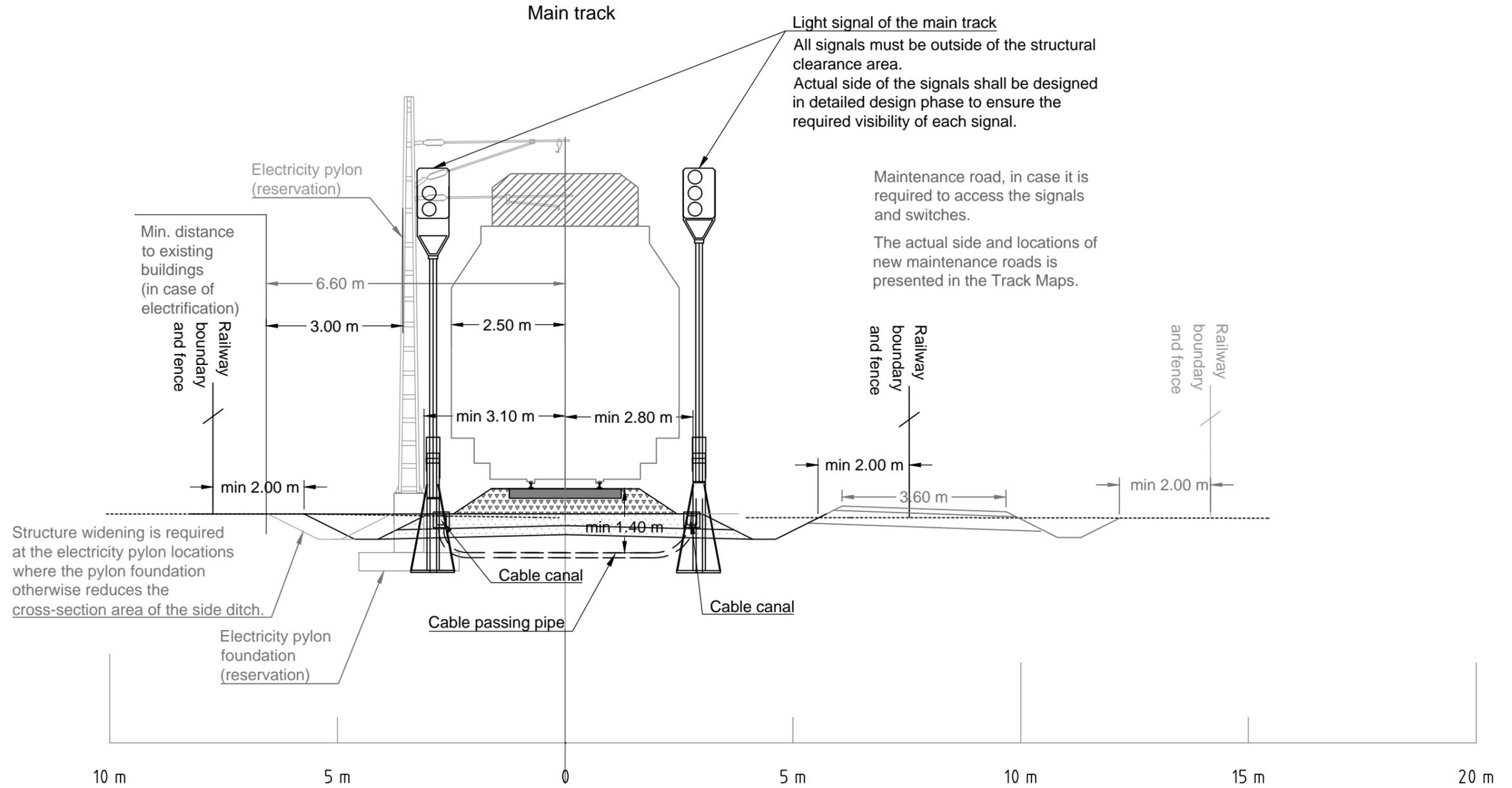


Typical cross section: Railway equipment on 1-track main line



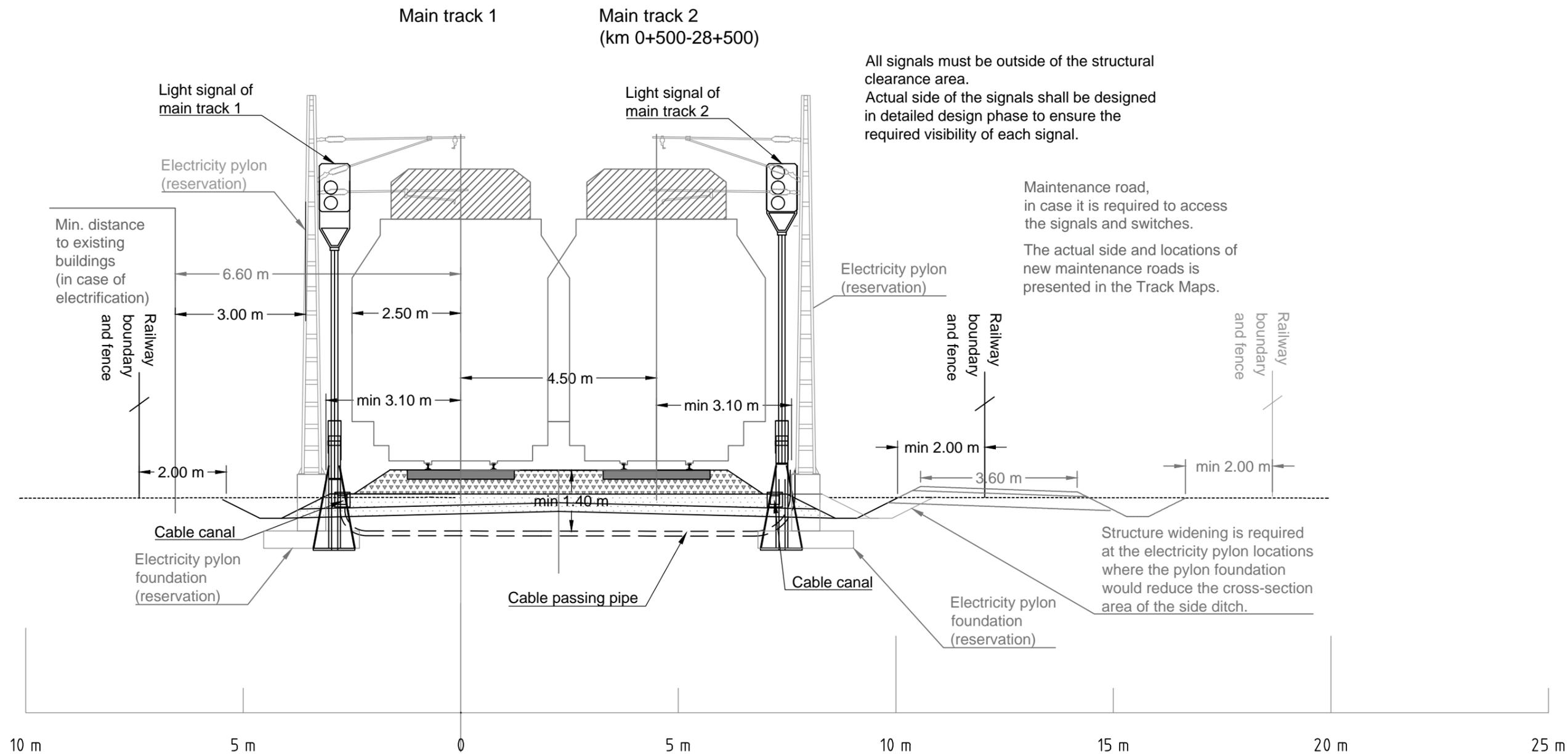
Presented values represent the minimum values. Actual width of structure and equipment depends on the track and ground elevations.

All presented elements of railway electrification are schematic. The actual dimensions may vary depending on the chosen system. The purpose of this drawing is to show the estimated clearance requirements.

Version 23.10.2017

Other	Description	Date	Author	Date	Appr.
	MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS	VR TRACK			
		Railway Project, Pre-engineering phase 2 Typical equipment cross-sections Single track main line			
		PLANN. SVi	DRAW. SVi	DATE 23.10.2017	HEIGHT -
	SUPERV. JHa	APPR.	SCALE 1:100	DRAWING NO. 001 / 002	

Typical cross section: Railway equipment on 2-track main line



All signals must be outside of the structural clearance area.
Actual side of the signals shall be designed in detailed design phase to ensure the required visibility of each signal.

Maintenance road, in case it is required to access the signals and switches.
The actual side and locations of new maintenance roads is presented in the Track Maps.

Structure widening is required at the electricity pylon locations where the pylon foundation would reduce the cross-section area of the side ditch.

Presented values represent the minimum values. Actual width of structure and equipment depends on the track and ground elevations.

All presented elements of railway electrification are schematic. The actual dimensions may vary depending on the chosen system. The purpose of this drawing is to show the estimated clearance requirements.

Version 23.10.2017

Other	Description	Date	Author	Date	Appr.	
	MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS	VR TRACK		Railway Project, Pre-engineering phase 2 Typical equipment cross-sections Double track main line		
		PLANN. SVi	DRAW. SVi	DATE 23.10.2017	HEIGHT -	COORD. -
		SUPERV. JHa	APPR.	SCALE 1:100	DRAWING NO. 002 / 002	