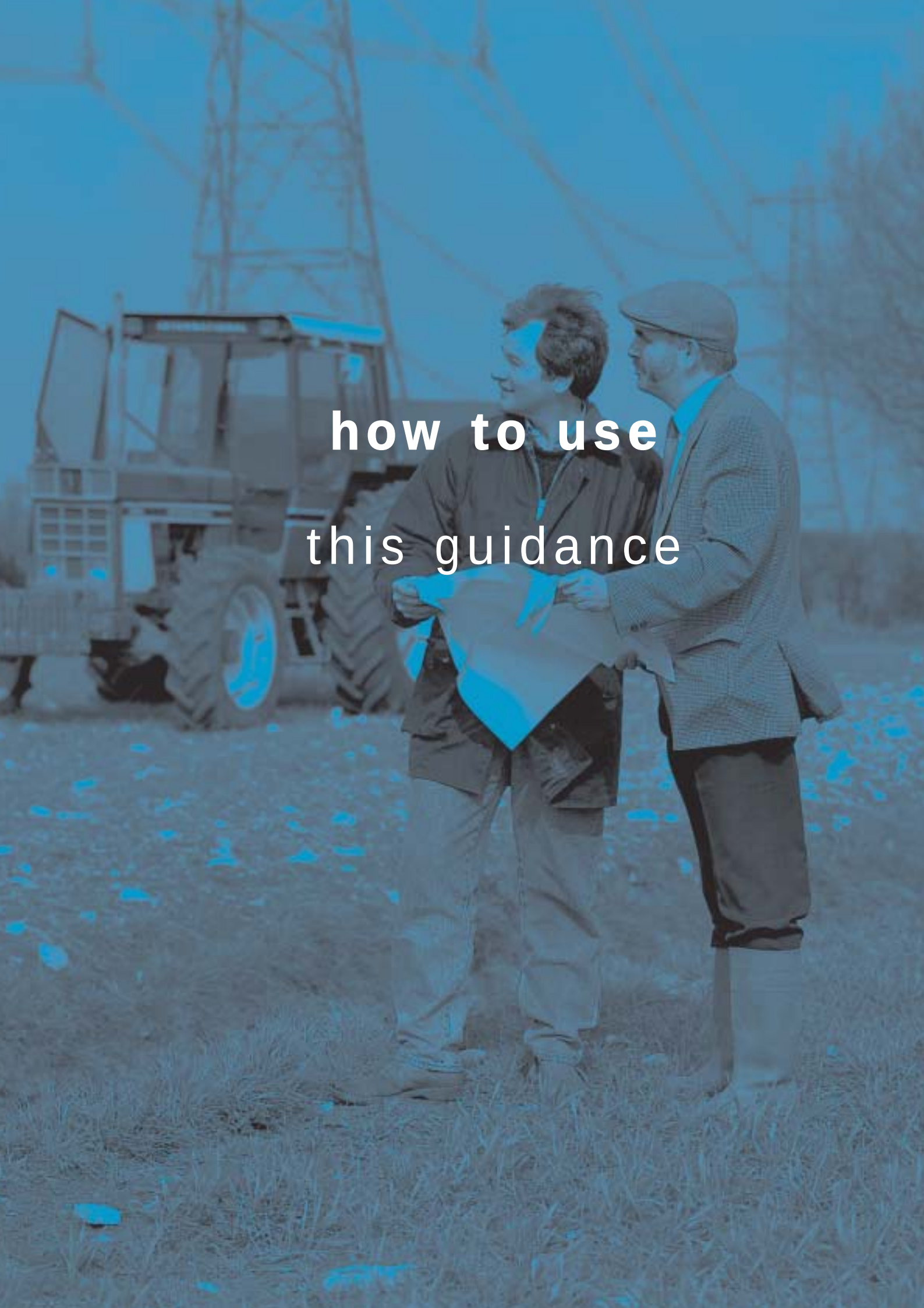


how to use

this guidance

How to use this guidance

The Sense of Place guidelines are a valuable tool to stimulate creative solutions to the design and layout of development on land crossed by high voltage overhead lines. The guidelines provide practical advice for all parties involved in the development of land affected by high voltage overhead lines.

National Grid is not proposing a single solution. The relevance of each of the design principles will vary depending on the circumstances of each individual development site and each individual development proposal – for example: a developer proposing to develop a distribution facility and/or business park may not attach the same priority to the use of screening as might a developer proposing a residential site.

The guidelines are a valuable tool to stimulate creative solutions to the design and layout of development on land crossed by high voltage overhead lines.

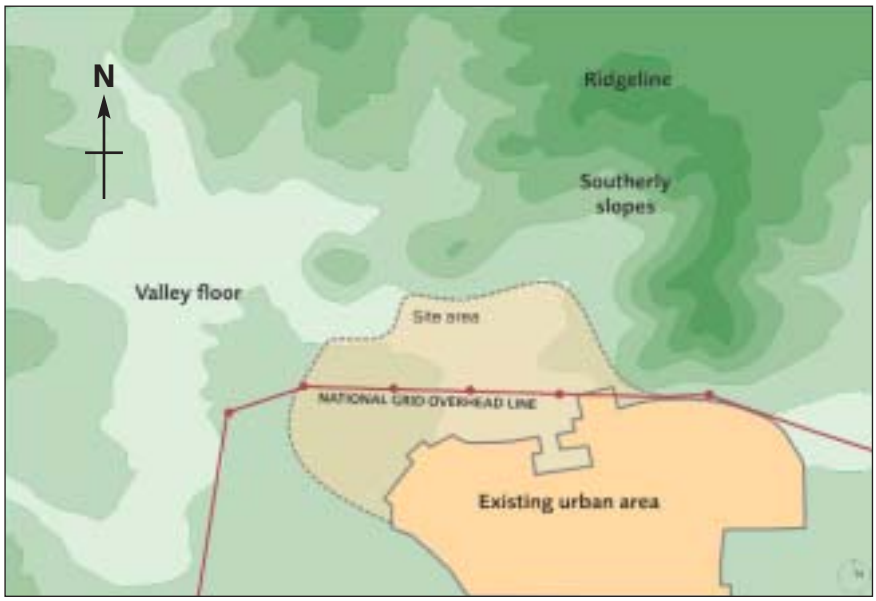
Putting it all together

The guidelines can assist designers seeking to develop an integrated design solution to sites crossed by high voltage overhead lines. In order to demonstrate the application of the guidelines, a conceptual master plan for a typical sustainable urban extension to a settlement has been developed.

Good urban design principles are advocated, and there are many publications on this issue available to assist the master planning process. The purpose of this section, however, is to demonstrate the detailed application of the Sense of Place guidelines within the master planning process.

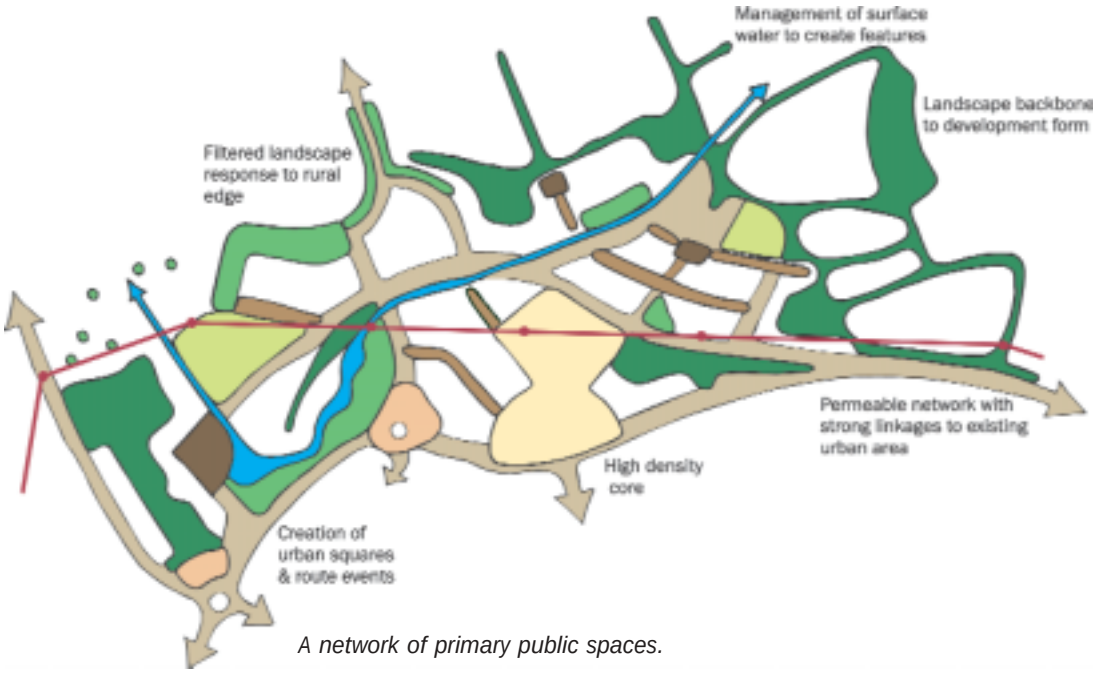
The initial stage in any master plan approach is a thorough survey of the site and the surrounding area. This should include an appraisal of the types of pylons present, their orientation and their three-dimensional scale, taking account of topography. This should also include those pylons that lie within view of a site.

In terms of topography, our demonstration site is predominantly within a valley floor with rising land to the north and east. The National Grid overhead power lines are sited within the base of the valley. Low-lying land towards the western end of the site forms part of a fluvial floodplain.



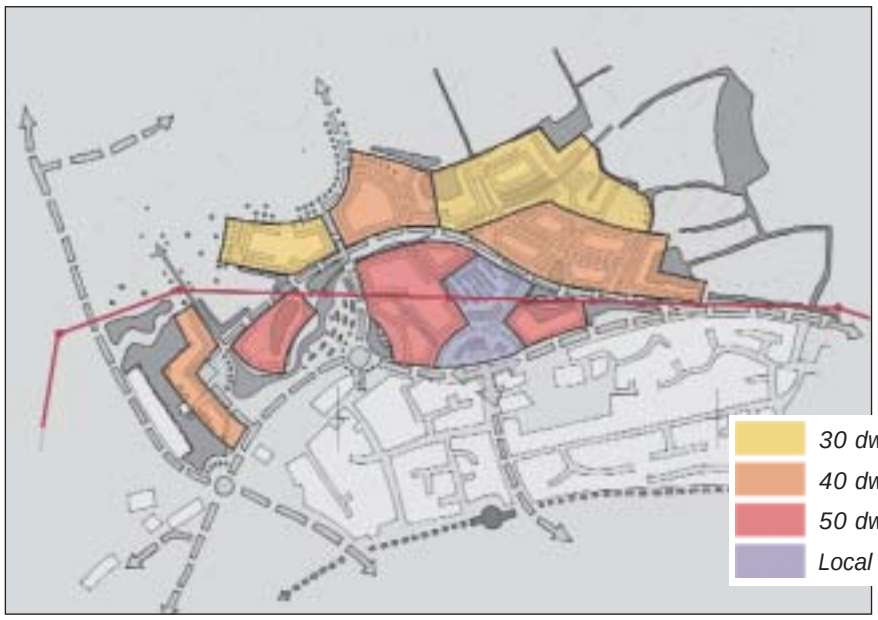
The demonstration site lies predominently within the valley floor.

The first step is to establish a network of primary public spaces designed to diminish the impact of the overhead power line. By looking closely at how the site can link with existing streets and local facilities, by considering topography and the presence of other constraints, and by understanding the nature of the overhead power line, the best areas for new homes and other complementary uses such as a local centre of shops and offices can be identified.



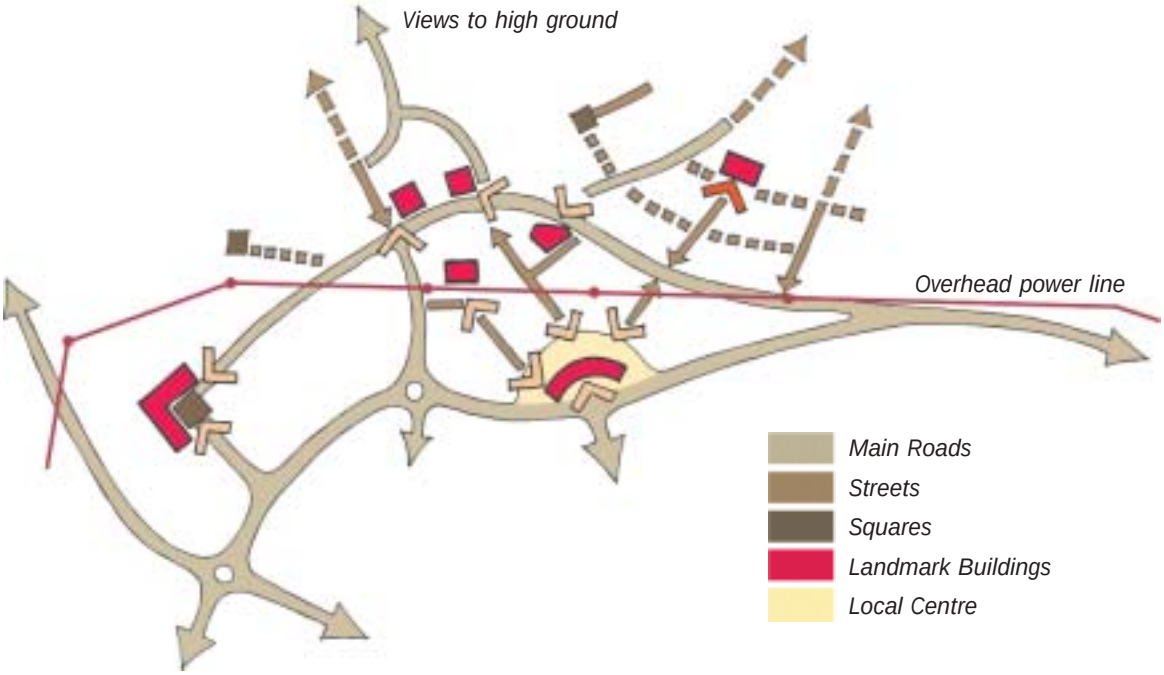
A network of primary public spaces.

The density of development has a key role to play in screening views of the overhead power line. By placing higher density blocks, with closer-knit development and taller buildings, closest to the overhead power line, views of the line are screened from most public areas. In the conceptual master plan, this is achieved with blocks of a density of 50 dwellings per hectare of land. The proposed local centre is also designed to be high density which is in keeping with its character and use, as well as helping to reduce the impact of the overhead power line. This plan also shows linkages into existing street networks and services including a railway station. Elsewhere on the site density is reduced to 30 dwellings per hectare towards the edges of the development.



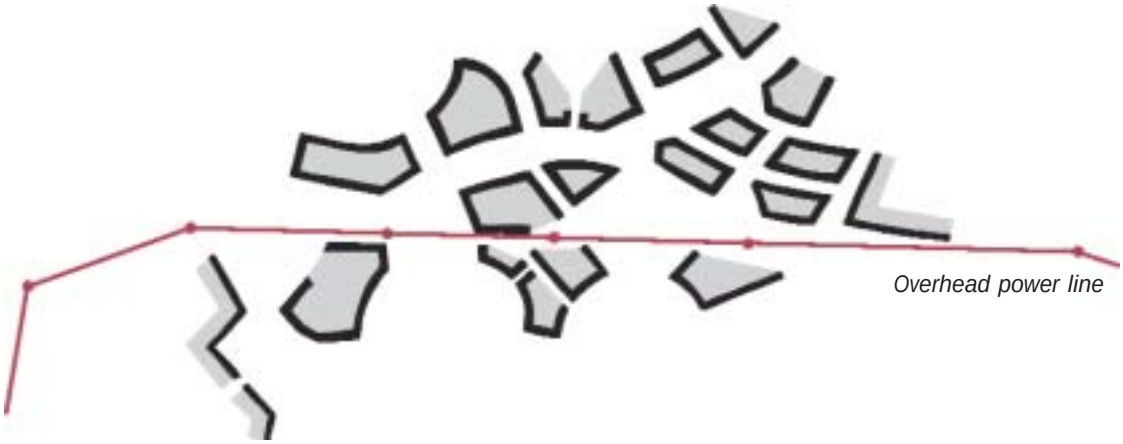
Land uses and densities.

The conceptual master plan creates a movement network linking primary public spaces into existing street and path networks. The alignment of streets and paths across the whole site ensures that there are no overt views of pylons, helping to reduce their impact and avoid the impression of a linear corridor. Landmark buildings are used to terminate main views and to provide focal points within the urban area, drawing attention away from the overhead power lines.



Alignment of streets.

Development blocks are orientated to minimise direct views of pylons. Some development may front onto the overhead power lines (although preferably not pylons) as part of a variety of design responses to the transmission route. Development blocks adjacent to overhead power lines can also be left open-ended, with the resultant space being used to create public gardens, squares or parking courts.



Alignment of blocks.

A key design objective is to break down the linearity of the transmission route into inter-related cells and places. Though constrained, the land beneath overhead power lines can be used positively to provide amenities for adjoining occupiers such as car parking, or to achieve other objectives such as providing flood attenuation. The conceptual master plan pays attention to how the land beneath overhead power lines will be experienced depending on whether the viewer is standing in the street or other open public space or is moving, for example driving a car.

Overall aerial perspective.

In breaking down linearity the conceptual master plan provides a range of design responses:

- ***Public Open Space***

Land adjacent to overhead power lines is used as part of the outfield for playing fields and other supervised recreation (see appendix 4). The land can also be used for informal open space (dog walking, cycling etc) or as nature conservation areas.

The conceptual master plan also shows land beneath overhead power lines fulfilling a valuable role in accommodating a sustainable urban drainage system. As well as serving a practical purpose, water adds to the sensory richness of an area and provides high levels of visual amenity.

- ***Urban Streets***

Creating tighter and higher urban form and reducing on-street parking to allow narrower streets helps to obscure overhead power lines from view. The conceptual master plan accommodates urban streets beneath overhead power lines, with careful attention being paid to the relationship between development and pylons.

- ***Car Parking Courtyards***

Car parking courtyards are used in the conceptual master plan around the base of pylons and work well in both residential and non-residential contexts. The need for access to pylons or for maintenance work on the overhead power lines needs to be taken into account.

- ***Local Centre***

A Local Centre featuring shops and offices and its ancillary uses such as service yards and car parking forms the focal point of the conceptual master plan. These uses can be appropriately accommodated close to overhead power lines and often need larger buildings which, in turn, are likely to be more in scale with pylons, helping to reduce the visual impact of the pylons. Land beneath the lines can also be used for storage and service areas providing appropriate safety clearances are maintained (see appendix 9).

- ***Structural Landscape and Screening***

Appropriate planting can take place up to and underneath overhead power lines, reducing their visual impact and enhancing the overall environment. Attention needs to be paid to the precise species employed, the long-term management and the need to maintain appropriate safety clearances, as set out in appendix 3 and appendix 9. Within the conceptual master plan, strategic planting is used to screen distant views, as well as views from the immediate area around the pylons.

Strategic screening can enhance the quality and intimacy of the area, giving the impression that pylons and lines are further away. Mature trees planted along streets can effectively screen views and enhance the residential environment. Layers of planting are employed in the conceptual master plan to create a series of silhouettes into the distance, creating a depth in the field of vision that helps to reduce the visual impact of overhead power lines. In this way views of pylons can be effectively screened without the need for continuous belts of planting.

- ***Transport Corridors and Movement***

The conceptual master plan uses land beneath overhead power lines for streets and paths as part of a range of different uses to ensure the linearity of the route is not reinforced. Overhead power lines have less visual impact when seen from a moving vehicle than when seen from the same viewpoint by a pedestrian. Streets and paths also allow more landscaping to take place in the vicinity of the overhead power lines.

The conceptual master plan demonstrates that it is possible to provide a high quality environment around high voltage overhead lines that reflects the planning and urban design aspirations of the Government's urban renaissance agenda.

Help for developers and landowners

National Grid does not own the land that is crossed by overhead power lines. The line is retained by means of either wayleave agreements or permanent easements with the landowner.

Where the overhead power line is held on a permanent easement the landowner has already accepted a payment for the retention of the line in perpetuity. This grants access rights for National Grid to maintain and repair the overhead power line.

Where the overhead power line is held on a wayleave, the landowner is being paid annually for the rights to keep the line in situ.

Where a loss is suffered due to the presence of an overhead power line, National Grid would negotiate a compensation payment in return for a permanent easement. The landowner/developer has a duty to mitigate loss, for example by applying these guidelines.

In many cases developers and landowners understand at the outset that it is unlikely that the high voltage overhead line crossing a site is going to be moved. National Grid provides information and guidance to developers to assist with the site layout and creation of a master plan that takes the presence of the existing high voltage overhead line into account.

National Grid provides free information and guidance to developers.

Application by local authorities

These guidelines clearly demonstrate the nature of the constraint posed by National Grid high voltage overhead lines, and the opportunities that exist to create attractive and high quality environments on sites crossed by overhead power lines. Local planning authorities, as part of their plan preparation function, can therefore be reassured that the presence of high voltage overhead lines does not rule out the creation of sustainable and successful places. In most cases the allocation of such land for development is a wholly practical and viable option.

The Sense of Place guidelines also have a valuable role to play in assisting local planning authorities in their development control function, in considering planning applications on land crossed by high voltage overhead lines. The guidelines can be employed to promote the highest standards of design on such sites and can be used as a benchmark for assessing the merits of a master plan and its design response to overhead power lines.

Through positive dialogue and consultation, National Grid prefers to work with local authorities to create policies in development plans that are appropriate to the local area and reflect best practice.

For example, it may be useful to local authorities where they are allocating sites crossed by high voltage overhead lines to consider adopting this design guidance as a whole, as supplementary planning guidance, or else to take certain elements of it and incorporate it into supplementary planning guidance.

In such cases it may be helpful to include the following wording in the development plan:

Proposals for development on land crossed by high voltage overhead lines should take account of the presence of the overhead power line at the outset in the layout or master planning process. Proposals for such land should employ appropriate methods to lessen the impact of the high voltage overhead line on future development, and in particular on the public realm.

These guidelines can be employed by local authorities to help promote the highest standards of urban design.

Community involvement

For many years National Grid has been committed to appropriate consultation on its own major infrastructure projects.

Community involvement is becoming more commonplace - pre-application consultation for major development schemes, stakeholder workshops and planning for real exercises are all providing a direct input for local communities into the design of development. National Grid sees the Sense of Place guidelines as a potential vehicle to assist others when consulting on the formulation of development proposals on land near to high voltage overhead lines.

For example, as well as providing clarity and advice on general issues surrounding the transmission of electricity, the guidelines give an insight into the potential for creative design solutions. This will provide a foundation of shared knowledge that can facilitate an informed debate on the issues raised, and allow a greater breadth of development options to be considered.

These guidelines may help local communities in the development consultation process.

Future steps

The Sense of Place guidelines show that innovative design solutions and fresh thinking can be employed to create attractive high quality environments around high voltage overhead lines. This forward-looking approach is National Grid's contribution to the progressive urban design agenda that is seeking to transform the image of our towns and cities.

But it does not stop here. The next step is to apply the guidelines to a live situation. National Grid is in consultation with a number of interested organisations in this regard to investigate the potential application of the guidelines to suitable sites.

National Grid is keen to maintain the healthy and creative dialogue that has characterised the development of these guidelines, and is happy to answer any queries that may have been raised by them. Contact details can be found at appendix 15.

Contact National Grid for further information and potential demonstration sites.

www.nationalgrid.com/uk/senseofplace