Licence Alteration Request

Alteration Details	
Licence	**P0090-01 ELANCO Animal Health Ireland Limited.**
Licensee	ELANCO Animal Health Ireland Limited.
Title of Alteration	**Fort Gary Technical Amendment**

Screening Report

No.	Question	Answer
1	Does the proposed alteration require a new class of activity or process?	No
2	Does the proposed alteration cause a new / additional main emission point?	No
3	Does the proposed alteration increase or change specified emissions **significantly**?	No
4	Does the proposed alteration increase **significantly** the overall total emission from the installation/facility?	No
5	Does the proposed alteration involve development or proposed development that has already been granted planning permission or requires a grant of planning permission and was/is subject to EIA by the Planning Authority or An Bord Pleanála?	No
6	Did the proposed alteration require the preparation of a Natura Impact Statement (NIS) for consideration by any Planning or Public Authority?	No
7	Does the proposed alteration indicate that the EPA should conduct an Appropriate Assessment (on foot of a screening for Appropriate Assessment)?	No
8	Does the proposed change conflict with BAT as set out in the relevant BAT Conclusions? See here	No
9	Does the proposed alteration adversely affect the energy efficiency of the installation/facility?	No
10	Does the proposed alteration adversely affect the environmental risk of the installation/facility **significantly**?	No

Consent of copyright owner required for any other use.
For inspection purposes only.

EPA Export 21-01-2016:00:59:47

11	Does the proposed alteration cause an increase above the capacity limitations specified in the licence?	No
12	Does the proposed alteration require an extension of operating hours (where controlled by the licence) for an installation/facility where the public is likely to have an interest in such an extension?	No
13	Does the proposed alteration involve the incineration or co-incineration of waste materials displaying hazardous properties that were not previously authorised (as per the WID/IED)?	No
14	Does the proposed alteration introduce materials of techniques which adversely alter the probability, magnitude and duration or complexity of the site transboundary impact?	No
15	Does the proposed alteration constitute a substantial change?	No
16	Does the proposed alteration require a change to a condition or schedule of the Licence?	No

Consent of copyright owner required for any other use.
For inspection purposes only.

Recommendation

Based on your responses to the forgoing questions, the recommended option is for you to submit a Request for Approval of your proposed change, under Condition 1 of your licence, to the Office of Environmental Enforcement. This 'Request for Approval' should be submitted to your OEE regional team via the 'Request Alteration' which can be accessed via your EDEN log-in in the LMA application.

By selecting the 'Proceed' button within the 'Request Alteration' option, you will find your proposed change listed in the 'Saved Application' list. By choosing the 'Request for Approval' option in this application, you will be directed to complete a 'Licensee Return' to request approval from OEE.

Note: The responses you have provided in this Screening Report will form part of the information record if you decide to progress with this alteration request.

Recommendation Date: 30/06/2015

EPA Export 21-01-2016:00:59:47

Licence Alteration Request

Clerical or Technical Amendment Application Details

Proposed Alteration Description

In accordance with Section 96 of the EPA Act 1992 (and subsequent amendments) Elanco wishes to apply to the EPA for a Technical Amendment to Licence Reg. No. P0090-02. This Technical Amendment Supporting Information Report outlines the intended operations at Fort Gary 1 & 3. As part of the Report an updated site plan and site ownership plan for operations at Sligo has been prepared, in addition to an emission plan and utilities plan for Fort Gary 1 & 3.
Elanco have leased and retrofitted Fort Gary 1 & 3, a warehousing facility and office building, located adjacent to Elanco's Main Plan on the Finisklin Road, Sligo. Elanco intend to use Fort Gary 1 for temporary product storage, labelling and packaging of sealed contained product. In addition, there will be office space for administration and support services located within Fort Gary 3

Priority	1. Routine
Category of Amendment	(c) Otherwise facilitating the operation of the licence (or certificate) and the making of the amendment does not result in the relevant requirements of section 83(5) of the EPA Act as amended/ section 42B(1) of the Waste Management Act as amended/environmental requirements ceasing to be satisfied

Licence Condition Changes

Condition / Schedule Reference	Current Condition / Schedule Wording	Suggested New Wording
Condition1 - Scope	Existing condition 1.1, 6, 6.2 & 11 of IPPC liccence No. P0090-02	Condition 1:IPPC activities shall be as set out in the licence application and in the technical amendment supporting report, June 2015. For the purposes of this amendment the boundary change is highlighted in red on technical amendemnt drawing 1, site plan. Condition 6: As per agreement with Agency the test programme will be modified to Incorporate Fort Gary Condition 6.2: As per agrementwith Agency sampling, analysis, measurements, examinations, maintenance & calibration programme will be modified to Incorporate Fort Gary operations Condition 11: As per agreement with Agency reporting will be modified to Incorporate Fort Gary operations

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:47

Licence Alteration Request

Questions		
Q1	Is planning permission required to support the proposed alteration?	Yes
If 'Yes', please provide written confirmation from the Planning Authority that an EIA was not required in this instance OR an EIA Screening Report that indicates that the development does not comprise or is not for the purposes of the activity		Appendix F 6227 Notification to GRANT PERMISSION planning 09 02 14.pdf
Q2	Does the application involve an installation boundary change?	Yes
If 'Yes', for a proposed site boundary reduction please attach an OEE Exit Audit Approval for the reduced boundary area. In the case of an installation boundary increase for an Industrial Emission Licenced activity, you are required to provide the reason that you consider a Baseline Report is not required. In the case of all boundary changes also provide an updated site boundary location map in accordance with Section B of the EPA Licence Application Form.		Appendix C 934245-RPT-1_Final.pdf
Q3	Does the application involve changes to emissions to sewer?	No
Q4	Attach Appropriate Assessment Screening Report here	TA Supporting Information Report for Elanco Final.doc

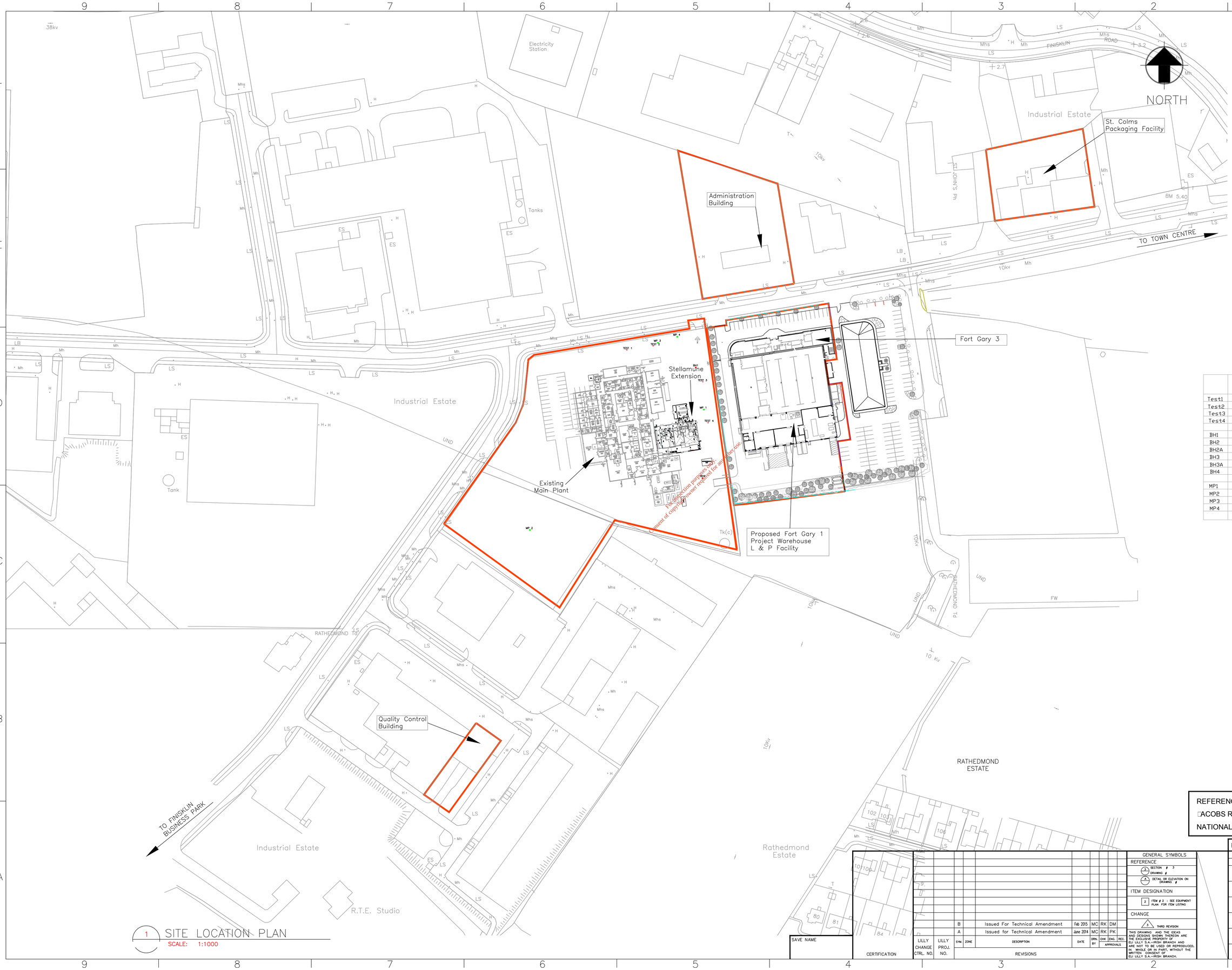
Additional Documentation
Appendix A - 1.pdf
Appendix A - 2.pdf
Appendix A - 3.pdf
Appendix A - 4.pdf
Appendix D E 6 EPA_GIS_Data _Template.pdf
Appendix E FWR Elanco Sligo.pdf
TA Supporting Information Report for Elanco Final_1.doc

For inspection purposes only.
Consent of copyright owner required for any other use.

Final Declaration	
Name	Paul Monaghan
Position	EHS Officer

Application Details			
Selected by:	Paul Monaghan	**Selected date:**	30/06/2015
Submitted by:	Paul Monaghan	**Submitted date:**	30/06/2015

EPA Export 21-01-2016:00:59:47



	EASTING	NORTHING	ELEV
Test1	167809.92	336563.52	9.79
Test2	167825.36	336565.94	10.08
Test3	167854.45	336544.86	8.66
Test4	167857.54	336520.86	8.46
BH1	167850.33	336553.29	8.71
BH2	167838.77	336520.36	8.34
BH2A	167847.86	336521.53	8.39
BH3	167849.90	336507.50	8.33
BH3A	167839.89	336506.56	8.31
BH4	167854.27	336488.34	8.34
MP1	167855.08	336528.54	8.61
MP2	167753.05	336457.89	6.79
MP3	167828.12	336567.75	10.08
MP4	167839.47	336571.25	10.10

Reproduction purposes only
Consent of copyright owner required for any other use.

1 SITE LOCATION PLAN
SCALE: 1:1000

REFERENCE SLIGO O.S. MAP N□ 1011-05
□ACOBS REPRODUCTION LICENCE N□. AR0014915
NATIONAL GRID REF: G□□□3□5

PROJECT NO. 76622702 **A1**

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Technical Amendment Drawing 1
Site Plan

SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK	ENG.	REG.
B		Issued For Technical Amendment	Feb 2015	MC	RK	DM	
A		Issued for Technical Amendment	June 2014	MC	RK	PK	

REVISIONS

LILLY CHANGE CTRL. NO.
LILLY PROJ. NO.
CERTIFICATION
SAVE NAME

GENERAL SYMBOLS
REFERENCE
3 SECTION # 3 DRAWING #
A DETAIL OR ELEVATION ON DRAWING #
ITEM DESIGNATION
2 ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING
CHANGE
2 THIRD REVISION

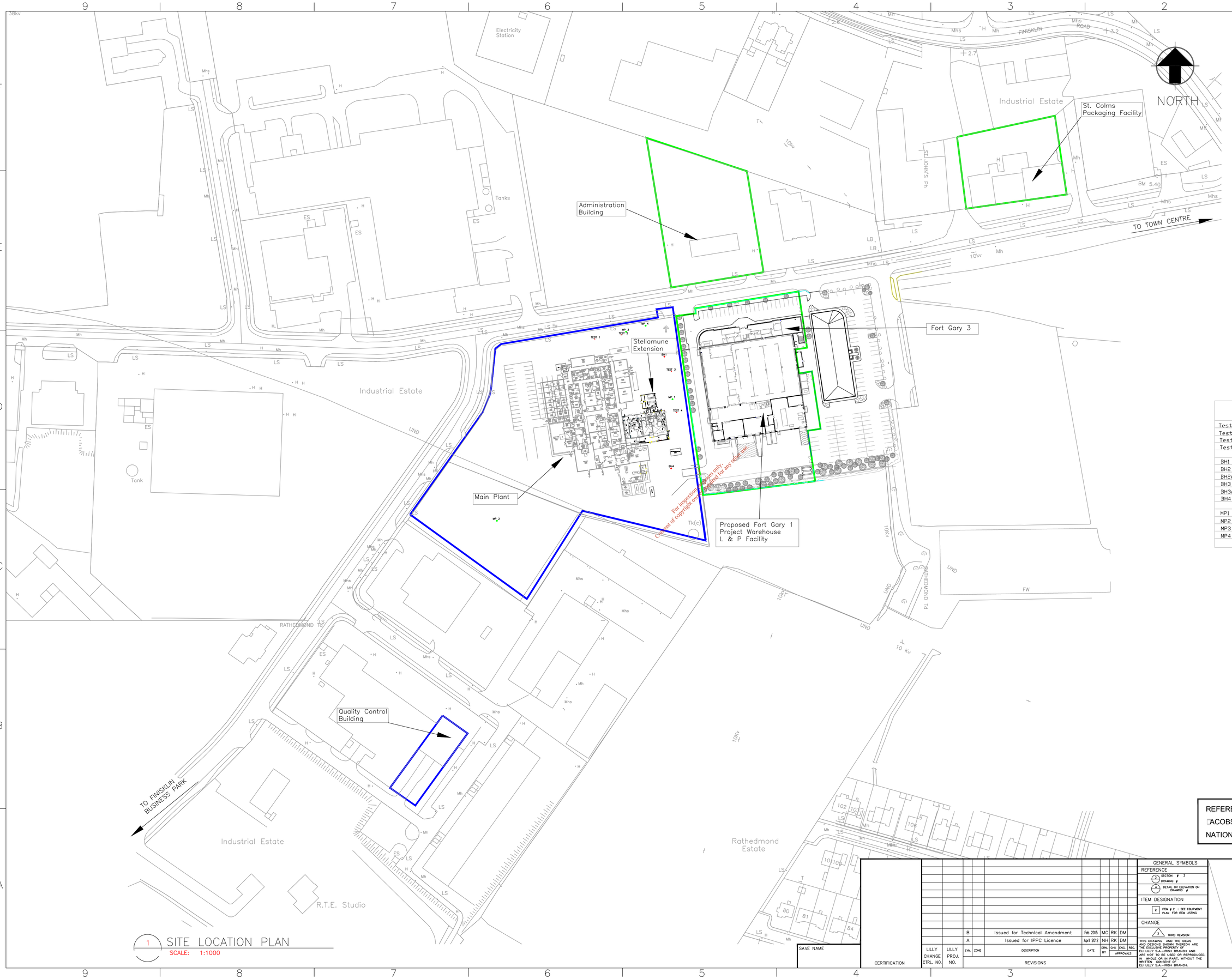
THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF ELI LILLY S.A.–IRISH BRANCH AND ARE NOT TO BE USED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF ELI LILLY S.A.–IRISH BRANCH.

APPROVALS

ENG APPROV BY DATE

ENGINEERING APPROVAL	PK	DATE	June 2014
CHECKED	RK	SCALE	1:1000 at A1
RECORDS CONTROL	N/A	DRAWN	MC
AMW DRAWING NO.		REV.	B

EPA Export 21-01-2016:00:59:47



LEGEND:

LAND LEASED BOUNDARY

OWNERSHIP BOUNDARY
ELANCO SITE BOUNDARY

	EASTING	NORTHING	ELEV
Test1	167809.92	336563.52	9.79
Test2	167825.36	336565.94	10.08
Test3	167854.45	336544.86	8.66
Test4	167857.54	336520.86	8.46
BH1	167850.33	336553.29	8.71
BH2	167838.77	336520.36	8.34
BH2A	167847.86	336521.53	8.39
BH3	167849.90	336507.50	8.33
BH3A	167839.89	336506.56	8.31
BH4	167854.27	336488.34	8.34
MP1	167855.08	336528.54	8.61
MP2	167753.05	336457.89	6.79
MP3	167828.12	336567.75	10.08
MP4	167839.47	336571.25	10.10

1 SITE LOCATION PLAN
SCALE: 1:1000

REFERENCE SLIGO O.S. MAP N□ 1011-05
□ACOBS REPRODUCTION LICENCE N□ AR0014915
NATIONAL GRID REF: G□□□3□5

SAVE NAME

CERTIFICATION

	B	Issued for Technical Amendment	Feb 2015	MC	RK	DM		
	A	Issued for IPPC Licence	April 2012	NH	RK	DM		
LILLY CHANGE CTRL. NO.	LILLY PROJ. NO.	SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK. ENG. APPROVALS	REC.

REVISIONS

GENERAL SYMBOLS
REFERENCE
SECTION # 3 DRAWING #
DETAIL OR ELEVATION ON DRAWING #
ITEM DESIGNATION
2 ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING
CHANGE
3 THIRD REVISION

THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF ELI LILLY S.A.–IRISH BRANCH AND ARE NOT TO BE USED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF ELI LILLY S.A.–IRISH BRANCH.

PROJECT NO. 76622702 **A1**

ENG APPROV BY	DATE

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Technical Amendment Drawing 2
Ownership Plan

ENGINEERING APPROVAL	DM	DATE	April 2012
CHECKED	RK	SCALE	1:1000 at A1
RECORDS CONTROL	N/A	DRAWN	NH
AWW DRAWING NO.		REV.	B

EPA Export 21-01-2016:00:59:47

NORTH

YIELD GATE

YIELD GATE

CCTV

E1

CCTV

WAREHOUSE.

EXISTING BUILDING

EXIST. ESB SUBSTATION

FORT GARY 2 OFFICE BLOCK

EX. S/W SEWER LOCAL TO NEW SUBSTATION.

NEW ESB SUBSTATION

NEW TRANSFORMER.

NEW SUBSTATION & TRANSFORMER SURFACE WATER DRAINAGE TO DISCHARGE INTO EXIST. SURFACE WATER DRAIN SEWER. ALL ø150 uPVC PIPES.

SPRINKLER MAIN.

EX. FIREMAIN.

EX. SURFACE WATER SEWER.

EX.S.4

EX. SURFACE WATER SEWER BELOW SLAB.

EX. FIREMAIN (APPROX LOCATION).

ELEC. ROOM.

E2

6 x ø160 ELEC. DUCTS

PLANT ROOM

EX. SURFACE WATER SEWER.

STELLAMUNE PRODUCTION BUILDING

ø200 WATERMAIN/FIREMAIN.

150ø FOUL SEWER 1:80

SPRINKLER MAIN.

EX. SURFACE WATER SEWER.

10 KV ESB FEED.

EX. FOUL WATER SEWER.

PIV

H

EXIST. FOUL MANHOLE.

150ø FOUL SEWER 1:80

PIV

SPRINKLER MAIN.

EX. SURFACE WATER YARD DRAINAGE & GULLYS.

NEW OIL SEPARATOR.

GAS LINE.

LPG TANK.

LPG TANK.

EARTHING RODS.

GAS CONTAINER SLAB.

SPRINKLER MAIN.

CUTTER

EXIST. SPRINKLER WATER PUMP HOUSE.

EXIST. SPRINKLER WATER STORAGE TANK.

FIRE WATER RETENTION TANK.

SEPARATOR

Tk(c)

EX. SURFACE WATER SEWER OUTFALL TO PUBLIC SEWER

For inspection purposes only.
Consent of copyright owner required for any other use.

UTILITIES LEGEND

- EXISTING SURFACE WATER
- EXISTING FOUL SEWER
- EXISTING FIREMAIN
- EXISTING PROCESS WASTE
- EXISTING ELECTRICAL SERVICES
- SURFACE WATER
- FOUL SEWER
- SPRINKLER WATER MAIN.
- WATERMAIN/FIREMAIN.
- ELECTRICAL SERVICES
- GAS LINE

NOTES:

SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK.	ENG.	REG. APPROVALS
A	ALL	Issued for Technical Amendment	17 Feb 2015	PJ	RK	RK	DM

REVISIONS

SAVE NAME 3.DWG

CERTIFICATION

LILLY CHANGE CTRL. NO.

LILLY PROJ. NO.

GENERAL SYMBOLS

REFERENCE
(1) SECTION # 3 DRAWING #
(A) DETAIL OR ELEVATION ON DRAWING #

ITEM DESIGNATION
2 ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING

CHANGE
2 THIRD REVISION

THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF ELI LILLY S.A.–IRISH BRANCH AND ARE NOT TO BE USED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF ELI LILLY S.A.–IRISH BRANCH.

ENG APPROV BY | DATE

PROJECT NO. 76 – 6227–02 **A1**

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Fort Gary Project
Technical Amendment
Drawing 3 – Utilities.

CLIENT DRAWING NO.

ENGINEERING APPROVAL | DATE

CHECKED | SCALE 1: 250

RECORDS CONTROL | DRAWN

AMW DRAWING NO. 3 | REV.

EPA Export 21-01-2016:00:59:47

PT_CD	PT_TYPE	EASTING	NORTHING	VERIFIED	EMISSION
A1-1	A	836493	567790	N	NOx, SOx, CO, Particulates
A1-2	A	836491	567789	N	NOx, SOx, CO, Particulates
A2-1	A	836543	567777	N	Isopropanol
A3-1	A	836504	567765	N	Isopropanol
A3-2	A	836543	567766	N	Isopropanol
A3-3	A	836513	567804	N	Isopropanol
A3-4	A	836513	567790	N	Isopropanol
A3-5	A	836333	567686	N	NOx, SOx, CO, Particulates
A3-6	A	836663	568001	N	NOx, SOx, CO, Particulates
A3-7	A	836629	567830	N	NOx, SOx, CO, Particulates
A3-8	A	836663	568001	N	NOx, SOx, CO, Particulates
A3-9	A	836553	567753	N	Exhaust
A3-10	A	836507	567753	N	Steam or condensate
A3-11	A	836508	567755	N	Steam or condensate
A3-12	A	836492	567783	N	Steam or condensate
A3-13	A	836493	567792	N	Steam or condensate
A3-14	A	836535	567785	N	Exhaust
A3-15	A	836540	567785	N	Exhaust
A3-16	A	836547	567785	N	Steam or condensate
A3-17	A	836560	567782	N	NOx, SOx, CO, Particulates
A3-18	A	836486	567790	N	Recirculated air
A3-19	A	836655	568016	N	Recirculated air
A3-20	A	836514	567836	N	Recirculated air
A3-21	A	836505	567853	N	Recirculated air
A3-22	A	836508	567859	N	Recirculated air
A3-23	A	836513	567867	N	Recirculated air
A3-24	A	836522	567881	N	Recirculated air
A3-25	A	836521	567888	N	NOx, SOx, CO, Particulates
A3-26	A	836533	567889	N	Recirculated air
A3-27	A	836512	567836	N	Recirculated air
SE1	SE	836499	567801	N	C.O.D, B.O.D, Total Phosphorus as P), Total Kjeldahl Nitrogen, Total Ammonia (as N), Formaldehyde, Suspended Solids.
SE2	SE	836345	567673	N	C.O.D, B.O.D, Total Phosphorus as P), Total Kjeldahl Nitrogen, Total Ammonia (as N), Suspended Solids.
N1	N	836535	567787	N	dBa
N2	N	836511	567806	N	dBa
N3	N	836560	567784	N	dBa
N4	N	836487	567792	N	dBa
N5	N	836490	567786	N	dBa
N6	N	836558	567775	N	dBa
N7	N	836322	567677	N	dBa
N8	N	836339	567684	N	dBa
N9	N	836667	568014	N	dBa
N10	N	836516	567798	N	dBa
N11	N	836519	567789	N	dBa
N12	N	836511	567799	N	dBa
N13	N	836520	567797	N	dBa
N14	N	836506	567806	N	dBa
N15	N	836506	567801	N	dBa
N16	N	836533	567792	N	dBa
N17	N	836531	567798	N	dBa
N18	N	836330	567276	N	dBa
N19	N	836495	567822	N	dBa
N20	N	836516	567836	N	dBa
N21	N	836505	567853	N	dBa
N22	N	836508	567859	N	dBa
N23	N	836513	567866	N	dBa

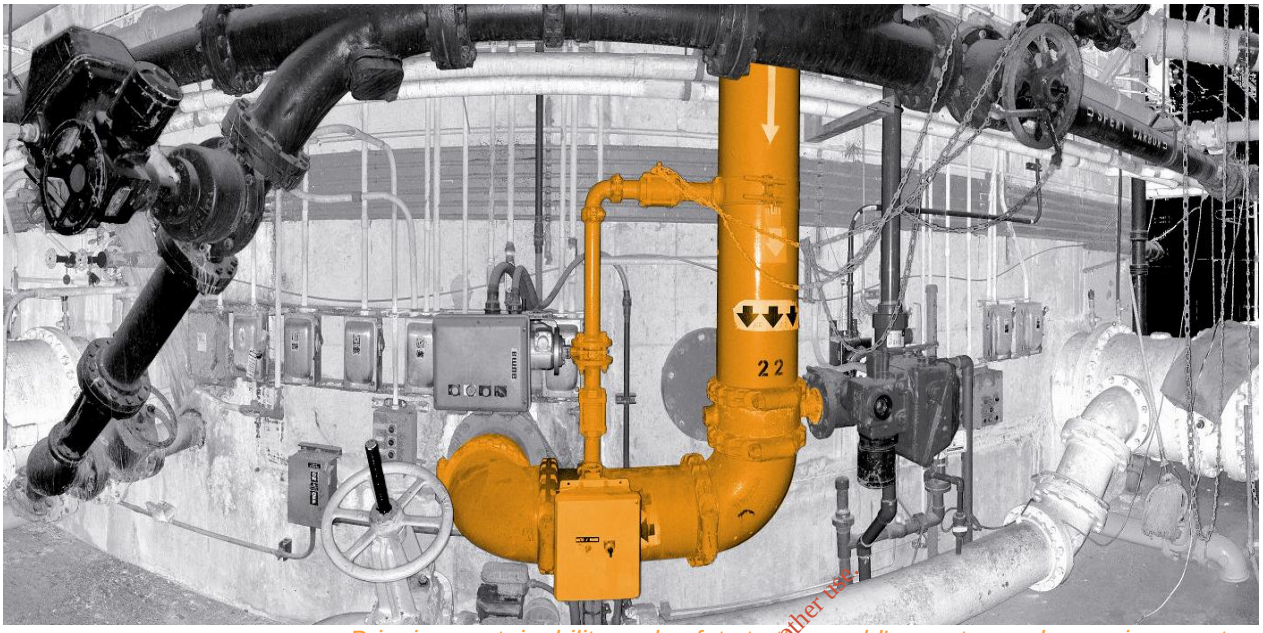
For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:47

N24	N	836516	567877	N	dBa
N25	N	836516	567880	N	dBa
N26	N	836516	567884	N	dBa
N27	N	836519	567881	N	dBa
N28	N	836522	567892	N	dBa
N29	N	836533	567889	N	dBa
N30	N	836512	567882	N	dBa

For inspection purposes only.
Consent of copyright owner required for any other use.

CRA EUROPE



Bringing sustainability and safety to the world's most complex environments

For inspection purposes only.
Consent of copyright owner required for any other use.

Phase I Environmental Site Assessment

Finisklin Industrial Estate

Prepared for: Elanco Animal Health Ireland Ltd

CRA Europe
Unit 1, Calverton Business Park
Hoyle Road
Calverton
Nottingham, NG14 6QL
www.cra.co.uk

August 2013
934245 Report Number 1

EPA Export 21-01-2016:00:59:47

Phase I Environmental Site Assessment
Fort Gary 1 and 3

Finisklin Industrial Estate

For inspection purposes only.
Consent of copyright owner required for any other use.

Submitted to: Elanco Animal Health Ireland Ltd

This report was prepared by: Jo Steele

and

reviewed by: Nicole Gilmore

EPA Export 21-01-2016:00:59:47

Executive Summary

Conestoga-Rovers & Associates (Europe) Ltd. (CRA) was commissioned by Elanco Animal Health Ireland Ltd. (Elanco) to complete a Phase I Environmental Site Assessment (ESA) of Fort Gary 1 and 3, Finisklin Road, Finisklin Industrial Estate, Sligo, Ireland (the Property or Site).

The purpose of the Phase I ESA was to identify environmental concerns at the Site. This ESA was conducted to assist Elanco in conducting all appropriate inquiries into previous ownership and use of the Site and to evaluate business environmental risk for the Site. Elanco is considering leasing the Site. The Phase I ESA Site inspection was conducted by CRA on 31 January 2013.

The following terms used in this report are defined in the Standard as follows:

- Recognized Environmental Conditions (REC) means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property
- Historic REC means a condition that in the past would have been identified as an REC, but due to changed circumstances (e.g. remediation, natural attenuation, etc.) does not at present rise to the level of a REC
- Business Environmental Risk means a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated by the Standard

Consent of copyright owner required for any other use.
For inspection purposes only.

The Site comprises vacant offices (Fort Gary 3), warehousing space (Fort Gary 1), yard area and car parking. The Site is located on Finisklin Road within the Finisklin Industrial Estate, approximately 1 km west of Sligo City Centre. The Site is adjacent to an existing Elanco operational facility. Elanco plans to lease the Site initially for storage purposes, with subsequent use of the offices in the future. The offices are not currently in a state for occupation as they require to be fitted out. It is noted that the Site boundary to the south and east is not currently defined in the proposed lease.

Findings & Opinion

Based on the Phase I ESA including the Site inspection, database search, historic records reviewed, information provided by Site personnel and interviews, no potential issues were identified regarding RECs, historic RECs, de minimis conditions, and business environmental risk as defined in ASTM Standard E1527-05 at the Site. This opinion is subject to the

EPA Export 21-01-2016:00:59:47

substation, heating oil AST, and LPG ASTs not being included within the leased Site boundary, as discussed with Elanco.

Conclusions

CRA has performed a Phase I ESA in conformance with the scope and limitations of ASTM Standard E1527-05 of the buildings and property located at Fort Gary 1 and Fort Gary 3, Finisklin Industrial Estate, Sligo, Ireland. Any exceptions to, or deletions from this practice are described in Section 1.0 of this report.

This assessment has revealed no evidence of RECs at this Site.

Non-Scope Considerations (Environmental) Compliance

The following issues were identified regarding non-scope considerations.

i) **PCBs:** Elanco informed CRA that the existing infrastructure in the warehouse will be removed to optimise the storage space and new heating and cooling systems will be installed. If this is the responsibility of Elanco instead of the Site owner, it should be noted that some equipment (e.g. switch gear, lighting ballasts, etc.) may contain PCBs and will need to be tested and disposed of appropriately.

ii) **Heating Oil AST:** The heating oil AST is assumed to be excluded from the leased Site boundary; however, underground fuel lines are considered likely to cross the Site. In this case, the lease should state that any liability with regards to contamination from leaking pipework should not be attributed to Elanco and will remain the responsibility of the Site owner.

iii) **Asbestos-containing Materials (ACM):** The warehouse was constructed prior to the ban of ACM in Ireland. An ACM survey has not been undertaken for the Property. Elanco informed CRA that an asbestos survey will be conducted in the future.

iv) **Radon Gas:** The Site is located within an area where 1 to 5 % of buildings/dwellings are predicted to have radon gas levels >200 Bq/m^3; therefore, the Site is located in a high risk radon area. The warehouse was not constructed with radon protection measures. Elanco informed CRA that a radon survey will be conducted in the future.

v) **Fire Risk:** The CBRE building survey identified that the gas-fired boiler in the offices (beneath the eastern fire escape staircase) is not located within a fire rated enclosure and is a potential fire risk.

vi) **Energy Rating Certificate:** The CBRE building survey identified that the Site owner has not supplied a Building Energy Rating Certificate. This is required by the European Communities (Energy Performance of Buildings) Regulations 2006.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:47

Data Gaps

The database search information is not considered to be comprehensive with regards to the requirements of ASTM Standard E1527-05. In addition, there is a lack of historical maps available for the Republic of Ireland.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:47

Table of Contents

Page

1.0 Introduction 1

2.0 Site Description and Location 3
2.1 Site Description 3
2.2 Site Location 4

3.0 Environmental Databases Search and Historical Records Review 5
3.1 Environmental Databases Search 5
3.1.1 Land Use 5
3.1.2 Geology and Hydrogeology 5
3.1.3 Flood Risk 5
3.1.4 Statutory Licenses 6
3.2 Historical Topographical Maps 6
3.3 Local Authority Records 6
3.4 Previous Site Investigations and ESA 7

4.0 Site Inspection 8
4.1 Utility Services 8
4.2 Underground Storage Tanks (USTs) 8
4.3 Above Ground Storage Tanks (ASTs) 8
4.4 Raw Material, Chemical Use and Storage 9
4.5 Solid, Hazardous and Special Waste 10
4.6 Wastewater 10
4.7 Stormwater 10
4.8 Air Emissions, Ozone Depleting Substances (ODS) and Fluorinated Gases 10
4.9 Asbestos-Containing Materials (ACM) 11
4.10 Polychlorinated Biphenyls (PCBs) 11
4.11 Ionizing Radiation 12
4.12 Spills and Releases 13

5.0 Summary of Identified Environmental Issues 14
5.1 Findings & Opinion 14
5.2 Conclusions 14
5.3 Non-Scope Considerations (Environmental) Compliance 14
5.4 Data Gaps 15

6.0 Environmental Professional Statement 16

7.0 References 17

Consent of copyright owner required for any other use.
For inspection purposes only.

EPA Export 21-01-2016:00:59:47

List of Figures
(Following Text)

Figure 1 Site Location Plan

Figure 2 Site Layout Plan

List of Appendices

Appendix A Database Search Information and Historical Maps

Appendix B Site Photographs

Appendix C Underground Utility Plans

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:47

1.0 Introduction

Conestoga-Rovers & Associates (Europe) Ltd. (CRA) was commissioned by Elanco Animal Health Ireland Ltd. (Elanco) to complete a Phase I Environmental Site Assessment (ESA) of Fort Gary 1 and 3, Finisklin Road, Finisklin Industrial Estate, Sligo, Ireland (the Property or Site).

The Site comprises vacant offices (Fort Gary 3), warehousing space (Fort Gary 1), yard area and car parking. The Site is located on Finisklin Road within the Finisklin Industrial Estate, approximately 1 km west of Sligo City Centre. The Site is adjacent to an existing Elanco operational facility that manufactures animal pharmaceutical products. Elanco plans to lease the Site initially for storage purposes, with subsequent use of the offices in the future. The offices are not currently in a state for occupation as they required to be fitted out.

The purpose of the Phase I ESA was to identify environmental concerns at the Site. This ESA was conducted to assist Elanco in conducting all appropriate inquiries into previous ownership and use of the Site and to evaluate business environmental risk for the Site. The Phase I Site inspection was conducted by CRA on 31 January 2013. A Site location map is presented as Figure 1.

Consent of copyright owner required for any other use. For inspection purposes only.

This Phase I ESA included an environmental database search, historical records review, a Site inspection of accessible areas, a review of relevant Site records made available to CRA, and interviews with individuals associated with the Site. This Phase I ESA was prepared by Jo Steele and Rick Shepherd of CRA.

The following tasks were conducted during the Phase I ESA:

- Site inspection and interviews with individuals familiar with operating practices at the Site. Specifically, the Site inspection focused on the following:
  - The source and type of wastewater generated at the Site, the location and configuration of wastewater conveyance mechanisms and the ultimate receptor of wastewater discharges.
  - Air emission sources.
  - Chemical use, storage, and handling practices.
  - Liquid and solid waste handling, accumulation, storage, and disposal areas.
  - Evidence of surficial contamination related to releases, leaks, or emissions of hazardous substances or petroleum products.
  - Surface drainage features, the location and configuration of storm sewers and drainage systems, and the ultimate receptor(s) of stormwater discharges.
  - Underground storage tanks (USTs) and above ground storage tanks (ASTs) at the property, both active and out of service.

EPA Export 21-01-2016:00:59:48

  - The presence and management of chlorofluorocarbons (CFCs).
  - Storage and management of any PCB wastes and/or PCB equipment (e.g., transformers, capacitors, switch gear, starters, circuit breakers and hydraulic equipment).
  - The extent and configuration of any ongoing remedial programs at the Site.
  - Miscellaneous potential environmental compliance issues or management practices such as water supply systems, asbestos, and radon gas.
  - Historical or ongoing complaints with respect to Site operations from neighbours or other third parties, or from Local Authorities.
  - Historical or ongoing complaints with respect to adverse impacts to the Site from adjacent properties.
  - Observations of conditions that represent potential environmental concerns.
  - Observation of potential asbestos-containing materials (ACM).
- Review of environmental databases and historical records.
- Review of past and current property use and adjacent property occupancy.
- Inspection of the facilities, equipment, utility services, operations, and associated Site records.
- Review of previous environmental reports prepared for the Site.

For inspection purposes only.
Consent of copyright owner required for any other use.

CRA relied on information received during the ESA as accurate unless contradicted by written documentation or field observations.

The following report summarises the information gathered by CRA during the Phase I ESA and identifies RECs, as defined in the Standard, at the Site.

In addition to identifying RECs at the Sites, the Phase I ESAs included a preliminary evaluation of the following non-scope considerations as defined in ASTM E1527-05:

- Asbestos-containing materials (ACM) (visual assessment only)
- Radon gas
- Environmental and health and safety compliance

Evaluation of the Site for radon gas, asbestos, and regulatory compliance was performed for the purpose of providing a general indication of potential issues. This assessment does not serve as a substitute for an ACM or radon gas survey, or a comprehensive environmental, health, and safety compliance audit.

The Phase I ESA has been prepared for the use of Elanco and may not be relied upon by any other party without written consent from CRA.

EPA Export 21-01-2016:00:59:48

2.0 Site Description and Location

2.1 Site Description

The Site is located at Fort Gary Business Centre and comprises offices (Fort Gary 3) connected to warehousing space (Fort Gary 1). The offices and warehousing are currently vacant. To the east of the Site is Fort Gary 2, which is an office building, partially vacant and partially leased by Abbott Ireland. No other buildings are present at Fort Gary Business Centre. The buildings form the majority of the Site area, and are surrounded by car parking and a yard, and a small amount of landscaping at the boundaries. The Site is accessible via Finisklin Road which bounds the north of the Site, and a gate in the south-eastern corner of the Site that is accessed via the Fort Gary 2 car park.

The definitive lease Site boundary has not been confirmed to CRA; LPG and heating oil storage tanks are located to the south of the yard area and Elanco does not plan to use these tanks. The tanks currently serve the adjacent Fort Gary 2 offices. Elanco would prefer to lease a section of land to the east of the buildings to install equipment associated with warehouse temperature control; this area contains an electrical substation and switch gear plant room. A Site layout plan is presented as Figure 2.

For inspection purposes only.
Consent of copyright owner required for any other use.

In the 1980s, the warehousing portion of the Site was constructed and used by Taurus, a company owned by the Site owner, Mr. Michael McGoldrick. Taurus assembled parts to manufacture non-mechanical access equipment, for example, ladders and working platforms. The warehousing was refurbished approximately four years ago. The refurbishment included replacement of roof and wall cladding and removal of some redundant fixtures and fittings. In 2006, Mr. McGoldrick constructed the three-storey offices as an extension to the warehouse.

The buildings are constructed of concrete and steel frame structure. The warehouse has insulated metal cladding panels and blockwork walls. The office adjoins the warehouse and has concrete blockwork walls and pre-cast concrete flooring. The roofing is constructed of metal panels with rainwater guttering discharging to underground drains. The warehouse flooring is paint coated concrete. The offices have not been fully fitted out internally and have not been occupied to date.

The office portion of the building is rectangular in shape and comprises of three-storeys with a reception area in the centre of the ground floor. The central section of the offices comprises a lift, stairs, two risers for pipes, cabling and ducting, and toilet facilities on each floor. Further fire escape staircases are located at each end of the office building. Above the third floor is a roof space accessed via stairs, where water storage tanks are located.

The warehousing space is split into two sections, with a wall separating the areas, with access via a large door. A mezzanine floor office is located in the north-western corner of

EPA Export 21-01-2016:00:59:48

the warehouse. A former boiler room accessed only externally is located in the north-eastern corner of the warehouse. The boiler has been removed, but the flue is still present. Above the boiler room is a disused water storage tank. The warehouse has two roller shutter doors for access to the yard, on the southern elevation. A mezzanine floor used for storage is located in the south-western corner of the warehouse. The warehousing is currently used by the Site owner for storage of miscellaneous equipment and racking relating to the previous operations, and some finished and packaged product (step ladders, etc.) remaining.

Two LPG gas storage tanks and one oil storage tank are located south of the yard area. A substation and switch gear building directly adjoins the warehouse building at the eastern wall. The lease Site boundary may not include these features; however, underground pipework relating to the tanks may cross the leased Site.

2.2 Site Location

The Site is located approximately 1 km west of Sligo city centre. The Site is within the Finisklin Industrial Estate, with Finisklin Road bordering the northern side of the Site. The Site is bordered by the following properties:

North: Finisklin Road, and Elanco's Support Service Office beyond.

East: Fort Gary 2 office building and open field beyond.

South: Open field and residential beyond.

West: Elanco's Production Facility.

Consent of copyright owner required for any other use.
For inspection purposes only.

EPA Export 21-01-2016:00:59:48

3.0 Environmental Databases Search and Historical Records Review

3.1 Environmental Databases Search

An Envirocheck® database search was reported on 8 February 2013. The database search was undertaken to establish environmentally-relevant features or activities within an area up to 1 km from the Site. The findings are included within this report. The search includes a series of databases to establish land use, geology, hydrogeology, flood risk, and statutory licences.

By analysing this information, the potential for activities or features in the surrounding area to impact the Site, and also the possibility that activities on Site might be affecting any sensitive receptors in the surrounding area was evaluated. Only data available within the database search could be reviewed. It is possible that unlicensed activities or other features may exist and these would not be identified using the database search.

The following information has been obtained from the Envirocheck® database which can be found in Appendix A.

For inspection purposes only.
Consent of copyright owner required for any other use.

3.1.1 Land Use

The following types of land use are included in the database search for Republic of Ireland sites: collieries, mines, quarries, active quarries, gravel pits, and lime kilns. The records show that there are no sites of this type within 600 m of the Site.

3.1.2 Geology and Hydrogeology

The sub soils identified at the Site and surrounding area comprise metamorphic till, esturine sediments (silt and clay), and Made Ground.

The bedrock beneath the Site has been identified as limestone and calcareous shale of Marine Shelf Facies.

The bedrock aquifer is described as a locally important aquifer, as the bedrock is moderately productive only in local zones.

3.1.3 Flood Risk

Information on three types of flood risk, fluvial, coastal and pluvial, has been provided by the Envirocheck report. According to the report, there is no risk to the Site from these types of flooding.

EPA Export 21-01-2016:00:59:48

The nearest area at risk from fluvial flooding is 310 m northwest of the Site. The nearest area at risk from coastal flooding is 135 m north east of the Site. The nearest area at risk from pluvial flooding is located 50 m south of the Site.

3.1.4 Statutory Licenses

The database search has identified three records for statutory licenses surrounding the Site as follows:

- Fort Dodge Laboratories Ireland Ltd (now Elanco) – Integrated Pollution Control;
- G. Bruss Gmbh Dichtungstechnik – Integrated Pollution Control; and
- Deepwater Quay – Waste Licence.

3.2 Historical Topographical Maps

CRA reviewed the following historical maps, to identify the historical usage of the Site and adjacent properties:

- 6 Inch Mapping Series 1837, 1837-1913, and 1837-1944;
- 1:63,360 Mapping Series 1942;
- 1:25,000 Mapping Series 1949; and
- 1:170,000 Mapping Series 1990.

Consent of copyright owner required for any other use.
For inspection purposes only.

The Site is shown to be undeveloped on all of the maps, and is assumed to be of agricultural land use. The 1:63,360 and 1:170,000 scale maps do not provide a detailed view of the Site.

The 1837-1913 map shows the harbour area of Sligo to be developed approximately 500 m to the north and east of the Site. The 1837-1944 map shows an iron works was present approximately 300 m to the north of the Site. Other features include an historic well approximately 400 m south of the Site and a historic mill approximately 500 m northeast of the Site.

3.3 Local Authority Records

CRA contacted the Local Authority (Sligo County Council) with a request for information regarding environmental concerns at the Site. Mr. Enda Killoran from the Environment Department of the council confirmed that they are not aware of any current or historical environmental issues with regards to the Site.

EPA Export 21-01-2016:00:59:48

3.4 Previous Site Investigations and ESA

CRA was not provided with previous environmental investigation or ESA reports for the Site.

A Building Survey Report by CBRE assessing the condition of the Site buildings was provided to CRA by Elanco. CBRE visited the Site on February 7, 2012 and assessed building construction, mechanical and electrical plant, legal matters (e.g. boundaries), energy efficiency, and asbestos. The survey included both Fort Gary 1 and 3; however, the report title only references Fort Gary 3. The report reference is as follows: Fort Gary 3, Finisklin Business Park, Sligo, Elanco Lilly, CBRE, March 2012.

CBRE noted that a small domestic style gas heating boiler was located under the eastern fire escape staircase. The boiler was not located in a fire rated enclosure and should not be located within the area of the fire escape. Elanco informed CRA that the boiler is likely to be removed or not used, as they would prefer electrically powered heating/cooling for the Site; however, alternative options are being considered. With regards to fire safety, CBRE identified that a fire risk assessment is required, and that some necessary fire safety equipment is not present or is insufficient (e.g. fire alarms, detectors, signage).

CBRE states that the offices are of an age that asbestos containing materials are unlikely to be present. In Ireland, the use of asbestos containing materials was banned in 2001. The warehouse was constructed in the 1980s and has the potential to contain asbestos.

The Radiological Protection Institute Ireland confirmed that the Site is located within an area where 1-5 % of buildings/dwellings are predicted to have radon levels >200 Bq/m^3; therefore the Site is located in a high risk radon area.

Consent of copyright owner required for any other use.
For inspection purposes only.

CBRE identified that flooding occurred nearby at Finisklin Road, with a flood event in November 2009. This confirms the information on flooding potential provided in the Envirocheck report.

A Building Energy Rating certificate has not been provided by the Site owner, as required by the European Communities (Energy Performance of Buildings) Regulations 2006.

CBRE noted that improvements should be made with regards to disabled access; these improvements are listed in the report.

EPA Export 21-01-2016:00:59:48

4.0 Site Inspection

On 31 January 2013, Jo Steele of CRA completed an inspection of the Property. The Site walkover included an inspection of the offices, warehousing and external areas, and visual observations of adjacent properties as viewed from the Site and surrounding roadways.

CRA was accompanied during the Site inspection by Mr. Paul Monaghan, EHS & Biosafety Office of Elanco. CRA also met the Site owner, Michael McGoldrick. The following subsections relate to the observations from the Site inspection and interviews with Elanco and Michael McGoldrick.

Site photographs taken during the Site inspection are included in Appendix B.

4.1 Utility Services

The Site is connected to electricity and mains water utilities. LPG gas tanks are located at the Site, serving the Fort Gary 2 building. No evidence of an on-Site well or septic system was observed by CRA during the Site inspection.

The offices (Fort Gary 3) have not been occupied since constructed in 2006; the internal area is not fully fitted and the current heating system comprises a small gas fired boiler (domestic style) for radiators in the central section of the building.

For inspection purposes only.
Consent of copyright owner required for any other use.

The warehousing area (Fort Gary 1) was heated by oil fired space heaters when operational. These were reported to be disconnected at the time of the inspection by Mr. McGoldrick. The heating oil AST is located south of Fort Gary 1.

Elanco is planning to remove all current heating infrastructure and has not yet decided whether the buildings will be heated by oil, gas or electricity powered equipment. If heating oil is required, Elanco is planning to install a new oil storage tank.

4.2 Underground Storage Tanks (USTs)

Mr. McGoldrick informed CRA that there are no historical or current underground storage tanks (USTs) at the Site. No evidence of USTs was observed during the Site walkover.

4.3 Above Ground Storage Tanks (ASTs)

The office building has two cold water storage tanks in the roof space above the third floor. A redundant water storage tank is located in the northeast corner of the warehouse. Elanco

EPA Export 21-01-2016:00:59:48

is planning to remove the water storage tanks and replace them with pressurised water supply. Elanco has a Legionella testing regime for their properties in Finisklin Industrial Estate, which would be extended to this Site.

Two LPG ASTs are located in the yard area, south of the warehouse. These are currently serving the Fort Gary 2 building, adjacent to the Site.

One oil storage AST is located in the yard area, south of the warehouse. The AST was installed in the 1980s when the warehouse was constructed and stored oil used to heat the building. The single skinned, steel AST has a capacity of approximately 2,000 gallons, and is currently in use, serving the adjacent Fort Gary 2 building. The AST is surrounded by a concrete bund, which was not sealed; a small hole was located near the base of the eastern bund wall, the hole would allow rainwater or potential releases of oil to drain to open ground. The AST and bund are located adjacent to the yard area, with the east, west and south walls of the bund surrounded by open ground. During the inspection, a small volume of rainwater was observed to have accumulated in the base of the bund. No oily residues were observed on the water surface within the bund, and staining was not present on the surrounding ground surface. Cracks were observed in the bund walls. The fill point to the AST is located within the bund. Pipes exit the tank and pass through the bund wall before entering the ground at the eastern side of the AST.

A plan dated 2004 showing an indicative location of the underground pipes is provided in Appendix C. The plan shows the pipe crossing the yard and beneath the building. The pipe is likely to lead to the former boiler room and/or oil fired space heating system.

Mr. McGoldrick informed CRA that spills and releases are not known to have occurred from the AST. Elanco does not currently intend to use this AST.

For inspection purposes only.
Consent of copyright owner required for any other use.

4.4 Raw Material, Chemical Use and Storage

The Site was historically used for assembly of parts to construct non-mechanical working platforms (e.g. ladders). No manufacturing was carried out at the Site and therefore no raw materials were used.

The Site is currently vacant, with the Site owner storing disused equipment and some ladders remain in the warehouse.

CRA observed a small amount of chemicals being stored at the Site in the warehouse, some of which are assumed to have been used during the refurbishment of the Site:

- Wood glue in a 1 litre plastic container;
- Hempadur 45141 for surface preparation in a 15 litre (approximate) tin;

EPA Export 21-01-2016:00:59:48

- Hempels curing agent 97430 in a 10 litre (approximate) tin;
- Paints in two 5 litre (approximate) tins;
- Hempels thinner 08450 in a 20 litre (approximate) tin;
- Titan oil-flow solvent cleaner in a 10 litre (approximate) plastic container; and
- Hydrochem concrete sealant in a 20 litre (approximate) tin.

There was no dedicated chemical storage area observed at the Site.

4.5 Solid, Hazardous and Special Waste

No evidence of the on-Site disposal of solid waste was observed by CRA during the Site inspection. Two waste bins were observed in the yard area, for general and recycling waste. Current waste generation at the Site is related to the refurbishment works.

Mr. McGoldrick informed CRA that historically, wastes generated at the Site were mainly general waste, metals waste and cardboard packaging.

For inspection purposes only.
Consent of copyright owner required for any other use.

4.6 Wastewater

Wastewater at the Site is generated from the sanitary facilities provided on Site. These are directed to the municipal sewer system. A plan showing the locations of the underground drainage system is provided in Appendix C.

4.7 Stormwater

Stormwater generated at the Site consists of runoff from the building roof and parking areas. The details of the Site drainage could not be obtained during the Site inspection. Drainage plans have been requested from the Site owner but were not available at the time of report submission. It is not currently known whether oil/water interceptor drains are present at the Site. A plan showing the locations of the underground drainage system is provided in Appendix C.

4.8 Air Emissions, Ozone Depleting Substances (ODS) and Fluorinated Gases

There are currently no significant air emissions, or ozone depleting substances and fluorinated gases at the Site.

A small domestic style gas boiler is located in the offices building. Elanco plans to remove the boiler.

EPA Export 21-01-2016:00:59:48

Adjacent to the warehouse building is a substation and electrical switch gear room. Air conditioning units associated with the adjacent Fort Gary 2 are located above the switch gear room.

Historically, the Site will have had emissions associated with the oil fired heating system.

4.9 Asbestos-Containing Materials (ACM)

Asbestos surveys have not been undertaken at the Site.

The offices were constructed in 2006, after the ban of asbestos in Ireland which occurred in 2001. Therefore, it is unlikely that the offices will have any asbestos containing materials (ACM), and none were observed by CRA during the inspection.

The warehousing building was constructed in the 1980s and has the potential to contain asbestos materials. During the inspection, CRA observed vinyl floor tiles in a mezzanine office in the warehouse, an old boiler room with flues (boiler has been removed), and electrical fuse boxes and switch gear that may contain asbestos.

Elanco informed CRA that they intend to commission an asbestos survey for the Site in the near future.

For inspection purposes only.
Consent of copyright owner required for any other use.

4.10 Polychlorinated Biphenyls (PCBs)

The Environmental Protection Agency of Ireland published a document called *Management Plan for Polychlorinated Biphenyls (PCBs) in Ireland*, in August 2008. This document summarises the dates when PCBs were banned in the European Union (EU) as follows:

- In the EU, the sale of certain items of PCB containing equipment was banned from 1986;
- PCBs are known to have been used in capacitors up until 1989 and in the absence of contrary information, any capacitor manufactured during or prior to 1989 should be assumed to contain PCBs;
- PCBs are known to have been used in oil filled circuit breakers up until 1989; and
- Lighting ballasts rarely display sufficient technical details to determine their PCB status. As a general rule, all lighting ballasts manufactured before 1989 that do not contain a 'PCB-free' label should be considered to contain PCBs.

An electricity transformer (substation) is located adjacent to the eastern wall of the warehouse. Mr. McGoldrick informed CRA that the substation was installed in the 1980s and is owned and maintained by the Electricity Supply Board (ESB). The substation building was

EPA Export 21-01-2016:00:59:48

locked at the time of the inspection and is only accessible by ESB; therefore, CRA could not observe the condition of the substation. No staining was observed on the hardstanding surrounding the substation building.

The electrical switch gear and fuse boxes in the warehouse (on the eastern walls), are no longer used; new switch gear is located in the external plant room adjacent to the substation. Based on the age of the redundant electrical equipment (original to the building in 1980s) PCBs may be present.

Hydraulic systems have the potential to contain PCBs, and the lift system at the Site comprised hydraulics. The lift was installed when the offices were constructed and has not been commissioned for use. No PCB labelling was observed for the lift system; however, given the age of the lift system it is unlikely to contain PCBs.

A bridge crane, aka overhead crane, is located within the northern half of the warehouse. It should be confirmed whether the crane system has associated hydraulic oils that may contain PCBs. Elanco would not require this crane system and would look to have it removed to create further storage space.

Lighting systems potentially contain PCBs in the ballasts. Mr. McGoldrick informed CRA that the current lighting in the warehouse was installed approximately 15 years ago.

Site personnel were not aware of any other potential PCB-containing equipment within the Site building. No PCB-labelled equipment was observed by CRA during the Site inspection.

For inspection purposes only.
Consent of copyright owner required for any other use.

4.11 Ionizing Radiation

No labelled sources of ionizing radiation were identified at the Site.

The Site is located within an area where 1 to 5 % of buildings/dwellings are predicted to have radon gas levels >200 Bq/m^3; therefore, the Site is located in a high risk radon gas area. The warehouse was built prior to radon protection measures being enforced; therefore, there is a potential for radon gas to migrate into the building. Mr McGoldrick informed CRA that the offices have been constructed with radon gas protection measures.

Elanco informed CRA that they intend to commission a Radon survey for the Site in the near future.

EPA Export 21-01-2016:00:59:48

4.12 Spills and Releases

CRA did not observe any areas of staining or stressed vegetation in the exterior area of the Site which could have indicated spills or releases. If any releases or spills during filling operations of the oil AST have occurred, it is likely that they would have leaked to ground, as the bund was observed to be unsealed. Mr. McGoldrick informed CRA that no spills or releases of chemical or petroleum products/wastes have occurred at the Site.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

5.0 Summary of Identified Environmental Issues

5.1 Findings & Opinion

Based on the Phase I ESA including the Site inspection, database search, historic records reviewed, information provided by Site personnel and interviews, no potential issues were identified regarding RECs, historic RECs, de minimis conditions, and business environmental risk as defined in ASTM Standard E1527-05 at the Site. This opinion is subject to the substation, heating oil AST, and LPG ASTs not being included within the leased Site boundary, as discussed with Elanco.

5.2 Conclusions

CRA has performed a Phase I ESA in conformance with the scope and limitations of ASTM Standard E1527-05 of the buildings and property located at Fort Gary 1 and Fort Gary 3, Finisklin Industrial Estate, Sligo, Ireland. Any exceptions to, or deletions from this practice are described in Section 1.0 of this report.

This assessment has revealed no evidence of RECs at this Site.

For inspection purposes only.
Consent of copyright owner required for any other use.

5.3 Non-Scope Considerations (Environmental) Compliance

The following issues were identified regarding non-scope considerations.

i) **PCBs:** Elanco informed CRA that the existing infrastructure in the warehouse will be removed to optimise the storage space and new heating and cooling systems will be installed. If this is the responsibility of Elanco instead of the Site owner, it should be noted that some equipment (e.g. switch gear, lighting ballasts, etc.) may contain PCBs and will need to be handled and disposed of appropriately.

ii) **Heating Oil AST:** The heating oil AST is assumed to be excluded from the leased Site boundary; however, underground fuel lines are considered likely to cross the Site. In this case, the lease should state that any liability with regards to contamination from leaking pipework should not be attributed to Elanco and will remain the responsibility of the Site owner.

iii) **Asbestos-containing Materials:** The warehouse was constructed prior to the ban of ACM in Ireland. An asbestos survey has not been undertaken for the Property. Elanco informed CRA that an asbestos survey will be conducted in the future.

iv) **Radon Gas:** The Site is located within an area where 1 to 5 % of buildings/dwellings are predicted to have radon gas levels >200 Bq/m^3; therefore, the Site is located in a high risk radon gas area. The warehouse was not constructed with radon gas

EPA Export 21-01-2016:00:59:48

protection measures. Elanco informed CRA that a radon gas survey will be conducted in the future.

v) **Fire Risk:** The CBRE building survey identified that the gas-fired boiler in the offices (beneath the eastern fire escape staircase) is not located within a fire rated enclosure and is a potential fire risk.

vi) **Energy Rating Certificate:** The CBRE building survey identified that the Site owner has not supplied a Building Energy Rating Certificate. This is required by the European Communities (Energy Performance of Buildings) Regulations 2006.

5.4 Data Gaps

The database search information is not considered to be comprehensive with regards to the requirements of ASTM Standard E1527-05. In addition, there is a lack of historical maps available for the Republic of Ireland.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

6.0 Environmental Professional Statement

This Phase I ESA was completed by or under the direct supervision of an Environmental Professional (EP), who to the best of our professional knowledge and belief, meets the definition of Environmental Professional as defined in §312.10 of 40 CFR 312. The EP has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries (AAI) in conformance with the standards and practices set forth in 40 CFR Part 312. Under the final AAI Standard, certain aspects of the Phase I ESA (interviews, on site visual inspection, the historical records review, and the search for environmental liens) may require an update if the timeframe between their completion and acquisition of the property exceeds 180 days.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

7.0 References

Interviews with Mr. Paul Monaghan and Mr. Michael McGoldrick, 31 January 2013.

Envirocheck Environmental Database Search and Historical Maps, 7 February 2013.

Fort Gary 3, Finisklin Business Park, Sligo, Elanco Lilly, CBRE, March 2012

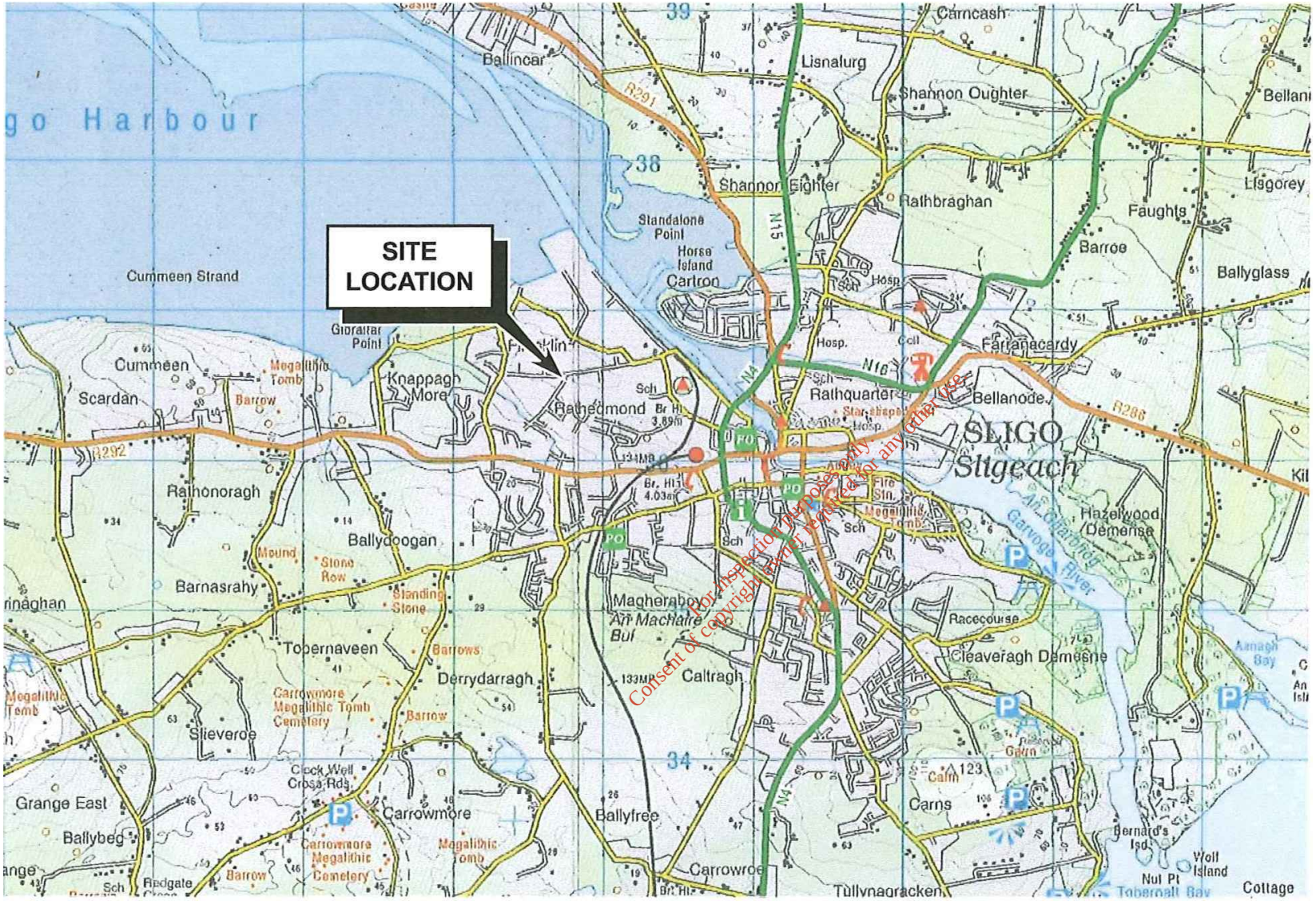
For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

Figures

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48



For inspection purposes only
Consent of copyright owner required for any other use

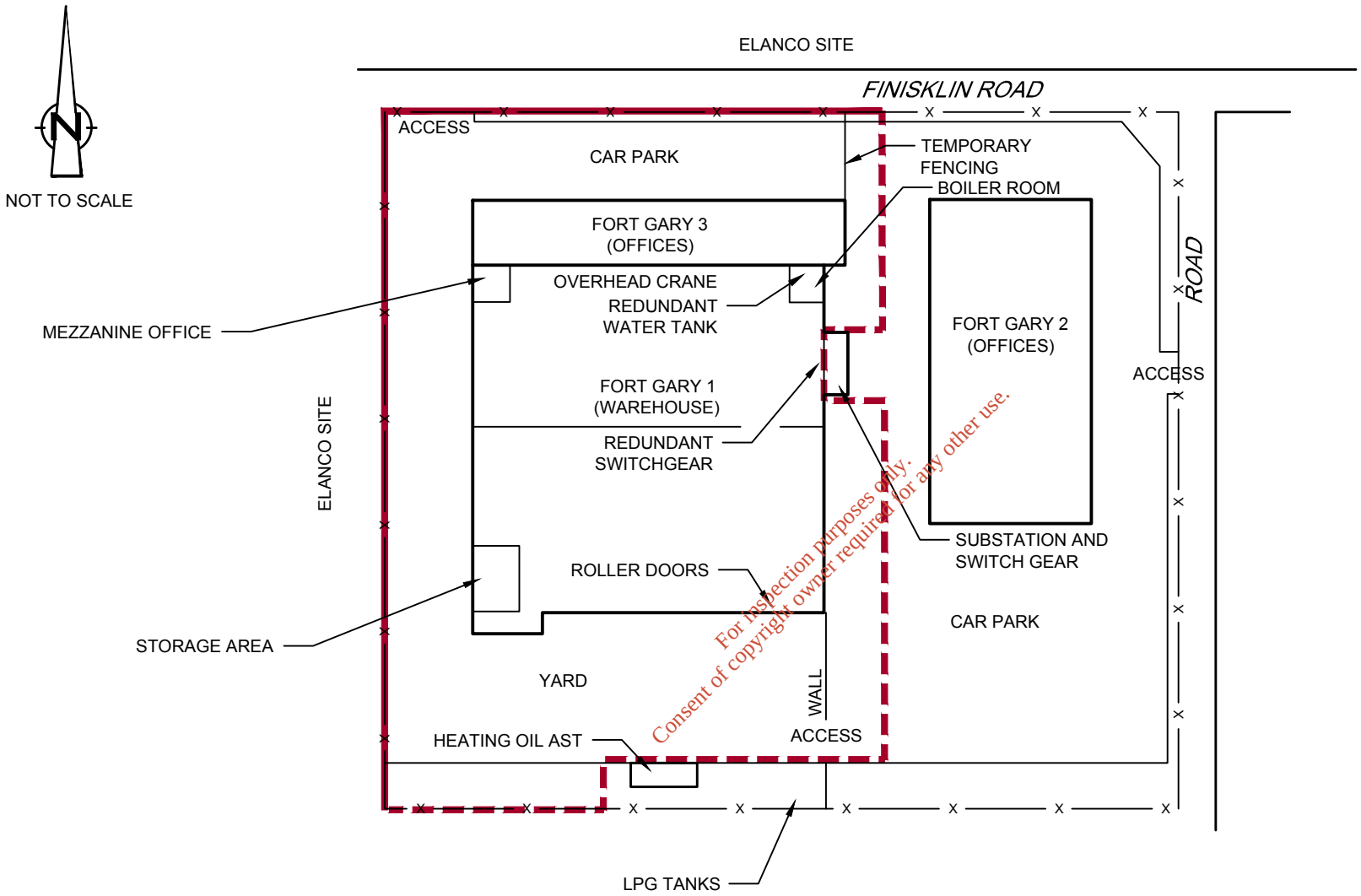
figure 1

SITE LOCATION PLAN
PHASE I ENVIRONMENTAL SITE ASSESSMENT
ELANCO
Fort Gary 1 and 3, Sligo

SOURCE: URS FIGURE 1 SITE LOCATION MAP

934245-00(001)GN-WA001 FEB 5/2013

EPA Export 21-01-2016:00:59:48



For inspection purposes only.
Consent of copyright owner required for any other use.

figure 2

SITE LAYOUT PLAN
PHASE I ENVIRONMENTAL SITE ASSESSMENT
ELANCO
Fort Gary 1 and 3, Sligo

LEGEND

ASSUMED SITE BOUNDARY

NOTE: SITE BOUNDARY NOT CONFIRMED.

934245-00(001)GN-WA002 FEB 11/2013

EPA Export 21-01-2016:00:59:48

Appendices

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

Appendix A

Database Search Information and Historical Maps

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

Envirocheck® International

Order Details

Order Number: 43816792

Report Reference: AEL-0016-LEFD-098946

Coordinates: Latitude: 54.27665°, Longitude: -8.49327°

10 Digit Grid Ref: 67872 36549

Search Buffer (m): Up to 1000m

Site Details: Finiskin Business Park

Finiskin Road

Sligo

Republic of Ireland

For inspection purposes only.
Consent of copyright owner required for any other use.

Contents

1. Ordnance Survey Environmental Report
2. Flood Risk
   - 2.1. Fluvial Flood Risk
   - 2.2. Coastal Flood Risk
   - 2.3. Pluvial Flood Risk
3. Historical Mapping
4. Bedrock Hydrogeology Map
5. Groundwater Vulnerability Map

Useful Contacts

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:48

1. Ordnance Survey Environmental Report

For inspection purposes only.
Consent of copyright owner required for any other use.

ordnance survey ireland
SMARTMAPS.ie
...intelligence, mapped!

Environmental Report

For inspection purposes only.
Consent of copyright owner required for any other use.

Date Produced: 30/01/2013

Reference No: 19631880

Radius Inner: 300metres

Radius Outer: 600metres

Center Easting: 567882

Center Northing: 836538

Address: Tower point 44
North Road
Brighton BN1 1YR
GB

Ordnance Survey Ireland

Environmental Report
Environmental Map Data

EPA Export 21-01-2016:00:59:48

Table of Contents

INTRODUCTION 3
SECTION 1: SEARCH_RESULTS 10
SECTION 2: LAND_USE_MAP 11
SECTION 3: LAND_USE_DETAIL 12
SECTION 4: SITE_HISTORY_MAP 13
SECTION 5: SITE_HISTORY_DETAIL 14
SECTION 6: STABILITY_MAP 15
SECTION 7: STABILITY_DETAIL 16
SECTION 8: WATER_HISTORY_MAP 17
SECTION 9: WATER_HISTORY_DETAIL 18
SECTION 10: STATUTORY_LICENSES_MAP 19
SECTION 11: STATUTORY_LICENSES_DETAIL 20
SECTION 12: ORTHO 21
TERMS AND CONDITIONS OF SALE ("CONDITIONS") 22

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Introduction

Welcome to Ordnance Survey Ireland's (OSi) Environmental Report. The report outlines information on an area of land, based on a location you specified when ordering your report, and covers an area with a radius of 600m from a specific geo point generated from the location information provided by you (excluding any land outside of the Republic of Ireland). The report is generated by searching for information using this specific geo-point, therefore the report should not be used in respect of any other location and will not contain any information on land outside of the area described above.

For ease of use the report is broken down into the following sections:

- Land use
- Historic Site History
- Stability
- Water History
- Statutory Licences
- Other

The report consists of a summary of the information we have found after searching certain databases (a list of these databases and an explanation of which is contained in each of them follows). More detailed information is provided in the subsequent content pages. The content pages provide information using symbology to identify the relevant features on a map. The report also provides an aerial photograph of the area covered by the report.

This report consists solely of information obtained from OSI's sources as identified. These sources do not comprise all sources of environmental or mapping information in relation to the land area you have chosen and there may be features of the land which are not identified in our sources. This report may therefore not contain all the information you need. Furthermore this report is intended only as a summary of information and OSI does not provide any risk assessment service or advice to you in relation to any matter relating to the selected land area. Further sources of information in relation to particular aspects of the report are set out in the explanation of the data sets.

OSI stresses the need to consult a qualified professional when assessing any piece of land and/or making decisions in relation to the fitness for any purpose of any land, or the saleability or value of any land. A qualified professional should also be consulted to assess the significance and validity of the information provided in the report. Furthermore this report is not intended as a substitute for a physical inspection of the land and structures on it.

For inspection purposes only.
Consent of copyright owner required for any other use.

Whilst OSI has taken all due care in the provision of the information contained in the report, it does not provide any guarantee of the accuracy of the data. A number of organisations have provided data used in the generation of the Environmental Report. Where appropriate a link to the organisation's website is provided where it may be possible to obtain further information.

For further information in relation to use of this report please refer to the copy of the terms and conditions annexed to the end of this report pursuant to which your purchase was made.

Report Dataset Information

Land use

Name: Colliery
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Collieries. A coal mine and its accompanying structures are collectively known as a colliery.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Mine
Description of data contained: This dataset displays the surface and underground sites of mines and originates from the Mine Records dataset, which is held within the Geological Survey of Ireland. The dataset gives the size and shape of the workings above ground and also indicates if there are underground workings associated with the site. Attributes include the site name, whether the site is a surface or underground feature.
Source: Geological Survey of Ireland
Currency of data: dating from antiquity to the present-day.
Further Information: http://www.gsi.ie/

Name: Quarry
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Quarries.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Name: Active Quarries
Description of data contained: This dataset is part of the 2004 Directory of Active Pits and Quarries published by the GSI.The entries in the Directory are based on information supplied by the operators and includes operator name, address, location, contact person, rock or mineral type, geological description, products, specifications and scale of the operation. The Directory provides information on individual operations indexed by location, rock or mineral type, product and operator name.
Source: Geological Survey of Ireland
Currency of data: 2004
Further Information: http://www.gsi.ie/

Name: Gravel Pits
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Gravel Pits. A Gravel pit is the British English term for an open cast working for extraction of gravel (river-deposited rounded stones). Gravel pits normally lie in river valleys where the water table is high, so they fill naturally with water to form ponds or lakes.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Lime Kiln
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations Lime Kilns. Lime Kilns date from the 18th century and were in use until the 1940s in some areas. By lighting fires in these kilns and adding crushed limestone, lime was produced for use as fertiliser in the fields and also for whitewashing cottages. Most of the lime kilns around the country have been destroyed and only rare examples survive.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

❖ Site History

Name: Seasonal Lakes
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Historic Seasonal Lakes. Seasonal lakes or Turlough's are usually found in the lowland karsts of western Ireland. They are lakes which disappear for part of the year, leaving a floor covered with grasses, sedges and herbs. They occur in limestone areas west of the Shannon and are unique to Ireland.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's .
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

For inspection purposes only.
Consent of copyright owner required for any other use.

Name: Rail Tram /Tram Line
Description of data: This information was captured from the 1890's Ordnance Survey Historic mapping showing locations of Railway and Tram lines.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Historic Well
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing Historic locations of wells.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's.
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Power Stations
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Power Stations.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's .
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Mills
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations various types of mills.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Marsh
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Marsh. A Marsh is a type of wetland.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Gas Works
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations historic Gas Stations. Gas Works are the workplace where coal gas is manufactured.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Name: Foundry
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Foundries.
A foundry is the buildings and iron works for casting metals.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Windmill
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Windmill Sites.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Historic Flood Plains
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Historic liable to Flood areas.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

❖ Stability

Name: Vulnerability
Description of data: Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. The map shows the vulnerability of the first groundwater encountered (in either sand/gravel aquifers or in bedrock) to contaminants released at depths of 1-2 m below the ground surface. Where contaminants are released at significantly different depths, site specific data is used to determine groundwater vulnerability The geological and hydrogeological characteristics can be examined and mapped, thereby providing a groundwater vulnerability assessment for any
area or site. Four groundwater vulnerability categories are used in the scheme - **extreme (E)**, **high (H)**, **moderate (M)** and **low (L)**.
Vulnerability maps are an important part of groundwater protection schemes.
These datasets are shown in accordance with the River Basin District (RBD) in which they lie.
Source: Geological Survey of Ireland
Currency of Data: From 2005
Further information:
http://www.gsi.ie/ and also at http://www.wfdireland.ie/ - The European Union Water Framework Directive which rationalises and updates existing water legislations and provides for water management on the basis of River Basin Districts (RBD's).

For inspection purposes only.
Consent of copyright owner required for any other use.

Name: Sub Soils
Description of data: This dataset contains details of the modelling of soil types and forest productivity rankings in any given area. The Soils and Subsoil's data was generated by Teagasc with co-operation of the Forest Service, EPA and The Department of Marine and Natural Resources in May 2006 under the NDP program. This dataset is not represented cartographically in the report, however the information from this dataset is provided in the details section. Within the Irish forest soils classification project a number of themes are mapped nationally using remotely sensed imagery and data, from which soil type, productivity and distribution are modelled. These themes include Subsoils, Topography and Land Cover. The association of subsoil (soil parent material), topography and land cover with soil type is being modelled using the thematic maps and field data within a Geographic Information System (GIS). The soil types being modelled fall into five broad classes; shallow mineral, deep mineral well drained, mineral poorly drained, peat over mineral and peat. Finally forest productivity rankings will be ascribed to different soil types based on analysis of existing forest productivity datasets and supplementary fieldwork. The program was completed in May 2006 and there is no formal update plan.
Source: Environmental Protection Agency
Currency of Data: May 2006
Further information www.epa.ie

Name: Bedrock, National Bedrock Aquifer Map
Description of data: This map displays any stratum or combination of strata that stores or transmits groundwater (Local Government (Water Pollution) Act, 1990 (an aquifer). More commonly an aquifer is described as a permeable geological stratum or formation that can both store and transmit water in significant quantities. This dataset is not represented cartographically, however the information from this dataset is provided in the details section where the classification of aquifers developed by the Geological Survey of Ireland are shown. Some factors used in this classification are hydro geological, lithological and structural. Based on the hydro geological characteristics and on the value of the groundwater resource, the Republic of Ireland's entire land surface is divided into nine aquifer categories (also described as resource protection areas).
Source: Geological Survey of Ireland
Currency of Data: From 2005
Further Information: http://www.gsi.ie/

Name: National Bedrock Map of Ireland 1:1,000,000
Description of data: Simplified Geological map of Ireland, compiled by the GSI. Attributes shown are Formation Name, Rock Type and Age of the Bedrock. This dataset is not shown cartographically in the report, but the recorded attributes are provided in the details section.
Source: Geological Survey of Ireland
Currency of Data: From 2005
Further information: http://www.gsi.ie/

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Name: Dykes500K
Description of data: A dyke in geology refers to an intrusive igneous body. This dataset is derived directly from the seamless digital National Bedrock Map of Ireland 1:100,000 and consists of a map of the structural Geology of Ireland at the scale 1:500,000, detailing linework codes and dyke names.
Source: Geological Survey of Ireland
Currency of Data: 2004
Further Information: http://www.gsi.ie/

Name: Faults500K
Description of data: Faults are planar rock fractures, which show evidence of relative movement. This dataset is derived directly from the seamless digital National Bedrock Map of Ireland 1:1,000.000 and consists of a map of the structural Geology of Ireland at the scale 1:500,000, detailing linework codes and fault names.
Source: Geological Survey of Ireland
Currency of Data: 2004
Further Information: http://www.gsi.ie/

Name: Landslide Locations
Description of data: This information is extracted from the National Landslides Database, which was compiled by the Irish Landslides Working Group and further information can be found in "Landslides in Ireland" which was published by the GSI in 2006. Attributes include the name, county, mechanism type, material, terrain type and the source of the information documented.
Source: Geological Survey of Ireland
Currency of Data: 2006
Further information: http://www.gsi.ie/

Name: National Bedrock Map of Ireland 1:500,000 Scale
Description of data: An all-Ireland Geology map at 1:500,000 scale detailing attributes of Formation, Rock Type and Age of bedrock. The map is derived from the GSI 1:100,000 scale Bedrock Map Series and the GSNI 1:250,000 scale Geological Map of Northern Ireland. This dataset is not shown cartographically in the report, but the recorded attributes are provided in the details section.
Source: The Geological Survey of Ireland (GSI) in conjunction with the Geological Survey of Northern Ireland (GSNI) published this map.
Currency of Data: From 2005
Further Information: http://www.gsi.ie/

For inspection purposes only.
Consent of copyright owner required for any other use.

❖ Water History

Name: Bathing Water Quality
Description of data: This database contains details of the bathing areas from each county and their compliancy with the quality of bathing water regulations for the past four years
The Quality of Bathing Water Regulations (S.I. 155 of 1992) implemented the requirements of the Bathing Water Directive (76/160/EC) in Irish law. The purpose of the legislation is to ensure that the quality of bathing water is maintained and, where necessary, improved so that it complies with specified standards designed to protect public health and the environment. A new Bathing Water Directive was entered into force in March 2006, with member states having until March 2008 to comply with the new requirements. This new Directive aims to provide greater benefits in relation to improved health protection for bathers and a more pro-active approach to beach management including public involvement.
Source: Environmental Protection Agency
Currency of Data: 2006
Further information www.epa.ie **or** www.wfdireland.ie

Name: Ground Water Quality
Description of data: This dataset contains details of groundwater monitoring networks and the links between groundwater and the ecological health of associated receptors. This information is used to help protect groundwater used for public and private drinking water supplies and is also used to help protect associated surface water and ecological receptors.
Historically groundwater monitoring in the Republic of Ireland focused on the protection of drinking water supplies and investigating the impacts of point source pollution. However, the WFD and the forthcoming EU Directive on "the Protection of Groundwater Against Pollution and Deterioration" adopt a more holistic view of water resources, establishing links between groundwater and associated surface water and ecological receptors. Therefore, groundwater monitoring networks have been developed to improve knowledge of, and the links between, groundwater and the ecological health of associated receptors.
The National WFD Groundwater Monitoring Programme is implemented by the Environmental Protection Agency. The monitoring is used to assess the general state of groundwater quality and groundwater levels / flows in the Republic of Ireland. Thereafter, groundwater monitoring data are used to help determine the status of groundwater in the Republic of Ireland. In turn this information is used to help protect groundwater used for public and private drinking water supplies and is also used to help protect associated surface water and ecological receptors.
Source: Environmental Protection Agency
Currency of Data: 2006
Further information: www.epa.ie or www.wfdireland.ie

Name: Estuarine and Coastal Water Quality
Description of data: This dataset contains details of include inputs of organic matter, nutrients and contaminants from sources such as urban waste water, industrial discharges, riverine inputs and accidental spillages into Estuarine and Coastal waters.
This dataset is not represented cartographically in the report, however the information from this dataset is provided in the details section.
The estuarine and coastal environment is subject to a wide variety of pressures. These include inputs of organic matter, nutrients and contaminants from sources such as urban waste water, industrial discharges, riverine inputs and accidental spillages. Local impacts can also arise from marine-based activities such as dredging and aquaculture. The quality of Ireland's tidal waters is determined by the composition of the waters of the North East Atlantic that bathe our coasts and the degree to which this is altered by inputs of organic matter, nutrients and other materials from the land and atmosphere.The principal legislation governing water quality in Ireland is the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003), which transposed the requirements of Directive 2000/60/EC, establishing a framework for Community action in the field of water policy (the Water Framework Directive, WFD) into Irish law.
The WFD has set out that a Member State shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water, and shall protect, enhance and restore all bodies of surface water with the aim of achieving good status by 2015.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Source: Environmental Protection Agency
Currency of Data: 2006
Further information www.epa.ie **or** www.wfdireland.ie

Name: Lake Water Quality
Description of data: This dataset contains details of the levels of Eutrophication in lakes in Ireland
This dataset is not represented cartographically in the report, however the information from this dataset is provided in the details section.
Lakes are a national asset on which we depend for many services and amenities. They are an important source of drinking water, water used in industry and for agricultural purposes. In addition they provide for recreational activities such as angling, sailing, bathing and many other water-based sports. Eutrophication is the principal threat to lake water quality in Ireland. This is caused by the over-enrichment of lake waters by nutrients, especially phosphorus, which results in accelerated growth of planktonic algae, Cyanobacteria and higher forms of plant life.
The principal legislation governing lake water quality in Ireland is the Phosphorus Regulations, prepared under Article 4(4) of the Local Government (Water Pollution) Act, 1977 (Water Quality Standards of Phosphorus) Regulations, 1998 (S.I. 258 of 1998). The Phosphorus Regulations require that water quality be maintained or improved by reference to the trophic status assigned by the EPA with a target of oligotrophic or mesotrophic status in all our lakes.
Source: Environmental Protection Agency
Currency of Data: 2006
Further information www.epa.ie **or** www.wfdireland.ie

Name: River Water Quality
Description of data: This dataset contains details of the rating of any river under the Q-value system used by the EPA in its river monitoring program
The Q value system describes the relationship between water quality and the macroinvertebrate community in numerical terms. Q5 waters have high diversity of macroinverebrates and good water quality, while Q1 have little or no macroinvertebrate diversity and bad water quality.Intermediate values, Q1-2, 2-3, 3-4 etc denote transitional conditions.
Source: Environmental Protection Agency
Currency of Data: 2006
Further information www.epa.ie **or** www.wfdireland.ie

Name: Catchments All Island
Description of data: This dataset shows the boundaries of river basins in Ireland, as digitized from the OSI source "Ireland's Rivers and their basins" circa 1956
This dataset is not represented cartographically in the report, however the information from this dataset is provided in the details section. The management of water resources based on catchments or river basin districts have been instigated at European Union level with the introduction of the Water Framework Directive in the year 2000. The European Communities (Water Policy) Regulations 2003 enacted on the 22nd December 2003 brings this legislation into Irish law and states that by June 2009 all local authorities will have to have a River Basin Management Plan adopted. A co-coordinated programme of measures to achieve at least "good status" for rivers, lakes, ground water, estuarine waters and coastal waters needs to be provided. Ireland has been divided into 7 No. river basin districts and Consultants are currently engaged in the drafting of river basin management plans in close consultation with the local authorities involved. The original source of this information is from the 1958 map 'Ireland and its river basins' and was digitised in 1997 with no formal update schedule.
Source: Environmental Protection Agency
Currency of Data: 1997
Further information www.epa.ie

Consent of copyright owner required for any other use.
For inspection purposes only.

Name: River Basins District
Description of data: This dataset contains details of the specific river basin district covering the area and the lead authority with responsibility for monitoring the district.
Management of water quality in the EU was placed on a new and more comprehensive footing by the adoption, in late 2000, of the directive establishing a framework for Community action in the field of water policy. The directive is very ambitious in its intent, calling as it does for the attainment of good quality in all waters by 2015. Good quality in this context is a situation in which biological and/or chemical characteristics show only minor differences compared to the natural state. While there is provision for less demanding targets in the case of waters which have been irreversibly modified, the achievement of the quality goals of the directive are likely to prove extremely difficult if not impossible in many situations. In addition to the quality target, the directive promotes inter alia the sustainable use of water resources and the elimination of the discharge of hazardous substances.
The directive requires that waters be managed as hydrological units, i.e. as individual river catchments or groups of contiguous catchments, termed river basin districts (RBDs). The main duties of the RBDs are to draw up management plans and to prepare programmes of the measures considered necessary to achieve the quality and other goals of the directive. Member States must identify competent authorities to apply the rules of the directive in each RBD and in regard to other aspects of the directive. There is a very specific requirement that the public be consulted in the implementation of the directive, in particular the preparation of management plans and programme of measures. A web site (www.wfdireland.ie) has been established by the Department of the Environment, Heritage and Local Government to provide information to the public on the background and aims of the directive.
The directive was adopted in Ireland under Regulations made in December 2003. A total of seven RBDs have been identified, four (Eastern, South Eastern, South Western and Western) wholly within the State and three (North Western, Neagh-Bann and Shannon*) shared with Northern Ireland. The competent authorities identified are the local authorities in the case of the RBDs and the EPA for a number of technical aspects including the formulation of The hydrometric areas are checked against the hydrological DTM with field verification in 2002, reported to Europe in 2004 (Article 3 Water framework directive) and not expected to change.
Monitoring programmes. Other public authorities identified in the regulations are required to exercise their functions in a manner which is consistent with the aims of the directive. The regulations also give powers to the EPA to specify the public authorities by whom the monitoring programmes required under the directive will be undertaken. This dataset is not represented cartographically in the report, however the information from this dataset is provided in the details section.
Source: Environmental Protection Agency
Currency of Data: 2002
Further information www.epa.ie **or** www.wfdireland.ie

Name: Groundwater Well locations
Description of data: A database compiled by the Geological Survey of Ireland, containing details on water wells drilled containing such information as yield, location, discharge rate and pumping test information.
Source: Geological Survey of Ireland
Currency of Data: 2003

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Further information:
http://www.gsi.ie/

Name: Karst Information
Description of data: A database compiled by the Geological Survey of Ireland, containing locations of karst features classified according to Karst type, e.g. springs, turloughs, caves, depressions, swallow holes and enclosed depressions. Each karst feature has a Grid reference and further descriptions. **Karst** is a term used worldwide to describe the distinctive landforms that develop on rock types that are readily dissolved by water. In Ireland, limestone (composed of calcium carbonate) and to a lesser extent **dolomite** (calcium and magnesium carbonate) is by far the most widespread rocks that show karst features.
Source: Geological Survey of Ireland
Currency of Data: From 2005
Further information:
http://www.gsi.ie/

Name: Spring
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of spring sources. A Spring is any natural discharge of water from rock or soil onto the surface of the land of into a body or surface water.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Water Pump Locations
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of water pumps.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Sluice
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of sluices. A sluice is a small door in a lock gate that is opened to allow water to enter, or leave, the lock. A sluice is a water channel that is controlled at its head by a gate. A sluice gate is traditionally a wooden or metal plate which slides in grooves in the sides of the channel.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

For inspection purposes only.
Consent of copyright owner required for any other use.

Name: Weir
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Weirs. A weir is a small overflow type dam commonly used to raise the level of a small river or stream. Weirs have traditionally been used to create mill ponds. Water flows over the top of a weir, although some weirs have sluice gates which release water at a level below the top of the weir. The crest of an overflow spillway on a large dam is often called a weir.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Reservoir Locations
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Reservoirs. A Reservoir is a place where water is stored until it is needed. A reservoir can be an open lake or an enclosed storage tank.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

Name: Swallow Holes
Description of data: This information was captured from the 1830's Ordnance Survey Historic mapping showing locations of Swallow holes. Swallow holes are the point at which a surface stream disappears underground. A swallow hole generally implies nearly instantaneous water loss into an opening at the bottom of a sink hole or karst valley i.e. the Burren, Co. Clare.
Source: Ordnance Survey Ireland
Currency of Data: circa 1830's
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

❖ Statutory Licences

Name: Integrated Pollution Control (IPC)
Description of data: This dataset contains details of all active IPC licences granted by the EPA as per March 2007
Since 2002, any person or company involved in certain large-scale or complex industrial processes with significant polluting potential were required to have an IPC licence. Over 70 industrial classes came within the scope of IPC licensing and these are listed in the First Schedule of the Environmental Protection Agency Act, 1992. Since the commencement of IPC Licensing in 1994, the EPA had processed 675 applications and granted 624 IPC licences by 31st July 2004.
Source: Environmental Protection Agency
Currency of Data: 2007
Further Information: www.epa.ie

Name: Waste Licence
Description of data: This dataset contains details of all active waste licences granted by the EPA as per March 2007**.** In 1996 the Environmental Protection Agency began licensing certain activities in the waste sector, including landfills, transfer stations, hazardous waste disposal and other significant waste disposal and recovery activities in Ireland.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Aim of Waste Licensing:
A waste licence is a single integrated licence, which deals with emissions to all environmental media, in addition to the environmental management of the facility. All related waste operations carried on by the applicant in connection with the activity are taken into consideration in determining an application for a waste licence. The EPA must be satisfied that the activity will not cause environmental pollution when it is carried on in accordance with the conditions of a waste licence. The detailed procedures in respect of the processing of a waste licence application are set out in the Waste Management Act, 1996 which was amended by the Protection of the Environment Act, 2003 and associated Regulations
Source: Environmental Protection Agency
Currency of Data: 2007
Further Information: www.epa.ie

❖ Other

Name: Aerial Photography Information
Ordnance Survey Ireland has captured a national database of Aerial Photography captured at 1:40,000.
Source: Ordnance Survey Ireland
Currency of Data: Captured from 2004 – 2006
Further Information: Contact Ordnance Survey Ireland www.osi.ie or Ph +35318025300

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 1: Search_Results

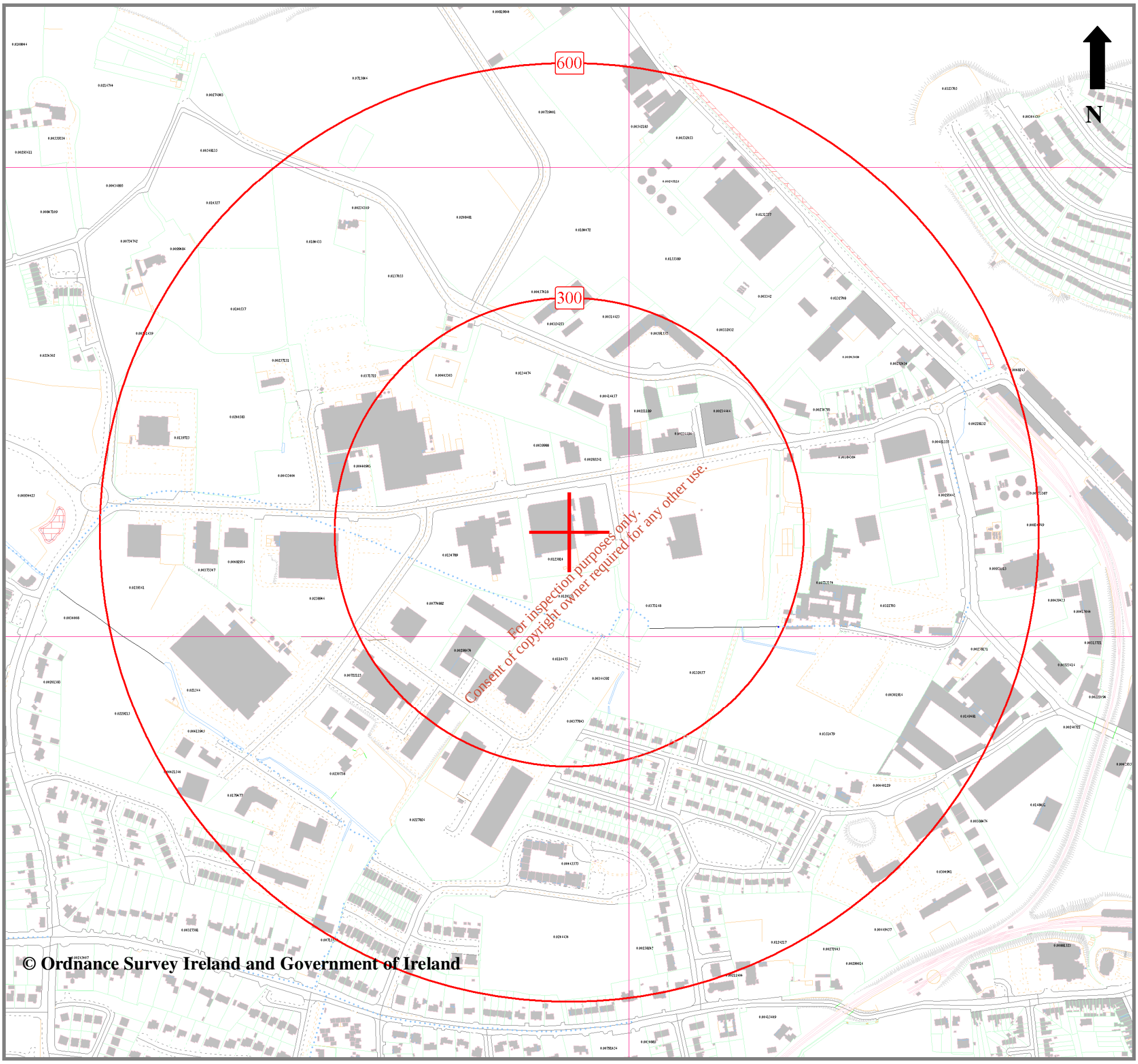
Source	Total	0-300 metres	300-600 metres
Land Use			
Colliery	0	0	0
Mine	0	0	0
Quarry	0	0	0
Active Quarries	0	0	0
Gravel	0	0	0
Lime Kiln	0	0	0
Site History			
Rail Tram	0	0	0
Seasonal Lake	0	0	0
Tram Line	0	0	0
Historic Well	2	0	2
Power Station	0	0	0
Mills	2	0	2
Marsh	0	0	0
Gaswork	0	0	0
Foundry	0	0	0
Wind Mill	0	0	0
Flood Plain	0	0	0
Stability			
Vulnerability	0	0	0
Subsoils	3	2	1
Bedrock Aquifer	1	1	0
Dykes 500K	0	0	0
Faults 500K	0	0	0
Landslide Locations	0	0	0
Bedrock 500k	1	1	0
Water History			
Bathing Water Quality	0	0	0
Weir	0	0	0
Catchments All Island	2	2	0
Estuarine and Coastal Water Quality	2	2	0
Ground water Quality	0	0	0
Lake Water Quality	0	0	0
River Basin Districts	2	2	0
River Water Quality	0	0	0
Karst Features	0	0	0
Wells	0	0	0
Pump	4	0	4
Reservoir	0	0	0
Sluice	0	0	0
Spring	0	0	0
Swallow Hole	0	0	0
Statutory Licences			
Integrated Pollution Control	2	1	1
Waste Licences	1	0	1

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 2: Land_Use_Map



© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 3: Land_Use_Detail

Theme	Text
Land Use	
Quarry	No results found when searching this layer
Mine	No results found when searching this layer
Active Quarries	No results found when searching this layer
Gravel	No results found when searching this layer
Colliery	No results found when searching this layer
Lime Kiln	No results found when searching this layer

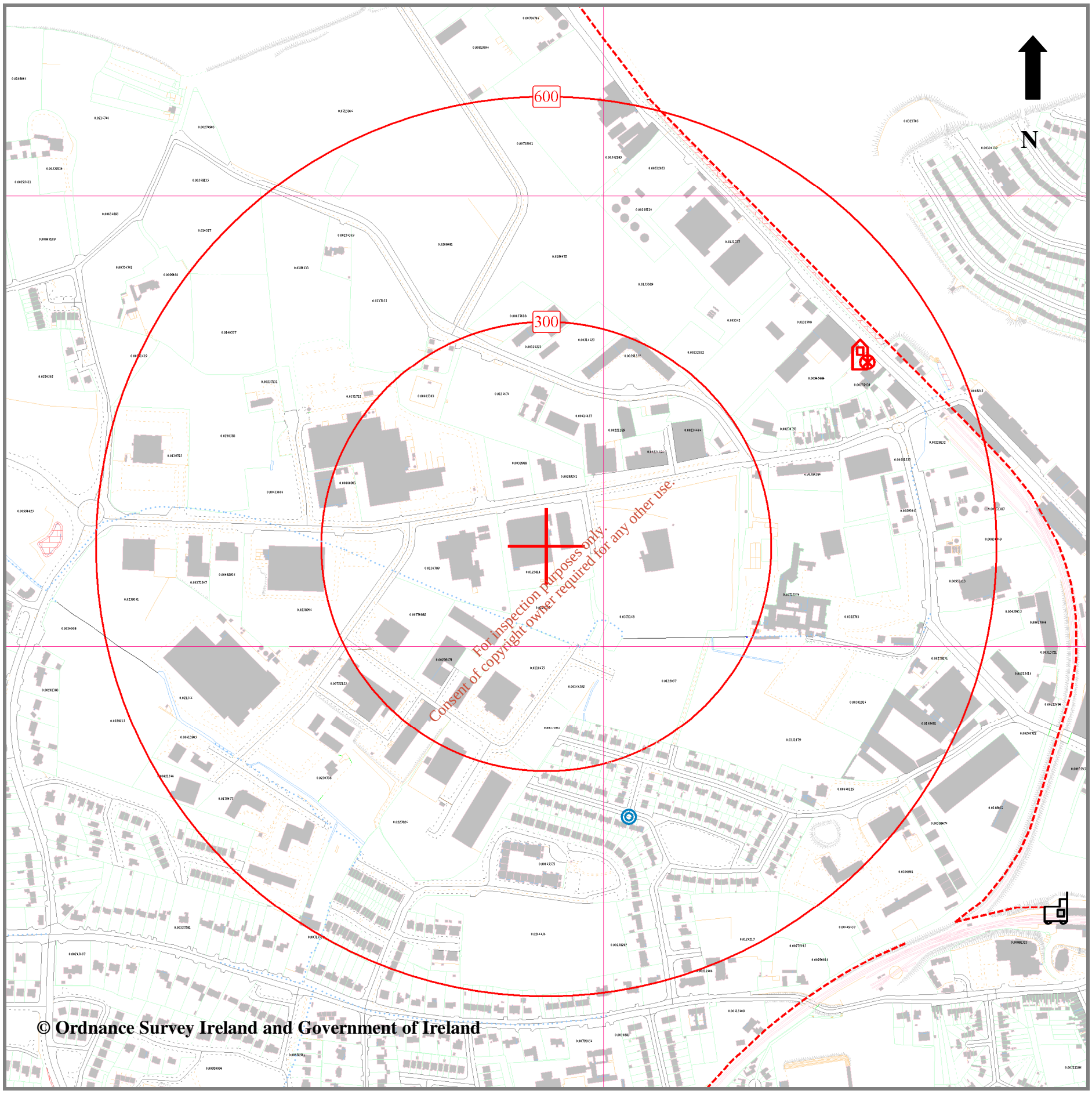
*Where the centroid co-ordinate is found, this is the central point of the polygon.
#Additional information is only provided for results found within the buffer zone

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 4: Site_History_Map



Historic Well Symbol	Mills Symbol	Rail Tram Line
◎		------

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 5: Site_History_Detail

Theme	Text
Site History	
Wind Mill	No results found when searching this layer
Historic Well	Description: Well Point East, North: 567992, 836177
Historic Well	Point East, North: 567992, 836177
Seasonal Lake	No results found when searching this layer
Flood Plain	No results found when searching this layer
Mills	Point East, North: 568300, 836794
Mills	Description: Harbour Mills (Corn) Point East, North: 568299, 836794
Marsh	No results found when searching this layer
Gaswork	No results found when searching this layer
Foundry	No results found when searching this layer
Power Station	No results found when searching this layer

*Where the centroid co-ordinate is found, this is the central point of the polygon.

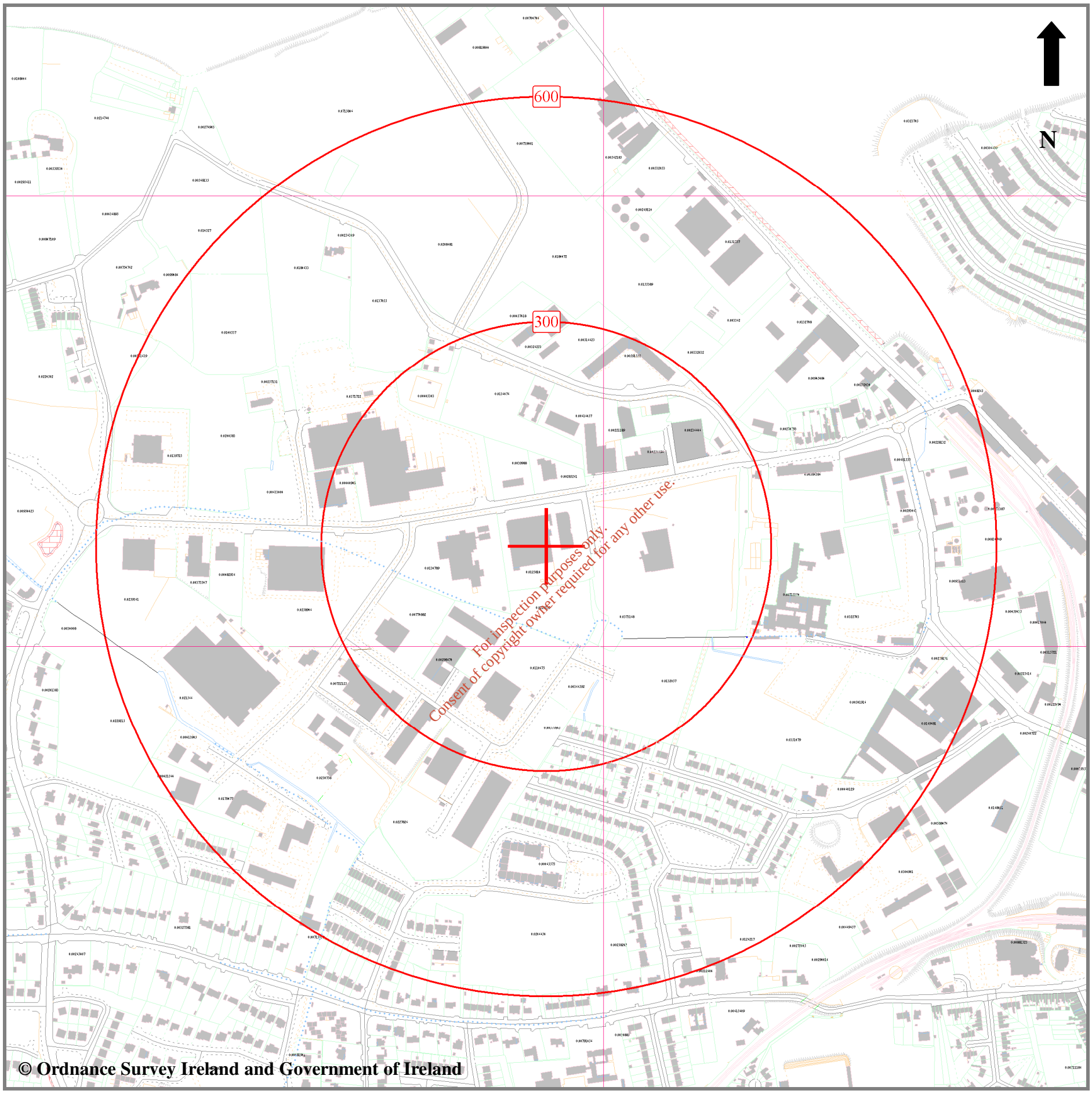
#Additional information is only provided for results found within the buffer zone

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 6: Stability_Map



Bedrock Aquifer Polygon

Bedrock500k Polygon

Subsoils Polygon

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 7: Stability_Detail

Theme	Text
Stability	
Landslide Locations	No results found when searching this layer
Vulnerability	No results found when searching this layer
Subsoils	County: Sligo Soil Composition: Metamorphic till Centroid East, North: 566990, 836557
Subsoils	County: Sligo Soil Composition: Estuarine sediments (silts/clays) Centroid East, North: 567655, 836972
Subsoils	County: Sligo Soil Composition: Made ground Centroid East, North: 568797, 835568
Bedrock 500k	Unit Name: Marine shelf facies; Limestone & calcareous shale Age Bracket: Palaeozoic, Carboniferous, Mississippian Centroid East, North: 616991, 617346
Bedrock Aquifer	Description: Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones Centroid East, North: 563572, 835916

*Where the centroid co-ordinate is found, this is the central point of the polygon.

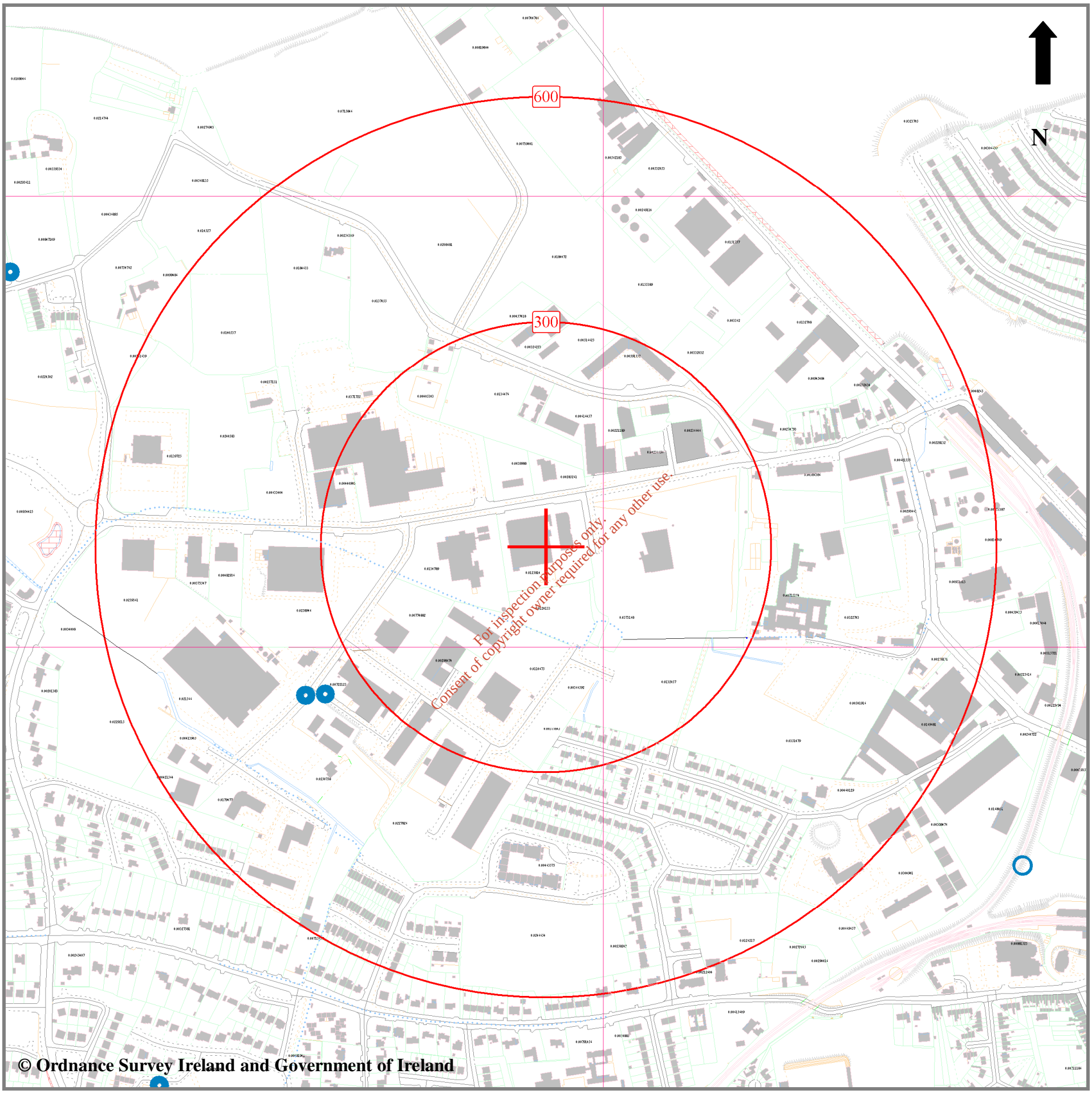
#Additional information is only provided for results found within the buffer zone

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:48

Section 8: Water_History_Map



Catchments Polygon

Est & Coastal Polygon

Pump Symbol

River Basin Polygon

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:49

Section 9: Water_History_Detail

Theme	Text
Water History	
Weir	No results found when searching this layer
Bathing Water Quality	No results found when searching this layer
Spring	No results found when searching this layer
Sluice	No results found when searching this layer
Reservoir	No results found when searching this layer
Pump	Point East, North: 567588, 836342
Pump	Point East, North: 567562, 836341
Pump	Description: Pump Point East, North: 567562, 836341
Pump	Description: Pump Point East, North: 567588, 836342
Wells	No results found when searching this layer
Karst Features	No results found when searching this layer
River Water Quality	No results found when searching this layer
River Basin Districts	Name: Western Lead Authority: Galway County Council Centroid East, North: 525047, 779030
River Basin Districts	Name: Western Lead Authority: Galway County Council Centroid East, North: 486920, 779325
Lake Water Quality	No results found when searching this layer
Ground water Quality	No results found when searching this layer
Estuarine and Coastal Water Quality	Name: Sligo Harbour Category Name: Bay Assesment ASS01_05: Unpolluted Assesment ASS99_03: Unpolluted Assesment ASS95_99: Unpolluted Centroid East, North: 564631, 838016
Estuarine and Coastal Water Quality	Name: Garavoge Estuary Category Name: Estuary Assesment ASS01_05: Intermediate Assesment ASS99_03: Intermediate Assesment ASS95_99: Intermediate Centroid East, North: 566190, 837970
Catchments All Island	Centroid East, North: 565204, 834183
Catchments All Island	Centroid East, North: 583038, 835270
Swallow Hole	No results found when searching this layer

Consent of copyright owner required for any other use.
For inspection purposes only.

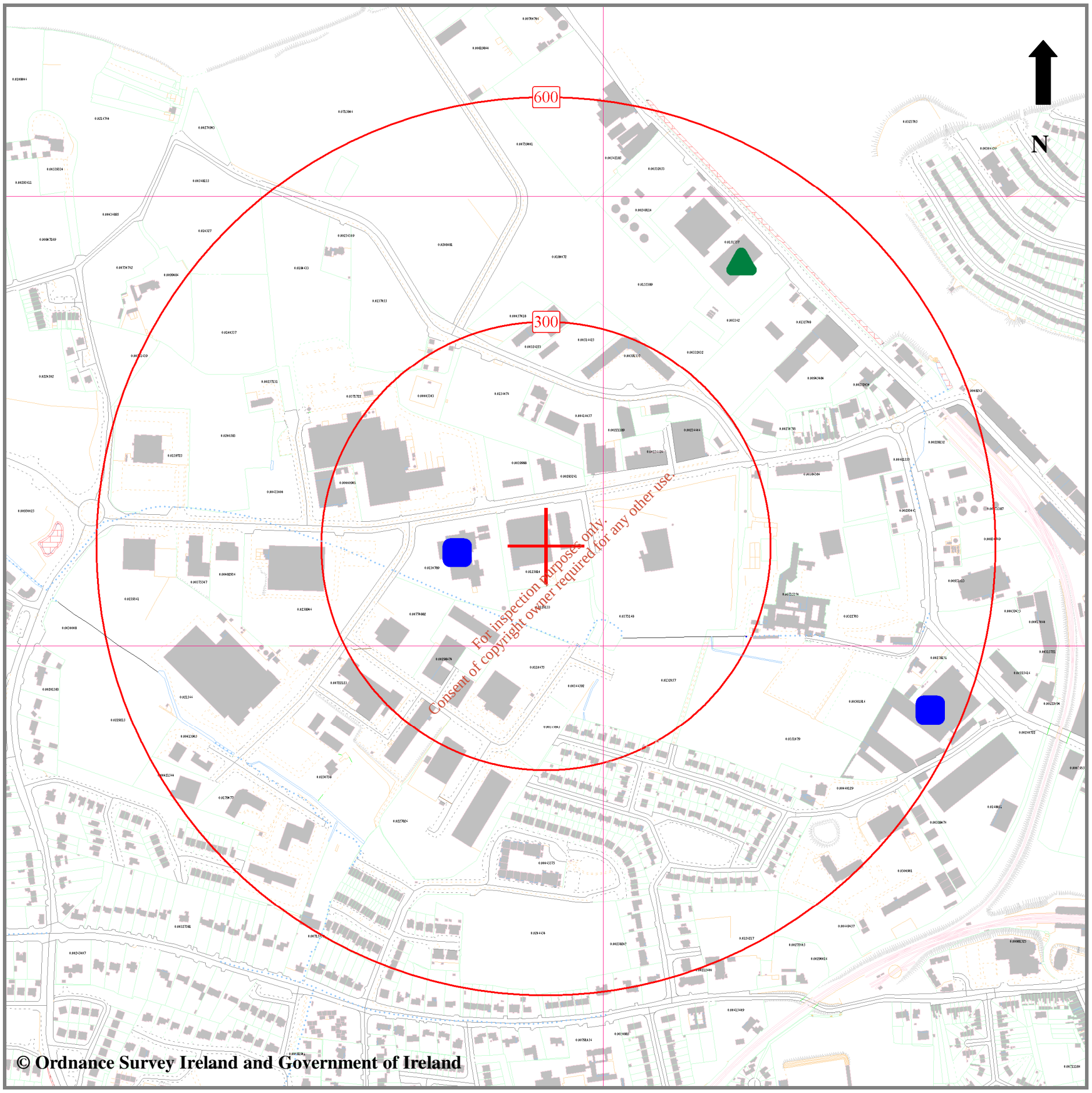
*Where the centroid co-ordinate is found, this is the central point of the polygon.

#Additional information is only provided for results found within the buffer zone

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:49

Section 10: Statutory_Licenses_Map



IPC Symbol

Waste Licences Symbol

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:49

Section 11: Statutory_Licenses_Detail

Theme	Text	
Statutory Licences		
Integrated Pollution Control	Name: Location: Address: Point East, North:	Fort Dodge Laboratories Ireland Limited Finisklin Industrial Estate Sligo 567764, 836529
Integrated Pollution Control	Name: Location: Address: Point East, North:	G. Bruss Gmbh Dichtungstechnik Finisklin Road Sligo 568395, 836319
Waste Licences	Name: Location: Address: Point East, North:	Deepwater Quay Sligo 568142, 836915

*Where the centroid co-ordinate is found, this is the central point of the polygon.

#Additional information is only provided for results found within the buffer zone

For inspection purposes only.
Consent of copyright owner required for any other use.

© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:49

Section 12: Ortho



© Ordnance Survey Ireland and Government of Ireland

EPA Export 21-01-2016:00:59:49

2. Flood Risk

Table 1. Risk of flooding from rivers, the sea and groundwater for Finiskin Business Park, Finiskin Road, Sligo (the Site).

Flood Risk*	On Site	0-250m	250-1000m
Fluvial Flood Risk	NA	NA	310m NW
Coastal Flood Risk	NA	135m NE	NA
Pluvial Flood Risk	NA	50m S	NA

*Flood models provided by JBA Consulting 07th February 2013, based on the 1:200 year flood event.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:49

Envirocheck® International

2.1. Fluvial Flood Risk

Caution Note: This map is intended to be a preliminary screening tool only and should not be relied upon for any other purpose or in isolation. It provides an approximate guide to areas which may be at risk of flooding. The map, including the key, and information derived therefrom is not a substitute for detailed modelling or risk assessment, which you are strongly advised to consider in every case. Neither should it be used in the design or production of any flood mitigation or defence works. A detailed Flood Risk Assessment is recommended to confirm the likely extent and depth of flooding, to establish flow routes and to demonstrate the impact of any development on flood risk.



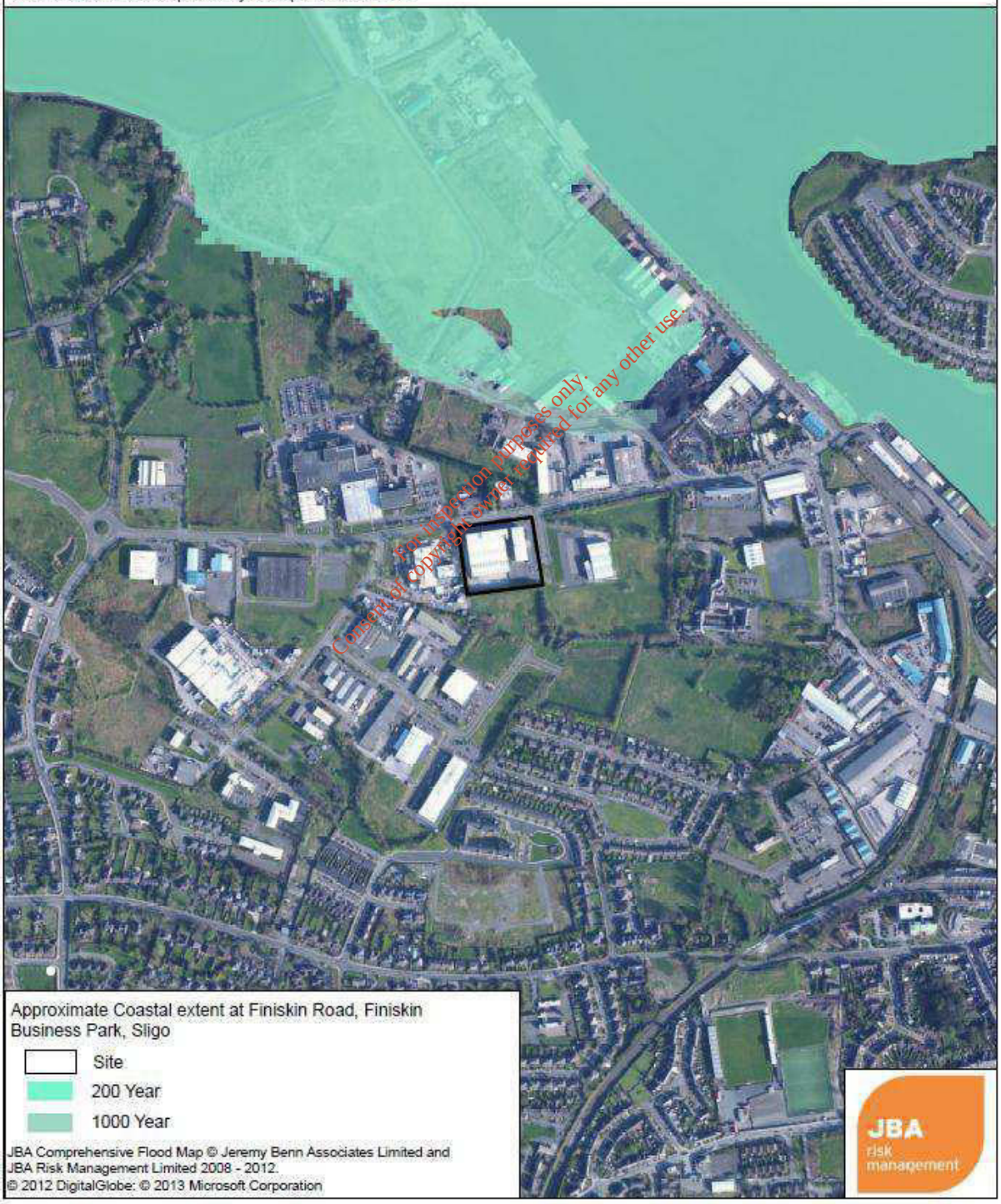
Consent of copyright owner required for any other use.
For inspection purposes only.

EPA Export 21-01-2016:00:59:49

Envirocheck® International

2.2. Coastal Flood Risk

Caution Note: This map is intended to be a preliminary screening tool only and should not be relied upon for any other purpose or in isolation. It provides an approximate guide to areas which may be at risk of flooding. The map, including the key, and information derived therefrom is not a substitute for detailed modelling or risk assessment, which you are strongly advised to consider in every case. Neither should it be used in the design or production of any flood mitigation or defence works. A detailed Flood Risk Assessment is recommended to confirm the likely extent and depth of flooding, to establish flow routes and to demonstrate the impact of any development on flood risk.



For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:49

Envirocheck® International

2.3. Pluvial Flood Risk

Caution Note: This map is intended to be a preliminary screening tool only and should not be relied upon for any other purpose or in isolation. It provides an approximate guide to areas which may be at risk of flooding. The map, including the key, and information derived therefrom is not a substitute for detailed modelling or risk assessment, which you are strongly advised to consider in every case. Neither should it be used in the design or production of any flood mitigation or defence works. A detailed Flood Risk Assessment is recommended to confirm the likely extent and depth of flooding, to establish flow routes and to demonstrate the impact of any development on flood risk.



For inspection purposes only.
Consent of copyright owner required for any other use.

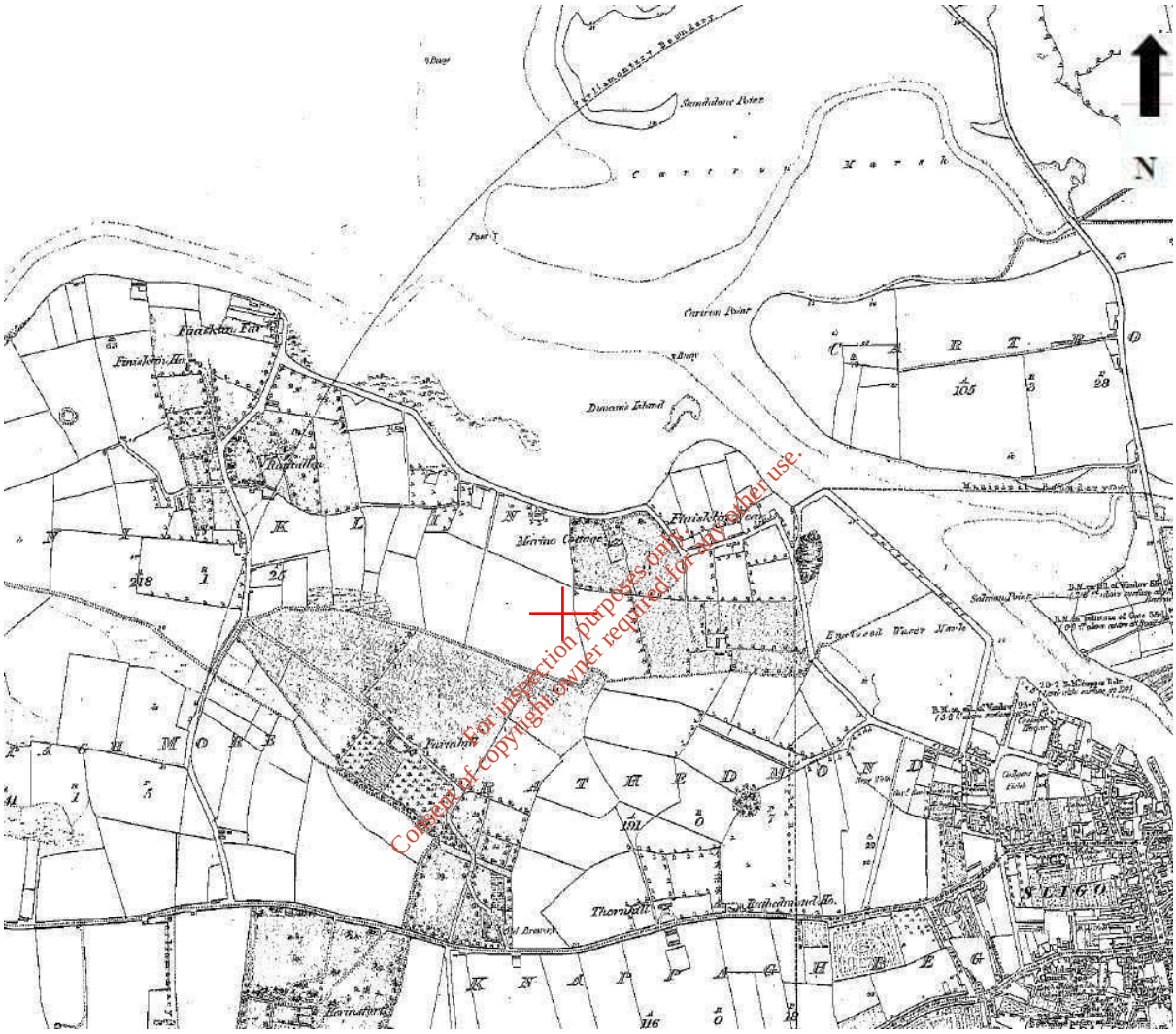
3. Historical Mapping

Map No.	Map Series	Period
1	6 inch Mapping Series	1837
2	6 inch Mapping Series	1837-1913
3	6 inch Mapping Series	1837-1944
4	1:63,360 Mapping Series	1942
5	1:25,000 Mapping Series	1949
6	1:170,000 Mapping Series	1990

For inspection purposes only.
Consent of copyright owner required for any other use.

Envirocheck® International

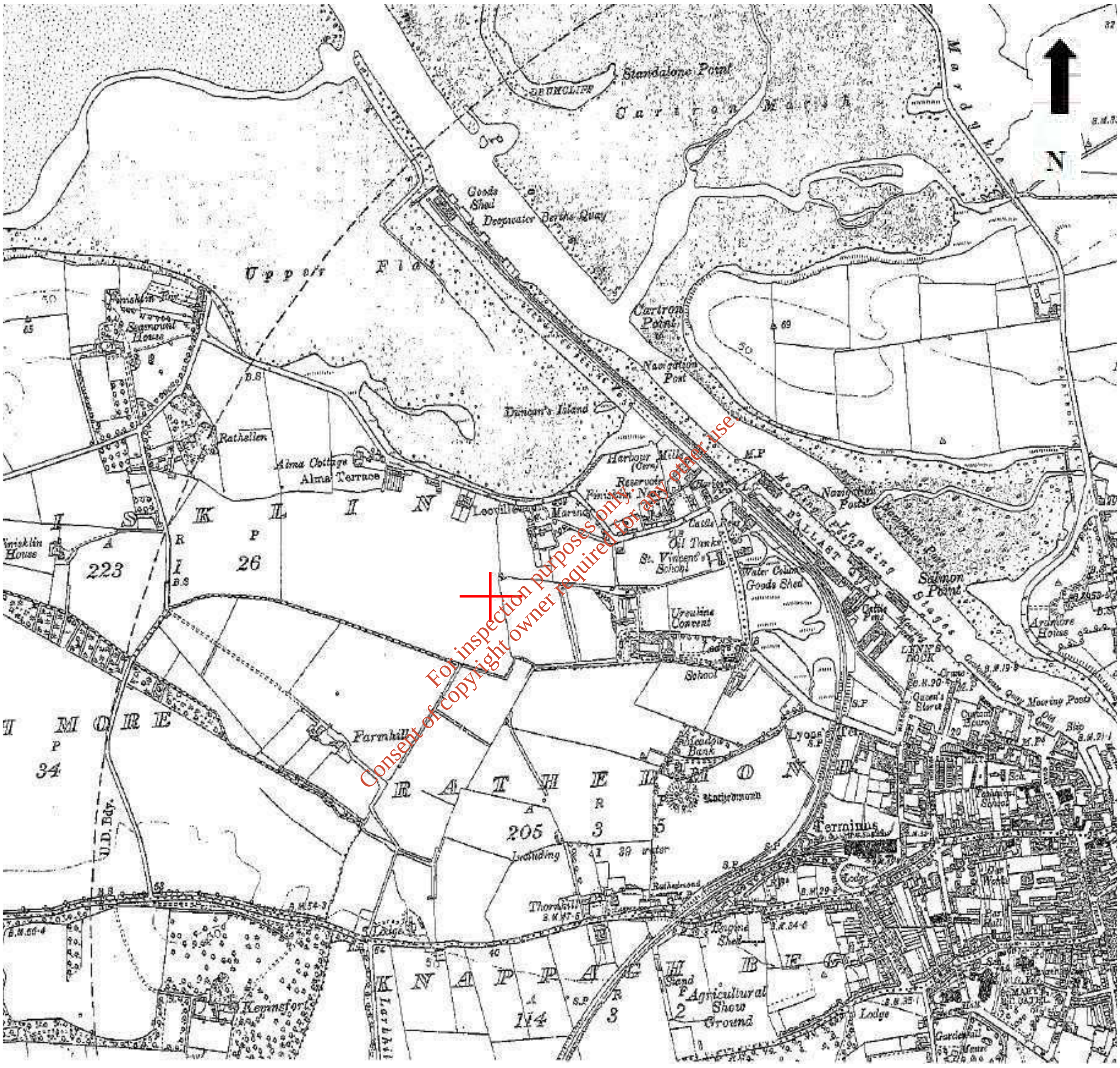
Map No 1.



Consent of copyright owner required for any other use.
For inspection purposes only.

Envirocheck® International

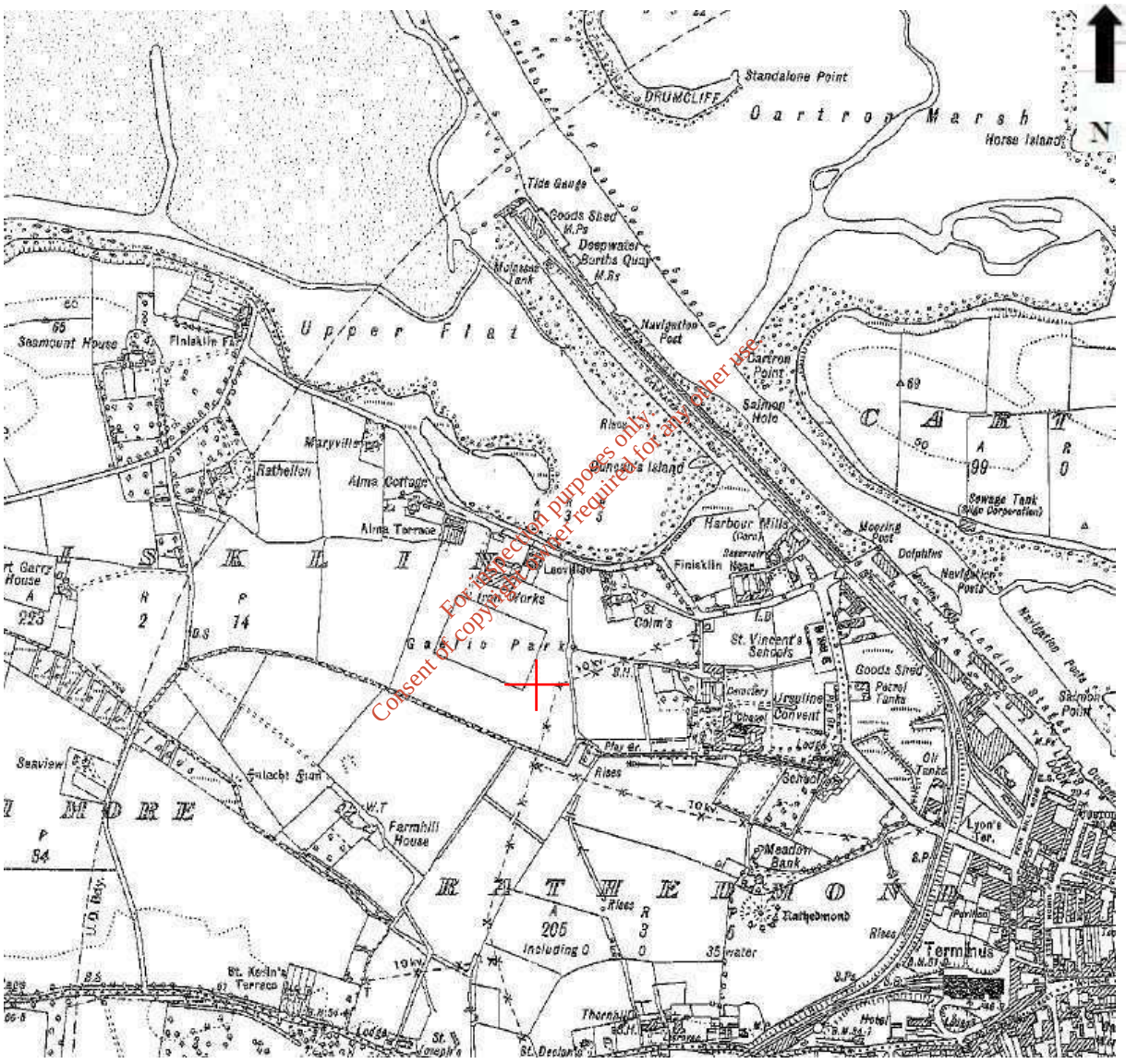
Map No 2.



For inspection purposes only.
Consent of copyright owner required for any other use.

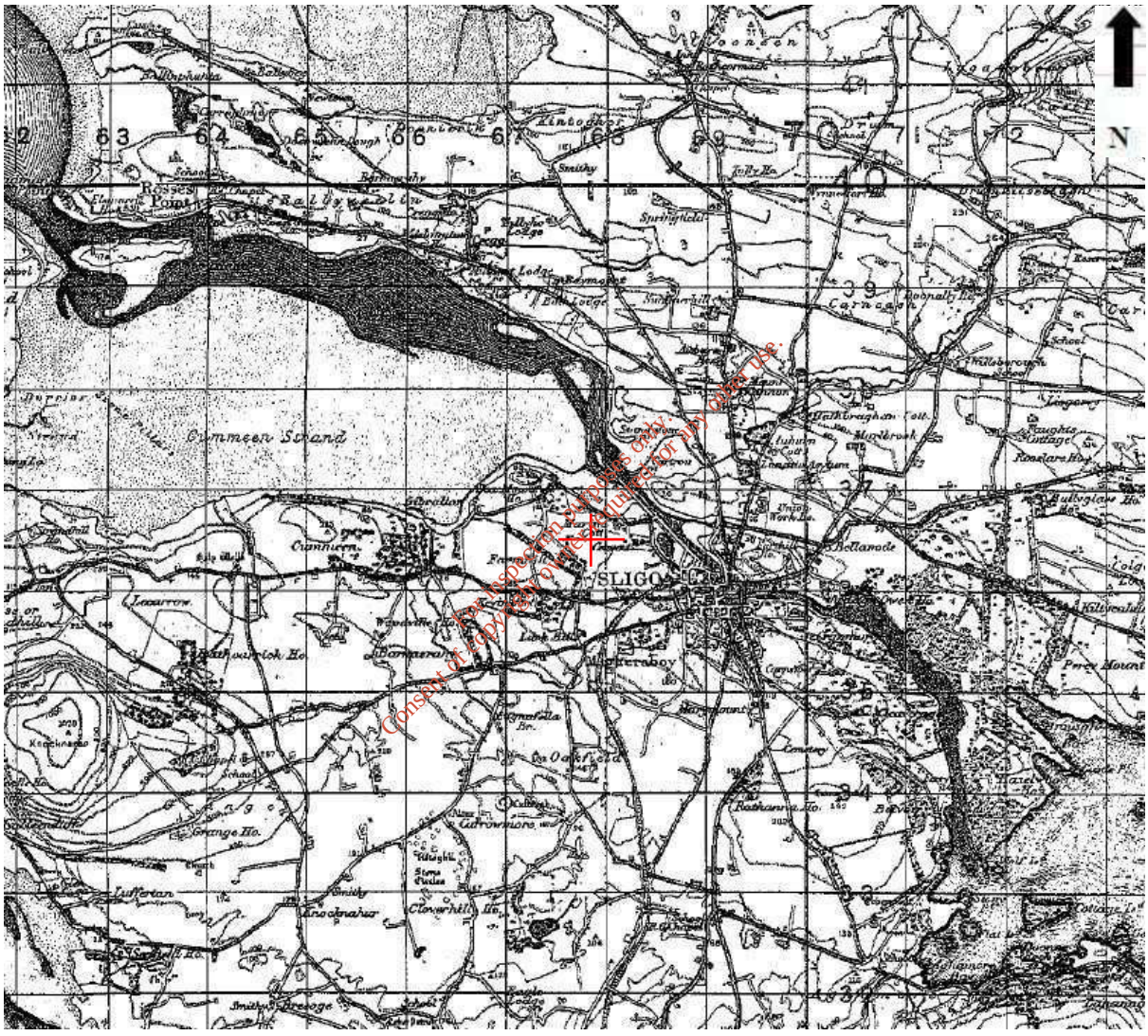
Envirocheck® International

Map No 3.



Envirocheck® International

Map No 4.



For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:49

Envirocheck® International

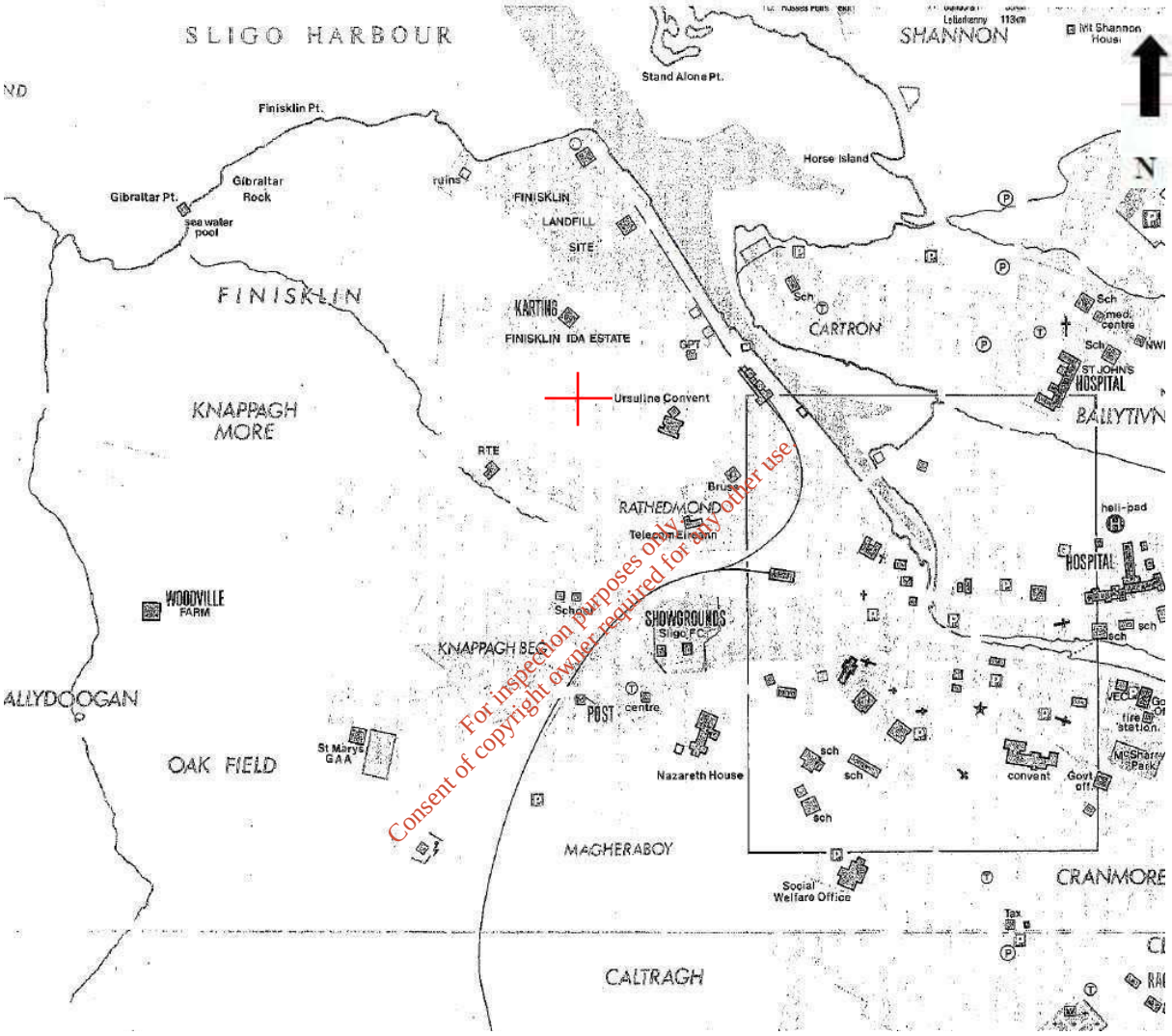
Map No 5.



Consent of copyright owner required for any other use.
For inspection purposes only.

Envirocheck® International

Map No 6.

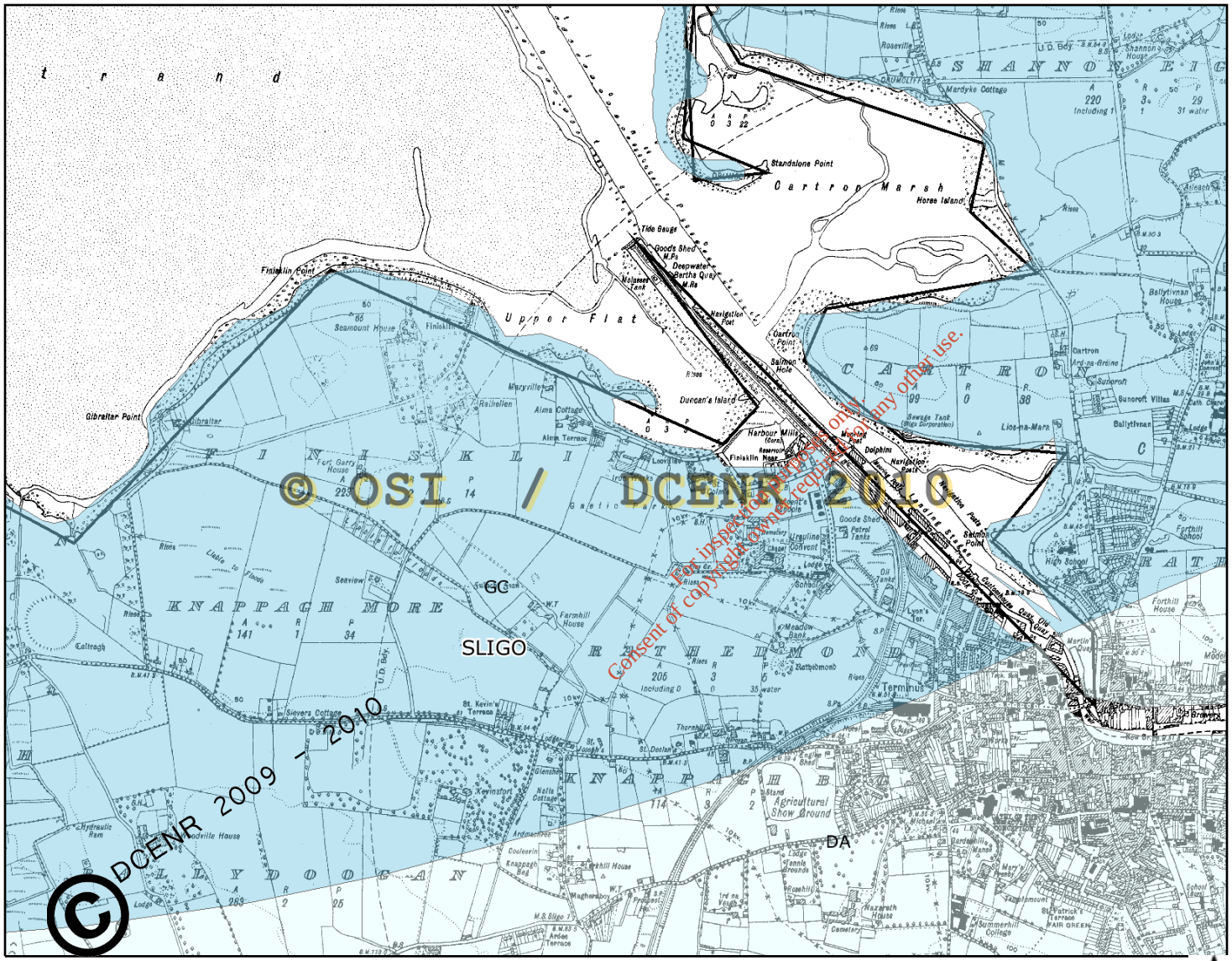


Consent of copyright owner required for any other use.
For inspection purposes only.

4. Bedrock Hydrogeology Map

For inspection purposes only.
Consent of copyright owner required for any other use.

Bedrock Hydrogeology Map



0 450 900 1350 m.

Map center: 167839, 336671

N



Legend

Bedrock 100k Solid Geology

- AA - Aille and Barney Fms (undifferentiated)
- AA - Allen Andesite Formation
- AAwp - Westport Oolite
- AB - South Achillbeg Formation
- ABcg - Achillbeg Conglomerate Member
- ABps - Achillbeg Lighthouse Psammite Member
- ABsl - Achillbeg School Black Slate Member
- AD - Aghaward Formation
- AD - Ardagh Shale Formation
- AD - Ardenagh Formation
- AD - Ashleam Bridge Dolomitic Formation
- AE - Aghamore Formation
- AE - Ardane Formation
- AG - Addergoole River Formation
- AG - Aghfarrell Formation
- AG - Aghmacart Formation
- AGdh - Dowery Hill Member
- AGdo - Aghmacart Formation
- AH - Achill Head Formation
- AH - Arklow Head Formation
- AHfv - in Arklow Head Formation
- AI - Aille Limestone Formation
- AK - Askingarran Formation
- AL - Altan Limestone Formation
- AL - Annascaul Formation
- AL - Argillaceous Limestones (Visean)
- ALmk - in Argillaceous Limest (Visean)
- AN - Anaffrin Formation
- AN - Annabella Formation
- ANgm - Glennamong Member
- ANrd - Old Road Member
- AP - Ards Pelite Formation
- AP - Ashleam Head Formation
- AQ - Ards Quartzite Formation
- AQ - Ashleam Bridge Quartzite Formation
- AQgr - Ashleam Bridge Graphitic Member
- AR - Ardvarney Formation
- AR - Ayle River Formation
- ARM - Armagh Group
- AS - Ardnasillagh Formation
- AS - Ashleam Bay Formation

Scale: 1:17,596

This map and its data may not be used or reproduced for commercial purposes without the prior written permission of Ordnance Survey of Ireland. This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Snapshot Date: 07-Feb-2013

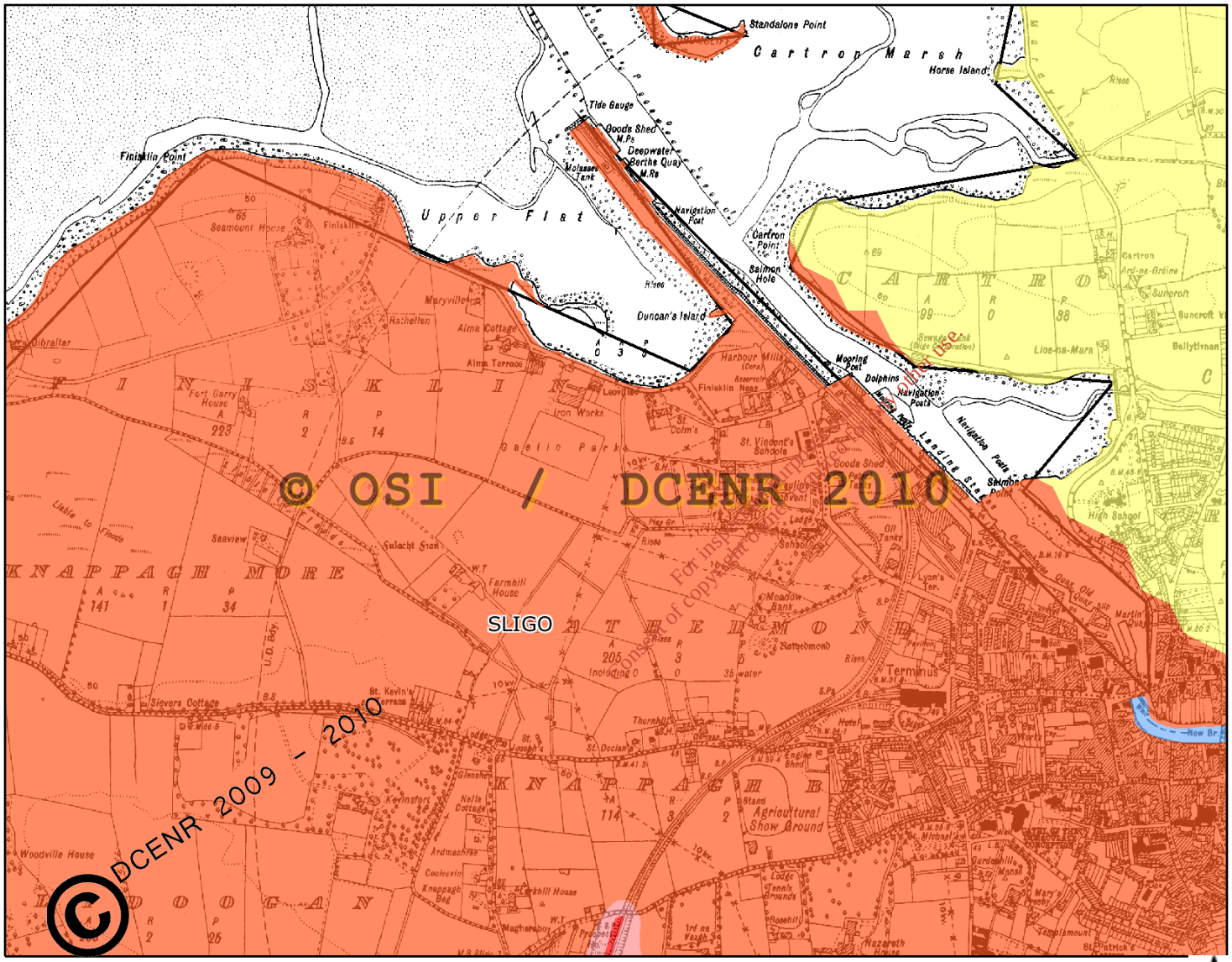
Copyright Ordnance Survey Ireland/Government of Ireland,DCENR,GSI. Ordnance Survey Ireland Licence No. EN 0047212

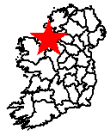
EPA Export 21-01-2016:00:59:49

5. Groundwater Vulnerability Map

For inspection purposes only.
Consent of copyright owner required for any other use.

Groundwater Vulnerability





Legend

Vulnerability

- X (Rock near Surface or Karst)
- E - Extreme
- H - High
- M - Moderate
- L - Low
- HL - High to Low. Only an interim study took place.
- Water
- No Data Available
- County Boundaries
- Watermark

0 375 750 1125 m.

Map center: 167968, 336525

Scale: 1:14,252

This map and its data may not be used or reproduced for commercial purposes without the prior written permission of Ordnance Survey of Ireland. This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Snapshot Date: 07-Feb-2013

Copyright Ordnance Survey Ireland/Government of Ireland,DCENR,GSI. Ordnance Survey Ireland Licence No. EN 0047212

EPA Export 21-01-2016:00:59:49

Useful Contacts and Information

Name and Address	Telephone/Fax/Email
Landmark Information Group The Smith Centre Fairmile Henley-on-Thames Oxfordshire RG9 6AB www.landmark.co.uk	Telephone +44 (0) 844 844 9960 Fax +44 (0) 844 844 9951 customerservices@landmarkinfo.co.uk
Argyll Environmental Limited UK Head Office Lees House 21-33 Dyke Road Brighton BN1 3FE www.argyllenvironmental.com	Telephone: +44 (0) 845 458 5250 Fax: +44(0) 845 458 5260 info@argyllenviro.com

For inspection purposes only.
Consent of copyright owner required for any other use.

Appendix B

Site Photographs

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:49



Photo 1 – Northern elevation of the Fort Gary 1 (offices) building



For inspection purposes only.
Consent of copyright owner required for any other use.

Photo 2 – Third floor of offices, view towards the west

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49



Photo 3 – Northern half of the warehouse space with overhead crane

For inspection purposes only.
Consent of copyright owner required for any other use.



Photo 4 – Redundant electrical switchgear in warehouse

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49



Photo 5 – Potential asbestos containing floor tiles in mezzanine office space in the warehouse



For inspection purposes only.
Consent of copyright owner required for any other use.

Photo 6 – Southern section of the warehouse

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49



Photo 7 – Location of chemicals in the warehouse



For inspection purposes only.
Consent of copyright owner required for any other use.

Photo 8 – External substation and switchgear room, with air conditioning units for Fort Gary 2

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49



Photo 9 – LPG tanks to the south of the Site

For inspection purposes only.
Consent of copyright owner required for any other use.



Photo 10 – Heating Oil AST and bund to the south of the Site

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49

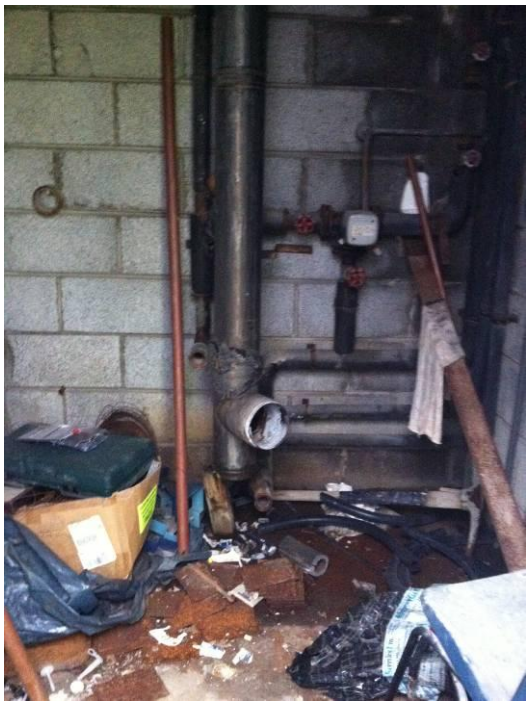


Photo 11 – Former boiler room



Photo 12 – Yard to the south

For inspection purposes only.
Consent of copyright owner required for any other use.

SITE PHOTOGRAPHS

EPA Export 21-01-2016:00:59:49

Appendix C

Underground Utility Plans

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:49

NOTE:

(1) Architects to be informed immediately of any discrepancies.

(2) Do not scale from drawing use figured dimensions only.

(3) All levels indicated are not referenced to ordinance datum points and therefore are assumed levels.

(4) All Underground Services positions are all shown indicatively and are to be confirmed by Client.

For inspection purposes only.
Consent of copyright owner required for any other use.

Gas tank

oil tank

oil spillage tank

P&W fence

Top of embankment

Tarmac

Concrete

Tin fence

Tin sheeted fence

Mesh fence

Ranch fence

Brick wall

Pole

Sign

FH

MH cl=10.20 il=9.60

MH cl=10.14 il=8.21

MH cl=10.11 il=8.55

MH cl=10.08

MH CL=10.21

oMH cl=10.13

oMH cl=10.81

oMH cl=10.86

RG

COMPRESSOR ROOM

FFL=10.46

FACTORY BAY No-3

FFL=10.38

FACTORY WORKSHOP BAY No-2

FFL=10.35

FACTORY WORKSHOP BAY No-1

FFL=10.38

CONCRETE FLOOR

GOODS OUT

GOODS IN

LOADING DOCK 1

Ramp

Guard rail

Steps 7 risers

CONCRETE YARD

ELECTRIC ROOM

FEMALE

MALE

CANTEEN

OFFICE

RECEPTION

CORRIDOR

SALESROOM

ENTRANCE

Paul Doherty Architects

JUNE 2004

SURVEY

OVERALL BUILDING & SITE SURVEY Scale 1:250

REV.	NOTES	DATE

PROJECT **PROPOSED UPGRADING & EXTENSION TO EXISTING FACTORY & OFFICES For: TAURUS PRODUCTS MANUFACTURING LTD., FINISKLIN, SLIGO.**

DRAWING TITLE **OVERALL BUILDING & SITE SURVEY**

PROJECT STAGE SURVEY	SCALE 1:250	DATE 14 JUNE 2004
SURVEYED BY Sean Loingsigh	COMPUTER; REF / FILE	DRAWING NO. 04-34-04

Paul Doherty Architects Ltd.
Architects & Interior Designers
DRIMARK, KILLYBEGS ROAD, DONEGAL TOWN.
TEL:(073)23131/FAX:(073)23152
e-mail: pdoarch@eircom.net

EPA Export 21-01-2016:00:59:49

POLE

P&W fence

Mesh fence

PETROL INTERCEPTOR

OIL

GAS

TARMAC fall 1:200

FOOTPATH

GRASS VERGE

SIGN & BARRIER

PAVING

FLOODLIGHTS

STEPS

RAMP

SEWER ROOM

ESB SUB

140 KVA TO FACTORY

BOILER ROOM

SIGN

GRASS VERGE

POLE

FOOTPATH

E.S.B.

EIRCOM

E-NET

GAS LINE

WATER MAINS

OIL LINE

SEWER

STORM WATER

SERVICE DUCT

RADON SUMP & VENT

For inspection purposes only.
Consent of copyright owner required for any other use.

STAGE	DATE	COMMENTS
PLANNING	JAN. 2006	FINAL PLANNING DRAWINGS
PLANNING 2	MAY. 2007	EXTENSIONS TO GROUND FLOOR AREA RE-POSITIONING OF EASTERN ESCAPE STAIRWELL
PRE-CONST.	SEP. 2007	REVISED POWER DISTRIBUTION

Client:
TAURUS MANUFACTURING LTD.
FINISKLILN,
SLIGO.

Project:
FORT GARY 3 OFFICE BLOCK,
FINISKLIN INDUSTRIAL ESTATE,
SLIGO.

Scale: 1:250

Dr. no.: FG3-028

DRY SERVICES LAYOUT

Hayes & Associates
Architects & Consultants
Finisklin, Sligo, Ireland.
phone/fax: 071-9161875

©Copyright : No unauthorised reproduction or copying without the express consent of Hayes & Associates.

EPA Export 21-01-2016:00:59:49

POLE

P&W fence

Mesh fence

PETROL INTERCEPTOR

GAS

OIL

TARMAC fall 1:200

FOOTPATH

GRASS VERGE

LP

SIGN & BARRIER

PAVING

GT

UPLIGHTS

STEPS

RAMP

FH

GAS METERS

POWER ROOM

ESB SUB

WATER METERS

BOILER ROOM

SIGN

SV

E.S.B.

EIRCOM

E-NET

GAS LINE

WATER MAINS

OIL LINE

SEWER

STORM WATER

SERVICE DUCT

RADON SUMP & VENT

For inspection purposes only.
Consent of copyright owner required for any other use.

STAGE	DATE	COMMENTS
PLANNING	JAN, 2006	FINAL PLANNING DRAWINGS
PLANNING 2	MAY, 2007	EXTENSIONS TO GROUND FLOOR AREA RE-POSITIONING OF EASTERN ESCAPE STAIRWELL
PRE-CONST.	SEP, 2007	REVISED POWER DISTRIBUTION

Client:
TAURUS MANUFACTURING LTD.
FINISKLILN,
SLIGO.

Project:
FORT GARY 3 OFFICE BLOCK,
FINISKLIN INDUSTRIAL ESTATE,
SLIGO.

Scale: 1:250

Dr. no.: FG3-027

WET SERVICES LAYOUT

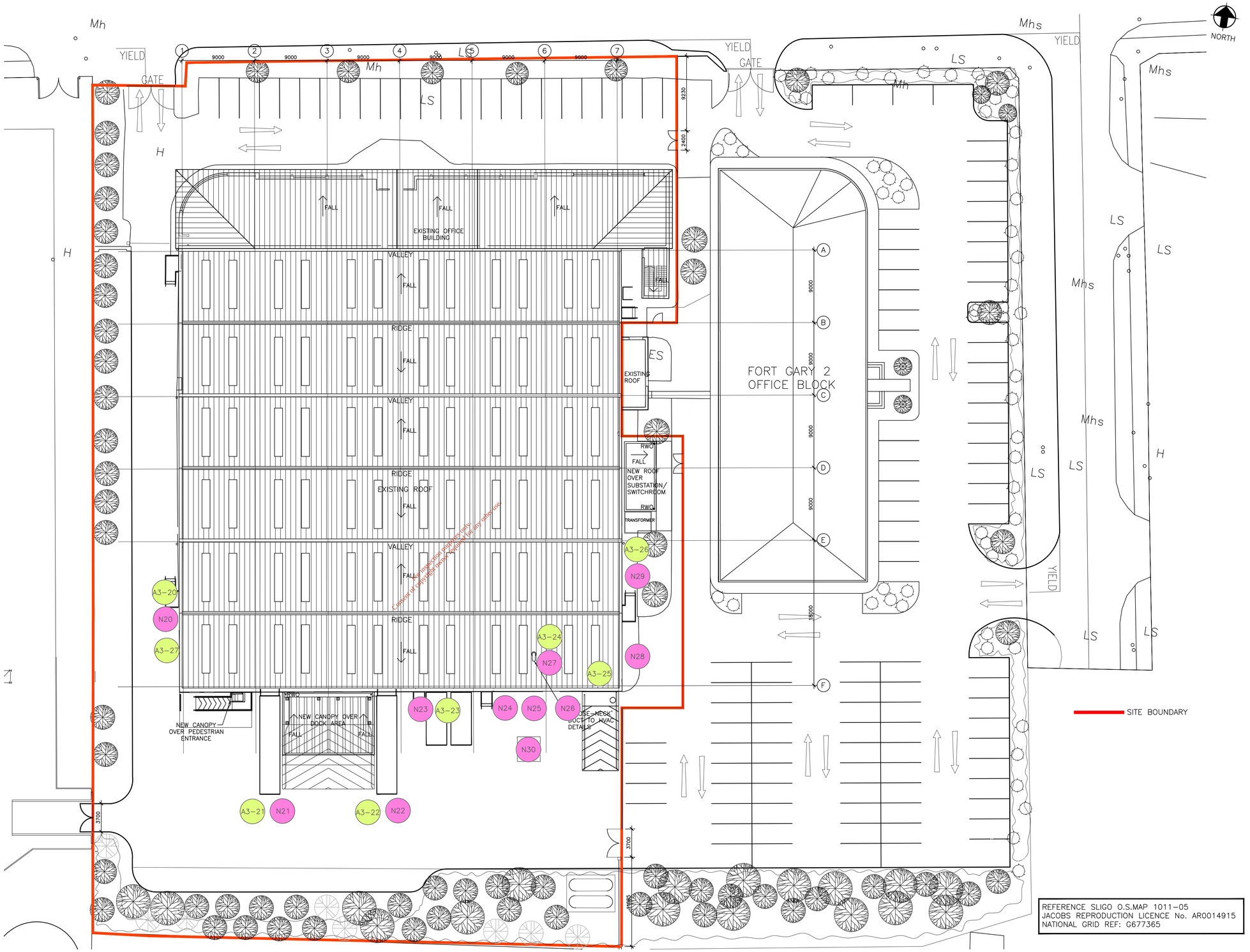
Hayes & Associates
Architects & Consultants
Finisklin, Sligo, Ireland.
phone/fax: 071-9161875

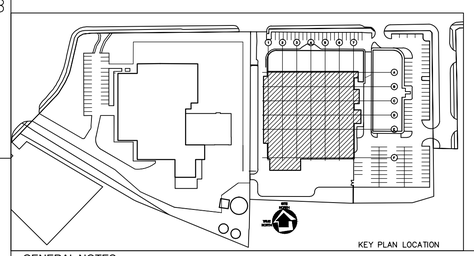
©Copyright : No unauthorised reproduction or copying without the express consent of Hayes & Associates.

EPA Export 21-01-2016:00:59:49

Legend

Boiler Emissions	
Main Air Emissions	
Minor Air Emissions	
A3-20	Exhaust Fan
A3-21	Mobile Chiller Unit
A3-22	Mobile Chiller Unit
A3-23	Exhaust Fan
A3-24	AHU Exhaust
A3-25	Boiler
A3-26	Exhaust Fan
A3-27	Exhaust Fan
Emissions to Sewer	
Noise Emissions	
N20	Exhaust Fan
N21	Mobile Chiller Unit
N22	Mobile Chiller Unit
N23	Exhaust Fan
N24	AHU.
N25	AHU
N26	Air Compressor
N27	AHU Exhaust
N28	Boiler
N29	Exhaust Fan
N30	Condenser





KEY PLAN LOCATION

A SITE PLAN
SCALE: 1:250

REFERENCE SLIGO O.S.MAP 1011-05
JACOBS REPRODUCTION LICENCE No. AR0014915
NATIONAL GRID REF: G677365

GENERAL NOTES:
Refer □□e Ar□□i□□ur□□S□□□e □f W□□□f□r e□□e□□□f C□□□r□□□ □ I□□eri□r□ P□□□□ge.
U□e□□ □□□ed □□er□i□e□□□□ □□□ □re i□ □□e□□r□□□ □□□e□□□□e□.
F□r W□□□f□□e de□i□□ □ee dr□□i□g N□. □□-□22□-01-01/A.01N/0014 □□d S□e□ifi□□□□□ N□□. □□-□22□-01-01/A.02A/0014□15 □ □□-□22□-01-01/B.02B/0001
F□r I□er□□□D□r□□Ir□□□ □□ger□□ I□er□□□Wi□d□□□refer □□ D□□r□Wi□d□□ □ L□u□re S□□edu□e□D□□. N□□. □□-□22□-01-01/A.03A/0002□0003 □□d 0004.
F□r Cei□□g □eig□□□i□f□r □□□□ □ee Refe□□ed Cei□□g Dr□□i□g N□□. □□-□22□-01-01/A.01L/0001□0002 □ 0003
F□r S□□□r□W□re □ee S□□i□r□W□re S□□edu□e□D□□. N□. □□-□22□-01-01/A.03A/000□
F□r C□□r□□□ Fur□□re □□□□e Ce□□r□□□ Perf□r□ □□□e S□e□ifi□□□□□D□□. N□. □□-□22□-01-01/A.02A/0014 □□d Mi□□ Me□□□□r□S□□edu□e N□. □□-□22□-01-01/A.03A/000□.

F□r C□e□r□□□ Perf□r□ □□□e S□e□ifi□□□□□ □ee D□□N□. □□-□22□-01-01/A.02A/0014.
T□e C□e□r□□□ S□□□e□ i□ □□e F.M. □□□r□□ed.
F□r □□□□□□ □f Bu□□er R□i□ □□d F□□r-□□u□□ed r□i□ □ee F□□r Fi□□□e□Dr□□i□g N□□. □□-□22□-01-01/A.01S/0001 □ 0002 □□d □□-□22□-01-01/A.01S/1001 □ 1002.
F□r de□i□□f Bu□□er R□i□ □□d F□□r-□□u□□ed r□i□ □ee I□er□□□De□i□S□ee□ Bu□□er R□i□ □□d B□□□rd□Dr□□i□g N□. □□-□22□-01-01/A.01N/0013.
F□r Fi□□□e□□ee I□er□□□Fi□□□e□S□□edu□ □□-□22□-01-01/A.03A/0001 □□d F□□r Fi□□□e□Dr□□i□g N□□. □□-□22□-01-01/A.01S/0001□0002□1001 □ 1002.
F□r Lege□d □□d A□□re□i□□□□□ □ee Dr□□i□g N□. □□-□22□-01-01/A.01A-/0001.

SAVE NAME
6227-01_01A01A0003.DWG

CERTIFICATION

LILLY CHANGE CTRL. NO.

LILLY PROJ. NO.

SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK. ENG.	REC. APPROVALS
A		Issued for Tecnical Amendment	16 Feb 2015	MC	RK	DM

REVISIONS

GENERAL SYMBOLS
REFERENCE
2 SECTION # 3 DRAWING #
A DETAIL OR ELEVATION ON DRAWING #
ITEM DESIGNATION
2 ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING
CHANGE
2 THIRD REVISION

THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF EU LILLY S.A.—IRISH BRANCH AND ARE NOT TO BE USED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF EU LILLY S.A.—IRISH BRANCH.

PROJECT NO. 76622702 **A1**

ENG APPROV. BY	DATE

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Technical Amendment Drawing 4

Emissions Plan

CLIENT DRAWING NO.

ENGINEERING APPROVAL	DATE	16 Feb 2015
CHECKED	SCALE	1:250 at A1
RECORDS CONTROL	DRAWN	MC
AMW DRAWING NO.	REV.	A

EPA Export 21-01-2016:00:59:49

Elanco Animal Health Ireland Ltd

Firewater Retention Risk Assessment: Fort Gary

DOCUMENT CONTROL SHEET

For inspection purposes only.
Consent of copyright owner required for any other use.

Client:	**Elanco Animal Health Ireland Ltd**					
Project Title:	**Fort Gary**					
Document Title:	**Firewater Retention Risk Assessment**					
Document No:	**MGC0423RP0002**					
This Document Comprises:	**DCS**	**TOC**	**Text**	**No. of Appendices**	**List of Figures**	**List of Tables**
	1	**2**	**17**	**2**	**1**	**1**

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
F01	Final	C. Killian F. Clifford			Galway	12th June 2015

EPA Export 21-01-2016:00:59:50

TABLE OF CONTENTS

1 INTRODUCTION 1

2 FORT GARY COMPLEX 3

2.1 LABORATORY AND PRODUCTION FACILITY 4

2.2 AMBIENT STORE 4

2.3 ADMINISTRATION 4

2.4 COLD ROOMS 5

2.5 PALLET AREA 5

2.6 GOODS IN / GOODS OUT 5

2.7 WASTE AREA 5

2.8 PLANT ROOM 5

3 DRAINAGE SYSTEMS AND CONTAINMENT 6

3.1 SURFACE WATER 6

3.2 FOUL WATER 6

3.3 CONTAINMENT 6

4 EMERGENCY RESPONSE, FIRE FIGHTING / SUPPRESSION SYSTEMS 7

4.1 EMERGENCY RESPONSE 7

4.2 FIRE DETECTION AND ALERT SYSTEMS 7

4.3 FIRE FIGHTING / SUPPRESSION SYSTEMS 7

4.3.1 Fire Extinguishers 7

4.3.2 Sprinkler System 7

4.4 SLIGO COUNTY COUNCIL FIRE SERVICE (SFS) 8

4.4.1 Response Time 9

4.4.2 Appliance Details 9

4.4.3 Time to Extinguish Fire 9

5 MATERIALS INVENTORY 10

5.1 L&P FACILITY 12

5.2 COLD ROOM 1 13

5.3 COLD ROOM 2 13

5.4 SUMMARY 13

6 RISK ASSESSMENT 15

6.1 COLD ROOMS 15

6.1.1 Fire Load 15

6.1.2 Fire Risk 15

6.1.3 Environmental Load 15

6.1.4 Environmental Risk 15

6.2 SUMMARY 16

7 CONCLUSIONS AND RECOMMENDATIONS 17

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

7.1 CONCLUSIONS 17
7.2 RECOMMENDATIONS 17

LIST OF FIGURES

Figure 1.1: View of Fort Gary Complex 1
Figure 2.1: General Site Overview for the Fort Gary Complex 3
Figure 2.2: Typical Warehouse Layout 4

LIST OF TABLES

Table 5.1: EPA Guidance R Phrase Recommendations 11
Table 5.2: WGK Hazard Category Table 12
Table 5.3: Mercury Quantity Calculation (for each Cold Room) 13
Table 5.4: Revised Cold Room 1 (Cold Room 2 similar) 13
Table 5.5: SI 272/2009 Summary 14
Table 5.6: EPA R Phrase Summary 14
Table 5.7: WGK Summary 14
Table 6.1: Risk Assessment Summary 16

For inspection purposes only.
Consent of copyright owner required for any other use.

APPENDICES

APPENDIX A FACILITY PLANS **PAGES 1**

APPENDIX B DRAINAGE SYSTEMS **PAGES 1**

EPA Export 21-01-2016:00:59:50

1 INTRODUCTION

RPS was engaged by Elanco Animal Health Ireland Ltd. to carry out a Firewater Retention Risk Assessment (FWR) for their Fort Gary Complex at the Finisklin Industrial Estate, Sligo. As part of the Integrated Pollution Prevention and Control (IPPC) Licence standard conditions the licensee is required to carry out a risk assessment to determine if the activity should have a firewater retention facility. Elanco has requested this assessment in advance of receipt of the licence conditions from the EPA to outline the extent of work, if any, which may be required to satisfy the EPA's requirements. The assessment is being carried out in accordance with the EPA publication "Firewater Retention Facilities (Draft Guidance Note to industry on the Requirements for Firewater Retention Facilities)".

Elanco was established at the Finisklin Industrial Estate in 1991. There they produce and test a complete range of veterinary vaccines for companion and large animals. Elanco's operations are spread across a number of buildings and sites within the business park including administration and offices, storage and warehousing, laboratories and production areas. This report considers the area known as the Fort Gary Complex and does not include any other building or site. An image of the Fort Gary Complex is included in **Figure 1.1**.


For inspection purposes only.
Consent of copyright owner required for any other use.

Figure 1.1: View of Fort Gary Complex

The assessment is based on drawings, documents and a material inventory received from Elanco, correspondence with Elanco staff and a detailed site walkover and inspection of the Fort Gary Complex. The report outlines the following:

- Facilities and production areas within the Fort Gary Complex,
- Drainage systems to the Fort Gary Complex,
- Emergency response, fire fighting, suppression systems and local fire department information,
- Materials and chemicals used and stored on site,
- Fire scenarios (by relevant area) including assessment of fire load, fire risk, environmental load and environmental risk,

EPA Export 21-01-2016:00:59:50

- Quantities of firewater likely to be applied in the event of a fire (if required),
- Impact of rainfall during a fire event (if required),
- Conclusions and recommendations.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

2 FORT GARY COMPLEX

The Fort Gary Complex is located in the centre of the Finisklin Industrial Estate to the west of Sligo Town Centre and the main N4 road. The overall site area is approximately 10,100 m^2 (2.50 acres) made up of approximately 9,800 m^2 (2.42 acres) of developed land including concrete paths, tarmac roads and buildings. The remainder of the site is undeveloped, grassed or landscaped land. Elanco has ownership of only one of the buildings on the complex. **Figure 2.1** below shows the plan overview of the complex with Elanco's building outlined with a red boundary. The site area within this boundary is approximately 5,630 m^2 (1.39 acres) made up of approximately 5,460 m^2 (1.35 acres) of developed land.



For inspection purposes only.
Consent of copyright owner required for any other use.

Figure 2.1: General Site Overview for the Fort Gary Complex

RPS visited Elanco's offices on 14th June 2013 which included a detailed inspection of the Fort Gary Complex. The building is currently a steel frame shell awaiting fit out with Elanco's various facilities. The general construction is a double height steel frame structure with external block walls and cladding. **Figure 2.2** indicates a typical image of the internal shell of the building. The facilities to be integrated into the Fort Gary Complex can be split into the following main areas:

- Laboratory & Production (L&P 1 – 4) Facility – including clean rooms and process areas,
- Ambient Store,
- Administration (FG3),

EPA Export 21-01-2016:00:59:50

- Cold Rooms (Refrigerated Containers),
- Pallet Area,
- Goods In / Goods Out,
- Waste Area,
- Plant Room.

An overall site plan and ground floor drawing are included in **Appendix A – Facility Plans.**



For inspection purposes only.
Consent of copyright owner required for any other use.

Figure 2.2: Typical Warehouse Layout

2.1 LABORATORY AND PRODUCTION FACILITY

The L&P Facility is to be located along the eastern side of the Fort Gary Complex. It is currently proposed that this area be split into four zones as outlined on the ground floor plan in **Appendix A**. Compartment walls will be painted blockwork / partition wall or clean room construction, with a minimum of 1 hour fire resistance. Materials and substances will be used within this area and brought in on an as required basis from the storage areas.

2.2 AMBIENT STORE

The Ambient Store will contain storage racking and pallets however there will be no chemicals stored in this area. Compartment walls will be painted blockwork / partition wall or clean room construction, with a minimum of 1 hour fire resistance.

2.3 ADMINISTRATION

The northern section of the Fort Gary Complex is an existing office building (FG3) to be used for administration purposes. This area houses general offices, canteen, toilets and locker rooms. The general construction is two storey concrete block walls with a glazed / clad exterior, internal partitions of

EPA Export 21-01-2016:00:59:50

block or timber stud and a flat roof over. No materials or substances are stored in this area except for general kitchen and office cleaning products.

2.4 COLD ROOMS

Two cold rooms (comprising two external refrigerated “Dawson” units) are to be located at the south of the Fort Gary Complex. The majority of materials and substances will be stored (in plastic containers, glass vials) in these areas at very low temperatures. Externally these have a form of construction similar to the appearance of a ‘Portakabin’.

2.5 PALLET AREA

The pallet area is located at the south of the Fort Gary Complex, between the goods in / out area and the production areas. No materials or chemicals will be stored in this area. General construction is as per the building envelope.

2.6 GOODS IN / GOODS OUT

This area at the southern end of the complex serves the facility for receipt of materials and dispatch of final products. No materials or chemicals will be stored in this area. General construction is as per the building envelope.

For inspection purposes only.
Consent of copyright owner required for any other use.

2.7 WASTE AREA

This area is adjacent to the goods in / goods out area at the south of the complex and stores all waste from the facility prior to collection. No materials or chemicals will be stored in this area. General construction is as per the building envelope.

2.8 PLANT ROOM

The plant room generally contains equipment which does not form part of the day to day process activities. This will be a new extension at the southeast of the complex with general construction as per the building envelope. No materials or substances will be stored in this area.

EPA Export 21-01-2016:00:59:50

3 DRAINAGE SYSTEMS AND CONTAINMENT

The facility has two drainage systems as follows:

- Surface Water,
- Foul Water,

The layout of the system is indicated on the Original Drainage Layout in **Appendix B – Drainage Systems.** These drawings were prepared in 2004 when the adjacent building to the east was developed. Drainage drawings for the new design are yet to be completed however it is anticipated the existing systems will largely be maintained with additional tie ins for refurbished warehouse areas.

3.1 SURFACE WATER

The site is relatively flat due to its developed nature of roads, parking and footpaths. There is a slight rise from east to west of approximately 300 mm which is in line with the estate access road to the north. The existing surface water system consists of a series of gullies and roof downpipes surrounding the building and connecting via feeder pipes to the main system pipelines and manholes. The main pipelines discharge to the public mains in two locations to the southeast and southwest of the building. The system also serves the neighbouring development to the east.

As there is currently no retention facility, the surface water system will act as the collection system for firewater at the site. It should be noted that the surface water system for the site serves the entire Fort Gary complex, i.e. Elanco's red line boundary plus the neighbouring property to the east.

For inspection purposes only.
Consent of copyright owner required for any other use.

3.2 FOUL WATER

The foul system consists of one line of sewer from the existing offices along the northern face of the building which ties into the neighbouring development to the east. The system discharges to the existing public sewers at the southeast corner of the site. There is currently no foul sewer serving the warehouse section of the building.

3.3 CONTAINMENT

There will be no containment at the facility.

EPA Export 21-01-2016:00:59:50

4 EMERGENCY RESPONSE, FIRE FIGHTING / SUPPRESSION SYSTEMS

This section has been compiled from information provided by the Client, correspondence with Sligo Fire Department and previous experience on similar projects. As Fort Gary is yet to be developed and occupied emergency procedures, detection and suppression systems are yet to be finalised. However Elanco has emergency procedures in place for their other buildings and sites throughout the industrial estate. It is anticipated these will be similar to what is proposed for Fort Gary and they are detailed below.

4.1 EMERGENCY RESPONSE

Elanco has an in-house Emergency Response Team (ERT) fully trained in standard procedures and actions to be carried out during emergencies such as fires, fuel spills, bomb threat etc. The ERT includes a group of employees within each department who have undertaken additional roles such as Fire Marshall, Evacuation Officer, Responsible Contact Person etc. Each employee received specific training in relation to their role, responsibilities and reporting mechanisms in order to smoothly interact with the various officers during an emergency.

In addition to the above, all employees within the facility receive training courses from the ERT to ensure they are familiar with the procedures to be followed during an emergency. This includes awareness of the different alarm signals, what to do during an emergency, knowledge of the ERT personnel and who to contact. Drills are conducted four times each year; two of which consist of a walkthrough of the procedures with the ERT as far as the emergency exits, the other two consist of full plant evacuation to external assembly points.

For inspection purposes only.
Consent of copyright owner required for any other use.

4.2 FIRE DETECTION AND ALERT SYSTEMS

Fire detection systems at Elanco generally take the form of smoke detectors and heat sensors to trigger alarms. There are also manual break glass units located throughout the facilities. The alarms may be activated automatically or manually, where the alarm signal indicates that a full evacuation must take place immediately.

4.3 FIRE FIGHTING / SUPPRESSION SYSTEMS

Elanco has confirmed that there will be two main fire fighting / suppression systems at Fort Gary as follows:

- Fire extinguishers (hand operated),
- Sprinklers.

4.3.1 Fire Extinguishers

Fire extinguishers employed on site are generally standard hand operated 2 kg CO_2 units. These are spread throughout the facility stored in easily accessible wall mounted locations to facilitate availability to all areas in the plant. Fire extinguishers deploying CO_2 do not form part of the firewater volume.

4.3.2 Sprinkler System

Underground Fire Main

EPA Export 21-01-2016:00:59:50

The Fort Gary Complex is protected by automatic fire sprinkler system fed from a 200mm fire ring main which is in turn fed by a fire water storage tank and fire pump. The sprinkler system is fed by fire pump sets in the fire pump house on the Main Plan site to the west. All are designed and installed in accordance with the requirements of Factory Mutual (FM) rules. The 200mm cement lined ductile iron fire main is installed from a connection in the existing fire main just outside the existing sprinkler pump house and across the boundary fence line into the new building. This pipe then travels along the length of the building to the office area (FG3) wet alarm valve, this section of main is controlled by post indicator valve (PIV) 03. There is a tee connection on the mains to feed the new L&P area. This section of mains is controlled by PIV 04 and enters the building at the Goods In/Out and terminates at the valve set header. There are isolating valves on each section of the fire main as described above for isolation and an above ground post (PIV 03/04) allows users to determine the position of the valve and operate it from above ground.

Wet Sprinkler System

Wet sprinkler systems are indoor and shall be maintained above 4°C. Pipework is constantly charged with water. Activation of the wet pipe sprinkler system is by loss of system water pressure due to breaking of sprinkler bulb when the air temperature exceeds the temperature rating of the sprinklers. This pressure loss is detected by the fire pump pressure and flow switches and will start the fire pumps. The only sprinkler heads that activate are those that exceed the temperature rating of the sprinklers and rupture, i.e. only where the fire actually is. The wet sprinkler system serves all areas within the L&P Facility and the refrigerated units (Cold Stores).

Dry Pipe System

A dry sprinkler system consists of sprinkler heads fitted to a section of pipe filled with compressed air. Because this section of pipe is exposed, it cannot be ordinarily charged with water because water is subject to freezing. Instead the pipework downstream of the alarm valve is charged with compressed air. The air pressure is maintained using a compressor which behaves exactly as its wet counterpart. When the sprinkler head operates, the orifice of the sprinkler head is opened, releasing the pressurized air. This ends the previous equilibrium of pressure on the wet and dry side of the alarm, allowing the alarm valve to open and the water to discharge through the operational sprinklers. A pressure switch on the affected system sends a signal to the fire monitoring panel in the control room and also to the remote alarm panel. The dry pipe system only serves the external canopy area at the Cold Stores.

Consent of copyright owner required for any other use. For inspection purposes only.

Water for the FG3 sprinkler system is fed by the existing electric and diesel fire pumps in the Main Plant sprinkler pump house. These pumps draw water from the existing 500m^3 tank and are rated at a flow rate of 340m^3/hr at 100 psi nominal pressure. The offices on all three floors of FG3 are fitted with wet pipe closed head sprinkler system which conforms to FM Global codes for Hazard Class 1. This ensures a water supply of 4mm/min over 140m^2. The sprinkler heads are activated by high temperature so any activation is confined to the area where a fire is. There is a flow switch installed at the riser coming into the building which is linked to the fire alarm. In the event of the flow switch activating, an evacuation will be triggered. This system is tested on a quarterly basis. There is an isolation valve at the riser into the building and another one on the boundary between Fort Gary and Main Plant compounds. Both of these are fitted tamper switches which are linked back to the fire alarm. If they are activated, then a fault is displayed.

4.4 SLIGO COUNTY COUNCIL FIRE SERVICE (SFS)

SFS has been consulted in order to obtain figures relating to the following:

- Response time to a fire,
- Details of appliances brought to site (including capacity, pump rates etc),

EPA Export 21-01-2016:00:59:50

- Estimate of time to extinguish a fire.

4.4.1 Response Time

SFS has confirmed that it will take 10 – 12 minutes to mobilise and arrive on site following activation of an alarm in the station, depending on traffic conditions. The fire station is located at St. Anne's Terrace in the town, 3 km to the east of the site. Google Route Mapping suggests this will take eight minutes. Allowing time for mobilisation and traffic conditions by adding an additional 50% to the time equates to 12 minutes. Therefore 12 minutes is allowed for response time.

4.4.2 Appliance Details

SFS has confirmed that two Class B fire tenders would be deployed to site under normal circumstances. Class B fire tenders have a capacity of 2,250 litres each and can each pump water at a rate of 2,500 litres/minute. Fire tenders will be connected to site hydrants to replenish the tankers allowing a continual flow of water. Depending on the severity of the fire, additional tenders and tankers are available to attend emergency situations, however in general two Class B tenders are sufficient.

4.4.3 Time to Extinguish Fire

SFS has noted that the sprinklers will contain the fire to a size that would be easily dealt with following arrival on site. They did not specify a time for this but previous experience working with other local authorities suggests areas served by sprinklers would be extinguished and surfaces sufficiently cooled within 15 minutes of arrival on site. Therefore the total time to extinguish a fire will be 27 minutes.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

5 MATERIALS INVENTORY

Elanco has provided RPS with a full inventory of materials and substances to be stored on site. Toxicity information for some materials has been provided and some additional research has been carried out for less well known materials. The toxicity information is an essential part of the risk assessment process in order to classify each material in accordance with environmental legislation and within known environmental risk standards. The legislation and standards used as part of this report are as follows:

1. Statutory Instrument No. 272/2009 – European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI 272/2009 for short)

These regulations apply to all surface waters and are made to give effect to the measures needed to achieve the environmental objectives established by the European Communities Water Framework Directive. The objectives of the Water Framework Directive are to protect all high status waters, prevent further deterioration of all waters and to restore degraded surface and groundwaters to good status by 2015. SI 272/2009 includes a list of priority substances to be controlled and outlines the maximum allowable concentration in receiving waters.

Each material used and stored at the Fort Gary Complex will be checked against the list of priority substances in SI 272/2009. This will be the initial check on the requirement for control of substances at the plant prior to the risk assessment.

2. EPA Firewater Retention Facilities (Draft Guidance Note to industry on the Requirements for Firewater Retention Facilities) (EPA Guidance for short)

The European Communities Dangerous Substances Directive is implemented in Ireland for labelling, packaging and classification of dangerous materials. The classification uses phrases indicating special risks ('R' Phrases) and safety advice ('S' Phrases). Materials stored and used at Elanco have been assigned R Phrases where available and these are detailed later in this section. The R Phrases relevant to a firewater risk assessment are as follows:

For inspection purposes only.
Consent of copyright owner required for any other use.

- R10 – Flammable,
- R11 – Highly flammable,
- R12 – Extremely flammable,
- R50 – Very toxic to aquatic organisms,
- R51 – Toxic to aquatic organisms,
- R52 – Harmful to aquatic organisms,
- R53 – May cause long term adverse effects in the aquatic environment.

According to Appendix A, Part I of the EPA Guidance, firewater retention facilities are generally required for industrial operations that store dangerous substances classified under the following R Phrase reference numbers and exceed the storage quantities indicated in **Table 5.1**.

EPA Export 21-01-2016:00:59:50

Table 5.1: EPA Guidance R Phrase Recommendations

R Phrase	Max Storage Quantity (m^3 or tonnes)
R50	1
R51	10
R52	100
R53	1,000

Each material used and stored at the Fort Gary Complex will be classified with an R Phrase (where available) and the maximum quantity stored on site will be checked against the control limits above prior to completion of the risk assessment.

3. German Federal Environmental Agency – Classification of Substances into Water Hazard Classes (WGK for short)

For over twenty years German industry and authorities have been classifying substances according to this system. The system looks at four basic properties of substances as follows:

- Acute oral or dermal toxicity to mammals,
- Data on aquatic toxicity (fish, organisms),
- Biodegradability,
- Potential for bioaccumulation.

For inspection purposes only.
Consent of copyright owner required for any other use.

Based on these four properties a water hazard rating (WGK) may be given to materials as follows:

- WGK 1 – Low hazard to water,
- WGK 2 – Hazardous to water,
- WGK 3 – Severely hazardous to water.

Materials which fall outside these ratings based on their properties are considered non-hazardous. Such materials would have low solubility, low toxicity and would be readily biodegradable. The hazard associated with the facility can thus be categorised based on the volume of such materials stored as per **Table 5.2** below:

EPA Export 21-01-2016:00:59:50

Table 5.2: WGK Hazard Category Table

Volume (m^3) Or Mass (tonne)	Hazard Categorisation		
	WGK 1	WGK 2	WGK 3
≤ 0.1	A	A	A
> 0.1 ≤ 1	A	A	B
> 1 ≤ 10	A	B	C
> 10 ≤ 100	A	C	D
> 100 ≤ 1,000	B	D	D
> 1,000	C	D	D

The categories associated with the above are as follows:

- Category A – Low hazard facility,
- Category B – Moderate hazard facility,
- Category C – High hazard facility.

For inspection purposes only.
Consent of copyright owner required for any other use.

Each material used and stored at the Fort Gary Complex will be rated with a WGK number (where available) and the maximum quantity stored on site will be checked against the categorisation control limits above prior to completion of the risk assessment.

As noted previously in the report, Elanco's policy is to store the majority of chemicals in bulk storage units to be brought into production areas and used on an as-required basis. The following sections outline each location at Fort Gary where materials are stored in accordance with the colour coded drawing **Appendix A**.

5.1 L&P FACILITY

Material	Quantity	SI 272	RPhrase	WGK
3M Stainless Steel Polish	0.0012 m^3	No	N/A	1
Electrolube LRM Label Remover	0.0004 m^3	No	12, 50, 51, 53	3
EXPO2 White Board Cleaner	0.00024 m^3	No	N/A	1
Evo-Stick Glue	0.0005 m^3	No	11, 50, 51, 53	3
Henkel Technomelt 1000 Pellets	0.025 t	No	N/A	N/A
Kunst Stoff Anti-Static Polish	0.0005 m^3	No	N/A	N/A
WD40	0.0002 m^3	No	R10	N/A

EPA Export 21-01-2016:00:59:50

5.2 COLD ROOM 1

Material	Quantity	SI 272	RPhrase	WGK
Stellamune*	2.8234 m^3*	Yes*	50, 53*	3*
Duvaxyn	0.03 m^3	No	N/A	N/A

5.3 COLD ROOM 2

Material	Quantity	SI 272	RPhrase	WGK
Stellamune*	2.8234 m^3*	Yes*	50, 53*	3*
Duvaxyn	0.03 m^3	No	N/A	N/A

*** Note with regard to Stellamune as follows:**
One of the constituents of Stellamune is thimerosal. Thimerosal contains mercury which is a priority substance and has the RPhrases and WGK ratings as noted above. However the overall quantity of mercury is low as outlined in the table below.

For inspection purposes only.
Consent of copyright owner required for any other use.

Table 5.3: Mercury Quantity Calculation (for each Cold Room)

Item	Quantity
A:125 ml Stellamune Vials	11,320 no.
B: 50 ml Stellamune Vials	28,168 no.
C: Quantity of Mercury per 125 ml Vial	0.01381 g
D: Quantity of Mercury per 50 ml Vial	0.00555 g
Mercury Quantity (A x C) + (B x D)	**312.66 g**

Therefore the Cold Room data in 5.2 may be revised in accordance with the following table.

Table 5.4: Revised Cold Room 1 (Cold Room 2 similar)

Material	Quantity	SI 272	RPhrase	WGK
Mercury (in Stellamune product)	0.000313 t	Yes	50, 53	3
Duvaxyn	0.03 m^3	No	N/A	N/A

5.4 SUMMARY

A summary of the above in line with the legislation and standards for the entire facility is outlined below.

EPA Export 21-01-2016:00:59:50

Table 5.5: SI 272/2009 Summary

SI 272/2009 Material	Elanco Storage Quantity (m^3 or tonnes)
Mercury	0.000626

Table 5.6: EPA R Phrase Summary

R Phrase	Elanco Storage Quantity (m^3 or tonnes)
R50	0.001526
R51	0.0009
R52	N/A
R53	0.001526

Table 5.7: WGK Summary

WGK	Elanco Storage Quantity (m^3 or tonnes)
1	0.00144
2	N/A
3	0.001526

For inspection purposes only.
Consent of copyright owner required for any other use.

The materials inventory and summary tables suggest the following:

- Priority substances in accordance with SI 272/2009 will be contained at the plant,
- The storage quantity of R50 – R53 materials is below the maximum recommended storage quantity for a plant without firewater retention facilities,
- The storage quantity of WGK 3 materials suggests a Category A, low hazard facility.

Therefore, following the above initial screening and based on the SI 272/2009 criteria, further investigation for Fort Gary in the form of a qualitative risk assessment is required. The assessment in Section 6 will determine fire and environmental risks in detail associated with the relevant areas and confirm final recommendations with regard to the requirement for firewater retention facilities.

EPA Export 21-01-2016:00:59:50

6 RISK ASSESSMENT

The risk assessment for Fort Gary will be carried out for the Cold Rooms identified in Section 5 above. No other areas contain high volumes of environmentally sensitive materials. The fire risk in some areas may be high, for example where forklift truck charging areas are located, however the quantities of materials stored in these areas are insignificant and they therefore pose no environmental risk. The assessment will look at the following criteria and rate them as low, medium or high:

- Fire load,
- Fire risk,
- Environmental load,
- Environmental risk.

The results are summarised in tabular format at the end of the assessment.

6.1 COLD ROOMS

6.1.1 Fire Load

A relatively high volume of material will be stored in these rooms however these are not flammable in nature and no fire accelerants will be present. The construction of the rooms is similar to a 'Portakabin' structure and therefore not of a flammable nature. The fire load is therefore considered **low.**

For inspection purposes only.
Consent of copyright owner required for any other use.

6.1.2 Fire Risk

Sources of ignition are limited. The rooms will be maintained at a temperature between 2 – 8ºC and a sprinkler system will also be in place. The rooms will be detached from the main building and busy activity areas and only authorised personnel will be permitted access. Therefore the fire risk is considered **low.**

6.1.3 Environmental Load

Relatively high volumes of environmentally sensitive materials (according to SI 272/2009) are stored. Therefore the environmental load is considered **high.**

6.1.4 Environmental Risk

Despite the relatively high environmental load, due to the low fire load and the unlikely requirement for fire fighting measures (low fire risk), the environmental risk is considered **low.**

EPA Export 21-01-2016:00:59:50

6.2 SUMMARY

The assessment may be summarised in **Table 6.1** below:

Table 6.1: Risk Assessment Summary

Location	Fire		Environmental		Retention
	Load	Risk	Load	Risk	
Cold Rooms	L	L	H	L	NO

From **Table 6.1** it may clearly be seen that firewater retention is not required at Fort Gary.

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The following general notes and conclusions may be drawn from the above report and subsequent assessments:

- There is currently no dedicated firewater retention facility at the site. In the event of a fire, firewater will flow across floors internally onto external hardstanding and into the surface water system. This system flows directly to Sligo Wastewater Treatment Plant where it is discharged to Sligo Harbour,

- The facility is fully sprinklered resulting in shorter durations required to extinguish fires according to correspondence with SFS,

- The volumes of chemicals and substances currently stored on site (summarised in **Section 5.4**) necessitate further investigation for Fort Gary in the form of a qualitative risk assessment,

- **The risk assessment carried out on the relevant areas (Cold Rooms) concludes that firewater retention facilities are not required at Fort Gary.**

7.2 RECOMMENDATIONS

In order to maintain the current level of risk at the Fort Gary site the following should be monitored on an ongoing basis as part of the facility management:

- Materials in and storage conditions at the Cold Store in particular (where a high environmental risk exists) should be monitored to ensure the level of environmentally sensitive material remains at current levels and storage conditions are not altered. This may increase risk of fire and subsequently the environmental risk,

- If there are any future building renovations or site infrastructure works proposed, specialist advice should be sought with regard to firewater retention as there may be a requirement for an addendum to this or a new report,

- If there are any changes to storage conditions, materials or quantities at the facilitity, specialist advice should be sought with regard to firewater retention as there may be a requirement for an addendum to this or a new report.

Consent of copyright owner required for any other use. For inspection purposes only.

EPA Export 21-01-2016:00:59:50

APPENDIX A

FACILITY PLANS

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

OFFICE / ADMIN / LOBBY AREAS

AMBIENT STORE

L&P FACILITY

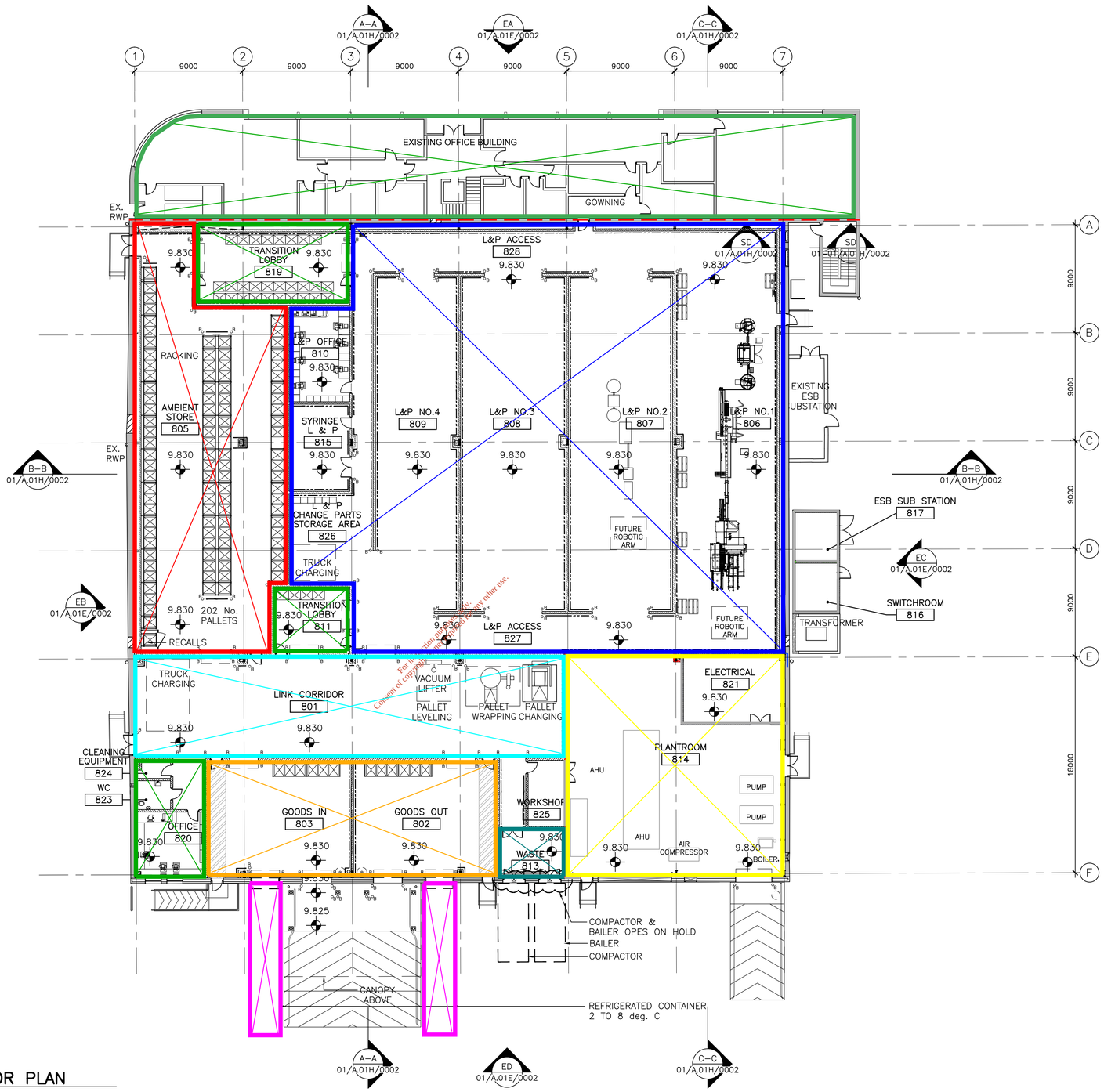
PALLET AREA

PLANT ROOM

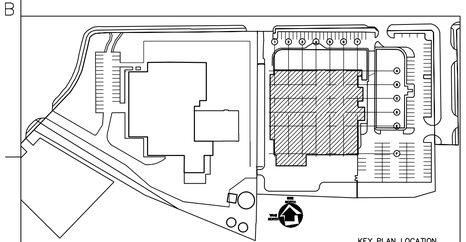
GOODS IN / GOODS OUT

COLD ROOMS

WASTE AREA



For inspection purposes only. Consent of copyright owner required for any other use.



KEY PLAN LOCATION

A GROUND FLOOR PLAN
SCALE: 1:200

LEGEND
- 900MM HIGH PEDESTRIAN BARRIER
- 300mm HIGH LOW LEVEL BUMPER RAIL
- ST. STEEL PROTECTION BOLLARDS WITH HIGH VISIBILITY STRIP
- XX — WALL TYPE TAG

0M 4M 10M
1:200

GENERAL NOTES:
Refer □ □e Ar□□i□□ur□S□□□e □f W□r□□f□r e□e□□□f C□□ur□□□ □ I□eri□r□ P□□□□ge.
U□e□□ □□ed □□er□i□e□□□□□□□re i□ □e□□r□□□ □□□e□□□□e□.
F□r W□□T□□e de□i□□ □ee dr□□i□g N□. □□-□22□-01-01/A.01N/0014 □□d S□e□ifi□□□□□ N□□, □□-□22□-01-01/A.02A/0014□15 □ □□-□22□-01-01/B.02B/0001
F□r I□er□□□D□r□□I□r□□□ □□ger□□ I□er□□□Wi□d□□□refer □□ D□r□Wi□d□□ □ L□u□re S□□edu□e□D□□. N□□. □□-□22□-01-01/A.03A/0002□0003 □□d 0004.
F□r Cei□g □eig□□□i□f□r □i□□□ □ee Refe□□ed Cei□g Dr□□i□g N□□. □□-□22□-01-01/A.01L/0001□0002 □ 0003
F□r S□□□r□W□re □ee S□□i□r□W□re S□□edu□e□D□□. N□. □□-□22□-01-01/A.03A/000□
F□r C□e□r□□□. Fur□i□re i□□□e C□e□r□□□. Perf□r□ □□□e S□e□ifi□□□□□D□□. N□. □□-□22□-01-01/A.02A/0014 □□d Mi□□ Me□□□□r□S□□edu□e N□. □□-□22□-01-01/A.03A/000□.

F□r C□e□r□□□ Perf□r□ □□□e S□e□ifi□□□□□ □ee D□□N□. □□-□22□-01-01/A.02A/0014.
T□e C□e□r□□□ S□□e□ i□ □□e F.M. □□□r□□ed.
F□r □□□□□□ f Bu□□er R□i□ □d F□□r-□ □u□□ed r□□□ee F□□r Fi□□e□Dr□□i□g N□□ □□-□22□-01-01/A.01S/0001 □ 0002 □d □□-□22□-01-01/A.01S/1001 □ 1002.
F□r de□□□ f Bu□□er R□i□ □d F□□r-□ □u□□ed r□□□ee I□er□□De□iS□ee□ Bu□□er R□i□ □d B□□rd□Dr□□i□g N□. □□-□22□-01-01/A.01N/0013.
F□r Fi□i□e□ee I□er□□Fi□i□e□S□edu□e □□-□22□-01-01/A.03A/0001 □d F□□r Fi□i□e□Dr□□i□g N□□ □□-□22□-01-01/A.01S/0001□0002□1001 □ 1002.
F□r Lege□d □□d A□□re□i□□□□ee Dr□□i□g N□. □□-□22□-01-01/A.01A-/0001.

KEYED NOTES:
A. C□□r□□□. N□□ □□□-□□ □ei□g. See dr□□i□g N□□ □□-□22□-01-01/A.01D/1001□1002 □ 1003 f□r de□i□.
B. I□er□□□R□□er S□u□er D□□r□. See S□e□ifi□□□□□D□□ N□. □□-□22□-01-01/A.02A/0025
C. W□□□ Cei□g. See S□e□ifi□□□□□D□□ N□. □□-□22□-01-01/B.02B/0001
D. R□□□g □ A□□le□S□□re□See S□e□ifi□□□□□D□□ N□. □□-□22□-01-01/A.02A/0001
E. F□r S□i□r □□d H□□dr□i□ See S□e□ifi□□□□□D□□ N□. □□-□22□-01-01/A.02A/001□
F. I□eri□r D□□r□. See S□e□ifi□□□□□D□□ N□. □□-□22□-01-01/H.02A/000□ □ C□e□r□□□ Perf□r□ □□□e S□e□ifi□□□□□ D□□ N□. □□-□22□-01-01/A.02A/0014
G. Fire r□□ed □□□□□ □□e□i□□□□ □uf□□□urer C□e□r□□□ de□i□.
H. 1.2 □3.3□ Cei□g Tri□ M□du□e f□r C□e□r□□□ □ □ Fire r□□ed □ei□g □□ □□e□i□□□□ □uf□□□urer C□e□r□□□ de□i□.
K. P□u□ □□ Me□□□i□□S□e□ifi□□□□□ □ de□i□
L. A□□e□□L□dder□See S□e□ifi□□□□□D□□N□.
□□-□22□-01-01/A.02A/001□
M. E□□er□□□D□□r□. See S□e□ifi□□□□□D□□N□.
□□-□22□-01-01/A.02A/0005
N. E□□er□□□R□□er S□u□er. See S□e□ifi□□□□□D□□N□.
□□-□22□-01-01/A.02A/0004
P. E□i□□g R□f C□□di□g □. E□i□□g S□ee□S□u□ure.
R. C□e□r□□□ W□□□. See S□e□ifi□□□□□ D□□ N□. □□-□22□-01-01/A.02A/0014
S. A□□le□Cei□g. T.C□e□r□□□ P□r□□. See S□e□ □□-□22□-01-01/A.02A/0014

SAVE NAME
6227-01_01A01D0002.DWG

CERTIFICATION

LILLY CHANGE CTRL. NO.	LILLY PROJ. NO.

SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK.	ENG.	REC. APPROVALS
6		Issued for Construction	3 Oct 2014	GY	MC	MK	PK
5		Issued for Construction	1 Sep 2014	GY	SB	JE	PK
4		Issued for Construction	18 Aug 2014	GY	MC	MK	PK
3		Issued for Client Approval	28 Jul 2014	GY	MC	MK	PK
2		Issued for Construction	16 Jun 2014	JS	LB	MK	PK
1		Issued for Construction	1 May 2014	LB	MC	JE	PK
0		Issued for Construction	25 Apr 2014	LB	MC	MK	PK
F		Issued for Architectural Tender Package	13 Mar 2014	LB	MC	MK	PK
E		Issued for Tender	7 Mar 2014	LB	MC	MK	PK
D		Issued for Tender	3 Mar 2014	LB	MC	PB	PK
A	ALL	Issued for Cold/Ambient Stores Tender	23 Jan 2014	LB	MC	MK	MK

REVISIONS

GENERAL SYMBOLS
REFERENCE
SECTION # 3 DRAWING #
DETAIL OR ELEVATION ON DRAWING #
ITEM DESIGNATION
ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING
CHANGE
3 THIRD REVISION

THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF EU LILLY S.A.–IRISH BRANCH AND ARE NOT TO BE COPIED OR REPRODUCED, IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF EU LILLY S.A.–IRISH BRANCH.

PROJECT NO. 76 – 6227–01 **A1**

ENG APPROV | BY | DATE

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Fort Gary Project
Ground Floor Plan

CLIENT DRAWING NO.

ENGINEERING APPROVAL | DATE 17 Oct 2013 14:53:48
CHECKED | SCALE 1:200
RECORDS CONTROL | DRAWN

AMP DRAWING NO. 76-6227-01-01/A.01D/0002 | REV. 6

EPA Export 21-01-2016:00:59:50

APPENDIX B

DRAINAGE SYSTEMS

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

To Main SW Sewer

To Main FW Sewer

To Main SW Sewer

Surface Water (SW) Sewers Serving Fort Gary Complex

Foul Water (FW) Sewers Serving Fort Gary Complex

POLE

P&W fence

Mesh fence

PETROL INTERCEPTOR

GAS

OIL

TARMAC fall 1:200

FOOTPATH

GRASS VERGE

LP

MH

RG

FH

PAVING

SIGN & BARRIER

GTD

UPLIGHTS

STEPS

RAMP

GAS METERS

POWER ROOM

ESB SUB

WATER METERS

BOILER ROOM

SIGN

SV

For inspection purposes only.
Copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

Date Received
18 FEB 2014
JACOBS ENGINEERING

Comhairle Bhuirg Shligigh
(SLIGO BOROUGH COUNCIL)

Planning and Development Act 2000

NOTIFICATION OF GRANT OF PERMISSION

Elanco Animal Health Ireland Ltd
C/o Jacobs Engineering (Ireland) Ltd.,
Merrion House,
Merrion Road,
Dublin 4

Planning Register Number: PD 13/71

Application Receipt Date: 11/11/2013

Notice is hereby given that the Sligo Borough Council by Order dated 09/01/2014 GRANTED PERMISSION to the above-named, for development of land, in accordance with the documents lodged, namely:-

Consent of copyright owner required for any other use.
For inspection purposes only.

development consisting of a single storey extension to the south side (rear) of the existing factory building, sized 333m2 and approx. 5.6m high with external plant located on the flat roof over; a single storey extension to the east side of the existing factory building containing an ESB substation and switchroom, sized 29m2 and approx. 3.0m high with adjacent transformer; a single storey extension to the east side of the existing factory building containing a lobby, sized 8m2 and approx. 3.0m high and new canopy to rear (south) elevation, approx. 6.1m high, including associated demolitions. The works include minor modifications to the existing facades and additional escape ladders, external plant equipment located on the west side of the building, new vehicular access gate to the west boundary fence and extension to existing rear concrete yard, sized 224m2 at Fort Gary Label and Pack Facility, also known as Fort Gary 1, Fort Gary Buisness Centre at Finisklin Industrial Estate, Finisklin Road, Sligo.

Subject to the 13 condition(s) set out in the Schedule attached.

Signed on behalf of Sligo Borough Council.

pp C. Quinn

Janet McNamara
Administrative Officer
PLANNING SECTION

Date: 09/02/14

This permission shall expire FIVE YEARS after the date of the grant of permission.

EPA Export 21-01-2016:00:59:50

SCHEDULE 1 – REASONS AND CONSIDERATIONS

Having regard to the following:

i. The provisions of the Sligo and Environs Development Plan 2010-2016.
ii. The existing pattern of development in the area.
iii. Art. 6.3 of EU Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora).
iv. The reports from internal sections.

It is considered that the proposed development, subject to compliance with the following conditions, would not be injurious to the amenities of property in the vicinity, would not be prejudicial to public health, would not have an adverse impact on any Natura 2000 site, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and sustainable development of the area.

SCHEDULE 2 – SCHEDULE OF CONDITIONS

1. The proposed development shall be carried out in accordance with the plans and particulars submitted to Sligo Borough Council on 11th November 2013 except where altered or amended by the conditions in this permission.

Reason: **To enable Sligo Borough Council to check the proposed development when completed to reference to approved particulars**

2. All car-parking spaces shall be clearly delineated on site.

Reason: **In the interests of orderly development**

3. Disposal of construction and demolition waste shall be in accordance with national waste regulations.

Reason: **In the interests of waste management and environmental protection**

4. The oil interceptor serving the development shall be routinely de-sludged in accordance with the manufacturer's recommendations. De-sludging of the interceptor shall be carried out by an authorised waste disposal contractor with a current, valid, waste collection permit/license for the collection and disposal of waste oils.

Reason: **In the interests of environmental protection**

5. No development over or alteration shall take place to the alignment or level of an existing public sewer or water main without the prior consent of Sligo Borough Council. In the case of the sewer or water main requiring alteration proposals shall be submitted to and agreed with in writing to the Sanitary Services Section of Sligo Borough Council prior to the commencement of development.

Reason: **In the interests of orderly development**

Ref: **SW/EC/SK**

For inspection purposes only.
Consent of copyright owner required for any other use.

EPA Export 21-01-2016:00:59:50

6. Prior to commencement of development the applicant shall submit for the written agreement of the planning authority 'as constructed' drawings of the water main layout including pipes sizes, pipe class, pipe locations, sluice valve locations, hydrant location, metering arrangements, construction details, specifications etc. This shall also show the point of connection to the existing local authority watermain including the existing watermain details.

Reason: **In the interests of orderly development**

7. No surface water/rainwater shall discharge into the Foul Sewer system unless by agreement with Sligo Borough council.

Reason: **In the interests of orderly development**

8. Prior to commencement of development the CCTV survey referred to in 'General Notes' on drawing 0004 shall be carried out by the applicant and submitted to the Local Authority for written agreement. On foot of this, the applicant shall submit a revised drawing showing any network changes and the location of the connection points to the Local Authority sewer. The Local authority sewer shall also be indicated on this drawing. Development on site shall not commence until these details are agreed in writing with the Planning Authority.

Reason: **In the interests of orderly development**

9. If the storm water sewer is connected to a combined sewer, the applicant shall submit detailed Surface Water calculations for the Surface Water system incorporating a Sustainable Urban Drainage System. Prior to commencement of development the applicant shall submit revised site layout plans, longitudinal sections and specifications for the Sustainable Urban Drainage System in writing for the agreement of Sligo Borough Council.

Reason: **In the interests of orderly development**

For inspection purposes only.
Consent of copyright owner required for any other use.

10. The surface water and foul sewer and manholes etc. shall be constructed, laid and tested in accordance with the requirements of "Recommendations for site development works for Housing Areas 1998" published by the Department of the Environment.

Reason: **In the interests of orderly development**

11. Except as otherwise indicated on 'site plan and landscaping' drawing submitted to the planning authority on 11th November 2013, all existing landscaping on the site shall be retained and protected from damage during construction.

Reason: **In the interests of visual amenity**

12. The external finishes of the building and proposed fencing shall be in accordance with details submitted the planning authority on 11th November 2013.

Reason: **In the Interests of visual amenity**

Ref: **SW/EC/SK**

EPA Export 21-01-2016:00:59:50

13. Prior to the commencement of development the developer shall pay the sum of €2426.40 **(Two Thousand, Four Hundred and Twenty Six Euro and Forty Cent)** to Sligo Borough Council as a contribution towards expenditure that was and/or that is proposed to be incurred by the planning authority in respect of public infrastructure and facilities benefiting development in the area of the Authority, as provided for in the Contribution Scheme for Sligo Borough made by Sligo Borough Council. The phasing of payments may be agreed in writing with the Planning Authority prior to the commencement of development.

€ 788.58	Roads / footpaths and urban improvements
€1152.54	Amenity, open spaces / parks, urban renewal
€485.28	Libraries, museums and community / cultural development

Reason: **It is considered reasonable that the payment of a contribution be required in respect of the public infrastructure and facilities benefiting development in the area of the Planning Authority and that is provided, or that is intended will be provided, by or on behalf of the Local Authority**

ADVICE NOTE:

1. In terms of construction and demolition waste management and disposal of construction and demolition waste, the applicant is advised to refer to the document titled "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects" a useful aid in managing their activities in a sustainable manner. This document is available from the Department of the Environment, Community and Local Government; (http://www.environ.ie/en/Publications/Environment/Waste/WasteManagement/ Phone No. 1890 20 20 21).

2. The mains water supply to be taken to the kitchen supply only with all other usage including toilets or electric showers supplied from roof storage tanks.

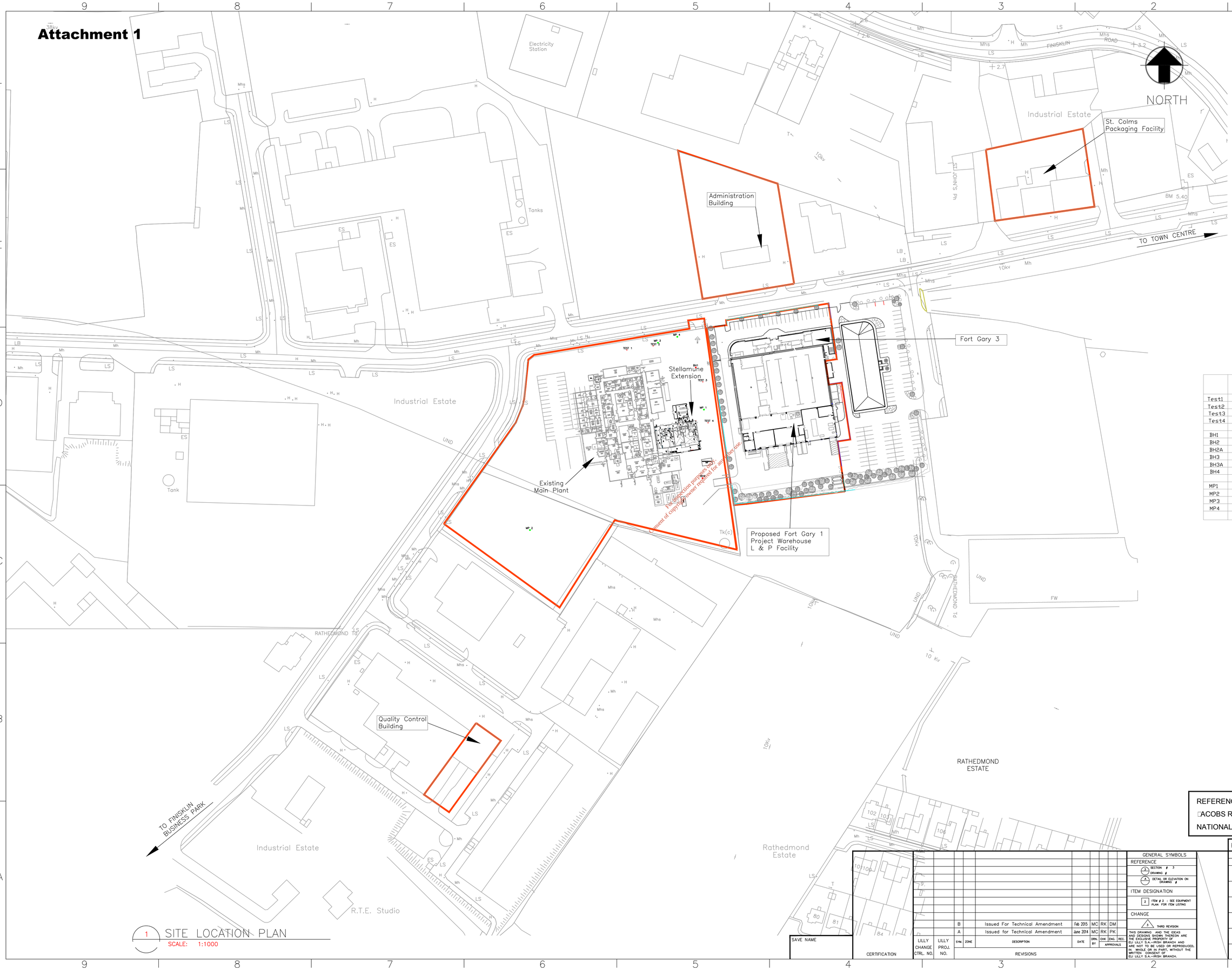
3. Water storage facilities sufficient for 24 hours maximum demand shall be installed at the development.

Consent of copyright owner required for any other use.
For inspection purposes only.

Ref: **SW/EC/SK**

EPA Export 21-01-2016:00:59:50

Attachment 1



	EASTING	NORTHING	ELEV
Test1	167809.92	336563.52	9.79
Test2	167825.36	336565.94	10.08
Test3	167854.45	336544.86	8.66
Test4	167857.54	336520.86	8.46
BH1	167850.33	336553.29	8.71
BH2	167838.77	336520.36	8.34
BH2A	167847.86	336521.53	8.39
BH3	167849.90	336507.50	8.33
BH3A	167839.89	336506.56	8.31
BH4	167854.27	336488.34	8.34
MP1	167855.08	336528.54	8.61
MP2	167753.05	336457.89	6.79
MP3	167828.12	336567.75	10.08
MP4	167839.47	336571.25	10.10

For inspection purposes only.
Consent of copyright owner required for any other use.

1 SITE LOCATION PLAN
SCALE: 1:1000

REFERENCE SLIGO O.S. MAP N□ 1011-05
□ACOBS REPRODUCTION LICENCE N□. AR0014915
NATIONAL GRID REF: G□□□3□5

PROJECT NO. 76622702 **A1**

Elanco Animal Health Ireland
Sligo, Co. Sligo, Ireland

Technical Amendment Drawing 1
Site Plan

ENGINEERING APPROVAL	PK	DATE	June 2014
CHECKED	RK	SCALE	1:1000 at A1
RECORDS CONTROL	N/A	DRAWN	MC
AMW DRAWING NO.		REV.	B

SYM.	ZONE	DESCRIPTION	DATE	DRN. BY	CHK	ENG.	REG.
B		Issued For Technical Amendment	Feb 2015	MC	RK	DM	
A		Issued for Technical Amendment	June 2014	MC	RK	PK	

REVISIONS — APPROVALS

LILLY CHANGE CTRL. NO. | LILLY PROJ. NO. | CERTIFICATION | SAVE NAME

GENERAL SYMBOLS
REFERENCE
3 SECTION # 3 DRAWING #
A DETAIL OR ELEVATION ON DRAWING #
ITEM DESIGNATION
2 ITEM # 2 : SEE EQUIPMENT PLAN FOR ITEM LISTING
CHANGE
2 THIRD REVISION

THIS DRAWING AND THE IDEAS AND DESIGNS SHOWN THEREON ARE THE EXCLUSIVE PROPERTY OF ELI LILLY S.A.–IRISH BRANCH AND ARE NOT TO BE USED OR REPRODUCED, IN WHOLE OR IN PART, WITHOUT THE WRITTEN CONSENT OF ELI LILLY S.A.–IRISH BRANCH.

EPA Export 21-01-2016:00:59:50