

Architectural Design Statement for Part VIII

Old Greenfields, Maynooth - Kildare County Council

November 2022





Aerial View of the Site



Part VIII Architectural Design Statement Contents

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Project Team

Old Greenfields, Maynooth, Co. Kildare.

Client

Kildare County Council.



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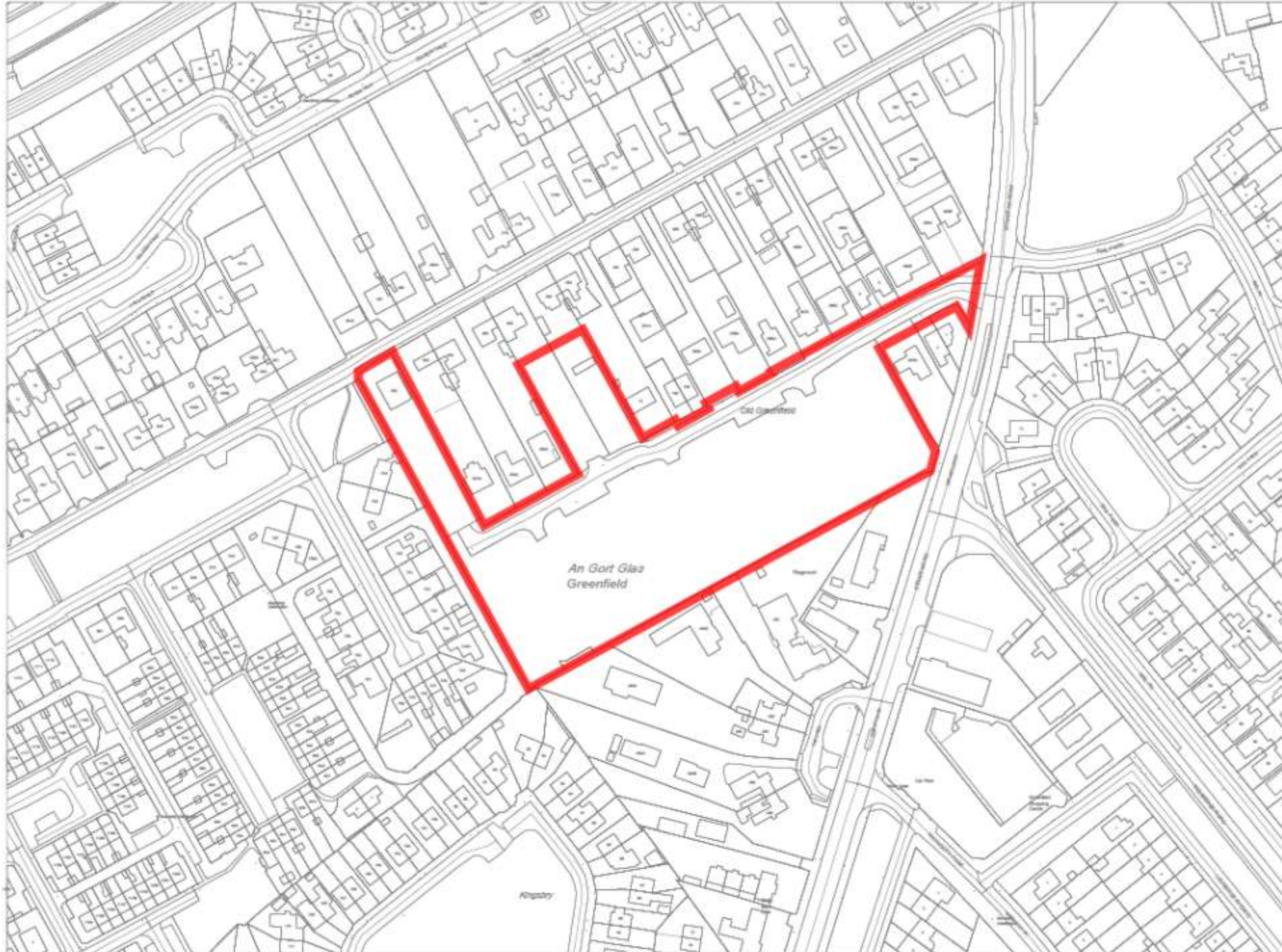
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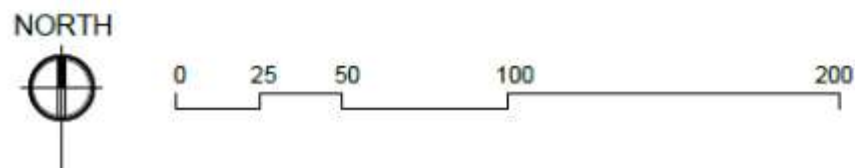


1. Site Information

Old Greenfields, Maynooth, Co. Kildare.



Site Location Map



Brief & Introduction

The site is located on Old Greenfields, Maynooth, Co. Kildare. There are a variety of amenities to support housing including community buildings, businesses, green space, walking routes and educational facilities all *within walking distance* of the site. Bus stops are located nearby and the train station is serviced by the Sligo-Dublin route.

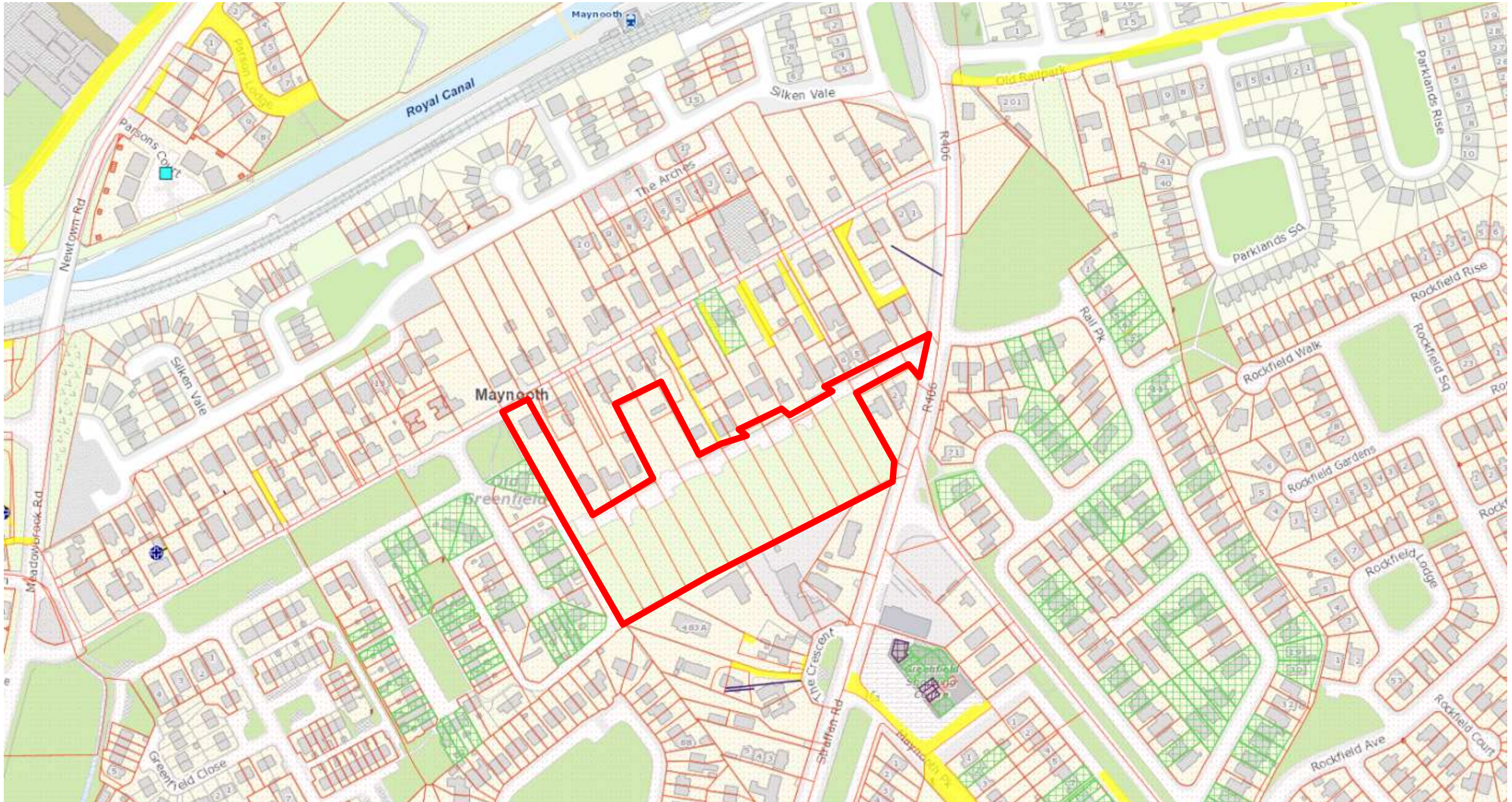
The scheme design is for 65 housing units for Kildare County Council. The provides accommodation for 258 people.

This is currently an undeveloped green field site, containing existing house to the north-west along the Old Greenfield Road. The site is *surrounded by existing housing to all boundaries*. The *proposed entrance is off Straffan Road*.



1. Site Information: PRAI

Old Greenfields, Maynooth, Co. Kildare.



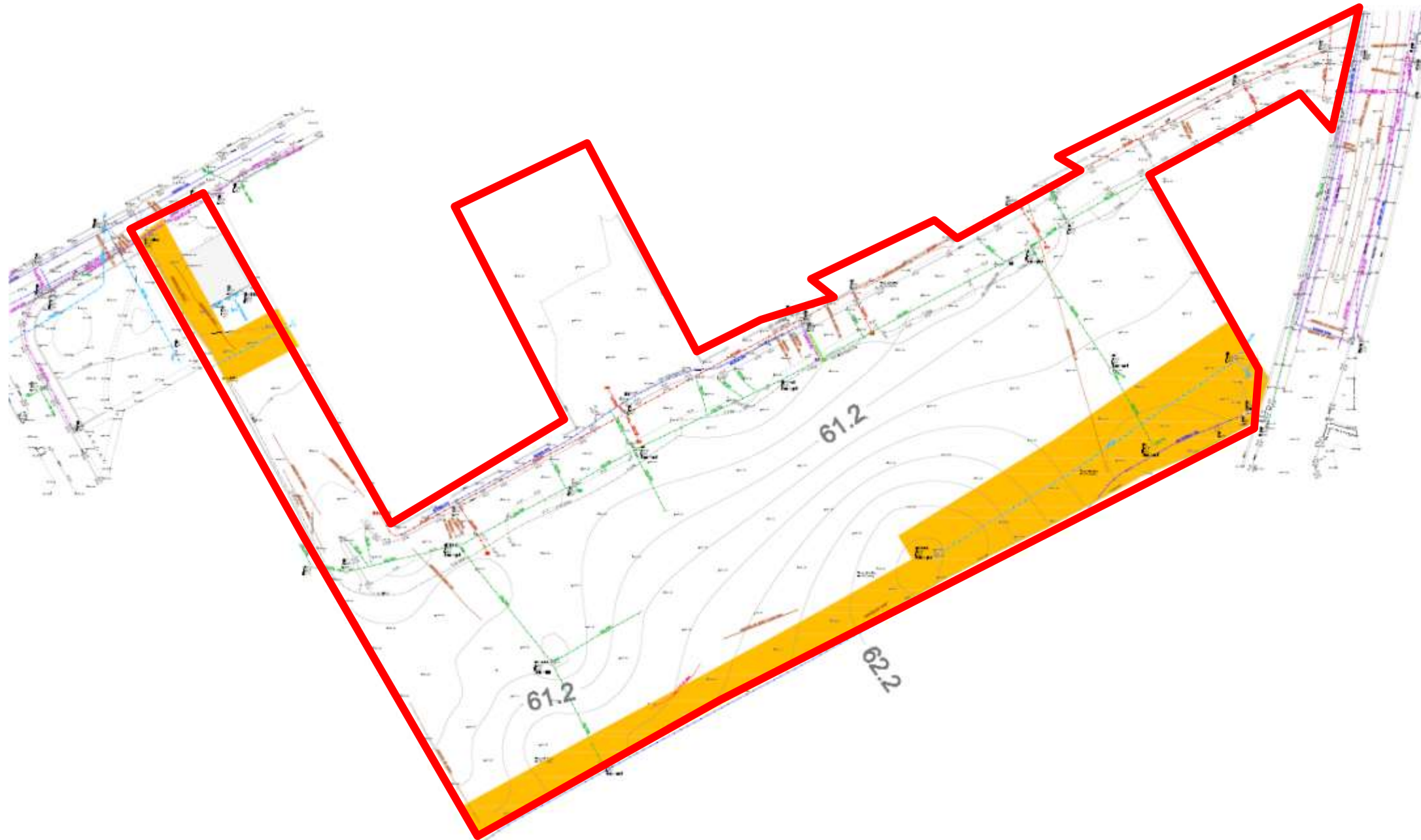
PRAI map with site boundary indicated in red.

From checking the PRAI, the ownership of the site and the community centre is in one lot, however, note there are known statutory wayleaves on the site. See overleaf for details in regards to the Irish Water Statutory Wayleaves .



1. Site Information: Wayleave

Old Greenfields, Maynooth, Co. Kildare.



Wayleave in yellow with site boundary indicated in red (Refer to drawing no.PA-002 Topographical Survey).

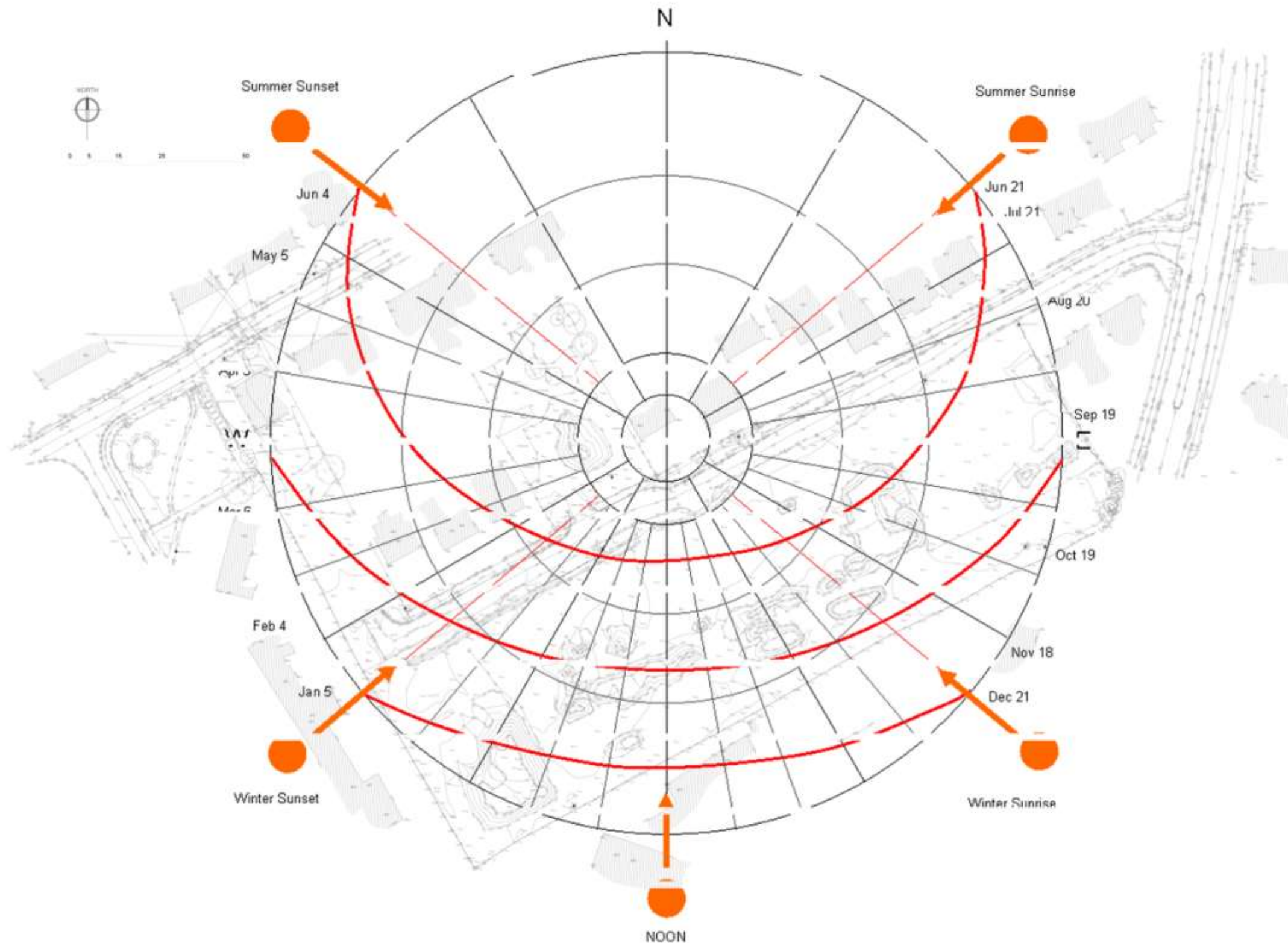
2HP have provided commentary on the statutory wayleaves below:

"There are existing Irish Water ,water main pipes and foul sewer pipework which transverses and encroaches upon the site.
Thus statutory wayleaves are provided to ensure minimum separation distances are achieved in compliance with that set out by Irish Water details and code of practice."



1. Site Information: Topographical Survey and Sun Path Diagram

Old Greenfields, Maynooth, Co. Kildare.



We have plotted over our sun diagram to analyze how light travels over the site. In addition to this, the site contours have been plotted to give an idea of levels, with each line representing a 0.5m adjustment. While most of the site has a gradual gradient across it, there are mounds of steeper soil present in patches across the site.

Overhead wires are present along Old Greenfield Road to the far north-west.

On the following pages we describe features of the site with photographs taken during site visits and with the aid of Google Street View.



1. Site Information: Site Photos and Views to Site

Old Greenfields, Maynooth, Co. Kildare.



View from Old Greenfield (existing house on north-west of site-Fitzgerald Close is road running along right hand side of house).



View from north-east entrance to site off Straffan Road.



View along Straffan Road, approach to site entrance on left.



View of entrance to site along the Straffan Road (spire of the College chapel visible in the distance).



1. Site Information: Site Photos and Views to Site (captured November 2021)

Old Greenfields, Maynooth, Co. Kildare.



1.



2.



3.



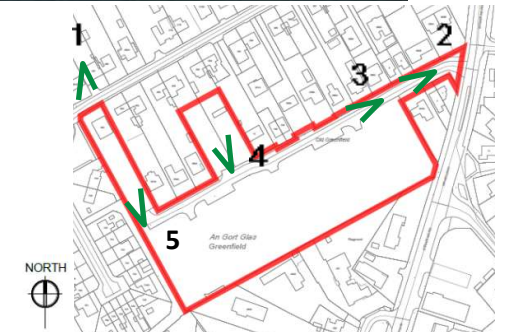
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1. Site Information: Site Photos and Views to Site (captured November 2021)

Old Greenfields, Maynooth, Co. Kildare.



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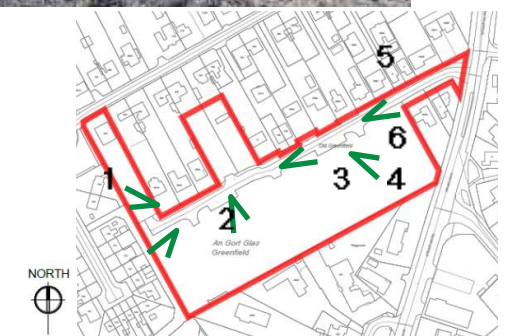
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1. Site Information: Site Archaeology and Nearby Protected Structures

Old Greenfields, Maynooth, Co. Kildare.

Site Archaeology and Nearby Protected Structures:

Maynooth or Maigh Nuad, meaning plain of Nuadha (Nuadha was one of the ancient Irish Gods). It is a university town in north County Kildare (home to Maynooth University-part of the National University of Ireland).

Located 24km west of Dublin, it is considered a commuter town. The railway line is located on the Dublin-Sligo route.

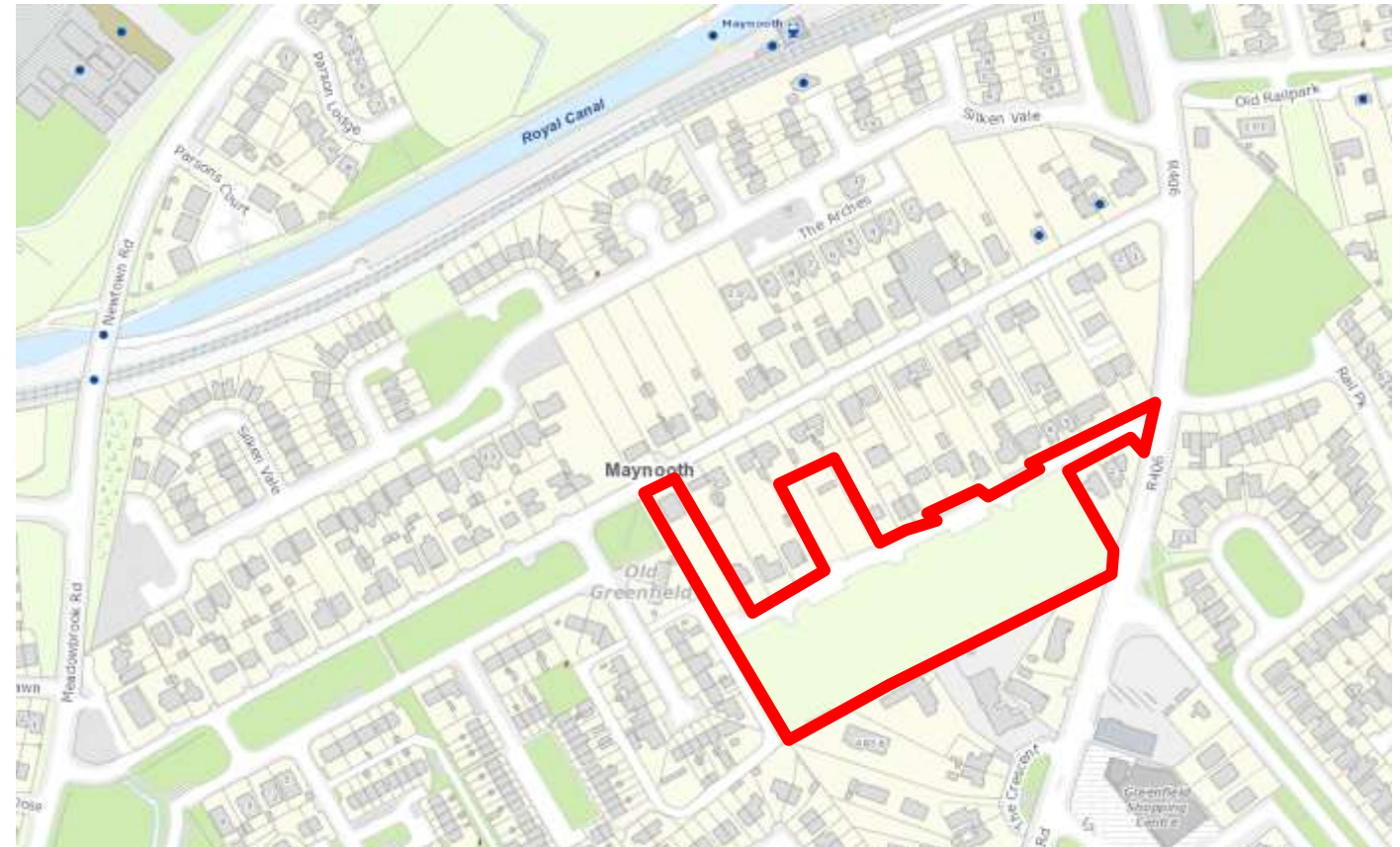
Maynooth town lies within the western edge of the Pale.

Some nearby monuments to the site include:

- A) St Patrick's College (1831-1833) - Reg. No. 11803126
- B) St Patrick's College-handball alley (1925-1935) - Reg. No. 11803129
- C) Section of Canal (1790-1796) - Reg. No. 11803136
- D) Signal Box (1845-1850)- Reg. No. 111803107
- E) Station Master's House (1880-1885) - Reg. No. 11803106
- F) House (1850-1870 - Reg. No. 11803109
- G) House (1900-1910) - Reg. No. 11803105
- H) House (1900-1910) - Reg. No. 11803104
- I) Bond Bridge (1790-1800) - Reg. No. 11803133
- J) Bridge (1845-1855) - Reg. No. 11803132

Sources:

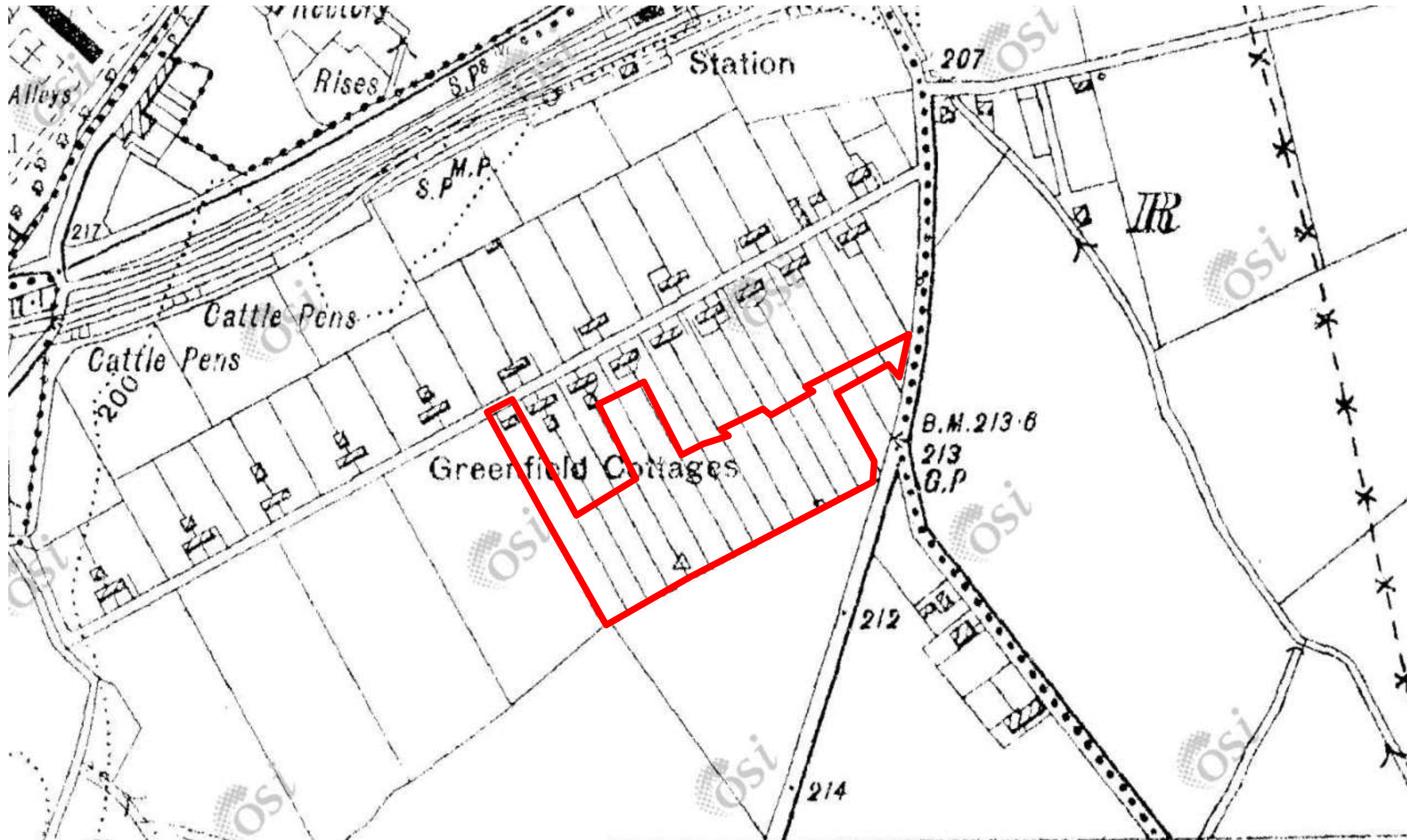
- <https://maps.archaeology.ie/HistoricEnvironment/>
- www.buildingsofireland.ie



Location of nearby monuments in Maynooth.



1. Site Information: Historic Map



Historic 6 inch last edition B&W (1837-1842)

The site was originally part of the long back gardens belonging to the existing cottages.



1. Site Information: Appropriate Assessment Screening

Old Greenfields, Maynooth, Co. Kildare.



European sites in relation to vicinity of site of proposed development.



Figure 1. Showna Funnann site and NHAs/NHAs within 15km of the Proposed Development

Table 1 European Sites located within 15km or the potential Zone of Influence¹ of the Proposed Development.

Site Code	Site name	Distance (km) ²
000391	Ballynafagh Bog SAC	14.52
001387	Ballynafagh Lake SAC	14.76
001398	Rye Water Valley/Carton SAC	1.60

Summary from the AA Screening Report, refer to same for further details:

It can be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

It is the view of Moore Group Environmental Services that it is not necessary to undertake any further stage of the Appropriate Assessment process.

A finding of no significant effects report is presented in Appendix A in accordance with the EU Commission’s methodological guidance (European Commission, 2001).”

It was concluded therefore that an appropriate assessment is not required.



1. Site Information: Environmental Impact Assessment (EIA) Screening Report

Old Greenfields, Maynooth, Co. Kildare.

P1 Current ground cover



P2 Existing boundaries



P3 View over brown field site



P4 Ground condition 21/02/2022



P5 View from Old Greenfield Road



Above: images from the EIA Screening Report

Summary from the EIA Screening Report, refer to same for further details:

An EIA Screening Report was completed for the proposal at the Old Greenfields site at Maynooth, Co. Kildare. This confirmed that there are no badger setts, nor evidence of bat roosts present or evident on the site. It considered the proposal in relation to the following environmental factors:

- * Population and human health
- * Biodiversity, with particular attention to species and habitats protected under the Birds and Habitats Directive
- * Land, soil, water, air and the landscape.
- * Climate
- * Interaction between above
- * Expected effects from relevant major accidents and / or disasters

Resultantly, it determined that a full Environmental Impact Assessment Report was not required since it was unlikely that the proposed development would impact the local environment on the brown field site.

It was concluded therefore that there was little likelihood of significant effects on the environment and local flora and fauna arising from the proposed development, so therefore an Environmental Impact Assessment Report is not required for this proposal.



2. Proposed Site Layout: Proposed Site Layout Plan



Proposed Site Layout

The requirement for housing is to be as follows:

- 1 no. Type A (1B2P single storey house)
- 1 no. Type B (4B5P single storey house)
- 14 no. Type C (3B5P two storey houses)
- 7no. Type D (2B4P two storey houses)
- 1 no. Type E (4B7P house)
- 18 no. Type F (apartments)
- 5 no. Type G (2B4P duplexes)
- 5 no. Type K (1B2P apartments)
- 6 no. Type H (2B4P apartments)
- 3 no. Type K (2B4P apartments)
- 2 no. Type J (1B2P apartments)
- 2 no. Type L (3B/5P two-storey House)

The above ratio is informed by housing need in the Maynooth area.

The proposed site layout adopts the Woonerf Principle (please refer to p.28) intended to slow traffic and provide a safer environment for pedestrians.

The scheme provides 16% open space to be enjoyed by users. A total of 86 dedicated bicycle spaces have been provided throughout the site. There are 90 parking spaces provided; comprising of four accessible spaces and six electric vehicle charging spaces.

Active frontages provide passive surveillance to the street and open spaces and provide vibrancy to the area. The design approach and employment of the Woonerf approach have placed emphasis on the landscaping and surface treatment, particularly important in relation to the Sustainable Urban Drainage (SuDs) approach.

Further information on the design approach can be found overleaf.



2. Proposed Site Layout

Design Approach: sustainable drainage



Urban Planting

	Prunus lusitanica Hedging
	Portugal Laurel
	Carpinus Betulus Fastigiata Hornbeam
	Betula Jacquemontii

Plants for wet/dry planter beds (Bio Retention Swales)

	Saxifraga rosacea
	Irish Saxifrage
	Pennisetum alopecuroides Fountain Grass
	Nepeta faassenii 'purisian blue' Catmint

Plants for Wet Swales (Bio Detention Swale)

	Iris pseudacorus Yellow Flag Iris
	Typha latifolia Bulrush
	Veronica beccabunga European Speedwell

Note: Rain Garden planting to be a mix of Wet Swale and Bio Diversity planting

The site shall have the following:

- Tree pits within the landscape
- In lieu of the grassed swales; shallow planted bio-swales with suitable planting by landscaped architect are to be used and agreed with Parks as opposed to grass swales
- Bio-retention areas at corners with suitable planting (indicated in blue on sketch).
- Permeable paving for all the parking as per 2HPs details.
- Include land drains under any overflow grass area reconnected to positive drains
- Set kerbs down flat so water can flow into any bio-swales or grass area (also aligns with the Woonerf Principle).
- Storage tanks below ground are to be avoided. Either a pond or planted shallow bio-detention area at the end of the treatment train should be installed to store any excess water.
- The preference was for the bio-detention area which is described effectively as a planted depression in the ground to encourage bio diversity and has the capacity to store any additional water volumes. This area will also be wet / damp, effectively a large rain garden above ground in the green space. 2HP to size the overflow volume and note same on their drawings
- 2HP to check with the local area engineer be contacted to confirm the outflow is adequate and whether it requires any upgrades.

The landscaping strategy and layout of boundaries (left) were informed based on the above considerations and approach towards a more sustainable drainage.

Proposed Landscaping Layout



2. Proposed Site Layout

Design Approach: sustainable drainage



Along with the Woonerf approach, another design strategy which was identified to be a key priority for the site was adopting a sustainable approach to the drainage. The sketch (left) identifies where porous surfaces are to be used (paving and roadways), areas of swales and calculations of the requirements for the site.

By working closely with Kildare County Council and the civil engineer (2HP), we have developed the proposal in this manner. Resulting discussions concluded that the following would be introduced to achieve the sustainable approach to drainage:

- Back gardens – water butt and shallow soak pit (could be a Resolute arched tank as concerns over crushing of stone during construction of boundary walls).
- Front of house - NBS planter boxes.
- Agreed not to detail main roads in porous asphalt due to possible rutting and maintenance issues for housing.



3. Selected Precedents

Woonerf Principle - 'Living Streets'



Image: thisoldcity.com



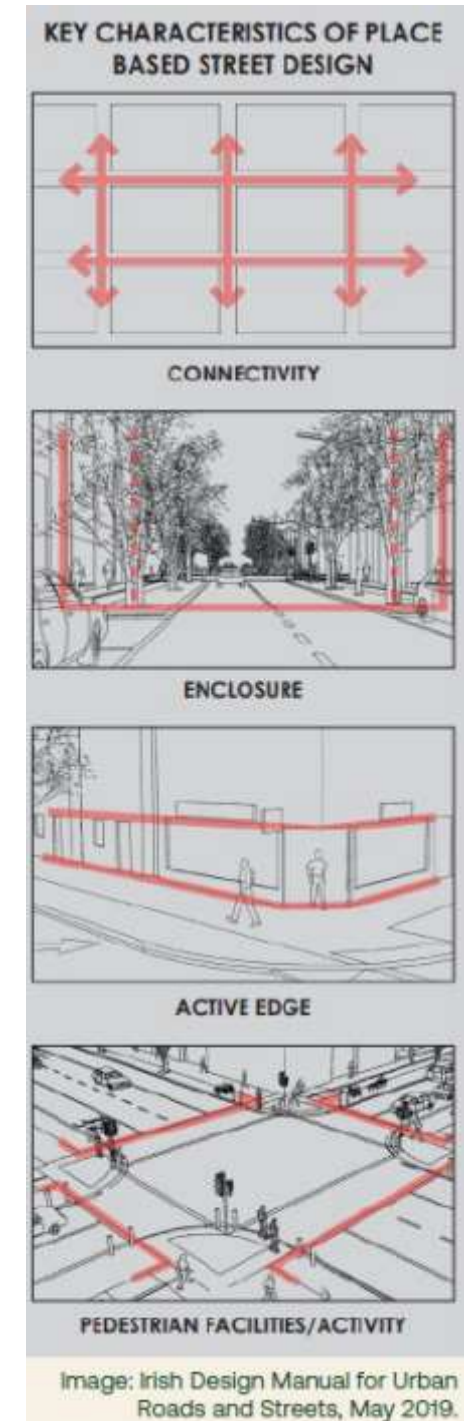
Image: Life on a Dutch Woonerf- <https://www.youtube.com/watch?v=bSBdshn2tUM>



Image: 1e de Riemerstraat, Den Haag, Netherlands. twitter.com/drmatthewhardy/status

The Woonerf approach or living streets was adopted as the design approach towards the street layout within the layout for Greenfields. The following features are used in the design and result in:

- Gentle curve to the street and use of physical barriers: vehicular traffic is slowed to pedestrian pace by introducing trees, posts and bollards and winding the street
- Shared streets and no kerbs-continuous height across the street: improved accessibility and psychology of shared surfaces-priority to pedestrians.
- Landscaping and street furniture-social interaction and enriching the physical environment Opportunity to enhance neighbourhoods.
- Passive surveillance and reduced crime.
- Reduced road traffic accidents.
- Less carbon emissions produced by traffic.



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



Aerial view from site entrance (north-east)



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



Aerial view of site from north-west



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



View of site from south-west



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



View of site from south-east



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



View from east towards Block 8



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



View from south towards Block 7



4. Model Views

Old Greenfields, Maynooth, Co. Kildare



View from east towards Block 5





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