Proposed Residential Development at Railpark West, Maynooth, Co. Kildare

Landscape Design Responses to LRD Opinion

for

Maynooth Montane Limited

December 2025

Landmark Design & Consultancy Ltd

Landscape Design & Consultancy

1. Layout and Design

(b)The open space to the northeast area of the site is not sufficiently overlooked and a revised approach to this area is required.

Response:
The northeast open space has been redesigned to ensure full passive surveillance from surrounding buildings, consisting a looped circulation route.

This provides natural surveillance, activity, and safe oversight consistent with DMURS and KDA requirements.

(j) The over dominance of attenuation area in public open space 2 exceeds the 10% maximum outlined within section 15.6.6 and objective in o 26 of the kcdp 2023–2029.

Response:

The provision of SuDS within Public Open Space exceeds the 10% maximum referenced in Section 15.6.6 and Objective IN O26 of the Kildare County Development Plan 2023–2029. However, strict adherence to this threshold is not achievable in the context of a compact urban development where a net density of 50.1 dwellings per hectare is required.

The Sustainable Residential Development in Urban Areas – Guidelines for Planning Authorities 2024, place a strong and explicit emphasis on the delivery of compact, higher-density development supported by multifunctional green infrastructure. The guidelines specifically recognise that in urban locations, public open space must perform multiple roles, including recreation, biodiversity enhancement, microclimate regulation and surface water management through SuDS. They confirm that the integration of drainage infrastructure within landscaped public spaces is not only acceptable, but actively encouraged as a fundamental component of climate-resilient compact growth. The proposed integration of the detention basin within the public open space therefore represents a direct and robust implementation of national policy, rather than a departure from it.

Higher-density schemes inherently create proportionally greater hardstanding and reduced private space, placing increased pressure on public open space to accommodate both amenity and drainage functions. In this context, the site must attenuate all surface water on site, and above ground SuDS solutions are strongly preferred by both the Planning Authority due to their performance, visibility, and long-term maintenance advantages.

Detention basins provide significantly greater attenuation capacity than rain gardens and SuDS tree pits, which, while valuable for biodiversity and water quality, offer only minimal storage volumes and cannot meet the hydraulic requirements associated with higher-density layouts. To satisfy engineering requirements, ensure climate-

resilient drainage and comply with Parks Department expectations regarding open space usability, the detention basin represents the only viable solution.

Its placement within the public open spaces allows the basin to be integrated as a multi-functional landscape feature, designed with shallow gradients, naturalistic edges and high-quality planting so it contributes positively to amenity, visual character and biodiversity.

Taking these constraints and performance requirements into account, the resulting SuDS area, represents a balanced and well-considered response that enables the development to deliver both high-quality public open space and compliant, sustainable surface-water attenuation within a compact, policy-driven density framework.

2. Surface Water

6. All sustainable drainage systems (suds) features within areas proposed for taking in charge shall be designed and constructed in accordance with Kildare county council's sustainable drainage systems (suds) taking in charge standard details. All tree pits shall collect runoff via overland flow and not direct discharge to base of tree pit.

Response:

- Raingarden detail shows overland flow via dropped kerbs into bioretention areas; no piped inflow to tree pits.
- Tree pits in soft and hard landscape areas are fully detailed, with no piped drainage connections shown (Heavy Standard Tree & Hard Landscape Tree planting details).
- All detention basins follow KCC’s SuDS design: 1:5 facing public realm, freeboard, climate change uplift and infiltration rates provided within Combined Services Plan.

Thus, SuDS conforms with KCC Taking-in-Charge guidance.

3. Open Space, Landscaping and Boundary Treatment

1. **The proposal does not adequately consider or respond to the proximity of the proposed neighbouring residential park. greater integration and contextual sensitivity are required to ensure cohesive development. a higher degree of collaboration and design continuity is required between adjoining developers to ensure an integrated and well-functioning neighbourhood.**

Response:
The drawings now demonstrate clear physical and visual integration**:**

- Multiple pedestrian connections to adjoining zoned/KDA lands are explicitly shown on Detail Plans and the Landscape Plan.
- Boundary treatments along the MERR edge are coordinated with the MERR project's stone wall typologies (2.0 m and 2.5 m), ensuring landscape and character continuity.
- Open space orientation and circulation routes are aligned to enable future seamless links to adjoining phases.

This provides a cohesive neighbourhood structure in accordance with the LAP KDA requirements.

2. **The designated open space appears peripheral in location and is likely to experience considerable pressure due to the volume and intensity of use expected. its capacity and design may not sufficiently meet the needs of future residents.**

Response:
The open space system has been strengthened significantly:

- Central Open Space is located at the heart of the layout, overlooked by apartments, duplexes and streets.
- Open spaces are multi-functional**,** combining kickabout, inclusive play, exercise stations, informal play and seating.
- Circulation loops integrate all open spaces, distributing use rather than concentrating it in any one location.

The network now satisfies the LAP requirement to provide centrally located, accessible, high-amenity spaces.

6. The existing hedgerow along the laneway at rail park should be retained due to its ecological and visual value.

Response:
Item 9 of the Opinion confirms the Council's expectation that the scheme must deliver a pedestrian connection to the existing footpath network, including Railpark Lane. To provide this essential connectivity, identified as a core movement requirement within the KDA, Hedgerow No. 44 at the north-west of the site must be removed.

The arboricultural assessment records Hedgerow H44 as an unmanaged native hawthorn hedgerow with elder and a bramble-dominated understorey. While of native composition, it is in only fair structural and physiological condition, displays fragmentation and overgrowth, and includes multiple gaps infilled with bramble. In its current degraded state, the hedgerow provides limited ecological or landscape functionality and does not form part of a strong continuous green corridor. Its removal therefore enables the delivery of a critical pedestrian linkage without resulting in the loss of a high-value or high-quality landscape feature.

Furthermore, the scheme includes substantial replacement and enhancement measures along this boundary, comprising mixed-species native hedgerow and tree planting designed to deliver a more robust, diverse, and ecologically functional green edge. These measures will enhance habitat quality, strengthen green-infrastructure connectivity, and provide a long-term net benefit compared with the existing fragmented hedgerow.

7. Construction works are likely to impact the southern hedgerow, which should be reviewed to mitigate potential loss.

Response:

The Boundary Treatment Plan incorporates BS 5837–compliant protection measures, with fencing positioned at the hedgerow dripline to prevent construction encroachment and ensure the southern hedgerow remains undisturbed.

• Landscape Sections confirm that the southern hedgerows lie outside all construction zones, with new planting set back appropriately from the boundary to provide additional buffering during works.
• The proposed retention of the southern hedgerow also aligns with the layout of the adjoining lands, for which planning is currently pending, ensuring continuity of green infrastructure across site boundaries.
• Hedgerow removal is limited strictly to locations where vehicular or pedestrian connections must be provided to adjoining lands, in line with movement objectives and the requirements of the planning authority.
• The arborist's full design suite sets out the detailed assessment of the existing

hedgerows, the precise extent of any required interventions, and all recommended protection measures to ensure that retained hedgerows are safeguarded throughout construction.

9.The proposal lacks sufficient integration with the landscape strategy of the MERR particularly in relation to detention basins. The landscape and drainage designs should be coordinated to ensure effective water management and landscape character.

Response:

The proposal has been developed to ensure alignment with the landscape strategy of the MERR, with particular regard to the interface between boundary treatments, planting structure, and the character of adjoining green-infrastructure corridors. Detail Plans 3 and 4 illustrate coordinated boundary treatments, including 2.0 m and 2.5 m stone walls as included on the MERR plans. The Landscape Sections demonstrate how native woodland belts and hedgerows along the site boundary strengthen the MERR's existing green infrastructure network.

Importantly, all stormwater generated within the development is managed entirely on-site; MERR drainage basins lie outside the application boundary and are not relied upon for the development's SuDS function. The coordinated approach therefore ensures that while drainage systems operate independently, the landscape structure is fully integrated, resolving both the visual and functional relationship between the two schemes.

4. Roads/Transport

13. The applicant is requested to submit details of a root management system to be used where trees are planted adjacent to roads and/or footpaths to prevent heave of surfaces.

Response:

- Root-barrier systems are clearly shown on the Tree Planting in Hard Landscape Detail (Root barrier 600 mm depth) as indicated on Drawing No. 08_Landscape Details.
- Locations of root barriers are indicated on Drawing No. 07_Combined Services Plan.

21. The applicant is requested to overlay the street lighting, with the landscape proposals, to ensure that all trees are a minimum of 5 metres away from lamp standards. (It is noted that the public lighting design complies with the current KCC technical specification (2023).

Response:

- **5 m exclusion zones** are explicitly shown on the Combined Services Plan ("tree planting not permitted within this area"). Refer to Drawing No. 07_Combined Services Plan
- Tree positions on the landscape plan are fully coordinated with lighting locations. Refer to Drawing No. 07_Combined Services Plan

5. Ecological Impact Assessment

3. A revised landscape plan is needed to the reflect the additional hedgerow and the need to ensure functional ecological corridors linking to the surrounding landscape where possible. this review and reappraisal may assist the applicant to comply with the KCC policy BI P6.

Response:

The Landscape Plans show extensive new native hedgerow planting throughout the scheme. All feasible opportunities to introduce new hedgerows have been fully explored and incorporated, ensuring that these new linear habitats work in tandem with the existing retained hedgerows to create a continuous, robust, and ecologically functional network across the site. Together, the retained and newly planted hedgerows deliver strong habitat linkages and movement corridors for wildlife, fully aligning with the requirements of BI P6 and the LAP ecological connectivity objectives, which emphasise the protection, reinforcement, and expansion of green infrastructure networks.

5. There are several areas where some additional hedgerow planting may be additionally appropriate on site, and it is requested that any additional areas of hedging should be highlighted and outlined in the overall landscape plan for the site and highlighted as areas for potential offset of biodiversity loss.

Response:

The Landscape Plans show extensive new native hedgerow planting throughout the scheme. All feasible opportunities to introduce new hedgerows have been fully explored and incorporated, ensuring that these new linear habitats work in tandem with the existing retained hedgerows to create a continuous, robust, and ecologically functional network across the site. Together, the retained and newly planted hedgerows deliver strong habitat linkages and movement corridors for wildlife, fully aligning with the requirements of BI P6 and the LAP ecological connectivity objectives, which emphasise the protection, reinforcement, and expansion of green infrastructure networks.

4. It is recommended that the majority of tree and shrub species to be planted on site should be of native provenance and these should be included in the landscape plan.

Response:

The Landscape Plan and Detail Plans demonstrate a strong commitment to biodiversity through extensive use of native planting across the scheme, including native woodland mixes, native hedgerows, and a palette of native tree species such as oak, birch, Scots pine and rowan throughout all open spaces.

Raingarden planting has been designed using native or naturalised, pollinator-friendly species that are resilient to wet–dry cycles and contribute to the ecological function of SuDS features.

Overall, the planting strategy now incorporates 80–90% native-dominant species, significantly strengthening ecological value, habitat connectivity and long-term landscape resilience.