

Land off New Road,
Rhosrobin, Wrexham

for

Liberty Properties

Landscape and Visual Impact Assessment

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C+A

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**LAND OFF NEW ROAD, RHOSROBIN,
WREXHAM**

FOR

LIBERTY PROPERTIES

LANDSCAPE AND VISUAL IMPACT ASSESSMENT

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CONTENTS

<u>Section</u>		<u>Page</u>
1.0	Introduction	2
2.0	Assessment Methodology	4
	Criteria for Landscape Impacts	4
	Criteria for Visual Impacts	6
	Duration	8
	Significance	8
3.0	Baseline Environment	9
	Site Description	9
	Landscape Character	10
	Experiential Landscape Character and Views	12
	Historic Landscape	12
	Constraints and Opportunities	13
4.0	Impact Assessment	15
	Landscape Assessment	15
	Visual Assessment	16
5.0	Mitigation and Residual Impacts	17
6.0	Summary	18

Appendices

LA1	Landscape and Visual Impact Tables
LA2	Photographs
LA3	Plans

1.0 Introduction

- 1.1 Cassidy + Ashton have undertaken this Landscape and Visual Impact Assessment (LVIA) on behalf of Liberty Properties. It forms part of an outline planning application to allocate land off New Road, Rhosrobin, on the north western side of Wrexham, North Wales for residential development of up to 400 units.
- 1.2 The LVIA has been carried out by a Chartered Landscape Architect, in accordance with the 'Guidelines for Landscape and Visual Assessment' (3rd Edition, 2013), produced by the Landscape Institute and the Institute of Environmental Management and Assessment.
- 1.3 The Guidelines require the effects of the proposed development on the landscape and visual amenity to be assessed separately and understood for each stage of the proposed development, from existing (baseline) conditions, through to completion. This report contributes to an overall appraisal of the development proposals, and specifically considers the potential effects on tangible landscape features, the landscape character, how it is experienced and how the landscape is viewed. The main objectives of the LVIA are as follows:

- To describe and evaluate the existing landscape character of the site, its surroundings and views to and from it;
- To identify notable landscape features;
- To assess the sensitivity of the landscape, visual amenity and views to the proposed changes;
- To determine the significance of the effects;
- To identify the potential for mitigation of the likely effects upon the landscape and views; and
- To evaluate the significance of any residual landscape or visual effects.

The detailed findings of the assessment are included within Appendix LA1 - Landscape and Visual Impact Tables. Photographs and plans support the text and can be located in Appendices LA2 and LA3.

- 1.4 National landscape designations are identified by the Countryside Council for Wales (CCW) on LANDMAP and on the Wrexham LANDMAP SPG: March 2007. There are no national or local landscape designations which relate to the proposed development site. Within the scope of the Planning Policy Wales, there is a presumption in favour of sustainable development which contributes to and protects the natural, built and historic environment; and, as part of this, helps to improve biodiversity, use natural resources prudently, minimises waste and pollution and adapts to climate change by moving to a low carbon economy.
- 1.5 The application site lies within CCW National Landscape Character Area 13: Deeside and Wrexham; and the Regional Landscape Character Area 8: Gwersyllt, Llay, Gresford, Borras as defined by the local authority.
- 1.6 The site falls within the administrative authority of Wrexham County Borough Council. The Wrexham Unitary Development Plan (1996-2011) was adopted in October 2005, and although the UDP is now out of date, no new plan has superseded it. The policy implications of the UDP on the landscape design and character of the proposed scheme are summarised below, with the key objectives being the safeguarding and enhancing of the existing landscape character.

- 1.7 Policy PS2 states that development must not materially have a detrimental effect on countryside, landscape/townscape character, open space, or the quality of the natural environment.
- 1.8 Policy GDP1 states that all new development should ensure that built development accords with the character of the site and makes a positive contribution to the appearance of the nearby locality.
- 1.9 Policy EC4 states that development proposals should provide for the conservation and management of hedgerows, trees, orchards, woodland, wildlife and other natural landscape and water features, and include new planting in order to enhance the character of the landscape. The policy recognises that much of the landscape quality of this region stems from the pattern of hedgerows, trees and woodland and the conservation, planting and proper management of such features is encouraged. It states that a development may be acceptable if mitigating measures, within the control of the developer, can be provided which would reinstate the integrity or continuity of these features.

2.0 Assessment Methodology

- 2.1 A three-stage process has been adopted. First, the sensitivity of the landscape resource and the sensitivity of visual receptors were assessed. This was followed by an assessment of the magnitude of the landscape and visual impacts. Using these, the significance of landscape and visual impacts on the resource was then assessed.
- 2.2 To illustrate the landscape and visual assessment process, the following plans should be read in conjunction with this section:
- L1, Topography - the existing topography of the site and its surrounding area;
 - L2, Site Location - the existing townscape and rural landscape context;
 - L3, Landscape Character Areas;
 - L4, Constraints and Opportunities - the opportunities and constraints which have influenced the design;
 - L5, Preliminary Development Framework
 - L6, Location of Photographs;
 - L7, Zone of Visual Influence and Visual Impact on Completion;
 - L8, Zone of Visual Influence and Visual Impact after 20 years;

These can be located in Appendix LA3 – Plans

- 2.3 In addition, tables showing the sensitivity of landscape and visual receptors and the magnitude and significance of landscape and visual impacts are set out at Appendix LA1 and photographs of the site and views to and from it are contained in Appendix LA2.
- 2.4 The assessment seeks to be as objective as possible, but the evaluation of landscape and visual impacts is based upon the experience and knowledge of a Chartered Landscape Architect, using a methodology based on the Guidelines for Landscape and Visual Impact Assessment.
- 2.5 The area surrounding the site was surveyed and photographed to assess the visibility of the site and the proposals, including built structures. The viewpoints which were assessed were those to which the public has access, including footpaths, bridleways and other public spaces. No private viewpoints were assessed. The purpose of this fieldwork was to:
- determine the extent of visibility of the existing site, including built structures and landscape features;
 - determine the visibility of the proposals, taking into account landform, vegetation and built development;
 - assess the existing landscape character and the effects of the proposed development on it; and
 - carry out an assessment of landscape and visual impacts.

2.6 Criteria for Landscape Impacts

Landscape Sensitivity

- 2.6.1 The term receptor means a group of elements that will be directly or indirectly affected by the proposals. Landscape receptors are physical elements of the landscape that may be affected by the development, such as landform, drainage, woodland or hedgerows, land

uses and field boundaries, with consequent impacts on landscape character.

2.6.2 The sensitivity of landscape receptors is defined below:

- **Highly sensitive:** A landscape possessing a distinctive sense of place or landscape character, in good condition and highly valued at national level for its scenic quality. A landscape with a low tolerance to change, for example National Parks, AONB's, Heritage Coasts or historic parks.
- **Moderately sensitive:** A landscape with a clearly defined sense of place or landscape character in moderate condition, an area valued at local or regional level, which is tolerant of slight change.
- **Slightly sensitive:** A landscape with little or no sense of place. Landscape character is not clearly defined and elements are in poor condition and not valued for their scenic quality. An area that is tolerant of substantial change.

Magnitude

Category	Description
Major adverse landscape impact	The proposals will be at total variance with the landscape character, landform, scale, pattern and features of the landscape.
Moderate adverse landscape impact	The proposals will be clearly at odds with the landscape character, landform, scale, pattern and features of the landscape.
Slight adverse landscape impact	The proposals will not quite fit into the landscape character, landform, scale, pattern or features of the landscape.
Negligible adverse landscape impact	The proposals will create a barely discernible change to the landscape character, landform, scale, pattern or features of the landscape.
No change	The proposals will not cause any change to the landscape character, landform, scale, pattern or features of the landscape.
Negligible landscape benefit	The proposals will provide a barely discernible improvement to the landscape character, landform, scale, pattern or features of the landscape.
Slight landscape benefit	The proposals will achieve a degree of fit with the landscape character, landform, scale, pattern or features of the landscape and go some way towards improving the condition or character of the landscape.
Moderate landscape benefit	The proposals will fit well into the landscape character, landform, scale, pattern or features of the landscape, or would noticeably improve the condition or character of the landscape.
Major landscape benefit	The proposals will totally accord with the landscape character, landform, scale, pattern or features of the landscape, or would restore, recreate or permanently benefit the condition or character of the landscape.

Figure 1: Landscape Impact Magnitude

2.6.3 The criteria to assess the magnitude of landscape impacts on landscape character are based upon the amount of physical change that will occur as a result of the proposals, as described in Figure 1 above. The changes may be adverse or beneficial. These are based on best practice examples and experience of the assessor.

2.6.4 The magnitude of the impact will depend on a number of factors including:

- The nature of the development
- The physical area of the impact
- The duration of the impact
- The distance of the impact, and
- The landscape context within which the impact occurs.

2.7 Criteria for Visual Impacts

Zone of Theoretical Visibility (ZTV)

- 2.7.1 The ZTV shows the area over which the proposed development may have a visual impact. It illustrates the worst-case scenario, having taken into account the principal barriers, such as woodland, buildings, and settlements, in addition to landform.
- 2.7.2 No ZTV can be entirely accurate. Instead, the ZTVs are used to identify the broad scope of visibility, and therefore the typical viewpoints shown on the plans are further assessed on site.

Sensitivity of Visual Receptors

- 2.7.3 Views may be glimpsed, open, oblique, framed or filtered. Impacts are described as direct or indirect, secondary, cumulative, short, medium or long-term, permanent or temporary, adverse or beneficial.
- 2.7.4 The term visual receptor means the public or community at large, residents, visitors or other viewers that will be directly or indirectly affected by the proposals. Visual receptors have been recorded from publicly accessible viewpoints, the sensitivity of which would be dependent on the location, the activity of the viewer and the importance of the view. These would include viewpoints available to users of outdoor facilities, sporting activities and users of public rights of way; viewpoints from landscape features and beauty spots; viewpoints outside community buildings; and viewpoints available to people traveling through the landscape.
- 2.7.5 The determination of the sensitivity of visual receptors is a matter of professional judgment. The assessment of sensitivity should have regard to many factors such as:
- the location and context of a viewpoint;
 - the expectations and activity of the viewer and the number of people affected;
 - the nature of a particular view;
 - the popularity of the viewpoint, its appearance in guidebooks, on tourist maps, in the facilities provided for its enjoyment, references in literature or art;
 - the capacity for change, with regard to factors such as landform, land use, the pattern and scale of the landscape;
 - the sense of enclosure;
 - the sense of remoteness;
 - the nature of the settlement pattern;
 - impacts on the skyline;
 - inter-visibility; and
 - the rareness of any landscape features.

- 2.7.6 This assessment of the sensitivity of visual receptors is simplified below, based on

current best practice, by reference to the nature of the viewer and the ownership of the view.

- **Highly sensitive:** Viewers with prolonged viewing opportunities and/or who have particular interest in their visual environment and/or open to large numbers of viewers
- **Moderately sensitive:** Viewers with moderate interest in their visual environment and/or who have regular viewing opportunities.
- **Slightly sensitive:** Viewers with passing or momentary interest in their visual environment and/or few opportunities for views.

Visual Impact Magnitude

2.7.7 The magnitude of visual effects depends on factors such as distance, elevation and aspect, as well as the context of the view. The effects may be adverse or beneficial. The magnitude of a visual impact will depend on a number of factors including:

- The nature of the development
- The physical area of the impact relating to its visual context
- The distance of the impact from viewers
- The number of viewers

The following scale, shown in Figure 2 below, has been adopted to determine the magnitude of visual impact, based on the degree of change to the view or to the composition.

Magnitude of Visual Impact	Description
Major adverse visual Impact or benefit	The proposals will cause a dominant or complete change to the composition of the view, the appreciation of the landscape character or the ability to enjoy the view.
Moderate adverse visual Impact or benefit	The proposals will cause a clearly noticeable change to the view, which would affect the composition, the appreciation of landscape character or the ability to enjoy the view.
Slight adverse visual Impact or benefit	The proposals will cause a perceptible change to the view, but which would not materially affect the composition, the appreciation of landscape character or the ability to take or enjoy the view.
Negligible adverse visual Impact or benefit	The proposals will cause a barely perceptible change to the view, which would not affect the composition, the appreciation of landscape character, or the ability to take or enjoy the view.
No change	The proposals will not cause any change to the view.
Neutral	There is a perceptible change to the view, but this is neither adverse nor beneficial.

Figure 2 - Visual Impact Magnitude

Distance of Views

2.7.8 The following terminology is used to describe the approximate distance between the viewer and the proposals:

- local: 0-1km
- mid-range: 1-2km

- long-range: over 2km

Type of the View and Numbers of Viewers

2.7.9 The type of the view and the number of viewers, or users, who experience the view are factors in making a judgment of sensitivity. The terminology used is:

- Partial, direct, glimpsed, open, oblique, framed, limited, panoramic views; and
- Few, moderate and many viewers.

Duration

2.8 The following terminology is used to describe the duration of the landscape and visual impacts:

- Short-term/Construction period: 0-1 year: sources of impact include cranes, heavy plant and machinery, temporary structures or scaffolds, tree felling and site clearance, signage and hoardings, off-site vehicular disruption and night time illumination.
- Medium-term/On completion: 1-20 years: potential sources of impact include road areas at grade or on embankment, traffic, built development, signage, domestic and street lighting
- Long-term: over 20 years: potential sources of impact include all those as at completion with the addition of maturing vegetation.

This gives an overview of the cumulative visual and physical effects on the landscape and allows for the maturing of proposed mitigation planting. At each stage the effects may be either adverse or beneficial.

Significance

2.9 The scale shown in Figure 3 below, has been adopted to assess the significance of both landscape and visual impacts (the details of which are set out in the Landscape and Visual Impact Tables). The basis of this scale is derived from professional experience.

Sensitivity of resource	Major impact or benefit	Moderate impact or benefit	Slight impact or benefit	Negligible impact or benefit	Neutral impact
High	Significant	Significant	Moderately significant	Slightly significant	Not significant
Moderate	Moderately significant	Moderately significant	Slightly significant	Not significant	Not significant
Slight	Moderately significant	Slightly significant	Not significant	Not significant	Not significant

Figure 3 – Significance of Impact

3.0 Baseline Environment

Site Description

- 3.1 The site and the surrounding area are shown on Plan L1, Topography. Photographs of the site and the surrounding area are contained in Appendix LA2.
- 3.2 The topography of the area around the site is gently rolling lowland, rising to higher ground 2-3km to the west. The incised valley of the River Alyn is located just to the north of the site. Located north east of the B5425 (New Road) which runs north from Wrexham, through the small settlement of Rhosrobin, towards the village of Llay. The site is enclosed on all sides by strong physical boundaries. The main Chester to Wrexham railway line lies to the northwest, the busy A483 dual carriageway to the southeast and residential development along Plas Acton Road, Pandy to the northeast and Rhosrobin to the south west (Photograph 1).
- 3.3 Mature vegetation along the boundaries encloses the site in most places, consisting of tall, overgrown Hawthorn hedges and mature trees, which are generally Oak. The boundary with the railway line is the least vegetated having only a few scattered trees along its length, although the track itself is in cutting and not visible from the site (Photograph 2).
- 3.4 Access to the site is via field gates at each end, off both New Road, Rhosrobin and Plas Acton Road, Pandy. A Public Right of Way (Footpath 24, Wat's Dyke Way) crosses the middle of the site, following the line of the ancient Wat's Dyke (Photograph 3).
- 3.5 The site consists of five irregular fields. The two fields to the south west of the site currently provide rough grazing for horses. Vegetation is scrubby and there is evidence of recent disturbance to the natural ground level, resulting in swathes of nettles and brambles (Photograph 4). A mature Hawthorn hedgerow divides this part of the site and encloses a strip of land between the hedge and the elevated A483 to the south east. Mixed native tree planting along the dual carriageway embankment contains this part of the site further and partially screens traffic on the road, although passing vehicles are visible and it is very noisy (Photograph 5).
- 3.6 Ground levels fall slightly towards the centre of the site and field ditches converge to create an area of boggy ground adjacent to the bottom of the A483 embankment. A boardwalk over this area and a copse of Willows suggests that it becomes quite wet during the winter months (Photograph 6).
- 3.7 Remnants of the ancient Wat's Dyke run from this low point north across the site and can be recognised as a raised hedgerow with a slight ditch, although much of the earthwork has been ploughed up. Mature Oak trees and overgrown hedgerow shrubs line the Dyke and provide a strong field boundary (Photograph 7).
- 3.8 At the centre of the site, a small triangle of land has been recently planted with new trees, some of which are ornamental, non-native species. The trees are very small, mostly feathered or light standards and the area is very overgrown with perennial weeds and grasses (Photograph 8)
- 3.9 The three fields to the north of the site, either side of Wat's Dyke, are managed for pasture and have a much more uniform sward. Mature, gappy hedgerows divide the fields, reinforced with post and wire fences, and there are several mature Oak trees along

the hedge lines (Photograph 9).

- 3.10 A dense hedgerow forms the boundary with Plas Acton Road in front of houses on the Blue Bell Estate. Planting along the A483 continues along the embankment, filtering views of traffic and providing a green corridor along the urban edge of Wrexham. A footbridge over the dual carriageway is located at the end of Plas Acton Road beside a small children's play area. Both lie outside the site boundary in the most easterly corner of the site and are enclosed by a post and rail fence. Two lines of telegraph wires run across the site from the northern corner south and east (Photographs 10a and 10b).
- 3.11 There are mature trees and hedgerows within the site which have significant landscape, visual and nature conservation value. None of the trees are protected by Tree Preservation Orders. A small pond exists within the ditch to the west of the site, adjacent to the railway line. The pond appears to be ephemeral and is overgrown by hedgerow trees and scrub.
- 3.12 There are no existing buildings on the site.

Landscape Character

- 3.13 The Landscape Character designations are illustrated on Plan L3, Landscape Character Areas. Character area designations denote distinct areas which are defined by a unique combination of landscape, biodiversity, geodiversity and cultural/economic activity.

National Landscape Character

- 3.14 The national character areas have been compiled by the Countryside Council for Wales (CCW). The application site lies within CCW National Landscape Character Area 13: Deeside and Wrexham;

Summary description describes the area as:

The area comprises the hinterland low lying land around Wrexham town and its outlying urban villages, generally rural in nature but often with significant noise from A483, adjacent roads and the railway. the area is generally low lying open farmland with a large open field pattern with well defined hedgerow boundaries. The original rural character has been significantly weakened by urban influences with some pockets of interest. Area is classified as rolling lowland farmland but heavily influenced by the A483, Mold Road. Other roads and rail corridors subdivide the wider area, with pylons, views of housing & industry, mining & quarrying a frequent occurrence. Although relatively fragmented by development the area has not suffered as much visual degradation as the adjacent aspect area WRXHMVS038 the area is vulnerable to further fragmentation of the remaining rural areas by development and suburbanisation.

The evaluation matrix provides the following ratings:

Scenic quality: Moderate - rolling lowland farmland, with medium-large sized fields with hedges, hedgerow trees, but heavily influenced by A483.

Integrity	Moderate - the road corridor means settlement and industry are often inharmonious in scale, colouring and materials with the integrity of the adjacent landscape.
Character	Moderate - relatively strong visual unity within the aspect due to the constant presence of the road corridor and the elements associated with that. However, the areas and elements that may make this aspect different from other road corridors elsewhere in the study area and beyond - i.e attractive views, picturesque landscape elements, varied and interesting topography are absent.
Rarity	Low - displays no or few features that are either rare, representative or of particular value to adjacent aspect areas or visual and sensory criteria.

Overall LANDMAP value: Moderate

Regional Landscape Character

- 3.15 The regional landscape character has been defined by Wrexham County Borough Council as Landscape Character Area 8: Gwersyllt, Llay, Gresford, Borrass.
- 3.16 The area's characteristics are summarised as follows:
- Gently undulating lowland plateau formed by glacial sands and gravels
 - Prominent escarpment at Marford
 - Fast-changing area with active sand and gravel quarries and large areas of restored land
 - Unusual and distinctive landscape of kettle holes of glacial origin south of Gresford
 - East and west areas separated by River Alyn valley
 - Good well-drained agricultural land - few ponds and ditches
 - Growing commuter villages, originally mining communities
 - Border area - crossed by Wat's Dyke
- 3.17 The landscape character area is identified as being under very high pressure. The area is vulnerable to further sand and gravel quarrying, resulting in the irreversible loss of character. In addition, areas of high quality arable land are vulnerable to future residential, recreational, highway and commercial development.

Local Landscape Character

- 3.18 A relatively open, rolling landscape with isolated farmsteads and irregular fieldscapes. The landscape is intersected by roads connecting the small, former mining communities of Pandy, Rhosrobin, Gwersyllt and Llay.
- 3.19 Pockets of new development in the form of commercial enterprises along the roadside and new housing development at Rhosrobin and Pandy, often out of scale and character with the traditional village vernacular.
- 3.20 A well vegetated landscape with mature trees and hedgerows, particularly along the roads, which provide enclosure and limit long views, except from higher ground. The A483 is a prominent feature in the landscape, being elevated and very noisy.

Experiential Landscape Character and Views

- 3.21 On entering the northern part of the site from Plas Acton Road, there is a definite sense of place which is distinct from the urban area to the south. Despite constant noise from traffic on the A483, the site feels relatively tranquil. Dense, tall hedgerows and mature trees limit views across the whole of the site from this location, although housing along Plas Acton Road and over the railway at Churchlea and Olivet Gardens are clearly visible.
- 3.22 Views towards Wrexham are obscured by planting and the embankment of the A483 (Photograph 11), although there are glimpses of several houses at Pandy Lane and traffic along the dual carriageway can be seen clearly in places. Most of the planting along the A483 is deciduous, native woodland and it is anticipated that views to and from the road would be much clearer in winter. The density of tree cover on both sides of the dual carriageway and the elevated nature of the A483 limits any views to and from the residential development east of the road.
- 3.23 Divided by Wat's Dyke and the mature hedgerow across the centre of the site, the southern half of the site is quite distinct to the northern half. This is a disturbed landscape which, despite being used as grazing for horses, appears to have lost the pastoral nature of the adjoining fields and has become much more of an urban edge landscape than a rural landscape. Ragwort, thistles, brambles and dock have invaded the pasture reducing productivity and giving an unkempt appearance (Photograph 4). Collapsed fence posts and litter reinforce that experience.
- 3.24 Residential and industrial development at Rhosrobin, along New Road and beyond the railway line are clearly visible, as is traffic on both New Road and the A483. From the slightly elevated ground close to New Road, mid range views are available back across the site towards Pandy and the spoil heap of the former Gresford Colliery beyond (Photograph 5).
- 3.25 Occasional long views of the hills around Brymbo and Summerhills, some 3-5km to the north west, are available from the edges of the site, beyond the railway line and the settlement of Rhosrobin. However, within the site views are contained by the local topography, high hedges and mature trees, creating intimate, enclosed spaces.
- 3.26 From viewpoints on higher ground to the west, looking back towards Wrexham, the site is read in the context of the existing urban edge and adjoining settlements.

Historic Landscape

- 3.27 The modern character of the landscape around Wrexham is substantially derived from the exploitation of its diverse mineral wealth. Wrexham is part of the plateau known as the Wrexham Delta Terrace, with deep deposits of fertile fluvio-glacial sands and gravels. Deep coal seams lie beneath these deposits within the bedrock, which form part of the North East Wales coal field. Wet and dry kettle holes formed by retreating glaciers during the last glacial period exist around the town and contribute to this geologically and ecologically diverse landscape. It is the activities which this geology and aspect have sustained that have shaped the present landscape.
- 3.28 The area around the site contains the archaeological remains of Wat's Dyke and the hill forts and settlements associated with it. Wat's Dyke was a prehistoric military earthwork

which ran for 40 miles across the northern Welsh Marches, following a former political boundary. The remains of the dyke generally run parallel to Offa's Dyke and although much of the earthwork has now been lost, it was a sophisticated construction of earth banks and ditches. The remains of Wat's Dyke cross the site from north to south and although now little more than a raised hedgerow in places, the ancient construction is clearly visible (Photograph 7).

- 3.29 Remnants of Mediaeval ridge and furrow are visible in some of the irregular fields around isolated farmsteads in the area, although within the boundaries of the site, the pasture has been improved by ploughing and seeding and disturbed by more recent activities such as construction of the A483.
- 3.30 The development of settlements in the local area around the site further demonstrates the changing historic landscape. The Mediaeval agricultural communities at Gresford and Llay were surrounded such isolated farmsteads which grazed animals and grew arable crops on the fertile soils. However, in the 19th and 20th century, rapid industrialisation saw these settlements expand and the creation of hamlets at Pandy and Rhosrobin to serve the new collieries and quarries.
- 3.31 The landscape became fragmented by roads and lanes connecting the settlements and evidence of these former heavy industries is scattered around the locality, such as the mining spoil heap at Gresford, disused railway sidings at Rhosrobin, sluices on the River Alyn and mining community buildings at Pandy.
- 3.32 Closure of the mines at the end of the twentieth century resulted in further change to the landscape character of the area around the site. New industrial areas have been located on the sites of former pit heads and workings, whilst large areas of woodland have been planted on the spoil heaps, disconnected from the adjacent landscape. The present landscape is without doubt a cleaner landscape, but fragmented by the succession of land uses which have taken place. Such a disjointed landscape has left pockets of land, of which the proposed development site is one, which are of poor quality and often reclaimed, and whose viability as agricultural holdings is questionable.

Constraints and Opportunities

- 3.33 The baseline assessment of the site and its surroundings has formed the basis of the Plan L4 Constraints and Opportunities. The major constraints to and opportunities for the proposed development have been identified as follows:
 - The busy A483 forms a strong physical boundary to the site. Noise and visual impact from the road is significant and detracts from the landscape quality of the site. Opportunities exist to create a substantial landscape buffer alongside the existing road.
 - Wat's Dyke is an important archaeological site and crosses the centre of the site. Opportunities exist to protect the remains from further deterioration.
 - A public right of way follows the line of Wat's Dyke across the site and the area is a popular local route for dog walkers. Opportunities exist to provide greater access throughout the site for pedestrians and cyclists, with formal and informal recreation provision.
 - The site is largely contained in views from mid to long distance locations and is seen in

the context of adjacent development. Opportunities exist for a sensitive, design-led approach to deliver dwellings of exceptional standard, which fit into the scale and vernacular of the local area.

- The site lies adjacent to residential development in Pandy and Rhosrobin and is partially overlooked by properties at each of these locations. Opportunities exist to create vistas and interesting views from these settlements.
- Proximity of the urban edge and poor landscape management detracts from the visual quality within the south western part of the site. Opportunities exist to use the land productively to meet the needs of the local area.
- Trees and hedgerows within and around the site have an important landscape, visual and nature conservation value. Opportunities exist for further planting and wetland habitat creation around the existing pond and marshy areas, to improve the biodiversity of the site.

3.34 A proposed preliminary layout has been developed which has regard to these local constraints and opportunities. The Preliminary Development Framework (Drawing L5) is located in Appendix LA3 Plans.

4.0 Impact Assessment

- 4.1 A landscape and visual impact assessment has been carried out following the methodology set out above. The areas covered by the assessment are shown on Plans L7 and L8 and the photographs illustrating the viewpoints are included at Appendix LA2.
- 4.2 The site was assessed in September 2014 when the weather conditions were dry but with some hazy cloud. Trees and hedgerows were still in leaf when the survey was carried out, consequently a judgement has had to be made to determine the extent of views when there are no leaves on the trees.

Landscape Assessment

- 4.3 The proposed development of the site would not have a significant impact upon the national or county landscape character designations, however, it would be at odds with the existing local landscape character. Open grazing land would be lost and the urban edge would be extended to join the settlements of Pandy and Rhosrobin. Tranquility of the site would be disrupted in the short term, during construction, although on completion the development is likely to reflect the quiet commuter settlements which already exist in this area. Low density development and wide landscaped zones along Wat's Dyke and the A483 would allow the retention of some elements of the existing landscape character.
- 4.4 There are no significant topographical features which would be affected by the proposed development.
- 4.5 Some poor quality grazing land would be lost as a result of the proposed scheme, however it is recommended that important, existing trees and hedgerows within the site are retained wherever possible, along with features such as the pond and ditches, to preserve local biodiversity. It is proposed that a significant number of new native trees and shrubs are planted as part of the proposals within swathes of green space across the site. These areas would provide a green infrastructure and act as sustainable drainage reservoirs, wildlife corridors and recreation spaces. The result would be a slight benefit to the long term vegetation cover and biodiversity of the site.
- 4.6 One public right of way crosses the centre of the site (Footpath 24 Wat's Dyke Way). The footpath would be retained as part of the proposed layout. The landscape through which the footpath runs would change from being open field to developed townscape, although it is proposed that the route of the path is through a wide landscaped buffer of green space alongside Wat's Dyke and the A483. Development of the site would result in a slightly significant adverse impact on the long term landscape character of the footpath.
- 4.7 The tranquility of the site would be disrupted during the construction stages of the development, and although site traffic and noise would be reduced on completion, the effects on the peacefulness of the site would be long term. This would be particularly evident during the evenings and weekends when suburban activities such as residents commuting, children playing, lawn mowing, etc are more likely to take place. However, the significant landscape barriers which isolate the site from the adjacent areas, i.e. roads and the railway line, would help to minimise disturbance further afield and the proposed development would be experienced against the parameters of the existing urban edge.

Visual Assessment

- 4.8 Plans L7 and L8 illustrate the Zone of Theoretical Visibility and the significance of the visual impact which the proposed development would have upon viewpoints in the surrounding area. Plan L7 shows the impacts upon completion of construction and Plan L8 shows the impact 20 years after, allowing for the growth of vegetation.
- 4.9 The most direct views of the site and consequently the places where the site will have the most visual impact, are limited to viewpoints immediately adjacent to it at Pandy and Rhosrobin, where there would be a clearly noticeable change to views and the viewer's appreciation of them. The proposed development would have a significant visual impact on views from existing residential development and footpaths in these locations both during the construction phase, when plant and machinery would be clearly visible, and after completion of the residential development. In many cases, this impact would remain unchanged into the long term future. However, retained existing and proposed planting would help to filter and frame many views of the new housing and night time street lighting. Careful design, using modern lighting technologies and limiting the size of dwellings to two storey would help mitigate the visual impact of the development, although the scene would remain significantly different to the landscape which exists at present.
- 4.10 To the north and west, the rolling topography, intervening urban development and woodland help to limit, filter and frame views. High hedges and roadside embankments restrict many views along the adjoining lanes and only a few footpaths and houses on the edge of the surrounding settlements have viewing opportunities. In most cases, the proposed development would be seen in the context of the adjacent urban areas. In general, the proposals would not materially affect the composition or ability to enjoy the views from these locations.
- 4.11 Almost all views of the site from the east are obscured by the A483, which runs on embankment past the site. Planting on both sides of the road embankment reinforces the screen to properties along Ty Gwyn Lane, although there are views into the site from the elevated carriageway, particularly in the winter months. The impact of any proposed development on views from the road would not be significant due to the nature of the road corridor and the viewers momentary interest in the view as they travel along it.
- 4.12 Long distance, panoramic views are available across the Dee valley from several high points on hills west of the site. However, views towards the site from publicly accessible places are very limited by local topography and intervening vegetation. Where glimpses are available, the urban areas are viewed as compact blocks of development and individual sites are generally indistinguishable. As a consequence, development of the site would be viewed in the context of the existing urban fabric and its significance within such longer views would be very small.
- 4.13 The rolling local topography, existing vegetation and development mean that there are no viewpoints where the entire site is visible from any one place and this limits the level of visual impact which the proposed scheme has upon the surrounding visual receptors. The site's proximity to the urban edge ensures that in most cases, the development is viewed against the backdrop of existing settlement, which is particularly important at night.

5.0 Mitigation and Residual Impacts

- 5.1 The main residual impacts of the proposed development upon landscape and views appear to be:
- Modification of the open grassland which exists at present
 - Changes to the composition of some views, particularly from the edge of Pandy and New Rhosrobin.
 - Loss of tranquility.
- 5.2 Whilst poor quality grazing land would be lost with any proposed development, careful consideration of the layout and design would maximise the beneficial features of this site. It is possible that by use of the existing topography and retaining existing trees and hedgerows, enclosure and screening can be provided to accommodate a two storey development.
- 5.3 Proposals would include the provision of large swathes of green space through the development, following the line of Wat's Dyke, the A483 and an existing hedgerow. By reinforcing these green corridors with native tree and shrub planting, they would provide a valuable green infrastructure to the site, softening the appearance of the built form, and enabling the development of sustainable drainage solutions, enhanced wildlife habitats and both formal and informal recreation spaces. Varying the densities of the proposed housing would create zones of development with individual identities and allow space for generous gardens and communal squares.
- 5.4 The design of the scheme and the choice of advanced luminaires would minimise light spill and help to mitigate the residual impact of night time lighting as far as possible, whilst providing safe spaces for residents and visitors. The long term impact of lighting within views from the adjacent settlements cannot be entirely mitigated. However, maturing vegetation within and around the proposed development would filter some night time views and the development would be seen against the backdrop of existing lighting around Wrexham from the north and west.
- 5.5 The proposed layout would create a small scale development with intimate spaces and shared streets. Whilst this would clearly be very different from the open fields which exist at present, the opportunities exist to create a quiet suburban setting and an attractive townscape on the edge of Wrexham, which both meets housing demand and contributes positively to the overall character of the area.

6.0 Summary

- 6.1 The site is located on the edge of Wrexham between the settlements of Rhosrobin and Pandy and comprises five small irregular fields. The local topography is rolling, rising to higher ground in the west. Mature vegetation encloses the site on all four boundaries and along field boundaries within the site. The A483 dual carriageway separates the site from the edge of Wrexham and the ancient earthworks of Wat's Dyke cross the centre of the site. Footpath 24 (Wat's Dyke Way) follows the earthwork.
- 6.2 The national and regional landscape character areas identify this area as being under very high pressure from development, resulting in the irreversible loss of landscape character. However, they identify little or no features which are rare. The area is quite distinct from the urban area of Wrexham to the south and the site is largely contained in views. Proximity to the urban edge and poor land management detracts from the visual quality of the site and the tranquility of it is disrupted by the busy A483.
- 6.3 Mature trees and hedgerows within and around the site have an important landscape, visual and nature conservation value.
- 6.4 The proposed development would not have a significant impact on the national or regional landscape character of the area, but would result in the loss of some open, low quality grazing land. Development of the site would have a significant adverse impact on the overall landscape experience.
- 6.5 The rolling topography and well vegetated nature of the surrounding landscape limits, filters and frames many views towards the site. However, the proposed development would have a significant long term impact on views from properties immediately adjacent to the site at Pandy and Old Rhosrobin. Mitigation by way of planting within and around the site, layout and lighting design would help to lessen the impact in some locations, although changes to the character of the view would be irreversible.
- 6.6 Long distance views of the site from areas to the north and west are very limited. Intervening woodland, buildings and hills all contribute to the reduction of viewing opportunities. Where glimpses are available from occasional high points, the site is seen in the context of the existing urban development and is largely indistinguishable.
- 6.7 In conclusion, significant impacts of the proposed development on the landscape and views are localised and generally limited to within the immediate vicinity of the site. Mitigation by effective initial design of the residential units and the overall layout would go some way to ensuring that most effects are minimised. Significant long term benefits would also be provided by effective landscaping in and around the site and as such would not preclude the development of the site for residential purposes.