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INTRODUCTION

1.1 This Environmental Impact Statement (EIS) provides supporting information to accompany a Planning Application to Fingal County Council and a Waste Licence Review Application (WLA) to the Environmental Protection Agency (EPA) by Roadstone Limited in respect of a proposed increase in the permitted waste intake to its established licensed inert soil recovery facility at the Huntstown Quarry Complex at North Road, Finglas, Dublin 11, from a maximum of 750,000 tonnes per annum at the present time to 1,500,000 tonnes per annum in future years.

1.2 The location of the application site is indicated on an extract from the 1:50,000 scale Ordnance Survey Discovery series map of the area, reproduced as Figure 1-1.

EXISTING APPROVED DEVELOPMENT

1.3 Roadstone is currently importing significant volumes of excess or waste soil, stone and rock from construction and development sites across Dublin City, North and West County Dublin to backfill the North Quarry at Huntstown in North Dublin. The backfilling activity is part of the overall restoration scheme for the Roadstone landholding which ultimately envisages that all existing and/or planned quarries will be backfilled to former ground level using inert, naturally occurring soil and stone waste material.

1.4 In August 2014, Roadstone secured planning permission for continuation of quarrying at Huntstown until 2034 (Fingal County Council Ref. No FW12A-0022 and An Bord Pleanala Ref. No. 06F.241693). This grant of planning permission includes provision for backfilling and restoration of the existing North, West and South Quarries and the planned Central Quarry to above groundwater level and/or to original ground level.

1.5 The entire development at Huntstown was subject to Environmental Impact Assessment (EIA). For impact assessment purposes, a maximum projected waste intake rate of 750,000 tonnes per annum was assumed in the Environmental Impact Statement (EIS) which accompanied the planning application. As such, this is the *de-facto* upper limit on permitted waste intake for backfilling of quarries within the Huntstown complex.

1.6 The extraction of rock and the production of aggregates is essentially a temporary use of lands, which ceases when the deposit is fully exhausted or it is no longer economically viable to continue extraction. Upon cessation of quarrying activity, the opportunity arises to return the worked lands to a beneficial after-use by backfilling them to above the groundwater table and/or original ground level.

1.7 In the case of Huntstown Quarry, backfilling of the 4 quarries is effectively a necessity in order to prevent the formation of large open water bodies once groundwater pumping / dewatering ceases. Were such water bodies to develop, they would attract birdlife and lead to a significant increase in bird numbers in the local area. As the quarries at Huntstown all lie immediately beneath the main flight path in and out of Dublin Airport, this in turn could create a potentially significant bird hazard for any low flying aircraft overhead.

1.8 The backfilling of the quarries at Huntstown also facilitates the restoration of the quarried lands to agricultural use (at least initially) and improves the protection provided to the underlying groundwater resource, which is currently classified as 'extremely vulnerable' due to the absence of any protective soil cover.

1.9 The inert soil, stone and rock being recovered at the facility are sourced from construction and development sites where prior studies, field inspections and investigations and/or laboratory testing has indicated that there is no contamination present in any of the excess soils which have to be removed off-site. All inert soil, stone and rock is brought to the facility by waste contractors holding valid waste collection permits and using authorised vehicles.

1.10 At the present time, in addition to the imported waste, minor quantities of virgin aggregate are used at the recovery facility for construction of temporary haul roads across backfilled materials as and when required. It is expected that once 'End of Waste' criteria for recycled aggregates have been published and adopted by the EPA that these materials could eventually be replaced by recycled (or secondary) aggregates (principally crushed concrete, blocks, etc) which satisfy the EPA's prescribed 'End of Waste' criteria.

EXISTING WASTE LICENCE

1.11 As much of the soil and stone to be imported and used for backfilling and restoration purposes is classified as waste, the size and scale of the proposed activity is such that it also requires a waste licence from the Environmental Protection Agency (EPA). The activity is technically classed by national and European waste management legislation as '*recovery through deposition on land*' and the existing development is conventionally described as a '*soil recovery facility'*.

1.12 A waste licence (Ref. No. W0277-01) in respect of the existing facility only applies in respect of waste recovery activity at the North Quarry. The waste licence was issued by the EPA in February 2015 and provides for :

- Backfilling of up to 7,295,000 tonnes (approximately 3,840,000m^3) of inert naturally occurring materials, of which approximately 7,200,000 tonnes must be imported.
- Provision of new infrastructure and/or shared use of existing infrastructure with the established aggregate, concrete and asphalt production businesses which are co-located at the quarry;
- A maximum importation rate of 750,000 tonnes of soil and stone waste per calendar year.
- Separation of non-inert C&D waste (principally metal, timber, PVC pipes and plastic) unintentionally imported to the facility prior to its removal off-site (to appropriately licensed waste disposal or recovery facilities);
- Restoration of the backfilled void (including placement of cover soils and seeding) and its return to agricultural grassland; and
- Ongoing environmental monitoring of noise, dust, surface water and groundwater for the duration of the soil recovery / quarry backfilling works and for a short period thereafter.

1.13 A number of pre-commencement submissions in respect of the soil recovery facility, including a Closure, Restoration and Aftercare Management Plan (CRAMP) and Environmental Liabilities Risk Assessment (ELRA) were

submitted to the Agency following the award of the waste licence. These submissions were approved by the EPA and the Financial Provisions required on foot of these were put in place by Roadstone during September 2015. The recovery facility commenced operations in early October 2015.

NEED FOR THE DEVELOPMENT

1.14 Within a few weeks of opening the soil recovery facility at Huntstown, Roadstone identified that there was significant demand for use of its facility by waste hauliers working in the construction and development industry. Notwithstanding a number of measures taken to limit, restrict or slow the rate of soil and stone waste intake over the early months of 2016, Roadstone still had to suspend waste intake at the facility in late July 2016, after it had reached its maximum permitted intake tonnage for the year (750,000 tonnes). It is anticipated at the present time that the facility will not be in a position to re-open for waste intake and recovery until 1 January 2017.

1.15 Having undertaken a review of the available capacity and intake rates at similar recovery facilities across the Greater Dublin Area, Roadstone has identified that there is likely to be a significant constriction in available soil waste recovery capacity at authorised (ie. permitted or licensed) facilities following the suspension of activity at its Huntstown facility. This assessment is consistent with anecdotal reports from waste hauliers of a similar constriction in soil recovery capacity around Dublin in the final months of 2015.

1.16 In view of these findings, and in order to meet the strong market demand for soil waste recovery capacity in North Dublin and across the Greater Dublin Area, Roadstone has decided to apply for planning permission to increase the soil waste intake rate at its Huntstown recovery facility from a maximum of 750,000 tonnes per annum to a maximum of 1,500,000 tonnes per annum.

1.17 The existing West Quarry was previously stripped of overburden soils to a depth of up to 3m in anticipation of its future development as a quarry. Having undertaken a detailed review of structural geology and extractable resources at the West Quarry in recent years however, Roadstone has decided not to proceed with further development of the planned West Quarry and to bring forward the backfilling and restoration of this area (which has been approved previously).

1.18 In addition to obtaining planning permission for an increase in the maximum annual limit of soil waste intake, it will also be necessary to submit a separate waste licence review application to the EPA in order to obtain a similar increase in the maximum annual intake limit set by the current waste licence (Ref. W0277-01). The waste licence review application to the EPA will also make provision for

- extension of the existing licensed area to also provide for the backfilling of the West Quarry;
- additional backfilling of an area in the south end of the North Quarry which has been quarried in recent years and is likely to be further quarried in the near future (1-2 years); and
- some minor modifications to the licensed area to take account of changes in land ownership and re-alignment of internal haul roads around the quarry complex in recent years.

1.19 Making provision in the waste licence review application for additional backfilling at the West Quarry and the area quarried / to be quarried at the southern end of the North Quarry, will increase the overall permitted capacity of the licensed waste recovery facility from 3,850,000m^3 (7,300,000 million tonnes) to approximately 5,025,000m^3 (9,550,000 tonnes).

THE SITE

Site Location

1.20 The site to which this planning application refers is located entirely within the townlands of Huntstown, Johnstown and Kilshane, Co. Dublin, approximately 2.5km north-west of the Dublin suburb of Finglas and 2km north-west of the interchange between the N2 Dual Carriageway and the M50 Motorway. The plan extent of the lands owned by Roadstone Ltd. are outlined in blue on a 1:500 scale map of the area, reproduced as Figure 1-2. The plan extent of the application site is also outlined in red on the same figure.

Site Description

1.21 The application area covers a total area of approximately 48.65 hectares (117.25 acres) and comprises

- a deep limestone quarry (the North Quarry) with perimeter screening and overburden mounds
- a relatively shallow quarry (the West Quarry) from which overburden soil cover has been removed and
- existing ancillary site infrastructure (offices, sheds, hardstand areas, wheelwash, weighbridges, settlement ponds etc.), much of which is shared with aggregate, concrete and asphalt production businesses co-located at the Huntstown Quarry Complex.

1.22 The licensed recovery facility covers an area of approximately 36.1 hectares (87.0 acres) and comprises the North Quarry and adjoining site infrastructure. The void at the North Quarry which is being gradually backfilled at the present time originally covers an area of approximately 11.2 hectares (27.0 acres). As part of the waste licence review, the licenced area will be extended to facilitate backfilling of the West Quarry (approval for which has already been obtained under Permission Ref. F12A-0022 / ABP Ref. 06F.241.693).

1.23 The existing West Quarry covers an area of approximately 12.2 hectares (29.4 acres). This area was previously stripped of overburden soils at the time the Northern Cross Motorway (M50) was being constructed around 1995 / 1996, in anticipation of its future development as a quarry. Roadstone has decided not to proceed with further development of the West Quarry and to bring forward the backfilling and restoration of this area.

1.24 Ground levels across the application site have been significantly disturbed by previous quarrying activities. The original ground levels around the worked-out North Quarry vary between approximately 62mOD and 66mOD (Malin) along the eastern face and between 80mOD and 85mOD along the western face. Existing ground levels immediately behind the quarry faces are locally 5m to 10m higher than surrounding ground due to the presence of perimeter screening mounds. The existing floor level in the North Quarry lies at approximately 38mOD to 39mOD and its depth from the original (surrounding)

ground level varies from 24m to 28m along its eastern face and from 42m to 47m along its western face. It is envisaged that an area at the southern end of the quarry will be extended a further 15m down (to 23mOD) over the next 1 to 2 years, in line with the 2014 grant of planning permission for rock extraction activities.

1.25 The original ground levels around the West Quarry vary between approximately 85mO to 87mOD (Malin) along the western face and between 83mOD and 85mOD along the eastern face. Existing ground levels immediately behind the western face are up to 5m higher than surrounding ground due to the presence of perimeter screening mounds Kilshane Road and up to 10m higher on the eastern side on account of overburden mounds. Existing floor level in the West Quarry lie at approximately 81mOD to 82mOD and its depth from the original (surrounding) ground level is generally around 3m.

Site Access

1.26 Traffic access to the application site is primarily obtained via the existing North Road (the former N2 National Primary Road). Traffic coming from Dublin City Centre or the M50 Motorway turns onto the N2 Dual Carriageway and travels a short distance north, before turning (west) off a dedicated slip road onto the R135 regional Road (known as the 'North Road') at Coldwinters. Thereafter traffic continues south for a short distance along the North Road before turning right (west) via a dedicated right–turn junction onto the access road leading into the Huntstown Quarry Complex.

1.27 As well as serving Roadstone's quarries and related businesses, the access road also serves the Huntstown Power generating plant operated by Viridian and the proposed anaerobic digestion plant which has yet to be built by Stream BioEnergy (approved under Permission Ref. FW13A/0089).

1.28 Traffic travelling south from Ashbourne exits the N2 Dual Carriageway at the Cherryhound Interchange near The Ward and continues south along the North Road, through Kilshane Cross, to the right-turn junction with the access road leading into the Huntstown Quarry Complex.

1.29 There is no road access to the Huntstown Quarry complex or to the application site from Kilshane Road (also known as Cappagh Road) to the west of Roadstone's land holding. Traffic from Blanchardstown and the N3 to the west travels along the recently constructed N2 / N3 Link Road to the Cherryhound Interchange and then continues south along the North Road.

1.30 With a weight restriction applying to HGV movements along Kilshane Road, traffic from the Ballycoolin and Finglas suburbs of north-west Dublin travel via Kilshane Way to the N2-N3 Link Road, and from there to the quarry and application site.

1.31 Traffic movement within Roadstone's landholding runs over a paved road surface up to the central infrastructure area in the centre of the quarry complex Immediately past the wheelwash, traffic travelling to the backfilling area at the North Quarry turns right and heads north along an existing internal paved road, over the weighbridge and past the recovery facility offices and settlement ponds. Thereafter traffic to the North Quarry backfilling area runs over a network of unpaved haul roads. Traffic travelling to the West Quarry continues straight (west) past the wheelwash and travels all the way there along existing internal paved roads.

Surrounding Land-Use

1.32 The application site is located entirely within the existing quarry complex at Huntstown. The land immediately beyond the south-eastern corner of the North Quarry is used for the processing of aggregates and manufacture of concrete and asphalt products (at the Central Quarry), while the lands to the immediate west, north and north-east of it are primarily in use as agricultural grassland.

1.33 At the West Quarry, the lands immediately to the north comprise the North Quarry and some lands in agricultural use while the lands to the east and south-east comprise a nature reserve area and the South Quarry, where rock continues to be extracted for aggregate and concrete production. The lands to the south and west comprise neighbouring light industry and science and technology parks (Ballycoolin Business Park, Rosemount Business Park, Millennium Business Park and Northwest Business Park).

1.34 At a greater distance, the Huntstown Power station (operated by Viridian), North Road and recently constructed N2 Dual Carriageway all lie to the east of the application site. The M50 motorway and the proposed alignment for the Metro West light rail line both lie to the south, while there is additional light industrial and commercial development on lands further to the south west. The lands to the north are still used predominantly as agricultural grassland. Existing land-use in the vicinity of the application site, including residential and industrial development, is shown on a land-use map in Figure 1-3.

LAND OWNERSHIP

1.35 Roadstone Ltd. is the holder of the freehold title to the lands around the quarry at Huntstown. Its total landholding extends to approximately 200.3 hectares (483 acres). The extent of the company's land ownership is indicated on Figure 1-2. Details of land folios and ownership are summarized in Figure 1-4.

THE APPLICANT

1.36 Roadstone Ltd. was originally founded by the Roche Brothers in the 1930's and became part of Cement Roadstone Holdings (CRH) plc in 1970, following the merger of Roadstone and Cement Ltd. The present day company was formed in 2009 by the amalgamation of CRH's three construction materials businesses in Ireland, Roadstone Dublin Ltd., Roadstone Provinces Ltd. and J.A. Wood Ltd. The company is Ireland's leading supplier of aggregates, construction and road building materials and employs several hundred people at 65 locations throughout the country.

1.37 Although Roadstone's principal business interest is in mineral extraction and manufacture of building materials and products, it is currently backfilling and restoring a small number of quarries using imported inert soil waste and operating construction and demolition waste recycling facilities at several of its locations across the State.

1.38 In addition to the licensed soil recovery facility it currently operates at Huntstown, Roadstone also operates an EPA licensed inert soil / C&D waste recovery facility at Fassaroe, west of Bray (Waste Licence Ref W0269-01). It was recently granted a waste licence for another soil recovery facility at Milverton Quarry, near Skerries in June 2015 (Waste Licence Ref. No. W0272-01) and it is envisaged that soil recovery activities will commence at this

location in late 2016 / early 2017, once some preparatory works have been completed. The company also operates a permitted soil recovery facility and construction and demolition waste recovery facility at two separate locations within the Belgard Quarry Complex, near Tallaght.

1.39 In light of the capacity constraints identified above, the company has in recent weeks, also applied for planning permission for a soil recovery facility at Calary Quarry, at Kilmacanogue, in County Wicklow (Planning Ref. 16.574). This recovery facility however will largely serve as a replacement facility for that at Fassaroe, the backfilling of which is nearly complete.

1.40 Roadstone is committed to achieving and maintaining industry leading environmental standards. To this end, the company has established, and actively implements, an in-house Environmental Management System (EMS) at all its established waste recovery locations, including Huntstown. The EMS has achieved external accreditation to ISO 14001 standard and is subject to audit on an annual basis.

PLANNING HISTORY

1.41 The excavation and blasting of limestone has been undertaken at the Huntstown Quarry Complex for the past four decades, following grant of an outline permission in or around 1969. It is understood that quarrying at the northern and central areas was commenced at some time in the early-to-mid 1980's, on foot of a planning permission granted in 1982.

1.42 In 1994, a 10 year planning permission (Fingal County Council Ref. No. 93A/1134 and An Bord Pleanála Ref.P06F.092622) was granted to Roadstone Dublin Ltd (as it then was) for continued quarrying and production of aggregate and concrete materials at its Huntstown Quarry Complex. Planning permission for the existing construction and demolition waste recycling facility in the Central Quarry was granted in 2002 (Fingal County Council Ref. No. F02A/0602 and An Bord Pleanála Ref.PL06F.200623).

1.43 Backfilling and restoration of the North Quarry using imported soil and stone waste first commenced in 2002 / 2003 around the time the Dublin Port Tunnel was being constructed and continued intermittently after that time up to 2008. The backfilling and soil recovery activity at that time was undertaken as part of quarry restoration works which had previously been notified to, and agreed with, Fingal County Council in accordance with Condition No. 17 of the 1994 planning permission. This activity was undertaken in accordance with a series of waste permits issued over that period by Fingal County Council.

1.44 In 2004, planning permission was granted for continuation of quarrying and related activities at the Huntstown Quarry Complex for a further 10 year period (Fingal County Council Ref. No. F03A/1430 and An Bord Pleanála Ref. PL06F.206789).

1.45 In August 2014, Roadstone secured planning permission for continuation of quarrying at the Huntstown Quarry complex for a further 20 year period (Fingal County Council Ref. No FW12A-0022, An Bord Pleanala Ref. No. 06F.241693). The overall development proposal, which was subject to EIA, included provision for ultimate backfilling and restoration of the existing North, West and South Quarries and the planned Central Quarry to ground level. The maximum waste intake rate assumed for impact assessment purposes in the EIS which accompanied the planning application was 750,000 tonnes per annum.

Effluent Discharge Licences

1.46 Discharges from quarry dewatering and ongoing soil and stone waste recovery activities at the North Quarry are directed to the Ballystrahan Stream and Ward River catchment and are currently regulated by way of the EPA waste licence (Ref. W0277-01)

1.47 Roadstone also discharges process water from aggregate washing and concrete production activities at the central infrastructure area via a series of existing settlement ponds to the Ballystrahan Stream. These discharges are regulated by way of a separate discharge licence from Fingal County Council (Ref. No WPW/F/008-01) which was issued on the 24th November 2011.

PLANNING CONTEXT

Fingal County Development Plan (2011 -2017)

1.48 The planning and development controls pertaining to the application site are those outlined in the current Fingal County Development Plan (2011 - 2017).

1.49 Under the current county development plan, the application site is the subject of two zoning objectives. The first provides for heavy industry[1] and the second seeks to *"protect and promote in a balanced way, the development of agriculture and rural related enterprise, biodiversity, the rural landscape, and the built and cultural heritage*"[2]. The Heavy Industry zoning permits in principle 'extractive industry/ quarry', 'concrete/asphalt' and 'waste disposal and recovery facility (high impact)' uses. The Rural zoning permits in principle 'extractive industry/quarrying' uses. Neither 'concrete/asphalt' nor 'waste disposal and recovery' are listed as 'not permitted'. Lands adjoining the site are mainly zoned for General Employment. An extract from the land zoning map is reproduced in Figure 1-5.

1.50 The development plan map shows a number of local objectives in the vicinity of the application site as follows :

- Local Objective 405 seeks to facilitate development of infrastructure for waste management, including construction and demolition waste processing, biological treatment of organic waste, a sludge treatment facility and a waste transfer station.
- Local Ojective 418 relates provision of additional units in the area to accommodate homeless persons and
- Local Objective 409 states that the quantum of development on Roadstone lands is to be determined by the capacity of the road infrastructure.

1.51 The Huntstown quarry complex is partly or fully located with the various zones associated with the safe operation of Dublin Airport. The quarry complex is

[1] The objective vision is to *"Facilitate opportunities for industrial uses, activities and processes which may give rise to land use conflict if located within other zonings. Such uses, activities and processes would be likely to produce adverse impacts, for example by way of noise, dust or visual impacts. HI areas provide suitable and accessible locations specifically for heavy industry and shall be reserved solely for such uses."*

[2] The objective vision is to *"Protect and promote the value of the rural area of the County. This rural value is based on: Agricultural and rural economic resources Visual remoteness from significant and distinctive".*

close to the airport, but it is not located within the inner public safety zone. It is located, however, partly within the inner airport noise zone, the outer public safety zone and the outer airport noise zone. It is not considered that these effect the proposed development.

1.52 There are no designated or proposed Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or proposed Natural Heritage Areas (NHA's) within or contiguous to Roadstone's landholding at Huntstown. Huntstown Quarry is not identified as a County Geological Site. Much of the application site is identified as a Nature Development Area.

1.53 The development plan map also shows a protected structure within the landholding and application site (no. 663). This protected structure is also a national monument. Records held by the National Monuments Service of the Department of Environment, Heritage and Local Government indicate that there are a number of national monuments within and in the immediate vicinity of Roadstone's landholding. At the northern end of the application site, the ruins of Kilshane Church, a graveyard and holy well (Ref. DU014-012) are identified as part of an extended archaeological site. These features are also included in the list of protected structures in the Fingal County Development Plan. There are no visible remains of these monuments remaining in situ.

1.54 Section 2.6 of the development plan addresses quarrying and aggregate extraction. Objective EE35 states the

"Consider proposals for aggregate extraction only where the Council is satisfied through an environmental assessment that environmental quality and amenity will be protected and appropriate provision for the restoration of the landscape and habitat is being made."

Ultimately, the restoration scheme for the site has been previously approved and the basis for the restoration scheme has been established. However, the proposed increase in the rate of infilling will ensure that the restoration process is expedited.

1.55 Section 4.5 of the development plan relates to waste management. The plan requires the submission of construction and demolition (C&D) waste management plans in respect of development projects and states:

"The Construction and Demolition Waste Management Plan, as a minimum, shall include provision for the management of all construction and demolition waste arising on site, and make provision for the reuse of said material and/or the recovery or disposal of this waste to authorised facilities by authorised collectors. Where appropriate, excavated material from development sites is to be reused on the proposal, for landscaping, land restoration or for preparation for development."

This recognises the potential for C&D, including inert soils, to be used in land restoration proposals.

Objective WM14 seek to

"Protect floodplains and biodiversity where construction and demolition waste is to be recovered by land reclamation."

1.56 Section 2.6 of the of the County Development Plan deals with development in rural areas. Section 5.4 discusses development of extractive industry and identifies a requirement for worked out quarries, pits and spoil heaps to be

rehabilitated to suitable land use. The plan also states that the '*landfilling of quarries with waste other than topsoil, subsoil and builders rubble is not considered to be an acceptable method of rehabilitation'*. The proposal for a soil recovery facility at Huntstown is fully consistent with the stated policy objective in the existing County Development Plan in that it provides for backfilling and restoration of the existing quarry using only imported inert soil and stone.

1.57 The proposal for a soil recovery facility at Huntstown is fully consistent with the stated policy and objective in that it provides for

- re-use / recovery of inert soils for site restoration purposes
- future development of the site in the long-term and
- establishment of an inert waste recovery facility in close proximity to a major centre of economic activity in North County Dublin.

1.58 Immediately east of Roadstone's landholding, the National Monuments Record (NMR) indicates that there is an enclosure (Ref. DU014-015) and ring fort (Ref DU014-016) located in Coldwinter townland, on the opposite side of the North Road. These features are also included in the list of protected structures in the County Development Plan. A castle, motte (earthen mound) and bailey (courtyard) (Ref. DU014-013) is located north-east of the landholding in Newtown townland, while a fulacht fia (Ref. DU014-050), a Bronze Age cooking site, is located west of the landholding in Grange townland.

1.59 The Fingal County Development Plan indicates that the Huntstown and Kilshane townlands lie within a landscape area which is characterised as low lying agricultural land. There are no protected views or prospects into or out of the application site identified in the Development Plan.

Eastern Regional Waste Management Plan 2015-2021

1.60 Fingal is one of several counties in the Eastern Midland waste region of Ireland which is covered by the Eastern Midland Waste Management Plan (2015-2021) which published by Dublin City Council (the lead Local Authority for the plan) in May 2015.

1.61 Section 7.3 of the plan addresses 'priority waste' streams, including construction and demolition waste. It notes an increase in construction related activity during 2014 and emphasises the importance of ensuring that appropriate processing facilities are in place to facilitate increased reuse, recycling and recovery of all C&D waste streams.

1.62 Section 11.2.2 of the plan presents an overview of construction and demolition waste management activities within the region. It identifies that in 2012, 41% of all recorded C&D waste collected and managed in the region (1.3 million tonnes of a total of 3.25 million tonnes) comprised inert soil and stones. This volume was generated at a time which corresponded with possibly the lowest point of the downturn in construction related activity following the Global Financial Crisis of 2008.

1.63 Section 11.2.2 notes a sharp decrease in the number of operational landfills in recent years. It also highlights growing awareness of the ecological and biodiversity value of low-lying wetlands and marginal agricultural land which were backfilled or reclaimed using construction and demolition wastes in the past and comments that at many of these sites, the primary activity appears to

have been deposition of waste rather than land improvement (also known as 'sham recovery'). In view of these trends and the likelihood that fewer of these facilities or sites will be available as outlets for C&D waste than in the recent past, the plan signals that alternative recovery options will need to be provided to facilitate recovery of C&D wastes in the years ahead.

1.64 The plan also raises the question as to whether or not the placement of inert waste at many of the infill sites used in the past is an appropriate land use strategy or indeed the best use of a potentially recyclable material, noting that quarries in particular often require large quantities of soil material to fill voids or use it for remediation and/or landscaping purposes.

1.65 It is considered in light of the above that the continued recovery of soil and stone waste, and the proposed intensification of activity at the existing recovery facility at Huntstown, broadly complies with the policy objectives for C&D waste set out in the current waste management plan for the Eastern Midland Region.

CONSIDERATION OF ALTERNATIVES

1.66 In view of the policy objectives outlined in the Eastern Regional Waste Management Plan 2015-2021, the development of waste recovery activities for inert soils and/or inert construction and demolition waste at quarry voids is restricted to locations where they occur.

1.67 Roadstone asserts that the proposed intensification of existing waste recovery activities at Huntstown offers clear environmental and economic advantages as the facility is located close to a large economic centre (northern fringe of Dublin City and north County Dublin) and is readily accessible using existing high quality national and regional road infrastructure.

PLANNING AND ENVIRONMENTAL GAINS

1.68 The intensification of soil and stone waste recovery activities at Huntstown generates a number of planning and environmental gains, all of which would have been recognised previously when Fingal County Council (and Bord Pleanála on appeal) granted planning permission for backfilling and restoration of the quarries to former ground level (Fingal County Council Ref. No FW12A-0022, An Bord Pleanala Ref. No. 06F.241693).

1.69 The advantages offered by the ongoing operation (and intensification) of soil recovery activities at the existing licensed facility at Huntstown include

- an established land use and appropriate zoning;
- there are existing environmental management, control and monitoring systems in-situ;
- it holds all legal permits and consents required for the activity;
- it is accessed via high capacity national road infrastructure (the N2 Dual Carriageway and M50 Motorway and the North Road, the former N2 National Primary Road) and minimises the need for HGVs to travel over extended lengths of local or regional road networks; and
- it generally provides good separation distance from surrounding commercial and residential development, thereby minimising negative environmental impacts.

1.70 Although they may differ in magnitude, the environmental impacts arising from the proposed intensification of activities at the existing waste recovery facility are essentially similar to those arising from adjoining land use within the quarry complex, which principally comprise

- rock extraction and processing to produce virgin / construction grade aggregate
- production of construction materials (principally concrete and asphalt).

With waste recovery activities for example, noise and vibration impacts will generally be lower than for established quarrying or processing activities.

1.71 The intensification of soil and stone waste recovery activities at the Huntstown facility is generally consistent with the principles of sustainable development in that:

- it is located close to construction markets, originating sites and/or relevant waste sources in Dublin City and the Greater Dublin Area, thereby minimising fuel consumption and carbon emissions by haulage lorries;
- by virtue of being co-located within an existing extractive site and maximising use of available resources and site infrastructure, it also minimises consumption of natural resources;
- it maximises operational efficiencies and in particular offers opportunities to reduce the overall number of transport journeys to and from construction sites through the introduction of a backloading system (whereby HGVs delivering aggregates from the adjoining quarry will return with inert soil waste from the destination site or another construction site en route);
- it minimises the potential development footprint; and
- it minimises impacts on the natural environment and residential amenity.

1.72 The backfilling of the North and West quarries at Huntstown will, when complete, substantially restore these areas to their original ground level. The lands will initially be restored to agricultural use, most likely as grassland.

1.73 Backfilling of the existing quarry voids will also provide for better protection of the underlying groundwater resource, which is currently vulnerable due to the absence of any protective soil cover.

DIFFICULTIES ENCOUNTERED WITH EIS COMPILATION

1.74 This Environmental Impact Assessment was compiled on the basis of published regional and local data and site-specific field surveys. No difficulties were encountered in compiling the required information.

CONTRIBUTORS

1.75 Roadstone Limited appointed SLR Consulting Ireland to prepare this Environmental Impact Statement (EIS) in support of its Waste Licence Application for the proposed backfilling of the quarry void at Huntstown Quarry, North Road, Finglas, Dublin 11.

1.76 Section 1 of this Environmental Impact Statement comprises an introduction while Section 2 provides a detailed description of the proposed development and has been prepared by SLR Consulting Ireland in consultation with Roadstone Limited.

1.77 Sections 3 to 14 of the EIS provide details of existing environmental receptors, and for each receptor, provide an assessment of the potential environmental impact of the proposed development and details of mitigation measures, where these are considered necessary.

1.78 The contributors who have assisted in the preparation of this EIS are identified in Table 1-1 below:

Table 1-1
List of Contributors

TOPIC	CONTRIBUTOR	COMPANY
Introduction	Aoife Byrne BSocSc(int), MRUP, MRTPI, MIPI Derek Luby BE, MSc, DIC, MIEI	SLR Consulting Ireland
Description of Development	Derek Luby BE, MSc, DIC, MIEI	SLR Consulting Ireland
Human Beings	Aoife Byrne BSocSc(int), MRUP, MRTPI, MIPI	SLR Consulting Ireland
Flora and Fauna	Steve Judge BSc (Hons)	SLR Consulting Ireland
Soils and Geology	Tom Moore BSc., PGeo, EurGeol	SLR Consulting Ireland
Water	Dr. Peter Glanville BA PhD, PGeo EurGeol	SLR Consulting Ireland
Climate and Air Quality	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Noise and Vibration	Aldona Binchy MSc. (Eng)	SLR Consulting Ireland
Landscape	Anne Merkle Dipl. Ing (FH) MILI	SLR Consulting Ireland
Cultural Heritage	Dr. Charles Mount MA	Consultant
Material Assets	Aoife Byrne BSocSc(int), MRUP, MRTPI, MIPI	SLR Consulting Ireland
Traffic	Richard Frisby BS (Ops. Engineering)	Roadplan Consulting Ltd.
Co-ordination of EIA	Derek Luby BE, MSc, DIC, MIEI	SLR Consulting Ireland

1.79 Each contributor has been fully briefed about the proposal and the background to it. They have also visited the site and are familiar with the local environment.

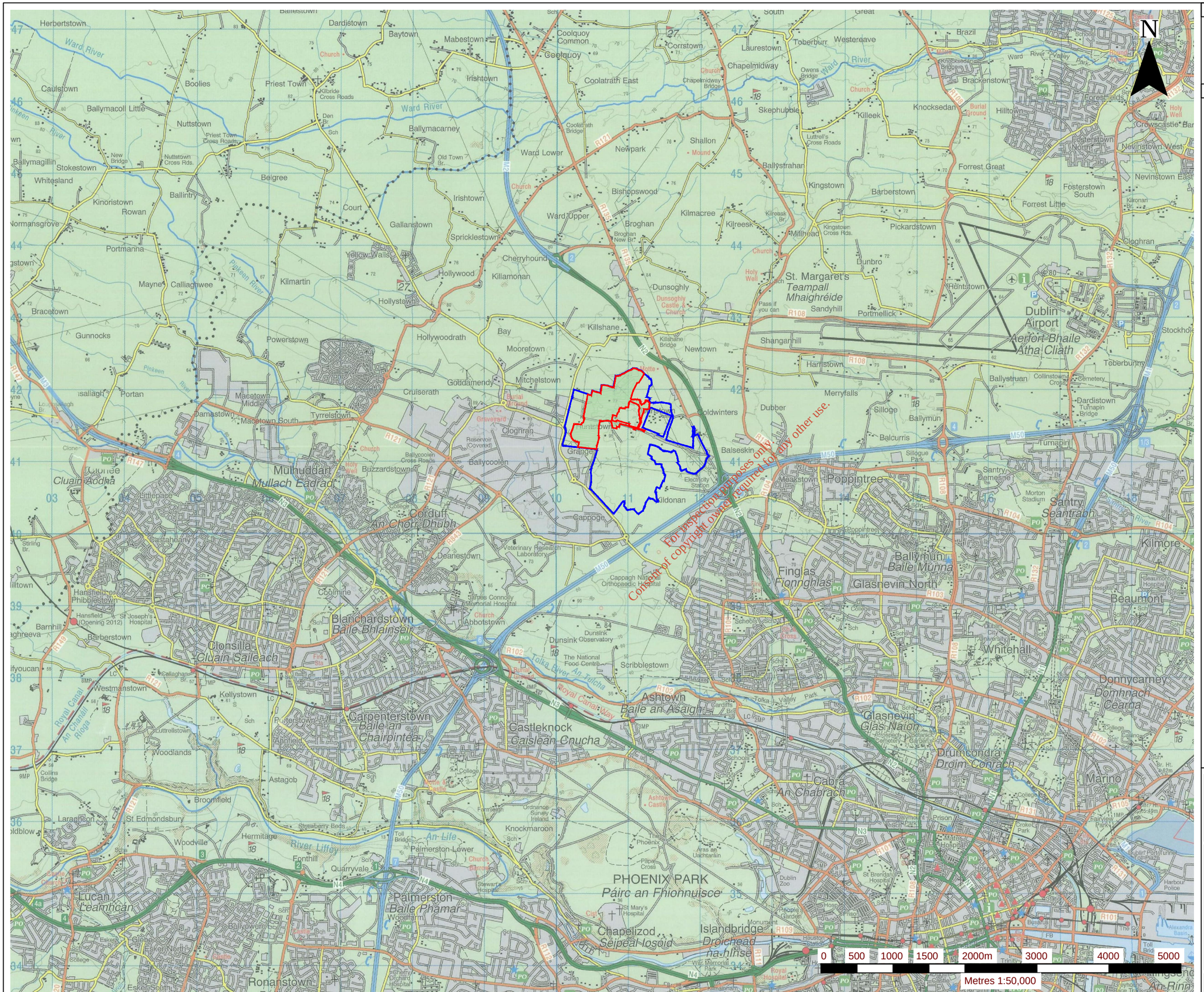
CONSULTATIONS

1.80 In preparing this Environmental Impact Statement, consultations were had with a number of organisations and agencies including

- Environmental Protection Agency (Office of Licensing and Guidance)
- Fingal County Council (Planning Section)
- Fingal County Council (Environment Section)
- Fingal County Council (Heritage Officer)
- Fingal County Council (Roads Section)
- Geological Survey of Ireland (to discuss geological heritage and aquifer classification)

1.81 Other consultations and informal discussion held by contributors in undertaking their environmental impact assessments are detailed in the specialist environmental sections of the EIS, together with details of relevant archives and documentation held by state agencies and organisations.

FIGURES



NOTES

1. EXTRACT FROM 1:50,000 O.S DISCOVERY MAP **NO. 50**

2. ORDNANCE SURVEY IRELAND LICENCE NO. **SU 0000716 (C)** ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

ROADSTONE LIMITED LAND INTEREST **(c. 200.3 ha)**

APPLICATION AREA **(c. 48.65 ha)**

SLR CONSULTING IRELAND
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ROADSTONE LIMITED
ENVIRONMENTAL IMPACT STATEMENT

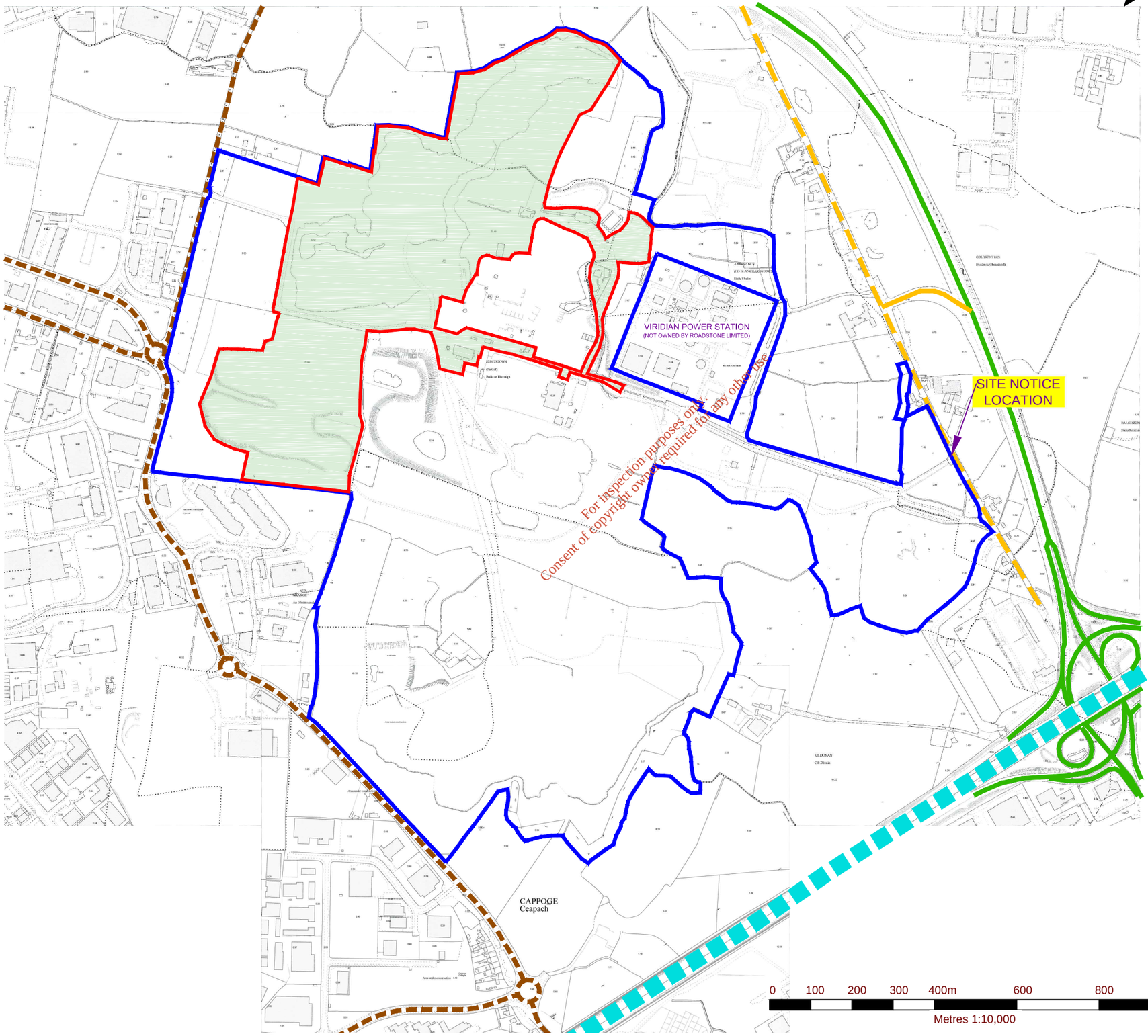
HUNTSTOWN WASTE RECOVERY FACILITY
NORTH ROAD, FINGLAS, DUBLIN 11

SITE LOCATION MAP

FIGURE 1-1

Scale	Date
1:50,000 @ A3	AUGUST 2016

0180.00152.0.FIG_1-1.Site Location Map.dwg



NOTES

1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET **NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A & 3130-B**.

2. ORDNANCE SURVEY IRELAND LICENCE NO. **SU 0000716 (C)** ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE LIMITED LAND INTEREST **(c. 200.3 ha)**
- APPLICATION AREA **(c. 48.65 ha)**
- N2 DUAL CARRIAGEWAY
- NORTH ROAD (R135)
- LOCAL ROAD
- M50 MOTORWAY

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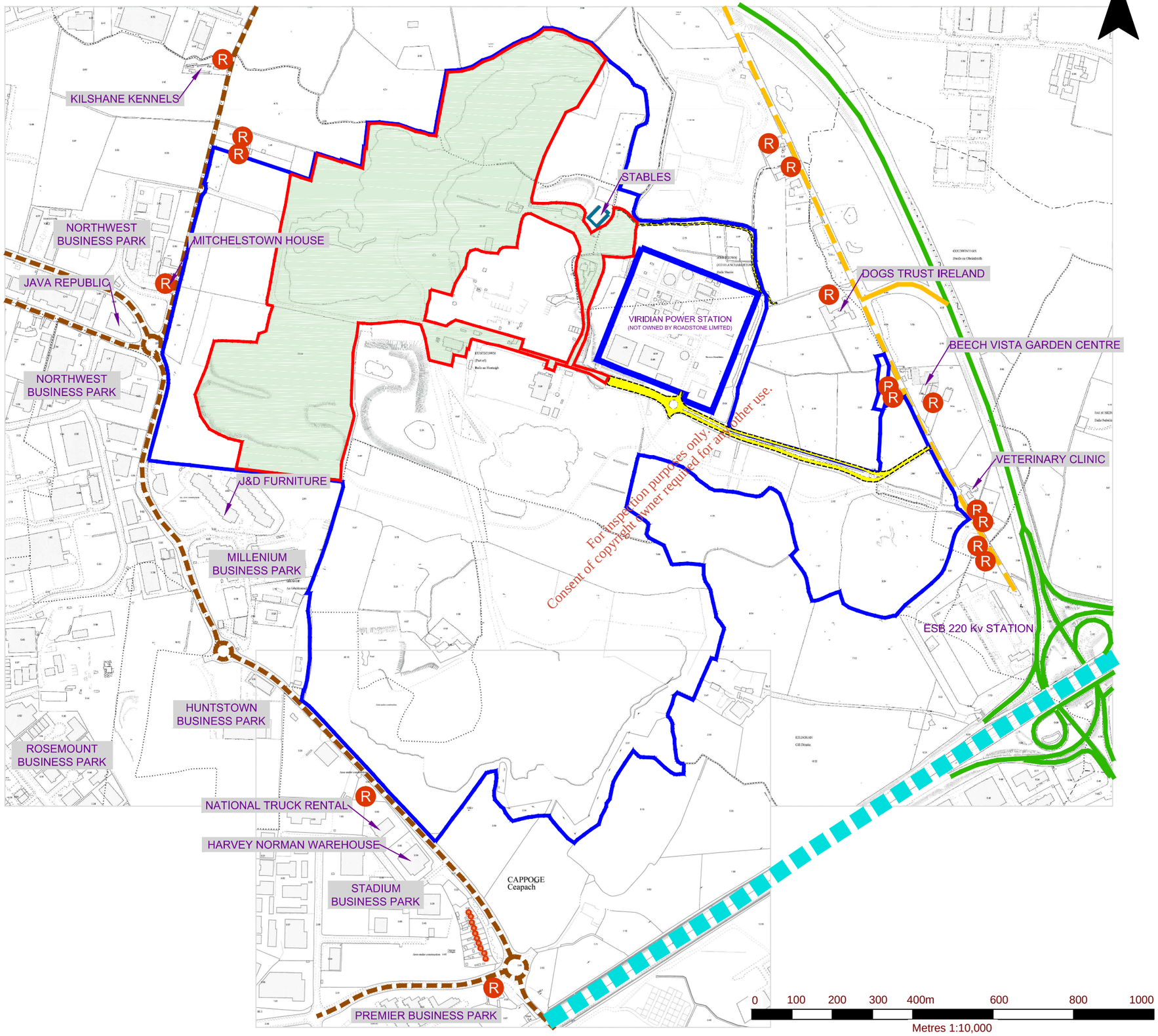
SITE NOTICE LOCATION MAP

FIGURE 1-2

Scale: 1:10,000 @ A3

Date: AUGUST 2016

0180.00152.0.FIG_1-2.Site Notice Location Map.dwg



NOTES

1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET **NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A & 3130-B**.

2. ORDNANCE SURVEY IRELAND LICENCE NO. **SU 0000716 (C)** ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE LIMITED LAND INTEREST **(c. 200.3 ha)**
- APPLICATION AREA **(c. 48.65 ha)**
- N2 DUAL CARRIAGEWAY
- NORTH ROAD (R135)
- LOCAL ROAD
- M50 MOTORWAY
- RIGHT OF WAY
- R — LOCATION OF NEAREST RESIDENCES

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SURROUNDING LAND USE

FIGURE 1-3

Scale	Date
1:10,000 @ A3	AUGUST 2016

0180.00152.0.FIG_1-3.Surrounding Land Use.dwg

N

VIRIDIAN POWER STATION
(NOT OWNED BY ROADSTONE LIMITED)

CAPPOGE
Ceapach

0 100 200 300 400m 600 800 1000
Metres 1:10,000

NOTES

1. EXTRACT FROM 1:2,500 ORDNANCE SURVEY DIGITAL SHEET **NO'S. 3062-A, 3062-B, 3062-C, 3062-D, 3063-A, 3063-C, 3130-A & 3130-B**.

2. ORDNANCE SURVEY IRELAND LICENCE NO. **SU 0000716 (C)** ORDNANCE SURVEY & GOVERNMENT OF IRELAND

LEGEND

- ROADSTONE LIMITED LAND INTEREST **(c. 200.3 ha)**
- APPLICATION AREA **(c. 48.65 ha)**
- FOLIO DN2889
- FOLIO DN18240
- FOLIO DN3291
- FOLIO DN132971F
- FOLIO DN18734
- FOLIO DN8115
- FOLIO DN19138
- FOLIO DN8118
- FOLIO DN8999

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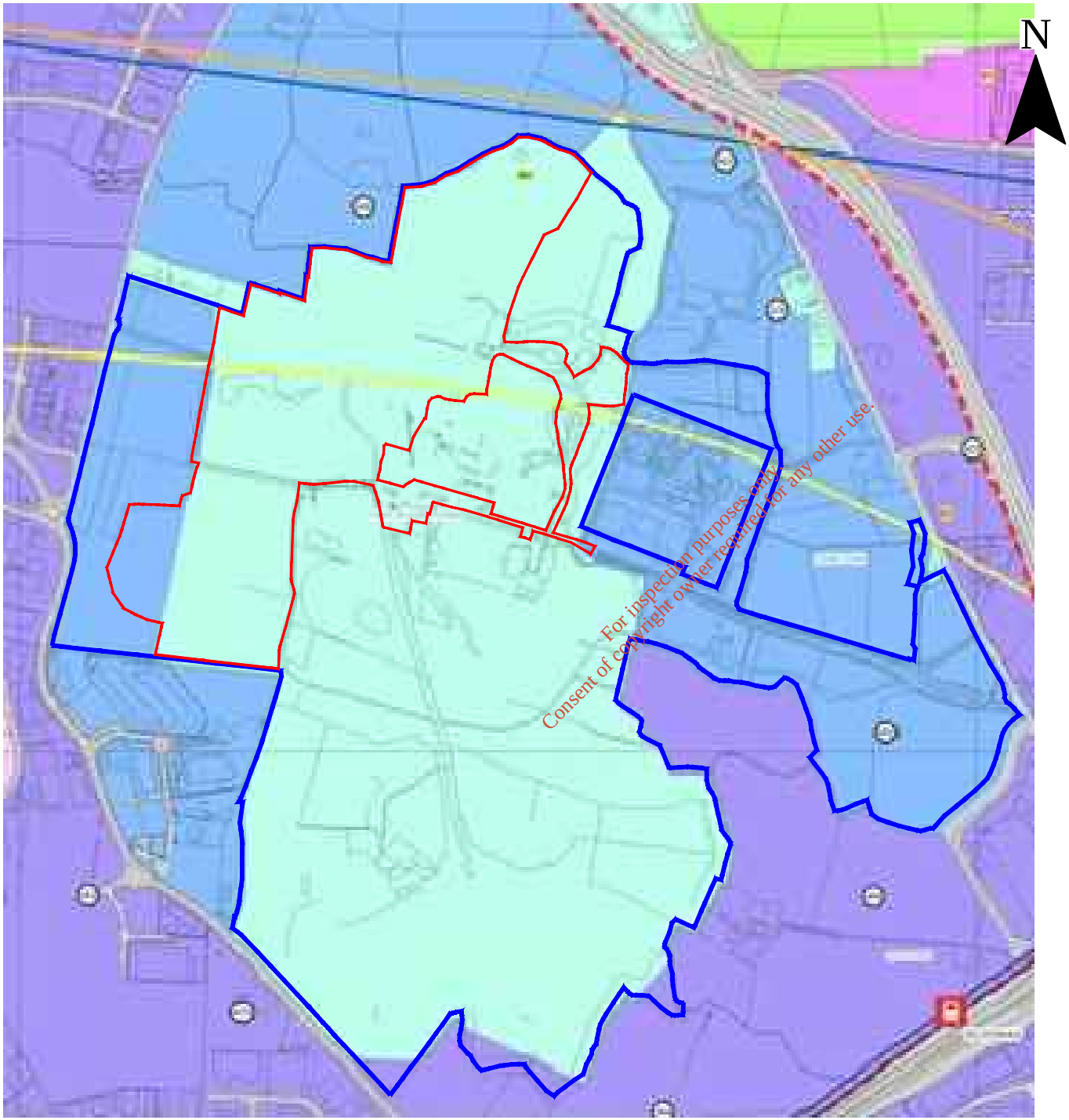
LAND OWNERSHIP DETAILS

FIGURE 1-4

Scale 1:10,000 @ A3
Date AUGUST 2016

0180.00152.0.FIG_1-4.Land Ownership Details.dwg



NOTES

1. EXTRACT TAKEN FROM FINGAL DEVELOPMENT PLAN **2011 - 2017**

LEGEND

ROADSTONE LIMITED LAND INTEREST **(c. 200.3 ha)**

APPLICATION AREA **(c. 48.65 ha)**

Objective CI	Provide for and protect civic, religious, community, education, health care and social infrastructure
Objective GB	Protect and provide for a Greenbelt
Objective GE	Provide opportunities for general enterprise and employment
Objective HA	Protect and enhance high amenity areas
Objective HI	Provide for heavy industry
Objective HT	Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment
Objective LC	Protect, provide for and/or improve local centre facilities
Objective OS	Preserve and provide for open space and recreational amenities
Objective RA	Provide for new residential communities in accordance with approved local area plans and subject to the provision of the necessary social and physical infrastructure
Objective RB	Provide for and facilitate rural-related business which has a demonstrated need for a rural location
Objective RS	Provide for residential development and protect and improve residential amenity
Objective RU	Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage
Objective RV	Protect and promote the character of the Rural Village and promote a vibrant community in accordance with an approved local area plan, and the availability of physical and community infrastructure
Objective WD	Provide for distribution, warehouse, storage and logistics facilities which require good access to a major road network within a good quality environment

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EXTRACT FROM LAND ZONING MAP

FIGURE 1-5

Scale: 1:12,500 @ A4

Date: AUGUST 2016

0180.00152.0.FIG_1-5.Extract from Land Zoning Map.dwg