Summary of Technical Work To Date:

Strategic Site 2: Land to the East of Ashton Green

November 2024

This note provides a summary of the technical work that has been carried out to date in relation to Strategic Site 2: Land to the East of Ashton Green allocated under Policy SL03 of the Leicester Local Plan 2020-2036 (Submission Version 2023).

- Air Quality & Odour Technical Note (BWB, June 2020)
- Air Quality Assessment Ashton Green East (BWB, March 2021)
- Arboricultural Survey, Ashton Green East (BWB, August 2020)
- Archaeology & Heritage Summary Statement (BWB, September 2020)
- BNG Metrics Report (Arcadis, October 2021)
- Ecology Stage 1 Report (Arcadis, February 2018)
- Existing Utility Services Layout (BWB, June 2020)
- Flood Risk Assessment (BWB, August 2020)
- Foul Drainage Technical Note (BWB, November 2021)
- Geo Environmental Assessment (BWB, June 2020)
- Landscape Character Visual Assessment (Land Studio, April 2021), including:
 - o LCVA App A Methodology (April 2021)
 - LCVA App C Planning Policy (April 2021)
 - LCVA Figures (April 2022)
 - o LCVA Viewpoints (April 2021)
- Noise Technical Note (BWB, June 2020)
- Sustainable Drainage Statement (BWB, August 2020)
- Utility Services Due Diligence Assessment (BWB, December 2020)

In addition, a Summary Risk Register has also been produced by BWB which summarises the mitigations suggested by the land promoter in any reports prepared by BWB.

Summary of the conclusions of each of the above reports is outlined below. The above reports informed the preparation of the Indicative Land Use Masterplan (November 2022) and Land promotion document (January 2023).

Access Appraisal Note (October 2020)

Summary

BWB was appointed by Leicester city council to produce an appraisal outlining the access options into Ashton Green East and conclude on an access strategy. This included:

- Establishing the state of existing road access to the site
- Appraisal of existing cycle and pedestrian infrastructure around the site
- Investigation into current public transport access around the site.
- Assessment of access to local amenities from the site
- Investigation of Personal Injury Collision Data around the site.

Findings

- The appraisal finds that the site benefits from good connections to existing road routes both into Leicester via Ashton Green Road and to surrounding settlements via the A6 and A46. Some road improvements were ongoing on Thurcaston Road to improve access to the Ashton Green Development.
- Existing pedestrian and cycle access is found to be good although the quality varies around the site. Some shared foot and cycle routes exist on the adjacent roads with others only having narrow pedestrian provision. Several improvements to pedestrian and cycle routes are to be made as part of the development.
- There are no bus services currently serving the development. Nearby Birstall and Thurcaston are connected to the city centre by infrequent bus services which have the potential to serve the new development. Regular services run throughout the day between the suburbs southwest of Ashton Green and Leicester City Centre.
- The settlements close to the site have a concentration of amenities, particularly Birstall and Anstey. These are all within the 5km maximum cycling distance with most of the walkable amenities being in Birstall.
- Several isolated PICs were recorded around the site but only one was serious causing for little concern.

Proposed Arrangements

Proposed road access to the development is via a new arm off Ashton Green Roundabout and new access off Greengate Lane. Both access points will provide new walking and cycling infrastructure alongside the road. Access to the employment land is proposed to be primarily from Thurcaston Road with secondary access off Greengate Lane. Also proposed is the extension of existing bus services 25 and 22b into the residential development at a higher than existing frequency as well as the extension of service 26 to serve the employment site.

Modelling undertaken on the proposed road layout confirms that this would be able to accommodate the predicted capacity arising from the new development.

As a result of this note no issues have been identified to allocate the site in the Local Plan from a highways access perspective although mitigations will be included in the policy to:

- Provide a safe and suitable access into the site for all modes of transport.
- Provide extensions to bus services to cover the development site.

Air Quality & Odour Technical Note (June 2020)

Summary

BWB Consulting Limited was appointed by Leicester City Council to carry out an appraisal of the air quality and odour on the Ashton Green East Site. This aimed to highlight potential constraints to the development and further assessment work required to support future planning applications.

The report was based on the following sources:

- A review of Air Quality Constraints Assessment prepared by Arcadis in 2017
- A review of OS mapping and online aerial imagery
- A review of local air quality monitoring data
- A review of the local authority planning portal
- A site walkover undertaken on 16/06/2020 to experience the odour environment present at the site during the walkover
- Preliminary dispersion modelling utilising available monitoring and traffic data

Findings

- The previous constraints assessment couldn't discount air quality as a constraint. It recommended a detailed air quality assessment would be required to determine the suitability of the site for sensitive uses and impact on local air quality from development.
- Road traffic particularly from the A46 is the primary influence on pollutant concentrations within the site.

- Local air quality monitoring doesn't capture the air quality on the site as it's further outside the Leicester AQMA however the monitored concentrations within 1km of the site were all below the mean objective for the previous 5 years of data.
- Road Traffic Emissions Assessment was undertaken in line with DEFRA guidance. The annual mean concentrations of pollutants N02 PM10 and PM2.5 are predicted to be below the relevant annual objectives.
- Bradgate Bakery and Biffa Bursom Waste Management are considered the predominant sources of odour on the site. The former's baking processes produce odour while the latter's odour comes from refuse processing. The Walker & Sons bakery and Walker Snacks Manufacturing slightly further from the site are also considered to be potential odour sources.
- During the site walkover, although all odour sources were operational, no related odours were detected on the site

Limitations and Recommendations

- Dispersion modelling used freely available data and didn't consider future scenarios. Traffic levels are expected to change from those used in the assessment and therefore a future application should be supported by modelling of future scenarios
- Odour conditions may vary dependent on weather and wind direction and therefore this assessment only provides a snapshot view.
- A future road traffic impact assessment is recommended to determine traffic impacts on local air quality as well as additional modelling to predict pollutant concentrations. A qualitative construction phase dust assessment is recommended to identify dust mitigation measures

The Council has reviewed the Air Quality and Odour Technical Note and accepts its findings. Mitigations will be included in the policy to:

• Require a detailed road traffic impact assessment with the submission of planning application.

Air Quality Assessment (March 2021)

Summary

BWB were appointed by the City Council to undertake an air quality feasibility assessment on several strategic sites within the city. The assessment measured air dispersion modelling different development scenarios to identify the changes in concentrations of key pollutants. These changes were measured against the relevant air quality objectives for the sites according to DEFRA guidance.

Results

The development sites were not predicted to result in any new exceedances of the relevant air quality objectives with negligeable impacts to overall air quality predicted from the development of the sites. Each site's use was also deemed suitable given levels of background pollutants detected on site.

Detailed road traffic impact assessments are deemed necessary to support future applications on any of the sites given their size. These should establish impacts on local air quality from increases in traffic arising from the developments. A qualitative construction phase dust assessment should also be carried out.

The Council has reviewed the Air Quality and Odour Technical Note and accepts its findings. Mitigations will be included in the policy to:

• Require a detailed road traffic impact assessment with the submission of planning application.

Arboriculture Survey (August 2020)

Summary

BWB were appointed by Leicester City Council to undertake a survey of all the trees over >75mm diameter on the site. This was with the objectives of informing the site's design and mitigation recommendations as well as helping to produce tree protection and removal plans in response to development plans coming forward.

The purpose of the tree categorisation method used is to define the immaterial quality and value to the existing tree stock, informing retention and removal of trees during development.

Information collected includes:

- Species
- Height
- stem diameter
- branch spread
- height of crown clearance
- Age class

- Physiological condition
- Structural condition
- Estimated remaining contribution
- Category grade

Results and Recommendations

- 47 individual trees were identified as part of the survey forming 17 tree groups, 3 woodlands and 12 hedgerows. Two woodlands and 12 individual trees were identified as category A. The survey recommends that plans should give good clearance to these large mature trees and woodland compartments the majority of which sit in a central woodland are and the field boundaries.
- 11 individual trees, 7 tree groups and 1 woodland group were identified as category
 B. These are all deemed to be healthy and valuable either to the landscape or it's associated habitats while potentially being less mature or of lower quality than the category A trees. Where these are to be retained, it's recommended their health and condition is monitored.
- Hedgerows around the site are also recommended to be retained with enhancement and management where gaps are present.
- 11 individual trees and 6 tree groups were identified as class C being generally acceptable to retain or removed as per development plans.
- The remaining trees are identified as category U possessing significant defects and therefore requiring assessment of whether their valuable features can be retained or if removal is most appropriate

The Council has reviewed the Arboricultural Survey and accepts its findings. Mitigations will be included in the policy to:

- Retain and provide good clearance to large mature trees and woodland compartments.
- Where any tree removal is required, this must be mitigated for by replacement planting of suitable tree species.
- Recommend management and improvement of some of the retained woodland to aid mitigation process and benefit local and existing user

Archaeological and Heritage Summary Statement (September 2020)

Summary

BWB was appointed by Leicester City Council to prepare an assessment of the potential impacts to local heritage and archaeology from development at Ashton Green East. The assessment was prepared with regard to paragraph 189 of the NPPF.

This involved:

- A walkover survey of the site
- A geophysical survey of the site
- Guidance on national legislation
- Guidance on national policy
- Guidance on local policy

Findings

- There are no: scheduled monuments, conservation areas, listed buildings, registered battlefields or registered parks and gardens within the study area
- There are five heritage assets, and two archaeological events recorded within the site and a further eight assets and five events in the wider study area. The seven archaeological events unearthed remains from the Neolithic to the Medieval period
- Geophysical survey of the site and trenching immediately west of the site found little of archaeological interest save some indications of an Iron Age settlement and related pottery. Ridge and furrow was also noted from LiDAR analysis of the land immediately west of the site.

Recommendations

The findings don't present a constraint to development although there's evidence of notable Bronze Age, Middle Iron Age and Roman remains on site. Because of this, further trenching to uncover any unknown archaeological features is recommended as well as reporting back during invasive phases of development.

The Council has reviewed the Archaeology and Heritage Statement and accepts its findings. Mitigations will be included in the policy to:

• Require an archaeological assessment.

Ashton Green East Biodiversity Metrics Report (October 2021)

Summary

Arcadis was appointed by Leicester City Council to undertake a Biodiversity Net Gain assessment for three strategic sites. This involved a survey of existing habitat on the site of Ashton Green East. This is to ensure compliance with new legislation requiring 10% measurable net gains for biodiversity where it's impacted by development. The report sought to demonstrate steps had been taken to demonstrate the possible net gain feasible as part of development including a sketch masterplan of this.

Methodology

Habitat on site was surveyed and mapped following the Joint Nature Conservation Committee methodology. These habitats were classified into different standard typologies.

Defra Biodiversity metric 2.0 was used to calculate the number of biodiversity units provided by each habitat within the site. These numbers represent a baseline condition of the site.

Based on a sketch masterplan, post development condition of the habitats was assessed and from this, recommendations were made as to what habitats were compatible and deliverable in conjunction with this design.

Limitations and Assumptions

- A new version of the biodiversity metric has been produced since undertaking the survey
- Connectivity of all habitats has been set at low until a review of the metrics used has taken place
- Some areas of habitat were too small to calculate as the metric used only works to 2 decimal places, but this won't affect the net score particularly.
- Predictions of the post development biodiversity value are contingent on the effective installation and management of the habitats.
- Retained habitats will be enhanced through management unless they're deemed to be in good condition

Results

To achieve the 10% gain, it's recommended that the following interventions are applied.

- Creation of further high value habitat e.g. ponds, wetland, woodland and scrub
- Habitat creation or enhancement on land beyond the site owned by the city council

- Purchase of additional land to provide space for new habitat
- Purchase of biodiversity units from 3rd party organisations
- Working with 3rd parties to deliver biodiversity units on their land

The council has reviewed the findings of this report and suggests including the mitigations in the policy to:

• Require a detailed landscape design and ecological management plan.

Technical Site Constraints – Ecology Stage 1 (February 2018)

Summary

Arcadis were commisioned by Leicester City Council to identify constraints, context and opportunities for strategic sites with regards to ecology. Following a desk-based review, the key ecological constraints identified were:

- Biodiversity Enhancement Site designation (part of the site is designated for biodiversity enhancement in the local plan.
- Priority Habitats (the site supports habitats including lowland mixed deciduous woodland, mature trees, hedgerows and field margins
- Adjacent Local Wildlife Site (LWS) (Great Central Railway is adjacent to the site and supports priority habitat "Neutral grassland"). Due to proximity of the site, there's potential for indirect effects on the LWS from development

Potential for ecological gains were also identified including enhancement of habitats on site and creation of new ones.

Assumptions and Limitations

- Assumptions have been made regarding the presence of habitats and the species they contain. These are based on previous ecology reports, desk study records and professional judgement.
- Assumptions have also been made on the importance of the identified ecological features
- Some of the evidence reviewed is relatively old and therefore may no longer be accurate. Ecological field data has a lifespan of 2 years
- Records of protected species are submitted by third parties to LRERC and thus is neither a definitive list and depends on the variable efforts of recorders.

Results

- The northern part of the site is predominantly arable land with several other habitats including species poor grassland, dense scrub, species rich hedgerow with trees, species poor hedgerow and wet ditch.
- The southern portion of land also contains arable land bordered by a mix of species rich and poor hedgerows and wet ditches.
- The southern portion of the site also contains broadleaved woodland and some notable standalone trees and hedgerows. There's also a mix of dense and scattered scrub combined with species poor grassland.
- Various protected species are recorded within 2 km of the site including Cinnabar and sallow moths, Great Crested Newts, Barn Owls, Hobby, Numerous bat species and badgers. It's possible that some or all of these are present on the site itself

Recommendations

- Extended phase 1 habitat survey to support detailed masterplanning
- Updated Great Crested Newt surveys
- Breeding Bird Survey
- Bat Activity Survey
- Bat roost inspection surveys
- Badger Survey

Biodiversity Enhancements

Enhancement of woodland to increase size and increase resilience against surrounding influences.

Seed sewing and cutting regime to enhance the value of the grassland on site especially adjacent to Great Central Railway.

New swales and wet basins potentially as part of SuDS alongside new woodland and rough grassland to support amphibian habitats

Improving ecological connectivity between habitats on site and the LWS at the Great Central Railway and habitats associated with previous phases of development at Ashton Green

The council has reviewed the findings of this report and suggests including the mitigations in the policy to:

- Ensure key ecological constraints including Biodiversity Enhancement Site, Green Space designations, Priority Habitats and diversity of habitats are retained at a level which maintains their value and permits their continued functioning.
- Require detailed assessment of key ecological constraints including number of protected species and species of conservation concern to support detailed masterplanning and individual planning applications.

Landscape Character Visual Assessment (April 2021)

Summary

This document discusses the baseline information in relation to landscape and visual matters associated with the site at Ashton Green East in Glebelands, Leicester. The site consists of mainly arable fields, some paddocks, and a large woodland belt running through the centre of the site.

The following landscape receptors were identified:

- East Midlands Regional Landscape Character Area 10a Forested Ancient Hills,
- Thurcaston Road Green Wedge, and
- The Site itself

It was concluded that although there are several landscape features within the site which contribute positively to the site's landscape character, such as the woodland belt, mature oak trees and hedgerow boundaries the site is not located within or adjacent to any statutory landscape designations. The site has also been degraded in places by the removal of hedgerows and is now influenced by the adjoining transport routes and new developments along these routes. Therefore, the landscape baseline has an overall Medium sensitivity to change.

Impacts

The landscape sensitivity is affected by the limited access into the site, limiting how the site is experienced to its periphery. As a result, the landscape is experienced primarily from adjoining roads which adversely affect the areas perceived tranquillity.

The experiential quality of the adjoining roads also has an impact on the sites landscape susceptibility to change, these are fairly busy roads providing access to Beaumont Leys

and Birstall. Ashton Green Road is now characterised by the new housing at Glebelands and industrial units off Thurcaston Road.

The landscape baseline concludes that overall, the site at Ashton Green East has a Medium sensitivity to change. This acknowledges that there are landscape features such as, hedgerows, mature standard trees and the central belt of woodland which have increased levels of sensitivity due to their visual amenity, arboricultural value and positive contribution to the landscape character.

The visual baseline concludes that the visual receptors range from medium/low to medium with an average sensitivity of Medium. Although views are available into the site, these views are experienced from fairly busy transport routes, where the site is seen within the context of several housing developments and new industrial units, creating a setting and precedent for urban expansion.

The Council has reviewed the Landscape Character Assessment and accepts its findings. The Local Plan has a policy on Design Principles (DQP01) which will ensure that development of this strategic site will respond positively to the site and its local and wider context including townscape and streetscape, key views, natural and landscape features, that it will integrate well into its surroundings, and that it will contribute positively to its context in terms of scale, height, amount, massing, urban form, layout, siting, appearance, façade design, and roofscape.

Noise Technical Note (June 2020)

Summary

BWB consulting was appointed to provide noise input into the evolving masterplan for the development of Ashton Green East. The Technical note considers the prevailing noise environment, the nearest noise sensitive receptors and the proposals. An appraisal of the potential for noise impacts on the nearest receptors, and the scheme itself, has been completed, along with initial advice regarding outline mitigation measures.

Impacts

The Note highlights the average noise level generated from the A46 bypass measured in dB. This impact is felt on the northern half of the site, where average noise levels often exceed 55dB, reaching up to 75dB and over where adjacent to the A46.

The proposals include an employment area in the southern section of site, to the south of Greengate Lane. Generally, at this stage, the exact nature of any businesses is not known

and so it is difficult to provide a meaningful initial assessment of the potential for operational noise to disturb existing and future noise sensitive receptors.

Recommendations

Where possible, the proposed residential area should remain outside of the dark red (65-70 dB) and indigo (70-75 dB) noise contours shown in Figure 5.1 to avoid significant additional noise mitigation.

Gardens closest to the motorway should face away from the road, and placed behind buildings so as to be effectively screened.

Where feasible, delivery access routes, service yards, roller shutter doors and externally mounted fixed plant should be placed away from boundaries with residential uses, and ideally acoustically screened from them by the associated employment buildings themselves.

The Council has reviewed the Noise Technical Note and accepts its findings and recommendations. Mitigations will be included in the policy to:

• Protect proposed noise sensitive uses, e.g., residential, from noise generative elements within the development through careful consideration of the site layout.

Risk Register (September 2020)

Summary

BWB Consulting have reviewed constraints for the proposed development site with a view to highlighting any constraints to the subsequent promotion of the site into the emerging City of Leicester Local Plan. The following environmental disciplines have been reviewed:

- Arboriculture
- Geo Environmental
- Flood Risk
- Drainage
- Utilities
- Heritage
- Archaeology
- Air Quality
- Noise
- Transport and Access

The Risk Register uses a matrix to assess the risk to the disciplines against probability and impact, using a scale of Low, Medium and High for each. For impact, the scale is defined as the following:

- Low: Unlikely to affect Local Plan promotion, asset value, design, project cost or programme.
- Medium: Unlikely to affect Local Plan promotion, asset value, may constrain design options. Likely to affect project cost and programme.
- High: Potential to affect Local Plan promotion, asset value/constrain design and have significant implications for cost and programme.

Impacts

The following are all considered high in overall risk:

Discipline	Constraint	Probability	Impact	Proposed Mitigation
Flood	Effect of	High	Medium	The site is currently in a greenfield condition and
Risk	Development			development will increase the surface area of
	on the Wider			impermeable surfaces, likely leading to an
	Catchment			increase in surface water runoff from the site. A
				Sustainable Drainage Statement (SDS) will provide
				a drainage strategy which will aim to manage
				runoff from the development in a sustainable way.
				This will include the use of Sustainable Drainage
				Systems (SuDS) and limiting runoff rates from the
				development to the equivalent mean annual
				greenfield runoff rate (QBAR).
Drainage	Surface	High	Medium	In the event infiltration is not proven to be viable,
	Water			surface water should be discharged to the local
	Drainage			watercourses on site. If a gravity connection to a
				watercourse cannot be achieved, a connection
				should be made to the public surface water sewer
				network. Surface water would likely be drained
				from the site via SuDS to the watercourses on site.
				Examples of the type of SuDS include (but are not
				limited to) attenuation basins, swales, permeable
				paving and tree pits. The SuDS should provide
				storage up to the 1 in 100 year + 40% climate
				change storm events.
Drainage	Foul Water	High	Medium	STW recommend the proposed development
	Drainage			connects into the public 375mm/450mm foul
				sewer at the west of Leicester Road (into or
				downstream of MH4201). Given the existing
				topography, a gravity connection from the entire

				site to the recommended foul sewer is not
				expected to be possible. Catchments 4, 6 and 8 all
				fall to the east, away from the recommended
				sewer. In the event that a gravity connection from
				the whole development cannot be made, foul
				pumping station(s) will be required. Any foul
				pumping stations should be located in the lowest
				developable area of the catchment that they serve,
				so a gravity connection to the pumping station can
				be achieved. The pumping stations should be
				constructed in accordance with adoptable
				standards including the incorporation of vehicular
				access and a 15m cordon sanitaire from to
				habitable dwellings. STW have highlighted that
				they would need to model the foul flows from the
				proposed development and they have outlined that
				such work is likely to take between 4 – 8 weeks to
				complete. It is recommended that a preferred
				connection point is established and
				communicated with STW, along with details of the
				planning status of the application, to allow them to
				undertake a representative hydraulic assessment
				of the proposed development.
Utilities	Water Main	High	Medium	STW have advised of an easement, size 12 metres –
	on site			6 metres on either side of the pipe - where no
				building structure temporary or permanent is
				permitted. The pipe and easement are not to be
				located within front, side or rear gardens of a
				development site. Main to be located in green
				public open space or adoptable public highway,
				subject to review and STW agreement,
				construction constraints will also apply. The
				proposed site plan will have to coordinate with this
				service to avoid diversion costs.
Utilities	HV Electricity	High	Medium	Western Power Distribution have advised of an
	on site			easement to the Overhead HV services. Exact
				details to be confirmed by WPD.
Noise	Noise from	Medium	High	An acoustic barrier which removes line of sight to
	road traffic			the noise source should provide at least 10dB of
	onto .			attenuation. Iherefore, any proposed gardens up
	proposed			to the 65dB line suitable garden levels could be
	receptors -			achieved with one of the following approaches:
	impacting on			(i) Design the development Site such that the
	outdoor			buildings provide a noise barrier to the garden

amenity	areas, so that gardens are on the screened side of
areas	dwellings;
	(ii) Provide noise barriers around the perimeters of
	the gardens; or
	(iii) Install an acoustic barrier along the perimeter
	of the development Site.
	Where possible, the proposed residential area
	should remain outside of the indigo (70-75 dB) and
	dark red (65-70dB) noise contours to avoid
	significant additional noise mitigation in gardens.
	Gardens closest to the motorway should face away
	from the road, and placed behind buildings so as
	to be effectively screened or more significant
	mitigation is likely to be required i.e. acoustic bund
	and barrier combinations.

Sustainable Drainage Statement (August 2020)

Summary

A Sustainable Drainage Statement (SDS) sets out the principles of drainage design for a development and summarises the reasoning behind the chosen design. This includes consideration of national and local guidance, justification of specific flow rates, volumes of attenuated storage, as well as the appropriate level of treatment to be provided to surface water runoff.

Recommendations

- It is recommended that the final layout uses the proposed road infrastructure to provide drainage exceedance (overland flood flow) routes through the development and towards the basins for events in excess of the capacity of the drainage system.
- Further investigation into the land ownership and levels of all watercourses that are proposed to be utilised as surface water outfalls should be undertaken in due course.
- Further investigation is recommended to find a viable option for surface water discharge if catchment 4 (a slither of to the east of the northern site adjacent to the railway line) catchment is proposed to be developed, as this catchment is undevelopable in its current state.
- As part of any future planning application, this conceptual drainage design should be developed into a more detailed drainage strategy alongside the masterplan.

- Severn Trent Water recommend the proposed development connects into the public 375mm/450mm foul sewer at west of Leicester Road (into or downstream of MH4201).
- In the event that a gravity connection from the whole development cannot be made, foul pumping station(s) will be required. Any foul pumping stations should be located in the lowest developable area of the catchment that they serve, so a gravity connection to the pumping station can be achieved. The pumping stations should be constructed in accordance with adoptable standards including vehicular access and a 15m cordon sanitaire from to habitable dwellings.
- It is recommended that a preferred connection point is established and communicated with Severn Trent Water, along with details of the planning status of the application, to allow them to undertake a hydraulic assessment of the proposed development.

The Council has reviewed the Sustainable Drainage Statement and accepts its findings and recommendations. Mitigations will be included in the policy to:

• Develop a detailed drainage design as part of any application for development of the site, taking into account the findings and recommendations of the Sustainable Drainage Statement (August 2020)

Utility Services Due Diligence Assessment (December 2020)

Summary

BWB Consulting Limited (BWB) was instructed by Leicester City Council to carry out a Utility Services Due Diligence Assessment for the proposed Residential and Employment Uses situated at Strategic Site 2 Land East of Ashton Green.

The purpose of the report is to overview and outline the following:

- Existing utility services that are located within and around the proximity of the proposed new development.
- Diversions, if any, that are likely to be required to accommodate the proposed development works; and
- The extent of utility works necessary to service the proposed development together with indicative budget costs.

Impacts

Below is a summary of the statutory services that will impact the proposed site in terms of the proposed diversions and connections works:

- Record information provided by Western Power Distribution (WPD) shows that there
 IS existing Low Voltage (LV) and High Voltage (HV) cables within the site boundary.
- Record information provided by Severn Trent Water shows that there **IS** existing water infrastructure within the site boundary.
- Record information provided by Cadent Gas shows that there **IS NOT** existing gas infrastructure within the site boundary.
- Record information provided by Openreach shows that there **IS NOT** existing communications infrastructure within the site boundary.

Recommendations

- It is recommended that a more enhanced survey such as a type B survey to PAS 128:2014 is also carried out prior to construction. This will more accurately determine the location of existing utility services but also identify services which maybe present within and around the site boundary but have not been identified in our desktop study such as private water and gas mains.
- WPD (Western Power Distribution) have advised a minimum clearance of 3m from a LV conductor and 11kV conductor (inclusive of maximum swing) to any object which is ordinarily accessible or to any surface of a building. WPD have recommended 6.6m as the safe clearance from the centreline of an LV conductor and 11kV conductor.
- STW (Severn Trent Water) have confirmed there is an easement of 12 metres (6 metres on either side of the pipe) over this water main. No building structure, temporary or permanent, is permitted within this area.
- Once a proposed masterplan is available it is recommended that applications are made to revise the budget quotes.
- Once a proposed masterplan becomes available, a review of existing services routed in adjacent highway should be undertaken to confirm any requirements for alterations or diversions to accommodate new site access roads.
- A summary of the preliminary budget costs obtained for new electric, gas, water and telecoms connection works:

Utility	Estimated Cost (exc. VAT)
Electricity	£1,763,560.82
Gas	£256,993.39
Water	£408,332.00
Water (Infrastructure)	£270,575.00
Openreach	£0.00
	£2,699,461.21

- A summary of potential diversions to clear the site (totaling to an estimated cost of £420,000.00):
 - Diversion of 11kV HV overhead cables routed along the north west perimeter of the residential element of the site;
 - Diversion of the 11kV HV overhead cables routed through the employment element of the site, from the north west boundary to the south east;
 - Diversion of the LV overhead cables along the west perimeter of the employment element of the site;
 - Diversion of the water main routed through the site, from east to west in the proposed residential element of the site boundary.

The Council has reviewed the Utilities Services Due Diligence Assessment and accepts its findings. Mitigations will be included in the policy to:

• Coordinate with the constraints of the existing onsite electricity supply services, the existing onsite gas service, the existing onsite water main, and the existing onsite communications infrastructure as far as practicable to avoid costly diversion works.

Flood risk Assessment (August 2020)

Summary

The Flood Risk Assessment (FRA) was prepared in accordance with the requirements set out in the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance. It was produced on behalf of Leicester City Council as land promoter in respect of a planning application on the strategic site of Ashton Green involving construction of a mixed-use development. The role of the document was to promote the strategic development site through an emerging new City of Leicester Local Plan.

Conclusions

The report demonstrates that the proposed development is at an acceptable level of flood risk, subject to the recommended flood mitigation strategies being implemented.

Fluvial

Although located within Flood Zone 1, minor watercourses both within and along the site boundary are considered to pose a flood risk to development. In line with SFRA, it is recommended that development be set back 20m from watercourses, with undeveloped space to be used as 'blue corridors' for public open space or recreation.

Groundwater

Deposits underlying the site are considered to be relatively impermeable, although the SFRA identifies the site as having a 'high' susceptibility to groundwater flooding. Resilience to residual risk posed by groundwater flooding is provided through raising finished floor levels by a minimum of150mm above surrounding ground levels, in line with building best practices. In line with the SFRA, it is recommended that results from a site investigation accompany a planning application for the site. Furthermore, caution is advised during construction, especially during excavation with appropriate dewatering applied, as necessary.

Pluvial runoff

Surface water flood risk that is not associated with the minor watercourses within the vicinity of the site is likely to be associated with isolated topographical depressions. Mitigated can be provided as the site is developed. To manage residual risk posed by surface water flooding, finished floor levels should be raised a minimum of 150mm above surrounding ground levels, in line with best building practices. Furthermore, ground levels should be profiled to direct surface flows away from the development, towards the nearest drainage point. This will also provide mitigation for residual risk posed by sewer flooding.

Impact of the Development

The site has been located so as to not encroach or displace any floodplain. Surface water runoff from the development will be controlled appropriately and discharged to the local watercourse at the equivalent greenfield QBAR rate. It is proposed that the foul water from the development will be discharged to the public sewer. Modelling undertaken by Severn Trent Water will first need to be completed to determine capacity.

The council has reviewed and accepted the findings of this report. Mitigations in the policy will be included as below:

- Development should be set back an appropriate easement from any watercourses and ponds on site.
- Further consultation with the Lead Local Flood Authority is required to determine the necessary easements.

Foul Drainage Technical Note (Nov 2021)

Summary

The report discusses the site and level constraints associated with the foul drainage strategy and detail how a connection could be made to the public sewer network. This was produced along side the flood risk and the sustainable drainage reports.

Conclusions

Some new on site provision will be required including new pumping stations and some works off site will be required to for the new development to be connected to the wider foul drainage network.

Seven Trent Water have confirmed that the existing public system has enough capacity to accommodate the proposed development at present. It was noted that there are significant development proposals for the area and some infrastructure has been upgraded and they are working to ensure that the sewage treatment works at Wanlip is equipped to accept the growth over the coming years.

The technical note demonstrates that the foul drainage strategy for the site is achievable.

The council has reviewed and accepted the findings of this report. Mitigations in the policy will be included as below:

• Sufficient connection to the wider foul drainage network and any required pumping stations to achieve this.

Geo-Environmental Assessment Report (Jun 2020)

Summary

The purpose of this report was to assess existing geo-environmental data to provide an assessment of the sub surface, potential development constraints and possible cost abnormalities in the context of the developability of this site.

Conclusions

Potential Contaminant Sources

The following potential contamination sources have been identified at the site.

- Former tank in south west corner of northern plot;
- Possible infilled ground in location of former ponds;

- Possible contamination associated with scrap yard;
- Possible Made Ground associated with construction of former and current buildings;
- Possible fuel storage at farm buildings in south west of site.

A railway has also been identified as being near the site which could also be a potential contaminant source.

Potential Human Health Pollutant Linkages

The identified potential contamination sources are located in highly localised areas across the site. Made Ground could represent a potential ground gas risk which may require ground gas protection measures. Where identified, ground gas protection measures could mitigate the risk. It is considered that the proposed development poses a low risk to human health receptors.

Potential Controlled Waters Pollutant Linkages

The glacial till and the bedrock are low sensitivity aquifers and unlikely to yield a continuous groundwater body. The only viable pollutant linkage relating to the surface water receptors related to the tank being located adjacent to the drain in the south west corner of the northern plot. The tank has not been present on the mapping for a long time, and it is likely that any impact would have migrated, diluted or degraded away by now. Overall, in the context of the proposed development, the risk to controlled waters is considered to be low.

The Council has reviewed the Geo-Environmental Assessment Report and accepts its findings.

Landscape Character Visual Assessment (April 2021)

This document discusses the baseline information in relation to landscape and visual matters associated with the site.

Aspects of the landscape character likely to be affected

The landscape baseline identified and evaluated existing landscape receptors likely to be affected by any changes proposed to the site. These receptors were then assessed to determine their landscape sensitivity by combining their value, quality, and susceptibility to change. The following landscape receptors were identified:

- East Midlands Regional Landscape Character Area 10a Forested Ancient Hills,
- Thurcaston Road Green Wedge, and
- The Site itself

It was concluded that although there are several landscape features within the site which contribute positively to the site's landscape character, such as the woodland belt, mature oak trees and hedgerow boundaries the site is not located within or adjacent to any statutory landscape designations. The site has also been degraded in places by the removal of hedgerows and is now influenced by the adjoining transport routes and new developments along these routes. Therefore, the landscape baseline has an overall medium sensitivity to change.

Aspects of the visual amenity likely to be affected

The visual baseline identified user groups who may be materially affected any changes to the site within the Zone of Theoretical visibility.

Visual receptors identified within this assessment were limited due to the limited public views available within the site and study area. The following visual receptors were identified:

- Users of Green Gate Lane,
- Users of Ashton Green Lane, and
- Public Rights of Way to the north and south of the site

The visual baseline concluded that the visual receptors range from medium/low to medium with an average sensitivity of Medium. Although views are available into the site, these views are experienced from relatively busy transport routes, where the site is seen within the context of new and existing housing developments and new industrial estates, creating a setting and precedent for urban expansion in the locality.

The Council has reviewed the Landscape Character Visual Assessment and accepts its findings and recommendations. Mitigations recommended in the report will be included in the policy and are as follows:

- Retain positive landscape characteristics such as mature trees, woodland belts and hedgerow boundaries.
- Retain aspects of visual amenity along Green Gate Lane, Ashton Green Lane and Public Rights of Way.

Land East of Ashton Green Indicative Land Use Masterplan (Nov 2022)

