

Chapter 14: Summary of Mitigation & Residual Effects

14. Summary of Mitigation & Residual Effects

14.1. Introduction

This chapter of the ES provides a summary of the proposed mitigation measures and the final residual effects of the proposed development.

14.2. Mitigation Measures Summary

Table 14.2.1 presents the collated mitigation measures recommended throughout the ES for reference purposes. These are typically identified as being secured via planning condition or via compliance with legislation.

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Table 14.2.1
Mitigation Measures Summary

Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
Socio-economics	Demolition & Construction	Generation of construction employment	Local Recruitment To maximise local recruitment, enhancement measures would include commitment to advertise job vacancies in local job agencies and newspapers in accordance with ‘local and relevant postcodes’ to maximise those employed locally. Training Opportunities The contractor would be required to work with local education and training centres, and industry bodies, to provide apprenticeships and training opportunities, particularly for those in the NEET category (not in employment, education or training). Given the duration of the construction phase, the proposed development offers opportunity for prolonged training.	Secured by Planning condition
Transport	Demolition & Construction	Potential impact on all road users associated with the potential for HGV movements to be uncontrolled.	Implementation of a Construction Traffic Management Plan (CTMP) and a Construction Environmental Management Plan (CEMP) to reduce the effects of HGVs and worker vehicles throughout construction. As part of this, traffic management measures specifically designed to protect vulnerable road users such as pedestrians will be implemented; these measures include clearly delineated pedestrian routes and set hours of operation to reduce the likelihood of pedestrian / vehicle interaction. It must be additionally noted that adverse effects of construction will be temporary, and closely managed and monitored throughout the construction period.	Secured by Planning condition
Transport	Completed Development Stage	Potential impact on all road users from number of vehicles generated by the development.	Implementation of a Travel Plan to reduce car vehicle trip generation and promote sustainable mode share	Secured by Planning condition
Air Quality	Demolition & Construction	NO ₂ & particular emissions & dust	None required. However, for completeness, best practice demolition and construction stage air quality mitigation measures are set out in Chapter 6 Construction Strategy & CEMP and summarised below: Communication – Develop and implement a stakeholder communications plan that includes community engagement before work commences on site. – Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager. – Display the head or regional office contact information. – Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Local Authority. Site Management – Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. – Make the complaints log available to the local authority upon request. – Record any exceptional incidents that cause dust and/or emissions, either on- or off- site, and the action taken to resolve the situation in the log book. Monitoring – Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the Local Authority upon request. – Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. Site Preparation – Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible – Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site. – Fully enclose site or specific operations where there is a high potential for dust production and they are active for an extensive period. – Avoid site runoff of water or mud. – Keep site fencing, barriers and scaffolding clean using wet methods. – Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used. – Cover, seed or fence stockpiles to prevent wind whipping. Operating Vehicle/Machinery & Sustainable Travel – Ensure all vehicles switch off engines when stationary - no idling vehicles. – Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable. – Produce a Construction Logistics Plan (CLP) to manage the sustainable delivery of goods and materials.	These measures will be included in the CEMP secured by Planning Condition

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Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
Operations – Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques. – Ensure an adequate water supply on the site for effective dust suppression, using non-potable water where possible and appropriate. – Use enclosed chutes and conveyors and covered skips. – Minimise drop heights and use fine water sprays wherever appropriate. – Ensure equipment is available to clean any dry spillages, and clean up spillages as soon as reasonably practicable using wet cleaning methods Waste Management – Avoid bonfires and burning of waste materials. Earthworks – Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. – Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil as soon as practicable. – Only remove cover in small areas during work and not all at once. Construction – Avoid scabbling (roughening of concrete surfaces) if possible. – Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out. – Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems Trackout – Use water-assisted dust sweeper on access and local roads, if required. – Avoid dry sweeping of large areas. – Ensure vehicles entering and leaving site are covered to prevent escape of materials. – Record all inspections of haul routes and any subsequent action in a site log book. – Inspect haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably possible. – Implement a wheel washing system, if required. – Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits. – Access gates to be located at least 10 m from receptors where possible.				
Noise & Vibration	Demolition & Construction	Impacts on residential receptors (R01-R08) from demolition and construction traffic noise	Implementation of a Construction Traffic Management Plan and a CEMP to reduce the effects of HGVs and worker vehicles throughout construction. As part of this, traffic management measures designed to mitigate noise effects to sensitive receptors will be implemented: these measures include set hours of operation, and traffic routing and scheduling of vehicle movements.	Planning Condition
Noise & Vibration	Demolition & Construction	Impacts on residential receptors (R01-R08) from demolition and construction noise	Implementation of a CEMP to reduce noise effects from demolition and construction activities throughout the construction stage. This would include the following measures: – Careful programming to ensure activities which may generate noise and vibration are planned well in advance and sensitive receptors are notified of the works. – Identification and use of low noise techniques. For example, equipment that breaks concrete by munching or similar, rather than by percussion. Where construction plant is known to generate significant levels of noise than it is to be used sparingly and the construction activity monitored to minimise noise levels. – All plant brought onto site should comply with the relevant EC/UK noise limits applicable to that equipment or should be no noisier than would be expected based on the noise levels quoted in BS 5228-1. Plant should be properly maintained and operated in accordance with manufacturers’ recommendations. – Where feasible, all stationary plant should be located so that the noise at all occupied sensitive receptors is minimised and, if practicable, every item of static plant when in operation should be sound attenuated using methods based on the guidance and advice given in BS 5228-1 (e.g., local screening). – Items of plant on the site operating intermittently should be shut down in the intervening periods between use. – Adoption of a noise monitoring regime and the establishment of noise Action Levels in consultation with Wrexham Borough Council, above which consideration would be given to the use of alternative techniques and/or other means of controlling noise levels. – Implementation of 2.4 m solid hoarding around the application site boundary for the duration of the works, noting that details can be refined subject to further assessment once the details of the construction phasing works are known; and Implementation of a CLP to pre-plan and manage traffic associated with the works to minimise disturbance to sensitive receptors. The CLP would include aspects such as operation of a ‘Just in Time’ policy for the delivery and supply of materials for the work to minimise the disruption to the local community.	CEMP, secured by planning condition
Noise & Vibration	Demolition & Construction	Impact on residential receptors (R04) from demolition and construction vibration	Implementation of a CEMP to reduce vibration effects from demolition and construction activities throughout the construction stage. Careful programming should be implemented to ensure activities that may generate vibration are planned well in advance and sensitive receptors are notified of the works.	CEMP, secured by planning condition

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Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
Noise & Vibration	Completed Development	Impacts on residential receptors (R01-R08) & the potential hotel receptors (HR01-HR08) from completed development traffic noise	Whilst the noise effects relating to completed development stage traffic noise would be negligible, potential impacts would be further mitigated through the implementation of a Travel Plan to reduce car vehicle trip generation and promote sustainable mode share.	Planning condition
Noise & Vibration	Completed Development	Impacts on residential receptors (R03-R06) & the potential hotel (HR03-HR06, & HR08) from completed development operational noise associated with HGV movements and loading/unloading noise	Adverse noise impacts on the receptors relate to operational activities in the outline component. Noise effects relating to HGV movements and unloading will be mitigated by either acoustic barriers/additional bunds, or designing the location of HGV docks and parking to be away from this receptor. This would be designed at the reserved matters stage and secured through an appropriately worded planning condition.	Planning condition
Noise & Vibration	Completed Development	Impacts on the potential hotel receptors (HR01-HR08) from completed development operational noise associated with HGV movements and loading/unloading noise	The ventilation strategy for the potential hotel would consist of mechanical ventilation with heat recovery (MVHR). As such, sufficient ventilation can occur with windows closed. Glazing and ventilation will be designed to ensure that the BS8233 internal criteria are met within potential hotel rooms proposed. This would be designed at the reserved matters stage and secured through planning condition.	Planning condition
Noise & Vibration	Completed Development	Impacts on residential receptors (R01-R08) & the potential hotel receptors (HR01-HR08) from potential noise disturbance from building services plant	Plant noise limits have been set to ensure sensitive receptors are not affected. The plant noise limits are based on the measured background noise levels (L ₉₀) representative at each sensitive receptor.	Planning condition
Biodiversity	Demolition & Construction	Habitat loss and fragmentation Resulting effects on species (Native hedgerows, scattered trees, ponds, great crested newt (GCN), bats, breeding birds)	The landscaping strategy for the outline component will be developed in accordance with the landscaping strategy for the detailed component and will be agreed with Wrexham CBC at the reserved matters stage. The landscaping strategy will include the provision of sufficient hedgerows, trees and ponds required to mitigate impacts from loss of these habitats (including as habitat for species) during demolition and construction. The benefits of this mitigation will not be forthcoming until the completed development stage.	Planning Condition
Biodiversity	Demolition & Construction	Direct impacts/damage to retained habitat & Resulting effects on species (Native hedgerows, scattered trees, bats)	Implementation of a tree protection plan in accordance with British Standard 5837: 2012 Trees in relation to design, demolition and construction. An arboricultural clerk of works (ACoW) would be appointed to ensure effective delivery of arboricultural protection measures, with a site presence at key points e.g. tree removal, installation of tree protection fencing and vacuum excavation and root pruning.	Planning Condition
Biodiversity	Demolition & Construction	Indirect impacts on retained habitat Damage to retained ponds Resulting effect on species from the above including habitat damage and disturbance (Native hedgerows, scattered trees, veteran trees, standing water (ponds), GCN (and other S7 amphibian species)	Implementation of a CEMP in accordance with British Standard 42020: 2013 Biodiversity: Code of Practice for Planning and Development to include measures to minimize any potential localized indirect impacts from potential pollution events from construction machinery, runoff, lighting and dust arisings. These measures will include: – Minimum 8 m buffer zone around retained ponds; – Best practice measures to reduce noise, dust and vibration; and – Measures to reduce incidence of contamination e.g. silt fencing, no refuelling near ponds.	Planning Condition
Biodiversity	Demolition & Construction	Loss of ponds (S7 habitat).	The detailed landscape plan and planting plan would include replacement pond creation during the construction phase. However, ponds can only qualify as S7 habitat under specific criteria, one of which relates to regularly supporting protected or notable species including GCN. Management of ponds will be in-line with a GCN mitigation strategy and management plan to ensure they remain suitable for GCN. These management measures would increase the likelihood of the ponds supporting GCN, thereby increasing the likelihood of the ponds becoming S7 habitat in the long-term.	Planning Condition
Biodiversity	Demolition & Construction	Loss, damage/disturbance of habitat (aquatic and terrestrial	A European protected species mitigation licence (EPSML) for GCN from NRW would be applied for following planning approval. This would contain a mitigation strategy detailing required mitigation, compensation and enhancement in respect to all anticipated impacts on GCN. This mitigation would also safeguard other amphibians that may be present	Planning condition / legal compliance

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Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
		Killing/injury of species (GCN and other S7 amphibian species) Habitat fragmentation and isolation Detriment to maintenance of FCS for GCN	e.g. common toad. Mitigation is likely to include a trapping and translocation exercise, supervision of key work stages by an ecological clerk of works (ECoW), reasonable avoidance measures (RAMs) and compensatory planting. The licence would also contain long-term management and monitoring requirements to ensure newly created habitats remain suitable for GCN. A site approximately 1.2 km south east of the application site has been identified for the purpose of providing additional habitats to off-set the on-site loss of habitat for Favourable conservation of GCN. As shown in Appendix 11.13, the proposals comprise twelve new ponds which will be delivered across the 3.6 ha site to provide long-term conservation of GCN. The site would be sown with a wildflower grass mix and native scrub mixes with the provision of hibernacula for GCN. Although the exact mitigation cannot be confirmed at this stage, NRW would not grant the licence unless the mitigation proposals were sufficient to ensure FCS is maintained. The licence application would contain consideration of how the proposed development meets the three ‘tests’ required to be granted a licence as well as an assessment of how mitigation proposals would maintain FCS. Detailed consideration of these factors is therefore not undertaken in this ES chapter.	
Biodiversity	Demolition & Construction	Disturbance of species (bats, badger, hedgehog, brown hare)	Implementation of a sensitive lighting strategy to minimize potential disturbance effects on species. This would include measures such as: – Minimizing requirement for artificial lighting as far as is reasonable practicable both spatially and temporally; – Focusing lighting towards work areas only; – Directing lighting away from key habitat features such as ponds, trees and linear habitat features e.g. hedgerows, with an increase of less than 1 Lux within 10 m of these features; – Maintaining dark corridors around application site boundaries; – Preferential use of LED and warm white lighting; and – No upward light spill.	Planning Condition
Biodiversity	Demolition & Construction	Habitat loss/damage/disturbance (bat roosts) Killing/injury of species (bats) Detriment to maintenance of FCS.	Nocturnal surveys would be undertaken of all trees with high or moderate potential for roosting bats that are due to be impacted by the proposed development within the outline component. If these surveys identify the presence of any bats roosts then a EPSML would be applied for from NRW following planning approval. The licence would contain a mitigation strategy for roosting bats detailing the required mitigation, compensation and enhancement in respect to all anticipated impacts on roosting bats. Mitigation is likely to include supervision by an ECoW during key stages of work, sensitive working methods and timing near roosts and provision of alternative roosting spaces suitable for the species found roosting (e.g. bat boxes). The licence would also contain long-term management and monitoring requirements to ensure the mitigation remains suitable for roosting bats in the long term. Although the exact mitigation is currently unknown, NRW would not grant the licence unless the mitigation proposals were sufficient to ensure FCS is maintained. The licence application would contain consideration of how the proposed development meets the three criteria required to be granted a licence as well as an assessment of how mitigation proposals would maintain FCS. Detailed consideration of these factors is therefore not undertaken in this ES chapter. Buildings would be demolished in winter (November – March) when bats are least likely to be present. If this is not possible, buildings would be demolished using RAMs and following a pre-commencement check of the buildings by a bat licensed ecologist. Removal of PRFs by hand may be required if deemed appropriate following this check. Soft fell of any trees assessed as having low suitability for roosting bats will be undertaken under the supervision of a bat licensed ecologist. The trees removed would be replaced during the construction phase as documented in a landscape strategy. They would however take time to mature and develop PRFs. As such, the benefit would only be forthcoming in the development’s operational stage.	Planning condition / legal compliance
Biodiversity	Demolition & Construction	Habitat loss (badger setts)	Pre-construction badger check no more than four weeks prior to commencement. If a sett is found, it would either be mitigated for through a NRW sett closure licence or through RAMs, dependent on the proposed works within 30 m of the sett. Exact mitigation requirements, if any, would be confirmed following the pre-construction check.	Planning Condition
Biodiversity	Demolition & Construction	Killing/injury of species (badger, hedgehog, brown hare)	Implementation of RAMs to include measures such as: – Covering excavations overnight or providing a ramp so that nocturnal species do not get trapped within; and – Sensitive vegetation clearance methods and timing.	Planning Condition
Biodiversity	Demolition & Construction	Killing/injury/disturbance of species (breeding birds)	Clearance of suitable nesting habitat would be undertaken outside of the typical nesting season (considered to be March to August inclusive). Where this is not possible and works need to be carried out during the bird breeding season, a nesting bird check of vegetation to be cleared or buildings to be demolished must be undertaken by an experienced ecologist no more than 24 hours prior to clearance. If any active bird nests are discovered these would be given a minimum standoff of 5 m (this may increase depending on the species/proposed works and location) within which no potentially disturbing works would take place until the young have fledged and the nest vacated. A second nesting bird check would then be undertaken to ensure the tree/vegetation does not contain any further active nests prior to felling/removal works taking place.	Planning Condition
Biodiversity	Completed Development	Habitat loss/degradation Resulting effects on species (Hedgerows, scattered trees, veteran trees, ponds, GCN and other S7 amphibians, bats, breeding birds)	The LEMP would include long-term management measures for the retained and newly created habitats to ensure the value of retained habitats and habitats planted in the demolition and construction stage is maintained in the long-term. The development would include ample roads and footpaths to minimize vehicle or pedestrian encroachment into habitats during the operational phase. Where appropriate, signage or barrier fencing could be used to protect the most sensitive habitats and to protect visitors to the development e.g. fencing around ponds.	Planning Condition

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Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
Biodiversity	Completed Development	Disturbance of species (Lesser silver water beetle, bats, badger, hedgehog, brown hare)	Implementation of a sensitive lighting strategy as described above for the Demolition and Construction Stage.	Planning Condition
Biodiversity	Completed Development	Habitat fragmentation for bats (commuting)	Additional bunds along the northern and western boundaries of the outline component would improve connectivity, particularly around the application site boundary and these would be planted to also act as a foraging resource. The landscaping strategy for the outline component will be developed in accordance with the landscaping strategy for the detailed component and will be agreed with Wrexham CBC at the reserved matters stage. The landscaping strategy will include the provision of sufficient alternative flight lines/commuting routes around and through the application site to mitigate impacts from habitat fragmentation during demolition and construction.	Planning Condition
Contamination	Demolition & Construction	Exposure of workers & accidental spread of Asbestos Containing Materials (ACMs)	ACM surveys will be completed on existing buildings, prior to the commencement of demolition works, to identify if asbestos is present. Where present, demolition would be preceded by the removal of asbestos by licensed contractors as required by the Control of Asbestos Regulations (2012).	CEMP, secured by planning condition
Contamination	Demolition & Construction	Impacts on human health, controlled waters & retained vegetation from mobilisation of potential new contamination	A detailed CEMP will be developed to place environmental controls on the demolition and construction activities to ensure any construction related impacts are mitigated. This will include the preparation of a pollution incident control plan, which will be put in place during the demolition and construction works and will include the consideration of any required dewatering activities. Other mitigation measures that will be included in the CEMP include: – Correct storage of chemicals, fuels and oils (e.g. use of secondary containment such as bunds and drip trays as appropriate); – Designated refueling areas for vehicles and equipment to minimise the risk of spills entering the environment; – Appropriately managed concrete washout; – Dust suppression and monitoring; and – An emergency response spill kit and detailed procedures for the response to a pollution incident.	CEMP, secured by planning condition
Contamination	Demolition & Construction	Impacts on human health, controlled waters & retained vegetation from mobilisation of existing contamination	Prior to the start of any works on-site, ground Investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. The proposed ground investigation will include testing of existing soils in order to confirm the presence/absence of any contamination present. If required, a remediation strategy would be prepared to record how the remediation works would be undertaken to ensure the site is ‘Suitable for Use’ and will not present a risk to human health, groundwater, or the built environment. Mitigation measures that would be included within the remediation strategy would include: – Removal of any contamination hot spots; – In-situ or off site remediation of contaminated soils or groundwater; – Requirements for clean cover systems within areas of soft landscaping; and – The relevant compliance criteria suitable for the proposed end use (including for imported material) as well as any monitoring required for verification.	Planning Condition
Contamination	Demolition & Construction	Impacts on human health from migration of hazardous gas & vapours from made ground	The CEMP will include necessary mitigation measures to be adopted. Due to the potential for ground gas and depleted oxygen, construction and maintenance workers undertaking sub surface works will be required in the CEMP to refer to relevant Occupational Health guidance of working in hypoxic environments and employ appropriate protection and control measures.	CEMP, secured by planning condition
Contamination	Demolition & Construction	Direct contact of newly installed structures and services with aggressive ground and potential hazardous ground gases/vapours.	Prior to the start of any works on site, Ground Investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. The ground investigation will include testing in order to determine appropriate concrete design and service materials to be implemented.	Planning Condition
Contamination	Completed Development Stage	Impacts on controlled waters from contamination from the storage and use of fuels and other materials on site, including risks associated with the storage of fuels within the proposed Petrol Filling Station	Safe and appropriate storage and use of materials on site, to be implemented in accordance with appropriate Environmental Management Plan (EMP) and in line with relevant legislation and Environmental Permits where necessary.	Secured by Planning Condition/ Contract documentation/Legislation/Environmental Permits
Contamination	Completed Development Stage	Impacts on controlled waters resulting from increased phosphates	Consultation is currently being undertaken with NRW and DCWW to identify if there is sufficient capacity in the existing Five Fords WwTW for phosphate treatment. Should this not be the case, the wastewater from the proposed development will be treated on-site, including ‘polishing’ to reduce phosphate concentrations to appropriate levels, prior to discharge into the application site’s surface water drainage system.	Planning Condition

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Technical Area	Stage	Possible Effect Being Mitigated	Mitigation Measure	How Secured/Trigger
Contamination	Completed Development Stage	Impacts on human health from exposure to potential existing contamination within soils	Prior to the start of any works on-site, ground Investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. Following completion of the ground investigation, where contamination has been shown to exist within the application site, then a remedial strategy will be prepared. The remedial strategy will define any remedial works required in order to render the site ‘suitable for use’ as proposed and will be submitted for agreement with the Local Planning Authority. Where required, potential remedial works may include: – Details of any hotspots to be removed and details of validation testing required. – Details of any clean cover systems required within areas of soft landscaping. – Details of any gas protection requirements to be installed within proposed buildings. These remedial works will be completed and implemented as part of the demolition and construction phase.	Planning Condition
Contamination	Completed Development Stage	Direct contact of newly installed structures and infrastructure with aggressive ground.	Concrete design and infrastructure specification to be informed by the findings of ground investigation to ensure the use of suitable materials.	Planning Condition
Contamination	Completed Development Stage	Risks associated with migration of potential hazardous ground gases/vapours	Ground Investigation will be carried out to confirm the existing ground conditions. Subject to the identified ground conditions, gas monitoring to be carried out to inform the need for gas protection measures within the proposed buildings. Where required, gas protection measures will be implemented into proposed buildings.	Planning Condition
Contamination	Completed Development Stage	Direct contact of retained vegetation and/or new planting within contaminated (phytotoxic) soils.	Ground investigation will be carried out to confirm the existing ground conditions and understand the potential risks to new planting within the final development. Where potential risks are identified then recommendations for remedial works, such as the provision of clean cover within proposed landscaped areas will be implemented in accordance with an agreed remedial strategy.	Planning Condition
Landscape & Visual Amenity	Completed Development Stage	Impacts on visual receptors	A landscaping strategy for the outline component will be developed in accordance with the landscaping strategy for the detailed component and will be agreed with Wrexham CBC at the reserved matters stage. The landscaping strategy will include the provision of sufficient hedgerows, trees and planting required to mitigate impacts to surrounding visual receptors. For example, planting on the bund in the north-western corner of the application site would be implemented to soften and improve the appearance of the bund.	Planning Condition

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14.3. Residual Effects Summary

All residual effects of the proposed development are summarised in **Table 14.3.1**.

The likely significant residual effects of the proposed development are set out in the section below.

14.3.1. Likely Significant Effects

Construction Stage

Following implementation of mitigation measures, the proposed development would produce the following likely significant environmental effect during the construction phase:

- Impacts on native hedgerows from habitat loss – **Moderate Adverse (significant at county level)**;
- Impacts on trees and ponds from habitat loss – **Minor Adverse (significant at a local level)**;
- Impacts on GCN & other S7 amphibian species – **Minor Beneficial (significant at a local level)**;
- Impacts on roosting bats & breeding birds from habitat loss & fragmentation – **Minor Adverse (significant at a local level)**; and
- Alterations to the existing views from the following visual receptors as a result of demolition and construction works: residents of dwellings along Hugmore Lane; users of Francis’ Lane; users of Public Footpath Holt 24; users of Public Footpath Holt 25; and users of Public Footpath Holt 26/ Isycoed 6 – **Major to Moderate Adverse**.

Completed Development Stage

Following implementation of mitigation measures, the proposed development would produce the following likely significant environmental effects during the completed development stage:

- Generation of new operational employment – **Moderate Beneficial**;
- Noise impacts resulting from on-site operational activities (such as deliveries and servicing and plant) during the completed development stage on existing Residential Receptors (R03-R05) and proposed potential Hotel Receptors (HR03-HR06) – **Moderate Adverse**;
- Impacts on native hedgerows, scattered trees & standing water from habitat creation - **Minor Beneficial (significant at a local level)**;
- Impacts on GCN & other S7 amphibians, bats from habitat creation and maintenance of favourable conservation status (FCS) – **Minor Beneficial (significant at a local level)**;
- Impacts on breeding birds from habitat creation – **Minor Beneficial (significant at a local level)**;
- Alterations to the existing views of the following visual receptors as a result of the completed development (opening year): Residents of dwellings along Hugmore Lane; users of Francis’ Lane; users of Public Footpath Holt 25; users of Public Footpath Holt 26/Isycoed 6- **Major to Moderate Adverse** (reducing to **Moderate Adverse (not significant)** following 15 years.

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Table 14.3.1
Summary of Residual Effects: Proposed Development Scenario

Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Socio-economics	Demolition & Construction	Local labour force and economic activity (Low to Medium)	Generation of construction employment – In addition to the benefit of direct employment of up to 24 employees (net) from the local authority area, there would also be those who would benefit from skills training, resident employment opportunities and secondary effects.	Minor (not significant)	BEN	ST	D&IND	T	IRR
Socio-economics	Completed Development	Local labour force and economic activity (Low to Medium)	Generation of new operational employment - As previously stated, the operational employment will provide a range of job types across engineering, technicians, managers and administrative and support Staff. The total net number of new operational jobs is between 306 and 880 on-site. No additional mitigation measures are proposed and therefore, the residual effect is as per that shown adjacent.	Moderate (significant)	BEN	LT	D&IND	P	IRR
Transport	Demolition & Construction	Users of A5156 (Low)	Severance impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Driver delay impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian delay from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian amenity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrians from fear and intimidation relating to demolition and construction traffic	Minor (not significant)	ADV	ST	D	T	R
			Impacts relating to accidents & severity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
Transport	Demolition & Construction	Users of A534 (Medium)	Severance impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Driver delay impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian delay from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian amenity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrians from fear and intimidation relating to demolition and construction traffic	Minor (not significant)	ADV	ST	D	T	R
			Impacts relating to accidents & severity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
Transport	Demolition & Construction	Users of Industrial Estate Road (High)	Severance impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Driver delay impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian delay from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian amenity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrians from fear and intimidation relating to demolition and construction traffic	Minor (not significant)	ADV	ST	D	T	R
			Impacts relating to accidents & severity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
Transport	Demolition & Construction	Users of Bryn Lane (Medium)	Severance impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Driver delay impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian delay from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian amenity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrians from fear and intimidation relating to demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts relating to accidents & severity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
Transport		Users of Ridley Wood Road (Low)	Severance impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R

14 Summary of Mitigation & Residual Effects

Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
	Demolition & Construction		Driver delay impacts on road users from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian delay from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrian amenity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts on pedestrians from fear and intimidation relating to demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
			Impacts relating to accidents & severity from demolition and construction traffic	Negligible (not significant)	ADV	ST	D	T	R
Transport	Option 1 Completed Development Stage Assessment	Users of A5156 (Low)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 1 Completed Development Stage Assessment	Users of A534 (Medium)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Minor (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 1 Completed Development Stage Assessment	Users of Industrial Estate Road (High)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 1 Completed Development Stage Assessment	Users of Bryn Lane (Medium)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 1 Completed Development Stage Assessment	Users of Ridley Wood Road (Low)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Transport	Option 2 Completed Development Stage Assessment	Users of A5156 (Low)	Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 2 Completed Development Stage Assessment	Users of A534 (Medium)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Minor (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 2 Completed Development Stage Assessment	Users of Industrial Estate Road (High)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Minor (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 2 Completed Development Stage Assessment	Users of Bryn Lane (Medium)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
Transport	Option 2 Completed Development Stage Assessment	Users of Ridley Wood Road (Low)	Severance impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic	Negligible (not significant)	ADV	LT	D	P	R
			Impacts relating to accidents & severity from operational traffic	Negligible (not significant)	ADV	LT	D	P	R

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Transport	Inter-Development Cumulative Stage (Option 1)	Users of A5156 (Low)	Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Transport	Inter-Development Cumulative Stage (Option 1)	Users of Industrial Estate Road (High)	Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Transport	Inter-Development Cumulative Stage (Option 1)	Users of Bryn Lane (Medium)	Severance impacts on road users from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Transport	Inter-Development Cumulative Stage (Option 2)	Users of A5156 (Low)	Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Transport	Inter-Development Cumulative Stage (Option 2)	Users of Industrial Estate Road (High)	Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Transport	Inter-Development Cumulative Stage (Option 2)	Users of Bryn Lane (Medium)	Severance impacts on road users from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Driver delay impacts on road users from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian delay from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrian amenity from operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
			Impacts on pedestrians from fear and intimidation relating to operational traffic from the proposed development in-combination with cumulative schemes	Minor (not significant)	ADV	LT	D	P	R
Air Quality	Demolition and Construction	All Human Receptors (R1 – R23) (Very Low)	2030 Future Baseline + Cumulative Schemes + Demolition and Construction Traffic (NO ₂) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	ST	D	T	R
Air Quality	Demolition and Construction	All Human Receptors (R1 – R23) (Very Low)	2030 Future Baseline + Cumulative Schemes + Demolition and Construction Traffic (PM ₁₀) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	ST	D	T	R

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Air Quality	Demolition and Construction	All Human Receptors (R1 – R23) (Very Low to Low)	2030 Future Baseline + Cumulative Schemes + Demolition and Construction Traffic (PM _{2.5}) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	ST	D	T	R
Air Quality	Completed Development	All Human Receptors (R1 – R23) (Very Low)	2030 Future Baseline + Cumulative Schemes + Completed Development (Option 2 – B2/B8 use plus alternative uses) (NO ₂) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	LT	D	T	R
Air Quality	Completed Development	All Human Receptors (R1 – R23) (Very Low)	2030 Future Baseline + Cumulative Schemes + Completed Development (Option 2 – B2/B8 use plus alternative uses) (PM ₁₀) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	LT	D	T	R
Air Quality	Completed Development	All Human Receptors (R1 – R23) (Very Low to Low)	2030 Future Baseline + Cumulative Schemes + Completed Development (Option 2 – B2/B8 use plus alternative uses) (PM _{2.5}) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	LT	D	T	R
Air Quality	Completed Development	Proposed Hotel	2030 Future Baseline + Cumulative Schemes + Completed Development (Option 2 – B2/B8 use plus alternative uses) (24-hour PM ₁₀ and 1-hour NO ₂) The residual impact on pollutant concentrations is of negligible significance	Negligible (not significant)	ADV	LT	D	T	R
Noise & Vibration	Demolition and Construction Stage	Residential receptors R01 – R03; R06 - R08 (High)	Noise impacts resulting from demolition and construction stage on-site activities on existing sensitive receptors	Minor (not significant)	ADV	ST	D	T	IRR
Noise & Vibration	Demolition and Construction Stage	Residential receptors R04 & R05 (High)	Noise impacts resulting from demolition and construction stage on-site activities on existing sensitive receptors, following the implementation of additional mitigation	Minor (not significant)	ADV	ST	D	T	IRR
Noise & Vibration	Demolition and Construction Stage	All Residential Receptors (R01 – R08) (High)	Noise impacts resulting from demolition and construction traffic on existing sensitive receptors.	Minor (not significant)	ADV	ST	D	T	IRR
Noise & Vibration	Demolition and Construction Stage	Residential Receptors R04 (High)	Vibration impacts resulting from demolition and construction site on-site activities on existing sensitive receptors	Minor (not significant)	ADV	ST	D	T	IRR
Noise & Vibration	Completed Development Stage	Residential Receptors R03, R06 & Potential Hotel Receptors HR04	Noise impacts resulting from road traffic generated during the completed development stage on existing and proposed sensitive receptors	Negligible (not significant)	ADV	LT	D	P	IRR
Noise & Vibration	Option 2 Completed Development Stage Assessment	Residential Receptors (R01, R02, R04, R05, R07, R08) & Potential Hotel Receptors (HR01, HR02, HR03, HR05-HR08) (High)	Noise impacts resulting from road traffic generated during the completed development stage on existing and proposed sensitive receptors	Negligible (not significant)	BEN	LT	D	P	IRR
Noise & Vibration	Completed Development Stage	Residential Receptors (R01, R02, R07, R08) & Potential Hotel Receptors (HR01, HR02 & HR07, HR08) (High)	Noise impacts resulting from on-site operational activities (such as deliveries and servicing and plant) during the completed development stage on existing and proposed sensitive receptors	Negligible (not significant)	ADV	LT	D	P	IRR
Noise & Vibration	Completed Development Stage	Residential Receptor R06 (High)	Noise impacts resulting from on-site operational activities (such as deliveries and servicing and plant) during the completed development stage on existing sensitive receptors, following the implementation of additional mitigation	Minor (not significant)	ADV	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Noise & Vibration	Completed Development Stage	Residential Receptors R03-R05, and Potential Hotel Receptors HR03-HR06 (High)	Noise impacts resulting from on-site operational activities (such as deliveries and servicing and plant) during the completed development stage on existing and proposed sensitive receptors, following implementation of additional mitigation	Moderate (significant)	ADV	LT	D	P	IRR
Noise & Vibration	Inter-Development Cumulative Stage	Residential Receptor R02 and Potential Hotel Receptors HR05 - HR07	Inter-development cumulative effects resulting from road traffic generated during the completed development stage of the proposed development and cumulative schemes on existing and proposed sensitive receptors. The residual effect would change from Negligible Beneficial (not significant) in the completed development stage to Negligible Adverse (not significant) in the inter-development cumulative stage.	Negligible (not significant)	ADV	LT	D	P	IRR
Biodiversity	Demolition and Construction Stage	Native hedgerows (County)	Impacts on native hedgerows from habitat loss, with the implementation of additional mitigation.	Moderate (significant)	ADV	MT	D	T	R
			Impacts on native hedgerows from habitat damage, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on native hedgerows from potential pollution and contamination, with the implementation of additional mitigation.	Negligible (significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on native hedgerows during the demolition and construction stage are considered to range from negligible, not significant to negative/moderate adverse, significant at the County level.	Moderate (significant)	ADV	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Scattered trees (Local)	Impacts on scattered trees from habitat loss, with the implementation of additional mitigation.	Minor (significant)	ADV	MT	D	T	R
			Impacts on scattered trees from habitat damage, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on scattered trees from potential pollution and contamination, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on scattered trees during the demolition and construction stage range from negligible, not significant to negative/minor adverse, significant at the Local level.	Minor (significant)	ADV	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Veteran trees (County)	Impacts on veteran trees from potential pollution and contamination, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Demolition and Construction Stage	Standing water (ponds) (Local)	Impacts on standing water (ponds) from habitat loss, with the implementation of additional mitigation.	Minor (significant)	ADV	MT	D	T	R
			Impacts on standing water from habitat damage and potential impacts from pollution and contamination, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on standing water during the demolition and construction stage are considered to range from negligible, not significant to negative/minor adverse, significant at the Local level.	Minor (significant)	ADV	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Great crested newt (and other S7 amphibian species) (Local)	Impacts on GCN and other S7 amphibian species from habitat loss and maintenance of FCS, with the implementation of additional mitigation.	Minor (significant)	BEN	MT	D	T	R
			Impacts on GCN and other S7 amphibian species from killing/injury/disturbance, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on GCN and other S7 amphibian species from habitat damage and potential impacts from pollution and contamination, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
			Overall residual effects on GCN and common toad during the demolition and construction stage are considered to range from negligible, not significant to minor beneficial, significant at the Local level.	Minor (significant)	BEN	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Bats	Impacts on bats from habitat loss, fragmentation and maintenance of FCS, with the implementation of additional mitigation.	Minor (significant)	ADV	MT	D	T	R
			Impacts on roosting bats from killing/injury/disturbance, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on roosting bats from habitat (trees) damage, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Disturbance impacts on roosting bats from construction noise and vibration, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Disturbance impacts on roosting, foraging and commuting bats from construction lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on bats during the demolition and construction stage are considered to range from negligible, not significant to negative/minor adverse, significant at the Local level.	Minor (significant)	ADV	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Badger (Local)	Impacts on badger from habitat loss (setts), with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Disturbance impacts on badger from construction lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Killing/injury of badger, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on badger during the demolition and construction stage are considered to be negligible, not significant.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Demolition and Construction Stage	Breeding birds (Local)	Impacts on breeding birds from habitat loss, with the implementation of additional mitigation.	Minor (significant)	ADV	MT	D	T	R
			Killing/injury/disturbance of nesting birds, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on breeding birds during the demolition and construction stage are considered to range from negligible, not significant to negative/minor adverse, significant at the Local level.	Minor (significant)	ADV	MT	D	T	R
Biodiversity	Demolition and Construction Stage	Wintering Birds (Local)	Impacts on wintering birds from habitat loss, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Killing/injury/disturbance of wintering birds, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Potential indirect impacts from habitat loss	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on wintering birds during the demolition and construction stage are considered to be negligible, not significant at the Local Level.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Demolition and Construction Stage	Hedgehog (Local)	Killing/injury of hedgehog, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Disturbance impacts on hedgehog from construction lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on hedgehog during the demolition and construction stage are considered to be negligible, not significant.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity		Brown hare (Local)	Killing/injury of brown hare, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
	Demolition and Construction Stage		Disturbance impacts on hedgehog from construction lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on brown hare during the demolition and construction stage are considered to be negligible, not significant.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Native hedgerows (County)	Planting of native hedgerows, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
Biodiversity	Completed Development Stage	Scattered trees (Local)	Planting of scattered trees, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
Biodiversity	Completed Development Stage	Veteran trees (County)	Loss or degradation of veteran trees as a result of recreational use, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Standing water (ponds) (Local)	Replacement of ponds, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
Biodiversity	Completed Development Stage	Great crested newt (and other S7 amphibian species) (Local)	Impacts on GCN and other S7 amphibians from habitat creation and maintenance of FCS, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
			Impacts on GCN from disturbance associated with the operation of the proposed development.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on GCN during the operational stage range from negligible, not significant to positive/minor beneficial, significant at the local level.	Negligible (not significant) to Minor (significant at a local level)	BEN	LT	D	P	R
Biodiversity	Completed Development Stage	Bats (Local)	Impacts on bats from habitat creation and maintenance of FCS, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
			Disturbance impacts on bats from operational lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on bats during the completed development stage range from negligible, not significant to positive/minor beneficial, significant at the Local level.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Badger (Local)	Disturbance impacts on badger from operational lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on badgers from disturbance associated with the operation of the proposed development.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effect on badgers during the completed development stage would be negligible, not significant.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Breeding birds (Local)	Impacts on breeding birds from habitat creation, with the implementation of additional mitigation.	Minor (significant at a local level)	BEN	LT	D	P	R
			Impacts on breeding birds from disturbance associated with the operation of the proposed development	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effects on bats during the completed development stage range from negligible, not significant to positive/minor beneficial, significant at the Local level.	Negligible (not significant) to Minor (significant at a local level)	BEN	LT	D	P	R

14 Summary of Mitigation & Residual Effects

Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Biodiversity	Completed Development Stage	Wintering Birds (Local)	Impacts on wintering birds from disturbance associated with the operation of the proposed development	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Hedgehog (Local)	Disturbance impacts on hedgehog from operational lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Impacts on hedgehog from the operation of the proposed development and risk of killing and injury to hedgehogs.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
			Overall residual effect on hedgehogs during the completed development stage would be negligible, not significant.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Biodiversity	Completed Development Stage	Brown hare (Local)	Disturbance impacts on brown hare from operational lighting, with the implementation of additional mitigation.	Negligible (not significant)	N/A	N/A	N/A	N/A	N/A
Contamination	Demolition and Construction Stage	Human Health (Demolition & Construction Workers and adjacent site users (High)	Where present, demolition & construction workers and potential users of the adjacent land may be exposed to Asbestos Containing Materials through dusts generated during the demolition of existing buildings and during the general site clearance works on site. ACM surveys will be completed on existing buildings, prior to the commencement of demolition works, to identify if asbestos is present. Where present, demolition would be preceded by the removal of asbestos by licensed contractors as required by the Control of Asbestos Regulations (2012).	Negligible (not significant)	ADV	ST	D	P	IRR
Contamination	Demolition and Construction Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC) (High/Medium)	The removal of existing surface vegetation and topsoil from across the application site as part of the site clearance works may result in an increased risk of surface water run-off which could impact on both the local surface water network and ultimately the SAC. Demolition and construction works will be carried out in accordance with a CEMP which will define environmental controls to be implemented throughout the works, including the need for surface water management and possible environmental monitoring and testing during the works, where required.	Negligible (not significant)	ADV	ST	D	T	R
Contamination	Demolition and Construction Stage	Human Health (Demolition & Construction Workers, Adjacent site users) (High)	The removal of existing surface vegetation and topsoil from across the site will expose any areas of vapours/hazardous ground gases and contamination present within existing soils and water across the application site. This poses a risk to both the workers on site involved in these works, and occupants and users of adjacent land through the increased risks of dust. Prior to the start of any works on-site, ground Investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. The proposed ground investigation will include testing of existing soils in order to confirm the presence/absence of any contamination present. The findings will inform the mitigation measures to be included in, and implemented via, the CEMP and within individual contractors’ Risk Assessments and Method Statements for precautionary or mitigation measures required during the works, such as Personal Protective Equipment (PPE) and dust monitoring or environmental sampling.	Negligible (not significant)	ADV	ST	D	T	R
Contamination	Demolition and Construction Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC), Human Health (Demolition & Construction Workers, Adjacent site users) (High/Medium)	In addition to imported materials required by the construction, it is anticipated that site won topsoil and other site-won soils, cleared as part of the preliminary site clearance works, will be stockpiled and retained on site for later re-use. An increased risk of surface water run off exists associated with the storage of such materials on site. Demolition and construction works will be carried out in accordance with a CEMP which will define environmental controls to be implemented throughout the works, including the need for surface water management and possible dust and environmental monitoring and testing during the works, where required.	Negligible (not significant)	ADV	ST	D	T	R

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Contamination	Demolition & Construction Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer); and Surface Waters, including the River Dee and Bala Lake SAC), Human Health (Demolition & Construction Workers, Adjacent land Users (High/Medium)	As part of the demolition and construction phase, new sources of potential contamination will be introduced to the site, including fuels which will be stored on site for use by the construction plant and machinery. The storage and use of such materials represent a risk to both Controlled Waters and Human Health Receptors through the potential for leakage and accidental spills. Demolition and construction works will be carried out in accordance with a CEMP, which will define environmental controls to be implemented throughout the works, including; - Recommendations for the correct storage of chemicals, fuels and oils on site, including the need for secondary containment such as bunds and drip trays, as appropriate. - The need for suitable areas for the storage of materials and hazardous materials on site, including designated refuelling areas and areas of concrete washing. - Details of emergency spill response and procedures for pollution incident reporting.	Negligible (not significant)	ADV	ST	D	T	R
Contamination	Demolition and Construction Stage	Retained vegetation (Low)	Where phytotoxic contamination exists at shallow depth within the application site then a potential risk exists to retained planting in soft landscaping within the completed development. Ground investigation will be carried out to confirm the existing ground conditions and understand the potential risks to retained planting within the final development. Where potential risks are identified then recommendations for remedial works will be made, such as the provision of clean cover within proposed landscaped areas which will be implemented in accordance with an agreed remedial strategy.	Negligible (not significant)	BEN	LT	D	P	IRR
Contamination	Completed Development Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC) (High/Medium)	Where contamination is present within the application site then Controlled Waters may be at risk where these soils are retained within the final development. In line with the nature of the proposed development then it is noted that the majority of the surface of the final development will comprise hardstanding (reduced infiltration) thus this risk applies predominantly to areas of open space and/or landscaping within the final development. Prior to the start of any works on-site, ground investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. Following completion of the ground investigation, where contamination has been shown to exist within the application site, then a remedial strategy will be prepared. The remedial strategy will define any remedial works required in order to render the site ‘suitable for use’ as proposed and will be submitted for agreement with the Local Planning Authority. Where required, potential remedial works may include: - Details of any hotspots to be removed and details of validation testing required. - Details of any treatment proposal prior to reuse/retention within the proposed development. - Details of any clean cover systems required within areas of soft landscaping. These remedial works will be completed and implemented as part of the demolition and construction phase.	Negligible (not significant)	BEN	LT	D	P	IRR
Contamination	Completed Development Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC) (High/Medium)	Controlled Waters could be at risk from impact from increased phosphate concentrations, mainly through wastewater from site occupants and site usage. The wastewater from the final development is likely to be treated on-site, including ‘polishing’ to reduce phosphate concentrations to appropriate levels, prior to discharge into the application site’s surface water drainage system. Alternatively, the wastewater may be discharged into the existing DCWW combined sewer prior to treatment at the Five Fords WwTW and subsequent discharge into the River Dee (subject to confirmation from DCWW regarding sufficient loading capacity and headroom for phosphate treatment). The wastewater treatment strategy for the proposed development will be agreed with Wrexham CBC and secured by an appropriately worded planning condition.	Negligible (not significant)	BEN	LT	D	P	R

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Contamination	Completed Development Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC), Human Health Future Site Users, Adjacent land Users (High/Medium)	Given the proposed development would comprise industrial floorspace, as well as a PFS, there is the potential for impacts on both Controlled Waters (ground and surface waters), including the SAC, as well as future site users, as a result of leaks and spillage of contaminative materials stored. Mitigation is proposed in the form of safe and appropriate storage and use of materials on site, to be implemented in accordance with appropriate Environmental Management Systems (EMS) and in line with relevant legislation and Environmental Permits where necessary. For all hazardous materials, there should be sufficient infrastructure in place to mitigate and contain any spills and a review of the site drainage and oil interceptors should be undertaken and submitted as part of the planning process.	Negligible (not significant)	BEN	LT	D	T	R
Contamination	Completed Development Stage	Controlled Waters (Kinnerton Sandstone Formation Principal Aquifer and Salop Formation Secondary A Aquifer; and Surface Waters, including the River Dee and Bala Lake SAC) (High/Medium)	The wastewater from the final development is likely to be treated on-site, including ‘polishing’ to reduce phosphate concentrations to appropriate levels, prior to discharge into the application site’s surface water drainage system. Alternatively, the wastewater may be discharged into the existing DCWW combined sewer prior to treatment at the Five Fords WwTW and subsequent discharge into the River Dee (subject to confirmation from DCWW regarding sufficient loading capacity and headroom for phosphate treatment).	Negligible (not significant)	BEN	LT	D	P	R
Contamination	Completed Development Stage	Human Health (Future Site Users and Adjacent land users) (High)	Where contamination is present within the application site then Future Site Users may be at risk where these soils are exposed within the final development. In line with the nature of the proposed development then it is noted that the majority of the surface of the final development will comprise hardstanding thus this risk applies predominantly to areas of open space and/or landscaping within the final development. Prior to the start of any works on-site, ground Investigation will be carried out to confirm the anticipated ground and groundwater conditions indicated by the PRA. Following completion of the ground investigation, where contamination has been shown to exist within the application site, then a remedial strategy will be prepared. The remedial strategy will define any remedial works required in order to render the site ‘suitable for use’ as proposed and will be submitted for agreement with the Local Planning Authority. Where required, potential remedial works may include: - Details of any hotspots to be removed and details of validation testing required. - Details of any clean cover systems required within areas of soft landscaping. - Details of any gas protection requirements to be installed within proposed buildings. These remedial works will be completed and implemented as part of the demolition and construction phase.	Negligible (not significant)	BEN	LT	D	P	IRR
Contamination	Completed Development Stage	New Buildings and Infrastructure (Medium)	A potential risk exists where buried concrete and plastic pipework comes into direct contact with existing made ground and natural soils which contain compounds (for example sulphates) that are aggressive to buried concrete. Concrete design and infrastructure specification will be informed by the findings of ground investigation to ensure the use of suitable materials are implemented as part of the demolition and construction stage.	Negligible (not significant)	BEN	LT	D	P	IRR
Contamination	Completed Development Stage	New Buildings and Infrastructure (Medium)	Lateral and vertical migration of hazardous ground gas and volatile vapours originating from made ground or organic natural soils on site (for example within former infilled ponds), potentially resulting in an explosion that could cause damage to a building or related infrastructure. Ground Investigation will be carried out to confirm the existing ground conditions. Subject to the identified ground conditions, gas monitoring will be carried out to inform the need for gas protection measures within the proposed buildings. Where required, gas protection measures will be implemented into proposed buildings as part of the demolition and construction stage.	Negligible (not significant)	BEN	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Contamination	Completed Development Stage	Retained vegetation and new planting (Low)	Where phytotoxic contamination exists at shallow depth within the application site then a potential risk exists to new planting in soft landscaping within the final development. Ground investigation will be carried out to confirm the existing ground conditions and understand the potential risks to new planting within the final development. Where potential risks are identified then recommendations for remedial works will be made, such as the provision of clean cover within proposed landscaped areas which will be implemented in accordance with an agreed remedial strategy as part of the demolition and construction stage.	Negligible (not significant)	BEN	LT	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	National Landscape Character Area 13 Deeside and Wrexham (Low sensitivity)	Loss of agricultural land. Increase in disturbance	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	National Landscape Character Area 14 Maelor (Medium sensitivity)	Loss of agricultural land. Increase in disturbance	Moderate (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Overall character of the setting of the application site (Low sensitivity)	Increase in urban character and visual disturbance	Minor (not significant)	ADV	ST	IND	P	IRR
Landscape & Visual	Demolition and Construction Stage	Overall character of the application site (Low sensitivity)	Loss of agricultural land. Change to construction site	Moderate (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of dwellings along Hugmore Lane (Medium sensitivity)	Construction activity within view	Major-Moderate (significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Francis' Lane (Medium sensitivity)	Demolition and construction activity within view	Major-Moderate (significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Holt 25 (High sensitivity)	Construction activity within view	Major-Moderate (significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Holt 26/Isycoed 6 (Medium sensitivity)	Construction activity within view	Major-Moderate (significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Ridlewood Road (Low sensitivity)	Construction activity within view	Moderate-Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Bryn Lane (Low sensitivity)	Demolition and construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Employees of Ridley Wood Industrial Complex (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Hugmore Lane (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Demolition and Construction Stage	Users of Abenbury Way (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Employees of and visitors to Clays Driving Range and Golf Course (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of Hugmore House (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Bieston 5 (Medium sensitivity)	Construction activity within view	Negligible (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of A534 Wrexham Road (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of Hugmore Farm (Medium sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of Hazel Brook House (Medium sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Holt 24 (High sensitivity)	Construction activity within view	Major-Moderate (significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of dwellings along Francis' Lane (Medium sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of B5130 (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Residents of Laurel Grove House (Medium sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Employees of Wrexham Industrial Estate (Negligible sensitivity)	Construction activity within view	Negligible (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Rodens Hall Road (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Isycoed 14 (High sensitivity)	No effect	None	-	-	-	-	-

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Demolition and Construction Stage	Users of Public Bridleway Abenbury 10 and Public Footpath Abenbury 12 (High sensitivity)	Construction activity within view	Moderate (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Pedestrian users of Bryn Estyn Road (High sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Demolition and Construction Stage	Users of Borrás Hall Lane (Low sensitivity)	Construction activity within view	Minor (not significant)	ADV	ST	D	P	IRR
Landscape & Visual	Demolition and Construction Stage	Users of Borrás Road (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Demolition and Construction Stage	Users of Public Footpath Holt 20 (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	National Landscape Character Area 13 Deeside and Wrexham (Low sensitivity)	Presence of additional industrial buildings	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	National Landscape Character Area 14 Maelor (Medium sensitivity)	Presence of additional industrial building	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Overall character of the setting of the application site (Low sensitivity)	Influence of expanded industrial estate	Minor (not significant)	ADV	LT	IND	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Overall character of the application site (Low sensitivity)	Change of character to urban	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of dwellings along Hugmore Lane (Medium sensitivity)	Completed buildings within view	Major-Moderate (significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Francis’ Lane (Medium sensitivity)	Completed buildings within view	Major-Moderate (significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Holt 25 (High sensitivity)	Completed buildings within view	Major-Moderate (significant)	ADV	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Holt 26/Isycoed 6 (Medium sensitivity)	Completed buildings within view	Major-Moderate (significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Ridlewood Road (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Bryn Lane (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Employees of Ridley Wood Industrial Complex (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Hugmore Lane (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Abenbury Way (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Employees of and visitors to Clays Driving Range and Golf Course (Low sensitivity)	Completed buildings within view	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of Hugmore House (Low sensitivity)	Completed buildings within view	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Bieston 5 (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	Users of A534 Wrexham Road (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of Hugmore Farm (Medium sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of Hazel Brook House (Medium sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Holt 24 (High sensitivity)	Completed buildings within view	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of dwellings along Francis’ Lane (Medium sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of B5130 (Low sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Residents of Laurel Grove House (Medium sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Employees of Wrexham Industrial Estate (Negligible sensitivity)	Completed buildings within view	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Rodens Hall Road (Medium sensitivity)	Completed buildings within view	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Isycoed 14 (High sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Bridleway Abenbury 10 and Public Footpath Abenbury 12 (High sensitivity)	Completed buildings within view	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening Year	Pedestrian users of Bryn Estyn Road (High sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	Users of Borrass Hall Lane (Low sensitivity)	Completed buildings within view	Negligible (not significant)	ADV	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Completed Development Stage – Opening Year	Users of Borrass Road (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening Year	Users of Public Footpath Holt 20 (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	National Landscape Character Area 13 Deeside and Wrexham (Low sensitivity)	Presence of additional industrial buildings set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	National Landscape Character Area 14 Maelor (Medium sensitivity)	Presence of additional industrial buildings set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Overall character of the setting of the application site (Low sensitivity)	Influence of additional industrial buildings set within mature mitigation planting	Minor (not significant)	ADV	LT	IND	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Overall character of the application site (Low sensitivity)	Presence of additional industrial buildings set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of dwellings along Hugmore Lane (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Francis’ Lane (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Holt 25 (High sensitivity)	Completed buildings within view set within mature mitigation planting	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Holt 26/Isycoed 6 (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Moderate (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Ridlewood Road (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR

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Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Bryn Lane (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Employees of Ridley Wood Industrial Complex (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Hugmore Lane (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Abenbury Way (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Employees of and visitors to Clays Driving Range and Golf Course (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of Hugmore House (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Bieston 5 (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of A534 Wrexham Road (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of Hugmore Farm (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of Hazel Brook House (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Holt 24 (High sensitivity)	Completed buildings within view set within mature mitigation planting	Moderate (not significant)	ADV	LT	D	P	IRR

14 Summary of Mitigation & Residual Effects

Technical Area	Stage	Receptor (Sensitivity)	Residual Impact	Residual Effect					
				Significance	ADV/BEN/NEU	ST/MT/LT	D/IND	P/T	R/IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of dwellings along Francis’ Lane (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of B5130 (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Residents of Laurel Grove House (Medium sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Employees of Wrexham Industrial Estate (Negligible sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Rodens Hall Road (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Isycoed 14 (High sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Bridleway Abenbury 10 and Public Footpath Abenbury 12 (High sensitivity)	Completed buildings within view set within mature mitigation planting	Minor (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Pedestrian users of Bryn Estyn Road (High sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Borrás Hall Lane (Low sensitivity)	Completed buildings within view set within mature mitigation planting	Negligible (not significant)	ADV	LT	D	P	IRR
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Borrás Road (Medium sensitivity)	No effect	None	-	-	-	-	-
Landscape & Visual	Completed Development Stage – Opening year + 15 years	Users of Public Footpath Holt 20 (Medium sensitivity)	No effect	None	-	-	-	-	-