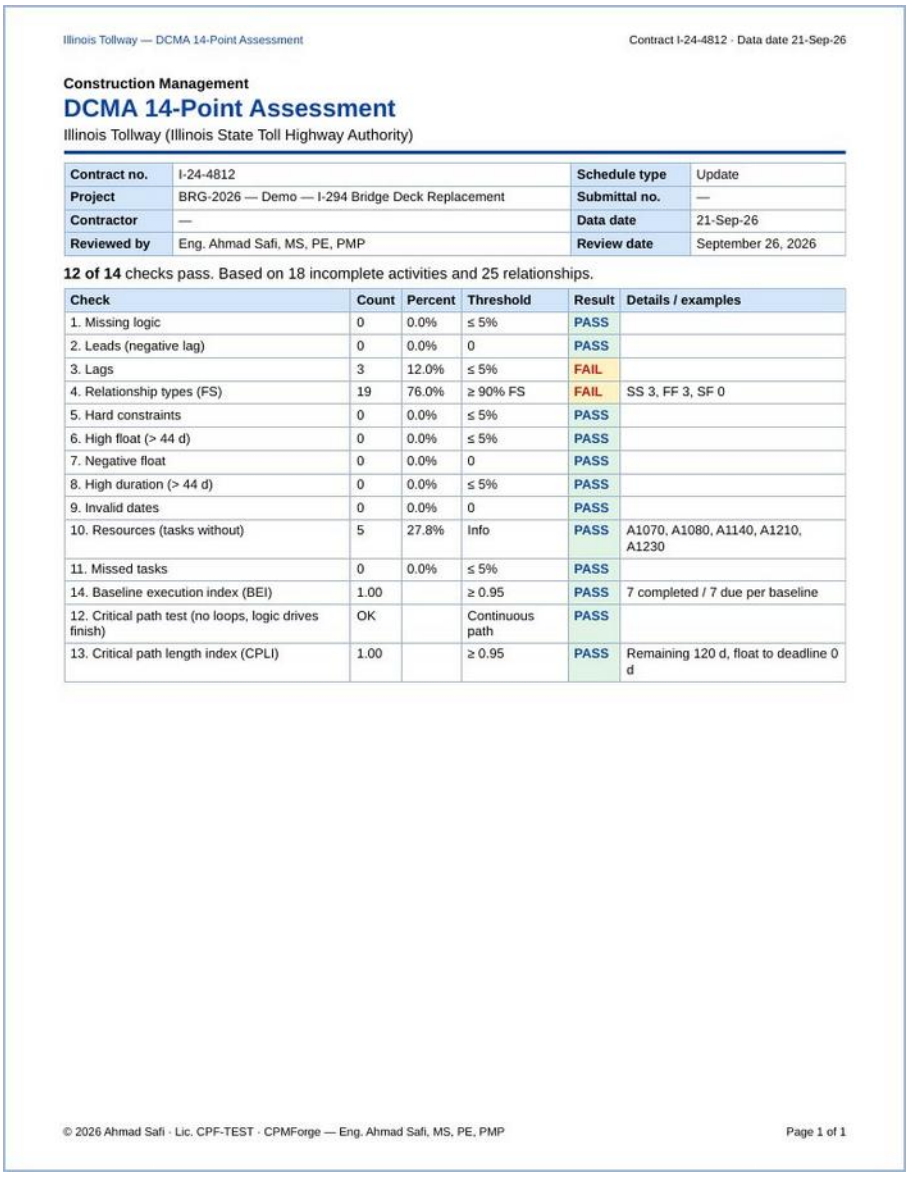
Activity ID	Activity name	Orig. dur.	Rem. dur.	Start	Finish	Total float	Responsibility
A1240	Project management (LOE)	144	120	17-Aug-26 A	11-Mar-27	0	GEN / GC
A1230	Girder fabrication & delivery	30	27	08-Sep-26 A	27-Oct-26	0	GEN / SUB
A1100	NB — Repair beam seats & bearings	8	8	21-Sep-26	30-Sep-26	19	NB / GC

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Figure 33-10. Look-ahead (next 30 days)

DCMA 14-Point Assessment

Item	Details
Open it	Verify → Report: DCMA 14-Point Assessment → Preview / Print / Download Word.
Purpose	Formal DCMA assessment.
Contents	The 14 DCMA tests with thresholds, measured values and results, and a short explanation of each test.
Output	Print / PDF, Word (.doc).



Illinois Tollway — DCMA 14-Point Assessment — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

DCMA 14-Point Assessment

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

12 of 14 checks pass. Based on 18 incomplete activities and 25 relationships.

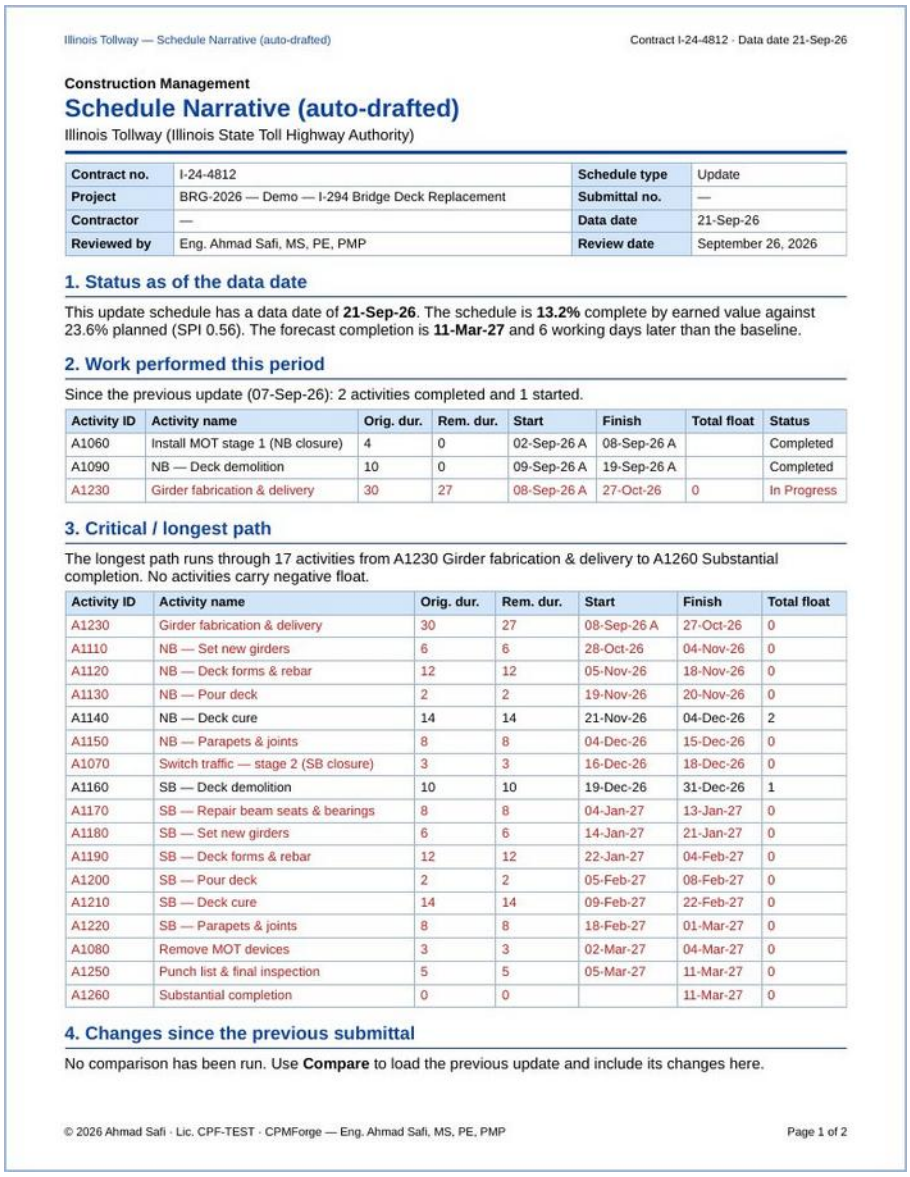
Check	Count	Percent	Threshold	Result	Details / examples
1. Missing logic	0	0.0%	≤ 5%	PASS	
2. Leads (negative lag)	0	0.0%	0	PASS	
3. Lags	3	12.0%	≤ 5%	FAIL	
4. Relationship types (FS)	19	76.0%	≥ 90% FS	FAIL	SS 3, FF 3, SF 0
5. Hard constraints	0	0.0%	≤ 5%	PASS	
6. High float (> 44 d)	0	0.0%	≤ 5%	PASS	
7. Negative float	0	0.0%	0	PASS	
8. High duration (> 44 d)	0	0.0%	≤ 5%	PASS	
9. Invalid dates	0	0.0%	0	PASS	
10. Resources (tasks without)	5	27.8%	Info	PASS	A1070, A1080, A1140, A1210, A1230
11. Missed tasks	0	0.0%	≤ 5%	PASS	
14. Baseline execution index (BEI)	1.00		≥ 0.95	PASS	7 completed / 7 due per baseline
12. Critical path test (no loops, logic drives finish)	OK		Continuous path	PASS	
13. Critical path length index (CPLI)	1.00		≥ 0.95	PASS	Remaining 120 d, float to deadline 0 d

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Figure 33-11. DCMA 14-Point Assessment

Schedule Narrative (auto-drafted)

Item	Details
Open it	Verify → Report: Schedule Narrative (auto-drafted) → Preview / Print / Download Word.
Purpose	Quick monthly summaries.
Contents	A short automatic narrative: status, work performed, critical path, changes and next 30 days.
Output	Print / PDF, Word (.doc).



Illinois Tollway — Schedule Narrative (auto-drafted) Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Schedule Narrative (auto-drafted)

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

1. Status as of the data date

This update schedule has a data date of **21-Sep-26**. The schedule is **13.2%** complete by earned value against 23.6% planned (SPI 0.56). The forecast completion is **11-Mar-27** and 6 working days later than the baseline.

2. Work performed this period

Since the previous update (07-Sep-26): 2 activities completed and 1 started.

Activity ID	Activity name	Orig. dur.	Rem. dur.	Start	Finish	Total float	Status
A1060	Install MOT stage 1 (NB closure)	4	0	02-Sep-26 A	08-Sep-26 A		Completed
A1090	NB — Deck demolition	10	0	09-Sep-26 A	19-Sep-26 A		Completed
A1230	Girder fabrication & delivery	30	27	08-Sep-26 A	27-Oct-26	0	In Progress

3. Critical / longest path

The longest path runs through 17 activities from A1230 Girder fabrication & delivery to A1260 Substantial completion. No activities carry negative float.

Activity ID	Activity name	Orig. dur.	Rem. dur.	Start	Finish	Total float
A1230	Girder fabrication & delivery	30	27	08-Sep-26 A	27-Oct-26	0
A1110	NB — Set new girders	6	6	28-Oct-26	04-Nov-26	0
A1120	NB — Deck forms & rebar	12	12	05-Nov-26	18-Nov-26	0
A1130	NB — Pour deck	2	2	19-Nov-26	20-Nov-26	0
A1140	NB — Deck cure	14	14	21-Nov-26	04-Dec-26	2
A1150	NB — Parapets & joints	8	8	04-Dec-26	15-Dec-26	0
A1070	Switch traffic — stage 2 (SB closure)	3	3	16-Dec-26	18-Dec-26	0
A1160	SB — Deck demolition	10	10	19-Dec-26	31-Dec-26	1
A1170	SB — Repair beam seats & bearings	8	8	04-Jan-27	13-Jan-27	0
A1180	SB — Set new girders	6	6	14-Jan-27	21-Jan-27	0
A1190	SB — Deck forms & rebar	12	12	22-Jan-27	04-Feb-27	0
A1200	SB — Pour deck	2	2	05-Feb-27	08-Feb-27	0
A1210	SB — Deck cure	14	14	09-Feb-27	22-Feb-27	0
A1220	SB — Parapets & joints	8	8	18-Feb-27	01-Mar-27	0
A1080	Remove MOT devices	3	3	02-Mar-27	04-Mar-27	0
A1250	Punch list & final inspection	5	5	05-Mar-27	11-Mar-27	0
A1260	Substantial completion	0	0		11-Mar-27	0

4. Changes since the previous submittal

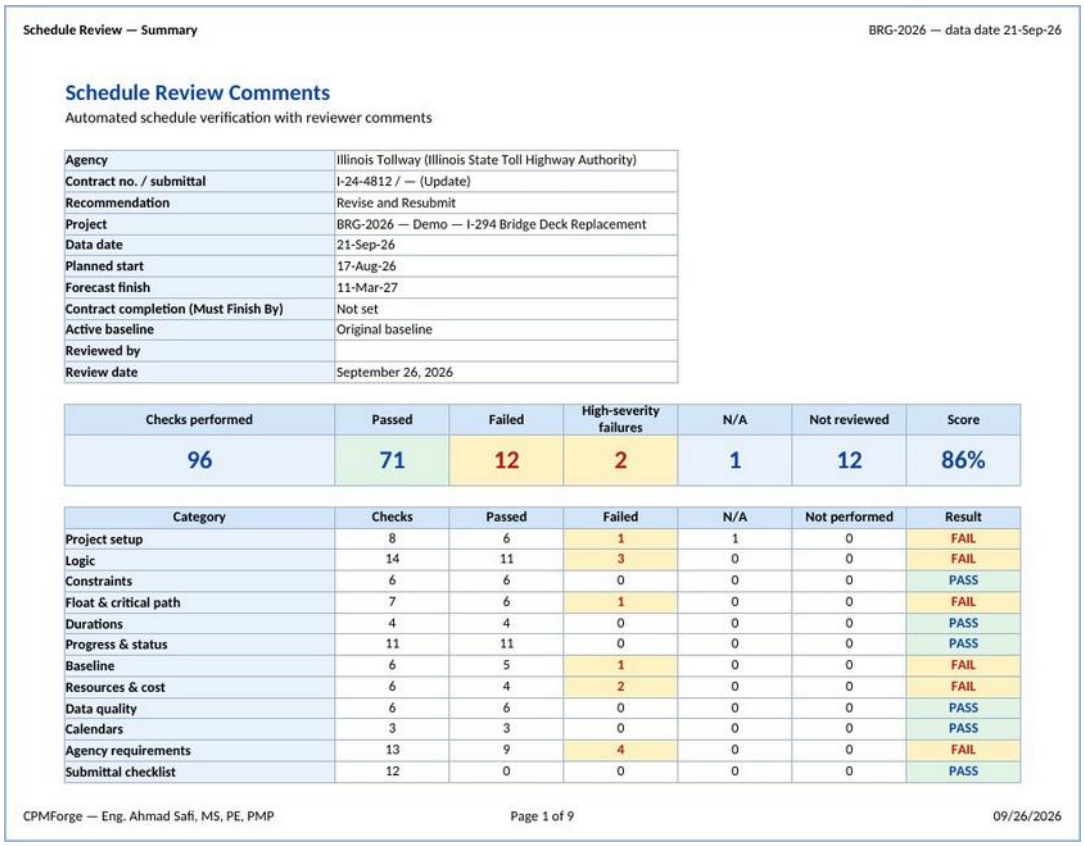
No comparison has been run. Use **Compare** to load the previous update and include its changes here.

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Figure 33-12. Schedule Narrative (auto-drafted)

Review comments workbook (Excel)

Reports → Review comments (Excel workbook) creates a workbook with a summary sheet and one row per finding: number, check, severity, plain-English meaning, affected activities, required action, reviewer comment, and columns for the contractor's response and the reviewer's disposition. Send it with the transmittal letter; the contractor answers in the same file.



Schedule Review — Summary BRG-2026 — data date 21-Sep-26

Schedule Review Comments

Automated schedule verification with reviewer comments

Agency	Illinois Tollway (Illinois State Toll Highway Authority)
Contract no. / submittal	I-24-4812 / — (Update)
Recommendation	Revise and Resubmit
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement
Data date	21-Sep-26
Planned start	17-Aug-26
Forecast finish	11-Mar-27
Contract completion (Must Finish By)	Not set
Active baseline	Original baseline
Reviewed by	
Review date	September 26, 2026

Checks performed	Passed	Failed	High-severity failures	N/A	Not reviewed	Score
96	71	12	2	1	12	86%

Category	Checks	Passed	Failed	N/A	Not performed	Result
Project setup	8	6	1	1	0	FAIL
Logic	14	11	3	0	0	FAIL
Constraints	6	6	0	0	0	PASS
Float & critical path	7	6	1	0	0	FAIL
Durations	4	4	0	0	0	PASS
Progress & status	11	11	0	0	0	PASS
Baseline	6	5	1	0	0	FAIL
Resources & cost	6	4	2	0	0	FAIL
Data quality	6	6	0	0	0	PASS
Calendars	3	3	0	0	0	PASS
Agency requirements	13	9	4	0	0	FAIL
Submittal checklist	12	0	0	0	0	PASS

CPMForge — Eng. Ahmad Safi, MS, PE, PMP Page 1 of 9 09/26/2026

Figure 33-13. Review comments workbook (printed view)

CHAPTER 34

The professional schedule narrative

Reports → Schedule narrative (professional) (or the **Narrative** button) writes a complete monthly narrative from the schedule, the stored updates, comparisons, delay analysis and QA results — without AI or internet.

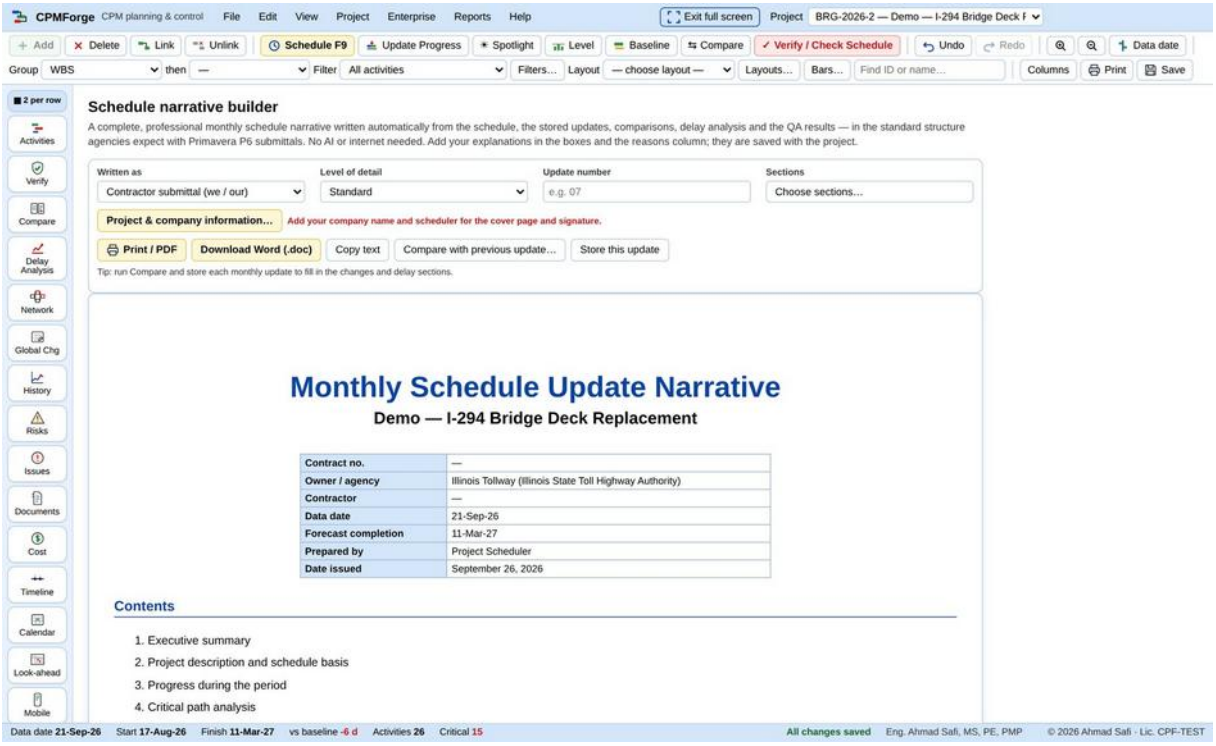


Figure 34-1. Narrative builder

1. Enter your details once in **Project & company information**.
2. Choose **Written as** — Contractor submittal ("we completed…") or Owner / CM review ("the Contractor…").
3. Choose the level of detail (concise, standard, detailed), type the update number and choose sections if needed.
4. Store each update and run **Compare** first so the changes and delay sections are complete.
5. Type your own explanations in the box under each section and the **reason** for each change; add lost work days in Section 8.
6. **Print / PDF**, **Download Word** or **Copy text**.

Section	Content
Cover and contents	Company, logo, title, update number, project, contract table, prepared by, date issued, distribution.
1. Executive summary	Percent complete, forecast vs contract and baseline, change since last update.
2. Project description and schedule basis	Description, owner, contractor, baseline approval, calendars, holidays, constraints with justification.

Section	Content
3. Progress	Completed, started and in-progress work; missed activities; progress by work area; out-of-sequence work.
4. Critical path	Path traced through work areas with a table.
5. Float analysis	Float distribution, forecast trend chart, lowest float by work area.
6. Changes	Added / deleted activities and changes with reasons.
7. Delays and time extensions	Windows and TIA results and recovery.
8. Weather and lost days	Your lost-day table.
9. Manpower, equipment and cost	Resources and earned value.
10. Milestones	Forecast, baseline, variance and status.
11. Next 30 days	Planned work, critical first.
12. Areas of concern	Automatic concerns and actions.
13. Schedule quality	Checks passed and failed.
14. Attachments	Submittal attachment list.
15. Statement	Certification and signatures.

Sample pages



Illinois Tollway — Schedule Narrative Contract I-24-4812 · Data date 21-Sep-26

ABC Construction Management, LLC
100 Main St, Chicago, IL · (312) 555-0100 · schedules@abccm.com

Monthly Schedule Update Narrative

Update No. 02

Demo — I-294 Bridge Deck Replacement

Contract no.	I-24-4812
Owner / agency	Illinois Tollway
Owner's representative	Jane Smith, PE
Contractor	XYZ Bridge Builders, Inc.
Location	I-294 over Salt Creek
Data date	21-Sep-26
Forecast completion	11-Mar-27
Prepared by	John Doe, PSP — Project Scheduler
Date issued	September 26, 2026
Distribution	Owner PM; CM office; file

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Figure 34-2. Narrative — cover page

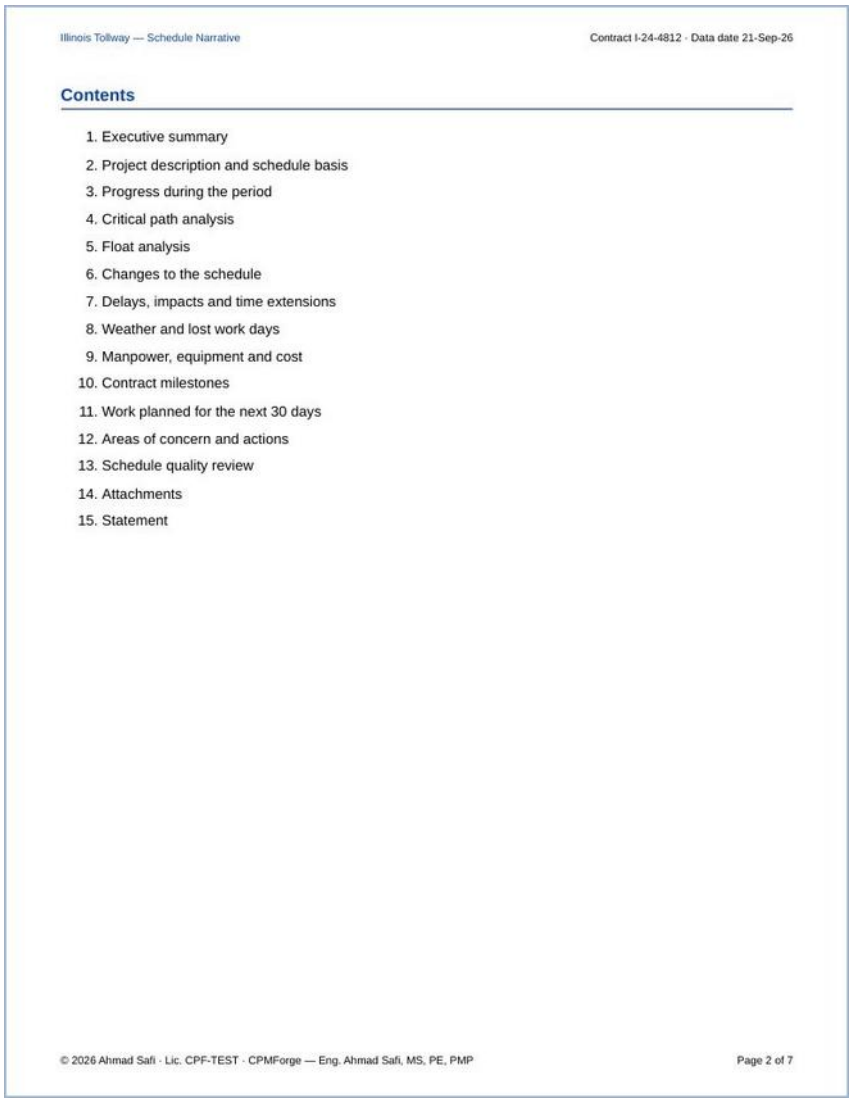
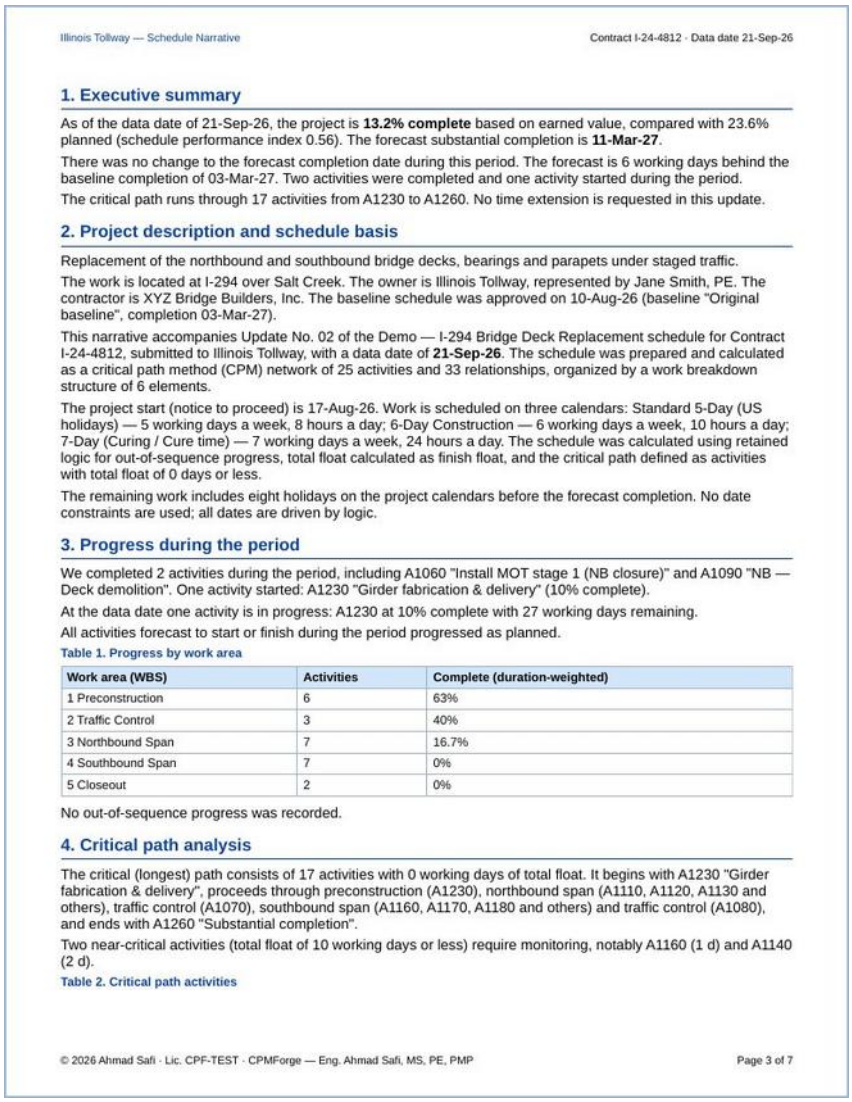


Figure 34-3. Narrative — contents



Illinois Tollway — Schedule Narrative

Contract I-24-4812 · Data date 21-Sep-26

1. Executive summary

As of the data date of 21-Sep-26, the project is **13.2% complete** based on earned value, compared with 23.6% planned (schedule performance index 0.56). The forecast substantial completion is **11-Mar-27**.

There was no change to the forecast completion date during this period. The forecast is 6 working days behind the baseline completion of 03-Mar-27. Two activities were completed and one activity started during the period.

The critical path runs through 17 activities from A1230 to A1260. No time extension is requested in this update.

2. Project description and schedule basis

Replacement of the northbound and southbound bridge decks, bearings and parapets under staged traffic.

The work is located at I-294 over Salt Creek. The owner is Illinois Tollway, represented by Jane Smith, PE. The contractor is XYZ Bridge Builders, Inc. The baseline schedule was approved on 10-Aug-26 (baseline "Original baseline", completion 03-Mar-27).

This narrative accompanies Update No. 02 of the Demo — I-294 Bridge Deck Replacement schedule for Contract I-24-4812, submitted to Illinois Tollway, with a data date of **21-Sep-26**. The schedule was prepared and calculated as a critical path method (CPM) network of 25 activities and 33 relationships, organized by a work breakdown structure of 6 elements.

The project start (notice to proceed) is 17-Aug-26. Work is scheduled on three calendars: Standard 5-Day (US holidays) — 5 working days a week, 8 hours a day; 6-Day Construction — 6 working days a week, 10 hours a day; 7-Day (Curing / Cure time) — 7 working days a week, 24 hours a day. The schedule was calculated using retained logic for out-of-sequence progress, total float calculated as finish float, and the critical path defined as activities with total float of 0 days or less.

The remaining work includes eight holidays on the project calendars before the forecast completion. No date constraints are used; all dates are driven by logic.

3. Progress during the period

We completed 2 activities during the period, including A1060 "Install MOT stage 1 (NB closure)" and A1090 "NB — Deck demolition". One activity started: A1230 "Girder fabrication & delivery" (10% complete).

At the data date one activity is in progress: A1230 at 10% complete with 27 working days remaining.

All activities forecast to start or finish during the period progressed as planned.

Table 1. Progress by work area

Work area (WBS)	Activities	Complete (duration-weighted)
1 Preconstruction	6	63%
2 Traffic Control	3	40%
3 Northbound Span	7	16.7%
4 Southbound Span	7	0%
5 Closeout	2	0%

No out-of-sequence progress was recorded.

4. Critical path analysis

The critical (longest) path consists of 17 activities with 0 working days of total float. It begins with A1230 "Girder fabrication & delivery", proceeds through preconstruction (A1230), northbound span (A1110, A1120, A1130 and others), traffic control (A1070), southbound span (A1160, A1170, A1180 and others) and traffic control (A1080), and ends with A1260 "Substantial completion".

Two near-critical activities (total float of 10 working days or less) require monitoring, notably A1160 (1 d) and A1140 (2 d).

Table 2. Critical path activities

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Figure 34-4. Narrative — executive summary and schedule basis

Tip

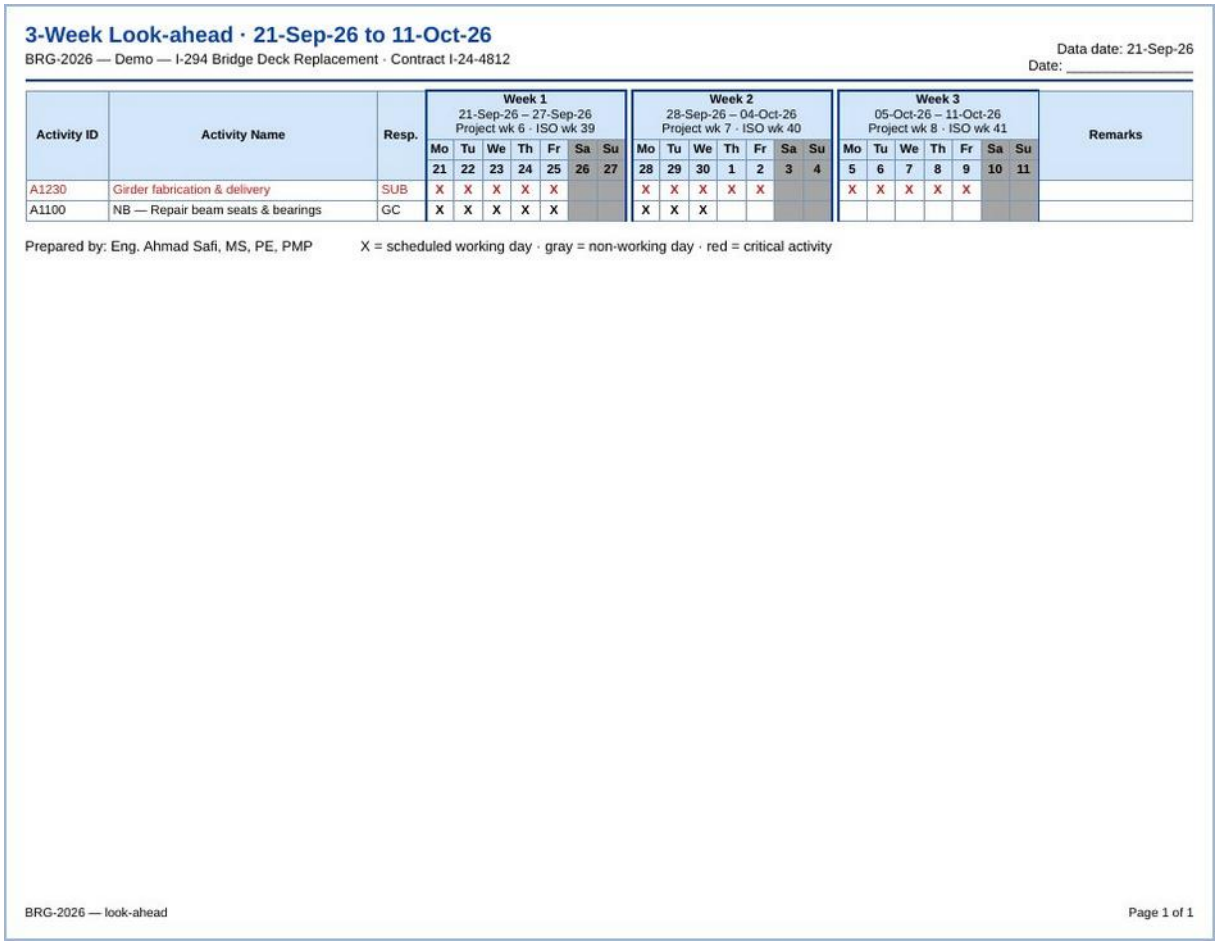
The explanations you type are saved with the project and printed in the narrative. Filling in the reasons for changes is what turns a good narrative into an excellent one.

CHAPTER 35

Analysis and field reports

Look-ahead weekly grid (print and Excel)

Item	Details
Open it	Look-ahead in the navigation panel, or Reports → Look-ahead weekly grid.
Purpose	The Monday–Sunday chart used in weekly progress meetings.
Contents	Activities with an X on each working day of each week; gray non-working days; responsibility, start/finish and remarks columns; added meeting rows.
Options	Start date, current week, week number, number of weeks, week start day, work calendar, group by WBS, hide completed.
Output	Print / PDF (landscape), Excel.



3-Week Look-ahead · 21-Sep-26 to 11-Oct-26

BRG-2026 — Demo — I-294 Bridge Deck Replacement · Contract I-24-4812

Data date: 21-Sep-26

Date: _____

Activity ID	Activity Name	Resp.	Week 1 21-Sep-26 – 27-Sep-26 Project wk 6 · ISO wk 39							Week 2 28-Sep-26 – 04-Oct-26 Project wk 7 · ISO wk 40							Week 3 05-Oct-26 – 11-Oct-26 Project wk 8 · ISO wk 41							Remarks
			Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	
			21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	
A1230	Girder fabrication & delivery	SUB	X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			
A1100	NB — Repair beam seats & bearings	GC	X	X	X	X	X			X	X	X												

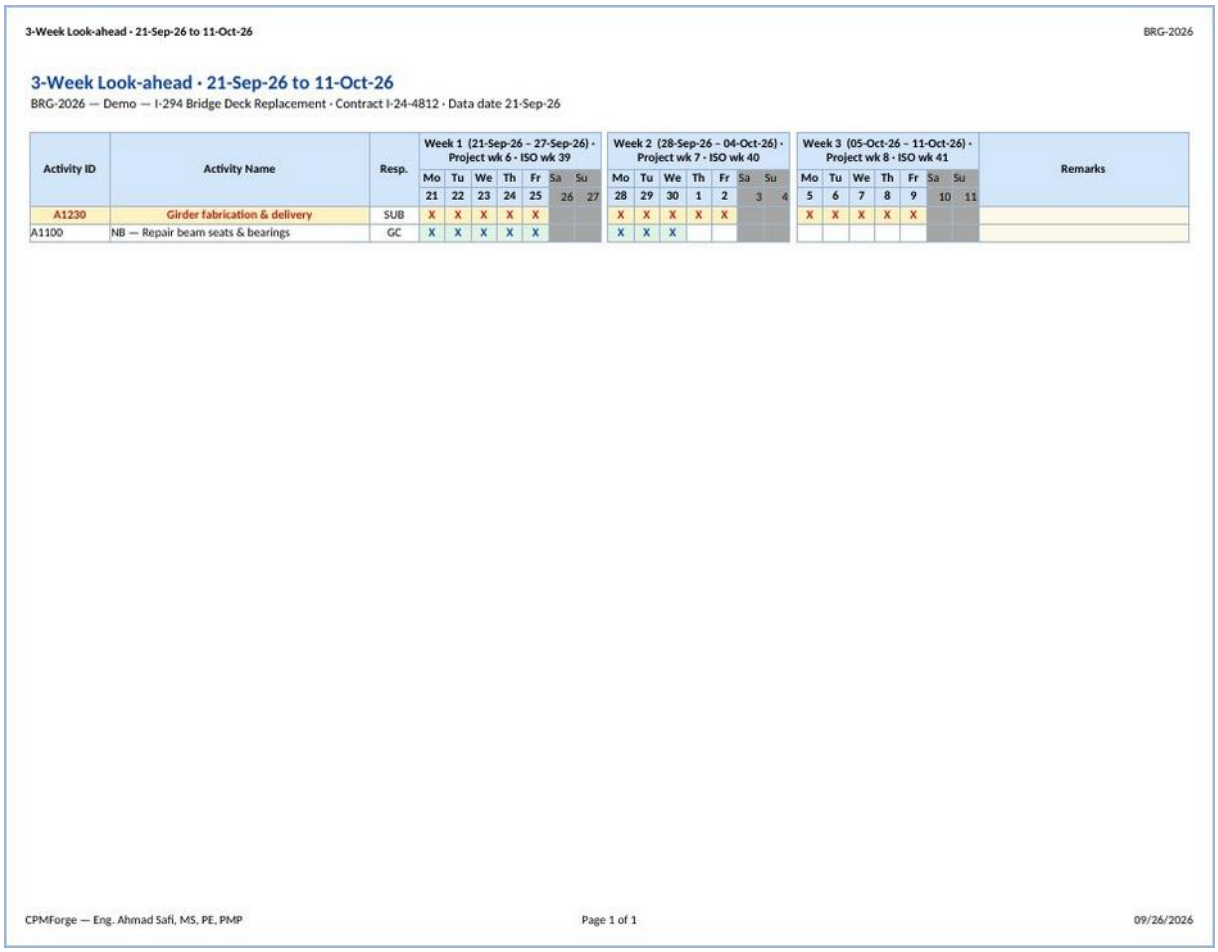
Prepared by: Eng. Ahmad Safi, MS, PE, PMP

X = scheduled working day · gray = non-working day · red = critical activity

BRG-2026 — look-ahead

Page 1 of 1

Figure 35-1. Look-ahead weekly grid (print and Excel)



3-Week Look-ahead · 21-Sep-26 to 11-Oct-26 BRG-2026

3-Week Look-ahead · 21-Sep-26 to 11-Oct-26

BRG-2026 — Demo — I-294 Bridge Deck Replacement · Contract I-24-4812 · Data date 21-Sep-26

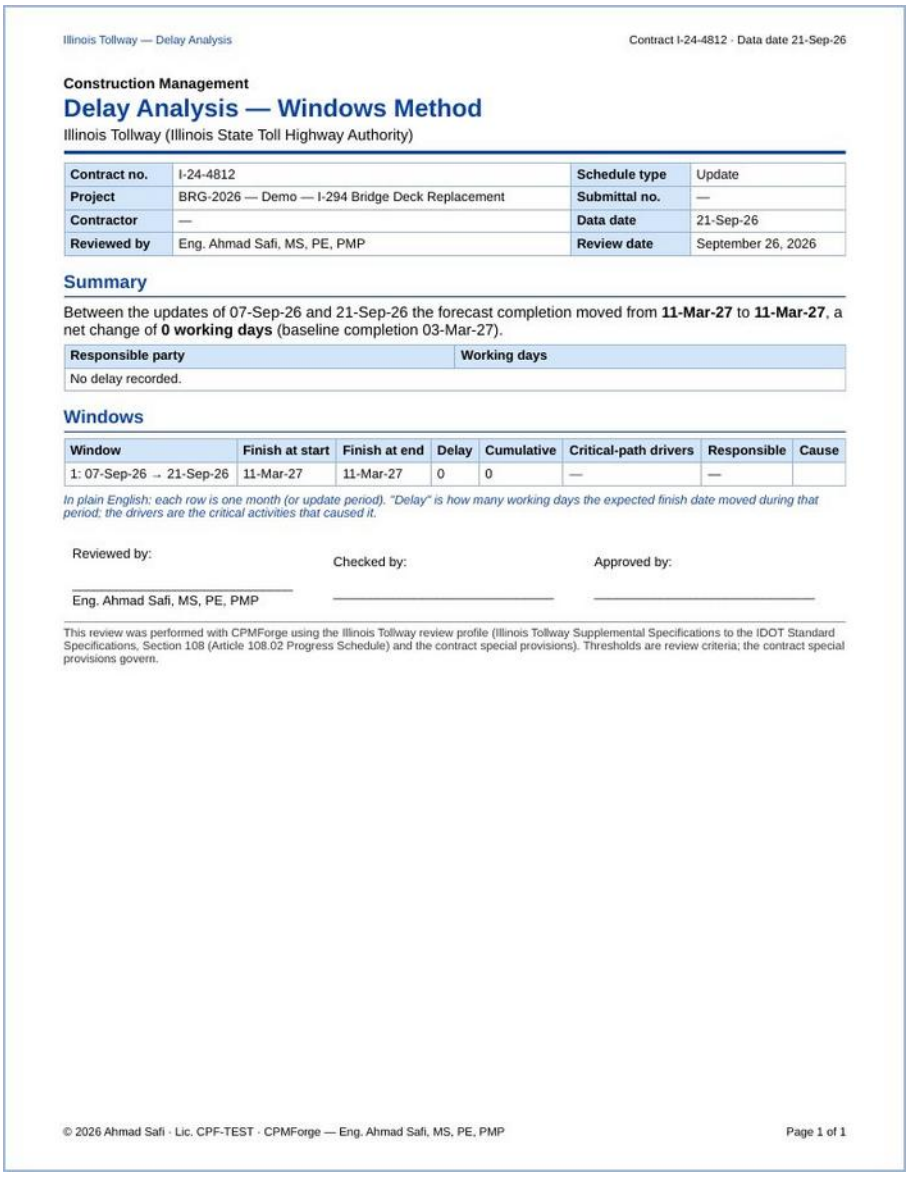
Activity ID	Activity Name	Resp.	Week 1 (21-Sep-26 – 27-Sep-26) · Project wk 6 · ISO wk 39							Week 2 (28-Sep-26 – 04-Oct-26) · Project wk 7 · ISO wk 40							Week 3 (05-Oct-26 – 11-Oct-26) · Project wk 8 · ISO wk 41							Remarks
			Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	
			21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	
A1230	Girder fabrication & delivery	SUB	X	X	X	X	X			X	X	X	X	X			X	X	X	X	X			
A1100	NB — Repair beam seats & bearings	GC	X	X	X	X	X			X	X	X												

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Figure 35-2. Look-ahead grid exported to Excel (printed view)

Delay analysis — windows report

Item	Details
Open it	Delay Analysis → Windows analysis → Print delay report / Export (Excel).
Purpose	Documents how the forecast completion moved between updates and why.
Contents	Summary of the net movement, delay by responsible party, and one row per window: finish at start and end, delay, cumulative delay, critical-path drivers, responsible party and cause; plus the narrative if written.
Output	Print / PDF, Excel.



Illinois Tollway — Delay Analysis — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Delay Analysis — Windows Method

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

Summary

Between the updates of 07-Sep-26 and 21-Sep-26 the forecast completion moved from **11-Mar-27** to **11-Mar-27**, a net change of **0 working days** (baseline completion 03-Mar-27).

Responsible party	Working days
No delay recorded.	

Windows

Window	Finish at start	Finish at end	Delay	Cumulative	Critical-path drivers	Responsible	Cause
1: 07-Sep-26 → 21-Sep-26	11-Mar-27	11-Mar-27	0	0	—	—	

In plain English: each row is one month (or update period). "Delay" is how many working days the expected finish date moved during that period; the drivers are the critical activities that caused it.

Reviewed by: Eng. Ahmad Safi, MS, PE, PMP

Checked by: _____

Approved by: _____

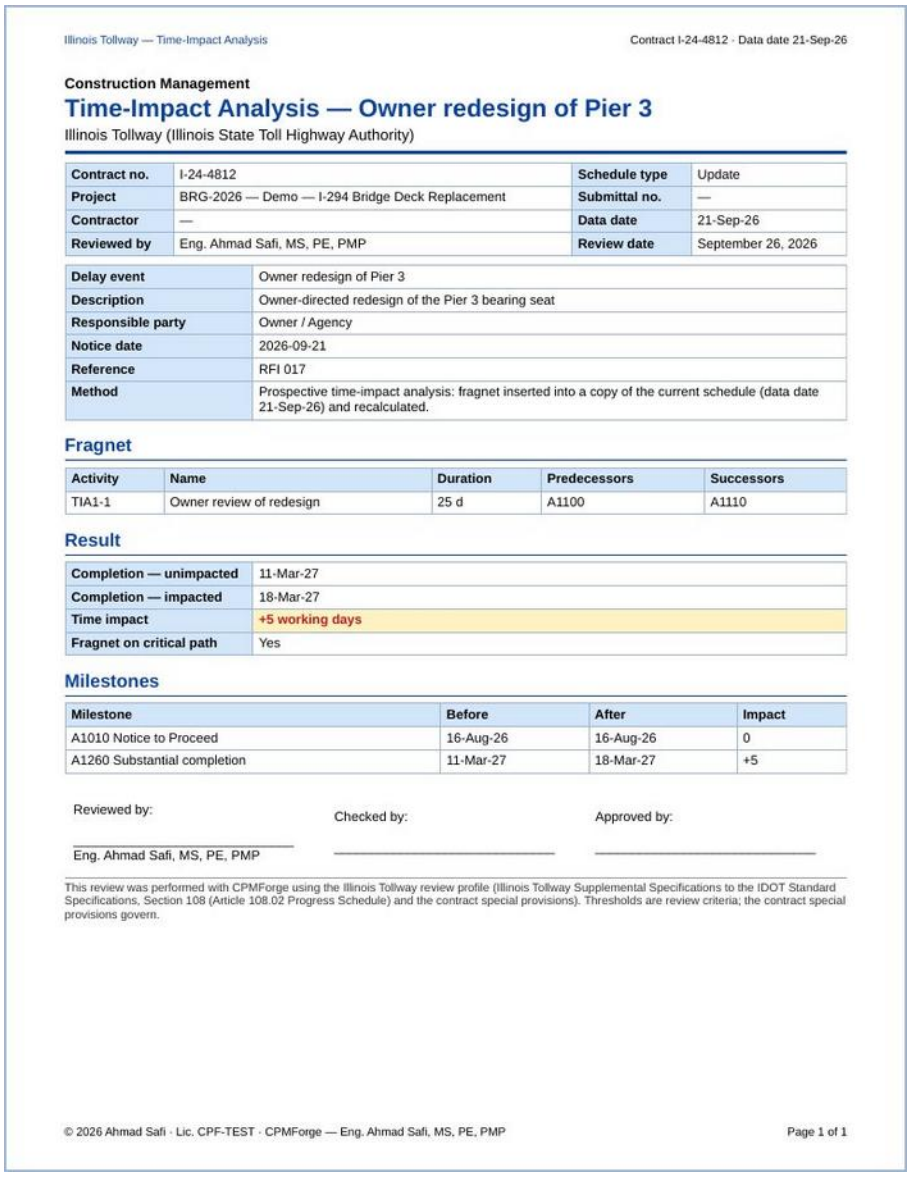
This review was performed with CPMForge using the Illinois Tollway review profile (Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Section 108 (Article 108.02 Progress Schedule) and the contract special provisions). Thresholds are review criteria; the contract special provisions govern.

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Figure 35-3. Delay analysis — windows report

Time-impact analysis report

Item	Details
Open it	Delay Analysis → Time-impact analysis → Print TIA report.
Purpose	Supports a time-extension request for one delay event.
Contents	Event, description, responsible party, notice date and reference, method, the fragnet activities and logic, unimpacted and impacted completion, time impact, milestone impacts and the narrative.
Output	Print / PDF.



Illinois Tollway — Time-Impact Analysis — Contract I-24-4812 · Data date 21-Sep-26

Construction Management

Time-Impact Analysis — Owner redesign of Pier 3

Illinois Tollway (Illinois State Toll Highway Authority)

Contract no.	I-24-4812	**Schedule type**	Update
Project	BRG-2026 — Demo — I-294 Bridge Deck Replacement	**Submittal no.**	—
Contractor	—	**Data date**	21-Sep-26
Reviewed by	Eng. Ahmad Safi, MS, PE, PMP	**Review date**	September 26, 2026

Delay event	Owner redesign of Pier 3
Description	Owner-directed redesign of the Pier 3 bearing seat
Responsible party	Owner / Agency
Notice date	2026-09-21
Reference	RFI 017
Method	Prospective time-impact analysis: fragnet inserted into a copy of the current schedule (data date 21-Sep-26) and recalculated.

Fragnet

Activity	Name	Duration	Predecessors	Successors
TIA1-1	Owner review of redesign	25 d	A1100	A1110

Result

Completion — unimpacted	11-Mar-27
Completion — impacted	18-Mar-27
Time impact	+5 working days
Fragnet on critical path	Yes

Milestones

Milestone	Before	After	Impact
A1010 Notice to Proceed	16-Aug-26	16-Aug-26	0
A1260 Substantial completion	11-Mar-27	18-Mar-27	+5

Reviewed by: Eng. Ahmad Safi, MS, PE, PMP

Checked by: _____

Approved by: _____

This review was performed with CPMForge using the Illinois Tollway review profile (Illinois Tollway Supplemental Specifications to the IDOT Standard Specifications, Section 108 (Article 108.02 Progress Schedule) and the contract special provisions). Thresholds are review criteria; the contract special provisions govern.

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Figure 35-4. Time-impact analysis report

Earned value report

Item	Details
Open it	Tracking / Earned value → Print, or Export Excel (4 sheets).
Purpose	Cost and schedule performance with forecasts.
Contents	S-curves, PV / EV / AC, SPI, CPI, earned schedule, five estimates at completion, by WBS and period.
Output	Print / PDF, Excel.

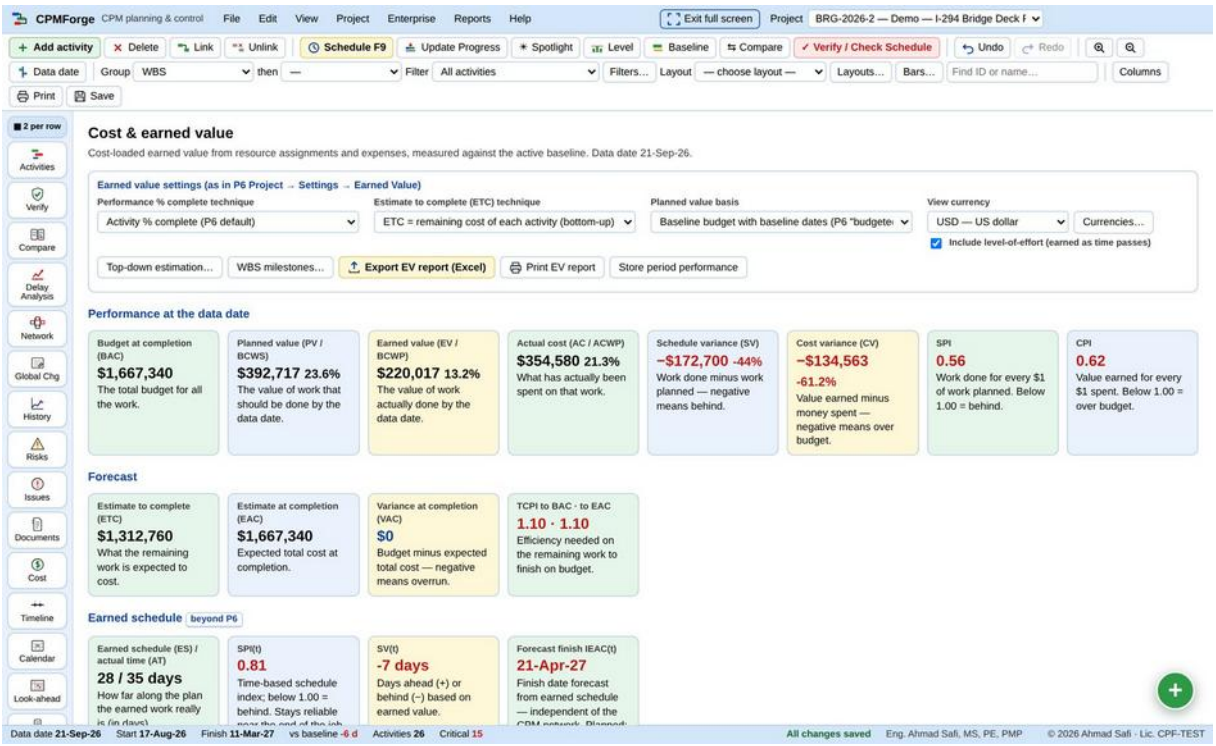


Figure 35-5. Earned value report

Gantt chart printout

Item	Details
Open it	File → Print / PDF (from the Activities view).
Purpose	The schedule itself for submittals and meetings.
Contents	Activity table columns and bars as displayed, with title block, logo, legend, revision box and page numbers.
Options	Page setup (paper, orientation, margins, title block) and the print preview options (pages wide, timescale start and end, columns, repeat columns).
Output	Print / PDF.

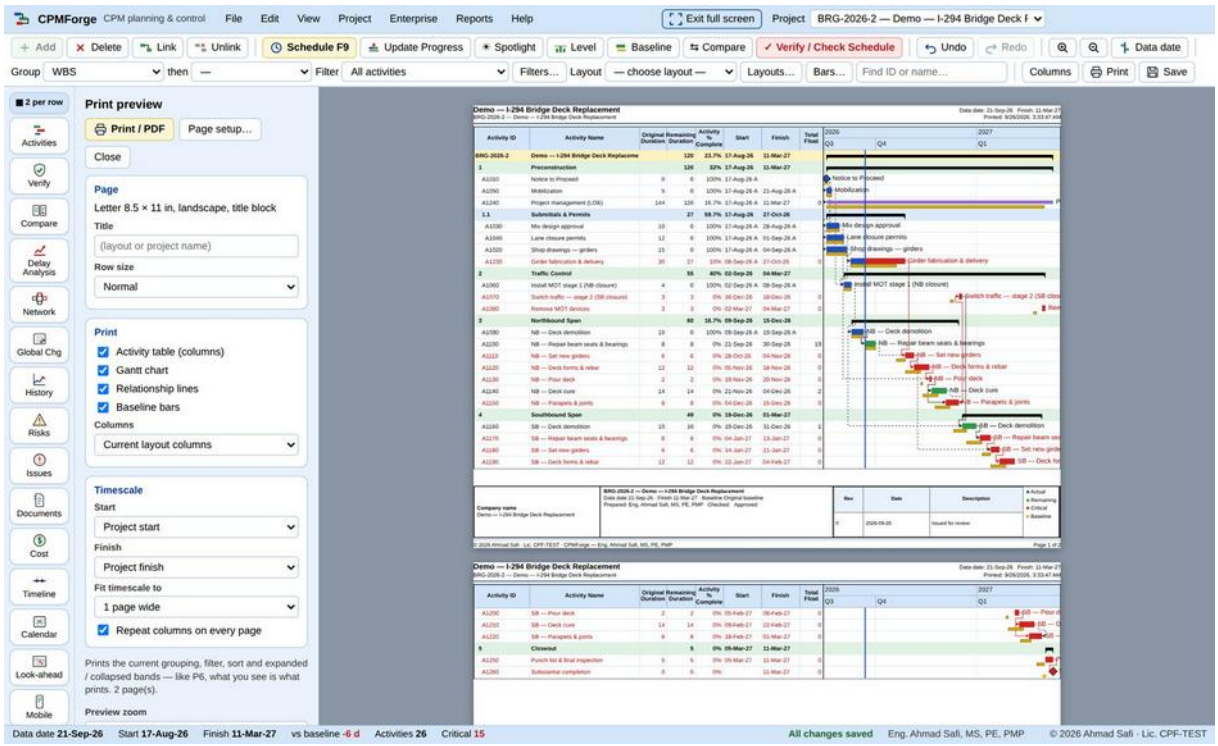


Figure 35-6. Gantt chart printout

Published project website

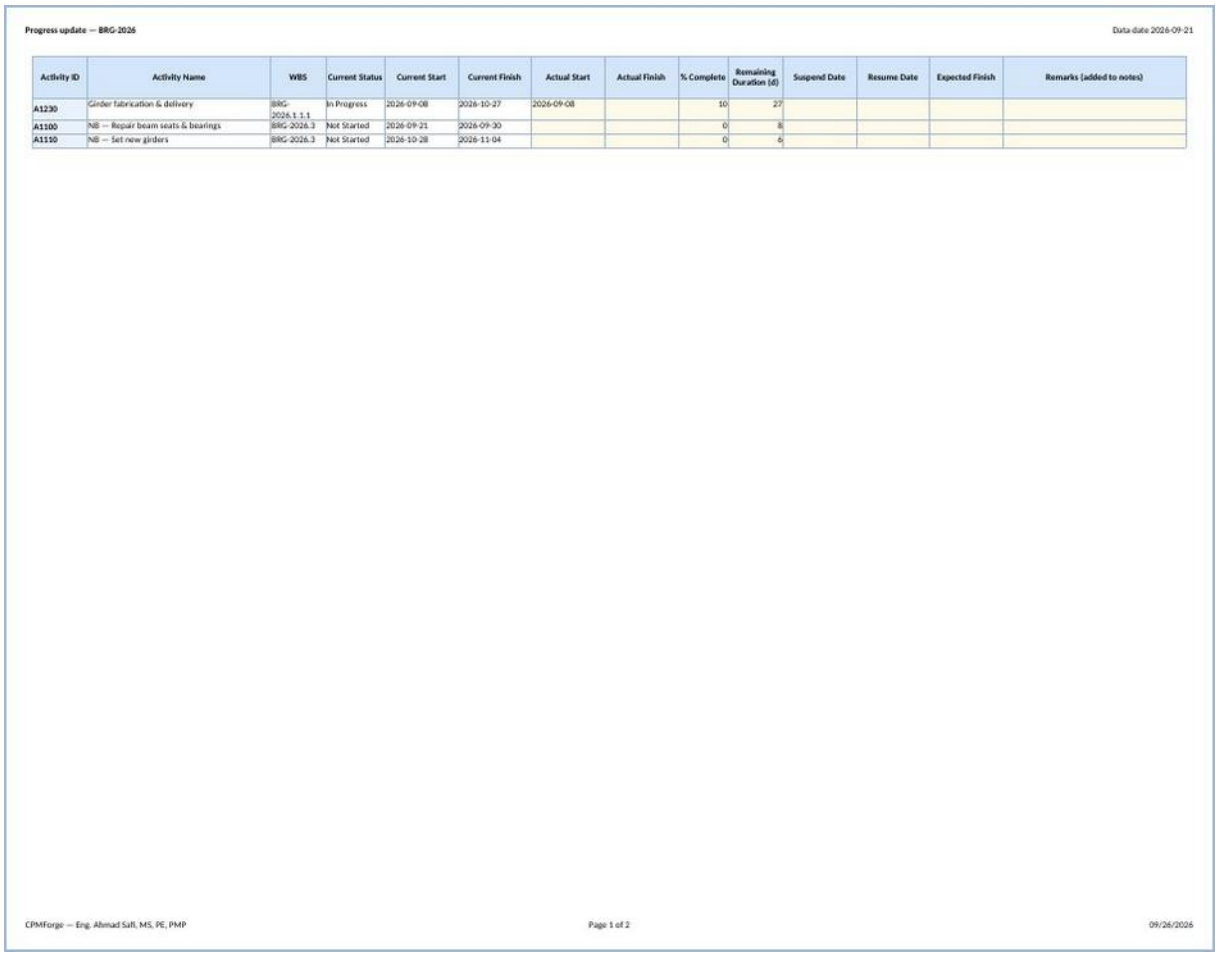
Item	Details
Open it	File → Publish project website.
Purpose	Share the schedule with people who do not use CPMForge.
Contents	One HTML page with the Gantt picture, milestones, critical path, look-ahead and key tables.
Output	HTML file to e-mail or post.

CHAPTER 36

Excel outputs, batch reports and the AI narrative

Excel outputs

Workbook	Where	Content
Review comments	Reports / Verify	Findings with explanation, actions and response columns.
Progress update sheet	File → Export progress update sheet	Activities to update with columns for actual start, actual finish, % complete, remaining duration and remarks; import back with File → Import progress update.
Look-ahead grid	Look-ahead → Export to Excel	Weekly grid with X marks and remarks.
Activity table	File → Export activity table	The table as displayed (columns, grouping, filter).
Comparison	Compare → Export comparison (Excel)	Every change between two versions.
Delay windows	Delay Analysis → Export (Excel)	Windows with delays, drivers and responsibility.
Earned value	Tracking → Excel	Project, WBS, period and activity sheets.



Progress update — BRG-2026 Data date 2026-09-21

Activity ID	Activity Name	WBS	Current Status	Current Start	Current Finish	Actual Start	Actual Finish	% Complete	Remaining Duration (d)	Suspend Date	Resume Date	Expected Finish	Remarks (added to notes)
A1230	Girder fabrication & delivery	BRG-2026.1.1.1	In Progress	2026-09-08	2026-10-27	2026-09-08		10	27				
A1100	NB — Repair beam seats & bearings	BRG-2026.3	Not Started	2026-09-21	2026-09-30			0	8				
A1110	NB — Set new girders	BRG-2026.3	Not Started	2026-10-28	2026-11-04			0	6				

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Figure 36-1. Progress update sheet (printed view)

Batch reports

Reports → Batch reports prints or exports several reports in one step — for example the monthly package of narrative, critical path, look-ahead, milestones and QA summary. Save your selection to reuse it every month.

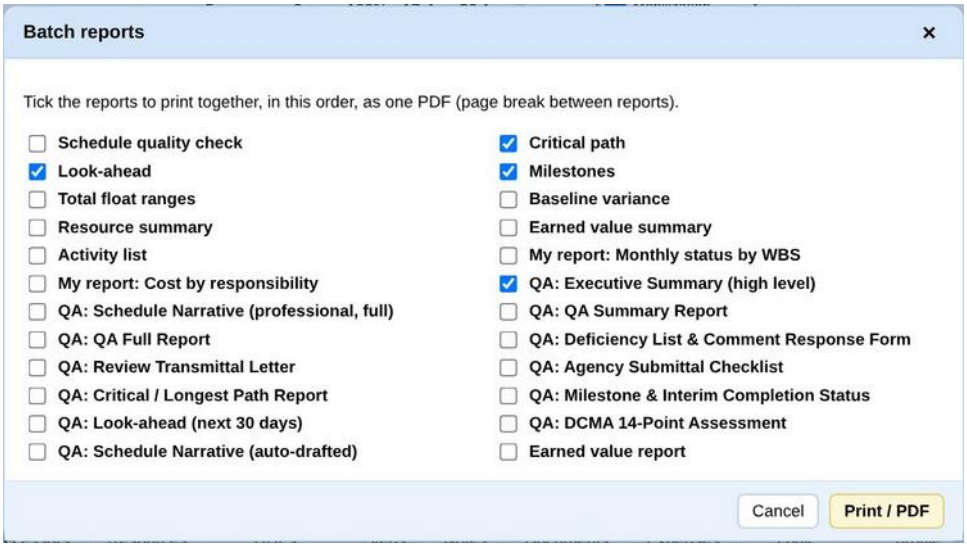


Figure 36-2. Batch reports

AI narrative (optional)

Reports → AI narrative builds a prompt from the project facts. Copy it into ChatGPT, Claude or Gemini, or generate the draft inside CPMForge with your own API key. Only the text shown in the window is sent, and only when you click Generate. Always review and edit the draft; you remain responsible for its content.

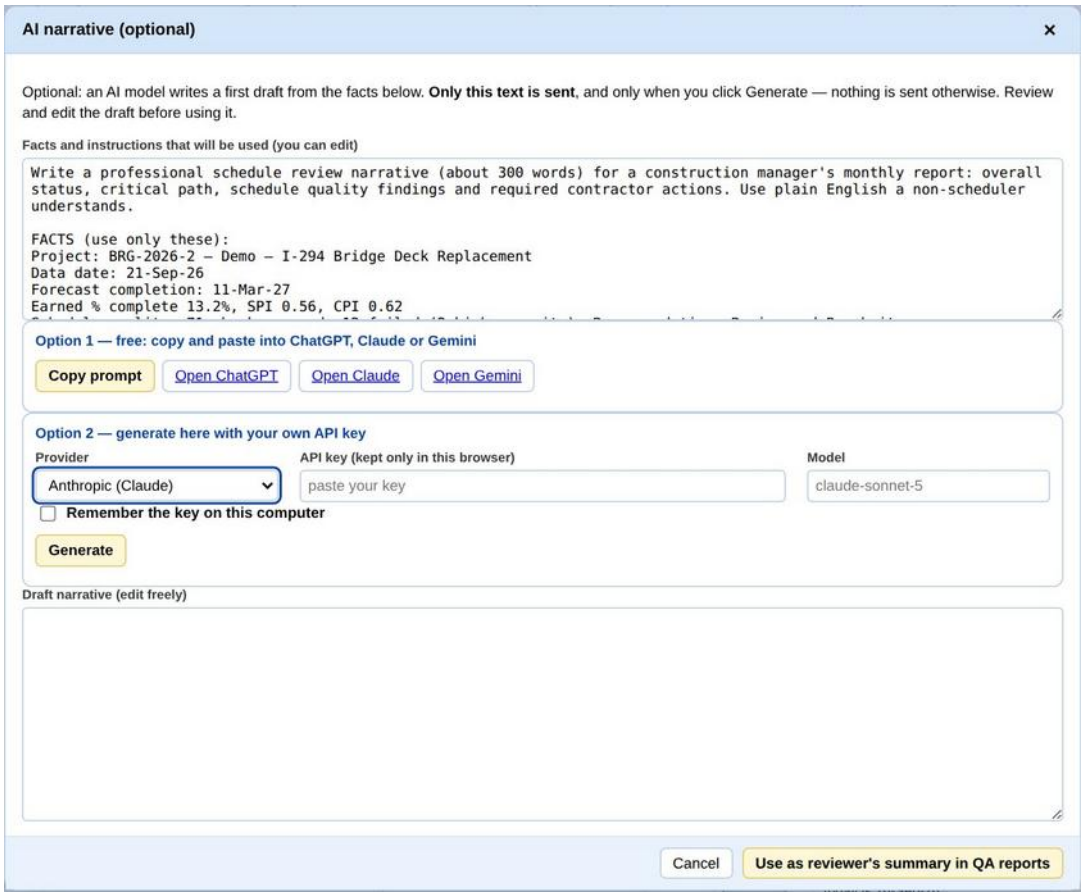


Figure 36-3. AI narrative (optional)

Part VIII — Workflows

Step-by-step procedures for contractors, CMs and owners

CHAPTER 37

Contractor: preparing the baseline schedule

1. Enter project & company information and schedule options (data date = NTP, must finish by = contract completion).
2. Set up calendars (5-day, 7-day curing, winter shutdown, night work) and holidays.
3. Build the WBS (phases, stages, areas) and a Responsibility code.
4. Add activities and milestones (contract and interim completion dates).
5. Add logic — every activity with a predecessor and a successor; avoid leads and long lags.
6. Load resources and costs if required by the contract.
7. Press F9; review the critical path and float.
8. Verify with the agency profile and fix all High findings.
9. Create the baseline; print the Gantt, critical path and narrative; export the XER.
10. Submit, and record comments and the resubmittal.

CHAPTER 38

CM / owner: reviewing a contractor schedule

1. **File → Import Primavera XER** (the contractor's file).
2. Select the agency profile and click **Verify**.
3. Run **Compare** against the previous update or baseline.
4. Review the critical path, float, constraints, calendars and progress.
5. Run the windows analysis if the completion moved.
6. Write the reviewer summary; print the **QA Summary** or **Executive Summary** and the **Deficiency List**.
7. Export the **Review comments workbook** and send it with the transmittal letter.
8. Record the decision (accepted, accepted as noted, revise and resubmit, rejected) and store the update.

CHAPTER 39

Monthly update

1. Agree the cut-off date (new data date).
2. Collect field progress (progress sheet, spotlight list).
3. Enter actuals, % complete and remaining durations; apply actuals where appropriate.
4. Make and document logic and duration changes.
5. Schedule (F9), verify, compare with the last update.
6. Update the look-ahead for the progress meeting.
7. Write the narrative with reasons for changes; print the monthly package (batch reports).
8. Store period performance; export backup and XER.

CHAPTER 40

Baseline schedule review checklist

- Meets contract requirements (format, level of detail, milestones, calendars, cost / resource loading).
- Complete scope; WBS matches the contract stages.
- Logic complete; no open ends except start and finish; leads and lags justified.
- Durations reasonable; constraints only for contract dates.
- Critical path continuous and credible; float reasonable.
- Verification passed with no High findings; narrative and attachments complete.

CHAPTER 41

Recovery schedule

1. Identify the delay and its causes (windows analysis, compare).
2. Set the recovery target (contract or milestone date).
3. Resequence work, add crews or shifts, change calendars (overtime, weekends) — document each change.
4. Recalculate, verify and compare with the current update.
5. Use a reflection (what-if copy) to test options before changing the schedule.
6. Explain the plan in the narrative (Section 7) and monitor recovery each month.

Part IX — Reference

Every command, button, screen, tab, report and check

CHAPTER 42

Menu command reference

Edit menu



Figure 42-1. Edit menu

Command	What it does
Cut activities	Cuts the selected activities so they can be pasted elsewhere (Ctrl+X).
Find and replace	Finds and replaces text in activity IDs, names or any text column (Ctrl+H).
Spell check	Checks spelling of activity names and notes and suggests corrections.
User preferences	User preferences: date format, row height, font size, duration units (days, hours, weeks, months) and other display options.
Undo	Undoes the last change (Ctrl+Z). Up to 40 steps.
Redo	Redoes the last undone change (Ctrl+Y).
Add activity	Adds a new activity below the selected one (Insert key or the green + button).

Command	What it does
Duplicate activity	Duplicates the selected activity with a new ID.
Copy activities	Copies the selected activities or cells (Ctrl+C). Cells can be pasted into Excel.
Paste activities	Pastes copied activities or cells (Ctrl+V), including from Excel.
Fill down (current column)	Copies the value of the top selected cell down through the selected rows (Ctrl+D).
Dissolve activity	Deletes an activity but keeps the logic by linking its predecessors directly to its successors.
Delete activity	Deletes the selected activities and their relationships (Delete key).
Link selected (FS)	Links the selected activities in order with finish-to-start relationships.
Unlink selected	Removes the relationships between the selected activities.
Select all	Selects all visible activities (Ctrl+A).
Global Change	Opens Global Change: change a field for many activities at once using conditions (e.g. add 2 days to all “Paving” activities).
Assign WBS to selected	Moves the selected activities to a chosen WBS element.
Renumber activity IDs	Renumbers activity IDs using a prefix, start number and increment.

View menu

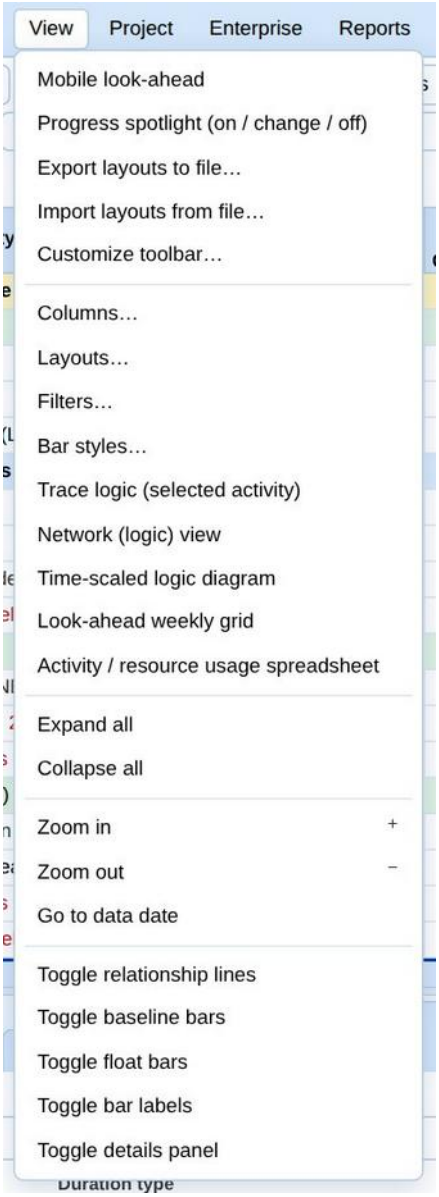


Figure 42-2. View menu

Command	What it does
Mobile look-ahead	Switches to the phone-friendly look-ahead (opens automatically on small screens).
Progress spotlight (on / change / off)	Highlights the activities that should be progressed in the update period (between the last and new data date).
Export layouts to file	Saves your layouts (columns, grouping, filters, bars) to a file to share with colleagues.
Import layouts from file	Loads layouts from a file.
Customize toolbar	Chooses which buttons appear on the toolbar.
Columns	Chooses and orders the columns in the activity table (about 90 available).

Command	What it does
Layouts	Saves, applies, renames and deletes named layouts (columns, grouping, sorting, filters and bar settings).
Filters	Creates and applies filters (e.g. critical activities, not started, WBS, codes, dates), including combined AND/OR conditions.
Bar styles	Sets bar styles and colors for the Gantt chart (critical, remaining, actual, baseline, float, milestones).
Trace logic (selected activity)	Shows the predecessors and successors of the selected activity, several levels deep, as a logic trace.
Network (logic) view	Opens the network (PERT-style) logic diagram.
Time-scaled logic diagram	Opens the time-scaled logic diagram — activities on a time scale with all relationship lines.
Look-ahead weekly grid	Opens the weekly look-ahead grid (Mo–Su with X on working days).
Activity / resource usage spreadsheet	Opens the activity / resource usage spreadsheet by period.
Expand all	Expands all WBS groups.
Collapse all	Collapses all WBS groups to show summaries only.
Zoom in	Zooms the Gantt time scale in.
Zoom out	Zooms the Gantt time scale out.
Go to data date	Scrolls the Gantt chart to the data date.
Toggle relationship lines	Shows or hides relationship lines on the Gantt.
Toggle baseline bars	Shows or hides baseline bars.
Toggle float bars	Shows or hides total-float bars.
Toggle bar labels	Shows or hides bar labels.
Toggle details panel	Shows or hides the bottom details panel.

Project menu

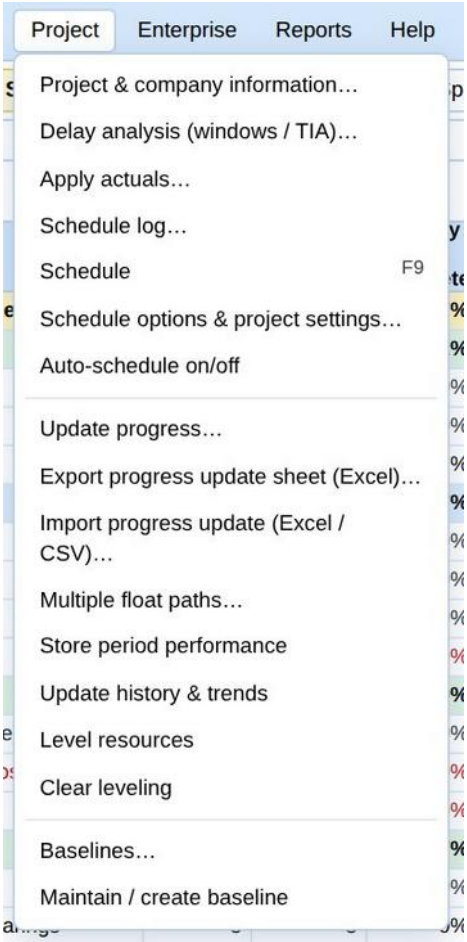


Figure 42-3. Project menu

Command	What it does
Project & company information	Enter your company, contract, owner, contractor, scheduler and project manager details, used on narratives, reports and title blocks.
Delay analysis (windows / TIA)	Opens Delay Analysis: windows analysis between stored updates and time-impact analysis (TIA) of delay events.
Apply actuals	Applies actual dates automatically: activities planned to start or finish before the new data date are given actual dates (you choose which).
Schedule log	Shows the schedule calculation log: open ends, constraints, out-of-sequence progress, errors and warnings.
Schedule	Calculates the schedule (F9): forward and backward pass, dates, total and free float, and the critical path.
Schedule options & project settings	Schedule options and project settings: data date, must-finish date, calendars, retained logic / progress override, total float calculation, critical path definition, lag calendar and more.
Auto-schedule on/off	Turns automatic rescheduling after each change on or off.
Update progress	Moves the data date and updates progress: actual dates, % complete and remaining durations.

Command	What it does
Export progress update sheet (Excel)	Creates an Excel progress update sheet for the field or contractor to fill in, to be imported back with “Import progress update”.
Import progress update (Excel / CSV)	Imports the progress update sheet (Excel or CSV) that the field or contractor filled in: actual dates, % complete and remaining durations.
Multiple float paths	Calculates multiple float paths (driving paths) to a chosen end activity.
Store period performance	Stores the current update (dates, float, status of every activity) as a period record, used by History, trends and Delay Analysis.
Update history & trends	Opens the update history and trend charts (forecast finish, % complete, float over time).
Level resources	Levels resources: delays activities within limits so resources are not over-allocated, with P6-style leveling options.
Clear leveling	Removes leveling delays.
Baselines	Opens the Baselines screen: create, assign (up to 3 on the Gantt) and update baselines.
Maintain / create baseline	Creates a new baseline from the current schedule.

Enterprise menu

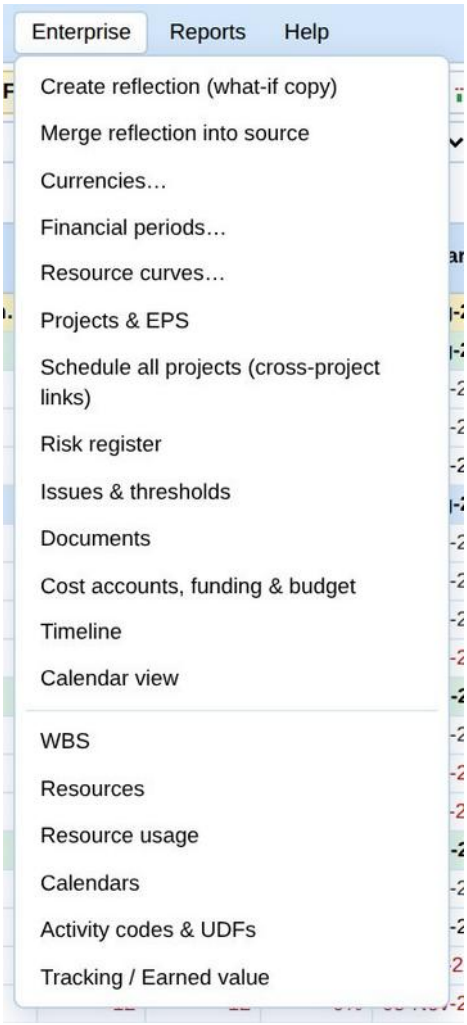


Figure 42-4. Enterprise menu

Command	What it does
Create reflection (what-if copy)	Creates a what-if copy (reflection) of the project to test changes safely.
Merge reflection into source	Merges the changes from a reflection back into the original project after showing them.
Currencies	Currencies and exchange rates.
Financial periods	Financial periods (pay-period cut-off, weekly, 4-4-5) used for cost reporting.
Resource curves	Resource curves (front-loaded, bell, back-loaded…) and a 20-point custom curve editor.
Projects & EPS	Opens the Projects & EPS screen, where you open, copy, rename, close or delete projects and organize them in an enterprise project structure.
Schedule all projects (cross-project links)	Schedules all open projects together, using cross-project relationships.
Risk register	Risk register: probability, impact, score, response and linked activities.
Issues & thresholds	Issues and threshold monitoring.

Command	What it does
Documents	Documents register: drawings, submittals and files linked to activities.
Cost accounts, funding & budget	Cost accounts, funding sources and budget summary.
Timeline	Timeline view of milestones and key dates.
Calendar view	Month calendar showing activities and milestones.
WBS	WBS editor.
Resources	Resources and roles dictionary.
Resource usage	Resource usage histogram.
Calendars	Calendars editor (working days, hours, holidays, exceptions).
Activity codes & UDFs	Activity codes and user-defined fields (UDFs).
Tracking / Earned value	Tracking and earned value: S-curves, SPI, CPI, EAC, earned schedule.

Reports menu

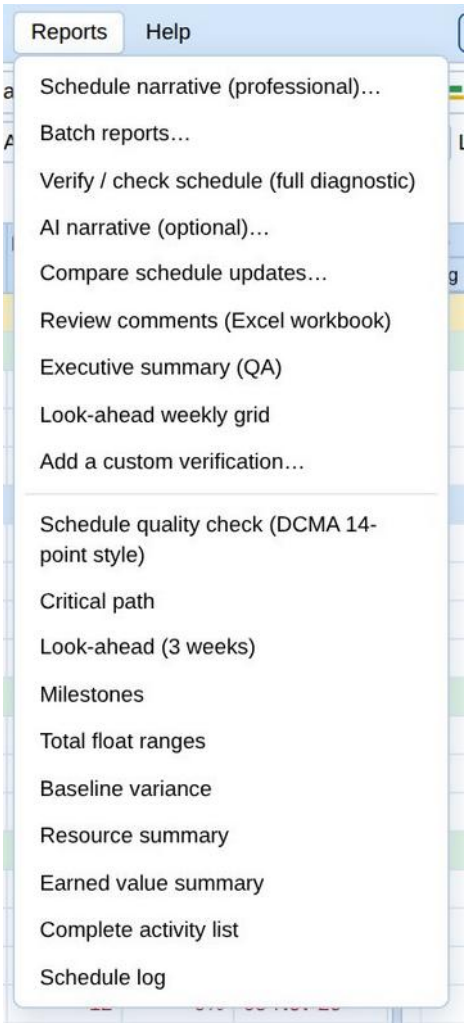


Figure 42-5. Reports menu

Command	What it does
Schedule narrative (professional)	Opens the Schedule Narrative builder — writes a complete professional monthly narrative automatically.
Batch reports	Prints or exports several reports in one step (e.g. the monthly report package).
Verify / check schedule (full diagnostic)	Runs all schedule checks (96 built-in plus agency and custom checks) and opens the Verify screen.
AI narrative (optional)	Optional AI draft of a narrative: copy a prompt to ChatGPT, Claude or Gemini, or use your own API key.
Compare schedule updates	Compares the current schedule with a previous update or baseline: added/deleted activities, logic, duration, date and float changes.
Review comments (Excel workbook)	Creates the review comments Excel workbook: every finding with plain-English explanation and a contractor response column.
Executive summary (QA)	Opens the one-page Executive Summary with GREEN / AMBER / RED status.
Look-ahead weekly grid	Opens the weekly look-ahead grid (Mo–Su with X on working days).
Add a custom verification	Adds your own verification rule (field, condition, threshold, severity).
Schedule quality check (DCMA 14-point style)	Schedule quality report in DCMA 14-point style.
Critical path	Critical path report.
Look-ahead (3 weeks)	Three-week look-ahead report (start date and number of weeks adjustable).
Milestones	Milestones report with forecast, baseline and variance.
Total float ranges	Activities by total float range.
Baseline variance	Baseline variance report (start and finish variance).
Resource summary	Resource summary.
Earned value summary	Earned value summary.
Complete activity list	Complete activity list.
Schedule log	Shows the schedule calculation log: open ends, constraints, out-of-sequence progress, errors and warnings.

Help menu



Figure 42-6. Help menu

Command	What it does
License agreement & copyright	Shows the license agreement and your acceptance record (license ID, date).
User guide	Opens the built-in user guide.
Keyboard shortcuts	Lists all keyboard shortcuts.
About	Version and copyright information.

The File menu is listed in Chapter 7.

CHAPTER 43

Toolbar reference

Button	What it does
Add activity	Adds an activity (Insert).
Delete	Deletes selected activities.
Link	Links selected activities finish-to-start.
Unlink	Removes links between selected activities.
Schedule F9	Calculates the schedule.
Update Progress	Moves the data date and updates progress.
❋ Spotlight	Highlights activities to update this period.
Level	Levels resources.
Baseline	Baselines screen.
⇆ Compare	Compares with a previous update.
✓ Verify / Check Schedule	Runs all schedule checks.
Undo	Undo (Ctrl+Z).
Redo	Redo (Ctrl+Y).
Data date	Shows / changes the data date.
Filters…	Filters.
Layouts…	Layouts.
Bars…	Bar styles.
Columns	Columns.
Print	Print preview.
Save	Save to file (Ctrl+S).

CHAPTER 44

Navigation screens

Screen	What it shows
Activities	The main workspace: activity table, Gantt chart and details panel.
Verify	Schedule verification: run all checks, PASS/FAIL results with plain-English explanations, agency profiles and QA reports.
Compare	Compare two versions of a schedule.
Delay Analysis	Windows analysis and time-impact analysis.
Network	Network logic diagram.
Global Chg	Global Change — change many activities at once.
History	Stored updates and trend charts.
Risks	Risk register.
Issues	Issues register.
Documents	Documents register.
Cost	Cost accounts, funding and budget.
Timeline	Milestone timeline.
Calendar	Month calendar of activities.
Look-ahead	Weekly look-ahead grid for progress meetings.
Mobile	Phone-friendly look-ahead.
Logic Diagram	Time-scaled logic diagram.
Assignments	Resource assignments window.
Spreadsheet	Usage spreadsheet by period.
Projects	Projects and EPS.
WBS	WBS editor.
Resources	Resources and roles.
Usage	Resource usage histogram.
Calendars	Calendars.
Codes	Activity codes and UDFs.
Baselines	Baselines.
Tracking	Tracking and earned value.
Reports	All reports.
Narrative	Schedule narrative builder.
Help	Built-in help.

CHAPTER 45

Details panel tabs

Tab	Content
General	Activity ID, name, type (task, milestone, level of effort, WBS summary, resource dependent), WBS, calendar, duration type, % complete type, durations, float, leveling priority.
Status	Actual start and finish, % complete, remaining duration, suspend/resume, expected finish, constraints (primary and secondary).
Predecessors	Predecessors: add, edit or delete relationships (FS, SS, FF, SF) and lags; shows driving relationships.
Successors	Successors, same as predecessors.
Resources	Resource assignments: resource, role, budgeted / actual / remaining units, price type, curve, lag.
Codes & UDFs	Activity code values and user-defined field values.
Steps	Steps (sub-tasks) with weights; completing steps updates physical % complete.
Notes	Notebook notes for the activity.
Documents	Documents linked to the activity.
Expenses	Expenses (non-resource costs).
Trace Logic	Trace Logic — predecessors and successors around the activity.
Usage profile	Usage profile of the activity's resources by period.
Resource spreadsheet	Resource spreadsheet by period for the activity.

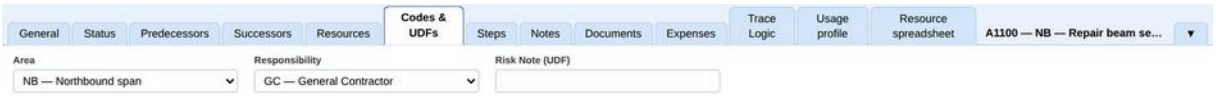


Figure 45-1. Codes & UDFs tab

CHAPTER 46

Column reference

All 84 columns available in **View → Columns**. Columns marked “Editable” can be changed directly in the table.

Column	Meaning	Edit
Activity ID	Unique code of the activity. Editable.	Editable
Activity Name	Description of the work. Editable.	Editable
WBS	WBS element the activity belongs to (code path).	
Activity Type	Task, start or finish milestone, level of effort, WBS summary or resource dependent.	
Status	Not started, in progress or completed.	
Calendar	Calendar used by the activity.	
Original Duration	Planned working duration. Editable.	Editable
Remaining Duration	Working time left from the data date. Editable for in-progress work.	Editable
Activity % Complete	Progress according to the % complete type. Editable.	Editable
Start	Actual start (marked A) or forecast start.	
Finish	Actual finish (A) or forecast finish.	
Early Start	Earliest possible start from the forward pass.	
Early Finish	Earliest possible finish.	
Late Start	Latest start without delaying completion (backward pass).	
Late Finish	Latest finish without delaying completion.	
Actual Start	Actual start date. Editable.	
Actual Finish	Actual finish date. Editable.	
Total Float	Days the activity can slip without delaying completion or a constraint.	
Free Float	Days it can slip without delaying any successor.	
Critical	Yes when the activity is critical (float threshold or longest path).	
BL Start	Start in the project baseline.	
BL Finish	Finish in the project baseline.	
Var. BL Start	Working days between baseline start and current start.	
Var. BL Finish	Working days between baseline finish and current finish.	
Primary Constraint	Primary constraint and its date.	
Predecessors	List of predecessors with type and lag.	
Successors	List of successors with type and lag.	
Budgeted Total Cost	Budgeted cost of resources and expenses.	
Actual Total Cost	Actual cost to date.	
At Completion Cost	Estimated cost at completion.	

Column	Meaning	Edit
Notes	Activity notes (first line).	
Float Path	Float path number from Multiple float paths (1 = driving path).	
Float Path Order	Order of the activity within its float path.	
Relative Float	Float relative to the float path end activity.	
Duration Type	Duration type (fixed duration & units, fixed units, fixed units/time…).	
Percent Complete Type	Percent complete type: duration, physical or units.	
Suspend Date	Date work was suspended.	
Resume Date	Date work resumed.	
Steps % Complete	Percent complete of weighted steps.	
Leveling Priority	Priority used by resource leveling.	
Risks	Number of linked risks.	
Documents	Number of linked documents.	
Open Issues	Number of open issues.	
External Links	Relationships to activities in other projects.	
Expense Cost	Cost of expense items.	
Schedule % Complete	Percent the activity should be complete at the data date according to the baseline.	
Duration % Complete	Duration % complete.	
Physical % Complete	Physical % complete (entered or from steps).	
Units % Complete	Units % complete from resource assignments.	
Expected Finish	Expected finish date (used when the option is on).	
Primary Resource	Primary resource.	
Near Critical	Yes when total float is at or below the near-critical threshold.	
Longest Path	Yes when the activity is on the longest path.	
Actual Duration	Working days from actual start to finish or data date.	
At Completion Duration	Actual plus remaining duration.	
BL Duration	Duration in the baseline.	
Var. BL Duration	Difference between baseline and at-completion duration.	
Predecessor Count	Number of predecessors.	
Successor Count	Number of successors.	
Secondary Constraint	Secondary constraint and date.	
Budgeted Units	Budgeted resource units.	
Actual Units	Actual resource units.	
Remaining Units	Remaining resource units.	
Planned Value Cost	Planned value (budgeted cost of work scheduled).	
Earned Value Cost	Earned value (budgeted cost of work performed).	
Schedule Variance Cost	Schedule variance = EV − PV.	

Column	Meaning	Edit
Cost Variance	Cost variance = EV − AC.	
SPI	Schedule performance index = EV / PV.	
CPI	Cost performance index = EV / AC.	
Remaining Total Cost	Remaining cost.	
Leveling Delay	Delay added by resource leveling.	
External Early Start	External early start from another project.	
External Late Finish	External late finish from another project.	
Start Float	Start float (late start − early start).	
Finish Float	Finish float (late finish − early finish).	
BL2 Start	Start in baseline 2.	
BL2 Finish	Finish in baseline 2.	
Var. BL2 Finish	Finish variance to baseline 2.	
BL3 Start	Start in baseline 3.	
BL3 Finish	Finish in baseline 3.	
Var. BL3 Finish	Finish variance to baseline 3.	
Scheduling Mode	Automatic or manual scheduling for the activity.	
Manual Start	Start date of a manually scheduled activity.	
Scheduling Calendar	Calendar actually used for scheduling (activity or resource calendar).	

CHAPTER 47

Schedule options reference

Project → **Schedule options & project settings**. Each option and its effect:

Option	Effect
Project ID / Project name	Identify the project on screens, reports and exports.
Planned start	Earliest date work can start (notice to proceed).
Data date (status date)	Separates actual progress from the forecast; remaining work cannot be scheduled before it.
Must finish by (optional)	Contract completion date. Total float is measured to it; negative float means the forecast is late.
Default calendar	Calendar given to new activities and used for project-level calculations.
Critical activities are	Either activities with total float at or below the threshold, or the longest path.
Critical float threshold (days)	Float value used when critical is defined by total float (usually 0).
Out-of-sequence progress	Retained logic keeps remaining work behind unfinished predecessors; progress override ignores that logic for started activities.
Calendar for scheduling relationship lags	Which calendar counts lag days: predecessor, successor, 24-hour or project default.
Calculate start-to-start lag from	Early start or actual start of the predecessor.
Ignore relationships to and from other projects	Schedules this project on its own even if cross-project links exist.
Percent complete type	Project default: duration, physical or units % complete.
Auto-schedule after each edit	Recalculates automatically after every change.
Compute total float as	Finish float, start float or the smaller of the two.
Make open-ended activities critical	Treats activities without successors as critical.
Level resources during scheduling	Runs resource leveling every time the schedule is calculated.
Use expected finish dates	Uses expected finish dates to set remaining durations of in-progress work.
Near-critical when total float ≤ (days)	Threshold for near-critical reporting and highlighting.
Time units	Days or hours for durations (hours for shift schedules).
Relationships to/from other projects	How external links are shown and used.
Activity steps set % complete	When on, completing steps updates physical % complete.
New activity links to selected	Links a new activity to the selected one automatically.

Tip

Match the owner's requirements before the first submittal — most agencies expect **retained logic** and total float calculated as **finish float**. The agency profile checks both.

CHAPTER 48

Mouse actions

Where	Action	Result
Activity table	Click a row / Ctrl+click / Shift+click	Select one / add to selection / select a range
Activity table	Click a cell	Edit the value
Activity table	Click a column heading	Sort by the column
Activity table	Drag a column edge	Change the column width
Activity table	Right-click a row	Context menu
Gantt chart	Drag a bar	Move the activity (sets a start-no-earlier-than constraint)
Gantt chart	Drag the end of a bar	Change the duration
Gantt chart	Drag from the end of one bar to another	Create a finish-to-start relationship
Gantt chart	Drag the empty chart	Scroll in time
Gantt chart	Drag the timescale left / right	Zoom out / in
Gantt chart	Hover over a bar	The cursor shows what a drag will do: move, resize or link
Gantt chart	Right-click	Bar or timescale menu
Splitter bars	Drag	Resize table, chart and details panel
Look-ahead grid	Click a day cell	Add or remove an X on a working day
Verify	Hover over a FAIL	Plain-English explanation pop-up

CHAPTER 49

Keyboard shortcuts

Keys	Action
F9	Schedule
F11	Full screen on / off
Insert	Add activity / contextual add
Delete	Delete activity
Ctrl+S	Save
Ctrl+Shift+S	Save as
Ctrl+Z / Ctrl+Y	Undo / Redo
Ctrl+C / Ctrl+V / Ctrl+X	Copy / Paste / Cut
Ctrl+D	Fill down
Ctrl+A	Select all
Ctrl+H	Find and replace
Enter / Esc	Save / cancel a cell edit

CHAPTER 50

Best practices and common errors

Common error	How CPMForge detects it	Fix
Missing logic / open ends	Logic checks, schedule log	Add predecessors and successors.
Too many constraints	Hard / soft constraint checks	Use logic instead; keep contract dates only.
Long durations	High duration check (> 44 days)	Split into measurable activities.
Leads and long lags	Lead and lag checks	Replace with activities or SS/FF links.
Negative float	Negative float check, narrative	Recovery plan or time extension.
Actual dates after the data date	Invalid dates check	Correct the actuals.
Out-of-sequence progress	Out-of-sequence check, schedule log	Correct logic to the real sequence.
Excessive float	High float check	Add missing successors.
Wrong calendars	Calendar checks	Assign the right calendar.
Disconnected milestones	Milestone logic checks	Tie milestones to work.

CHAPTER 51

CPMForge vs Primavera P6 and Microsoft Project — terms

CPMForge	Primavera P6	Microsoft Project
Activity	Activity	Task
WBS	WBS	Summary task / outline
Relationship (FS, SS, FF, SF)	Relationship	Dependency / link
Schedule (F9)	Schedule (F9)	Automatic scheduling
Data date	Data date	Status date
Total float	Total float	Total slack
Baseline	Baseline	Baseline
Activity codes	Activity codes	Outline codes / custom fields
UDF	User defined field	Custom field
Layout	Layout	View / table
Verify	Check schedule / third-party tools	—
Narrative builder	Written manually	Written manually
Reflection	Reflection	Copy of the project
Store period performance	Store period performance	—

CHAPTER 52

Data security, backups and records

- Projects are stored in your browser on your computer; nothing is uploaded to the CPMForge server.
- Use **Save** to link a file on your computer or company drive; export a **full database** backup monthly.
- Name files by project, update and date (e.g. BR101_U07_2026-09-30.xer).
- Keep XER, narrative, QA reports and comment workbooks for every update as the project record.
- Clearing browser data or changing computers requires restoring from backup files.

CHAPTER 53

Frequently asked questions

Can I open Primavera P6 schedules?

Yes. Import P6 XER or P6 XML files (File menu). Export back to XER or XML for P6 users.

Can I open Microsoft Project .mpp files?

Not directly. In Microsoft Project use File → Save As → XML, then File → Import MS Project XML. Your data never leaves your computer.

Where is my data stored?

On your computer, inside the browser. Nothing is uploaded to the CPMForge server. Keep backup files (Chapter 52).

Can two people work on the same project at the same time?

No. Each computer keeps its own copy. Share project files through your company drive and let one person own the master file; use Compare and reflections to bring changes together.

How do I move my projects to a new computer?

On the old computer export a full database (File → Export full database). On the new computer sign in and import it (File → Import backup).

Does CPMForge work without internet?

Yes, for up to 7 days at a time. It needs internet to sign in and to confirm the license.

Why is an activity red?

It is critical: its total float is at or below the critical threshold, or it is on the longest path.

Why did my dates change after scheduling?

Logic, calendars, constraints or the data date changed. Read the schedule log and use Trace Logic.

What does negative float mean?

The forecast is later than a constraint or the contract completion date by that many working days.

How do I show only critical activities?

Toolbar Filter → Critical, or build a filter in Filters…

How do I print on 11×17 paper?

File → Page setup → Tabloid / 11×17, landscape; then File → Print / PDF.

Can I use my own logo?

Yes — File → Page setup → Logo. It prints on reports, Gantt charts and the narrative cover.

How do I check a contractor schedule?

Import the XER, choose the agency profile on Verify, click Verify, then print the QA Summary and the Deficiency List (Chapter 38).

Can I add my own checks?

Yes — Reports → Add a custom verification.

Is the AI narrative required?

No. The professional narrative is written by CPMForge without AI. The AI option is optional and sends nothing unless you click Generate.

How do I undo a mistake?

Ctrl+Z (up to 40 steps). For bigger changes restore a backup file.

What happens to my projects if my license is not active?

Nothing is deleted. CPMForge opens in read-only mode: you can view, print and export.

How many activities can a project have?

Tested with more than 10,000 activities; a 5,000-activity schedule calculates in a fraction of a second.

CHAPTER 54

Known limitations

CPMForge is designed for one scheduler per project file with data kept on the user's own computer. It does not include:

- **Multi-user editing** of the same project at the same time, check-in / check-out, or a shared company database.
- **User security profiles**, timesheets, team-member progress entry or approval workflows.
- **Direct reading of .mpp files** (use MS Project XML).
- **Monte Carlo schedule risk simulation** (probability of finishing by a date).
- **Company-wide portfolio dashboards** and scheduled automatic jobs.
- Import of P6 layouts, filters and print settings (CPMForge has its own).

Results, agency profiles and reports support — but do not replace — professional judgment. Contract documents always govern.

CHAPTER 55

Troubleshooting

Problem	Solution
Dates look wrong	Check the activity calendar, constraints, data date and out-of-sequence setting; read the schedule log.
Critical path not continuous	Look for constraints, open ends, lags and calendars; use Trace Logic.
XER import fails	Export the XER again from P6 (all fields); import one project at a time.
.mpp file will not open	Save it as XML in Microsoft Project, then Import MS Project XML.
Printout too small	Page setup: larger paper, fewer pages wide, fewer columns.
License or sign-in problem	Connect to the internet; Help → Account → Check license now; remove a device you no longer use.
Lost data	Restore the latest backup file with Import backup (JSON).

CHAPTER 56

Support and contact

Website	cpmforge.com
E-mail	info@cpmforge.com
Help in the program	Help → User guide, Help → Keyboard shortcuts, Help → About

What to include in a support request

- Your name, company and **license ID** (Help → License agreement & copyright, or Help → Account).
- The CPMForge version (Help → About) and your browser.
- What you did, what you expected and what happened — step by step.
- A screenshot of the screen or error message.
- If possible, the project file (File → Export project backup) or the XER — only if you are allowed to share it.



CHAPTER 57

Glossary

Term	Definition
Activity	A unit of work with a duration.
Baseline	Approved schedule used to measure variance.
Calendar	Working days, hours and holidays.
Constraint	A date imposed on an activity.
CPM	Critical path method.
Critical path	Longest path of activities controlling completion.
Data date	Date separating actuals from the forecast.
DCMA 14-point	Standard set of schedule-quality tests.
Earned value	Value of work performed, compared with plan and cost.
Fragnet	Small network added to model a delay.
Free float	Delay possible without delaying a successor.
Lag	Waiting time on a relationship.
Look-ahead	Short-term schedule of the next weeks.
Relationship	Logic link between activities.
TIA	Time-impact analysis.
Total float	Delay possible without delaying completion.
WBS	Work breakdown structure.
Windows analysis	Delay analysis between successive updates.
XER	Primavera P6 exchange file.

Appendix A — List of built-in checks

CPMForge includes 96 built-in checks, plus agency-profile checks and your custom rules. Thresholds of agency profiles can be edited on the Verify screen.

ID	Area	Check	Severity
P01	Project setup	Data date is defined and on or after the project start	High
P02	Project setup	Data date is not in the future	Medium
P03	Project setup	Contract completion date (Must Finish By) is entered	Medium
P04	Project setup	Forecast finish meets the contract completion date	High
P05	Project setup	An active baseline is assigned	High
P06	Project setup	Schedule calculates completely	High
P07	Project setup	Project start milestone exists	Medium
P08	Project setup	Project finish milestone exists	Medium
L01	Logic	Missing predecessors (open start)	High
L02	Logic	Missing successors (open finish)	High
L03	Logic	Circular logic (loops)	High
L04	Logic	Leads (negative lags)	High
L05	Logic	Lags	Medium
L06	Logic	Long lags (over 10 working days)	Low
L07	Logic	Finish-to-start relationships	Medium
L08	Logic	Start-to-finish relationships	Medium
L09	Logic	Dangling start (start not driven)	Medium
L10	Logic	Dangling finish (finish drives nothing)	Medium
L11	Logic	Redundant relationships	Low
L12	Logic	Duplicate relationships	Medium
L13	Logic	Level of Effort activities are tied at both ends	Medium
L14	Logic	Activities with excessive predecessors (more than 10)	Low
C01	Constraints	Hard constraints	High
C02	Constraints	Mandatory constraints	High
C03	Constraints	All constraints (hard and soft)	Medium
C04	Constraints	As Late As Possible constraints	Low
C05	Constraints	Constraint dates before the data date	Medium
C06	Constraints	Constraints left on completed activities	Low
F01	Float & critical path	Negative float	High
F02	Float & critical path	High float (over 44 working days)	Medium
F03	Float & critical path	A critical path exists	High
F04	Float & critical path	Critical path starts at the data date	Medium
F05	Float & critical path	Critical path reaches the project finish	Medium

ID	Area	Check	Severity
F06	Float & critical path	Critical path length index (CPLI)	Medium
F07	Float & critical path	Critical activities are not excessive	Low
D01	Durations	High duration (over 44 working days)	Medium
D02	Durations	Zero-duration tasks (should be milestones)	Medium
D03	Durations	Remaining duration greater than original	Low
D04	Durations	Very short tasks (1 day) are not excessive	Low
S01	Progress & status	Actual start after the data date	High
S02	Progress & status	Actual finish after the data date	High
S03	Progress & status	Actual finish before actual start	High
S04	Progress & status	Not-started work forecast before the data date	High
S05	Progress & status	In-progress activities with zero remaining duration	Medium
S06	Progress & status	Not-started activities showing progress	Medium
S07	Progress & status	Out-of-sequence progress	Medium
S08	Progress & status	Started activities have an actual start	High
S09	Progress & status	In-progress work that should have finished	Low
B01	Baseline	Missed tasks	Medium
B02	Baseline	Baseline execution index (BEI)	Medium
B03	Baseline	Project finish versus baseline finish	High
B04	Baseline	Activities finishing more than 20 days late	Medium
B05	Baseline	Activities added since the baseline	Low
B06	Baseline	Original duration changed from the baseline	Low
R01	Resources & cost	Tasks without resources (resource-loaded schedule)	Medium
R02	Resources & cost	Resource over-allocation	Medium
R03	Resources & cost	Assignments with zero budgeted units	Low
R04	Resources & cost	Assigned resources have a price	Low
R05	Resources & cost	Actual units on not-started activities	Medium
R06	Resources & cost	Schedule is cost-loaded	Low
Q01	Data quality	Duplicate activity IDs	High
Q02	Data quality	Possible duplicate activities (accidental copies)	Low
Q03	Data quality	Placeholder or unclear activity names	Medium
Q04	Data quality	Activities not assigned to a WBS element	Medium
Q05	Data quality	Empty WBS elements	Low
Q06	Data quality	Milestones carry no resources	Low
K01	Calendars	Working calendars include holidays for the project period	Medium
K02	Calendars	Calendar hours per day are valid	Low
K03	Calendars	Number of calendars in use is reasonable	Low
S10	Progress & status	Suspended activities have a resume date	Medium
S11	Progress & status	Steps agree with activity % complete	Low
AG01	Agency requirements	Illinois Tollway: activity original durations within the maximum	Medium

ID	Area	Check	Severity
AG02	Agency requirements	Illinois Tollway: contract completion milestone tied to the contract date	High
AG03	Agency requirements	Illinois Tollway: contract / interim milestones represented	Medium
AG10	Agency requirements	Illinois Tollway: activity code "Stage" assigned to every activity	Medium
AG11	Agency requirements	Illinois Tollway: activity code "Location" assigned to every activity	Medium
AG12	Agency requirements	Illinois Tollway: activity code "Responsibility" assigned to every activity	Medium
AG20	Agency requirements	Illinois Tollway: scheduling options as specified	Medium
AG21	Agency requirements	Illinois Tollway: lags within the maximum	Medium
AG22	Agency requirements	Illinois Tollway: number of calendars	Low
AG23	Agency requirements	Illinois Tollway: negative float addressed by a recovery schedule	High
AG24	Agency requirements	Illinois Tollway: update shows progress through the data date	Medium
AG26	Agency requirements	Illinois Tollway: maintenance of traffic / staging activities shown	Medium
AG27	Agency requirements	Illinois Tollway: utility and permit activities shown	Medium
SUB01	Submittal checklist	Transmittal letter identifying the submittal number and contents	Medium
SUB02	Submittal checklist	Native Primavera P6 file (.XER) that opens without errors	Medium
SUB03	Submittal checklist	PDF Gantt chart organized by WBS / stage, showing the data date and critical path	Medium
SUB04	Submittal checklist	Narrative report: progress this period, critical path discussion, delays and causes, changes since last submittal, work planned next period	Medium
SUB05	Submittal checklist	Longest path / critical path report	Medium
SUB06	Submittal checklist	Contract completion date and interim completion dates shown as milestones	Medium
SUB07	Submittal checklist	Schedule comparison with the previous update, with every logic, duration and constraint change explained	Medium
SUB08	Submittal checklist	Tollway lane-closure windows and maintenance of traffic stages reflected in calendars and logic	Medium
SUB09	Submittal checklist	Interfaces with adjacent Tollway / IDOT contracts shown as milestones (critical items and completion dates listed in the special provisions)	Medium
SUB10	Submittal checklist	Utility relocation and permit activities shown with responsible party	Medium
SUB11	Submittal checklist	Monthly update submitted with the pay estimate	Medium
SUB12	Submittal checklist	Recovery schedule when the forecast shows a late completion or interim milestone	Medium

Appendix B — Monthly update checklist

- Data date set to the cut-off date
- All actual starts and finishes on or before the data date
- Remaining durations reviewed for in-progress work
- Logic and duration changes documented with reasons
- Schedule calculated (F9); no new open ends
- Verification run; High findings corrected
- Compared with the previous update; critical path reviewed
- Look-ahead issued for the progress meeting
- Narrative written; reports printed
- Period stored; backup and XER exported

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Build, update and verify professional CPM schedules — with confidence.

CPMForge User Guide is the complete, step-by-step reference for CPMForge — professional critical path method software for construction. Written by a construction manager for contractors, schedulers, construction managers and owners, it explains every menu, button, screen and report, and walks you through a complete project from an empty file to the monthly report package.

What you will learn

- Build schedules from scratch: WBS, activities, logic, calendars, resources and costs
- Update progress, store monthly updates and compare schedule versions
- Verify any contractor schedule in one click with 95+ checks and agency profiles
- Analyze the critical path, float, delays (windows analysis and TIA) and risks
- Produce QA reports, executive summaries and a complete professional narrative
- Work with Primavera P6 XER / XML, Microsoft Project XML, Excel and PDF

Inside this book

59 chapters · 9 parts · 139 figures · 96 built-in checks listed · complete command, column and report reference · workflows for contractors and construction managers · frequently asked questions · glossary · index

About CPMForge

CPMForge runs in your web browser with nothing to install, and your schedules stay on your own computer. Learn more, see the full searchable online guide and start using CPMForge at cpmforge.com.

About the author

Eng. Ahmad Safi, MS, PE, PMP, is a senior construction manager with more than 30 years of experience in heavy civil infrastructure, including major highway and toll-road programs. He is a licensed professional engineer and a PMP exam trainer.

cpmforge.com · **info@cpmforge.com**

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