

# **A30 Chiverton to Carland Cross Environmental Statement**

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Landscape assessment table - operation**

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Planning Act 2008  
Infrastructure Planning (Applications: Prescribed Forms and Procedure)  
Regulations 2009 (as amended)  
APFP Regulation 5(2)(a)



# Table of Contents

Pages

## Table of Tables

Table 7-1 Landscape assessment table – operation

i

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Landscape receptor	Sensitivity	Operational impact	Operational effects at winter of Year 1	Mitigation	Significance of residual effects at Year 15
<b>Direct Effects on the components and character of the landscape within the order limits</b>					
Features and overall character of the local landscape	Moderate	<p><u>Landscape elements:</u> The scheme would lead to the loss of</p> <ul style="list-style-type: none"> <li>• 7.7ha of woodland,</li> <li>• 100 individual trees,</li> <li>• 4.49km of Cornish hedgerow,</li> <li>• 7.09m of soft hedgerow,</li> <li>• 0.41ha of heathland,</li> <li>• 15.73ha of semi-improved and poor semi-improved grassland,</li> <li>• 77.01ha of improved grassland,</li> <li>• 1.49ha of marshy grassland,</li> <li>• 13.88ha of scrub,</li> <li>• 0.03ha of bracken, and</li> <li>• 43.59ha of arable,</li> </ul> <p><u>Topography, geology and water:</u> The scheme would broadly follow the undulating topography of the receiving landscape, but is on embankment and in cutting where necessary, such as at grade separated junctions and over water courses to achieve a design that adheres to current highway standards. The scheme would potentially give rise to moderate adverse change to geology by causing subsidence or collapse of shallow underground mine workings in locations where embankments and cuttings are proposed at Chiverton, Journey's End, Nanteague, Tolgroggan and Carland Cross. the road drainage and water environment assessment predicts neutral changes to flood risk, accidental spillage risk, groundwater resources and water quality. A slight adverse change was identified for surface water quantity because of local changes in flows resulting from drainage of cuttings along the scheme. A slight to moderate adverse change was identified to geomorphology because of new watercourse crossings and discharge points from the road drainage system.</p> <p><u>Cultural heritage:</u> The scheme would give rise to changes to the settings of Bonze Age round barrows within the study area, of which some are beneficial and some adverse. The cohesiveness of the Carland Cross barrow cemetery would be restored through the removal of the existing A30. Listed milestones that would potentially experience direct change would be carefully removed, stored and replaced close to their original locations Buried archaeological remains within the footprint of the scheme and construction compounds would experience direct change</p> <p><u>Recreation and access:</u> The scheme would cause severance to 3 no. sections of the 'Quiet Lanes' network; a short section of NCN32, The Cornish Way; and a short section of the Link to NCN32. With the implementation of management as described, it is considered that there will be a short-term and slight adverse change to the PRow network and local routes during construction. Where the proposed scheme severs local routes, the provision of alternative routes/diversions will ensure that access across the new A30 is maintained at key points. During operation there would be a long-term and slight beneficial change to recreational routes and access.</p> <p><u>Biodiversity aspect:</u> Effects from construction and operation of the scheme without mitigation include slight or slight to moderate adverse effects on designated nature conservation sites, loss of habitat woodland, heathland and hedgerows and on terrestrial invertebrates and bats.</p> <p><u>Visual and sensory:</u></p>	Moderate and significant	<p>The Environmental Masterplan for the scheme (prepared in July 2018) is expected to deliver an overall net gain in terms of habitat creation and enhancement. It provides approximately:</p> <ul style="list-style-type: none"> <li>• 28.25ha of woodland,</li> <li>• 690 individual trees,</li> <li>• 12.61km of new Cornish Hedges,</li> <li>• 8.5km of soft hedgerows</li> <li>• 5.3ha of heathland,</li> <li>• 64.13ha of species-rich grassland (including 5.07ha of pollination strips, 4.23ha of wet grassland and 0.34ha of native bulb planting),</li> <li>• 5.29ha of aquatic and semi-aquatic vegetation.</li> <li>• 1.48ha of marginal planting,</li> <li>• 1.98ha of wetland,</li> <li>• 11.07ha of scrub buffer, and</li> <li>• 0.06ha of bracken fern scrub.</li> </ul> <p>The Landscape mitigation has been designed to:</p> <ul style="list-style-type: none"> <li>• Complement and reinforce the component characteristics and overall character of the landscape helping the scheme integrate into the receiving landscape;</li> <li>• Screen views of the scheme of sensitive visual receptors and manage views of the landscape from the proposed road; and</li> <li>• enhance and connect the habitats within the local area, provide natural barriers to deter flying species from the carriageway, and provide habitat corridors leading to multispecies crossing points while also connecting to the wider landscape."</li> </ul> <p>As these mitigation measures establish and grow over the first fifteen years of operation, they would fulfil their intended function as screening, amenity improvement, landscape integration and biodiversity improvements, leading lead to a reduction in adverse changes to habitats, visual amenity and the character of the landscape. They would lead to a positive change to the condition and quality of the landscape within the order limits improving the overall character of the soft estate landscape. The magnitude of residual change would be reduced to <b>minor</b> adverse on balance</p>	Slight adverse and Not significant

Landscape receptor	Sensitivity	Operational impact	Operational effects at winter of Year 1	Mitigation	Significance of residual effects at Year 15
<b>Direct Effects on the components and character of the landscape within the order limits</b>					
		<p>The Visual assessment predicts significant adverse change to the visual amenity of receptors along the scheme including 20 residential properties, two public rights of way and Open Access Land at Newlyn Downs and farm workers at NFH.</p> <p>Reductions in noise would occur for some residents in these and other areas. However, there would also be some adverse noise effects from the scheme on individual dwellings. These would occur either as a direct effect from the new scheme, or as a result of indirect effects from scheme-related traffic changes on other roads. The area to the north of the proposed Chiverton Junction would be negatively affected by increased noise levels.</p> <p>Considering on balance all the adverse and beneficial changes to the component elements and perceptual aspects of the landscape above, the change to the character of the landscape is considered to be <b>moderate and adverse</b>.</p>			
<b>Direct effects on the host Landscape Character Area receptor</b>					
CA 11 – Redruth, Camborne, and Gwennap	High	<p>The scheme would affect a small portion at the north-eastern edge of the CA. The scheme would introduce new road infrastructure, however the effect of this would be localised, restricted to approximately 1km<sup>2</sup> of plateau near Three Burrows.</p> <p>The main component of the scheme in this area would be the Chiverton Cross junction. Although this junction would increase capacity and become grade separated, its location would be approximately 600m northeast from the existing junction, moving it significantly further away from the WHS.</p> <p>The current lighting at the existing Chiverton Cross junction would be removed and not replaced as part of the scheme. This would result in an improvement of night time character in this rural area.</p> <p>In this area, a series of three large fields would be disrupted, interrupting the field pattern. However, the older, more fine-grained field patterns in the Perrancombe Valley and in the WHS would remain unaffected, leaving the integral parts of the landscape character unaffected.</p> <p>A number of hedgerows, including Cornish Hedges, would be removed to implement the scheme, reducing the vegetation in the area immediately adjacent to the scheme. No Important Hedgerows would be affected.</p> <p>Vehicular transport routes would be improved through the new route, and the reduction in traffic on the existing A30 would improve recreational access would improve for cyclists.</p> <p>All of these effects would be contained to a very small area on the outskirts of the CA. As a whole the direct effect on topographic features, vegetation, recreational access, tranquillity and sense of scale would be <b>negligible adverse</b> in magnitude.</p>	<b>Slight</b> adverse and insignificant	<p>Blocks of woodland adjacent to the road would have reached heights of approximately 7m.</p> <p>Woodland planting around the new Chiverton junction would reduce the impact of the road infrastructure on visual amenity and contain the sense of disturbance, improving tranquillity. This planting would also tie in with landscape character of the WHS and Perrancombe valley to the northwest leading to Perranporth, with its distinct wooded character.</p> <p>Retained hedgerows would be reinforced. New hedgerows would be introduced to demarcate new field boundaries, in keeping with the overall character of the CA, particularly the more highly wooded areas in Perrancombe Valley and the WHS.</p> <p>The adverse magnitude of change would be reduced slightly, but not enough to reclassify the magnitude of change.</p>	<b>Slight</b> adverse insignificant
CA 14 – Newlyn Downs	Moderate	<p>The scheme would run through the centre of the southern half of the CA. This corridor already comprises a noticeable number of humanising features, such as wind turbines, solar farms, pylon lines, and road infrastructure.</p> <p>The current lighting at the existing Carland Cross junction would be removed and not replaced under the proposed scheme. This would result in an improvement of night time character in this rural area.</p> <p><u>Topographic features</u></p> <p>The scheme would largely be sympathetic to the existing topographic patterns. However, there would be a number of new junctions that would introduce prominent built form that, at a very localised level, would have an adverse impact on the scale, tranquillity and landscape pattern in each immediate area. This includes the junctions at Chybucca and Carland Cross, and the bridges at Tresawsen, Marazanvose, Tolgroggan, Trevalso, and Pennycomequick.</p> <p><u>Vegetation</u></p> <p>Some Important Hedgerows would be affected near Nanteague Farm, NFH, Chyverton House, Zelah, Henver Lane, Pennycomequick, and Journey's End. A number of other hedgerows, largely</p>	<b>Moderate</b> adverse and significant	<p>A number of measures would be introduced to mitigate the effect of the loss of vegetation along the length of the scheme.</p> <p>Retained hedgerows would be reinforced. New hedgerows would be introduced to demarcate new field boundaries and to filter views, in keeping with the Newlyn Downs CA. Where Cornish Hedges are most appropriate, they would be used also, particularly between Chybucca and Tresawsen.</p> <p>Generous blocks of woodland would be introduced in areas where significant screening is required and where this would be in keeping with the overall character of the CA, particularly the more highly wooded areas in Perrancombe Valley and the WHS.</p> <p>Pine woodland would be included between Four Burrows and Garvinack Brake/North Plantation, between</p>	<b>Slight</b> adverse insignificant

Landscape receptor	Sensitivity	Operational impact	Operational effects at winter of Year 1	Mitigation	Significance of residual effects at Year 15
<b>Direct Effects on the components and character of the landscape within the order limits</b>					
		<p>Cornish hedges would also be affected by the scheme. Other significant vegetation would be partially removed, including a distinctive block of deciduous woodland to the east of Nantegue farm, woodland along the lane to Trevalso, and heathland and a small proportion of the pine woodland at the disused quarry at Carland Cross.</p> <p><u>Transport Routes</u> Vehicular transport routes would be improved through the new route, and the reduction in traffic on the existing A30 would improve recreational access would improve for cyclists.</p> <p><u>Recreation and Access</u> Some PRow's and bridleways would be realigned as a result of the scheme. The recreational area at Newlyn Downs would be affected in the southeastern portion, where the junction at Carland Cross would be visible. However where recreational activity is concentrated in the north, there would be minimal effect.</p> <p><u>Heritage</u> A number of barrows along the ridgeline are a feature of the character of this area. At Carland Cross one significant group has been severed by the existing A30. These would be reunited as a result of the realignment of the proposed scheme.</p> <p><u>Field Patterns</u> The scheme would intrude into a series of fields. These are mostly the large rectilinear fields of more recent enclosure and are less critical to the character of the area than those of a more intricate scale near Allet common, which remain unaffected by the scheme.</p> <p>The only area of industrial heritage that would be affected is at Newlyn Downs, where the Carland Cross junction would be somewhat visible from the southeastern portion of the historical area.</p> <p><u>Tranquillity/Scale</u> An increase in the capacity of the A30 route would see an increase in vehicular movements, which would result in an increase in disturbance and loss of tranquillity in areas adjacent to the scheme. Correspondingly, there would be an increase in tranquillity in areas such as Tresawsen, where the primary route would move further away.</p> <p><u>Quality and Condition</u> The operation of the scheme at year 1 would detract slightly from the cohesiveness and condition of the landscape, due to the removal of existing hedgerows, Cornish hedges, woodland blocks, and heathland. In particular, those at Nanteague, Trevalso, and Carland Cross.</p> <p>Cornish Hedges would have an immediate beneficial impact at year 1. Planting at year 1, including new blocks of woodland, new hedgerows, and reinforcement of existing hedgerows, would integrate the scheme very slightly into the landscape, but would only counteract the adverse effects described above slightly.</p> <p>The direct changes to the CA would be permanent and irreversible, and <b>moderate adverse</b> in magnitude.</p>		<p>Nancarrow and Two Barrows, south of Tregorlands, west of Pennycomequick, south of Journey's End, and at the proposed Carland Cross junction.</p> <p>Replacement heathland would be provided at Carland Cross/Newlyn Downs.</p> <p>Blocks of woodland would have reached heights of approximately 7m, while hedgerows would have become mature and reached their full mitigation potential.</p> <p>These mitigation measures would integrate the scheme into the landscape, minimising adverse impacts from the introduction of built form, and strengthening landscape features and patterns such as field patterns and woodland corridors.</p> <p>The adverse magnitude of change would be reduced down to <b>minor</b> adverse.</p>	
<b>Indirect effects on the settings of nearby Landscape Character Area receptors</b>					
CA 12 – St Agnes	high	<p>Impact from operation would be barely perceptible from CA 12.</p> <p>It would be possible to discern the scheme only from a few areas of particularly high ground, such as at St Agnes Beacon. From these points, the scheme would be able to be discerned, but not affect the overall visual setting of the CA.</p> <p>Any remote indirect effects would be permanent and irreversible. Impact on the visual setting of this designation would be barely noticeable due to the distance from the scheme.</p> <p><b>No change</b></p>	<b>Neutral</b>	<p>Planting of woodland blocks, introduction of hedgerows and Cornish hedges, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would make the scheme very difficult to discern from this CA.</p> <p>The adverse magnitude of change would be reduced incrementally.</p>	<b>Neutral</b>
CA 13 – Fal Ria, Truro and Falmouth	Moderate	<p>Impact from operation would only indirectly affect a small section at the western edge of CA 13.</p> <p>Effects would be permanent and irreversible. The proposed Chiverton Cross junction would be partially visible from the upper slopes of the Silver Valley.</p>	<b>Slight</b> adverse and insignificant	<p>Planting of woodland blocks, introduction of hedgerows, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would reduce the noticeability of the scheme</p>	<b>Slight</b> adverse insignificant

Landscape receptor	Sensitivity	Operational impact	Operational effects at winter of Year 1	Mitigation	Significance of residual effects at Year 15
<b>Direct Effects on the components and character of the landscape within the order limits</b>					
		There are a number of existing built form elements which detract from the character in this area, including a solar farm and wind turbines. The localised impact of the junction on these upper slopes would be minimal and in keeping with the existing detracting infrastructure in the area. The impact of this junction on the setting of the CA as a whole would be barely perceptible, due to the undulating landform as the CA steps down into deep wooded valleys. The indirect changes to the CA would be <b>negligible adverse</b> in magnitude.		from the upper slopes of Silver Valley within this CA. It would continue to be barely perceptible to the setting of the CA as a whole. The adverse magnitude of change would be reduced incrementally.	
<b>Indirect effects on the settings of nearby Landscape Designation receptors</b>					
Cornwall and West Devon World Heritage Site (CWD WHS) – A6i Gwennap Mining District	High	Impact from operation would only indirectly affect a small section at the north-eastern edge of the A6i CWDM WHS. Any indirect effects would be permanent and irreversible. The main component of the scheme in this area would be the Chiverton Cross junction. Although this junction would become grade separated and increase the capacity of vehicular movements, its location would be approximately 600m northeast from the existing junction, moving it significantly further away from the WHS. The current lighting at the existing Chiverton Cross junction would be removed and not replaced under the proposed scheme. This would result in an improvement of night time character in this rural area. Impact on the wider visual setting of this designation would be minimal, due to the undulating landform and frequent filtering of views through intervening wooded hedgerows. Due to the movement of the Chiverton Cross junction away from the WHS, the overall impact of the scheme would be slightly beneficial. The indirect changes to the designation would be <b>negligible beneficial</b> in magnitude.	<b>Slight beneficial</b> and insignificant	Planting of woodland blocks, introduction of hedgerows, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would reduce the noticeability of the scheme from the north-western corner of the A6i CWDN WHS. It would continue to be barely perceptible to the setting of the designation as a whole. The beneficial magnitude of change would be increased incrementally.	<b>Slight beneficial</b> insignificant
Cornwall and West Devon World Heritage Site (CWD WHS) – A7 St Agnes	high	Impact from operation would be barely perceptible from the A7 CWDM WHS. It would be possible to discern the scheme only from a few areas of particularly high ground, such as at St Agnes Beacon. Any remote indirect effects would be permanent and irreversible. From these points, the scheme would be able to be discerned, but not affect the overall visual setting of the A7 CWD WHS. Impact on the visual setting of this designation would be imperceptible due to the distance from the scheme. <b>No change</b>	<b>Neutral</b>	Planting of woodland blocks, introduction of hedgerows and Cornish Hedges, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would make the scheme very difficult to discern from this designated area.  The adverse magnitude of change would be reduced incrementally.	<b>Neutral</b>
Cornwall Area of Outstanding Natural Beauty (AONB) – St Agnes	high	Impact from operation would be barely perceptible from the Cornwall AONB. It would be possible to discern the scheme only from a few areas of particularly high ground, such as at St Agnes Beacon. Any remote indirect effects would be permanent and irreversible. From these points, the scheme would be able to be discerned, but not affect the overall visual setting of the Cornwall AONB. Impact on the visual setting of this designation would be imperceptible due to the distance from the scheme. <b>No change</b>	<b>Neutral</b>	Planting of woodland blocks, introduction of hedgerows and Cornish Hedges, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would make the scheme very difficult to discern from this designation.  The adverse magnitude of change would be reduced incrementally.	<b>Neutral</b>
Heritage Coast – 7 St Agnes	high	Impact from operation would be barely perceptible from the Heritage Coast. It would be possible to discern the scheme only from a few areas of particularly high ground, such as at St Agnes Beacon. Any remote indirect effects would be permanent and irreversible. From these points, the scheme would be able to be discerned, but not affect the overall visual setting of the Heritage Coast. Impact on the visual setting of this designation would be imperceptible due to the distance from the scheme. <b>No change</b>	<b>Neutral</b>	Planting of woodland blocks, introduction of hedgerows and Cornish Hedges, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would make the scheme very difficult to discern from this designation.  The adverse magnitude of change would be reduced incrementally.	<b>Neutral</b>

Landscape receptor	Sensitivity	Operational impact	Operational effects at winter of Year 1	Mitigation	Significance of residual effects at Year 15
<b>Direct Effects on the components and character of the landscape within the order limits</b>					
St Clement Area of Great Landscape Value (AGLV)	Moderate	Impact from operation would only indirectly affect the western edge of the AGLV. Effects would be permanent and irreversible. Impact on the visual setting of this designation would be minimal, due to the distance from the scheme and the visual containment of the area within Cornish and vegetated hedgerows. <b>No change</b>	<b>Neutral</b>	Planting of woodland blocks, introduction of hedgerows and Cornish Hedges, and reinforcement of existing hedgerows would have all reached their full mitigation potential, with woodland reaching heights of approximately 7m. These mitigation measures would make the scheme very difficult to discern from this designation.  The adverse magnitude of change would be reduced incrementally.	<b>Neutral</b>
Chyverton Registered Park and Garden (RPG) (List Entry: 1000512)	Moderate	Impact from operation would only indirectly affect a small section at the south-eastern edge of Chyverton RPG. Effects would be permanent and irreversible. The introduction of the Zelah Bypass and local access road near the historical main entrance to the Park, would introduce humanising built form to the setting of the park, detracting slightly from the sense of place and rural character at the edge of the Park. The scheme's mainline would be in a 4m cutting to the south of Chyverton Park and then would emerge onto a 1m embankment to the southeast as it passes over the existing Two Barrows underbridge. The meadow immediately to the south of Chyverton Park is important to its setting. This would be partially severed by the new slip road and associated attenuation pond. Existing Lowland Meadow habitat, hedgerows, and individual trees in this area would be retained where possible. Impact on the visual setting of this designation as a whole would be minimal, due to the siting of the Park within a slight basin and the strong visual containment from existing woodland within the RPG grounds. The indirect changes to the designation would be <b>minor adverse</b> in magnitude.	<b>Slight</b> adverse and insignificant	Woodland planting would be introduced to the south of the park, around the scheme's minor roads and their junction with the Zelah Bypass. The cuttings and embankments of the Zelah Bypass and the mainline would be planted with woodland. A hedgerow would be reinstated on the northern side of the meadow. By year 15 the hedgerow would have reached full maturity and the trees would have reached heights of approximately 7m. The reinstated Lowland Meadow habitat would also be fully established. These mitigation measures would considerably reduce the visibility of the scheme. They would reinforce the wooded character of the landscape and reinstate field boundaries appropriate to the area and the setting of the Park.  The adverse magnitude of change would be reduced down to <b>negligible</b> .	<b>Slight</b> adverse insignificant





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