



DMURS COMPLIANCE STATEMENT

Moygaddy Castle SHD

Sky Castle Ltd **S665** 26 August 2022

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MOYGADDY CASTLE SHD



Consulting Engineers

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O'Connor Sutton Cronin & Associates (OCSC) have been appointed by *DMURS ComplIance Statement* to carry out the design of the civil engineering services associated with the proposed 360nr. unit residential and crèche development at Moygaddy, Co. Meath, which is located northeast of the town of Maynooth, Co. Kildare.

Planning Permission is sought be Sky Castle Ltd. for the development of a site which extends to 19.52 hectares gross site area in the townland of Moygaddy, Maynooth Environs, Co. Meath. The net developable area equates to 7.89 hectares which equates to a residential density of 45.6 units per hectare.

The proposed development will consist of the following:

- 1. Construction of 360 no. residential units comprising:
 - (i) 196 no houses (including 19 no. 2 beds, 156 no. 3 beds and 21 no. 4 beds).
 - (ii) 102 no. duplexes (including 51 no. 1 beds and 51 no. 2 beds) set out in 6 no. blocks.
 - (iii) 62 no. apartments (including 26 no. 1 beds and 36 no. 2 beds) set out in 2 no. blocks.
- Provision of a public park and playground with associated 42 no. car parking spaces adjacent to Moygaddy Castle and pedestrian and cyclist links along the River Rye. The overall public open space (including the High Amenity Lands) equates to 7.98 hectares.
- 3. Provision of private open spaces in the form of balconies and terraces is provided to all individual apartments and duplexes to all elevations.
- 4. Development of a two-storey creche facility (514 sqm), outdoor play area and associated parking of 29 no. spaces.
- 5. Provision of a single storey Scout Den facility, including a hall, kitchen, meeting room and ancillary facilities (220sqm) and associated parking of 6 no. spaces.
- 6. Provision of 4 no. bridge structures comprising:
 - (i) an integral single span bridge at Moyglare Hall over the River Rye Water to connect with existing road infrastructure in County Kildare and associated floodplain works and embankments.
 - (ii) a new pedestrian and cyclist bridge at Kildare Bridge which will link the proposed site with the existing road network in County Kildare.



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- (iii) a new pedestrian and cycle bridge across Blackhall Little Stream on the L22143 adjacent to the existing unnamed bridge.
- (iv) a new pedestrian and cycle bridge over the Moyglare Stream linking the proposed residential site with the proposed Childcare Facility, Scout Den and Moygaddy Castle Public Park.
- 7. Provision of 500m of distributor road comprising of 7.0m carriageway with turning lane where required, footpaths, cycle tracks and grass verges. All associated utilities and public lighting including storm water drainage with SuDS treatment and attenuation.
- 8. Proposed road improvement and realignment works including:
 - (i) realignment of a section of the existing L6219 local road, which will entail the demolition of an existing section of the road which extends to circa 2,500 sqm.
 - (ii) Provision of pedestrian and cycle improvement measures along the L6219 and L22143 which abuts the boundary of Moygaddy House which is a Protected Structure (RPS ref 91558).
 - (iii) Provision of pedestrian and cycle improvement measures along the R157 which abuts the Carton Demense Wall which is a Protected Structure (RPS Ref 91556).
- 9. Provision of 2 no. vehicular and pedestrian accesses from the L6219 local road, 1 no. vehicular and pedestrian entrance from the L22143 and an additional vehicular and pedestrian access from the R157 to the Childcare and Scout Den facilities.
- 10. The proposed development will provide 283 no. of bicycle parking spaces, of which 200 no. are long term spaces in secure bicycle stores and 83 no. are short term visitor bicycle parking spaces. 12 no. bicycle spaces are provided for the creche and 12 no. bicycle spaces are provided for the Scout Den.
- 11. A total of 667 no. car parking spaces are provided on site located at surface level. The car parking provision includes 10 no. Electric Vehicle charging and Universally Accessible spaces allocated for the Apartment & Duplex units. All Houses will be constructed with provision for EV Charging.
- 12. Provision of site landscaping, public lighting, bin stores, 3 no. ESB unit substations, site services and all associated site development works.
- 13. A Natura Impact Statement (NIS) and Environmental Impact Assessment Report (EIAR) has been included with this application.





A separate application will be made to Kildare County Council for the provision of the section of MOOR south of the River Rye that ties into the already constructed section adjacent to Moyglare Hall that is within the Kildare County Council jurisdiction This overlap of applications will ensure unimpeded access to the proposed development lands for all modes of transport including vehicular and dedicated pedestrian and cyclists' facilities.

The proposed link roads and streets together with the junctions, footpaths and cycle facilities have been designed in accordance with the requirements of the Design Manual for Urban Roads and Streets (DMURS) and the National Cycle Manual (NCM). DMURS is the design philosophy used in the design of all new residential roads and urban streets and the key objective of DMURS is to achieve safe, attractive and vibrant streets by balancing the needs of all users and prioritising alternatives to car journeys. The subject site is fully consistent with this recommended approach and achieves a sense of place and residential amenity whilst also facilitating efficient and secure internal movement. The site layout encourages permeability through the site, connecting to the wider area via pedestrian links and cycleways and seeks to prioritise pedestrians and cyclists in accordance with the policies set out in DMURS.

The scheme complies with the following key DMURS Design Principles:

INTEGRATED STREET NETWORKS

The subject site will be linked to Maynooth Town Centra via the proposed section of the MOOR as part of this application and the Moyglare Road. New dedicated pedestrian and cyclist infrastructure will be provided along the proposed section of the Maynooth Outer Relief Road (MOOR) & within the internal development. All footpaths within the development will be a minimum of 1.80m wide and will run parallel to the proposed road infrastructure The SHD site will be serviced by way of two uncontrolled junctions that will access the L6219.

The provision of infrastructure on the MOOR will include a 7.0m carriageway,1. verge, footpath and also cycle tracks designed in accordance with the National Cycle Manual.





Pedestrian and cyclist infrastructure will also be provided along the L6219 and L22143 linking the residential lands to the creche and public parklands to the east.



Figure 1: Site Layout

MOVEMENT AND PLACE

The proposed development incorporates a permeable and legible street network that offers route choice and flexibility for managing movement. There is a fully integrated pedestrian network with all the main landscape spaces connected to a universally accessible route. In line with best practice, the design incorporates an orthogonal type street layout thus promoting legibility as well as connectivity.

The proposed network is structured and will draw future occupants toward focal points including green open space.

PERMEABILITY AND LEGIBILITY





Pedestrian and cyclist movement is prioritised by providing a layout that restricts the speed of vehicular movements by use of vertical and horizontal deflection and by use of shared streets. A high degree of pedestrian permeability throughout the site is created by providing footways that connect the spaces between each block with crossings located at each junction.

TRAFFIC MANAGEMENT

By assigning carriageway widths within the development of 6.0m link road access and where perpendicular parking occurs on both sides of the road and the remaining road will have a width of 5.0m local streets, along with variations in the horizontal alignment of the access road, a natural traffic calming effect is provided in both a physical and psychological sense, which will assist in self-regulating vehicular speeds. Gradients proposed to minimise the need for revving of engines and associated noise and emissions, while appropriate landscaping will absorb excessive sound. Pedestrian priority will be provided at some internal junctions in the form of raised entry treatments which also serve as a traffic calming measure. The location of the site will promote the use of public transport, walking and cycling thus contributing to reduced air emissions.

MOVEMENT, PLACE AND SPEED

High levels of pedestrian movement are catered for which supports vibrant and sustainable places. The segregation and exclusion of vehicular traffic and where appropriate the use of shared streets within the development also supports the sense of place.





Element	Consistency with DMURS
	All Link roads and Streets within the development to have a Hierarchy
	of Widths to include 6.00m for the main link road and where
	perpendicular parking occurs and 5.0m for the minor roads.
Streets and	Maximum road gradient 1:12 with minimum gradient 1:100. Corner
Link Roads	Radii to be 6.0m on external junctions and 3.0m on all internal
	junctions. Speed Limits to be 30.0 kph.
	The MOOR will be designed as an arterial route 7.0m wide and have
	a design speed of 60kph.
	All footpaths provided will be a minimum of 1.8m in line with DMURS.
Footpaths	Proposed footpath along MOOR will be 2.0m wide. New footpath links
	will be constructed to enhance connectivity.
	The cycle facilities proposed are a combination of dedicated 1.75m
	off road cycle tracks along the MOOR. In addition there will be on-
	road cycle facilities which are shared with vehicular traffic and
Cycle Facilities	acceptable for low traffic speed urban environments.
	The New cycle facilities that will be constructed along the MOOR will
	connect to the existing sections of MOOR already completed and
	connect on to the Moyglare Road.
	Both entrance junctions are priority junctions with pedestrian and
	cycle crossings where required. The MOOR will connect to the L6219
Junctions	via additional priority junctions.
	All crossings to have appropriate tactile paving to aid vulnerable road
	users. Visibility standards maintained at all junctions.
	The internal development horizontal and vertical visibility to be
	maintained at all junctions and crossings in line with the 30 kph
Visibility	Design Speed.
	The MOOR will be design in accordance with a 60kph DMURS Design
	Speed.



CONCLUSION

As can be seen in the table above, it is considered that the design elements of the proposed street and link road in the development are in compliance with the objective of the Design Manual for Urban Roads and Streets (DMURS) which aims to provide safe, attractive and vibrant streets by balancing the needs of all users and prioritising alternatives to car journeys.



VERIFICATION

This report was compiled and verified by:

Joshua Tai BE, MIEI

Civil Engineer

O'Connor Sutton Cronin & Associates







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