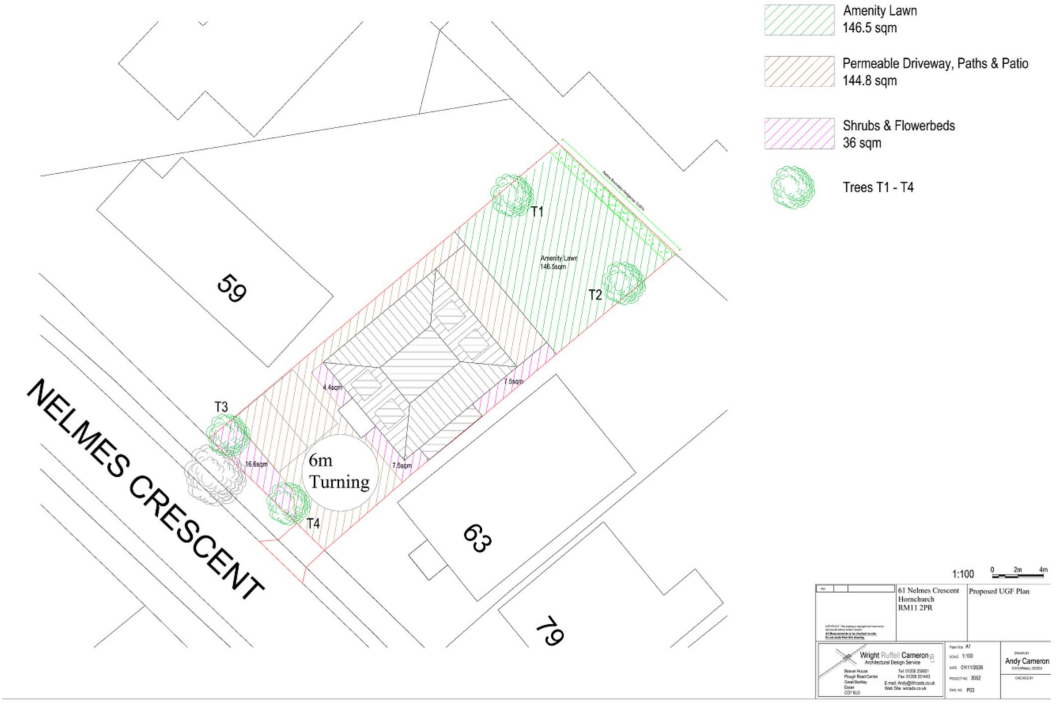
URBAN GREENING FACTOR (UGF) COMPLIANCE STATEMENT

Project Address: 61 Nelmes Crescent, Hornchurch
Application Reference: P1241.26
Target Benchmark Required: 0.40 (Residential Standard)
Proposed Site UGF Score: **0.40 (PASS)**

1. Executive Summary

This statement has been prepared to demonstrate compliance with Urban Greening Factor (UGF) policies under the local planning framework and the London Plan matrix. The site encompasses a total physical boundary area of 446.90 m². The proposed development features a highly balanced landscape design that blends functional hardstanding with high-scoring vertical and boundary assets to maximize biodiversity, stormwater mitigation, and suburban greening.

Through the implementation of structurally engineered permeable paving, targeted structural borders, a continuous native hedgerow boundary, and a multi-zonal tree canopy overlay, the development achieves a Final UGF Score of 0.40, clearing the policy threshold of 0.40.



2. Detailed UGF Calculation Breakdown

Feature Description	Area (m²)	UGF Category / Factor	Weighted Score
New House Footprint	107.000	Sealed Surface (0.0)	0.00
Permeable Driveway & Patio	144.800	Permeable Paving (0.1)	14.48
Amenity Lawn	146.544	Standard Grass (0.4)	58.62
Shrubs & Flower Beds	36.000	Flower/Shrub Planting (0.7)	25.20
Native Boundary Hedgerow	12.556	Hedges - Linear Shrubs (0.6)	7.53
4x Medium Trees (Maturity Overlay)	92.000	Trees - 5–10m canopy (0.8)	73.60
Total Physical Site Area	**446.900**	**Total Weighted Score:**	**179.43**

Final Proposed UGF Score = 179.43 ÷ 446.90 = 0.402 → 0.40 (PASS)

3. Design Rationale & Ecological Justification

- **Tree Canopy & Structural Distribution:** In strict accordance with the London Plan Policy G5 UGF methodology, new trees are scored based on their projected maturity canopy area—assessed at an average of 23 m² per tree—and are credited with a premium factor weighting of 0.8. These vertical layers sit directly above ground-level green infrastructure assets, enhancing the vertical complexity of the site without changing the fixed land boundary denominator. To maximize public amenity and spatial performance, the assets are balanced cross-zonally:
  - **Front Garden Zone:** Implements 1no. Carpinus betulus 'Fastigiata' (Upright Fastigiate Hornbeam) (T3) and 1no. Pyrus calleryana 'Chanticleer' (Chanticleer Pear) (T4) adjacent to the 144.80 m² permeable driveway matrix. These upright species provide prompt roadside visual softening and particulate filtration while protecting the engineered sub-base via deep, compact, non-invasive root networks.
  - **Rear Garden Zone:** Integrates 1no. Amelanchier x grandiflora 'Robin Hill' (Juneberry) (T1) and 1no. Betula utilis 'Grayswood Ghost' (Grayswood Ghost Birch) (T2) within the main amenity lawn and soft-scaped perennial borders. This canopy layer creates valuable localized summer cooling, shadows the patio environment, and builds an active vertical habitat bridge for native birds and pollinators.
- **Linear Hedgerow Integration:** A continuous 12.556-metre native hedgerow run (mapped at a standard mature width of 1m) is integrated securely along the property boundaries. Scoring a high-value factor of 0.6, this asset forms a dense ecological corridor consisting of a curated mix of Crataegus monogyna (Hawthorn), Carpinus betulus (Hornbeam), and supporting native species. This specific composition serves as an eco-friendly replacement for standard timber boundary fencing, providing complex foraging resources, secure nesting structure for local birds, and crucial seasonal blooms for native pollinators.
- **Sustainable Urban Drainage (SuDS):** The 144.80 m² driveway and rear patio use an open-graded, structurally engineered permeable paving matrix. This setup allows direct ground infiltration to mitigate surface water runoff, preventing flash flooding and relieving burden on local municipal drainage systems.
- **Biodiversity & Flora Layering:** The 36.00 m² of flower and shrub planting beds work alongside the lawn to create complex multi-tiered habitats. Species chosen for these beds focus on robust, low-maintenance native perennials to offer year-round ecological texture and aesthetic interest.

4. Planting Scheme & Quantity Schedule

4.1 Native Hedgerow Boundary (12.556m Linear Run)

Planted in a staggered double row at a density of 5 saplings per linear metre (approx. 40cm spacing between rows).

- **50% Crataegus monogyna (Common Hawthorn)** – 32 Bare-root saplings (40-60cm length)
- **30% Carpinus betulus (Common Hornbeam)** – 19 Bare-root saplings (40-60cm length)
- **10% Prunus spinosa (Blackthorn)** – 6 Bare-root saplings (40-60cm length)
- **10% Acer campestre (Field Maple)** – 6 Bare-root saplings (40-60cm length)

Total Hedgerow Quantity: 63 Saplings

4.2 Rich Flower & Shrub Beds (36.0 m² Total Layout)

Designed at an industry-standard planting density of 4.5 plants per square metre to achieve rapid canopy closure and suppress weeds (162 containerised plants total).

Tier 1: Structural & Upper Shrub Layer (15% of area / ~5.4 m²)

- **Cornus alba 'Sibirica' (Red-barked Dogwood)** – 8 plants (3L pots). Compact groupings for structural winter bark color.
- **Viburnum opulus (Guelder Rose)** – 7 plants (3L pots). Lacecap spring blooms and high bird-foraging value.

Tier 2: Mid-Height Herbaceous Perennials & Ornamental Grasses (50% of area / ~18.0 m²)

- **Echinacea purpurea (Purple Coneflower)** – 24 plants (2L pots). High-impact pollinator asset.
- **Salvia nemorosa 'Caradonna' (Balkan Clary)** – 32 plants (2L pots). Upright violet spikes with premium drought tolerance.
- **Rudbeckia fulgida 'Goldsturm' (Black-eyed Susan)** – 24 plants (2L pots). Late-season architectural seed heads.
- **Pennisetum alopecuroides 'Hameln' (Fountain Grass)** – 13 plants (2L pots). Soft texture and movement.

Tier 3: Ground Cover & Front Border Softeners (35% of area / ~12.6 m²)

- **Geranium 'Rozanne' (Hardy Cranesbill)** – 30 plants (1L pots). Continuous summer-long ground coverage.
- **Alchemilla mollis (Lady's Mantle)** – 24 plants (1L pots). Soft chartreuse foliage to feather outward onto lawn and paving boundaries.