



Limerick City and County Council

Planning Department

Section 5 Application

DECLARATION ON DEVELOPMENT AND EXEMPTED DEVELOPMENT

Applicant's Name: ANALOG DEVICES INTERNATIONAL

Applicant's Address: Raheen Business Park,

Limerick, Ireland

V94 RT99

Telephone No. [REDACTED]

Name of Agent (if any): BRADY SHIPMAN MARTIN

Address: Mountpleasant Business Centre,

Ranelagh, Dublin 6

D06 X7P8

Telephone No. 01 2081900

Address for Correspondence:

BRADY SHIPMAN MARTIN

Mountpleasant Business Centre,

Ranelagh, Dublin 6, D06 X7P8

Location of Proposed development (Please include **EIRCODE**):

ANALOG DEVICES INTERNATIONAL

Raheen Business Park, Limerick, Ireland

V94 RT99

Description of Proposed development:

Provision of additional plant in the form of a scrubber (No.5) plant to provide resilience, enhance efficiency and to maintain existing operations

Section of Exempted Development Regulations and/or section of the Act under which exemption is claimed:

Class 21 of Exempted Development Regulations and / or Section 4(1)(h) of the Planning Acts

Is this a Protected Structure or within the curtilage of a Protected Structure.

YES/NO NO

Applicant's interest in site: Owner

List of plans, drawings, etc. submitted with this application:

241110-PUNCH-XX-XX-DR-S-1050_Site Location Plan 1:1000

241110-PUNCH-XX-XX-DR-S-1051_Site Location Plan 1:500

241110-PUNCH-XX-XX-DR-S-1052_Existing Site Layout

241110-PUNCH-XX-XX-DR-S-1053_Scrubber 5 GA Layout Plan, Section & 3D

241110-PUNCH-XX-XX-DR-S-2050 – Contiguous Elevation - Sheet 1

241110-PUNCH-XX-XX-DR-S-2051 – Contiguous Elevation - Sheet 2

Section 5 Planning Cover Letter

Screening for Appropriate Assessment

Have any previous extensions/structures been erected at this location YES/NO

If Yes please provide floor areas of all existing structures:

The proposed scrubber plant is being provided adjacent to existing scrubber plant (refer to accompanying planning report and drawings)

Signature of Applicant (or Agent) Thomas Burns

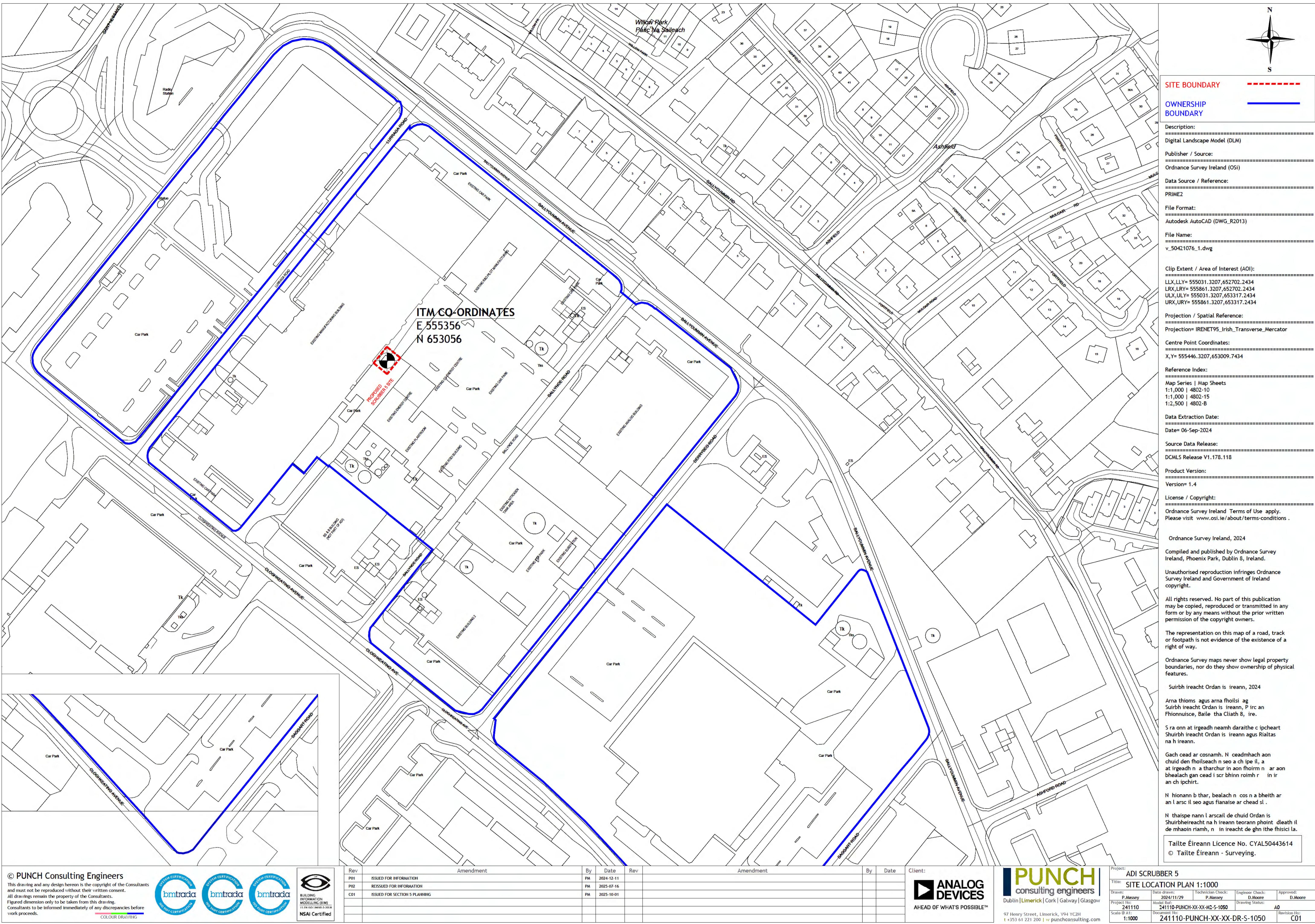
NOTES: Application must be accompanied by:

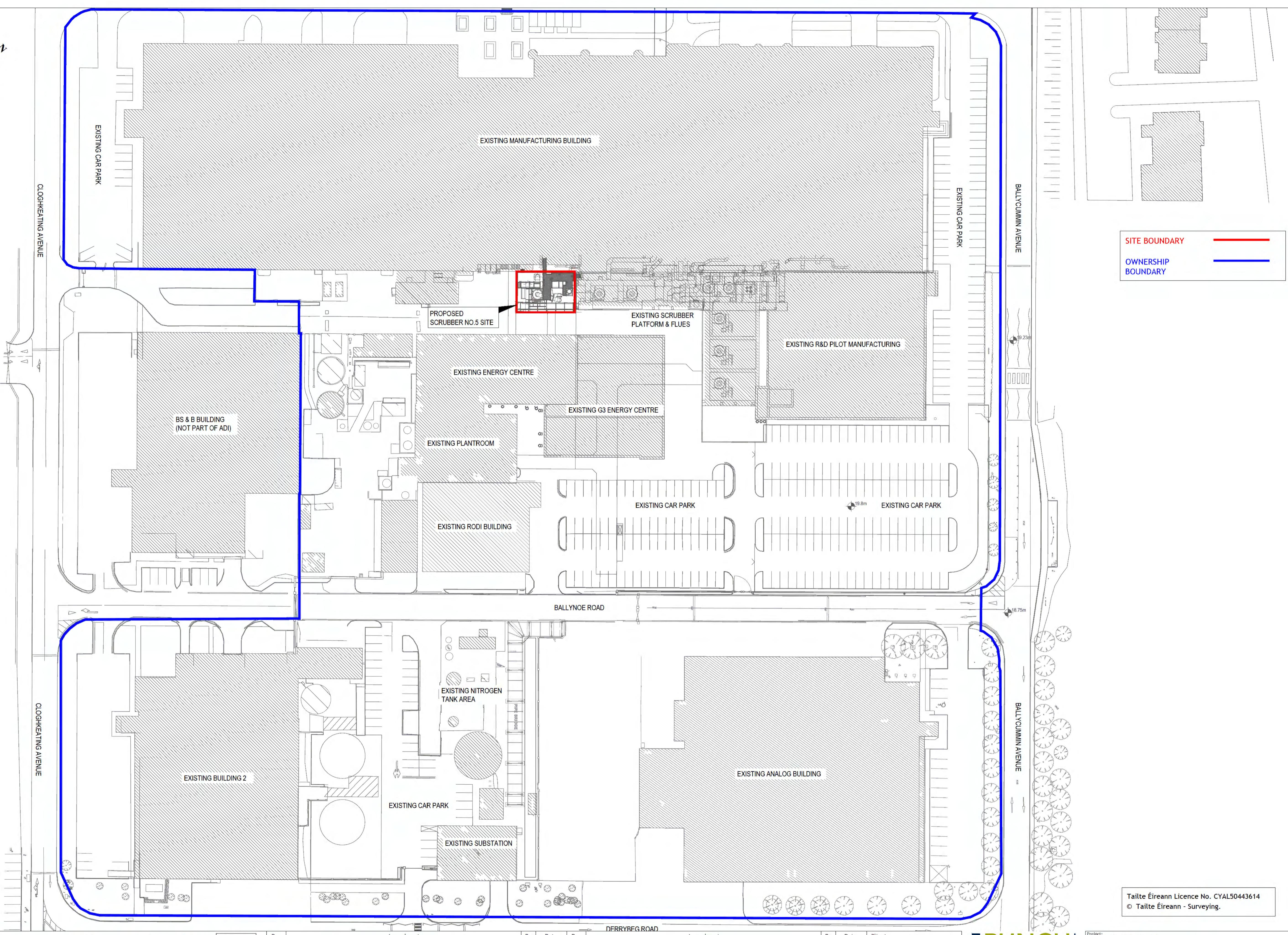
- (a) Fee of €80
- (b) Site location map
- (c) Site layout plan
- (d) Dimensioned plans and elevations of the structure and any existing structures.
- (e) Where the declaration is in respect of a farm building, a layout identifying the use of each existing building together with floor area of each building.

Application to be forwarded to:

**Planning Department,
Limerick City & County Council,
Dooradoyle,
Limerick,
V94 XF67**

**Enquiries:
Telephone: 061-556556
E-Mail: planning@limerick.ie**





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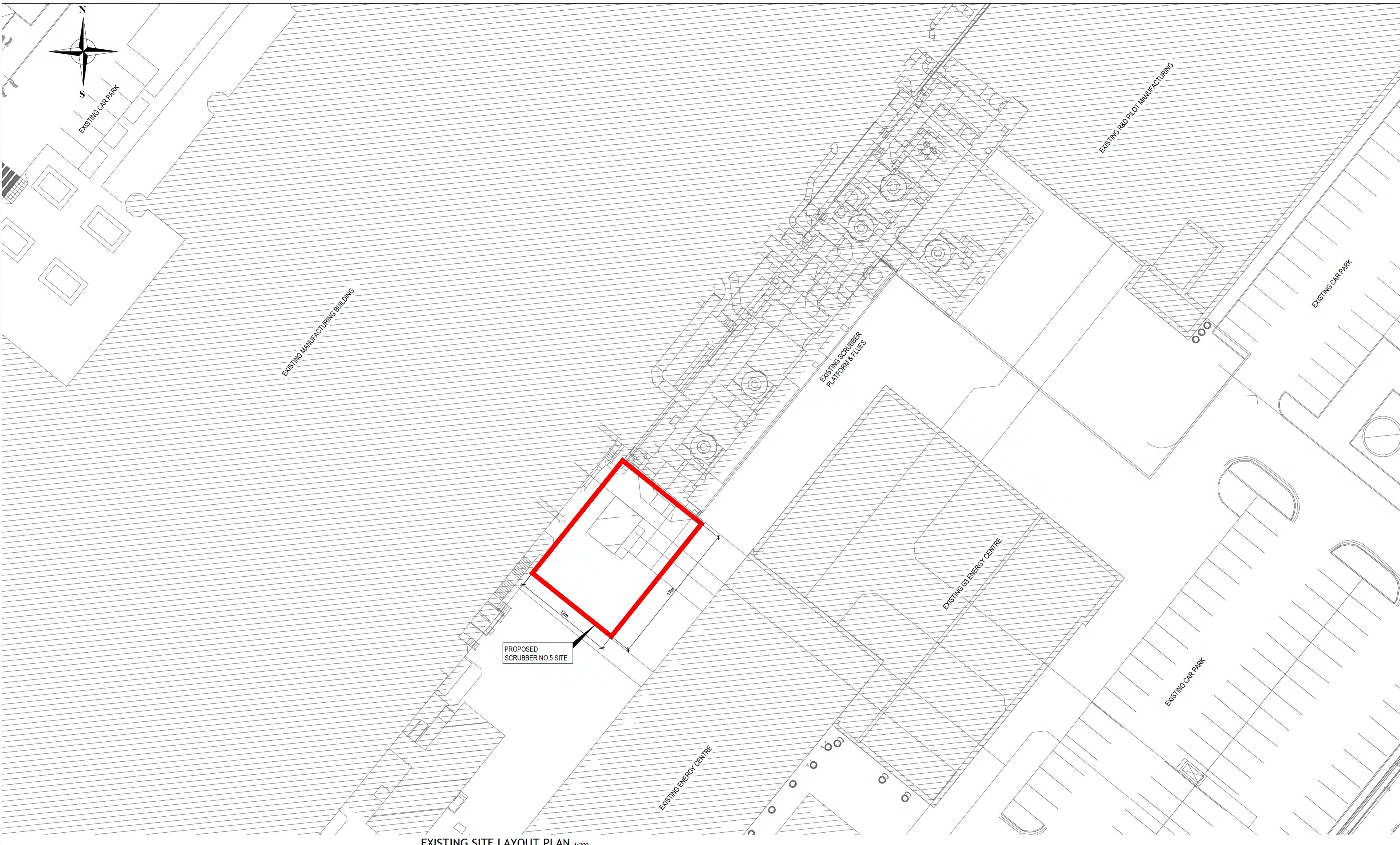


BUILDING INFORMATION MODEL (BIM)
 15 EN ISO 19650-3:2018

NSAI Certified

COLOUR DRAWING

Rev	Amendment	By	Date	Rev	Amendment	By	Date	Client:
P01	ISSUED FOR INFORMATION	PM	2024-12-11					
P02	UPDATED WITH CURRENT SCRUBBER 5 LAYOUT	PM	2025-07-17					
C01	ISSUED FOR SECTION 5 PLANNING	PM	2025-10-01					



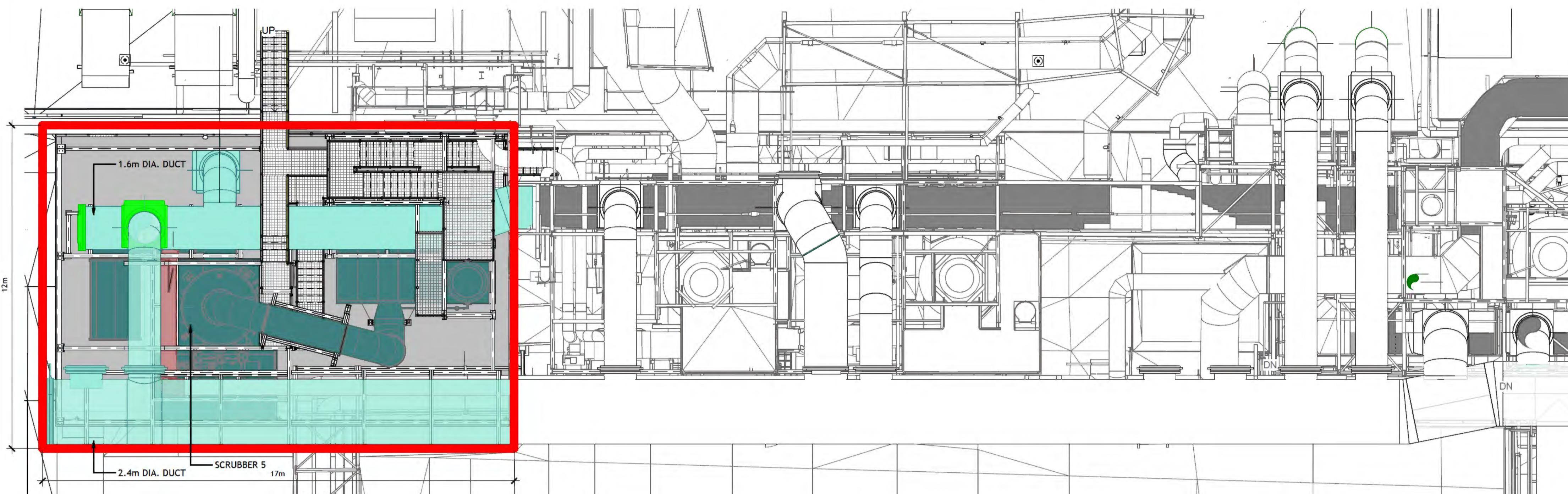
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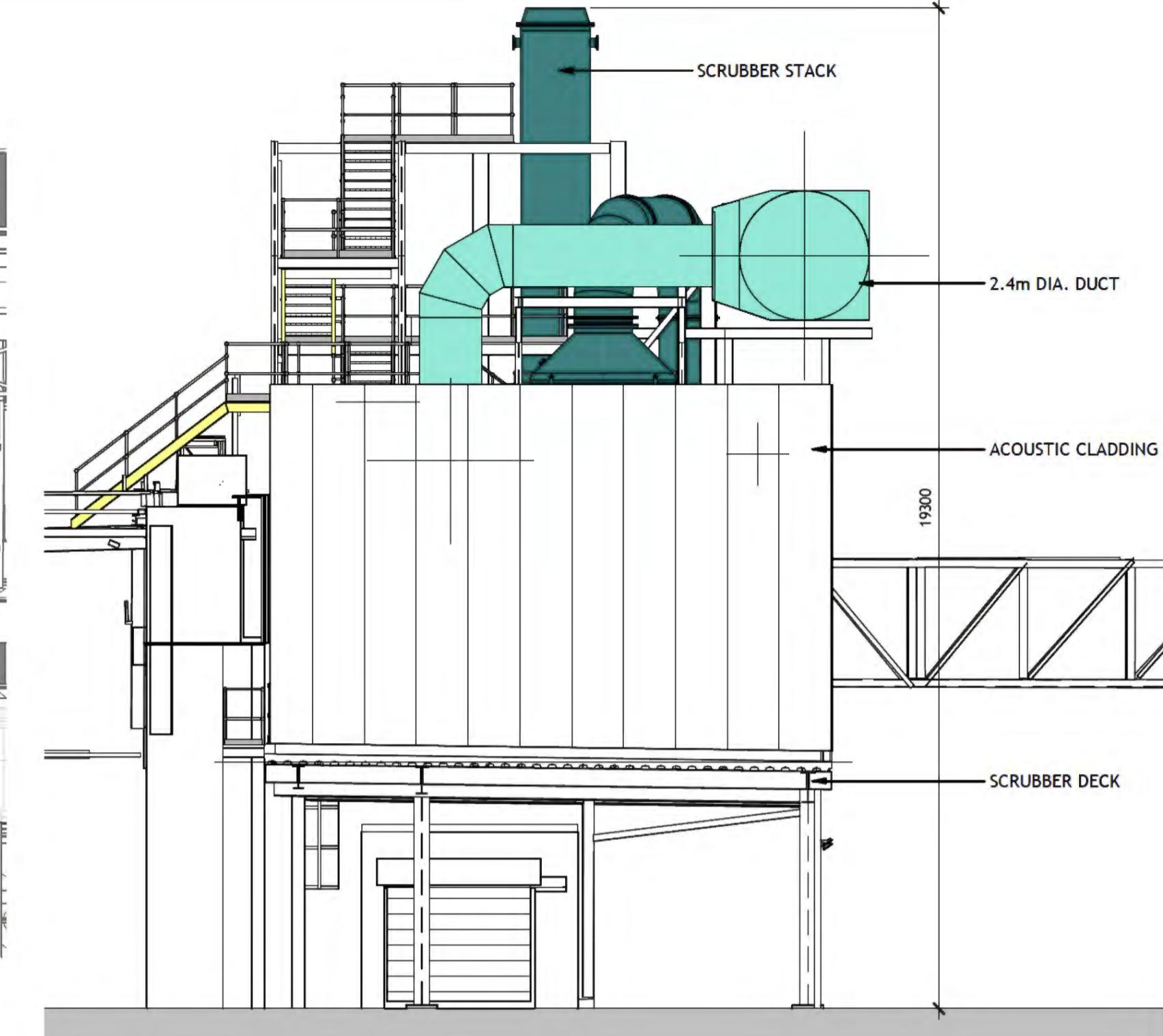
Rev	Amendment	By	Date	Rev	Amendment	By	Date
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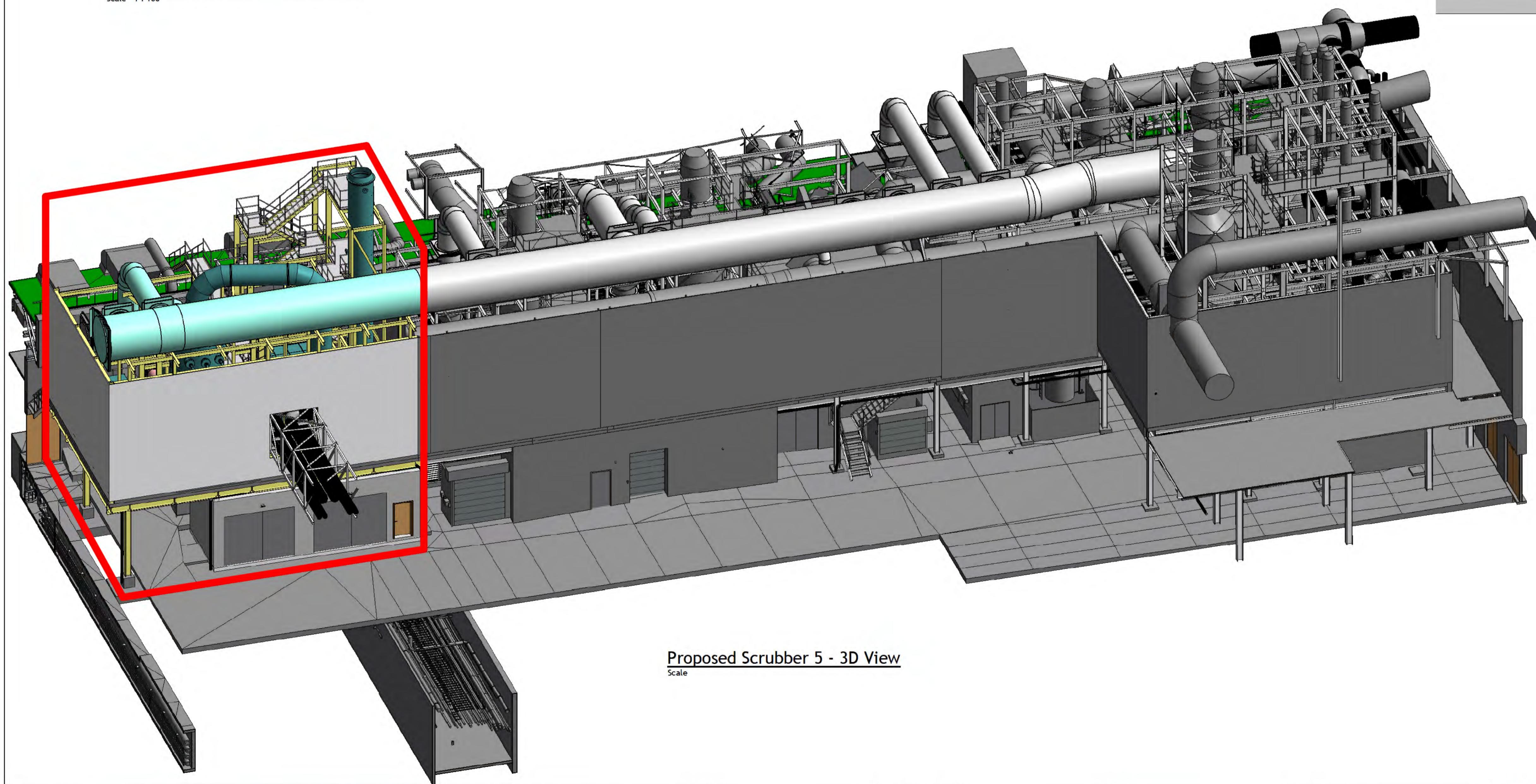
Proposed Scrubber 5 - Layout Plan

Scale 1 : 100



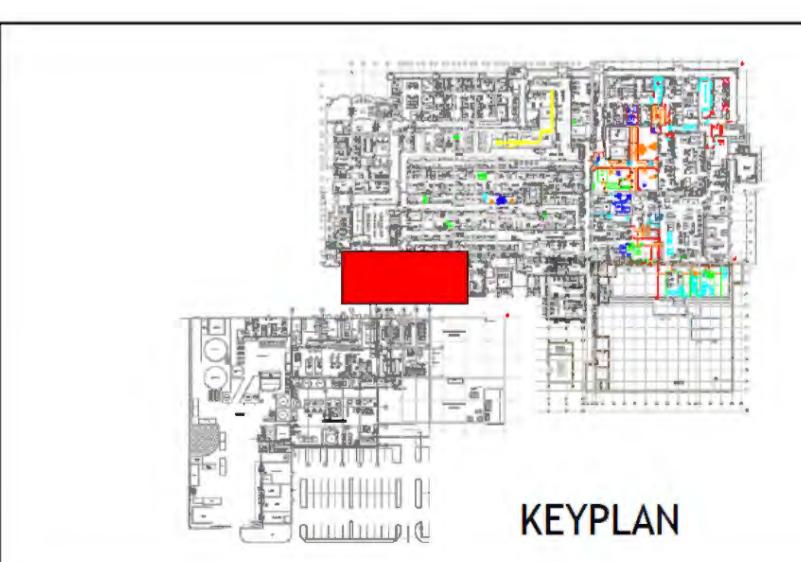
Proposed Scrubber 5 - Section

Scale 1 : 100



Proposed Scrubber 5 - 3D View

Scale



Project: ANALOG DEVICES SCRUBBER 5									
Title: SCRUBBER 5 GA LAYOUT PLAN, SECTION & 3D									
Drawn:		Date drawn:		Technician Check:		Engineer Check:		Approved:	
P. Massey	01/05/2025			P. Massey		D. Moore			
Project No:	241110	Model No:	241110-PUNCH-55-XX-M3-5-9000	Drawing No:	52	Revision No:		Document No:	
Scale (of A1)	1 : 100	Occupied No:	241110-PUNCH-XX-XX-DR-S-1053	Revision No:	C01				

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BUILDING INFORMATION MODELLING
ISO EN 19650-1:2019
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Rev

Amendment

By

Date

Rev

Amendment

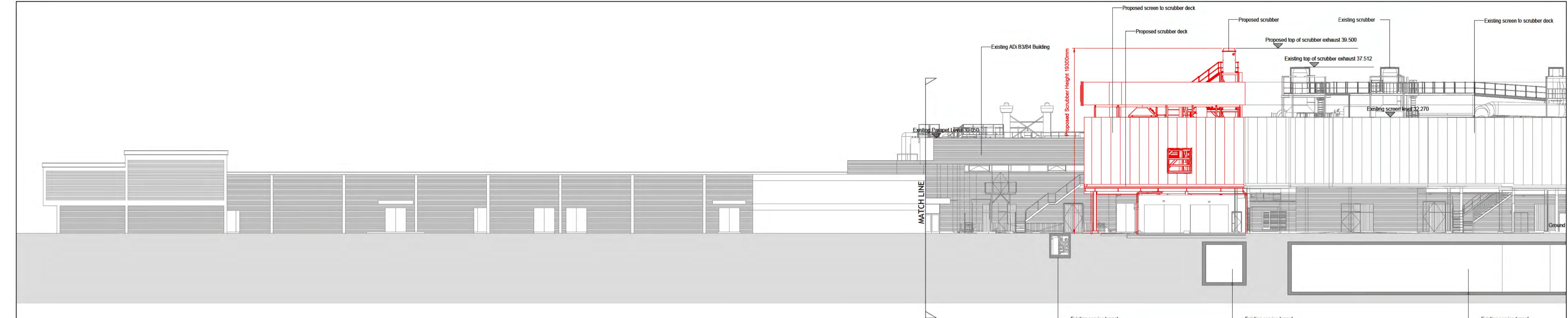
By

Date

Client:

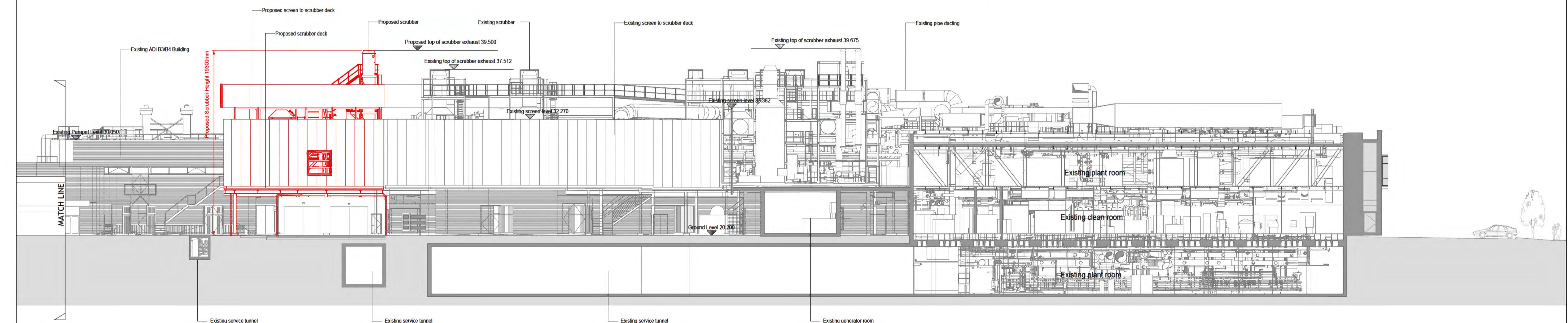


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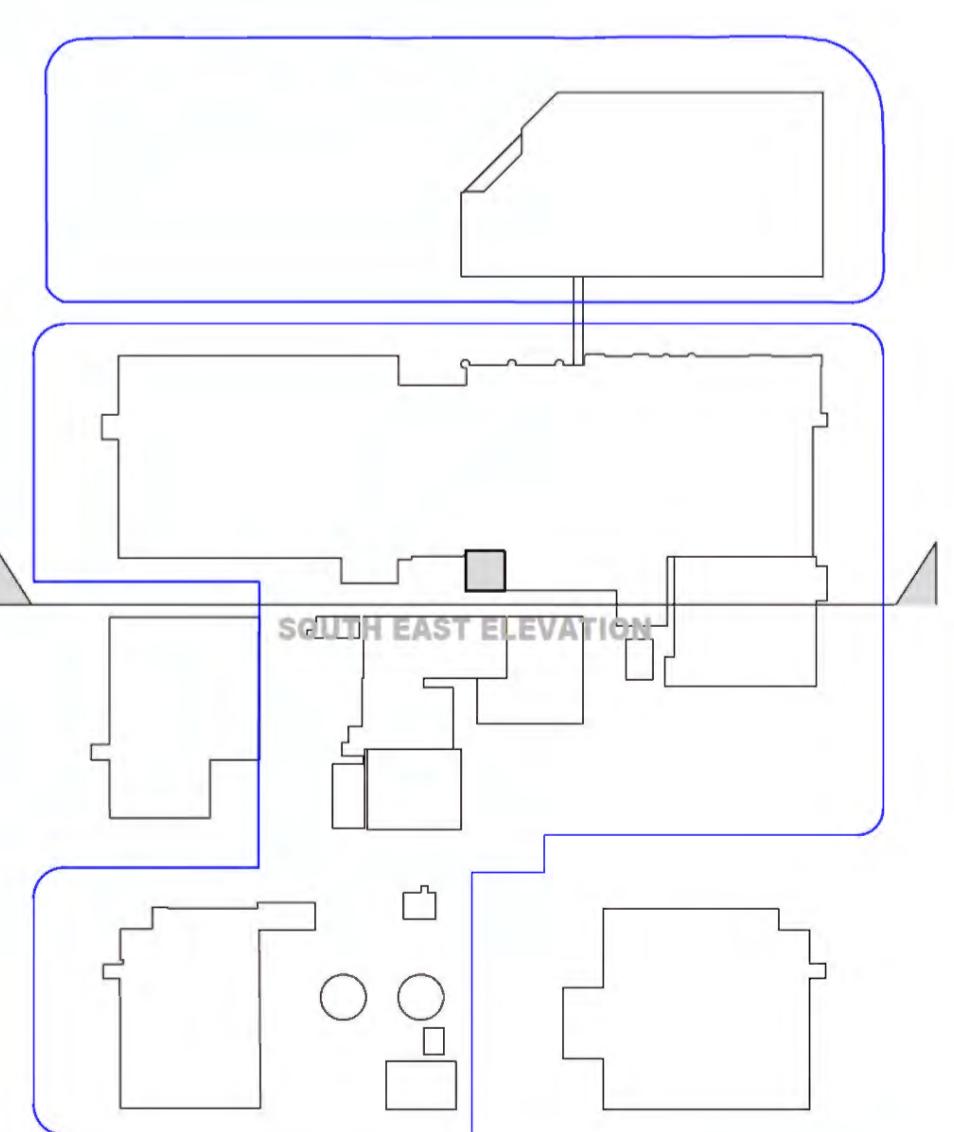
PROPOSED SOUTH EAST ELEVATION

SCALE 1:200



PROPOSED SOUTH EAST ELEVATION

SCALE 1:200



KEY PLAN

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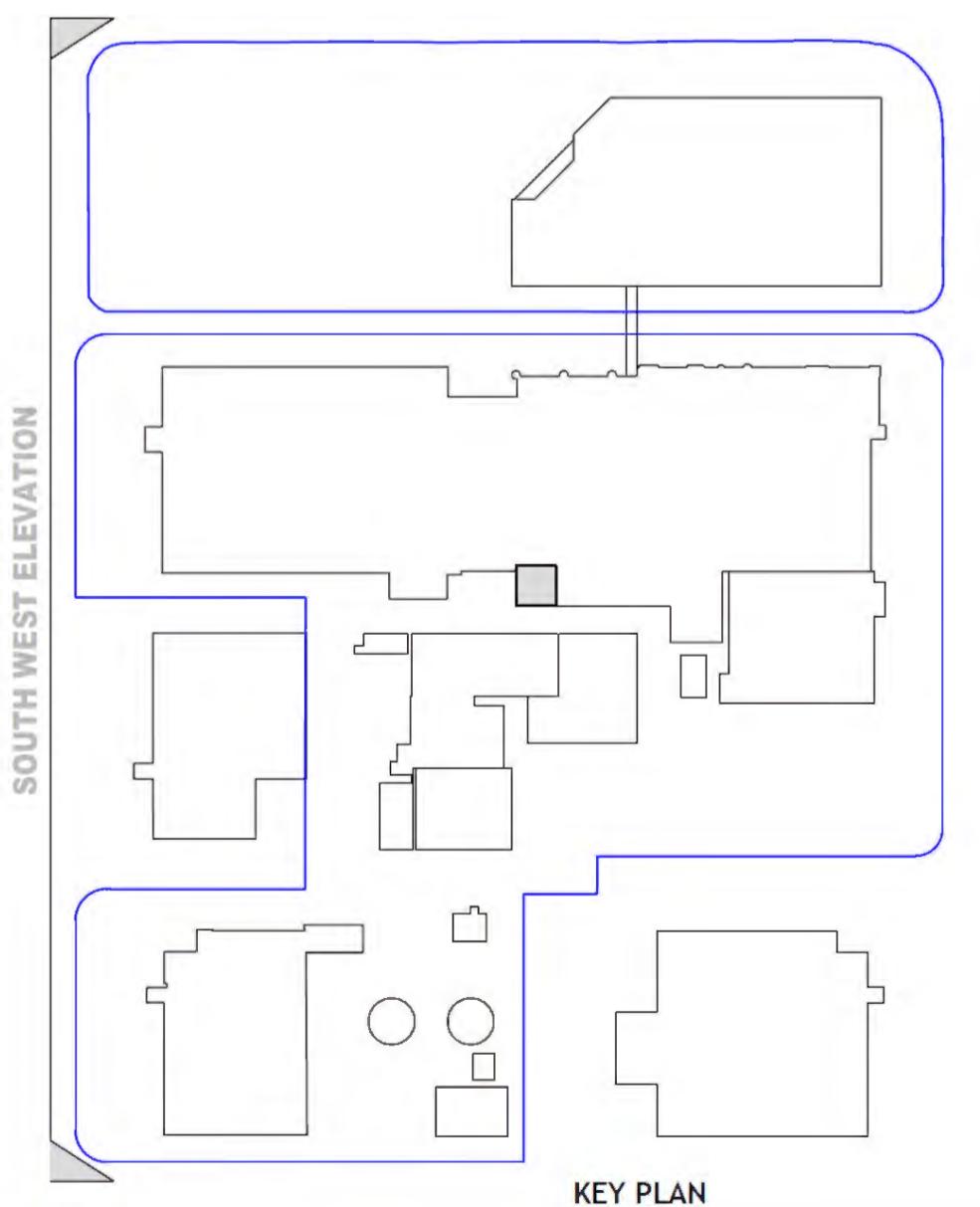
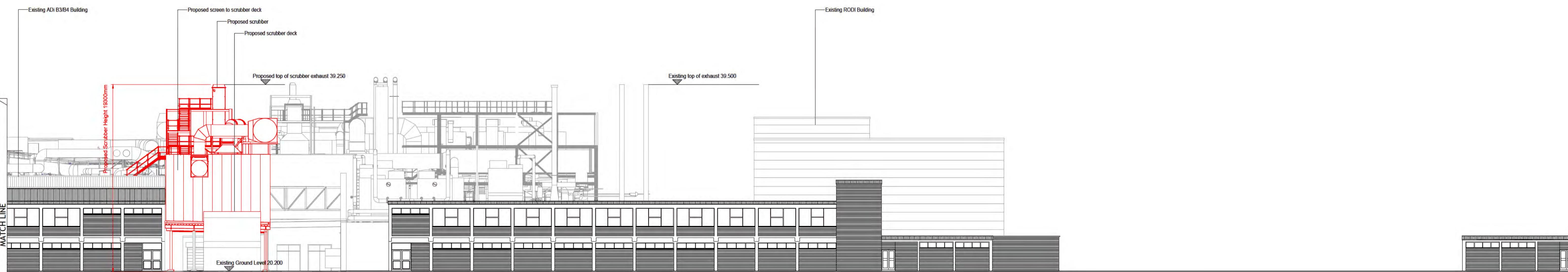
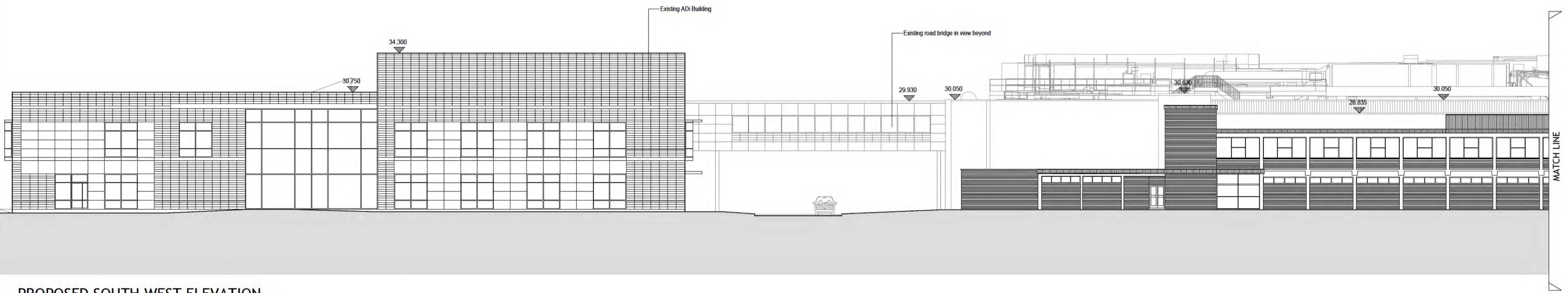
Rev | Amendment | By | Date | Rev | Amendment | By | Date | Client:

P01	ISSUED FOR INFORMATION	PM	2024-12-11					PUNCH Consulting Engineers
P02	UPDATED WITH CURRENT SCRUBBER 5 ELEVATION	PM	2025-07-17					
C01	ISSUED FOR SECTION 5 PLANNING	PM	2025-10-01					



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Project:	ADI SCRUBBER 5
Title:	CONTIGUOUS ELEVATION - SHEET 1
Drawn:	P.Massey
Date drawn:	2024/11/29
Technician Check:	P.Massey
Engineer Check:	D.Moore
Approved:	D.Moore
Mod:	241110
Drawing Status:	A0
97 Henry Street, Limerick, V94 YC2H	
t +353 61 221 200 punchconsulting.com	
Scale @ A1:	1:200
Document No:	241110-PUNCH-XX-XX-M2-5-2050
Revision No:	C01





Project Title:	ADI B3/B4 Scrubber 5 Deck Extension	Project No.	241110
Register No.	241110-PUNCH-S5-XX-RG-S-001	Our Ref.	DM / PM

DD	12	16	17	02	14				
MM	12	07	07	10	10				
YY	24	25	25	25	25				
om:	L	L	L	L	L				
by:	PM	PM	PM	PM	PM				

Document Register & Issue Slip

Issued from:

Issued by:

Revision History				
P01	P02	P02	C01	C01
P01		P02	C01	C01
P01		P02	C01	C01
P01		P02	C01	C01
P01		P02	C01	C01
P01		P02	C01	C01

Bending schedule included:

Issue Status	S2	S2	S2	A0	A0						
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Status Code (Purpose of Issue)

S0 WIP S1 Coordination S2 Information S3 Review & comment S4 Work Stage Approval S6 PIM Authorisation S7 AIM Authorisation

30 WIP 31 Coordination 32 Information 33 Review & comment 34 Work Stage

A0 Planning A1 Pre-Tender A2 Tender A3 Contract A4 Construction A5 Legal
A0/A1/A2/A3... Approved & accepted as Stage Completed CB As Constructed

Volume	Role	Sheet	Page
XX	S	2	1

09/10/2025 10:40:19

Receipt No.: LA25/25192113

Customer Address:

Thomas Burns
 Brady Shipman & Martin
 Ref Analog

Code	Ref	Amount
PL041	Ref Analog Devices	80.00 EUR

Paid with: Credit / Debit Card

Subtotal: 80.00 EUR

Tax (VAT): 0.00 EUR

Total: 80.00 EUR

Tendered: 80.00 EUR

From: CASH OFFICE HQ

VAT Reg No: 3267368TH

Please retain this receipt for your records

[Limerick City & County Council Disclaimer](#)

Comhairle Cathrach
 & Contae Luimnigh
 Limerick City
 & County Council

ATLANTIC PORT
LIMERICK
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HEALTH
 & SAFETY
 AUTHORITY
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Planning Department,
Limerick City and County Council,
Dooradoyle,
Limerick V94 XF67

Date: 15 October 2025

Applicant: Analog Devices International

Location: Analog, Raheen Business Park, Limerick

Re: Section 5 Declaration of Development and Exempt Development

To whom it concerns,

Brady Shipman Martin is acting on behalf of Analog Devices International (ADI) who owns and operates the ADI Facility at Raheen Business Park, to the southwest of Limerick City.

In this application, ADI is applying to Limerick City and County Council for a declaration of development and exempt development in accordance with Section 5 of the Planning and Development Acts 2000, as amended. The Section 5 declaration relates to the proposal to provide an element of additional plant in the form of a scrubber (No.5) to be located alongside four existing scrubbers all of which are centrally located within the developed ADI Campus. The additional plant is being provided so as to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works. There is no change or increase in activity, throughput or in emissions to the environment. The facility is subject to the operational controls of the EPA's Industrial Emissions Licence No. P0224-04.

The application is accompanied by:

- A completed Section 5 Application for 'Declaration on Development and Exempted Development',
- Payment of the appropriate application fee (€80),
- Planning Report
- Screening for Appropriate Assessment, and
- Drawings including site location and layout drawings, together with dimensioned plans and elevations of the existing structure / plant and the new plant.



**Brady Shipman
Martin.**
**Built.
Environment.**

I trust that the above is in order, however, please do not hesitate to contact me if you require further information.

Yours sincerely,

A handwritten signature in black ink that reads 'Thomas Burns.'

Thomas Burns

Brady Shipman Martin

7186_ADI Limerick_S5 Application_2025-10-15

Planning Department
Limerick City and County Council
Dorradoyle,
Limerick, V94 XF67

Date: 14 October 2025

Applicant: Analog Devices International

Location: Analog, Raheen Business Park, Limerick,

Re: Declaration of Development and Exempt Development for proposed plant within the ADI Campus

To whom it concerns,

Brady Shipman Martin is acting on behalf of Analog Devices International (ADI) who owns and operates the ADI Facility at Raheen Business Park, to the southwest of Limerick City.

In this application, ADI is applying to Limerick City and County Council for a declaration of development and exempt development under Section 5 of the Planning and Development Acts 2000, as amended ('the planning acts'). The basis for exempt development is made on what constitutes exempt development under Class 21 of Schedule 2 of the Planning and Development Regulations 2001, as amended (the 'planning regulations') and / or Section 4 of the planning acts.

Introduction to Application

The Section 5 declaration relates to the proposal to provide an element of additional plant in the form of a scrubber (No.5) to be located alongside four existing scrubbers all of which are centrally located within the developed ADI Campus. The additional plant is being provided so as to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works. There is no change or increase in activity, throughput or in emissions to the environment.

Scrubbers are filtration systems which use a variety of technologies to capture particulates, gases, chemicals, and odours from air in large spaces prior to release to the environment.

The facility is subject to the operational controls of the EPA's Industrial Pollution Control Licence No. P0224-04. This licence is also under review under IPC Licence Review No. P0224-05.

The information provided in support of the Section 5 referral includes the following:

- Completed Section 5 Declaration Application Form;
- Application fee (€80)
- Section 5 Declaration Planning Cover Letter (this letter);
- Screening for Appropriate Assessment (Byrne Ó Cléirigh, 2025);
- Drawing Register & Issue Slip (Punch, 2025):
 - Drawing 241110-PUNCH-XX-XX-DR-S-1050 - SITE LOCATION PLAN 1:1000
 - Drawing 241110-PUNCH-XX-XX-DR-S-1051 - SITE LOCATION PLAN 1:500
 - Drawing 241110-PUNCH-XX-XX-DR-S-1052 – EXISTING SITE LAYOUT PLAN
 - Drawing 241110-PUNCH-XX-XX-DR-S-1053 – SCRUBBER 5 GA LAYOUT PLAN, SECTION & 3D
 - Drawing 241110-PUNCH-XX-XX-DR-S-2050 – CONTIGUOUS ELEVATION - SHEET 1
 - Drawing 241110-PUNCH-XX-XX-DR-S-2050 – CONTIGUOUS ELEVATION - SHEET 2

Basis for Declaration of Exempt Development

The planning regulations include provisions for 'exempt development' under Schedule 2, with provisions for industrial purposes detailed under CLASS 21 and CLASS 22.

CLASS 21 outlines the following (*emphasis added*) to be exempted development as per Table 1 below.

Table 1: Except from Schedule 2 of the Planning and Development Regulations 2001, as amended.

Column 1	Column 2
Description of Development	Conditions and Limitations
<i>Development for industrial purposes</i>	
CLASS 21 (a) Development of the following descriptions, carried out by an industrial undertaker on land occupied and used by such undertaker for the carrying on, and for the purposes of, any industrial process , or on land used as a dock, harbour or quay for the purposes of any industrial undertaking—	1. Any such development shall not materially alter the external appearance of the premises of the undertaking.

Column 1 Description of Development	Column 2 Conditions and Limitations
<ul style="list-style-type: none">(i) the provision, rearrangement, replacement or maintenance of private ways or private railways, sidings or conveyors,(ii) the provision, rearrangement, replacement or maintenance of sewers, mains, pipes, cables or other apparatus,(iii) the installation or erection by way of addition or replacement of plant or machinery, or structures of the nature of plant or machinery. <p>(b) Any works for the provision within the curtilage of an industrial building of a hard surface to be used for the purposes of or in connection with the industrial process carried on in the building.</p>	2. The height of any plant or machinery, or any structure in the nature of plant or machinery, shall not exceed 15 metres above ground level or the height of the plant, machinery or structure replaced, whichever is the greater.

It is clear that the description of exempt development as set out in Column 1 of Table 1 above allows for the **installation or erection by way of addition of plant or machinery, or structures of the nature of plant or machinery**, where, as per Column 2 the **height of any plant or machinery or any structure in the nature of plant or machinery, shall not exceed 15 metres above ground level or the height of the plant, machinery or structure replaced, whichever is the greater**.

The proposed scrubber meets the description of the **installation or erection by way of addition of plant or machinery**.

The existing ground level in the vicinity of the proposed development is c.20.2m above ordnance datum (AOD). The highest point of the proposed scrubber is 19.3m above ground level (i.e. 39.5m (AOD)), and as such, is greater than 15m in height. However, the proposed highest level is below that of the highest point of an existing adjoining scrubber, which is of 19.475m (39.675 AOD) – Refer to Figure 1 (and Drawing No. 241110-PUNCH-XX-XX-DR-S-2050).

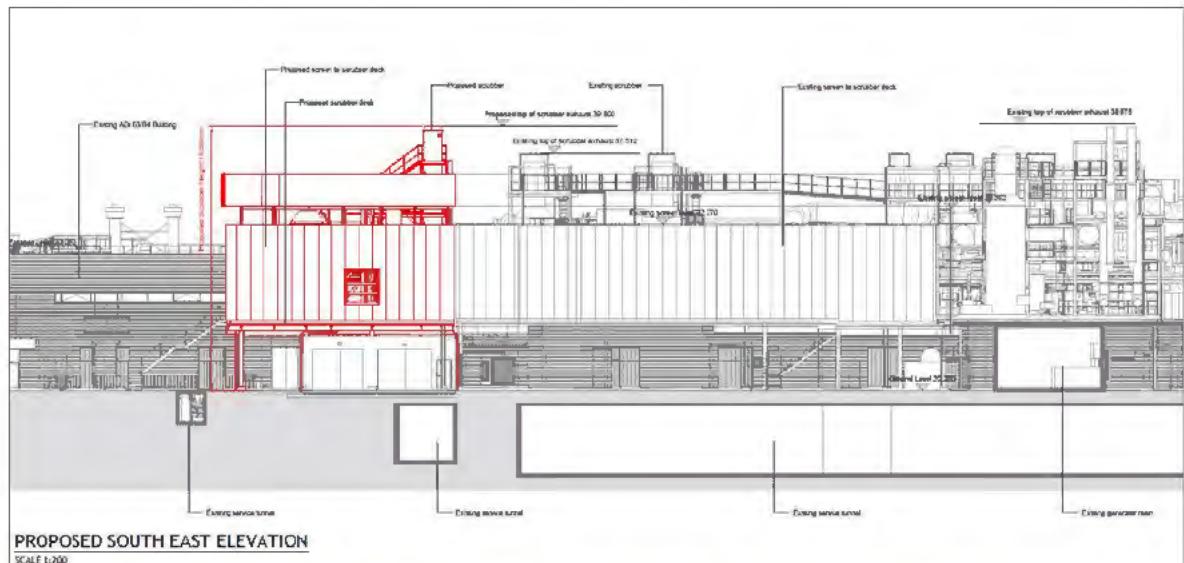


Figure 1: Elevation showing Existing Plant (top level 39.675m) the Proposed Plant (top level 39.500m)

The planning acts also include provisions for 'exempt development' under Section 4(1)(h):

4.—(1) The following shall be exempted developments for the purposes of this Act—

(h) "development consisting of the carrying out of works for the maintenance, improvement or other alteration of any structure, being works which affect only the interior of the structure or which do not materially affect the external appearance of the structure so as to render the appearance in consistent with the character of the structure or of neighbouring structures."

In this regard, proposed scrubber (No.5) comprises plant and equipment being provided alongside existing similar scrubber plant (Nos. 1 to 4) centrally situated within the wider long-established ADI Campus. The location is over 100m from any surrounding public roads and effectively enclosed by surrounding ADI and other business park development.

Locally the existing and proposed plant is located to the rear (southeast) of the existing manufacturing building adjoining the central service and utility area for the campus, which includes energy centres, plant rooms, and general plant and equipment. Proposed Scrubber No. 5 is provided alongside the existing scrubbers and as with the existing plant, the main element of the proposed plant is screened by enclosing acoustic cladding. Refer to Figure 2.

Being centrally located with service / utility area of the wider ADI Campus, the existing and proposed plant is well-screened from public viewpoints. While the plant is external, the proposed development does not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures.

Indeed the proposed plant is fully consistent with the character, nature and visual appearance of the existing similar plant.

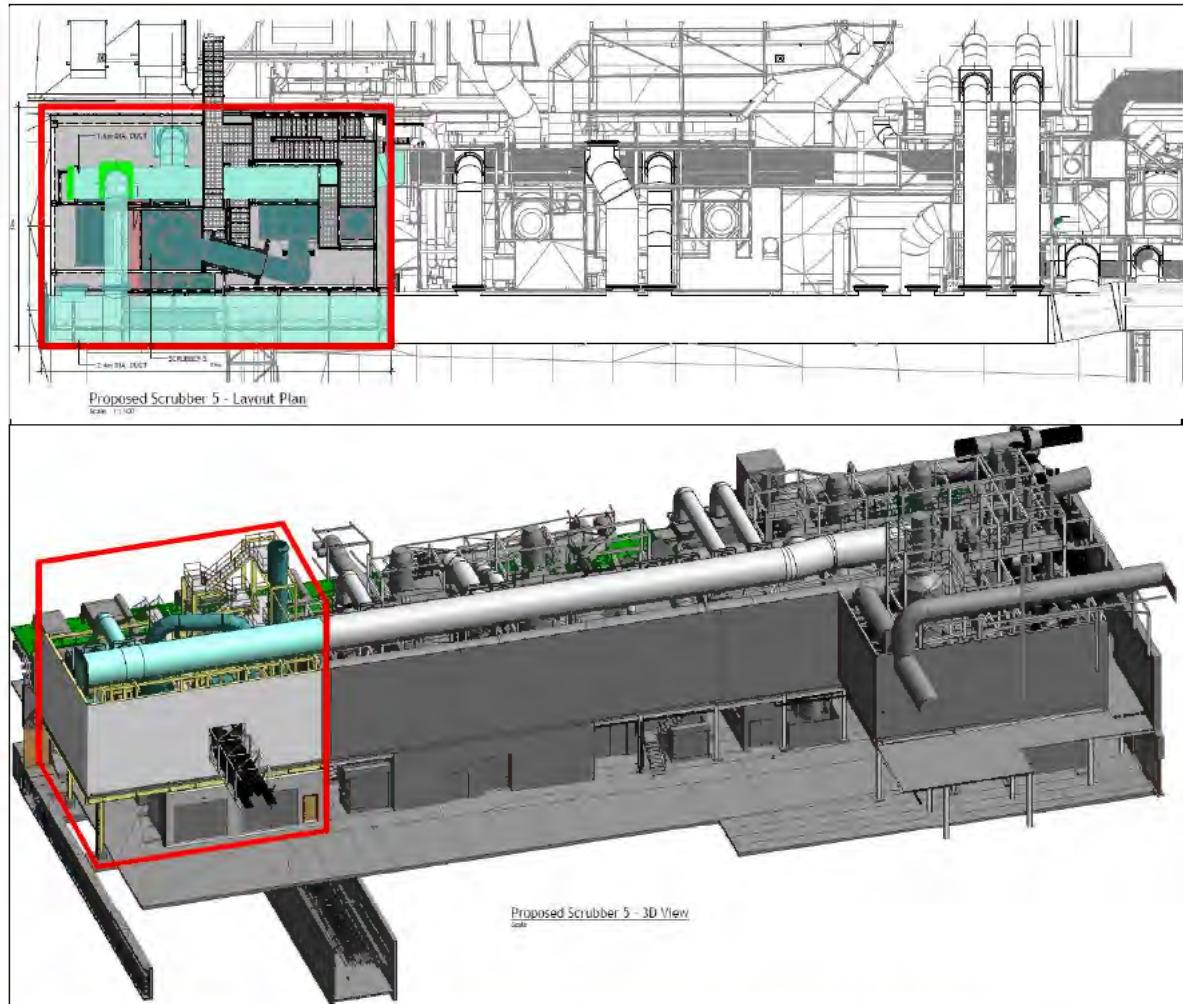


Figure 2: Plan and 3D Model showing Existing Scrubber Plant the Proposed Scrubber Plant

We note that considerations for exempted development are also subject to the restrictions under Article 9, and specifically Article 9(1) of the Planning and Development Regulations 2001, as amended ('the planning regulations'). Responses to these provisions are set out in the **Table 1** below.

Table 1: Response to Article 9(1) of Planning and Development Regulations 2001, as amended.

Description	Response
<p>Development to which article 6 [exempted development] relates shall not be exempted development for the purposes of the Act—</p>	
<p>(a) if the carrying out of such development would—</p> <ul style="list-style-type: none"> <li data-bbox="354 624 1033 725">(i) contravene a condition attached to a permission under the Act or be inconsistent with any use specified in a permission under the Act, <li data-bbox="354 759 1033 905">(ii) consist of or comprise the formation, laying out or material widening of a means of access to a public road the surfaced carriageway of which exceeds 4 metres in width, <li data-bbox="354 994 1033 1062">(iii) endanger public safety by reason of traffic hazard or obstruction of road users, <li data-bbox="354 1152 1033 1264">(iiia) endanger public safety by reason of hazardous glint and/or glare for the operation of airports, aerodromes or aircraft, <li data-bbox="354 1466 1033 1971">(iv) except in the case of a porch to which class 7 specified in column 1 of Part 1 of Schedule 2 applies and which complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1, comprise the construction, erection, extension or renewal of a building on any street so as to bring forward the building, or any part of the building, beyond the front wall of the building on either side thereof or beyond a line determined as the building line in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan, 	<p>Does not apply.</p> <p>The development is centrally located within the existing developed ADI Campus and there is no change to public roads.</p> <p>The development does not impact roads or road users or their safety.</p> <p>The development adjoins existing similar plant within the existing developed ADI Campus. There is no impact on public safety by reason of hazardous glint and/or glare for the operation of airports, aerodromes or aircraft.</p> <p>Does not apply.</p>

Description	Response
Development to which article 6 [exempted development] relates shall not be exempted development for the purposes of the Act—	
(v) consist of or comprise the carrying out under a public road of works other than a connection to a wired broadcast relay service, sewer, water main, gas main or electricity supply line or cable, or any works to which class 25, 26 or 31 (a) specified in column 1 of Part 1 of Schedule 2 applies,	Does not apply: - The development does not impact roads.
(vi) interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,	The development is centrally located within the existing developed ADI Campus and does not interfere with the character of a landscape, or a view or prospect of special amenity value or special interest.
(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,	The development is centrally located within the existing developed ADI Campus and does not interfere with places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest.
(viiA) consist of or comprise the excavation, alteration or demolition of any archaeological monument included in the Record of Monuments and Places, pursuant to section 12 (1) of the National Monuments (Amendment) Act 1994, save that this provision shall not apply to any excavation or any works, pursuant to and in accordance with a consent granted under section 14 or a licence granted under section 26 of the National Monuments Act 1930 (No. 2 of 1930) as amended,	The development is centrally located within the existing developed ADI Campus and does not interfere with any archaeological monument included in the Record of Monuments and Places.
(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the	Does not apply: - A screening for appropriate assessment (AA) has been prepared (Byrne Ó Cléirigh, 2025) - see below.

Description	Response
Development to which article 6 [exempted development] relates shall not be exempted development for the purposes of the Act—	
development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site,	
(viiC) consist of or comprise development which would be likely to have an adverse impact on an area designated as a natural heritage area by order made under section 18 of the Wildlife (Amendment) Act 2000.	The development is centrally located within the existing developed ADI Campus and will not have an adverse impact on an area designated as a natural heritage area.
(viii) consist of or comprise the extension, alteration, repair or renewal of an unauthorised structure or a structure the use of which is an unauthorised use,	Does not apply.
(ix) consist of the demolition or such alteration of a building or other structure as would preclude or restrict the continuance of an existing use of a building or other structure where it is an objective of the planning authority to ensure that the building or other structure would remain available for such use and such objective has been specified in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,	Does not apply: - The additional plant is being provided so as to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works.
(x) consist of the fencing or enclosure of any land habitually open to or used by the public during the 10 years preceding such fencing or enclosure for recreational purposes or as a means of access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility,	Does not apply: - The development is centrally located within the existing developed ADI Campus.
(xi) obstruct any public right of way,	Does not apply: - The development is centrally located within the existing developed ADI Campus.

Description	Response
Development to which article 6 [exempted development] relates shall not be exempted development for the purposes of the Act—	
(xii) further to the provisions of section 82 of the Act, consist of or comprise the carrying out of works to the exterior of a structure, where the structure concerned is located within an architectural conservation area or an area specified as an architectural conservation area in a development plan for the area or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan and the development would materially affect the character of the area,	Does not apply: - The development is centrally located within the existing developed ADI Campus.
<p>(b) in an area to which a special amenity area order relates, if such development would be development:—</p> <p>(i) of class 1, 3, 11, 16, 21, 22, 27, 28, 29, 31, (other than paragraph (a) thereof), 33 (c) (including the laying out and use of land for golf or pitch and putt or sports involving the use of motor vehicles, aircraft or firearms), 39, 44 or 50(a) specified in column 1 of Part 1 of Schedule 2, or</p> <p>(ii) consisting of the use of a structure or other land for the exhibition of advertisements of class 1, 4, 6, 11, 16 or 17 specified in column 1 of Part 2 of the said Schedule or the erection of an advertisement structure for the exhibition of any advertisement of any of the said classes, or</p> <p>(iii) of class 3, 5, 6, 7, 8, 9, 10, 11, 12 or 13 specified in column 1 of Part 3 of the said Schedule, or</p> <p>(iv) of any class of Parts 1, 2 or 3 of Schedule 2 not referred to in subparagraphs (i), (ii) and (iii) where it is stated in the order made under section 202 of the Act that such development shall be prevented or limited,</p>	<p>Does not apply.</p> <p>The development is centrally located within the existing developed ADI Campus, which is zoned for industrial use.</p> <p>Does not apply.</p> <p>Does not apply.</p> <p>Does not apply.</p>
(c) if it is development to which Part 10 applies, unless the development is required by or under any statutory provision (other than the Act or these Regulations) to comply with procedures for the purpose of giving effect to the Council Directive,	Does not apply:- The additional plant is not of a nature or scale that meets any threshold at or above which Part 10 applies and does not result in likely environmental impacts that would

Description	Response
Development to which article 6 [exempted development] relates shall not be exempted development for the purposes of the Act—	
	come under Article 103 of Part 10 of the Regulations.
(d) if it consists of the provision of, or modifications to, an establishment, and could have significant repercussions on major accident hazards.	Does not apply: - The additional plant is being provided so as to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works.

A Screening for Appropriate Assessment (AA) has been prepared by Byrne Ó Cléirigh (2025), the conclusion of which states:

“...in view of best scientific knowledge and in view of the conservation objectives of the European sites, the installation of a new plant at ADI, individually or in combination with other plans or projects, is not likely to have a significant effect on the European sites. Therefore, in our opinion an Appropriate Assessment of the installation of the proposed plant is not required, as the project is not directly connected with or necessary to the management of the sites and, it can be excluded on the basis of objective scientific information that the project, individually or in combination with other plans or projects, will have a significant effect on a European site.”

The Screening for Appropriate Assessment includes (*inter alio*) the following appendices:

- Appendix 1: Copy of EPA IPC Licence P0224-04
- Appendix 4: Air Dispersion Modelling Assessment

Results from the Air Dispersion Modelling Assessment (Byrne Ó Cléirigh (2025)), which has been conducted in accordance with the EPA's *Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)* (December 2019) and which is based on a conservative basis with the emission points assumed to operate 24-hours per day, 7-days per week at their respective licence limits, indicate that:

“...[e]mission limits are in accordance with ADI's licence review application (P0224-05). ”

Prior modelling shows that operation of all existing and proposed new main emission points discharging inorganic substances would comply with the relevant short term and long term environmental assessment levels, and are lower than the maximum allowable process contribution from the EPA's guidance, even for the very conservative assumptions outlined above. Actual emissions will be considerably lower than those predicted based on these conservative assumption."

Conclusion

The proposed plant, comprising an additional scrubber (No.5) is located adjacent to and is physical and visually consistent with the character and nature of the four existing scrubbers (No. 1 to 4). The plant is being provided so as to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works. There is no change or increase in activity, throughput or in emissions to the environment.

Being plant of lesser height being provided in addition to existing similar plant, the proposed development meets the conditions of Class 21 as exempt development for industrial purposes. Likewise the proposed plant is consistent with the requirements of Section 4(1)(h) of the planning acts for exempt development in that it does not materially affect the external appearance of the structure so as to render the appearance inconsistent with the character of the structure or of neighbouring structures.

Finally, provision of the proposed plant does not conflict with, contravene or impact on any of the restrictions to exempt development as set out under Article 9(1) of the planning regulations.

For the reasons above, we submit that the proposed Scrubber No. 5 plant should be considered as 'exempted development'.

I trust that the above is in order, however, please do not hesitate to contact me if you require further information.

Yours sincerely,



Thomas Burns
for
Brady Shipman Martin

7186ADI Scrubber No.5_Section 5_Planning Cover Letter_2025_10_15



Additional Scrubber Plant

Screening for Appropriate Assessment

Prepared for:

Analog Devices International UC

Certified Final

Ref: 431-25X0153 R1

24 July 2025

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DISCLAIMER

This report has been prepared by Byrne Ó Cléirigh Limited with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporating our Terms and Conditions and taking account of the resources devoted to it by agreement with the Client.

We disclaim any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report is confidential to the Client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

Contents

1	INTRODUCTION	1
2	LEGISLATIVE CONTEXT.....	1
3	METHODOLOGY.....	1
3.1	Guidance	1
3.2	Data Sources	2
4	DESCRIPTION OF PROPOSED DEVELOPMENT	3
4.1	Analog Devices International UC	3
4.2	Proposed Development	3
4.3	ADI Licence Review.....	4
4.4	Other Plans.....	5
5	IDENTIFICATION OF RELEVANT EUROPEAN SITES	6
5.1	Definitions.....	6
5.2	Conservation Objectives	6
5.3	Source-Pathway-Receptor Connections	7
6	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS	14
7	CONCLUSION	19

APPENDICES

Appendix 1: Copy of IPC Licence P0224-04

Appendix 2: Planned Developments in Vicinity of Project

Appendix 3: European Sites

Appendix 4: Dispersion Modelling assessment

1 INTRODUCTION

Analog Devices International UC (ADI) is proposing to provide additional plant to provide redundancy and operational resilience to enable ongoing system availability of the existing interconnected scrubbers for manufacturing operations. An acid scrubber a type of air pollution control device used to remove acidic gases and fumes from process exhaust gas streams before releasing to air. At present, ADI uses eight vertical packed bed wet scrubbers which are usually in continuous use. ADI is proposing to install an additional element of scrubber plant to provide redundancy for resilience of operation during maintenance.

ADI is intending to seek a Section 5 Declaration on Development and Exempted Development from Limerick City and County Council for the provision of this element of additional plant. This Appropriate Assessment Screening has been carried out to assist the competent authority in undertaking a screening exercise for Appropriate Assessment (AA) for the proposed project.

The screening has been carried out by Dr. Sarah Kelly, a Principal Engineer with Byrne Ó Cléirigh (BÓC). She holds a bachelor's degree in mechanical engineering and doctorate from Trinity College Dublin. She is a Chartered Engineer with Engineers Ireland. She has over 27 years of professional experience, including 25 years as an environmental consultant. She has carried out screenings for Appropriate Assessment in support of applications to planning authorities in accordance with the relevant Irish and EU guidance on Appropriate Assessment, and has advised the Commission for Regulation of Utilities (CRU) in reviewing the Appropriate Assessment screenings that were submitted to the CRU as part of their consenting process for gas and electricity infrastructure projects. She has been supporting ADI on environmental compliance since 2022.

2 LEGISLATIVE CONTEXT

2.1 Habitats Directive

The Habitats Directive (92/43/EEC) (as amended) seeks to safeguard the long-term survival of Europe's most valuable and threatened species and habitats. The geographical areas of particular importance to these species and habitats have been selected as Special Areas of Conservation (SAC) and Special Protection Areas (SPA) which are collectively referred to (in Ireland) as European or Natura 2000 sites. Together, these sites comprise the pan-European Natura 2000 network of protected areas.

Consent for the project can only be given after determining that it will not adversely affect the integrity of any European site in view of the conservation objectives of that site. The screening for Appropriate Assessment represents the first stage in the assessment process. If, following screening, it is determined that there is no likelihood of significant effects, no further assessment is required.

3 METHODOLOGY

3.1 Guidance

The legislative provisions for appropriate assessment screening for planning applications are set out in Section 177U of the *Planning and Development Act 2000* as amended.

In 2021, the Office of the Planning Regulator published *OPR Practice Note PN01: Appropriate Assessment Screening for Development Management*, which provides information and guidance on screening for appropriate assessment during the planning application process.

The OPR guidance sets out the stages for conducting a screening assessment. These stages require the following:

1. Describe the proposed development and local site characteristics.
2. Identify the relevant European sites and compile information on Qualifying Interests and conservation objectives.
 - a) Identify all European sites that might be affected using the Source-Pathway-Receptor model.
 - b) Identify the Qualifying Interests of the site concerned and the conservation objectives.
 - c) Determine which of those Qualifying Interests/conservation objectives could be affected by the proposed development.
3. Assess the likely significant direct and indirect effects on the conservation objectives of the site(s) in relation to:
 - a) the project alone, and
 - b) In-combination with other plans and projects.

Screening can result in the following conclusions or outcomes:

- **No likelihood of significant effects:** Appropriate assessment is not required and the planning application can proceed as normal. Documentation of the screening process including conclusions reached and the basis on which decisions were made must be kept on the planning file.
- **Significant effects cannot be excluded:** Appropriate assessment is required before permission can be granted. A Natura Impact Statement (NIS) will be required in order for the project to proceed.

We have had regard to the structure of the OPR template screening form in carrying out our screening for appropriate assessment.

3.2 Data Sources

In carrying out this screening assessment, we have relied on data from the following sources¹:

- Plant descriptions and scope of works provided by ADI.
- Scientific data collated by ADI for the purposes of other planning applications.
- Scientific data collated by ADI for the purposes of compliance with IPC licence conditions.
- Limerick City & County Council Planning Register.
- The GIS datasets for the Special Areas of Conservation and Special Protection Areas available from the NPWS, showing the locations and areas of the European sites.
- The GIS datasets for the Sites of Community Interest, Special Areas of Conservation, and Special Protection Areas available from the Commission's Natura 2000 portal.
- Site Synopses for the relevant Natura 2000 sites, published by the Department of Arts, Heritage, and the Gaeltacht (available from the NPWS).

¹ Data accessed in July 2025

- Conservation Objectives Series for the relevant European sites, available from the NPWS.
- Natura 2000 Standard Data Forms for the relevant sites (available from the NPWS and the Commission's Natura 2000 portal).
- Limerick Development Plan 2022-2028.
- Flood Risk Management Plan for Shannon Estuary South (2018).
- Water Action Plan 2024: A River Basin Management Plan for Ireland.
- IE / IPC licence information (available from the EPA Licence and Enforcement Portal).
- Environmental Impact Assessment Portal.
- National Planning Database.

4 DESCRIPTION OF PROPOSED DEVELOPMENT

4.1 Analog Devices International UC

The ADI facility is situated in the Raheen Business Park; approximately 4.5 km southwest of Limerick City. The site comprises a manufacturing facility with associated administration buildings, stores and car parking.

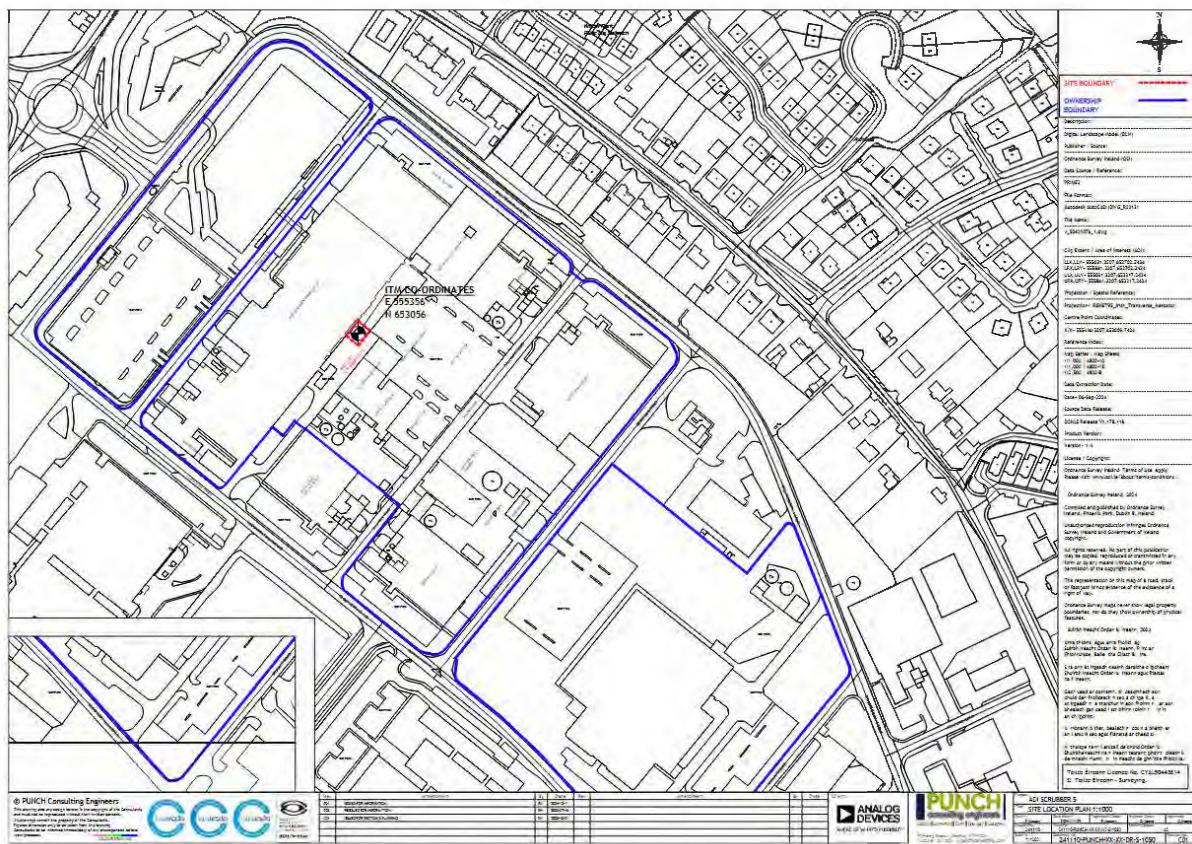
The Raheen Business Park is a large business park with range of national and multi-national companies. ADI is located at the north corner of the business park, close to the Ballycummin entrance to the park. To the north east of the campus is the main service road to the park, Ballycummin Avenue, which is the north east perimeter of the park.

The facility operates under Integrated Pollution Control (IPC) Licence no. P0224-04 (included in Appendix 1). The site is classified as a lower tier COMAH site and is subject to the requirements of the COMAH regulations.

4.2 Proposed Development

The site is centrally located within the existing established ADI campus and is part of the existing developed area of the campus. The site is located to the rear of Building 1 on Cloughkeating Avenue, adjacent to the existing scrubber plant / deck on a hardstanding area. Surface water from the hardstanding area drains to the existing surface water network for the campus.

Figure 1: Site Location in red, ADI property ownership boundary in blue



The proposed project involves the installation of plant in the form of an additional scrubber to provide redundancy and operational resilience to enable ongoing system availability of the existing interconnected scrubbers for manufacturing operations. The scope of works is outlined below:

- Excavate two footpad areas (2 m x 2.6 m and 1.8 m x 1.8 m) to a depth of c. 2.0m below ground, with the formation brought up in lean mix concrete from rock.
- Construct extension to the existing steel elevated scrubber deck to accommodate the new plant.
- Install new plant, associated discharge flues with interconnected ducting, and associated electrical and mechanical equipment.
- All associated connection and commissioning works to connect to existing site infrastructure. As with the existing plant, stormwater drainage from the new plant deck will be routed to ADI's process wastewater treatment plant and subsequently discharged to foul sewer.

4.3 ADI Licence Review

As an IPC licenced facility, all main emission points to air associated with ADI's operations, including the emissions from the scrubber stacks, are subject to licence conditions to ensure that there is no negative impact on the surrounding environment. These conditions include limits on the concentration of emission parameters and volume flow through each unit.

ADI submitted an application for a review of its licence in May 2023 (application reference P0224-05) in order to accommodate development plans, including the addition of the scrubber plant which is the subject of this assessment (referenced A2-28 in the licence review application). The application

includes an air dispersion modelling assessment of emissions from the site, and proposed limits for existing and new licensed emission points. The application does not propose any changes to the surface water discharge or monitoring arrangements from the site, or any changes to the noise limits or noise monitoring arrangements. The EPA has not made a final decision on the licence application at the time of carrying out this assessment.

When granted, the updated licence will include licence limit conditions for the new scrubber plant which will ensure ongoing protection of the environment.

4.4 Other Plans

In 2022, ADI applied for to Limerick City and County Council for planning permission to install a larger hydrogen tank to replace the existing tank (planning ref. 2238), and for an extension to the existing manufacturing facility (known as C2 Fanfare) (planning ref. 22803). In 2023, ADI acquired adjacent PFL site and applied for planning permission to redevelop this building as additional office space (planning ref. 2360609). Limerick City and County Council's decision to grant conditional permission in each case was appealed to An Bord Pleanala (ABP). ABP granted permission for the hydrogen tank on 7th September 2023 and C2 Fanfare development on 12th September. ABP granted permission for the PFL development on 19th February 2025. In 2025, ADI applied for permission to replace a section of existing cladding with glazing on the north-west and part of the south-west elevation of the Catalyst Building (planning ref. 2560174). Limerick City and County Council's decision to grant conditional permission has been appealed to An Coimisiún Pleanála. ADI has also applied for permissions to install new windows and doors to part of the front elevation of Building 1 and to install a new enclosed fire escape stairs to the side of the existing building (planning ref. 2560508). No decision had been made at the time of carrying out this assessment.

In addition to ADI's plans outlined above, there are other planned developments in the vicinity of ADI's facility. A list of planning applications and permissions within the Business Park, together with any proposed developments adjacent to the business park which, in our professional opinion, are of a scale to potentially give rise to in-combination effects with other projects during their construction phase is included in Appendix 2.

Four other EPA licensed facilities are currently operating in the Business Park:

- Howmedica International S.de R.L. trading as Stryker Orthopaedics (IE licence no. P0023-03)
- Regeneron Ireland Designated Activity Company (IE licence no. P0991-02)
- Adhesives Research Ireland Limited (IPC licence no. P0452-01)
- Eli Lilly Kinsale Ltd. (IE licence no. P1200-01)

The EPA's licensing portal does not identify any current or proposed plans or projects at any of these licensed facilities.

While still listed as being licensed on the EPA website, IMAG Optical Storage Ltd. facility in the Raheen (licence no. P0265) closed in 2004.

No other plans or projects associated with the National Planning Database, EIA Portal, Limerick Development Plan, Flood Risk Management Plan or River Basin Management Plan which could have the potential for in-combination effects were identified.

5 IDENTIFICATION OF RELEVANT EUROPEAN SITES

5.1 Definitions

The European Communities (Birds and Natural Habitats) Regulations 2011, as amended, define Natura 2000 sites as:

the European network of special areas of conservation under the Habitats Directive and special protection areas under the Birds Directive, provided for by Article 3(1) of the Habitats Directive and, for the purposes of these Regulations, includes European Sites;

European sites are defined under the *Planning and Development Act 2000 (as amended)* as:

- (a) a candidate site of Community importance
- (b) a site of Community importance
- (c) a candidate special area of conservation
- (d) a special area of conservation
- (e) a candidate special protection area
- (f) a special protection area

5.2 Conservation Objectives

The European Communities (Birds and Natural Habitats) Regulations 2011, as amended, provide the following definitions:

- “conservation objectives”, in relation to a European site, means the maintenance and restoration of the habitat and species in respect of which the site has been identified as a European Site at favourable conservation status or their restoration to such favourable status, and shall include such particular objectives as the Minister may from time to time establish for those purposes
- “conservation status of a natural habitat” means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species
- “conservation status of a species” means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations

Furthermore, the European Communities (Birds and Natural Habitats) Regulations provide the following definitions for the favourable conservation status of habitats and species:

- “favourable conservation status of a natural habitat” means the conservation status of a natural habitat when:
 - (a) its natural range and areas it covers within that range are stable or increasing, and
 - (b) the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
 - (c) the conservation status of its typical species is favourable.
- “favourable conservation status of a species” means the conservation status of a species when:
 - (a) population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

- (b) *the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and*
- (c) *there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*

The NPWS has published individual conservation objectives for each of the habitats identified in Section 6.3 (Refer to the data sources in Section 3.2). The qualifying interests and conservation objectives for each of these European sites is summarised in Table 1.

5.3 Source-Pathway-Receptor Connections

There are no habitats or areas of ecological or biodiversity interest or value on the site or within the ADI Campus. Installation of the new plant will not involve any works directly on or adjacent to any European sites, and will not result in any emissions directly into or on to a European site.

In light of the nature and associated environmental footprint of the development at ADI, we consider that it is reasonable, and conservative, to confine the initial screening assessment to those sites within 15 km of the site. There is no possibility of a source-pathway-receptor connection to any European site outside this initial screening radius.

There is a single SPA within 15 km of ADI, namely the River Shannon and River Fergus Estuaries SPA (site code 004077), the closest part of which is approximately 2.6 km to the north of the site. The site of c. 188 m² comprises existing hard standing and is centrally located within the developed ADI campus. The ADI campus is located within the wider developed Raheen Business Park. There are no habitats or areas of ecological or biodiversity interest or value on the site or within the ADI Campus. Likewise, there are no areas or features of potential value to the qualifying interests of the River Shannon and River Fergus Estuaries SPA on the site or within the ADI Campus.

There are also four SAC within 15 km of ADI:

- Lower River Shannon SAC (site code 002165), approximately 2.1 km to the north
- Tory Hill SAC (site code 000439), approximately 9.1 km to the south
- Askeaton Fern Complex SAC (site code 002279), approximately 12.2 km to the west
- Curraghchase Woods SAC (site code 000174), approximately 13.9 km to the west.

These European sites are identified in the maps in Appendix 3.

We have assessed each of these European sites individually based on the Source-Pathway-Receptor (S-P-R) risk assessment principal in order to identify those European sites which are within the Zone of Influence.

Construction Phase

The construction phase will be limited to a 16 week duration, with subsequent commissioning phase of 4 weeks.

Excavation works will be limited to the footprint of two footpads (2.6 m x 2 m and 1.8 m x 1.8 m) to a maximum depth of 2 m. Biannual groundwater monitoring carried out by AECOM at the ADI campus in compliance with IPC licence conditions has shown groundwater levels in the vicinity of the proposed project is at least 10 m below ground level². Therefore, there is no S-P-R connectivity between the proposed facility and any European site via groundwater.

The plant deck will be steel fabrication; excavation is limited to two footpads (total area ~8.5m²) with the formation brought up in lean mix concrete from rock (~17m³). There is therefore very limited requirement for storage of construction materials on site, and the risk of contamination to surface water as a result of construction works is extremely low. Surface water emissions from the hardstanding area discharge to, and, during the construction phase, will continue to discharge to, ADI's existing stormwater system before joining the Raheen Business Park surface water network, which discharges via a man-made surface water attenuation lagoon – referred to as the Loughmore Canal – and the Barnakyle River³ to the Estuary. The Lower River Shannon SAC is ~8km and the River Shannon and River Fergus Estuaries SPA ~8.5 km from the ADI site via this hydrological pathway. An assessment of likely significant effects via this S-P-R connection is included in Section 6.

The site is located within an existing developed campus with associated road and campus levels of lighting; there will be no lighting disturbance associated with the proposed project either during or on completion of the works.

There is the potential for very local short term noise disturbance associated with construction traffic and site works. Typical construction noise will not be detectable above ambient noise within 200 m of the site. With the closest European site more than 2 km away, there is therefore no possibility of this short term potential impacts affecting any European site.

While there is the potential for the generation of very small amounts of dust associated with excavation works, IAQM guidance⁴ recommends a conservative zone of influence for construction dust of 50 m from the boundary of the site. With the closest European site more than 2 km away, there is therefore no possibility of this short term potential impact affecting any European site.

² Biannual groundwater monitoring results:

	2020		2021		2022		2023		2024	
Groundwater depth (m)	13.497	12.312	13.415	13.376	13.538	11.108	12.335	10.565	10.961	13.629

³ The Barnakyle River has been assigned a Water Framework Directive (WFD) Status. It was categorised as having moderate ecological potential in the most recent 2016 - 2021 window. The majority of the other tributaries entering the Maigue River are also classified under the WFD; the classification of these tributaries for the period 2016 – 2021 is ‘Poor’ (a lower status than the Barnakyle River, which also flows into the Maigue River).

⁴ Guidance on the assessment of dust from demolition and construction, Version 1.1, Institute of Air Quality Management, February 2014

Operational Phase

As outlined in Section 4.3, all main emission points associated with ADI's operations, including the new plant, are required to operate under licence conditions to ensure protection of the environment. We have carried out an air dispersion modelling assessment in order to determine the potential zone of influence via atmospheric connectivity. Details of this assessment are included in Appendix 4.

Emissions from the new plant were assessed in combination with all other emission points at ADI's facility which emit the same parameters, with all units assumed to be operating at their licence limit 24 hours per day, 365 days per year. This is an extremely conservative assumption. Periodic measurements show that in practice, scrubber emissions are considerably lower than licence limits, and the proposed plant is designed to introduce redundancy into the system and so all units will not run together in practice. The results therefore represent an extremely conservative, worst case scenario. Offsite sources were also considered; based on EPA air dispersion modelling guidance, a cumulative assessment with offsite emission sources was not required.

The assessment clearly demonstrates that, even under the very conservative modelling assumptions, no European site lies within the zone of influence, and there is no S-P-R connectivity to any European site via the atmosphere.

There will be no extraction of or emissions to groundwater during the operational phase of the project. Therefore there is no S-P-R connectivity between the proposed facility and any European site via groundwater.

ADI's facility operates, and will continue to operate, within its IPC licence limits, as follows:

Daytime dB L _{ar, T} (30 minutes)	Evening time dB L _{ar, T} (30 minutes)	Night-time dB L _{Aeq, T} (30 minutes) <small>Note 1</small>
55	50	45

Note 1: During night time hours, there shall be no clearly audible total component or impulsive component in the noise emissions from the activity at any noise-sensitive location.

Under the condition 4.5 of ADI's IPC licence

Noise from the installation shall not give rise to sound pressure levels measured at any noise sensitive locations (NSLs) which exceed the limit value(s).

The closest noise sensitive locations are within 50 m of the site boundary. The closest European site is 2.1 km from the proposed project. There is no S-P-R noise connectivity between the proposed facility and any European site due to separation distance.

As with the existing situation, surface water emissions from the plant deck will be routed to ADI's process wastewater treatment plant and subsequently discharged to foul sewer. There is therefore no S-P-R connection via surface water to the Lower River Shannon SAC or River Shannon and River Fergus Estuaries SPA during the operating phase of the project.

Decommissioning Phase

Decommissioning works would be limited to the disconnection and removal of the plant. No construction or demolition works would be required.

Surface water emissions from the plant deck will continue to discharge to ADI's foul water system as outlined for the operational phase of the project.

We have summarised the results of our assessment to identify relevant European sites within the zone of influence of the proposed works in Table 1 overleaf.

Table 1: Identification of relevant European sites using Source-Pathway-Receptor model and compilation of information on Qualifying Interests and conservation objectives (Step 2 in OPR template screening form)

Site & distance to ADI	Qualifying Interests	Conservation Objectives	Distance from proposed project (km)	Connection (Source-Pathway-Receptor)	Considered further in screening (y/n)
004077 River Shannon and River Fergus SPA	<p>A017 Cormorant <i>Phalacrocorax carbo</i> A038 Whooper Swan <i>Cygnus cygnus</i> A046 Light-bellied Brent Goose <i>Branta bernicla hrota</i> A048 Shelduck <i>Tadorna tadorna</i> A050 Wigeon <i>Anas penelope</i> A052 Teal <i>Anas crecca</i> A054 Pintail <i>Anas acuta</i> A056 Shoveler <i>Anas clypeata</i> A062 Scaup <i>Aythya marila</i> A137 Ringed Plover <i>Charadrius hiaticula</i> A140 Golden Plover <i>Pluvialis apricaria</i> A141 Grey Plover <i>Pluvialis squatarola</i> A142 Lapwing <i>Vanellus vanellus</i> A143 Knot <i>Calidris canutus</i> A149 Dunlin <i>Calidris alpina</i> A156 Black-tailed Godwit <i>Limosa limosa</i> A157 Bar-tailed Godwit <i>Limosa lapponica</i> A160 Curlew <i>Nurmenius arquata</i> A162 Redshank <i>Tringa tetanus</i> A164 Greenshank <i>Tringa nebularia</i> A179 Black-headed Gull <i>Chroicocephalus ridibundus</i> A999 Wetlands</p>	<p>To maintain the favourable conservation condition of the breeding (A017) and wintering (A017 to A0179) bird species</p> <p>To maintain the favourable conservation condition of the wetland habitat (A999) as a resource for the regularly-occurring migratory waterbirds that utilise it</p>	2.6 km	<p>Hydrological connectivity during the construction phase of the project through stormwater discharge from standing area via Raheen Business Park surface water network, which discharges via a man-made surface water attenuation lagoon – referred to as the Loughmore Canal – and the Barnakyle River to the Estuary.</p> <p>Distance of pathway >8.5 km.</p>	yes

Site & distance to ADI	Qualifying Interests	Conservation Objectives	Distance from proposed project (km)	Connection (Source-Pathway-Receptor)	Considered further in screening (y/n)
002165 Lower River Shannon SAC	1029 Freshwater Pearl Mussel <i>Margaritifera margaritifera</i> 1095 Sea Lamprey <i>Petromyzon marinus</i> 1106 Atlantic Salmon <i>Salmo salar</i> (only in fresh water) 1150 *Coastal lagoons 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1355 Otter <i>Lutra lutra</i> 1410 Mediterranean salt meadows (<i>Juncetalia maritime</i>) 91E0 *Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) 1096 Brook Lamprey <i>Lampetra planeri</i> 1099 River Lamprey <i>Lampetra fluviatilis</i> 1110 Sandbanks which are slightly covered by sea water all the time 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1160 Large shallow inlets and bays 1170 Reefs 1220 Perennial vegetation of stony banks 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1310 Salicornia and other annuals colonising mud and sand 1349 Bottlenose Dolphin <i>Tursiops truncates</i> 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation 6410 Molinia meadows on calcareous, peaty, or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	To restore the favourable conservation conditions To maintain the favourable conservation conditions	2.1 km	Hydrological connectivity during the construction phase of the project through stormwater discharge from standing area via Raheen Business Park surface water network, which discharges via a man-made surface water attenuation lagoon – referred to as the Loughmore Canal – and the Barnakyle River to the Estuary. Distance of pathway >8 km.	yes

Site & distance to ADI	Qualifying Interests	Conservation Objectives	Distance from proposed project (km)	Connection (Source-Pathway-Receptor)	Considered further in screening (y/n)
000439 Tory Hill SAC	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) 7230 Alkaline fens	To restore the favourable conservation condition	9.1 km	No ecological connection.	No
	7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	To maintain the favourable conservation condition			
002279 Askeaton Fern Complex SAC	7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * 7230 Alkaline fens	To maintain the favourable conservation condition	12.2 km	No ecological connection.	No
000174 Curraghchase Woods SAC	91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) 91J0 <i>Taxus baccata</i> woods of the British Isles 1303 Lesser Horseshoe Bat <i>Rhinolophus hipposideros</i>	To restore the favourable conservation condition	13.9 km	No ecological connection.	No
	1016 Desmoulin's Whorl Snail <i>Vertigo moulensisana</i>	To maintain the favourable conservation condition			

6 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

The potential impacts on European sites from the project are examined in Table 2 under the OPR's *screening analysis template* criteria

Table 2: Assessment of likely significant effects (*Step 3 in OPR template screening form*)

Impacts:	Significance of Impacts
(a) Identify all potential impacts that may result in significant effects on the conservation objectives of a European site, taking into account the size and scale of the project under the following headings:	
Construction phase e.g. <ul style="list-style-type: none"> Vegetation clearance Demolition Surface water runoff from soil excavation/infill Landscaping (including borrow pits) Dust, noise, vibration Lighting disturbance Impact on groundwater/dewatering Storage of excavated/construction materials Access to site Pests 	<p>The site is located within the existing developed ADI Campus in Raheen Business Park.</p> <p>There will be no vegetation clearance, no landscaping (including borrow pits) and no dewatering required.</p> <p>The site is located within an existing developed campus with associated road and campus levels of lighting; there will be no lighting disturbance associated with the project either during or on completion of the works</p> <p>There will be no noise or dust connectivity between the site and any European site due to separation distance.</p> <p>Construction work is limited to the construction of two footpads (2.6 m x 2 m and 1.8 m x 1.8 m) and installation of a fabricated steel plant deck. The footpads will be excavated to a maximum depth of 2 m; there will be no interaction with groundwater, which is c. 10m below ground.</p> <p>Surface water drainage from the existing footprint is connected to the surface water drainage network. There is therefore a potential S-P-R connection via surface water between the European sites 002165 (Lower River Shannon SAC) and 004007 (River Shannon and River Fergus SPA). Excavations are limited to the removal of ~17 m³ of existing hardcore and gravel; there will be no soil excavation. The footpad formation will be brought up in lean mix concrete from rock (~17m³). There is no requirement for the storage of significant quantities of construction materials on site. Consistent with work practices that ADI implements across the wider site as an IPC licensed facility, standard good practice measures for construction sites for storing and handling materials will be implemented during the construction phase to prevent accidents and spillages. Stormwater from the project footprint connects into the existing ADI site stormwater drainage system (which is IPC licensed) before discharge to the Business Park stormwater network via the existing ADI surface water drainage system. These factors combine to ensure that there is negligible risk of significant discharge of contaminated stormwater to the Raheen Business Park. With a hydrological separation distance between the site and European sites (>8 km) via the attenuation lagoon, in our opinion, there are no potential impacts that may result in significant effects on either of these European sites in light of their conservation objectives.</p> <p>Specifically, in our opinion, there are no potential impacts associated with</p> <ul style="list-style-type: none"> Vegetation clearance Demolition Surface water runoff from soil excavation/infill

Impacts:	Significance of Impacts
Construction phase (contd.)	<ul style="list-style-type: none"> • Landscaping (including borrow pits) • Dust, noise, vibration • Lighting disturbance • Impact on groundwater/dewatering • Storage of excavated/construction materials • Access to site • Pests <p>or any other potential impacts associated with the construction phase of the project that may result in significant effects on a European site in light of its conservation objectives.</p>
Operational phase e.g. <ul style="list-style-type: none"> • Direct emission to air and water • Surface water runoff containing contaminant or sediment • Lighting disturbance • Noise/vibration • Changes to water/groundwater due to drainage or abstraction • Presence of people, vehicles and activities • Physical presence of structures (e.g. collision risks) • Potential for accidents or incidents 	<p>Dispersion modelling, carried out under very conservative assumptions, has demonstrated that there is no S-P-R air connectivity between the proposed facility and any European site (see Appendix 4). The closest European site is 2.1 km from the site. There is no S-P-R noise connectivity between the proposed facility and any European site due to separation distance.</p> <p>There will be no groundwater abstraction or discharges to groundwater associated with the Project.</p> <p>The facility is designed to operate unmanned and will not result in increased activity in the area during the operating phase.</p> <p>Stormwater from the plant deck will be routed to ADI's process wastewater treatment plant and subsequently discharged to foul sewer. There is therefore no S-P-R surface water connectivity during the operating phase of the project.</p> <p>Specifically, in our opinion, there are no potential impacts associated with</p> <ul style="list-style-type: none"> • Direct emission to air and water • Surface water runoff containing contaminant or sediment • Lighting disturbance • Noise/vibration • Changes to water/groundwater due to drainage or abstraction • Presence of people, vehicles and activities • Physical presence of structures (e.g. collision risks) • Potential for accidents or incidents <p>or any other potential impacts associated with the operational phase of the project that may result in significant effects on a European site in light of its conservation objectives</p>

Impacts:	Significance of Impacts
<p>Decommissioning phase e.g.</p> <ul style="list-style-type: none">• Vegetation clearance• Demolition• Surface water runoff from soil excavation/infill• Landscaping (including borrow pits)• Dust, noise, vibration• Lighting disturbance• Impact on groundwater/dewatering• Storage of materials• Access to site• Pests	<p>The scope of work would consist of dismantling of the equipment only for subsequent removal from site. No construction or demolition works would be required.</p> <p>In our opinion, there are no potential impacts associated with the decommissioning phase of the project that may result in significant effects on a European site in light of its conservation objectives.</p>

Impacts:	Significance of Impacts
In-combination / other plans and projects	<p>The works are not located in, or in the vicinity of a European site and, as summarised in this screening assessment, on its own, the works are not likely to have any significant effects on any European sites in light of their conservative objectives.</p> <p>A list of planning applications and permissions in the vicinity of the Project is included in Appendix 2. Dispersion modelling undertaken to determine the zone of influence via the atmosphere included all proposed new emission points at ADI from ADI's licence review application, including those associated with the various planning permissions in Appendix 2.</p> <p>No other plans or projects associated with the Limerick Development Plan, Flood Risk Management Plan or River Basin Management Plan which could have the potential for in-combination effects were identified.</p> <p>The project is very limited in scale and duration; potential noise and dust associated with construction works will be very localised and be limited to the 16 week construction period, and would not combine with the other projects to give rise to significant effects in this regard.</p> <p>There will be no emissions to or abstraction of groundwater associated with the construction, operational or decommissioning phases of the Project. In combination impacts due to groundwater emissions can therefore not arise.</p> <p>The ADI facility will continue to operate within current licence limits for noise emissions during the operational phase of the project. In combination impacts due to noise emissions therefore cannot arise.</p> <p>There will be no change in terms of quality or quantity of surface water discharge to the Raheen Business Park stormwater network during the construction phase, which is very limited in both scale and duration. During the operational phase, stormwater run-off from the plant deck will be routed to ADI's process wastewater treatment plant and subsequently discharged to foul sewer. In combination impacts due to surface water emissions can therefore not arise, either with specific plans that have been identified or with other works carried out from time to time, as required, for maintenance, repair, enhancement, replacement or upgrade (being exempt works) or existing structures, plant, or machinery.</p> <p>The air dispersion modelling assessed the impact of air emissions from the new plant in combination with all existing and proposed emission points from the ADI facility. Based on EPA air dispersion modelling guidance, no cumulative impact assessment with offsite sources was required, as maximum annual emission were significantly lower than threshold values for cumulative impacts. The dispersion modelling demonstrates that there is no European site within the zone of influence from emissions to air from the ADI facility.</p> <p>Based on our assessment above, in our opinion there are no potential impacts from the project, in combination with other plans, that may result in significant effects of the conservation objectives of either of these European sites.</p>

Impacts:	Significance of Impacts
<p>(b) Describe any likely changes to the European site</p> <p>Examples of the type of changes to give consideration to include:</p> <ul style="list-style-type: none"> • Reduction or fragmentation of habitat area • Disturbance to QI species • Habitat or species fragmentation • Reduction or fragmentation in species density • Changes in key indicators of conservation status value (water or air quality etc.) • Changes to areas of sensitivity or threats to QI • Interference with the key relationships that define the structure or ecological function of the site 	<p>As described above, there are no potential impacts arising from the project, either individually or in combination with other plans or projects, that may result in significant effects on any European site in light of its conservation objective. Therefore, there are no likely changes to any European site as a result of the project.</p> <p>Specifically, in our opinion, the proposed project is not likely to result in</p> <ul style="list-style-type: none"> • reduction or fragmentation of habitat area • disturbance to QI species • habitat or species fragmentation • reduction or fragmentation in species density • changes in key indicators of conservation status value (water or air quality etc.) • changes to areas of sensitivity or threats to QI • interference with the key relationships that define the structure or ecological function of the site <p>for any European site.</p>
<p>(c) Are 'mitigation' measures necessary to reach a conclusion that likely significant effects can be ruled out at screening?</p>	<p>No mitigation measures are necessary to reach a conclusion that likely significant effects can be ruled out at screening.</p>

7 CONCLUSION

We have assessed the potential for the proposed project to impact on any European site, taking into account the proximity, their qualifying interests, and conservation objectives of the sites.

In our opinion, in view of best scientific knowledge and in view of the conservation objectives of the European sites, the installation of a new plant at ADI, individually or in combination with other plans or projects, is not likely to have a significant effect on the European sites. Therefore, in our opinion an Appropriate Assessment of the installation of the proposed plant is not required, as the project is not directly connected with or necessary to the management of the sites and, it can be excluded on the basis of objective scientific information that the project, individually or in combination with other plans or projects, will have a significant effect on a European site.

* * * * *

APPENDIX 1: COPY OF IPC LICENCE P0224-04

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

Integrated Pollution Control Licence

Licence Register Number:	P0224-04
Company Register Number:	519435
Licensee:	Analog Devices International Unlimited Company
Location of installation	Raheen Industrial Estate Raheen Limerick



ENVIRONMENTAL PROTECTION AGENCY ACT 1992 AS AMENDED

INTEGRATED POLLUTION CONTROL LICENCE

Decision of Agency, under Section 90(2) of the EPA Act 1992 as amended in respect of licence

Reference number in Register of licences: P0224-04

Further to notice dated 26/08/21, the Agency in exercise of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, for the reasons hereinafter set out, hereby grants an IPC review licence to Analog Devices International Unlimited Company, Bay F1, Raheen Industrial Estate, Limerick, CRO number 519435

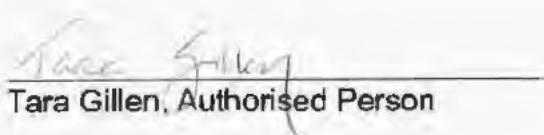
to carry on the following activity

13.2 The manufacture of integrated circuits and printed circuit boards

at Raheen Industrial Estate, Raheen, Limerick subject to the conditions as set out.

GIVEN under the Seal of the Agency on this the 13th day of January 2022.

PRESENT when the seal of the Agency was affixed hereto:


Tara Gillen, Authorised Person


T.J.



INTRODUCTION

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

Analog Devices International (ADI) Unlimited Company is a producer of analogue, mixed signal and digital signal processing technology, the production of which involves the manufacture of integrated circuits.

Analog first established a manufacturing facility in Limerick in 1976 and subsequently expanded, acquiring the adjacent Millipore site in 2000 and Essilor site in 2007. In 2012, ADI added a European Research and Development Centre to the north of the main production building and in 2016 commenced construction of an expansion to the manufacturing facility. The installation operates on a 24 hour basis, seven days a week, with scheduled shutdowns throughout the year.

This revised licence provides for an amendment of the stack heights specified in *Schedule B.1: Emissions to Air*, of this licence where necessary, to reflect the current (actual) stack heights. This licence review does not introduce any new main air emission points, nor does it alter the actual heights of the existing stacks. The review also amends the existing licence (P0224-03) to accommodate the installation of silt traps and oil separators based on an assessment of the environmental risk.

There are no changes to the current on-site processes, or the raw materials used at the installation.

The main emissions to air from the installation arise from the production processes as well as from the operation of the installation's boilers. Process air emissions are comprised mainly of acids, inorganic dust, particulates and solvents. There is one process effluent emission point, discharging to the Bunlucky Waste Water Treatment Plant, via the Industrial Development Authority (IDA) Ireland's pipeline network for the industrial estate, and Irish Water's sewer network for the Limerick agglomeration. These emissions include treated process waste water and sanitary waste water. In addition, storm water run-off from the installation discharges to a man-made attenuation pond (The Loughmore Canal) within the business park.

The licence sets out in detail the conditions under which Analog Devices International Unlimited Company will operate and manage this installation.

Table of Contents

	Page No
Glossary of Terms	1
Decision and Reasons for the Decision	8
Part I Schedule of Activities Licensed	9
Part II Schedule of Activities Refused	9
Part III Conditions	10
Condition 1. Scope	10
Condition 2. Management of the Installation	10
Condition 3. Infrastructure and Operation	12
Condition 4. Interpretation	15
Condition 5. Emissions	16
Condition 6. Control and Monitoring	18
Condition 7. Resource Use and Energy Efficiency	20
Condition 8. Materials Handling	20
Condition 9. Accident Prevention and Emergency Response	21
Condition 10. Closure, Restoration and Aftercare Management	22
Condition 11. Notification, Records and Reports	22
Condition 12. Financial Charges and Provisions	24
SCHEDULE A: Limitations	26
SCHEDULE B: Emission Limits	26
SCHEDULE C: Control and Monitoring	31
SCHEDULE D: Annual Environmental Report	38

Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended, unless otherwise defined in the glossary.

Accident	For the purpose of this licence an accident means an unplanned event that may result in pollution.
Adequate Lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Approval	Approval in writing/electronically.
Annually	All or part of a period of twelve consecutive months.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility or installation, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques.
Biannually	At approximately six – monthly intervals.
Biennially	Once every two years.
BOD	5-day Biochemical Oxygen Demand (without nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Compliance Point	The point (location, depth) at which a compliance value should be met. Generally, it is represented by a borehole or monitoring well from which representative groundwater samples can be obtained.
Compliance Value	The concentration of a substance and associated compliance regime that, when not exceeded at the compliance point, will prevent pollution and/or achieve water quality objectives at the receptor.

Consumption (in the context of Chapter V IED 2010/75/EU)	Shall mean the total input of organic solvents into an installation per calendar year, or any other 12-month period, less any volatile organic compounds that are recovered for reuse.
Contained conditions (in the context of Chapter V IED 2010/75/EU)	Shall mean conditions under which an installation is operated so that the volatile organic compounds released from the activity are collected and discharged in a controlled way either via a stack or abatement equipment and are, therefore, not entirely fugitive.
Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
CRO Number	Company Register Number.
Daily	During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
Day	Any 24-hour period.
Daytime	0700hrs to 1900hrs.
dB(A)	Decibels (A weighted).
DO	Dissolved oxygen.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.
EMP	Environmental Management Programme.
EMS	Environment Management System. The aspect of the organisation's overall management structure that addresses immediate and long-term impacts of its products, services and processes on the environment.
End User Agreement	An agreement between the licensee and Irish Water which provides for the contractual conditions and arrangements (outside the terms and conditions set out in this licence) relating to the acceptance of, and treatment by, Irish Water of the licensee's trade effluent and wastewater.

Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
Evening Time	1900hrs to 2300hrs.
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two-week intervals.
Fugitive Emissions (in the context of Chapter V IED 2010/75/EU)	Fugitive emissions shall mean any emissions not in waste gases of volatile organic compounds into air, soil and water as well as, solvents contained in any products, unless otherwise stated in Part 2 of Annex VII of the Industrial Emissions Directive 2010/75/EU.
Gas Oil	Gas oil as defined in Directive (EU) 2016/802 of the European Parliament and of the Council of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels.
GC/MS	Gas chromatography/mass spectroscopy.
Groundwater	Has the meaning assigned to it by Regulation 3 of the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010), as amended.
ha	Hectare.
Hazardous Substances	Substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
Heavy metals	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
Hours of operation	The hours during which the installation is authorised to be operational.
ICP	Inductively coupled plasma spectroscopy.
IDA Ireland	Industrial Development Agency (Ireland) Wilton Park House, Wilton Place, Dublin 2.

Incident	The following shall constitute an incident for the purposes of this licence:
	(i) an emergency;
	(ii) any emission which does not comply with the requirements of this licence;
	(iii) any malfunction or breakdown of key environmental abatement, control or monitoring equipment;
	(iv) any trigger level specified in this licence which is attained or exceeded;
	(v) any compliance value specified in this licence which is attained or exceeded;
	(vi) any indication that environmental pollution has, or may have, taken place.
Input (in the context of Chapter V IED 2010/75/EU)	Shall mean the quantity of organic solvents and their quantity in mixtures used when carrying out an activity, including the solvents recycled inside and outside the installation, and which are counted every time they are used to carry out the activity.
Installation	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Act 1992 as amended is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity.
IPC	Integrated Pollution Control.
Irish Water	Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1
K	Kelvin.
kPa	Kilopascals.
$L_{A_{eq},T}$	This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).
$L_{A_r,T}$	The Rated Noise Level, equal to the $L_{A_{eq}}$ during a specified time interval (T), plus specified adjustments for tonal character and/or impulsiveness of the sound.
Licensee	Analog Devices International Unlimited Company, Bay F1, Raheen Industrial Estate, Limerick, CRO Number: 519435.
Local Authority	Limerick City and County Council.
List of Wastes (LoW)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2014/955/EU, as

	amended by any subsequent amendment published in the Official Journal of the European Community.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2300hrs to 0700hrs.
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Odour-sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other premises or area of high amenity which for its proper enjoyment requires the absence of odour at nuisance levels.
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).
Organic Compound	Shall mean any compound containing at least the element carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates.
Organic Solvent	As defined in Council Directive 2010/75/EU.
Potential emissions	Emissions which take place only under abnormal operating conditions. Examples include emissions from overpressure valves, bursting discs, and emergency generators.
PRTR	Pollutant Release and Transfer Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Re-use (in the context of Chapter V IED 2010/75/EU)	Shall mean the use of organic solvents recovered from an installation for any technical or commercial purpose and including use as a fuel but excluding the final disposal of such recovered organic solvent as waste.

SAC	Special Area of Conservation designated under the Habitats Directive, Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
Sanitary effluent	Wastewater from installation toilet, washroom and canteen facilities.
SOP	Standard operating procedure.
SPA	Special Protection Area designated under the Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
Specified emissions	Those emissions listed in <i>Schedule B: Emission Limits</i> , of this licence.
Start-up and shut-down operations (in the context of Chapter V of the IED 2010/75/EU)	Shall mean operations excluding regularly oscillating activity phases whilst bringing an activity, an equipment item or a tank into or out of service or into or out of an idling state.
Standard method	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
TOC	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Volatile Organic Compound (VOC)	Shall mean any organic compound as well as the fraction of creosote, having at 293,15K a vapour pressure of 0,01kPa or more, or having a corresponding volatility under the particular conditions of use.

Waste	Any substance or object which the holder discards or intends or is required to discard.
Waste Gases (in the context of Chapter V of the IED 2010/75/EU)	Shall mean the final gaseous discharge containing volatile organic compounds or other pollutants, from a stack or abatement equipment into air.
Water Services Authority	Limerick City and County Council.
Weekly	During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week.
WWTP	Waste water treatment plant.

Decision and Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

The Agency has accordingly decided to grant a licence to Analog Devices International Unlimited Company to carry on the activity listed in *Part I, Schedule of Activities Licensed*, subject to the conditions set out in *Part III, Conditions*; such licence to take effect in lieu of Licence Register Number: P0224-03.

In reaching this decision the Agency has considered the documentation relating to the existing licence, Register Number: P0224-03; the review application, Register Number: P0224-04 and the supporting documentation received from the licensee; the consent received from Irish Water under Section 99E of the EPA Acts as amended; the submission received; the Inspector's Report dated 28 July 2021; the proposed determination dated 26 August 2021; the objection from the Applicant; the Technical Committee Report dated 9 December 2021 on the objection to the proposed determination and has carried out an Environmental Impact Assessment (EIA) Screening and an Appropriate Assessment Screening of the likely significant effects of the activity on European Sites.

EIA, as respects the matters that come within the functions of the Agency, was not required for the activity to which this decision relates. Having considered the information provided by the licensee, the nature, size and location of the activity and the mitigation measures proposed by the licensee it has been determined that the activity does not constitute a project to which the EIA Directive applies and that the activity is unlikely to give rise to significant effects on the environment by virtue of its nature, size and location.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Lower River Shannon SAC (Site Code: 002165) River Shannon and River Fergus Estuaries SPA (Site Code: 004077).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

This determination was made in light of the scale and nature of emissions to the environment and the distance from the installation to European sites and their qualifying interests.

- Air dispersion modelling has demonstrated that emissions to air from the installation will not result in ground level concentrations which exceed air quality standards for the protection of the environment. European Sites are determined to be outside of the zone of influence of air emissions from the installation.
- European Sites and their qualifying interests are determined to be outside of the zone of influence of noise emissions due to the distance from the installation.
- With regard to European Sites which are hydrologically connected to the installation, there are no process emissions to surface water or to groundwater from the installation. It has been determined that the Limerick Municipal Waste Water Treatment plant has the capacity to sufficiently treat the effluent discharges from the activity.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, the Agency hereby grants this revised Integrated Pollution Control licence to:

Analog Devices International Unlimited Company, Bay F1, Raheen Industrial Estate, Limerick and CRO Number 519435

under Section 90(2) of the said Act to carry on the following activity:

13.2 - The manufacture of integrated circuits and printed circuit boards

at Raheen Industrial Estate, Raheen, Limerick subject to the following twelve Conditions, with the reasons therefor and associated schedules attached thereto.

Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

Part III Conditions

Condition 1. Scope

- 1.1 IPC activities at this installation shall be restricted to those listed and described in *Part I Schedule of Activities Licensed* and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 The licensee shall carry on the licensed activity in accordance with the limitations set out in *Schedule A: Limitations* of this licence.
- 1.3 For the purposes of this licence, the installation authorised by this licence is the area of land outlined in red on Drawing Number 01, Titled "Site Layout" of the review application P0224-04. Any reference in this licence to "installation" shall mean the area thus outlined in red. The licensed activity shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
 - (i) a material change or increase in:
 - the nature or quantity of any emission;
 - the abatement/treatment or recovery systems;
 - the range of processes to be carried out;
 - the fuels, raw materials, intermediates, products or wastes generated, or
 - (ii) any changes in:
 - site management, infrastructure or control with adverse environmental significance,shall be carried out or commenced without prior notice to, and without the approval of, the Agency.
- 1.5 The installation shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 This licence is for the purpose of licensing under the EPA Act 1992 as amended only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
- 1.7 This licence shall have effect in lieu of the licence granted on 05 October 2017 (Register No. P0224-03).

Reason: To clarify the scope of this licence.

Condition 2. Management of the Installation

2.1 Installation Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy shall be present on the installation at all times during its operation or as otherwise required by the Agency.
- 2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.

2.2 Environmental Management System (EMS)

2.2.1 The licensee shall maintain and implement an EMS. The EMS shall be updated on an annual basis.

2.2.2 The EMS shall include, as a minimum, the following elements:

2.2.2.1 Management and Reporting Structure.

2.2.2.2 An environmental policy, defined by Management, that includes a commitment to continuous improvement of the environmental performance of the installation.

2.2.2.3 Schedule of Environmental Objectives and Targets

The licensee shall maintain and implement a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, as referred to in the conditions of this licence, including an evaluation of practicable options for:

- (i) energy and resource efficiency;
- (ii) the reduction in water consumption;
- (iii) the reduction in effluent generation;
- (iv) the optimisation of Cleaning in Place (CIP) system;
- (v) the use of cleaner technology, cleaner production;
- (vi) the prevention, reduction and minimisation of waste including waste reduction targets;
- (vii) the impacts from eventual decommissioning of the installation;
- (viii) the replacement of substances assigned hazard statements H340, H350, H350i, H360D or H360F (as well as halogenated volatile organic compounds (VOCs) assigned H341 or H351), as far as possible, in as short a time period as possible; and
- (ix) Minimisation of VOC emissions to atmosphere, to include implementation of fugitive emission reduction programme.

The Schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The Schedule shall be reviewed annually, and amendments thereto notified to the Agency for agreement as part of the Annual Environment Report (AER).

2.2.2.4 Environmental Management Programme (EMP)

The licensee shall maintain and implement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.3 above. The EMP shall include:

- designation of responsibility for targets;
- the means by which they may be achieved; and
- the time within which they may be achieved.

The EMP shall be reviewed annually.

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.5 Documentation

- (i) The licensee shall maintain and implement an environmental management documentation system which shall be to the satisfaction of the Agency.

(ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.6 Corrective Action

(i) The licensee shall maintain and implement to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.

(ii) Where a breach of one or more of the conditions of this licence occurs, the licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.

(iii) All corrective and preventative actions shall be documented.

2.2.2.7 Awareness and Training

The licensee shall maintain and implement for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.2.2.8 Public Awareness and Communications Programme

The licensee shall maintain and implement a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the installation, at all reasonable times, concerning the environmental performance of the installation.

2.2.2.9 The licensee shall maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

2.2.2.10 Efficient Process Control

The licensee shall maintain and implement a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

Reason: *To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.*

Condition 3. Infrastructure and Operation

3.1 The licensee shall ensure, at all times after the grant of this licence, that all infrastructure and all equipment required under this licence has been and is:

- (i) installed;
- (ii) commissioned;
- (iii) present on site; and
- (iv) maintained in full working order.

3.2 The licensee shall have regard to the following when choosing and/or designing any new plant/infrastructure:

- (i) energy efficiency, and
- (ii) the environmental impact of eventual decommissioning.

3.3 Where any condition or schedule of this licence specifies any later deadline for installation of any piece of infrastructure or equipment, Condition 3.1 in this case shall apply as and from the deadline specified.

3.4 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.

3.5 **Installation Notice Board**

3.5.1 The licensee shall maintain an Installation Notice Board on the installation so that it is legible to persons outside the main entrance to the installation. The minimum dimensions of the board shall be 1200mm by 750mm. The notice board shall be maintained thereafter.

3.5.2 The board shall clearly show:

- (i) the name and telephone number of the installation;
- (ii) the normal hours of operation;
- (iii) the name of the licence holder;
- (iv) an emergency out of hours contact telephone number;
- (v) the licence reference number; and
- (vi) where environmental information relating to the installation can be obtained.

3.6 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.

3.7 In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.

3.8 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.

3.9 **Tank, Container and Drum Storage Areas**

3.9.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).

3.9.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:

- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
- (ii) 25% of the total volume of substance that could be stored within the bunded area.

3.9.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under Condition 6.13 of this licence.

3.9.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.

3.9.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.

3.9.6 All bunds shall be uniquely identified and labelled at the bund.

3.10 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. Once used, the absorbent material shall be disposed of at an appropriate facility.

3.11 **Silt Traps and Oil Separators**

The licensee shall maintain silt traps and oil separators at the installation and shall maintain the sustainable drainage system from the car park beside the European Research and Development Centre. The licensee shall within six months of date of grant of this licence, install:

- (i) Silt traps to ensure that storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge, in accordance with the proposals contained in the storm water assessment completed as part of this licence review application entitled "*Assessment of Stormwater Discharges in the Context of IPC Licence Condition 3.8*", dated 14 June 2019;
- (ii) Oil separators on the storm water discharges as proposed in the storm water assessment completed as part of this licence review application entitled "*Assessment of Stormwater Discharges in the Context of IPC Licence Condition 3.8*", dated 14 June 2019. The separators shall be Class I by-pass separators.

The separators shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).

3.12 **Fire-water Retention**

- 3.12.1 The licensee shall carry out a risk assessment to determine if the activity should have additional infrastructure for fire-water retention. The licensee shall submit a report to the Agency for approval on the findings and recommendations of the assessment within six months of the date of grant of this licence.
- 3.12.2 In the event that a significant risk exists for the release of contaminated fire-water, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the approval of the Agency, a suitable risk management programme. The risk management programme shall be fully implemented within three months of date of notification of approval of the programme by the Agency.
- 3.12.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted for collection.
- 3.12.4 The licensee shall examine (based upon the findings of the risk assessment in Condition 3.12.1) as part of the response programme in Condition 3.12.2 the need to provide automatic diversion of storm water for collection.
- 3.12.5 The licensee shall have regard to any guidelines issued by the Agency with regard to firewater retention when carrying out the requirements of Conditions 3.12.1 and 3.12.2.

3.13 All pump sumps, storage tanks, or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) from the date of grant of this licence.

3.14 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence for the reduction in fugitive emissions.

3.15 All wellheads, at the installation shall be adequately protected to prevent contamination or physical damage.

3.16 The licensee shall maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.

3.17 Natural gas shall be used in the boilers on site. In the event of an interruption to the supply of natural gas, an alternative fuel such as gas oil may be used with the prior approval of the Agency.

Reason: *To provide for appropriate operation of the installation to ensure protection of the environment.*

Condition 4. Interpretation

4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:

4.1.1 Continuous Monitoring

- (i) No 24-hour mean value shall exceed the emission limit value.
- (ii) 97% of all 30-minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
- (iii) No 30-minute mean value shall exceed twice the emission limit value.
- (iv) For total volatile organic carbon (TVOC) (as C) concentration limits, none of the arithmetic averages of any valid readings taken during any 24-hour period of operation of an installation or activity, except start up and shut down operations and maintenance of equipment, exceeds the emission limit values.
- (v) For TVOC (as C) concentration limits, none of the hourly averages exceeds the emission limit values by more than a factor of 1.5.

4.1.2 Non-Continuous Monitoring

- (i) For any parameter where, due to sampling/analytical limitations, a 30-minute sample is inappropriate, a suitable sampling period should be employed, and the value obtained therein shall not exceed the emission limit value.
- (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
- (iii) For all TVOC (as C) concentration limits:
 - For monitoring exercises greater than 60 minutes duration, no average value shall exceed the emission limit values, and the highest 60-minute average value within one monitoring exercise shall not exceed 1.5 times the emission limit values;
 - For monitoring exercises of 60 minutes duration or less, no average value shall exceed 1.5 times the emission limit values;
 - At least three consecutive readings shall be obtained in each monitoring exercise.
- (iv) For all other parameters, no 30-minute mean value shall exceed the emission limit value.
- (v) Mass flow thresholds refer to a rate of discharge expressed in units of kg/h, above which the concentration emission limit value applies. Mass flow threshold rates shall be determined on the basis of a single 30-minute measurement (i.e. the concentration determined as a 30-minute average shall be multiplied by an appropriate measurement of flow and the result shall be expressed in units of kg/h).
- (vi) Mass flow emissions shall be calculated on the basis of the concentration, determined as an average over the specified period, multiplied by an appropriate measurement of flow. No value, so determined, shall exceed the mass flow limit value.

4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:

4.2.1 From non-combustion sources:
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).

4.2.2 From combustion sources:
Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels.

4.3 Emission limit values for emissions to sewer/waters in this licence shall be achieved without the introduction of dilution, and shall be interpreted in the following way:

4.3.1 Continuous Monitoring

- (i) No flow value shall exceed the specific limit.
- (ii) No pH value shall deviate from the specified range.
- (iii) No temperature value shall exceed the limit value.

4.3.2 Composite Sampling

- (i) No pH value shall deviate from the specified range.
- (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual results similarly calculated shall exceed 1.2 times the emission limit value.

4.3.3 Discrete Sampling

For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.

4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.

4.5 Noise

Noise from the installation shall not give rise to sound pressure levels measured at any noise-sensitive locations (NSLs) which exceed the limit value(s).

Reason: To clarify the interpretation of limit values fixed under the licence.

Condition 5. Emissions

5.1 Emissions may be made from the specified emission points set out in *Schedule B: Emission Limits*, of this licence subject to compliance with the Emission Limit Values specified in that Schedule.

5.1.1 Uncontaminated storm water may be discharged to surface water.

5.1.2 Uncontaminated storm water may be emitted to groundwater or to soil.

5.1.3 Minor, diffuse and potential emissions may be emitted to air as specified in the application, or as approved by the Agency under Condition 1 of this licence.

5.2 Notwithstanding the requirements of Condition 5.1, there shall be no other emissions from the installation.

5.3 No emissions, including odours and dust, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.

5.4 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.

5.5 The licensee shall ensure that all or any of the following:

- Vermin
- Litter
- Dust

associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the installation or beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

5.6 Emissions to Sewer via IDA Ireland Pipeline:

5.6.1 Other than the trade effluent authorised to be discharged under this licence, the licensee shall at no time discharge or cause or permit to be discharged into the sewer via the IDA Ireland pipeline, trade effluent or any other matter unless authorised in writing by Irish Water.

5.6.2 The licensee shall conclude an end user agreement with Irish Water.

5.6.3 The licensee shall ensure that any trade effluent generated from canteen activities shall pass through appropriate grease removal equipment prior to discharge to sewer.

5.6.4 A summary report of volumes of trade effluent and other matter discharged to the sewer along with monitoring and analysis data as specified in *Schedule B.3: Emission Limits to Sewer via IDA Ireland Pipeline* of this licence and *Schedule C: Control and Monitoring*, of this licence shall be forwarded to both Irish Water and the Local Authority in a manner and timeframe as may be specified by Irish Water.

5.7 Solvent Management Plan (SMP)

The licensee shall prepare and implement a SMP for the installation for each calendar year. The substances to be included in the SMP shall be determined with reference to the definition of an organic solvent in the IED 2010/75/EU. The SMP shall be prepared in accordance with any relevant guidelines in Annex VII Part 7 of the IED 2010/75/EU or as issued by the Agency and shall be submitted as part of the AER. The licensee shall keep records of the data from which the reported information was derived and supporting documentation including a description of the methodology used for data collection. The licensee shall report annually on the implementation of the SMP.

5.8 Fugitive Emissions

5.8.1 The licensee shall maintain the programme, to the satisfaction of the Agency, for the identification, quantification and reduction of fugitive emissions using an appropriate combination of best available techniques.

5.8.2 Fugitive emissions shall not exceed 15% of the total solvent input per calendar year.

5.9 Substitution of Hazardous Substances

If already in use in any process at the installation which is an activity under Chapter V of 2010/75/EU, any substance or mixtures which, because of their content of VOCs classified as carcinogens, mutagens, or toxic to reproduction under Regulation (EC) No. 1272/2008, are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F, shall be replaced, as far as possible by less harmful substances or mixtures with the shortest possible time. Measures for the replacement of such substances or mixtures, and the timeframe for replacement, shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2.2.3.

5.10 The emission of either VOCs, which are assigned or need to carry the hazard statements H340, H350, H350i, H360D or H360F, or halogenated volatile organic compounds which are assigned or need to carry the hazard statements H341 or H351, shall be controlled under contained conditions as far as technically and economically feasible and shall not exceed the relevant emission limit values set out in *Schedule B: Emission Limits*, of this licence.

Reason: *To provide for the protection of the environment by way of control and limitation of emissions.*

Condition 6. Control and Monitoring

6.1 Test Programme

- 6.1.1 The licensee shall prepare a test programme for abatement equipment installed to abate emissions.
- 6.1.2 The programme shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.1.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
- 6.1.4 The test programme shall as a minimum:
 - (i) establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence; and
 - (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor.
- 6.1.5 A report on the test programme shall be submitted to the Agency within one month of completion.

6.2 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control and Monitoring* of this licence.

- 6.2.1 Sampling and analysis shall be undertaken by competent staff in accordance with documented operating procedures. Unless otherwise approved by the Agency, sampling and analysis of emissions to atmosphere shall be carried out by ISO 17025 accredited persons/organisations, with accreditation for the relevant scope of sampling and analysis, and in accordance with the Agency's air monitoring policy.
- 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using appropriate control standards with evaluation of test responses.
- 6.2.4 Where any analysis is sub-contracted it shall be outsourced to a competent laboratory.

6.3 The licensee shall ensure that

- (i) sampling and analysis for all parameters listed in the schedules to this licence; and
- (ii) any reference measurements for the calibration of automated measurement systems

shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards, which will ensure the provision of data of an equivalent scientific quality, shall apply.

6.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been approved in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as approved by the Agency.

6.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that all monitoring results accurately reflect any emission, discharge or parameter specified in this licence.

6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available or installed at the installation and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.

6.7 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.

6.8 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended as required or approved by the Agency following evaluation of test results.

6.9 The licensee shall prepare and implement a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.

6.10 The integrity and water tightness of all tanks, bunding structures, containers and underground pipes and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by a suitably qualified and experienced person. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.

6.11 The storm water drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be required by the Agency), bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. The licensee shall maintain a drainage map on site. The drainage map shall be reviewed annually and updated as necessary.

6.12 An inspection system for the detection of leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be developed within six months of the date of grant of this licence and maintained thereafter.

6.13 Storm Water

6.13.1 A visual examination of the storm water discharges shall be carried out weekly. A log of such inspections shall be maintained.

6.13.2 The licensee shall maintain suitable trigger levels for pH, conductivity and total organic carbon (TOC) in storm water discharges. The licensee shall have a response programme to address any exceedance of the trigger values such that storm waters exceeding these levels will be diverted for retention and suitable disposal. The licensee shall have regard to the Environmental Protection Agency "Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities".

6.13.3 The trigger values may be changed by, or with the approval of, the Agency, following evaluation of appropriate storm water monitoring data.

6.14 Groundwater monitoring shall be carried out in accordance with *Schedule C.6: Groundwater Monitoring*, of this licence.

6.15 Noise

The licensee shall carry out a noise survey of the site operations as required by the Agency. The survey programme shall be undertaken in accordance with the methodology specified in the '*Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*' as published by the Agency.

6.16 Pollutant Release and Transfer Register (PRTR)

The licensee shall submit a PRTR data report for the site. The pollutants and/or wastes to be included in the PRTR shall be determined by reference to EC Regulations No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant Agency guidance and shall be submitted electronically in the format specified by the Agency.

- 6.17 The licensee shall maintain a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.18 The licensee shall permit authorised persons of the Agency or other authorised persons acting on behalf of IDA Ireland, to inspect, examine and test, at all reasonable times, any works and apparatus installed in connection with the process effluent and to take samples of the process effluent.
- 6.19 The licensee shall within twelve months of date of grant of licence review the locations for vegetation sampling to be carried out in accordance with *Schedule C.6: Ambient Monitoring*, of this licence. The vegetation sampling programme shall have regard to the air dispersion modelling submitted to the Agency as part of the application for this licence.

Reason: *To provide for the protection of the environment by way of treatment and monitoring of emissions.*

Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall carry out an audit of the energy efficiency of the site as required by the Agency. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing".
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.

Reason: *To provide for the efficient use of resources and energy in all site operations.*

Condition 8. Materials Handling

- 8.1 The licensee shall ensure that waste generated in the carrying on of the activity shall be prepared for re-use, recycling or recovery or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.
- 8.2 Waste sent off-site for recovery or disposal
 - 8.2.1 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
 - 8.2.2 Waste sent off-site for recovery or disposal shall be transferred only to an appropriate facility.
- 8.3 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.

- 8.4 Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste and materials shall be clearly labelled and appropriately segregated.
- 8.5 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control and Monitoring*, of this licence.
- 8.6 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.7 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No. 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.

Reason: *To provide for the appropriate handling of material and the protection of the environment.*

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
 - 9.3.1 In the event of an incident the licensee shall immediately:
 - (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (ii) isolate the source of any such emission;
 - (iii) evaluate the environmental pollution, if any, caused by the incident;
 - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - (v) identify the date, time and place of the incident; and
 - (vi) notify the Agency as required by Condition 11.3 of this licence.
 - 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:
 - (i) identify and put in place measures to avoid recurrence of the incident; and
 - (ii) identify and put in place any other appropriate remedial actions.

Reason: *To provide for the protection of the environment.*

Condition 10. Closure, Restoration and Aftercare Management

10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution. A final validation report to include a certificate of completion to demonstrate there is no continuing risk to the environment shall be submitted to the Agency within three months of termination or planned cessation of the activity.

10.2 Closure, Restoration and Aftercare Management Plan (CRAMP)

10.2.1 The licensee shall submit a revised CRAMP for agreement by the Agency. The licensee shall maintain a fully detailed and costed plan for the closure, restoration and long-term aftercare of the site or part thereof.

10.2.2 The plan shall be reviewed annually, and proposed amendments thereto notified to the Agency for agreement. No amendments may be implemented without the agreement of the Agency.

10.3 The CRAMP shall include, as a minimum, the following:

- (i) a scope statement for the plan;
- (ii) the criteria that define the successful closure and restoration and aftercare of the activity or part thereof, which ensures minimum impact on the environment;
- (iii) a programme to achieve the stated criteria;
- (iv) where relevant, a test programme to demonstrate the successful implementation of the plan;
- (v) details of the long-term supervision, monitoring, control, maintenance and reporting requirements for the restored facility; and
- (vi) details of the costings for the plan.

10.4 The licensee shall, and to the satisfaction of the Agency, make financial provision to cover any liabilities associated with closure, restoration and aftercare identified in Condition 10.2. The amount of financial provision held shall be reviewed and revised as necessary.

10.5 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and Guidance on Financial Provision for Environmental Liabilities (2015), as may be amended or replaced, when implementing Conditions 10.2, 10.3 and 10.4 above.

Reason: *To make provision for the proper closure of the activity ensuring protection of the environment*

Condition 11. Notification, Records and Reports

11.1 The licensee shall submit the reports, proposals and submissions required by this licence by the deadlines specified. The licensee shall not be in compliance with the requirements of this condition unless and until it has submitted every report, proposal and submission, the deadline for which has passed.

11.2 The licensee shall carry out every action required by the Agency, and arising out of such reports, proposals or submission, by such deadline as the Agency may specify. The licensee shall not be in compliance with the requirements of this condition unless and until it has carried out every such action.

11.3 The licensee shall notify the Agency, in a format as may be specified by the Agency as soon as practicable after the occurrence of any of the following:

- (i) an incident or accident as defined by the glossary;
- (ii) any emission that does not comply with the requirements of this licence.

The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions. All details required to be communicated must be in accordance with any guidance provided by the Agency.

11.4 In the event of any incident which relates to discharges to sewer via the IDA Ireland Pipeline having taken place, the licensee shall notify IDA Ireland, Irish Water and the Local Authority in a manner prescribed by Irish Water, as soon as practicable after such an incident.

11.5 The following shall be notified, as soon as practicable after the occurrence of any incident which relates to a discharge to water:

- (i) Inland Fisheries Ireland in the case of discharges to receiving waters.
- (ii) Irish Water and/or Water Services Authority in the case of any incident where the discharge(s) have been identified as upstream of a drinking water abstraction point.

11.6 The licensee shall make a record of any notification made under Condition 11.3. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident or accident. The record shall include all corrective actions taken to manage the incident or accident, minimise wastes generated and the effect on the environment, and avoid recurrence. In the case of a breach of a condition, the record shall include measures to restore compliance.

11.7 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.

11.8 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.

11.9 The licensee shall as a minimum ensure that the following documents are accessible at the site:

- (i) the licences relating to the installation;
- (ii) the current EMS for the installation;
- (iii) the previous year's AER for the installation;
- (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;
- (v) relevant correspondence with the Agency;
- (vi) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
- (vii) up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment; and
- (viii) any elements of the licence application or EIA documentation referenced in this licence.

This documentation shall be available to the Agency for inspection at all reasonable times.

11.10 The licensee shall submit to the Agency, by the 31st March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D: Annual Environmental Report*.

of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.

11.11 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be maintained on a monthly basis and shall as a minimum contain details of the following:

- (i) the tonnages and LoW Code for the waste materials sent off-site for disposal/recovery;
- (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);
- (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
- (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
- (v) details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
- (vi) details of any rejected consignments;
- (vii) details of any approved waste mixing;
- (viii) the results of any waste analyses required under *Schedule C: Control and Monitoring* of this licence; and
- (ix) the tonnage and LoW Code for the waste materials recovered/disposed on-site.

11.12 The licensee shall submit report(s) electronically as required by the conditions of this licence to the Agency.

11.13 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.

Reason: *To provide for the collection and reporting of adequate information on the activity.*

Condition 12. Financial Charges and Provisions

12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of €7,861, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act 1992 as amended. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Environmental Protection Agency Act 1992 as amended, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Irish Water Charges

The licensee shall pay to Irish Water such sum as may be determined from time to time, having regard to the variations in the cost of providing drainage and the variation in effluent reception, treatment, monitoring, sampling and analysis costs. Payment to be made on demand from Irish Water.

12.3 Environmental Liabilities

- 12.3.1 The licensee shall arrange for the revision, by an independent and appropriately qualified consultant, of a comprehensive and fully costed revised Environmental Liabilities Risk Assessment (ELRA), which addresses the liabilities from past and present activities. A report on this assessment shall be submitted for approval and agreement by the Agency. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement.
- 12.3.2 The licensee shall, and to the satisfaction of the Agency, make financial provision to cover any liabilities with respect to the ELRA in Condition 12.3.1 above. The amount of financial provision held shall be reviewed and revised as necessary.
- 12.3.3 The licensee shall revise the cost of closure, restoration and aftercare annually and any adjustments shall be reflected in the financial provision made under Condition 12.3.3 above.
- 12.3.4 The licensee shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) and Guidance on Financial Provision for Environmental Liabilities (2015), as may be amended or replaced, when implementing Conditions 12.3.1 and 12.3.2 above.

Reason: *To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.*

SCHEDULE A: Limitations

The organic solvent consumption capacity of surface treatment activities at the installation shall not exceed 150 kg per hour or 200 tonnes per year.

SCHEDULE B: Emission Limits

B.1 Emissions to Air

Boilers

Emission Point Reference No.	Location	Maximum volume to be emitted per hour (m ³)	Minimum discharge height above ground (m)	Parameter	Emission Limit Value (mg/m ³)
A1-1	G3 Plant Room	1,400	17.240	Nitrogen Oxides (as NO ₂)	250
A1-2	G3 Plant Room	1,700	17.390		
A1-3	G3 Plant Room	1,300	17.425		
A1-4	G3 Plant Room	3,200	17.250		
A1-5	G3 Plant Room	4,000	17.210		
A1-6	Integrated Passive Device (IPD) Extension	2,750	19.500		
A1-7	IPD Extension	2,750	19.500		
A1-8	IPD Extension	2,750	19.500		

Emission Point Reference No:

A2-1, A2-2, A2-4, A2-5, A2-6

Location:

Scrubber Deck, Building 1

Volume to be emitted:

Maximum rate per hour: 64,800 m³
Maximum rate per day: 1,555,200 m³

Minimum discharge height:

A2-1 17.515 m above ground
A2-2 17.560 m above ground
A2-4 17.535 m above ground
A2-5 17.510 m above ground
A2-6 19.500 m above ground

Parameter	Emission Limit Value (mg/m ³)
Total Fluorides (as HF)	0.2
Total Acids (as HCl)	5
Inorganic Dust Class III	0.5
Total Particulates	20

Emission Point Reference No: A2-3
Location: Scrubber Deck, Building 1
Volume to be emitted: Maximum rate per hour: 15,000 m³
Maximum rate per day: 360,000 m³
Minimum discharge height: 17.448 m above ground

Parameter	Emission Limit Value (mg/m ³)
Total Fluorides (as HF)	0.4
Total Bromides (as HBr)	3
Total Acids (as HCl)	5
Inorganic Dust Class II	0.01
Inorganic Dust Class III	0.5
Total Particulates	20

Emission Point Reference No: A2-7, A2-8, A2-9
Location: Scrubber Deck, Building 1
Volume to be emitted: Maximum rate per hour: 64,800 m³
Maximum rate per day: 1,555,200 m³
Minimum discharge height: 19.500 m above ground

Parameter	Emission Limit Value (mg/m ³)
Total Fluorides (as HF)	0.2
Total Bromides (as HBr)	3
Total Acids (as HCl)	5
Inorganic Dust Class IH	0.5
Total Particulates	20

Emission Point Reference No: A2-10
Location: Building 1
Volume to be emitted: Maximum rate per hour: 6,000 m³
Maximum rate per day: 144,000 m³
Minimum discharge height: 12.759 m above ground

Parameter	Emission Limit Value (mg/m ³)
Total Fluorides (as HF)	0.4
Total Bromides (as HBr)	3
Total Acids (as HCl)	5

Emission Point Reference No: A2-11
Location: Effluent Plant
Volume to be emitted: Maximum rate per hour: 1,545 m³
 Maximum rate per day: 37,050 m³
Minimum discharge height: 9.170 m above ground

Parameter	Emission Limit Value (mg/m ³)
Total Fluorides (as HF)	3
Total Acids (as HCl)	5

Emission Point Reference No: A2-12, A2-13, A2-14, A2-15, A2-16, A2-17
Location: Scrubber Deck, Building 1
Volume to be emitted: Maximum rate per hour: 9,216 m³
 Maximum rate per day: 221,184 m³
Minimum discharge height: A2-12 17.840 m above ground
 A2-13 17.900 m above ground
 A2-14 17.900 m above ground
 A2-15 17.840 m above ground
 A2-16 19.500 m above ground
 A2-17 19.500 m above ground

Parameter	Emission Limit Value (mg/m ³)
Organics Class I	15
Total Volatile Organic Carbon (as C)	75
Sum of the individual VOCs with hazard statements H340, H350, H350i, H360D or H360F	2 <small>Note 1</small>

Note 1: For discharges of VOCs where the mass flow of the sum of the compounds is greater than or equal to 10 g/h.

B.2 Emissions to Water

There shall be no emissions to water of environmental significance.

B.3 Emissions to Sewer via IDA Ireland Pipeline

Emission Point Reference No:	SE-1
Name of Receiving Waters:	Limerick Dock (Transitional Waters)
Location:	Cloghkeating Avenue
Volume to be emitted:	Maximum in any one day: 2,000 m ³ Maximum rate per hour: 120 m ³

Parameter	Emission Limit Value	
	mg/l	kg/day
Temperature	35 °C (max)	
pH	6 - 9	
Toxicity	10 TU	
Chemical Oxygen Demand (COD)	400	100
Suspended Solids	200	50
Sulphate	1,000	1,000
Fats, oils and greases	15	15
Fluoride	50	50
Total Ammonia (as N)	20	20
Total Phosphorus (as P)	20	20
Total Heavy Metals	3	-
Arsenic	0.05	-
Cadmium	0.005	-
Chromium	0.1	-
Copper	0.1	-
Lead	0.05	-
Zinc	0.3	-
Nickel	0.1	-
Mercury	0.001	-
Silver	2	-

B.4 Noise Emissions

Daytime dB L _{Ar,T} (30 minutes)	Evening time dB L _{Ar,T} (30 minutes)	Night-time dB L _{Aeq,T} (30 minutes) ^{Note 1}
55	50	45

Note 1: During night time hours, there shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise-sensitive location.

SCHEDULE C: Control and Monitoring

C.1.1. Control of Emissions to Air

Emission Point Reference No: A2-1 to A2-10
 Description of Treatment: Scrubber

Control Parameter	Monitoring	Key Equipment ^{Note 1}
pH of scrubbing solution	Continuous monitor of pH and liquid level	pH probe Liquid level detector and controller Circulating pumps Scrubber fans

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

C.1.2. Monitoring of Emissions to Air

Emission Point Reference No: A1-1 to A1-8

Parameter	Monitoring Frequency	Analysis Method/Technique
NO _x	Biannually	Standard Method
Carbon Monoxide	Biannually	Standard Method

Emission Point Reference No: A2-1, A2-2, A2-4, A2-5, A2-6

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Fluorides (as HF)	Quarterly	Standard Method
Total Acids (as HCl)	Quarterly	Standard Method
Inorganic Dust Class III	Biannually	Standard Method
Total Particulate Matter	Biannually	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method

Emission Point Reference No: A2-3

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Fluorides (as HF)	Quarterly	Standard Method
Total Bromides (as HBr)	Quarterly	Standard Method
Total Acids (as HCl)	Quarterly	Standard Method
Inorganic Dust Class II	Biannually	Standard Method
Inorganic Dust Class III	Biannually	Standard Method
Total Particulate Matter	Biannually	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method

Emission Point Reference No: A2-7, A2-8, A2-9

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Fluorides (as HF)	Quarterly	Standard Method
Total Bromides (as HBr)	Quarterly	Standard Method
Total Acids (as HCl)	Quarterly	Standard Method
Inorganic Dust Class HI	Biannually	Standard Method
Total Particulate Matter	Biannually	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method

Emission Point Reference No: A2-10

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Fluorides (as HF)	Quarterly	Standard Method
Total Bromides (as HBr)	Quarterly	Standard Method
Total Acids (as HCl)	Quarterly	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method

Emission Point Reference No: A2-11

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Fluorides (as HF)	Quarterly	Standard Method
Total Acids (as HCl)	Quarterly	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method

Emission Point Reference No: A2-12 to A2-17

Parameter	Monitoring Frequency	Analysis Method/Technique
Total Volatile Organic Carbon (as C)	Quarterly	Standard Method
Organics Class I	Quarterly	Standard Method
Organics Class II	Quarterly	Standard Method
Volumetric Flow	Quarterly	Standard Method
Temperature	Quarterly	Standard Method
VOCs with hazard statements H340, H350, H350i, H360D or H360F	Quarterly	Standard Method

C.2.1. Control of Emissions to Water

There shall be no emissions to water of environmental significance.

C.2.2. Monitoring of Emissions to Water

There shall be no emissions to water of environmental significance.

C.2.3. Monitoring of Storm Water Emissions

Emission Point Reference No: SW-1a, SW-1b, SW-2, SW-3, SW-4, SW-5

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual	Weekly	Standard Method
pH	Monthly	Standard Method
Conductivity	Monthly	Standard Method
Total Organic Carbon	Monthly	Standard Method

C.3.1. Control of Emissions to Sewer via IDA Ireland Pipeline

Emission Point Reference No: SE-1
Description of Treatment: pH adjustment
Equipment: Waste water treatment plant

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Effluent (pH)	Continuous monitoring of effluent	pH probe and controller, dosing and transfer pump
Flow balancing	Balancing of effluent	Balance tank
Fats, oil and grease removal	FOG content in effluent as a result of kitchen/canteen activities ^{Note 2}	-
Visual inspection (G3 yard sump only)	Prior to decanted	-

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

Note 2: Grease removal equipment shall comply with the requirements of European Standards (EN) or Plumbing and Drainage Institute (PDI) standards or as otherwise specified by Irish Water.

C.3.2. Monitoring of Emissions to Sewer via IDA Ireland Pipeline

Emission Point Reference No: SE-1

Parameter	Monitoring Frequency ^{Note 1}	Analysis Method /Technique
Flow rate	Continuous	On-line flow meter with recorder
pH	Continuous	pH electrode/meter and recorder
Temperature	Daily	On-line temperature probe with recorder
Chemical Oxygen Demand - Cr	Bi-weekly	Standard Method
Suspended solids	Monthly	Standard Method
Sulphate	Daily	Standard Method
Fats, oils and greases	Biannually	Standard Method
Sodium	Monthly	Standard Method
Fluoride	Weekly	Standard Method
Total Phosphorus (as P)	Monthly	Standard Method
Total Ammonia (as N)	Monthly	Standard Method
Total heavy metals	Weekly	Standard Method
Arsenic	Biannually	Standard Method
Cadmium	Biannually	Standard Method
Chromium	Biannually	Standard Method
Copper	Biannually	Standard Method
Lead	Biannually	Standard Method
Nickel	Biannually	Standard Method
Mercury	Biannually	Standard Method
Silver	Biannually	Standard Method
Anionic surfactants/Detergents (MBAS)	Biannually	Standard Method
Respirometry	Annually	Standard Method
Toxicity ^{Note 2}	As required	Standard Method
Priority Substances	As required	Standard Method

Note 1: All samples excluding those for pH and temperature, shall be collected on a 24-hour flow proportional composite sampling basis.

Note 2: The number of toxic units (Tu) = 100/x hour EC/LC₅₀ in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.

C.4 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Mixed Solvents	Per consignment	Major components	Standard Method
To be agreed by the Agency ^{Note 1}	-	-	-

Note 1: Analytical requirements to be determined on a case by case basis.

C.5 Noise Monitoring

Period	Minimum Survey Duration
Daytime	A minimum of 3 sampling periods at each noise monitoring location. ^{Note 1}
Evening-time	A minimum of 1 sampling period at each noise monitoring location.
Night-time ^{Note 2}	A minimum of 2 sampling periods at each noise monitoring location.

Note 1: Sampling period is to be the time period T stated as per *Schedule B.4: Noise Emissions*, of this licence. This applies to day, evening and night time periods.

Note 2: Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.

C.6 Ambient Monitoring

Groundwater Monitoring

Location: GW1, GW2, GW3, GW4, GW5 ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Techniques
pH	Biannually	pH electrode/meter
Conductivity	Biannually	Standard Method
Chemical Oxygen Demand	Biannually	Standard Method
Total Nitrogen	Biannually	Standard Method
Major Cations	Biannually	Standard Method
Major Anions	Biannually	Standard Method
Fluoride	Biannually	Standard Method
Heavy Metals	Biannually	Standard Method
Diesel Range Organics	Biannually	Standard Method
Trace Organics	Biannually	Standard Method

Note 1: Monitoring locations may be amended as agreed by, or as required by, the Agency.

Vegetation Monitoring ^{Note 1}**Location:**

To be amended, and approved by the Agency, as required.

Parameter	Monitoring Frequency	Analysis Method/Technique
Fluoride	Annually	Standard Method

Note 1: Vegetation Monitoring requirements subject to Condition 6.

SCHEDULE D: Annual Environmental Report

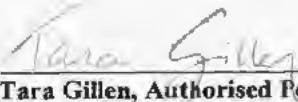
Annual Environmental Report Content	Note 1 & Note 2
Environment Management objectives and targets summary.	
Energy and water use and generation summary.	
Complaints summary.	
Incidents summary.	
Emissions summary.	
Waste management summary.	
Solvent management plan implementation.	
Assessment of compliance with fugitive VOC emissions.	
Review of Closure, Restoration and Aftercare Management Plan.	
Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).	
Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).	
Financial provision summary.	
Any other items specified by the Agency.	

Note 1: Content may be revised subject to the agreement of the Agency.

Note 2: The AER shall be completed in accordance with current Agency guidance.

Sealed by the seal of the Agency on this the 13th day of January 2022

**PRESENT when the seal of the Agency
Was affixed hereto:**



Tara Gillen, Authorised Person



APPENDIX 2: PLANNED DEVELOPMENTS IN VICINITY OF PROJECT

Project Reference	Status	Overview
2560508 (ADI)	Applied	Alterations to part of the external envelope of an existing manufacturing facility to consist of new windows and doors to part of the front elevation of the building & addition of a new enclosed fire escape stairs to the side of the existing building.
2560174 (ADI)	Appealed	Replacing a section of existing cladding with glazing on the north-west and part of the south-west elevation of the Catalyst Building
2461160	Conditional Permission	Extensions, modifications, alterations and new structures to previously permitted (planning Ref. 22190 as amended by planning permission Reg. Ref.23152), with a proposed total additional floor area of approximately 67,997m ²
2461155	Conditional Permission	construction of a single storey entrance porch and canopy to the front of the existing school building, the construction of a single storey extension to the side and rear of the existing school building
2460921	Appealed	Expansion of Storage & Distribution Warehouse facility
2360703	Conditional Permission	Partial demolition of 1895m ² of South Court Hotel & construction of 6 no. storey, 2 no. basement mixed use development.
2360609 (ADI)	Conditional Permission	Redevelopment of existing building.
2460010	Conditional Permission	Development including a two storey nursing home, single storey service building and a biodiversity area
24384	Appealed	Change of use within the current administration area from an open plan office space to a production area
24220	Appealed	Erection of new palisade fence (680 m)
24401	Conditional Permission	An illuminated "Regeneron" external sign, size 13M (L) x 1.5M (H), located at high level on the southwest side of Building 19
2360947	Conditional Permission	Construct a single storey ESB Substation c/w MV & LV Rooms within the floor space of the existing units
2360551	Conditional Permission	Erection of 599.65 m ² or 113.92 kWp of photovoltaic panels on the roof of existing warehouse building, with all associates site works
2360141 2360142	Conditional Permission	The development comprises of the amalgamation of Units 1 and 2 into a single unit, the change of the existing planning permission from part warehousing and part light industrial to light industrial use.
236	Conditional Permission	The construction of a 3,600 sq.m solar panel array with an output capacity of approximately 580 kWp to be mounted on the roof of the existing main building and to include all associated site works
23110	Conditional Permission	The fill of lands with inert imported waste such as clay, stone, construction of new entrance from Pearse Road and associated site works site works for the purpose of increasing land levels. The development is related to an activity requiring an application for a waste permit.

Project Reference	Status	Overview
221099	Conditional Permission	filling of lands with inert imported waste such as clay, stone along with associated site works for the purpose of increasing land levels. The development is related to an activity requiring an application for a waste permit
22991	Conditional Permission	The construction of a two-storey extension to the rear of the existing building and the refurbishment of the existing two-storey building and all other associated works.
22841	Appealed	Residential development comprising 96 no. residential unit
22803 (ADI)	Conditional Permission	Extension to C1 R&D Pilot Line building to provide R&D and 1st Industrial deployment/Manufacturing use in the proposed C2 Fanfare building at Raheen Industrial Business Park, Raheen, Co. Limerick
22517	Conditional Permission	Construction of an extension to the front of unit, and all associated site works
22321	Conditional Permission	Construction of an ESB MV Sub-Station building for a proposed finished product and raw materials store, at their existing food production facility
22190 (as altered by 23152)	Conditional Permission	10-year permission for development of a Biopharmaceutical Manufacturing Campus with an overall floor area of 47,384 m ² .
2238 (ADI)	Conditional Permission	Construction of a new liquid hydrogen storage tank and associated equipment
211637 (as altered by 22808)	Conditional Permission	The construction of a 550 m ² extension to the North West of the existing Howmedica production facility, relocating the existing canteen facility, kitchen and storage areas and all associated site works. The works will also include a small 72 m ² extension to an existing corridor within the facility to improve circulation.
2093	Conditional Permission	Construction of a new two storey nursing home building, consisting of 82 No. single ensuite bedrooms, kitchen, dining areas, communal areas, treatment rooms, internal secure landscaped garden and all other associated rooms and entrance signage. The development will also consist of the construction of a Garden & Storage shed, a new entrance and entrance walls, internal access road, car and bicycle parking, foul pump station, stormwater attenuation system, connection to all services together with all other associated site work

The table above lists all planning applications and permissions within the Raheen Business Park as listed on the National Planning Application Map Viewer. In addition, we have listed any proposed developments in close vicinity of the business park which, in our professional opinion, are of a scale to potentially result in-combination effects with other projects during their construction phase should those periods overlap. We assess the potential for in-combination impacts with ADI's proposed project in Section 6 of this report.

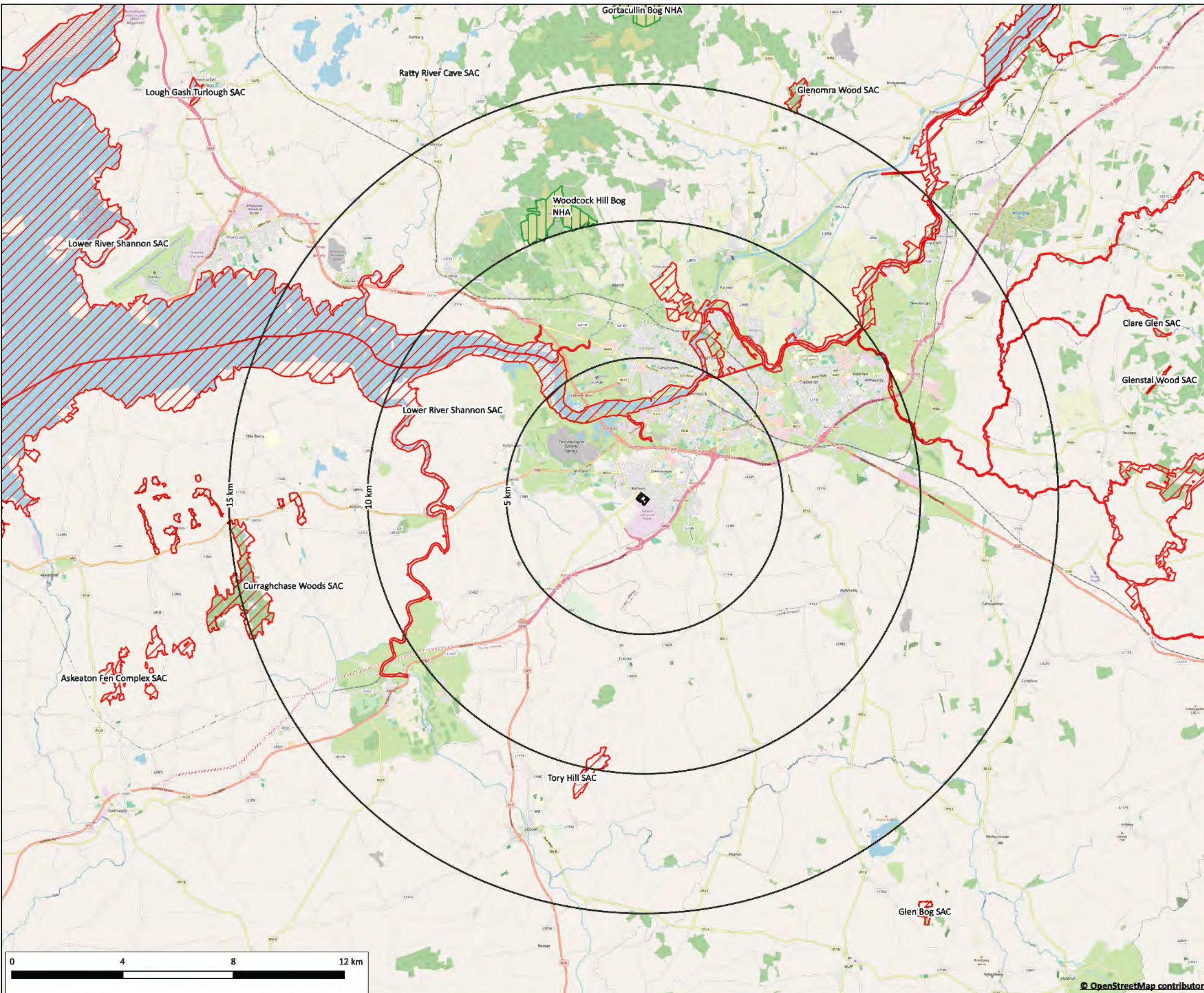
APPENDIX 3: EUROPEAN SITES



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Client	Analog Devices International		
Project	Screening for Appropriate Assessment for new Scrubber		
Title	Special Protection Areas		
Scale	1:125,000	431-25X0153 Appendix 3.1	R0
FBS	07.02.15		



Gortacullin Bog NHA
Ratty River Cave SAC
Lough Gash Turlough SAC
Lower River Shannon SAC
Woodcock Hill Bog NHA
Glenomra Wood SAC
Clare Glen SAC
Glenstal Wood SAC
Curraghchase Woods SAC
Askeaton Fen Complex SAC
Tory Hill SAC
Glen Bog SAC



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Client	Analog Devices International		
Project	Screening for Appropriate Assessment for new scrubber		
Title	Special Areas of Conservation		
Scale	1:125,000	431-25X0153	R0
FBS	07.02.15	Appendix 3.2	

APPENDIX 4: AIR DISPERSION MODELLING ASSESSMENT



Appendix 4

Air Dispersion Modelling Assessment

Prepared for:

Analog Devices

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Contents

1	INTRODUCTION	1
2	ADI EMISSION SOURCES	1
2.1	Boiler Emissions	1
2.2	Process Emissions	2
2.3	Stack Parameters	3
2.4	Emissions from Adjacent Licensed Facilities	7
3	RESULTS OF PREVIOUS MODELLING	8
4	MODELLING FOR EUROPEAN SITES	10
4.1	EPA Guidance	10
4.2	UK Environment Agency Guidance	10
5	DISPERSION MODELLING METHODOLOGY	11
5.1	Overview	11
5.2	Modelling Programmes	11
5.3	Input Data	11
5.4	Modelling Outputs	14
6	RESULTS	14
7	CONCLUSIONS	14

Annex 1: Wind Roses

Annex 2: Site Layout

Annex 3: Hydrogen Fluoride Contours

1 INTRODUCTION

This report by Byrne Ó Cléirigh describes an air dispersion modelling assessment for Analog Devices (ADI), Limerick to assess potential Source-Pathway-Receptor (S-P-R) connectivity between ADI's facility and any European site associated with the installation of new plant in the form of an additional new scrubber on the campus.

ADI has submitted an application for a review of their licence (application no. P0224-05) in order to accommodate future developments. One of the new main emission points included in the application is the new plant which is the subject of this screening for appropriate assessment.

Our assessment investigates the potential in-combination impact of the new plant in conjunction with existing emission points and other new process emission points to atmosphere which are included in ADI's application for a review of its IPC licence. A number of the new emission points are associated with required redundancy to allow exhaust gas treatment systems to be taken offline without affecting production. Taking a conservative approach, the modelling has assumed that all emission points will be operational and emitting at their licence limits.

The modelling was conducted in accordance with the EPA's *Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)* and the predicted ground level concentrations were assessed in the context of ambient quality standards and guidance values.

2 ADI EMISSION SOURCES

2.1 Boiler Emissions

Under ADI's current IPC licence (P0224-04), there are eight licensed boiler emissions to atmosphere associated with natural gas fired boilers, providing space heating to the production, office and ancillary areas across the facility, as summarised in Table 1. No additional boiler emissions are proposed under the licence review application.

Table 1: Existing Licensed Boiler Emission Points

Designation	Description
A1-1	Boiler 3 at G3 plant area
A1-2	Boiler 2 at G3 plant area
A1-3	Boiler 1 at G3 plant area
A1-4	Boiler 1 at G3 plant room extension
A1-5	Boiler 2 at G3 plant room extension
A1-6	IPD boiler no. 1
A1-7	IPD boiler no. 2
A1-8	IPD boiler no. 3

2.2 Process Emissions

Under ADI's current IPC licence (P0224-04), there are seventeen licensed main emission points to atmosphere serving the existing production areas of the site, as summarised in Table 2.

Table 2: Current Main Emission Points to Atmosphere

Designation	Description
A2-1	6" FAB scrubber no. 4
A2-2	6" FAB scrubber no. 3
A2-3	Pumped exhaust from FAB
A2-4	6" FAB scrubber no. 1
A2-5	6" FAB scrubber no. 2
A2-6	6" FAB scrubber
A2-7	IPD scrubber 1
A2-8	IPD scrubber 2
A2-9	IPD scrubber 3
A2-10	Aqua Regia scrubber
A2-11	Effluent plant scrubber
A2-12	Solvent exhaust 6" FAB No. 3
A2-13	Solvent exhaust 6" FAB No. 1
A2-14	Solvent exhaust 6" FAB No. 2
A2-15	Solvent exhaust 6" FAB No. 4
A2-16	IPD solvent exhaust no. 1
A2-17	IPD solvent exhaust no. 2

The application for a review of the licence includes the introduction of fifteen new main emission points to atmosphere as set out in Table 3. Eight of the new emission points, including emission point A2-28, which is the subject of this screening for appropriate assessment, will be similar in scale and emissions to licenced emission points A2-7, A2-8 and A2-9, discharging inorganic acids (total fluorides, total bromides and total acids), class III inorganic dusts and total particulates. Each of the emission points will discharge via a new abatement system (one scrubber for each of the emission points). One new emission point, again discharging via a scrubber unit, will be similar to existing emission point A2-3. Six new main emission points will discharge organic substances (solvents) similar to those discharged from the existing emission points A2-12, A2-13, A2-14, A2-15, A2-16 and A2-17.

Table 3: New Main Emission Points to Atmosphere

Designation	Description
A2-18	C2 Solvent Exhaust 1
A2-19	C2 Solvent Exhaust 2
A2-20	C2 Solvent Exhaust 3

Designation	Description
A2-21	C2 Solvent Exhaust 4
A2-22	C2 Solvent Exhaust 5
A2-23	C2 Solvent Exhaust 6
A2-24	C2 scrubber 1
A2-25	C2 scrubber 2
A2-26	C2 scrubber 3
A2-27	C2 scrubber 4
A2-28*	West scrubber 1
A2-29	West Scrubber 2
A2-30	North Scrubber 1
A2-31	North Scrubber 2
A2-32	C2 Pumped Exhaust 1

*Subject of this screening for appropriate assessment

2.3 Stack Parameters

The substances discharged to atmosphere from the existing and new emission points to atmosphere are shown in Table 4, together with the stack height, stack diameter and volumetric flow rate and proposed licensed concentration limits.

Emission points which emit the same licensed parameters as the proposed scrubber (A2-28), and therefore have the potential to give rise to in-combination effect, are highlighted in red.

Table 4: Boiler & Main Emission Stack Parameters

Ref.	Diameter (m)	Flow Rate (Nm ³ /h)	Temp. (K)	Stack Height (m)	Proposed Licensed Concentration Limit (mg/Nm ³)									
					Actual	NO ₂	Fluorides (HF)	Bromides (HBr)	Total Acids (HCl)	Inorganics Class II	Inorganics Class III	TPM	Organics Class I	TOC
A1-1	0.70	1,400	405	17.240	250	-	-	-	-	-	-	-	-	-
A1-2	0.70	1,700	400	17.390	250	-	-	-	-	-	-	-	-	-
A1-3	0.48	1,300	420	17.425	250	-	-	-	-	-	-	-	-	-
A1-4	0.60	3,200	430	17.250	250	-	-	-	-	-	-	-	-	-
A1-5	0.60	4,000	420	17.210	250	-	-	-	-	-	-	-	-	-
A1-6	0.90	2,750	415	19.500	250	-	-	-	-	-	-	-	-	-
A1-7	0.90	2,750	415	19.500	250	-	-	-	-	-	-	-	-	-
A1-8	0.90	2,750	415	19.500	250	-	-	-	-	-	-	-	-	-
A2-1	1.48	64,800	289	17.515	-	0.2	-	5	-	0.5	14	-	-	-
A2-2	1.48	64,800	289	17.560	-	0.2	-	5	-	0.5	14	-	-	-
A2-3	0.65	15,000	289	17.448	-	0.4	3	5	0.01	0.5	14	-	-	-
A2-4	1.48	64,800	289	17.535	-	0.2	-	5	-	0.5	14	-	-	-
A2-5	1.48	64,800	289	17.510	-	0.2	-	5	-	0.5	14	-	-	-
A2-6	1.48	64,800	289	19.500	-	0.2	-	5	-	0.5	14	-	-	-
A2-7	1.16	64,800	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-8	1.16	64,800	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-

Ref.	Diameter (m)	Flow Rate (Nm ³ /h)	Temp. (K)	Stack Height (m)	Proposed Licensed Concentration Limit (mg/Nm ³)									
					Actual	NO ₂	Fluorides (HF)	Bromides (HBr)	Total Acids (HCl)	Inorganics Class II	Inorganics Class III	TPM	Organics Class I	TOC
A2-9	1.16	64,800	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-10	0.60	8,000	289	12.759	-	0.4	3	5	-	-	-	-	-	-
A2-11	0.15	1,545	293	9.170	-	3	-	5	-	-	-	-	-	-
A2-12	0.62	9,216	292	17.840	-	-	-	-	-	-	-	-	15	75
A2-13	0.62	9,216	290	17.900	-	-	-	-	-	-	-	-	15	75
A2-14	0.62	9,216	291	17.900	-	-	-	-	-	-	-	-	15	75
A2-15	0.62	9,216	293	17.840	-	-	-	-	-	-	-	-	15	75
A2-16	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-17	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-18*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-19*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-20*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-21*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-22*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-23*	0.5	10,466	293	19.500	-	-	-	-	-	-	-	-	15	75
A2-24*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-25*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-

Ref.	Diameter (m)	Flow Rate (Nm ³ /h)	Temp. (K)	Stack Height (m)	Proposed Licensed Concentration Limit (mg/Nm ³)									
					Actual	NO ₂	Fluorides (HF)	Bromides (HBr)	Total Acids (HCl)	Inorganics Class II	Inorganics Class III	TPM	Organics Class I	TOC
A2-26*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-27*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-28*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-29*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-30*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-31*	1.16	61,214	289	19.500	-	0.2	3	5	-	0.5	14	-	-	-
A2-32*	0.65	15,000	289	19.500	-	0.4	3	5	0.01	0.5	14	-	-	-

Emission points marked with an asterisk (*) are the new (currently unlicensed) emission points associated with licence review application P0224-05

2.4 Emissions from Adjacent Licensed Facilities

2.4.1 Overview

The closest licensed facilities to ADI are listed in Table 5 (those within 5 km of the site), with the closest of these located approximately 0.3 km from the site. A number of the facilities are licensed to discharge similar substances to atmosphere as those that arise at ADI.

Table 5: Adjacent Licensed Facilities

Reg. No.	Site	Approximate Distance from ADI (m)	Licensed Emissions to Atmosphere
P0023-03	Howmedica International S.de R.L. Trading As Stryker Orthopaedics	290	Inorganic class II Inorganic class III Total particulates Total organic carbon
P0991-02	Regeneron Ireland	630	Nitrogen oxides Carbon monoxide
P0265-01	IMAG Optical Storage Limited*	740	Total organic carbon
P0452-01	Adhesives Research Ireland Ltd	920	Total organic carbon
P1200-01	Eli Lilly Kinsale Ltd,	770	Nitrogen Oxides Carbon Monoxide
W0082-03	Starrus Eco Holdings Limited (Dock Road)	2,500	-
P1048-2	J.H. Roche & Sons Ltd.	2,770	Nitrogen Oxides (as NO ₂)
P0029-06	Irish Cement Limited (Limerick)	3,120	Sulphur oxides Nitrogen oxides Dust Carbon monoxide Total organic carbon Hydrogen chloride Hydrogen fluoride Ammonia slip Dioxans and furans Mercury & its compounds The sum of cadmium & thallium & their compounds The sum of antimony, arsenic, lead, chromium, cobalt, copper, manganese, nickel, vanadium
P0329-01	James McMahon Limited	3,200	-
W0281-01	Limerick Gasworks	3,800	-

* closed since 2004

2.4.2 Cumulative Impact Assessment

The requirement for undertaking a cumulative impact assessment is described in Section 6.6 and Appendix E of the EPA's guidance and is based on a US Environmental Protection Agency method that has been adapted for Ireland (*Prevention of Significant Deterioration*). The requirement applies to new major sources or major modifications at existing sources. In this context, the EPA provides guidance on the interpretation of *major*, noting that it applies to installations that have the potential to emit more than 250 tonnes¹ per annum of any regulated pollutant, or 100 tonnes per annum for certain specific industries (none of which apply to ADI).

Table 6 summarises the total maximum annual mass emissions of the parameters specified in ADI's licence as they apply to scrubber emissions, including new emission points which will be added under the licence review application (i.e. all sources highlighted in red in Table 4).

Table 6: Maximum annual mass emissions (tonnes per year)

	Total proposed under licence review
Total Fluorides	1.94
Total Bromides	19.0
Total Acids	45.9
TA Luft Inorganics Class II	0.0026
TA Luft Inorganics Class III	4.55
Total Particulates	127.31

None of ADI's licensed emissions are greater than 250 tonnes per year, and none of the surrounding facilities discharge the same licensed parameters at a rate which would be classified as major sources using the EPA guidance.

As the emissions from ADI do not constitute either a *major source* or a *major modification*, a cumulative assessment with offsite parameters is not required and only the emissions from ADI have been modelled in this study.

3 RESULTS OF PREVIOUS MODELLING

A summary of the results from the dispersion modelling undertaken in support of ADI's licence review application, as they pertain to the new scrubber plant installation, is shown in Table 7. The table shows the highest predicted offsite ground level concentrations at the closest sensitive receptors for each of the parameters.

For all parameters, the highest predicted ground level concentrations occur close to the site boundary, generally along one of the roads within Raheen Industrial Estate, with the predicted ground level concentrations decreasing further beyond the site boundary.

¹ The US EPA criteria are expressed in tons rather than tonnes; 250 tons is equivalent to approximately 227 tonnes.

Table 7: Summary for Future Case

Parameter	Averaging Period	BC ($\mu\text{g}/\text{m}^3$)	PC ($\mu\text{g}/\text{m}^3$)	PEC ($\mu\text{g}/\text{m}^3$)	PEC as % of EAL	EAL ($\mu\text{g}/\text{m}^3$)	Easting	Northing
Total Fluorides	1 hour	0	7.04	7.04	4.40%	160	155475	153125
	monthly	0	0.887	0.887	5.54%	16	155550	153050
Total Bromides	1 hour	0	50.93	50.93	7.28%	700	155200	153200
Total Acids	1 hour	0	161.02	161.02	21.47%	750	155475	153125
Inorganic dust (Class II)	1 hour (99%ile) (nickel, Ni)	0	1.65E-03	1.65E-03	1.65%	0.1	155475	153125
	1-hour (selenium, Se)	0	1.39E-03	1.39E-03	0.00%	30	155475	153125
	Annual (lead, Pb)	0	3.18E-05	3.18E-05	0.01%	0.5	155525	153100
Inorganic dust (Class III)	1 hour (99%ile) (vanadium, V)	0	0.195	0.195	64.93%	0.3	155475	153125
	1-hour (vanadium, V)	0	0.397	0.397	52.91%	1	155475	153125
	Annual (manganese, Mn)	0	0.085	0.085	56.45%	0.15	155525	153100
Total Particulates (as PM_{10})	Daily 90.4%ile	21.40	22.09	34.74 ^{Note 1}	69.48%	50	155525	153100
	Annual	12.65	8.81	21.46	53.65%	40	155525	153100

The study concluded that:

- Operation of the existing and new main emission points discharging inorganic substances would comply with the relevant short term and long term environmental assessment levels, and the maximum allowable process contribution from the EPA's guidance.
- Operation of the existing and new main emission points discharging organic substances would comply with the relevant short term and long term environmental assessment levels, and the maximum allowable process contribution from the EPA's guidance.
- Operation of the licenced boilers would comply with the 99.8th percentile 1-hour and the annual average air quality standard for nitrogen dioxide and the maximum allowable process contribution from the EPA's guidance for both parameters.
- The expansion of the site and the installation of fifteen new main emission points to atmosphere will not give rise to offsite ground level concentrations of any licensed parameter above the relevant air quality standard or environmental assessment level.

Further details of the modelling methodology and results can be found in the [Air Dispersion Modelling Report](#) (page 20 to 78).

4 MODELLING FOR EUROPEAN SITES

4.1 EPA Guidance

EPA guidance on assessing the air quality impact of projects on European Sites focusses on assessing the impact of ammonia emissions and nitrogen deposition from EPA licensable activities, with an assessment methodology provided in the EPA's *Licence Application Instruction Note 2* (IN2).

There will be no NOx or ammonia emissions from the proposed scrubber plant. There will therefore be no S-P-R connectivity to any European site associated with nitrogen deposition.

4.2 UK Environment Agency Guidance

The UK Environment Agency (EA) provides environmental standards for the screening of protected conservation areas, as follows:

Table 8: UK Environment Agency Environmental Standards for European Sites

Substance	Environmental Standard	Averaging time
Ammonia	1 $\mu\text{g}/\text{m}^3$ (lichens or bryophytes present) 3 $\mu\text{g}/\text{m}^3$ (not present)	Annual mean
Hydrogen Fluoride	0.5 $\mu\text{g}/\text{m}^3$	Weekly mean
Hydrogen Fluoride	5 $\mu\text{g}/\text{m}^3$	Daily mean
Nitrogen oxides (expressed as nitrogen dioxide)	30 $\mu\text{g}/\text{m}^3$	Annual mean
Nitrogen oxides (expressed as nitrogen dioxide)	75 $\mu\text{g}/\text{m}^3$ 200 $\mu\text{g}/\text{m}^3$ *	Daily mean
Ozone (used for detailed daily nitrogen oxides assessment)	AOT40 of 6000 $\mu\text{g}/\text{m}^3$ **	Period between May and July
Sulphur dioxide	10 $\mu\text{g}/\text{m}^3$ (lichens or bryophytes present) 20 $\mu\text{g}/\text{m}^3$ (not present)	Annual mean
Acidity deposition	Depends on location	Annual mean
Nutrient nitrogen deposition	Depends on location	Annual mean

* Only for detailed assessments where the ozone is below the AOT40 critical level and sulphur dioxide is below the lower critical level of 10 $\mu\text{g}/\text{m}^3$

**Calculated from accumulated hourly ozone concentrations – AOT40 means the sum of the difference between each hourly daytime (08:00 to 20:00 Central European Time) ozone concentration greater than 80 $\mu\text{g}/\text{m}^3$ (40 ppb) and 80 $\mu\text{g}/\text{m}^3$, for the period between 01 May and 31 July

Based on EA guidance, if

- the short term process contribution (daily /weekly)is less than 10% of the short term environmental standard for protected conservation areas
- the long term process contribution (annual or multi-year) is less than 1% of the long term environmental standard for protected conservation areas

then the emissions are insignificant and no further assessment is required.

Of the parameters for which the EA lists an environmental standard for protected areas , only hydrogen fluoride (HF) is applicable to emissions from the scrubbers at ADI. We have assessed hydrogen fluoride emissions from ADI's facility in order to assess the potential impact of operations on any European site, and provide the results of this assessment in section 6. As noted in Section 2.4.2, based on maximum licensed emission quantities, a cumulative impact assessment with offsite sources was not required.

5 DISPERSION MODELLING METHODOLOGY

5.1 Overview

In order to assess the impact of the emissions to atmosphere from the site, we have assessed the HF emissions from the new scrubber plant in combination with HF emissions to atmosphere from existing licensed emission points and other proposed emission points from the licence review application. All emission points are assumed to operate concurrently at the proposed licence limits.

The model inputs are described in the following sub-sections.

5.2 Modelling Programmes

The following software was used to conduct and assess the air dispersion modelling:

- BREEZE AERMOD, a dispersion model that simulates essential atmospheric physical processes and provides refined concentration estimates over a wide range of meteorological conditions and modelling scenarios.
- BREEZE AERMAP, a terrain pre-processor to prepare the terrain information required by AERMOD for complex terrain scenarios.
- BREEZE BPIP (Building Profile Input Programme) to model the effects of building downwash on the emission from the stacks.
- BREEZE 3D Analyst, a post-processing package to analyse the output data from the dispersion model.

5.3 Input Data

5.3.1 Site Buildings & Structures

The length, width, height and co-ordinates of the buildings and building structures across the site were entered into the model. In addition, large off-site buildings with the potential to impact on the building downwash were entered into the model.

5.3.2 Emissions & Emission Rates

Table 9 summarises the maximum emission rates (in grams per second) of Hydrogen Fluoride that will be discharged from the existing and proposed main emission points based on the proposed licence limits and stack parameters from the licence review application. These parameters were used as inputs to the model.

Table 9: Summary of Hydrogen Fluoride Discharged to Atmosphere (g/s)

Ref.	Description	Status	HF
A2-1	6" FAB scrubber no. 4	Existing	0.0036
A2-2	6" FAB scrubber no. 3	Existing	0.0036
A2-3	Pumped exhaust from FAB	Existing	0.0017
A2-4	6" FAB scrubber no. 1	Existing	0.0036
A2-5	6" FAB scrubber no. 2	Existing	0.0036
A2-6	6" FAB scrubber	Existing	0.0036
A2-7	IPD scrubber 1	Existing	0.0036
A2-8	IPD scrubber 2	Existing	0.0036
A2-9	IPD scrubber 3	Existing	0.0036
A2-10	Aqua Regia scrubber	Existing	0.0009
A2-11	Effluent plant scrubber	Existing	0.0013
A2-24	C2 Scrubber 1	Future	0.0034
A2-25	C2 Scrubber 2	Future	0.0034
A2-26	C2 Scrubber 3	Future	0.0034
A2-27	C2 Scrubber 4	Future	0.0034
A2-28	West Scrubber 1	Proposed Development	0.0034
A2-29	West Scrubber 2	Future	0.0034
A2-30	North Scrubber 1	Future	0.0034
A2-31	North Scrubber 2	Future	0.0034
A2-32	C2 Pumped exhaust	Future	0.0017

5.3.3 Emission Durations & Frequencies

As set out in the EPA's guidance, each of the emission points has been modelled on the basis of 24 hour per day, 365 day per year operation as each of the emission points could be operational at any time of the year. In practice, the emission points do not operate on a continuous basis for 365 days of the year; the proposed plant is being installed to provide redundancy and operational resilience to enable ongoing system availability of the existing interconnected scrubbers for manufacturing operations. Modelling results of ground level concentrations are therefore very conservative.

5.3.4 Meteorological Data

The meteorological station at Shannon airport is the closest Met Éireann weather station to the site. The EPA's guidance requires a minimum of five years of meteorological data to be used, with the most recent year of the five-year dataset to be within ten years of the date of the dispersion modelling study. For this study, AERMOD-ready meteorological data from the Shannon weather station for the five years from 2016 to 2020 has been used. The wind roses for the five years are included in Annex 1.

5.3.5 Digital Terrain Data

Digital terrain data for the site and the surrounding area was provided by the Ordnance Survey of Ireland on a 10 m grid. The elevations of each co-ordinate of the model grid were extracted from this data and entered into the model via the AERMAP pre-processor. Buildings entered in the model at specific co-ordinates were automatically assigned an elevation based on the terrain data.

5.3.6 Surface Roughness

The location of the site is rural as per the EPA's guidance on determining whether a source is in an urban or rural setting, namely that the urban option should be selected if greater than 50% of the area within a 3 km radius of the source (site) is either industrial, commercial or compact residential. As shown on the site layout in Annex 2, the majority of the land within 3 km of ADI is rural, with approximately 25% to 30% falling within the broad definition of an urban setting. Therefore, the urban option in AERMOD has not been selected and the surface roughness data from the AERMOD-ready meteorological data files has been used.

5.3.7 Receptor Points

Two Cartesian grids of receptor points around the site and its environs were set up, shown in Table 10.

Table 10: Receptor Grids

	Grid 1	Grid 2
Length	2,000 m	8,000 m
Width	2,000 m	8,000 m
Grid spacing	50 m	200 m
Number of receptor points	1,681	1,681

The grid used in the model contained the maximum ground level concentrations for all the modelled parameters.

5.4 Modelling Outputs

The BPIP programme was run to calculate the building downwash for the model. The AERMOD programme was then run to calculate the resultant ground-level concentrations (raw data) for each of the receptor points over each of the five years of meteorological data.

The raw data from AERMOD was subsequently analysed in 3D Analyst. The relevant maximum concentrations for each receptor point for each of the five years over which the model was run were extracted from this raw data. These results are assessed in Section 6 against the criteria described in Section 4.2.

6 RESULTS

We have calculated the daily and weekly maximum ground level concentrations at all gridded receptors, and used the results to plot the contours corresponding to 10% of the environmental daily and weekly standard. The results for each of the five years 2016-2020 are shown in Annex 3. For each chart, the contour showing the ground level concentration corresponding to 10% of the daily environmental standard (i.e. the contour showing a maximum daily concentration of $0.5\mu\text{g}/\text{m}^3$) is shown in red. The contour showing the concentration corresponding to 10% of the weekly environmental standard (i.e. the contour showing a maximum weekly concentration of $0.05\mu\text{g}/\text{m}^3$) is shown in green.

The results show that no European site lies within the daily or weekly 10% contour. Therefore, based on EA guidance, the impact of hydrogen fluoride emissions from ADI's facility on any European site are insignificant.

7 CONCLUSIONS

The modelling has been conducted in accordance with the EPA's latest *Air Dispersion Modelling from Industrial Installations Guidance Note* (AG4) (December 2019) using 5-years of meteorological data, and on a conservative basis with the emission points assumed to operate 24-hours per day, 7-days per week at their respective licence limits (or proposed licence limits for the new emission points). Emission limits are in accordance with ADI's licence review application (P0224-05).

Prior modelling shows that operation of all existing and proposed new main emission points discharging inorganic substances would comply with the relevant short term and long term environmental assessment levels, and are lower than the maximum allowable process contribution from the EPA's guidance, even for the very conservative assumptions outlined above. Actual emissions will be considerably lower than those predicted based on these conservative assumption.

We have carried out additional modelling to assess the potential impact of HF on any protected site, using UK EA guidance. All European sites lie well outside the contours which indicate a concentration of 10% of the short term environmental standard. Therefore, based on UK EA guidance, the likely effects on any European site are insignificant.

Based on our assessment, there is no likelihood that emissions from ADI's facility will result in any significant effect on any European site. There is therefore no Source-Pathway-Receptor connectivity via the atmosphere to any European site and no European sites fall within the Zone of Influence via this pathway.

* * * * *

ANNEX 1: WIND ROSES

Figure A1.1: Wind Rose 2016

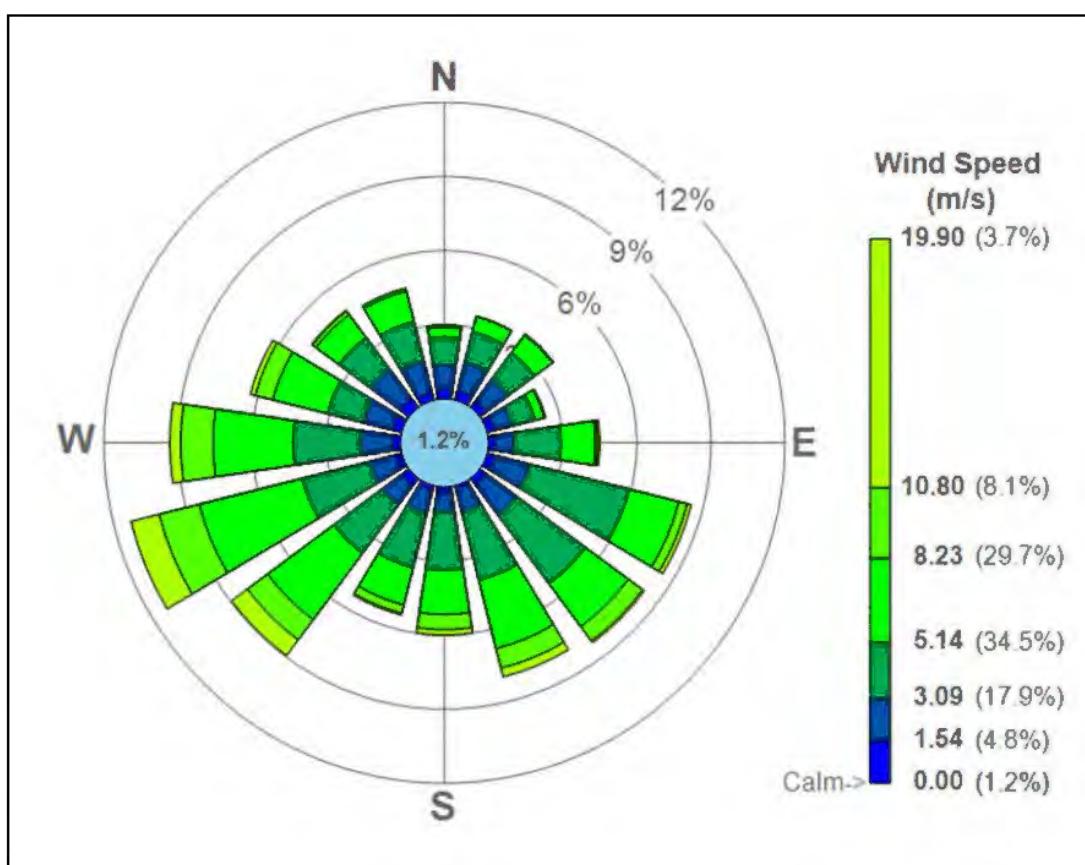


Figure A1.2: Wind Rose 2017

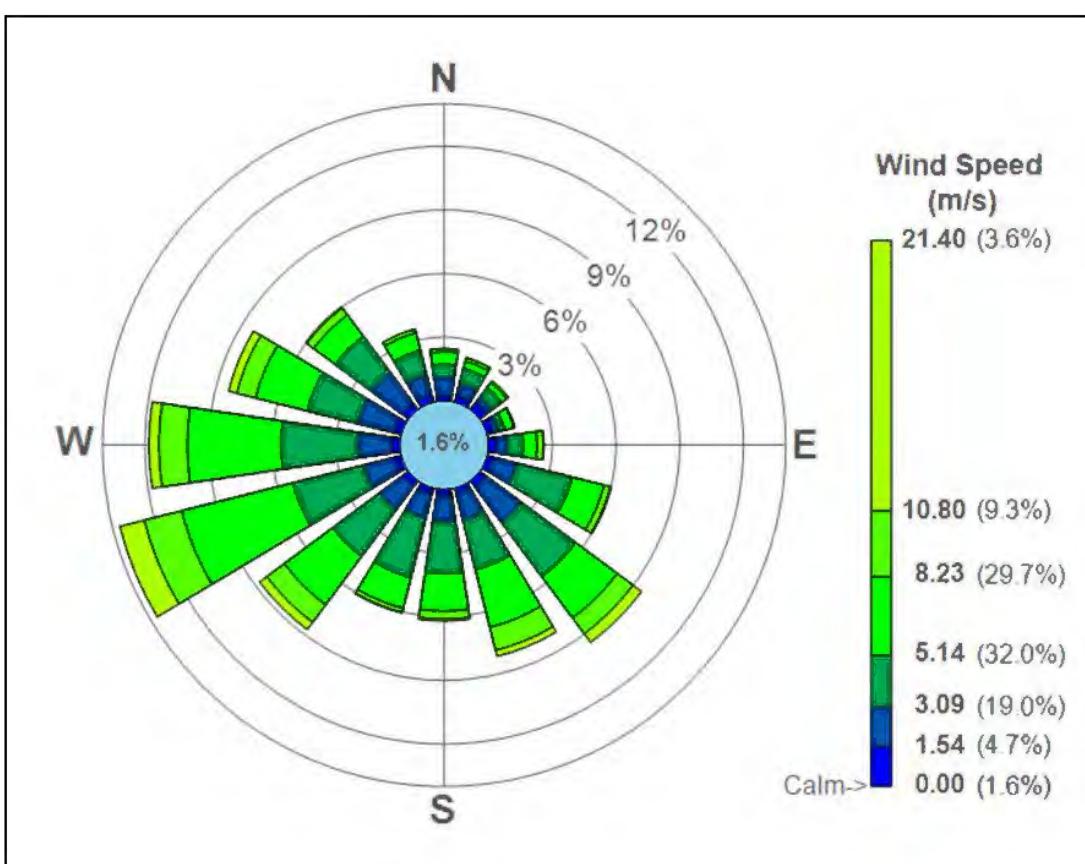


Figure A.3: Wind Rose 2018

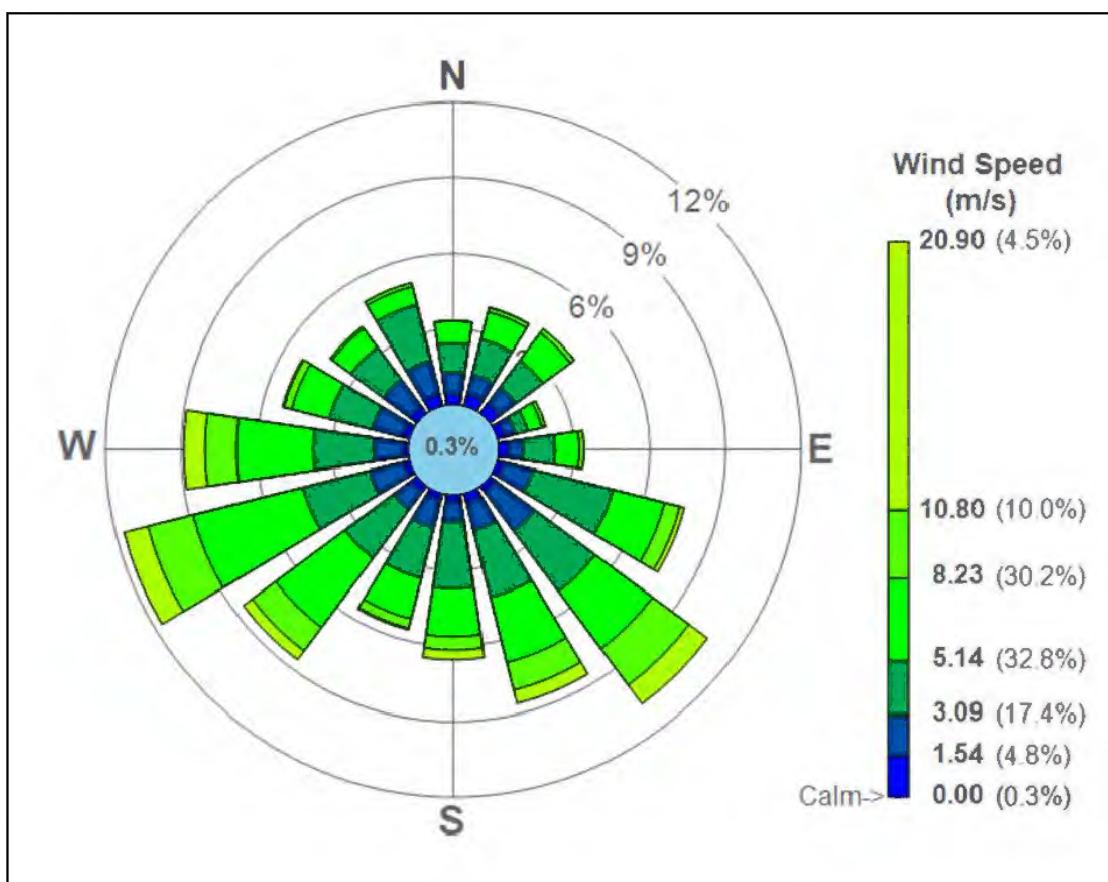


Figure A1.4: Wind Rose 2019

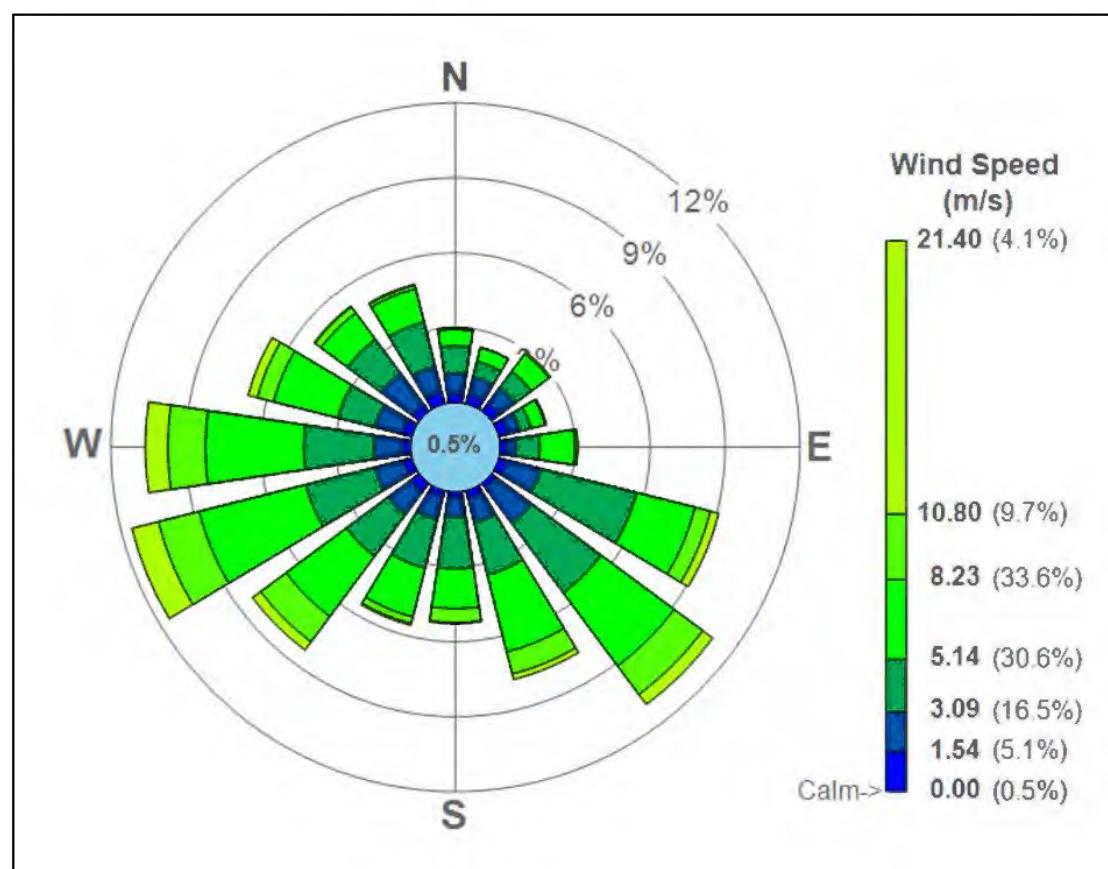
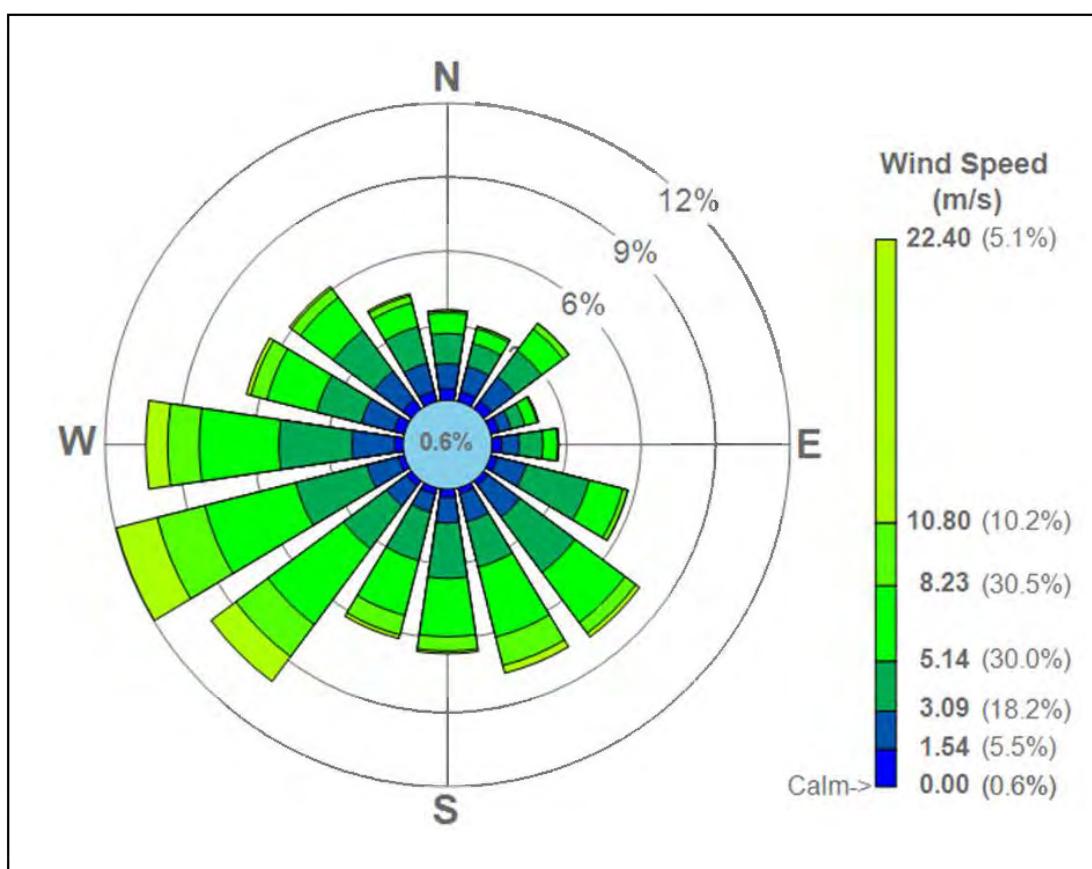


Figure A1.5: Wind Rose 2020



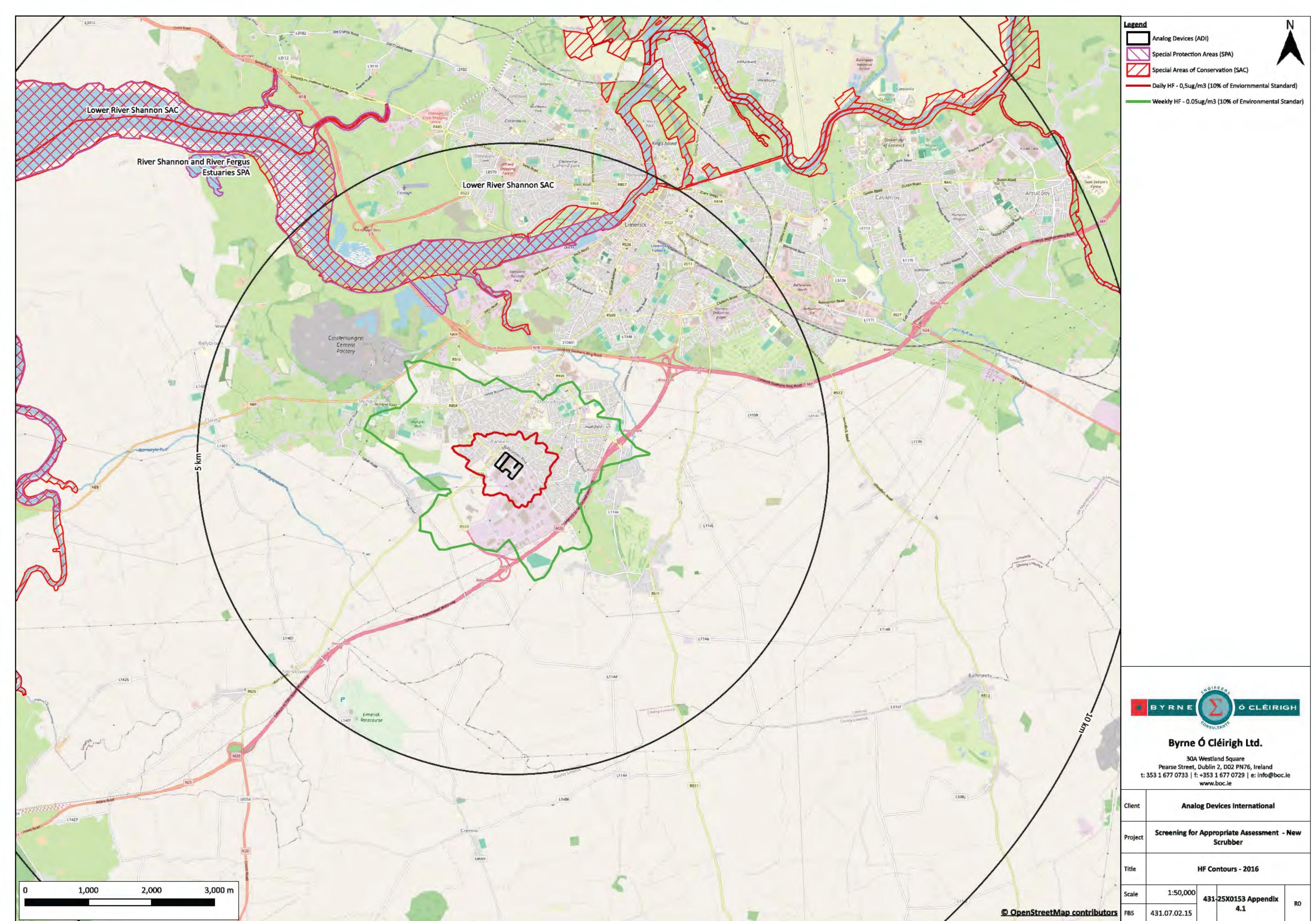
ANNEX 2: SITE LAYOUT

Figure A2.1 shows the area within a 3 km radius of the site. The area bounded in yellow is considered to be industrial, commercial or compact residential, accounting for approximately 25% to 30% of the total area. In accordance with the AERMOD guidance, the urban option has **not** been selected for this air dispersion model.

Figure A2.1: Land Use within 3 km Radius of Analog Devices



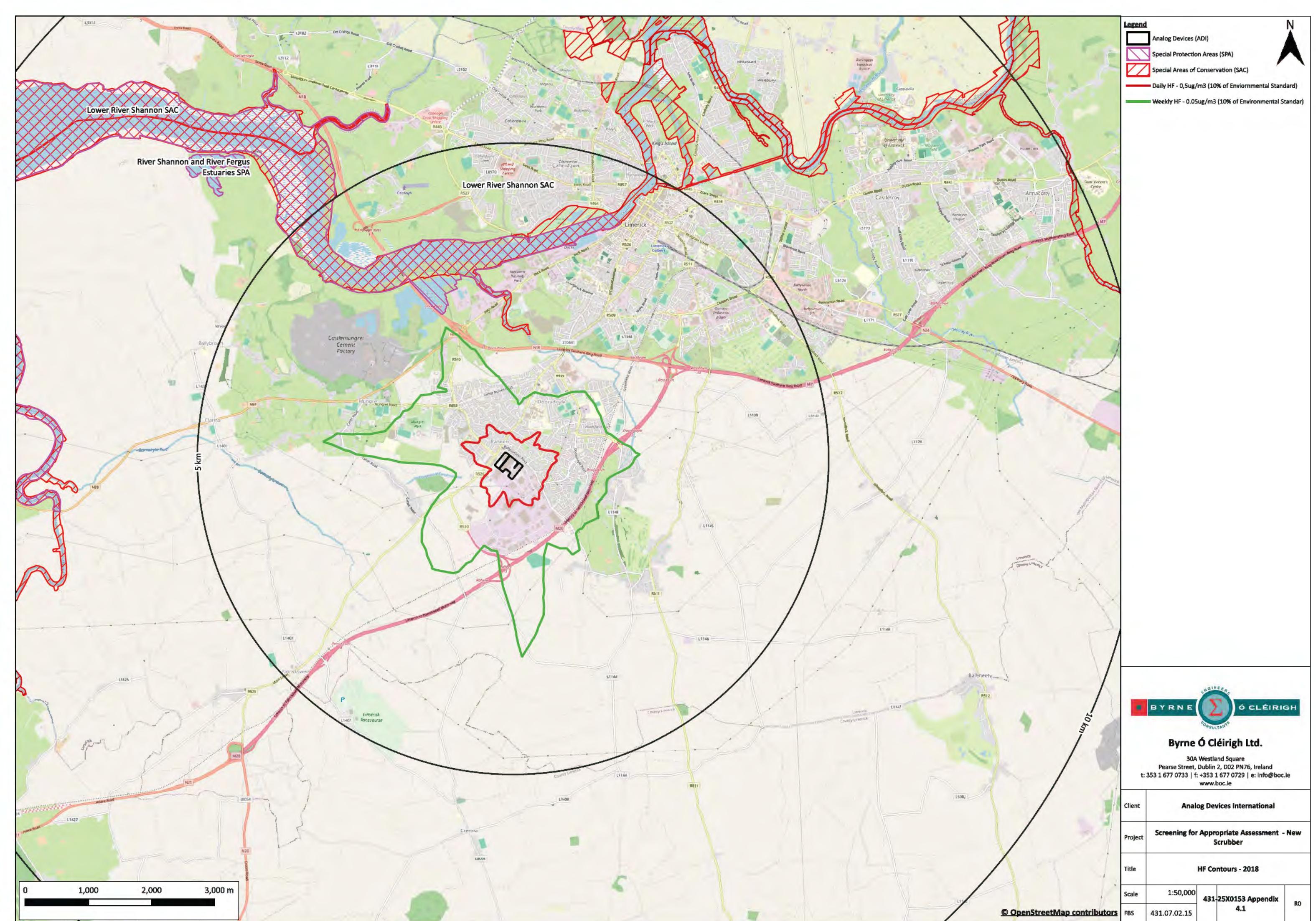
ANNEX 3: HYDROGEN FLUORIDE CONTOURS

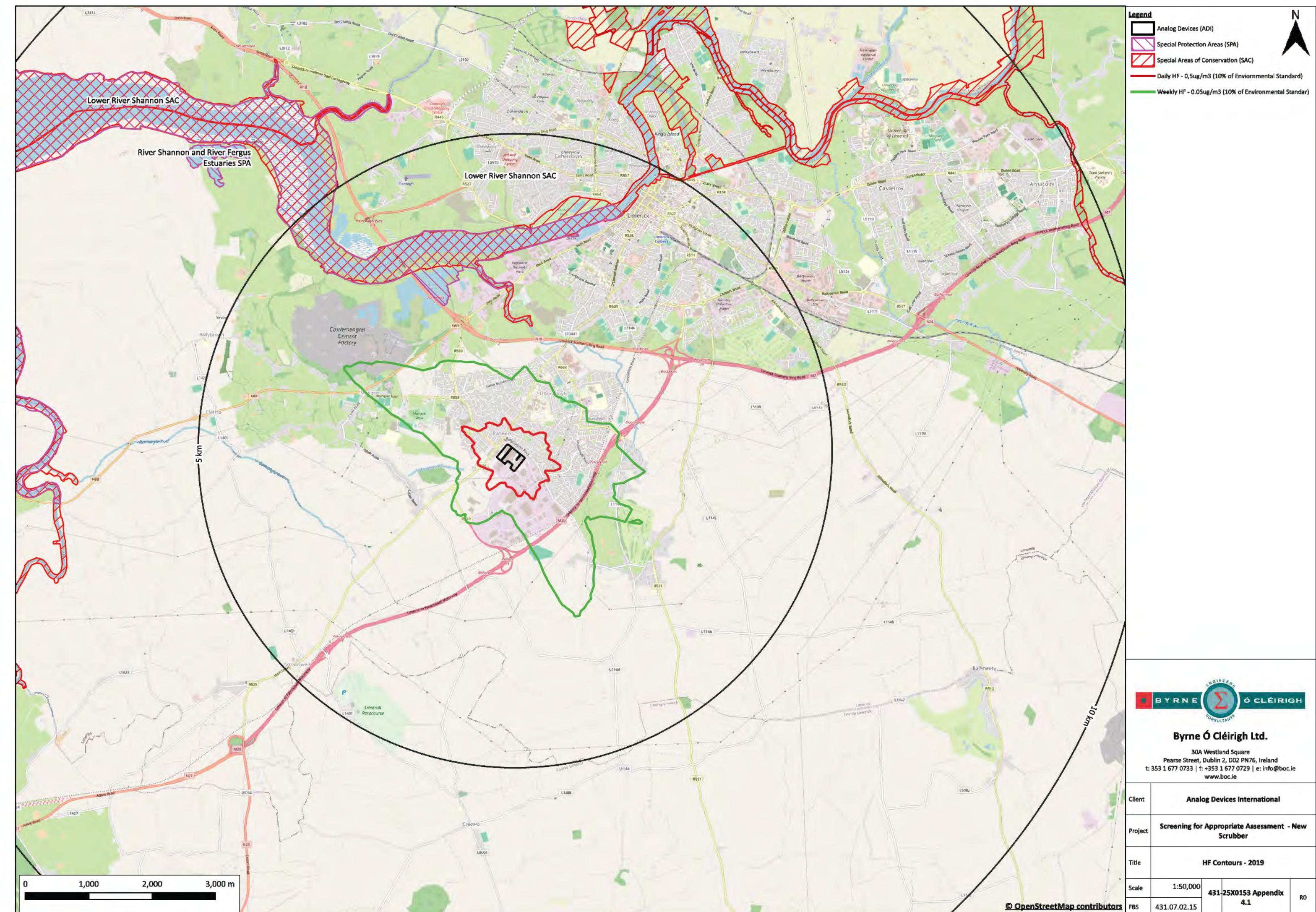


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Analog Devices International

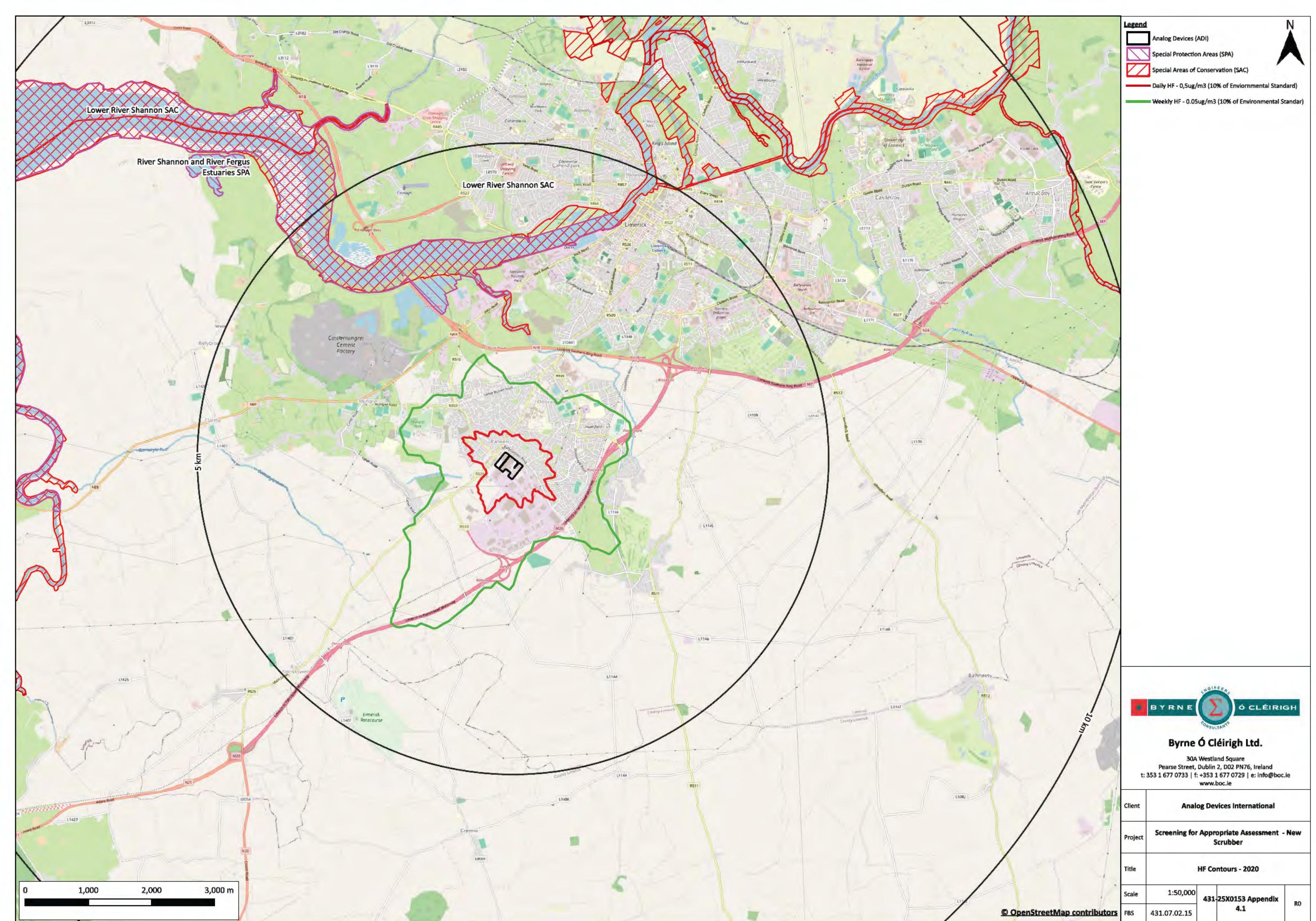
Screening for Appropriate Assessment - New

2017-2018 - 2020

1:50,000

491-23A0153 Appendix
4.1

© OpenStreetMap contributors



Report on application under Section 5 of the Planning and Development Act 2000 (as amended)

Reference no. EC-214-25

Name and Address of Applicant: Analog Devices International
Raheen Business Park
Limerick
V94 RT99

Agent: Brady Shipman Martin
Mountpleasant business Centre
Ranelagh
Dublin 6
D06 X7P8

Location: Raheen Business Park
Limerick
V94 RT99

Description of Site and Surroundings:

The site is located within the Raheen Business Park on the west side of Limerick City and occupied by Analog Devices international which lies between Cloghkeating Avenue to the northwest and Saggart Road to the south east and bounded by Ballycummin Avenue to the north east and Cloghkeating Avenue to the southwest.

Zoning:

High Tech/Manufacturing

Proposal:

This is an application requesting a Section 5 Declaration on whether the following works are or are not development or are or not exempted development:

- Provision of additional plant in the form of a scrubber (no. 5) plant to provide resilience, enhance efficiency and to maintain existing operations.

The proposed scrubber is centrally located within the site, to the rear of an existing manufacturing building and adjacent to 4 existing scrubbers. The additional scrubber is to provide resilience, enhance efficiency and maintain existing operations in the situation where one of the existing scrubbers is off-line for maintenance or other upgrade works. There is no change or increase in activity, throughput or in emissions to the environment. Scrubbers are filtration systems which capture particulates, gases, chemicals and odours from the air in large spaces prior to release to the environment. The facility is subject to the operational controls of the EPA's Industrial Pollution Control Licence No. P0224-04. The licence is also under review under IPC Licence Review No. P0224-05.

This Section 5 declaration includes the following:

- Application Form
- Cover Letter
- Site location Map
- Site Layout
- Elevations

Planning History:

25/60508: Analog Devices were granted conditional permission for 1) Alterations to part of the external envelope of an existing manufacturing facility to consist of new windows and doors to part of the front elevation of the building; 2) the addition of a new enclosed fire escape stairs to the side of the existing building; 3) the provision of a new internal circulation stair core and lift; and 4) all associated site development works at Building 1 within the Analog Devices B.V Limited Campus in Raheen Business Park, Limerick, V94 RT99. The application relates to works on a site to which Integrated Pollution Control (IPC) Licence No. P0224-04 applies. The decision was appealed to An Coimisiun Pleanala who dismissed the appeal as the substance of the grounds of appeal did not relate to matters subject of the development.

25/60174: Analog Devices granted permission for replacing a section of existing cladding with glazing on the north-west elevation of the catalyst building. Current under appeal to ABP. 23/60609: Analog Devices granted conditional 10 year permission for the generation of a building and site. The development (i) partial demolition of sections of the existing industrial building, intended as enabling works (ii) the change of use of the remaining, existing building from industrial (factory) and ancillary office use to office use; (iii) provision of new mezzanine level within the existing building; (iv) façade improvements (v) the construction of a new two / three storey extension to the rear and side of the building comprising (a) offices, (b) high tech laboratory / research space, (c) meeting rooms, (d) reception area, (e) canteen, (f) employees gym area, (g) social spaces, (h) external terrace and (i) associated roof plant; (vi) closure of the northern part of the Ballynoe Road adjoining the western site boundary, with provision for a new access road on the southern site boundary, which will connect with the remaining Ballynoe Road at the south western corner of the site; (vii) provision of significant public realm absorbing the closed part of the Ballynoe Road and the creation of a new pedestrian plaza with bicycle parking; and (viii) all ancillary site development works including (a) building and free standing signage; (b) provision of a delivery bay on the Derrybeg Road; (c) bin stores; (d) plant rooms; and (e) PV panels. A Natura Impact Statement(NIS) is included in the application. The application was appealed to An Bord Pleanala by a third party, who upheld the decision and granted permission subject to conditions (REF: 319334/24).

22/803 – Grant of Permission - As part of the continuing regeneration and rejuvenation of our Campus, and upgrade of our facilities, we, Analog Devices International are applying for a ten-year planning permission for an extension to our C1 R&D Pilot Line building to provide R&D and 1st Industrial deployment/Manufacturing use in the proposed C2 Fanfare building at Raheen Industrial Business Park, Raheen, Co. Limerick. The planning application consists of the following: 1. Permission for the construction of a two-storey over basement extension to the existing C1 R&D Pilot Line building, with proposed ground floor R&D and 1 st Industrial deployment/Manufacturing use, and basement, mezzanine and roof level plant areas; 2. The construction of a two-storey extension to the existing Energy Centre with proposed service tunnel connecting to the new R&D Fanfare basement; 3. The construction of a scrubber deck extension, with 4 new proposed scrubbers and flues, associated mechanical discharge flues and associated generator/electrical/support rooms; 4. Re-organisation of the site layout, with associated works, and the proposed relocation of 300 car park spaces from the proposed extension on Ballynoe Ave. to a landscaped car park accessed off Derrybeg Road (including the provision of new EV points, motorcycle spaces and bicycle spaces); 5. Relocate 2 existing groundwater control wells; 6. Associated alterations to the existing Manufacturing building and siteworks. This is an existing Lower Tier Seveso site, and the development consists of modifications to an establishment within the meaning of the European Communities Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations. The site operates under an Integrated Pollution Control (IPC) licence. A Natura Impact Statement (NIS) is included in the application.

23/60548 application withdrawn for permission for the enabling of works to an existing building and comprises the (i) partial demolition of sections of the existing building; (ii) the temporary cladding of exposed openings remaining in the existing building; and (iii) the temporary construction of hoarding on the site perimeter, all pending the change of use and redevelopment of the building and site (subject to a separate planning application)

22/418 – Grant of Permission – Permission for elevation changes.

22/38 – Grant of Permission – Permission for the construction of a new liquid hydrogen storage tank and associated equipment, alterations as required to existing equipment, and removal of existing liquid hydrogen storage tank being made redundant, and all associated site works. This is an existing Lower

Tier Seveso site, and the development consists of modifications to an establishment within the meaning of the European Communities Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations.

19/192 – Grant of Permission – Permission for elevation changes. 19/180 – Grant of Permission – Permission for a 2.5 metre high fence to the rear and side boundaries and a 1.6 metre high fence to the front boundary and carry out all associated site works.

15/283 – Grant of Permission- 10 year permission for an extension of Manufacturing facility to provide R&D Pilot Line/Manufacturing use. The planning permission consists of the following: (1) The demolition of Building 6 and adjacent ancillary buildings; (2) The construction of a two storey over basement extension to the existing Manufacturing building, with ground floor R&D Pilot Line/Manufacturing, and basement and mezzanine level plant areas; (3) the construction of a two storey over basement extension to the existing plant room with basement service tunnel connecting to the existing Manufacturing basement; (4) The construction of a two storey extension to the existing Boiler/Energy centre; (5) The provision of 2 no. water storage tanks; (6) The construction of a scrubber deck extension and associated generator room, with 3 new scrubbers, 3 new flues and associated alterations to the existing flue heights; (7) Re-organisation of the site layout and carparking, with associated works, including a perimeter fence and landscaping along the Ballycummin Avenue boundary and (8) Provision of signage on the Ballycummin Avenue elevation.

12/619 – Grant of Permission – Permission for the construction of a terracotta clad screen wall (to the height of the adjacent B1/B3 building, extending from the main entrance along the northwest (Lurraga Road) elevation and returning to the southwest (Cloughkeating Avenue) elevation. Associated site works will include the breakup of adjacent hard standing to facilitate soft landscaping including selected trees and shrubs in front of the northwest elevation.

01/2703 – Grant of Permission – Permission for a loading bay.

90/365 – Grant of Permission – Permission for a change of use and alterations to a factory to include extension of laboratory and storage space, additions to service block in yard, holding tanks, compound and car parking.

93/1279 – Grant of Permission – Permission for a water fab building extension with support extension to storage and plant facilities and surface parking.

96/2608 – Grant of Permission – Permission for the retention of extension to existing factory

Enforcement History

DC-056-23 – Hours of operation outside what was conditioned. Warning letter served.

Assessment

Consideration as to whether a development constitutes exempted development or not is governed by Sections 4 and 5 of the Planning and Development Act 2000 (as amended) and Articles 5, 6, 7, 8, 9, 10 and 11 of the Planning and Development Regulations 2001 (as amended).

Is the proposal development?

Section 2(1) in this Act, except where otherwise requires –

'works' includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal.

'structure' as any building, structure, excavation, or other thing constructed or made on, in or under any land, or part of a structure so defined, and –

(a) Where the context so admits, includes the land on, in or under which the structure is situated.

Section 3(1) defines 'development' as 'the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land'.

The proposed development on site, comprising the construction of a scrubber constitutes 'works' and 'development'.

Is the proposal exempted development?

The proposal for the construction of a scrubber within the Analog Devices Campus will be assessed under Class 21 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended) which is noted as follows:

(a) *Development of the following descriptions, carried out by an industrial undertaker on land occupied and used by such undertaker for the carrying on, and for the purposes of, any industrial process, or on land used as a dock, harbour or quay for the purposes of any industrial undertaking—*

- (i) *the provision, rearrangement, replacement or maintenance of private ways or private railways, sidings or conveyors,*
- (ii) *the provision, rearrangement, replacement or maintenance of sewers, mains, pipes, cables or other apparatus,*
- (iii) *the installation or erection by way of addition or replacement of plant or machinery, or structures of the nature of plant or machinery.* (emphasis added by planner)

(b) *Any works for the provision within the curtilage of an industrial building of a hard surface to be used for the purposes of or in connection with the industrial process carried on in the building*

The conditions/limitations in respect of Class 21 are as follows:

1. *Any such development shall not materially alter the external appearance of the premises of the undertaking.*

It is noted that the proposed scrubber is centrally located and surrounded by buildings within the overall campus. It is located adjacent to existing scrubbers which would be the ideal location. However, the scrubber will be particularly evident from the southwest along Cloughkeating Avenue and therefore would be considered to materially alter the external appearance of the premises.

2. *The height of any plant or machinery, or any structure in the nature of plant or machinery, shall not exceed 15 metres above ground level or the height of the plant, machinery or structure replaced, whichever is the greater*

The proposed scrubber has a height of 19.3 metres. While the applicant contends that this is below the height of an existing adjoining scrubber (19.475 metres), this comparison does not provide sufficient justification for exceeding the 15-metre threshold set out in Limitation 2 of Class 21. The regulation clearly stipulates that the height of any new plant or machinery must not exceed 15 metres above ground level, unless it is replacing an existing structure of greater height.

In this case, the proposed scrubber is not a replacement but an additional installation. Its function as a backup during maintenance or upgrade of existing scrubbers does not alter its status as a new structure. Therefore, the development does not comply with the conditions of exemption under Class 21 and would require planning permission.

Article 9 Restrictions

'The proposed development is not restricted by any of the restrictions in Article 9 of the Planning and Development Regulations 2001 (as amended)'.

Appropriate Assessment

An AA Screening examination was carried out by Limerick City & County Council (see appendix 1). Overall it is considered that the development as proposed should not exercise a significant effect on the conservation status of any SAC or SPA as there are no source-pathway-receptors and the site does not directly encroach on any Natura 2000 European Sites. Therefore, an Appropriate Assessment is not necessary (See appendix 1 for AA Screening Form).

Environmental Impact Assessment

Based on a preliminary examination of the proposal there is no real likelihood of significant effects on the environment and EIA is not required.

Conclusion/Recommendation

The proposed construction of a scrubber 19.3m in height is considered development and not exempted development under Class 21 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended).

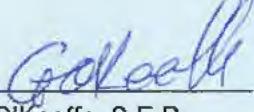
Regard has been had to –

- (a) Section 2, 3 and 4 of the Planning and Development Act 2000 (as amended)
- (b) Class 21 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended)
- (c) The plans & particulars submitted with the application received on 16th October 2025.

It is therefore considered that the said works are development and not exempted development under Class 211 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended) / Planning and Development Act 2000 (as amended).



Aine Leland
Executive Planner
Date 23/10/2025

Agreed 
Gráinne O'Keeffe, S.E.P

Date: 24/10/2025

Appendix 1- AA Screening examination
AA PN01 Screening Form

STEP 1: Description of the project/proposal and local site characteristics:	
a. File Reference No:	EC/214-25
b. Brief description of the project or plan:	This is an application requesting a Section 5 Declaration on whether the construction of 19.3m scrubber is exempted development
c. Brief description of site characteristics:	The site is located within the Raheen Industrial Estate
d. Relevant prescribed bodies consulted: e.g. DHLGH (NPWS), EPA, OPW	N/A
e. Response to consultation:	N/A

STEP 2: Identification of relevant Natura 2000 sites using Source-Pathway-Receptor model and compilation of information on Qualifying Interests and conservation objectives.

European Site (code)	List of Qualifying Interest/Special Conservation Interest ¹	Distance from proposed development ² (km)	Connections (Source-Pathway-Receptors)	Considered further in screening Y/N
Lower River Shannon SAC 002165	https://www.npws.ie/protected-sites/sac/002165	2.2km	No	N
River Shannon and River Fergus SPA 004077	https://www.npws.ie/protected-sites/sac/004077	2.6km	No	N

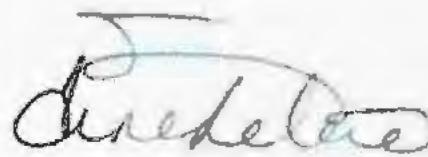
STEP 3: Assessment of Likely Significant Effects

a. Identify all potential direct and indirect impacts that may have an effect on the conservation objectives of a European site, taking into account the size and scale of the project under the following headings:	
Impacts:	Possible Significance of Impacts: (duration/Magnitude etc)
Construction phase e.g <ul style="list-style-type: none">• Vegetation clearance• Demolition• Surface water runoff from soil excavation/infill/landscaping (including borrow pits)• Dust, noise, vibration• Lighting disturbance• Impact on groundwater/dewatering• Storage of excavated/construction materials• Access to site• Pests	Na, Given the level of development proposed and the location of the development which is centrally located within an established industrial operation facility.
Operation phase e.g. <ul style="list-style-type: none">• Direct emission to air and water	Na, Given the level of development proposed and the location of the development which is centrally

<ul style="list-style-type: none"> • Surface water runoff containing contaminant or sediment • Lighting disturbance • Noise/vibration • Changes to water/groundwater due to drainage or abstraction • Presence of people, vehicles and activities • Physical presence of structures (e.g collision risk) • Potential for accidents or incidents 	located within an established industrial operation facility.
In-combination/Other	N/A given the level of development.

b. Describe any likely changes to the European site:	
Examples of the type of changes to give consideration to include: <ul style="list-style-type: none"> • Reduction or fragmentation of habitat area • Disturbance to QI species • Habitat or species fragmentation • Reduction or fragmentation in species density • Changes in key indicators of conservation status value (water or air quality etc) • Changes to areas of sensitivity or threats to QI • Interference with the key relationships that define the structure or ecological function of the site 	None. The application site is not located adjacent to or within an EU site identified above. Therefore, there is no risk of habitat loss or fragmentation or any effects on QI species directly or ex-situ.
c. (Are 'mitigation' measures necessary to reach a conclusion that likely significant effects can be ruled out at screening?)	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

STEP 4: Screening Determination Statement
The assessment of significance of effects: Describe how the proposed development (alone or in-combination is/is not likely to have significant effects on European site (s) in view of its conservation objectives
On the basis of the information on file, which is considered adequate to undertake a screening determination and having regard to: <ul style="list-style-type: none"> • the nature and scale of the proposed development on fully serviced lands, • the intervening land uses and distance from European sites, • the lack of direct connections with regard to the Source-Pathway-Receptor model, it is concluded that the proposed development, individually or in-combination with other plans or projects, would not be likely to have a significant effect on the above listed European sites or any other European site, in view of the said sites' conservation objectives. An appropriate assessment is not, therefore, required.
Conclusion: AA Screening is not required.

Tick as appropriate:		Recommendation:
i.	It is clear that there is no likelihood of significant effects on a European Site	<input checked="" type="checkbox"/> The proposal can be screened out: Appropriate Assessment not required.
ii.	It is uncertain whether the proposal will have a significant effect on a European Site	<input type="checkbox"/> Request further information to complete screening <input type="checkbox"/> Request NIS <input type="checkbox"/> Refuse planning permission
iii.	Significant effects are likely	<input type="checkbox"/> Request NIS <input type="checkbox"/> Refuse planning permission
Signature and Date of Recommending Officer:		 Aine Leland Executive Planner 23/10/2025
Signature and Date of the Decision Maker:		Gráinne O'Keeffe, Senior Executive Planner 23/10/2025

Appendix 2
EIA Screening Examination

Establishing if the proposal is a 'sub-threshold development':

Planning Register Reference:	EC-214-25	
Development Summary:	This is an application requesting a Section 5 Declaration on whether the construction of 19.3m scrubber is exempted development	
Was a Screening Determination carried out under Section 176A-C?	<input type="checkbox"/>	Yes. no further action required
	<input checked="" type="checkbox"/>	No. Proceed to Part A
A. Schedule 5 Part 1 - Does the development comprise a project listed in Schedule 5, Part 1 , of the Planning and Development Regulations 2001 (as amended)? (Tick as appropriate)		
<input type="checkbox"/> Yes. specify class: [insert here] _____		EIA is mandatory
		No Screening required
<input checked="" type="checkbox"/> No		Proceed to Part B
B. Schedule 5 Part 2 - Does the development comprise a project listed in Schedule 5, Part 2 , of the Planning and Development Regulations 2001 (as amended) and does it meet/exceed the thresholds? (Tick as appropriate)		
<input checked="" type="checkbox"/> No. the development is not a project listed in Schedule 5, Part 2		No Screening required
<input type="checkbox"/> Yes the project is listed in Schedule 5, Part 2 and meets/exceeds the threshold, specify class (including threshold): [specify class & threshold here]		EIA is mandatory
<input type="checkbox"/> Yes the project is of a type listed but is <i>sub-threshold</i> : Two residential units 10. Infrastructure Projects - (b)(i)		No Screening required
<input type="checkbox"/> Yes the project is of a type listed but is <i>sub-threshold</i> : Two residential units 10. Infrastructure Projects - (b)(i)		Proceed to Part C
c. If Yes , has Schedule 7A information/screening report been submitted?		
<input type="checkbox"/> Yes, Schedule 7A information/screening report has been submitted by the applicant		Screening Determination required
<input type="checkbox"/> No, Schedule 7A information/screening report has not been submitted by the applicant		Preliminary Examination required

Signature and Date of Recommending Officer:



Áine Leland
Executive Planner
23/10/2025

Signature and Date of the Decision Maker:

Gráinne O'Keeffe,
Senior Executive Planner
23/10/2025

Appendix 3- Photographs





Comhairle Cathrach
& Contae Luimníogh
Limerick City
& County Council

Pleanáil, agus Cruthú Áite
Comhairle Cathrach agus Contae Luimníogh
Bothar Thuar an Daill
Tuar an Daill, Luimneach
V94 WV78

Planning and Place-Making
Limerick City and County Council
Dooradoyle Road
Dooradoyle, Limerick
V94 WV78

PLANNING & PLACE-MAKING

REG POST:

**Analog Devices International,
c/o Brady Shipman Martin,
Mountpleasant business Centre,
Ranelagh,
Dublin 6.
D06 X7P8**

EC/214/25

29 October 2025

Re: Declaration under Section 5

Dear Sir/Madam,

I refer to the above application for Section 5 Declaration on Development and Exempted Development.

Please find herewith a copy of Council's decision on same.

Yours faithfully,


**(for) Senior Planner,
Development Management**

Tuar an Daill, Luimneach
Dooradoyle, Limerick

customerservices@limerick.ie
www.limerick.ie
@LimerickCouncil
061 - 556 000

LIMERICK CITY & COUNTY COUNCIL

APPROVED OFFICER'S ORDER

SECTION 5 – DECLARATION ON DEVELOPMENT AND EXEMPTED DEVELOPMENT

No. AOO/DC/2025/1198

File Ref No. EC/214/25

SUBJECT: Declaration under Section 5.
Planning and Development Act 2000 as amended
Planning and Development Regulations 2001 as amended

RE: **An additional plant in the form of a scrubber at Analog Devices International, Raheen Business Park, Limerick**

ORDER: Whereas by Director General's Order No. DG/2024/141 dated 07th October 2025, Dr. Pat Daly, Director General, Limerick City & County Council did, pursuant to the powers conferred on him by Section 154 of the Local Government Act, 2001, (as amended by the Local Government Reform Act, 2014 and the Local Government (Mayor of Limerick) and Miscellaneous Provisions Act, 2024), delegate unto Grainne O'Keeffe, Senior Executive Planner the functions as defined in the Local Government Acts, 1925 to 2024.

Now therefore pursuant to the delegation of the functions aforesaid, I, Grainne O'Keeffe, Senior Executive Planner, having considered the report and recommendation of Áine Leland, Executive Planner dated 23/10/2025, hereby order that a Declaration under Section 5 of the Planning and Development Act 2000 (as amended) be issued to Analog Devices International, c/o Brady Shipman Martin, Mountpleasant business Centre, Ranelagh, Dublin 6 to state that the works as described above is

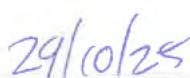
Development and is NOT Exempt Development.

Signed



SENIOR EXECUTIVE PLANNER, PLANNING & PLACE-MAKING

Date



Certified to be a true copy of Approved Officer's Order, Planning & Development Order No. AOO/DC/2025/1198 dated 29/10/25, pursuant to Section 151(7) of the Local Government Act 2001

Signed:



SENIOR EXECUTIVE PLANNER, PLANNING & PLACE-MAKING



Comhairle Cathrach
& Contae Luimnigh
Limerick City
& County Council

Pleanail, agus Crutha Aite
Comhairle Cathrach agus Contae Luimnigh
Bothar Thuair an Daill
Tuar an Daill Luimneach
V94 WV78

Planning and Place-Making
Limerick City and County Council
Dooradoyle Road
Dooradoyle, Limerick
V94 WV78

SECTION 5 – DECLARATION ON DEVELOPMENT AND EXEMPTED DEVELOPMENT

DECLARATION NO.

EC/214/25

Name and Address of Applicant: Analog Devices International, Raheen Business Park, Limerick

Agent: Brady Shipman Martin, Mountpleasant Business Centre, Ranelagh, Dublin 6

Whether the additional plant in the form of a scrubber at Analog Devices International, Raheen Business Park, Limerick is or is not Development or is or is not Exempted Development. The works as described on the plans submitted with the application on the 16th of October 2025.

AND WHEREAS the Planning Authority has concluded that the additional plant in the form of a scrubber at Analog Devices International, Raheen Business Park, Limerick **DOES NOT** come within the scope of exempted development under Class 211 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 (as amended) / Planning and Development Act 2000 (as amended). See Report attached.

NOW THEREFORE the Planning Authority in exercise of the powers conferred on it by Section 5(2) (a) of the Planning and Development Act 2000 (as amended) hereby decides that the said development as described above is **Development and is NOT Exempt Development**.

Signed on behalf of the said Council

Date: 21.10.2025

NOTE: A Declaration on Development or Exemption issued by Limerick City & County Council may be referred to An Coimisiún Pleanála on payment of €220 for review within 4 weeks after the issuing of the declaration.