



Figure 4.9 Indicative photomontage of the proposed pedestrian bridge looking southeast. The blue green colour of the structure reflects the hues of nearby buildings and helps integrate the structure in its setting.



PIERS

The piers are proposed as precast double 'V' shapes to reflect the triangularity of the structure. The piers taper towards the structure, emulating a 'hand' holding the structure, adding interest to the overall composition.

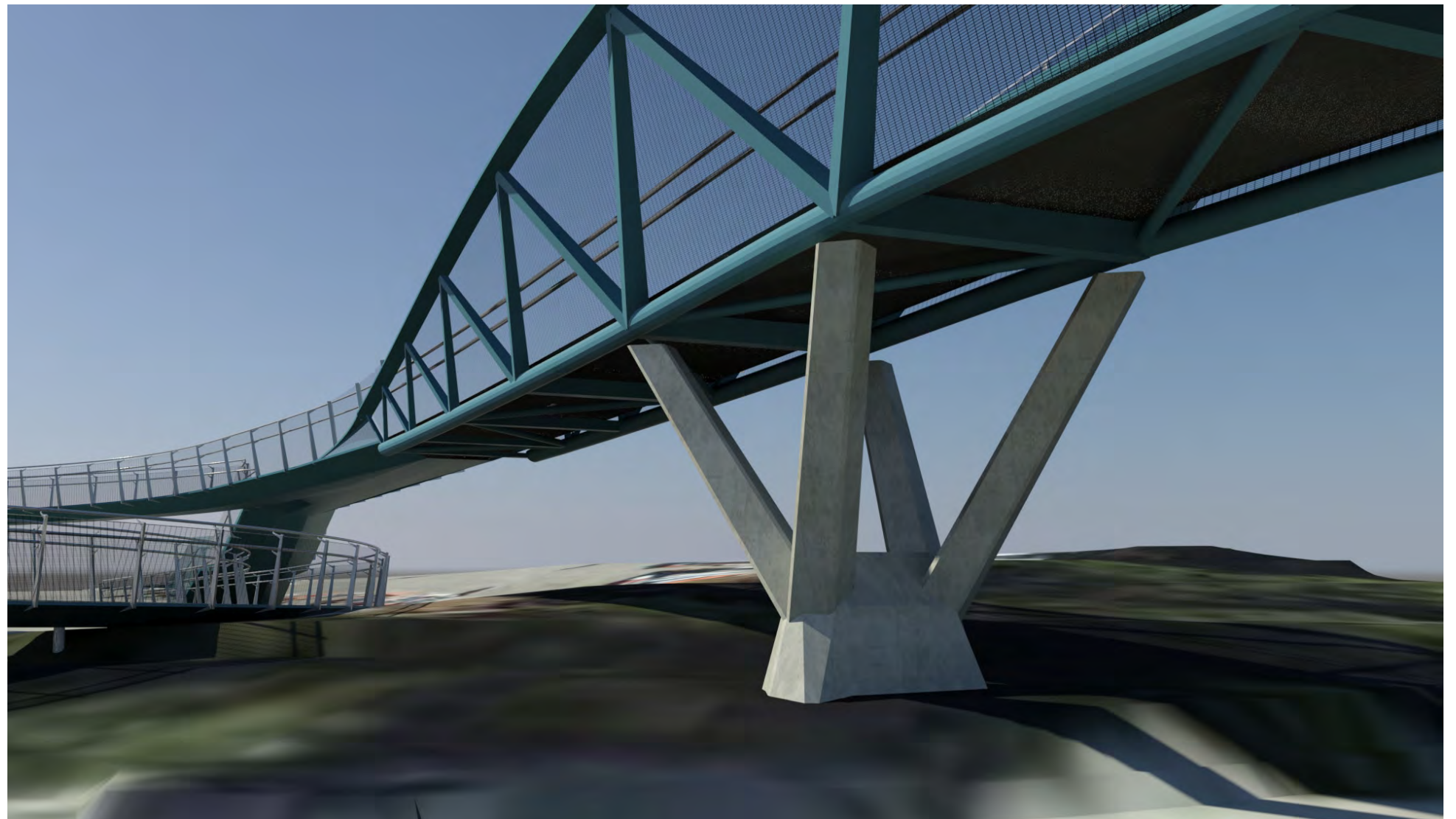


Figure 4.10 Abstract 3D study of the pier configuration. The "V" shape form echoes the truss language and the diamond shape of the piers visually relates to the top truss chord and diagonals.

SCREENS

Safety screens have been incorporated into the design in the form of a three metre high steel mesh. The mesh is situated on the 'inside' of the truss allowing ease of installment and retaining the apertures of the truss as open as possible. Where the screen extends above the truss, the screen 'folds' back towards the structure by ten degrees. This allows the superstructure to be expressed, creating a more dynamic interface between the various elements. The top edge of the screen follows a curvilinear alignment to complement the truss structure.

Within the truss, the mesh is proposed to be painted in the same colour as the superstructure whilst those section of the screen above the truss would have a galvanised finish to further accentuate the form language of the structure.

Screen posts are aligned vertically with the rhythm of the truss when seen in elevation. This provides ease of construction and minimises any mesh cut offs. To retain a 'clean' and uncluttered appearance within the truss, no posts are proposed for the screens. In this case, it is proposed to fold the mesh to provide the required stiffness.



Figure 4.11 Abstract 3D study of the bridge deck, showing the configuration of the safety screens. The screens visually integrate with the balustrade treatment of the approaches.

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The safety screens at the southern approach terminate by slanting the screen upwards and diminishing in height as the superstructure increases in height, creating a more open character and visually relating to the shade canopy. This treatment is different from the northern approach, where the screen visually becomes the balustrade. This different treatments accentuate the asymmetry of the structure.

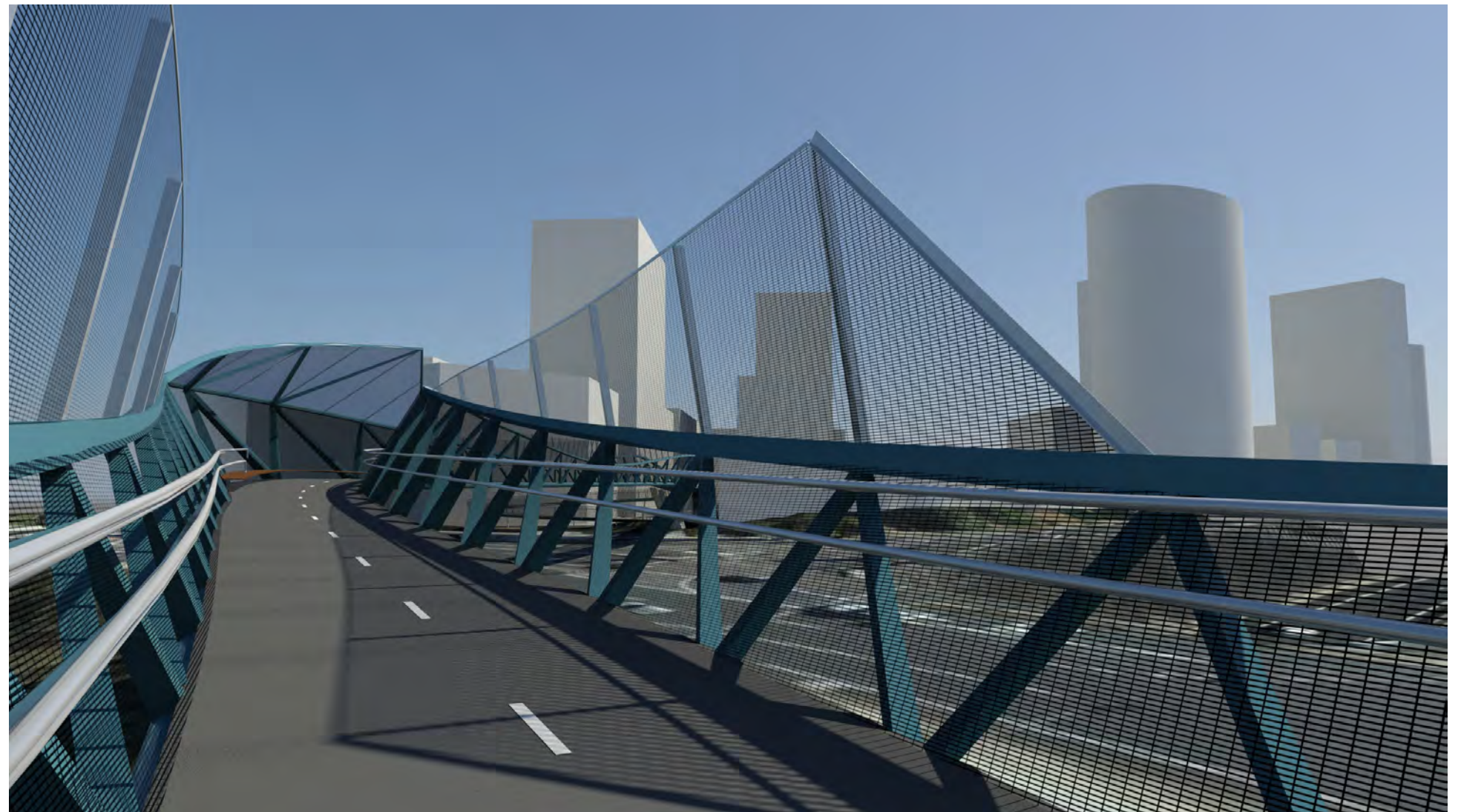


Figure 4.12 Abstract 3D study of the bridge deck, southern approach.

BALUSTRADES

The balustrades are designed as an extension of the screens to reinforce the fluidity of the overall structure. Balustrades 'lean' outwards by ten degrees to create an open inviting structure. The top of the balustrade raises towards the interface with the superstructure and aligns with the screens. This approach aims to minimise clutter by visually unifying the secondary components.



Figure 4.13 Abstract 3D study of the northern approach interface with the main span. The balustrade follows the form language of the safety screens to create an uncluttered and visually integral approach of secondary elements.

PEDESTRIAN SEATING

Towards mid-point of the structure, seating has been incorporated to add interest and a resting place along the journey. The seating is located opposite Bundara Reserve and has been integrated by widening the bridge deck at this location which is situated over the piers to limit any impacts to the structure. The seating echoes the fluidity of the structure, that, combined with the widened deck, further emphasises its sculptural form. This resting place allows views towards the cemetery and Bundara Reserve.

SHADE CANOPY

A shade canopy is proposed over the seating area, ensuring shade in the afternoon. The shade canopy cantilevers off the top of the truss and echoes a similar treatment as the seating, creating a composition between these two elements.

The canopy's structure emulates the superstructure of the pedestrian bridge, creating a playful composition that acts as a visual marker along the journey. The cladding material for the canopy is proposed in translucent acrylic sheeting tinted blue-green to compliment the overall structure.

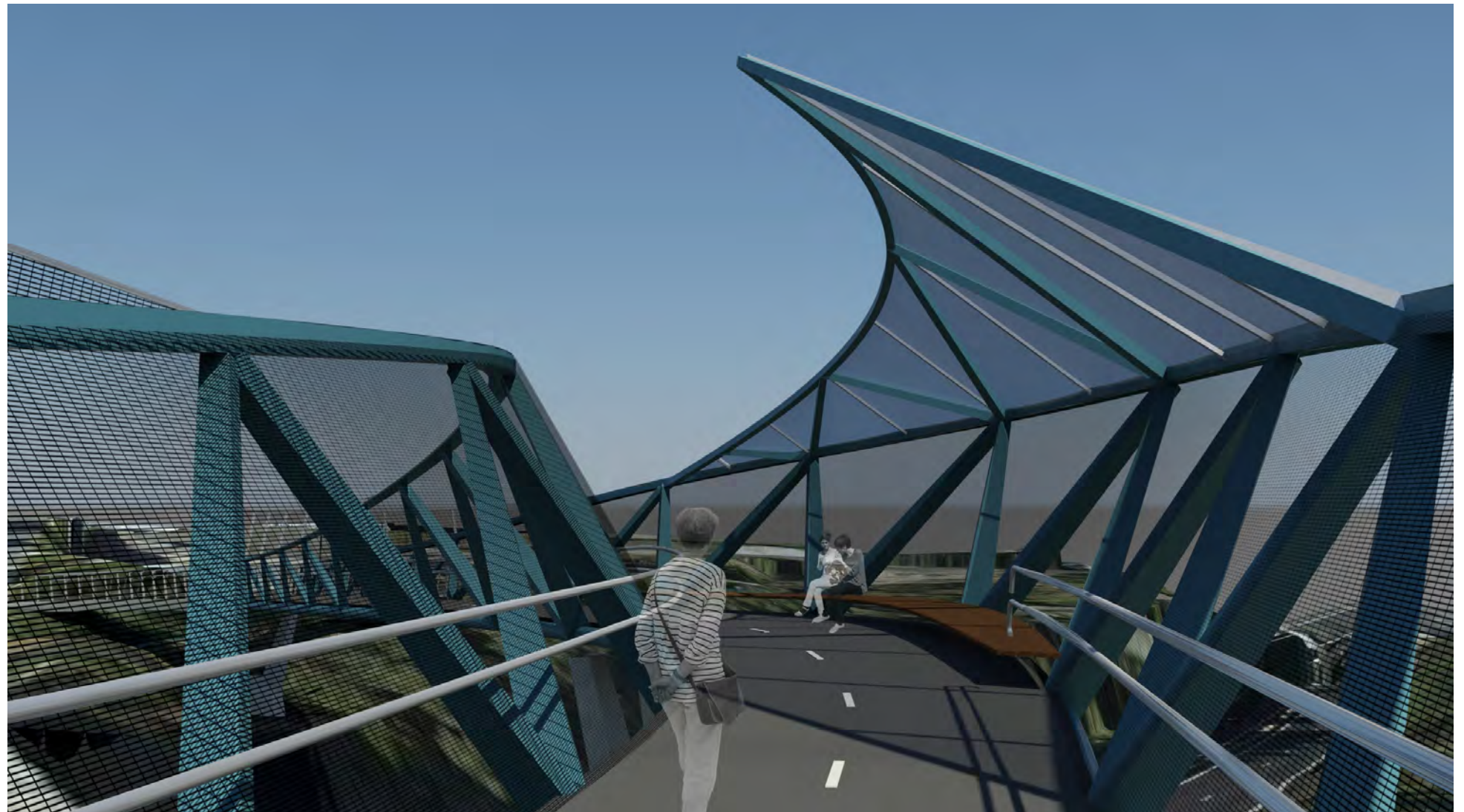


Figure 4.14 Abstract 3D study of the seating and canopy arrangement. The canopy's structure follows the form language of the main truss to create a unified composition.

NORTHERN APPROACH

A circular ramp has been integrated at the former M2 Site predominantly due to the level difference between the pedestrian bridge and the local street level. The ramp is constrained by built form elements and is based on a single revolution, winding under itself, creating a visual accent at the end of the street axis. This is complemented by a series of leaning piers that hold the ramp system to create a more dynamic looking structure.

Stairs at this approach have been integrated to provide direct access for pedestrians. The stairs and ramp converge towards the bottom, unifying these two elements at the interface with the plaza level.

It is intended that cycle safety barriers would be incorporated into the design at the interface of the access stair and ramp during the detail design stage.



Figure 4.15 Abstract 3D study of the northern approach at plaza level. The access stair and ramp converge into a single element to create a more inviting interface with the streetscape.

The ramp is supported by tapered steel columns which are slightly tilted in the same angle as the outer balustrade to create an integral and dynamic composition.



Figure 4.16 Abstract 3D study of the northern approach ramp showing the relationship of piers and balustrades.



Figure 4.17 Indicative photomontage of the proposed pedestrian bridge looking north from Epping Road along the M2 Motorway corridor.



Figure 4.18 Abstract 3D overview of the bridge structure.

05 CONCLUSION

The proposed pedestrian bridge would provide a feature element that responds to the site constraints, accentuating the dynamic qualities of the North Ryde Station Precinct.

The design incorporates CPTED (Crime Prevention Through Environmental Design) such as incorporating lighting, maximising visual exposure for users and interfacing in areas of high visibility. The design also provides for ease of maintenance by limiting graffiti surfaces, avoiding any lift structures and providing for a robust and durable structure in the selection of materials and finishes.

The project delivers an important cornerstone that links the overall precinct with a landmark structure that would enhance the identity of the development.



Figure 5.1 Abstract 3D study showing the fluid form of the pedestrian bridge. A landmark for North Ryde.

APPENDIX 1



Colour study of pedestrian bridge with white paint finish.



Colour study of pedestrian bridge with silver paint finish.

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Colour study of pedestrian bridge with black paint finish.