Appendix B: SA Scoring Assumptions for Employment Sites

Contents

Sustainability Objective: Natural Environment

Scoring Assumptions:

It is assumed that wildlife corridors will be included on all sites, if required by HRA, and no development will be permitted on nationally or internationally designated wildlife sites. However, development sites that are within close proximity of an international, national or local designated conservation site still have the potential to affect the biodiversity or geodiversity of those sites/features, e.g. through off-site habitat damage/loss, fragmentation, disturbance to species, air pollution, water pollution etc. Conversely, there may be opportunities to promote habitat connectivity if new developments include green infrastructure. Therefore, while proximity to designated sites provides an indication of the potential for an adverse effect, uncertainty exists for all effects (shown with '?'), as appropriate mitigation may avoid adverse effects and may even result in beneficial effects. As a starting point for the assessment, distances of 250m and 1km (depending on the level of the designation) have been used as an indication of proximity, as there are no standard distance thresholds available and it is recognised that the distance over which effects may occur vary between habitats and species and the types of effect being considered. This level of detail is not possible to be determined with certainty as part of a strategic site options assessment.

- Employment sites that are within 250m of one or more internationally or nationally designated biodiversity or geodiversity sites may have a significant negative (--?) effect.
- Employment development sites that are between 250m and 10km of one or more internationally or nationally designated biodiversity or geodiversity sites and/or that are within 250m of a locally designated site (e.g. County Wildlife Sites, Local Nature Reserves, Regionally Important Geological Sites) and/or contain UKBAP Priority Habitats or habitats that would support protected species, may have a minor negative (-?) effect.
- Employment development sites that are more than 10km from any internationally or nationally designated biodiversity or geodiversity sites, and that are over 250m from a locally designated site, and that do not contain UKBAP Priority Habitats could have a negligible (0?) effect.

All employment site options are assumed to have opportunities for the provision of green infrastructure, as shown in the assumed characteristics, however, larger sites are more likely to be able to provide a range of multi-functional green infrastructure. In some instances, existing green infrastructure may already be present on site and these assets may be lost if not incorporated into the new development.

Therefore, which may lead to a mixed effect overall:

- Employment sites that contain an existing green infrastructure asset that could be lost as a result of new development may have a minor negative effect (-?) although this is currently uncertain as it may be possible to conserve or even enhance that asset through the design and layout of the new development.
- Employment sites providing 10ha or more employment land could have a minor positive effect (+) through the retention and provision of local green infrastructure.

Sources of data:

County Wildlife Sites

County Geological Sites

Local Nature Reserves (LNR)

National Nature Reserves (NNR)

Special Area of Conservation (SAC)

Special Protection Area (SPA)

Ramsar sites

Sites of Special Scientific Interest (SSSI)

Aerial imagery

Sustainability Objective: Landscape

Scoring Assumptions:

Development in sensitive locations could have adverse impacts on the character and quality of the landscape. Because effects will be uncertain as they will also depend on factors such as the design and scale of the development, uncertainty exists for all effects (as indicated by a ?). The following base assumptions will be used, with site known site specific details used to adjust the level of potential adverse effect as appropriate:

- Sites that are in a visible/prominent locations within the Undeveloped Coast designation could have a significant negative (--?) effect.
- Sites that are within the Undeveloped Coast designation but are less visible/prominent in the landscape could have a minor negative (-?) effect.
- Sites that are within 250m from the Dartmoor National Park boundary could have a significant negative (--?) effect.
- Sites that are within 1km from the Dartmoor National Park boundary could have a minor negative (-?) effect.
- Sites that are within 250m from the Exeter City boundary could have a significant negative effect
- Sites that are within 1km from the Exeter City boundary could have a minor negative (-?) effect.
- Sites that are within 250m from the historic defined landscapes of Mamhead, Oxton, Powderham and the Haldon Estates could have a significant negative (--?) effect.
- Sites that are within 1km from the historic defined landscapes of Mamhead, Oxton, Powderham and the Haldon Estates could have a minor negative (-?) effect.
- Other sites which have been identified as having local landscape sensitivities could have a minor negative effect

Sources of data:

Dartmoor National Park boundary

Exeter City boundary

Undeveloped Coast designation

Mamhead, Oxton, Powderham and the Haldon Estates

Sustainability Objective: Historic and Built Environment

Scoring Assumptions:

The assumed characteristics table notes that no development proposed in the GESP will be permitted on nationally or internationally designated heritage sites. Historic England's definition of the setting of a heritage asset is contained in the National Planning Policy Framework Glossary in Annex 2, which states "The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance, or may be neutral". Detailed impacts on the setting of individual historic assets are difficult to determine during a strategic level of assessment such as this SA for potential strategic development sites to be allocated in the Plan. Effects would be more able to be determined once specific proposals are developed for a site and submitted as part of a planning application.

Consequently, in all cases, potential effects are recorded as uncertain (?) given the absence of detailed information on the following:

- the significance and sensitivity of heritage assets, including how their setting contributes to their significance; and
- the exact scale, design and layout of the new development.
- In the absence of detailed assessment work on the historic environment of each of the potential sites, the following assumptions have been made as an indication of potential effects on heritage assets:
- A potential significant negative effect (--?) will be identified where an employment site contains a statutory heritage asset (e.g. Listed Buildings (Grades I and II*), Scheduled Monuments, Registered Parks and Gardens, and Conservation Areas).
- A potential minor negative effect (-?) will be identified where an employment site contains a Grade II Listed Building and/or is within 3km of all other statutory heritage assets.

In addition, which may lead to a mixed effect overall:

- Large, greenfield sites (>10 ha) could have sufficient space to accommodate a well-designed development and create a new high quality built environment. Similarly, previously developed land (>1ha) may present opportunities to enhance the overall quality of the built environment as new development would replace and potentially improve the existing development. Both of these types of sites could result in a minor positive effect (+?).

Sources of data:

Conservation Areas

Listed Buildings

Registered Parks & Gardens

Scheduled Monuments

Aerial Imagery

Sustainability Objective: Climate Change Mitigation

Scoring Assumptions:

The proximity of employment development sites to existing centres where there is a concentration of residential areas and potential employees will affect the extent to which people are able to make use of non-car based modes of transport to commute to and from work.

- Employment development sites more than 5km from Exeter or a Main Town could have an uncertain significant negative (--?) effect.
- Employment development sites between 1-5km away from Exeter or a Main Town could have an uncertain negligible (0?) effect.
- Employment development sites less than 1km away from Exeter or a Main Town could have an uncertain minor positive (+?) effect.
- Employment brownfield sites within or adjacent to Exeter or a Main Town could have an uncertain significant positive (++?) effect.

Also a key factor in determining the use of the non-car based modes of transport will be the presence of nearby existing sustainable transport links, although the actual use of sustainable transport modes will depend on people's behaviour.

- Employment sites that are within 1 km of a railway station and 500 m of a bus stop with frequent services (minimum half hourly) (regardless of proximity to cycle routes) are likely to have a significant positive (++) effect due to distance from public transport options.
- Employment sites that are within either 1 km of a railway station or 500 m of a bus stop with frequent services (minimum half hourly), but not both, (regardless of proximity to cycle routes) are likely to have a minor positive (+) effect due to distance from public transport options.
- Employment sites that are more than 1 km from a railway station and more than 500 m from a bus stop but that have an existing cycle route within 1 km of the site could also have a minor negative (-?) effect due to distance from public transport options, although this is uncertain depending on whether the nearby cycle route(s) could be used for the purposes of commuting or undertaking day to day journeys.
- Employment sites that are not within 1 km of a railway station but are within 500 m of a bus stop with infrequent services (more than half hourly), (regardless of proximity to cycle routes) are likely to have a minor negative (-) effect due to distance from public transport options.
- Employment sites that are more than 1 km from a railway station and 500 m from a bus stop and that do not have an existing cycle route within 1 km are likely to have a significant negative (--) effect due to distance from public transport options.

New transport links such as bus routes or cycle paths may be provided as part of new employment developments and the effects of this are considered under this objective. As set out in the characteristics of strategic employment development sites, all sites are assumed to include basic internal active travel, but only large sites are assumed to provide sustainable and active transport links to nearby settlements. Only large employment site options are assumed to have opportunities for the provision of green infrastructure (the effects of which are captured under SA objective 1), and the opportunities for green infrastructure to support or create transport networks is assumed within this objective to be covered by the provision of active travel links.

Therefore (which could result in mixed effects overall):

- Employment development sites providing less than 1ha of employment land could have an uncertain significant negative (--?) effect.
- Employment development sites providing between 1ha-9.9ha of employment land could have an uncertain negligible (0?) effect.
- Employment development sites of 10ha or more of employment land could have an uncertain minor positive (+?) effect.

The location or scale of employment development will not affect the energy efficiency of the development; this would depend largely on the detailed proposals for sites and their design, which are not known at this stage.

Sources of data:

- *Settlement hierarchy from Local Plan*
- *Assumed employment land capacity of each site*
- *Railway stations*
- *Bus stops*
- *Bus frequency[5]*
- *Local cycle routes*
- *National Cycle Network*

Sustainability Objective: Climate Change Adaptation

Scoring Assumptions:

The development of new employment development on greenfield land is more likely to increase the area of impermeable surfaces and could therefore increase overall flood risk, although it is recognised that other standards relating to incorporation of Sustainable Drainage Systems (SuDS) will apply. NPPF Paragraph 164 requires that any development in an area at risk of flooding '*incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate'*. The effects of new development on this SA objective are therefore dependent to some extent on its design, for example whether it incorporates SuDS, which is unknown and cannot be assessed at this stage.

Where employment site options are located in areas of high flood risk, it could increase the risk of flooding in those areas (particularly if the sites are not previously developed) and would increase the number of people and assets at risk from flooding. National Planning Practice Guidance identifies which types of land uses are considered to be appropriate in Flood Zones 2, 3a and 3b. Buildings used for financial, professional and other services; offices; general industry, storage and distribution are classed as 'less vulnerable uses', which are suitable in areas of flood zone 1, 2 and 3a but are unsuitable in flood zone 3b.

A sequential approach should be followed to steer new development to areas with the lowest probability of flooding (i.e. flood zone 1) and local planning authorities will need to undertake a flood risk sequential test when allocating sites. Where there are no reasonably available sites in flood zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in flood zone 2. Only where there are no reasonably available sites in flood zones 1 or 2 should the suitability of sites in flood zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses.

A Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority as such by the Environment Agency in line with the NPPF. In these locations, there is a need for surface water to be managed to a higher standard than normal to ensure any new development will contribute to a reduction in flooding risks in line with NPPF.

Therefore:

- Sites that are within a Critical Drainage Area or that are entirely or mainly (i.e. >50%) on greenfield land that is within flood zone 3 could have a significant negative (--?) effect although this is uncertain depending on whether the land is flood zone 3a or 3b, which cannot be determined at this stage, and dependent on the SuDS provision made and whether the design of development brought forward could avoid areas of flood risk.
- Sites that are entirely or mainly on greenfield outside of flood zone 3 would have an uncertain minor negative effect (-?), dependent on the SuDS provision made.
- Sites that are entirely or mainly on brownfield within flood zone 3 could also have a minor negative (-?) effect although this is uncertain depending on whether the land is flood zone 3a or 3b, and dependent on the SuDS provision made and whether the design of development brought forward could avoid areas of flood risk.
- Sites that are on brownfield land outside of flood zone 3 are likely to have a negligible (0) effect.

Sources of data:

- *Flood Zones*
- *Critical Drainage Areas*
- *Aerial imagery*

Sustainability Objective: Land Resources

Scoring Assumptions:

It is recognised that the strategic site options for the Plan are generally larger greenfield sites as there are not sufficient previously developed (brownfield) sites within the area, therefore there is not much opportunity for the reuse of previously developed land, which represents more efficient use of land in comparison to the development of greenfield sites. The development of greenfield land could result in the loss of high quality agricultural land.

Therefore:

- Sites with more than 5 ha of Grade 1[6], Grade 2 or Grade 3 agricultural land would have a significant negative (--) effect.
- Sites with between 1 ha and 5 ha of Grade 1 or Grade 2 or Grade 3 agricultural land would have a minor negative (-) effect.
- Sites with less than 1 ha of Grade 1 or Grade 2 or Grade 3 agricultural land would have a negligible (0) effect.
- Site with more than 5 ha of Grade 3 agricultural land according to the national GIS dataset could have a significant negative (--?) effect although this is uncertain depending on whether the land is Grade 3a or 3b (which cannot be determined from the national GIS dataset).
- Sites with between 1 ha and 5 ha of Grade 3 agricultural land according to the national GIS dataset could have a minor negative (-?) effect although this is uncertain depending on whether the land is Grade 3a or 3b (which cannot be determined from the national GIS dataset).
- Sites that comprise less than 1ha of Grade 3 agricultural land according to the national GIS dataset or comprise entirely of Grade 4 or lower agricultural quality land would have a negligible (0) effect.

In addition, as part of a mixed effect:

- Sites with up to 5ha of previously developed land would have a minor positive (+) effect
- Sites with more than 5ha of previously developed land would have a significant positive (++) effect

In addition, as part of a mixed effect:

- Large employment sites (>10 ha) that are mostly (>50%) within a Minerals Safeguarding Area would have a significant negative (--) effect, as mineral resources could be sterilised. However, this will be uncertain (--?) as there could be the opportunity to extract the mineral resource prior to the development going ahead.
- Large employment sites (>10 ha) that are partially (<50%) within, or small employment sites (<10 ha) that are mostly (>50%) within a Minerals Safeguarding Area would have a minor negative (-) effect, as mineral resources could be sterilised. However, this will be uncertain (-?) as there could be the opportunity to extract the mineral resource prior to the development going ahead.
- Employment sites of any size that are within a Minerals Safeguarding Area in which evidence indicates all mineral resource have been extracted will have a negligible (0) effect.

The effects of new employment development on waste generation will depend largely on resident's behaviour and not on the site's size or location.

Sources of data:

Agricultural Land Classification

Mineral Safeguarding Areas

Aerial imagery

Sustainability Objective: Water Resources

Scoring Assumptions:

Levels of water consumption within new development will be determined by its design and onsite practices, rather than the location of the site, therefore effects on water supply cannot be determined. However, the location of employment development could affect water quality in nearby waterbodies during construction. The extent to which water quality is affected would depend on construction techniques, the processes undertaken on that employment land, and the use of sustainable drainage systems (SuDS) within the design; therefore effects are uncertain at this stage. In addition, the location of sites could affect water quality, depending on whether they are in an area where there is capacity at the local sewage treatment works (STWs) to treat additional wastewater generated by the overall scale of development proposed. However, South West Water has advised that all potential sites for the Plan can be connected to existing STW (some of which will require expansion), with no impact on the output water quality at any sites (i.e. all water quality will stay within permitted limits).

- Employment sites that contain or are adjacent to watercourses that run into the Exe Estuary SPA could result in significant negative (--?) effects on water quality although this is uncertain at this stage of assessment.
- Employment sites that contain or are adjacent to watercourses that do not run into the Exe Estuary, could result in moderate negative (-?) effects on water quality although this is uncertain at this stage of assessment.
- Employment sites that are not close to any watercourses would have a negligible (0) effect.

Sources of data:

Rivers and lakes GIS mapping

Sustainability Objective: Homes

Scoring Assumptions:

The location of employment development will not have a direct effect on this SA objective; therefore all of the site options will have a negligible (0) effect.

Sources of data:

No data needed.

Sustainability Objective: Health

Scoring Assumptions:

Public health will be influenced by the proximity of employment sites to open spaces, walking and cycle paths, easy access to which can encourage participation in active outdoor recreation by employees at the site during breaks and after work as well as active modes of commuting:

- Employment sites that are within 800 m of an area of major open space and that are within 400m of a walking or cycle path will have a significant positive (++) effect.
- Employment sites that are within 800 m of an area of major open space or that are within 400m of a walking or cycle path (but not both) will have a minor positive (+) effect.
- Employment sites that are more than 800 m from an area of major open space and more than 400m from a walking or cycle path will have a minor negative (-) effect.

In addition, it is anticipated that larger sites will deliver green infrastructure and active transport links, as shown in the assumed characteristics (which could result in mixed effects overall).

- Sites with capacity for 10ha or more will have a minor positive (+) effect.
- Sites with capacity for up to 1 – 9.9ha will have a negligible (0) effect.

Sources of data:

Assumed capacity of each site

Major open space

Public Rights of Way

National Trails

Sustainability Objective: Wellbeing

Scoring Assumptions:

Where an employment development site is within an area of higher levels of deprivation compared to Devon as a whole, the new development may have positive effects on wellbeing locally as a result of improved job opportunities locally. Any such employment site options would be likely to have a minor positive (+) effect.

Where new employment development is proposed within close proximity (100m) of sensitive receptors (e.g. existing houses, schools, hospitals etc.) there may be negative effects on amenity as a result of increased noise and light pollution, particularly during the construction phase.

Therefore, which may result in mixed effects overall:

- Employment sites that are in close proximity (within 100m) to existing residential development, residential allocations or other sensitive receptors may have a minor negative (-) effect during the construction and operational phases.

Proximity to an Air Quality Management Area (AQMA) can also influence the effects of new employment development on air quality, as development in or near to those areas could result in an increase in car use and the associated emissions, affecting the wellbeing of surrounding residents. There may also be emissions from the employment site itself, depending on the nature of the commercial activities onsite. Therefore, which may result in mixed effects overall:

- Employment sites that are within, or within 1 km of, an AQMA would have a significant negative (--) effect, as these sites would have potential to result in increased traffic within the AQMA.
- Employment sites that are further than 1 km from an AQMA but have been identified to have potential to result in increased traffic within an AQMA would have a minor negative (-) effect.
- Employment sites that are further than 1 km from an AQMA and have not been identified to have potential to result in increased traffic within an AQMA would have a negligible (0) effect.

The effects of new employment development on levels of crime and fear of crime will depend on factors such as the incorporation of green space within development sites which, depending on design and the use of appropriate lighting, could have an effect on perceptions of personal safety, particularly at night. However, such issues will not be influenced by the location of employment development; rather they will be determined through the detailed proposals for each site. Therefore, no score is given in relation to the effects of employment site options on this part of the SA objective.

Sources of data:

Deprivation levels

Aerial imagery

AQMAs

Sustainability Objective: Access to Services

Scoring Assumptions:

Although access to services is less relevant to employment sites compared to residential sites, employment sites that are located at the larger settlements within the Greater Exeter area will generally provide better access to a wider range of existing services and facilities compared to sites located at smaller settlements, and these services may be used by employees at the site during breaks and before or after work. Therefore:

- Sites that are located adjacent to Exeter of a Main Town would have a minor positive (+) effect.
- Sites that are located adjacent to a Defined Village would have a minor negative (-) effect.
- Sites that are located adjacent to an undefined village or settlement, or sites that are not located adjacent to a settlement would have a significant negative (--) effect.

In addition, which could lead to mixed effects overall,

- Sites adjacent to areas where there is ultrafast broadband (>300mbps) available would have a significant positive (++) effect.
- Sites adjacent to areas where there is superfast broadband (30-300mbps) available would have a minor positive (+) effect.
- Sites in areas where there is standard broadband (10-30mbps) available would have a minor positive (+) effect.
- Sites where there is <10mbps internet download speed currently available would have a minor negative (-) effect.

Sources of data:

Settlement hierarchy from local Plans

Broadband availability

Sustainability Objective: Jobs and Local Economy

Scoring Assumptions:

The employment development sites will all have positive effects due to the nature of the development proposed, the extent of which will depend on their size. Therefore:

- Sites with capacity for more than 10ha of employment land will have a significant positive (++) effect.
- Sites with capacity for between 1ha and 9.9ha of employment land will have a minor positive (+) effect.
- Sites with capacity for less than 1ha of employment land will have an uncertain minor positive (+?) effect.

Sources of data:

Settlement hierarchy from local Plans

Assumed employment land capacity of each site

Sustainability Objective: Town Centres

Scoring Assumptions:

The achievement of this objective will not be significantly influenced by the location of employment sites. However, the location of new employment sites has the opportunity to support the vitality and viability of existing town centres by increasing the number of day-to-day visitors to the town centres and supporting businesses and services in those locations. Employment development in out of centre locations could have the opposite effect and detract from the health of centres. Therefore:

- Employment sites that are located adjacent to Exeter or a Main Town would have a minor positive (+) effect.
- Employment sites that are not located adjacent to Exeter or a Main Town would have a minor negative (-) effect.

Sources of data:

Settlement hierarchy in Local Plan

Sustainability Objective: Connectivity and Transport

Scoring Assumptions:

Proximity to sustainable transport links will influence how accessible employment sites are for people commuting to and from work. [A proximity of 1km was used for railway stations to represent the 'acceptable' walking distance. A shorter distance of 500m was used for bus stops to represent the 'desirable' walking distance to a commuting method, as it is assumed that people would generally be willing to travel further to access a railway station than a bus stop, as railway stations generally provide the fastest mode of travel to more distant employment areas. In terms of access to cycle routes for commuting purposes, a straight-line distance of 1km was used in the appraisal on the assumption that links to cycle routes are likely to also use road carriageways.]

It is assumed that people would generally be willing to travel further to access a railway station than a bus stop. It is also recognised that many cyclists will travel on roads as well as dedicated cycle routes, and that the extent to which people choose to do so will depend on factors such as the availability of cycle storage facilities at their end destination, which are not determined by the location of employment sites. How safe or appealing particular roads are for cyclists cannot be determined at this strategic level of assessment. However, the proximity of site options to existing cycle routes can be taken as an indicator of how likely people are to cycle from a residential site to their place of work, for example.

- Employment sites that are within 1 km of a railway station and 500 m of a bus stop with frequent services (minimum half hourly) (regardless of proximity to cycle routes) are likely to have a significant positive (++) effect due to distance from public transport options.
- Employment sites that are within either 1 km of a railway station or 500 m of a bus stop with frequent services (minimum half hourly), but not both, (regardless of proximity to cycle routes) are likely to have a minor positive (+) effect due to distance from public transport options.
- Employment sites that are more than 1 km from a railway station and more than 500 m from a bus stop but that have an existing cycle route within 1 km of the site could also have a minor negative (-?) effect due to distance from public transport options, although this is uncertain depending on whether the nearby cycle route(s) could be used for the purposes of commuting or undertaking day to day journeys.
- Employment sites that are not within 1 km of a railway station but are within 500 m of a bus stop with infrequent services (more than half hourly), (regardless of proximity to cycle routes) are likely to have a minor negative (-) effect due to distance from public transport options.
- Employment sites that are more than 1 km from a railway station and 500 m from a bus stop and that do not have an existing cycle route within 1 km are likely to have a significant negative (--) effect due to distance from public transport options.
- In addition, it is anticipated that larger sites will deliver sustainable transport links, particularly in the form of new bus routes, as shown in the assumed characteristics (which could result in mixed effects overall).
- Sites with capacity for more than 10ha of employment land will have a minor positive (+) effect.
- Sites with capacity for less than 10ha of employment land will have a negligible (0) effect.

Access to the local road network and the impact on the strategic road network are not assessed through the SA, as these are not sustainability issues. Instead, the SA focusses on the extent that site options would provide opportunities for sustainable transport use. Note that provision of walking and cycling links within new development is covered under SA objective 4 above, and access to broadband is covered under SA objective 11.

Sources of data:

Assumed employment land capacity of each site

Railway stations

Bus stops & Bus frequency

Local cycle routes

National Cycle Network