Watercourses: The development will change the permeability of 62.9 hectares of land. The ecological assessment must account for downstream impacts—such as chemical runoff or altered water tables—affecting nearby river catchments and valleys; **climate change and extreme weather patterns**: Replacement of green infrastructure with hard surfacing will significantly impact on surface temperatures, and will diminish the positive effects of mitigating high temperatures

Amber/Red Priority bird Species: Proposing out-of-season vegetation removal is **not sufficient protection** on its own for amber- or red-listed birds during development. While clearing vegetation out of season avoids immediate criminal liability under the Wildlife & Countryside Act 1981 (which prohibits destroying active nests), it does nothing to mitigate the permanent loss of critical habitat for vulnerable species. **Baseline Depletion**: Clearing vegetation, even out of season, destroys habitat that must be accounted for in the pre-development baseline. **10% Replacement Rule**: Under mandatory. **Metric Penalties**: Artificially clearing a site early to lower its biodiversity score is penalized; planning authorities can use past habitat data to calculate the baseline

The Mitigation Hierarchy: The National Planning Policy Framework **mandates a strict "Avoid, Mitigate, Compensate" approach**. **Habitat Loss**: **Simply removing the vegetation out of season skips the "Avoid" and "Mitigate" steps** regarding long-term foraging and breeding ranges. **Alternative Habitats**: Creating equivalent or better-quality nesting and foraging grounds on- or off-site. **Buffer Zones**: Keeping core nesting and feeding zones completely untouched during and after construction. **Long-Term Features**: Integrating strategic landscape features, such as specific hedgerows or specialized bird boxes, legally secured for 30 years. proposed site development must take account of the national habitat network on neighbouring land, specifically considering **ecological connectivity**, **local wildlife corridors**, and **functionally-linked land**. Planning rules require projects to protect nature across property lines. **Hedgerow fracturing and Boundary Ecosystems: The "Relief Road" Impact:** Local consultations highlight significant objections regarding a proposed relief road/infrastructure corridors cutting through the Masterplan area. Ecologically, this introduces major **fragmentation barriers, localized noise, and artificial light pollution** that threatens **bat commuting routes**, nesting birds, and terrestrial fauna crossing toward the Benhall countryside. Note:- the proposed site is regarded by Hopkins Ecology Consultancy as ‘low priority’ for bats.

South Saxmundham Garden Neighbourhood (SSGN), accounting for the habitat network on neighboring land is a strict statutory requirement. Under **Policy SCLP12.29 of the East Suffolk Council Local Plan**, Because the live planning application (**Ref: DC/26/1490/OUT**) submitted by Pigeon Developments Ltd covers 161 acres spanning both Saxmundham and Benhall Parishes, cross-boundary ecological impact is a major focus for local planning committee. **Connective Green Infrastructure: "Principle 1" of the developer's masterplan framework dictates creating connective green infrastructure**. New landscape corridors must align with the hedgerows, tree lines, and watercourses of neighboring agrarian fields in Benhall to prevent fracturing local wildlife pathways.

A12 Coexistence and Corridors: Because the development site sits on either side of the busy A12 corridor, special consideration must be given to safely connecting the eastern residential zones and western employment lands without creating an impenetrable barrier for local fauna. **Secure a minimum 10% Biodiversity Net Gain (BNG):** Ensure that the required on-site habitat enhancements **utilize target species lists that support the wider East Suffolk nature recovery strategy,** matching the baseline habitats of neighboring countryside lines, eg., the Great Crested Newt strategic opportunities areas; the priority species distribution areas for the region; and the National Habitat Network. **Establish Robust Buffer Zones:** Keep intense construction, drainage networks, and heavy lighting arrays set back from the rural boundaries facing the Benhall Parish side to prevent edge-effect degradation on unallocated natural land.

River Fromus Corridor & Hydrological Vulnerabilities - Watercourse Interception: The River Fromus corridor runs adjacent to/through the wider landscape context of Saxmundham. Retaining hydrology and guarding against **increased surface water runoff** from the newly urbanized landscape is a critical constraint. **Sedimentation Risks:** Construction phase mitigation must heavily focus on protecting the water quality of this river system, which acts as a primary vector to wider downstream habitat networks. **The Layers Land Ownership & Allocation:** Local Plan Policy SCLP12.29 allocates land east of the railway line (historically known as **The Layers**) to host the SANG. However, historically, elements of this land have sat outside direct developer control. If the red-line boundary of the application cannot guarantee long-term control, the mandatory **30-year habitat maintenance covenant** required by the Environment Act 2021 cannot be legally secured. **Infrastructure Interception (River Fromus Bridge):** Both the Suffolk CC Landscape Team and the Sea Link Local Impact Report have highlighted that major infrastructure proposals—such as the proposed River Fromus bridge—intersect the designated SANG allocation area. This reduces the baseline area capable of generating unfragmented habitat units. **The Kiln Lane Crossing Bottleneck:** Strategic papers note that the SANG is physically divorced from the main housing blocks by the railway line, relying on the Kiln Lane Crossing. If heavily lit or cleared for emergency vehicular access, it risks degrading the baseline edge habitats of the SANG itself, lowering its starting metric score.

Based on the layout of the **South Saxmundham Garden Neighbourhood (SSGN)**, the live hybrid application (**Ref: DC/26/1490/OUT**), and the intersection of the **Environment Act 2021** with **Habitats Regulations**, several ecological vulnerabilities exist in the Biodiversity Net Gain (BNG) metric and mitigation strategy. **Challenge 1: Illegal "Double-Counting" of SANG Baseline Enhancements - The Ecological Challenge:** Under Defra's statutory BNG rules, any habitat creation used to meet Habitats Regulations requirements (the SANG at *The Layers*) can only count toward BNG if it delivers **additionality** beyond what is needed to make the SANG functional. If the applicant has scored basic SANG infrastructure (e.g., cleared dog-walking paths, formal amenity grass, and high-footfall clearings) as "High Distinctiveness" habitats (like Lowland Meadow) without adjusting for intense recreational pressure, they are double-counting. High footfall and dog fouling will actively degrade soil quality and prevent these habitats from ever reaching regenerative biodiversity status. The planning authority must compel the applicant to apply a **strategic risk multiplier** or downgrading penalty to any BNG units claimed within 15 meters of the SANG walking loops. A minimum of 10% of the total post-development BNG must be demonstrated completely outside of the SANG boundary. The BNG metric likely overestimates the connectivity and ultimate distinctiveness score of these fragmented pockets. Wildlife underpasses and dense, multi-layered native structural planting buffers (minimum 15m depth) must be legally conditioned along the transport infrastructure to shield adjacent habitat networks. **Challenge 2: Fragmentation by the Infrastructure & A12/Fromus Link. The Ecological Challenge:** The masterplan is divided by major infrastructure, including the railway line, Kiln Lane crossing, and the proposed link roads/bridges over the River Fromus corridor. A static BNG metric calculation treats a block of habitat as a single polygon. In reality, a habitat bisected by a road or heavy pedestrian link suffers from severe **edge-effect degradation**, localized light pollution, and acoustic disturbance. The metric likely overestimates the connectivity and ultimate distinctiveness score of these fragmented pockets.

<u>Challenge 3</u>: Unrealistic Target Conditions for On-Site Open Spaces: The Ecological Challenge- To achieve a 10% net gain on a dense 69-hectare mixed-use development - unrealistic target conditions for on-site green infrastructure (e.g., classifying sustainable drainage systems [SuDS] or residential verges as "Good Condition" wetlands or species-rich grasslands). In a garden neighborhood setting, urban pressures, intensive public maintenance, and domestic pet predation make achieving "Good" condition highly improbable. **Required Mitigation/Action:** Force the applicant to downgrade all integrated urban green spaces, SuDS, and verges to "Moderate" or "Poor" condition within the statutory metric tool. Any resultant unit deficit must be fulfilled via a secured **off-site BNG agreement** or through the purchase of statutory biodiversity credits, rather than relying on fabricated on-site targets. **<u>Challenge 4</u>: Temporal Lag and 30-Year Legal Securitization: The Ecological Challenge -** The SSGN is a long-term strategic allocation that will be delivered in phases over many years. The metric assumes habitats materialize instantly, whereas target conditions for woodlands and mature scrub take 15 to 30 years to establish. This creates a severe **temporal lag** where local wildlife networks are displaced long before replacement habitats are functionally viable. Furthermore, if land ownership at *The Layers* or peripheral parcels is fractured, the 30-year management covenant required by the Environment Act 2021 cannot be enforced. **Required Mitigation/Action:** A strict **Grampian planning condition** must be applied, preventing the commencement of residential phases until the baseline SANG and BNG structural planting have undergone a mandatory 2-year establishment period. The council must secure a site-wide **Habitat Management and Monitoring Plan (HMMP)** backed by a Section 106 legal agreement that binds all current and future landowners to the 30-year maintenance framework.