

DESIGN STATEMENT including Landscape Strategy
to accompany electricity transmission DIS application to An Bord Pleanála

Proposed Substation
at Kish Business Park, Arklow, County Wicklow

October 2022

International
Digital
Infrastructure

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Notes

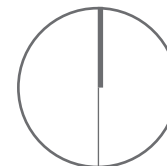
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01 Introduction

01.1 INTRODUCTION

This design statement relates to the proposed Substation Site development for a new information and communications technology facility permitted under 20/1088, comprising of a Substation Building, Control Building and the Customer Compound, with landscaping and associated infrastructure, at Kish Business Park, Arklow, Co. Wicklow. The application to An Bord Pleanála also includes associated transmission line connections.

01.2 APPLICANT AND DESIGN TEAM

The Applicant: Crag Wicklow Limited

The applicant, Crag Wicklow Limited, is a responsible developer of information and technology facilities across Ireland and the UK. Its objective is to support and enhance the country's technology industry through development and employment has secured its position as the primary indigenous company within this sector.

Architect: Reddy | Architecture+Urbanism

Reddy Architecture + Urbanism is a firm of architects and design professionals providing a comprehensive range of design services in Ireland, the UK, Europe and with associated offices in the Middle East and the USA. The practice has accumulated extensive experience in masterplanning large-scale commercial, industrial and mixed-use development schemes, and are especially familiar with the landscapes, built environment and context of the east of Ireland.

This Design Statement (DS) has been prepared by Reddy A+U on behalf of Crag Wicklow Limited. It accompanies and supports a detailed planning application for the development of the Electrical Substation and transmission line connections for the Information and Communications Technology facility (ICT facility *hereinafter*) at Kish Business Park, permitted under Planning Application No. 20/1088. The DS has been prepared with guidance produced by the Department for Environment, Heritage and Local Government and other additional professional bodies. It takes account of the Wicklow County Development Plan and the Arklow Town and Environs Local Area Plan. The DS sets out the background to the proposals, an analysis of the application site, and an explanation of the design process that has informed the evolution of the development proposals. The DS is a supporting document with descriptive information; it should always be read in conjunction with the formal scaled drawings and documents which constitute the planning application.

The Design Team

John Spain Associates

Planning Consultant

AWN Consulting Engineers

Environmental Consultant

Alan Traynor Consulting Engineers Ltd.

Civil and Structural Consultant

Homan O'Brien Engineering

Mechanical and Electrical
Consultant

01.3 APPLICATION SITE

The site is located approximately 2km south of Arklow Town centre. It is a part of the irregular shaped site ICT facility site of greenfield lands with existing mature hedgerows to its perimeter.

The site area is approximately 8.68 hectares.

The application site comprises of existing farmland, defined by road layout as designed in the ICT facility application.

The north west and north east boundaries are defined by the proposed Clogga access road to the ICT facility, whereas south east and south west boundaries are defined by the access road in front and in the south elevation of of ICT facility Building 1 respectively.

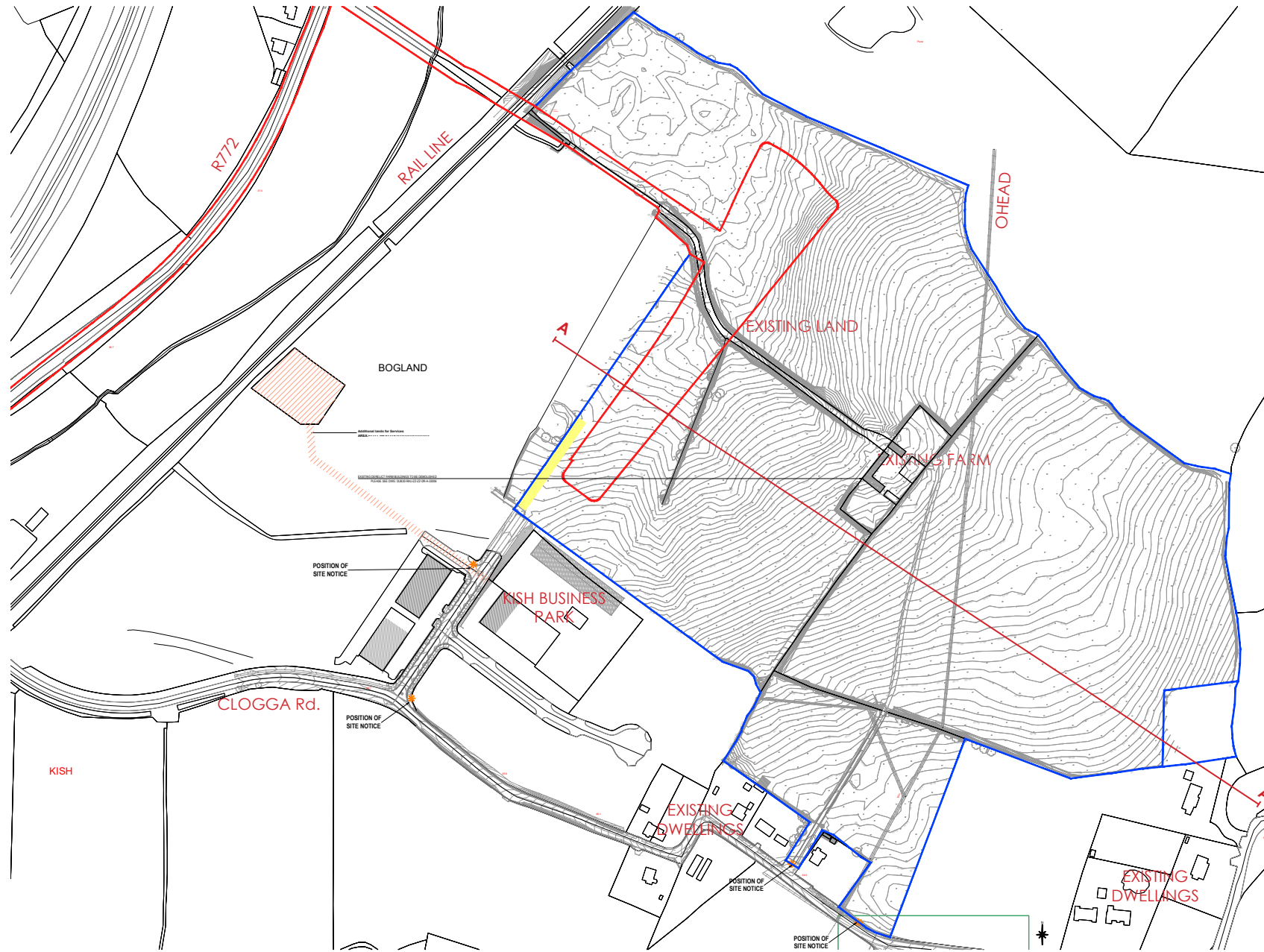
The M11 motorway is located less than 1km to the west of the site providing connectivity to Dublin and along the east coast. This connects to the R772 regional road which provides access to the site via Kish Business Park and towards Arklow town.



Clogga Road Kish Business Park



01.4 EXISTING SITE



A-A

+37m AOD

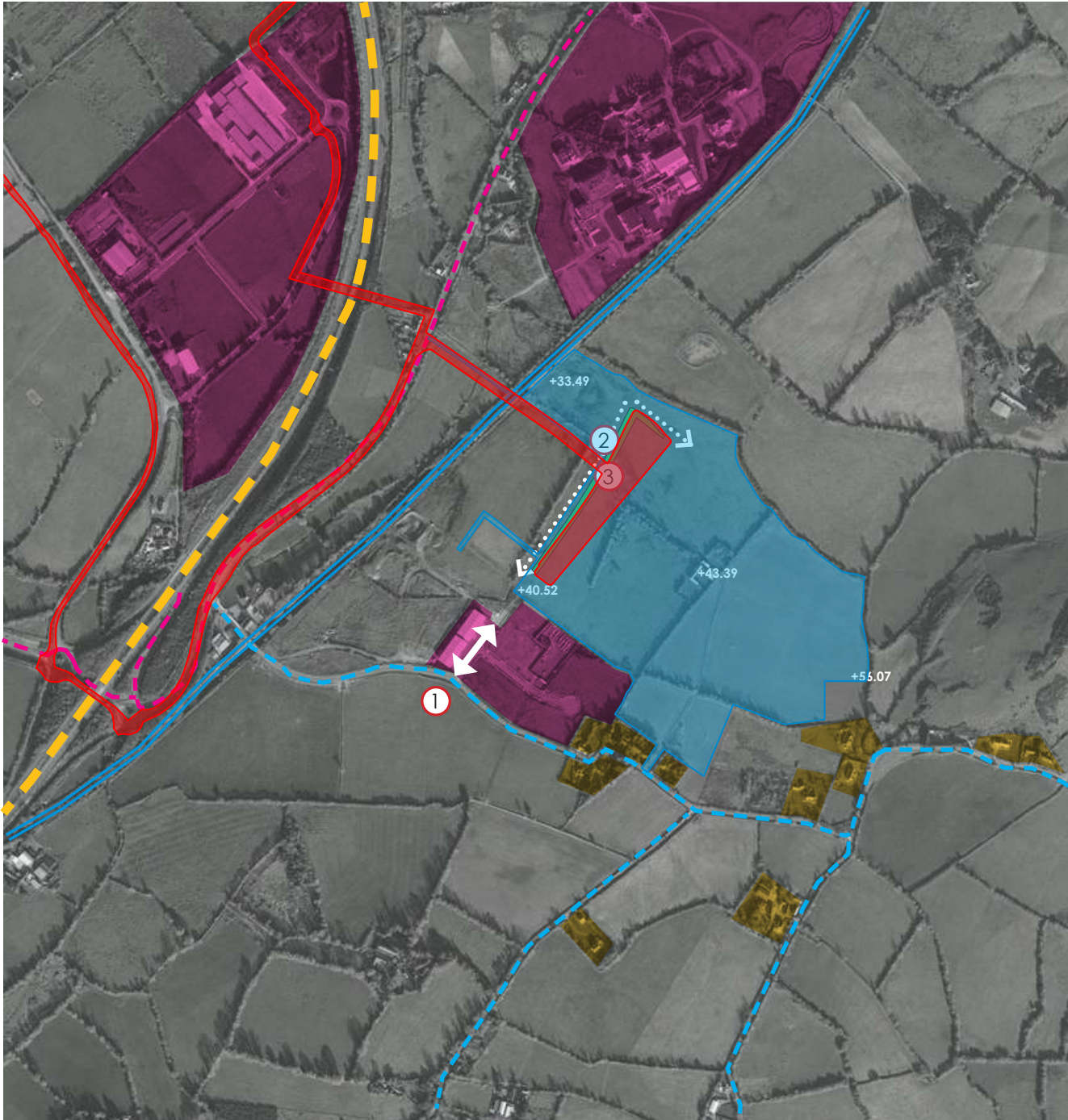
+55m AOD

01.5 SITE LAYOUT PERMITTED UNDER 20/1088



02 Strategy

02.1 SITE OPPORTUNITIES | CONSTRAINTS



LEGEND

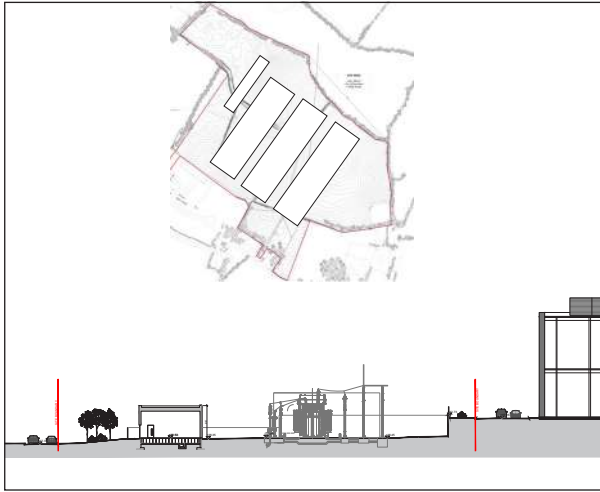
- COMMERCIAL LAND USE
- RESIDENTIAL LAND USE
- M11 Motorway
- Regional Road (R772)
- Railway line (Dublin - Wexford)
- Local Road

① The M11 motorway provides vehicular connectivity along the east coast between Dublin and Wexford. This artery is connected to the site via the R772, providing access to Arklow town, and Clogga Rd. which crosses the rail line. Kish Business Park to the south-west of the site has existing road infrastructure connecting the entry point of the application site to the network of surrounding transport routes.

② The site access point will run along the north-west boundary allowing access to lands beyond the application site in the north thus ensuring future land use and viability. Further internal roads across the application site will seek to provide balanced road infrastructure with existing topographical constraints.

③ The north-east and north-west area of the site will serve as a green buffer for the Substation site to minimise the impact buildings will have on the environment. This Substation application is defined as critical infrastructure in support of the permitted ICT facility outlined further in this document.

02.2 SITE STRATEGY



TOPOGRAPHY

The site topography levels range generally from approximately +34.5m AOD along the north-west boundary to 38.5m on the south-east, and up to +40.8m at the south-west corner for the ICT site itself.

The levels in relation to the Substation application, will generally be at a similar grade of the distributor road coming through Kish Business park.

A retaining wall will account for the level change between the permitted ICT application area and this substation application. Refer to the section drawing inset above and also detailed contextual sections included in this application documentation.



ACCESSIBILITY

The proposed substation application buildings will be accessed from the distributor road which runs north east from Clagga road and through the current Kish Business Park.

Site access is proposed via Kish Business Park to the north-west of the application site. The access roads (shown above in red) are already permitted as part of the ICT Facility development under the Planning Permission No. 20/1088



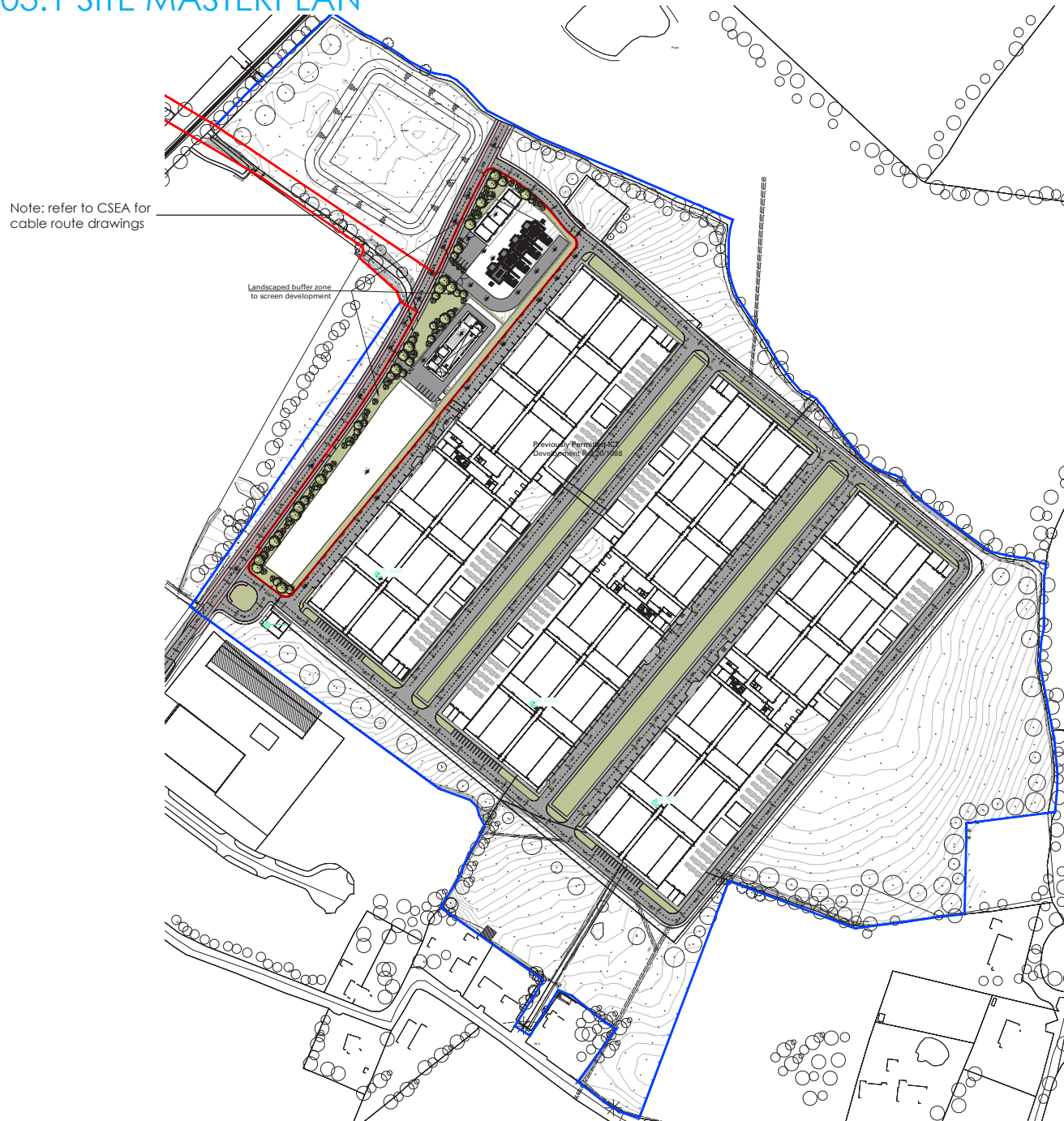
INTEGRATION

The site will be integrated into the wider context of the development permitted under Planning Permission No. 20/1088.

The landscape strategy will seek to mitigate the development proposals through buffer and screen planting along the north-west / north-east boundary.

03 Proposals

03.1 SITE MASTERPLAN



The site masterplan has been developed with the desire to minimise site impacts, ensure the greenfield land use is optimised and provide considered landscaped screening from existing properties adjoining the site.

The layout of the site permitted under 20/1088 uses the existing site topography as a base reference for creating an efficient layout in terms of movement, access and mitigation of site impacts. Building footprints are carved into the existing topography as far as is reasonably practical to reduce overall height impacts and massing on site while ensuring accessibility is provided for all.

The Substation site is located at the bottom of the slope. It is accessible from the permitted distributor road which comes through Kish Business park and runs along the the north-west boundary of the site. Green buffers have been proposed along that road in order to minimise the impact of the proposed buildings.

03.2 3D VIEWS

Control Building
Customer Compound
110 kv Eirgrid Substation
Area reserved for future development
Permitted ICT buildings under planning reference 20/1088



Existing warehouse buildings
to south west of site

03.2 3D VIEWS

110 kv Eirgrid Substation
building



03.2 3D VIEWS

Control
Building

Landscape buffer along road boundary to
screen proposed development



04 Landscape

04.1 LANDSCAPE STATEMENT

This Landscape Design Statement is prepared on behalf of Crag Wicklow Limited as part of the detailed planning application for the proposed development of a Substation and transmission lines to support the permitted ICT facility. This application comprises two buildings and the Customer Compound with landscaping and associated infrastructure, at Kish Business Park, Arklow, Co. Wicklow.

The Substation and ICT buildings will have reduced impact on the landscape and visual character of the area through the protection and retention of existing mature hedgerows, augmented with additional earth mounding, screen planting and also enhancing the tree planting strategy along access routes. Careful consideration has been given to mitigate the visual impact and maximise the screening of the development to integrate the proposals with the surrounding context.



The existing ICT Facility site view from Kish Business Park

04.2 SITE CONTEXT

The subject site has an area of c. 8.68 hectares and this represents the extended red line north of the motorway to pick up the cable route associated with this application.

The area generally associated with the substation buildings themselves is 1.79 Ha

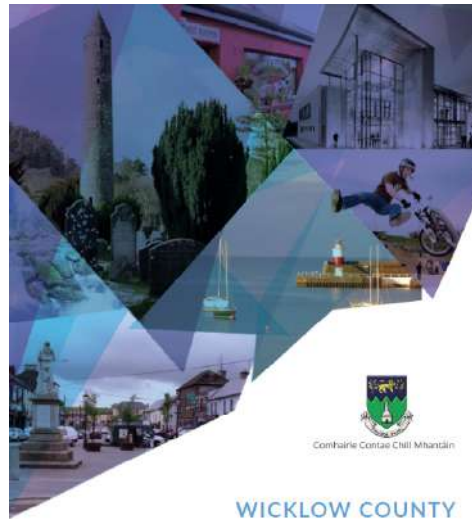
The area of the proposed application is longitudinal in shape and neighbours the permitted ICT application area ref 20/1088 which when constructed will be to the north and east of the existing Kish Business Park to the south eastern boundary along Clogga Road.

In addition to the mitigation and preservation measures associated with application Ref 20/1088, this application will support the greening of the area with a landscape buffer to the north west and north east to screen the substation from view from public road. Please refer to the landscape and visual impact assessment included in this application.

Wicklow County Development Plan 2016 -2022 includes the following objectives:

NH18 *To encourage the preservation and enhancement of native and semi-natural woodlands, groups of trees and individual trees, as part of the development management process, and require the planting of native, and appropriate local characteristic species, in all new developments.*

NH19 *To encourage the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County.*



Comhairle Contae Chill Mhantáin

WICKLOW COUNTY
Development Plan
2016 - 2022

December 2016



WICKLOW COUNTY DEVELOPMENT PLAN
2022 - 2028

Interim Plan Adoption Decision Document

- September 2022 -



Comhairle Contae Chill Mhantáin



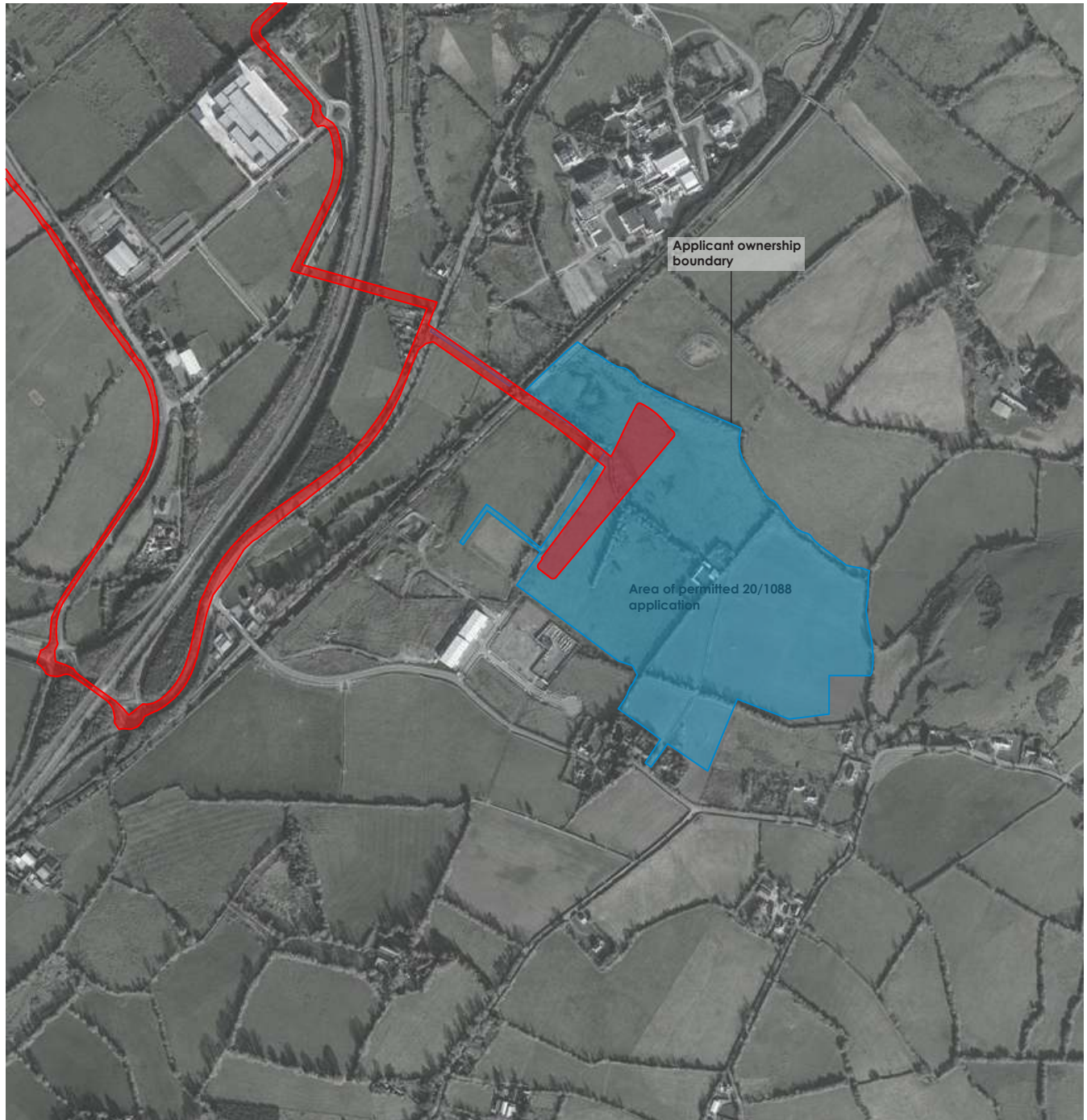
Images of existing lands of where permitted ICT application is granted.

04.3 SITE DESCRIPTION

Kish Business Park borders the south-west corner of the site and will provide the main entrance to the development through a new extended access / distributor road.

The north-west part of the site will be screened continuously by proposed planting as permitted under the previous ICT application ref. 20/1088.

Further, the roadside boundary of this substation application will be landscaped to create a visual buffer and reduce impact of the proposed development when observed from public road.



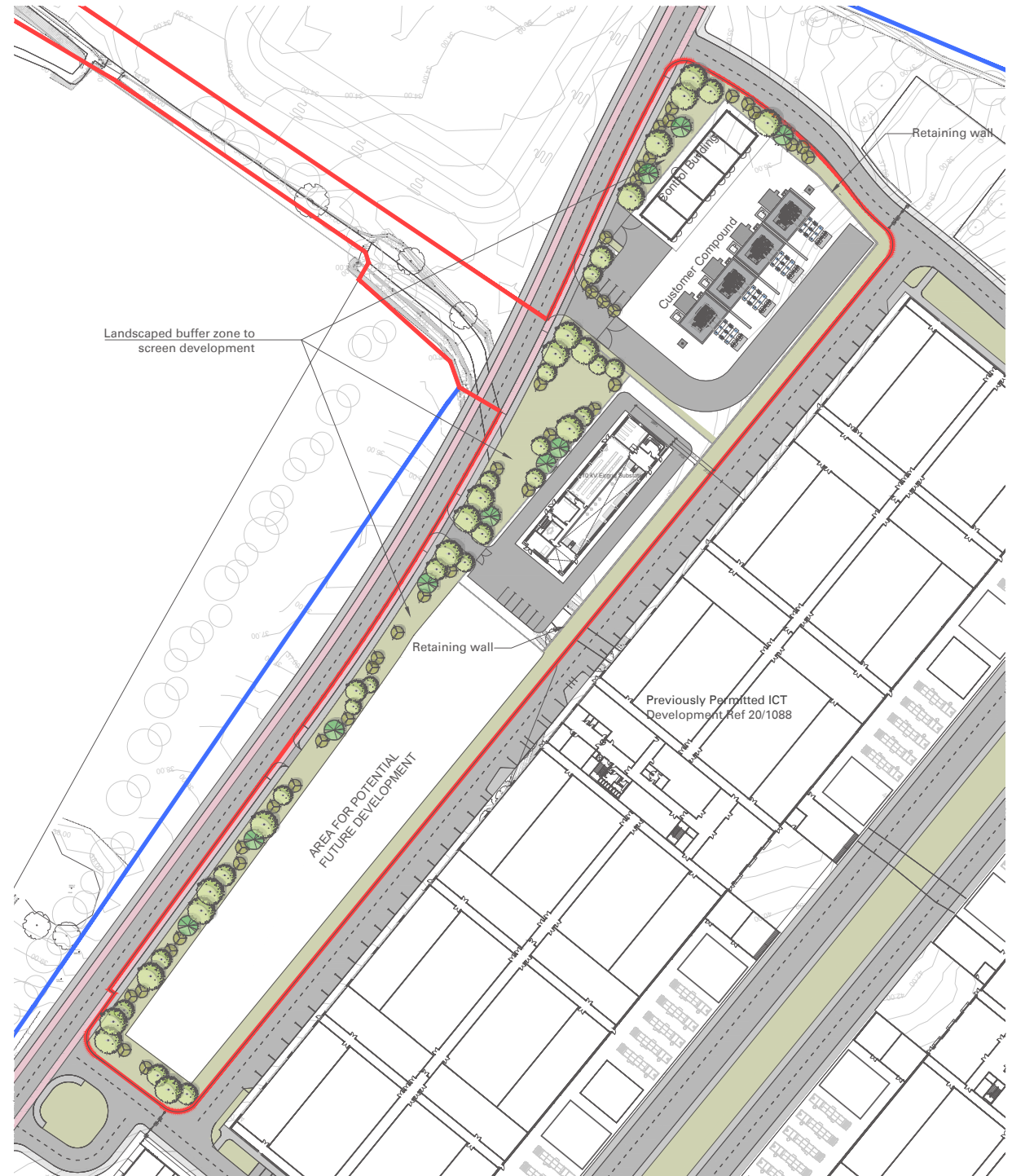
04.4 LANDSCAPE PROPOSALS

The proposed development aims to blend into the surrounding environment with the retention of existing planting / hedgerows around the boundary of the site and the use of additional screen planting to maximise buffer/screening, while also allowing for the creation of habitats for birds and wildlife.

The retention and protection of the existing boundary trees and planting are a key element of the landscape proposal; specifically the hedgerows along the south-west and south-east of the site of the permitted application 20/1088

A proposed sub-canopy and tree planting layer will be planted with the intention to create a buffer along the public road and blend the proposed development into its surrounding environment. Woodland whips planting of *Pinus sylvestris*, *betula pendula*, *Prunus spinosa* and *Ilex aquifolium* are proposed which work well as screening layers.

Tree planting of *Acer pseudoplatanus* 'Rotterdam' will provide seasonal interest to the scheme and respond to Local Authority objectives.



04.5 SUGGESTED SPECIES

SEMI-MATURE TREE PLANTING

Acer pseudoplatanus 'Rotterdam'
Amelanchier x grandiflora 'Robin Hill'

WOODLAND WHIP PLANTING

Pine (*Pinus sylvestris*)
Birch (*Betula pendula*)
Hawthorn (*Crataegus monogyna*)
Blackthorn (*Prunus spinosa*)
Ivy (*Ilex aquifolium*)

SUBCANOPY PLANTING

Yew - *Taxus baccata*
Viburnum opulus
Euonymus europaeus
Sambucus nigra

Predominantly native and adaptive planting,
90-120cm in height planted at 1.5m centres.

All planting works are to be carried out
to BS8545: 2014 (Trees from nursery to
independence in the landscape). Good
quality topsoil to BS3882: 2015. All tree works
to be carried out to BS3998:2010 (Tree Work
Recommendations)



'Rotterdam'



'Robin Hill'



Pine



Hawthorn



Birch



Blackthorn

04.6 OUTLINE SPECIFICATION

Landscape works are to be undertaken by an ACLI approved landscape contractor and in accordance with BS4428:1989 Code of General Practice for general landscape operations.

Trees and sub canopy layer along the northwestern roadside boundary are to assist with visual screening of the proposed development into the surrounding landscape in accordance with BS583:2012 Trees in relation to Construction.

The landscape will be implemented, managed and maintained for five years to ensure 100% coverage of the site. The proposed mixed woodlands planting will be such that it establishes a closed canopy within six years. The planting is to be carried out within the first planting season (November - March) after construction on a phased basis.

Landscape design and input by:

JJ Digby
B.Ag.Sc.(Land. Hort.) M.I.L.I.
Landscape Architect