

Development standard reference	Summary of design standard criteria	Demonstration of compliance with development standards
<p>16.3.1 Hard Landscaping, Vol 1, p. 291 * taking account of APPENDIX 23 – GREEN INFRASTRUCTURE GUIDING PRINCIPLES</p>	<ul style="list-style-type: none"> ● A) Good quality, durable, appropriate to local environment. ● B) Define public open space and private domain. ● C) Provide a secure environment. ● D) Distinguish between different modes of transport. ● E) Mitigate against increased surface water runoff as a result of the development into the surface drainage system by the use of combination of permeable surfaces, bio retentive interventions and swales or attenuation ponds ● F) Boundaries treatment should not adversely affect the visual character of the development but rather should be used to define spaces. ● G) Street furniture should be sited such that it results in an obstacle for people with disabilities. 	<p>A) High quality materials such as natural stone and reconstituted stone paving, resin bound gravel are proposed. 80mm deep flags for natural stone in vehicular trafficked zones, flamed or bush hammered finish with high strength bedding mortar e.g. Steintec or E/A are proposed.</p> <p>B) High quality materials of natural stone paving and kerbs are proposed for the public realm areas i.e. the 'Rowan Palce and Observatory Square, the central civic space, cafe and retail frontage and pathways within the development. Resin bound gravel pathways and reconstituted stone paving flags are proposed within the shared surface areas of the residential development and differentiate it from the public realm. Clear routeways and defined boundaries are proposed for the ground plane surfacing to delimit the public realm space from the 'home zone' communal space.</p> <p>C) It is proposed to have a clear distinction between public opens space which is fully accessible for the residents and public alike and the 'communal open space' in accordance with the requirements of this section of the development plan. Here clear routeways for the public and the location of residential blocks ensures that passive surveillance of the public realm is maintained. The clearly defined 'home zones' of apartment blocks overlook each communal courtyard garden to provide a secure environment for the residential apartments. Ground level residential units are separated by a 'privacy' or 'defensible space' to the immediate curtilage. Here, children can play in a safe and secure area near their own home. More vulnerable members of the residential community such as elderly residents can also enjoy the communal garden within the secure 'home zone'. All residents also have the opportunity to have access to the wider community with well-defined connectivity of the public realm. The public realm contains a new Rowan Palce & 'Observatory Square' contained within the retail zone of the development. This connects to the sports and recreational zone within the centre of the masterplan where a children's playground, Table tennis zone, MUGA and Civic space are proposed. A public linear routeway for pedestrians is defined by a tree lined green way which segregates the pedestrian from the dual way cycle route connecting Observatory Square to Fassaugh avenue. This contains public lighting and is overlooked by the residential units to allow for passive surveillance along the proposed 'greenway'. The greenway is punctuated by fitness stations or 'trim trail' nodes.</p> <p>D) Three modes of transport are proposed within the development: Pedestrian, Cycling & Vehicular. It is proposed to articulate through the hard landscape surfacing and detail to provide a hierarchy of use for the pedestrian who is given priority within 'home zones'. Here low vehicular speeds and a gated entrance permit a shared surface arrangement. Surface carparking is limited to disabled user permit holders. Guiding documents referred to include the Urban Design Manual (DEHLG, 2009). A designated two way cycle route is proposed in accordance with the principles set out in the National Cycle Manual (2011) with a contrasting surface treatment to the designated pedestrian pathway. The main vehicular routeways are towards the Carnlough entrance leading to the proposed childcare facility and basement ramp. Here, high quality natural stone paving articulates a transition from vehicular routeway to fully pedestrianised public realm of the central public recreational zone. This is to define a priority for the pedestrian as highlighted as an objective in the Urban Design Manual. The pedestrian and cycle greenway may in the future connect to an enhanced connection route to the Royal Canal greenway and Broombridge Luas and Train station.</p> <p>E) Permeable resin bound roadways are proposed. Bio retentive tree trenches, <i>intensive</i> green roof podium gardens are proposed to mitigate against the risk of inundation of surface water drains.</p> <p>F) All new boundary walls are proposed as brick faced exposed concrete 2.4m high to railway and residential gardens with gently graded ground plane planted with native trees and</p>

		<p>hedgerow to create a biodiverse corridor to the periphery of the development. Internal gates and railings which delimit public open space from communal open space and private open space shall be to a contemporary appealing design to integrate it into the residential context of the proposed development.</p> <p>G) All street furniture is to be designed and located so as to ensure it does not encroach upon circulation routes and therefore will not present as a hazard for those with visual or physical impairments. A diagram of circulation routes and seating nodes is to be provided within the application to demonstrate same.</p>
<p>16.3.2 Soft Landscaping including Trees Vol. 1 p. 294 * taking account of APPENDIX 23 – GREEN INFRASTRUCTURE GUIDING PRINCIPLES</p>	<p>A) Existing trees and vegetation should be retained where possible B) Take account of the existing landscape character C) Seek to expand the existing green infrastructure network D) Landscaping works should be integrated with Sustainable Urban Drainage Systems E) A hierarchy of planting to create visual variety within the landscape amenity space. Green roofs and permeable surfaces to be considered within the landscape scheme.</p>	<p>A) 20.5% open space achieved 10.62% Public open space & 9.4% semi public/communal at ground level. Additional semi communal open space are proposed with 4no. roof terraces along the blocks fronting the railway. B) As outlined in B/C of 16.3.2 above a contiguous greenway, village green, new civic plaza, playgrounds, trim trail and an allotment garden are proposed for the development. C) A suite of SUDS are proposed as set out D of 16.3.2 using infiltration, filtration and detention measures. D) All communal garden amenity space has been provided with a larger proportion of soft landscape surface. Public realm due to the programmatic requirements such as civic space, playground, table tennis, MUGA and public plaza are hard landscaped. The landscape design has carefully considered these spaces and in all cases have introduced soft landscape using street trees, planted margins and a public 'village green' within the urban plaza near adjacent to the retail complex. <i>Extensive</i> green roofs are proposed throughout save for when PV cells are required to comply with nZEB criteria. An <i>intensive</i> green podium public open space is proposed within the centre of the development.</p>
<p>16.10.3 Residential Quality Standards – Apartments and Houses,</p>	<p>A) 10% of the site area shall be reserved as public open space. This should be of a high-quality design, overlooked and accessible to the maximum number of dwellings. B) A landscaping plan will be required for all developments, identifying all public, communal (semi-private) and private open space. C) Consideration should be given to the provision of community gardens and/or allotments in new developments D) Optimise passive surveillance; clearly define what is private, semi-private (communal), and public space; control access and minimise the number of households which share a common entrance, effectively managing space and using appropriate boundary treatments and lighting.</p>	<p>A & D) 10.62% dedicated public open space is provided within the proposed development. Qualitative measures are outlined in 16.3.1, 16.3.1 above. Here there public and communal space is delimited with communal space accessed by the residential apartments to control and effectively manage the communal open space. The public realm is overlooked by the retail and apartment complexes to optimise passive surveillance. Private space is separated from semi-private and or public zones by privacy or defensible zones. A proposed lighting layout is included in the submission with associated lighting luminance levels. Refer to the M&E lighting data information and drawing. Boundary treatments comprises of a secure concrete with birch clad boundary wall typically 1.8m with a soft landscaped edge to the existing residential housing on Carnlough road and Fassaugh Avenue. A brick faced concrete wall is proposed 2.4m high between the railway and the proposed public greenway, also mediated by trees and understorey planting. B) A landscape masterplan is submitted with the application identifying all public (10.62%) communal and private open space 9.4% where 3103msq is required. C) A communal allotment garden is proposed within the development which it is hoped to engender a sense of place and community for the building of a sustainable neighbourhood.</p>
<p>16.8 Access for All Vol.1.p, 301 & Appendix 15 vol.2. p, 178</p>	<p>A) The landscape design should have due regard to National Disability Authority's Building For Everyone Planning Guidance (Booklet 9, 2009), the UK Lifetime Homes Standards, B) Compliance with Part M of the Building Regulations C) Design to accommodate decreased mobility as residents may acquire some level of mobility impairment through accident, or inevitably through old age.</p>	<p>A & B) Compliance with Part M to be taken as the minimum standard and due regard to be considered for the accessibility of public realm, communal and allotment spaces. C) The landscape masterplan has taken due consideration of the various demographic which make up a sustainable neighbourhood. Therefore, the grading of public footpaths, pathways and public open spaces within the development shall be designed to be 1 in 80. Maximum gradients of inclined pathways shall be not steeper than 1 in 21. This is limited to the entrance pathway section exiting Fassaugh avenue and at Carnlough Road. All facilities within the public, private and communal open space shall be fully accessible to those with visual and physical impairments. Disabled user spaces are</p>

	<p>D) Particulars of design set out in appendix 15</p>	<p>located close to the entrance cores of each residential block and retail units. Surface visitor parking bays within the development are designed to be of the standard as disabled user parking bays. A permeability diagram is provided as part of the landscape submission where due consideration has been given to define unobstructed routeways free of street furniture and public lighting. Uncontrolled traffic junctions, tactile paving locations, dished kerbs and cross fall levels are noted where applicable. Wayfinding has been considered as an integral part of the landscape masterplan with tree lined streets along with surface treatments to orientate the pedestrian cycle and vehicular user to their destination within the development. Additional wayfinding signage to be provided.</p> <p>D) Due consideration of Appendix 15 has been taken and has been included within the design strategy.</p>
16.9 Roads and Services, Vol.1 p.302	<p>A) Scale, intensity, layout, design and location of proposed developments and will adhere to the Design Manual for Urban Roads and Streets (DMURS). B) Pipes, cables, etc. under roads shall be grouped together as far as possible for easier access and less disruption, to avoid damage from tree roots and to facilitate tree planting.</p>	<p>A) Qualitative aspects of the landscape including the road layout should consider the prioritization of the pedestrian as set out in DMURS. How this has been demonstrated is set out in section 16.3.1 above. B) All pipe work, service ducts and routeways are to be provided under roadway and pathways. All proposed trees are in dedicated trenches with root directors to segregate the tree pit and avoid a conflict with services. Refer to M&E and Civil engineer drawings for services layout.</p>
16.10.1 Residential Quality Standards – Apartments Communal Open Space, Vol.1. P 309	<p>A) Private and communal amenity space may adjoin each other, there should generally be a clear distinction with an appropriate boundary treatment and/or 'privacy strip' between the two. B) 25 or more units small play spaces of 85-100 msq. are considered for 0-6 yrs, schemes of 100 or more apartments, play areas of 200-400 sq.m. for older children and young teenagers should be provided. D) wheelchair accessible E) Good orientation. C) Minimum area for communal amenity space Studio 4: sq.m. One bedroom: 5 sq.m. Two bedroom: 7 sq.m. Three bedroom: 9 sq.m</p>	<p>A) Private and public open space have a clear connectivity but are delimited by fencing, gates and a privacy strip where directly adjoining or facing public open space. B) Play space provision: 1no. playground @ 100msq for 0-6yrs (communal garden) 1 no. playground 200msq 0-12yrs (communal garden) 1no. 400msq playground (public realm) 0-12 yrs. 1no. Private playground 100msq (Creche Facility) C) 3103msq is required as communal open space for this development for 147 no. 1 beds, 265 no. 2 beds and 45 no. 3 beds), 27no studio and 1 no. 3 bed house. The dedicated communal open space provided is 3585msq or 9.4% of site area. Refer to open space diagram. Public open space provision is 4100msq or 10.62% of site area.</p>
16.14 Community Facilities Vol.1 325,326	<p>A) the development should enhance existing facilities allowing for multi-functional, conveniently accessible, well integrated with pedestrian and cycle routes use, where they serve a wider community and accessible to all members of society including those with disabilities.</p>	<p>A) A proposed community building is proposed adjacent to the public plaza to the southern entrance of the site. This fronts onto a public plaza and a new 'Village Green'. Within the centre of the masterplan a proposed publicly accessible playground for 0-12 years, 2 no. table tennis features, a MUGA and Civic space are located. A cycle way connecting the 'Observatory Square' to Fassaugh Avenue along with a dedicated pedestrian route and trim-trail punctuated with benches and a picnic table space and a civic space aims to serve the residents as well as the wider community. The design strategy set out in section 16.8 describes in detail how the public and semi-private amenities is inclusive in design principles to accommodate all members of society.</p>
16.38.5 Disabled Car Parking	<p>B) At least 5% of car parking spaces should be designated parking spaces</p>	<p>B) A minimum of 5% (20no.) parking bays are conveniently located to each residential core and retail entrances. All surface carparking bays within the communal and public realm have been designed to the same spatial requirements in accordance with subsection 16.8. An additional 4no designated parking spaces are proposed adjacent to the retail unit to the south of the development.</p>
16.15 Playgrounds/Play Spaces	<p>A) Play spaces for small children i.e. under 5s, should be provided close to residential dwellings, safe</p>	<p>A) These are located within the residential gardens which are passively overlooked within a secure semi-private context with only disabled user and occasional visitor/ drop off traffic</p>

	<p>from traffic and other hazards, overlooked informally from dwellings or frequented roads or footpaths with good linkages with the residential development can be created and where meaningful community interaction can take place</p> <p>B) Have sunny and shady parts and be equipped with natural play elements such as logs/tree stumps/sand/water etc. and with apparatus for swinging, climbing, and rocking.</p> <p>C) Bespoke, Well-located, Use made of natural elements, Wide range of play experiences provided, Accessible to both disabled and non-disabled children, meets community needs, Allows children of different ages to play together, Builds in opportunities to experience risk and challenge, Sustainable and appropriately maintained, Allows for change and evolution.</p>	<p>permitted. Hard landscape in accordance with DMURS prioritise pedestrian users. Gated vehicular entrances to the main residential development restrict vehicular traffic where communal play spaces are provided. The play spaces are located within the fully pedestrianised and clearly bounded garden spaces. The publicly accessible play space 400msq for 0-12 years is located within a fully pedestrianised space away from vehicular routeways. There is good connectivity between the three play facilities with the larger, publicly accessible playground centrally located within the masterplan. Here a variety of features aim to integrate the existing residential community on Carnlough road/ Fassagh Ave and the new residential development.</p> <p>B) All play spaces are located to a favourable orientation with mounding and soft landscape features creating places of shade and sunlight. A range of play elements which provide opportunities for natural play have been proposed.</p> <p>C) Within the communal area a bespoke 'Club house' centred on a specimen tree contains a hub/ node for the residents families replete with a 'tree swing', den and naturalised climbing features. It is intended that a new community will grow and integrate with the wider community through the shared use of the public amenities and creation of a new neighbourhood centre, public playground, MUGA, table tennis zone and civic space provision. As described in 16.8 the landscape design has integrated level access throughout and requisite visual impairment warning surfaces in order that the development is an inclusive to all members of society. It is hoped that this will bring together 'different groups on neutral territory where all can intermingle safely and securely' as set out in 16.15.</p>
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