

TRANSPORT STATEMENT

Shaneragh BESS

794-NI-P&E-02933
12 December 2024

REPORT

Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
V01	Project Team Review	T McCammon	S Houlihan	S Houlihan	Dec 2024
V02	Planning Submission	T McCammon	S Houlihan	S Houlihan	Dec 2024

Approval for issue

Stephen Houlihan		12 December 2024
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1 INTRODUCTION

1.1 Purpose & Site Context

RPS was commissioned by RES to prepare a **Transport Statement (TS)** as part of a planning application pack which seeks permission for the following:

“Battery Energy Storage System (BESS), DNO substation building, control building, auxiliary transformer, grid compliance equipment, CCTV & lighting columns, security fencing, ancillary works, access track, entrance upgrades, hardstanding, widening along the Skreen Road and associated works.”

Figure 1.1 illustrates the site location in the context of the surrounding road network, with the proposed development layout presented in **Appendix A**.

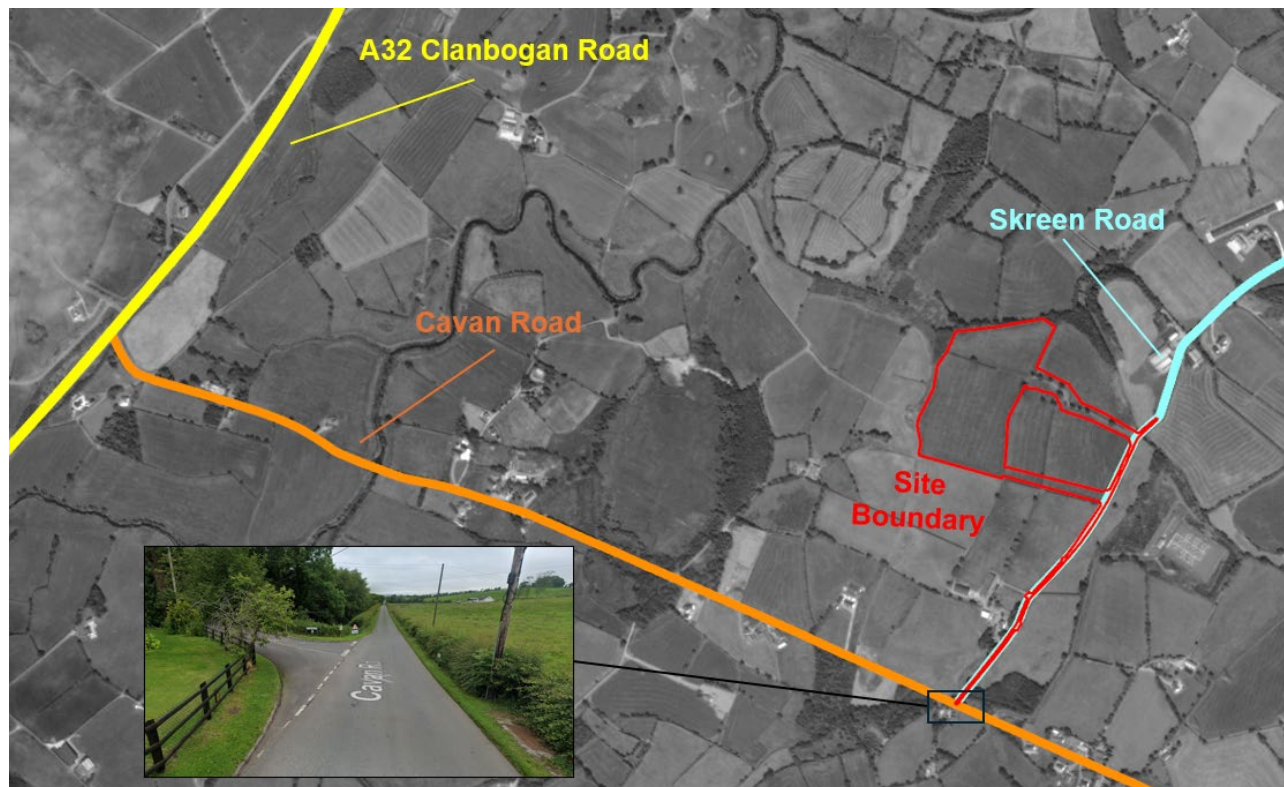


Figure 1.1 - Site Location

The site is located within a rural setting, situated approximately 2.5km from the A32 Clanbogan Road strategic road network. The surrounding land uses consists of rural residential dwellings and agriculture. The proposed development will access the A32 strategic road network via Cavan Road, and Skreen Road as shown in **Figure 1.1**.

The proposed development comprises of a construction, operational and decommissioning phase, with the most onerous phase for vehicular movements associated with the construction phase. During the operational phase the facility will be nominally unmanned and vehicle movements will be associated with routine maintenance and inspection only, anticipated to comprise typically of two to four vehicle (Transit Van or similar) trips per month. Therefore the traffic impacts associated with the operational phase are not considered further within this TS.

The purpose of this TS is to quantify the demand for travel associated with the construction element of the development and establish whether the local road network can accommodate this increased demand. Measures to minimise or mitigate the impact of vehicle movements, if necessary, will be outlined in this report.

The TS was prepared in accordance with the **Transport Assessment (TA)** guidelines document (July 2006) published by the Department for Infrastructure (DfI).

2 POLICY AND GUIDELINES

In undertaking the assessment of the potential traffic and transport impacts associated with the proposed development, all relevant local and national policy and guidance was considered, including:

- Guidelines for the Environmental Assessment of Road Traffic (IEMA Guidelines, 2023)
- Transport Assessment Guidelines (DfI, 2006)
- Development Control Advice Note (DCAN) 15
- Design Manual for Roads and Bridges (DMRB)
- Fermanagh & Omagh Local Development Plan 2030; and
- Fermanagh & Omagh Local Transport Study.

The main transport constraints relating to the proposed development relate to the transportation of construction material and the impact of general and abnormal loads construction traffic. In order to quantify the significance of any changes in traffic flows, the following criteria is used (from IEMA Guidelines):

- “Include highway links where traffic flows will increase by more than 30% (or the number of Heavy Goods Vehicles will increase by more than 30%)”; and
- “Include any other specifically sensitive areas where traffic flows will increase by 10% or more.”

Where observations of existing traffic levels are recorded as being exceptionally low, any increase in traffic flow is likely to result in a predicted increase in traffic levels which could in normal circumstances be considered a major impact. Where this situation is identified, it is important to consider any increase both in terms of its relative increase in respect of existing traffic flows, as well as the overall total flow in respect of the available capacity of the section of road being considered.

The DfI TA guidance provides information relevant to the preparation of a TA and TSs for developments in Northern Ireland. The guidance ensures that mechanisms are in place to specify, assess, revise, implement, monitor and review the impacts that developments will have on the wider transport system. The guidance establishes thresholds when a TA or TS is required, and states the following:

- A TA is required for most large developments where there is a potential for a major traffic impact on the surrounding transport network. These developments include the following:
 - Food / non-food retail with Gross Floor Area (GFA) over 1,000m²
 - Hotels with more than 50 beds; or
 - Residential developments with 100 dwellings or more.
- Transport Statements are slimmed down versions of a full TA when the traffic impacts are not considered to be significant on the surrounding highway network, but still need to be considered.

3 BASELINE CONDITIONS

3.1 Existing Road Network

It is proposed that the development will utilise existing accesses off Skreen Road; the location of these accesses in relation to Skreen Road is indicated in **Figure 3.1**.



Figure 3.1 - Existing Site Accesses on Skreen Road

Skreen Road is a local rural road that connects Cavan Road to Dunnamona Road. Cavan Road, also a rural road, connects the A32 Trunk Road to the B46 Dromore Road local distributor road, providing access to various settlements. The A32 Trunk Road links Omagh to Enniskillen and includes a dedicated right turn lane facility at its junction with Cavan Road.

3.2 Traffic Surveys

In order to determine existing traffic flows and vehicle speeds on Skreen Road in the vicinity of the site, Automatic Traffic Counts (ATCs) were undertaken by Tracsis Traffic Data Ltd, which commenced on Monday 14th October 2024 and finished on Sunday 20th October 2024. The ATC survey locations are illustrated in **Figure 3.2**.

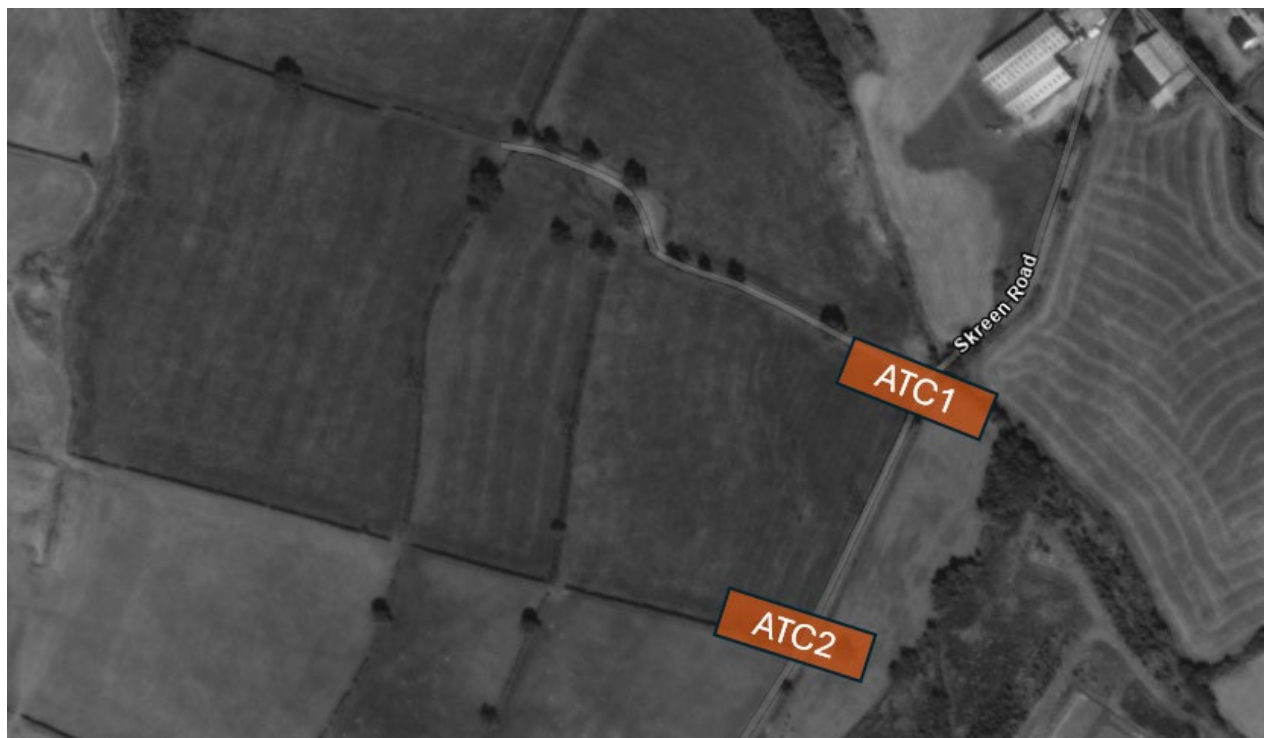


Figure 3.2 - ATC Survey Locations

The total daily traffic flows for each day surveyed is presented in **Table 3.1**.

Table 3.1 - Total Daily Vehicle Flows with % HGV on Skreen Road

Survey Day	Skreen Road ATC Daily Two-way Vehicle Flows				
	Northbound Vehicles	Southbound Vehicles	Total Vehicle (Two-way)	Total HGVs (Two-way)	HGV Percentage
Monday 14 th October 2024	13	15	28	5	18%
Tuesday 15 th October 2024	11	18	29	4	14%
Wednesday 16th October 2024	27	28	55	9	16%
Thursday 17 th October 2024	17	20	37	3	8%
Friday 18 th October 2024	21	17	38	5	13%
Saturday 19 th October 2024	14	13	27	2	7%
Sunday 20 th October 2024	14	14	28	3	11%
5 Day Average	18	20	37	5	14%
7 Day Average	17	18	35	4	12%

As illustrated in **Table 3.1**, traffic flows along Skreen Road are minimal, however Skreen Road does currently accommodate HGV traffic. Although traffic levels were consistent through the week, Wednesday 16th October 2024 resulted in the highest level of daily traffic flows and HGV vehicles at the survey site. Vehicle speeds were also recorded in the vicinity of the existing site access points, with these daily vehicle speeds presented in **Table 3.2** and **Table 3.3**, and which demonstrate vehicle mean and 85th percentile speeds, per direction and two-way.

Table 3.2 - Daily Vehicle Speeds on Skreen Road at ATC Site 1

Survey Day	Skreen Road ATC 1 Daily Vehicle Speeds					
	Northbound		Southbound		Two-Way	
	Mean Speed (mph)	85 th Percentile (mph)	Mean Speed (mph)	85 th Percentile (mph)	Mean Speed (mph)	85 th Percentile (mph)
Monday 14 th October 2024	19	23	22	26	21	24
Tuesday 15 th October 2024	18	22	20	26	19	24
Wednesday 16 th October 2024	20	25	21	26	21	25
Thursday 17 th October 2024	21	27	20	26	21	26
Friday 18 th October 2024	20	24	21	24	20	24
Saturday 19 th October 2024	16	21	19	26	18	23
Sunday 20 th October 2024	18	23	17	24	18	23
5 Day Average	20	24	21	26	20	25
7 Day Average	19	24	20	25	20	24

As seen in **Table 3.2**, the mean and 85th percentile speed remains constant across the week with an average 85th percentile speed of 25mph recorded at ATC Site 1.

Table 3.3 - Daily Vehicle Speeds on Skreen Road at ATC Site 2

Survey Day	Skreen Road ATC 2 Daily Vehicle Speeds					
	Northbound		Southbound		Two-Way	
	Mean Speed (mph)	85 th Percentile (mph)	Mean Speed (mph)	85 th Percentile (mph)	Mean Speed (mph)	85 th Percentile (mph)
Monday 14 th October 2024	24	29	28	32	26	32
Tuesday 15 th October 2024	24	33	26	33	25	32
Wednesday 16 th October 2024	25	30	26	30	26	30
Thursday 17 th October 2024	25	38	29	38	27	37
Friday 18 th October 2024	24	32	26	34	25	32
Saturday 19 th October 2024	23	29	23	32	23	32
Sunday 20 th October 2024	22	30	22	28	22	29
5 Day Average	25	31	27	32	26	31
7 Day Average	24	30	26	32	25	31

As seen in **Table 3.3**, the mean and 85th percentile speed is slightly higher at ATC Site 2 with an average 85th percentile speed recorded at 31mph.

3.3 Road Safety

The Northern Ireland Statistics & Research Agency (NISRA) was interrogated to determine if there were any collisions which have occurred over the most recent five years of data that is currently available (2013-2023), with this information is presented in **Figure 3.3**.



Figure 3.3 - Collision Data from 2013-2023 in the vicinity of the site access

As indicated in **Figure 3.3**, there were no collisions recorded in the vicinity of the site.

3.4 Pedestrian and Cycle Network

There is no existing dedicated pedestrian or cycling facilities in the vicinity of the site on Skreen Road, however given the rural location and nature of the proposed development, and minimal anticipated operational trips for maintenance works purposes only, there will be no walking or cycling trips associated with the proposed development once operational.

4 DEVELOPMENT PROPOSAL

Given the nature of the proposed development, it is anticipated that the onerous trip attracting time period will be associated with the construction phase.

4.1 Construction Phase Traffic Generation

ATC surveys were undertaken to determine the existing baseline traffic flows and traffic speeds recorded along the proposed construction traffic route as identified in **Chapter 3** of this TS. This data was used to inform how the site's expected daily trip arrivals and departures might impact the surrounding road network during the construction phase.

Based on Applicant project experience, it is anticipated that the construction phase will occur over a period of 18 months. Overall, the delivery of materials to site will generally occur uniformly over the project's construction period, however with a peak in months five to nine. During the peak months it is expected that there will be 11 HGV two-way trips to the site per day. Deliveries are expected to occur regularly and will be scheduled to prevent conflict between vehicle arrivals and departures, including queueing and delays within the road network.

The proposed development also requires an estimated total of 10-40 staff to be on site at any one time during the scheme construction. Construction staff will typically arrive in teams of 3-5 persons in working vans. Whilst the number of construction staff will vary across the construction phase, in accordance with a worst-case scenario approach, this assessment considers the above referenced months 5 to 9. During these months there will be up to 40 construction staff arriving on site per day with an area of the site's temporary construction compound to be used to park vehicles. Allowing for 13 staff vehicles arriving in teams of 3 staff, and one staff member arriving in a single occupancy vehicle, this equates to 14 staff vehicles arriving at the site and 28 two-way staff vehicle trips per day.

These construction staff and HGV traffic movements will all be scheduled to occur outside of the traditional commuter peak periods of 08:00 - 09:00 and 17:00 - 18:00. Workers are predicted to arrive between 07:00 and 08:00, leaving site before 17:00 or after 18:00 in the evening. HGV deliveries will arrive/depart during the working day (out with the AM/PM commuter peaks) and in accordance with the Construction Traffic Management Plan (CTMP - see Chapter 5). It should also be noted that the construction phase impact upon the surrounding road network will be temporary, and the volumes of traffic described above are entirely within the range of normal fluctuations in daily traffic that would be expected upon the road network.

Construction staff arrivals and departures, along with travel trends will be presented within the contractor's CTMP. It is anticipated that the requirement to provide and agree a CTMP with the planning authority prior to the commencement of development, will be applied as a planning condition to any emerging consent for the Proposed Development. This approach has emerged as standard practice applied to applications of this type within Northern Ireland and elsewhere.

4.2 Proposed Site Layout and Access

It is proposed that two existing accesses on Skreen Road will be upgraded to serve the Proposed Development. The northern access will act as the main vehicular access point, with the southern accesses acting as a secondary access. The proposed layout including the location and layout of these access points is shown in **Appendix A**. The ATC surveys presented in **Tables 3.2** and **3.3** demonstrate that the 5-day 85%ile speed on Skreen Road in the vicinity of the northern access is 25mph and 31mph for the southern access; therefore visibility splays of 2.4m x 45m and 2.4m x 60m respectively, is considered acceptable, with these visibility splay drawings presented in **Appendix B**.

4.3 Abnormal Loads

A mobile crane which will be brought to site at the start of the construction period and removed at the end, as well as HGVs transporting Battery Storage Enclosures (BSEs) throughout construction are considered abnormal loads requiring access to the site. A typically mobile crane of this type, illustrated in **Figure 4.1**, measures 3.1 meters in width, ~20m meters in length, and has a gross weight of 96 tonnes. The BSEs will be transported to the site via articulated vehicles with suitable axle trailers that can accommodate 47 tonnes and

based on high cube 20ft shipping container profile. DfI and the Police Service Northern Ireland (PSNI) shall be notified at least five working days in advance of the abnormal loads accessing the site as required.

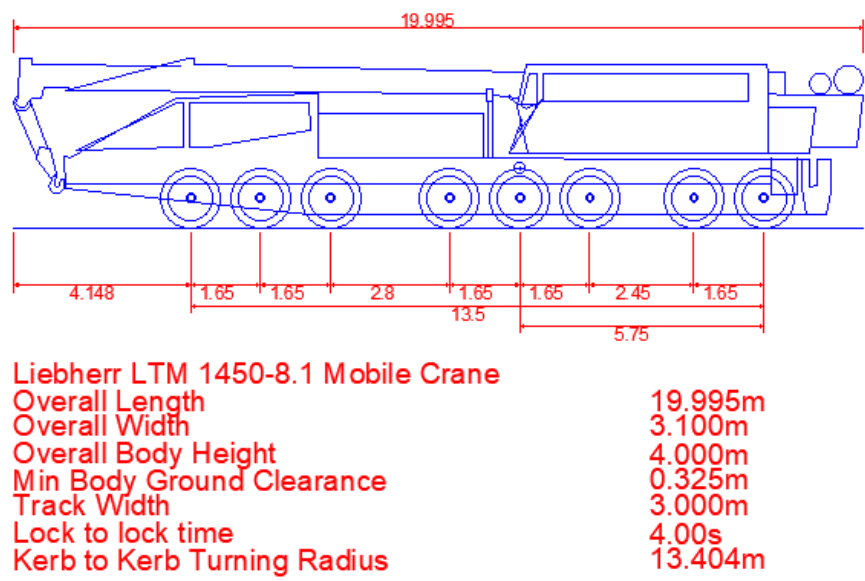


Figure 4.1 – Mobile Crane Dimensions

4.3.1 Swept Path Analysis

A swept path analysis was undertaken for the abnormal load vehicles accessing the site and which is illustrated in **Appendix C**. A topographical survey undertaken along Skreen Road confirmed that the carriageway width narrows to 2.9m in places from Cavan Road to the site access. Therefore, to cater for the width of the mobile crane vehicle and swept paths of all HGVs, it is proposed that Skreen Road be temporarily widened by approximately 500mm at sections along its length to have a consistent width to cater for the mobile crane vehicle. The proposed widening is shown in **Appendix D**.

5 TRAFFIC MANAGEMENT MEASURES

The primary means of controlling construction vehicular traffic, including confirmation of construction vehicle route, construction vehicle types, site access design and details of pre-&-post road condition surveys, will be through the approved CTMP, which will inter alia present the routes that should be avoided during construction activities. The outline CTMP will form part of the contractor agreements, offering a means of enforcement by the Site Manager. Typical components of measures that may be included within the CTMP are set out below.

The palette of measures which are outlined are based on experience of similar projects and existing knowledge. It is recognised that the contents of the CTMP and measures contained therein will be formed through engagement with the DfI in advance of construction.

5.1 Indicative Construction Vehicle Route

The indicative construction vehicle route, shown in **Appendix E**, aims to minimise additional construction traffic flows on to the surrounding roads. The construction vehicle route will originate from the A32, proceed onto Cavan Road and then on to Skreen Road to the site access.

5.1.1 Pre-&-Post Construction Road Condition Survey

During a site visit undertaken in October 2024, it was observed that the road condition is poor in places along Cavan Road as shown in **Figure 5.1**, located approximately 600m to the northwest of its junction with Skreen Road.



Figure 5.1 – Existing Road Condition on Cavan Road

Therefore, as part of the overall monitoring, an agreement on wear and tear on road infrastructure caused directly by construction traffic would be established prior to construction commencing. This pre-&-post construction road condition survey will be agreed between the Applicant, contractor and DfI as part of the detailed CTMP, and the agreement will set out the area of review, scope and response requirement of any dilapidations that can be proven to be linked to construction activities.

5.2 Temporary Construction Measures

Within the site itself, a construction compound area will provide an area for loading and unloading of vehicles and will provide a turning area to allow vehicles to exit the site in forward gear. All delivery drivers and

construction workers will be advised of the construction route, agreed with DfI as part of the approved CTMP, prior to making their delivery or commencing work.

It is also proposed that temporary signage will be located in the vicinity of the site access and suitable locations along Skreen Road during the construction period to warn drivers of the site entrance, as indicated in **Figure 5.1**.



Figure 5.2 - Temporary Signage in Vicinity of Site Access

There may also be a requirement to identify temporary advance signage on Cavan Road, however if required, this will be set out in the final CTMP agreed with DfI. A Site Manager will also be appointed for the project and the details will be provided once confirmed. The Site Manager for the project will undertake the transport co-ordination role for the development and their main responsibilities will include:

- Managing implementation of the CTMP
- Vehicle scheduling
- Checking for scheduled road works that could disrupt arrivals
- Checking for scheduled refuse collections to avoid conflict with HGV deliveries
- Handling any complaints; and
- Acting as a point of contact for employees, contractors, and the general public.

The Site Manager will ensure that there is adequate liaison between the following key stakeholders throughout the construction period:

- The Contractor
- Site neighbours and other local stakeholders such as emergency services or local transport providers; and
- DfI.

Regular review meetings and telecommunication will be held between the Site Manager and DfI if requested / required. It is envisaged that update meetings / telecommunication will be held on an ad-hoc basis as required. Furthermore, the Site Manager will provide any monitoring data, delivery schedules, complaints or breaches of agreements to DfI if requested. Given the rural nature of the site and proximity to the road network, specific restriction in vehicle arrivals times may not need to be implemented. Mud and debris on the road are regarded as one of the main environmental nuisances and safety problems arising from construction sites. The contractor will ensure that the area around the site including the public highway is regularly and adequately swept to prevent any accumulation of dust and dirt.

As part of overall monitoring, an agreement on wear and tear on road infrastructure caused directly by construction traffic would be established prior to construction commencing. The agreement will set out the area of review, scope and response requirement of any dilapidations that can be proven to be linked to construction activities.

The palette of measures which are outlined are based on experience of similar projects and existing knowledge. It is recognised that the contents of the CTMP and measures contained therein will be formed through engagement with DfI in advance of construction.

6 CONCLUSION

RPS was commissioned by RES to prepare a **Transport Statement** as part of a planning application pack which seeks permission for the:

“Battery Energy Storage System (BESS), DNO substation building, control building, auxiliary transformer, grid compliance equipment, CCTV & lighting columns, security fencing, ancillary works, access track, entrance upgrades, hardstanding, widening along the Skreen Road and associated works.”

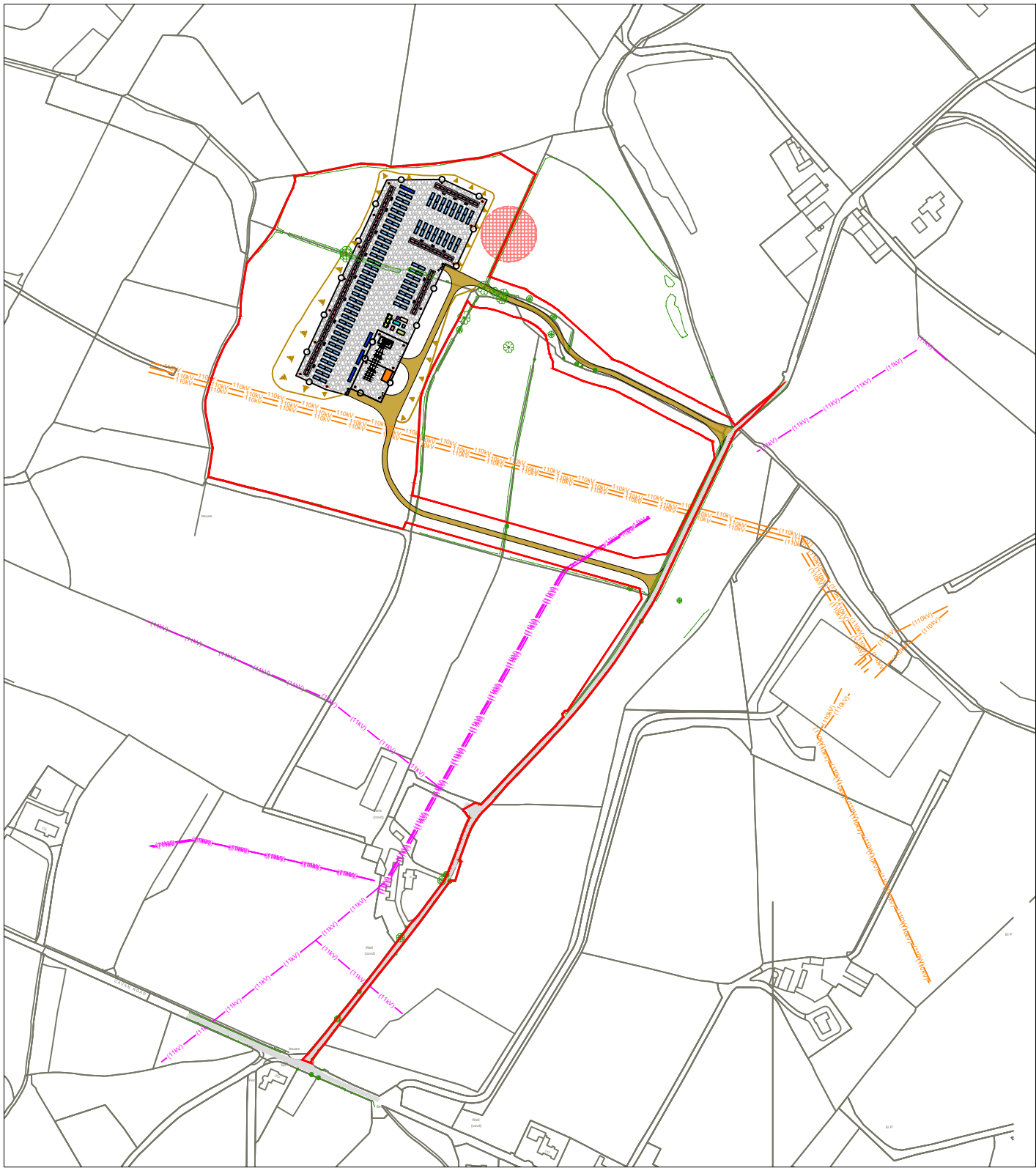
This Transport Statement was prepared in accordance with the Transport Assessment Guidance (2006) document published by Department for Infrastructure and has also taken account of other relevant national, regional and local policies.

The assessment has considered the traffic generation associated with the most onerous month of the 18-month construction phase and concludes that the construction phase will not have a significant impact upon the surrounding highway network. The decommissioning phase will have a less onerous programme and impact than the construction phase.

The assessment has considered the traffic generation associated with the operational phase of the development and concluded that the operational phase will have an insignificant impact upon the surrounding highway, the operational phase is anticipated to generate 1 vehicle trip per week for general maintenance.

Therefore on the basis of the information presented above this proposal should be recommended for planning approval.

Appendix A - Site Layout



KEY:

- EARTHWORKS BATTER
- PROPOSED EXISTING ROAD WIDENING
- EXISTING ROAD
- EXISTING HV 11kV OHL (RECORDS)
- EXISTING HV 11kV OHL (SURVEYED)
- EXISTING HV 110kV OHL (RECORDS)
- EXISTING HV 110kV OHL (SURVEYED)
- ECOLOGICAL BUFFER (25m)
- EXISTING TREES AND VEGETATION

NOTES:

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KEY:

- DEVELOPMENT BOUNDARY (OUTSIDE OF LINE DENOTES BOUNDARY)
- PALISADE, WELDMESH OR ACOUSTIC FENCE
- BATTERY STORAGE ENCLOSURE (BSE)
- POWER CONVERSION SYSTEM (PCS) WITH SINGLE MV SKID AND APRON SLAB
- DNO SUBSTATION BUILDING
- BESS SUBSTATION BUILDING
- AUXILIARY TRANSFORMER
- LV DISTRIBUTION EQUIPMENT
- AGGREGATION PANEL WITH LV PILLAR
- PRE-INSERTION RESISTOR
- CAPACITOR BANK
- HARMONIC FILTER AND RESISTOR
- SPARES CONTAINER
- LIGHTING / CCTV COLUMN
- GRAVEL OR ASPHALT FINISH TO SUIT DETAILED EARTHING DESIGN.
- ACCESS TRACK

SHEET 1 OF 2

4	BM	PP	PH	2024-12-15	ADDED ROAD WIDENING AND UPDATED DEVELOPMENT BOUNDARY
3	BM	BY APPD	PH	2024-11-05	ADDED EXISTING TREES, VEGETATION AND ECOLOGICAL BUFFER AND UPDATED LAYOUT
2	BM	PP	PH	2024-09-17	DESIGN EVOLUTION
1	BM	PP	PH	2024-08-15	PRELIMINARY FOR DISCUSSION

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
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PURPOSE	COORDINATES
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PLANNING	TM65 IRISH GRID
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SCALE	DATUM
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AS SHOWN @A3	N/A
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LAYOUT DRAWING	T-LAYOUT NO
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N/A	N/A
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PROJECT TITLE	SHANERAGH
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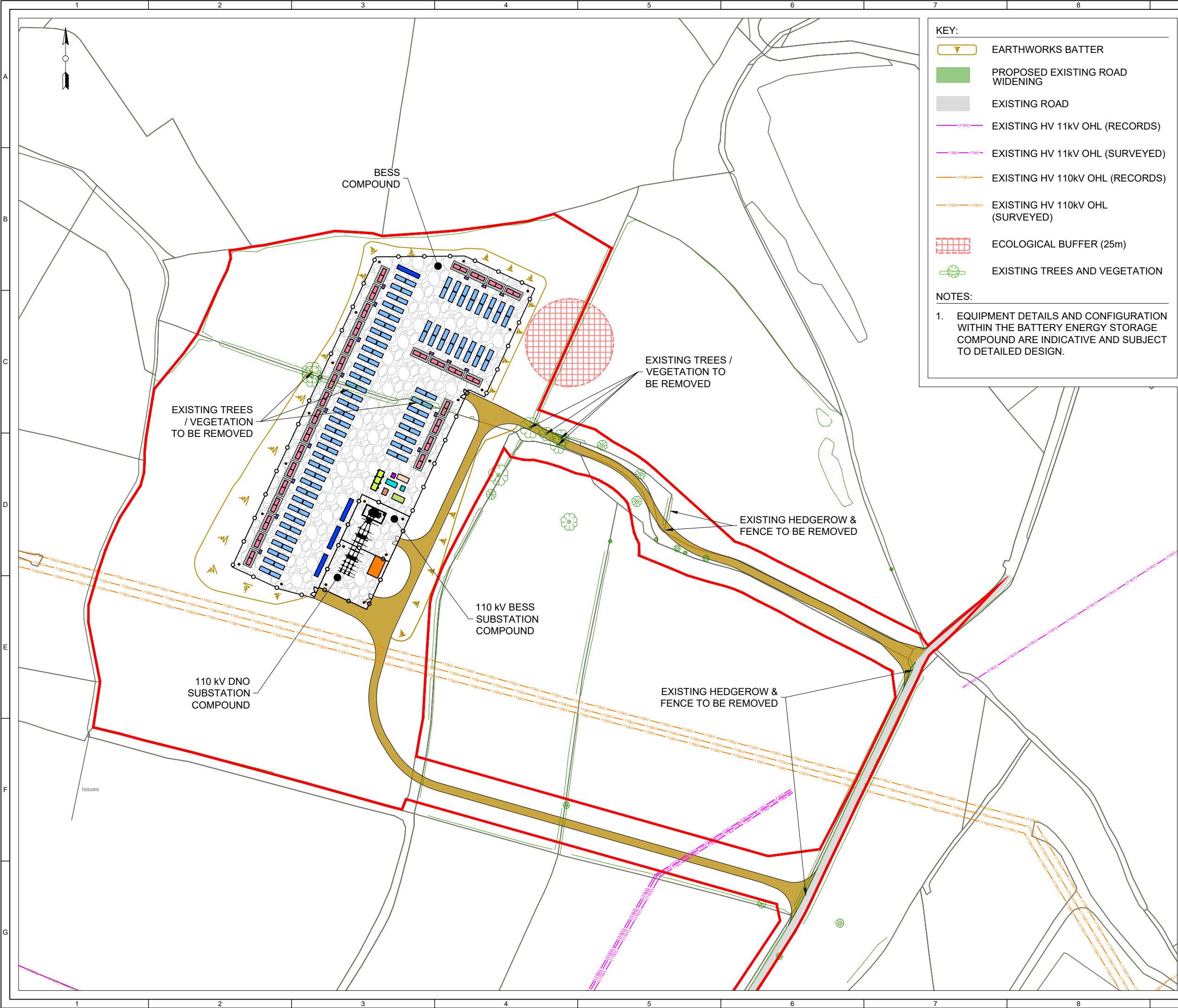
DRAWING TITLE	INFRASTRUCTURE LAYOUT
---------------	-----------------------

RES DRAWING NUMBER	REV
05577-RES-LAY-DR-PT-001	4

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WWW.RES-GROUP.COM



KEY:

- EARTHWORKS BATTER
- PROPOSED EXISTING ROAD WIDENING
- EXISTING ROAD
- EXISTING HV 11kV OHL (RECORDS)
- EXISTING HV 11kV OHL (SURVEYED)
- EXISTING HV 110kV OHL (RECORDS)
- EXISTING HV 110kV OHL (SURVEYED)
- ECOLOGICAL BUFFER (25m)
- EXISTING TREES AND VEGETATION

NOTES:

1. EQUIPMENT DETAILS AND CONFIGURATION WITHIN THE BATTERY ENERGY STORAGE COMPOUND ARE INDICATIVE AND SUBJECT TO DETAILED DESIGN.

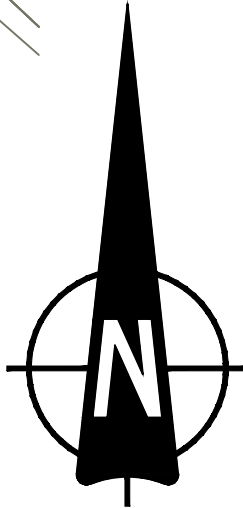
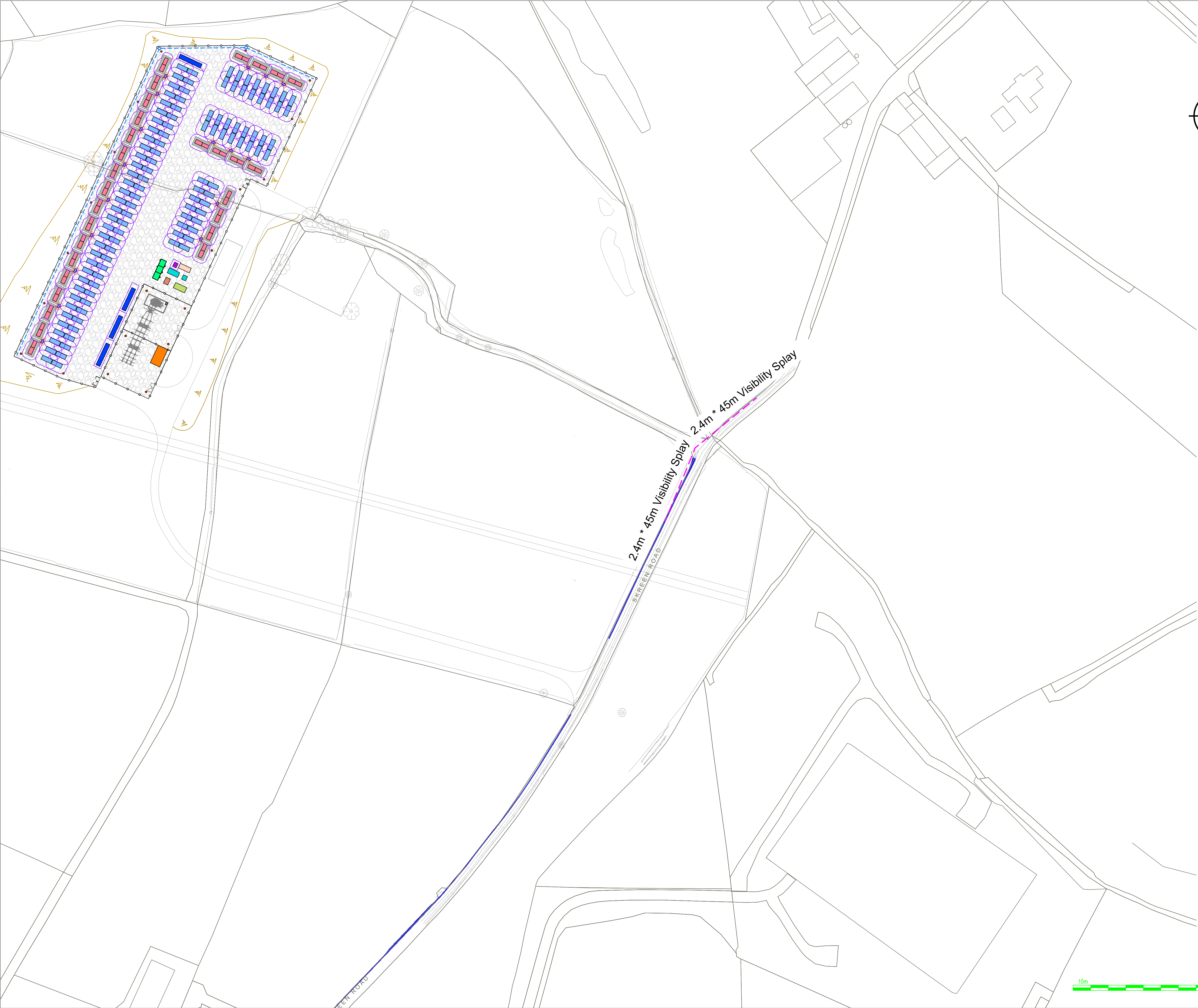
KEY:

- DEVELOPMENT BOUNDARY (OUTSIDE OF LINE DENOTES BOUNDARY)
- PALISADE, WELDMESH OR ACOUSTIC FENCE
- BATTERY STORAGE ENCLOSURE (BSE)
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- HARMONIC FILTER AND RESISTOR
- SPARES CONTAINER
- LIGHTING / CCTV COLUMN
- GRAVEL OR ASPHALT FINISH TO SUIT DETAILED EARTHING DESIGN.
- ACCESS TRACK

SHEET 2 OF 2

4	BM	PP	PH	2024-12-15	ADDED ROAD WIDENING AND UPDATED DEVELOPMENT BOUNDARY	E	
3	BM	BY APPD	PH	2024-11-05	ADDED EXISTING TREES, VEGETATION AND ECOLOGICAL BUFFER AND UPDATED LAYOUT		
2	BM	PP	PH	2024-09-17	DESIGN EVOLUTION		
1	BM	PP	PH	2024-08-15	PRELIMINARY FOR DISCUSSION		
ISSUE		DRAWN	CHKD	APPD	DATE	REVISION NOTES	F
PURPOSE					COORDINATES		
PLANNING					TM65 IRISH GRID		
SCALE					DATUM		
1:2,000					@A3	N/A	G
LAYOUT DRAWING					T-LAYOUT NO		
N/A					N/A		
PROJECT TITLE							
SHANERAGH							G
DRAWING TITLE							
INFRASTRUCTURE LAYOUT							
RES DRAWING NUMBER							
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Appendix B – Site Access Visibility Splays



NOTES

1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
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Hard copies, dwf and pdf will form a controlled issue of the drawing. All other formats (dwg, dxf etc.) are deemed to be an uncontrolled issue and any work carried out based on these files is at the recipients own risk. RPS will not accept any responsibility for any errors arising from the use of these files, either by human error by the recipient, listing of un-dimensioned measurements, compatibility issues with the recipient's software, and any errors arising when these files are used to aid the recipients drawing production, or setting out on site.
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Key

Existing Layout	
Proposed Layout	
Achievable Visibility	
Proposed Road Widening	

rev	amendments	check	date

rps	Elmwood House 74 Boucher Road Belfast BT12 6RZ	T +44 (0) 28 90 667914 F +44 (0) 28 90 668286 W www.rpsgroup.com/ireland E ireland@rpsgroup.com
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Client
RES

Project
Shaneragh BESS

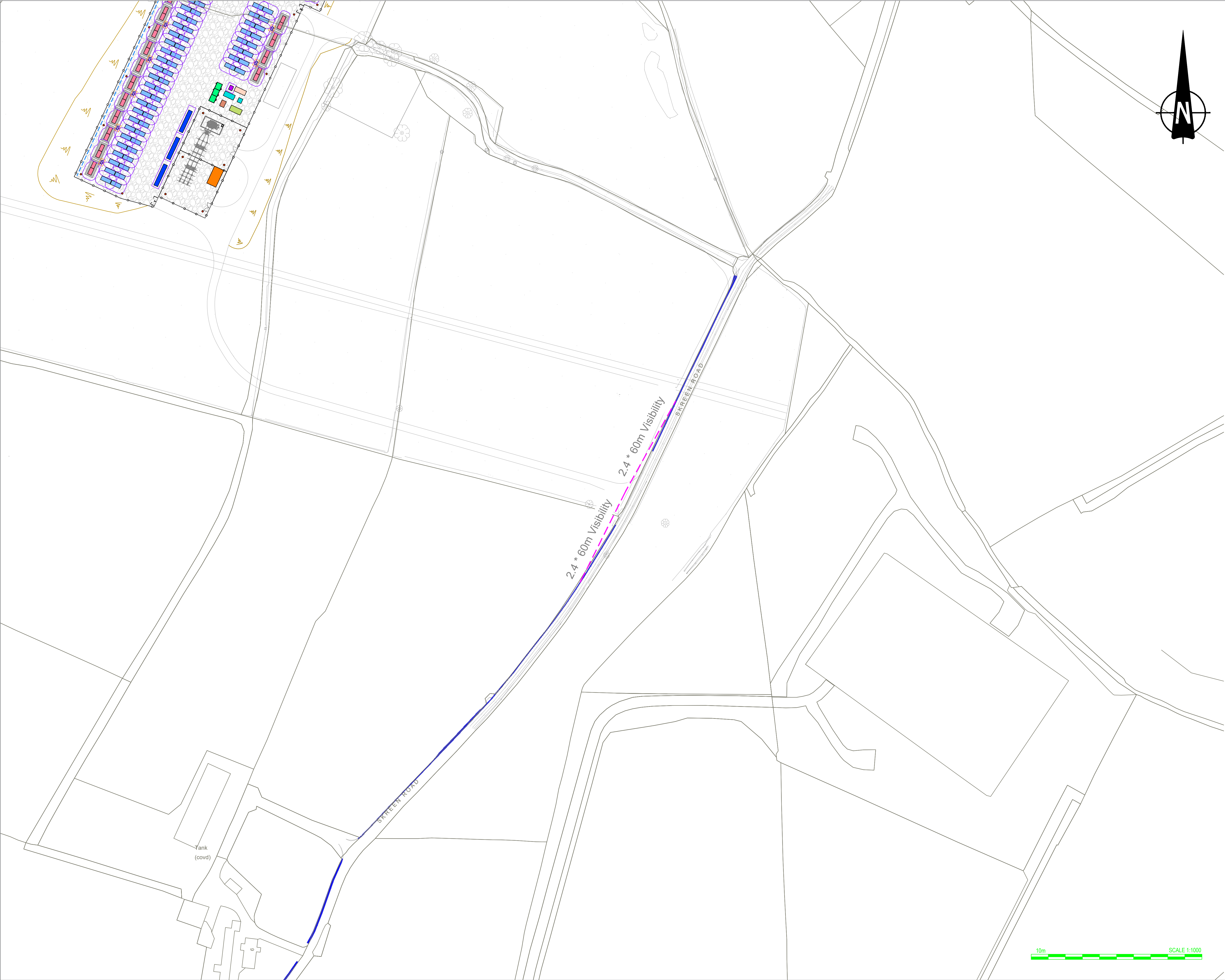
Title
Skreen Road / Site Access (northern) - 25mph Visibility Splay Sheet 1 of 1

Project Number	Sheet Size	Drawing Scale
794-NI-P&E-02933	A1	1:1000

Drawing Number
SK014

Drawn By	Status	Revision
TM	Preliminary	-

Checked By	Approved By	Date
MMcG	SH	12/12/2024



- ### NOTES
1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
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 4. Datum.

Key	
Existing Layout	
Proposed Layout	
Proposed Visibility	
Proposed Road Widening	

rev	amendments	check	date

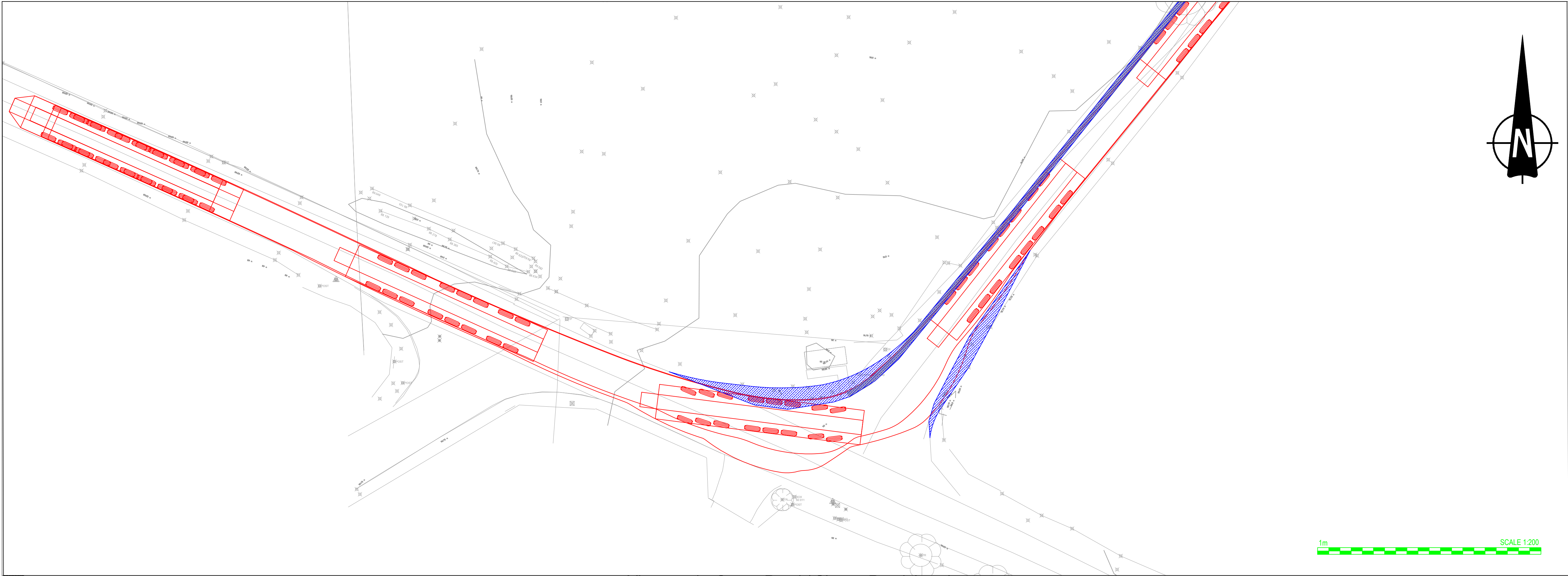


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74 Boucher Road
Belfast
BT12 6RZ

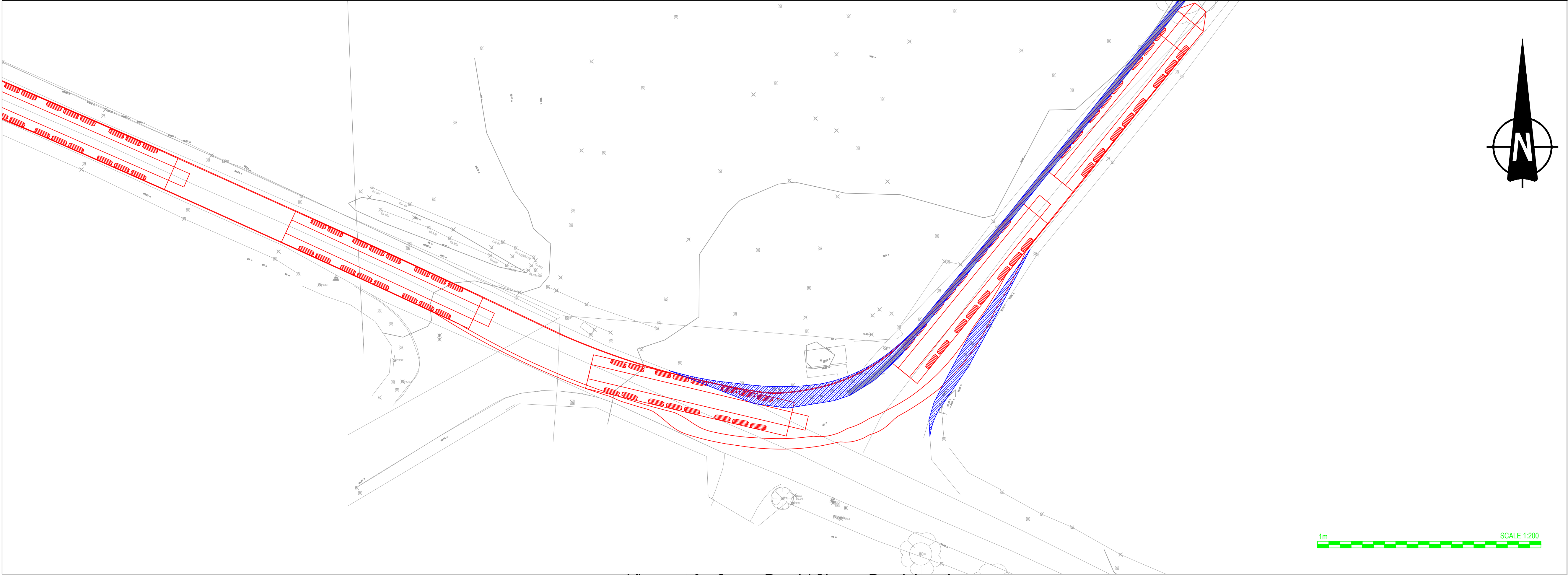
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F +44 (0) 28 90 668286
W www.rpsgroup.com/ireland
E ireland@rpsgroup.com

Client		
RES		
Project		
Shaneragh BESS		
Title		
Skreen Road / Site Access (southern) - 30mph Visibility Splay Sheet 1 of 1		
Project Number	Sheet Size	Drawing Scale
794-NI-P&E-02933	A1	1:1000
Drawing Number		
SK017		
Drawn By	Status	Revision
TM	Preliminary	-
Checked By	Approved By	Date
MMcG	SH	12/12/2024

Appendix C – Swept Path Analysis



Viewport 1 - Cavan Road / Skreen Road Junction
Mobile Crane - Right Out



Viewport 2 - Cavan Road / Skreen Road Junction
Mobile Crane - Left In

- NOTES**
1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
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 4. Datum.

Key

Existing Layout

Proposed Layout

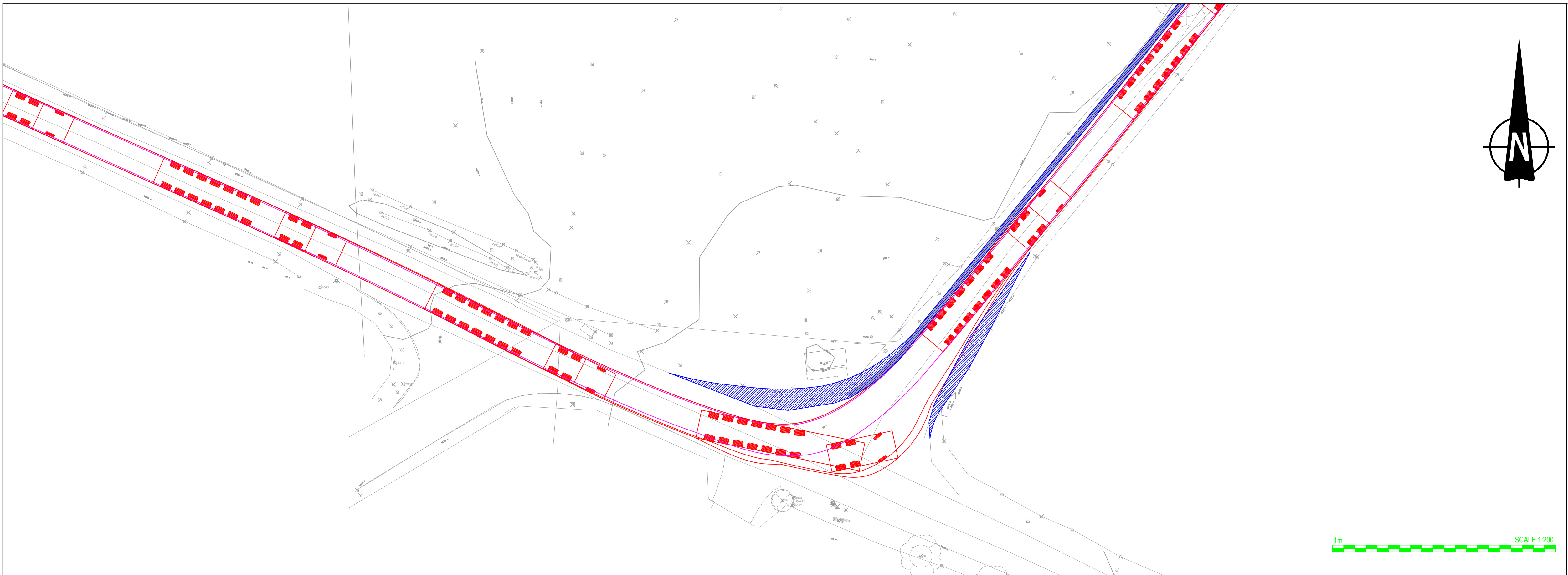
Proposed Road Widening

Liebherr LTM 1450-8.1 Mobile Crane
Overall Length 19.995m
Overall Width 3.100m
Overall Body Height 4.000m
Min Body Ground Clearance 0.925m
Track Width 3.000m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 13.404m

rev	amendments	check	date
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Client			
RES			
Project			
Shaneragh BESS			
-			
Title			
Cave Road / Skreen Road Junction			
- Crane Swept Path			
Sheet 1 of 1			
Project Number	Sheet Size	Drawing Scale	
794-NI-P&E-02933	A1	1:200	
Drawing Number			
SK001			
Drawn By	Status	Revision	
TM	Preliminary	-	
Checked By	Approved By	Date	
MMcG	SH	12/12/2024	



Viewport 1 - Cavan Road / Skreen Road Junction
Grid Transformer - Right Out

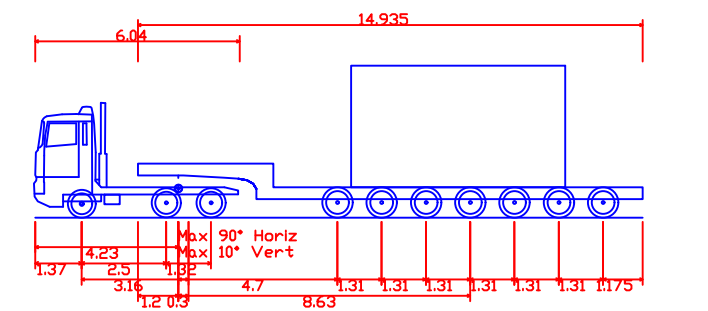


Viewport 2 - Cavan Road / Skreen Road Junction
Grid Transformer - Left In

NOTES

1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
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4. Datum.

Key	
Existing Layout	
Proposed Layout	
Proposed Road Widening	



60MVA GRID TRANSFORMER	
Overall Length	17.965m
Overall Width	2.550m
Overall Body Height	4.496m
Min Body Ground Clearance	0.315m
Max Track Width	2.850m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.990m

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	BT12 6RZ	E ireland@rpsgroup.com

Client

RES

Project
Shaneragh BESS

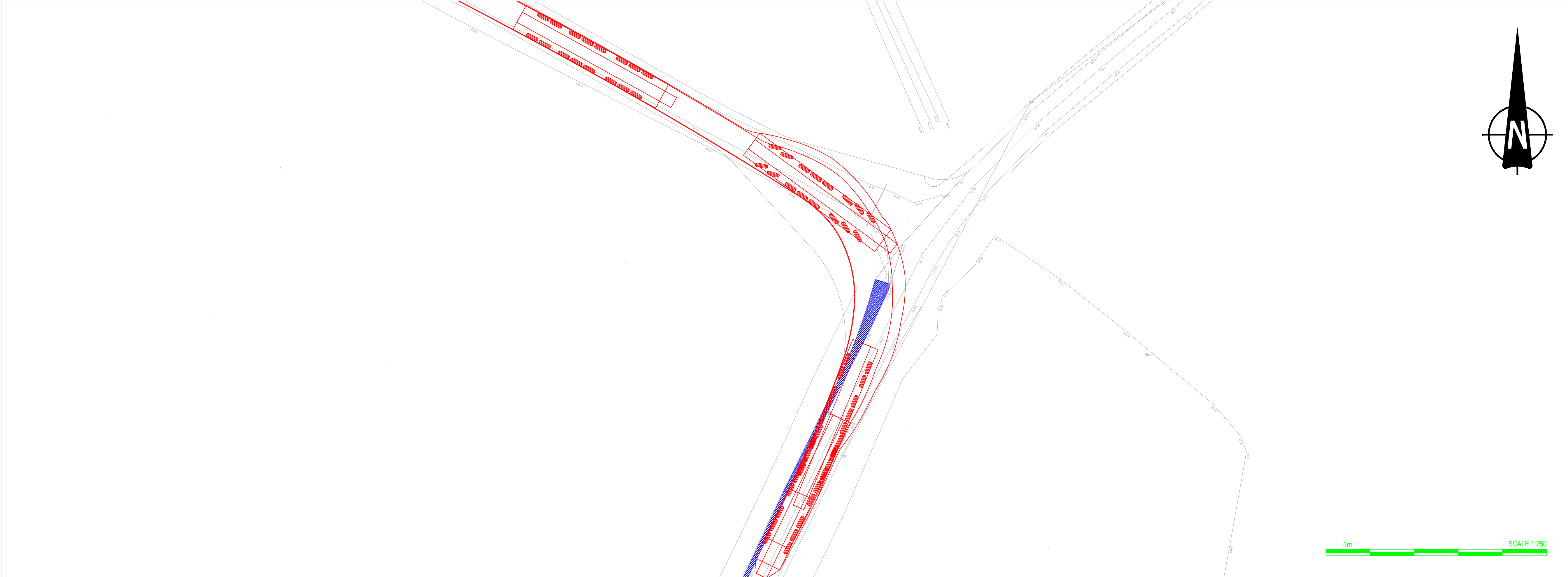
Title
Cave Road / Skreen Road Junction
- Low Loader Swept Path
Sheet 1 of 1

Project Number	Sheet Size	Drawing Scale
794-NI-P&E-02933	A1	SH

Drawing Number
SK002

Drawn By	Status	Revision
TM	Preliminary	-

Checked By	Approved By	Date
MMcG	SH	12/12/2024



Viewport 1 - Skreen Road / Site Access (northern)
Mobile Crane - Right Out



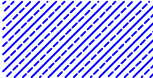
Viewport 2 - Skreen Road / Site Access (northern)
Mobile Crane - Left In

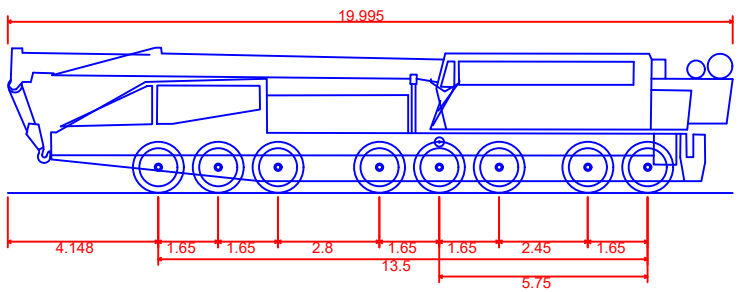
- NOTES**
1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 2. Existing Services.
Any information concerning the location of existing services indicated on this drawing is intended for general guidance only. It shall be the responsibility of the contractor to determine and verify the exact horizontal and vertical alignment of all cables, pipes, etc. (both underground and overhead) before work commences.
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 4. Datum.

Key

Existing Layout _____

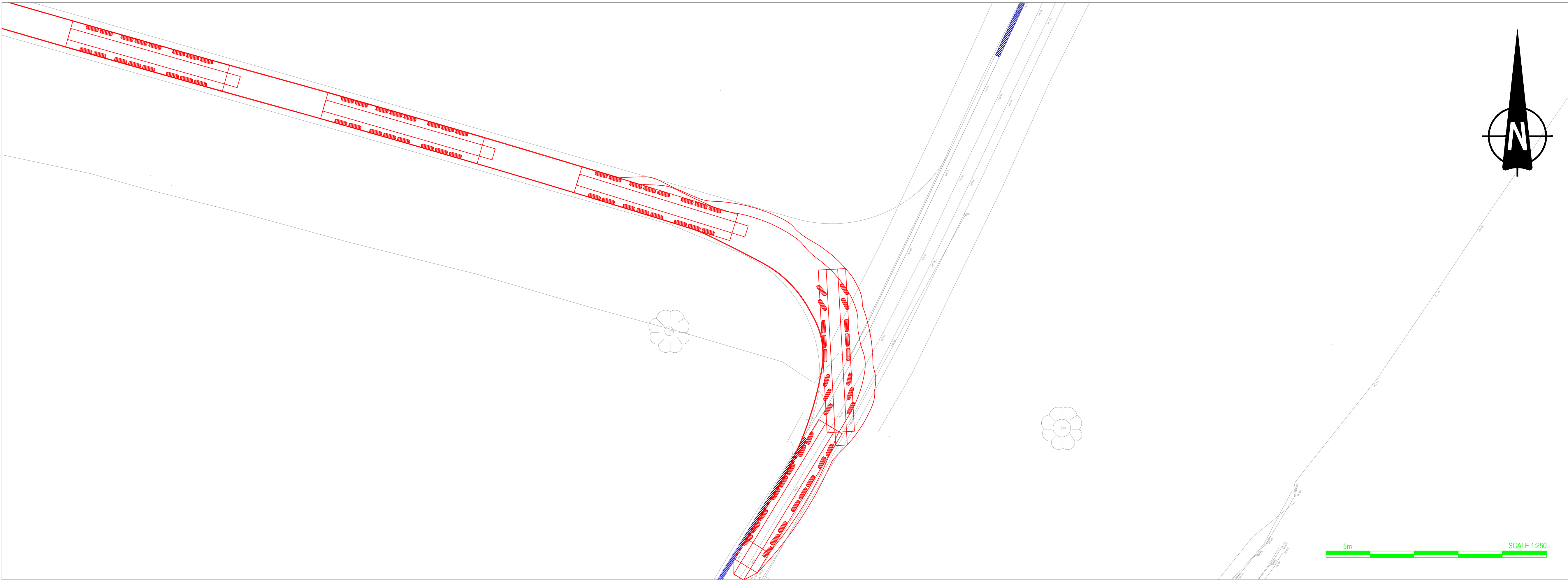
Proposed Layout _____

Proposed Road Widening 

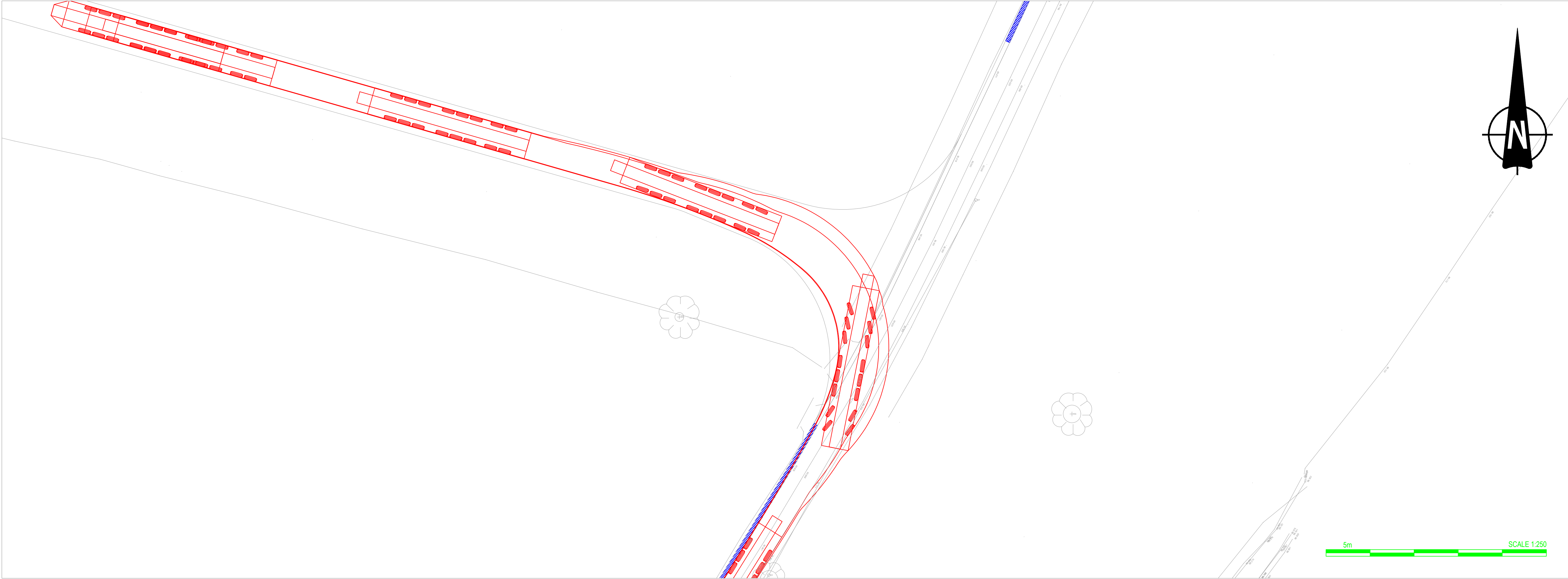


Liebherr LTM 1450-8.1 Mobile Crane
Overall Length 19.995m
Overall Width 3.100m
Overall Body Height 4.000m
Min Body Ground Clearance 0.325m
Track Width 3.000m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 13.404m

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Client			
RES			
Project			
Shaneragh BESS			
-			
Title			
Skreen Road / Site Access (northern) - Crane Swept Path Sheet 1 of 1			
Project Number	Sheet Size	Drawing Scale	
794-NI-P&E-02933	A1	1:250	
Drawing Number			
SK007			
Drawn By	Status	Revision	
TM	Preliminary	-	
Checked By	Approved By	Date	
MMcG	SH	12/12/2024	



Viewport 1 - Skreen Road / Site Access (southern)
Mobile Crane - Right Out



Viewport 2 - Skreen Road / Site Access (southern)
Mobile Crane - Left In

- NOTES**
1. Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 2. Existing Services.
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 4. Datum.

Key

Existing Layout

Proposed Layout

Proposed Road Widening

Liebherr LTM 1450-8.1 Mobile Crane

Overall Length	19.995m
Overall Width	3.100m
Overall Body Height	4.000m
Min Body Ground Clearance	0.325m
Track Width	3.000m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	13.404m

rev	amendments	check	date
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Client

RES

Project

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-

Title

Skreen Road / Site Access (southern)
- Crane Swept Path
Sheet 1 of 1

Project Number

Sheet Size

Drawing Scale

794-NI-P&E-02933

A1

1:250

Drawing Number

SK003

Drawn By

Status

Revision

TM

Preliminary

-

Checked By

Approved By

Date

MMcG

SH

12/12/2024

Client

RES

Project

Shaneragh BESS

Title

Skreen Road / Site Access (southern)
- Crane Swept Path
Sheet 1 of 1

Project Number

794-NI-P&E-02933

Sheet Size

A1

Drawing Scale

1:250

Drawing Number

SK003

Drawn By

TM

Status

Preliminary

Revision

-

Checked By

MMcG

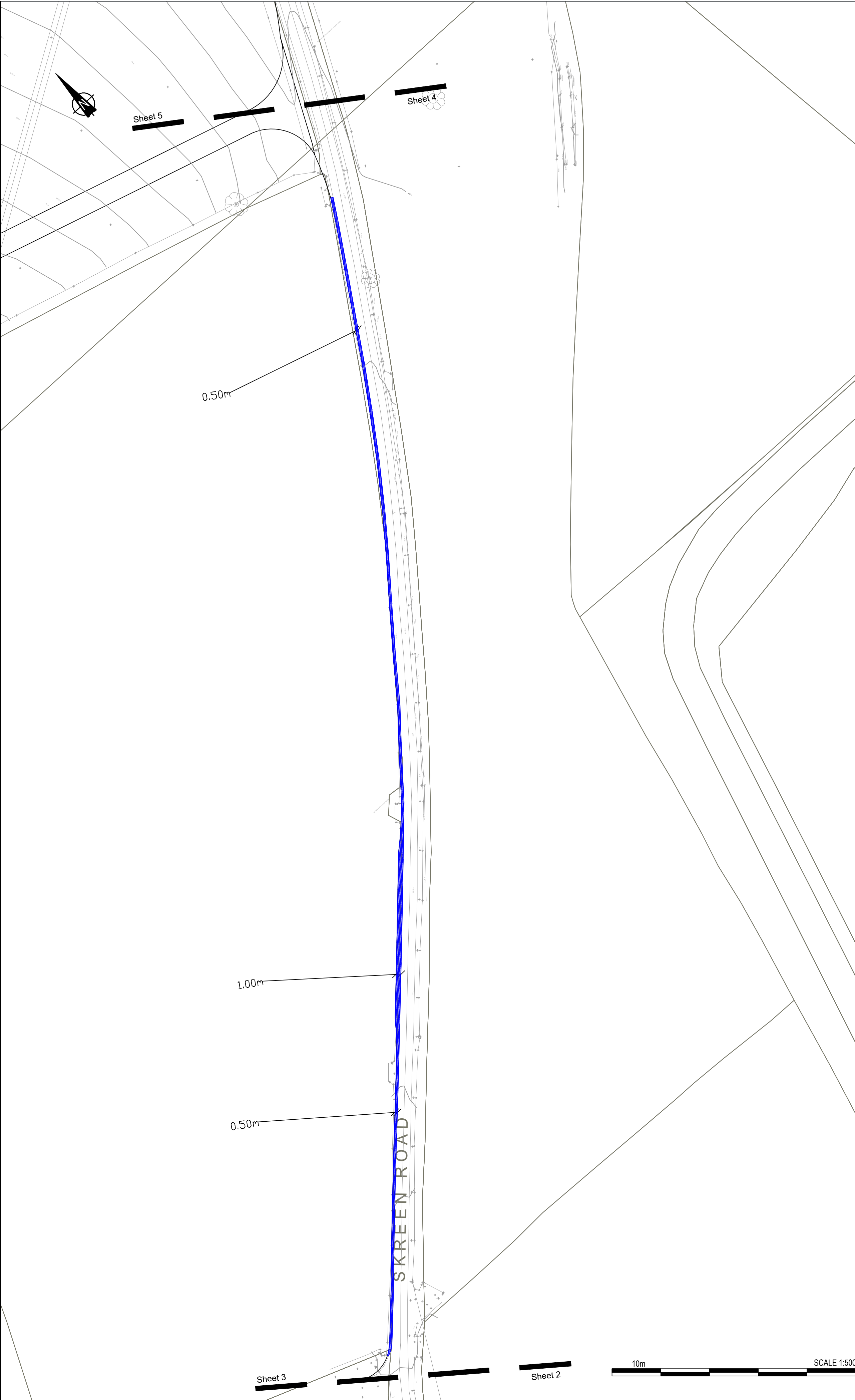
Approved By

SH

Date

12/12/2024

Appendix D – Proposed Road Widening on Skreen Road



NOTES

- Verifying Dimensions.**
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
- Existing Services.**
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- Issue of Drawings.**
Hard copies, dxf and pdf will form a controlled issue of the drawing. All other formats (dwg, dxf etc.) are deemed to be an uncontrolled issue and any work carried out based on these files is at the recipient's own risk. RPS will not accept any responsibility for any errors arising from the use of these files, either by human error by the recipient, listing of un-dimensioned measurements, compatibility issues with the recipient's software, and any errors arising when these files are used to aid the recipient's drawing production, or setting out on site.
- Datum.**

Key

Existing Layout

Proposed Layout

Proposed Narrow Trench Construction. For more information see: 794-NI-P&E-02933-SK002-Detail A

Note*
Existing fence line and final road extents to be confirmed

rev	amendments	check	date

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Client

RES

Project

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Title

Cavan Road / Skreen Road
Junction Proposed Layout
Sheet 1 of 2

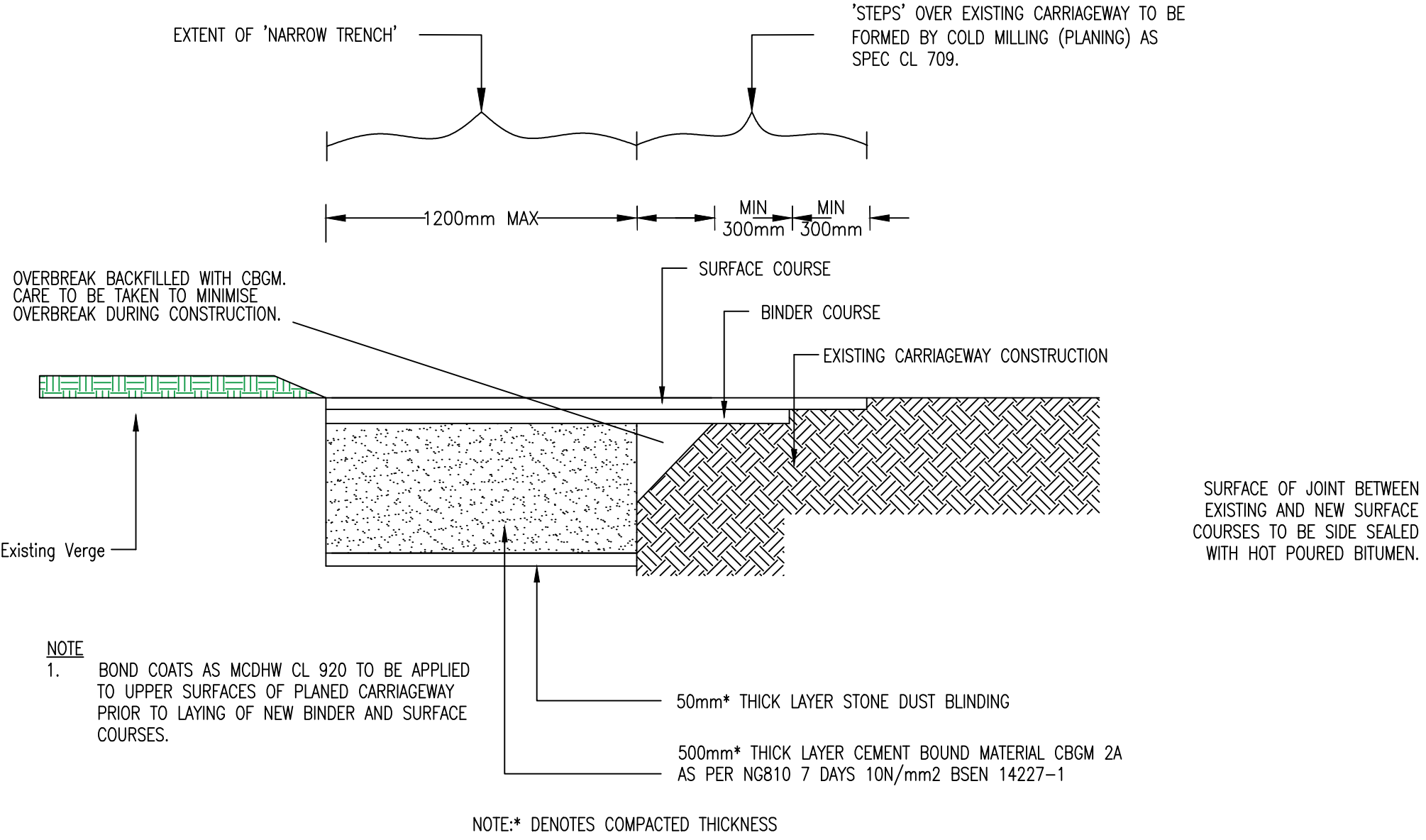
Project Number	Sheet Size	Drawing Scale
794-NI-P&E-02933	A1	As Shown

Drawing Number

SK001

Drawn By RD	Status S0	Revision /
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Checked By MMcG	Approved By SH	Date Dec 24
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DETAIL A:
NARROW TRENCH CONSTRUCTION

- NOTES**
- Verifying Dimensions.
The contractor shall verify dimensions against such other drawings or site conditions as pertain to this part of the work.
 - Existing Services.
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 - Issue of Drawings.
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 - Datum.

Key

Existing Layout

Proposed Layout

Proposed Narrow Trench Construction. For more information see: 794-NI-P&E-02933-SK002 - Detail A

rev	amendments	check	date
74 Boucher Road Belfast BT12 6RZ Elmwood House 74 Boucher Road Belfast BT12 6RZ T +44 (0) 28 90 667914 F +44 (0) 28 90 668286 W www.rpsgroup.com/ireland E ireland@rpsgroup.com			
Client			
RES			
Project			
Shaneragh BESS			
Title			
Cavan Road / Skreen Road Junction Proposed Layout Sheet 2 of 2			
Project Number	Sheet Size	Drawing Scale	
794-NI-P&E-02933	A1	As Shown	
Drawing Number			
SK002			
Drawn By	Status	Revision	
RD	S0	/	
Checked By	Approved By	Date	
MMcG	SH	Dec 24	

Appendix E – Indicative Construction Vehicle Route

