

SECTION A – NON-TECHNICAL SUMMARY

Sub-Section	Title	Location of Information
A.1	Non-Technical Summary	WLA p.12 and Attachment A.1

Figure No.	Title	Scale	Size
A.1	Site Location	1:50,000	A3
A.2	Site Location Map	1:2,500	A3
A.3	Proposed Facility Infrastructure during Capping and Land Reclamation Operations (Schematic)	1:2,500	A3

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ATTACHMENT A.1
NON-TECHNICAL SUMMARY

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A.1 NON TECHNICAL SUMMARY

A Waste Licence Application (WLA) that has been prepared to comply with the Waste Management (Licensing) Regulations 2004 (SI No. 395 of 2004). As required by Article 12 (1) (u) of the Waste Management (Licensing) Regulations, No. 395 of 2004, a Non-Technical Summary is provided below, which contains information on the matters specified in Paragraphs (a) to (t) of Sub-Article 12(1).

A.1.a Name and Address of Applicant

This section relates to Article 12(1)(a)

The applicant is:

Thornbush Holdings Ltd.
Shinagh House
Bandon
Co. Cork.

+353 (0)23 54143

A.1.b Name of Planning Authority

This section relates to Article 12(1)(b):

Cork County Council,
Planning Department,
County Hall,
Cork.

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A.1.c Name of Sanitary Authority

This section relates to Article 12(1)(c)

Cork County Council is the Sanitary Authority

A.1.d Location and Address of the Facility

This section relates to Article 12(1)(c)

The address of the facility is: Wallingstown and Inchera, Little Island Co. Cork and a national grid reference for it is 174169mE and 71630mN

A.1.e Nature of the Facility

This section relates to Article 12(1)(e)

This Waste Licence Application is for a proposed Construction, Demolition & Excavation Waste Recovery Facility (C,D&E Facility) and the associated management and restoration of waste lagoons, ponds and other lands covered by IPPC Licence Register No. P0389-01. The total area of this Waste Licence Application is ca. 29 ha. Figure A.2

The proposed CD&E Waste Recovery Facility will be located on a ca. 2.2 ha area in the north-western corner of a ca. 29 ha Integrated Pollution Control (IPPC) licensed Site that includes, waste lagoons, unfilled ponds and vacant lands. The objective of the proposed C,D&E Waste Recovery Facility is to accept and produce suitable materials for capping and restoration of lagoons, ponds and other lands currently within the IPPC Licensed Site. The proposed C,D&E facility will ensure compliance with existing Planning and Licensing consents for the former Mitsui Denman electrolytic plant at Wallingstown, Little Island. The IPPC Licence will be surrendered upon granting of the Waste Licence.

The quantity and nature of the wastes involved in this application are a maximum annual input of 300,000 tonnes per annum of inert (non hazardous) construction, demolition and excavation wastes for a period of up to 10 years.

A.1.f Classes of Activity

This section relates to Article 12(1)(f)

In accordance with the Third and Fourth Schedules of the Waste Management Acts, 1996 to 2003 (WMA, 1996), the following classes of activity will be carried out on the site:

Fourth Schedule (Waste Recovery Activities)

Class 4 Recycling or reclamation of other inorganic materials. (Principal Activity)

This is the Principal Activity and comprises the processing, including handling, screening and crushing, of imported construction, demolition and excavation wastes, and the subsequent production of inert secondary source granular materials on the 2.2 ha site within the current IPPC site boundary. In addition some materials may be imported directly to the Facility that may be considered wastes and subsequently used directly in the capping layer to be placed on existing waste surfaces and/or used in restoration/reclamation works to be carried out for example in the unfilled cells 13 to 15. These two activities are construed to be Class 4 waste recycling or reclamation activities.

Class 2 Recycling or reclamation of organic substance which are not used as solvents (including composting and other biological processes)

The construction and demolition wastes that are imported to the Facility may contain incidental wood, and plastic. These materials will be removed from the imported wastes and stored on the site for further processing and/or recovery/recycling off site.

Class 3 Recycling or reclamation of metals and metal compounds.

The construction and demolition wastes that are imported to the Facility will include reinforced concrete and may contain incidental metals. These materials will be removed from the imported wastes and stored on the site for further processing and/or recovery/recycling off site

Class 10 The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system .

The engineered capping materials (if considered to be waste and not a product by the Agency) and any topsoil (if considered to be waste and not a product by the Agency) placed on the surface of the lagoons are for ecological benefit.

Class 11 Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.

If the recovered materials are not considered to be engineered products by the Agency then the use of the recovered wastes on the surface of the lagoons and to restore/reclaim other areas of the site would fall under this class of activity in the Fourth Schedule.

Class 13 Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

Storage of inert materials in stockpiles prior to processing and reuse and storage of metals, wood, metals, plastic and other materials not meeting the specifications of the engineered materials required at the site is construed to fall under this class.

A.1.g Quantity and Nature of Wastes to be treated, recovered or disposed

This section relates to Article 12(1)(g)

It is estimated that approximately 1.2 to 1.4 million tonnes of materials will be accepted, treated (processed by screening and crushing operations) and recovered at the Facility at a maximum rate of 300,000 tonnes per annum over a period of up to 10 years depending on market conditions. The target wastes for the Facility will be non hazardous construction and demolition wastes and like materials. Source separated inert C&D wastes and excavated soils will be the target wastes for the Facility to minimise the amount of processing and the quantity of materials that are unsuitable for the capping waste lagoons and restoration of the site and the amount of materials to be removed from the Facility.

A list of wastes to be accepted with reference to the EWC code is as follows:

Table A.1.1: Wastes to be Accepted at the Facility

EWC code	Description	Restrictions	Comment
04 01 08	Waste gravel and crushed rocks (uncontaminated)		Testing required
17 01 01	Concrete	Selected C & D waste only (*)	No Testing Required according to Council decision
17 01 02	Bricks	Selected C & D waste only (*)	No Testing Required according to Council decision
17 01 03	Tiles and ceramics	Selected C & D waste only (*)	No Testing Required according to Council decision
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Selected C & D waste only (*)	No Testing Required according to Council decision
17 02 02	Glass	Not applicable	No Testing Required according to Council decision
17 05 04	Soil and stones	Excluding topsoil peat excluding soil and stones from contaminated sites	No Testing Required according to Council decision
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03		Testing Required
20 02 02	Soil and stones	Only from garden and parks waste: Excluding topsoil, peat	No Testing Required according to Council decision

A.1.h Raw and Ancillary Materials, Substances, Preparations, Fuels and Energy

This section relates to Article 12(1)(h)

Materials, substances, fuels and energy will be used during the construction and day to day operation of the Facility. The Facility will use diesel fuel, lubrication oil, electricity and water during construction and operation. Vermin control will also be used, the usage will depend on requirements. The quantities of vermin control that would be required are 20 x Bromatrol rat blocks and 40 grams of Difernard. It is proposed to visit the Facility on eight occasions annually to check on abatement.

Diesel Fuel: All plant involved in the processing and transport of waste and materials at the Facility will consume diesel fuel. The annual usage of diesel is estimated to be 530,000 litres. Diesel will be stored at the Facility in two 5,000 litre tanks.

Engine and Lunricant Oil: All plant and machinery will require regular maintenance and servicing to keep in good working order. The annual use of Engine and Lubrication oil is estimated to be approximately 2,500 to 3,000 litres.

Electricity: All office buildings at the facility, weighbridge etc will require electricity for general day to day operation. The consumption of electricity is estimated to be 78.55 kWatts

Water: There will be a number of demands for water at the Facility. These are as follows:

1. Drinking water and water for canteen, toilets etc. – ca. 90 litres/employee/day
2. Crusher/Screeners dust suppression – ca. 500 litres/employee/day
3. Misting System – weather dependent
4. Wheel wash – periodic top up and hardstands – weather dependent
5. Damping down roads and hardstands – weather dependent; and
6. Power sprinklers for dust suppression – weather dependent.

Raw Materials: Waste accepted will consist of C,D&E waste namely concrete, bricks, tiles and ceramics, soil and stone. A maximum of 300,000 tonnes of C,D&E materials will be accepted per annum over a 10 year period with an estimated 1,200,000 to 1,400,000 tonnes needed to cap and restore the Site.

A.1.i Plant; Methods; Process; Abatement, Recovery and Treatment Systems; and Operating Procedures

This section relates to Article 12(1)(i)

Plant

The plant at the Facility will consist of the following;

Crusher x1
Screener x2
Excavators x2
Wheel Loaders x2
Tractor with bowser x1

Methods, Processes & Recovery

Waste accepted at the Facility will be directed to the processing area and tipped at a designated location assigned for different types and grades of waste. The waste to be processed will mainly consist of Gravel, rock, tiles and ceramics, concrete, bricks, soil and mixtures of the aforementioned.

C,D&E waste with a high soil content will pass through a primary sorting unit for separating material into fractions of <20mm and >20mm. The fines/soil fraction will be stored for capping and restoration. Some of the oversize material will require breaking into smaller pieces to pass through the crusher. This will be carried out using a hydraulic hammer. From here the material size will be further reduced by placing in a crusher. This will be carried out using a wheel loader.

After crushing, the crushed material will pass through an over-band magnetic separator where the majority of ferrous materials will be removed to skips and brought to an appropriate Facility. After crushing further screening will take place to separate out different grades of material required for the capping and restoration process.

Materials of different granular size will be stockpiled separately in order to ensure that the correct blend of inert materials is used for restoration. The final product will be transported to the area for capping.

Unwanted waste found after tipping at the processing area will be segregated and stored in hooded skips. This waste may include wood, metals, plastic etc.. These skips will be collected on a regular basis and sent to an appropriate Facility for recycling/recovery or disposal.

Abatement and Treatment Systems

A trade effluent originating from the bunded waste quarantine area, bunded fuel storage areas and concrete storage hardstand will be discharged to the IDA sewer. This will be collected in gullies discharged to the sewer. An oil interceptor will be installed under the bunded fuel area to remove hydrocarbons in the discharge.

A foul water holding tank will be used to collect foul water from the canteen and office buildings. This will be emptied when required by a licensed contractor.

Surface water run-off from the macadam area will be collected in gullies. This will be directed to an oil interceptor and silt box before discharge to the public stormwater sewer into Lough Mahon. Surface water run-off from the hardcore turning yard will be directed to French drains running along the southern boundary of the C,D&E Facility. This will run under gravity to a silt box and to a soakaway. Surface water from the capped and restored surface will be directed to french drains running along the southern boundary of the Site. This water will flow into a Surface Water Management Pond to allow solids to settle out before being discharged to Lough Mahon or the IDA sewer depending on quality.

Operating Procedures will include

Waste Acceptance, handling and processing, waste acceptance, segregation and removal of unsuitable wastes, procedure for testing and storage of quarantine material and removal of unsuitable wastes at the Facility. These are given in detail in Appendix 2 Vol. 2 of the EIS.

A.1.j Information relating to Section 40(4) of the Waste Management Acts 1996 to 2003

This section relates to Article 12(1)(j)

The information contained within the Waste Licence Application form and its attachments including the accompanying Environmental Impact Statement demonstrates that the proposed facility meets the above requirements of the Act.

A.1.k Source, Location, Nature, Composition, Quantity, Level and Rate of Emissions from the waste management activities and period or periods during which emission will be made

This section relates to Article 12(1)(k)

Air

No scheduled emission point of dust will occur to the atmosphere at the Facility. During particularly dry or windy conditions the potential for dust blow will be greater (fugitive emissions). Dust will be generated from the processing activities carried out at the Facility with the crushing of materials being the main source.

Noise

Noise will be emitted from plant and equipment operating at the facility. The majority of plant will be situated at the processing area of the Facility with some plant working from time to time on remediation works at the Site.

Surface Water

Surface water run-off from the capped and restored areas of the Site will be collected in french drains running along the southern boundary of the Site. This water will drain into a Surface Water Management Pond (SWMP) before being discharged to Lough Mahon. This emission will occur during periods of heavy rainfall. It is not envisaged that the discharged water will contain elevated levels of contaminants.

Groundwater

Surface water run-off from the hardcore turning yard at the Facility will be directed to french drains running along the southern boundary. This water will be discharged to a Soakaway located beside the weighbridge station on-site. The volume of water discharged will also be weather dependent. It is not envisaged that the discharged water will contain elevated levels of contaminants.

Sewers

Emissions to sewer will comprise of surface water run-off and a trade effluent from the storage areas. Surface water run-off from the macadam area will be discharged to the public storm water sewer which eventually discharges to Lough Mahon.

A Trade Effluent will be generated from run-off from storage areas to include the bunded fuel area, waste quarantine area and waste skip storage area. This will occur during periods of rainfall or if a spillage occurs during refuelling or removing of waste from storage areas.

It is also proposed to discharge surface water currently in ponds and lagoons on-site into the IPPC emission discharge point SE1 (IDA Sewer) as permitted by the IPPC Licence No. P0389-01. Surface water run-off from the capped and restored area will be directed to a Surface Water Management Pond (SWMP) to allow solids to settle out. This will be discharged to Lough Mahon or the IDA sewer depending on quality

A.1.1 Assessment of Effects of any existing and proposed emissions on the environment including any environmental medium other than that into which the emissions are to be made and proposed measures to prevent or eliminated or where that is not practicable to limit or abate such emissions

This section relates to Article 12(1)(I)

Air

Baseline monitoring carried on separate occasions show levels of dust deposition rates between 33 and 121 $\mu\text{g}/\text{m}^3/\text{Day}$ around the facility. The facility will be operated to Best Practice and a cleaning and maintenance schedule will form part of the site operations to reduce dust emissions. These emissions will be controlled by water bowsers, spray mitigation systems and ceasing earthworks during particularly windy conditions.

Noise

Existing noise levels vary at the Site depending on the proximity of the monitoring location to the main Little Island Road and time of day. All noise levels at various locations are tabulated in Section 10.3, Vo1. 1 of the EIS. Calculation on predicted noise levels at the nearest Noise Sensitive Receptors show that noise levels will be under the guideline values of 55dB(A). Work will only be carried out at the Facility during the specified hours. All plant and equipment will be kept in good working order to avoid elevated noise levels.

Surface Water

Surface water run-off from the capped and restored areas of the Site will be collected in french drains and drain into a Surface Water Management Pond. This run-off will be retained in a settlement pond for period of time to allow solids to settle out before discharge to Lough Mahon. It is not envisaged that the discharged water will contain elevated levels of contaminants which would have a harmful effect on receiving waters.

Groundwater

Surface water run-off from the hardcore turning yard will pass through a silt box before discharging to a soakaway. This will remove any particles which the run-off may have accumulated up while flowing to french drains. It is not envisaged that the discharged water will contain elevated levels of contaminants.

Sewers

Surface water run-off from the macadam area will be directed to gullies on-site which will pipe water to a silt box and oil interceptor located on-site. This will remove any suspended solids or hydrocarbons that may be present before discharge to the public storm water sewer which eventually discharges to Lough Mahon. A shut-off valve will be placed on the line to stop discharging if required.

A Trade Effluent will be generated from run-off from storage areas to include the bunded fuel area, waste quarantine area and waste skip storage area. This will occur during periods of rainfall or if a spillage occurs during refuelling or removing of waste from storage areas. An oil interceptor will be placed at the bunded fuel area to remove any hydrocarbons that may be present in the discharge. A shut off valves installed will be used in the case of a spillage. This will allow for clean up any spillages that may occur to avoid contaminating discharge where possible.

A.1.m Monitoring and Sampling Points and Monitoring Plan for Emissions and the Environment

This section relates to Article 12(1)(m)

Potential emissions from the Site will include dust, noise, surface and groundwater emissions. In all there are three emission points to sewers, one emission point each for both surface and

groundwater and an area concentrated around the processing area which will be a source of noise and dust emissions. Emissions to sewers, surface and groundwater will be monitored at a point just before entry to the receiving body while dust and noise will be monitored around the boundary of the site to assess levels of emissions leaving the Facility. Locations have been specified for the monitoring of these. Qualified persons will carry out all environmental monitoring and any laboratory analysis that is required will be carried out at an approved laboratory.

A.1.n Arrangements for the Prevention, Minimisation and Recovery of Waste arising from the waste management activities concerned

This section relates to Article 12(1)(n)

Every effort will be made to recover as much material as possible, however there may be occasions when off-site disposal will be required. Any waste containing a large proportion of non-inert waste will be turned away from the Facility. This will be done as only inert waste will be processed at the Facility and also to reduce the amount of waste requiring segregation and disposal. Waste accepted may contain residual amounts of unwanted wastes such as wood, metal and plastic. These will be segregated out and placed in skips for storage. It is the intention of Thornbush Holdings to send these to an off-site Facility where they can be recovered or recycled for further use where possible. A small quantity of canteen and office waste will be created which will require off-site disposal. This will be placed in wheeled bins. Source segregation of this waste will be carried out to recover as many recyclable materials as possible.

A.1.o Arrangements for off site Treatment or Disposal of solid or liquid wastes

This section relates to Article 12(1)(o)

Thornbush holdings will appoint all relevant contractors on granting of Planning Permission and a Waste Licence. This will include appropriately Licenced contractors for the collection of segregated material for off-site recovery or disposal, waste from canteen and office buildings and for emptying the foul water holding tank. All contactors appointed will be approved by Cork County Council. A previous agreement under IPPC Licence Register No. P0389-01 allows for discharge of 1000m³/day of a trade effluent into the IDA sewer.

A.1.p Existing or Proposed Measures, including Emergency procedures to prevent unauthorised or unexpected emissions and minimise the impact on the environment of any such emissions

This section relates to Article 12(1)(p)

Unauthorised/unexpected emissions may involve: dust discharge into air, polluted run-off into surface and groundwater and emissions from plant. On-site personnel will deal with emergencies that may arise during normal operating hours. A phone number will be established if emergencies arise outside normal operating hours. Measures that will be

adopted at the Facility to prevent unexpected emissions will include bunding of waste and fuel storage areas to prevent spillage of liquid into soils and subsequently into groundwater. Spillage kits will be placed around the facility to deal with accidental spillages that may arise from operating plant during the processing of material at the Facility. All staff will be trained on how to use kits. Plant will be kept in good working order and serviced regularly to prevent fugitive and accidental emissions. If an emission or spillage occurs at the Facility the relevant authorities will be notified if needed depending on the seriousness of the emission.

A.1.q Proposed measures for the closure, restoration remediation or aftercare of the facility after the cessation of the waste management activities

This section relates to Article 12(1)(q)

The proposed Facility will be a temporary development in operation for the lifetime of the restoration programme (estimated to be a ten year period). Decommissioning will involve the removal of all stockpiles, wastes skips, materials, buildings and equipment which could result in environmental pollution if left at the Facility. All materials will be returned to the supplier or disposed/recovered by a licensed waste contractor. This would include any fuel present in storage tanks. All waste will be recovered/disposed of off-site by a licensed waste contractor. Any plant or equipment present at the facility at the point of closure will be sold for operational use or as scrap at an approved waste disposal/recovery Facility. Cleaning of the majority of plant and equipment will be carried out at the Facility as it will not have processed hazardous material during the operation lifetime.

Environmental monitoring will be carried out over the course of the lifetime of the project. This will identify if any investigations or post closure monitoring is required to ensure that the facility poses no continuation risk to the environment. The Application Site will be re-graded and capped in accordance with the closure and restoration plan that will be agreed with the EPA under a condition of the waste licence.

A.1.r Financial Provisions

This section relates to Article 12(1)(r)

Relates to Landfilling of waste and is not relevant to this Application

A.1.s Applicability of Seveso II directive to the proposed waste management activities

This section relates to Article 12(1)(s)

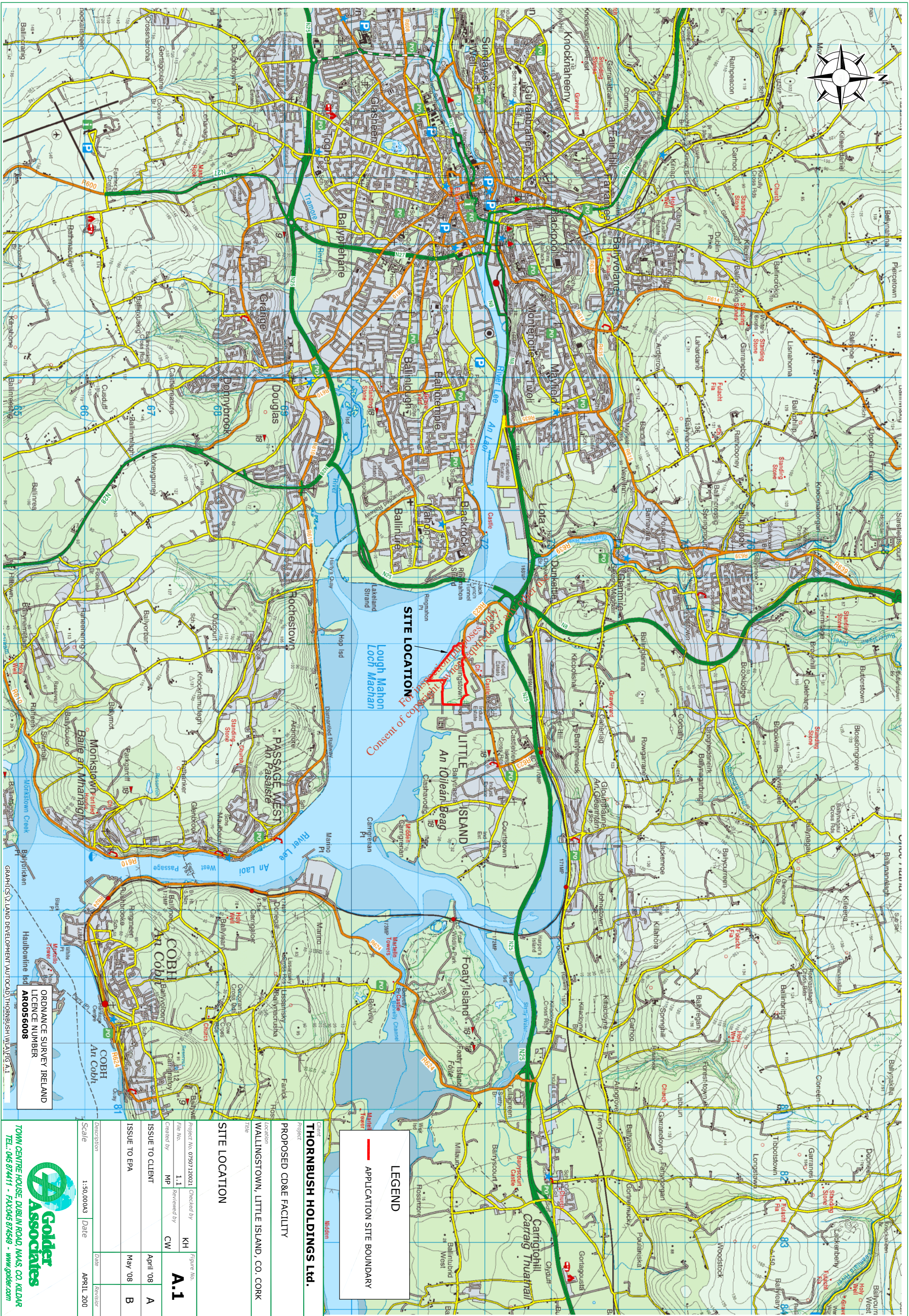
The activities proposed are not for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous substances Regulations , 2000 (SI No. 476 of 2000). The Seveso II directive does not apply to the proposed Facility.

A.1.t Control of Discharge of List I and List II substances to groundwater

This section relates to Article 12(1)(t)

It is not anticipated that any List I and List II substances will be discharged to groundwater from the C,D&E Waste Recovery Facility. Groundwater quality in and around the Application Site has been compromised from the historical land uses in the area. This has meant that acceptable levels of List II substances in groundwater have been exceeded. It is noted that a decline in elevated levels has occurred since the Closure of the Mitsui Denman Plant. The capping and restoration of the Site will also go some way to reducing the levels of pollutants in groundwater.

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SITE LOCATION

FOR THE PROPOSED CD&E FACILITY

LEGEND

— APPLICATION SITE BOUNDARY

Client
THORNBUSH HOLDINGS LTD.

Project
PROPOSED CD&E FACILITY

Location
WALLINGSTOWN, LITTLE ISLAND, CO. CORK

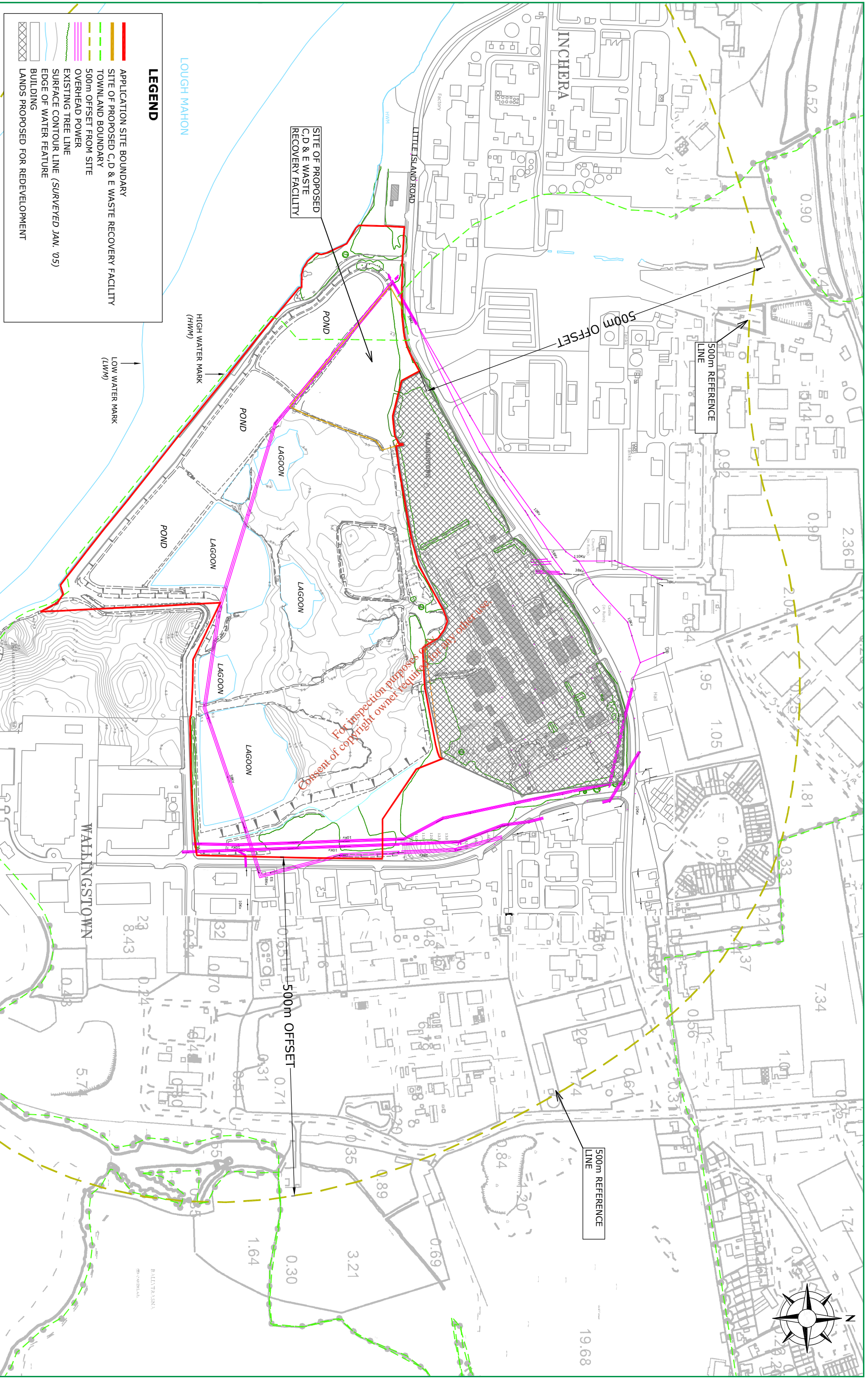
Title
SITE LOCATION

Project No. 0750720021	Checked by KH	Figure No. A.1
File No. 1.1	Reviewed by CW	
Created by MP		
ISSUE TO CLIENT	April '08	A
ISSUE TO EPA	May '08	B
Description	Date	Revisor
Scale 1:50,000A3	Date	APRIL 200



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ORDNANCE SURVEY IRELAND
LICENCE NUMBER
AR0056008



LEGEND

- APPLICATION SITE BOUNDARY
- SITE OF PROPOSED C, D & E WASTE RECOVERY FACILITY
- TOWNLAND BOUNDARY
- - - 500m OFFSET FROM SITE
- OVERHEAD POWER
- EXISTING TREE LINE
- SURFACE CONTOUR LINE (SURVEYED JAN. '05)
- EDGE OF WATER FEATURE
- BUILDING
- LANDS PROPOSED FOR REDEVELOPMENT

<p>Client: THORNBUSH HOLDINGS Ltd.</p>		<p>Project number: 07507120021</p>		<p>Created by: ODB</p>		<p>Issue to: ISSUE TO CLIENT</p>		<p>Date: May '08</p>		<p>Revision: A</p>		<p>Title: SITE LOCATION MAP</p>		<p>FIGURE No.: A.2</p>	
<p>Location: WALLINGSTOWN, LITTLE ISLAND, CO. CORK</p>		<p>File Location: THORNBUSH\WLA.A.2</p>		<p>Checked by: DK</p>		<p>Issue to: ISSUE TO EPA</p>		<p>Date: May '08</p>		<p>Revision: B</p>		<p>Scale: 1:2500 A1 1:5000 A3</p>			
<p>Project: WASTE LICENCE APPLICATION</p>		<p>ORDNANCE SURVEY IRELAND LICENCE NUMBER: AR0056008</p>		<p>Reviewed by: GP</p>											

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