

Hyphen

PLANNING APPLICATION

DESIGN STATEMENT

RECYCLING PLANT – LANDS AT HUNTSTOWN AND
COLDWINTERS, CO DUBLIN

RATHDRINAGH LAND LTD CO,
T/A IRISH RECYCLING LTD

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FIGURE 1: SITE PLAN WITH REDLINE BOUNDARY

1. Introduction

This Design Statement refers to the planning application for a proposed Recycling Plant and all associated elements (Figure 2, outlined in red).

The Recycling Plant is located on land set back from, and accessed off, North Road, in close proximity to Huntstown & Bia Energy Anaerobic Digestion Plants, Huntstown Power Station, and Finglas 220kV Substation, all in close proximity to the M50, Dublin Airport and Logistics Park.

The Design Statement should be read as part of the full suite of documents and drawings submitted for this Planning application. It documents the application's compliance with the principles contained within the Fingal County Development Plan 2023-2029.

Appendix A contains a Drawing List indicating the full list of architectural drawings submitted with this application.



FIGURE 2: SITE LAYOUT

2. Context

2.1 Zoning

Located in proximity to the M50, Dublin Airport Logistics Airport, Huntstown Power station, with Bia Energy and Energia Anaerobic Digestion Plants on adjacent lands to the North of the proposed site.

The site is contained within lands zoned as Objective HI – Heavy Industry, “*To provide for heavy industry.*” In the Fingal County Development Plan 2023-2029. The Development Plan identifies Waste Disposal and Recovery Facility to be permitted in principle under the zoning.

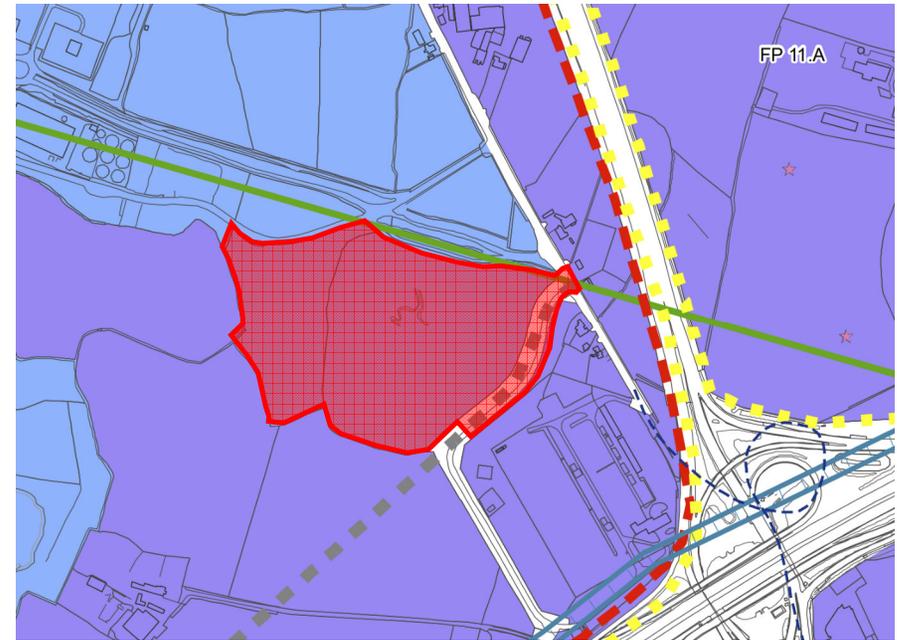


FIGURE 3: SITE ZONING, PER FINGAL COUNTY DEVELOPMENT PLAN 2023-2029 PLAN



FIGURE 3: SITE LOCATION'S SURROUNDING DEVELOPMENTS

3. Setting

3.1 Site Location and Context

FCC DEVELOPMENT PLAN

In line with the FCC Development Plan, the site has been reviewed to ensure the achievement of successful and sustainable neighbourhoods have been addressed under the following overarching principles:

- The Context of an Area
- Healthy Placemaking
- Connected Neighbourhoods
- Public Realm
- The Delivery of High-Quality and Inclusive Development
- Appropriate Density and Building Heights
- Materials, Colours and Textures
- Mix of dwelling types (excluded due to the nature of the development)

3.2 Existing Site

The site, area of 9.86 hectares, is made up of undeveloped land within close proximity to North Road. Situated within the Circular Economy Hub proposed lands positioned away from neighbouring residential to the site's East boundary.

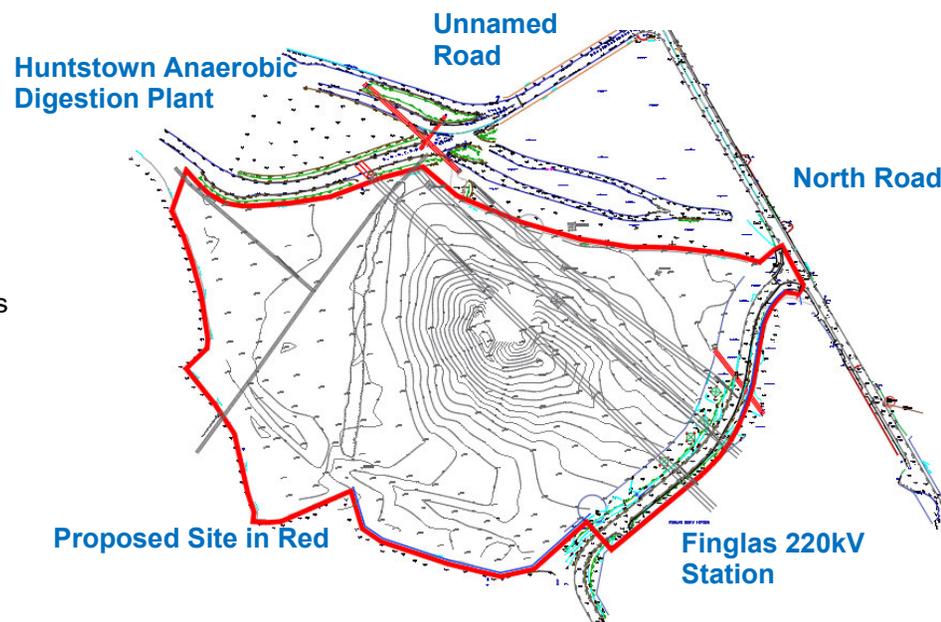


FIGURE 4: EXISTING SITE PLAN, WITH PROPOSED SITE OUTLINED IN RED

3.3 Previous Land Uses

The land's existing use is currently agricultural lands, with a number of ESB Pylons and overhead cables crossing the site, having previously been used for topsoil storage in the early 2000's. There are no other structures contained on the existing site.

According to the archaeological investigations on the site, there were buried archaeological remains identified that "...represent an extensive settlement complex consisting of an enclosure located on the top of the ridge, and associated linear and curvilinear anomalies extending to the south with associated small and large cut features..."

3.4 Adjacent Land Uses

The land to the North of the site, along the unnamed road contains:

- Huntstown Anaerobic Digestion Plant
- Bia Energy Anaerobic Digestion Plant
- Hunstown Power Station

Directly to the South is the Finglas 220kV Station, M50 and the N2 junction, to same.

Land directly to the East of the proposed development sandwiched between the North Road and the N2, have various residential and small economic enterprises, such as Veterinary Clinic, Canine Hydrotherapy Centres and home furniture Shops

Lands West and South West are currently agricultural but otherwise undeveloped, zoned for Objective GE, General Employment, under the Fingal County Council Development Plan 2023-2029.



FIGURE 5:GOOGLE MAPS IMAGE OF THE NEIGHBOURING BUILDING IN THE IMMEDIATE VICINITY OF THE PROPOSED DEVELOPMENT OF NORTH ROAD ENTRANCE



FIGURE 6: GOOGLE MAPS IMAGE OF THE NEIGHBOURING JUNCTION TO UNNAMED ROAD AND VARIOUS ANAEROBIC DIGESTION PLANTS AND POWER STATION IN THE IMMEDIATE VICINITY OF THE PROPOSED DEVELOPMENT

4. Connections

4.1 Alternatives to the Car

Objective CMO6 – Maintain and improve the pedestrian and cyclist environment and promote the development of a network of pedestrian/cycle routes which link residential areas with schools, employment, recreational destinations and public transport stops to create a pedestrian/cyclist environment that is safe, accessible to all in accordance with best accessibility practice

The layout allows the use of sustainable forms of transport such as walking and cycling, with clearly defined footpaths within the site, with the scheme been laid out to provide easy access for staff to the existing infrastructure on the North Road, as per FCCDP Table 14.15, “*Sites should be designed to minimise conflicts between vehicles and pedestrians/cyclists.*”

4.2 Bus & Train Routes

The site is served by public transport with Dublin Bus stop number 7132, located beside Charlestown Shopping Centre, with pedestrian access via pedestrian bridge crossing M50, and 134451, located at the junction of N2 slip road to North Road. From here buses run to and from Dublin city every 10-20 minutes throughout the day.

Per the Finglas County Council Development Plan 2023-2029, there is a future proposal of a light rail corridor, with the Kildonan Station within 300m radius of the site entrance.

4.3 Cycling

Although there is no existing cycling infrastructure along the North Road, access via bicycle is viable, along the existing road infrastructure.

16 bicycle parking spaces have been provided within the recycling plant scheme, in a dedicated area. Staff changing facilities have been provided within both the food container plant and materials recovery facility.

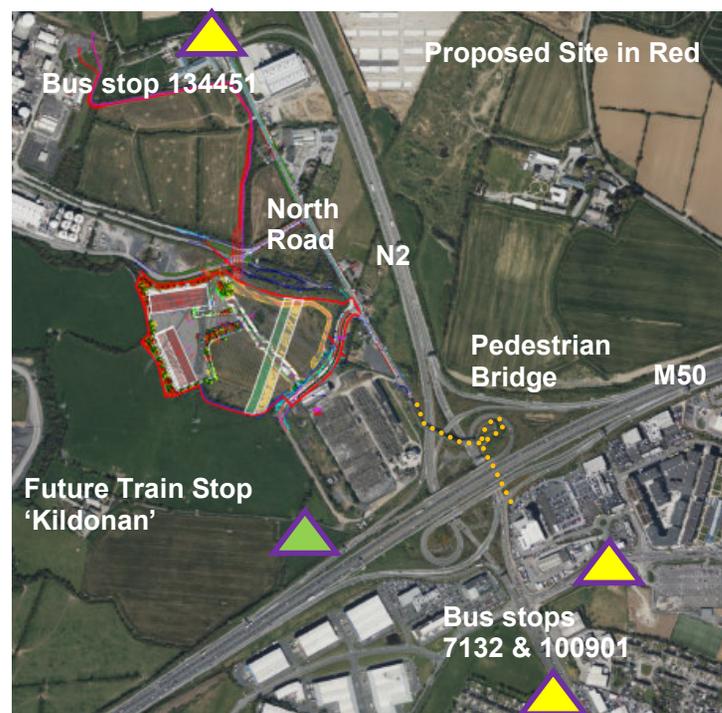


FIGURE 7: SITE LAYOUT SHOWING THE LOCATION OF BUS/TRAIN STOPS IN LOCALITY OF PROPOSED SITE

5. Inclusivity

Policy SPQH16 – Promote the development of built environments and public realms which are accessible to all, ensuring a new developments accord with the seven principles of Universal Design as advocated by the National Disability Authority, Building for Everyone: A Universal Design Approach...

The Universal Design concept of creating an environment that can be used by all people, regardless of their age, size, disability or ability has been applied to this development from first principles.

The design and layout of the scheme, public realm and community infrastructure have incorporated universal design insofar as is feasible, having regard to the provisions of the National Disability Authority 'Building for Everyone: A Universal Design Approach – Planning and Policy' (2012).

The following provisions have been made throughout the scheme

- Provision of designated accessible parking and set down points for people with disabilities;
- Level pedestrian routes with sufficient width;
- Use of surfaces suitable for wheelchairs and buggies;
- Use of tactile and blister paving;
- Use of colour contrast, particularly in the public realm;
- Ensuring level access to buildings from the street that is suitable for wheelchairs and buggies;
- Toilets and showers for disabled staff.
- DDA compliant lifts (see GA drawings); and
- Ambulant disabled stairs.

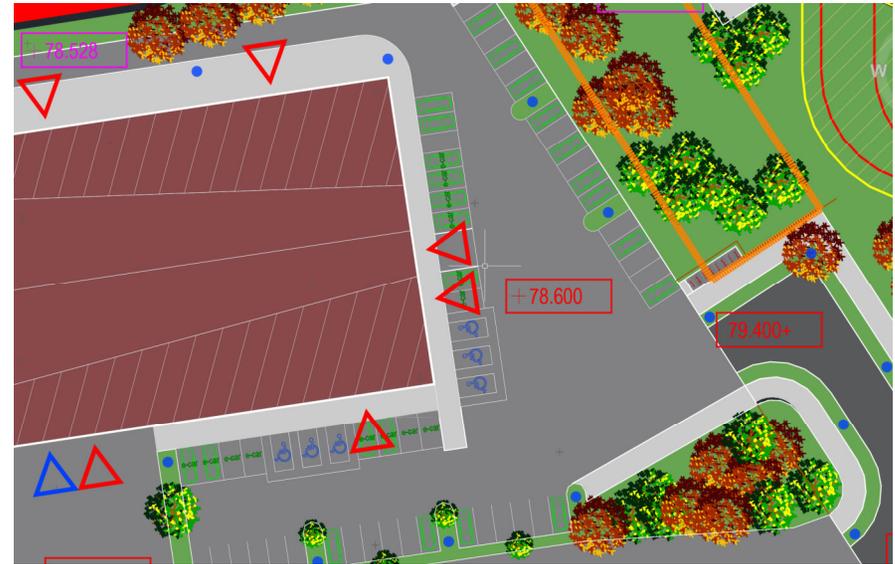


FIGURE 8: DISABLED PARKING AT PRIMARY ENTRANCES

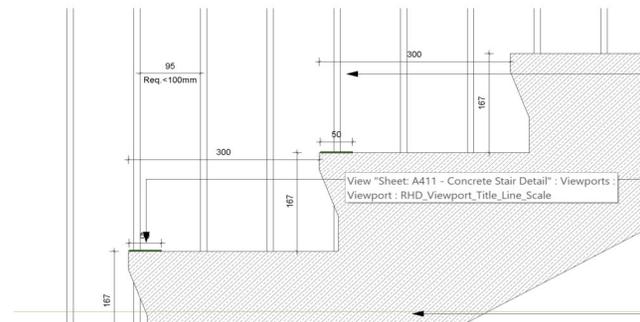


FIGURE 9: STAIRS IN FULL COMPLIANCE WITH TGD PART M, K AND B

6. Variety

6.1 Existing Variety

Within the existing built environment, through the nature of the various developments there are a variety of heights and forms, with no set uniformity. The land typology has a gentle slope across South to North and East to West, with minimal difference in elevation of existing buildings FFL surrounding the proposed site.

	FFL	Ridge Height
Residential Houses	77.15	83.73
Huntstown Power Plant	78.00	105.00
Bia Energia Anaerobic Plant	77.00	101.75
Huntstown Anaerobic Plant	79.00	97.00 (88.94)
Finglas 110kV GIS Substation	78.80	90.93

There are a variety of forms, residential detached bungalows with adjacent sheds of an agricultural or small enterprise nature. The Huntstown Power Plant and Anaerobic Digester Plants have large formatted buildings, with their overall forms split up into smaller elements, varying in size in height.

6.2 Proposed Variety

The proposed development is made up of two buildings, within the larger Circular Economy Hub, designed to suit their applications, simple in form, overall heights sit below that of the Huntstown Anaerobic Plant and the Bia Energia Anaerobic Plant, but moderately higher than that of the Finglas 110kv GIS Substation and somewhat more to the residential properties to the neighbouring site.

	FFL	Ridge Height
Food Container Plant	78.70	92.70
Materials Recovery Facility	78.70	94.70

With the proposed landscaping strategy, planting of trees to further alleviate height issues or competing with the existing format, screening the development in the overall surrounding setting.

The buildings have been designed to ensure that the height is broken up to reduce the overall height of the buildings, through colour blocking. As well as create a stepping height to that of the existing Anaerobic Plants and Power Plant.

7. Efficiency

The proposed Recycling Plant buildings have been designed so that the roof can be utilised for PV Panels, that allows for a 4.98 degrees inclination, the PV panels do not impact the visual amenities of the surrounding area, as they site below the parapet. These PVs will be set out on the roof to achieve the greatest efficiency possible and reduce any overshadowing that may occur, dependant on the technology that will be utilised at construction phase.

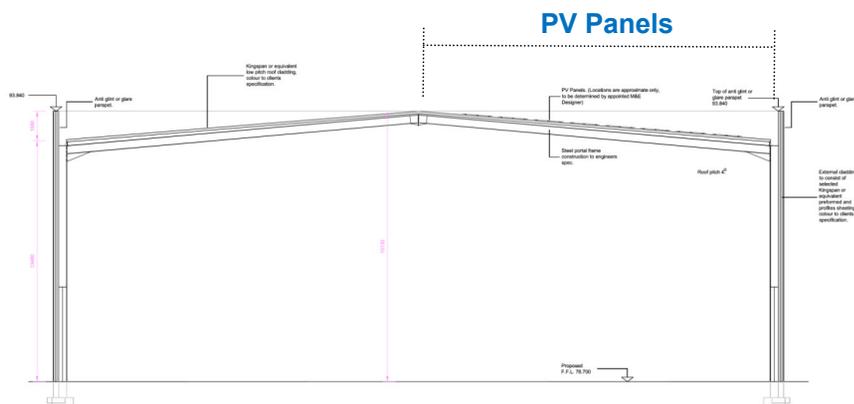


FIGURE 10: TYPICAL SECTION SHOWING INCLINATION OF PV PANELS

8. Layout

8.1 Design Brief

Every new project follows a defined sequence of steps. The starting point is an appraisal of the opportunities and constraints of the development site, both physical and regulatory against the development objectives of the investor.

Below is a re-cap of the design process leading to the original application.

Development Objectives

The specific development objectives for this development are to :

- Increase the National Recycling Infrastructure capacity; and
- Create employment.

Alternative Options

Three alternatives were considered:

1. The 'Do-Nothing' alternative;
2. Alternative locations and uses; and
3. Alternative design/layouts of the proposed development.

1. Do-Nothing:

This option was briefly considered and rejected on the basis that:

- The land under the Local Plan is intended to be re-purposed to an Employment Use, through the council zoning of lands to HI and GE lands to the West of the application, signalling a clear intent to further promote economic activity in the area.
- Do-nothing does not meet any of the Developer's objectives.

There would be a substantial loss of economic opportunity value.

2. Alternative Locations

No alternative site have been considered by the Applicant for the following reasons:

- The proposed is a strategically placed Recycling Plant facility to be located beside the Huntstown and Bia Energy Anaerobic Digester Plants and Huntstown Power Plant;
- Within close proximity to the N2 arterial road, and its corresponding junction to the M50;
- The site is located within an area identified in the Fingal County Council Development Plan 2023-2029 as an area for heavy industry uses (as previously stated);
- The site would provide a key development opportunity to contribute to the regeneration of an under-utilised site and with the land use identified in FP 12.8, Dublin Enterprise Zone;
- There is no evidence of site contamination; and
- The level terrain is suitable for large floorplate buildings.

3. Alternative Design & Layouts

Recycling Plant facilities are in general, simple buildings with self-contained modular processes, repetitive in nature to improve safety at all levels for construction and management.

This forms the building block for evaluating the site, matching the business case and achieving a best-fit outcome.

8.2 Design Evolution

Siting

Through the design evolution we were aware of the neighbouring residential properties and wanted to ensure any negative impact to them was greatly reduced. As such the siting of the proposed food container plant and materials recovery facility were positioned to the North and North-Westerly most boundaries of the overall Circular Economy Hub development, i.e. the greatest distance possible from residential properties.

Orientation

Again to minimise the impact to the surrounding land and properties an orientation of North to South, Material Recovery Plant, and East to West, Food Container Plant, was adopted which followed natural boundaries of the existing land. This facilitated in a reduced visual impact to North Road, with the Food Container Plant gable end predominately facing the East site boundary, and the Material Recovery Plant per the Circular Economy Hub proposed layout shielded by future buildings.

Change in Scale

Both proposed buildings are similarly scaled and were located to North Westerly areas of the site away from existing residential properties on the North Road, with much larger existing buildings situated further North-Westerly behind same.

Separation Distances to Existing Adjacent Dwellings

Through the design evolution we were acutely aware of the neighbouring residential properties and wanted to ensure any negative impact to them was greatly reduced. Thus the scaling and locating of buildings on the proposed site was carefully considered. The closest residential property is 305m, to the Food Container Plant building, with all others greater in separation distances.

Layout

The proposed buildings are contained within the overall proposed Circular Economy Hub, with a proposed Cul-de-sac road arrangement, which may extend in the future on to the unnamed road, to the site's Northernmost boundary to make same into a central spine road, allowing for ease of vehicular movement throughout the site, from the North Road and to comply with FCCDP Table 14.15 *“Alignment of opposite entrances is encouraged to promote continuity and provide uniformity.”*

At the Recycling Plant the access/egress has been split for general vehicles to general parking, and articulated vehicles to the loading area, from the proposed access road off North Road. With the use of planting and landscaping used to reduce the building's impact to the existing surroundings.



FIGURE 11: SITE SECTION SHOWING BUILDING SCALE TO EXISTING PYLON

9. Public Realm

9.1 Welcome and Inviting

Policy CMP12 Public Realm: Support and facilitate the provision of high-quality and attractive public realm that is accessible for all with a focus on improving connectivity and permeability in accordance with best practice public realm and guidance documents.

The proposed development's location has limited opportunity for engagement with the public realm at street level. Therefore, an alternative approach has been taken. The proposed scheme has strived to find a balance between the industrial facility required by the client, given the nature of their business, and creating a welcome and inviting area around the building. Sighting the site back from the road enables us to create a natural barrier, which in turns allows for this area to be adopted and used to add to the ecological value of the site.

The alignment of the buildings reduces the visual impact along the South and East frontages, in particular the view from the North Road. The existing and proposed planting and landscaping, around the whole of the site would provide screening of the proposed development from the North Road. Reducing the visual impact along North Road, allowing little to no views of the building façade.

9.2 Healthy Placemaking Landscaping

The landscaping and planting strategy was to ensure that the visual impact of the site did not detract or impact the neighbouring residential properties, as well as to help mitigate any acoustic impact the proposed development would transpire. Furthermore to assist with the SuDs

requirement of the site, through permeable paving and rainwater harvesting and attenuation storage cells within the soakaway.

It is proposed to use natural screening solutions, including soft landscaping and a SuDs drainage design, which offer benefits to ecology and the environment, which underpin Chapters 4 and 7 of the Fingal County Council Development Plan.

As per the Fingal County Council Development Plan Table 14.15,

“All waste and recycling areas should be covered/enclosed and appropriately screened from wind and public view.”

As such the view of the Food Container Plant and Materials Recovery Plant buildings are screened behind large areas of existing and proposed planting, with no views available from North Road or the access road, as per Figure 13.



FIGURE 12: 3D OF VIEW FROM PROPOSED CIRCULAR ECONOMY HUB ENTRANCE

9.3 Visual Impact of the Development

Through the utilization of planting, the view of the Food Container Plant and Materials Recovery Plant buildings are greatly screened from the North Road. As well as the retaining of planting to the North and West boundaries, to maintain existing boundary lines, minimising any visual and ecological impact to the surrounding area.

With set backs of minimal 26m to the Food Container Plant, and a greater distance again to the Materials Recovery Plant buildings, comprising of a mixture of hard and soft landscaping, to assist with visual continuity and creating an attractive streetscape as per Fingal County Council Development Plan Table 14.15.

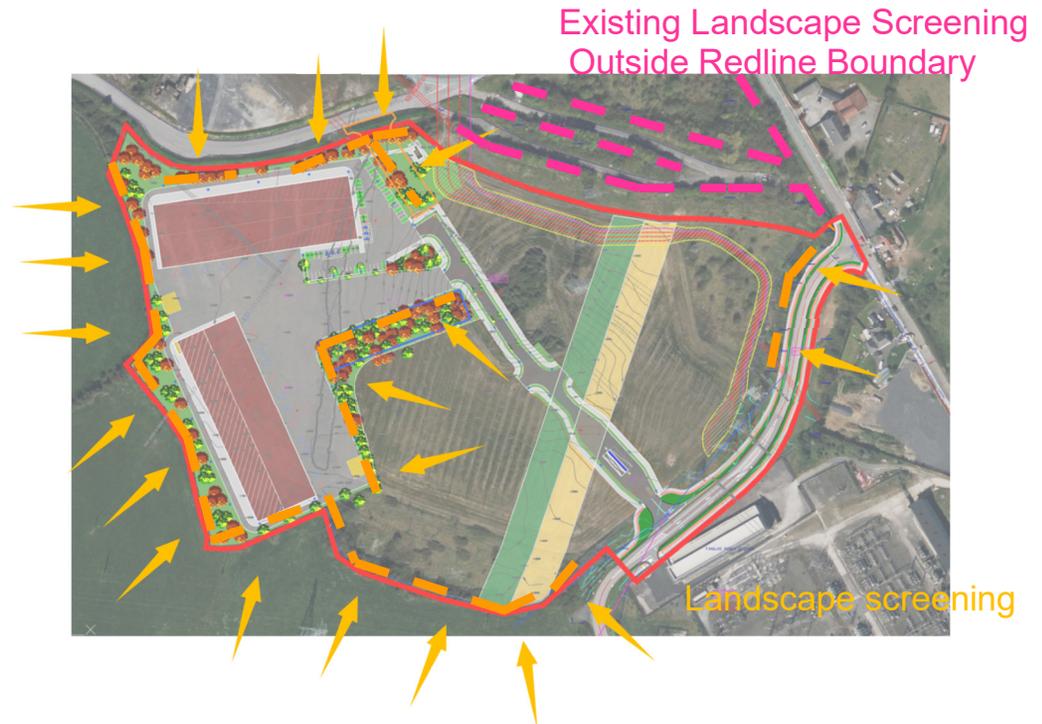


FIGURE 13: SITE PLAN WITH LANDSCAPE SCREENING TO SITE

10. Adaptability

The proposed site has been designed to ensure adaptability in the future, through change of uses in the buildings. Manoeuvrability of vehicles and splitting of the site is easily achievable. As per the Fingal County Council Development Plan Table 14.15:

“Building design should be as flexible and innovative as possible to facilitate the changing needs of occupiers and their processes.”

10.1 Buildings

The proposed Food Container Plant and Materials Recovery Plant buildings have been designed to be constructed as a portal steel structure, which fortuitously aids in any future change of use to the building.

Note that any change of use to these buildings would require further planning applications for same.

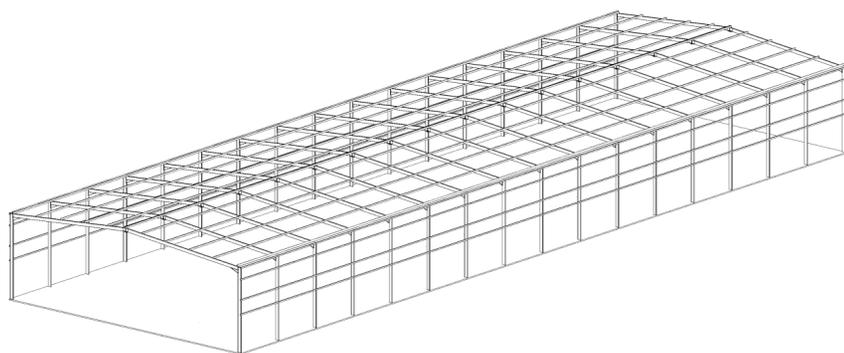


FIGURE 14: PROPOSED BUILDINGS STEEL PORTAL FRAME (FINISHES REMOVED)

10.2 Site

The proposed buildings have been designed as the Phase 1 of the overall Circular Economy Hub masterplan, which would be made up with various occupants in a number of future buildings.

The docking area/yard has been positioned to take into consideration the maximum manoeuvrability required for HGV to be achieved, so that multiple trucks are able to manoeuvre into position and exit during delivery and collection occurrences throughout the day, complying with FCCDP Table 14.15 for Loading/Services Areas *“Loading areas should be designed to accommodate vehicular manoeuvring on site.”*

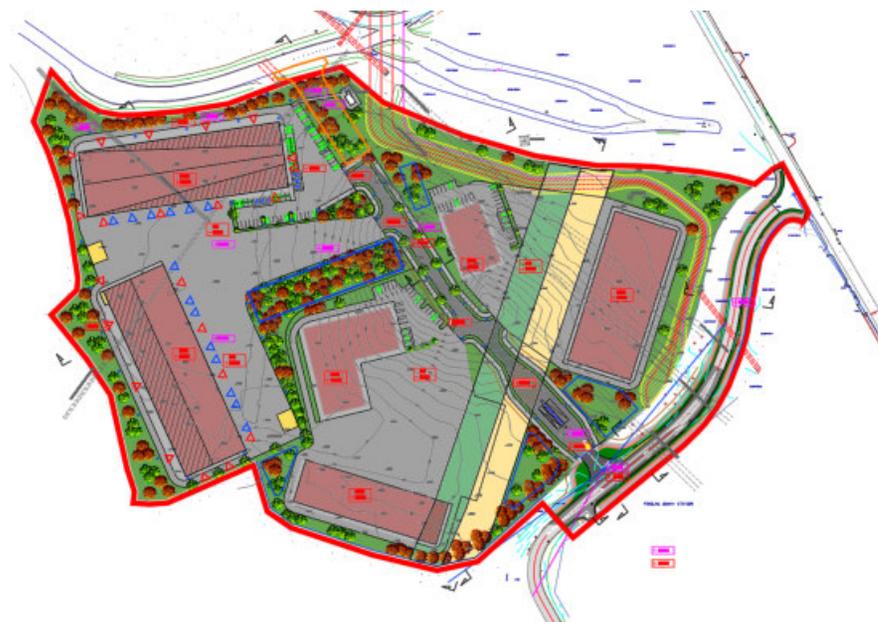


FIGURE 15: SITE PLAN OF OVERALL CIRCULAR ECONOMY HUB MASTERPLAN

11. Privacy and Amenity

The nature of the proposed development required careful consideration of its impact to the neighbouring residential properties, as within the Fingal County Council Development Plan Table 14.15 it states;

“Where residential areas are adjacent to industrial and business parks consideration should be given to having reduced heights at the abutting part of the site so as to minimise the contrast and impact between the two areas.”

The closest residential property to the redline boundary is approximately 17.0m, on the North Road, however to the proposed buildings it is 305m with no possibility of overshadowing occurring. Tree planting to the immediate vicinity of the proposed buildings as well as to the overall site boundaries, reduces the overlooking and adverse view impact to all neighbouring properties, as highlighted in Figures 17 & 18.

As well as allowing for an improved gradual height increase in the area to the existing anaerobic digestors and power plants.



FIGURE 17: 3D VISUAL WITH BUILDING HEIGHTS

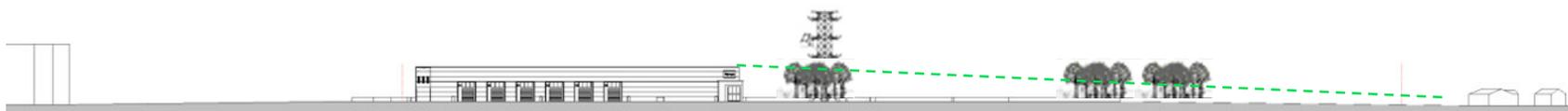


FIGURE 16: SITE SECTION SHOWING HEIGHT VARIATION FROM NEIGHBOURING RESIDENTIAL PROPERTIES

12. Parking

Fingal County Council Development Plan as per section 14.17.7 and table 14.19, requires the proposed development to have:

- Office General 1 space per 80sqm GFA
- Industry General 1 space per 100sqm GFA

	Ground Floor	First Floor	Total
Food Container Plant	5086m ²	248m ²	5334m ²
Materials Recycling Plant	5032 m ²	0 m ²	5032 m ²

Per the Traffic Wise, Traffic & Transport Assessment, Section 8.2, *it is forecasted that the full complement of staff will be 50 persons or less which includes all operatives and administration staff.*

As such, per the Development Plan standard for Industrial – General, the proposed development would be required to provide a total of 200 car parking spaces. As detailed in the above report the design will provide a total of 58 car parking spaces, with 14 no electrical vehicle spaces, over 10% provision, and 6 no disabled spaces provided.

The general parking layout has been designed in line with Fingal County Council Development Plan, Table 14.15:

- Parking areas to provide safe and convenient movement of vehicles and limit vehicular/pedestrian conflicts;
- Not dominate the layout of the development and designed as an integral part of each building;
- Parking appropriately screened and visual impact softened with the use of planting and landscape features;

- Parking should be broken into smaller modules broken by vegetation/landscaping; and
- Parking should be buffered from the road with landscaping to soften their appearance;



FIGURE 18: SITE PLAN SHOWING PARKING LOCATIONS

13. Detailed Design

13.1 Materials, Colour, Texture and Massing

MASSING

The site is located within the area zoned Objective HI, with typical buildings in this area being large industrial/energy units, with heights ranging from 12m to 27m.

Within the proposed site the proposed Food Container Plant building has a prevailing height of 14m, whilst the Material Recovery Facility building, prevailing height is 16m, with both siting below that of the Huntstown Anaerobic Digestion Plant on the Northerly site boundary, thus no increased heights beyond the norm proposed in surrounding developments to the North. Whilst similar in 2m height difference to the 110kV GIA Substation on the Southern site boundary. With these proposed buildings creating median between the two extremes within the surrounding area, most notably to the residential buildings.

TYPOLOGY

The industrial/energy building typology within the surrounding areas of North Road, is large formatted buildings, typically split up into smaller form, with some plant and flues accentuating their heights. Typically set back and accessed of secondary roads. With a simple utilitarian design suited to the function of the particularly element of the building.

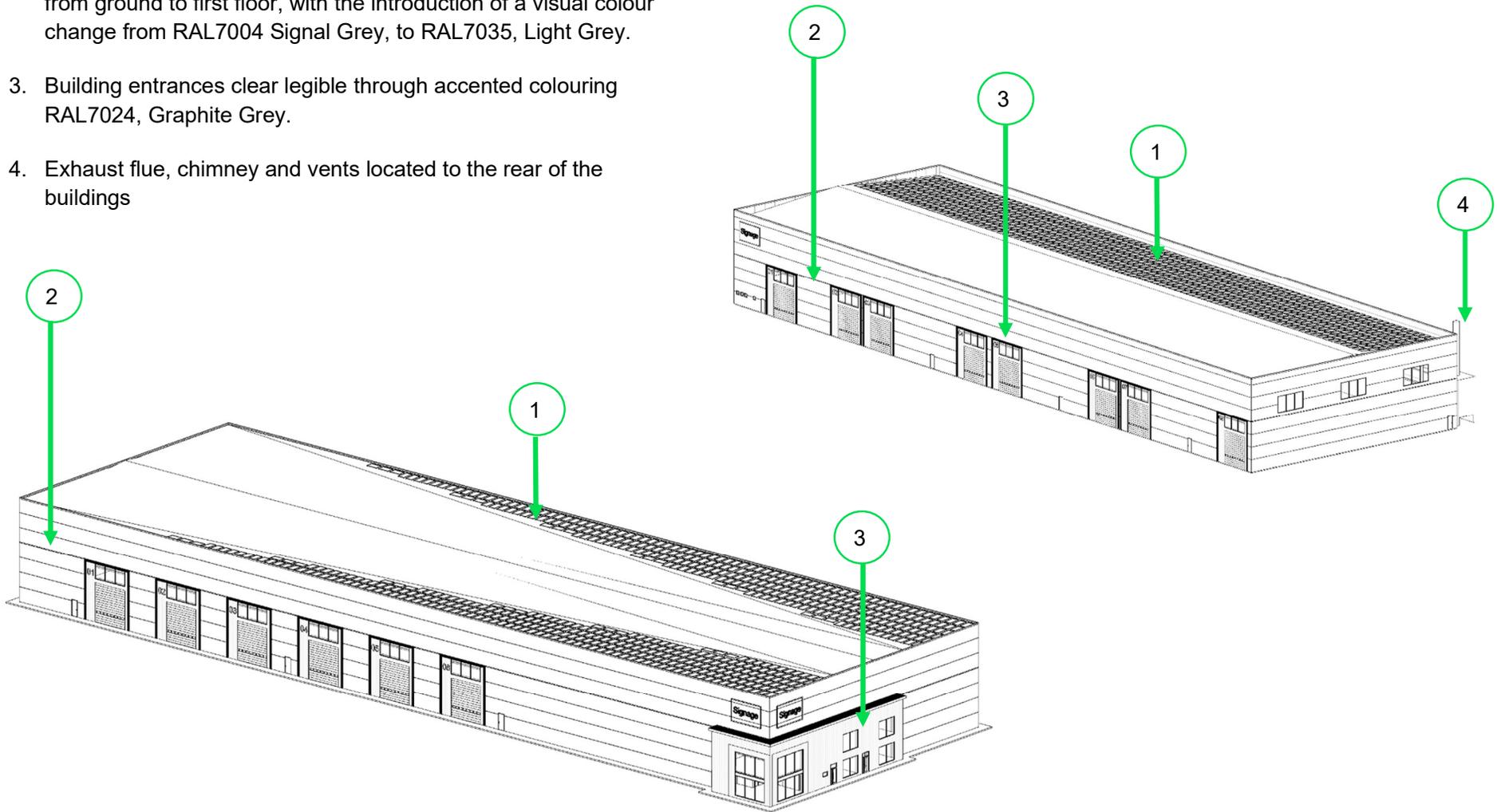


FIGURE 19: PROPOSED FOOD CONTAINER PLANT BUILDING ELEVATION DESIGN

The overall scale of the building has been broken down and reduced through the expression of muted colour blocks, dividing the overall height with a RAL 7004 Signal Grey to lower levels and RAL7035 Light Grey above docking doors, with entrances accented with the use of RAL7024, Graphite Grey, colour.

The buildings are made up of Architectural panels, which expand beyond the main building eaves level, with the top plant in the form of PV panels been recessed and screened below the parapet.

1. Roof plant, PV Panels recessed and screened below parapet. With simple form, continuous across the parapet.
2. The scale of the main facades reduced by a horizontal change from ground to first floor, with the introduction of a visual colour change from RAL7004 Signal Grey, to RAL7035, Light Grey.
3. Building entrances clear legible through accented colouring RAL7024, Graphite Grey.
4. Exhaust flue, chimney and vents located to the rear of the buildings



14. CGIs

14.1 View No Food Container Plant

14.2 1 – From Site Entrance



14.3 View No 2 – Internal Road to Proposed Recycling Plant



14.4 View No 3 – Main Entrance to Food Container Building



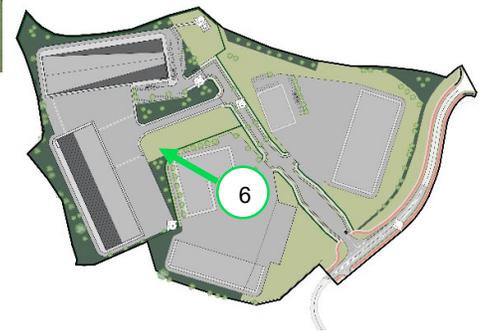
14.5 View No 4 – Material Recovery Plant & Food Container Plant Service Yard



14.6 View No 5 – View South to Main Entrance of Food Container Plant



14.7 View No 6 – Aerial Northerly View of Recycling Plant



Appendix A – Architectural Drawing List

8908-HYP-A-001	Site Plan – Food Container Plant and Materials Recovery Facility
8908-HYP-A-002	Food Container Plant – Proposed Floor and Roof GA Plans
8908-HYP-A-003	Food Container Plant – Proposed Elevations and Section
8908-HYP-A-004	Materials Recovery Facility – Proposed Floor and Roof GA Plans
8908-HYP-A-005	Materials Recovery Facility – Proposed Elevations and Section
8908-HYP-A-006	Bike Rack Detail