

DESIGN AND ACCESS STATEMENT
for
Kingmoor Park, Wrexham
Commercial Development

26405-01
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8.0 Summary

1.0 Introduction

This Design and Access Statement has been prepared in support of an outline planning application for the redevelopment of the Kingmoor Park site located on the Wrexham Industrial Estate.

The accompanying Statement provides a full description of the site, surroundings and development proposals.

The proposed redevelopment of the Kingmoor Park site is to be brought forward through two separate planning applications, comprising:

- **Plot 3 – Development of a Major Perspective End User (Plot 3A) and for TDG (Plot 3B).** Two individual Class B2/B8 units totalling circa 86,089sqm.
- **Plot 1 – Speculative development.** Creation of starter/nursery units totalling circa 7,627sqm.

The two planning applications are to be submitted concurrently and these applications together comprise the full extent of development on the Kingmoor Park Site.

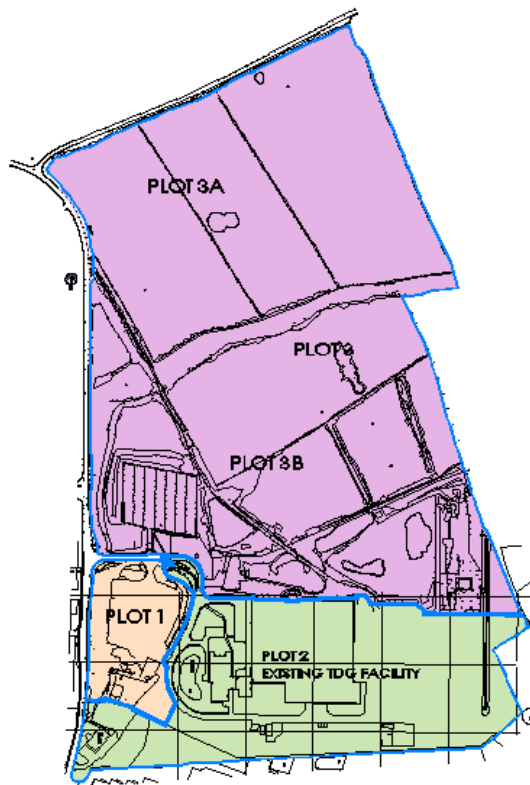


Figure 1 – Development Site Plan

The Statement has been structured and prepared in accordance with the **“CABE Design and Access Statements: How to write, read and use them guidance document 2007”** and in accordance with the Welsh Assembly Government document **“Planning and Inclusive Design (Access Statements) November 2007”**.

This Design and Access Statement is supported by an indicative architectural design including a site master plan, unit floor plans and elevations.

This Design and Access Statement is intended to establish a clear vision and a series of design/development principles which have underpinned the design evolution of the scheme.

Please note that Plot 2 as referenced later in this document is the existing TDG facility as indicated on the above plan.

2.0 Process

2.1 Site Assessment

Detailed surveys have been carried out of the site including topographical, ecological, arboricultural, hydrological, geotechnical and photographic. These are covered in detail in the supporting documentation that accompanies the outline planning application.

This statement should be read in conjunction with the technical reports submitted with the outline planning application.

2.1.1 Physical Context

Kingmoor Park Wrexham is located upon the established Wrexham Industrial Estate approximately 5 miles to the east of Wrexham Town Centre.

The Kingmoor Park site is bounded to the west by Bryn Lane and to the north by Ridley Wood Road. The existing TDG facility which is within the Kingmoor Park ownership bounds the development site to the south. To the east there are open fields between the development site and the B5130 road.

Wrexham Industrial Estate continues to the west of Bryn Lane and to the south beyond the TDG facility. There are open aspects/fields to the east of the B5130 and to the north of Ridley Wood Road.



Figure 2 – Aerial photograph

The site is bisected by an existing brook and a substantial tree belt which breaks plot 3 into two individual development sites. An existing track also cuts across the site from the northwest corner and also has a significant tree belt along part of its length.

Much of the site is currently undeveloped fields although existing hard standing areas exist on areas of the south adjacent to the existing TDG building in the form of car parking areas, former slabs for buildings and yard areas. The track mentioned above also forms an area of existing hard standing.

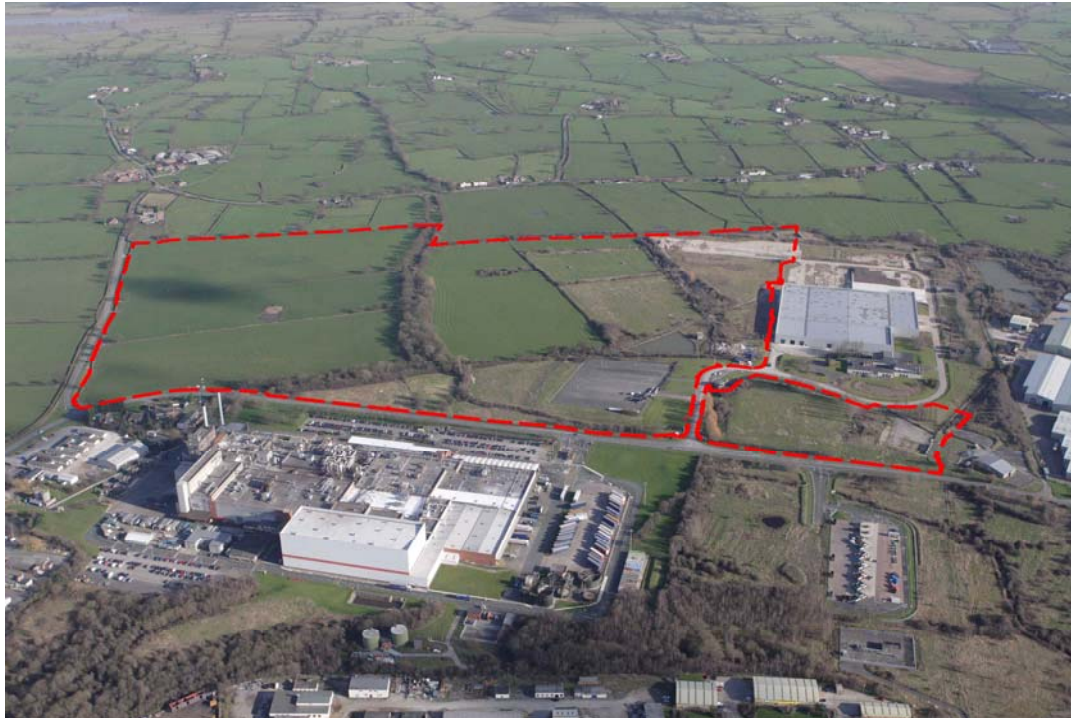


Figure 3 – View Of Site From The West

There are many other natural features on the site and these will be dealt with in detail within the technical reports.

2.1.2 Social Context

Part of any D&A is the task of demonstrating how the development has been produced in regard to the social characteristics. This section therefore considers how the proposal may affect people's relationship to the site as the development is brought forward. This consideration includes both local persons or passers by and future employees of the businesses being created.

The circular, *Guidance on changes to the development control system (2006)*, says that statements should explain the design principles and concepts that have informed the development. Statements accompanying all applications should explain and justify the decisions taken so far but must also explain the

principles that will be followed after permission is granted, even if details are still to be submitted at reserved matters. In this case, the full details are still waiting to be put forward as this is an outline application; the following explains where consideration has been able to be provided.

Social context means how people may be affected by the development. The social context for this development can be divided into: local population/local users of the area and new employees.

Local Populations

The nearest local populations are to the east along Ridley Wood Road, the village of Isycoed and properties to the north east. To the west there are properties on Bryn Lane. There are 3 footpaths in the vicinity of the site, one that runs towards the site from the north, one from the north east and one which passes in an east west direction to the south of the existing TDG operations. Their appreciation of the development will be mainly in visual terms and would be concerned in regard to traffic, noise and air quality for obvious reasons.

Where appropriate, these aspects of local population were considered as 'constraints' to the development of the site layout and scale, whilst the likelihood for noise and air quality issues were specifically quantified (see reports produced by Royal Haskoning, 2008 included with the planning application documents) to ensure that the proposals would not have an adverse effect or require re-design.

In terms of visual changes, the application process benefited from a Landscape and Visual report which has provided an assessment of the effects and suggested mitigation to shield views and soften changes. The report's influence on the design process is outlined in section 4 of this D&A statement whilst the full report is part of the suite of application documents.

Furthermore whilst the new development is not likely to affect directly any social aspect of the area, it is however the changes to the local environment to absorb this new population such as the local road carrying capacity that need to be taken into account to determine any obvious social effect. The new population and their transport choices is a change that needs to be considered in the design of the development as outlined in the supporting traffic statement.

In this sense, it is important to realise that the proposed operations will have a set of shift working patterns. This means the new vehicle journeys will be staggered and not necessarily over peak times. With regard to the design of the buildings this meant that a suitable amount of car parking was needed to accommodate change over where one shift would finish and a new set of staff arrive to start theirs. This new working population creates car parking demand and thus provision is made in the design for both building areas.

New Working Populations

The creation of these new units at Wrexham Industrial estate will have the clear and immediate social benefit of creating new jobs. The construction jobs will be largely temporary, but will maintain contracts and provide work and indirect benefits such as training and spend in the local economy. The longer term social benefit will be an increase of permanent work opportunities in the area.

D&A Guidance (CABE, 2007) requires that a statement should cover the relationship of those new employees to the new built form itself. They need to safely access and exit from their place of work and should where possible have as pleasant environment as possible to identify and relate to their place of work. For example the ability to take breaks outside or a sense of a good place to work can be very beneficial in creating quality workplaces. This need, coupled with ecological constraints has provided a response in both layout and landscaping.

Whilst final detailed matters are to be agreed at the reserved matters stage, basic principles of good design can be committed to at this stage which can then be demanded by planning condition to be supplied as part of the reserved matters. This ensures a commitment to good design is set from the outline application onwards and that the proposal relates well to a broad range of people:

- Visibility of entrances and access to the buildings will be clearly delineated by singular colour line markings on roads and floors. Clear separation between pedestrian and vehicular space by warning signs, fencing and road markings will maintain safety. The separation between public and private space will be clear at all road and footway entrances, with gated access, signage and fencing. This is important for security generally as well as ensuring the built form has clear definitions of accessibility.
- The Disability Rights Commission (DRC) guidance on access statements requires consideration from the start of the design process through to implementation of duties of the Disability Discrimination Act. Again, pp pathways, access, and pavement materials will ensure that disabled people will not be segregated but will be able to move and use the same entrances, pathways etc. as everyone else without detours. Areas for emergency congregation will be in the parking areas (given the adequacy of their size); these will easily be suitable for access to inclusive refuge points for disabled people.
- Safer places - the planning system and crime prevention (ODPM/Home Office, 2004) requires that development creates accessible yet safe places and that crime, and the fear of crime should be considered. In response to this, the layout of the entranceways are clearly defined as private development with signage and gateways, whilst perimeter fencing will deter any trespass or criminal activity. The main access point for the current TDG operations have a security house which is manned and will continue to be employed. It is therefore not anticipated that the proposal will increase any risk of crime or concept that more may occur.

In summary the social, economic, and environmental benefits that the scheme generates are clearly related, have influenced the design and are based, where appropriate on relevant D&A and broader guidance.

2.1.3 Economic Context

Wrexham Industrial Estate covers 550 hectares accommodating 300 businesses and employing 7,000 people. It is the economic driver of North Wales and beyond. Wrexham Industrial Estate is an established commercial centre providing a substantial skilled and flexible work force with a competitive cost base. The area provides superb infrastructure well placed for road, rail, air and sea access.

The development, which seeks to achieve a sustainable and modern business environment, will build upon the existing success of the Wrexham Industrial Estate and create an environment that is commercially and visually attractive and make a valuable contribution to the regional profile.

2.1.4 Planning Policy

The following documents have been instrumental in arriving at the final design solution for this scheme:

- Ministerial Interim Planning Policy Statement 01/2008 - Planning for Good Design;
- Ministerial Interim Planning Policy Statement 01/2005 - Planning for Renewable Energy;
- TAN 12 – Design (2002);
- Policy GDP1 – Development Objectives
- Policy T8 – Parking
- LPG Note 6 – Access to and the use of buildings (September 2004);
- LPG Note 7 – Landscape and development (November 2003);
- LPG Note 16 – Parking Standards (April 2005);
- LPG Note 17 – Trees and Development (April 2006);
- LPG Note 22 – Sustainable Building (July 2004);
- LPG Note 24 – Designing Out Crime (May 2003);
- LPG Note 26 – Landscape and Industrial Development (November 2003)
- Planning & Inclusive Design (Access Statements) – Welsh Assembly Government (2007)

In addition to the above the following documents have been consulted:

- Wales Spatial Plan (2008)
- Planning Policy Wales (March 2002)
- TAN 5 – Nature Conservation and Planning
- TAN 8 – Planning for Renewable Energy

- TAN 11 – Noise (October 1997);
- TAN 15 – Development and Flood Risk (July 2004); and
- TAN 18 – Transport (March 2007).
- Strategic Policies PS1, PS2, PS3, PS4, PS11, PS12
- Policy EC6 – Biodiversity Conservation
- Policy EC12 – Development and Flood Risk
- Policy EC13 – Surface Water Run-off
- Policy E3 – Large Single User Employment Site
- Policy T6 – Primary and Core Highway Network
- Site Appraisal Guidance – Wrexham County Borough Council (May 2005)

Detailed reference to these documents and to their inclusion in the final design solution arrived at for this scheme will be dealt with under the relevant sections within this statement.

2.2 Involvement

As part of the design process the following consultations were undertaken with the relevant statutory bodies and interested parties to identify their key concerns and to obtain relevant up to date information and data.

- Wrexham County Borough Council
A number of pre-application discussions took place with WCBC and various departments where consulted including;
 - Planning and Development Control
 - Public Protection (Environmental Health)
 - Planning Policy
 - Planning Policy (Landscape)
 - County Highways Team
 - County Ecologist
 - Economic and Regeneration
- Environment Agency
Pre- application discussions were undertaken with the Environment agency's Planning Liaison Officer to decide and agree the scope of assessment work.
- Countryside Council for Wales

Positive pre-application discussions were undertaken to discuss the various options for the site layout and to discuss proposed landscape and ecological mitigation.

- North Wales Wildlife
- North East Wales Wildlife
- Cofnod (North Wales Environmental Information Service)
- RSPB (North Wales)
- Welsh Water

Consultations were undertaken in a variety of formats, including letters, emails, telephone conversations and meetings. Further details of the consultations undertaken can be found within the supporting technical information.

All of the above information has been collated and circulated throughout the design team. Throughout the design process numerous design team meetings have taken place and the resultant proposed design has emerged as a direct result of this evaluation process.

2.3 Evaluation

Following consultations indicated above and detailed evaluation of the site constraints a detailed picture emerged as to the development opportunities available on the site.

There are a number of key features that had to be retained including the stream and associated tree belt dissecting the site and the trees along the section of the track adjoining Bryn Lane. Key features also exist to the eastern boundary, to the west between the track and Bryn Lane and in areas adjacent to the existing TDG facility.

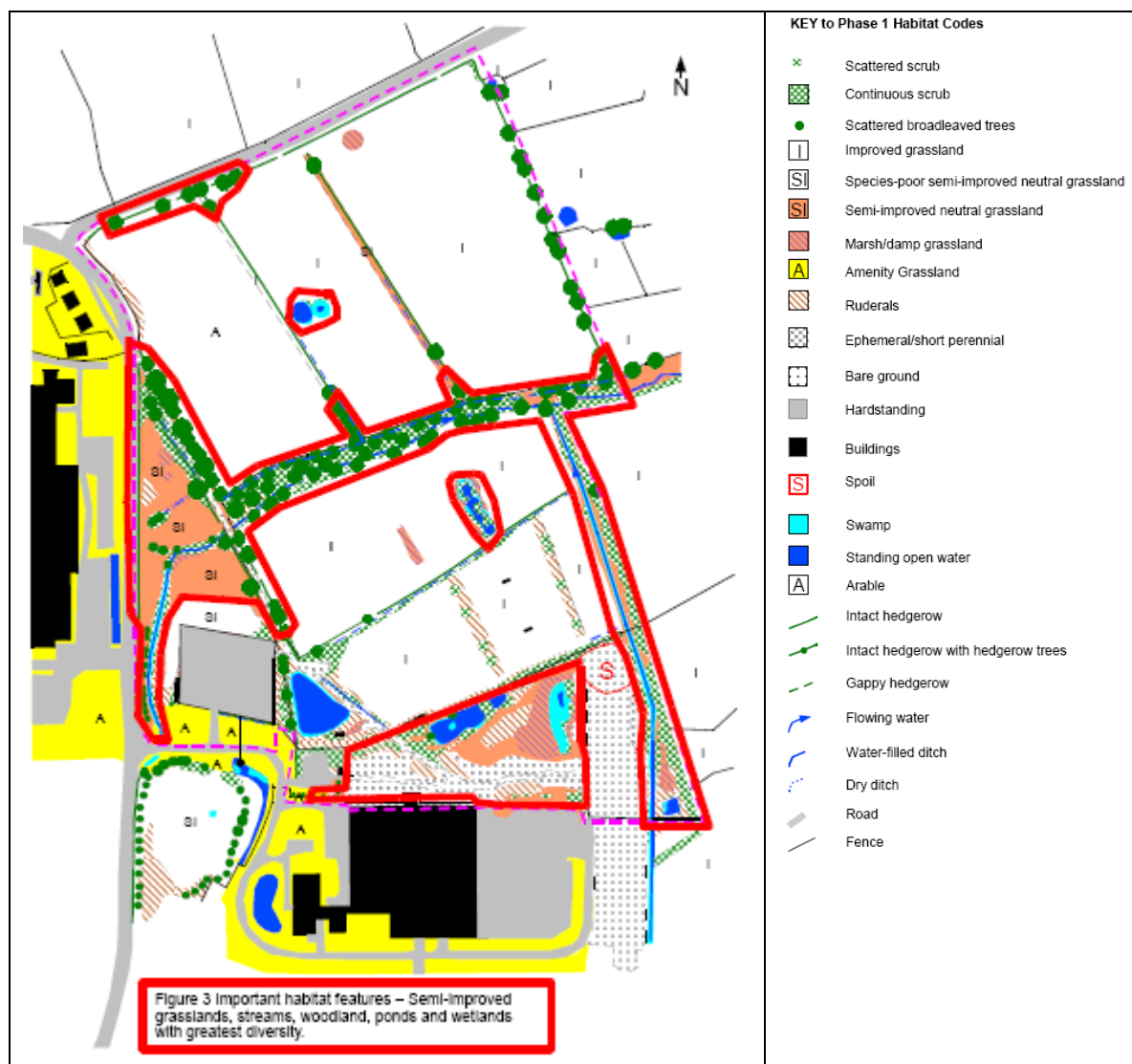


Figure 4 – Constraints Plan

3.0 Design Ethos/Vision

Fletcher Architects has drawn on its extensive experience in the field of industrial/distribution master planning and commercial regeneration in developing the design for the Kingmoor Park site.

Key to the successful design for the future of the site will be a carefully co-ordinated and strongly branded image which will encompass all aspects of the scheme. This will create an identity for the site and sense of place.

The design will be functional, to reflect its intended use and of a high standard to reflect its significance and prominence within the area.

In this respect, given its prominent location and surrounding employment uses, the design of the scheme has sought to provide a modern but functional design which fully appreciates the design constraints of the site.

Complementing the wider Wrexham Industrial Estate, the redevelopment of the application site will bring a relatively under-used site back in to substantive employment use, representing a significant private sector investment in the local economy.

3.1 Design Development/Evolution

Since our appointment on Kingmoor park the design has evolved through many iterations. Initial commercially driven design approach was to flatten and remove all features on the site to achieve a development footprint density of 40 to 45%.

It became apparent fairly early on in the site evaluation process that the Kingmoor Park site has many significant natural features that required a lot more thought and sensitivity to the approach described above.

Many design layouts have been undertaken to date, some on a speculative build basis and others led by specific end user requirements.

Figure 5 below indicates an early sketch scheme for a speculative development for a single end user of approximately 93,000sqm. In terms of size the unit fits comfortably on the site but in reality pays little respect to the natural tree features on the site with particular reference to the stream and tree belt that bisects the site.

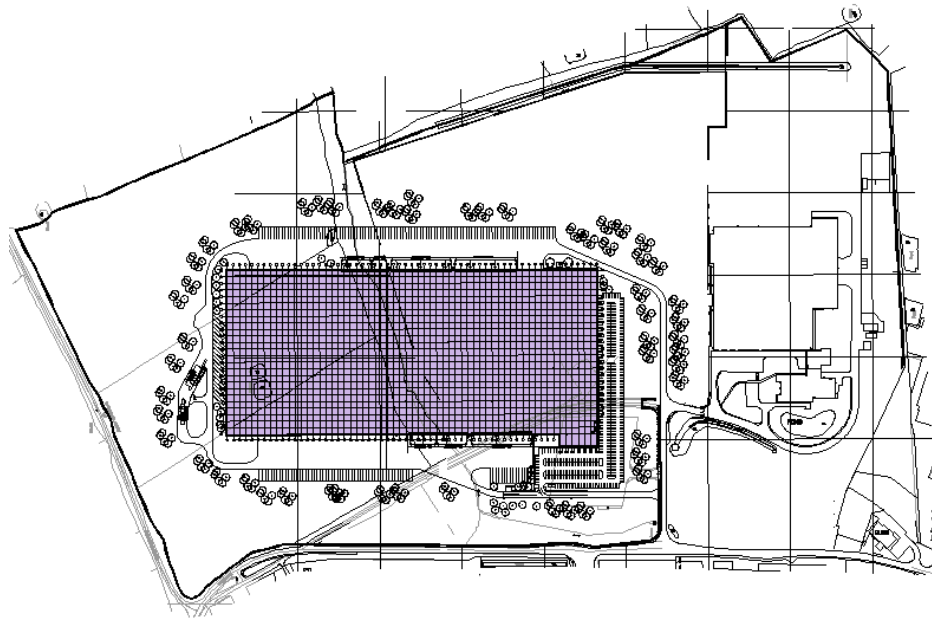


Figure 5 – Early Sketch Scheme

Figure 6 below indicates a development of two units sitting on the southern portion of the site. This layout to a certain degree respected some of the natural features on the site, notably the stream and tree belt. However it paid little regard for other equally important grass land features located at the southern end of the site close to the TDG building.



Figure 6 – Early Sketch Scheme

Figure 7 below indicates an end user led sketch scheme occupying a portion of Plot 3. Many of the end user led schemes have been of a similar size/scale to that indicated below.

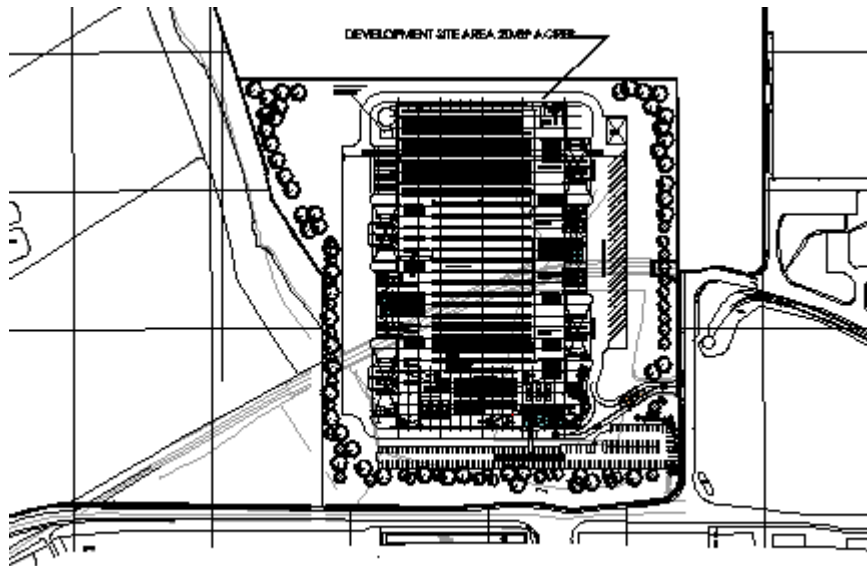


Figure 7 – Early Sketch Scheme

4.0 Scheme Proposals

Section 3 of Technical Advice Note 12: Design, deals with the design process and sets out the principles for sustainable design. As highlighted in paragraph 3.2 under collaboration, design is a multi disciplinary activity. To this end the design team that have brought this design forward have included Architect, Structural Engineer, Planning Consultants, Landscape Architects, Transport Consultant and Ecologists all of whom have explored and evaluated the site and established a coherent strategy for taking the scheme forward.

4.1 Use

The scheme represents a major commercial development providing a combination of large scale distribution/manufacturing facilities and smaller industrial starter/nursery units.

The larger units indicated on Plot 3 have been designed for proposed specific end users.

The Plot 1 scheme provides speculative smaller scale starter units.

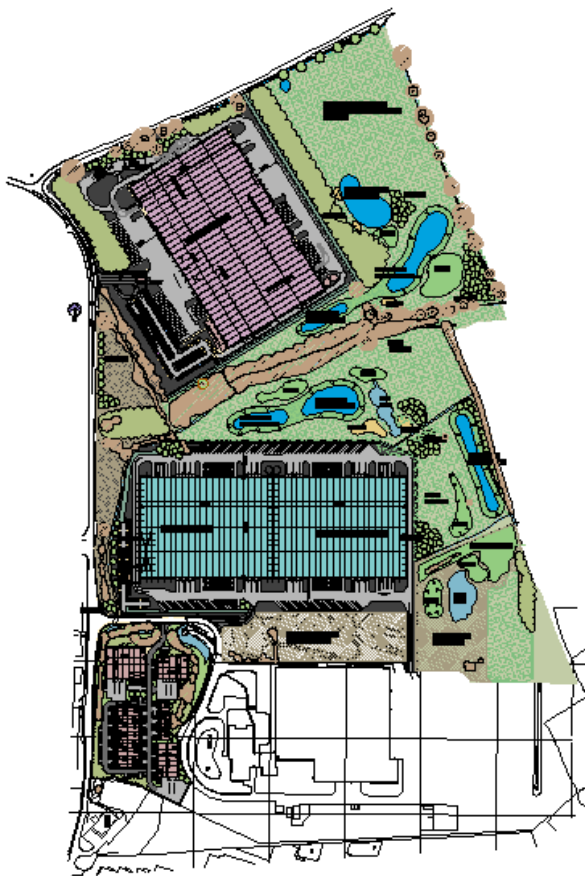


Figure 8 – Overall Site Layout

4.2 Quantum of Development

The following table indicates the anticipated maximum size of the units within this development:

SCHEDULE OF AREAS					Unit Size	Comment
UNIT 3A	38,555	sqm	415,005	sqft	251,000 x 150,000m	Excluding Pod Office
TDG UNIT	24,303	sqm	261,597	sqft	177,000 x 133,000m	
TDG EXPANSION	23,231	sqm	250,058	sqft	177,000 x 133,000m	
PLOT 1						
UNIT A	2,238	sqm	24,090	sqft	52,000 x 41,500m	
UNIT B	1,327	sqm	14,284	sqft	41,000 x 31,500m	
UNIT C1 TO C10	2,270	sqm	24,434	sqm	81,000 x 30,000m	Block Total
UNIT D1 TO D3	477	sqm	5,134	sqm	49,000 x 11,000m	Block Total
UNIT E	1315	sqm	14,155	sqm	45,500 x 28,000m	
OVERALL TOTAL	93,716	sqm	1,008,759	sqft		

Table 1 – Schedule of Areas

4.3 Layout

The proposed master plan layout has given careful consideration to the natural constraints that exist on the site, and where possible their retention.

The position and orientation of the buildings have been carefully considered both for operational and functional purposes and to create individual areas of open space with the retention of many of the existing natural features.

There are many constraints on the site and the team recognises the importance of “Designing in Context” as indicated in Technical Advise Note 12. In many ways the natural site constraints have afforded the opportunity to create a sustainable development by retaining as many of the existing features as possible and expanding/improving on them to provide an attractive environment for all.

Paragraph 5.60 of Technical Advise Note 12 states that, “where employment premises are grouped together, a sufficient scale of planting and earth forms to absorb the bulk of the buildings and ancillary circulation and parking areas is essential”. In establishing the site layout the buildings have been positioned

as close to the Bryn Lane end of the site as constraints will allow thus affording the opportunity to utilizing the rear section of the site to accommodate visual mounding and other areas of mitigation.

The development proposals form 3 distinct development zones each with a distinctive image united by common colour themes and palette of materials.

Plot 3A – Unit 3A (Major perspective end user)

Located to North of the development at the corner of Bryn Lane and Ridley Wood Road.

Access to the unit is via a newly formed junction directly off Bryn Lane. The location of the proposed entrance is dictated by the position of the existing tree belt and the existing highway layout in terms of adjacent access points and visibility.

The development is further restricted by the location of the stream and tree belt that crosses the site. Site has been designed to take into account these constraints as well as meeting the functional requirements of the end user.

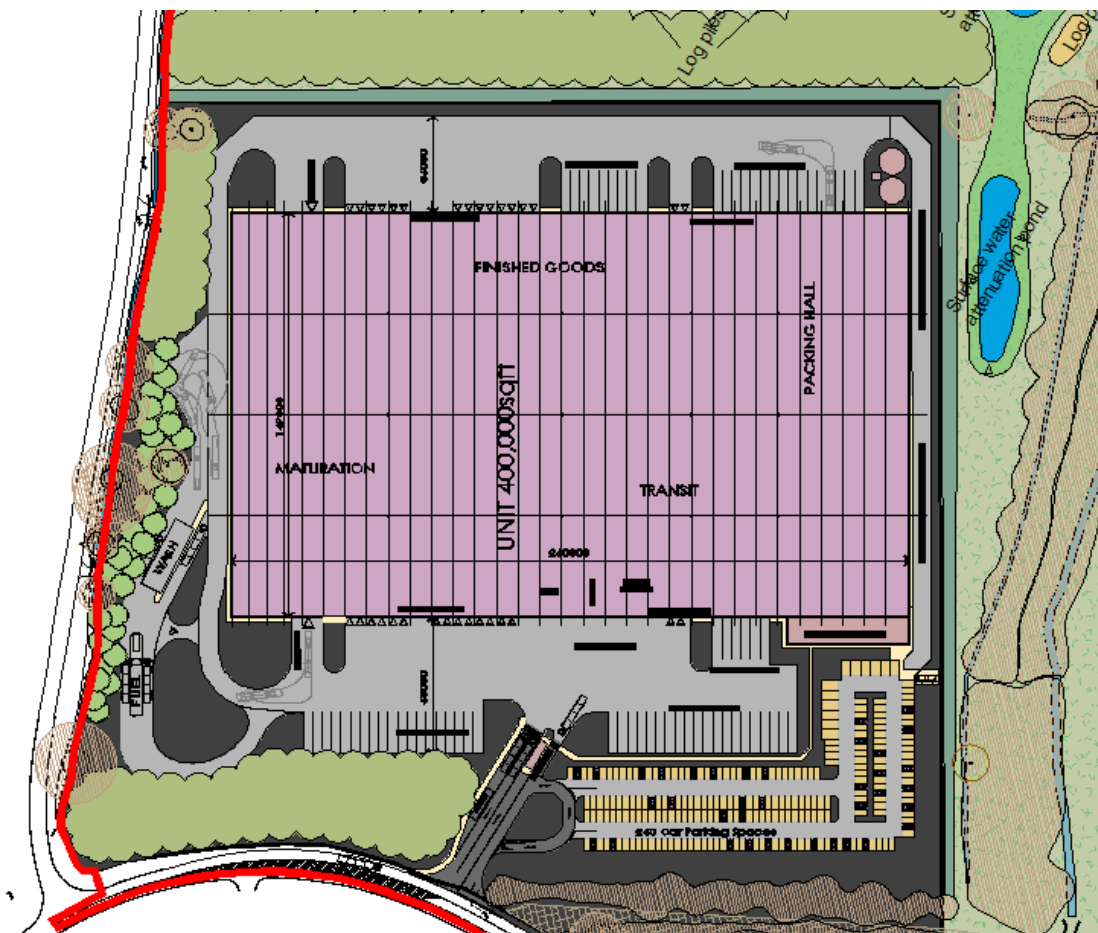


Figure 9 – Plot 3A Unit 3A Site Layout

Plot 3B – TDG

Located to the south of the development adjacent to the existing TDG site and will function as an extension to this site and not a replacement.

Site layout has been dictated by the constraints identified above notably the stream and tree belt, pond locations and other habitat features adjacent to the existing TDG unit. Access to the unit is via a newly formed access from the existing estate road although the two TDG facilities are linked at the rear of the site.

The TDG facility will be constructed in two Phases and the site layout reflects the need for future expansion.

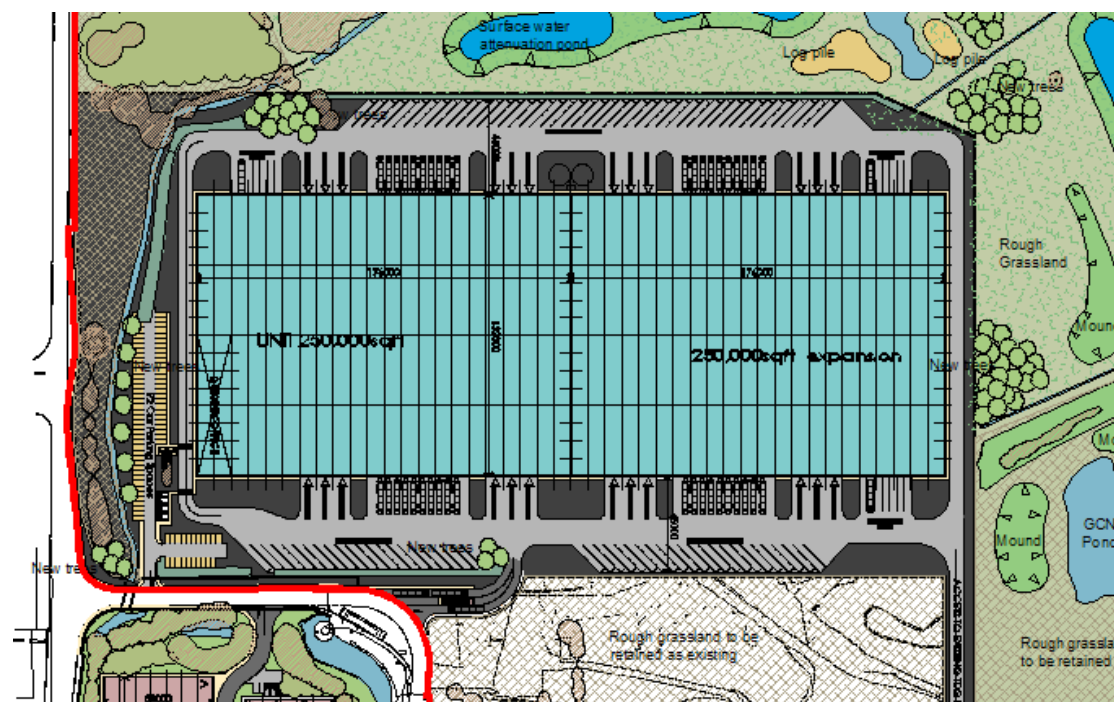


Figure 10 – Plot 3B TDG Site Layout

Plot 1 – Starter Units

Site is located between Bryn Lane and the existing TDG demise.

Scheme provides a range of Nursery/Starter Units ranging in size between 159sqm and 2,270sqm.



Figure 11 – Plot 1 Site Layout

4.4 Scale

The overall massing and scale of the units is dictated primarily by the internal functional requirements and commercial demands. This basic design criteria sets out the overall height and obviously scale of the buildings.

Overall building widths are provided both on the drawings and summarised under table 1. Low 6 degree pitch roofs have been utilized to minimize the overall height of the buildings.



Figure 12 – Indicative View From North West



Figure 13 – Indicative View From South West



Figure 14 – Indicative View From South West

Whilst the elevational treatment will be of good quality and characterised by a unified colour branding, the design is appropriately functional given the proposed use and position within the site.

The design concept is to create clean well-mannered elevations for all the buildings, with strong colour branding.

4.5 Strategy for Landscape and Ecological Mitigation

The site contains a number of natural features which are valued for contribution to landscape quality and ecology and habitats. Features of particular note contributing to positively to landscape are:

- mature hedgerows;
- mature oak trees within hedgerows;
- linear woodland through the central area of the site (mainly protected by Tree Preservation Order);
- field ponds, natural and man-made;
- ditches;

Other features such as mounded debris and disturbed ground are less important for landscape interest although provided very valuable habitats and can be modified and/or incorporated into the mitigation plan to be of optimum benefit.

The importance of the landscape features listed above is recognised and these will be protect and retained as far as possible within the development. Particular attention is paid to the retention of mature trees generally, TPO trees and perimeter hedges.

An arboricultural survey and impacts assessment has been undertaken which has informed of site constraints in relation to trees and has guided the scheme design from an early stage. As a consequence, a number of changes to the scheme layout have been incorporated through the planning stages in order to lead to the proposed layout which is considered to be the best solution for both operational requirements and retention of trees.

As part of the planning process hedges and areas of scrub habitat within the development site have been identified. Their significance in terms of landscape and ecological value has been assessed and where these are important they have been retained in all but impractical situations.

The development has potential to impact on existing landscape features. To develop this site to encourage single user occupation as intended by the UDP it is would be extremely difficult to retain all of the existing features whilst providing a viable development and therefore some impact must be considered. Generally the scheme aims to avoid or reduce impacts but where features will be lost the mitigation scheme proposes to replace them in other parts of the site. In addition to this links with adjoining hedgerows and trees will be established wherever practical to encourage the movement of wildlife in and around the site.

Throughout the scheme opportunities will be taken to increase tree cover particularly and where appropriate new mixed native hedges will be incorporated to link with existing similar habitats and to visually enclose built features such as yards and car parking areas.

Native tree and hedgerow species will be used within planting mixes as the throughout the development and will take precedence over ornamental species. The use of ornamental species around site perimeters is considered inappropriate and will be avoided. However at focal points and key locations small areas of ornamental planting may be included for seasonal interest, attractive appearance and other attributes such as berries which might be beneficial to wildlife.

There are various existing ponds, ditches and watercourses within the development site. These are a particular feature of the local landscape and some have special interest providing breeding sites for great crested a protected species. As protected species are known to be present it is vital that appropriate measures are taken to safeguard the animals their habitat. It is also desirable to enhance existing habitats and to create more suitable habitat in the locality. The provision of the ecological mitigation area to the east of the development site proposes to provide these elements. It will be designed to incorporate several new ponds.

The creation of a dedicated mitigation area which provides opportunities to include a range of landscape features as compensation for losses incurred within the development site whilst providing the required level of mitigation in relation to protected species.

4.6 Appearance

Quoting from paragraph 5.58 of Technical Advise Note 12, “The design of employment areas is important, as a high quality of design can add value to commercial property”. Paragraph 5.59 comments that, “Large new employment buildings can often make a bold statement of their purpose”.

In the case of Plot 3 we are very much dealing with large scale employment buildings and although fairly simple in terms of their activity/purpose they none the less still require a high level of design input. The nature of their operational requirements very much announces a statement of their purpose.

In the case of Plot 1 the scale of the buildings is smaller but will form part of the overall co-ordinate design ethos for the development.

The position and orientation of the buildings have been carefully considered for operational and functional purposes, to create individual areas of open space and aspect which give variety and interesting/attractive transverse vistas when passing through the site.

These variations to the building siting are balanced by a dynamic and coherent treatment of the building envelope. This is affected by the use of limited palettes of high quality materials, as follows:

- Horizontally laid true flat composite cladding.

- Horizontal laid built up wall cladding.
- Vertically laid built up wall cladding.
- Vertically laid built up wall cladding with solar collecting outer skin to south elevations.
- Translucent Insulated Cladding.
- Aluminium Facia/Overhang Feature.
- Pro-wall proprietary concrete dock leveller wall units.
- Curtain walling and window frames in powder coated aluminium with anti-sun glazing.

Each building has a strong horizontal theme with the built up cladding covering the majority of the facades. The elevations are articulated with contrasting colours and changes in the cladding orientations. The office elevations are primarily clad with the flat composite cladding and translucent cladding indicated above.

The facades are articulated further by the composite cladding projecting beyond the plain of the horizontal cladding. The integral office glazing is clearly articulated with deeply inset glazing about the building corners.

Dynamic cantilevered articulated canopies with flat roofs and flat panel soffits will provide additional interest at the office entrances and give further focus to these locations.

Low 6 degree pitch roofs are partially hidden by a nominal parapet up-stand and a small overhanging capping/facia feature.

Reference has been made to LPG 26: Landscape and Industrial Development, and comments have been noted with regards to the use of Medium – Dark colours for cladding. The indicative elevations accompanying this application provide an illustration of design intent primarily relating to the methods of articulation proposed in order to break up/soften the larger elevations.

Advances in cladding solutions such as “Solarwall” have afforded the opportunity for utilizing the southern facades as solar generators and we would wish to pursue this as a viable sustainable solution for this development. These solutions to some extent dictate the colour theme as certain colour bands are more efficient generators than others. A detailed proposal would be brought forward as part of a detailed/reserved matters application.

Other comments under LPG 26 in terms of colour use on other elements of the development including fences are duly noted and will be sympathetically acted upon.

5.0 Access

5.1 Vehicle Access

Vehicle access has been carefully considered, to reflect existing highway constraints.

Full details of access arrangements are described in the accompanying Transport Assessment, but in summary comprise:

- A new access directly off Bryn Lane will serve the proposed Unit 3A (Plot 3A). As part of the entrance works it is anticipated that Bryn Lane will be widened to accommodate a new right turn lane into the new entrance. A bus stop and turn around facility has been incorporated within the junction design.
- The proposed new TDG Unit (Plot 3B) will be accessed via a newly formed access road connecting to the existing access road that currently serves the existing TDG unit.
- The Plot 1 development will also be accessed via a newly formed access road connecting to the existing access road that currently serves the existing TDG unit.

As part of the redevelopment works the existing Bryn Lane Junction serving the existing TDG facility will be enhanced to accommodate a right turn lane and new footpaths linking the entrance to the existing bus lay-by.

5.2 Pedestrian/Cycle Access

Pedestrian and cycle access will be available at all vehicle access points.

Specific provision will be made for cyclists as part of the new junction works and within the site itself. Safe secure cycle storage in accessible locations will be provided within the site, relative to each demise/unit.

Footpaths will be provided within the site to limit pedestrian/car contact and this will be enhanced with calming measures at cross over points and low speed limits within the development.

5.3 Car Parking

The overall car parking provision has been set out in accordance with adoptable standards and reflects the individual unit occupier requirements.

The quantum of car parking is also reflective of maximum standards required by the Council's Highways Officers and the provision is set out in the transport assessment/report.

In addition, an appropriate number of disabled car parking spaces, in accordance with published standards will be dispersed throughout the site, to ensure accessibility for all.

5.4 Servicing

Hard standing given over to servicing has to be sufficient for the proposed use of the buildings, but should not adversely affect the overall design. Dedicated service yards and where applicable HGV parking facilities have been included for all units.

Access to Unit 3A (Site 3A) and TDG (Site 3B) servicing areas are via barrier controlled security points.

Full access has been allowed to all units for both refuse and especially emergency vehicles.

5.5 Ambulant Disabled Access

Specific reference has been drawn from LPG 6 Access to and Use of Buildings in finalizing the design of this project. It is intended that the scheme will be fully compliant with both Part M of the building regulations and with the Disability Discrimination Act.

Disabled parking facilities have been dispersed throughout the development and within 50m of the primary entrances to the units.

All units will have level access approaches and multi-storey units will be provided with lift facilities and ambulant disabled staircases.

External steps have been avoided and any ramps required will be in accordance with current legislation.

All units will have full disabled toilet and amenity provisions and full aspect to all parts of the building/unit.

Disabled toilet provisions will be included at all floor levels and where applicable showering facilities will be made available.

All detailed aspects of the building design including entrance doors, corridors, lobby arrangements, handrail s and sign posting will be fully in accordance with current legislation.

6.0 Security/Secured by Design

Minimising the security risk and designing out crime is of paramount importance. Comments under paragraphs 5.72 to 5.77 inclusive of Technical Advise Note 12 and LPG 24 have been noted and taken on board in finalizing the proposed site configuration.

Fletcher Architects has considerable experience in working with local crime prevention officers in order to design out the risk of crime. A full consultation will be undertaken with a view to achieving a Secured by Design accreditation.

6.1 Design, Layout & Spatial Relationships.

The units are arranged in small terraces and stand alone units where possible facing each other. Access is as described above.

Site layout has been set out to be as open as possible with all car parking directly visible from the individual units. In most cases the car parking is visible from multiple units.

Vehicle barriers control HGV access into Unit 3A and the TDG unit but there will not be vehicle gates/barriers to control the flow of traffic into the Site 1 development.

6.2 Fencing

6.2.1 A 2.4m high weld mesh fence will be provided to the all external boundaries. Within the Unit 3A and TDG schemes a similar fence will separate the car parking and service yard areas.

6.2.2 A low level 1.2m high post and rail fence to be provided along the line of all car parking areas adjacent to main estate roads within landscape areas to restrict access to designated access points.

6.3 Lighting

A lighting scheme, to BS 5489 standard for the site will be specified. The lighting will be designed to provide a uniform spread of light to an average of 0.4Uo (and never less than 0.25 at any point), clear colour rendition, and avoid deep shadows and minimise light pollution. Luminaries will be sturdy and resistant to vandalism, tampering and adverse weather conditions. The following areas will be illuminated:

- All Roads
- All Car Park Areas
- All Pedestrian Areas

6.4 Windows/Glazed Doors/Doors.

6.4.1 All windows will be should be tested and certificated to LPS 1175 Issue 6 Security Rating 1 or BS 7950.

6.4.2 All glazing at ground floor level should include laminated glass with a minimum thickness of 7.5mm.

6.4.4 All Ground and First floor offices to be fitted with locking handles and restrictor stays.

6.4.5 Entry doors will be tested and certificated to the Loss Prevention Certification Board standard LPS 1175 Security Rating 2. Fire doors will also comply with this standard and additionally will not have any external ironwork. Locks or locking mechanisms installed within door-sets will also incorporate one or both of the following attributes: -

A cylinder certified to BS EN 1303 grade 4 key security and grade 2 attack resistance. This is a requirement for door-sets utilising multi-point locking systems.

A lock certified to BS 3621:2004 or BS 8621:2004.

6.4.6 All personnel/fire escape doors to be fitted with four point secure locking mechanisms and self closing devices.

6.5 CCTV Installation.

A CCTV system will be installed then maintained and operated in accordance with British Standard 7958:2005 - *Closed Circuit Television {CCTV} Management and Operation [Code of Practice]*.

The location / siting of cameras will be agreed with the architectural liaison officer prior to commencement of development.

6.6 Landscaping

A detailed landscaped scheme will be agreed with the local planning authority prior to development commencing through suitable planning conditions. However, in order to improve visual surveillance and discourage loitering around the proposed development site, it is proposed that any vegetation proposed on the site will be kept to a maximum height of 1000mm, with any foliage to trees being at a height exceeding 2000mm so as not to create potential hiding places for would-be criminals to exploit or impede natural surveillance of the site. Refer to section 4.10 above.

7.0 Sustainability

The developer is committed to creating a sustainable development on the Kingmoor Park site. Reference has been made to the Ministerial Interim Planning Policy Statement 01.2005 “Planning for Renewable Energy”, to Technical Advice Note 8: “Planning for Renewable Energy” and to LPG 22 “Sustainable Building” in assembling this statement/design.

In addition to the above Technical Advice Note 12 deals with Resource Efficient Buildings under paragraphs 5.70 and 5.71 and this we believe is the true starting point for achieving a sustainable development. The building regulation updates as referred to in TAN 12 are now in place, and are seen as setting the minimum standards of insulation levels to be achieved. It is our will and desire to provide the most energy efficient building possible within realistic development constraints.

In the case of the building for the major perspective end user of unit 3A the nature of operation dictates a reversal of thermal efficiency in that a large portion of the building are chilled spaces so there is a requirement to keep the heat out rather than keeping it in the building. Investigations are on going to establish if there is a viable solution to incorporate energy transfer systems between the different elements of the building to produce a more energy efficient solution.

As indicated above the developer is committed to providing a sustainable development and a minimum BREEAM rating of very good will be achieved.

7.1 Material Use

As a demonstration of the developer's commitment to a sustainable development, the following measures are being considered to enhance the environmental performance of the buildings:

- Use of certified timber from Forest Stewardship Council (FSC).
- Landscaping from local provenance vegetation.
- Use of low VOC (Volatile Organic Compounds) paint.
- 100% recyclable ceiling tiles throughout offices.
- Recyclable office floor finishes.
- Recyclable amenity and toilet floor finishes.
- Low water use appliances.
- Creation of a site waste management plan.
- Use of permeable surfacing in car park areas.
- Use of low energy light fittings in the final detailed design where practicable.

7.2 Additional Considerations

In addition consideration will be given to the viability of implementing the following measures:

- Roof water collection and recycling (e.g. Rainwater harvesting)
- Increase roof lights provision (say from 10% to 15% provision)
- Solar photovoltaic electricity generated from roof panels supplying power to the building
- Solar water heating for staff amenity hot water and/or Swift Micro-wind Turbines
- Building management measures

7.3 Renewable Energy

The developer is committed to the provision of a source of renewable energy within the development.

The exact form of this renewable energy is still being evaluated and a detailed design solution would be brought forward as part of the detailed solution. As indicated above, one solution being examined is the use of a “solarwall” cladding solution which has become a cost efficient and viable renewable solution over recent years.

8.0 Summary

The Kingmoor Park site on the Wrexham Industrial Estate has many constraining natural features which have to the major part been retained and enhanced within the scheme proposals.

The development proposals represent a significant private investment within the region and are predominantly end user driven. The overall design of the scheme is essentially commercially driven and responds to modern occupier expectations but this has been adapted and adjusted to include within the scheme the constraints imposed by the many natural features..

The development will have a distinct image and properly address its location/context. It is the developer's aspirations to bring forward a fully sustainable but at the same time adaptable and commercially viable scheme.

A new landscaping scheme will build on the many features afforded to us on this site and take them forward to provide a fully sustainable environment.

The principles within this document provide a sound framework for guiding future detailed applications and the comprehensive development of the site.