

WEALDEN 3Rs BCR 2.3 APPENDICES TO PROOF OF EVIDENCE OF CORINNA DEMMAR

Landscape and Visual Resources

On behalf of Britaniacrest Recycling Limited

In relation to an appeal against the decision of West Sussex County Council to refuse planning permission for a proposed Recycling, Recovery and Renewable Energy Facility and Ancillary Infrastructure at Wealden Brickworks, Horsham

PINS Reference: APP/P3800/W/18/3218965

JSL2921 Appendices to Landscape and Visual Proof of Evidence Final September 2019

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Horsham District Landscape Character Assessment (detail)



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Ni4H Images of Stack





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Figures from constructed Buckinghamshire energy from waste facility and the consented Suex Darwin energy recovery facility











Proposed Entrance Visualisation - NTS



Proposed Aerial Visualisation -NTS



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Extracts from The Landscape of Power, Sylvia Crowe (1958)





Figs. 19, 20. A large building with a broken silhouette fades into the background more quickly than an unbroken cube.

The zone of scale-domination appears to fade out at a distance of approximately three times the building's own height. Buildings at more than this distance apart lose their relationship with each other.

The psychological zone extends farther and is only lost at the point where the structures merge into the background of landform by atmospheric perspective. The great buildings of the power station at Burry Port in South Wales become an impersonal shape on the headland from 4 miles away near Llanelly or from the coast of Gower, $2\frac{1}{2}$ miles away across the water, whereas they completely dominate the bay between Burry Point and Llanelly. Where it is desirable to lose the influence of a building as quickly as possible, as it must be in any position near a National Park or an area whose landscape value lies in its sense of remoteness, the building should be designed with this in mind. The distance at which this occurs is influenced by the architecture of the building in so far as it affects the silhouette and dispositions of mass. A shape which assimilates with the landform behind it, or which lies long and low on the ground, or which rises in slender towers, like the chimneys at Burry Point, fades into its backgrounds sooner and more gracefully than some huge and uncompromising rectangle, which refuses either to amalgamate with the landform or to permit an infiltration of light and shade. Architectural detailing which can only be appreciated at close quarters has no effect on this reconciliation of the building and landscape when seen from the distance, and one would like to see the

usual close-up perspectives of these buildings supplemented by longdistance views showing the mass relationship of building and landscape. Landscape is used here in the true and wider sense, and is not confined to treatment within the boundaries of the site (figs. 19, 20).

In a countryside in which it is intended to keep nature dominant the treatment of the surroundings of any installation of power should be designed to limit its zone of influence. This does not necessarily mean that concealment, even if possible, is the best answer. The sight of a structure which can be made to look part of the landscape composition, may well be less disruptive than an effort to conceal it. But it does mean that the aura of the landscape should be brought as close as possible to the structure, instead of the spirit of the structure pushing out into the landscape. This may mean a remodelling of the surrounding landscape, but a remodelling that is in tune with the prevailing character. In adjusting it to take the new structure there may well be a departure from the exact conditions prevailing on the site before the incursion. If a bare hill-top is used for a structure, the existing character of that hill, which is open emptiness, is thereby changed, and the argument that no planting must be added because there was none there before is unsound. It may be a visually correct decision, or it may not. The position must be reassessed in the light of the change which has already occurred. It may be that other hills in the district are covered with gorse, or chalkland scrub, and that the particular hill in question is only bare because it has been grazed. Therefore, if cover is required visually to obliterate the view of fences and ground construction, the local vegetation can legitimately be used, to preserve the character although not the exact detail of the landscape at the time the building arrived. Planting alien to the district and geological formation, would of course have the opposite effect of increasing the building's zone of influence.

The transitory nature of the pattern of local vegetation was illustrated in the case of Bradwell Power Station. In order to preserve the very rural character of the countryside to landward, more hedgerow trees and windbreaks were needed. (See page 65.)

Far from this being a contradiction of the local character, it was found on investigation that these additional trees had once existed and had been felled to make way for an airfield.

The superficial approach to a landscape, seeing only its appearance at the moment, without realizing either its past, its essential character channels of comprehension between men and the universe.

The vicious circle of ugly surroundings and lack of perception, must be broken from both directions. On one hand by the aesthetic side of man catching up with the scientific side and translating the new discoveries into their true form, and on the other by the onlookers sharpening their vision, demanding the best and being prepared to accept the new and unfamiliar shapes on their own merits and in the context of the universe.

The last people who should be blamed for the loss of landscape are the engineers and scientists. They have succeeded in their own field only too well. It is the other side of society which has failed; the artists, the humanists and the philosophers. Nor should these two sides of civilization be thought of as necessarily residing in different individuals. An electrical engineer may love the country as intensely as a poet. It is not so much the aesthetic individual as the aesthetic side of human nature which has been overridden and outpaced by the scientific side.

If the need to reconcile machines and landscape is recognized the means will be found and the present state of chaos will be only a passing phase of immaturity.

The earliest industrial buildings had a well-mannered simplicity which enabled them to fit into their surroundings as well as Telford's bridges fitted into theirs, but these erections were few and, by modern standards, small.

It is only comparatively recently that industrial shapes have become a major problem in the landscape. For the last hundred years they have been treated rather as a kitchen tool, something having no beauty in itself and which must either be kept in a box, or if exposed, must be confined to the kitchen. Light industry has used the box method, and has been clothed in varying degrees of orthodox architecture. Heavy industry has in the main been confined to the kitchen, in the big industrial areas, or if occasionally dropped into the garden or the drawingroom, it has been deplored or ignored.

Where the machinery is moderately compact and where shelter is required for it and for the workers, the box method is reasonable. But there can be no question of giving a conventional housing to some of the machinery which is appearing today. Some, like the power lines are linear in form. Some have a fantastic shape to which any conventional housing would be a direct contradiction. Others again are too vast to be included within one static shape. The methods so far adopted for bringing the atomic power stations into scale-harmony with their surroundings, are by transparency and by subdivision. That at Bradwell uses glass cladding to smooth out the harsh virility of the machines, without the overpowering solidity which opaque cladding would give, This treatment relates them to the huge simplicity of a cloud, in scale with the sky rather than with the earth. It is a form in keeping with a wide and simple land- and sea-scape, dominated by the sky. But in a complex landscape of close patterning its shape and size would be emphasized as a huge area of light void, making a hole in the pattern.

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For a patterned landscape the design relying on subdivision may be more successful, using the minimum of cladding and allowing the strong articulation of the pipes to contribute to the pattern of the background. An unclad structure could also be successful against a simple background, but in this case the character of the landscape would change from one of predominant repose to one of strong pattern against a recessive background. This may well be the best solution where several constructions are to be brought together into one view. The result will have the quality of the pattern of derricks and masts seen against the backcloth of sea and sky in a harbour (figs. 13, 14).

Both the old power station at Moulin and the newer switchgear at Clunie in the Pitlochry district, are examples of how unclad machinery may fit better into rugged country than a clad structure would do. The strong harsh pattern in its dark colours is unobtrusive against the dark heather, fern and outcropping rock on the flank of Ben Vrackie, and such impact as it makes is in sympathy with the strong, dark landscape. The question to clad or not to clad depends more on the surroundings than on the machinery. No well-designed machinery is ugly in itself. The modern farm machines, although clumsy by comparison with the fine lines of the old ploughs and scythes, brought to perfection as they were by centuries of craftsmanship, have still a stark, honest magnificence. A combine resting by a haystack has the bizarre outline of a prehistoric monster, and is perhaps in about the same stage of evolution, yet one such group makes a welcome accent in the view without overpowering its surroundings. But there would be a very different result if the group were repeated in every field. All depends on keeping the individual character of each landscape dominant, and on the relationship between the landscape and the objects in it. Some landscapes are
smooth, groomed and sophisticated. They may be workshops in the sense that the work of agriculture and perhaps even of some light industry is carried on in them, but they have the same relationship to a rugged landscape, whether wild or industrial, as a modern dream kitchen bears to that of the old farm-house. In the dream kitchen all is clean and electric, the tools are shut away and the metal shines. In the old farm kitchen, hams hang on iron hooks from the blackened rafters, the kettle with its curling spout and the pots with their baroque curves are as strong and black as those of the dream kitchen are shiny and streamlined. It is a free choice which one prefers, but it is quite evident what fits into each.

The rugged and smooth in landscape extend into industry.

There is the harsh but exciting pattern of heavy industry, full of strange shapes, and there is the tidy well-housed clean industry, with its bright coloured panels, its smooth lawns and beds of flowers.

Not only should the shape of each machine be carefully designed, but they should be considered one in relation to another. The shapes of unclad machinery and of latticed towers may combine into a strong articulated pattern. Or the linear pattern of a mast may be thrown into relief against the simple shape of a cooling tower. All these purely constructional shapes accord with the natural structure of land- and treeform or the quiet repose of water. But a clash may occur when they are brought into contact with humanized architecture or gardens, for here an elemental pattern is in conflict with humanized art. Reconciliation between objects and landscape could be helped by closer collaboration between the activities of one authority and another which would lead in some cases to a combination of uses in one erection, and to a sympathetic relationship between one shape and another.

Having reduced each shape to its essential form, they fall into certain categories. Some are essentially solid in construction, planted firmly in the ground. The relationship of these to the landscape is that they should grow from it. They may rise like a surfacing whale from the sweeping landform, as the hangers do on an airfield. Or they may stand foursquare like the cold-storage plants of East Anglia, or rise as a vertical tower. Boston stump, for all its height and grace, still grows firmly from the ground. They are essentially a part of the land, and in one way or another they should relate to their terrestrial surroundings. The largest of them are over-powering to any humanized or small-scale landscape,



The disparate scales of mast and church (fig. 23) become resolved at a distance of about three times the height of the mast because at this distance the natural angle of vision cannot take in both the vertical height of the mast and the horizontal distance to the church (fig. 24). But if the space between them is interspersed with single trees, repeating the church-scale, the mast-scale is again made apparent (fig. 25). A horizontal mass of trees does not have this effect and may improve the compositions (fig. 26). Fig. 27. The power station at Loch Moriston is built underground, leaving only the dams and gatehouses in the mountain landscape (see fig. 28 opposite).

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whether in town or country. While in urban scenes it may sometimes be possible to build up with gradually increasing scale from the humanized to the supra-human, this is not possible in rural landscapes and the best reconciliation is to interpose a zone of complete simplicity between the building and any area of human scale and intricacy. This zone may be of clear open ground, of water, or of massed trees. The reconciliation depends on the proportion of this zone of simplicity to the height of the building (see page 45). The effect will be nullified if the space is broken by scattered trees or buildings because these will serve as stepping-stones to the eyes, and tend to reunite the two scales between which a complete break is required. The only exception is any intervening object which is at the correct point and height to maintain the scale of progression from the eye to the large building.

To achieve the clarity of the intervening zone, it may well be necessary to put certain services and ancillaries to the building underground (fig. 27). The expedient of partially sinking a large building can sometimes be valuable if the building is designed with this in view, or landforms can be built up to achieve the same end. But sinking a building already designed for ground level truncates the true proportions, as may be seen in the case of a cooling tower whose parabolic curve was destroyed by partial sinking.



Fig. 28 (see facing page)

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Fig. 29. The wiry grace of the B.B.C. mast at Kirk O'Shotts relates it to the sky rather than to the earth.

The solid shapes of clad structures are merely larger editions of traditional buildings. But there are new shapes which instead of growing out of the ground, are balanced uponit or suspended above it. Because of their detachment they are easier to combine with the human scale than those which are earth-bound. They are of the realm of the clouds and stars, vast and ethereal, and human life and the human scale can continue beneath them. Cows grazing beneath the radar telescope on Jodrell Bank do not appear incongruous. They carry on their calm, earthy life beneath the fantastic tool which has evolved from the mathematician's brain, designed to harness cosmic forces in pursuit of interstellar knowledge.

Once a structure exceeds 100 ft, rising above the tallest trees, the effect on the landscape of any further increase in height is far less important than an increase in bulk. The B.B.C. mast at Kirk O'Shetts is not only a lovely and graceful thing in itself, but its impact on even the wildness of the landscape is slight, because it has the lonely character of a solitary thinker brooding over the landscape. A solid structure, one-tenth of the height, would be far more damaging (fig. 29).

This feeling of detachment generated by a structure that floats or rests lightly on the ground, suggests one of the answers to the problem of reconciling machines and the landscape.

The largest of these machines are creatures beyond the scale of the earthbound plants and animals. For this reason humanizing does not succeed in making them acceptable. Attempts to do so often add to the bulk and solidity of a concern, by clothing the raw machinery in a conventional shape when it would appear less overpowering in the nakedness of its essential form.

It is natural that a man should feel more dwarfed by a solid building which relates directly to his own body in all its dimensions, than by an open erection of the scaffold type which he is able to look upon as something apart, and which permits the landscape to flow through it. The most overwhelming buildings of all are those which confront the onlooker with classic proportions towering up to superhuman size. St. Peter's overwhelms, and it is intended to do so, with the overwhelming authority of the Mother Church. The Escorial overwhelms, and with all its magnificence, brings a touch of the sinister, because the power which it expresses is that of one man's authority over others. It is at its most lovely seen as a distant, impersonal shape, floating amongst the Spanish hills. The classic treatment deliberately relates a building to the human body and thereby prevents its being viewed dispassionately. A towering mast 600 ft. high relates in no way to the human body and can be looked on as dispassionately as a star. The impressive lines of a cooling tower are also emotionally remote, and apart from incongruity of scale with their surroundings, are no more oppressive to the human spirit than a hill, whereas a vast building designed with classic pilasters forces the human mind into association with itself. In the distance architectural divisions do not register and all that matters is the silhouette of the bulk of the building, or a very strong pattern of light and shade, such as that achieved by the building of the Steel Company of South Wales, near Llanelly, where the alternate projection and recess of bays is on a big enough scale to register as a break in the long mass of the building, even when seen from a distance, and plays an important part in binding the building into its background.

The place where humanizing proportion is needed is within the precincts of the building, so that the workers may feel that they are in a human world within the framework of the machine. This is usually recognized in the architectural and landscape treatment of the administrative block and the canteen. But it is less usual to find a satisfactory transition between this small-scale human detailing and the impersonal scale without. The landscape side of the problem is not particularly difficult once the need for separating the detail from the broad effect is appreciated. It can be done on the principle of the enclosed patio, or by the use of simple belts of planting, either in the form of drifts of shrubs, planted as enclosing windbreaks, or by means of woodlands, interpenetrating the surroundings and the building complex and serving both to bind it to the landscape from without and to give humanized seclusion within. To achieve this, the planting must not arbitarily follow the rectangular outline of the site, but must be shaped in sympathy with both the building and the surroundings, and can be used to contain within itself the car park and other small-scale ancillaries.

Where the contours allow it, or soil is available, the enclosure can be formed or at least augmented by sloping the ground up gently from the surroundings and dropping it at a wall or steeper bank on the inner side on the principle of a ha-ha. This is a useful device when the building requires the appearance of rising cleanly from the open ground, with the landscape sweeping up to it, without planting or walls. This effect,



Fig. 30. The ragged hole cut in the landscape by small transformer stations is accentuated by the surrounding fence. The landscape pattern can be carried across the intrusion by sweeping up drifts of local vegetation (top), or landform towards the enclosure (below).

although often suggested in sketch perspectives, cannot be effectively obtained otherwise, because of the worrying ground-level detail of parked cars, outbuildings and fences (fig. 30).

The false ha-ha formed by made-up ground is preferable to siting the fence in a ditch, both for reasons of drainage and because for security reasons a clear view of the fence from the interior of the site may be necessary.

It would be helpful if industrialists would on occasions allow their fences to deviate from the strict site boundary, giving an intake to the surrounding land where space could be spared from the building layout. This often deviates from the rectangle which usually comprises the site and could be used with advantage to bring the planting or landform of the surroundings into relation with the building (figs. 31-33).

In addition to categories of distinct shapes, structures in the landscape fall into definite categories of emphasis. First there are those subordinate to the landscape and to man's life within it. This category includes farm buildings, local roads, bridges and sensitively sited dwellings. Secondly there are the commanding but isolated objects, which say in effect, man has succeeded, against great difficulties, in planting his symbol within this area of all-powerful nature. The prototype is the mountain-top cairn. Traditional examples are the lighthouse on the rocky promontory and the castle on a rugged, isolated hill-top. The Bonnie Prince Charlie

nuclear power stations

IT WOULD HELP THE judgment of the public, as well as those concerned with other land-uses, if there were a clear statement of the technical requirements, as far as they are at present known, for siting atomic reactors. For these requirements are stringent, and make the choice of site strictly limited.

Their immense water requirements for cooling purposes means that in the British Isles there is a great advantage in siting them within easy pumping distance of the sea or of a large tidal water. Even so, the temperature of the water is raised to such a degree that the number of atomic reactors on a single tidal stretch must be limited unless the water is to become too hot for the fish.

If future developments overcome the need for water cooling it may be hoped that reactors will be sited within the derelict industrial and mineral working areas, rather than on the coasts and inland waters.

Because of the immense size of the concerns it must be possible to get the foundations down to load-bearing rock; there must be sufficient superficial space for the buildings and all their ancillaries, and a clear run out for the double line of power transmission. These conditions make it difficult to find a site in a built-up area.

The safety factor at present contains an element of doubt, which has almost certainly been one of the reasons for siting in comparatively isolated areas. But one may hope that either future research will assure absolute safety or that if this is unobtainable, no areas, urban or rural, will be subjected to the risk of contamination.

As it is an advantage to generate the electricity as near as possible to the consumer, the majority of the present reactors are being sited in the south of England, away from the coalfields and sources of hydroelectric power. All these factors taken together explain the siting of reactors at Bradwell, Hinkley Point and Berkeley.

The reasons for the Government's action in asking various concerns each to present projects for a reactor on an unknown site were obviously concerned with attracting the best brains to present a variety of solutions to a very urgent problem. But it was unfortunate that the method was bound to ignore the important point of designing the reactor in relation to its site. Each site chosen, although they all have the same technical requirements, is in a quite different type of landscape, which must affect the type of building which will best fit into it.

At Bradwell, the open landscape of grey sea and sky, of flat marshland and clouds, will be reflected in the grey and glass of the reactor's cladding.

In a more rugged landscape, the better treatment might well be to leave as much as possible of the machinery unclad and to let its strong gaunt framework contribute to the background pattern.

Can the scientific fact of the production of energy from nuclear fission, find expression in as fine, inevitable and elemental a way as that in which the dams express the strength of hydro-electric power? It is a challenge to architects and engineers to which we cannot expect an immediate answer. But when the true expression is found, it may reveal a kinship with the organic landscape which is lacking in the present structures.

But whatever their architecture, the scale and majesty of the reactors and turbine houses should be accepted; nothing can humanize them or relate them to a small-scale landscape. If the human scale is desired for the sake of the workers it should be designed to be seen from within only while from without it is contained within the big-scale composition (see page 50).

This composition will extend far into the landscape on all sides and any treatment of the ground immediately around the reactors should link up with the outer landscape, picking up and continuing its pattern in towards the reactor, and serving to bind building and landscape together. According to the type of landscape, this uniting character may be achieved by planting, or by landform and the smoothing out of all trivialities to give a continuous sweep up to the mass of the main structure. Any planting which is confined to the land within the perimeter fence, or which does not relate to that beyond, will accentuate the fact that the enclosure itself is hopelessly out of scale with the building.

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Fig. 39. Plan showing integration with landscape. The clean bulk of the main structure of the Bradwell Nuclear Power Station is emphasized by using land formation and planting to mask the worried details of transformér gear and fencing. The spirit of the flat landscape is echoed in the horizontal terraces of the spoil banks. Planting is confined to simple windbreaks and the augmentation of the local dykeside willow planting.





Whatever treatment is used should obliterate this boundary, and substitute for it the boundary of the horizon.

Scattered single trees even if natural to the existing landscape, should be replaced by massing, or by open, contoured ground, as the scale of the building will reduce any single trees in its vicinity to the stature of shrubs.

Considering the economic gains which atomic energy will presumably bring, it is only reasonable that the true cost of its effect on the landscape should be faced and balanced against these advantages, and that any steps which will make these buildings more acceptable as a part of the nation's landscape, should be considered even if they entail extra cost.

Where there is any possibility of meeting the technical requirements they should be sited on land already derelict, which could then be built up to a new landscape in scale and tune with the reactors. Where there is a choice between two sites in established landscapes, weight should be given to the one whose character will best take the new scale.



Appendix 5

Cover of Landscape, the Journal of the Landscape Institute, winter 2012

Winter 2012 www.landscapeinstitute.org

Rethinking HS2 Five design visions that make a virtue of rail infrastructure and motion

big infrastructure in the 21st century

Landscape and

Lessons from history Sylvia Crowe's seminal study of landscape and power 50 years on

Next generation Reflections on the road to becoming a landscape architect



Appendix 6

Extract from The Air Navigation Order 2016 and Regulations, CAP 393 (2016)



The Air Navigation Order 2016 and Regulations

Published for the use of those concerned with air navigation, but not to be treated as authoritative (see Foreword)

CAP 393



"aviation fuel" means fuel intended for use in aircraft;

"aviation fuel installation" means any apparatus or container, including a vehicle, designed, manufactured or adapted for the storage of aviation fuel or for the delivery of such fuel to an aircraft;

"aviation fuel installation manager" means a person who has the management of any aviation fuel installation on an aerodrome in the United Kingdom.

CHAPTER 2

Lights and lighting

Aeronautical lights

221.—(1) Except with the permission of the CAA and in accordance with any conditions subject to which the permission may be granted, a person must not establish, maintain or alter the character of—

- (a) an aeronautical beacon within the United Kingdom; or
- (b) any aeronautical ground light (other than an aeronautical beacon) at a national licensed aerodrome, or which forms part of the lighting system for use by aircraft taking off from or landing at such an aerodrome.

(2) In the case of an aeronautical beacon which is or may be visible from the waters within an area of a general lighthouse authority, the CAA must not give its permission for the purpose of this article except with the consent of that authority.

(3) A person must not intentionally or negligently damage or interfere with any aeronautical ground light established by or with the permission of the CAA.

Lighting of en-route obstacles

222.—(1) The person in charge of an en-route obstacle must ensure that it is fitted with medium intensity steady red lights positioned as close as possible to the top of the obstacle and at intermediate levels spaced so far as practicable equally between the top lights and ground level with an interval of not more than 52 metres.

(2) The person in charge of an en-route obstacle must, subject to paragraph (3), ensure that by night the lights required to be fitted by this article are displayed.

(3) In the event of the failure of any light which is required by this article to be displayed by night the person in charge must repair or replace the light as soon as reasonably practicable.

(4) At each level on the obstacle where lights are required to be fitted, sufficient lights must be fitted and arranged so as to show when displayed in all directions.

(5) In any particular case the CAA may direct that an en-route obstacle must be fitted with and must display such additional lights in such positions and at such times as it may specify.

(6) A permission may be granted for the purposes of this article for a particular case or class of cases or generally.

(7) This article does not apply to any en-route obstacle for which the CAA has granted a permission to the person in charge permitting that person not to fit and display lights in accordance with this article.

(8) In this article, an "en-route obstacle" means any building, structure or erection, the height of which is 150 metres or more above ground level, but it does not include a building, structure or erection—

- (a) which is in the vicinity of a national licensed aerodrome or an EASA certificated aerodrome; and
- (b) to which section 47 of the Civil Aviation Act 1982 (warning of presence of obstructions near licensed aerodromes) applies.



Appendix 7

Plan of permitted B8 development on the Appeal Site





Appendix 8

Interim Advice Note 135/10 – Landscape and Visual Effects Assessment

INTERIM ADVICE NOTE 135/10

LANDSCAPE AND VISUAL EFFECTS ASSESSMENT

Summary

This Interim Advice Note provides instructions on the assessment of landscape and visual effects of highway projects

Instructions for use

This IAN takes immediate effect and is applicable to the reporting of environmental impact assessments of trunk road and motorway projects in England replacing existing guidance in DMRB Volume 11 Section 3 Part 5.

Executive summary

This Interim Advice Note (IAN) sets out the requirements for the Highways Agency and Service Providers for the assessment and reporting of the effects highway projects on landscape character and on views from sensitive visual receptors. It has application to new construction, improvement and maintenance projects. It has been prepared in accordance with the principles set out in DMRB Volume 11 Section 2 providing a methodology for considering the significance of identified effects.

The IAN replaces DMRB Volume 11 Section 2 Part 5 for use in England.

Landscape and Visual Effects Assessment

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2 Landscape and UK Highways

Definition of Subject

- 2.1 The European Landscape Convention (Florence: Council of Europe, 2000, ETS 176), defines 'Landscape' as 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.
- 2.2 The Guidelines for Landscape and Visual Impact Assessment (GLVIA), published jointly by The Landscape Institute and the Institute of Environmental Management and Assessment (2nd edn. 2002) state that 'Landscape encompasses the whole of our external environment, whether within villages, towns, cities or in the countryside' (GLVIA para 2.1). Therefore this guidance does not differentiate between 'landscape' and 'townscape', and the approach taken applies to any landscape whether the context is urban, rural or a combination of both.
- 2.3 It should also be noted that 'Landscapes are considerably more than just the visual perception of a combination of landform, vegetation cover and buildings they embody the history, land use, human culture, wildlife and seasonal changes of an area. These elements combine to produce distinctive local character and continue to affect the way in which the landscape is experienced and valued. However, the landscape is also dynamic, continually evolving in response to natural or maninduced processes' (GLVIA para 2.3).
- 2.4 The assessment of landscape and visual effects are separate but linked procedures, in that the landscape is considered as an environmental resource whereas visual effects are assessed as one of the interrelated effects on population. Landscape effects are derived 'from changes in the physical landscape, which may give rise to changes in its character and how this is experienced. This may in turn affect the perceived value ascribed to the landscape' (GLVIA para 2.14), whilst visual effects 'relate to the changes that arise in the composition of available views as a result of changes to the landscape, to people's responses to the changes, and to the overall effects with respect to visual amenity' (GLVIA para 2.15).

Regulatory/Policy Framework

- 2.5 In 2000, the European Landscape Convention was produced by the Council of Europe, the aims of which are 'to promote landscape protection, management and planning, and to organise European co-operation on landscape issues'. This was the first international convention to focus specifically on landscape. The Convention was signed by the UK government on 24 February 2006 and ratified by the Council of Europe on the 21 November 2006. It is significant in that it acknowledges 'that the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday areas'. The recognition that all landscapes are potentially important, irrespective of location or condition, should be considered in any assessment of landscape effects and is acknowledged within this Advice Note.
- 2.6 The statutory organisations that advise on landscape issues in the UK are Natural England (formerly the Countryside Agency, English Nature and the Rural Development Service), Scottish Natural Heritage, the Countryside Council for Wales and the Environment, and the Northern Ireland Environment Agency. These organisations offer policy and advice on landscape, and are the primary source of definitive information and opinion on statutorily protected landscape areas.

- 2.7 In particular, section 62 of the Environment Act 1995 (England and Wales) places a duty on government bodies to have regard to the purposes of National Parks (i.e. by attaching greater weight to the purposes of conserving and enhancing natural beauty, etc,), and section 85/Part V of the Countryside and Rights of Way (CRoW) Act 2000 places similar duties for Areas of Outstanding Natural Beauty (AONBs).
- 2.8 Local planning authorities (and National Park Authorities where appropriate) also designate landscapes in development plans and hold information on regional and locally important landscapes to which policies apply. The Local Authority should be consulted at an early stage to gain information about the local landscape.

Key Issues/Impacts/Effects

- 2.9 For landscape and visual effects, the key issues are likely to be:
 - Whether the effects are temporary (e.g. the impact of a construction compound) or permanent (e.g. the removal of existing features or creation of new infrastructure);
 - direct effects or physical change to the landscape (e. g. landform changes, vegetation changes, changes to built features);
 - indirect effects on the character and quality of the landscape (e.g. changes in the perception of the landscape through the introduction of features alien to the character of the landscape such as lighting etc.);
 - direct effects on the visual amenity of visual receptors (e.g. changes in views and their composition for walkers, tourists etc. caused by the project);
 - indirect effects on visual receptors in different places (e.g. an altered visual perception leading to changes in public attitude, behaviour and how they value or use a place).
 - How the project would relate in landscape and visual terms to any other proposed development (e.g. urban regeneration schemes, housing development etc.).

Overlaps and Interactions with Other Subjects

- 2.10 Some other topics within an environmental assessment may touch on landscape issues or use landscape data, and care must be taken to avoid 'double counting' in the assessment process. This will require liaison between the various specialists at an early stage in order to eliminate overlaps, identify gaps and remove confusion.
- 2.11 This is particularly relevant for the Historic Landscape sub-topic of the Cultural Heritage advice note (see Volume 11 SECTION 3 Part 2), where the combination of historic landscape evidence and the potential change in the setting of, or views from historic monuments are clearly related (see 'Assessing the Effect of Road Schemes on Historic Landscape Character', Highways Agency, 2007).
- 2.12 Another area of potential overlap is with Nature Conservation (see Volume 11 SECTION 3 Part 4), since landscape provides the context for habitats and species, and the potential loss of landscape features and/or land severance/fragmentation will also affect biodiversity. Social and community issues (see Volume 11 SECTION 3 Part 8) may also overlap with the landscape topic (i.e. the way that spaces are used and valued by the local community).
- 2.13 It is also important to be aware of project mitigation proposals that may involve other topic areas, such as the installation of noise screening that would also have visual implications. Conversely, landscape requirements, such as screen planting, may, for example, disturb archaeological remains or conflict with wildlife considerations.

Assessing Magnitude of Impact

3.8 Based on consideration of the project, the magnitude of impact (which could be either adverse or beneficial) should be estimated. Depending on the complexity of the project, this may need to be broken down into different sections depending on the nature and value of the different character areas affected. Indicative criteria are provided for guidance in table 1. These are not prescriptive and in making judgements the landscape professional needs to be able to demonstrate to others a consistent and justifiable argument.

Magnitude of Impact	Typical Criteria Descriptors
Major Adverse	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements.
Moderate Adverse	Partial loss or noticeable damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic noticeable features and elements.
Minor Adverse	Slight loss or damage to existing character or features and elements, and/or the addition of new but uncharacteristic features and elements.
Negligible Adverse	Barely noticeable loss or damage to existing character or features and elements, and/or the addition of new but uncharacteristic features and elements.
No Change	No noticeable loss, damage or alteration to character or features or elements.
Negligible Beneficial	Barely noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic features and elements, or by the addition of new characteristic elements.
Minor Beneficial	Slight improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic features and elements, or by the addition of new characteristic elements.
Moderate Beneficial	Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristic features.
Major Beneficial	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features.

Table 1 Magnitude and Nature of Impact and Typical Descriptors

Assessing Landscape Sensitivity

- 3.9 The outputs from the landscape character assessment (i.e. landscape characteristics, their condition and value) should be considered to assess their sensitivity to changes arising from the project; 'The determination of the sensitivity of the landscape resource is based upon an evaluation of each key element or characteristic of the landscape likely to be affected. The evaluation will reflect such factors as its quality, value, contribution to landscape character, and the degree to which the particular element or characteristic can be replaced or substituted.' (GLVIA para. 7.17)
 - Landscape sensitivity will depend on the character of the receiving landscape, the nature of the proposed project and the type of change. Indicative criteria are provided for guidance in table 2. As with the determination of magnitude of impact, these are not prescriptive and in making judgements the landscape professional needs to be able to demonstrate to others a consistent and justifiable argument.

Table 3 Significance of Effect Categories



Table 2	Landscape Sensitivity and Typical Examples
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Sensitivity	Typical Descriptors and Examples
High	 Landscapes which by nature of their character would be unable to accommodate change of the type proposed. Typically these would be; Of high quality with distinctive elements and features making a positive contribution to character and sense of place. Likely to be designated, but the aspects which underpin such value may also be present outside designated areas, especially at the local scale. Areas of special recognised value through use, perception or historic and cultural associations. Likely to contain features and elements that are rare and could not be replaced.
Moderate	 Landscapes which by nature of their character would be able to partly accommodate change of the type proposed. Typically these would be; Comprised of commonplace elements and features creating generally unremarkable character but with some sense of place. locally designated, or their value may be expressed through non-statutory local publications. Containing some features of value through use, perception or historic and cultural associations. Likely to contain some features and elements that could not be replaced.
Low	 Landscapes which by nature of their character would be able to accommodate change of the type proposed. Typically these would be; Comprised of some features and elements that are discordant, derelict or in decline, resulting in indistinct character with little or no sense of place. Not designated. Containing few, if any, features of value through use, perception or historie and cultural associations. Likely to contain few, if any, features and elements that could not be replaced.

Assessing Significance of Effects

- 3.11 The evaluation of the significance of the landscape effects of the project is derived by assessing the sensitivity of the landscape against the magnitude of impact (bearing in mind the effectiveness of the mitigation measures), as shown in the matrix in table 3.
- 3.12 It should be noted that the categories in table 3 can be either beneficial or adverse, and that in some circumstances the addition of new features (e.g. 'gateway features' such as art work or a distinctive bridge design) will enhance the landscape, resulting in a significant beneficial effect.
- 3.13 Typical descriptors of the significance of effect categories in the matrix are provided in Table 4. These are not prescriptive and in making judgements the landscape professional needs to be able to demonstrate to others a consistent and justifiable argument. This is particularly important where a choice of categories is given in the matrix (e.g. where a landscape of high sensitivity experiences a moderate magnitude of impact, justification for the assessment of either a moderate or large degree of significance should be given).

Table 4 Typical Descriptors of Significance of Effect Categories

Sigr	ificance Category	Typical Descriptors Of Effect
1	Very Large Beneficial (Positive) Effect	 The project would: Greatly enhance the character (including quality and value) of the landscape Create an iconic high quality feature and/or series of elements. Enable a sense of place to be created or greatly enhanced.
2	Large Beneficial (Positive) Effect	 The project would: Enhance the character (including quality and value) of the landscape. Enable the restoration of characteristic features and elements lost as a result of changes from inappropriate management or development. Enable a sense of place to be enhanced.
3	Moderate Beneficial (Positive) Effect	 The project would: Improve the character (including quality and value) of the landscape. Enable the restoration of characteristic features and elements partially lost or diminished as a result of changes from inappropriate management or development. Enable a sense of place to be restored.
4	Slight Beneficial (Positive) Effect	 The project would: Complement the character (including quality and value) of the landscape. Maintain or enhance characteristic features and elements. Enable some sense of place to be restored.
5	Neutral Effect	 The project would: Maintain the character (including quality and value) of the landscape. Blend in with characteristic features and elements. Enable a sense of place to be retained.
6	Slight Adverse (Negative) Effect	 The project would: Not quite fit the character (including quality and value) of the landscape. Be at variance with characteristic features and elements. Detract from a sense of place.
7	Moderate Adverse (Negative) Effect	 The project would: Conflict with the character (including quality and value) of the landscape. Have an adverse impact on characteristic features or elements. Diminish a sense of place
8	Large Adverse (Negative) Effect	 The project would: Be at considerable variance with the character (including quality and value) of the landscape. Degrade or diminish the integrity of a range of characteristic features and elements. Damage a sense of place.
9	Very Large Adverse (Negative) Effect	 The project would: Be at complete variance with the character (including quality and value) of the landscape. Cause the integrity of characteristic features and elements to be lost. Cause a sense of place to be lost.

4 Reporting

4.1 The differences in levels of reporting for Scoping, Simple and Detailed Landscape Assessments are outlined as follows;

Scoping Assessment



- 4.2 Information gathering for the Scoping Exercise should consist of a combination of preliminary site surveys and desk-based studies of readily available information, such as that held by the statutory environmental bodies, local authorities and National Park Authorities. It is aimed at identifying major constraints that may be affected by the project or may require further study, and whether or not the project has the potential to generate any significant landscape effects.
- 4.3 If the Scoping Exercise shows that further work is required, the selection of Simple or Detailed Assessment will depend on consideration of:
 - the nature of the project (e.g. a maintenance project in an undesignated area is unlikely to need detailed landscape assessment);
 - the character (including quality and value) of the receiving landscape;
 - the reliability of the baseline data that is available;
 - the findings of the Scoping Exercise;
 - the level of detail of any previous assessments undertaken for the project, and whether the data were collected recently.

Simple Assessment

4.4 Landscape Baseline;

An appreciation of landscape character, comprising a review of any published character assessments, local perceptions and/or designations, together with the results of a site visit to gain an appreciation of the extent to which the landscape around the project is representative of the character described. Where no such assessments exist, or where the landscape around the project is not representative or has other distinctive characteristics, a general description of the landscape character around the project should be made, noting any particular features and/or elements that help to define (or detract from) landscape character. This appreciation should note the condition of the landscape and make an informed judgement as to its value.

4.5 Magnitude and Type of Impact;

The degree of change which the project would cause should be assessed, noting in particular the scale, duration and nature of potential changes on landscape character. A note should also be made of any mitigation measures that could reduce adverse effects.

4.6 Significance of Effect;

An assessment of the effects the project will have on the landscape, based on its sensitivity in relation to the project. This should state whether or not the project is likely to give rise to significant landscape effects and whether these are large or small, beneficial or adverse, temporary or permanent. If significant effects are anticipated or the outcome of the Simple Assessment is inconclusive (e.g. due to inadequate or incomplete data, requiring the need for more detailed surveys), then a recommendation for a Detailed Assessment should be made, stating the reasons for this decision and an outline of the further work that would be anticipated.

Detailed Assessment

- 4.7 Landscape Baseline;
 - Classification of the landscape into character areas, including a description of the key characteristics of each character area (including key negative features where appropriate) and an appraisal of their condition and value, together with a map showing the boundaries of different areas.
 - Acknowledgement of key elements, features or characteristics that are important or valued within the local context or in determining the local character (e.g. a green lane used as a footpath), and which provide a sense of place.
 - A photographic record. These should be numbered and cross-referenced to accurately plotted locations on an OS map of appropriate scale, which should also show the angle of view. The photographic survey should record important features and elements, variations in character and provide representative images of each character area.
- 4.8 Magnitude and Type of Impact;
 - A description should be provided of the project and its impact. This should include consideration of the total project (e.g. how well a new road alignment would fit the existing topography) as well as specific features of the design (e.g. the addition of new signage as part of an urban project). It should also include potential changes in landscape character away from the project (e.g. benefits due to the removal of traffic from a new bypass).
 - A description of the mitigation measures proposed to avoid, reduce or remedy any impacts. These measures are an integral part of the project, and the effects assessed will therefore be the net effects arising from the project complete with mitigation.

4.9 Significance of Effect;

A description of the landscape effects and their significance. This should be based on the sensitivity of the landscape in relation to the proposed project. It should include the effect of individual aspects of the proposed project as well as their combined effect (e.g. the road, plus its traffic, lighting and signage), and effects on the whole landscape (e.g. changes in character) as well as specific features and elements (e.g. loss of woodland or buildings).

Annex 2 Assessment of Visual Effects

Contents

- 1 Introduction
- 2 Identifying the Extent of Visibility

Determining the Zone of Visual Influence (ZVI) Desk Study Field Survey Visual Receptors and their Sensitivity

3 Identification of Impacts and Assessment of the Significance of Visual Effects

Recording Visual Effects Mitigation Assessing Magnitude of Impact Assessing Significance of Visual Effects

4 Reporting

Scoping Assessment Simple Assessment Detailed Assessment

1 Introduction

- 1.1 This annex outlines the methodology to be used for the assessment of visual effects, and covers Scoping, Simple and Detailed Assessments. Differences between the three assessment levels are reflected by;
 - The potential for the project to give rise to significant visual effects (i.e. if no significant effects are predicted then a Detailed Assessment will not be required);
 - the degree to which the project design is defined (i.e. if details are unavailable then only a Scoping or Simple Assessment will be possible), and;
 - the level of survey data that is available (i.e. a greater level of survey work would need to be completed for a Detailed Assessment).
- 1.2 Guidance on the difference between the reporting outputs from the methodology for each assessment level is provided in section 4.
- 1.3 The stages in the assessment are to:
 - Determine the extent of visibility of the proposals.
 - Collect and collate information on the visual context of the project.
 - Identify receptors and evaluate their sensitivity.
 - · Describe the degree of visual change caused by the proposals.
 - Identify and develop mitigation measures as a component of the iterative design process to avoid, reduce and where possible remedy adverse effects.
 - Assess the significance of the resultant visual effects.
- 1.4 The process is shown in Figure 1

Annex 2 Assessment of Visual Effects

2.14 Further analysis may be required in the form of cross sections and/or computer simulations, to establish if (for example) a new road and its lighting would be visible above an intervening ridge. If the presence of a new feature in a view is of particular importance and is difficult to assess on site or by cross section/computer analysis, then physical, on site measures including the positioning of raised access platforms or balloons at the proposed height, or the use of elevated cameras to look out from the proposed height, may be appropriate.

Visual Receptors and their Sensitivity

- 2.15 An important part of the assessment is to determine the sensitivity of potential visual receptors (i.e. viewers) within the ZVI. Sensitivity depends on the location, context and expectations of the viewer (e.g. the occupier of a residential property with open views would be highly sensitive, whereas an office worker within an urban context would be less so). The identification of various categories of visual receptor (viewer) and the assumed visual sensitivity of each forms part of the visual baseline against which the change in the view brought about by the proposed project can be assessed.
- 2.16 Visual receptors should be categorised by their sensitivity, and will include people in their homes, users of Public Rights of Way (PROW) and other areas of open space or recreational landscapes, people at work and people travelling along roads or railway lines. Indicative levels and examples are provided in table1, which are not prescriptive but intended for guidance.

Sensitivity	Typical Criteria
High	Residential properties.
\bigcirc	Users of Public Rights of Way or other recreational trails (e.g. National Trails footpaths, bridleways etc.).
	Users of recreational facilities where the purpose of that recreation is enjoyment of the countryside (e.g. Country Parks, National Trust or other access land etc.).
Moderate	Outdoor workers
C	Users of scenic roads, railways or waterways or users of designated tourist routes.
P/	Schools and other institutional buildings, and their outdoor areas.
Low	Indøor workers
	Users of main roads (e.g. trunk roads) or passengers in public transport on main arterial routes.
9(~	Users of recreational facilities where the purpose of that recreation is not related to the view (e.g. sports facilities).

Table 1 Visual Sensitivity and Typical Descriptors

3 Identification of Impacts and Assessment of the Significance of Visual Effects

- 3.1 The assessment of visual effects should be undertaken for the following scenarios:
 - During the construction period, assuming a maximum visibility or maximum perceived change situation (i.e. when construction activity is at its peak for any given view), and noting how long that period would be likely to last;
 - A winter's day in the year that the project would open to traffic or be fully
 operational (i.e. with noise/visual screens and mounds in place but before any
 planted mitigation has begun to take effect). This is usually a reflection of the
 operationally non-fully mitigated/maximum visibility scenario;
 - A summer's day in the fifteenth year after opening (i.e. when the planted mitigation measures can be assumed to be substantially effective). This is usually a reflection of the near fully mitigated scenario under normal conditions. (Note however, that planting may be subject to adverse local conditions such as exposure or high altitude, which may require a longer assessment date to be determined).

Recording Visual Effects

- 3.2 The assessment should be recorded by means of the ZVI map, together with a Visual Effects Drawing (VED), and accompanying Visual Effects Schedule (VES).
- 3.3 The ZVI map should be presented on a contoured OS base, showing;
 - the line of the new road or other project;
 - significant screening features;
 - the limit of the ZVI. It may be appropriate, especially in cases where the boundary to the ZVI is a zone of transition rather than a precise line (i.e. in a very flat landscape), to illustrate this graphically by means of a graduated tone or by different line (thicknesses;
 - A note to the effect that the boundary shown is not always precise and is an indication only of the area within which the most significant visual effects may be expected;
 - the principal representative viewpoints. These need not be exhaustive, but could cover the principal types and range of views of the proposed project which would be possible;
 - the full extent of the visibility of the project (noting that this may require several ZVI's as described in paragraph 2.4).
- 3.4 The VED should be presented on a contoured OS base, showing;
 - Buildings and important outdoor locations which would be affected, such as viewpoints, roads and Public Rights Of Way (PROWs), with lengths affected/unaffected highlighted in the case of footpaths;
 - Each location cross referenced to the VES by means of a unique number, which should be colour coded to show graphically the difference across the scheme for construction, winter year 1 and summer year 15 scenarios;
 - Major visual barriers such as ridge lines, tree belts, woodlands and intervening buildings or structures;
 - For a proposed road, it should note any sections which will be in cuttings of, say, 4.5m or greater depth (i.e. which would effectively screen the tallest vehicles);
 - The direction of the principal view (or arc of view if appropriate) from individual locations.

- 3.5 Separate schedules should be prepared for different receptor groups (e.g. residential properties, community facilities, commercial properties, rights of way etc.). Properties may also be grouped together by location, or where their impacts are the same, to simplify the schedule where necessary. The VES should record the following information for each location assessed;
 - Reference number from the VED.
 - Location, by address and property name/number.
 - Number of properties at that location, where grouped.
 - Type of property industrial, commercial, residential etc., and if residential, further detail such as number of storeys, size of windows and property elevation etc.
 - For PROWs and roads, length of route affected; for other recreational locations such as common land or open space, the approximate area affected.
 - Distance of the location from the nearest visible portion of the project (to the centre line for roads), but also noting whether other portions of the project may be visible. For a large receptor, the distance could be to the portion most affected, and this should be noted in the VES. For PROWs, a range of distance may be appropriate.
 - Description of existing view(s) towards location of project;
 - Description of change in view(s) resulting from project;
 - Level of visual effects and whether beneficial or adverse, for each of the scenarios outlined above (i.e. construction, winter year 1 and summer year 15);
 - Any explanatory notes. These would include the nature or angle of the view (e.g. oblique), and whether or not the views are screened or filtered by intervening vegetation, or marred by the presence of existing intrusive features (including roads and traffic). The number and location (e.g. ground floor, first floor etc) of windows overlooking the project should be noted (this may be impractical for projects overlooked by large numbers of properties, but is likely to be critical where a few properties/windows only are involved), as should the influence of proposed cuttings, embankments or mitigation measures. Note should also be made as to whether the view would be of the whole of the proposed project or just a part (i.e. lighting, gantries or a small component of it).
- 3.6 The visual assessment should note the date(s) and weather conditions on which the site survey was carried out. Depending on the complexity of the project, additional material may be necessary to further illustrate existing and proposed views, such as cross sections, photographs, artist's impressions or computer generated visualisations.

Mitigation

- 3.7 The assessment of the visual effects of the project should take account of any mitigation measures proposed. These may be solid barriers, such as fences or earth mounds, which would be effective from the first day of opening, or screen planting which would take a number of years to become effective.
- 3.8 It should be noted that although such measures could effectively screen views of traffic from the receptor, the mitigation measures themselves could cause visual intrusion, thus, for example, a large mound designed to screen traffic from properties could itself block a currently open view with subsequent adverse visual effects.
Assessing Magnitude of Impact

- 3.9 It is important to recognise that the assessment records the degree of change in the composition of the view, from that which would exist if the project were not completed to that which would result as a consequence of the project. In determining the magnitude of impact, or degree of change, the following should be considered;
 - Scale of change a large scale project such as a new motorway would generate a
 greater magnitude of change than would a small scale change such as a junction
 improvement. This change can be in the form of the addition of new features into
 the view or the removal of existing features (such as trees, woodland or
 buildings). It should also be noted that a relatively small scale project may
 constitute a major change within a very restricted, enclosed view.
 - Nature of change the extent to which a given change is out of character with the
 existing view can influence the effects which it would produce. For example, it is
 likely that the introduction of a new road into a view already containing other busy
 roads would be more in keeping with the existing character than the introduction
 of the same road into a presently rural view with few signs of development.
 - Duration of change it is important to consider if the change is permanent or temporary, and to what extent it would reduce over time as mitigation planting matures. Change should be categorised as being short term (i.e. up to 1 year or during construction if the construction period exceeds one year), short/medium term (i.e. 1 to 5 years, during which time new planting will have little significant effect in most cases), medium/long term (5 to 15 years, when planted mitigation will begin to take increasing effect) or long term (i.e. lasting beyond 15 years).
 - Distance the magnitude of any change would generally decrease with distance from its source, until a point is reached where there is no discernible change.
 - Screening intervening features may block the view completely (in which case there would be no change), or there may be a partial screen, in which case the magnitude of change would decrease. For instance, intervening features (e.g. other structures or vegetation) may filter a view, which in the case of vegetation may also change with the seasons, and this must be taken into account where appropriate.
 - The direction and focus of the view if the change occurs in the part of the landscape which is the principal area of existing visual interest, the effects are likely to be perceived to be greater than if the proposed change occurs away from the main area of visual interest. This is especially relevant in the context of views from within houses (which are effectively framed by their windows), or from gardens (where views are often restricted by vegetation), and from promoted or locally valued viewpoints.
 - Removal of past mitigation or existing vegetation for road widening or improvement projects, consideration must be given to the effects of any removal of planting or other mitigation provided as part of an earlier project or existing vegetation. Removal of such mitigation may increase effects from the original road, and a check should be made as to whether any commitments were made in a past environmental statement or at a Public Inquiry as to the provision and maintenance of that mitigation.

- Whether the receptor is static or moving if the receptor is static (for example an occupier of a residential property) then the view will be constant and greater emphasis should be placed upon it. If however the receptor is moving (for example along a Public Right of Way) then the view will be constantly changing, and the proposed project may only be visible for part of the time. Some consideration should therefore be given to how the change in the view affects the overall experience of walking along a given Right of Way (or for a long distance route, a discrete section of the Right of Way).
- Numbers and types of receptors potentially affected at a viewpoint (e.g. a popular viewpoint, busy trunk road, little-used path or minor lane).
- 3.10 The magnitude of impact, or degree of change, should be assessed using the indicative criteria in table 2. These are not prescriptive and are intended for guidance, and in making judgements the landscape professional needs to be able to demonstrate to others a consistent, structured, transparent and justifiable approach.

Magnitude of impact	Typical criteria descriptors
Major	The project, or a part of it, would become the dominant feature or focal point of the view.
Moderate	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor.
Minor	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view.
Negligible	Only a very small part of the project would be discernable, or it is at such a distance that it would form a barely noticeable feature or element of the view.
No change	No part of the project, or work or activity associated with it, is discernible.

Table 2 Magnitude of Impact and Typical Descriptors

Assessing Significance of Visual Effects

- 3.11 The evaluation of the significance of the visual effects of the project is derived by assessing the sensitivity of the receptor (table 1) against the degree of change in the view resulting from the project (table 2). These aspects can be combined to form a significance matrix as shown in Table 3. Typical descriptors of the significance levels in the matrix are provided in Table 4. As with the determination of receptor sensitivity and degree of change, these are not prescriptive and are intended for guidance.
- 3.12 In general terms a major magnitude of change on a highly sensitive receptor will produce an effect of high significance, and a minor magnitude of change on a less sensitive receptor will produce an effect of low or negligible significance. Major changes for less sensitive receptors and minor changes for more sensitive receptors could also produce significant levels of effect.
- 3.13 It should be noted however that it is not possible to set out a precise formula for the determination of the significance of effect as every case is different, and it is therefore important that the significance level determined is supported by reasoned justification in the form of a written explanation (supported by photographs and other illustrations as appropriate), so that the basis for the assessment is clear. This is particularly important where a choice of categories is given in the matrix (e.g. where a highly sensitive receptor experiences a moderate magnitude of impact, justification for the assessment of either a moderate or large degree of significance should be given).

		No change	Negligible	Minor	Moderate	Major /
ENSITIVITY	High	Neutral	Slight	Slight/Moderate	Moderate/Large	Large/Very Large
	Moderat	Neutral	Neutral/Slight	Slight	Moderate	Moderate/Large
VISUAL SI	Low	Neutral	Neutral/Slight	Neutral/Slight	Slight	Slight/Moderate

Table 3 Significance of Effect Categories

Table 4 Typical Descriptors of the Significance of Effect Categories

Significance	Typical Descriptors of Effect		
Very large Beneficial	The project would create an iconic new feature that would greatly enhance the view.		
Large Beneficial	The project would lead to a major improvement in a view from a highly sensitive receptor.		
Moderate Beneficial	The proposals would cause obvious improvement to a view from a moderately sensitive receptor, or perceptible improvement to a view from a more sensitive receptor.		
Slight Beneficial	The project would cause limited improvement to a view from a receptor of medium sensitivity, or would cause greater improvement to a view from a receptor of low sensitivity.		
Neutral	No perceptible change in the view.		
Slight Adverse	The project would cause limited deterioration to a view from a receptor of medium sensitivity, or cause greater deterioration to a view from a receptor of low sensitivity.		
Moderate Adverse	The project would cause obvious deterioration to a view from a moderately sensitive receptor, or perceptible damage to a view from a more sensitive receptor.		
Large Adverse	The project would cause major deterioration to a view from a highly sensitive receptor and would constitute a major discordant element in the view.		
Very Large Adverse	The project would cause the loss of views from a highly sensitive receptor, and would constitute a dominant discordant feature in the view.		

4 Reporting

4.1 The differences in levels of reporting for Scoping, Simple and Detailed visual assessments are outlined as follows;

Scoping Assessment

- 4.2 Information gathering for the Scoping exercise should consist of a combination of preliminary site surveys and desk-based studies of readily available information, such as OS mapping, to determine potential visual receptors. It is aimed at identifying major constraints that may be affected by the project or may require further study, and whether or not the project has the potential to generate any significant visual effects.
- 4.3 If the Scoping Exercise shows that further work is required, the selection of Simple or Detailed Assessment will depend on consideration of:
 - the nature of the project (e.g. a maintenance project on a heavily trafficked trunk road is unlikely to need detailed visual assessment);
 - the number and sensitivity of visual receptors (i.e. if a large number of residential properties are likely to be affected then detailed assessment would be required);
 - the findings of the Scoping Exercise;
 - the findings of any previous assessments undertaken for the project, and whether the data were collected recently.

Simple Assessment

4.4 Visual Baseline;

An initial assessment of the visibility of the project within the landscape should be made, determined from mapping and by observation of the area of the project from public vantage points. Settlements and prominent viewpoints should be noted, together with an initial appreciation of their visual amenity and sensitivity to change. Detailed ZVI's are not required for a Simple Assessment, but some illustrative material will be useful to explain the visual context (e.g. location of key settlements and viewpoints in relation to the project).

4.5 Magnitude and Type of Impact;

The scale, type and duration of change which the project would potentially bring to existing views and visual receptors should be assessed in outline terms and recorded.

4.6 Significance of Effect;

An assessment of the effects of the project on visual receptors in broad terms (a Visual Effects Drawing and Visual Effects Schedule as defined in paragraphs 3.4 and 3.5 will not be required for a Simple Assessment) should be made, stating if the project is likely to give rise to significant visual effects and whether these are beneficial or adverse, temporary or permanent. This assessment should include an estimate of the type, approximate number and location of receptors that are likely to experience visual effects.

Detailed Assessment

4.7 Visual Baseline;

- Maps to show the potential Zone of Visual Influence (ZVI), determined from mapping and/or computer generation and by observation, of the area of the project from public vantage points, as defined in paragraph 3.3. Settlements, groups of buildings, individual properties and other visual receptors within the ZVI (such as users of footpaths) should be noted, together with an assessment of their visual amenity and sensitivity to change. The importance of local landmarks and viewpoints, and the assessment of the extent and direction of views from properties should be recorded. The assessment should also take into consideration any committed development (i.e. developments with planning consent and/or development allocations in adopted local plans).
- A description of the potential visual receptors (including key viewers) that would be affected by the proposed project, the extent and quality (amenity) of their existing views and an assessment of their sensitivity.
- A photographic record showing views from key and representative visual receptors. These should be numbered and cross-referenced to accurately plotted locations on an OS map of appropriate scale, which should also show the angle of view.
- 4.8 Magnitude and type of Impact;
 - A description of the likely changes that will result in the view from key receptors (e.g. principle viewpoints and properties) as a result of the project.
 - A description of the mitigation measures proposed to avoid, reduce or possibly remedy any impacts. These measures are an integral part of the project, and the effects assessed will therefore be the net effects arising from the project complete with mitigation.

4.9 Significance of Effect;

- A description of the visual effects of the proposed project for each group of visual receptors and their significance, including key views and users of footpaths, transport routes etc.
- An OS based plan showing the visual effects of the proposed project on residential properties and other important receptors and viewpoints, illustrated to show the location of the properties affected and the degree to which they may be affected. This would comprise a Visual Effects Drawing and a Visual Effects Schedule, as defined in paragraphs 3.4 and 3.5 respectively.