Rural Office

Plascrug Active Travel Bridge
Aberystwyth

Rural Office
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Reference	191
Subject	Plascrug Active Travel Bridge
Title	Engagement Document: Comparative Review of Proposed Bridge Options

Cyngor Sir
CEREDIGION
County Council

Ymgynghoriaeth
GWYNEDD
Consultancy
YGC

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Optimal Bridge Design Criteria

This page outlines the optimal bridge design, incorporating all requirements identified for delivering a successful active travel bridge project at this stage.

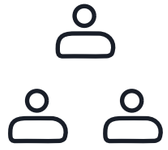
The three proposed bridge options discussed later in this document are evaluated against these criteria to identify which requirements are fully met – creating opportunities and positive impacts, and which are not fulfilled – resulting in challenges and potential negative impacts.

Accessibility

1. 1:20 gradient ramps ensure accessibility for a wide range of users.
2. Flat resting platforms every 10m on ramped sections.
3. Enhances the existing Active Travel network.
4. Continuous handrails along ramps and stairs support users of all abilities.

Surroundings

1. Utilises council-owned land.
2. Compliance with Network Rail requirements.
3. Opportunity to redesign & reconfigure the Lower Park Avenue car park.
4. Construction will require minimal removal of existing vegetation.



Stakeholders

1. Limited impact, potential for improvement of the Primary School grounds.
2. Opportunity to reconfigure Primary School entrance area on Plascrug Avenue.
3. Minimal overlooking issues into the Primary School grounds.
4. Minimal impact on Meithrinfa Camau Bach; potential for car park improvement.
5. Minimal impact on Aberystwyth Rugby Club.

Design

1. Well-resolved design with no headroom restrictions, ensuring safe access for cyclists.
2. Full 4.0m width across the structure provides generous space for all users, encouraging sustainable travel choices.
3. A safe and well-considered layout that promotes intuitive movement.
4. Compliant with minimum turning radius standards for cyclists.
5. A well-integrated structure that, if thoughtfully designed and executed, has the potential to become a valued local landmark.
6. Well-designed lighting ensures the bridge remains safe, welcoming, and accessible during low-light conditions and at night.
7. To further support safety, CCTV coverage is considered.

Construction

1. Minimal utility diversions required, reducing complexity and disruption to existing services.
2. Adequate construction access to be provided, ensuring sufficient space for machinery, equipment, and materials.
3. Provision and maintenance of the existing active travel route during construction works.

Operation, Maintenance & Cost

1. Sufficient space for future maintenance.
2. A balanced assessment of cost and risk that supports achieving the most cost-effective and strategically sound outcome.

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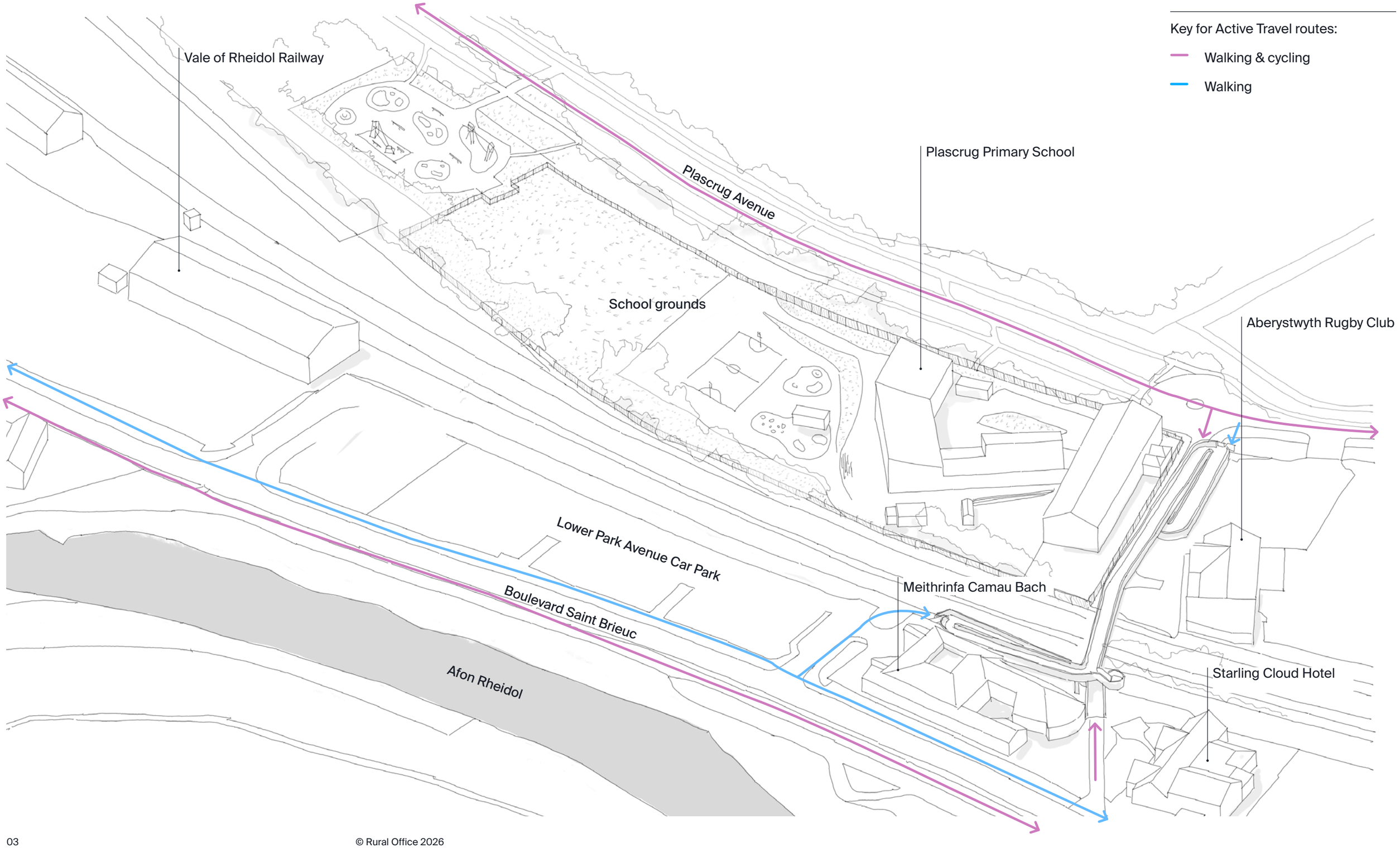
Option A
Bird’s eye view



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Option A
Challenges and Negative Impacts

Option A replaces the existing bridge while enhancing the active travel routes at the existing location with a new, wider deck structure. This option faces significant construction challenges due to restricted access and the complexity of building and maintaining a large-scale active travel bridge in a constrained site.

This page outlines the key challenges and potential negative impacts associated with this proposal.

- Accessibility
- Surroundings
- Stakeholders
- Design
- Construction
- Operation, Maintenance & Cost

Lease amendment needed with Meithrinfa Camau Bach and Aberystwyth Rugby Club.

Significant costs involved: demolition, temporary access, and complex design/ construction.

Closer to the Primary School than the existing bridge.

Limited construction access: craneage difficult due to surrounding buildings and heavy deck.

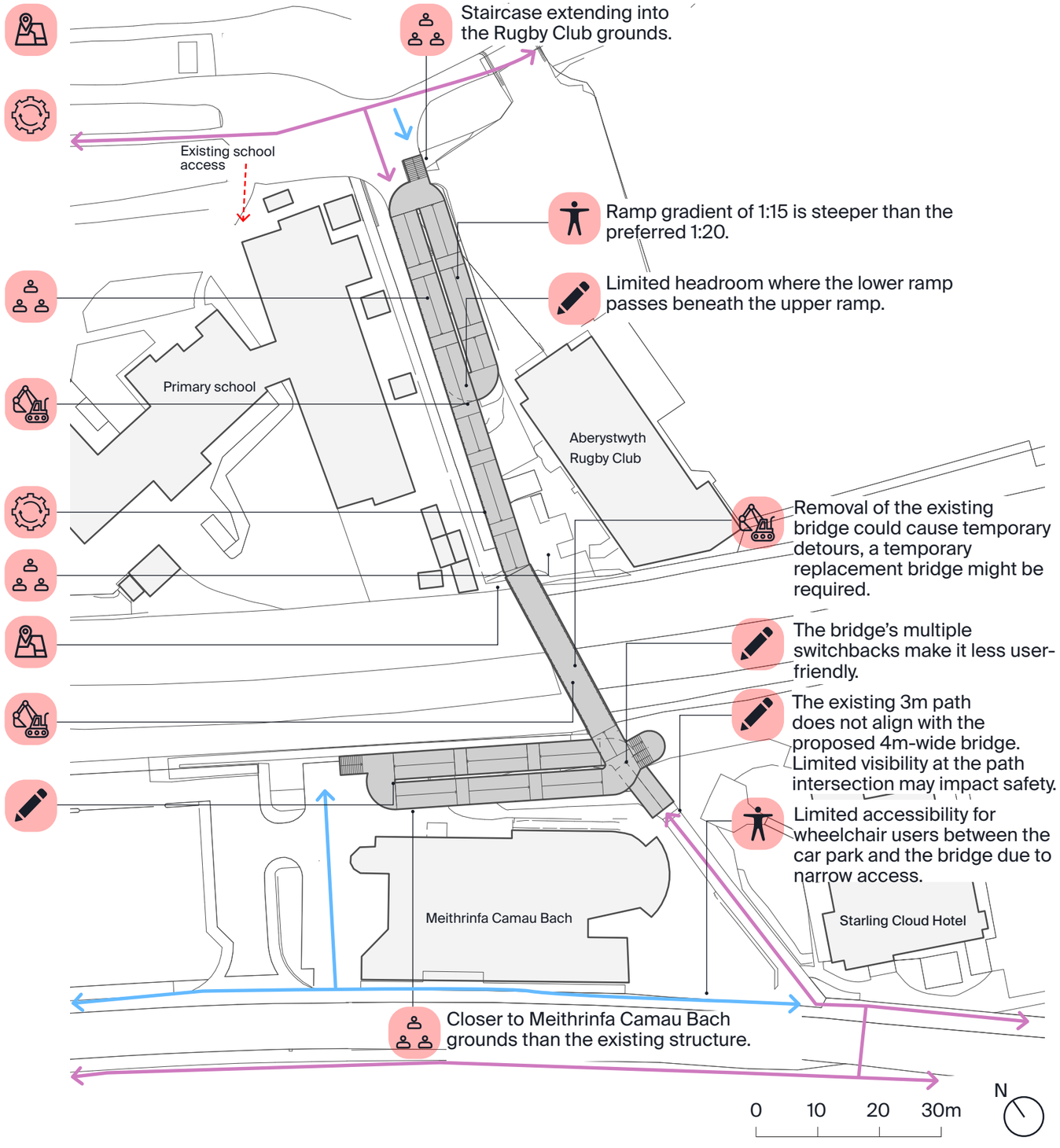
Restricted space for future maintenance.

Possible impact on the Rugby Club's access for deliveries.

Construction near the Network Rail boundary must allow for future access.

Utilities on the existing structure line may require costly diversions.

The minimum turning radius for cyclists may affect ramp spacing and introduce fabrication challenges.

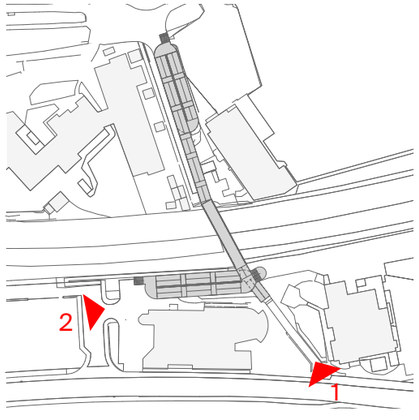


Key for Active Travel routes:

- Walking & cycling
- Walking

Option A Analysis

This page depicts views of the proposed bridge.

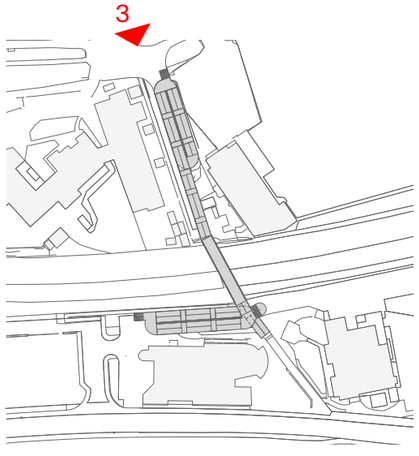


1. Approximate location and scale of the proposed bridge, view from Boulevard Saint Brieuc.

2. Approximate location and scale of the proposed bridge, view from the Lower Park Avenue car park.

Option A Analysis

This page depicts a view of the proposed bridge.



3. Approximate location and scale of the proposed bridge, view from the Plascrug Avenue roundabout.

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Option A Criteria

This page assesses Option A against the optimal bridge criteria to identify which requirements are fully met – creating opportunities and positive impacts, and which are not fulfilled – resulting in challenges and potential negative impacts.

Accessibility

1. Ramp gradient of 1:15 is steeper than the preferred 1:20.
2. Flat resting platforms every 10m on ramped sections.
3. Retains the existing Active Travel route, which is already familiar to the local community.
4. Continuous handrails along ramps and stairs support users of all abilities.

Additional considerations:

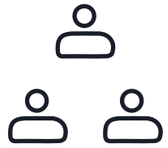
- Accessibility for wheelchair users between the car park and the bridge is limited due to the narrow access along Boulevard Saint Brieuc.

Surroundings

1. Lease amendment needed with Meithrinfa Camau Bachand Aberystwyth Rugby Club.
2. Construction near the Network Rail boundary, must allow for future access; NR may object if safety or access is compromised.
3. Opportunity to redesign & reconfigure the Lower Park Avenue car park.
4. Construction will require minimum removal of existing vegetation.

Additional considerations:

- It is classified as permitted development due to its alignment with the original structure.
- Existing infrastructure includes a Toucan Crossing already in place, providing more direct connectivity from the community of Penparcau (via the Rheidol Trail) to Plascrug Avenue.
- Removal of the roundabout between the school and the rugby club will create a more pedestrian/cyclist friendly environment.



Stakeholders

1. No impact on the Primary School grounds.
2. Primary School entrance area on Plascrug Avenue remains. No improvements.
3. A 2-metre-high privacy screen designed to prevent overlooking into the Primary School grounds.
4. Closer to Meithrinfa Camau Bach grounds than the existing structure. Existing parking for Meithrinfa Camau Bachto be improved and reconfigured.
5. Possible impact on the Rugby Club's access for deliveries. Staircase extending into the Rugby Club grounds.

Additional considerations:

- Closer to the Primary School than the existing structure.

Design

1. Limited headroom where the lower ramp passes beneath the upper ramp.
2. Full 4.0m width across the structure. The existing 3m path on the southern approach does not align with the proposed 4m-wide bridge.
3. The bridge's multiple switchbacks make it less user-friendly, and limited visibility at the southern path intersection may impact safety.
4. The minimum turning radius for cyclists may affect ramp spacing and introduce fabrication challenges.
5. Appears as a replacement bridge, with limited visibility due to its position among buildings and trees. The constrained design could limit its landmark potential.
6. Well-designed lighting ensures the bridge remains safe, welcoming, and accessible during low-light conditions and at night.
7. To further support safety, CCTV coverage is considered.

Additional considerations:

- An improvement compared to the existing bridge.

Construction

1. Utilities on the existing structure line may require costly diversions.
2. Limited construction access: craneage difficult due to surrounding buildings and heavy deck. Close proximity to various stakeholders resulting in confined working area.
3. Removal of the existing bridge could cause temporary detours, a temporary replacement bridge might be required.

Operation, Maintenance & Cost

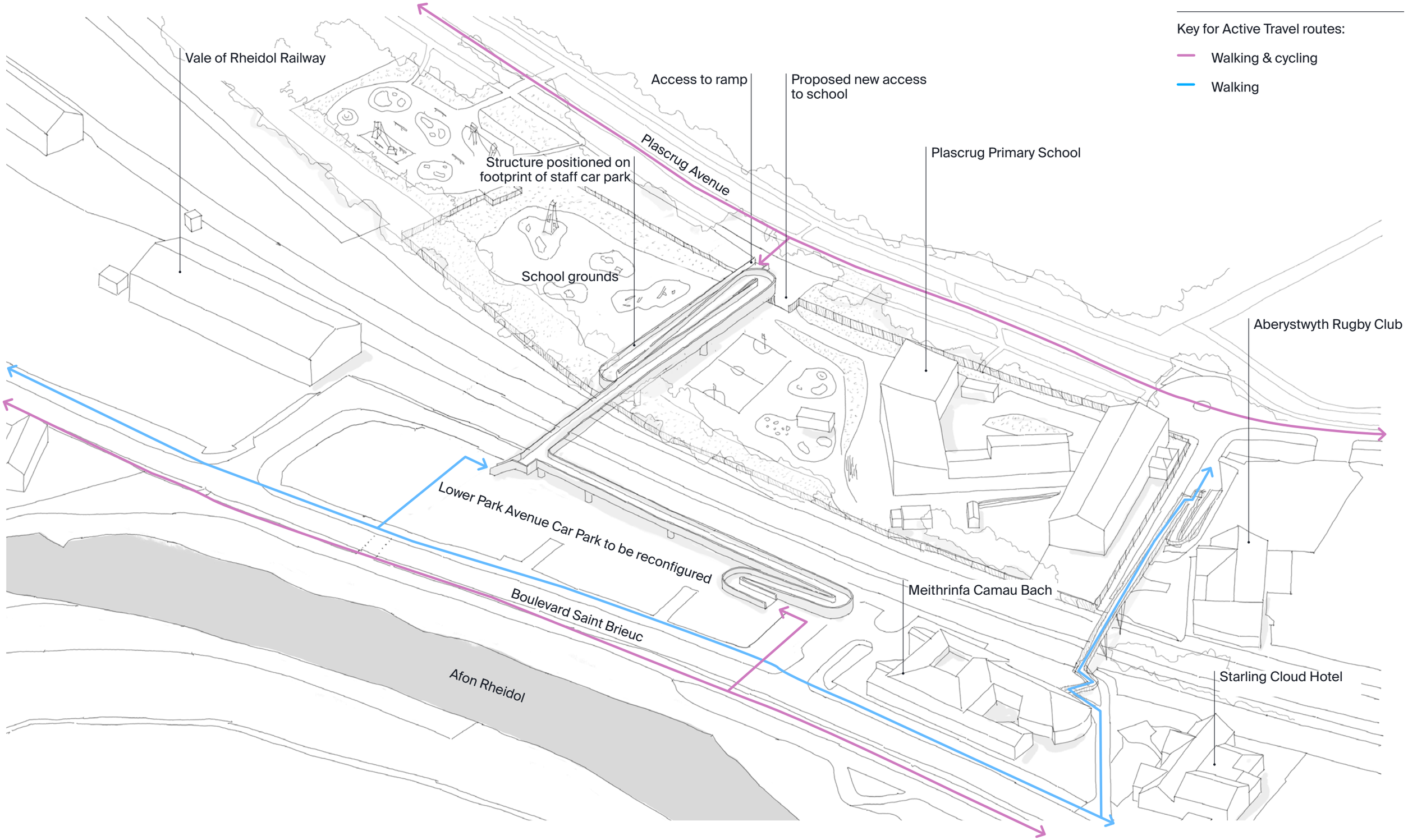
1. Restricted space for future maintenance.
2. Significant costs involved: demolition, temporary access, and complex design/ construction.

Text Key

green	Opportunities and Positive Impacts
red	Challenges and Negative Impacts
amber	Impacts Subject to Stakeholder Priorities

Disclaimer - No detail design has been carried out for any options proposed in this presentation.

Option B
Bird's eye view



Option B
Challenges and Negative Impacts

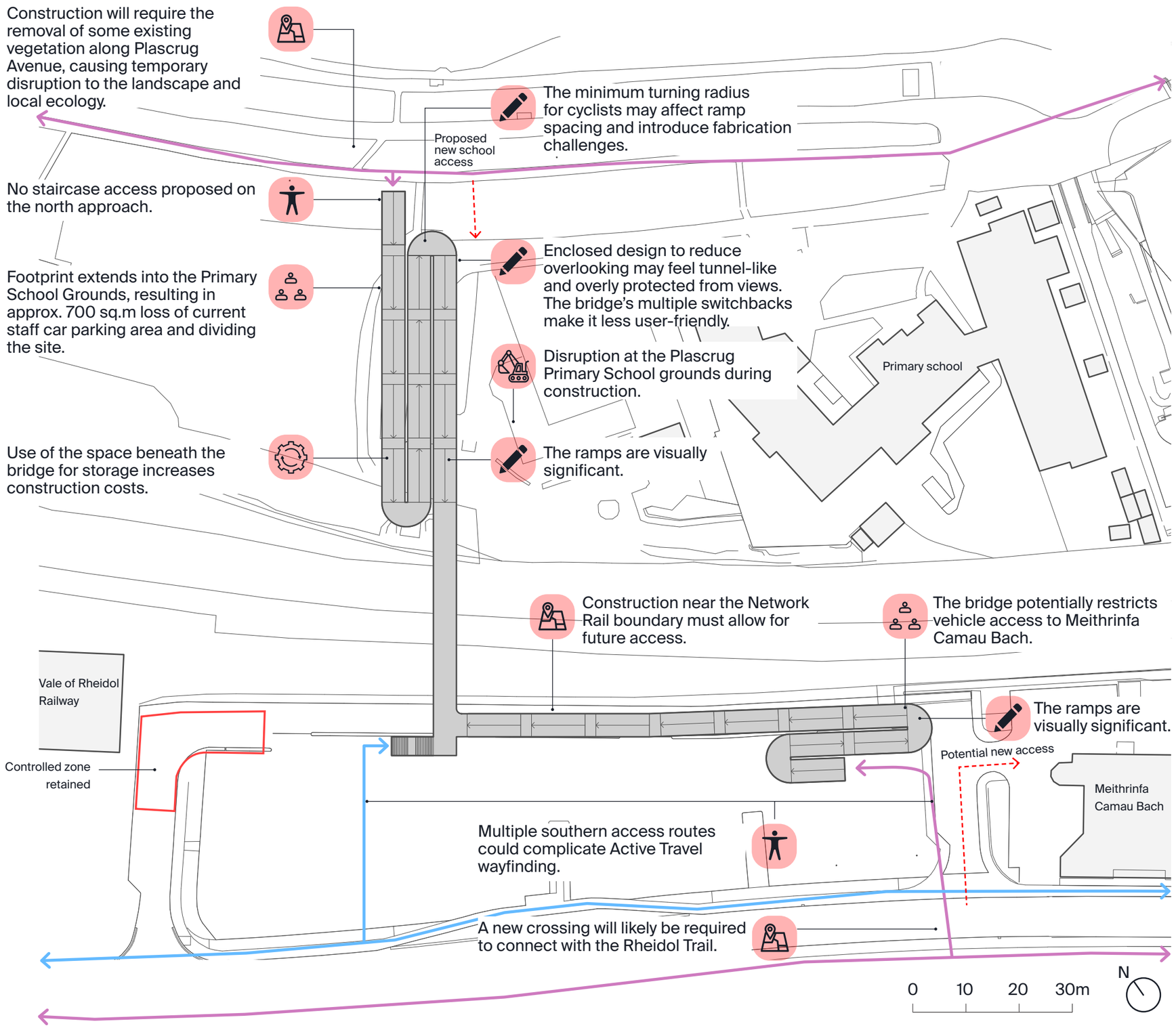
Option B routes through the Primary School grounds, introducing new active travel links that improve connectivity across the town. The design can also create a versatile under-bridge space for the school, which could be used for educational activities, recreation, or storage, and offers potential to enhance the existing playground. While this option provides some spatial benefits, it also divides the school site, which may impact cohesion and daily operations. To minimise disruption, the design prioritises preserving existing play areas and utilising staff parking areas rather than playground space. Existing bridge will be retained for pedestrians only (ramps will be removed), alongside this Option.

This page outlines the key challenges and potential negative impacts associated with this proposal.

- Accessibility
- Surroundings
- Stakeholders
- Design
- Construction
- Operation, Maintenance & Cost

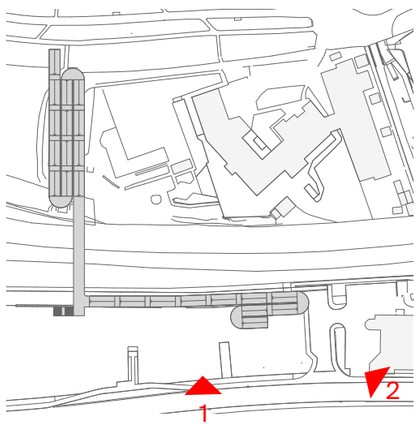
Key for Active Travel routes:

- Walking & cycling
- Walking



Option B
Analysis

This page depicts views of the proposed bridge from Boulevard Saint Brieuc.

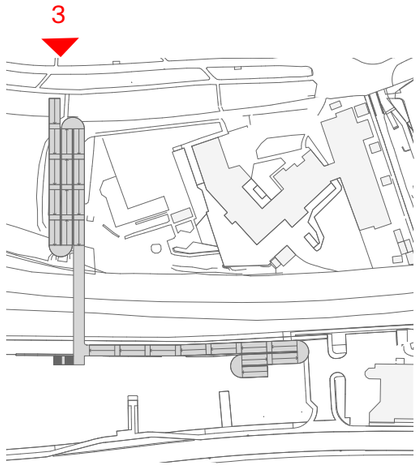


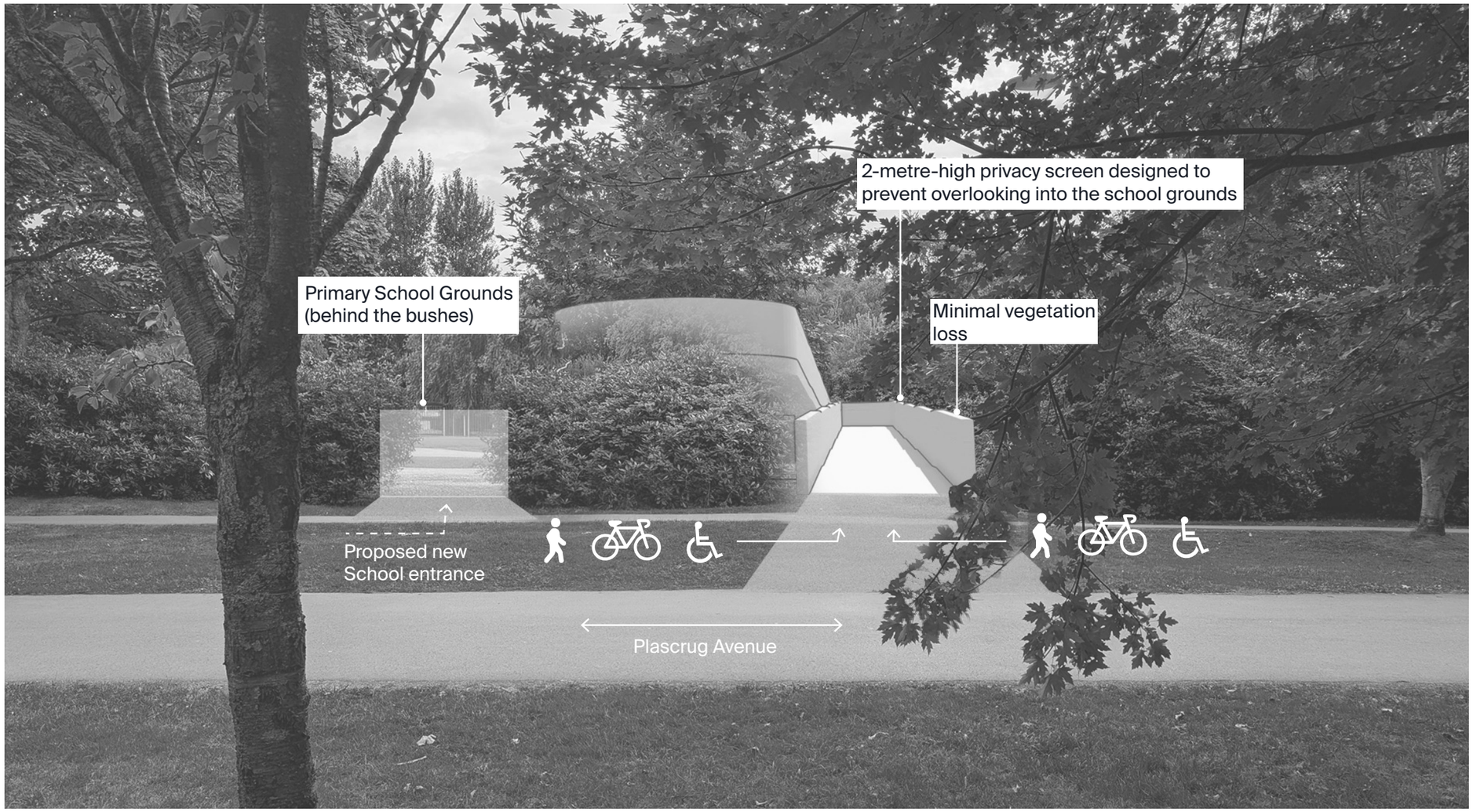
1. Approximate location and scale of the proposed bridge, view from Boulevard Saint Brieuc.

2. Approximate location and scale of the proposed bridge, view from Boulevard Saint Brieuc at Meithrinfa Camau Bach.

Option B Analysis

This page depicts views of the proposed bridge from Plascrug Anenue.

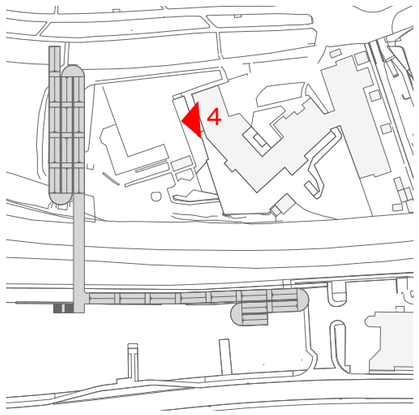


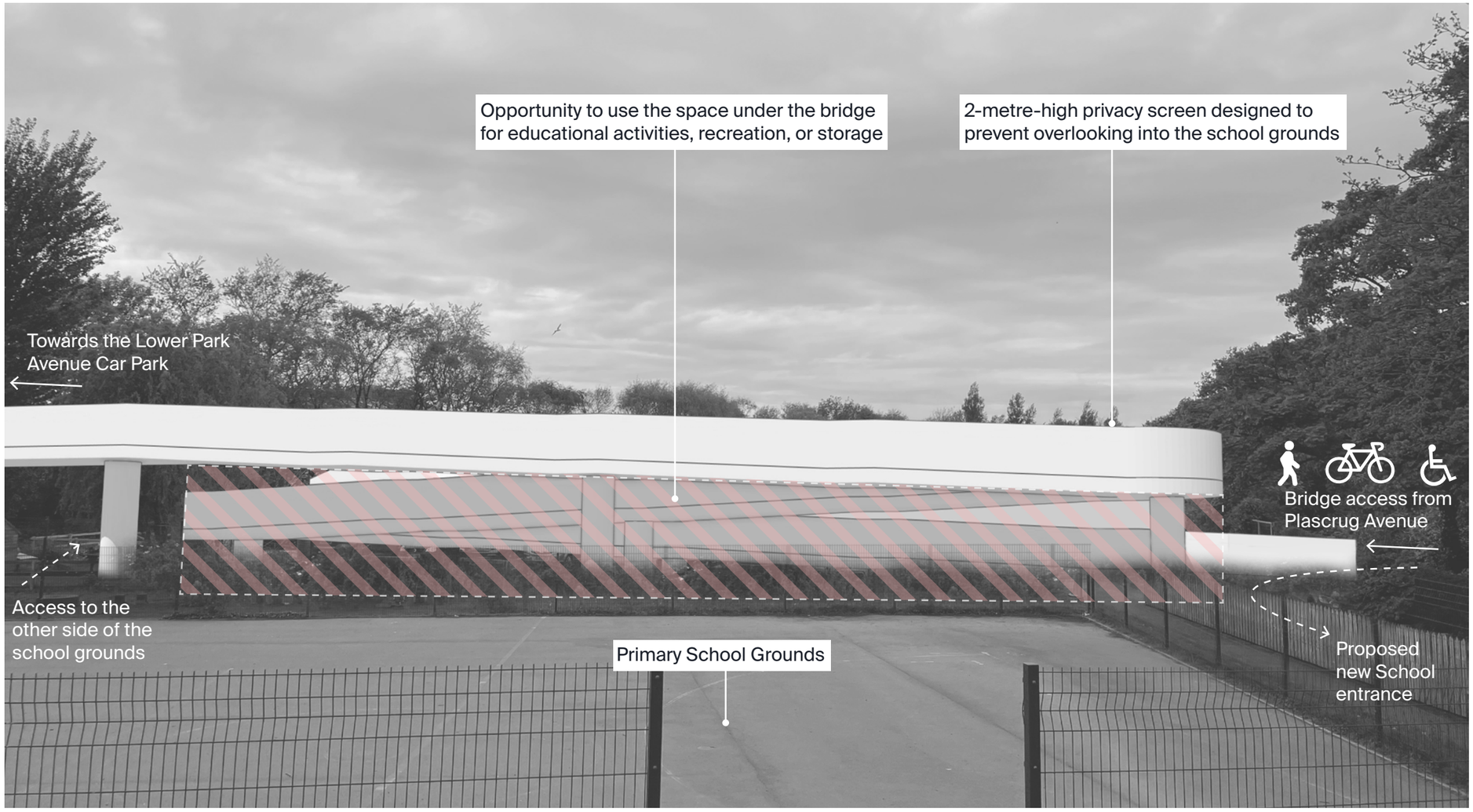


3. Approximate location and scale of the proposed bridge, view from Plascrug Avenue.

Option B Analysis

This page depicts views of the proposed bridge from the Plascrug Primary School grounds.





4. Approximate location and scale of the proposed bridge, view from the school grounds.

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Option B Criteria

This page assesses Option B against the optimal bridge criteria to identify which requirements are fully met – creating opportunities and positive impacts, and which are not fulfilled – resulting in challenges and potential negative impacts.

Accessibility

1. 1:20 gradient ramps ensure accessibility for a wide range of users.
2. Flat resting platforms every 10m on ramped sections.
3. Multiple southern access routes could complicate Active Travel wayfinding. However, in general it improves active travel links within Aberystwyth.
4. Continuous handrails along ramps and stairs support users of all abilities.

Additional considerations:

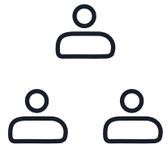
- No staircase access proposed on the north approach.
- Northern access moves away from the desire line.

Surroundings

1. Utilises council-owned land.
2. Construction near the Network Rail boundary, must allow for future access; NR may object if safety or access is compromised.
3. Opportunity to redesign the Lower Park Avenue car park to reduce town centre traffic and support sustainable Active Travel.
4. Construction will require the removal of some existing vegetation along Plascrug Avenue, causing temporary disruption to the landscape and local ecology.

Additional considerations:

- A new crossing will likely be required to connect with the Rheidol Trail.



Stakeholders

1. Opportunity to upgrade the Primary School grounds and repurpose space under the bridge for learning, play, or storage.
2. Footprint extends into the Primary School grounds, resulting in approx. 700 sq.m loss of current staff car parking area and dividing the site.
3. Opportunity to relocate the Primary School entrance for a greener, safer access point and reduced roundabout congestion.
4. A 2-metre-high privacy screen designed to prevent overlooking into the Primary School grounds.
5. The bridge potentially restricts vehicle access to Meithrinfa Camau Bach. Existing parking for Meithrinfa Camau Bachto be improved and reconfigured.
6. No negative impact on Aberystwyth Rugby Club.

Design

1. No headroom restrictions, ensuring safe access for cyclists.
2. Full 4.0m width across the structure provides generous space for all users, encouraging sustainable travel choices.
3. Enclosed design to reduce overlooking may feel tunnel-like and overly protected from views.
4. The bridge's multiple switchbacks on the southern side make it less user-friendly.
5. The minimum turning radius for cyclists may affect ramp spacing and introduce fabrication challenges.
6. Located prominently near the main road, the structure's visibility and scale give it a strong potential to become a local landmark, especially if supported by a high-quality design.
7. Well-designed lighting ensures the bridge remains safe, welcoming, and accessible during low-light conditions and at night.
8. To further support safety, CCTV coverage is considered.

Additional considerations:

- The ramps are visually significant.
- Vast improvements compared to the existing structure.

Construction

1. Minimal utility diversions required, reducing complexity and disruption to existing services.
2. Adequate construction access can be provided, ensuring sufficient space for machinery, equipment, and materials.
3. Existing footbridge near Meithrinfa Camau Bachcan remain in place during the construction works - no temporary replacement bridge needed.

Additional considerations:

- Disruption at the Plascrug Primary School grounds during construction.

Operation, Maintenance & Cost

1. Sufficient space for future maintenance.
2. The northern ramp's use of the space beneath the bridge for storage increases construction costs.

Additional considerations:

- Access to the School grounds required for maintenance.
- Two bridges to maintain in the future.
- Two bridges provide increased resilience in the future i.e. if one bridge needs to be closed for temporary maintenance, it will avoid a long detour for pedestrians and cyclists.

Text Key

green	Opportunities and Positive Impacts
red	Challenges and Negative Impacts

Disclaimer - No detail design has been carried out for any options proposed in this presentation.

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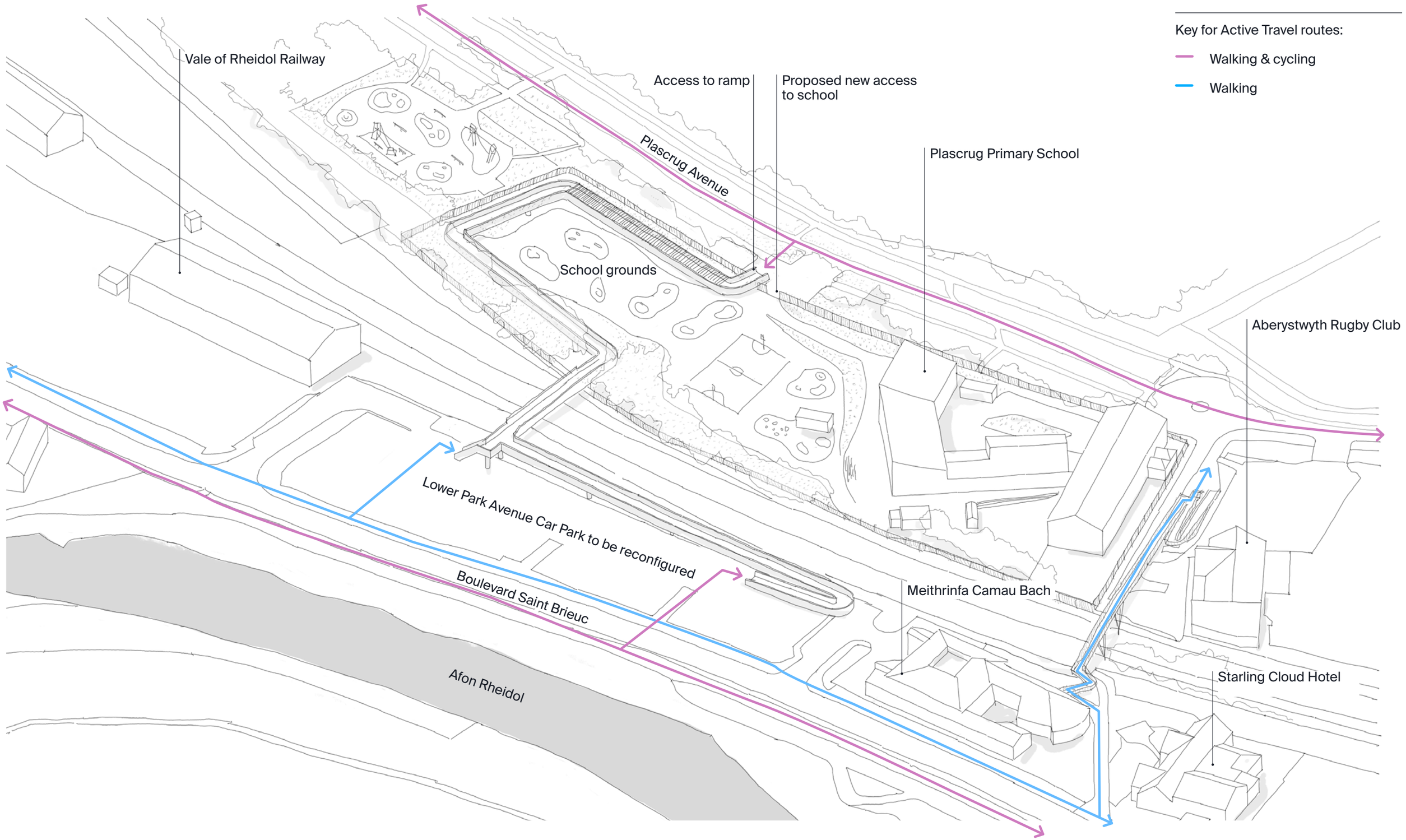
Option C
Bird's eye view



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Option C
Challenges and Negative Impacts

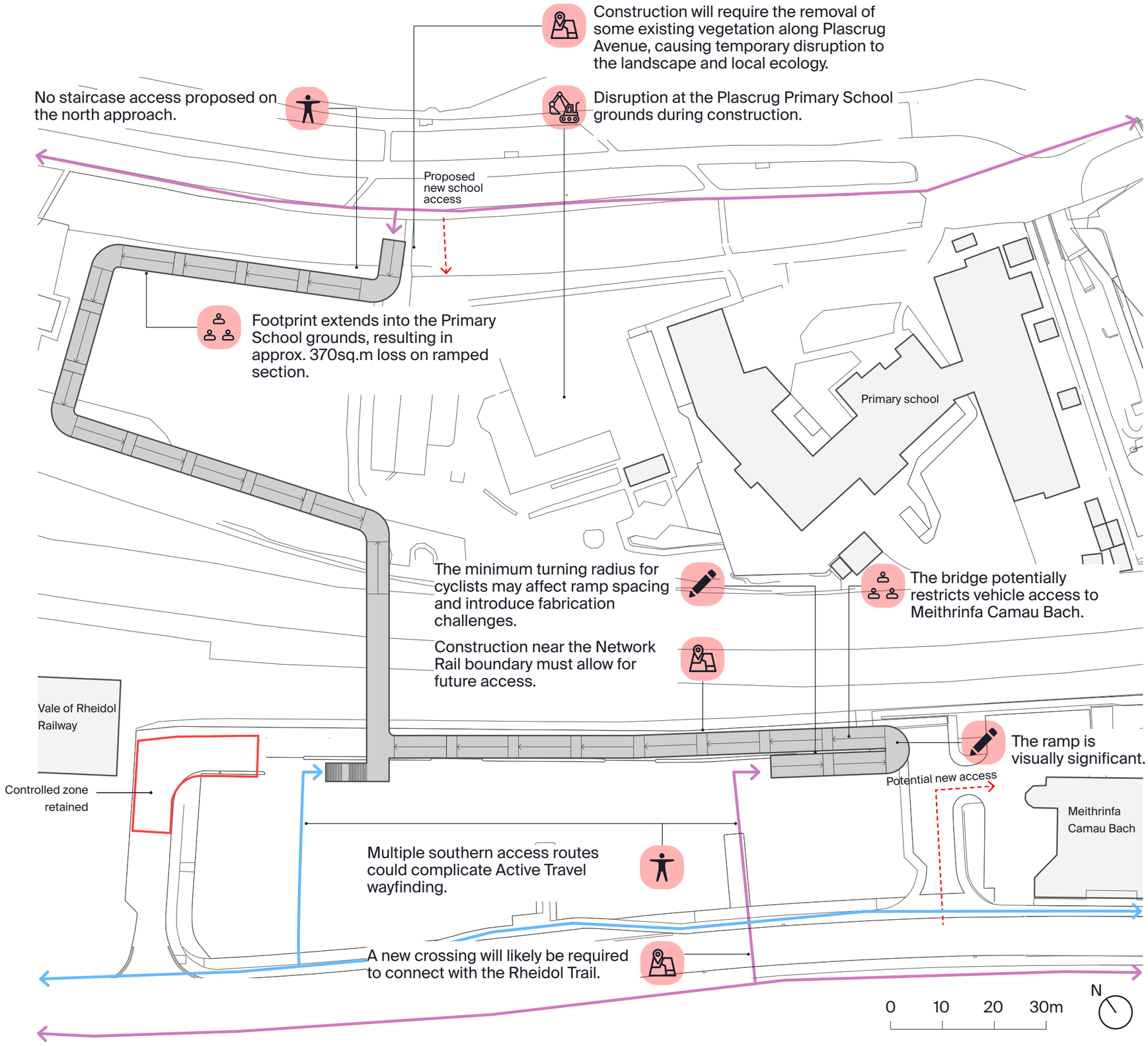
Option C passes through the Primary School grounds via a gentler, meandering path that introduces new active travel connections in the town while minimising disruption to the school grounds. Unlike Option B, it avoids dividing the site. The design provides potential to improve the Primary School's playground. Although still a substantial structure, its location in a less constrained area and its lighter-weight design make it the most straightforward and cost-effective to construct of the three options. Existing bridge will be retained for pedestrians only (ramps will be removed), alongside this Option.

This page outlines the key challenges and potential negative impacts associated with this proposal.

- Accessibility
- Surroundings
- Stakeholders
- Design
- Construction
- Operation, Maintenance & Cost

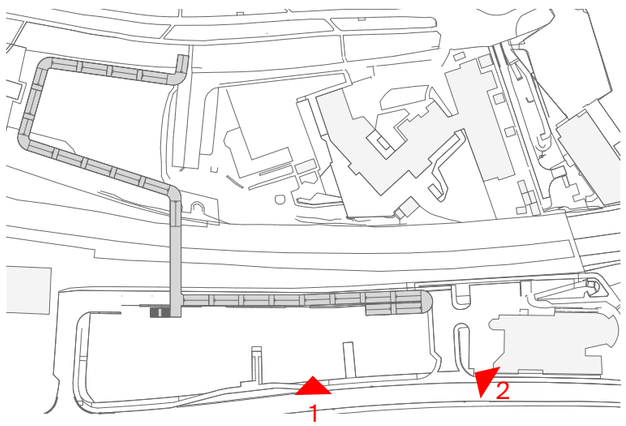
Key for Active Travel routes:

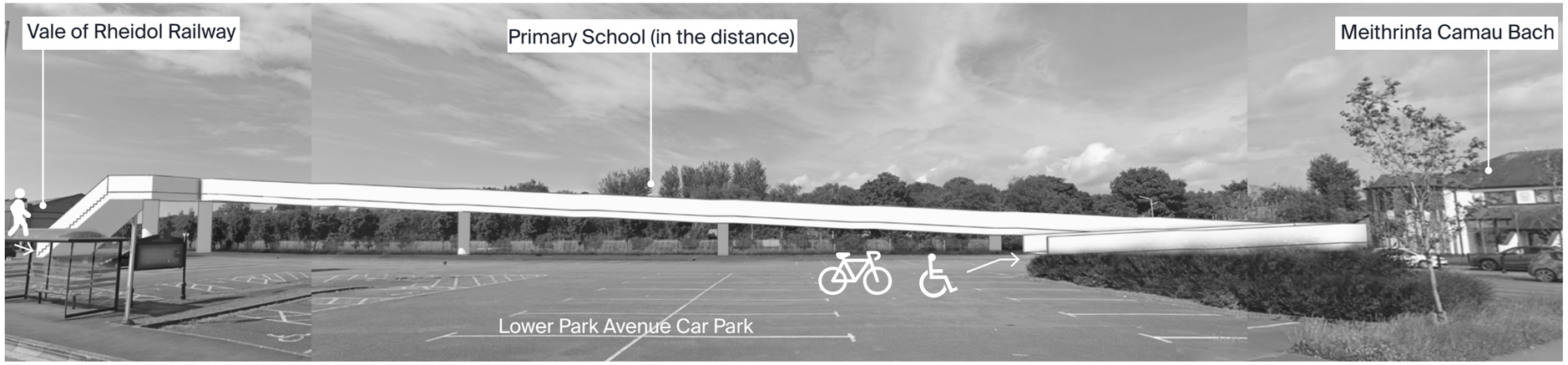
- Walking & cycling
- Walking



Option C Analysis

This page depicts views of the proposed bridge from Boulevard Saint Brieuc.



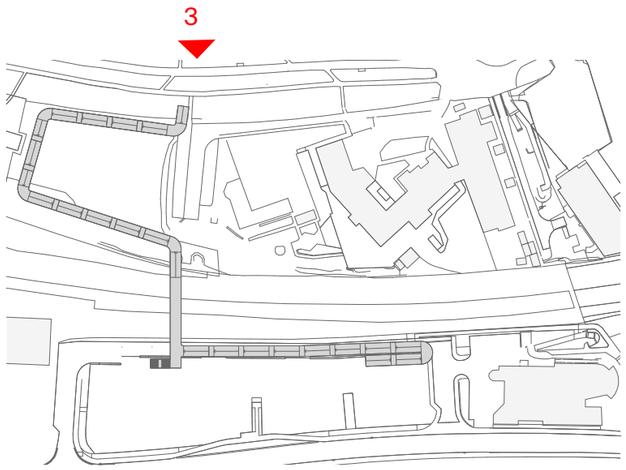


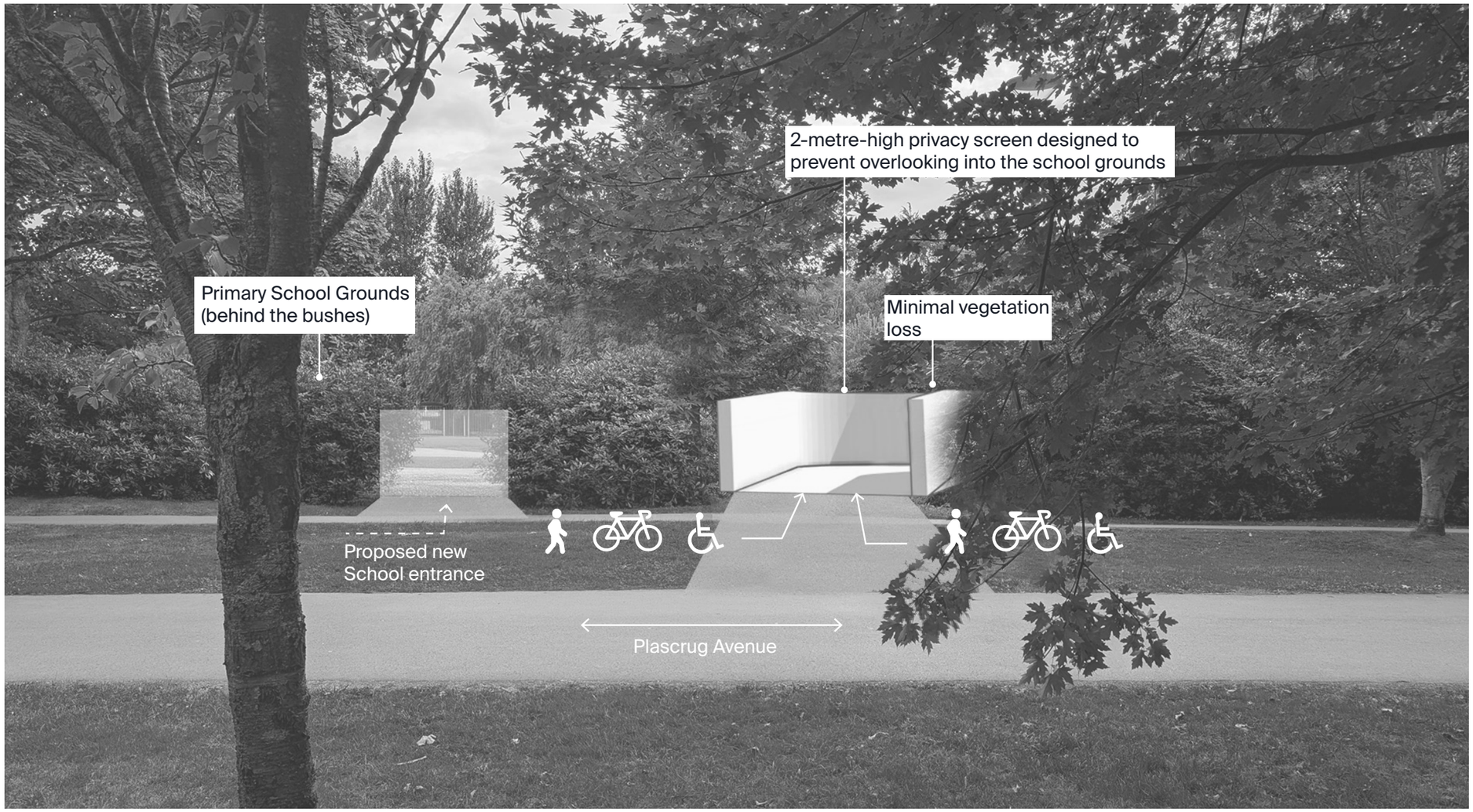
1. Approximate location and scale of the proposed bridge, view from Boulevard De Saint Brieuc.

2. Approximate location and scale of the proposed bridge, view from Boulevard Saint Brieuc at Meithrinfa Camau Bach.

Option C Analysis

This page depicts views of the proposed bridge from Plascrug Anenue.

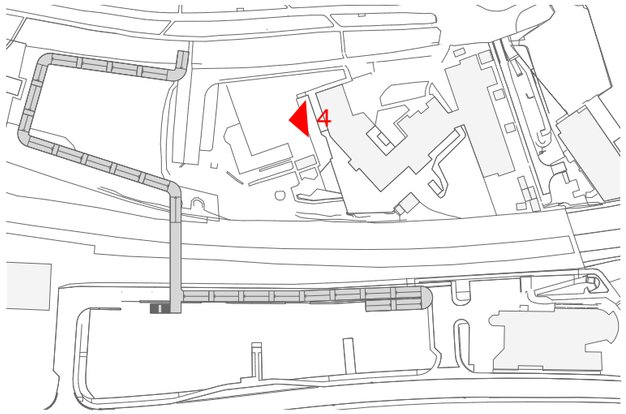




3. Approximate location and scale of the proposed bridge, view from Plascrug Avenue.

Option C Analysis

This page depicts views of the proposed bridge from the Plascrug Primary School grounds.



4. Approximate location and scale of the proposed bridge, view from the school grounds.

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Option C Criteria

This page assesses Option C against the optimal bridge criteria to identify which requirements are fully met – creating opportunities and positive impacts, and which are not fulfilled – resulting in challenges and potential negative impacts.

Accessibility

1. 1:20 gradient ramps ensure accessibility for a wide range of users.
2. Flat resting platforms every 10m on ramped sections.
3. Multiple southern access routes could complicate Active Travel wayfinding. However, in general it improves active travel links within Aberystwyth.
4. Continuous handrails along ramps and stairs support users of all abilities.

Additional considerations:

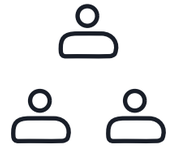
- No staircase access proposed on the north approach.
- Northern access moves away from the desire line.

Surroundings

1. Utilises council-owned land.
2. Construction near the Network Rail boundary, must allow for future access; NR may object if safety or access is compromised.
3. Opportunity to redesign the Lower Park Avenue car park to reduce town centre traffic and support sustainable Active Travel.
4. Construction will require the removal of some existing vegetation along Plascrug Avenue, causing temporary disruption to the landscape and local ecology.

Additional considerations:

- A new crossing will likely be required to connect with the Rheidol Trail.



Stakeholders

1. Opportunity to upgrade the Primary School grounds.
2. Footprint extends into the Primary School grounds, resulting in approx. 370sq.m loss on ramped section.
3. Opportunity to relocate the Primary School entrance for a greener, safer access point and reduced roundabout congestion.
4. A 2-metre-high privacy screen designed to prevent overlooking into the Primary School grounds.
5. The bridge potentially restricts vehicle access to Meithrinfa Camau Bach. Existing parking for Meithrinfa Camau Bach to be improved and reconfigured.
6. No negative impact on Aberystwyth Rugby Club.

Design

1. No headroom restrictions, ensuring safe access for cyclists.
2. Full 4.0m width across the structure provides generous space for all users, encouraging sustainable travel choices.
3. A safe and well-considered layout that promotes intuitive movement.
4. The minimum turning radius for cyclists may affect ramp spacing and introduce fabrication challenges.
5. Located prominently near the main road, the structure's visibility and scale give it a strong potential to become a local landmark, especially if supported by a high-quality design.
6. Well-designed lighting ensures the bridge remains safe, welcoming, and accessible during low-light conditions and at night.
7. To further support safety, CCTV coverage is considered.

Additional considerations:

- The ramps are visually significant.
- Vast improvements compared to the existing structure.

Construction

1. Minimal utility diversions required, reducing complexity and disruption to existing services.
2. Adequate construction access can be provided, ensuring sufficient space for machinery, equipment, and materials.
3. Existing footbridge near Meithrinfa Camau Bachcan remain in place during the construction works - no temporary replacement bridge needed.

Additional considerations:

- Disruption at the Plascrug Primary School grounds during construction.

Operation, Maintenance & Cost

1. Sufficient space for future maintenance.
2. Simpler design on open land makes construction cheaper.

Additional considerations:

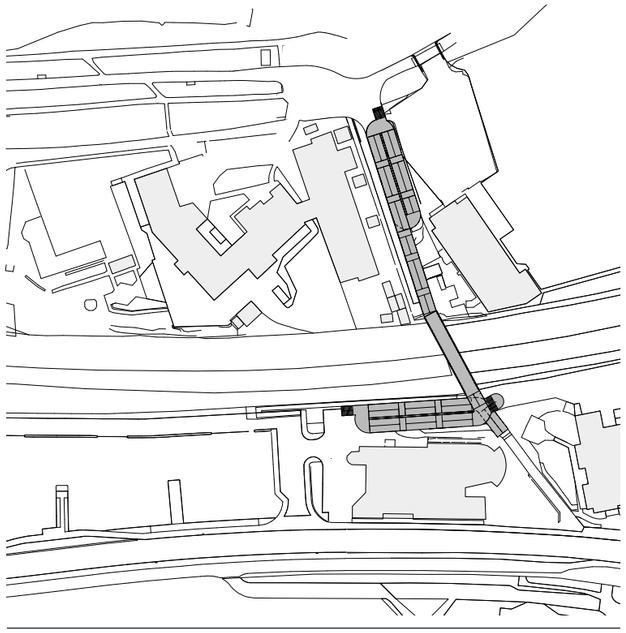
- Access to the School grounds required for maintenance.
- Two bridges to maintain in the future.
- Two bridges provide increased resilience in the future i.e. if one bridge needs to be closed for temporary maintenance, it will avoid a long detour for pedestrians and cyclists.

Text Key

green	Opportunities and Positive Impacts
red	Challenges and Negative Impacts

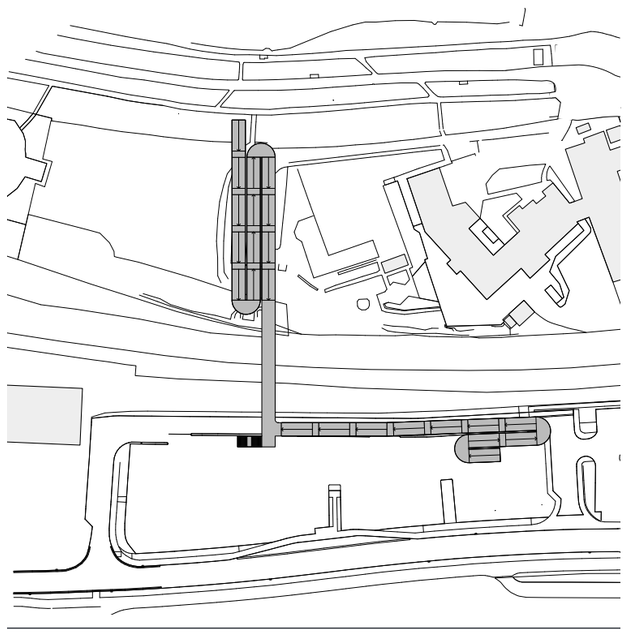
Disclaimer - No detail design has been carried out for any options proposed in this presentation.

All Options Summary



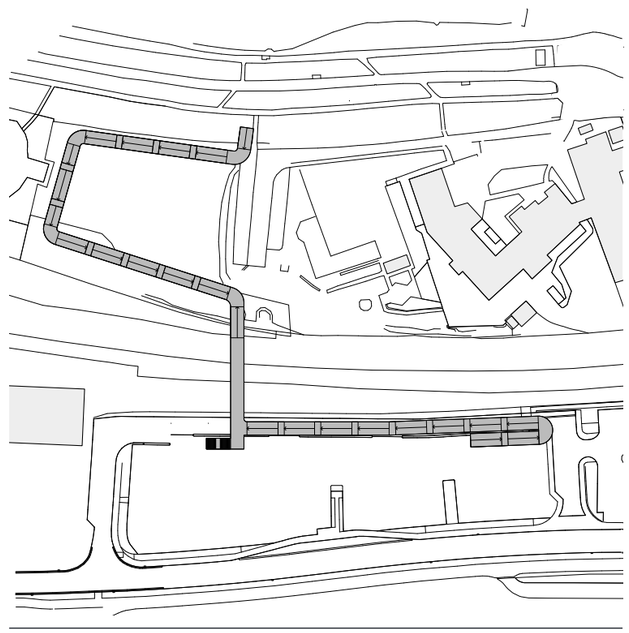
Option A

Replaces the existing bridge while enhancing the active travel routes at the existing location with a new, wider deck structure. This option faces significant construction challenges due to restricted access and the complexity of building and maintaining a large-scale active travel bridge in a constrained site.



Option B

Routes through the Primary School grounds, introducing new active travel links that improve connectivity across the town. The design can also create a versatile under-bridge space for the school, which could be used for educational activities, recreation, or storage, and offers potential to enhance the existing playground. While this option provides some spatial benefits, it also divides the school site, which may impact cohesion and daily operations. To minimise disruption, the design prioritises preserving existing play areas and utilising staff parking areas rather than playground space. Existing bridge will be retained for pedestrians only (ramps will be removed), alongside this Option.



Option C

Passes through the Primary School grounds via a gentler, meandering path that introduces new active travel connections in the town while minimising disruption to the school grounds. Unlike Option B, it avoids dividing the site. The design provides potential to improve the Primary School's playground. Although still a substantial structure, its location in a less constrained area and its lighter-weight design make it the most straightforward and cost-effective to construct of the three options. Existing bridge will be retained for pedestrians only (ramps will be removed), alongside this Option.

Diolch / Thank you — Please remember to fill out the questionnaire