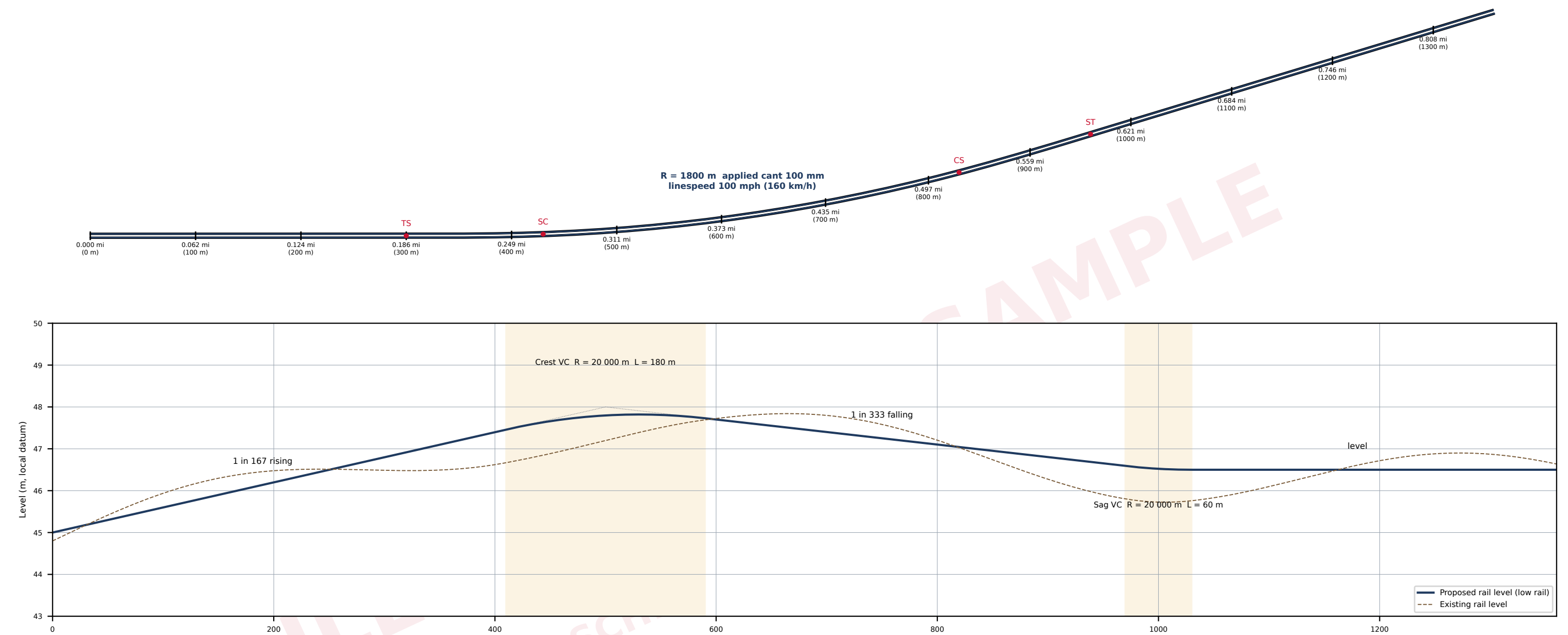


FICTIONAL BRANCH LINE - TRACK ALIGNMENT PLAN, PROFILE AND CANT/SPEED TABLE (NETWORK RAIL STYLE)



CANT / SPEED TABLE (Ea applied cant, Cd cant deficiency; Eq = 11.82 V²/R, V km/h)

Element	From (m)	To (m)	Radius (m)	Ea (mm)	Eq. cant (mm)	Cd (mm)	Speed (mph)	Remark
Straight	0	300	∞	0	0	0	100	
Transition T1	300	430	∞→1800	0→100	-	-	100	Cant gradient 1:1300; dE/dt 34.2 mm/s
Circular C1	430	830	1800	100	168	68	100	Cd 68 mm; dCd/dt 23.2 mm/s
Transition T2	830	960	1800→∞	100→0	-	-	100	Clothoid, linear cant, 34.2 mm/s
Straight	960	1360	∞	0	0	0	100	

NOTES

- Track geometry to generic NR track design standard principles (NR/L2/TRK/2049 - confirm current issue & limits with Infrastructure Mgr).
- Standard gauge 1435 mm, CWR on concrete sleepers. 4 ft 6 ft notation not shown.
- Mileages fictional; metric chainage shown.
- Limiting values are indicative only and must be verified against the current standard.
- Not for construction.

Revision

P01 2026-10-13 First issue - illustrative sample

RoadRail Design

roadraildesign.com

Project Fictional Branch Line Realignment, Example Junction

Title Fictional Branch Line - Track Alignment Plan & Profile

Client None - illustrative capability sample

Status S0 - Work in progress (sample)

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Rev

P01

Scale

1:2500 H / 1:250 V

Date

2026-10-13