

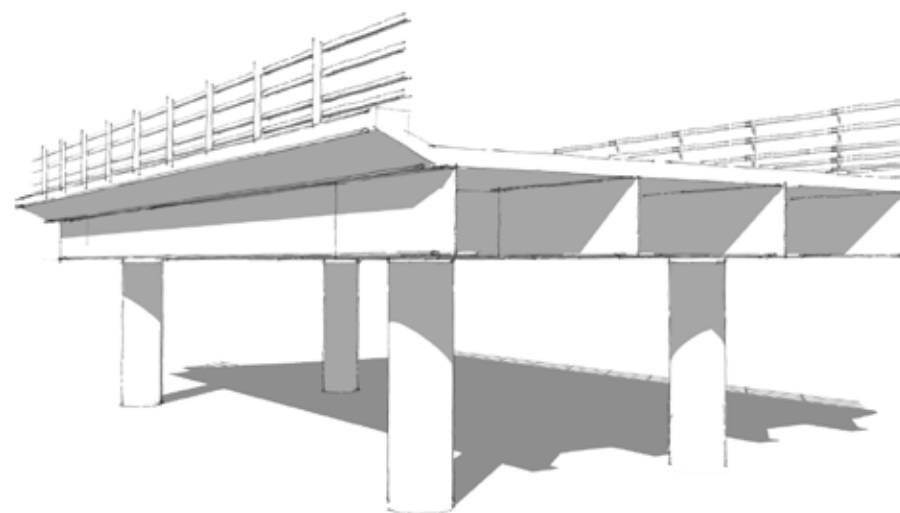


Figure 69. Steel girder with tapered soffit and deeper projection

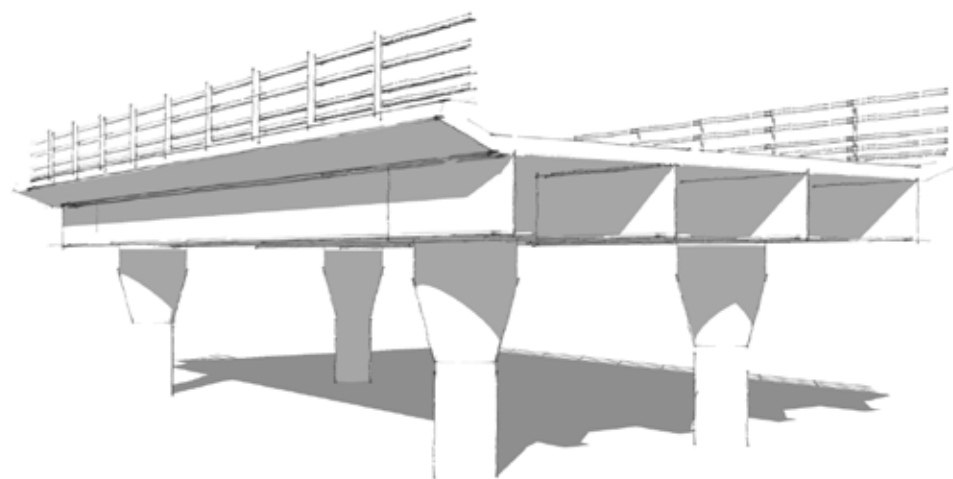


Figure 70. Steel girder with tapered and projecting soffit and tapered concrete columns

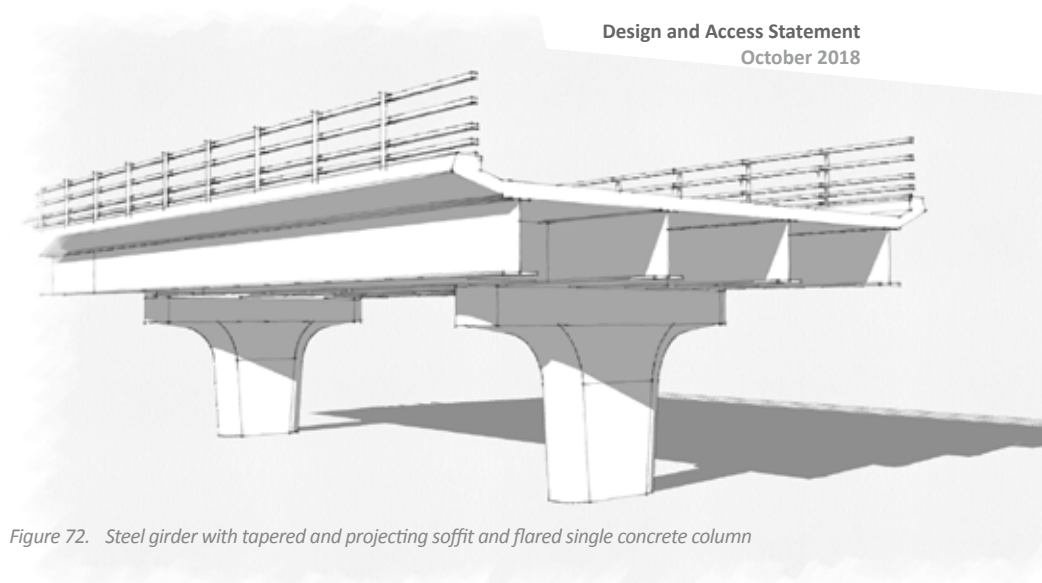


Figure 72. Steel girder with tapered and projecting soffit and flared single concrete column



Figure 71. Riverside cross section (Planting shown indicatively)

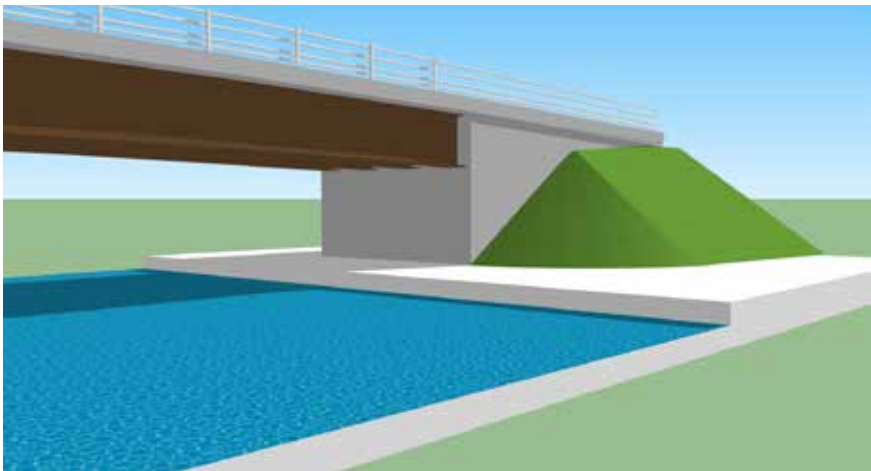


Figure 73. Simple retaining walled abutment (baseline scheme)



Figure 74. Retaining wall with girder extended over the abutment.



Figure 75. Open abutment with earth embankment

17 Abutments

Abutments

- 17.1 Open abutments are often preferable in an open landscape setting as walled abutment structures can block views. A combination of walled and banked abutments is proposed on the eastern ramps with the embankment opening opportunities for planting and screening
- 17.2 The retaining walls of the western bridge abutments will be faced in rock-filled gabion cages.
- 17.3 An open abutment is proposed on the eastern bank of the river at the junction of the main river span with the viaduct structure.
- 17.4 Walled abutments help provide a good fit with surrounding urban built form and bridges, but can heighten the visual effects. The use of walled abutment and embankment minimises effects on The Coal LWS and maximises the retention of trees.

- 17.5 Open abutments to the east (the viaduct and the bridge approach) contrast with the solid western ramp to create a relatively slender, appearance to the bridge with open views beneath and through the structure.
- 17.6 The deck/ parapet detail continues above and over the abutment allowing the shadow line to reduce the dominance of the abutment; and make the bridge appear longer and more slender.
- 17.7 The parapet railings also extend beyond the abutment walls to reinforce a continuous and sinuous appearance.
- 17.8 The sidewall of the abutment extends up to meet the cantilevered main deck and wraps around the main the girder to create a neat junction.
- 17.9 There is a slight angle to the gabion clad abutments walls that can make the wall appear less dominating, especially next to the footpaths.

Immediate setting

- 17.10 The space around the bridge needs to serve several functions.
 - It is the setting to the bridge / viaduct.
 - It is the foreground in views to the bridge / viaduct and is seen in views from the bridge / viaduct.
 - A 3m strip is also needed for maintenance access to the structure
- 17.11 The structure and it immediate context has been designed so that there is a degree of continuity in the transport corridor and urban river-edge open space.
- 17.12 The space under the viaduct and the bridge has been carefully considered in the concept design phase of the bridge and integrated into the final design of the whole structure.

- 17.13 The design beneath the viaduct has been amended to include the creation of marshy wetland areas and grasses, providing an area for seasonal flooding, and a diverse marshy habitat. The design intention is to allow people to see beneath the viaduct, through to the railway embankment, and discourage public access.
- 17.14 Wildflower grassland will be planted on the embankments.