

Bedford Milton Keynes Waterway – Bell Farm

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Project Background

The Bedford Milton Keynes waterway is a proposed new canal linking the Grand Union Canal in Milton Keynes with the River Ouse in Bedford.

A 2km section of the proposed route of the canal runs in and around the area of Bell Farm, west of Kempston between Homeless Wood in the south and Ridge Road in the north.

Bedford Borough Council owns the Bell Farm employment site for which an indicative masterplan has been drawn up for a mixed use development.



The Forest of Marston Vale

There is a considerable change of level across the site and locks will be required for the canal to negotiate this. Bridges will also be required in a number of locations, depending on the option, to take roads and footpaths across the canal.

Four options for the route of the waterway through this area have been proposed. The purpose of this study is to assess the landscape and visual impacts of each of the options.

Baseline

The study area is located within the North Marston Vale Landscape Character Area. Historically this has been a mix of farm land, settlements, mineral extraction, brick works and landfill. More recently new roads

have been built and housing developments are being constructed, which are currently visually intrusive and where mitigation planting will take time to mature. All of this has an effect on the tranquility of the area with road noise being constantly present to various degrees depending on location.

The area can be split into two Bedford's Green Gateway part of The Forest of Marston Vale and Bell Farm employment site.

The Forest of Marston Vale is a 61 square mile environmental regeneration project between Milton Keynes and Bedford. The intention of the project is to create a patchwork of woodland and green space, mixed with farmland to use *'trees and woodlands to create a living, vibrant and dynamic area in which people want to live, work and enjoy their leisure time'*.

Bedford's Green Gateway is the collective name for a linear 2.5km long swathe of new community woodlands between Wootton and Kempston. These woods create a green wedge between these expanding communities and 'green' the southern approach to Bedford. Much of the area currently has an open character as trees have only recently been planted with older hedgerows dividing the area. In time this will become woodland with open rides and clearings with glimpsed views out to the surrounding landscape.

Topographically the land rises up from the recently dualised A421 in the south east, to a ridge focused on Bell Farm and Ridgeway Wood which is over 10m higher. A mature oak tree is a dominant feature at the top of the ridge.



View from the ridge, across the Forest of Marston Vale tree planting to the landscape beyond

The land then drops down slightly to a small stream before rising again to Ridge Road. Currently there are views across the landscape from the ridge although in future much of this will be screened by the development of Bell Farm and the Forest of Marston Vale tree planting when it matures.

A number of public footpaths run across the area but there are also a number informal paths and a paved route making most of the area accessible.

The Bell Farm employment site is currently an open area mostly of tall ruderal vegetation with horse paddocks close to the farm buildings. Adjacent to the A421 is a large pond and flood storage area which it is proposed to reshape as part of the Bell Farm development proposals.

Users of the Forest of Marston Vale are likely to be present for casual recreational purposes, walking, cycling, horse riding and they are likely to appreciate their surroundings living in the local area.

Future users of the Bell Farm are likely to be workers in the employment site and visitors to leisure facilities depending on the final land uses of the area.

Those using the waterway and towpath will be boaters, walkers, cyclists and horse riders, who will be partly present to appreciate their surroundings.

Landscape and Visual Impacts of the Alternative Options

Option 1

Option 1 starts at the north-west tip of Van Dieman's Land Wood, and runs north-west through grass fields and into recently planted areas of the Forest of Marston Vale. Two locks will be required for the canal to ascend the hill up to Ridgeway Wood. Here the canal will turn north east and run along the northern side of the ridge, through Ridgeway Wood until it meets the existing access road to Bell farm and will follow that to Ridge Road.



Option 1 route through recent tree and shrub planting

The construction of the waterway would require the removal of a number of sections of existing mature hedgerow and areas of recently planted native trees and shrubs. Over time, as the Forest develops the impact of this loss would be negligible.

All of the area that Option 1 passes through is currently accessible to the public, either on public rights of way or by informal paths running through the Forest planting. Consideration will need to be given as to how the public rights of way will cross the canal and what the impact will be on circulation within the Forest. The locks provide potential crossing points.

There will be opportunities for new wetland habitat creation along the waterway, with the possibility of new ponds providing a water source.

For the duration of construction there would be considerable disruption for the users of the Forest, and public rights of way, caused by restrictions to access, the adverse visual impact of machinery and construction works and noise.

Over time the visual impacts will be negligible except for those using paths immediately in the vicinity of the waterway as the surrounding trees will block any more distant views. The waterway and especially the locks would provide an attractive destination and give the forest a central focus for users of the Forest.

This option would also create a vista from the ridge through the tree planting to the surrounding landscape.

This option is located some distance from the Bell Farm employment site. It would therefore have little immediate benefit on workers and visitors.

The Forest would create an attractive setting for users of the canal and provide them easy access to its recreation facilities (picnic tables, benches, footpath networks and play trail).

Moving the alignment towards the housing in Wooton would potentially create a barrier for residents to the Forest and also remove the waterway even further from the Bell Farm employment site.

Option 2a

Option 2a would run north-east along the line of the existing path north of Van Dieman's Land Wood and the pond, before turning north-west along the edge of the Bell Farm employment site, alongside a mature boundary hedge containing a number of trees. It would then pass through two locks to Ridgeway Wood and turn north-east, before following the route of the farm access road to Ridge Road.

Newly planted trees would have to be removed, gaps created in existing hedges and some hedge along the farm access road would probably have to be removed. There is potential that the excavation works would have an adverse impact on the existing mature hedge and trees along the boundary to the Forest. This should be retained and protected from damage.



Option 2a route with the boundary hedge between the Forest and Bell Farm on the right

There will be opportunities for new wetland habitat creation along the waterway, with the possibility of new ponds providing a water source.

During construction the impacts will be less severe than for Option 1 because most of the route is towards the edge of the Forest and screened by the existing hedge. The visual impact and effect on circulation will therefore be much less severe.

For users of the Forest during the operation of the waterway there would be limited impact on the existing circulation pattern, while providing the benefits a new visual feature and destination. A vista out to the

surrounding landscape would be created from the locks up to the ridge. The locks will also provide a crossing point to the Bell Farm employment site, although at least one more would be required to the south.

For workers and visitors to Bell Farm this option provides visual interest and an easily accessible recreational facility and on the edge of the development.

Users of the waterway would benefit from the attractive visual surroundings, especially if the mature hedge and trees that would screen the new buildings at Bell Farm were retained.

Option 2b

This option follows a similar line to Option 2a although it is located just within the Bell Farm employment site. It runs along the south western edge of the development then runs along the top of the ridge to the existing Bell Farm buildings and would require the construction of four locks

A gap would be created in an existing boundary hedge and it is likely that part of the hedges along the farm access road would have to be removed. Some trees near to the Bell Farm buildings may have to be felled. Any removal of newly planted trees would be limited in extent. There is potential that the construction works would have an adverse impact on the existing mature hedge and trees along part of the boundary to the Forest. This should be retained and protected from damage.



The hedge lined access road to Bell Farm

As it would be located within the employment area, Option 2b would have an impact on the layout of the development. This would be limited to along the western edge but the section of the waterway running along the ridge would mean that road bridges and bridges to buildings would be required. The bridges would necessitate raising roads or dropping the waterway thereby taking up additional space.

There would be opportunities for wetland habitat creation although this is likely to be more limited than for Options 1 and 2a as this could have an impact on the land take within the new development.

During construction the impacts on users of the Forest would be negligible because most of the route lies within the development site. This would be further reduced if the existing hedge was retained and act as a visual screen to the works. The public footpaths linking the Forest with Kempston would be diverted during construction.

When operational the waterway would create an attractive feature between the two land uses.

For users of the Forest during the operation of the waterway there would be limited impact on the existing circulation pattern, while providing the benefits a new feature and destination just outside of the Forest boundary. The locks would provide a crossing point to the Bell Farm employment site.

For workers and visitors to Bell Farm this option provides visual interest and an easily accessible recreational facility on the edge of the development similar to those for Option 2a.

Users of the waterway would have similar benefits to those of Option 2a although part of the route lies entirely within the employment site and therefore have views of new buildings rather than the natural environment of the Forest.

Option 3

Option 3 follows the same route as 2b to the Bell Farm employment site where it runs north-west through the site to the farm access road and on to Ridge Road. It is likely that part of the hedges along the farm access road and some trees close to the Bell Farm Buildings would have to be removed.

This alignment would have a significant impact on the layout of the Bell Farm employment site, effectively splitting it in two. A number of road bridges would be required over the waterway, with additional bridges required to allow access to buildings. The bridges would necessitate raising roads or dropping the waterway thereby taking up additional space.



The Bell farm employment site, looking up the hill towards the farm buildings

There is potential for the waterway to form part of a central linear park through the development.

During construction there would be limited impact to users of the Forest. However public footpaths linking the Forest with Kempston would have to be diverted.

There would be less benefit for users of the Forest than for the other options, with only the southern part of the route providing a visual feature within the Forest.

Workers and visitors to Bell Farm will benefit from a recreational feature, and possibly a linear park through the development giving the area a focus, although this would take up an area of land.

Users of the canal would be likely to be present to enjoy their surroundings and would be more likely to enjoy a route through the Forest of Marston Vale than a new development.

Recommendation

Taking the landscape and visual impacts into consideration Option 2a is the preferred option. This route provides a new feature with the Forest of Marston Vale; causes little impact on the existing circulation pattern; provides access for workers and visitors of the Bell Farm employment site; has no impact on the layout of the development; benefits users of the waterway by providing an attractive setting (especially if the existing hedge is retained), while providing access to facilities.