
Marina

- 1.7. The marina basin is, in effect, an expanse of water created by containing the space within the relocated flood embankment and creating an opening to the river through the existing embankment. Its built environment is shown within the submission, and the scale of moorings to be developed is submitted as 220 berths. This scale is consistent with the aspirations set out by The Lincolnshire Waterways Partnership (LWP) in its development strategy for such a facility to be located close to the eastern limits of the City of Lincoln. The proposed development is ideally located to meet The LWP's objectives.
- 1.8. The marina buildings will provide a focal point for the marina and will be a hub of activity, providing facilities for boaters and the general public wishing to access the river.
- 1.9. The Marina building will provide the following accommodation:
- Marina repair and servicing;
 - Staff offices and WC;
 - Chandlery;
 - Customer toilets and shower facilities;
 - Laundry facilities;
 - Store/cycle hire opportunity;
 - Café/bar.
- 1.10. The retail and cafe space is open and flexible, thus allowing it to cater for the most demanded services, and will be provided on the ground and first floors. This allows customers to enjoy elevated views of the marina and Witham valley from the glazed elevation.
- 1.11. Access to the marina building will be provided from both the marina side and the car park to the north. It is designed with multiple aspects to provide clear legibility for its customers, who may or may not be boaters, as well as active elevations.
- 1.12. A dry dock area and workshop building is also proposed to the west of the marina which will provide a facility for boat repair and maintenance.

Housing

- 1.13. The proposed housing is limited to the number needed to deliver the marina, the bridge, and the community infrastructure as a viable investment. On that basis, work has been undertaken to assess the scale of development needed to support the project. Initially, this required knowledge of how many houses would be needed to generate the value necessary to deliver the Marina. Following consultation with the local community, it was very clear that aspirations included the early and positive delivery of a new foot/cycle bridge, rather than safeguarding land to deliver a bridge at some future stage. The project has therefore been expanded to positively deliver the bridge, which has meant an increase in housing numbers to 155 dwellings.

- 1.14. The 155 houses includes 2, 3 and 4-bedroom dwellings, and would be sited between the proposed marina basin and Fiskerton Road.

Business Units

- 1.15. The application also includes the development of B1 business units which are intended to offer small businesses the opportunity to establish here and create/accommodate local employment. The inclusion of this element is a direct response to the community consultation process where it was made clear that, despite being a large settlement, it had no business park or location which accommodated local office employment.
- 1.16. The B1 business units again, seek outline planning permission, with means of access being the only matter not to be reserved for later consideration. They have a total gross floor area of 663sqm.

Open Space

- 1.17. The large area between the proposed marina, the river Witham, and the eastern field boundary will be left as an area of open space. Footpaths will be provided within this area – as detailed in the landscape strategy plan – to provide access to the public. The intention here, and for the site generally, is that this development delivers an open and inclusive facility for everyone. The open spaces will include well situated seating at key focal points which exploit attractive views of the Witham valley and the Cathedral crowned historic hillside, with heritage interpretation explaining the archaeological finds on the site.

New footbridge connection to the Sustrans Water Rail Way

- 1.18. The scheme also proposed a major addition in the form of a new footpath/cycle bridge connecting the development to the Sustrans Route number 1 along the Water Rail Way. This strategic connection is currently beyond easy and convenient reach of the residents of Cherry Willingham, as the closest access point is via the existing bridge east of Fiskerton some 3km eastwards from the site – in the opposing direction to the main demand, which is to connect to Lincoln. This proposal will offer a direct connection by a simple unobtrusive structure that will provide an off-road commuter route into the city centre, as well as a recreational route connecting Cherry Willingham to the Sustrans network. It will also provide a helpful link to Washingborough, connecting settlements north and south of the river with a sustainable transport option.
- 1.19. The structure itself is designed meet the stringent adoption requirements of the Lincolnshire County Council Bridges and Structures Team, and it will become the property of either the County Council or Sustrans. Access will be provided without steps to provide seamless connectivity to the Marina, the Viking Way along the north bank, and the Water Rail Way along the south bank. It will be 2.5m in width to meet the shared surface requirements of the aforementioned authorities.

Site Access

- 1.20. The access to the proposed development is intended to be a simple junction with Fiskerton Road East. An assessment of the likely operation of the access has been conducted with the results detailed in the submitted Transport Assessment. This assessment shows that the junction providing access to the development would operate within capacity, with negligible queuing, and takes account of recent and ongoing investment and traffic management measures associated with the delivery of the Eastern Bypass.
- 1.21. To ensure effective integration with the village, a new Toucan crossing is proposed to provide safe and convenient access for pedestrians and cyclists.
- 1.22. Within the site, access is provided directly onto the Viking Way, linking to an attractive network of footpaths which are proposed within the development site. This provides an opportunity for residents, as well as users of the site, to access central Lincoln through an attractive and peaceful footpath which runs along the river corridor. The new connection to the Viking Way will form part of a well landscaped focal point close to the water's edge with seating and amenity facilities provided.
- 1.23. The delivery of a bridge over the River Witham to connect to the Water Rail Way will offer a serious non-car mode of transport alternative for local commuters as well as for leisure use.

Construction Programme (Broad Phasing and Timescales)

- 1.24. Table 1 (below) sets out the phasing of works, in brief.

Table 1: Construction Works Phasing

Phase	Task	Start	Finish
Phase 1	Site Preparation	March 2018	June 2018
Phase 1	Ground Works And Marina Basin	March 2018	Oct 2018
Phase 1	Roads And Sewers	June 2018	Dec 2018
Phase 1	Services	Aug 2018	Dec 2018
Phase 2	Bridges	Jan 2019	Mar 2019
Phase 2	Housing Phase 1	Sept 2018	July 2019
Phase 2	Marina Chandlery And Workshop	Dec 2018	Nov 2019
Phase 2	Strategic Landscaping	Jan 2018	Mar 2018
Phase 3	Business Units	April 2019	Feb 2020
Phase 3	Housing Phase 2	Sept 2019	Aug 2020

Need and Alternatives

Strategic Context

- 1.25. Lincolnshire's waterways are underutilised and underdeveloped as assets which promote recreation and leisure for its residents as well as its visitors. This point is long recognised, and a shared strategy and joint action plan has been secured to address the factors that contribute to the poor performance of our waterways. The Lincolnshire Waterways Strategy, established by partner organisations including the Environment Agency, the Canal and River Trust (formerly British Waterways), and the County Council, has invested in excess of £20m in

waterway infrastructure improvement projects. These have led to the emergence of waterway businesses creating the potential for a growing waterways industry.

- 1.26. At a national level, Britain's inland waterways are thriving. The number of privately owned craft on the inland waterways has been increasing steadily since the 1950s, and has accelerated in recent years with a 2.4% annual increase recorded year on year from 2000 up to the recession. Whilst up to date figures aren't known, the anecdotal view is that growth has continued as a result of *staycation* trend.
- 1.27. Leisure spending in general had increased, supported by an increase in personal disposable income, which fed through to discretionary expenditures. Boating has continued to take its 'fair share' of that increased spending, and whilst increases have been more modest in recent years, there has been no fall back. Additionally, the growing importance of the 'grey pound' has delivered benefits to the boating sector disproportionately, with some 80% of boaters being over 50 years old. Also, waterways are offering steadily increasing amenity value as investment is made in the improvement of the environment of the canal network and in opening up new strategic links within the network.

The Do Nothing Option

- 1.28. There is an acknowledgement that the waterway network requires further investment and development in order to offer the level and quality of facilities that are demanded for it to function as an attractive leisure route/destination. The option of doing nothing would simply ensure that the current situation prevails, in that the lack of facilities along the route, and in particular east of the city of Lincoln, severely limits the attraction of the River Witham as a leisure route. These issues are understood and generally acknowledged by all parties. The geography of the City dictates that a marina must sit adjacent to, or, alongside the river and, therefore, the opportunities are restricted to the land adjacent to the river, either north or south of its route. Proximity to the City is a key consideration, and so, sites within the Parishes of Cherry Willingham, Fiskerton, and Washingborough offer the most likely localities to accommodate a marina of this sort.

Alternative Locations

- 1.29. Alternatives sites which could potentially, if available, deliver this facility have been discussed within the Environmental Statement. The applicant has considered three alternative sites within the 10km to the east of Lincoln along the course of the River Witham.

Table 2: Alternative Locations

Alternative Location	Assessment
Land north of Fen Road, Washingborough	Land north of Fen Road, Washingborough has been discounted as a realistic alternative due to the potential to significantly impact on a designated heritage asset of national significance – a well preserved section of the Carr Dyke, Roman Canal.
Land south of Lincoln Road / Ferry Road, Fiskerton	The environmental impacts associated with developing land south of Lincoln Road / Ferry Road, Fiskerton are likely to be similar to the proposed site at Cherry Willingham. However, the site is located further from Lincoln than the proposed site, and the

	highways impacts on the narrow streets within the centre of the village would need to be considered carefully. Development here is likely to have increased impact on the character and setting of the Grade I Listed Church of St Clement.
Spa Road, Lincoln	This site is known to be significantly contaminated due to a legacy of industrial former uses. Significant remediation work would be required in order to ensure there is no risk of contamination on site, or through the leaching of polluted waters. The economic viability of the development is also an issue, and it is noted that a substantial housing proposal on this site now benefits from planning permission.

1.30. Each of the alternative sites have significant environmental constraints and it is considered, based on the information available at the time of writing, that none of the reasonable alternatives represent options which could be considered a better practicable environmental option.

Preparation of the Environmental Statement

1.31. A team of specialist consultants have been advising the applicant throughout the advancement of the proposed development. This team of consultants have been commissioned to assess the likely effects of the development in the following subject areas.

Table 3: Environmental Statement Project Team

Environmental Statement Chapter	Technical Consultant
Introduction	Globe Consultants Limited
Planning Policy	Globe Consultants Limited
Need for Development and Alternatives	Globe Consultants Limited
Application Site and Proposed Development	Globe Consultants Limited
Socio-Economic Assessment	Globe Consultants Limited
Landscape Visual Impact Assessment	Influence Environmental Limited
Archaeology and Cultural Heritage	Pre-Construct Archaeology Limited /Globe Consultants Limited
Nature Conservation, Ecology and Biodiversity	Tim Smith - Freelance Ecology Consultant
Transport, Accessibility and Movement	Turvey Consultancy Limited
Flood Risk and Surface Water Drainage	Roy Lobley Consulting
Land Quality and Ground Conditions	Delta Simons Environmental Consultants Limited
Interactions and Cumulative Impacts	Globe Consultants Limited

Environmental Statement Availability

- 1.32. This Environmental Statement is available for inspection by the public during normal office hours (9am - 5pm Monday and Tuesday, 10am - 5pm Wednesday, 9am - 5pm Thursday and Friday) at West Lindsey District Council's offices at the following address:

West Lindsey District Council
Guildhall
Marshall's Yard
Gainsborough
Lincolnshire
DN21 2NA
Email: customer.services@west-lindsey.gov.uk
Telephone: 01427 676676

Impact Assessment

- 1.33. In order to ensure that all aspects of the environment were properly covered, the Environmental Impact Assessment was carried out by a team of specialists in several environmental disciplines. A non-technical summary of each specialist chapter is provided below. The reader is respectfully urged to consider the full Environmental Statement when considering the technical merits of the proposed development.

Socio-Economic

- 1.34. The proposed development will result in a net gain of direct and indirect employment. This development is expected to result in the creation of 53 additional job opportunities.
- 1.35. The new marina is expected to attract over £1 million per year in both indirect and direct revenue, with an additional £753,520 of indirect spending which is expected to further boost the wider economy. Visitors using the boating moorings and future residents of the new homes will also help to create additional job opportunities through consumer spending.
- 1.36. The development will increase Lincolnshire's tourist offer, with increased visiting numbers likely to have a positive impact on the County's economy.
- 1.37. The development provides social provisions through the inclusion of green infrastructure. The access the scheme provides, by means of a bridge to the 'Water Rail Way' assists in the promotion of the health and social benefits of increased activity and high quality living environments. The pedestrian and cycle access to Lincoln promoted by this new bridge, has the potential to contribute to increased car-free travel. There are also probable, but unmeasured, economic benefits derived from people having a more active lifestyle.

Archaeology and Cultural Heritage

- 1.38. The proposed development site lies across the historic fen-edge, and includes the natural earthwork of a former bank of the River Witham. The bank is associated with a number of features identified as cropmarks from aerial photographs, including three Bronze Age round barrows. A programme of archaeological investigation carried out in 2009 encountered

significant archaeological remains in the vicinity of the barrows, discovering a number of worked timber posts preserved in waterlogged peat layers. These were dated by sherds of late Bronze Age to early Iron Age pottery and part of a late Bronze Age sword. Other cropmark features were also encountered, but seemed likely to be post-medieval to modern in date.

- 1.39. This assessment, and the previous archaeological works undertaken in support of the planning application, have shown the potential for, and location of, archaeological remains within the proposed development area. This has enabled a mitigation strategy to be put forward to preserve the significant archaeological remains recorded with the south-east corner of the site, and to identify and preserve by record, through archaeological monitoring during construction works, any archaeological remains which may be encountered within the remainder of the site.
- 1.40. Key, long ranging views of Lincoln Cathedral and historic Lincoln will be maintained from the majority of key viewpoints, with the Cathedral crowned hillside remaining a dominant feature in the landscape. The setting of the Cathedral and other listed buildings within the vicinity of the site will not be significantly harmed by the development.

Landscape and Visual Impact Assessment

- 1.41. The effects on the users of the Viking Way and the Sustrans Route near the proposals and for a short period of time, would be significant. However, the landscape is expansive and the long ranging views and key features such as Lincoln Cathedral and the River Witham, would remain visible and dominant. The development type introduces some new elements to the landscape such as the marina, but it is appropriate in this location and low-key by nature of its design. The development proposals are supported by an extensive and substantial landscape strategy which aims to mitigate any adverse impacts of the proposed development.

Nature Conservation, Ecology and Biodiversity

- 1.42. The development site is currently an area of arable dominated farmland, with some improved grassland horse paddocks and mown areas, buildings, and internal and peripheral field boundary ditches, large drains and hedges. None of the existing habitats are of significant nature conservation interest. The majority of the vegetation is composed of plants which are common and widespread species of farmland, grassland, scrub, and wetlands, and only four species are of local nature conservation interest. The site has no significant populations of protected species or other wildlife interest. It has a breeding bird community which is typical for the onsite habitats; this includes small numbers of UK and Lincolnshire BAP Priority Species.
- 1.43. The development of the marina and associated features would result in a small number of adverse impacts on habitats, locally notable plants, and on components of the breeding bird community. The significance of these impacts is mostly negligible, although moderate or minor in a few instances. With appropriate mitigation and enhancements for wildlife (which the site offers much scope for on account of its size and the proposed landscaping and habitat creation), the residual impacts would not be significant for habitats, vegetation, protected species, most breeding birds, or other wildlife. There would be a residual adverse impact of

minor significance for the element of the breeding bird community which relies on open arable farmland.

- 1.44. In conclusion, therefore, the development of the marina, housing and other features, would result in a small number of adverse impacts, but these would be of limited significance. However, with appropriate mitigation and habitat enhancements, the site would result in gains for wildlife on the site and in the local area.

Transport, Accessibility and Movement

- 1.45. Local traffic data shows that at the present time, Fiskerton Road adjacent to the proposed site entrance carries approximately 650 vehicles during the busiest hour. It is forecast that the development could add 181 vehicles to the surrounding road network during the peak travel hour.
- 1.46. The assessment shows that the Church Lane/Fiskerton Road gyratory continues to operate within capacity, but with an increase in total delay in the morning of 3.5 seconds, and 3.2 seconds in the evening peak period. At the Outer Circle Road mini-roundabouts, the total delay at the combined junctions increases by 7.4 seconds in the morning (11%) and 0.3 seconds in the evening.
- 1.47. Road accident and casualty statistics show no accidents at the proposed site access and two 'slight' personal injury accidents within 500m of the site, over the most recent five year period. Neither of the accidents were close to the site, with one in 2015 being close to Church Lane/Fiskerton Road, and the second accident being in 2016 at the junction of Ash Grove.
- 1.48. The site access proposals are for a priority junction, dimensioned as previously approved, at Fiskerton Road where visibility in excess of current standards can be achieved. It is anticipated that the proposed junction will have ample capacity to accommodate the proposed development without resulting in unnecessary driver delay.
- 1.49. A formal pedestrian toucan crossing is to be provided to the west of the site access, connected to the site by a 3m shared footway/cycleway, which provides access and connectivity to the amenities provided in Cherry Willingham.
- 1.50. Within the site, access is provided directly onto the Viking Way by providing a crossing point over the North Delph and on to the riverbank. This will link to an attractive network of footpaths that are proposed within the development site, and will provide an opportunity for residents, as well as users of the site, to access central Lincoln through an attractive and peaceful footpath which runs along the river corridor. The new connection to the Viking Way will form part of a well landscaped focal point close to the water's edge with seating and amenity facilities provided. A major addition will be the construction of a new footpath/cycle bridge connecting the development to the Sustrans Route number 1 along the Water Rail Way.

Flood Risk and Surface Water Drainage

- 1.51. The site is located on the left bank of the River Witham which flows in an easterly direction past the site. The River Witham is designated as a Main River by the Environment Agency.

Earth flood banks run along both banks of the River Witham; these are maintained by the Environment Agency and protect the site from flooding.

- 1.52. The North Delph flows adjacent to the River Witham, just to the north of the north flood bank. The North Delph is an Internal Drainage Board watercourse; a further watercourse flows through the centre of the site into the North Delph.
- 1.53. Based on the Environment Agency's Flood Map, part of the site lies within an area which has been identified as being potentially liable to flooding.
- 1.54. The Drainage Strategy includes calculations of greenfield runoff rates and indicative sizes of the pond have been provided to ensure that there is adequate attenuation and storage on site (up to the 1 in 100 years + climate change rainfall event) so that the flow leaving the site is increased because of the development. The surface water sewers will be designed to Sewers for Adoption (7th Edition) and Building Regulations Part H standards. As surface water systems will be appropriately designed, sized, and sited, the risk from flooding of proposed surface water management systems is low. The Drainage Strategy sets out the proposed discharge location for the foul water from the proposed development which is into the existing foul sewers.
- 1.55. Following mitigation, the risk of flooding to the site is low.

Ground Conditions

- 1.56. The site is likely to be underlain by made ground or topsoil overlying alluvial soils in the south and mudstone in the north. A band of limestone bedrock is located through the centre of the site. The alluvium and mudstone are classified as Secondary Aquifers. The Limestone in the centre of the site is classified as a Principal Aquifer. A number of abstractions are located within 250m of the site for agricultural purposes.
- 1.57. The North Delph dyke flows adjacent to the southern boundary of the site, and the River Witham flows parallel to the dyke, approximately 50 m to the south of the southern site boundary. There are several drainage ditches that run through the site that feed North Delph Dyke and therefore the River Witham.
- 1.58. No potentially contaminative historical land use has been identified within 250m in the vicinity of the site from the available historical maps. There is limited potential for ground contamination to be currently present at the site from its current site use, which is mostly arable farmland and agricultural vehicle storage. An above ground fuel storage tank was observed in the south of the site adjacent to a farm building. Key potential contaminants are considered to be fertilisers and diesel oils, although no evidence of fertilisers were present during the site walk over, they may have been stored sometime in the past.
- 1.59. In order to mitigate the risks associated with potential contamination located on the site, the following is required;
 - Pre-demolition Asbestos Survey prior to the demolition of the buildings. If present, all asbestos is to be removed prior to demolition by a suitably qualified contractor, and strict health and safety precautions will be drawn up and adhered to during the asbestos removal.

- Appropriate measures are required to be taken to protect the adjacent watercourses from surface water run off during the construction phase.
- Consideration will be given to any engineering earthworks which may be required. Only suitable materials will be re-used on-site so as to not pose a risk to future users. Any material not suitable to be re-used on-site, will be disposed of appropriately. In order to avoid waste, a Waste Management Plan will be drawn up prior to the redevelopment.
- A hotspot protocol will be drawn up prior to construction/ground works to ensure that any contamination identified during the earthworks that is not previously identified during investigatory works, is assessed by a specialist in contaminated land.
- A suitable layer of topsoil and subsoil will be provided in areas of landscaping or garden areas.
- Gas/Radon protective measures are required to be installed in any proposed buildings.

1.60. Upon completion of the above mitigation measures, the risk to the end user, controlled waters, and the environment is considered to be low.

Cumulative Impacts

- 1.61. This chapter focuses on the individual environmental impacts assessed under each of the specialist chapters within this Environment Statement, and considers whether the combination of these impacts may act cumulatively to have a more significant overall effect.
- 1.62. To determine other developments within the area, a check of planning applications submitted to West Lindsey District Council and Lincolnshire County Council within the last 5 years was undertaken in October 2017. A further assessment was undertaken in relation to the Central Lincolnshire Local Plan (CLLP), in particular, Policy LP52: Residential Allocations - Large Villages which sets out the residential allocations during the CLLP plan period.
- 1.63. The CLLP allocates 432 homes to be built in Cherry Willingham over the plan period. The cumulative impacts associated with these future housing developments were assessed along with the Lincoln Eastern Bypass which is currently under construction.
- 1.64. Overall, the cumulative impact on the surrounding area is not considered to be significant due to the appropriate mitigation and enhancement measures forming a fundamental component of each of the planned developments referenced in this chapter. It is considered that the mitigation measures proposed for each individual effect within the Environmental Statement are sufficient to successfully mitigate against any further intra-project effects or cumulative impacts on receptors.