



Quakers Yard

Landscape Mitigation Considerations

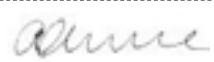
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01.00 INTRODUCTION

Amey Consulting's Landscape team have been requested to produce documentation that demonstrate consideration of landscape and visual mitigation.

This is to include:

- Review the existing Red Line Boundary and advise where it could be extended in order to support the Landscape interventions
- Landscape and Visual Mitigation considerations evaluating Pro's and Con's of possible soft Landscape design intervention
- Propose Landscape Planting Plan with ecological input that will allow for reinstatement of lost vegetation where possible, connect semi-ancient woodland where possible, connect green corridors where possible, indicative plant schedules (plan). Potential to include the Merthyr Tydfil Anglers Alliance (MTAA) land, if it is confirmed that it will be permanently given to the use of compensation planting, and they will take on management of it
- Landscape Management Plan (report) written in conjunction with Amey ecology team
- Prepare Indicative Visuals of planting at: Planting Year and Year 15 from 2Nr viewpoints.

Purpose of this document

This document is intended to demonstrate consideration of landscape and visual mitigation options for nearby receptors.



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02.00 THE EXISTING SITE

The Site at Quakers Yard has seen considerable development within the last year to an additional railwayline, platform and a new pedestrian footbridge over both lines along with a double ramp and steps to allow passengers to safely access both platforms. In order to upgrade these features there has been clearance of existing vegetation before the proposed development construction works commenced. The extent of clearance works can only be verified by satellite imagery available on the internet, such as Google Maps.



Key

Quakers Yard Railway Station

Image 2.1 Site Location - Quakers Yard taken from Google Maps 2023

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03.00 THE SITE CURRENTLY February 2023



View from the bottom of the embankment south of Taff Vale, at platform level, to the towards the north west illustrating vegetation clearance



View from the footbridge towards the east illustrating vegetation clearance and views towards residences



View from ground level south of the construction works towards the south illustrating existing informal paths and existing vegetation



View from the ramp on the southern side of the railway tracks towards the north west illustrating existing vegetation clearance

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View from the platform towards the north illustrating the northern side of the development and properties on Taff Vale



View from the platform towards the north east illustrating property boundaries on Taff Vale



View from Taff Vale towards the south illustrating vegetation clearance and new pedestrian structure



View from Taff Vale towards the south illustrating vegetation clearance and new pedestrian structure

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04.00 LANDSCAPE AND VISUAL RECEPTORS

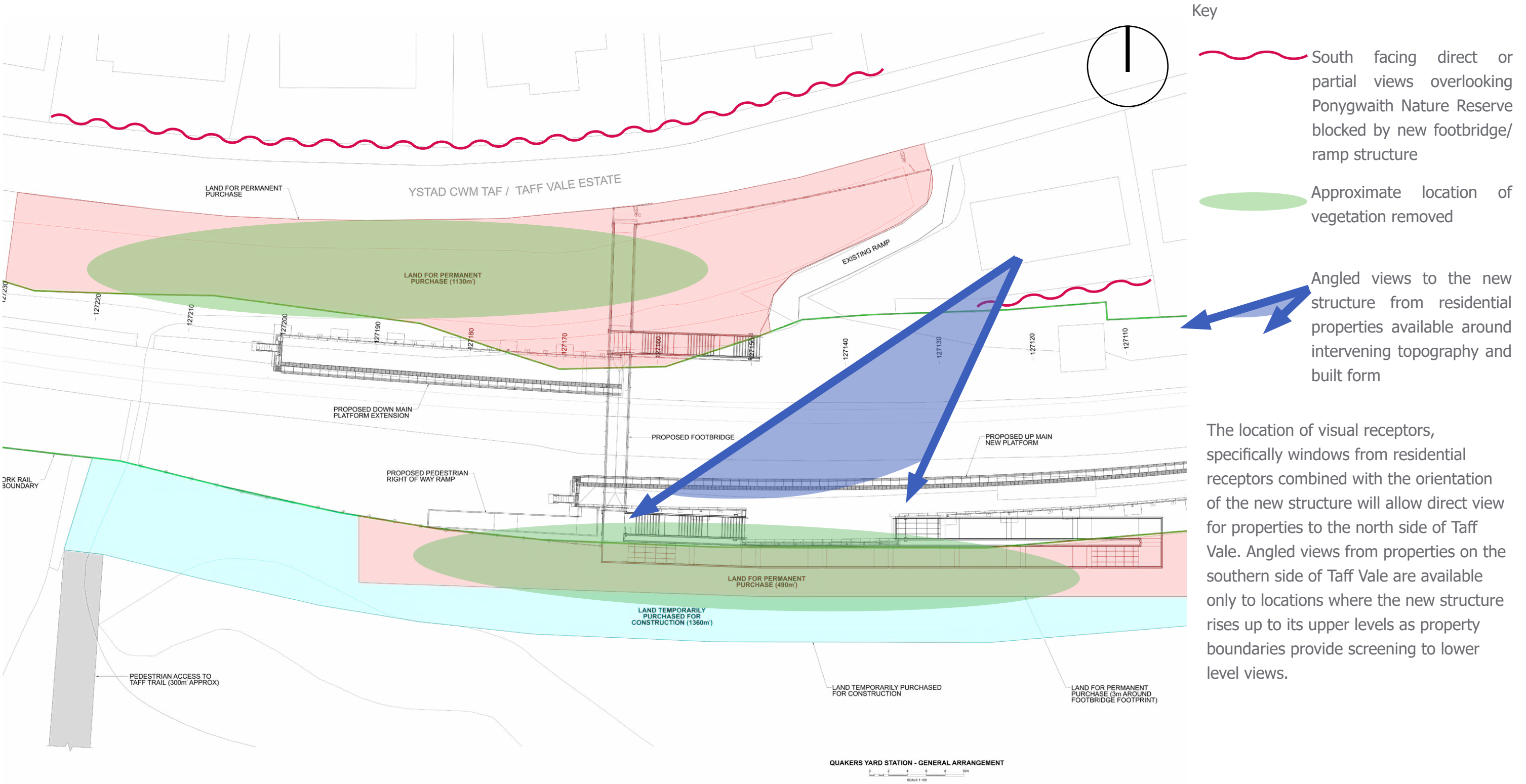
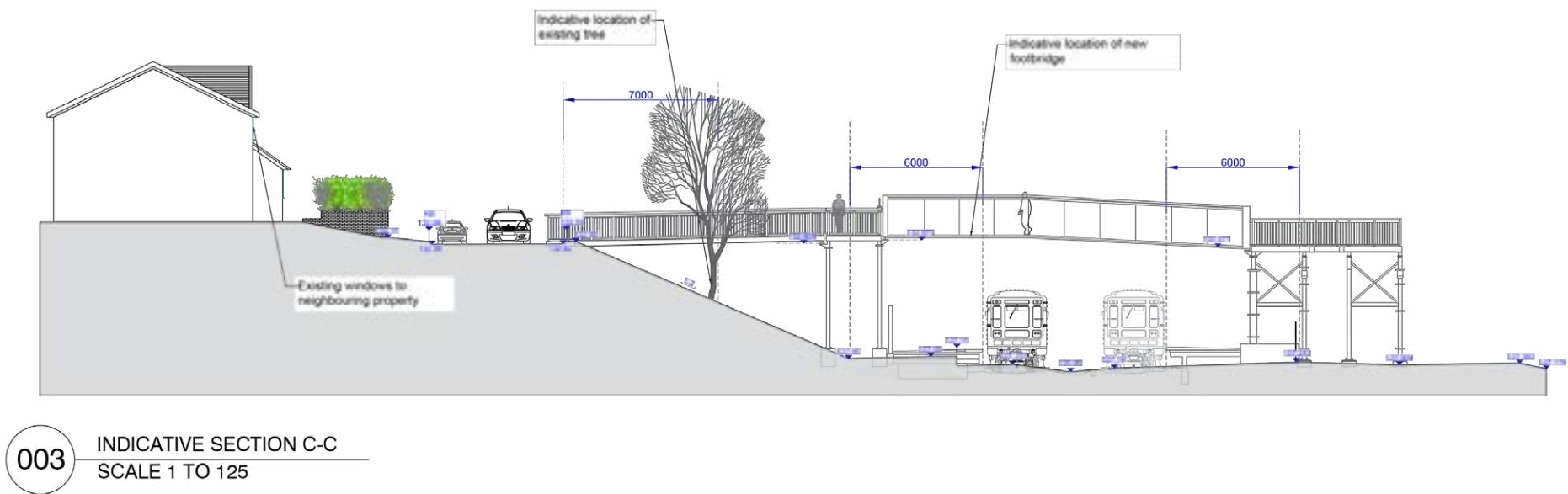
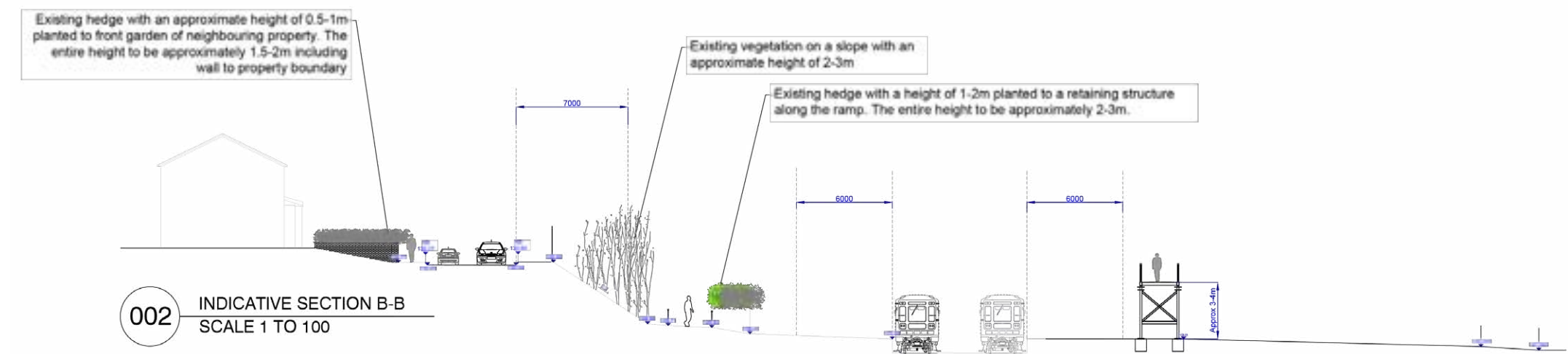
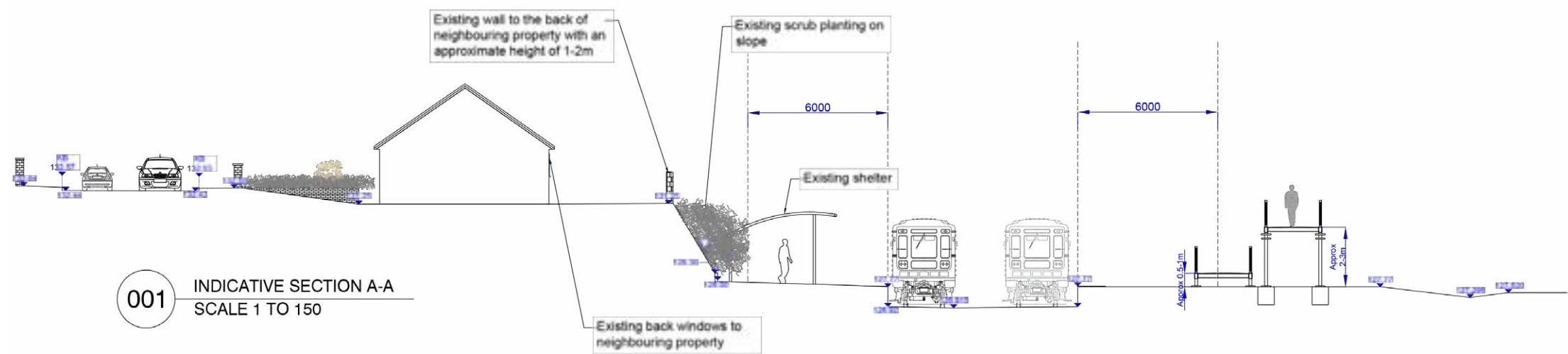


Figure 4.1 Site Location - Landscape and Visual receptors

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05.00 EXISTING SECTIONS



Location Plan

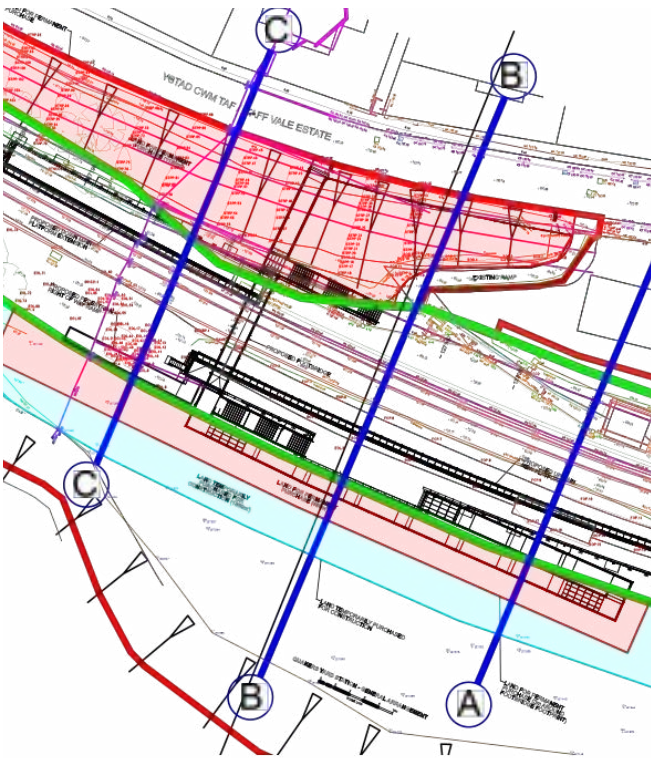


Image 5.1 Existing sections

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06.00 CONSTRAINTS

Constraints within the application boundary of the site at Quakers Yard:

- Design standards required to be adhered to:
 - Standards by Network Rail for line side vegetation (NR/L2/OTK/5201/MOD01)
 - Design Manual for Roads and Bridges (LD117 Landscape Design)
- Site topography
- Residents right to light
- Limited space availability to plant between new structure and residential properties

There is very little space to plant possible screening vegetation within the in the site between residents and the new pedestrian footbridge.

Network Rail standards

Adhering to design standards further limits available space to plant within the site.

'Reflecting the surrounding area's pattern and species composition not only plays an important part in the quality of a landscape design but also in the biodiversity of the surrounding area. Defining areas for landscape enhancement, vegetation retention and where necessary mitigation planting is crucial to developing the environmental/landscape masterplan and maintaining aesthetic quality. This may include planting outside the boundary.' - DMRB LD117 Landscape Design - Appendix A4

As per NR/L2/OTK/5201 "Lineside Vegetation Management Manual", please do not plant any trees in the CESS strip.

- (a) Remove vegetation within the immediate action zone.
- (d) Within 6 metres of the nearest rail - Prevent growth towards the immediate action zone; and
- (f) Treat vegetation on a cyclic basis to control growth.

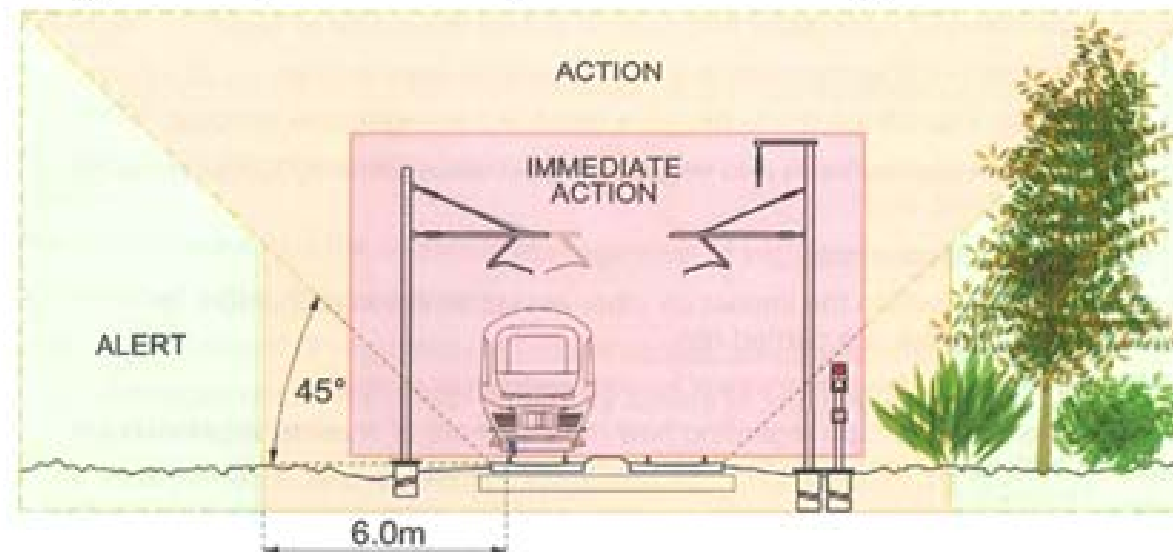


Figure 6.1 Illustration of offsets for planting required to railway lines

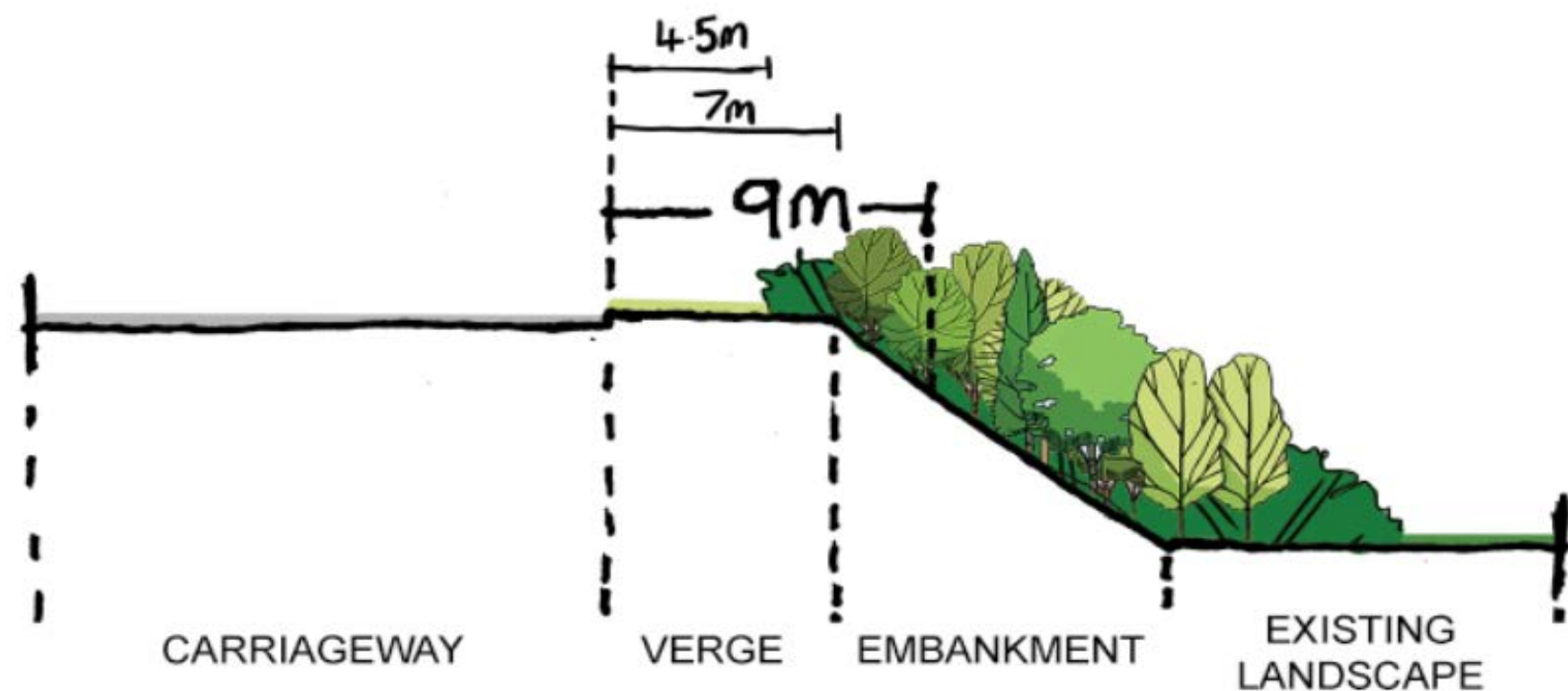


Figure 6.2 Illustration of offsets for planting required to roads

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07.00 POTENTIAL LANDSCAPE AND VISUAL MITIGATION

Mitigation measures form an essential part of the proposals, responding to local landscape character, retaining and enhancing green infrastructure and open space to the scale and pattern of the landscape context as well as retaining sensitive views. Mitigation is an important part of the design process, there are three forms of mitigation:

Primary - Inherent: Modifications to the location or design of the development made during the pre-application phase that are an inherent part of the project, and do not require additional action to be taken.

Secondary - Foreseeable: Actions that will require further activity in order to achieve the anticipated outcome. These may be imposed as part of the planning consent, or through inclusion in the ES.

Tertiary - Inexorable: Actions that would occur with or without input from the standard planning process feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

As the pedestrian footbridge is nearing construction at the time of writing this report, without consideration of primary or secondary mitigation measures, the project must now consider tertiary mitigation.

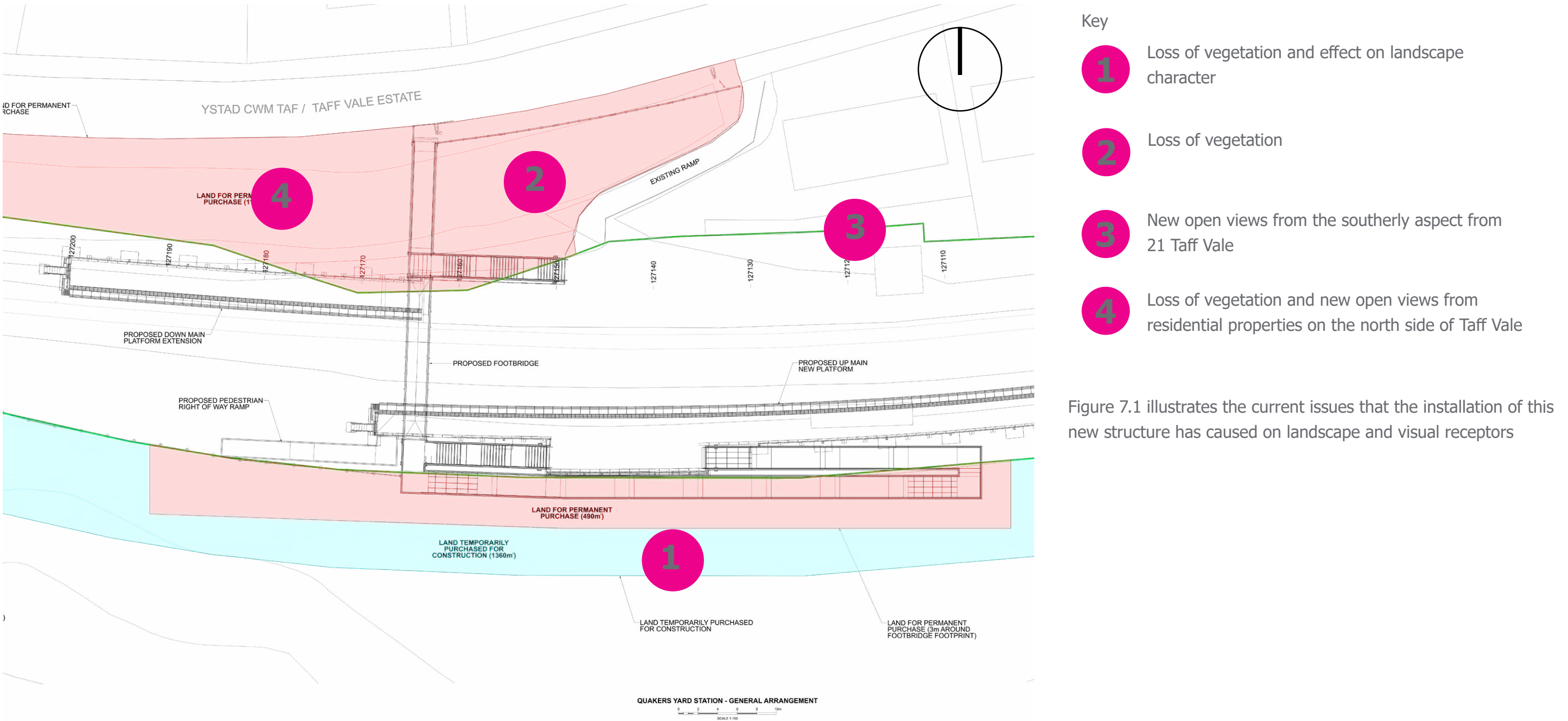


Figure 7.1 Mitigation considerations

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Mitigation considerations, reference to Figure 7.1 for locations

1. Loss of vegetation and effect on landscape character	
Native planting to the south of the pedestrian ramp on current topography	
Pros	Cons
Will enhance the natural fauna and flora	Does not offer any visual screening for nearby residents as the new structure is in front of the structure
Possibly provide connectivity to surrounding woodlands	
Will positively contribute to the Pontygwaith Nature Reserve	
Additional planting on land owned by Merthyr Tydfil Anglers Alliance	
Pros	Cons
Will enhance the natural fauna and flora	Does not offer any visual screening for nearby residents as the new structure is in front of the structure
Possibly provide connectivity to surrounding woodlands	Further consultation with resident will be required
Will positively contribute to the Pontygwaith Nature Reserve	Merthyr Tydfil will be responsible for maintenance and ensuring plant stock survival
Merthyr Tydfil Anglers Alliance have engaged with the project team to date and have requested planting on their land	
2. Loss of vegetation	
Native planting to the north of the steps on current topography	
Pros	Cons
Will enhance the existing natural fauna and flora	Due to topography there are very few areas where mid life native trees will offer visual screening of the new footbridge for residents on the northern side of Taff Vale
Will add limited visual screening where topography affords at maturity	In this area planting must adhere to DMRB planting offsets from the kerb from the northern side and from the southern side planting must adhere to Network Rail standards leaving limited space to plant between the new footbridge and residential receptors
Possibly provide connectivity to surrounding woodlands	A maintenance strip adjacent to the steps and under / adjacent to the footbridge must be maintained that further reduces planting areas available to aid natural surveillance and reduce unnecessary maintenance
Retaining wall to create raised planting beds and regrading of slope to 1:3	
Pros	Cons
Will enhance the existing natural fauna and flora	Raised planting beds will require design by structural specialist
At maturity could provide some visual screening to the south	Extent of possible root zone area available in a raised planter will limit the selection of species available
	In this area planting must adhere to DMRB planting offsets from the kerb from the northern side and from the southern side planting must adhere to Network Rail standards leaving limited space to plant between the new footbridge and residential receptors
	A maintenance strip adjacent to the steps and under / adjacent to the footbridge must be maintained that further reduces planting areas available to aid natural surveillance and reduce unnecessary maintenance
	Towards the east the path is bound on its eastern side by a wall with a retaining wall with a hedge above. Careful siting of the retaining wall to ensure that ambush point are not created
	Existing vegetation here will likely have to be removed to install a retaining wall and regrade

3. New open views to the southerly aspect of 21 Taff Vale	
Raised planting beds to the southern boundary property of 21 Taff Vale	
Pros	Cons
Will enhance the natural fauna and flora	Tall planting next to residential properties has the potential to cast shade on buildings, blocking sunlight lighting up properties as well as lowering temperatures of areas in shade
At maturity could provide some visual screening to the south	Raised planting beds will require design by structural specialist
	Planting palette possible here will be limited due to proximity to railway line and new shelter therefore the visual screening desired may not be provided by this solution
	Could provide another footing from the new shelter to the rear elevation of the property
	Extent of possible root zone area available in a raised planter will limit the selection of species available
	Removal of existing vegetation will be required
	Vegetation Planted in a raided bed will no comply with #Network Rail line side vegetation standards
Planting in rear garden of 21 Taff Vale	
Pros	Cons
Will enhance the natural fauna and flora	Resident will be responsible for maintenance and ensuring plant stock survival
At maturity could provide some visual screening to the south	Tall planting next to residential properties has the potential to cast shade on buildings, blocking sunlight lightening up properties as well as lowering temperatures of areas in shade
Resident can have input into species selected	Further consultation with resident will be required
Planting to the rear boundary of 21 Taff Vale	
Pros	Cons
Will enhance the natural fauna and flora	Tall planting next to residential properties has the potential to cast shade on buildings, blocking sunlight lightening up properties as well as lowering temperatures of areas in shade
At maturity could provide some visual screening to the south	Existing vegetation here will likely have to be removed to install a retaining wall and regrade
	As the ground is covered with existing thick scrub the ground conditions are not known, input from geo-techical engineers and structural specialist may be required
Extending the property boundary vertically up by increasing wall height or adding a trellis to the top of the wall	
Pros	Cons
Will provide visual screening to the south	A vertical extension in property boundary has the potential to cast shade on the building and garden, blocking sunlight lighting up the property as well as lowering temperatures of areas in shade
	Will require design by structural specialist
4. Loss of vegetation and new open views from residential properties on the north side of Taff Vale	
Fence to Taff Vale at 1.8m height	
Pros	Cons
Provides lower level visual screening	Will not provide screening from ground floor to upper floors for residents on the north side of Taff Vale
	Possibly create ambush points where the footbridge and fence meet at Taff Vale
	Will not contribute to the landscape receptor
Native planting	
Pros	Cons
Will enhance the natural fauna and flora	Due to topography there are very few areas where mid life native trees will offer visual screening of the new footbridge for residents on the northern side of Taff Vale
Will add limited visual screening where topography affords at maturity	In this area planting must adhere to DMRB planting offsets from the kerb from the northern side and from the southern side planting must adhere to Network Rail standards leaving limited space to plant between the new footbridge and residential receptors
Possibly provide connectivity to surrounding woodlands	A maintenance strip adjacent to the steps and under / adjacent to the footbridge must be maintained that further reduces planting areas available to aid natural surveillance and reduce unnecessary maintenance
Retaining wall at section B-B and regrading of slope to 1:3 and native planting with some heavy standard trees where possible	
Pros	Cons
Will enhance the natural fauna and flora	Due to topography there are very few areas where mid life native trees will offer visual screening of the new footbridge for residents on the northern side of Taff Vale
At maturity planting could provide some visual screening to the south	In this area planting must adhere to DMRB planting offsets from the kerb from the northern side and from the southern side planting must adhere to Network Rail standards leaving limited space to plant between the new footbridge and residential receptors
	A maintenance strip adjacent to the steps and under / adjacent to the footbridge must be maintained that further reduces planting areas available to aid natural surveillance and reduce unnecessary maintenance
	Raised planting beds will require design by structural specialist

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08.00 RECOMMENDATIONS

Consideration of the options above for landscape and visual receptors the following measures are recommended. It should be noted that these measures will not completely satisfy visual screening or connectivity of the landscape due to the size, scale and location of the new structure.

1. Loss of vegetation and effect on landscape character

Plant native species to the south of the ramp
Plant native species on additional land as offered by Merthyr Tydfil Alliance

2. Loss of vegetation

Plant native species on existing topography to enhance the existing planting

3. New open views to the southerly aspect of 21 Taff Vale

Plant in the rear garden of 21 Taff Vale will give the maximum visual screening
Extending the property boundary vertically up by increasing wall height or adding a trellis to the top of the wall

4. Loss of vegetation and new open views from residential properties on the north side of Taff Vale

Retaining wall and regrading of slope to 1:3 with native planting with some standard tree planted where possible

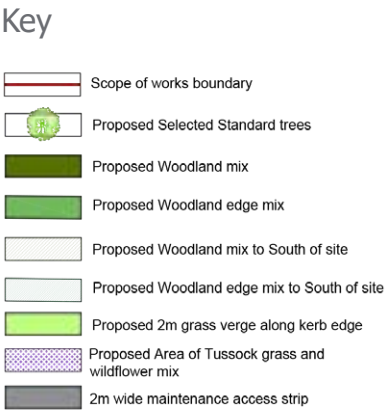


Figure 8.1 Proposed Planting Plan
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09.00 PROPOSED PLANTING PALETTE

Woodland Planting



Sorbus torminalis



Quercus robur



Betula pubescens



Betula pendula



Acer campestre



Malus sylvestris

Woodland Edge Planting



Prunus avium



Crataegus monogyna



Corylus avellana



Viburnum opulus



Cornus sanguinea



Rosa rugosa



Salix caprea

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10.00 REFERENCES

NR/L2/OTK/5201 Lineside Vegetation Manual, Network Rail, 2020

Railway Sustainability Design Guide, Habitat Design and Management Guidance Note, Network Rail, 2021

LD117 Landscape Design, Design Manual for Roads and Bridges, 2020

BS 8545:2014 Trees: from Nursery to Independence in the landscape - Recommendations, British Standards Institution, 2014

BS3936 Parts 1-4 Specification of Nursery Stock Specification for Trees and Shrubs, British Standards Institution, 1992

BS4428: 1989 Code of Practice for general landscape operations (excluding hard surfaces), British Standards Institution, 1989

BS 5837 (2012) – Trees in Relation to Design, Demolition and Construction, British Standards Institution, 2012

Quakers Yard

Landscape Mitigation Proposals

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