August 2023

Environmental Report - Addendum

Proposed 220kV Substation and Grid Connection

STRATEGIC POWER PROJECTS

Strategic Power Projects

Toomes and Monvallet

MALONE O'REGAN ENVIRONMENTAL

MALONE O'REGAN

Form ES - 04

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Title: Environmental Report - Addendum, Proposed 220kV Substation and Grid Connection, Strategic Power Projects, Toomes and Monvallet

Job Number: E1963

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Checked By: Kevin O'Regan **Signed:** KOR

Approved By: Kevin O'Regan **Signed:** KOR

Revision Record

Issue No.	Date	Description	Remark	Prepared	Checked	Approved
01	28/08/23	Report	Final	AB	KOR	KOR

Environmental Report - Addendum

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Strategic Power Projects

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APPENDICES

1 INTRODUCTION

Malone O'Regan Environmental has been commissioned by Strategic Power Projects Limited to prepare an Addendum to the Environmental Report (ER) that was submitted in support of a SID application (Reference 315456-23) in support of a response to An Bord Pleanála letter dated 31st July 2023.

In this July 2023 letter, the Board invited submissions by the Applicant on observations made by Louth County Council, Transport Infrastructure Ireland and the Department of Housing, Local Government and Heritage which were previously circulated with your correspondence of 13th and 29th March 2023.In response to the TII submission, it can be confirmed there will only be minimal truck movements, required during the construction stage that will exceed the weight thresholds set by the Road Traffic (Construction Equipment & Use of Vehicles) Regulations 2003, SI No. 5/2003 ("The Regulations"). The current proposal for a 220kV substation would require the transportation of temporary partial discharging commissioning equipment to and from the site. This is very specialised equipment that would have to be imported from the UK. This equipment would comprise ca. 4No. oversized loads that would need to be transported to and from the Site along the national road network from Dublin Port. In order to avoid this potential impact on the national road network, an alternative design proposal has been presented to the Board for consideration that would involve the construction of 2 no. 110kV substations to match the 220kV power capacity of the current proposal.

This proposed alternative design will require some amendments to the proposed development described and assessed in the original ER. Therefore, for completeness, this ER Addendum Report has been prepared to document whether any potential emissions or impacts from this proposed 2 no. 110kV substations will have the potential to result in any "Likely and Significant" (both negative and/or positive) effects that were not considered as part of the original ER.

1.1 SID Infrastructure

The proposed alternative design compromising of 2 no. 110kV substations will be critical infrastructure that will be intrinsically linked to both permitted renewable energy projects, comprising of both solar and battery storage developments. As part of the overall phased development of the Site, the following Permitted Developments are linked to the Proposed Development:

- **Louth County Council Ref No. 21/631 (Phase 1 - Granted)** for the permitted development for the construction of a solar PV and batter energy storage system development with associated substations and grid connections on a ca.42.23ha site.
- **Louth County Council Ref. No: PA 21/1478 (Phase 2 – Granted)** for the permitted alterations and extensions to the solar PV and battery energy storage system permitted under PR 21/631.
- **Louth County Council Ref. No: 22/534 (Phase 3 – Granted)** for development of a solar PV development as an extension to that approved under Ref No. 21/631 on a site of a total area of ca. 81.37ha. This application was approved following the submission of the Proposed Development SID Application.

1.2 Proposed 2 no. 110kV Substation

The components of an individual 110kV substation for this connection method are similar to those of a 220kV substation and would be close to or below the weight threshold stipulated in the Regulations. The footprint, layout and design of a single 110kV substation is also not dissimilar to that of a 220kV substation and footprint layout and the design of 2 no. 110kV substations is not dissimilar to the 2x 37KV substations already permitted under planning permission (Ref 21/631) on the site which this current proposal seeks to replace.

The Proposed Development, originally presented as part of the SID Application, entails the establishment of a 220kV substation, associated 220kV underground grid connection, cabling and associated works. This was designed to connect all three phases under 1 connection. However, since the original application, EirGrid has since offered to connect to Phase 1 with a 110kV grid connection, with the applicant accepting this grid offer.

The amended alternative design to the substation, the subject of this addendum, involves the use of 2 no. 110kV electrical substations, complete with customer and EirGrid compounds, and corresponding 110kV grid connections.

Outlined in Table 1-1 below are the alterative design that will occur for a comprehensive depiction of the Proposed Development, if the proposed 2 no. 110kV substations is permitted.

Table 1-1: Changes to the Description of the Proposed Development

Original Environmental Report	Changes in the proposed amendment of the energy system
Redline Boundary	No Change
1No. 220kV substation	2No. 110kV substations
1No. IPP building (with satellite dish attached) measuring ca. 9.9m x ca.19.3m x 8.0m (height)	2No. IPP buildings (modular steel construction) measuring 18.5m x ca.5.5m x ca.4.9m (hight)
1No. EirGrid Control Building measuring ca.11.7m x ca. 13.0m x ca.6.8m (height)	1No. EirGrid Control Building measuring ca. 25m x ca.18m x ca. 3/8m (height)
1No. Power Transformer and 1No. House Transformer (House TX).	2No. Power Transformers, 1No. House Transformers (House TX). 2No. Auxiliary Transformer.
1No. interface kiosk	2No. Interface kiosk
3No. lighting masts and 7No. lamp standards	9No. lighting masts and 12No. lamp standards
1No proposed underground cabling (220kV) and ducting which will extend from the substation site to the existing ESB substation	2No. proposed underground cabling (110kV) and ducting which will extend from the substation site to the existing ESB substation
Electrical apparatus, plant and equipment, overhead and underground electrical and communication cabling and associated works	No Change
Fencing Gates	No Changes
Parking, compounds and associated works	No Change

Table 1-2 below illustrates the updated drawings that have been included as part of this addendum, with context of the previous drawings submitted as part of the original SID application also provided.

Table 1-2: Context of drawings included

220kV Drawing Pack	2 no. 110kV drawing pack
Substation Location Map (05895-DR-001)	Substation Location Map (05895-DR-001-P7)
Substation Layout Plan (05895-DR-002)	Site Layout Plan (05895-DR-002-P8)
Overall Location Map (05895-DR-003)	Overall Location Map (05895-DR-003-P7)

Substation Elevations (05895-DR-201)	Substation Elevations (05895-DR-201-P8)
Plan & Elevations & Sections (05895-DR-202)	Control Building Plan & Elevations & Sections (05895-DR-202-P7)
Plan & Elevation & Sections (05895-DR-203)	IPP Building- Plan and Elevations (05895-DR-203-P7)
220kV UGC 200 Ducts with ECC Duct (05895-DR-209)	110kV Ducting through Regional/Local Roadways and Public Road Reinstatement with ECC (05895-DR-209)
220kV UGC200 Ducts with ECC Duct (05895-DR-210)	110kV Ducting in Access Track (with ECC Duct) (05895-DR-210)
Lightning Monopole Foundation Details (05895-DR-204)	**Unchanged from original application**
Gate & Fencing Details (05895-DR-205)	**Unchanged from original application**
Site Compound & Access Road Details (05895-DR-206)	**Unchanged from original application**
Drainage Detail (05895-DR-207)	**Unchanged from original application**
Rainwater Harvesting Detail (05895-DR-208)	**Unchanged from original application**
Auxiliary Dry Type Traffo (05895-DR-211)	**Unchanged from original application**
Interface Kiosk (05895-DR-212)	**Unchanged from original application**
Site Location Map 1 to 10560 (P700)	**Unchanged from original application**
Site Location Map 1 to 2500 (P701)	**Unchanged from original application**
Proposed Site Layout – redline area (P704)	**Unchanged from original application**

To support this application, 2No. hardcopies of each of the amended drawings have been provided to the board.

1.3 Overview of the Site and Context

The suggested alteration to the substation layout, as discussed in section 1.1 above, will not impact the overall site area or any element of the redline boundary outlined in the current SID Application.

1.4 Environmental Report (ER) Addendum

This Environmental Report (ER) Addendum has been prepared in accordance with all relevant legislative and best practice guidelines, refer to Chapter 2 of the original ER.

As in the original ER, the criteria for determining the significance of impacts and the effects are set out in Figure 1-2 below, taken from the EPA Guidance “Guidelines on the Information to be Contained in Environmental Assessment Reports” [1]. Definitions of impact, as outlined by the EPA and set out in the original ER, apply throughout this report.

In addition, this report takes into cognisance all relevant publications and guidance published since the original ER was submitted in January 2023.

Figure 1-1: Development Overview

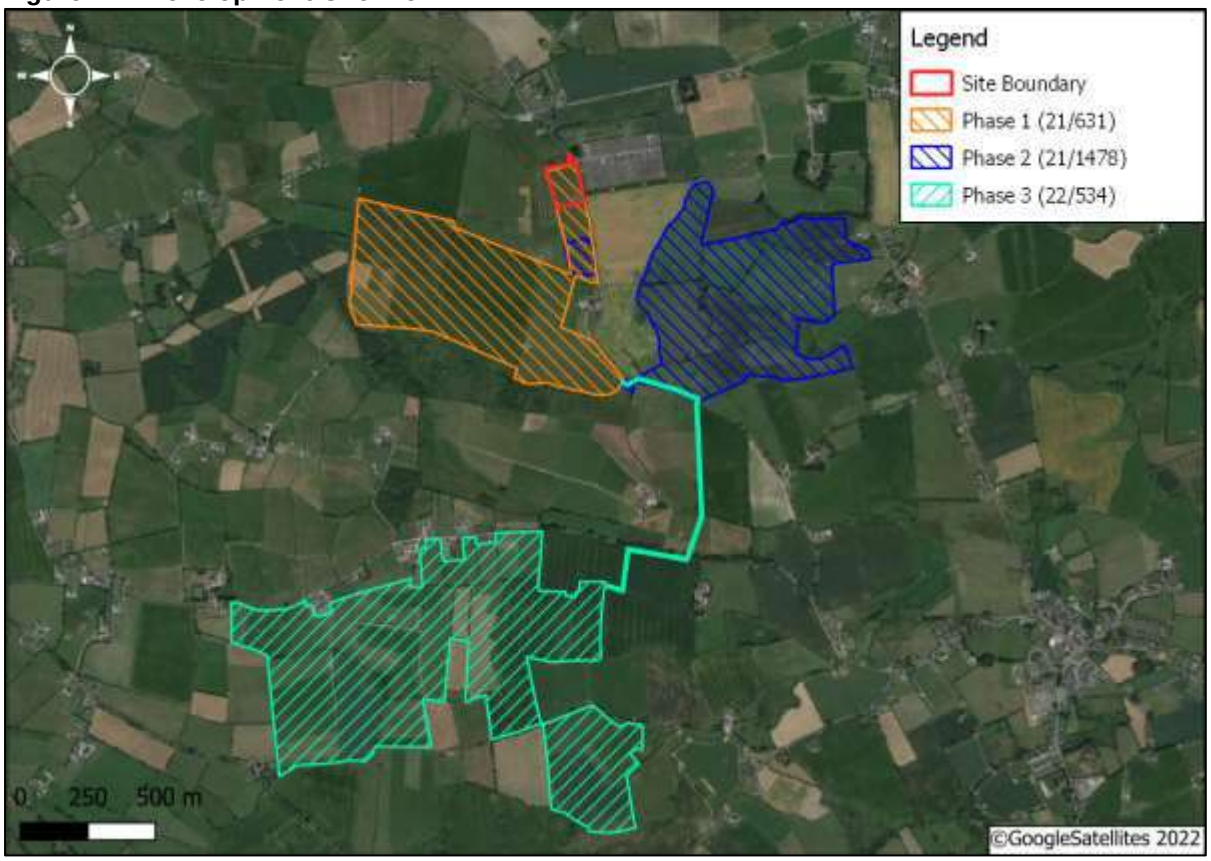
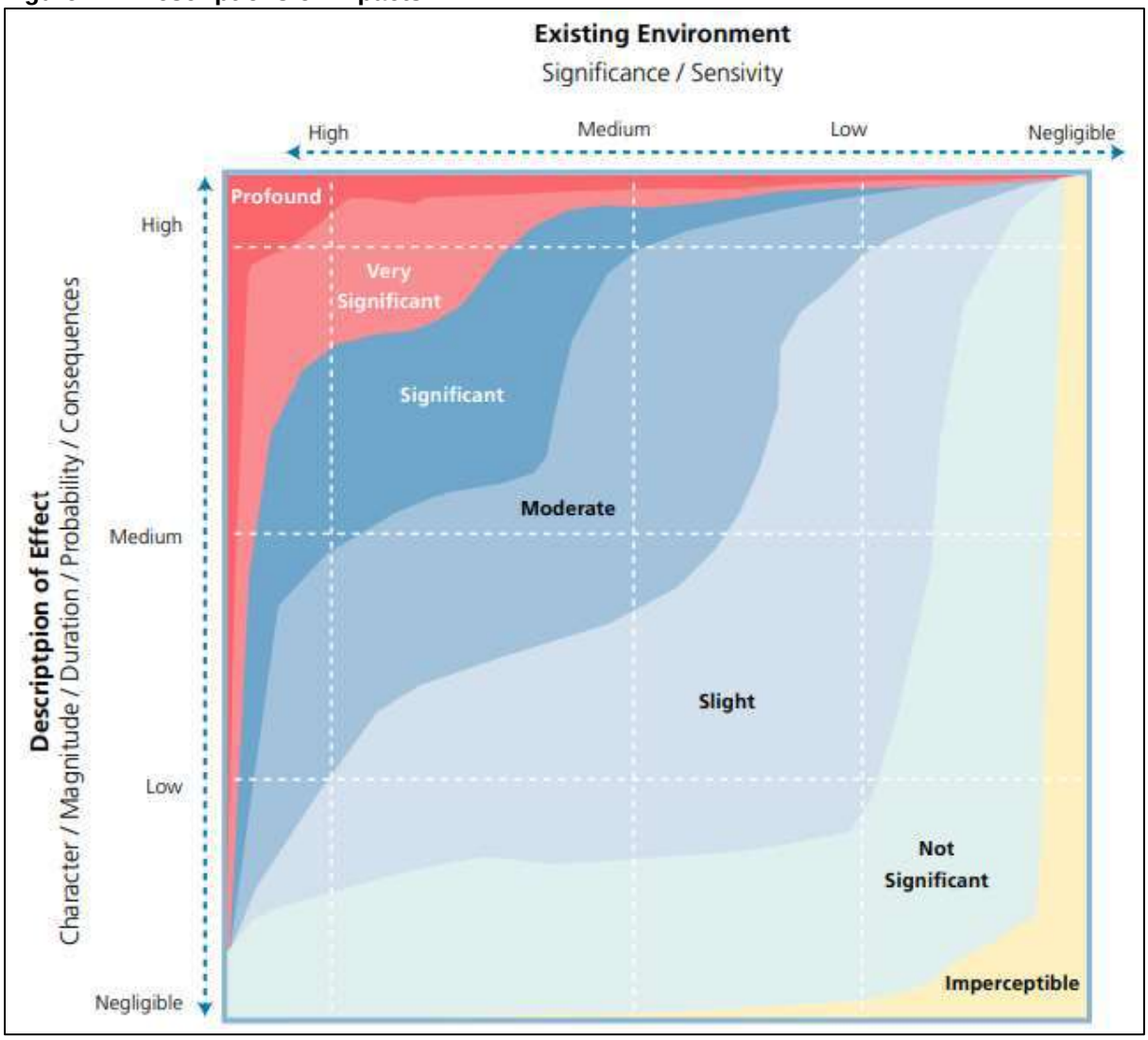


Figure 1-2: Descriptions of Impacts



2 ENVIRONMENTAL IMPACT ASSESSMENT SCREENING

As per the original proposal the alternative design of a 2 no. 110kV would not require an EIAR in accordance with Schedule 5 (Mandatory EIA Requirement) and Schedule 7 (Significance Assessment) of the Planning and Development Regulations 2001 (as amended) [2].

3 PLANNING CONTEXT AND NEED FOR THE PROPOSED DEVELOPMENT

The proposed addendum to the Proposed Development will not bring any significant modifications to the initial content presented in Chapter 3 of the ER. Consequently, the conclusions drawn from the Environmental Report (ER) regarding the Planning Context and the Need for the Proposed Development remain valid with respects to the 2 no. 110kV substations.

4 BIODIVERSITY

The Proposed Development has brought about no significant alterations to the initial content of the Biodiversity Chapter (Chapter 6) that was presented in the original SID application. The following conclusions were drawn concerning biodiversity:

Taking into account the nature of the Proposed Development and all the enhancement measures to be implemented as part of the Overall Development, it is considered that the Proposed Development is consistent with the National, Local and Municipal planning policies and objectives, will support the protection and enhancement of the environmental quality of the area. It is considered that the Overall Development will have a positive impact on local biodiversity.

The conclusions drawn from the Environmental Report with regards to Biodiversity in respect of the proposed addendum to the Proposed Development remain valid.

5 APPROPRIATE ASSESSMENT

A separate Stage 2: Appropriate Assessment – Natura Impact Assessment was prepared for the 220kV substation submission. This assessment adhered to the applicable legislation and guidelines. The assessment yielded the following conclusion:

It has been objectively concluded, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Development and all associated works, and with implementation of the proposed mitigation measures, that the Proposed Development will not, either alone or in combination with other plans or projects, adversely affect the integrity of the Dundalk Bay SAC and SPA or any other European site in light of the site's conservation objectives and best scientific knowledge. No reasonable scientific doubt exists in relation to this conclusion.

The conclusions drawn from the Natura Impact Assessment, in respect to the proposed addendum to the Proposed Development, remains valid.

6 WATER

The alternative design proposed in this addendum has led to no significant alterations that have the potential to effect Water (Chapter 7 of the ER). The conclusions drawn in the initial submission with regards to water are as followed:

As there will be no net increase in the discharge rate of runoff volume from the Site, the Proposed Development will not have any impact on any potential offside flooding events. The development of the substation and its associated infrastructure at the site will not result in any adverse impact to the hydrological regime of the receiving environment as there will be no identified impact on the site or any offsite receptors. Therefore, it is considered that the Proposed Development is an appropriate development for this Site from a flood risk perspective.

The conclusion drawn from the Water chapter, in respect to the proposed addendum to the Proposed Development, remains valid.

7 NOISE

The alternative design modification outlined in this addendum will not result in substantial changes to the sources of noise emissions associated with the Construction Phase activities, as detailed in the original submission (Chapter 8 of the ER). Therefore, the conclusions regarding the Construction Phase remain applicable, as stated:

During the Construction Phase, as per any construction project. The potential exists for temporary noise nuisance during specific construction work. Due to the distance of proposed construction works from NSRs identified and the general methods what will be involved in constructing ancillary infrastructure, standard construction noise will not breach noise limits at NSRs with exception of NSR11 for a short period.

During the Operational Phase, the proposed modification to the initial design has led to the incorporation of extra noise sources, owing to the adoption of a 2 no. 110kV substation layout. In the original submission, a single noise source (A Power Transformer) was chosen to depict operational noise emissions linked to the Proposed Development. However, with the alternative design, a total of 6No. noise sources have been incorporated, comprising 3No. House Transformers and 3No. Power Transformers. Table 7-1 below gives a comprehensive comparison of the inputs from these noise sources when compared to the initial 220kV substation design.

Table 7-1: Noise Emission Sources for 220kV and 2 no. 110kV substation

Plant Equipment Type	Technical Details	Reported Sound Power dB(A) at source	Sound Pressure dB(A) at 10m
220kV Substation			
Transformer	ABB 2500kVA Transformer (liquid filled distributor) or similar	80	49
2No. 110kV substations			
Power Transformer	110kV. Transformer energised at rated voltage with all fans running	89	61
House Transformer	33kV	40	12

The anticipated operational noise levels linked to the Proposed Development were evaluated considering conservative estimations of emissions. These range from 0 to 20dB (for the 220kV substation) and 0-30dB (for the 2 no. 110kV substations) at Noise Sensitive Receptors. The conclusions drawn considering noise emissions during the Operational Phase were detailed in Chapter 8 of the ER:

The characteristics of the proposed noise emissions will be similar to the existing acoustic environment and all results showed predicted worst-case values below the EPAs NG4 low background noise limits at all times at all NSRs. Therefore, as pert the IEMA Guidance (refer to Figure 8-4) it was predicted the cumulative impact during a worst-case scenario was deemed to be Negligible to Slight resulting in a Not Significant impact at all NSRs.

The projected noise emissions for the 2 no. 110kV substations, when considering a conservative estimation of emissions, demonstrate noise emissions that are comparable to the current acoustic environment. Additionally, all the values remain below the low background noise limits outlined in the EPA NG4s regulations [3], maintaining this consideration consistently across all times and at all Noise Sensitive Receptors. Consequently, the conclusions established in the original ER pertaining to the potential effects on Noise Sensitive Receptors retain their validity for the proposed addendum.

8 LANDSCAPE AND VISUAL

The proposed addendum from a 220kV substation to 2 no. 110kV substations will necessitate an alteration in the internal design and the construction of additional structures, including

another IPP building (Tabe 4-1 above). Photomontages from the same visual reference points (VP1 to VP6) presented in the original ER were prepared to assess the visual impacts of the proposed alternative design in detail (Appendix B). As the visual reference points are measured at the same location, no change in the overall sensitivity of these receptors is anticipated between the existing design and the proposed amendment.

Table 8-1 and 8-2 below presents a comparison of the 'Visual Impact Magnitude' and the 'Pre-Mitigation Significance/ Quality/ Duration of the Impacts' between the original design (220kV substation) and the proposed alternative design (2 no. 110kV substation) for each of the visual reference points.

Table 8-1: Visual Impact Magnitude (Pre & Post Mitigation) between 220kV and 2 no. 110kV substations

Design	VP1	VP2	VP3	VP4	VP5	VP6
Proposed addendum (2 no. 110kV substations)	Negligible	Low	Negligible	Negligible	Negligible	Negligible
Original Design (220 kV substation	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

Only the view from a commercial garage/shop on the R178 (VP2) shows a change in the visual impact magnitude between the existing design and the proposed addendum, increasing in magnitude from Negligible to Low. The proposed alternative design is almost entirely screened by existing vegetation and landform from this location, with only the site fence and the tips of some of the taller, external electrical infrastructure having the potential to be visible from this location. Once mitigation planting that forms part of the consented Monvallet I Solar Farm becomes established, only the tips of the taller infrastructure will be visible from this location.

Table 8-2: Pre-Mitigation Significance/ Quality/ Duration of Impact

Design	VP1	VP2	VP3	VP4	VP5	VP6
Proposed alternative design (2 no. 110kV substations)	Imperceptible / Neutral / Long Term	Slight-imperceptible / Neutral/ Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term
Original Design (220 kV substation	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term	Imperceptible / Neutral / Long Term

As with the Magnitude of potential visual impacts, only VP2 saw a slight increase in the Pre-Mitigation Significance, increasing from 'Imperceptible' to ' Slight Imperceptible'.

The conclusions as outlined in Chapter 9 of the initially submitted ER stand as follows:

In this context there is very little consequence in terms of physical impacts to the site, the landscape character of the area and the visual impacts at surrounding receptors that will arise from the Proposed Development. Consequently, there is no material cumulative impacts. It is not considered that there will be any significant visual impacts arising from the Proposed Development.

Considering the scale and nature of the Proposed Development's activities, it can be concluded that a proposed alternative design of 2 no. 110kV substations will offer little consequence in terms of visual or landscape impacts on sensitive receptors in the vicinity of the Site. Consequently, the initial conclusion from the ER remains applicable and valid.

9 CULTURAL HERITAGE

The proposed addendum will not introduce any changes to the design that could be considered to have an impact on elements initially presented in the Cultural Heritage chapter (Chapter 10) of the original ER.

The conclusions of the assessment were as followed:

There are no archaeological monuments in the boundary of the Site. The main elements requiring mitigation involve avoiding direct impact on any potential buried material of archaeological significance and this is best achieved by archaeological monitoring of areas of significant ground disturbance such as parts of the access tracks and substation construction. Therefore, significant ground disturbances should be subject to monitoring by a suitably qualified archaeologist in accordance with national guidelines.

Given the nature and scale of activities associated with the proposed addendum, the above conclusion submitted in Chapter 10 remains valid.

10 TRAFFIC

The findings of the traffic impact assessment as presented in support of the original application would broadly remain valid for the construction and operational phases of a 2 no. 110kV development.

The proposed alternative design will lead to a reduction in 4No. oversized loads, as discussed in section 1 above, which would have been necessary for transporting specialist commissioning equipment to and from Dublin Port to the Site. The conclusions outlined in the Traffic Chapter of the original ER (Chapter 11) were as follows:

The main potential period in which traffic issues might arise will be the temporary construction phase. The establishment existing access to sites for the Proposed Development, Permitted Developments and the Proposed Final Phase will provide safe access for all construction vehicles.

The reduction in the required number of oversized loads due to the proposed alternative design will result in a slight positive effect on temporary traffic impacts during the construction phase when compared to the original 220kV design. However, it's important to note that Construction Phase activities will still lead to a slight temporary increase in traffic on local roads, which will result in slight temporary negative effects. Therefore, the overall conclusions stated in Chapter 11 of the ER regarding traffic remain valid.

11 SCHEDULE OF ENVIRONMENTAL COMMITMENTS

The modification to the internal design of the Proposed Development will not impact the Schedule of Commitments for the Construction Phase. Consequently, Table 13-1 in the original report retains its validity.

12 CONCLUSIONS

The assessment of the original design compromising of a 220KV Sub-station as part of the ER concluded that the Proposed Development will not have the potential to result in any "Likely and Significant" effects on the surrounding environment. In response to a submission from TII,

an alternative proposal of 2 no. 110kV substations has been presented for consideration. This alternative proposal would still match the 220kV power capacity of the current application but would reduce the number of oversized loads required on the national road network.

The findings presented in this ER addendum confirm that any potential emissions or impacts associated with the use of a 2 no. 110kV alternative substation design, along with the related works, will not possess the likelihood of including any “Likely and Significant” effects that haven’t already been addressed as part of the original ER submitted to An Bord Pleanála within the current SID application.

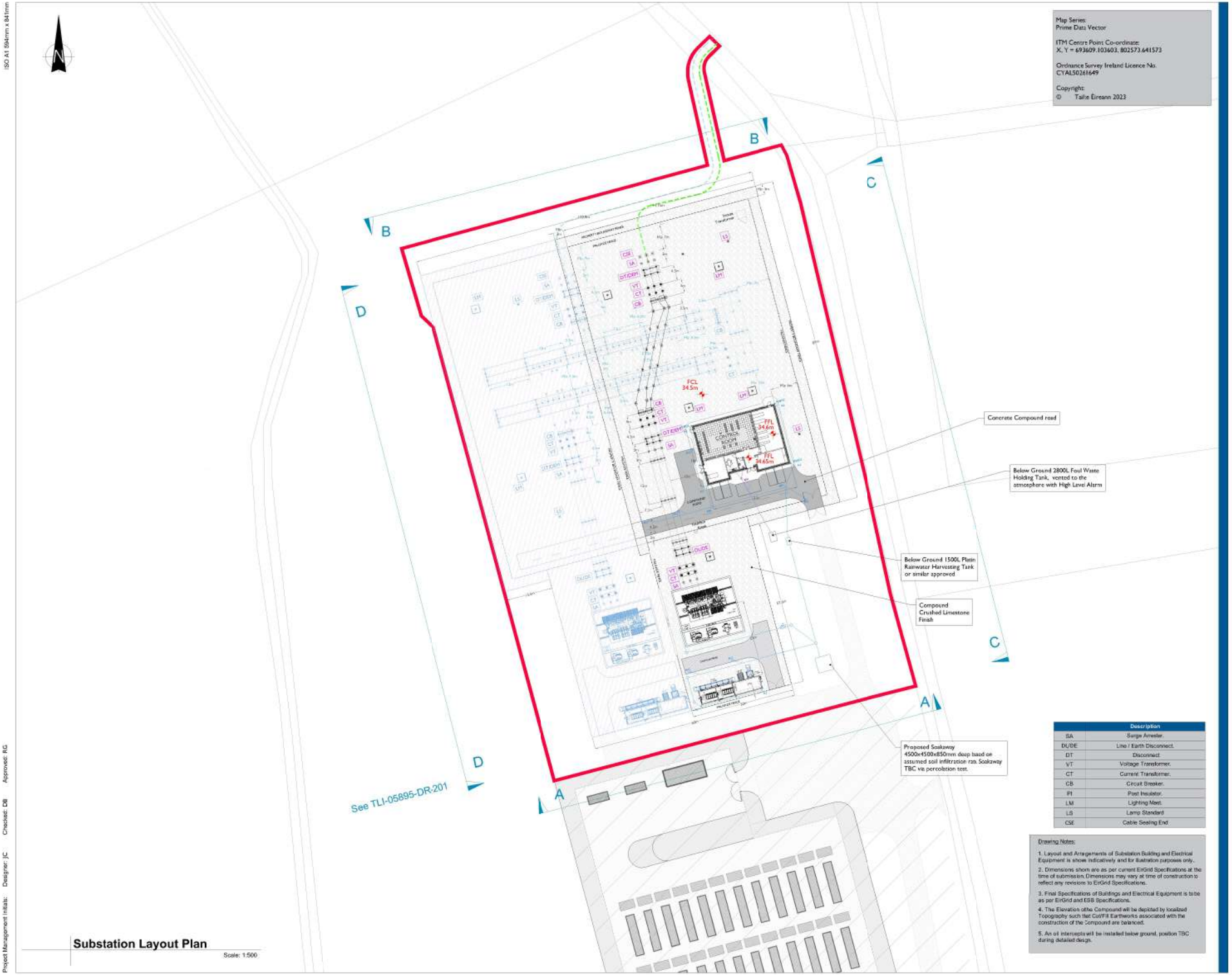
13 REFERENCES

[1] EPA, " Guidelines on the Information to be Contained in Environmental Impact Assessment Reports," Environmental Protection Agency, Dublin, 2022.

[2] Statutory Instrument, "The Planning and Development (Amendment) Act," office of the Attorny General, Dublin, 2019.

[3] EPA, "Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)," Environmental Protection Agency , Wexford, 2016.

APPENDIX A



Map Series:
Prime Data Vector

ITM Centre Point Co-ordinate:
X, Y = 693609.103603, 802573.641573

Ordnance Survey Ireland Licence No.
CYAL50261649

	Description
SA	Surge Arrester.
DI/DE	Line / Earth Disconnect.
DT	Disconnect
VT	Voltage Transformer.
CT	Current Transformer.
CB	Circuit Breaker.
PI	Post Insulator.
LM	Lighting Mast.
LS	Lamp Standard
CSE	Cable Sealing End

Drawing Notes:

1. Layout and Arrangements of Substation Building and Electrical Equipment is shown indicatively and for illustration purposes only..
2. Dimensions shown are as per current EirGrid Specifications at the time of submission. Dimensions may vary at time of construction to reflect any revisions to EirGrid Specifications.
3. Final Specifications of Buildings and Electrical Equipment is to be as per EirGrid and ESB Specifications.
4. The Elevation othe Compound will be depicted by localized Topography such that Cut/Fill Earthworks associated with the construction of the Compound are balanced.
5. An oil interceptor will be installed below ground, position TBC during detailed design.

Substation Layout Plan

Scale: 1:500

ISO A1 594mm x 841mm

Project Management Initials: Designer: JC Checked: DB Approved: RG

tli GROUP

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PROJECT

Proposed 2 x 110kV Substations

CLIENT

STRATEGIC POWER PROJECTS

CONSULTANTS

MALONE O'REGAN CONSULTING ENGINEERS

NOTES: -

See General Notes

LEGEND: -

- UGC Grid Connection Option shown thus
- Red Line Planning Boundary shown thus
- 150mm Crushed Limestone Compound surface shown thus
- Access Road surface (Hardcore Finish) shown thus
- EirGrid Compound Concrete surface finish shown thus
- Future 110kV Expansion Area
- Future 110kV Expansion Equipment
- Proposed 110kV Substation required based on ESB Networks / EirGrid connection offer.

ISSUE/REVISION

P8	25.08.23	Final Issue for Planning
P7	17.08.23	Final Issue for Planning
P6	28.03.23	Issued for Planning review
P5	22.02.23	Issued for Information
P4	09.02.23	Issued for Information
P3	06.12.22	Issued for Information
P2	02.12.22	Issued for Information
P1	15.11.22	Issued for Information
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-895

SHEET TITLE

Substation Layout Plan

SHEET NUMBER

05895-DR-002

APPENDIX B

Monvallet SID 2x 110kV Substation

LVIA Photomontages

This book contains imagery for the
viewpoints chosen for the LVIA study

July 2023

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INDEX

Viewpoint 1 - Imminent Baseline View + Outline View
Viewpoint 1 - Montage View + Mitigated View

Viewpoint 2 - Imminent Baseline View + Outline View
Viewpoint 2 - Montage View + Mitigated View

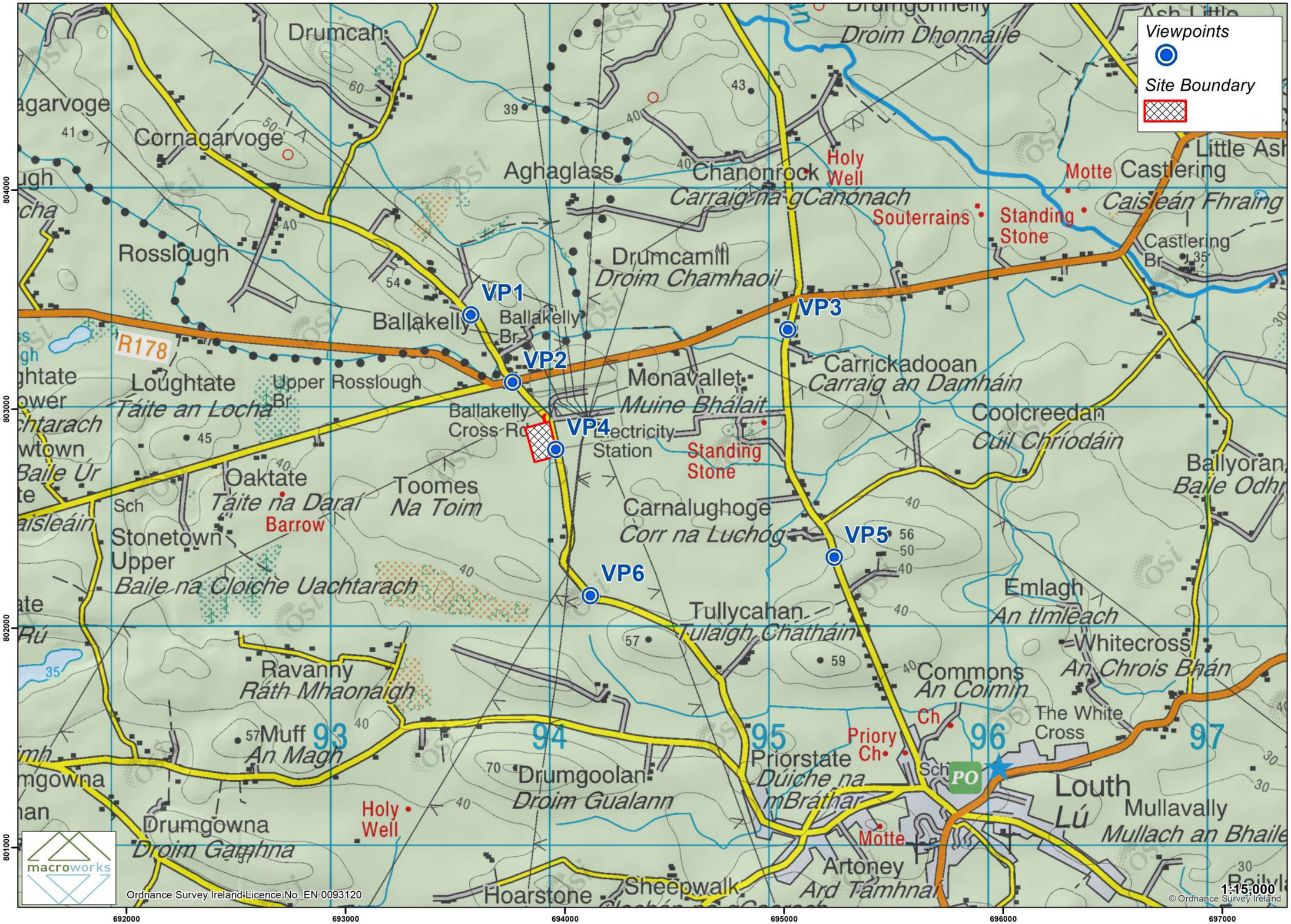
Viewpoint 3 - Imminent Baseline View + Outline View
NB - There are no Montage or Mitigated Montage Views for this viewpoint

Viewpoint 4 - Imminent Baseline View + Outline View
Viewpoint 4 - Montage View + Mitigated View
Viewpoint 4 - Contextual Views (x4)

Viewpoint 5 - Existing View + Outline View
NB - There are no Montage or Mitigated Montage Views for this viewpoint

Viewpoint 6 - Existing View + Outline View
NB - There are no Montage or Mitigated Montage Views for this viewpoint

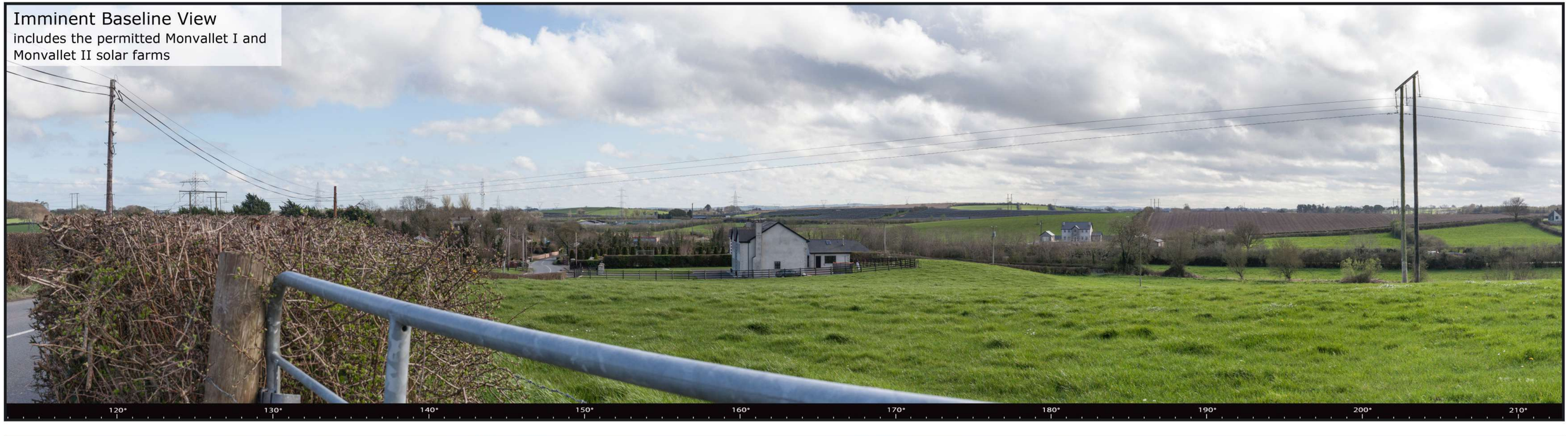
LVIA viewpoint locations selected for the Monvallet SID project



Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline and Outline)

Local road north of Ballakelly Bridge VP1



These are 100° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 60°.

Easting (IG):	293640	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	303418	Camera:	Canon 1-D Mark II digital SLR	Time:	15:51
Direction of View 163°	E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	100°				

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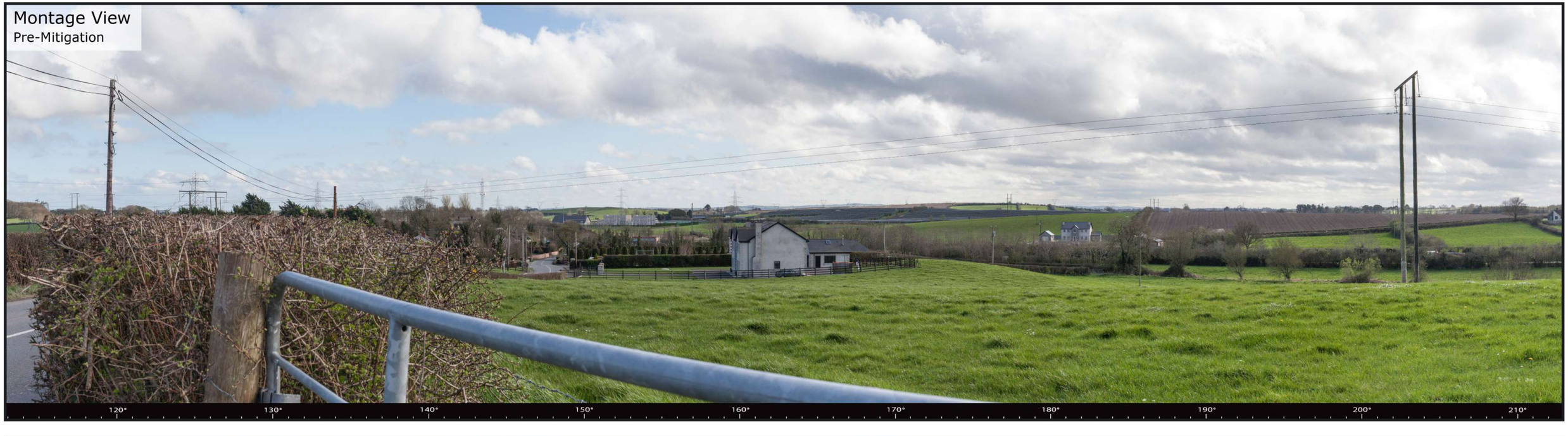
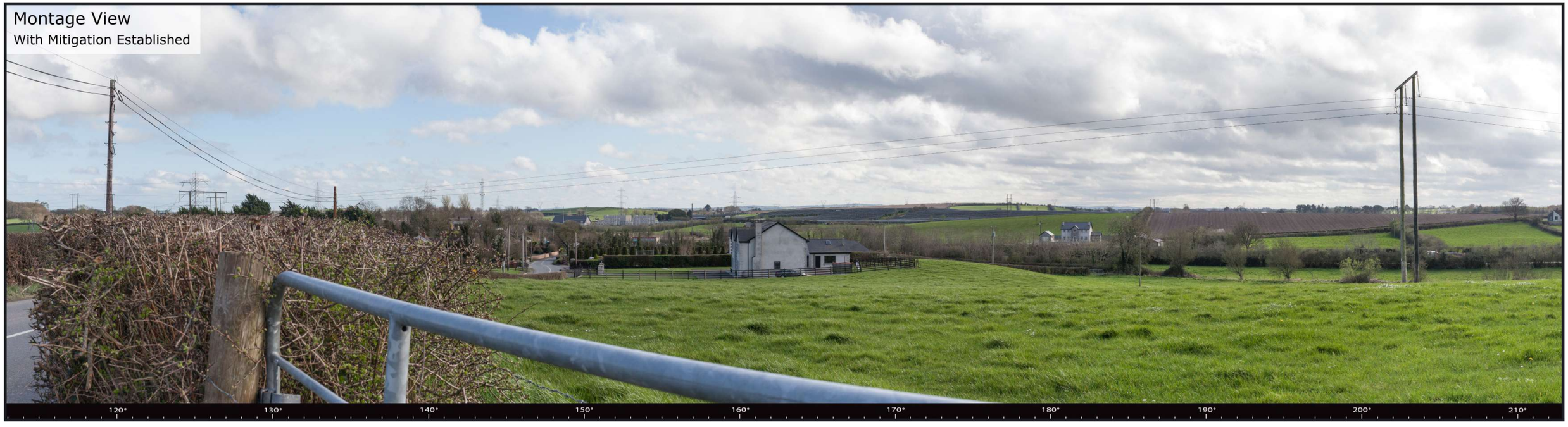
Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Montage pre- and post-mitigation establishment)

Local road north of Ballakelly Bridge VP1





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Northing (IG):	303418	Camera:	Canon 1-D Mark II digital SLR	Time:	15:51
Direction of View 163°	E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	100°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline and Outline)

Cross roads settlement at Ballakelly Bridge VP2

These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	293830	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	303110	Camera:	Canon 1-D Mark II digital SLR	Time:	15:36
Direction of View 167°	E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	80°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Montage pre- and post-mitigation establishment) Cross roads settlement at Ballakelly Bridge VP2

These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	293830	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	303110	Camera:	Canon 1-D Mark II digital SLR	Time:	15:36
Direction of View 167°	E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	80°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline and Outline)

Cross roads settlement at Carrickadooan VP3

Imminent Baseline View

includes the permitted Monvallet I and Monvallet II solar farms

Outline View

indicating physical position and scale of the proposed substation irrespective of screening

These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	295085	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	303350	Camera:	Canon 1-D Mark II digital SLR	Time:	15:21
Direction of View	126° W of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	80°				

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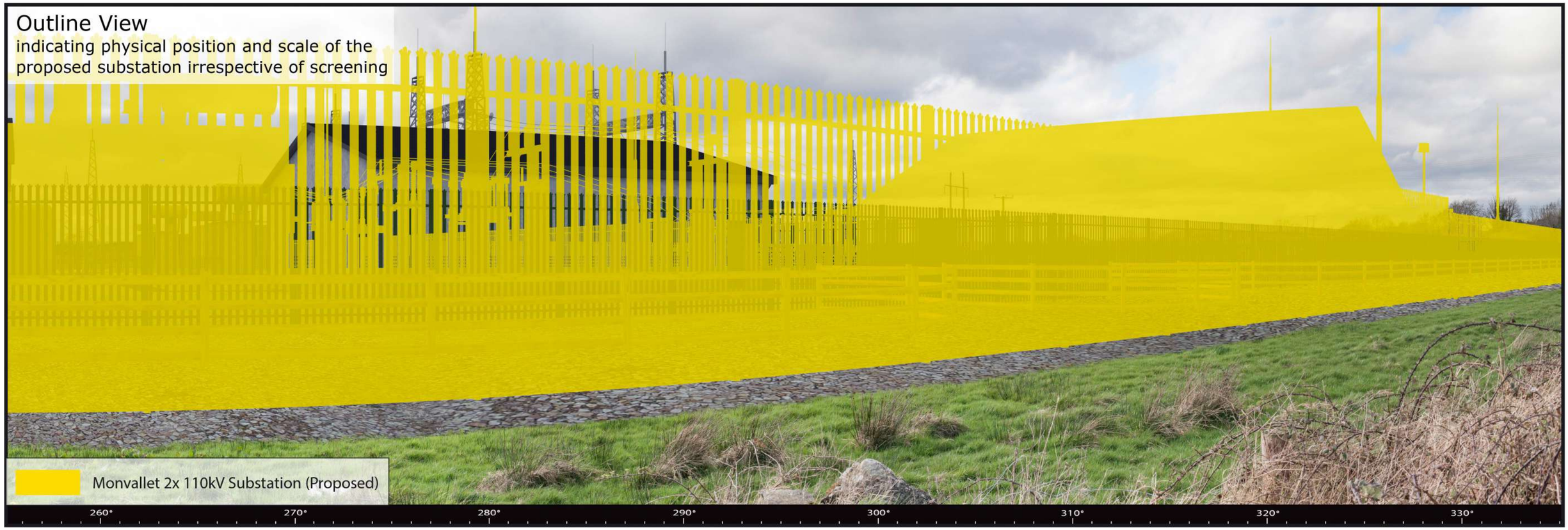
Imagery depicting the view towards the site (Imminent Baseline and Outline)

Local road adjacent to Monvallet substation VP4



These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	294027	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	302804	Camera:	Canon 1-D Mark II digital SLR	Time:	16:54
Direction of View	65°W of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Montage pre- and post-mitigation establishment) Local road adjacent to Monvallet substation VP4

These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	294027	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	302804	Camera:	Canon 1-D Mark II digital SLR	Time:	16:54
Direction of View	65°W of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	120°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline, Outline, Montage pre- and post-mitigation establishment)

Local road adjacent to Monvallet substation VP4

The 180° panoramic montages are captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.
In this instance , a wider field of view has been created for contextual purposes.
To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 20cm. To see this entire panoramic scene in reality would necessitate turning one's head through 140°.

Easting (IG):	294027.30	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	302804.33	Camera:	Canon 1-D Mark II digital SLR	Time:	16:54
Direction of View	106° W of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	180°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline and Outline)

Local road south east at Carnalughoge VP5

Imminent Baseline View

includes the permitted Monvallet I and Monvallet II solar farms

Outline View

indicating physical position and scale of the proposed substation irrespective of screening

These are 80° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 40°.

Easting (IG):	295297	Lens:	50mm / Full Frame Sensor	Date:	29/03/21
Northing (IG):	302312	Camera:	Canon 1-D Mark II digital SLR	Time:	15:15
Direction of View	75° W of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	80°				

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Monvallet SID 2x 110kV Substation

Imagery depicting the view towards the site (Imminent Baseline and Outline)

Local road to the southeast of the site VP6

Imminent Baseline View

includes the permitted Monvallet I and Monvallet II solar farms

Outline View

indicating physical position and scale of the proposed substation irrespective of screening

These are 160° panoramic montages captured and presented in accordance with the guidance set by the British Landscape Institute 2011 - Advice Note 01/11.

To view these panoramas on a flat surface one must move from left to right along its length whilst maintaining a perpendicular viewing direction and the specified correct viewing distance of 30cm. To see this entire panoramic scene in reality would necessitate turning one's head through 120°.

Easting (IG):	294185	Lens:	50mm / Full Frame Sensor	Date:	22/09/21
Northing (IG):	302137	Camera:	Canon 1-D Mark II digital SLR	Time:	10:32
Direction of View	37° E of Grid North	Camera Height:	1.7m Above Ground Level		
Angle of View:	160°				

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