STATEMENT OF RESPONSE TO
AN BORD PLEANÁLA'S CONSULTATION OPINION

IN RESPECT OF A

PROPOSED RESIDENTIAL DEVELOPMENT AT COOKSTOWN, ENNISKERRY, CO. WICKLOW

April 2021

PREPARED FOR

CAIRN PLC

Cairn Homes Properties, Limited.

PREPARED BY

JSA John Spain Associates
Planning & Development Consultants
Chartered Town Planners & Chartered Surveyors

39 Fitzwilliam Place, Dublin 2
Telephone: (01) 662 5803
E-mail info@johnspainassociates.com

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1.0 INTRODUCTION

1.1 The pre-application consultation opinion from An Bord Pleanála in relation to the proposed strategic housing development at Cookstown, Enniskerry, Co. Wicklow was received on the 2nd September 2020 (case reference no. **307089-20**).

1.2 The opinion states that An Bord Pleanála *"has considered the issues raised in the pre-application consultation process and, having regard to the consultation meeting and the submission of the planning authority, is of the opinion that the documents submitted with the request to enter into consultations require further consideration and amendment to constitute a reasonable basis for an application for strategic housing development."*

1.3 The opinion further states that *"An Bord Pleanála considers that the following issues need to be addressed in the documents submitted that could result in them constituting a reasonable basis for an application for strategic housing development".* The issues listed are under the following headings:

- Vehicular/Cyclist Movement;
- Interface with Cookstown road;

1.4 Section 2 of this report sets out how the applicant has responded to each of the issues raised by the Board in their Consultation Opinion, with particular reference to the Design Statement, and accompanying reports and drawings prepared by the design team and which accompany this application. This Statement of Response, and the associated amendments to the scheme, in turn responds to the key issues raised by the Planning Authority's opinion as set out in their Report on the pre-application proposals and the Board's Opinion.

1.5 Article 285(5)(b) of the Planning and Development (Strategic Housing Development) Regulations 2017 states:

'(5) At the conclusion of a pre-application consultation, the Board may do either or both of the following: (b) notify the prospective applicant that specified information should be submitted with any application for permission for the proposed development, including photographs, plans, maps, drawings or other material or particulars and, where the Board considers it appropriate, either or both—'.

1.6 The pre-application consultation opinion from An Bord Pleanála states pursuant to Article 285(5)(b) that the following specific information should be submitted with any application for permission:

"1. Additional details and/or revised proposals in relation to site services, having regard to comments contained within the Engineer's Report dated 14/02/2020, as submitted with the Planning Authority's Opinion, as relates to surface and foul water proposals.

2. A report that addresses issues of residential amenity (both existing residents of nearby development and future occupants), specifically with regards to daylight/sunlight analysis, overlooking, overshadowing, overbearing and noise. The report shall include full and complete drawings including levels and cross- sections showing the relationship between the proposed development and nearby residential development.

3. Additional CGIs/visualisations/3D modelling.

4. A report that specifically addresses the proposed materials and finishes of buildings, landscaped areas and any screening/boundary treatment. Particular regard should be had to the requirement to provide high quality and sustainable finishes and details which seek to create a distinct character for the development.

5. A plan of the proposed open space within the site clearly delineating public, communal and private spaces.

6. Waste Management Details.

7. Site Specific Construction and Demolition Waste Management Plan."

1.7 A detailed response to each of the points raised above has been provided within this response report and has been included as part of the planning application documentation.

Figure 1.1 – Overall Masterplan

Source: MOLA Proposed Site Layout Plan)

2.0 STATEMENT OF RESPONSE TO ISSUES RAISED

2.1 The following sets out how the applicant has addressed the four issues raised in the Board's Notice of Pre-Application Consultation Opinion, with reference to the accompanying documentation submitted, to ensure the subject application constitutes a reasonable basis for an application for strategic housing development.

2.2 The Site Layout Plan prepared by MOLA Architects shows the overall layout in context.

2.1 Response to Item 1 – Vehicular/Cyclist/Pedestrian Movement

2.3 Item 1 of the An Bord Pleanála opinion states the following:

"Further consideration of movement (pedestrian, cyclist and vehicular) within and through the development site, and to Enniskerry, and in particular the need for additional/upgraded pedestrian links, and how pedestrian movements will be facilitated in a safe manner across the Cookstown Road, as well as the potential need for road widening to facilitate the development.

Internally, further consideration of the provisions of the Design Manual for Urban Roads and Streets (DMURS) is required, and how the proposed layout and urban design response, including the arrangement of parking spaces, will contribute to the creation of attractive and safe streetscapes. Consideration should be given to the ease of pedestrian movements through the site, in particularly at key crossing points. Connections and permeability to the adjoining to the west and to the public park to the south should also be detailed.

Particular regard should be had to the comments contained within the Engineer's Report dated 14/04/2020, and to comments contained with the Transport Report dated 01/05/2020, as submitted with the Planning Authority's Opinion.
Further consideration of these issues may require amendment to the documents and/or design proposals submitted."

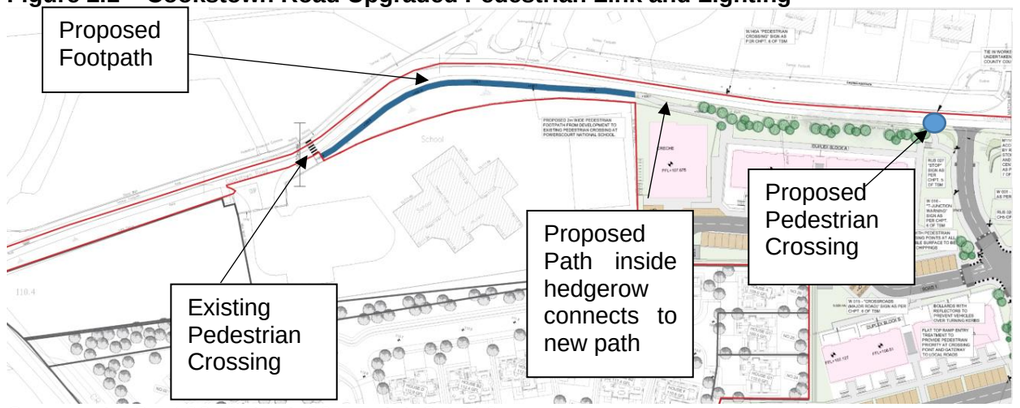
2.1.1 Pedestrian, Cyclist and Vehicular Movement

2.4 In relation to Issue No.1 referred to in the pre-application consultation opinion from An Bord Pleanála, the applicant has engaged with adjacent landowners and the proposals now include a pedestrian path and lighting between the subject lands and the existing pedestrian road crossing located at the Primary School. Additional lighting is proposed between the school and the R760 to the west.

2.5 A lighting plan, prepared by Sabre is included with the SHD application. The potential for road widening was considered by the design team and the preference was to keep the trees/hedgerow as much as possible along the Cookstown Road, and include a pedestrian footpath on the development side of the Hedgerow/tree boundary which will link into a new footpath on the southern side of the Cookstown Road.

In addition, with the agreement of Wicklow County Council, a pedestrian crossing is to be provided to tie into the existing footpath located on the northern side of the Cookstown Road (see figure 2.5).

Figure 2.1 – Cookstown Road Upgraded Pedestrian Link and Lighting



Source: BMCE 18243-BMD-00-ZZ-DR-C-1010

2.1.2 DMURs and Urban Design Response

2.6 In relation DMURs, we refer the Board to the DMURs compliance statement and road layout prepared by Barrett Mahony Consulting Engineers and the Design Statement prepared by MOLA. This section of the Response Document draws together the key elements of the BMCE and MOLA documents. The design of the proposed development is from an integrated design approach that seeks to provide a sustainable new community linked by well-designed streets which deliver a convenient, safe and attractive layout.

2.7 DMURS aims to end the practice of designing streets as traffic corridors, and instead focus on the needs of pedestrians, cyclists, and public transport users. The Manual sets out design guidance and standards for constructing new and reconfiguring existing urban roads and streets in Ireland. Incorporating good planning and design practice and focus on the public realm, it also outlines practical design measures to encourage more sustainable travel patterns in urban areas. The principal design guidance of DMURS has been considered in the design of this development.

2.8 It is highlighted that a Road Safety Audit of roads and Quality Audit of pedestrian/cyclist facilities was carried out by ILTP for the proposed development, which includes a Stage 1 Road Safety Audit. The issues raised within this audit were addressed and agreed with the auditor. A full copy of this report is included in the Barret Mahony SHD material.

2.1.2.1 Creating a Sense of Place using DMURS

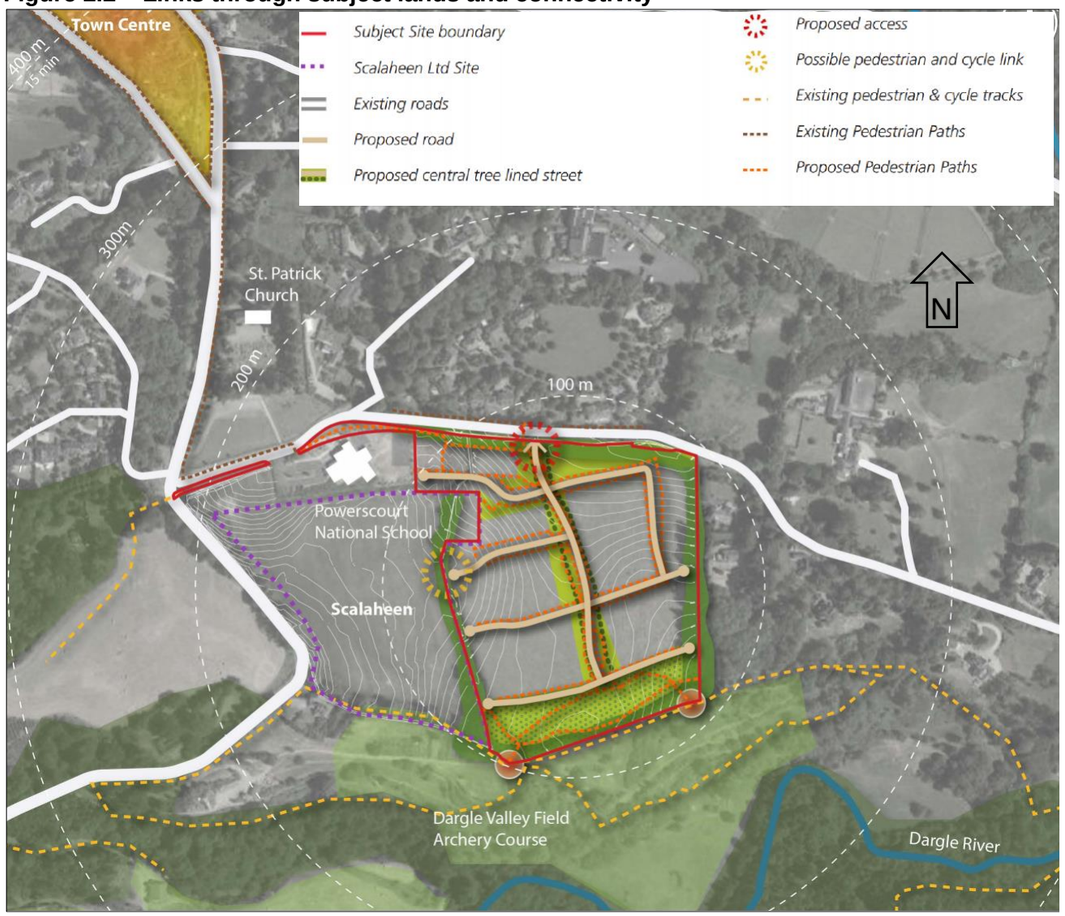
2.9 According to DMURs, four characteristics represent the basic measures that should be established in order to create people friendly streets that facilitate more sustainable neighbourhoods.

2.10 Each of these characteristics are set out below together with a commentary setting out how the proposed residential development complies with each of these characteristics:

Connectivity *- the creation of vibrant and active places requires pedestrian activity. This in turn requires walkable street networks that can be easily navigated and are well connected.*

2.11 The proposed development has been designed with pedestrians and cyclists taking precedence over other modes of transport. Pedestrian and cyclists connectivity is provided throughout the development with good links provided to the boundary with the permitted development to the west (19/871) along with the provision of a new pedestrian path towards the Primary School to the west along the southern boundary of the subject lands along the Cookstown Road.

Figure 2.2 – Links through subject lands and connectivity



2.12 Pedestrians are facilitated within the scheme at the following locations:

- Main entrance off Cookstown Road;
- Through the Linear Park at the south of the site. This link through the linear park will be from the park included in the adjacent development on the Scalaheen Ltd site (Planning Reg. Ref. 19/871);
- Future potential link to/from the adjacent Scalaheen Ltd site along the western boundary.

2.13 A new footpath is provided along the north-west boundary of the site, leading from the main north entrance, and along the north boundary of the existing school, leading to the existing pedestrian crossing at the school pedestrian entrance. A pedestrian crossing will also be provided to the west of the main north entrance of the site,(with the agreement of WCC) which will connect to the existing footpath on the opposite side of the Cookstown road. This will connect to a second footpath leading into Enniskerry village. The routes through the Linear park will connect to the existing Lovers Leap Lane to the south.

***"Enclosure** – A sense of enclosure spatially defines streets and creates a more intimate and supervised environment. A sense of enclosure is achieved by orientating buildings towards the street and placing them along its edge. The use of street trees can also enhance the feeling of enclosure."*

2.14 The scheme has been designed to create a legible and permeable layout with a range of dwelling types which, together with the integrated landscape design and site location, engender a sense of enclosure.

2.15 The layout has been designed so that the dwellings are overlooking streets and public open spaces which provide passive surveillance. Landscaping and tree planting are provided along the roads/streets which assist in providing a sense of enclosure. The landscaped avenue leading from the Cookstown Road to the proposed linear park includes public green areas along the route designed as landscaped places (including a play area), that offer the opportunity for meeting, walking and formal and informal play, creating an intimate supervised environment.

2.16 Shared surfaces and homezones provide further enclosure and sense of place within other parts of the development layout.

***"Active Edge** – An active frontage enlivens the edge of the street creating a more interesting and engaging environment. An active frontage is achieved with frequent entrances and openings that ensure the street is overlooked and generate pedestrian activity as people come and go from buildings."*

2.17 Dwellings are all located so that they front directly onto the roads and streets. Entrances to the units orientated towards main avenue which will ensure that there is plenty of activity as residents come and go. For example, House type E1 is positioned along the main avenue and provides an active frontage overlooking the series of open spaces and thoroughfare.

Figure 2.3 – Active Edge and Pedestrian Activity along Main Avenue

Source: CGI 2

***"Pedestrian Activity/Facilities** – The sense of intimacy, interest and overlooking that is created by a street that is enclosed and lined with active frontages enhances a pedestrian's feeling of security and well-being. Good pedestrian facilities (such as wide footpaths and well-designed crossings) also makes walking a more convenient and pleasurable experience that will further encourage pedestrian activity."*

2.18 As noted above the dwellings (e.g. House Type E1 which is double fronted) are all located so that they front directly onto the roads and streets, which will create animation and activity and also provide passive surveillance to enhance pedestrians feeling of safety and well-being.

2.19 The proposal includes homezone areas on quieter streets, creating intimate spaces for future residents, all with the objective of providing people friendly streets.

2.20 In accordance with the recommendations of DMURS the cyclists within the housing development will share the road carriageway. This will further encourage a reduction in traffic speeds.

2.21 Both horizontal and vertical deflections have been introduced throughout the road network to address the need for self-regulating traffic-calming. In addition, road levels have been designed to minimise surface gradients to reduce the need for revving engines and associated noise and emissions. Standard local street widths of 5.5m within the development are proposed in compliance with Section 4.4.9 of DMURS and Wicklow County Council Roads Department's pre-application submission observations. Junctions have been designed to minimise corner radii in line with Section 4.3.3 of DMURS.

2.22 The development layout facilitates the creation of a low-speed residential environment. With respect to the hierarchy of road users outlined in DMURS, the development places a strong focus on creating a vibrant and sustainable pedestrian environment, prioritising pedestrians while balancing the needs of all road users.

2.23 Footpaths in the development are designed as 2m wide typically, which meets the minimum requirement of 1.8m widths outlined in Section 4.3.1 of DMURS. Pedestrian crossing points along with associated tactile paving in accordance with the Traffic Management Guidelines are provided at anticipated pedestrian desire lines, while pedestrian priority raised table crossings have been located in line with higher demand crossing locations. Further to this, pedestrian priority will be provided at internal crossroad junctions in the form of raised tables which also serve as a traffic calming measure. Residential shared space homezones with contrasting surface finishes are proposed to encourage lower vehicular speeds and create a more attractive, high quality space for pedestrians.

2.1.2.2 DMURS Design Principles

2.24 DMURS sets out four core design principles which designers must have regard in the design of roads and streets. These four core principles are set out below together with a commentary setting out how these design principles have been incorporated into the design of the proposed residential development.

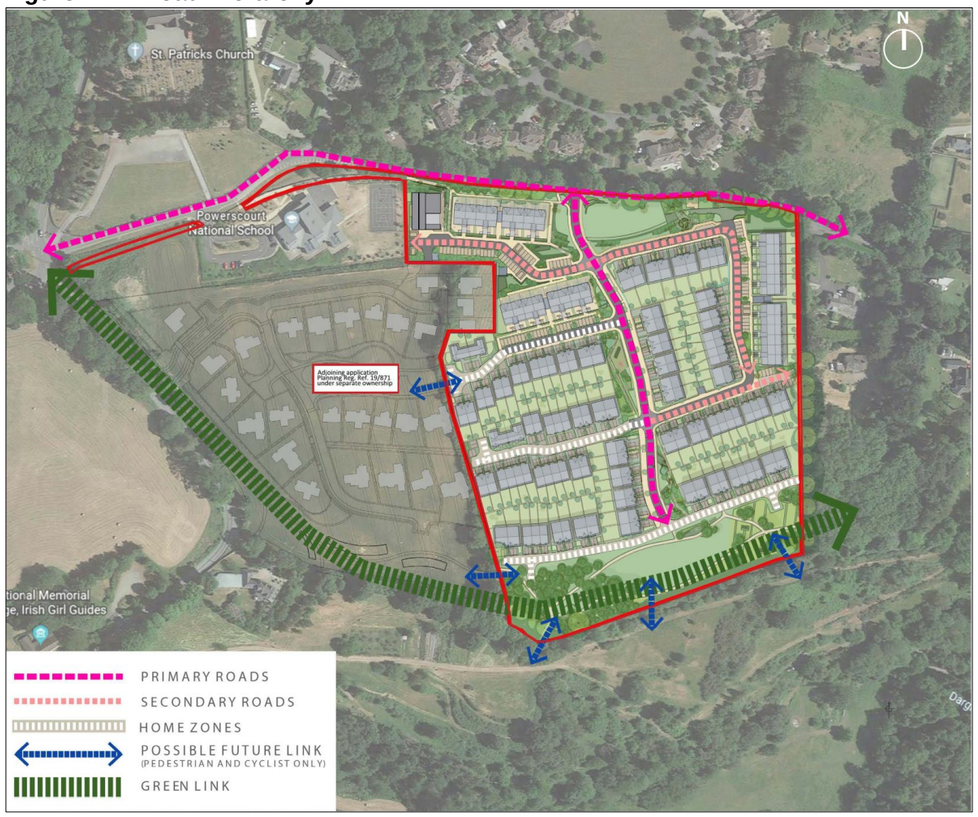
***"Design Principle 1 (Connected Networks)** – To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users and in particular more sustainable forms of transport."*

2.25 The proposed development has been carefully designed to ensure that the focus on connectivity is centred on pedestrians and cyclists. The provision of the high levels of connectivity for pedestrians and cyclists are intended to promote walking and cycling by making them a more attractive option to the private car.

2.26 The proposed road and path networks will connect the development with nearby recreational, retail and educational services in the area. Presently, there are well-established footpaths linking Cookstown Road (L1020) to Enniskerry Village. Enniskerry Village Square is approximately 850m from the entrance to the site. Powerscourt National School is located directly adjacent to the site at the north-west corner, next to the proposed creche facility. Public transport links (bus routes 44 and 185) are available within 15 minutes' walk and less of the site. The development strategy maximises connectivity with the local environment through the provision of permeable and legible, orthogonal street networks, with a particular focus on adherence to the hierarchy of road users and sustainable means of travel.

2.27 The development proposals make provision for future linkages to adjacent lands to the west and east. This represents good planning practice and allows for the integration of adjacent lands in the future to the subject lands, thereby ensuring that wider permeability can be provided over time as other adjacent lands are developed.

Figure 2.4 – Road Hierarchy



Source: MOLA Design Statement

Figure 2.5 – Illustrative Pedestrian Connections

Legend

- Proposed Vehicular Entrance
- Proposed Public Footpath
- Proposed Development Connections
- Existing Public Footpath
- Proposed Public Lighting
- Existing Lover's Leap Lane
- Permitted Development Connections (PRR 19/871)

Note: illustrative

***"Design Principle 2 (Multi-Functional Streets)** – The promotion of multi-functional, place based streets that balance the needs of all users within a self-regulating environment."*

2.28 The development incorporates a conspicuous hierarchy of multifunctional streets that offer route choice and flexibility for managing movement within the development. The layout facilitates creation of distinct place-based streets which serve to emphasise the low-speed residential nature of the development, providing safe means of travel for more vulnerable road users such as cyclists and pedestrians.

2.29 Self-regulating shared surface homezones are included in appropriate locations which serve to create a sense of place while balancing the needs of all users. These shared surface homezones are designed with a minimum 4.8m wide carriageway along with associated 1.2m wide flush pedestrian comfort zones as per pre-application observations received from Wicklow County Council Roads Department. Furthermore, these shared surface homezones will be distinguished from standard local streets using contrasting surfacing materials to create a distinct change in environment from standard local streets, further enhancing the sense of place in these areas.

***"Design Principle 3 (Pedestrian Focus)** – The quality of the street is measured by the quality of the pedestrian environment."*

2.30 The development layout facilitates the creation of a low-speed residential environment. With respect to the hierarchy of road users outlined in DMURS, the development places a strong focus on creating a vibrant and sustainable pedestrian environment, prioritising pedestrians while balancing the needs of all road users. Footpaths in the development are designed as 2m wide typically, which meets the minimum requirement of 1.8m widths outlined in Section 4.3.1 of DMURS. Pedestrian crossing points along with associated tactile paving in accordance with the Traffic Management Guidelines are provided at anticipated pedestrian desire lines, while pedestrian priority raised table crossings have been located in line with higher demand crossing locations.

2.31 Further to this, pedestrian priority will be provided at internal crossroad junctions in the form of raised tables which also serve as a traffic calming measure. Residential shared space homezones with contrasting surface finishes are proposed to encourage lower vehicular speeds and create a more attractive, high quality space for pedestrians. The public green areas are designed as landscape spaces that offer the opportunity for meeting, walking and formal and informal play. Desire lines through the landscape spaces are reflected in the path layout and integrate with the general street layout to provide a high level of pedestrian permeability. Proposed pedestrian routes provide for connection to the adjoining lands to fully integrate the landscape scheme with the surrounding landscape.

***"Design Principal 4 (Multidisciplinary Approach)** – Greater communication and co-operation between design professionals through promotion plan led multidisciplinary approach to design."*

2.32 The design of the layouts involved close collaboration and coordination between the Architect, Structural Engineer, Civil Engineer, Landscape Architect and Mechanical & Electrical Engineer, and takes account of the observations and comments raised by Wicklow County Council and An Bord Pleanála at the preapplication stage of the planning process. The interaction between the Landscape Architect and the Civil Engineer was of particular importance to design a layout that created attractive spaces for pedestrians and cyclists whilst complying with the key roads design principles for vehicular and non-motorised users. In addition to this interaction, the Architect and Mechanical & Electrical Engineer provided designs to incorporate lighting and building access to the scheme, which has been integrated into the strategy of the landscaping and desire lines for access and egress to buildings by non-motorised users and reflects the overall multidisciplinary approach taken to the overall development design.

2.33 The design proposals submitted to An Bord Pleanála reflect a robust integrated design approach that seeks to deliver safe, convenient, and attractive street networks which promote a sustainable community environment. It is Barrett Mahony Consulting Engineers opinion that the proposed residential development is fully consistent with both the principles and guidance outlined within the Design Manual for Urban Roads and Streets (DMURS) 2019.

2.1.3 WCC Engineer's Report and Transport Report

2.34 In relation to the above, Section 7 of the TTA prepared by BMCE sets out a summary of the response to the Wicklow County Council's Engineer's report dated 1st May 2020. The DMURS Statement Report also sets out a response to the DMURs commentary from WCC.

Table 2.1 – BMCE Summary Response to WCC Engineer's Report 1/5/2020

WCC Report Item	BMCE Response
18. Creche - Adequate car parking, based on the number of staff and children to be catered for, should be provided to serve this facility.	*Adequate parking has been provided adjacent to the creche, see Section 4.0 of this report for parking number and Appendix 1 for parking layout*
29. • Parking facilities should be designed in accordance with County Development Plan standards as set out above. *• Where parking is not provided for within the curtilage of a residential unit, parking spaces should be allocated specifically for that unit at a convenient location for reasons of residential amenity.* *• Visitors spaces should clearly marked.* *• The quantum of parking provided for the creche facility should be sufficient to cater for the scale of development proposed. Dual usage of parking spaces to serve the childcare facility and visitor parking for the adjoining residential units would be acceptable subject to appropriate layout and signage* *• Electric charging points should be provided for the use of residential units within Blocks C and D* *• A parking layout plan, demonstrating compliance with the above should be submitted as part of the application*	*• Parking numbers are contained in Section 4 of this report, and the parking layout is contained in Appendix 1.* *• Noted & complied with.* *• The majority of parking spaces are located within the curtilage of the houses. All remaining parking spaces will be marked/numbered.* *• Addressed in item 18 above.* *• 10 electric car charging points have been made available at different locations around the site.* *• See Appendix 1 and Design Statement submitted as part of this planning pack.*
Assessment should be undertaken of the effect of the development on the junction of Cookstown Road and R760 as detailed 50% of development traffic would be utilising this junction.	*Section 6.0 of this Report deals with the impact on traffic from this development on the junctions of Cookstown Road and R760, Cookstown Road and Bray Road (R117), and Bray Road (R117) and the N11. Supporting information can be found in Appendices 2 to 6.*

WCC Report Item	BMCE Response
The proposed development does not adequately prioritise sustainable transport modes.	*Cycle parking is provided within the development for use by the residents of the duplex apartments, as well as at the creche. See Sections 3.0 and 6.2 for information on pedestrian and cycling facilities, and information on existing and proposed public transport in the development vicinity.*
Response to DMURS Commentary	
The horizontal deflections are not adequate to regulate vehicle speeds sufficiently to address traffic safety at the internal cross roads.	Appropriate Deflections and additional DMURS measures incorporated into scheme

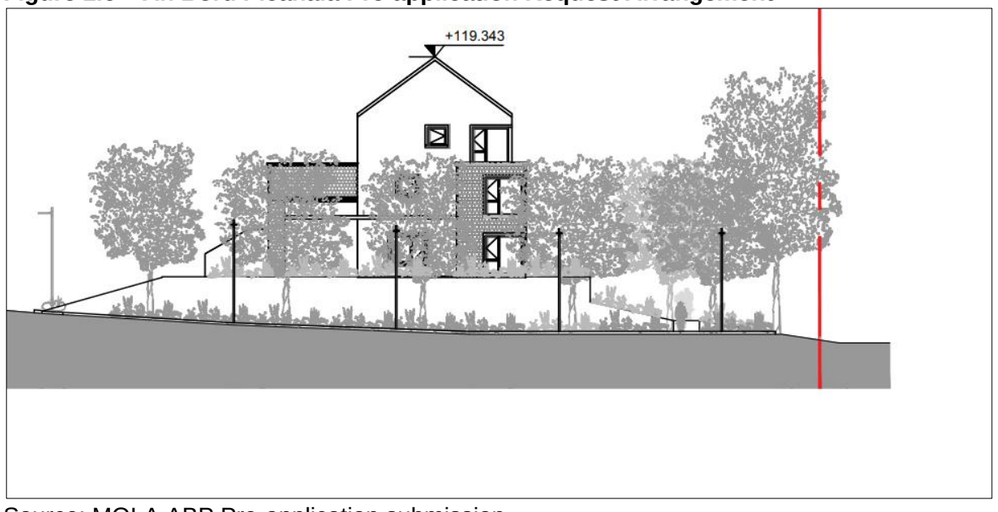
2.2 Response to Item 2 – Interface with Cookstown Road

2.35 Item no. 2 of the An Bord Pleanála opinion states:

"The prospective applicant should provide further justification and/or detail in relation to the proposed interface with the Cookstown Road, having regard to the apparent level differences from the road to the site, and the potential need for retaining walls. The applicant should provide detailed elevations/cross-sections/photomontages and CGI's showing this interface.
Further consideration of this issue may require an amendment to the documents and/or design proposals submitted."

2.36 In response to this item, the arrangement and architectural design along the Cookstown Road has been reviewed. The key elements include the redesign of the interface in the north western corner to include a reduction in levels, redesign of the creche and redesign of the duplex building and arrangement in the north western corner of the site.

Figure 2.6 – An Bord Pleanála Pre-application Request Arrangement



Source: MOLA ABP Pre-application submission

2.37 The existing character of Cookstown Road is of a semi-rural area of transition with hedgerows/trees retained on the northern side between Enniskerry Demesne and the Cookstown Road, with an existing footpath located between the treeline and the rear of the dwellings within Enniskerry Demesne. The design intent is to provide an appropriate transition along the Cookstown Road from the more rural eastern approach to the more built up area of Enniskerry. The transition is shown in the figures below (figures 2.9-2.11).

2.38 The interface with Cookstown Road is informed both by the levels and the desire the retain the rural character of the road by retaining in so far as possible the existing trees and hedgerows. This limits the degree of intervention possible to actively engage with the road.

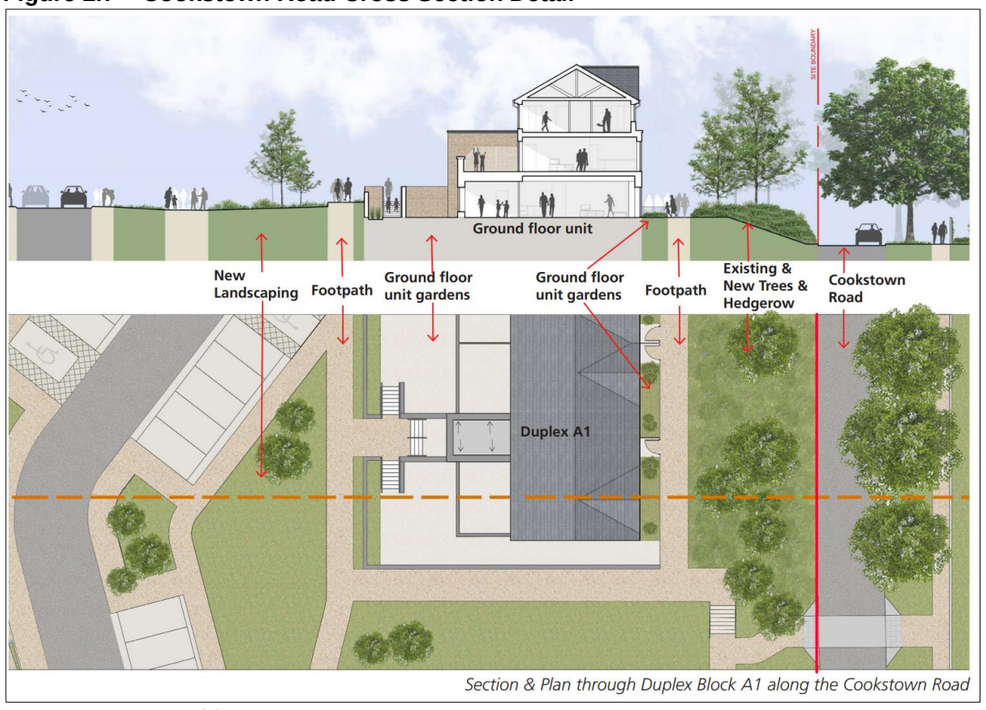
2.39 In response, the following amendments to the Duplex A block along the Cookstown Road, as well the Duplex B block located to the south of this block were included:

- Reduction in overall height of Duplex blocks
- Duplex blocks split into two elements.

2.40 The height changes have reduced the overall height of the blocks by 2.6m. This results in a more sympathetic relationship between the blocks and the Cookstown Road. The land banks down gently towards the road from the Duplex block A1 & A2. Splitting the blocks into two, has also reduced the visual impact of the units from the road.

2.41 The redesign included a reduction in the overall height of the duplex block from 119.3m Ordnance Datum to 116.7m Ordnance Datum, reducing the potential need for a large expanse of retaining walls save for a small extent of retaining wall at the north western corner of site. Some terraces and slopes are included. The landscaping has been designed to integrate the level changes and retain the trees/hedgerow along the boundary.

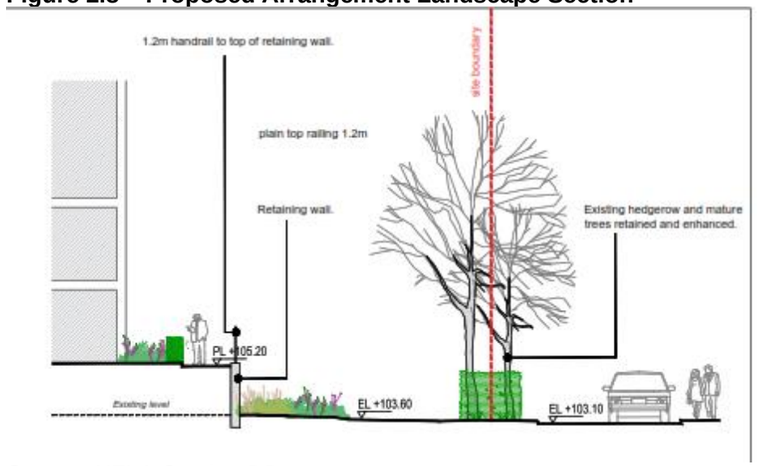
Figure 2.7 – Cookstown Road Cross Section Detail



Source: MOLA Architects

2.42 The creche design was developed to improve the architectural articulation in relation to its location on the site, and to match the aesthetics of the overall scheme. It has a relationship to the Cookstown Road, as well as the existing school and the new scheme behind. The creche can be accessed from the new public footpath as well as from within the scheme. The landscape slopes down gently from the creche towards the road. To the east of the main entrance is a large landscaped open space, which provides an attractive view into the scheme as well as maintaining the existing boundary trees and hedgerow.

Figure 2.8 – Proposed Arrangement Landscape Section



Source: KFLA Section DD

Figure 2.9 – Eastern portion of frontage with trees retained

Figure 2.10 – View from Cookstown Road Centrally within site

Figure 2.11 – Footpath connection at Western Boundary

3.0 STATEMENT OF RESPONSE TO SPECIFIC INFORMATION REQUIRED

3.1 The following sets out how the applicant has addressed the Board's request for additional information in respect of the proposed development.

3.1 Item no. 1 – Site Services – Foul and Surface Water Proposals

3.2 Item no. 1 seeks:

"1. Additional details and/or revised proposals in relation to site services, having regard to comments contained within the Engineer's Report dated 14/02/2020, as submitted with the Planning Authority's Opinion, as relates to surface and foul water proposals."

3.3 In response to this item we refer the Board to the Civil Engineering Infrastructure Report and Flood Risk Assessment prepared by BM Consulting Engineers.

3.4 Section 5 of the report details how BMCE have taken into account and addressed the Engineers Report dated 14/2/2020 as follows:

Table 3.1 – BMCE Response to WCC Report Summary

Points Raised in WCC Report	BMCE Response
The existing foul network in Enniskerry Village is subject to excessive surface water infiltration and regularly surcharges below the town square during extreme wet weather. Without significant upgrade or storm separation works, the network has insufficient capacity for new connections without giving rise to public health risk. The proposal to pump foul water is not sustainable and will likely involve high maintenance cost and public nuisance.	*The foul network in Enniskerry Village is the responsibility of Irish Water. A Confirmation of Feasibility letter & a Statement of Design Acceptance letter have both been received from Irish Water for the BMCE foul & water supply design for the Cookstown scheme. If repairs or upgrades are required by Irish Water in the Village then these can be addressed at Connection Offer stage.*
There are inconsistencies between the pipe size and gradient information contained on drawing C1020 and the Micro Drainage analysis. Very flat gradients with poor self cleansing characteristics will not be acceptable.	*These inconsistencies have been addressed in the updated drawings.*
A cover and invert level data table should accompany drawing C1020 and adequate information should be available to show that the top water level in the proposed soakaway is below the formation level of the adjacent public road.	*Manhole schedules have been provided on the updated drawings. The top water level in the soakaway for a 100 yr storm + 20% climate change is below the level of the adjacent Cookstown Road.*
Infiltration test results and analysis of the infiltration capacity of the site along with details of measures to demonstrate that surface water cannot flow onto the public road should be provided.	*Infiltration test results are contained in Appendix VIII of this report. Surface water is drained to the soakaway. The top water level in the soakaway for a 100 yr storm + 20% climate change is below the level of the adjacent Cookstown Road*
Drainage proposals should include for the collection of surface water from the L1020 from its junction with the R760 to the eastern boundary of the site.	*A number of new road gullies on the Cookstown Road, along the site frontage, have been shown on the drainage layout drawing C1020. These drain to local soakaways outside of the adjacent tree root protection zones.*

Source: BMCE

3.2 Item no. 2 – Residential Amenity Report

3.5 Item no. 2 seeks:

"2 A report that addresses issues of residential amenity (both existing residents of nearby development and future occupants), specifically with regards to daylight/sunlight analysis, overlooking, overshadowing, overbearing and noise. The report shall include full and complete drawings including levels and cross- sections showing the relationship between the proposed development and nearby residential development."

3.6 In response to this item this section of this response document provides the Residential Amenity Report and combines the elements of the various consultant responses to the protection of residential amenity of nearby development and future occupants.

3.7 The design team has been cognisant of the existing context and is proposing a scheme which will not impact on the residential amenity of adjoining residences.

3.2.1 Daylight/Sunlight Analysis (including overshadowing)

3.8 With regard to Daylight/sunlight analysis, we refer the Board to the comprehensive report prepared by IES Consulting. The report has analysed the potential impact on adjoining and future residents as well as Powerscourt National School. The report compares the existing site condition with that generated by the proposed development by means of a shadow analysis model study. This provides a visual representation of any changes to the availability of sunlight that may arise due to the proposed development.

3.9 The study uses the Equinox (21st March and September), and the Winter Solstices to demonstrate the potential impacts.

3.10 The analysis confirms that the shadows cast by the proposed development are largely limited to the confines of the site itself. In general, the surrounding properties are sufficiently at a remove that they will be typically unaffected by shadows cast by the proposed development.

3.2.1.1 Shadow Analysis

3.11 The executive summary notes:

"The Shadow analysis shows different shadows being cast from the existing and proposed schemes at particular periods throughout the year. Overall the impact of overshadowing would be classed as a negligible adverse impact given the following.

*• Enniskerry Demesne (North) No additional shading visible from the proposed development on these residential property during March and June with minimal overshadowing during *December to some of the properties. It should also be noted that there is extensive tree coverage between the proposed site and these existing properties and as such during the winter months the shadows cast will be from said trees and not the proposed development.*

• Pineheights/Tinnabeg (East) No additional shading visible from the proposed development on these existing residential properties during the months of March, June and December.

• Powers Court National School (West) No additional shading visible from the proposed development on the existing School during the months of March, June and December.

*• Powers Court Estate (Permitted Development 19/871) (West) Minimal additional shading is noted in the early mornings of March and December. No additional shading is visible from the proposed development on the existing properties at any other period. * Overshadowing can be expected in December when the sun is lower in the sky and shadows cast are much longer. Although this is the case, overshadowing is least noticeable during the winter months as there is a lot less sunlight available at this time of year and so the overall impact is vastly reduced. As noted above, there is extensive tree coverage between the proposed site and these existing properties and therefore during the winter months the shadows cast will be from said trees and not the proposed development.*

The potential impact is further quantified via the Daylight Analysis of Existing Buildings, Annual Probable Sunlight Hours and Sunlight to Existing Amenities sections within this report.

As mentioned in Section 3.3.17 of BRE's Site Layout Planning for Daylight and Sunlight, for a space to appear adequately sunlit throughout the year, at least 50% of the garden or amenity area should receive at least 2 hours of sunlight on the 21st of March. All of the private existing amenity areas tested out with the development site would continue to be quality spaces in terms of sunlight received exceeding BRE recommendations. The proposed development would have a negligible adverse impact to these existing gardens. On the 21st of March, the proposed amenity spaces provide across the development site as a whole would receive at least 2 hours of sunlight across 92% of their area, exceeding BRE recommendations. The crèche play area itself would receive 2 hours of sunlight across 63% of its area, again exceeding the BRE recommendations for sunlight and highlighting these will be quality spaces in terms of sunlight.

The Vertical Sky Component for 99% (145 of 147) of the points tested have a value greater than 27% or not less than 0.8 times their former value (that of the Existing Situation), exceeding the BRE recommendations. The remaining two points from the permitted development have values of 15% and 25% with a large windows in place. In addition these windows are I of 3 light sources to the space beyond and therefore should continue to receive adequate daylight. The results are to be expected in a typical modern housing development like this. Given the comments above there would be a minor adverse effect to these proposed neighbouring dwellings with an overall negligible adverse impact from the development as a whole."

Figure 3.1 – Potential Sensitive Receptors

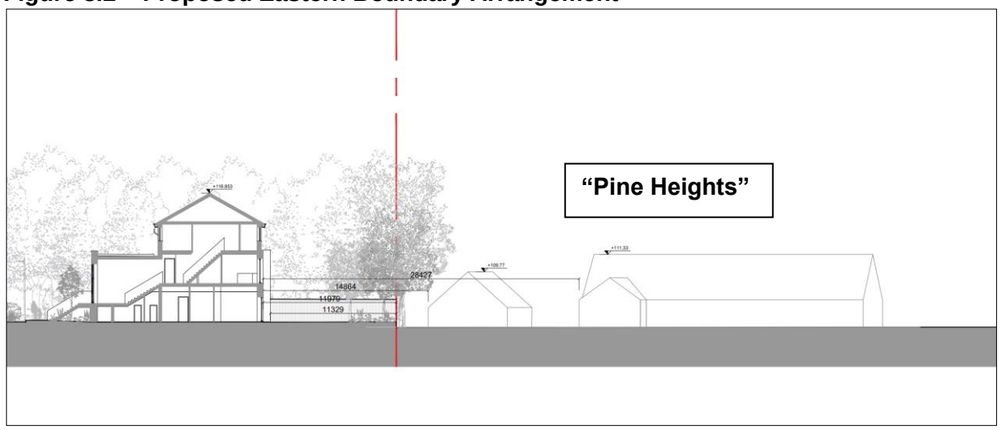
Source: IES Report

3.2.2 Overlooking/overbearing

3.12 In relation to overlooking/overbearing, the arrangement of the proposal was amended to so that the terraces previously proposed along the eastern boundary were relocated internally so as to avoid the perception of overlooking along that boundary. The revisions to the layout results in an appropriate transition between the proposed scheme and the existing 2 no. dwellings located to the east.

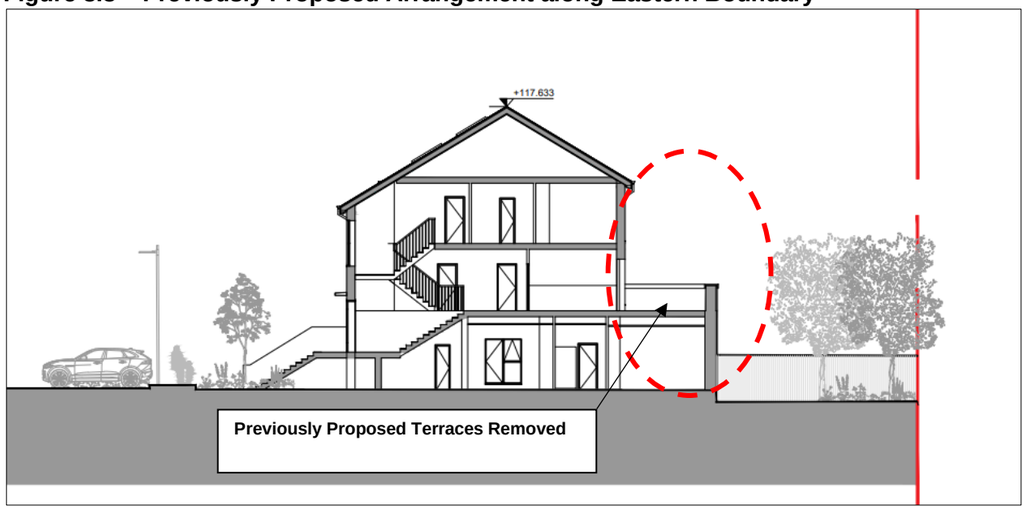
3.13 The following shows a cross section arrangement at a point along the eastern boundary (adjacent to '*Pine Heights*'. It can be seen that the distance from the rear façade of the duplex building is c. 28.4m to the adjoining residence. Furthermore it is noted that the proposed windows are c. 11.9m from the boundary and that the existing planting along the boundary will remain.

Figure 3.2 – Proposed Eastern Boundary Arrangement



3.14 With regard to the dwelling to the south (of Pine Heights) it is noted '*Tinnabeg*' is located c. 29.3m from the boundary to the proposed development and c. 11 m from the proposed duplex buildings. The previous arrangement proposed at Pre-application stage is outlined below which shows the previously proposed terraces at first floor level.

Figure 3.3 – Previously Proposed Arrangement along Eastern Boundary



Source: MOLA

3.15 It is noted for a small section along the eastern boundary there are some trees along the boundary, the understory of which has some *'gaps'*. The boundary treatment to the rear of the Duplex blocks is proposed to be 'Boundary Type 2' as set out in the KFLA Boundary treatment drawing, which comprises a robust 1.8m high, concrete post and timber panel fence (detail no. 1 – drawing 107).

Figure 3.4 – Eastern Boundary Tree line

3.2.3 Noise (including Vibration)

3.16 With reference to noise (and vibration), we refer the Board to the enclosed EIAR Chapter relating to Noise and Vibration by Byrne Environmental, included with the SHD application. The summary below addresses An Bord Pleanála's request for the inclusion of a residential amenity report relating to how noise from the development shall be managed and controlled to ensure that existing and future residential amenities shall not result in an adverse impact. The report analysed the construction phase and operational phase impacts of the proposed development on nearby sensitive receptors, including Enniskerry Demesne to the north, Pine Heights and Tinnabeg to the east and Powerscourt National School to the north west, and 'The Lodge' on Lover's Leap Lane to the south west.

3.17 The baseline noise environment in the vicinity of the proposed development site has been defined: "*by field surveys conducted during December 2020 at the closest noise sensitive receptors to the site boundaries. Sound level measurements were conducted in favourable weather conditions when there was no precipitation and when mean windspeeds were <5m/sec.*

3.18 The existing ambient noise climate in the vicinity of the site has been characterised with information obtained from site specific baseline noise surveys conducted in the vicinity of the closest noise sensitive receptors to the subject site.

3.19 The general area surrounding the subject site is currently comprised of existing residential developments and undeveloped agricultural lands. Local road traffic movements and agricultural activities are the most dominant noise sources at the current site. Local road traffic noise associated with the Cookstown Road which runs adjacent to the northern site boundary has been determined to the principal source of noise that may impact the proposed development. The subject site is not adversely impacted by N11 road traffic noise.

3.20 Various elements of both the construction and operational phases of the proposed development have the potential to impact on the receiving on the local receiving noise environment, on adjacent residential properties and on human health.

3.21 The potential and predicted impacts of the operational phases of the proposed development have been individually assessed.

3.22 Other lands adjoining the eastern site boundary have may be developed for residential housing in accordance with (Planning Reg Ref 19/871) in the future. A further permission (16/976) comprising 6 no. detached dwellings on a site to the north east may also be developed. Other developments in the area are located to the west of the town centre and not considered to contribute to the noise environment of the subject lands. The noise impacts associated with future adjacent residential developments will be similar to the noise generated by the subject residential component, in that the construction phases will generate short term slight to moderate impacts and the operational phase will be comprised of residential and neighbourhood noise which will not have an adverse operational phase noise impact on the receiving environment either on their own or combined as a cumulative impact.

3.23 Once the subject development is completed and if the lands to the east are developed there will be no residual adverse noise impact on the receiving environment associated with their operation.

3.24 The noise impact generated by additional traffic movements associated with the development is predicted to be of a slight impact on existing ambient noise levels at receptors along the local road network.

3.25 It may be concluded that during daytime and night-time periods, acceptable internal noise levels can be achieved in all residential units as defined in BS 8233 with windows closed.

3.26 With regard to the recommended mitigation by design measures as specified above, it may be concluded that residential properties located within the proposed development can be appropriately designed and constructed to achieve acceptable internal noise levels and to ensure the required acoustic performance of adjoining residential units.

3.27 Construction phase noise and vibration emissions will be temporary and transient and will be managed so as to minimise impact to population and human health by complying with all relevant guidance, as such the impact will be short-term and have a slight impact overall.

3.28 Operational phase noise will also be managed to achieve relevant noise limit values and is predicted to meet all such requirements. No operational phase vibration impacts are predicted. Therefore, the operational phase noise impacts will be neutral for the life of the development."

3.29 The EIAR proposes the following monitoring locations for the noise monitoring survey will be at residential noise sensitive receptors and the existing school adjacent to the site boundaries and indicated below.

Figure 3.5 – Proposed Noise & Vibration Monitoring Locations at local receptors

Source: Byrne Environmental Noise Assessment & Management Report

3.2.4 Air Quality

3.30 The EIAR also assessed the potential impacts of the proposed development on Air Quality and a summary is as follows:

3.31 "The ambient air quality data collected and reviewed for the purpose of this study focused on the principal substances (dust, vehicle exhaust emissions and boiler emissions) which may be released from the site during the construction and operation phases and which may exert an influence on local air quality.

3.32 The development area is located within a zone which includes sources of existing transportation related air emissions principally from local road infrastructure and sources of domestic, retail and commercial building heating. It is noted that there are no other major sources of industrial air emissions within 5km of the site.

3.33 The general area surrounding the subject site is currently comprised of existing residential developments and undeveloped agricultural lands. Local residential areas generate emissions to air associated with heating systems.

3.34 A site-specific short-term monitoring study was conducted for Nitrogen oxides, Sulphur dioxide and BTEX (Benzene, Toluene, Ethylbenzene and Xylene). All pollutants were measured at two location A1 using passive diffusion tubes over a two-week period.

3.35 The monitoring location was chosen in order to obtain short-term sample concentrations for the identified parameters from the principal sources of pollution i.e. vehicle exhaust emissions and home heating fossil fuel emissions from the Cookstown Road and local residential development.

3.36 The construction phase of the development has the potential to generate short term fugitive dust emissions during ground preparation and enabling works and from general site construction activities, however, these emissions will be controlled by appropriate mitigation techniques and through the implementation of a construction phase air quality management and monitoring plan throughout the duration of the construction phase to ensure that existing adjacent residential properties and lands will not be adversely impacted by a deterioration in air quality associated with the construction phase.

3.37 In order to ensure that adverse air quality impacts are minimised during the construction phase and that the potential for soiling of property and amenity and local public roads is minimised, the following mitigation measures shall be implemented during the course of all construction activities:

AQ CONST 1: Air Quality Mitigation Measures

- *Avoid unnecessary vehicle movements and manoeuvring, and limit speeds on site so as to minimise the generation of airborne dust.*
- *Use of rubble chutes and receptor skips during construction activities.*
- *During dry periods, dust emissions from heavily trafficked locations (on and off site) will be controlled by spraying surfaces with water and wetting agents.*
- *Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic only.*
- *Re-suspension in the air of spillages material from trucks entering or leaving the site will be prevented by limiting the speed of vehicles within the site to 10kmh and by use of a mechanical road sweeper.*
- *The overloading of tipper trucks exiting the site shall not be permitted.*
- *Aggregates will be transported to and from the site in covered trucks.*
- *Where the likelihood of windblown fugitive dust emissions is high and during dry weather conditions, dusty site surfaces will be sprayed by a mobile tanker bowser.*
- *Wetting agents shall be utilised to provide a more effective surface wetting procedure.*
- *Exhaust emissions from vehicles operating within the construction site, including trucks, excavators, diesel generators or other plant equipment, will be controlled by the contractor by ensuring that emissions from vehicles are minimised by routine servicing of vehicles and plant, rather than just following breakdowns; the positioning of exhausts at a height to ensure adequate local dispersal of emissions, the avoidance of engines running unnecessarily and the use of low emission fuels.*
- *All plant not in operation shall be turned off and idling engines shall not be permitted for excessive periods.*
- *Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind. Water misting or sprays will be used as required if particularly dusty activities are necessary during dry or windy periods.*
- *Material stockpiles containing fine or dusty elements including top soils shall be covered with tarpaulins.*
- *Where drilling or pavement cutting, grinding or similar types of stone finishing operations are taking place, measures to control dust emissions will be used to prevent unnecessary dust emissions by the erection of wind breaks or barriers. All concrete cutting equipment shall be fitted with a water dampening system.*
- *A programme of air quality monitoring shall be implemented at the site boundaries for the duration of construction phase activities to ensure that the air quality standards relating to dust deposition and PM10 are not exceeded. Where levels exceed specified air quality limit values, dust generating activities shall immediately cease and alternative working methods shall be implemented.*
- *A complaints log shall be maintained by the construction site manager and in the event of a complaint relating to dust nuisance, an investigation shall be initiated.*
- *Dust netting and site hoarding shall be installed along the north, south, east and western site boundaries to minimise fugitive windblown dust emissions falling on third party lands and existing residential areas.*

3.38 The operational phase of the development will see the operation of modern, well insulated thermally efficient buildings in which energy efficiency shall be achieved by implementing sustainable features into the building design.

3.39 National air quality standards shall not be adversely affected as a result of the short-term construction phase or the operational phase, thus ensuring that the potential for adverse impacts on human health is negligible.

3.40 The proposed development does not include the construction of any tall (high) structures which may impact on the local micro climate by means of shadowing effects or wind sheer effects, therefore the proposed development will not have an adverse impact on shading or temperature profiles at the nearest existing residential properties or on the local receiving environment in the vicinity of the site boundaries.

3.41 In order to ensure that adverse air quality impacts are minimised during the construction phase and that the potential for soiling of property and amenity and local public roads is minimised, a number of mitigation measures shall be implemented during the course of all construction activities.

3.42 The Operational Phase of the Cookstown development site will not generate air emissions that would have an adverse impact on local ambient air quality or local human health and as such there are no mitigation measures specified for the Operational Phase.

3.43 It is predicted that there will be a negligible impact on local air quality generated by increased traffic movements associated with the development.

3.44 The cumulative air quality impact of the proposed residential development, existing development and an adjoining proposed residential development (Planning Ref 19/871) and local transport infrastructure is assessed with regard to having established the baseline air quality and then predicting the impact that the proposed development will have on the baseline air quality. Together the combined impact can be assessed to determine if there is sufficient "atmospheric budget" to facilitate the proposed development.

3.45 The cumulative air quality impact associated with the construction phase and operational phase of the development will be negligible."

3.3 Item no. 3 – Additional CGIs/Visualisations

3.46 Item no. 3 seeks:

"3. Additional CGIs/visualisations/3D modelling."

3.47 We refer the Board to the CGIs and visualisations prepared by 3D Design Bureau included with the SHD application.

Figure 3.6 – View from Linear Open Space

Source: CGI no. 3 – 3D Design Bureau

Figure 3.7 – View towards Great Sugar Loaf

Source: CGI no. 3 – 3D Design Bureau

Figure 3.8 – View from Northern Boundary

Source CGI no. 1 – 3D Design Bureau

Figure 3.9 – View from Lovers Leap Lane

Source 3D Design Bureau View no. 20

3.4 Item no. 4 – Materials Report

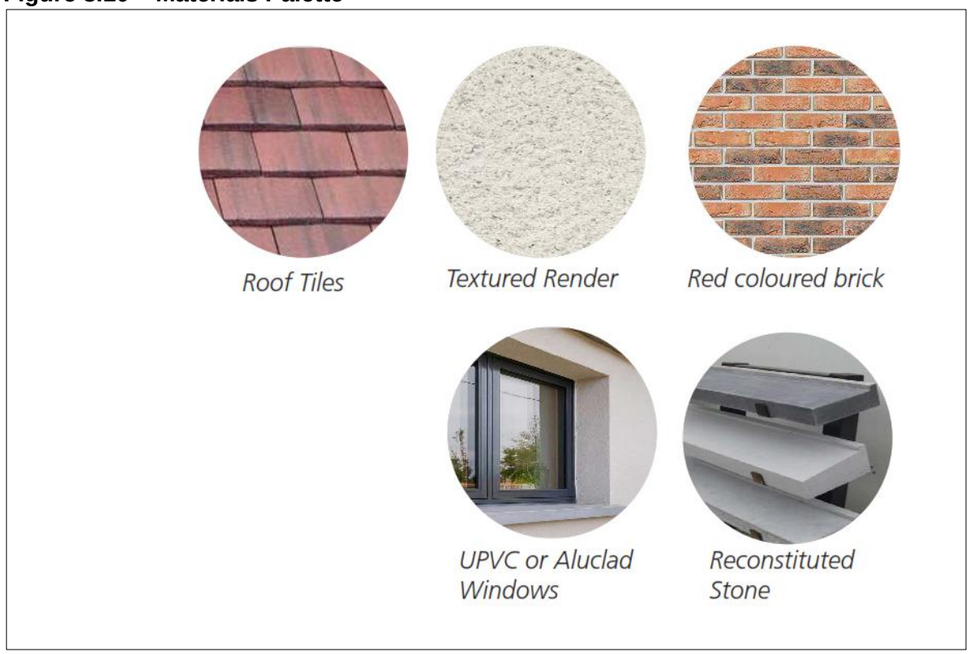
3.48 Item no. 4 seeks:

"4. A report that specifically addresses the proposed materials and finishes of buildings, landscaped areas and any screening/boundary treatment. Particular regard should be had to the requirement to provide high quality and sustainable finishes and details which seek to create a distinct character for the development."

3.4.1 Proposed materials and finishes of buildings

3.49 The response to this item combines the materials detail from the SHD application and comprises the Materials Report. We refer the Board to the Architectural Design Statement prepared by MOLA which includes detail on the proposed high quality materials and finishes, which provide a distinct character for the proposed development. All house and duplex units, as well as the creche, share a similar architectural language which will bring coherence to the development.

Figure 3.10 – Materials Palette



Source: MOLA Design Statement

3.50 As set out in the MOLA Design Statement, the materials proposed are durable and low in maintenance requirements. They are consistent with the aspirations to deliver high-quality, resilience and longevity.

3.51 Red coloured brickwork is featured as a plinth to the house types and extended as double height projecting bay features to the houses and Duplex units. Textured render, which can be seen on many buildings throughout Enniskerry village, is proposed. A red roof tile finish is proposed. White coloured fascias and soffits are proposed.

3.52 A double-glazed UPVC or Aluclad window system is proposed for the scheme, incorporating opening sections and sliding balcony doors. Reconstituted stone sills, window surrounds and copings are proposed, which are again a feature in Enniskerry. We refer the Board to the Statement of Consistency and the suggested condition in respect of materials/finishes in the event of a grant of permission.

3.53 A tiled canopy is proposed at the entrance doors and over bay windows. The creche will be finished in similar materials to provide a coherent design.

3.4.2 Proposed Finishes of Landscaped Areas

3.54 We refer the Board to the Landscape Report and Outline Landscape Specification, prepared by Kevin Fitzpatrick, Landscape Architecture.

3.55 There are a number of landscape treatments or typologies employed:

- Linear Park – enhances existing habitats and creation of woodlands and meadows. To provide for amenity uses and links to all adjoining landscape spaces and existing lane to the south. Including natural play spaces and activities provided using natural objects and materials. Proposed seating spaces overlooking the play area.
- Green corridor – strong linear landscape through the scheme including micro-woodlands, avenue and amenity spaces.
- Local Green Spaces – New green spaces to provide for passive and active recreation, including seating.
- Biodiversity links – Enhanced existing hedgerows and new green elements. Durable and low maintenance materials are specified by the Landscape Architects for the hard landscaping in the scheme. Car parking areas are integrated into the landscape design, using small unit concrete paviors or flags for the on-curtilage car parking and hard landscape areas to the houses.

Materials and Planting List

3.56 The play areas throughout the scheme are designed as a 'Natural Play Area', this is where a preference is given to natural play features, materials, and objects over the standard manufactured play equipment. There is a greater emphasis on building, creation, exploration and pretending as activities to extend the interest in the play area for users that visit regularly, as is common in a residential landscape space.

3.57 The surfaces will be primarily grass, gravel and sand. Level changes, grass mounds and steps will be incorporated into the scheme as a central feature of the space. Within the space created a number of activities are facilitated such as balancing, jumping, climbing and crawling.

3.58 Durable and low maintenance materials are specified by the Landscape Architects for the hard landscaping in the scheme. Car parking areas are integrated into the landscape design, using small unit concrete paviors or flags for the on-curtilage car parking and hard landscape areas to the house.

Planting Strategy

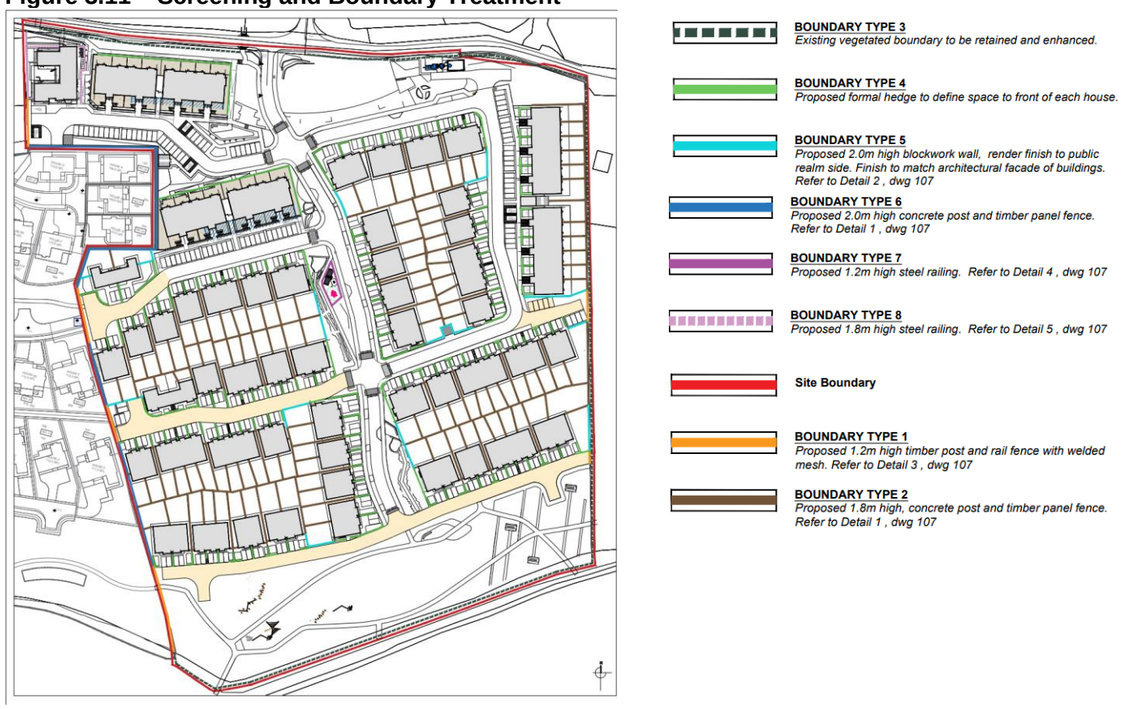
3.59 The plant species are chosen to respect and enhance the local environment while providing suitable vegetation that is harmonious with a residential area and will be successful through all stages of its maturity. Therefore, the planting palette has a limited number of species chosen for their appropriateness and with a preference for native planting where possible. Large native Oaks are the dominant tree species proposed throughout the main open space areas and will be complimented by large Horse Chestnuts, Limes, Beech and Red Oak trees.

3.60 These trees will mature into large parkland specimens. When the trees mature, they will have a strong visual presence and will define the character of the development as the existing trees go into decline. The street trees are chosen due to their more compact habit. These species are appropriate for the scale of the spaces in which they are to be used and are of a variety that will complement other native trees. Each street is to be planted using a single variety of tree and hedge giving a specific landscape character to each part of the development. The existing trees that are retained within the scheme are to be enhanced and strengthened by additional planting of native and naturalised broadleaf tree planting.

3.61 The perimeter planting around the site will be native and naturalized broad-leaf hedgerow and tree-planting, along with dense woodland and understory planting to create visual screening and improve biodiversity. Native plants Blackthorn, Hawthorn, Hazel and Holly are all used in the hedgerow mix and tree-planting in the hedgerows consists of Common Birch, Native Oak, Horse Chestnuts and Common Alder.

3.4.3 Screening/Boundary Treatment

Figure 3.11 – Screening and Boundary Treatment



3.62 We refer the Board to the Boundary Treatment Plan prepared by Kevin Fitzpatrick, Landscape Architecture (drawing no. 106), which shows the proposed boundary treatments, internally and externally to adjoining boundaries. Drawing no. 107, prepared by Kevin Fitzpatrick, Landscape Architecture, shows the boundary treatment details.

3.5 Item no. 5 – Open Space Delineation

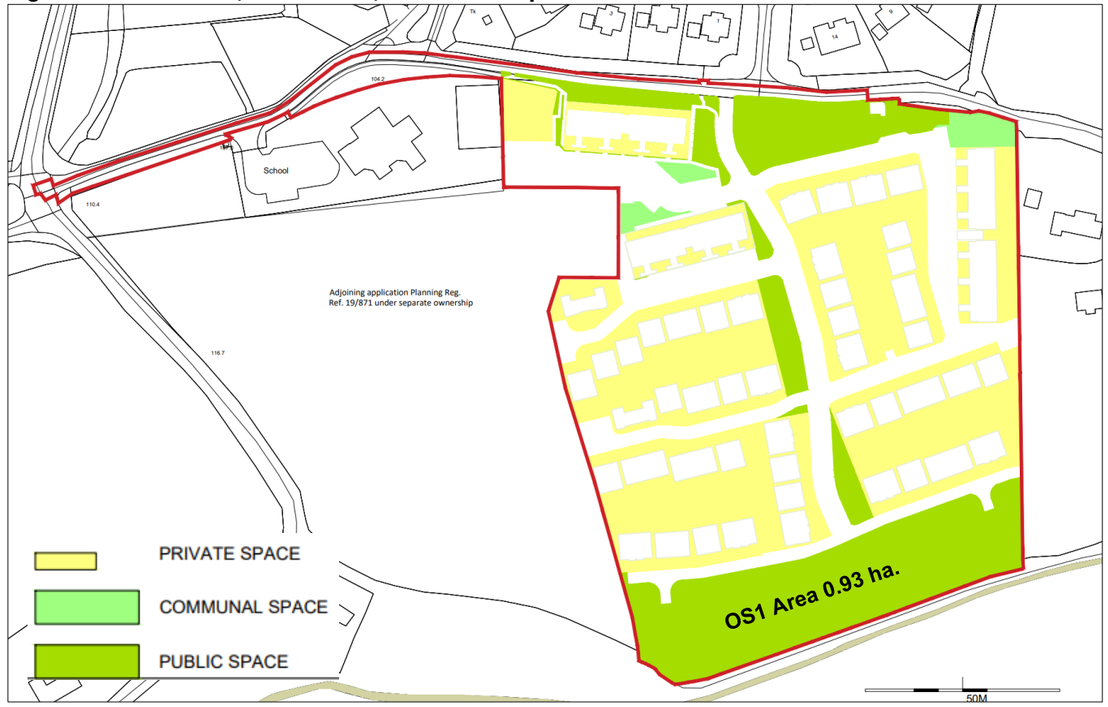
3.63 Item no. 5 seeks:

"5. A plan of the proposed open space within the site clearly delineating public, communal and private spaces."

3.64 We refer the Board to drawing no. 19010_MOLA_A00_00_DR_A_XX_A00_0820, "Private, Communal, and Public Space, prepared by MOLA Architects (see extract below).

3.65 The proposed development includes a substantial linear park open space area (zoned OS1) along the southern boundary of the subject site of c. 0.93 hectares. In addition to this on the residential zoned area of 5.16 hectares, some 0.4 ha of open space is provided (7.7%), which is above the 7.5% minimum requirement. Combined the two areas amount to 1.33 hectares of the gross site area or c. 21.2% of the overall site area.

Figure 3.12 – Private, Communal, and Public Space



Source: MOLA

3.66 Each home has access to an area of useable private outdoor space. Each private rear garden complies with or exceeds the WCC guidelines *'each housing unit should be provided with an area of private open space at a rate of 0.64sqm of private open space per sqm of floor area'.*

Figure 3.13 – Private Open Space (houses)

House/ Apartment Type	Unit Type	Description	Gross Unit Area (Sq.M)	Number of Units in Scheme	# Bedrooms	Garden area per bedroom (required)	Garden area per bedroom Quantity in compliance	Garden area 0.64 per unit area required	Garden area 0.64 per unit area achieved (worst case)	Quantity in compliance
House	A	Semi Detached	140.47	30	4	60-75	ALL	89.9008	89.99	ALL
House	B	Semi Detached / End of Terrace	118.80	32	3	60-75	ALL	76.032	77	ALL
House	B1	Semi Detached / End of Terrace - Side Entry	118.80	2	3	60-75	ALL	76.032	76.6	ALL
House	B2	Mid Terrace	119.80	10	3	60-75	ALL	76.672	76.8	ALL
House	D	Semi Detached	143.60	2	4	60-75	ALL	91.904	127	ALL
House	E	Semi Detached	180.24	20	4	60-75	ALL	115.3536	115.9	ALL
House	E1	Semi Detached - Side Entry	181.76	8	4	60-75	ALL	116.3264	116.5	ALL

Source: MOLA HQA

3.67 Duplex units are provided with private amenity space at both front and rear of the ground floor apartment units, while the upper duplex units are provided with a large terrace area. Communal open space is also provided adjacent to the duplex blocks, with the duplex units over-looking the spaces providing passive surveillance.

Figure 3.14 – Communal Open Space (Duplex Apartments)

Communal Amenity Space Requirement & Provision

Apartment/Duplex Unit Type	No. of Units	No. per Unit	Hectares Requirement	Hectares Provided
Block A1, A2, B1 & B2				
2 Bed	16	0.0007	0.0112	0.021
3 Bed	16	0.0009	0.0144	0.025
Total Residential	**32**		**0.0256**	**0.046**
Total Hectares			**0.0256**	**0.046**
Block C & D				
2 Bed	12	0.0007	0.0084	
3 Bed	12	0.0009	0.0108	
Total Residential	**24**		**0.0192**	
Total Hectares			**0.0192**	**0.06**

Source: MOLA

3.6 Item no. 6 – Waste Management Details

3.68 Item no. 6 seeks:

"6. Waste Management Details."

3.6.1 Construction Phase Waste Management

3.69 We refer the Board to item no. 7 below.

3.6.2 Operational Phase Waste Management

3.70 With regard to operational phase waste management, we refer the Board to the Operational Phase Waste Management Plan (OWMP) prepared by Byrne Environmental and the drawings prepared by MOLA, which show the locations of the bin stores within the scheme.

3.71 The Objective of the Waste Management Plan is to maximise the quantity of waste recycled by providing sufficient waste recycling infrastructure, waste reduction initiatives and waste collection and waste management information to the residents of the development. The Goal of the Waste Management Plan is to achieve a residential recycling rate of 50% of managed municipal waste by 2020 in accordance with The Eastern-Midlands Region Waste Management Plan 2015-2021.

3.6.2.1 Houses / Duplex & Maisonette Units

3.72 The design of residential houses, maisonettes and duplex units shall provide sufficient internal kitchen space for the storage of up to 10kg of general unrecyclable waste, green recyclable waste and organic waste. Individual houses shall have external storage space for 3 no. 220 litre waste bins for segregating recyclable, non-recyclable and organic waste. Residential houses shall be served by private waste collection contractor.

3.6.2.2 Duplex / Maisonette Communal Waste Storage Areas

3.73 The apartment/duplex blocks and the Maisonettes shall be served by common waste storage areas and shall include clearly visible guidelines on the appropriate segregation of different waste types. Signage will be posted to inform residents indicating the location of the local can, glass and clothing bring-bank at Bog Meadow Car Park in Enniskerry and the nature of waste materials that can be brought and deposited there.

3.74 All communal waste bins shall be brought from the communal bin storage areas to the designated demarcated bin collection areas within the development at road-level by the Facilities Management staff. Emptied bins shall be immediately returned to the bin storage areas following collection.

3.6.2.3 Creche

3.75 Waste generated by the Creche (510m2) shall be managed by the operators of the creche unit who shall engage a commercial waste contractor to collected waste generated. Wastes from the creche shall be stored in commercial waste bins within the curtilage of the premises and shall be segregated into grey (mixed waste), green (dry recyclable), brown (organic) and cardboard packaging waste. An area of 9m2 shall be included within the curtilage of the Creche to accommodate 4 no. 1100 litres wheelie bins.

3.7 Item no. 7 – Site Specific Construction and Demolition Waste Management Plan

3.76 Item no. 7 seeks:

"7. Site Specific Construction and Demolition Waste Management Plan."

3.77 We refer the Board to the Site Specific Construction Waste and By Product Management Plan prepared by Byrne Environmental.

3.78 The Objective of the Plan is to minimise the quantity of waste generated by construction activities, to maximise the use of materials in an efficient manner and to maximise the segregation of construction waste materials on-site to produce uncontaminated waste streams for off-site recycling.

3.79 Waste materials generated by construction and demolition activities will be managed according to the Department of the Environment, Heritage and Local Government's 2006 Publication - Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects.

3.80 As set out in the Construction and Demolition Waste Management Plan, waste will arise on the project mainly from bulk excavation and general construction activities relating to the roads and services and that the site management team will order materials and arrange storage in order to minimise the potential for waste on site.

3.81 Section 7 of the report outlines specific mitigation measures to reduce waste during the construction stage of the development.

4.0 CONCLUSIONS

4.1 This document outlines how the items outlined in the pre-application consultation opinion from An Bord Pleanála in relation to the proposed residential development at Cookstown, Enniskerry have been addressed in full by the applicant and design team prior to lodgement of the application to An Bord Pleanála.

4.2 The document also addresses the specific information requested by An Bord Pleanála and identifies the source or location of the response within the planning submission documentation.

4.3 The relevant prescribed authorities identified in the pre-application consultation opinion from An Bord Pleanála have also been notified of the submission of the planning application in accordance with Section 8(1)(b) of the Planning and Development (Housing) and Residential Tenancies Act 2016.

4.4 The layout and design changes incorporated into the final scheme will result in improvements to the overall design and layout and a sustainable approach to the development of these lands. It is respectfully submitted that the proposed development is consistent with the proper planning and sustainable development of the area, and is consistent with all relevant national, regional and local planning policies and guidelines.