Little Island Waste Recycling and Transfer Station

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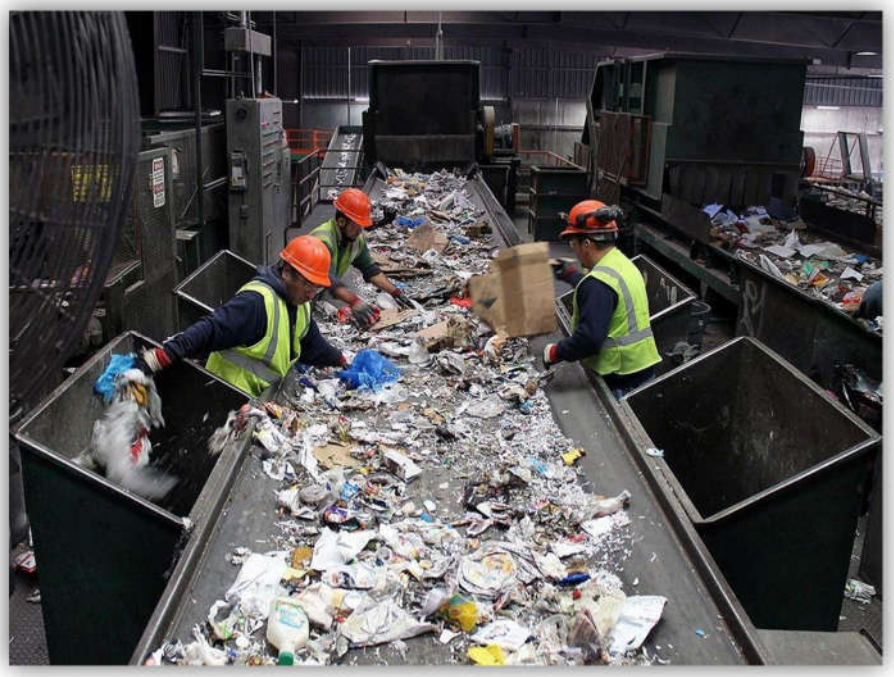

Proposed Development of a Recycling and Transfer Station at Courtstown Industrial Park, Little Island, Co Cork.

Environmental Impact Assessment

Volume IV: Non-Technical Summary

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Volume IV Non-Technical Summary

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Chapter One - Introduction

1.1 Introduction

Country Clean Recycling Unlimited Company (CCR) proposes to submit a planning application for the development of a warehouse facility operating as a waste recycling and transfer facility at Courtstown Industrial Park, Little Island, Co. Cork, the location of which is shown on **Figure 1.1 Site Location** provided in Appendix 1 of this document.

OES Consulting has been commissioned to prepare an Environmental Impact Assessment Report (EIAR) and Appropriate Assessment Screening Report for the proposed development which includes the following:

- *Provision of a new warehouse facility to provide a waste transfer and recycling plant and office area with a waste throughput of 95,000 tonnes per annum.*
- *Provision of appropriate receiving areas for receiving mixed non-hazardous waste materials.*
- *Development of a two-storey site office building.*
- *ESB MV sub Station Building.*

Waste Transfer and Segregation Warehouse

The proposed warehouse facility will be the primary element of the proposed development and will take up the majority of the site. The facility will be a single storey structure be spread over a total of 6,757m^2 as shown on **Drawings 1001** and **1010**, provided in **Appendix 1**. Building elevations will be concrete block built with insulated metal cladding on the top half of each elevation up to roof level which will be grey in colour. The roof will consist of two apex roofs spanning over 47m and 38m in area respectively as shown on **Drawings 1011 to 1013** with ridge heights of 12.8m and 12.43m respectively.

Site Office

The operational site offices will be located in the north eastern corner of the site and will provide offices, a staff canteen, locker rooms, toilets and a tea station over two floors as shown on **Drawing 1015**. The office building will offer two floors each covering an area of 107m^2.

ESB Sub Station

A 3m high ESB sub station and switch room is proposed in the south eastern corner of the development site, adjacent to the site entrance onto Harbourpoint Business Park road. The external facades will have a rendered blockwork finish with steel doors and an asphalt roof.

Proposed waste recycling facility

A designated waste recycling area will be provided along the south eastern side of the proposed warehouse to provide a public recycling facility. Members of the public will enter and exit this area via the main site entrance from Harbourpoint Business Park Road. A series of skips will be provided for waste segregation purposes which will be removed and replaced as necessary.

1.2 Activity Description

The proposed facility is essentially a new warehouse functioning as a waste processing plant. It will include the acceptance of source separation waste (e.g. brown bin waste, glass packaging, cardboard and co-mingled packaging waste) along with residual municipal waste and skip waste from household and commercial sources. The facility will allow for the diversion of these waste types to non-disposal waste management routes, by means of manual sorting, mechanical treatment, crushing, grading, magnetic separation, sorting and baling.

The proposed development will not accept or handle hazardous waste of any nature and proposes separation, sorting and recycling facilities only with no further treatment or chemical treatment processes proposed at the site such as incineration, pyrolysis or gasification. Disposal of waste will not occur at the site.

CCR will apply for to Cork County Council for a Waste Permit or EPA for a Waste License as appropriate to operate the facility.

1.3 Site and Surrounding Lands Description

The proposed waste transfer & recycling facility will be situated in on lands near the south-east coastline of Little Island, in the townland of Courtstown. The site is located within the Courtstown Industrial Park as shown on **Figures 1.1** and **1.2** provided in Appendix 1**.** The site is currently green-field and is located within an established industrial zoned area. The site is bounded by lands formerly used as the Harbour Point Golf Club to the west, an agricultural field to the north and number of commercial properties to the east and south.

he nearest residential properties are located 320m to the east and 370m to the north east on Harbour Point Business Park Road and Ballytrasna Park Road respectively. The eastern boundary of the proposed site is lined by the industrial properties lining Courtstown Park Road whilst the nearest residential properties to the south are those on Clash Road, 450m from the southern boundary of the site. The nearest residential properties to the west are those lining Clash Road, on the western boundary of the now disused Harbour Point Golf Club, 550m to the west.

The northern boundary is defined by a hawthorn hedge and two ash trees. Lands to north of the site are currently in agricultural use (grassland) and are zoned under the Local Area Plan 2017 Special Policy Area LI – X - 02 (Medium B density residential development up to a maximum of 250 dwelling units incorporating a landscape buffer between the residential units and other site uses).

Within the zoned area, approximately 150m to the north, an application for planning permission for a residential development comprising 75 houses, creche and associated site works was lodged on August 01, 2018Planning Ref: 18/6021. The application site is not contiguous and its boundary is some 150m from the Country Clean Recycling lands.

1.4 Regulatory Requirement for an EIAR

There is a requirement under planning legislation that planning applications proposing developments over a certain size criterion require an EIAR to be completed to assess the potential impacts of the development on environmental interests such as biodiversity, water, air quality, noise and human health. As the proposed development will have an annual intake of 95,000 tonnes of waste, it was determined that an EIAR was required.

Chapter Two – Planning Context and Need for the Development

2.1 Introduction

This chapter provides a description of the county and local planning policies relevant to the proposed Little Island site location and discusses the aims of Cork County Council for the ongoing development of Little Island.

2.2 Regional Policy/Guidelines

Regional Planning Guidelines for the Southwest Region 2010-2022

The Regional Planning Guidelines (RPGs) formulate public policy for the south west region, integrating land-use, transport, economic growth and investment, to enable the region to continue to grow as a sustainable high-quality location for investment and one in which to live, work and visit.

Regarding the requirement for integrated waste management industries, the guidelines state (section 5.6.17) that "*An important issue relating to waste management is the need for a Materials Recovery Facility (MRF) or Mechanical Biological Treatment (MBT) to be developed, at an early date, in a sustainable location within the Cork Gateway, with good transportation links*".

The proposed development seeks to address the current lack of material waste recovery facilities in County Cork as identified in section 1.3.29 "*Progress is required on the development of a materials recovery facility to service Cork City and County. While there are material waste recovery facilities in County Kerry, the development of additional such facilities at sustainable locations is desirable*".

The proposed development seeks to meet the aims of the Regional Planning guidelines in relation to the development of Materials Recovery Facilities within County Cork.

2.3 Local Planning Policy

Cork County Development Plan 2014

The 2014 Cork County Development Plan (CCDP) identifies Little Island as a Strategic Employment Area. The specific objective in the CCDP for Strategic Employment Areas is to promote the development of these areas which are considered suitable for large scale developments. It is an objective to protect lands in these areas from inappropriate development which may undermine their suitability as Strategic Employment Centres.

The proposed development site is also located within the designated County Metropolitan Cork Strategic Planning Area. Objective CS 4-1 of the County Plan recognises "*The importance of the role to be played by Metropolitan Cork in the development of the Cork 'Gateway' as a key part of the Atlantic Gateways Initiative and, in tandem with the development of Cork City, to promote its development as an integrated planning unit to function as a single market area for homes and jobs*", whilst also seeking to "*Maintain the principles of the Metropolitan Cork Greenbelt to protect the setting of the City*".

Section 11.7.4 of the CCDP states that the provision of strategic large-scale waste treatment facilities will be considered in 'Industrial Areas' designated as Strategic Employment Areas similar to the Little Island site.

Cobh Municipal District Local Area Plan

This Local Area Plan for the Cobh Municipal District was adopted on 24th July, 2017, and came into effect on 21st August, 2017, replacing the previous Blarney Electoral Area Plan.

Within Little Island, the continued future use of the proposed development site for industrial purposes has been proposed within the recently adopted Plan which designates the development site within a larger 7.01 ha zoned area under Site Objective **LI-I-02**:

"*Industrial Estate and/ or warehousing and distribution with provision for local access road. Minimum 20 – meter wide tree planted buffer along northern and western boundary of site. 20- meter wide*".

Under the LAP 2017, lands to the east of the site, formerly used as a gold course, are zoned **LI - X-01** Special Policy Area - *Mixed use development, including primarily business uses but also a hotel and significant open space, link road*. To the north, lands formerly included with in the industrial zoning, are now designated **LI-X-02** - *Medium B density residential development up to a maximum of 250 dwelling units incorporating a landscape buffer between the residential units and other site uses*.

It is noted that both the industrial zoning - LI-I-02 and nearby medium density residential zoning LI-X-02 incorporate requirements for a landscaped buffer, which has the effect of reinforcing screening of residential developments form the industrially zoned lands, thereby protecting the residential amenity, without compromising on the ability of the industrially zoned lands to be developed.

The Plan continues to state that *"Current Local Area Plan policy for the area is to reaffirm Little Island's function as a strategic centre of general business development while protecting the amenity enjoyed by existing residential communities (pg 151).*

2.4 National Waste Policy

The policy document, "A Resource Opportunity Waste Policy in Ireland" was published by the then Department of Environment, Community and Local Government in July 2012 and sets out the measures through which Ireland will make the further progress necessary to become a recycling society, with a clear focus on resource efficiency and the virtual elimination of landfilling of municipal waste.

The policy emphasises the need to generate a more developed indigenous recycling sector that not only reduces our reliance on volatile world markets, but also benefits the domestic economy in terms of securing greater value added and job creation in Ireland.

2.5 Regional Waste Policy

The Waste Management Plan for the Southern Region is the framework for the prevention and management of wastes in a safe and sustainable manner. The waste management plan is a statutory document prepared by the local authorities of the region, covering a period from 2015 to 2021. Three strategic targets have been set in the plan, relating to the areas of prevention, recycling and landfilling, with long term goals set down including reaching a recycling rate of over 60%.

Chapter Three – Alternatives

The Planning and Development Regulations 2001-2015 as amended, specifies the information to be contained within an EIAR. Schedule 6 1(d) specifies that an EIAR shall include *"An outline of the main alternatives studied by the developer and an indication of the main reasons for his or her choice taking into account the effects on the environment."*

A number of alternative options were proposed for the development including a do-nothing scenario, however this would potentially prevent much needed waste infrastructure from being developed within the south west in order to reduce waste streams for disposal and ultimately landfill, and was not assessed as the most suitable option to meet regional and county waste infrastructure needs.

A number of alternative locations within different parts of the Cork City environs were assessed as potential options for the development other than Little Island including Ringport Business Park, Ringaskiddy, and Ballincollig Commercial Park, Carrigrohane. However, a number of significant constraints faced the development of each of the alternative sites assessed that would prevent the development of a waste recycling and transfer station including road traffic levels, the proximity of neighbouring residential properties and difficulties in acquiring land use options from landowners.

The Little Island site was identified as the most suitable and appropriate site for the proposed development from an environmental impact, commercial and land use perspective. The granting of planning permission for a similar facility in 2008 on the proposed site highlighted to CCR that Cork County Council view the site as suitable for a waste transfer and recycling use (reference number 07/10229).

From an environmental impact perspective, the location and nature of the development site holds a number of key benefits over the alternative sites assessed. The site avoids a number of key impacts as it is not situated within or directly adjacent to a designated ecological site and the habitats within the proposed development site are considered to be of low ecological value. The proposed development site is surrounded by industrial and business premises and residential properties are not located on or adjacent to the site boundary or within the neighbouring lands.

A number of alternative waste processing options and site designs were also investigated in relation to the proposed development. The aim of the proposed development is to introduce alternative waste processing and waste reduction processes in Cork which will reduce the levels of household, commercial and other wastes going to landfill, in the most environmentally sustainable way possible. In this regard, the site aims to be as clean and efficient as possible in the separation of waste and therefore proposes to utilise mechanical separation which involves no chemical and combustion processes. The facility will process non-hazardous waste only through mechanical separation and will not operate chemical and combustion processes onsite such as gasification or pyrolysis. Mechanical separation will not result in environmental impacts on site or increase the risk of hazards or accidents in comparison with other combustion/chemical processes.

Chapter Four – Impacts

4.1 Introduction

This chapter provides a summary of the technical assessments completed for the EIAR including:

- 4.2 Biodiversity;
- 4.3 Land (Soils, Geology and Hydrology);
- 4.4 Water (Hydrology);
- 4.5 Noise and Vibration;
- 4.6 Air Quality, Odour & Climate;
- 4.7 Cultural Heritage;
- 4.8 Population and Human Health;
- 4.9 Landscape and Visual;
- 4.10 Material Assets;
- 4.11 Traffic and Transport, and
- 4.12 Interactions.

4.2 Biodiversity

The potential impacts of the proposed development (direct, indirect and cumulative) of the proposed development on biodiversity were assessed as part of the EIAR by an experienced ecologist using both desks based and site assessment techniques.

The proposed development site is located within a greenfield site in Courtstown industrial estate, Little Island, Co. Cork. The waste transfer and recycling facility is proposed within an area of approximately 1.5ha of unmanaged grassland adjacent to existing warehouses to the east and south of the site. A former golf course occurs immediately to the west of the proposed development site. The Great Island Channel occurs ca 0.5km south-east of the proposed development site. There are no watercourses within the proposed development site and therefore no direct surface water connectivity to the channel.

The potential impacts of the proposed waste transfer development on the Natura 2000 network of sites (European sites known as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) were assessed in a standalone Appropriate Assessment Screening Report. The proposed development site does not lie within any sites designated or under consideration for designation for nature conservation however, two internationally important sites occur within approximately 0.4km of the proposed development site. The Great Island Channel cSAC, and the Cork Harbour SPA both occur approximately 0.4km to the south-east of the proposed development site. The Appropriate Assessment Screening Report concluded that the proposed development is not directly connected with or necessary to the management of European sites and will not result in any adverse impacts on any such sites.

Site surveys confirmed that habitats present onsite are of low value to terrestrial mammal species. No protected mammal species were recorded within the site and there is an absence of aquatic habitats within the site. Rabbits were the only mammal species recorded within the proposed development site, though fox and hare are also likely to utilise those habitats that occur on site. Hedgerows and treeline habitat along the north and western site boundaries may potentially provide suitable foraging/ commuting habitat for bat species.

Common bird species were recorded in low numbers during each site visit. It is considered that the habitats within the proposed development do not provide suitable habitat for those species listed as Special Conservation Interests for the Cork Harbour SPA.

Considering the nature of the proposed development together with the type and extent of habitat that will be affected, the biodiversity assessment predicted that there will be no significant adverse direct, indirect, or cumulative impacts on the flora and fauna of the site and its surroundings from the development of the proposed project.

4.3 Land (Soils, Geology and Hydrology)

The impact of the proposed development on land, soils, geology and hydrogeology was assessed. The assessment included a review of information on the site provided by The Geological Survey of Ireland (GSI), which mapped the underlying bedrock as Dinantian Pure Unbedded Limestones consisting of massive and crinoidal fine limestone which forms the Little Island Formation**.** There are no mapped structural fault lines running through the site. The depth to bedrock has been found to vary from approximately 3 m depth to 10 m depth.

The GSI classify the soils underlying the Little Island site as being predominantly deep well drained mineral (Mainly basic) (BminDW) derived mainly from calcareous parent material. They are in the great soil groups of Grey Brown Podzolics, Brown Earths (medium-high base status). Beneath the topsoil lies naturally occurring brown subsoils comprising either very clayey sandy gravels or sandy very gravelly clays across the majority of the site.

The limestone bedrock within the region is classified by the Geological Survey of Ireland (GSI) as a regionally important karstified (Rkd) aquifer dominated by diffuse flow. According to the GSI, the Little Island site is underlain by undifferentiated sands and gravels, but these have not been classified as an aquifer.

In relation to soil and geology attributes, the assessment determined that the proposed development site is rated as being of Low importance. Based on historical use of the site, little to no contamination of underlying soil/geology is expected. No significant geological/extractable resources have been identified to underlie the proposed site area.

The development site is not currently zoned or used for agricultural purposes and the installation of a waste transfer station at this location will not result in the utilisation of prime agricultural land as a local resource.

The assessment concluded that the proposed impacts on soil, geological and hydrogeological features during both the construction and operational phases of the development will be insignificant. Mitigation measures are proposed to ensure minimal disturbance to the surrounding landscape and to prevent any degradation to groundwater underlying the sites. Any potential impact on land use will be negligible, minor and short-term in nature.

4.4 Water (Hydrology)

The potential impact from the construction and operation of the proposed waste transfer facility development on the receiving environment with respect to water, including surface water bodies (such as rivers, lakes and estuaries) was assessed.

Surface water bodies in the study area include Lough Mahon, which together with the outer River Lee Estuary, forms the upper section of Cork Harbour SAC. Surface water flowing into Lough Mahon includes freshwater flow from the River Lee into the tidal estuary which is mixed with tidal seawater from the lower Cork Harbour. The River Lee flows into Lough Mahon in the upper harbour and is one of the largest rivers in southwest Ireland and is the largest discharging into Cork Harbour, with a total catchment area covering approximately 2,000 sq. km.

On a more local scale there are no rivers or streams within or in the immediate vicinity of the development site. The northern boundary of the proposed site contains a drainage ditch which is associated with improvements for agricultural purposes. This channel will be protected and maintained during the construction phase of the development with the implementation of a development buffer zone surrounding the ditch, and will continue to operate as a drainage ditch during the operational stage of the development. There are no other surface water features on the site.

A review of the Office of Public Works (OPW) Catchment Flood Risk Assessment and Management (CFRAMS) flood mapping integrated maps 38 and 39 determined that the proposed development site is not at risk of fluvial, coastal or pluvial flooding, a finding repeated in the Cobh Municipal District

Local Plan land zoning map for Little Island, which shows that the site is not located within Flood Zone A or B.

There will be no discharges directly to surface waters during the construction or operation of the proposed facility. There will also be no direct discharges to ground during the operational phase of the facility, with the site primarily covered with hardstanding, roads, parking and yard areas, apart from the 20m band of trees on the western site boundary. All run-off and process water will be controlled and directed immediately to the proposed site drainage network which will connect into the existing storm and foul sewer connection at the entrance of the development.

It is considered that the operation of the development will have negligible or no variation to hydrology on and nearby the site. The vast majority of the site in which process activities will take place will be located on made ground and hard standing. Site infrastructure has been designed to include sufficient site drainage to divert and control any potential spills or leaks which may otherwise enter soils or groundwater.

The assessment considered that impacts on the hydrological environs during both the construction and operational phases of the development will be insignificant.

4.5 Noise and Vibration

The noise impact assessment completed for the proposed development has been completed through site surveys, desk-based review of compliance monitoring conducted for a similar existing facility and assessment of noise impacts and effects in accordance with recognised standards and guidance.

The ambient sound environment in the vicinity of the proposed development is typical of an emerging urban area. The ambient sound environment at the nearest Noise Sensitive Locations (NSLs) to the north is dominated by transportation noise although NSLs to the south, east and west are much less affected due to distance and also due to the shape of the island topography. The southern part of Little Island is still quite rural in nature.

Both the construction and operational phases of the proposed development were assessed as part of the EIAR. The construction phase is not considered likely to result in a potential impact on the nearest NSLs.

Most of the potentially significant noise sources associated with the operation of proposed development including the odour handling unit will be contained within the building. All waste handling and processing will be conducted within the building. There will be some vehicular movements on site however these will be intermittent, typical of the general area and will be screened from the nearest NSLs. Onsite operational activities will not cause excessive noise levels beyond the boundary of the facility and the noise assessment determined that it is not likely that existing ambient sound levels at the nearest residential NSLs will be exceeded. During the operation phase all onsite activity will be carried out in compliance with noise limits and conditions applied as the EPA when authorising the activity. HGV traffic arising on the local road network as a result of the proposed development is considered to be insignificant in terms of noise impact and effect.

Overall, the noise and vibration assessment concluded that the proposed development will not give rise to significant adverse effects on nearby noise sensitive locations. Furthermore, the assessment considered that the proposed development will not give rise to significant adverse effects at any residential dwellings proposed under a recent application for planning permission on a site 150m to the north of the proposed waste facility.

4.6 Air Quality, Odour and Climate

The proposed operations will involve the acceptance, sorting, processing (i.e. baling) and dispatching of municipal solid waste along with the acceptance of source separated food waste from household and commercial sources.

In order to assess the potential impacts on air quality, a detailed air quality and odour assessment was undertaken, which involved the use of an air dispersion model.

In terms of the assessment, particular attention was given to sensitive receptors, including local commercial units and habitats in proximity to the proposed plant location, and to the potential exposure of these receptors to named airborne pollutants resulting from the proposed operation of the plant.

There will be a construction phase to the plant in terms of buildings so the generation of construction-based dust maybe likely. There will be minor emissions associated with construction-based traffic. The construction activities have been examined to identify those that have the potential for air emissions. Where applicable, a series of suitable mitigation measures have been listed within the EIAR.

The overall impact of the construction phase of the plant will be negligible and effects will be short term in nature. All air quality guideline and limit values will be complied with during the construction phase of the project.

There will be an increase in direct impacts on air quality as a result of the operation of the proposed plant through emissions generated for the proposed operation of the plant itself and equipment within the plant to include odour control plant. Increased traffic flows to and from the plant will also give rise to emissions during the operation phase. A number of key odour management strategies will be incorporated into the design of the waste recycling facility to include:

The buildings will be constructed to a known specification of an air leakage of less than 3 m3[air]/m2[clad]/hr at 50Pa. The building will be built to this specification and process proved during commissioning. This will ensure that the building fabric will be essentially airtight when the odour control system is in operation.

Following an assessment of predicted emissions of Carbon monoxide, Oxides of nitrogen, Sulphur dioxide, Total particulates and odour, it was concluded that the facility operations will not give rise to any significant impact with emissions of these air pollutants from cumulative emissions from plant activity and traffic remaining well within Irish statutory air quality limits. Th assessment concluded that proposed plant operations will have negligible impact on the surrounding population with respect to Carbon monoxide, Oxides of nitrogen, Sulphur dioxide, Total particulates and Odours.

4.7 Cultural Heritage

An archaeological, architectural and cultural heritage assessment of the proposed development in Little Island was included as part of the EIAR. The assessment utilised desk based historical information and records and also a field inspection of the proposed development area which sought to assess whether any areas or sites of archaeological potential were present. During the course of the field investigation, the proposed development site and its surrounding environs were inspected for known or previously unknown archaeological sites.

The assessment determined that there are no known Recorded Monuments within the boundary of the development site or in the immediate vicinity. The National Inventory of Architectural Heritage (NIAH) does not list any building on or close to the site as being of architectural value. The nearest building recorded as having architectural merit is a detached four-bay single storey house (Reg. No 20907533) situated approximately 0.5km to the northwest of the site.

There are no known archaeological monuments within the site boundary and no potential archaeological sites were identified in the course of site inspection. The proposed development will not result in physical or visual impacts on any of the known Recorded Monuments in the wider vicinity of the site due to the scale of the proposal within an existing industrial landscape.

No cumulative or residual impacts upon the cultural heritage resource were identified as a result of the proposed development going ahead.

4.8 Population and Human Health

An EIAR for the type of development being proposed by CCR is required to include an assessment of potential impacts on population and human health with respect to the socio-economic effects and potential adverse impacts on human beings.

In carrying out development, one of the principal concerns is that human beings should experience no reduction in the quality of life as a consequence of the construction and occupational phases of a development.

The nearest residential properties are located 320m to the east and 370m to the north east on Harbour Point Business Park Road and Ballytrasna Park Road respectively. The eastern boundary of the proposed site is lined by the industrial properties lining Courtstown Park Road whilst the nearest residential properties to the south are those on Clash Road, 450m from the southern boundary of the site. The nearest residential properties to the west are those lining Clash Road, on the western boundary of the now disused Harbour Point Golf Club, 550m to the west. A planning application has been made for a development of 75 houses on lands 150m to the north of the site – although this application is at Further Information stage, the potential for impact on that proposed development was considered as part of the assessments.

Potential impacts on human beings include those relating to noise, odour, air quality, landscape and visual and a number of other impacts which have been identified and assessed as part of separate technical assessments within the EIAR.

The noise assessment concluded that the proposed development will not result in significant adverse impacts on local commercial properties and surrounding residents, including at those houses and creche proposed under Planning Ref: 18/6021. As a result, noise related impacts of the proposed development on human health were determined as not significant. The facility is not located in a quiet area or area of low background noise levels and the impact of the proposed development is not deemed to be significant. HGV traffic arising on the local road network as a result of the proposed development is considered to be insignificant in terms of noise impact and effect.

The proposed facility and operational processes have been designed to prevent air quality and odour impacts and emissions occurring at the site. All waste processing, sorting and baling will be undertaken within the facility building itself, with a negative air pressure and an odour extraction and treatment unit operating within the building. Storage of waste materials outside of the building will not occur, further reducing the potential for odour emissions from waste on site. It is not envisaged that the

proposed facility will impact on local air quality or generate adverse odours and will not impact on the health of the local population within Little Island and the surrounding area, including those houses and creche facility proposed under Planning Ref: 18/6021.

The proposed development will not impact on the potential for local residents and visitors to Little Island to enjoy the amenity and outdoor spaces of the area as it will not incur any significant impacts in respect of local landscape character or sensitive visual receptors in the environs of the site, including views from those houses proposed under Planning Ref: 18/6021. The absence of adverse impacts reflects the manner in which the proposed development will be integrated among similar developments in the business park, and the mitigating effect of distance in views from residential areas and the road network around the harbour.

The transportation assessment completed to inform the EIAR demonstrated that the proposed development will have an unnoticeable impact upon the established local traffic conditions and can easily be accommodated on the road network, conscious of the established busy conditions within Little Island generally. The addition of a total of 46 vehicles (expressed as Passenger Car Units (PCU) (worst case) movements during the peak hour is considered to have a negligible effect. The study assessed the capacity of the key junctions using proprietary modelling tools and confirmed that adequate capacity exists.

The primary aspects of the development and environmental factors that can impact on population and human health were assessed as part of the EIAR and it was determined that there will be no adverse impact on human health.

4.9 Landscape and Visual

A landscape and visual impact assessment was completed to inform the EIAR to examine potential effects of the proposed development on the landscape setting as well as on visual receptors in the landscape such as residents, visitors and people pursuing recreational activities.

The assessment of the landscape characteristics, values and sensitivities utilised seven viewpoints surrounding the Little Island facility to comprehensively reflect the views experienced both within and surrounding Little Island and from further afield.

The viewpoint assessment determined that views from the north of Little Island will have no visual impacts experienced from this location given the relative position of the development among existing developments and the diminishing effect of distance from this location. The assessment also determined that there will be no visual impacts experienced along Clash Road to the west given the screening effect of existing vegetation which means that the proposed development site will not be visible from this location.

The upper portion of the proposed development will appear in the views from across the bay at Harpers Island, however it will be set amongst existing business park buildings. In this respect it will not constitute a significant intervention in the view given the manner in which it will be integrated among existing buildings with a similar profile and colour.

Cumulative visual impacts associated with the proposed development relate to the increase in the built environment on the business park. This, however, is not significant in the context of existing industrial development in the area.

The landscape and visual impact assessment determined that the proposed development of a waste recycling and transfer facility will not incur any significant impacts in respect of local landscape character or sensitive visual receptors in the environs of the site, i.e. local or distant residents, including those houses proposed under Planning Ref: 18/6021, or users of the surrounding road network infrastructure.

The absence of adverse impacts reflects the manner in which the proposed development will be integrated among similar developments in the business park and the mitigating effect of distance in views from residential areas and the road network around the harbour.

4.10 Material Assets and Climate

CCR has completed an assessment of material assets and climate as part of the EIAR to ensure compliance with EPA guidelines.

The objective of a material assets assessment is to ensure that local and regional assets are used in a sustainable manner and to ensure their continued availability for future generations following the development of the project. Examples of material assets relevant to the proposed development include the assimilative capacity of air and water and the sterilisation of resources such as agricultural lands. Other assets include resources of minerals, soils, oil, gas, regional and local transportation infrastructure (roads, railways, canals, airports etc), and major utilities (water supplies, sewage, power systems, telecommunication systems).

The proposed waste transfer facility and operational processes have been designed to prevent air quality and odour impacts and emissions occurring at the site. All waste processing, sorting and baling will be undertaken within the facility building itself, with a negative air pressure and odour extraction and treatment unit operating within the building. Storage of waste materials outside of the building will not occur, further reducing the potential for odour emissions from waste on site. It is not envisaged that the proposed facility will impact on local air quality or generate adverse odours. The proposed development will not result in significant impacts on local air quality or produce emissions that would have the potential to impact on the local climate. No combustion, gasification or pyrolysis processes will occur onsite and emissions form such activities will not be present onsite.

As the proposed development will not emit significant air emissions during operation and emissions of carbon from the vehicles servicing the site will be small, the contribution made to the Greenhouse Effect as a result of operations at the proposed facility will be negligible.

The proposed development will not abstract groundwater from onsite wells or boreholes for usage on site. The facility proposes to connect with the existing Cork Metropolitan municipal water supply and will utilise approximately 10m^3 per day which will not place undue pressure on local water supply infrastructure of flows servicing Little Island. Overall the proposed development will not impact on the existing natural and supplied water sources within and surrounding Little Island.

The traffic and transport assessment completed to inform the EIAR considered that the proposed development will result in no significant operational traffic safety or road capacity issues affecting the established vehicular access or the established road network.

The proposed development will not adversely impact on local and material assets within and surrounding Little Island. Local air quality and water resources in the form of rivers, streams and lakes will not be adversely impacted by the proposed waste transfer and recycling facility. The development will not reduce agricultural land, minerals or soils resources within County Cork and will not place

undue pressure on the provision of local utilities such as electricity, water and sewage. The proposed development is not at risk of flooding, will not increase flood risk elsewhere and will not result in a significant impact on greenhouse gas production or local air quality within Little Island.

4.11 Traffic and Transport

A traffic and transport assessment was produced as part of the EIAR to address the traffic capacity considerations relating to the proposed development and assess the impact on the adjacent road network for both the critical weekday AM and weekday PM Peak hours.

The site is served by the main access road to Harbour Point and Courtstown Business Parks. The main business park access road leads to Ballytrasna Park to the north, and meets this road in the form of a simple priority junction.

A detailed classified traffic survey was undertaken of the key junctions in proximity to the site during January 2017. This included a comprehensive classified interval survey of each of the affected junctions. This data was used in order to establish current peak commuter hour traffic conditions and to establish the current usage of the roadways.

It should be noted that the proposed development is expected to generate a total of 46 additional traffic movements (expresses as Passenger Car Units (PCU) during the peak hours. This should be considered in light of the current traffic volumes on the R623 to the north of the Ballytrasna Park junction. The R623 carries a total traffic flow of 1,418 traffic movements in the AM Peak Hour and 1,751 movements during the PM Peak Hour in this location. An additional 46 traffic movements equates to an impact of less than 5% during each of the commuter peak hour

The traffic and transport assessment demonstrated that the proposed development will have an unnoticeable impact upon the established local traffic conditions and can easily be accommodated on the road network, conscious of the established busy conditions within Little Island generally. The addition of a total of worst case 46 movements during the peak hour is considered to have a negligible effect. The capacity of the key junctions has been assessed using proprietary modelling tools and this confirmed that adequate capacity exists. In this regard, given the very low additional traffic volumes, it is concluded that the development will not have any adverse impact upon traffic safety. It is considered that the proposed development will not result in significant operational traffic safety or road capacity issues, and will not affect the established vehicular access or the established road network.

4.12 Interactions

An EIAR is required to assess the interactions between topics/factors discussed as part of the EIA i.e. population and human health, biodiversity, land, soil, water air and climate, material assets, cultural heritage and landscape where relevant. This section describes and assesses the inter relationships between the different potential impacts of the proposed development.

Noise, Human Health and Biodiversity

Noise has the potential to impact upon the amenity enjoyed by residents living within Little Island and disturb the habits of natural species surrounding a development.

The noise assessment concluded that the proposed development will not give rise to significant adverse noise related effects on nearby noise sensitive locations. Noise resulting from the

construction and operation of the proposed development will not result in significant adverse impacts on biodiversity. Construction noise and increased human activity (including heavy vehicular access) are likely to result in the temporary displacement of birds and mammals from the immediate surroundings, however this is considered a short-term imperceptible negative impact due to the high background levels of disturbance from the existing industrial development in the area and the absence of species of conservation concern surrounding the proposed waste transfer and recycling facility development.

Air Quality, Human Health and Biodiversity

A significant decrease in air quality and the emission of harmful contaminants can pose a risk to the health of human beings and animals over periods of time.

The proposed development will not result in significant impacts on local air quality or produce emissions that would have the potential to impact on local air quality. Operations at the site are limited to manual and mechanical sorting and separation, baling and other sorting related activities. No combustion, gasification or pyrolysis processes will occur onsite and emissions from such activities will not be present onsite. Storage of waste materials outside of the building will not occur, further reducing the potential for odour emissions from waste on site. Detailed assessment and air dispersion modelling has shown that the proposed facility will not impact on local air quality or generate adverse odours and will not impact on the health of the local population or biodiversity within Little Island and the surrounding area.

Landscape and Visual and Human Health

Developments have the potential to cause adverse impacts on the local and regional visual landscape and as a result can reduce visual amenity for local residents. Negative impacts on views from windows and outdoor spaces such as back gardens can reduce the enjoyment of specific views valued by local residents. The landscape and visual assessment completed as part of the EIAR determined that the proposed development will not result in any significant impacts in relation to local landscape character or sensitive visual receptors in the environs of the site, i.e. local or distant residents or users of the surrounding road network infrastructure. The absence of adverse impacts reflects the manner in which the proposed development will be integrated among similar developments in the business park and the mitigating effect of distance in views from residential areas and the road network around the harbour. Amenity users such as visitors and local residents enjoying garden spaces, open windows and the general environs of Little Island will not be negatively impacted by the proposed development with no decrease in amenity enjoyment.

Water Quality and Ecology

The proposed development will not result in any adverse impacts on local hydrological features or on the fauna and flora which avail of the available natural water resources.

There are no rivers or streams within or in the immediate vicinity of the development site and due to this absence of watercourses, the site is unlikely to be of value to amphibians or aquatic species. The northern boundary of the proposed site contains a drainage ditch which is associated with improvements for agricultural purposes. This drainage ditch will be protected and maintained during the construction and operational phases of the development with a development free buffer zone implemented along the banks of the ditch to protect from spillages and contamination from construction materials. This will ensure protection of any flora and fauna either living within the ditch

or using it for feeding or travelling through the site. No other hydrological features will be at risk within the Little Island site during both the construction and operational phases.

It is considered that the operation of the development will result in negligible or no variation to hydrology and water quality on and surrounding the site and will not result in any adverse impacts on local hydrological features or on the fauna and flora which avail of the natural water resources.

Appendix 1: Figures and Drawings

OES Consulting 2nd Floor, FBD House, Fels Point, Tralee, Co Kerry
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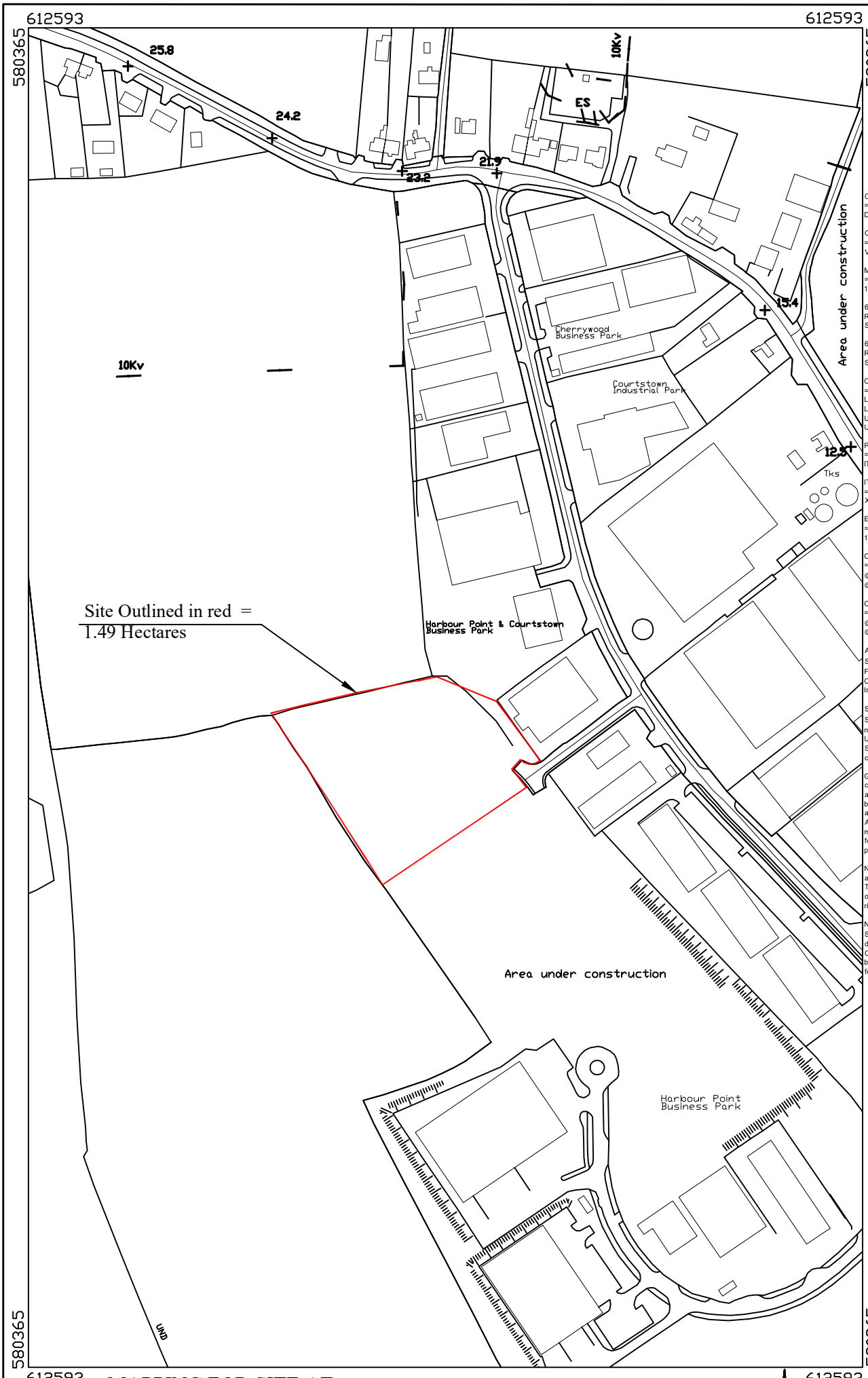
Client:	Ray Keane & Associates	
Project:	Waste Transfer Facility - Little Island	
Title:	Site Location	
Scale:	1:15,000 @ A3 Paper Size	
Ref:	Figure 1.1	
OES Ref:	1297_01	
Revision:	01	
Document Control:	Date:	25/09/2017
	Drawn By:	EOC
	Checked By:	DH
	Approved By:	DH



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DWG_35_LEVEL

Output File:
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Map Series:
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1:2500

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REVISION DATE = 27-Mar-2015
SURVEY DATE = 01-Nov-1992

6385-C
REVISION DATE = 07-Jul-2014
SURVEY DATE = 01-Oct-1992

Clip Extent:
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LRX,LRY = 577272,571321
ULX,ULY = 576697,572244
URX,URY = 577272,572244

Projection:
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ITM

ITM Centre Point Co-ordinate:
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X,Y = 576984,571782

Extraction Date:
==========
14-Sep-2016

Figure 1.2

Computer Generated Map
Date:Dec 2016
Scale 1:2500

Produced by
RKA Consulting Engineers
Ordnance Survey Ireland Licence
No. AR 0060016

MAPPING FOR SITE AT,
COURTSTOWN, LITTLE ISLAND, CO. CORK
Scale 1:2500

2 Clogheen Business Park, Blarney Road, Cork, Ireland.
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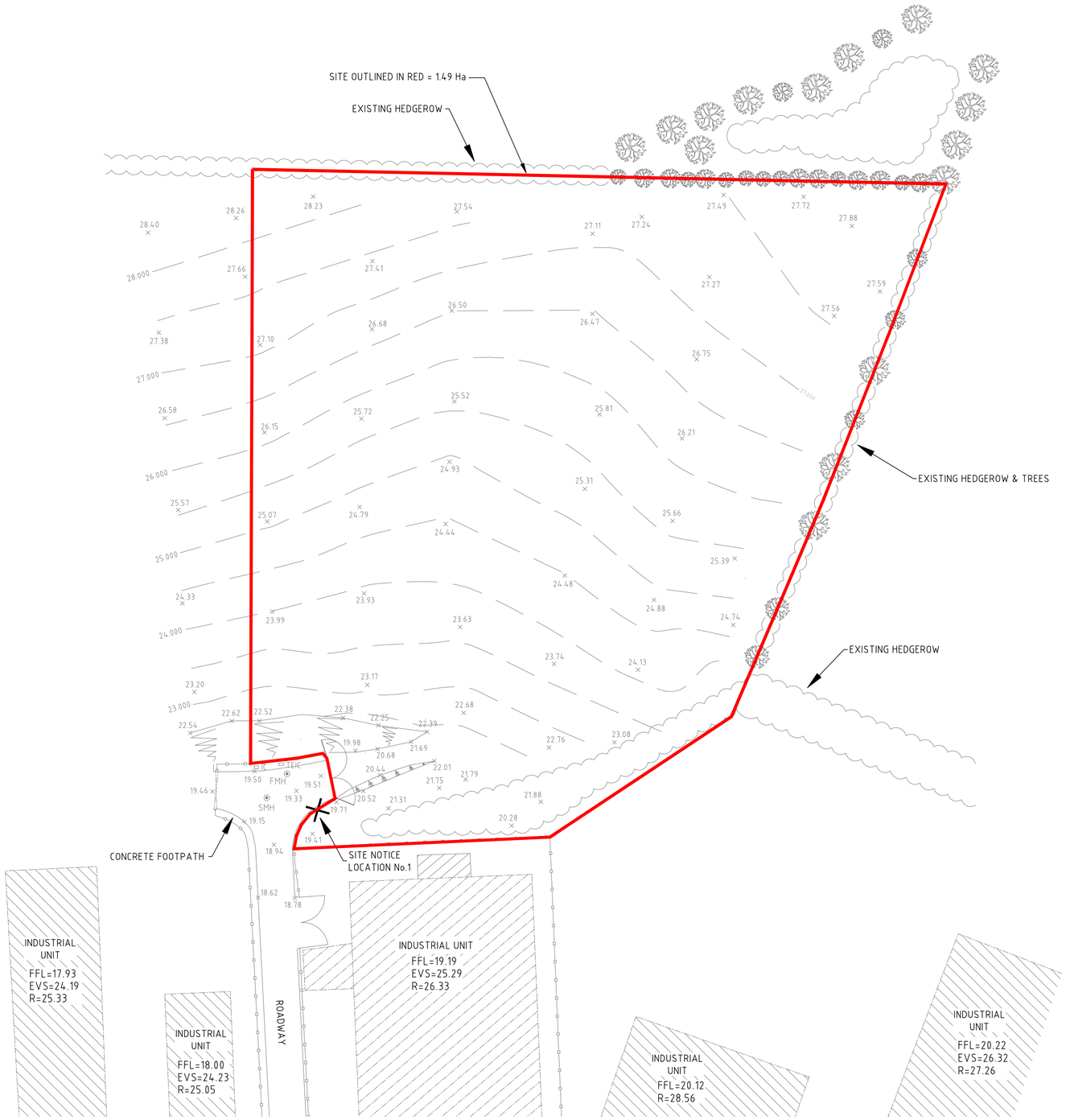
RAY KEANE & ASSOCIATES
CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Original Drawing Size A1

Notes

1. This drawing is to be read in conjunction with all relevant engineers and architects drawings and specifications.
2. Do not scale drawings. Use figured dimensions only. All dimensions to be checked on site.
3. All dimensions are in millimetres (mm).
4. Any discrepencies to be reported immediately to the consulting engineer.



EXISTING SITE SURVEY
SCALE 1:500

NOTES:

North refers to Magnetic North.

All levels relate to Malin Head Datum.

All dimensions are in milllimeters
Do not scale fom drawing

LEGEND:

MH = MANHOLE
CL = COVER LEVEL
IC = INSPECTION CHAMBER
FFL = FINISHED FLOOR LEVEL
EVS = EAVES LEVEL
R = RIDGE LEVEL
LS = LAMP STANDARD
SV = SLUICE VALVE
GY = ROAD GULLY
IC = INSPECTION CHAMBER
TEIC = TELECOM INSPECTION CHAMBER

Rev	Date	Drawn	Description	Ch'k'd
PL	Nov. '18	ME	Issued for Planning	PF

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RAY KEANE & ASSOCIATES
CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
Country Clean

Project:
Proposed Construction of Waste Transfer and Recycling Station At Courtstown, Little Island, Co.Cork.

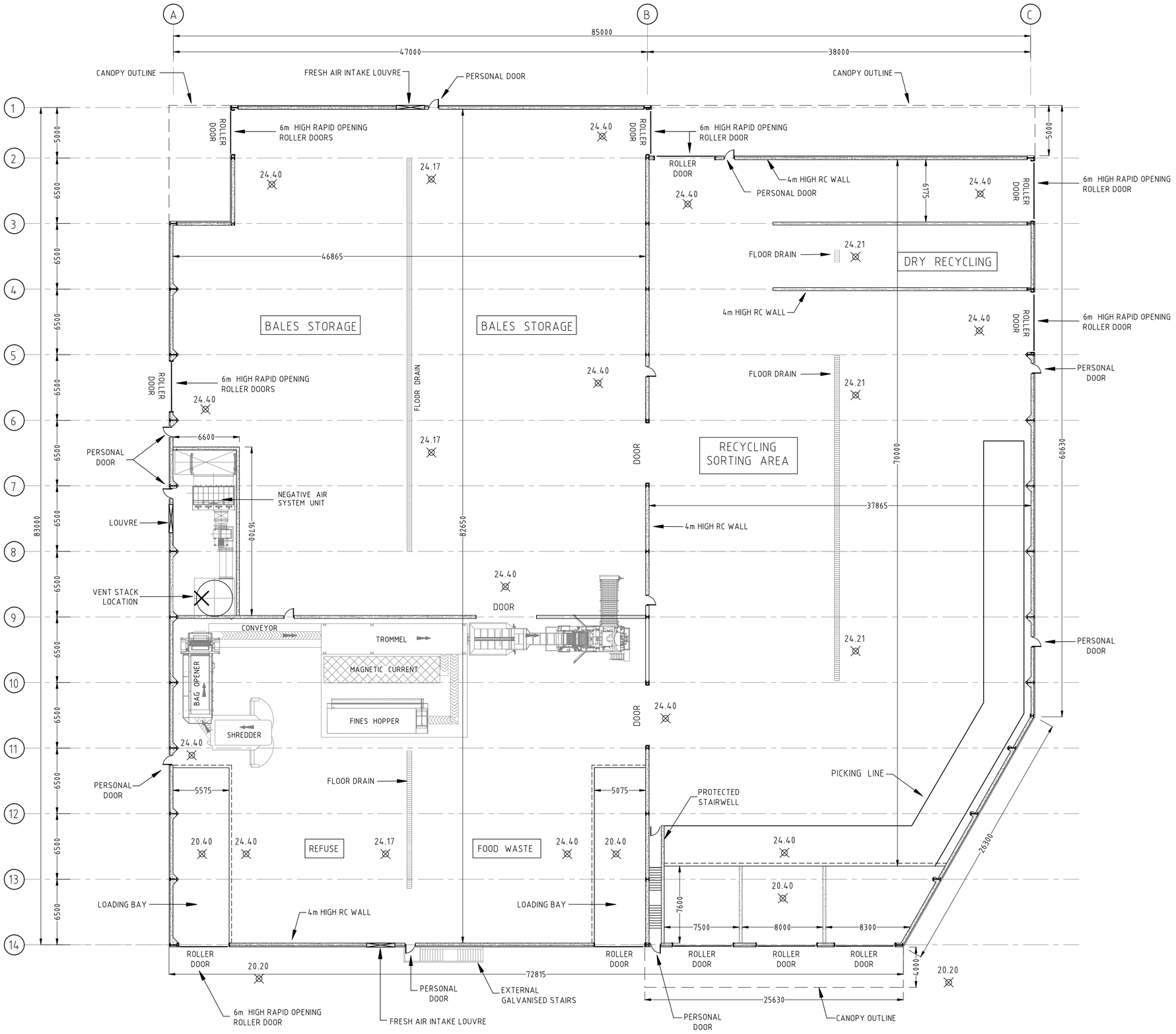
Drawing Title:
Existing Site Survey

Designed:	P.F.	Drawn:	M.E.	Date:	Nov 2018
Eng Chk:	P.F.	Dwg. Chk:	P.F.	Scale:	1:500 @ A1
Project. No:	0600-168				
Drawing No:	1000			Status:	Planning
				Rev:	PL

Original Drawing Size A1

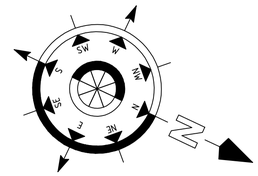
Notes

1. This drawing is to be read in conjunction with all relevant engineers and architects drawings and specifications.
2. Do not scale drawings. Use figured dimensions only. All dimensions to be checked on site.
3. All dimensions are in millimetres (mm).
4. Any discrepancies to be reported immediately to the consulting engineer.



PROPOSED GROUND FLOOR PLAN

SCALE 1:200



NOTES:

North refers to Magnetic North.

All levels relate to Malin Head Datum.

All dimensions are in milllimeters
Do not scale fom drawing

Rev	Date	Drawn	Description	Ch'k'd
PL	Nov. '18	ME	Issued for Planning	PF

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RAY KEANE & ASSOCIATES
CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
Country Clean

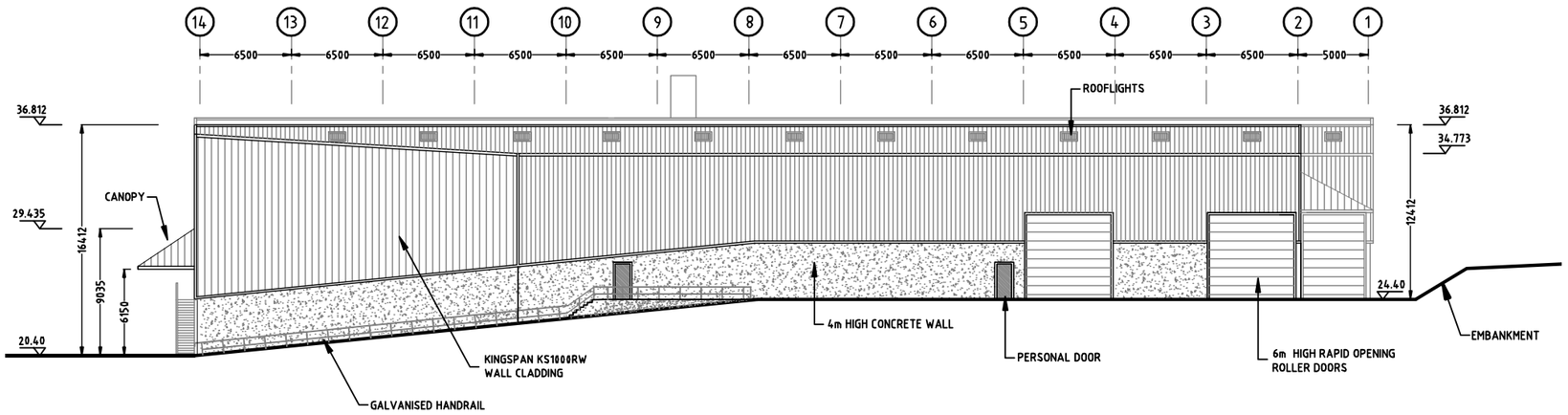
Project:
Proposed Construction of Waste Transfer and Recycling Station At Courtstown, Little Island, Co.Cork.

Drawing Title:
Proposed Ground Floor Plan

Designed:	P.F.	Drawn:	M.E.	Date:	Nov 2018
Eng Chk:	P.F.	Dwg. Chk:	P.F.	Scale:	1:200 @ A1
Project. No:	0600-168				
Drawing No:	1010	Status:	Planning	Rev:	PL

Original Drawing Size A1

Notes



PROPOSED NORTHERN ELEVATION -

SCALE 1:200

CLADDING DETAILS

FLASHING NOTES:

DRIP, CORNER & JAMB FLASHINGS TO BE 0.7mm THICK, COATED STEEL.
COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

GUTTER NOTES:

GUTTER TO BE COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

WALL & ROOF CLADDING NOTES:

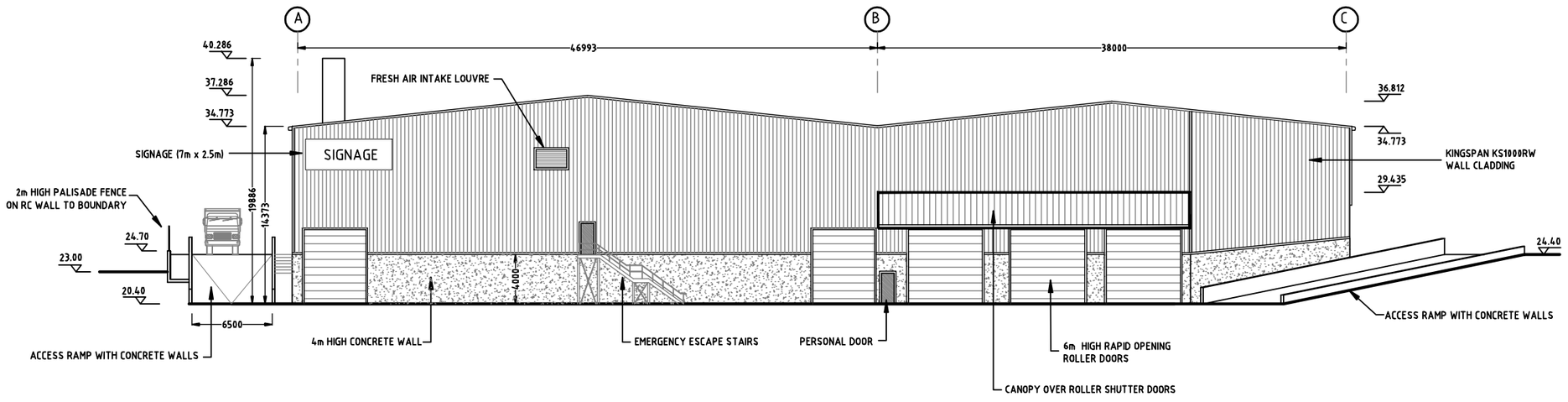
WALL & ROOF CLADDING TO BE KINGSPAN KS1000RW RANGE, WITH 60mm CORE & VERTICALLY LAID.
COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

ROOF LIGHT NOTES:

ROOF LIGHTS TO ACHIEVE AN AC RATING.

NOTE:

ALL COMPOSITE CLADDING PANELS SHALL BE OF KINGSPAN MANUFACTURE
FROM THE KS RW1000 RANGE GOOSEWING GREY (BS10A05, RAL 080 70 05) COLOUR.
ALL DETAILS OF FLASHINGS, DRIPS & GUTTERS SHALL BE IN ACCORDANCE WITH
APPROVED KINGSPAN DETAILS.



PROPOSED EASTERN ELEVATION -

SCALE 1:200

Rev	Date	Drawn	Description	Ch'k'd
PL	Nov.'18	M.B.	Issued for Planning	PF

2 Clogheen Business Park,
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RAY KEANE & ASSOCIATES
CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
Country Clean

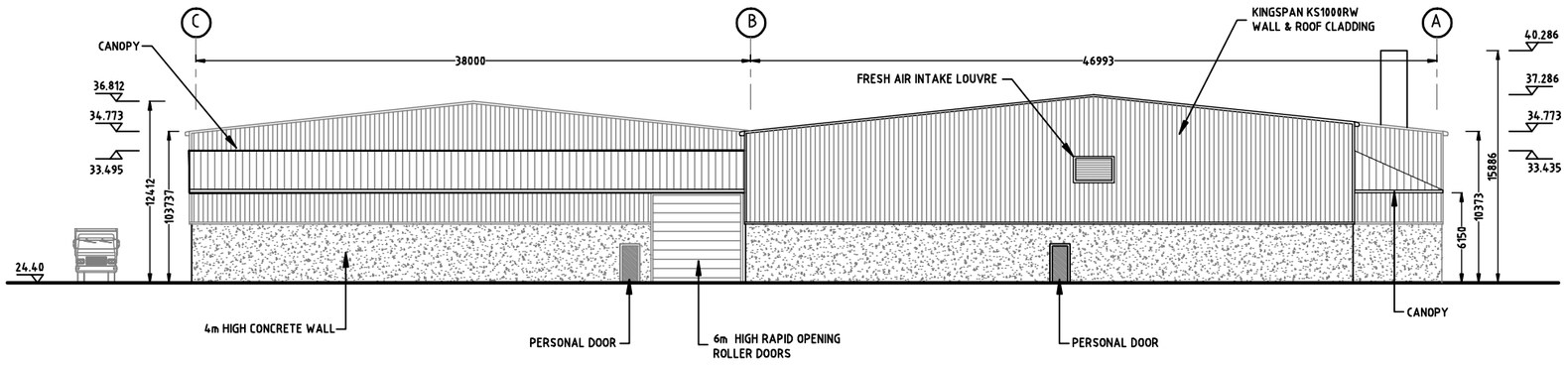
Project:
Proposed Construction of
Waste Transfer and Recycling Station
At Courtstown, Little Island, Co.Cork.

Drawing Title:
Proposed Warehouse
Northern & Eastern Elevations

Designed: P.F.	Drawn: D.T.	Date: Nov 2018	
Eng Chk: P.F.	Dwg. Chk: P.F.	Scale: 1:200 @ A1	
Project No: 0800-168			
Drawing No: 1011		Status: Planning	Rev: PL

Original Drawing Size A1

Notes



PROPOSED WESTERN ELEVATION

SCALE 1:200

CLADDING DETAILS

FLASHING NOTES:

DRIP, CORNER & JAMB FLASHINGS TO BE 0.7mm THICK, COATED STEEL.
COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

GUTTER NOTES:

GUTTER TO BE COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

WALL & ROOF CLADDING NOTES:

WALL & ROOF CLADDING TO BE KINGSPAN KS1000RW RANGE, WITH 60mm CORE & VERTICALLY LAID.
COLOUR : GOOSEWING GREY (BS10A05, RAL 080 70 05)

ROOF LIGHT NOTES:

ROOF LIGHTS TO ACHIEVE AN AC RATING.

NOTE:

ALL COMPOSITE CLADDING PANELS SHALL BE OF KINGSPAN MANUFACTURE
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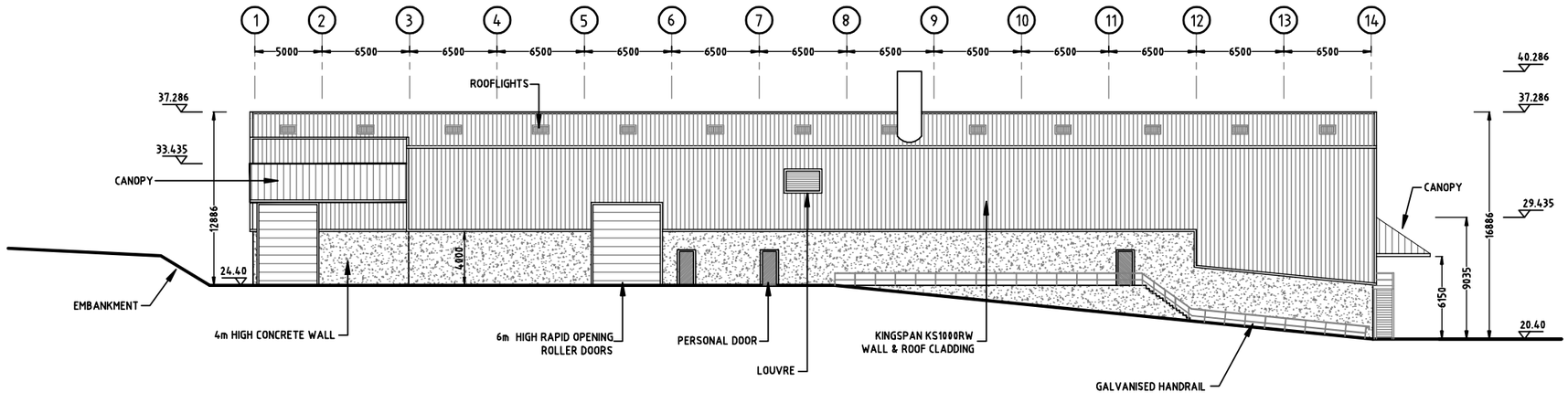

PROPOSED SOUTHERN ELEVATION

SCALE 1:200

Rev	Date	Drawn	Description	Ch'k'd
PL	Nov.'18	MR	Issued for Planning	PF

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CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
Country Clean

Project:
Proposed Construction of
Waste Transfer and Recycling Station
At Courtstown, Little Island, Co.Cork.

Drawing Title:
Proposed Warehouse
Southern & Western Elevations

Designed: P.F.	Drawn: D.T.	Date: Nov 2018	
Eng Chk: P.F.	Dwg. Chk: P.F.	Scale: 1:200 @ A1	
Project No: 0800-168			
Drawing No: 1012		Status: Planning	Rev: PL