Greater Cambridge Partnership

CAMBOURNE TO CAMBRIDGE

Environmental Statement
Appendix ES1: Mitigation Register

Cambourne to Cambridge - Mitigation Register

									Potentially mitigated (✓) or additional (✗) effects													
Ref	Description	Location	Purpose	Mitigation type	Delivery mechanism	Impacts mitigated	Temporary or Permanent	Status	L&V	Ecology	Surface water	Ground-water	Flood risk	Soils and land	Built heritage	Archae-ology	Socio-economic	Noise and vibration	Air quality	Transit and access	Carbon emissions	Materials	Climate resilience
1	Retention of existing hedgerow parallel to the C2C Scheme.	East Cambourne	Retention of existing habitat.	Avoid	Embedded design; Planning conditions 17 and 25	Habitat loss.	Permanent		✓	✓													
2	Design Speed of 50 KPH on a link without discontinuities.	Upper Cambourne	Reduced speeds reduces the level of air and noise pollution and the severity of potential accidents.	Minimise	Protective provision	Noise pollution; and air pollution.	Permanent											✓	✓	✓	✓		
3	Retention of existing habitat to the north of the C2C Scheme.	Bourn Airfield	To maintain green corridor for bat movements and as part of the landscape character.	Avoid	Embedded design; Planning conditions 17 and 18	Habitat loss and fragmentation.	Permanent		✓	✓													
4	Attenuation pond.	Bourn Airfield	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	Flood risk.	Permanent				✓		✓										✓
5	Elevated ground levels on either side of the C2C Scheme.	Northeast of Wellington Way	To lift bat flight path over the C2C Scheme.	Minimise	Embedded design; Planning condition 2	- Fragmentation of field boundary; and - Habitat loss.	Permanent			✓													
6	Semi-mature tree planting either side of the C2C Scheme.	Northeast of Wellington Way	To screen existing landscape from the C2C Scheme and to lift bat flight path over the C2C Scheme.	Minimise	Planning condition 17	Visual impact to existing landscape of the C2C Scheme.	Permanent		✓	✓													
7	Attenuation basin.	St Neots Road	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	Flood risk.	Permanent				✓		✓										✓
8	Sporadic woodland planting within this area.	South of the A428	To compensate for loss of existing woodland.	Compensate	Planning condition 17	- Habitat loss; and - Fragmentation.	Permanent		✓	✓									✓				
9	Attenuation basin.	West of Scotland Road Roundabout	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	Flood risk.	Permanent				✓		✓										✓
10	Semi-mature tree planting either side of the C2C Scheme north of St Neots road.	North of St Neots Road	To screen the C2C Scheme from properties south of St Neots Road.	Minimise	Planning condition 17	Visual impact to properties south of St Neots Road.	Permanent		✓	✓									✓				
11	Alignment goes on-road along St Neots Road between Scotland Farm roundabout and Long Road to avoid land take to shelterbelt between road and A428.	St Neots Road	To avoid loss of tree screen.	Avoid	Planning condition 2	Avoids permanent loss of the shelter belt between St Neots Road and the A428.	Permanent		✓	✓										✗		✓	
12	Planting of Semi-mature trees and native woodland to the northwest and north of the park and ride.	Park and ride	To screen the park and ride from the properties along Scotland Road.	Minimise	Planning condition 17	Visual impact to properties along Scotland Road.	Permanent		✓	✓									✓				
13	Outflow from the park and ride SUDs will be designed to provide sufficient pollution reduction to allow for discharge to Callow Brook.	Park and ride	To reduce pollutants reaching Callow Brook.	Minimise	Embedded design	Water pollution.	Permanent			✓	✓												
14	Attenuation basin.	Park and ride	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent		✓	✓	✓		✓										✓

15	Maintenance of existing public right of way.	North of Hardwick	To maintain passage along the existing public right of way.	Rectify	Embedded design; Planning condition 2	Severance of public access.	Permanent												✓				
16	Woodland retention north of St Neots Road.	North of St Neots Road	Mature plants provide screening and maintain the existing green corridor that runs north to south, benefiting bat movements.	Minimise	Planning condition 17	- Habitat loss; and - Fragmentation.	Permanent		✓	✓									✓				
17	Attenuation basin.	South of St Neots Road, West of Long Road	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent				✓		✓										
18	Alignment diverges south from St Neots Road at a point west of Comberton Plantation, so avoiding the plantation.	St Neots Road west of Long Road	To avoid wooded area south of Madingley Mulch.	Avoid	Embedded design; Planning condition 2	- Land take; - Habitat loss; - Fragmentation of field pattern; and - Removal of screening.	Permanent		✓	✓				✗										
19	Attenuation basin.	South of St Neots Road, West of Long Road	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent				✓		✓										✓
20	Semi-mature tree planting proposed within the land surrounding the proposed Long Road Junction.	Long Road Junction	To screen existing landscape from Long Road Junction.	Minimise	Planning condition 17	Visual impact to existing landscape of the proposed Long Road Junction.	Permanent		✓	✓									✓				
21	Clusters of Semi-mature tree proposed around Long Road Junction.	Long Road Junction	To lift bat flight path over the C2C Scheme.	Minimise	Planning condition 17	- Fragmentation; and - Habitat loss.	Permanent		✓	✓													
22	Bunds created either side of C2C scheme north of Coton.	North of Coton	To screen asphalt surface of the C2C Scheme from Madingley Road.	Minimise	Embedded design; Planning condition 2	Visual.	Permanent		✓														
23	Attenuation basin.	East of Long Road	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent			✓		✓											✓
24	Attenuation basin.	North of Coton	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent			✓		✓											✓
25	Bat hop over incorporating raised land to the north of the C2C Scheme, with Semi-mature trees north to south.	South of Crom-Lea Business Park	To lift bat flight path over the C2C Scheme.	Minimise	Embedded design; Planning conditions 2, 17 and 18	- Fragmentation of field boundary; and - Habitat loss.	Permanent			✓										✓			
26	Bat hop over incorporating raised land to the north of the C2C Scheme, with Semi-mature trees north to south.	North of reservoir	To lift bat flight path over the C2C Scheme.	Minimise	Embedded design; Planning conditions 2, 17 and 18	- Fragmentation of field boundary; and - Habitat loss.	Permanent			✓										✓			
27	Diversion of public right of way.	South of the University of the Cambridge	To maintain passage along the existing public right of way.	Rectify	Planning condition 9	Severance of public access.	Permanent													✓			
28	Semi-mature tree planting.	North of reservoir	To maintain green corridor and to compensate for the removal of existing hedgerow.	Minimise	Embedded design; Planning condition 17	Habitat loss.	Permanent		✓	✓									✓				

29	Bat hop over incorporating planting of Semi-mature trees north to south. The C2C Scheme is in cutting within this area.	North of Coton	To lift bat flight path over the C2C Scheme.	Minimise	Embedded design; Planning condition 17 and 18	- Fragmentation of field boundary; and - Habitat loss.	Permanent			✓									✓				
30	Semi-mature tree planting proposed to north of property 48 High Street in Coton.	North of property 48 High Street, Coton	To screen properties (No. 19 etc) to south of the C2C Scheme to west of Cambridge Road.	Minimise	Planning condition 17	Visual impact to property No. 48 High Street south of the C2C Scheme.	Permanent			✓									✓				
31	Bat hop over incorporating raised land to the north of the C2C Scheme, with hedgerows and Semi-mature trees north to south.	North of Coton	To lift bat flight path over the C2C Scheme.	Minimise	Planning condition 17 and 18	- Fragmentation of field boundary; and - Habitat loss.	Permanent			✓									✓				
32	Maintenance of existing hedgerow to maintain green corridor.	North of Coton	To maintain green corridor for bat movements and as part of the landscape character.	Avoid	Planning condition 17 and 18	- Habitat loss; and - Fragmentation.	Permanent		✓	✓									✓				
33	Semi-mature tree planting proposed to south of C2C Scheme, west of Cambridge Road.	North of properties on the west of Cambridge Road	To screen properties (No. 19 etc) to south of the C2C Scheme to west of Cambridge Road.	Minimise	Planning condition 17	Visual impact to properties south of the C2C Scheme.	Permanent		✓	✓									✓				
34	Semi-mature tree planting along the C2C Scheme as it traverses Coton Orchard. Fruiting or nut tree varieties on vigorous rootstocks to mimic orchard.	Coton Orchard	To maintain the character of the existing landscape, merging with the Orchard from a visual perspective.	Compensate	Planning condition 17	- Habitat loss; and - Fragmentation.	Permanent		✓	✓									✓				
35	Mammal culverts along the section of the C2C Scheme which traverses Coton Orchard. The mammal culverts will be accompanied by badger fencing to direct badgers towards the culverts.	Coton Orchard	To facilitate badger movements across Coton Orchard.	Compensate	Embedded design; Planning condition 2 and 8	- Habitat loss; and - Fragmentation.	Permanent			✓													
36	Design Speed for section of route incorporating M11 Bridge.	M11 Overbridge	Reduced speeds reduces the level of air and noise pollution and the severity of potential accidents.	Minimise	Protective provision	- Noise pollution; and - Air pollution.	Permanent												✓	✓	✓		
37	Maintenance of equestrian access under M11 bridge through using underpass (summarise features).	M11 Overbridge	Maintain equestrian access along existing bridleway.	Avoid	Embedded design	Permanent diversion of existing bridgeway.	Permanent			✗							✓			✓			
38	Existing Poplars to be pollarded.	East of Coton Orchard	To reduce the risk that trees will fall onto the road, maintaining safety of road uses and maintaining landscape features which promote bat movements across the C2C Scheme.	Minimise	Planning condition 10	- Habitat loss; and - Fragmentation.	Permanent			✓													✓
39	Semi-mature tree planting.	East of Coton Orchard	To compensate for loss of existing woodland and maintenance of existing bat flight paths.	Minimise	Planning condition 17	- Habitat loss; and - Fragmentation.	Permanent		✓	✓									✓				
40	Semi-mature tree planting proposed south of Rectory Farm.	West of M11	To screen Rectory Farm from the C2C scheme to the south.	Minimise	Planning condition 17	Visual impact to Rectory Farm.	Permanent		✓	✓									✓				
41	Crate soakaway attenuation pond.	East of M11	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning condition 2 and 14	- Habitat loss; and - Fragmentation.	Permanent			✓	✓		✓										✓
42	Diversion of bridleway.	East of M11	To maintain passage along the existing public right of way.	Rectify	Planning condition 9	Severance of public access.	Permanent										✓			✓			
43	Minimal scrub clearance.	East of M11	Vegetation will only be cleared within area required for the scheme.	Minimise	Planning condition 17	Habitat loss.	Permanent		✓	✓													
44	Diversion of public right of way.	South of the University of the Cambridge	To maintain passage along the existing public right of way.	Rectify	Planning condition 9	Severance of public access.	Permanent													✓			

45	Hedgerow and woodland planting.	South of the University of the Cambridge	To provide compensation for HPI woodland and hedgerow loss	Rectify	Planning condition 17	Habitat loss.	Permanent			✓									✓				
46	Woodland, grassland and semi-mature tree planting.	South of the University of the Cambridge	To compensate for habitat loss elsewhere on the Scheme and to maintain bat flight paths	Rectify	Planning condition 17	Habitat loss.	Permanent			✓									✓				
47	Attenuation basin.	South of the University of the Cambridge	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent				✓		✓										✓
48	Attenuation basin.	West of Bin Brook	To store storm water and attenuate discharge from the drainage network.	Minimise	Embedded design; Planning conditions 2 and 14	- Habitat loss; and - Fragmentation.	Permanent				✓		✓										✓
49	Woodland planting east to west.	West of Bin Brook	To maintain connectivity east to west maintain bat flight corridors.	Minimise	Planning condition 17	- Habitat loss; and - Fragmentation.	Permanent			✓													
50	Bin Brook bridge design to avoid impacts on flood storage capacity.	Bin Brook Bridge	To provide access across Bin Brook.	Avoid	Planning condition 2	Impacts on Bin Brook.	Permanent				✓		✓										✓
51	Bin Brook bridge designed to avoid impacts on hydrology of bin brook.	Bin Brook Bridge	To provide access across Bin Brook.	Avoid	Planning condition 2	Impacts on Bin Brook.	Permanent				✓		✓										✓
52	Bin Brook bridge designed as a clear span bridge.	Bin Brook Bridge	A clear span bridge maintains access for species along Bin Brook.	Minimise	Planning condition 2	-Fragmentation; and - Habitat loss.	Permanent			✓													
53	Section of bus way and service path located on platform structure.	Rifle Range Road	Avoids impacts on root protection areas of TPO trees.	Avoid	Planning condition 2	Damage/ loss to existing trees.	Permanent		✓	✓					✓		✓				✓		
54	Crate soakaway.	Rifle Range Road	To store storm water and attenuate discharge from the drainage network.	Minimise	Planning condition 2 and 14	- Habitat loss; and - Fragmentation.	Permanent				✓		✓										✓
55	Code of Construction Practice sets out a range of measures that reflect standard good practice and which will, when implemented, mitigate the majority of potentially significant effects from construction impacts.	Scheme wide	To describe control measures, practices and standards to be implemented throughout construction the C2C Scheme to ensure that adverse effects to people and the environment are kept as low as practicable.	Avoid	Planning condition 8	Construction impacts.	Temporary	Adopted	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
56	Detailed design and construction to be in accordance with the requirements of an agreed Sustainability Statement	Scheme wide	To ensure that material suppliers and construction contractors values and requirements align to GCP's commitments and other local authority documents.	Minimise	Planning condition 16	Increased embodied carbon emissions.	Temporary		✓				✓						✓		✓	✓	✓
57	Minor watercourse crossings have been designed to the 1 in 1000 year event (0.1% AEP) which accounts for flows greater than the 1 in 100 year plus 40% for climate change allowance.	Scheme wide	To reduce the likelihood of flood events by directing surface water runoff to existing ditches or local watercourses.	Minimise	Planning condition 14	Flood risk.	Permanent						✓										✓
58	Landscaping will maximise self-sustaining habitats such as woodland or grassland and limiting where possible trees that are being proposed on bunding/slopes to avoid any subsidence or dry outs	Scheme wide	To provide resilience to future climate hazards.	Minimise	Planning condition 16	Climate hazards.	Permanent		✓														✓
59	The detailed design will take account of the climate hazard and impacts set out in Technical Report 3, and mitigate the impacts for the design life of the C2C Scheme. This aligns with DMRB LA114 principles for design and mitigation measures, and Cambridgeshire County Council's Climate Change and Environment Strategy	Scheme wide	To provide resilience to future climate hazards.	Minimise	Planning condition 16	Climate hazards.	Permanent																✓

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