Green Infrastructure Assessment

Site Address:	Rhosddu Industrial Estate, Main Rd, Old Rhosrobin, Gwersyllt, Wrexham, LL11 4YL
Client Name:	LVW Group
Reference:	Green Infrastructure Assessment (GIA)
Date:	22/11/2023

Background

Arbtech Consulting Limited was instructed by LVW Group to undertake a Green Infrastructure Assessment (GIA) Assessment at Rhosddu Industrial Estate, Main Rd, Old Rhosrobin, Gwersyllt, Wrexham, LL11 4YL (hereafter referred to as "the site"). The assessment was required to inform a planning application for the installation of three units on-site with associated parking (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

This report should be read in conjunction with the following documents:

- Preliminary Ecological Appraisal (PEA) report for this site.

Site Location and Landscape Context

The site is located at National Grid Reference SJ 32873 52640 and has an area of approximately 0.4ha a fenced industrial site with grassland, hardstanding, and one building. It is surrounded by an industrial estate in the immediate vicinity including hardstanding, buildings, and access roads. There are grasslands and lines of trees/scattered trees to the north, east, and west of the industrial estate in the nearby vicinity. There is also a pond located ~130m northwest of the site boundary. To the south of the industrial estate are residential areas and the centre of Wrexham. The wider landscape comprises rural areas with the Welsh-English border to the east. A site location plan is provided in Appendix 2.

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e., left as found in baseline), enhanced (i.e., improved condition) or lost (i.e., destroyed by proposed development). Prior and post development plans can be found in Appendix 3 and 4.

Green Infrastructure (on-site)

The site (~0.4ha), comprises:

- Modified grassland (g4) (UK Habitat Classification: 2.0) (~0.1ha), and;

- Developed land; sealed surface (u1b) (UKHab: 2.0) (~0.3ha), with one building (u1b5) (UKHab: 2.0) (~0.09ha), and other developed land (u1b6) with gravel beds (310) (UKHab: 2.0) (~0.21ha).

There are also three semi-mature field maple trees (T01:T03), a young field maple tree (T04), and two groups of young goat willow trees (G01 and G02) (UKHab: 2.0: scattered trees (11) and young trees – self set (202).

Green Infrastructure (adjacent)

Adjacent to the site to the north, south, east, and west is industrial infrastructure (UKHab: 2.0: developed land; sealed surface (u1b)).

In the nearby vicinity of the site ~130m to the north-west of the site is a wildfowl pond (r1g) (UKHab: 2.0), as well as other neutral grassland (g3c) (UKHab: 2.0), and a line of trees (33) (UKHab: 2.0), with a high abundance of goat willow.

Green Infrastructure Assessment

Prior to the proposed development, the site has ~0.10ha of grassland and ~0.31ha of developed land, with a total area of ~0.41ha (*Table 1*). Post the development the site will have ~0.03ha of grassland and ~0.38ha of developed land (with a total area ~0.41ha). This will result in a ~73% loss in grassland on-site and a ~24% increase in developed land on-site. Some scattered young and semi-mature trees may also be lost as part of the proposed works (i.e., T01:T04, and G01 (G02 will likely be retained)). In summary, under the current plans, more on-site green infrastructure will be lost than gained.

Table 1. Changes to habitat sizes as part of the proposed works.

Habitats on-site	Pre-works (ha)	Percentage area (%)	Post-works (ha)	Percentage area (%)	Percentage increase/decrease of habitat (%)
Modified grassland	0.10	25.06	0.03	6.83	-72.82
Developed land; sealed surface	0.31	74.94	0.38	93.17	+24.03
Total site area	0.41	100.00	0.41	100.00	

Green Infrastructure Recommendations

The existing habitats on site are of low ecological value, therefore, the loss of them is not considered significant. The following green infrastructure could be added to the site to improve on-site biodiversity with higher quality habitats and increase site connectivity to greenspace in the wider landscape for wildlife:

- Using species-rich native seed mixes that incorporate pollinator-friendly plant species to increase invertebrate populations on-site and increase foraging opportunities for bats.
- The installation of hedgehog houses near to retained vegetation to provide refuge for hedgehogs.
- Planting of young/semi-mature native tree species to increase the connectivity of the site for bats, birds, etc.
- Planting of native hedgerows along site boundaries (e.g., hawthorn *Crataegus monogyna* or beech *Fagus sp.*,) to improve site connectivity to other green corridors in the nearby vicinity.
- The installation of bat and bird boxes (such as those mentioned in the PEA) to support these species on-site.

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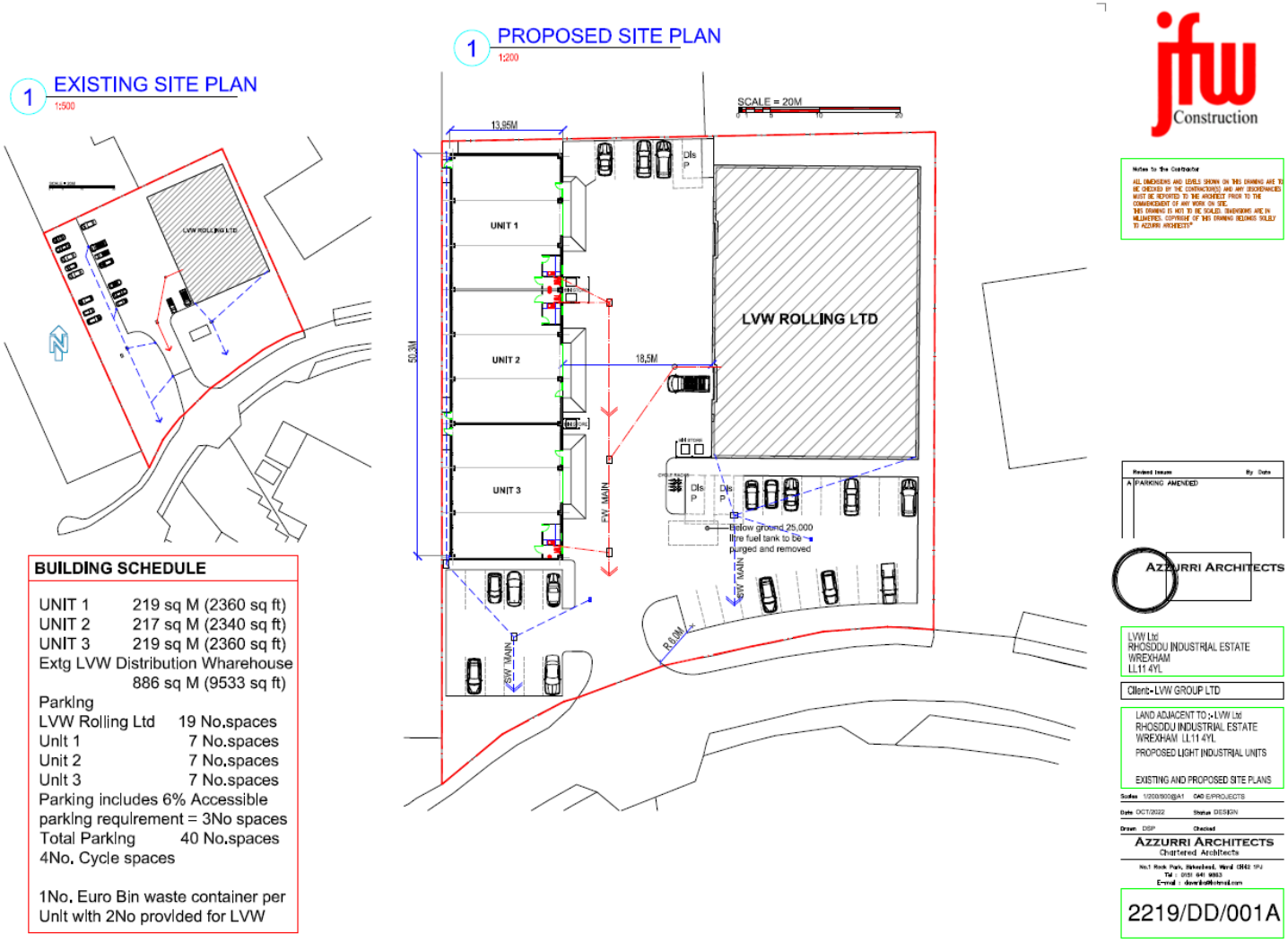
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Appendix 1: Proposed Development Plan



BUILDING SCHEDULE

UNIT 1	219 sq M (2360 sq ft)
UNIT 2	217 sq M (2340 sq ft)
UNIT 3	219 sq M (2360 sq ft)
Extg LVW Distribution Wharehouse	886 sq M (9533 sq ft)
Parking	
LVW Rolling Ltd	19 No.spaces
Unit 1	7 No.spaces
Unit 2	7 No.spaces
Unit 3	7 No.spaces
Parking includes 6% Accessible parking requirement = 3No spaces	
Total Parking	40 No.spaces
4No. Cycle spaces	
1No. Euro Bin waste container per Unit with 2No provided for LVW	

Appendix 2: Site Location Plan



Appendix 3: Habitat Plan – prior to works



Appendix 4: Habitat Plan – post works

