Land West of Cowbridge Road, Bicker Fen, Boston

Dilapidation Survey

Technical Note 02

Prepared for

AGR Solar 2 Limited

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APPENDICES

Appendix A – Dilapidation Survey Photograph Record

1.0 INTRODUCTION

1.1 Overview

1.1.1 Axis has been appointed by AGR Solar 2 Limited ('AGR') to undertake a dilapidation survey to assess the existing condition of the local highway network which will provide the access and egress for construction traffic associated with the proposed development of a photovoltaic array, grid connection, access improvement works and ancillary development on land at Bicker Fen, Boston and South Holland on land west of Cowbridge Road, Bicker Fen, Boston.

1.1.2 Planning consent for the proposed development was granted by both South Holland District (SHDC) and Boston Borough Council (BBC) under planning application reference number's H04-0848-22 and B/22/0356. Planning condition numbers 14 (SHDC) and 8 (BBC) requires that:

"Prior to the commencement of any part of the development hereby permitted, the condition of the parts of North Ing Drove, Cowbridge Road and Ing Drove that will be used by vehicles making deliveries of materials and components to the permitted development shall be recorded by written notes, still and moving photographic images during an inspection that shall be undertaken by the Applicants' representatives in the company of an officer of the Local Highway Authority. Those public roads shall be maintained, at the cost of the Applicants, in a safe and suitable condition throughout the construction phase of the permitted development and shall be reinstated to no less than the standard of their pre-commencement condition following completion of the construction phase. The Applicants shall also follow a reciprocal process during the decommissioning of the permitted development."

1.1.3 The purpose of this report is to present and discuss the findings of the pre-construction condition survey as stipulated by the above planning condition. The survey was undertaken on 6th February 2024. Video recordings covering all of the road within the survey area was obtained, along with photographs of key areas where deterioration was observed. Detailed plans of the photographs taken along with the respective locations and type of defect noted are contained within **Appendix A** at the end of this report.

1.2 Report Structure

1.2.1 The remainder of the report will be structured as follows:

i) **Section 2** provides a description of the site location and the extent of the survey area;
ii) **Section 3** provides a description of the survey findings and a photographic record of points of note for each of the roads within the survey area; and,
iii) **Section 4** summarises the findings of this report.

2.0 SITE LOCATION AND ACCESS STRATEGY

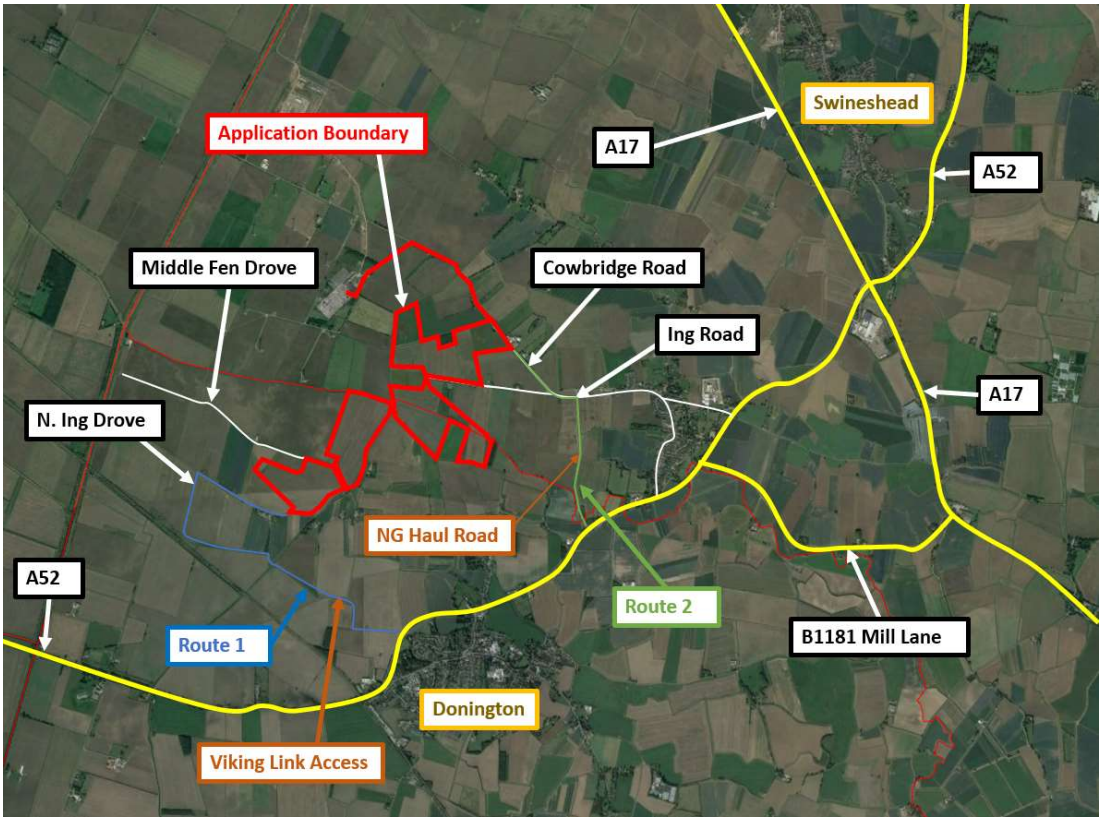
2.1 Site Location

2.1.1 The application site is located approximately 1.5km to the west of Bicker village, and approximately 1.5km north of Donington Village in South Holland, Lincolnshire.

2.1.2 The site is circa 97.3 hectares (ha) in size and comprises four parcels of land, located to the north and south of Ing Road and to the north-east and south-west of Middle Fen Drove. All parcels of land currently comprise a number of arable fields, which are sub-divided by ditches and broken hedgerows.

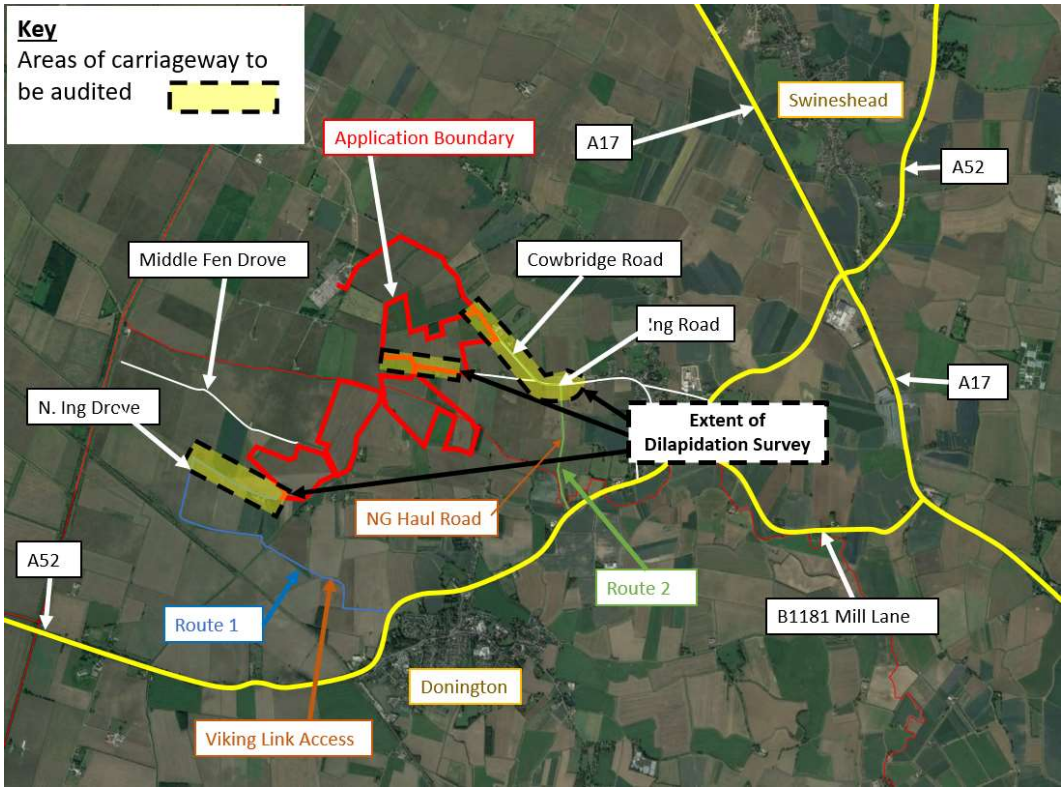
2.1.3 The site location and local highways context is illustrated in **Image 2.1**.

Image 2.1 – Site Location



2.1.4 The extent of survey areas as agreed with Lincolnshire County Council (LCC) are illustrated in **Image 2.2**. The sections of publicly owned highway included in the surveys are Cowbridge Road, Ing Road and N. Ing Drove.

Image 2.2 - Extent of Highway Audited (and access strategy)



2.2 Access Strategy

2.2.1 To mitigate the traffic impacts along Cowbridge Road along with the incidence of conflicts of vehicles meeting and passing side by side, an access strategy was previously agreed with LCC. The areas of carriageway that have been selected for audit are sections of public highway that feature along this agreed access strategy.

2.2.2 Access will be taken via a combination of two routes so as to provide a separate arrival and departure route for construction vehicles. This will comprise:

i) Route 1: Via the Viking Link 'haul / access road' route from Bridge End Causeway (A52), towards North Ing Drove, and Middle Fen Drove; and
ii) Route 2: Via the existing National Grid 'haul road' from Bicker Road (A52), towards Ing Drove, Cowbridge Road.

2.2.3 The above routes will be allocated for either arriving or departing construction vehicles once the timescales for construction of the neighbouring Vicarage Drove Solar development are known. This is to ensure that there is no conflict if they are built concurrently.

2.2.4 Providing a separate arrival and departure route will ensure that at no time will loaded and returning construction vehicles travel on the same section of any highway between either the A52 or the Application Site.

2.2.5 Once the photovoltaic array is operational, maintenance access will be provided from Cowbridge Road.

2.2.6 The access routing proposal is illustrated in **Image 2.2**, whereby Route 1 is outlined in blue and Route 2 is outlined in green.

3.0 SURVEY FINDINGS

3.1 Cowbridge Road

3.1.1 Cowbridge Road runs in a northwest / southeast orientation along the northeastern boundary of the proposed solar farm site. Vehicular access to the northeastern portion of the solar farm will be provided from Cowbridge Road.

3.1.2 The road is surfaced with asphalt and is currently in a substandard condition. The carriageway surface is subject to extensive cracking along with a significant number of failures along its edge. It is considered that the majority of carriageway edge failures to date have occurred as a result of frequent movements of large vehicles such as agricultural machinery. This is further evidenced by the regular appearance of tyre tread marks and verge encroachment on the side of the carriageway. In addition, the carriageway is characterised by numerous holes and areas of sunken road surface.

3.1.3 The overall condition of the asphalt surface can be described as having a medium to high level of deterioration across its entire length.

Images 3.1 – 3.2 – Cowbridge Road Small Hole and Sinkage in Asphalt Surface



Images 3.3 – 3.6 – Cowbridge Road Cracking in Asphalt Surface



Images 3.7 – 3.10 – Cowbridge Road Carriageway Edge Failure



Images 3.11 – 3.14 – Cowbridge Road General Deterioration of Asphalt Surface



3.2 Ing Drove and Ing Road

3.2.1 Ing Drove and Ing Road runs in an east / west orientation between the eastern boundary of the Site and the village of Bicker Bar. Vehicular access to the eastern and northern portions of the site will be provided from Ing Road. Only a short section of Ing Drove (circa 250m) will be used by HGV traffic during the construction phase to connect Cowbridge Road and Ing Road with the National Grid Haul Road (an unadopted road).

3.2.2 Both routes are surfaced with asphalt, albeit Ing Road is noted as being in a substandard condition whereas Ing Drove's condition is adequate for a rural setting.

3.2.3 Ing Road suffers from extensive cracking in the asphalt, carriageway edge failures, numerous potholes, and areas vegetation growth. Similar to Cowbridge Road, it appears that many of the failures in carriageway edge have occurred due to incursion

of large vehicles such as agricultural machinery onto the highway verge. In addition, the carriageway is characterised by a number of reinstated surface that has resulted in the surface becoming uneven in places.

3.2.4 Ing Drove features evidence of carriageway edge failure along its length. This is likely to be as a result of the incursion of large vehicles onto the verges. This is further evidenced by the incidence of tyre tread marks and verge damage.

3.2.5 The overall condition of the asphalt surface on Ing Road can be described as having a medium to high level of deterioration, whilst Ing Drove's asphalt surface is seen in having a medium level deterioration.

Images 3.15 – 3.16 – Ing Road Cracking in Asphalt Surface





Images 3.17 – 3.18 – Ing Road Carriageway Edge Failure




Images 3.19 – 3.20 – Ing Drove Carriageway Edge Failure




Images 3.21 – 3.22 – Ing Road Potholes




Images 3.23 – 3.24 – Ing Road On-Carriageway Vegetation Growth




Images 3.25 – 3.26 – Ing Road Reinstated Carriageway Patches




Images 3.27 – 3.28 – Ing Road General Deterioration of Asphalt Surface




Images 3.29 – 3.30 – Ing Drove General Deterioration of Asphalt Surface




3.3 N. Ing Drove

3.3.1 The section of N. Ing Drove surveyed runs in a northwest / southeast orientation along the southwestern boundary of the proposed solar farm site. Vehicular access to the south and southwestern portion of the solar farm will be provided from N. Ing Drove.

3.3.2 The road is surfaced with asphalt and is in a substandard condition. The road has regular instances of carriageway edge failures and reinstated surface, the latter of which has resulted in an uneven carriageway.

3.3.3 The overall condition of the asphalt surface can be described as having a medium to high level of deterioration.

Images 3.31 – 3.32 – N. Ing Drove Carriageway Edge Failure




Images 3.33 – 3.34 – N. Ing Drove Reinstated Carriageway Patches




Images 3.35 – 3.36 – N. Ing Drove General Deterioration of Asphalt Surface



4.0 SUMMARY AND CONCLUSIONS

4.1 Summary

4.1.1 The purpose of this report is to present the visual findings of a dilapidation survey of the local highway network in the immediate vicinity of the proposed Bicker Fen Solar Farm site, Boston. Specifically, this includes sections of the adopted (public) highway network that feature as part of the agreed access strategy for HGVs during the construction phase. The sections of carriageway surveyed are all surfaced with asphalt.

4.1.2 All sections of route surveyed, with the exception of Ing Drove, generally appear to be in a substandard condition. The types of defect identified from the survey include cracked asphalt, carriageway edge failure, potholes, sunken surfaces, on-carriageway vegetation growth and uneven surface resulting from sections of reinstated surface. As such, it has been deemed that Cowbridge Road, Ing Road and N. Ing Drove have evidenced medium to high levels of road surface deterioration. Ing Drove was noted in being in a better condition, with the only notable issue being a few instances of carriageway edge failures. As such, the road has been deemed in having a medium level of surface deterioration.

4.1.3 Much of the surface deterioration identified can be attributed to frequent movements of large, heavy vehicles such as agricultural machinery which currently make frequent use of the routes.

4.1.4 Axis has extensive video footage of the surveyed areas, which can be made available on request.

Appendix A – Dilapidation Survey Photograph Record