



westpark
Garden Village

DARLINGTON

Caring Sharing Daring

Locomotowntown

Quakertown

Darlingtown



westpark Garden Village

DARLINGTON

Caring Sharing Daring

Joint Masterplan & Development Brochure prepared
by Bussey & Armstrong and Darlington Borough Council
for land at Mount Pleasant Farm & Stag House Farm
North West Urban Fringe, Darlington

Bussey & Armstrong
Building Homes in Darlington since 1902



Billinghurst George & Partners



ARUP

Contents

Introduction

— Purpose

The Site

— Location

— Site Description

— Site History

— History of Bussey & Armstrong

Planning Policy

— The National Planning
Policy Framework

Development Framework & Connectivity

— Site Connections

— Public Transport

— Cycling

— Walking

— Local Facilities

Development Design Policy

— Vision

— Constraints Plan

— Design Rationale

— Character of the Built Form

— Design Code

— Landscape Design

Benefits

— Art Strategy

— Economic Benefits

— Sustainability

Deliverability

— Ecology

— Archaeology

— Traffic Impact

— Noise & Air Quality

— Ground Investigations

— Drainage

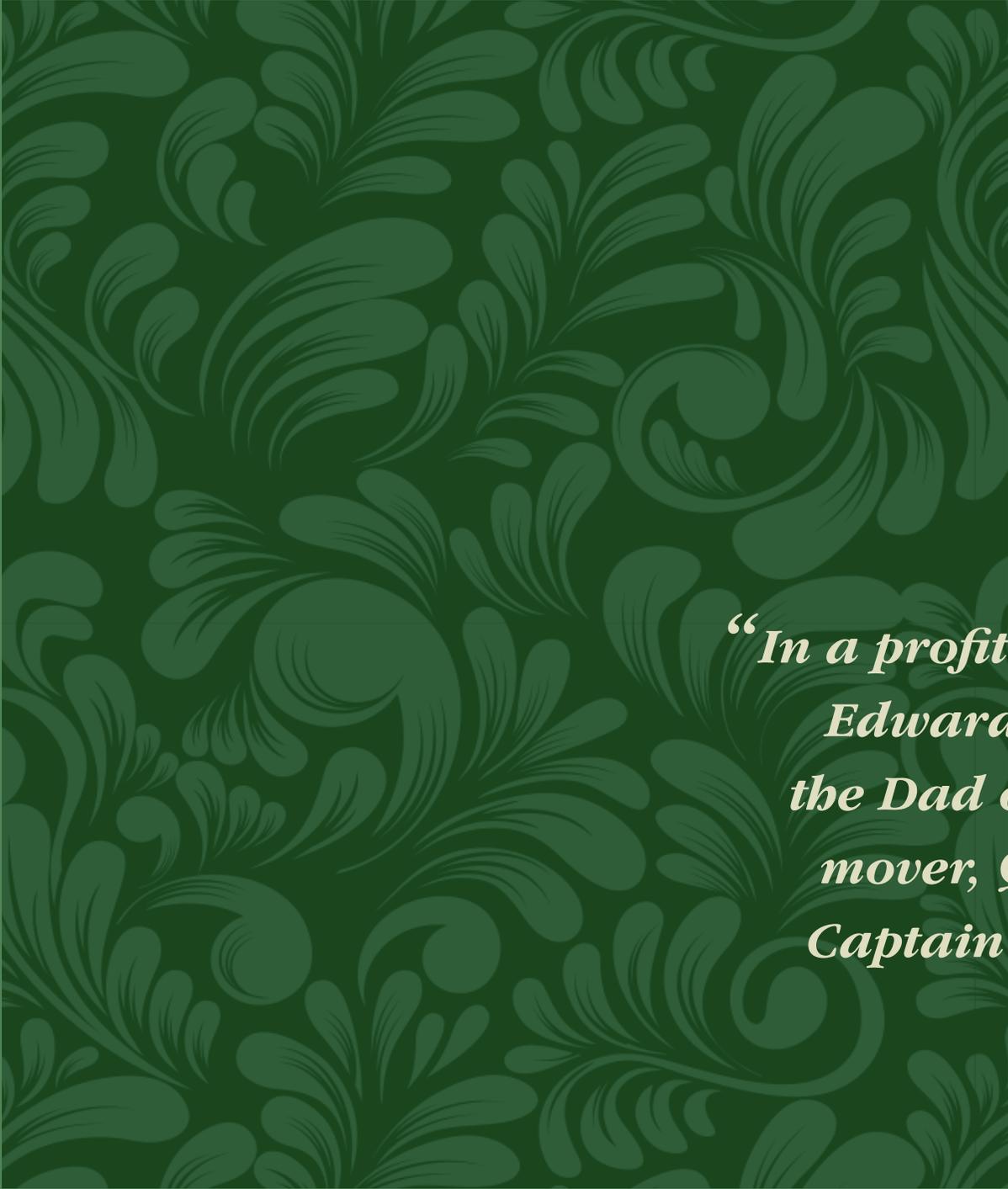
— Statutory Services

— Flood Risk

Conclusion



Entrance detail Leconfield by Bussey & Armstrong



*“In a profitable dream
Edward Pease,
the Dad of Steam,
mover, Quaker,
Captain Clean.”*

Introduction

Purpose

This Design document has been prepared for Bussey & Armstrong Projects, a Darlington based house builder, and Darlington Borough Council in respect of their adjoining development sites. The information in the document is intended to form part of an Outline Planning Application for the next phase of The West Park development in Darlington which will be known as 'West Park Garden Village'.

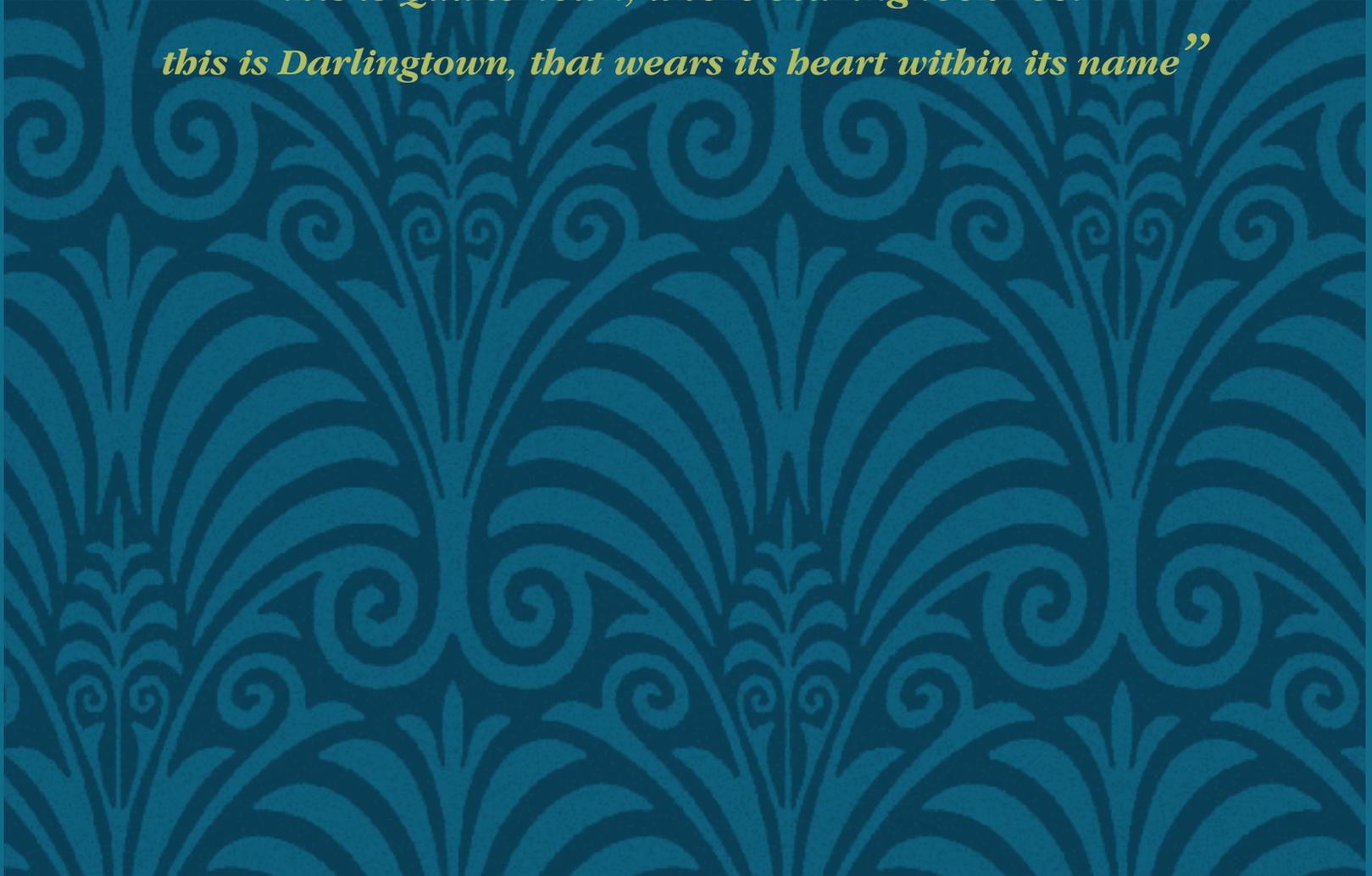
The Design document applies to both sites in Bussey & Armstrong and the Council's ownership, although the sites will be developed independently. The site has been identified in Darlington's Core Strategy as a key location for new housing. In an effort to fulfil house building targets in the Borough, the Council have been working alongside Bussey & Armstrong and their consultants to achieve a Masterplan strategy for this location.

This document will demonstrate the detailed level of research into, and assessment of the site's development potential for housing and additional complementary facilities. A number of detailed technical documents have also been prepared and these have informed a Constraints and Opportunities Plan.

This has been used to develop a realistic Site Masterplan and Development Framework, to indicate the potential for a truly sustainable housing community, combined with a site identified for future schools and recreational facilities to serve the local community.



*“this is Locomotiontown, where the railways first ran
this is Quakertown, where sharing took root
this is Darlington, that wears its heart within its name”*



The Site

Location

The West Park Garden Village site is located approximately 2.5 miles northwest of Darlington town centre, with close proximity to Junction 58 of the A1(M) Motorway.

The site is adjacent to earlier phases of West Park to the east – a mixed use development including housing, West Park Hospital, the village commercial centre, a Primary School, Nursery and 33 acres of open Parkland. The western and northern boundaries of the site lie adjacent to the A1 (M) and A68, with open farmland beyond.

The site location has excellent links to existing transport networks, as well as local amenities in and around Darlington, and creates an opportunity to provide housing, schools, open space and employment opportunities.





Site Description

The site can best be described by defining its current use as two separate farms. To the southwest of Newton Lane there is a triangular shaped site of roughly 20 hectares (50 acres) known as Stag House Farm. On the opposite side of Newton Lane is Mount Pleasant Farm which extends to around 61 hectares (150 acres) of arable land.

Stag House Farm is bounded by the A1(M) to the west, the former Barnard Castle / Tebay railway lines to the south and Newton Lane to the east. The site consists of pastureland with multiple trees and hedgerows. There is also a single farm house with outbuildings for livestock and storage within the immediate vicinity of the farm. Mount Pleasant Farm is also bounded by the A1(M) to the west, the A68 to the north, Edward Pease Way to the east and Newton Lane to the south. This part of the site consists of mixed arable and pastureland together with multiple trees and hedgerows. This site also contains a single farmhouse with outbuildings.



Site Description

The north of the site is relatively flat although there are minor undulations, in particular adjoining the A1(M) / A68 junction to the north. There is a gentle fall from west to east. Surface water collects in a stream which runs from north to south along part of the site.

The Mount Pleasant site is accessible from Edward Pease Way, which forms its entire eastern boundary. This road is 640 metres in length and provides excellent flexibility with regards to accessing the proposed development. The site is also divided by Newton Lane which offers further access opportunities into each section, with links to Cockerton to the east and outlying villages to the west.

There are a number of electricity pylons running across the site, however measures are in hand to have the supplies diverted underground. These will be routed along existing services corridors

which already carry water mains. The existence of the services corridors will ultimately benefit the site, as no building works will be carried out on the corridors, some 13-30m in width. This will present a number of opportunities to create landscaped links along the entire length of the site.

It is also intended to connect these new pedestrian corridors with existing bridleways and public footpaths to form a linked network of public open spaces, as well as routes for walkers and cyclists. The trees and hedges around the perimeter and across the site are mature and will be retained, where healthy. These will become an integral part of the Garden Village infrastructure.



Staghouse Farm



View looking from A1 motorway

Site History

West Park Phase 1

The existing West Park development adjoining the A68 at Faverdale, Darlington extends to around 120 acres which comprise of 60 acres of the former Darlington Chemical & Insulating Company works and tip with around 60 acres of former farmland.

The factory closed in 1992 and the buildings were demolished in 1995. Bussey & Armstrong Projects employed specialist engineers to investigate the factory site and tips. These extensive tests proved that the tips could be safely reclaimed by re-profiling to form a more natural landscape, whilst at the same time removing existing concrete slabs and foundations from the factory site and replacing with a new clay capping on which development could take place. Planning permission was granted in 2001 for a mixed use scheme including 700 new homes, a NHS Priority Services Hospital and a new 33 acre park. Reclamation works to the former factory and tip were completed in 2002/3.

All foundations and substructures were removed from the former factory site and development area. The former tip has been re-profiled and 46,000 trees planted to form new parkland.

Following a two year maintenance period and completion of a strict testing and monitoring regime, agreed with the Environmental Agency, West Park opened to the public in June 2005.

An Arts & Education Strategy was implemented in co-operation with Arts Council North and a team of artists including sculptors, artist blacksmiths and a poet were employed to develop the strategy within the park and on each element of the development.

The NHS hospital and first new homes were occupied in 2004, and further planning approvals were granted for a Community Village, Doctors Surgery, Community Hall, Primary School, Children's Nursery and Community Pub.

The West Park village centre was developed in 2007 providing local amenities including a Primary School, Neighbourhood Café, Dentist, Hair & Beauty Salon and Convenience Store. This is planned to be increased in size to include a Doctors Surgery, further retail units and community facilities.



The former Darchem Works



New housing at West Park



West Park village centre

History of Bussey & Armstrong



Bussey & Armstrong were established in Darlington around 1902 as 'House Builders' and 'Sawmillers'. Since then the company has developed many of the former Victorian Estates around Darlington, providing quality homes and communities for the residents of the town.



Bussey & Armstrong work with local Architects to ensure imaginative designs and layouts and use quality materials and workmanship provided by their own directly employed workforce. With the benefit of their long standing partnerships with specialist sub-contractors and suppliers, their aim is to continue to provide high quality well designed, yet affordable homes across the market.



The company has received a number of awards for their work including a Commendation from the Royal Institute of British Architects, under the Hadrian Award Scheme. They have also been recognised twice in the 'Daily Mail Greenleaf Landscaping Awards' for the Hill Garth development in Cockerton and the Woodlands Estate in Darlington.

In recent years they have developed housing at Rockcliffe Hall, Hurworth as part of an enabling development for the town's first 5 star resort hotel. In addition, the growing West Park development has won several prestigious awards, including the RICS Gold Award for Regeneration and LGC Sustainable Community Award.



Bussey & Armstrong
Building Homes in Darlington since 1902



*“cut maple and my sweetness flows like a song
children pass through my branches and are strong
music is strung on the flow of my grain”*

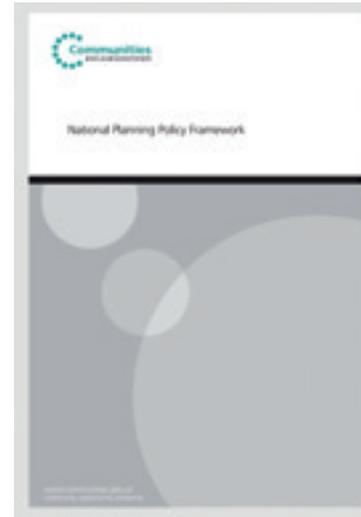
Planning Policy

The National Planning Policy Framework

The National Planning Policy Framework (NPPF) provides an overarching context for planning and decision making, and seeks to encourage positive sustainable development and growth whilst affording proper protection to the natural environment and our built heritage. NPPF explains that the concept of sustainable development incorporates three dimensions, i.e. economic, social and environmental roles, which should not be undertaken in isolation. National policy guidance is based on the premise that sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment.

NPPF introduces a 'presumption in favour of sustainable development', which lies at the heart of both 'plan making' and 'decision taking'. In terms of 'decision making', this means approving development that accords with the development plan without delay, and in other cases, to grant permission unless adverse impacts would outweigh benefits or where specific NPPF policies indicate that development should be restricted.

The guidance provides a series of core planning principles, which include the encouragement of development that the country needs, whilst taking into account legitimate environmental and heritage issues. In terms of residential development, the aim is to significantly boost the supply of housing through the provision of an appropriate land supply, along with local policies which deliver a wide choice of high quality homes and encourage high standards of design.



Local Planning Policies

The Darlington Core Strategy was adopted in 2011, and provides the strategic policies which will govern development in the Borough in the period up to 2026. Policy CS1 explains that new development and regeneration activity will be concentrated on sustainable locations within the main urban area, along with new housing and employment development in defined strategic locations, which include the North West Urban Fringe (i.e. the area that is the subject of the submitted planning applications). Policy CS10 identifies the North West Urban Fringe as being capable of delivering new houses commencing in 2016, with the bulk of development occurring from 2021 onwards. The development of the adjacent West Park scheme is identified as continuing through the first part of the plan period, with that development being completed before 2021.

The Core Strategy's broad strategic locations for new housing and economic development are currently being translated into specific allocations through the Council's emerging Making and Growing Places document. Preferred Options were published for consultation in June 2013, and draft Policy MGP5 set out refined proposals for the North West Urban Fringe. The policy identified 85 hectares of land at Stag House Farm and Mount Pleasant Farm for housing development, along with a small high quality office development, open space and playing fields, and incorporating high quality walking and cycling routes. Draft Policy MGP16 indicated that the residential element would be expected to deliver approximately 650 new homes from 2016 onwards with potential for additional housing beyond the plan period. In May 2014, the Borough Council published a proposed revision to the Preferred Options document, consultation for which is ongoing. A final decision on the precise

wording of Policy MGP16 is expected to be made in the near future but, whichever delivery date is identified, the North West Urban Fringe is a confirmed, sustainable strategic allocation, and the submitted planning applications are a vital pre-requisite to delivering the new homes that are required in the area. In this regard, all the identified requirements including affordable housing provision, open space and playing fields, highway linkages and walking/cycling routes have been fully addressed, as required by the Council's policies.

Summary

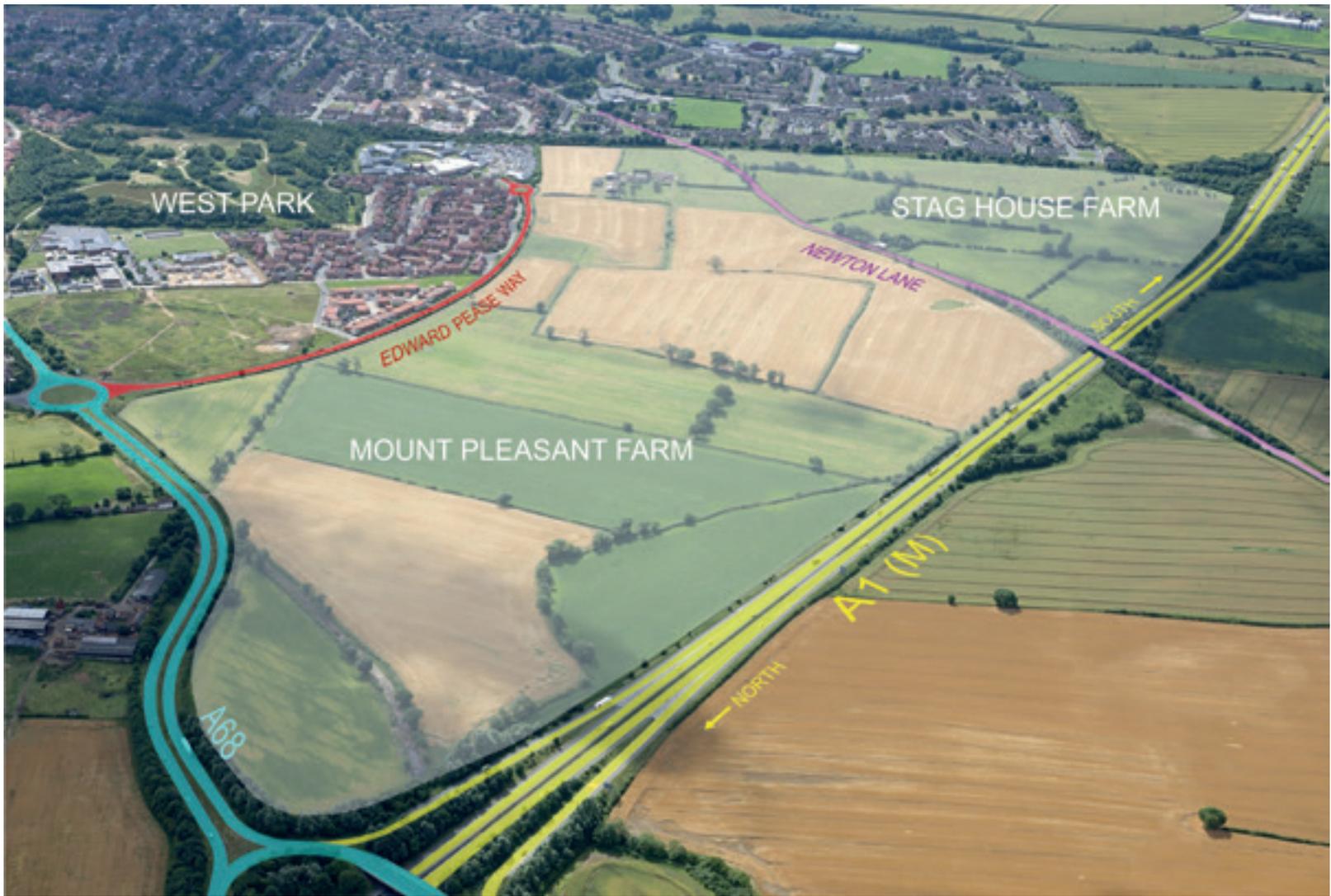
The submitted planning applications are therefore in accordance with NPPF guidance in respect of sustainable development and the need to boost housing supply by encouraging residential development in the right locations, and with the Borough Council's adopted and emerging policies in respect of new housing development at the North West Urban Fringe.





*“the purest of texts was inscribed on birch bark
proclaiming all nature to be one ark
keep festival within these urban glades”*

*Development
Framework &
Connectivity*



Aerial view looking south

Site Connections

The creation of a sustainable community relies heavily on successfully integrating buildings, local facilities, transport routes and landscaping in order to provide a diverse environment, capable of fulfilling the needs of the residents. In order to satisfy these requirements, it is important to ensure pedestrian routes and public transport take priority over private vehicles. This interaction supports recreational and community facilities within the vicinity, as well as benefitting the environment.

Connections also need to be carefully considered in the wider area: the site's location lends itself to utilisation of the nearby A1(M), rail links and regional airports. Footpath and cycle routes will also connect to the wider area via the designated cycle networks and public rights of way.



Public Transport

Bus Services

There are a number of good road connections in place around the proposed site which ensures that there are numerous bus services operating on a daily basis within the existing West Park site and surrounding areas.

Two bus routes take in the existing West Park Development along Edward Pease Way, numbers 16/16A (Scarlet Band) and 19 (Arriva). Both travel around the Faverdale Industrial Estate, onto West Auckland Road and on into

the town. The number 19 takes a more direct route along Woodland Road, with 16/16A taking in both Mowden and Harowgate Hill. The number 16/16A route also crosses the A1(M) into Heighington and Newton Aycliffe. Both routes operate during the daytime Monday to Saturday, the number 19 service being a regular service into town.

Also, the 1/1B/X1 (Arriva) bus runs along West Auckland Road in both directions taking passengers into town via Woodland Road and

also out of Darlington to Bishop Auckland and Tow Law. This operates daytime and evenings Monday – Saturday, and Sunday daytime.

It is envisaged that the southern end of the proposed development will have footpath links into the Branksome Estate, across and along Newton Lane and Jedburgh Drive. These links will provide short pedestrian access to the number 2 (Arriva) bus route into the town centre. The nearby Stooperdale Estate to the south of

West Park is also served by the number 4 (Arriva) service which takes passengers into the town centre, via Brinkburn Road.

The development proposals present an opportunity to provide a road link to support a circular bus route to serve the area.



Rail Network

Darlington railway station is an important interchange stop on the East Coast Main Line and has regular services to London Kings Cross (avg 2hr 30min), Edinburgh Waverley (2hr 5min), Manchester Piccadilly (2hr), Manchester Airport (2hr 30min) Leeds City Station (1hr) and Newcastle (30min).

Darlington also benefits from having excellent access to local rail services through the Bishop Line rail network. The line comprises of six, centrally located stations, including Darlington (Bank Top), Darlington North Road, Heighington, Newton Aycliffe, Shildon and as far as Bishop Auckland. Both Darlington stations are within easy access from West Park by cycling, local bus routes or by car. Darlington also has access to the Tees Valley line which connects all the main settlements of the Tees Valley and runs from Bishop Auckland to Saltburn via Darlington, Stockton-on-Tees, Middlesbrough and Redcar among many other smaller settlements.



Airports

Durham Tees Valley Airport is 5 miles (8.0 km) east of Darlington town centre and serves County Durham and Teesside. It has flights to some domestic locations across the UK and regular flights to Amsterdam, an international gateway to destinations throughout Europe and the World. The nearest larger airports are Newcastle Airport (47 miles / 76.6 km) and Leeds Bradford International Airport (62 miles / 100km).



Cycling

Cycle routes have been incorporated into the West Park Garden Village Masterplan. As well as providing new leisure routes through and around the development, links will be provided to the following existing routes:



Route 1 – Brinkburn Local Nature Reserve & West Park (short and long routes). This cycle route follows sections of the old Darlington to Barnard Castle disused rail track bed, and also the Cocker Beck Local Nature Reserve. The shorter route takes riders along Newton Lane, through the Branksome Estate and back along the nature reserve and takes, on average, 25 minutes. The longer route extends along Cocker Beck into Cockerton village and back onto Newton Lane, which adds a further 10 minutes.



Route 8 – Rockwell Nature Reserve, Faverdale & Darlington Town Centre. Riders would join this route along West Auckland Road and cut across town into the centre of Darlington providing excellent links to the train station as well as Darlington College. The path then makes its way eastwards out of town and along the River Skerne through Rockwell Local Nature Reserve heading back towards Faverdale via North Park. This route takes, on average, 60 minutes. West Park also has a purpose built bike track for keen BMX and mountain bikers. This is open to the general public and offers coaching lessons (4Motion, Darlington) as well as race events.

Darlington has developed seven radial routes that connect the edge of the town to the town centre, and these in turn are connected by a circular route. One of these radial routes is signed from the town centre as 'West Park' and utilises off road and quiet residential streets all the way to the existing West Park site. This in turn is connected to the circular route, utilising the Barnard Castle track bed, which runs to the south of West Park.



Walking

Pedestrian routes will feature significantly within the Garden Village allowing residents to walk to local amenities via easy to follow, short, direct and secure footpath links. A new footpath route will be created around the perimeter of the development, alongside the creation of the new linear park to the west of the site.

There are plans to create artwork along these routes as well as a nature trail, enhancing not only the wildlife but creating considerable visual appeal. There is also scope to improve the existing bridleways by providing better access links. Beyond the new development, pedestrian footpaths will link to Route 11 (West Park Nature Reserve), Route 10 (Cocker Beck Nature Reserve) and Route 12 (Branksome & Brinkburn).



Local Facilities

The proposed development lies on the north-western edge of Darlington. Although just minutes away from the town centre there are a wide range of facilities within the immediate area, all within walking distance.

These include:

Shops

- West Park Village
- Cockerton Village
- Whitby Way

Pubs & Cafes

- West Park Café
- The White Heiffer Pub

Education

- West Park Academy
- Mount Pleasant Primary School
- Cockerton C of E Primary School
- Darlington College of Maths & Science

Employment

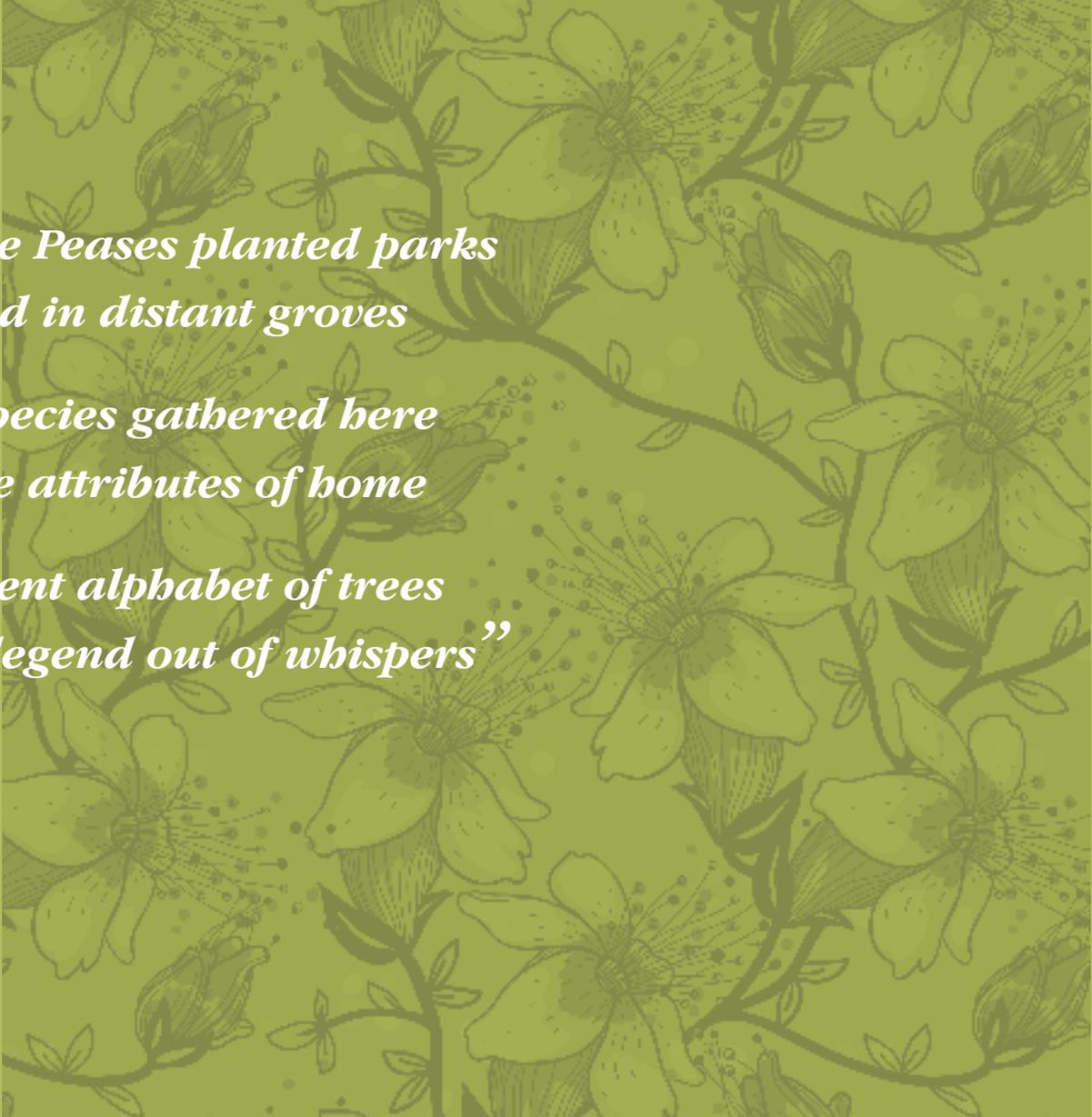
- Faverdale Industrial Estate

Recreation

West Park already benefits from a 33 acre Nature Reserve with good bridleway and footpath access links to the local area including the Barnard Castle Railway track bed. The proposed development will build upon this by provision of further public open space and improved access links.







*“just as the Peases planted parks
sourced in distant groves
so the species gathered here
spell the attributes of home
the ancient alphabet of trees
grows our legend out of whispers”*

*Development
Design Policy*



KEY

- Residential
- Playing Fields
- Education
- Existing Approved Residential
- Potential Commercial Retail
- Commercial Office (future phase)

Vision

The West Park Garden Village vision is to create a sustainable community based on the principles of the 'Garden City Movement'. Working with the existing landscape features, water courses, wildlife habitats and surroundings, it is intended to create a locally inspired scheme with distinctive character. The layout of the development is designed to integrate harmoniously into its surroundings by reinforcing existing connections and creating new ones. Buildings and land uses will carefully blend within the existing hedgerows, trees and topography to define

and enhance streets and open spaces, making for attractive surroundings. The boulevards, streets and footpaths are to be designed to encourage low vehicle speeds, creating safe, functional spaces. These easy to follow layouts promote the use of pedestrian and cycle routes, providing access to local community facilities. The carefully positioned public and private spaces are to be clearly defined, attractive, well managed and safe whilst integrating resident and visitor parking so as not to dominate the street scene.



Constraints Plan



KEY

-  Existing road infrastructure
-  Existing woodland
-  Existing trees
-  Existing hedgerows
- many with associated ditches
-  Existing active watercourses/bridleways
-  Existing multi user routes/bridleways
-  Existing properties
-  Existing services and associated easements
-  Existing location of cathodic apparatus
-  Existing overhead lines
-  Approx. location of existing 55db acoustic limit
-  Proposed zone for acoustic mitigation (approx. 50m)

Design Rationale

Considerations & Opportunities

The initial concept designs were prepared following the receipt of information gathered from all of the consultants involved. The constraints of the site and the surrounding areas were plotted onto the existing site plan to identify areas where careful consideration was needed to enable the development to be successful.

Many factors were considered when producing the initial concepts for the site, including the environmental and ecological impact any development may have on the area. Also, the nearby A1(M) posed potential air quality and noise impact issues from traffic. The historical landscape importance of many of the site's existing features were considered as well as the archaeological past.

Not all of the factors were considered as negative constraints. The site does benefit from being generally level, the transport, local amenities and infrastructure surrounding the site create good opportunities to connect with its neighbours.

Together these considerations enabled the creation of a concept that offers a sustainable mixed use development, that integrates well with both environmental and functional factors.

The design considerations and opportunities are as follows:

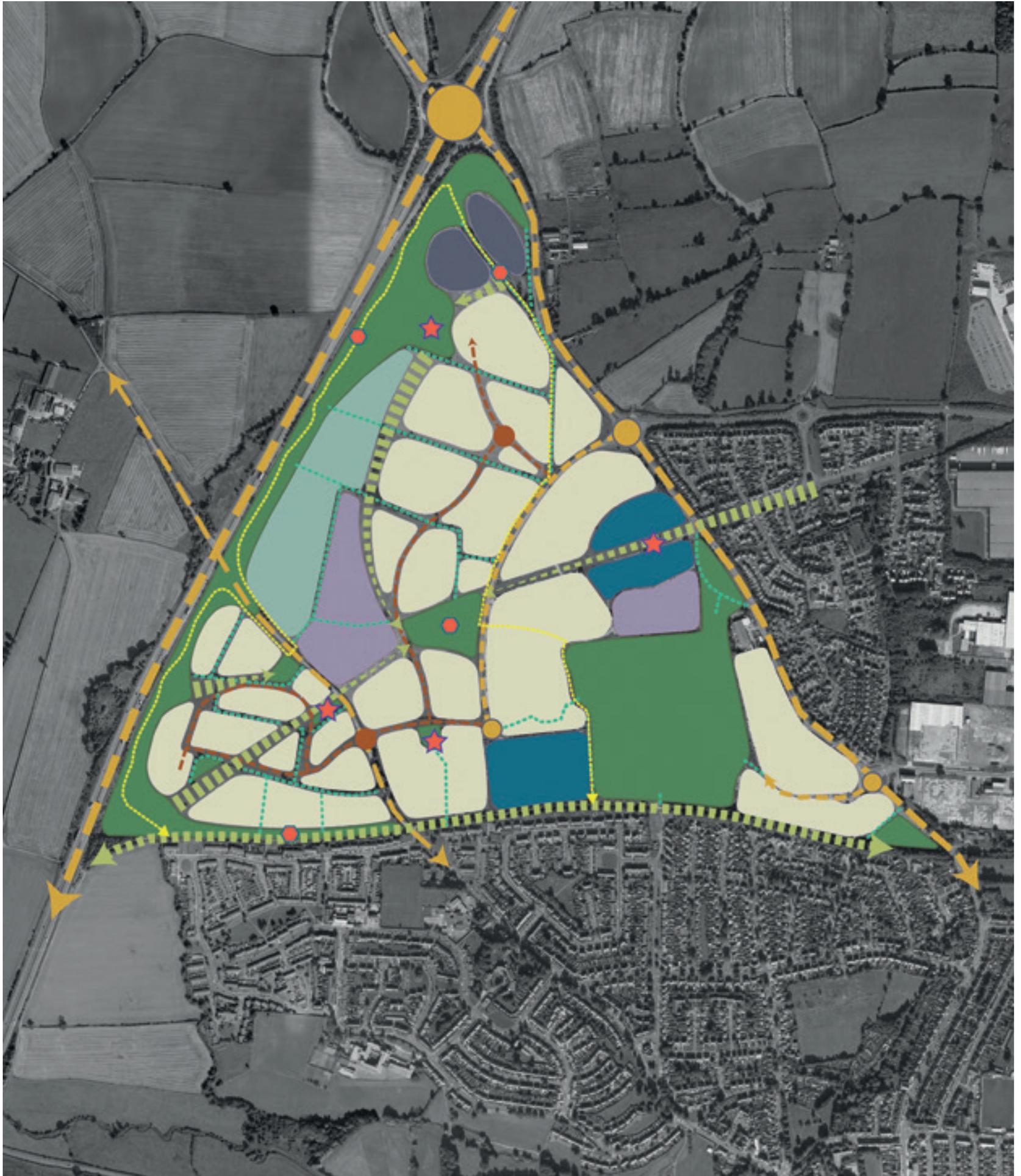
Design Considerations:

- Existing overhead power cables
- Existing water main
- Existing ditches / watercourses
- Existing trees & hedges
- Noise pollution - nearby A1(M)
- Air pollution - nearby A1(M)

Opportunities:

- Mostly level site
- Good transport connections
- Good local amenities
- Excellent landscaping to be utilised
- Utilising existing watercourses for Sustainable Urban Drainage System (SuDS)

The analysis of these design considerations and opportunities can be seen on the resulting diagram opposite.



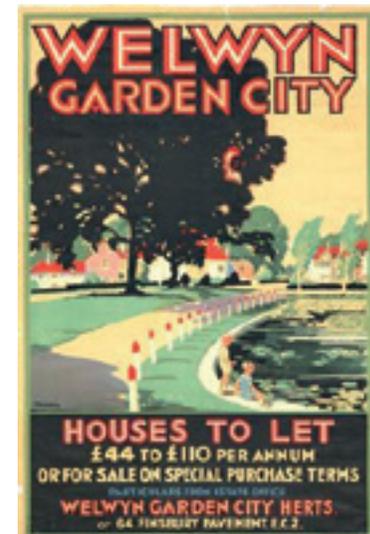
KEY

 Existing Road Infrastructure	 Existing or Proposed Tertiary Services/Facilities
 Proposed Road Infrastructure	 Potential Office/Commercial
 Proposed and Existing Green Infrastructure	 Potential Area for Playing Fields
 Proposed and Existing Green Corridors	 Existing or Area Reserved for Educational Use
 Proposed Green Links	 Proposed Multi-Use Route
 Existing, Approved and Proposed Residential Areas	 Existing and Potential Community Facilities
	 Potential location for Art Feature

Design Rationale – Garden Village Concept

Early 20th century architecture witnessed the emergence of the Garden City, first developed by Ebenezer Howard at Letchworth which is seen as 'the first of its kind', then later in Welwyn Garden City. The Garden City movement came about as a response to the dense, polluted towns and cities which emerged as a result of the Industrial Revolution.

Another good example of the Garden City is Port Sunlight, a model village built by the Lever Brothers to accommodate workers in their soap factories in Merseyside. The village is now a Conservation Area and contains 900 Grade II listed buildings. Built over the last decade, much of the West Park development was influenced by Darlington's Arts and Crafts movement of the late 19th and early 20th centuries. Design influences can also be seen from renowned Architects such as Voysey, Lloyd Wright & Lutyens.



Design Rationale

Principles of the Garden Village Concept

The basic ideal of the Garden City or Village was to create housing for families, containing both executive and affordable dwellings outside a town or city centre with good transport connections. The villages would have generous green areas for both private and communal uses, tree-lined boulevards and ease of access to transport. Sadly, these ideals have been lost since the arrival of the car and the need for high density, low cost housing replacing front gardens with parking spaces.

However, there has been renewed interest in garden villages by the Town and Country Planning Association and most recently by the Government in its Central Planning Policy Framework. This document suggests that the 'supply of new homes can sometimes be best achieved through planning for larger scale development... that follow the principles of garden cities' (para 52). It is the intention of Niven Architects, together with Bussey & Armstrong and Darlington Borough Council, to produce a contemporary designed Masterplan based largely on these principles.



Landscape Plan



KEY

- | | | |
|--|---|--|
|  Site Boundary (to add) |  Proposed green links
<i>(areas alongside existing hedges and ditches - enhanced for wildlife and physical links. Located on immediate routeways)</i> |  Proposed mounds
<i>(to form landscape features and acoustic buffers. 4m high to the south of Newton Lane and 3-4m to the north of it)</i> |
|  Existing trees to be retained where possible
<i>(shown with indicative extents of canopy and Root Protection Area)</i> |  Proposed areas for Residential Development
<i>(arrows indicate direction of frontage of properties)</i> |  Proposed living willow acoustic fence
<i>(to supplement acoustic bunds where required)</i> |
|  Existing hedgerows to be retained |  Proposed areas for Informal Playing Fields |  Existing watercourses |
|  Existing woodland/woodland edge areas |  Reserved area for Educational Facilities |  Existing water bodies/flushes |
|  Proposed woodland/woodland edge |  Potential area for Commercial Development |  Proposed water bodies
<i>(to be developed as SuDS and/or ecological features)</i> |
|  Indicative locations for proposed tree planting
<i>(ANS, Heavy standards, Selected Standards, Standards)</i> |  Proposed route of main link road
<i>(and associated footpaths)</i> |  Proposed swales/rain gardens
<i>(utilising existing hedgerow ditches where practicable)</i> |
|  Proposed public spaces
<i>(areas to contain a variety of landscape treatments and be suitable for a range of public and community uses. Located on key routeways)</i> |  Indicative route of informal footpaths/links |  Proposed and existing wetland areas |
| |  Indicative route of multi-use path |  Potential location for art installations/features |

Design Code

Good urban design can help ensure long-term property values, reduce crime, ease transport issues and contribute to public health and wellbeing. To ensure such a scheme is created throughout The West Park Garden village, a 'Design Code' has been prepared. This document will form an essential part of the outline planning submission, setting out detailed guidelines for developers to follow. The Design Code document not only defines housing layouts, parking ratios and communal spaces, it also provides detailed guidance on materials, window and door styles and landscaping boundary treatments.

This code will help streamline future planning applications allowing developers to provide a coherent quality environment addressing the design, sustainability and ecological issues present.



Landscape Design

West Park Garden Village – Philosophy for Landscape Design

The existing site at West Park has already set the scene for well-considered development within a matrix of planned open spaces. The proposed West Park Garden Village should be considered as the completing element of this development so that the overall settlement will form a distinctive triangular character area to the north west of Darlington, bounded by the line of the A1 Motorway to the western boundary.

Landscape Character, Trees and Hedgerows

West Park Garden Village site lies to the west of the West Park development on farmland currently occupied by two farms, the large one to the north being Mount Pleasant Farm (arable) and the smaller one in the south being Stag House Farm (pasture). The farmland has retained much of the original field pattern, marked by hedgerows of varying quality. Some of the hedgerows are clearly very old and have developed into lines of trees, while others are lower and have gaps between them.

Some of these have been removed to allow field expansion particularly in the arable areas but many are present, and one hedge in the northern part of the site has been identified as an ancient, species-rich hedge. Therefore, a key design principle for the development will be to retain hedges and associated ditches where possible in order to keep an element of the farmland character and to maintain the valuable assets hedges provide including wildlife routes, navigation lines for bats, and much needed landscape character.

Inevitably, roads and routes will need to cross the hedges so some removals will be required but these should be designed to cross in weaker or gap prone areas, where possible.

There are a number of existing trees on site which will be retained, where possible, including a group of magnificent, mature oaks which could form the focal point for a village green overlooked by houses.



Green Infrastructure and SuDS

The land is largely flat and many of the hedgerows have drainage ditches running parallel. Water management has been identified from the start as a key issue to be designed into the development to ensure a sustainable and successful approach to site drainage.

In accordance with best practice the site will be designed around principle of 'Green Infrastructure' (GI). Existing drainage ditches will be combined with new swales and attenuation ponds, and linked together within a network of green corridors to provide permeable routes not only for water but for wildlife and people.

This will accord with the principles laid out in Darlington's Green Infrastructure Strategy (2013) which includes the North West Urban Fringe 'In 2026 Darlington's green infrastructure network is high quality, multi-functional and accessible, which significantly enhances the community's quality of life and the natural environment for wildlife'.

There is a naturally wet area in a slight hollow which lies to the eastern boundary of the site, and therefore roughly in the centre of the wider triangle of the wider West Park development. This area has been identified as the key central open space and the wet area will be developed into a more significant water body. This area will be designed as a key central space at the heart of several long vistas and highly visible by road users using the spine road.

The southern boundary in Stag House Farm is one of the lowest points on the site and has been identified as the location for a series of linear attenuation ponds. It is proposed these will be designed not only to provide the vital function of attenuation but also to include an element of permanent water for aesthetic function, and with gently shelved margins capable of supporting marginal species to improve biodiversity.



Landscape Design

Key Constraints and Opportunities

The western boundary with the A1 Motorway is a significant constraint but also an opportunity for a creative design response. The motorway is largely level with the site therefore acoustic bunds will need to run along the western site boundary. It is proposed the bunds will be designed in organic shapes and planted to form a strong linear green edge to the development, also adapted to permit the existing stream and service corridors to cross.

In accordance with Green Infrastructure principles, this western linear green space will be designed to be multifunctional, not only providing the acoustic function through the bunds but

also a connecting green space with a footpath / bridleway, and the existing un-named watercourse expanded into 'oxbow' ponds providing opportunities to enrich and diversify native species.

The two service corridors cross the site, each around 25 metres wide. While they are a constraint to development they also provide an opportunity for connectivity, creative design, green links and long vistas. The design of surrounding housing could seek to provide natural surveillance by fronting onto the service corridors where possible, and seeking to join the linear space to nodal spaces in order to break up the linearity. Planting should also be avoided other than where trees exist already within the corridors.

Movement and Links

There are no public footpaths on the site at present, however a key design driver of the Masterplan is the creation of a permeable and well-connected site, both for internal circulation and for connections to nearby paths, shops and schools.

The existing bridleway that lies along Edward Pease Way (also a cycleway) is proposed to be partially re-routed and extended to create a circular multi-user route that will follow the line of ancient hedgerows in the north of the site. It will then cross the existing stream to follow the proposed linear green space alongside the acoustic bunds and western site boundary.

Connections to and across the 'trackbed' path are a key consideration, especially since the path may, in future, be extended northwards beyond the A1(M) where it presently terminates. This connection is already picked up on Darlington's Cycle Map which indicates a cycle link over the A1(M) connecting north towards Walworth. The service corridors will also be treated as connective routes, leading conveniently to the existing West Park Village and shops.



Ecology

The landscape design will seek to protect and enhance the existing site ecology. Initial surveys suggest that the site is not currently of ecological importance, largely due to the arable farming. Further survey work will help to identify which species are currently of greatest importance. The key design principle of tree and hedgerow retention along with creation of green infrastructure corridors, including wet features, will be of great potential value in increasing biodiversity on site.

Art

The landscape design is being developed to integrate with and embrace the emerging arts strategy for West Park Garden Village, which again is a continuation of principles established for the wider West Park triangle of development.

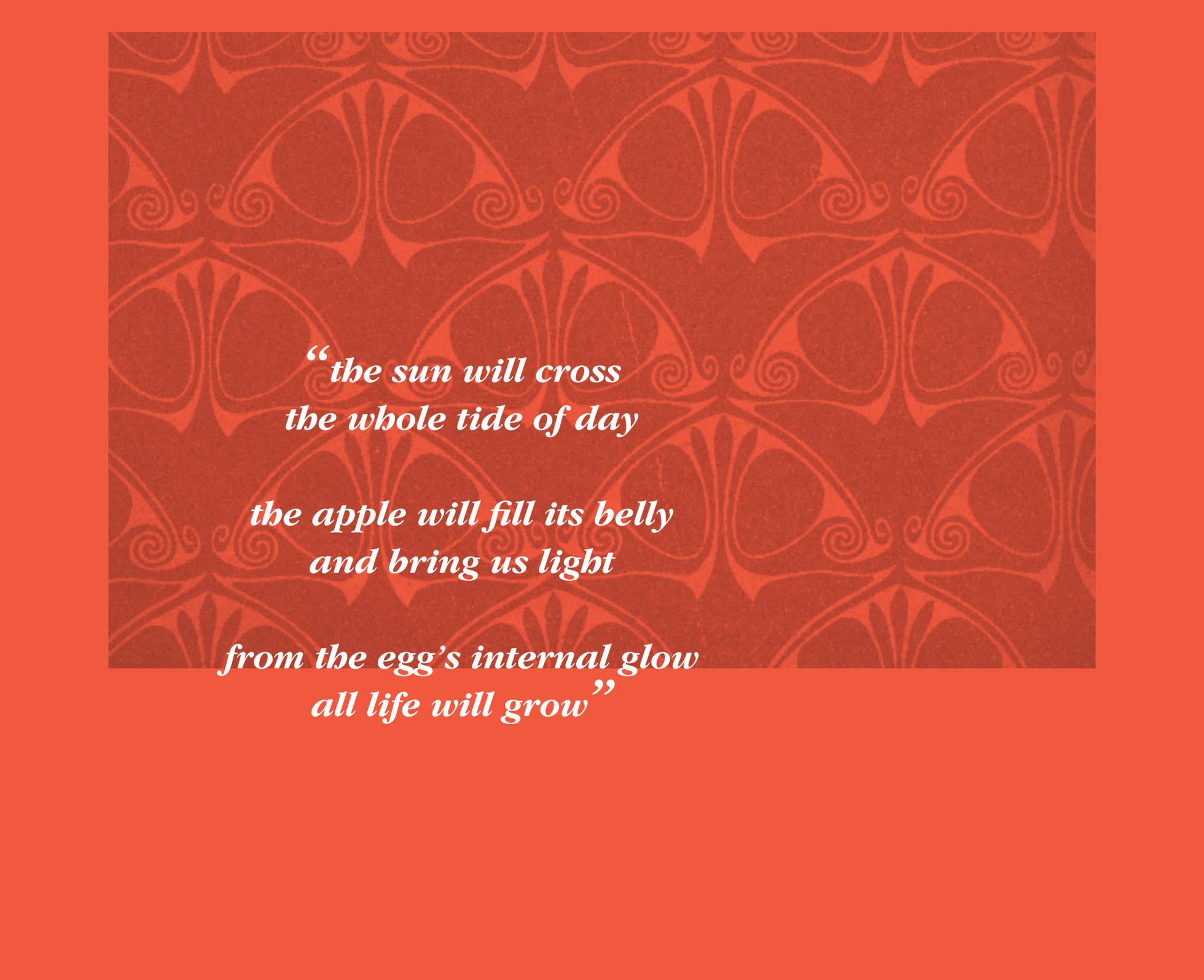
Sport and Play

Play items will be integrated into the landscape and will draw upon the emerging art themes, again in the spirit of the exemplar play area at West Park. Natural materials such as timber, rock and sand will be used, within a play strategy that provides a range of play experiences and opportunities for creative play for younger children and adventure play for older kids. Creation of sports pitches has been a long held aspiration for the site and can be integrated into future school / community provision, slotted into the wide flat spaces and sheltered by the retained hedgerows.

Education

Due to the strategic nature and size of the development site requirements for a Primary and Nursery School are needed and have been reserved via designated land use. The schooling options will be adapted and tailored into schooling development opportunities considering the wider neighbourhood area in and around West Park.





*“the sun will cross
the whole tide of day*

*the apple will fill its belly
and bring us light*

*from the egg’s internal glow
all life will grow”*

Benefits

Art Strategy

Art has been central to West Park both in the form it has taken, the process by which decisions have been made and the historical and cultural references it is based upon.

The art has predominantly taken the form of a scheme based on placing text in key areas of the landscape, marking entrance points into particular spaces within the development. To date it has

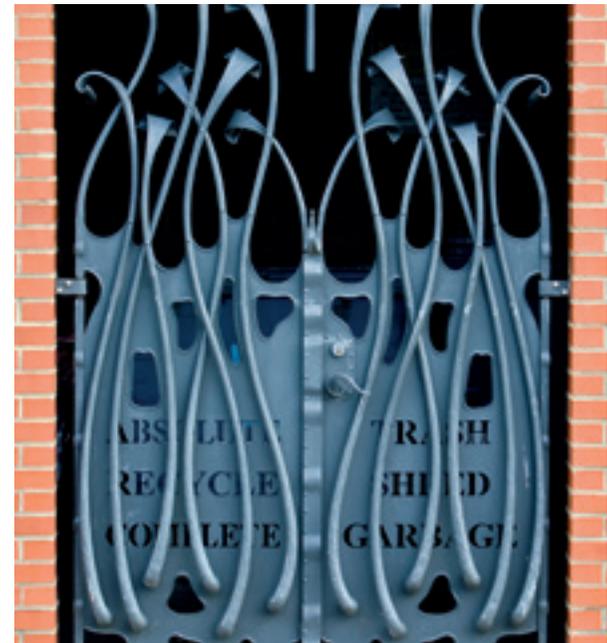
drawn on a set palette of colours and materials and deployed a specific font. The materials used are local stone, often Catcastle, coupled with ironwork, Corten steel, glass and enamel work.

Whilst all the materials have, at some point, been used in different forms an underlying unity can be identified.

The subject matter which forms the basis of the text in the existing development is generally based on local history, ecology and culture.

The poetry which appears on the stones and bridges, the street signs and windows of West Park focuses on the interrelationships with people, with the past, and with the environment.

The new site borders on three areas of historical importance to Darlington: the medieval villages of Archdeacon Newton and Whessoe, and a site where Romano-British remains have been discovered. This provides the artists with the opportunity to explore how the interrelated areas of agriculture, trade and technical innovation which has defined the identity of region over the centuries.



As in other parts of West Park, a number of subsidiary pieces will be placed as the project develops. Three peripheral sites are being considered for the placement of the artwork in the new development: at the small park by the roundabout on West Auckland Road; at the point where the stream emerges from beneath the motorway and cuts through

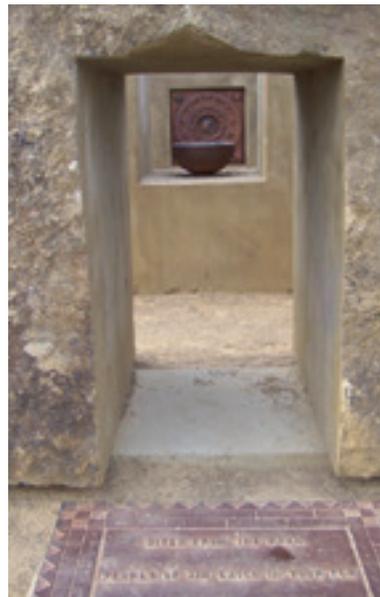
the acoustic baffling; and on the water corridor that marks the southern border of West Park Garden Village.

A further piece will be located within the central park. Whilst its design has not yet been finalised it will draw its references from the Roman heritage of the area and the idea of three strands radiating

from a central point. This piece will 'point' to other pieces within the Garden Village and also to the way in which the whole site is a unity of population, planning and environment.

The second piece which is to be sited by the motorway is intended to reflect the agricultural and ecclesiastical heritage of

Archdeacon Newton. The third piece is intended to direct the viewer's attention along the 'line of trade' marked by the old railway line. The idea of 'alignment' can be seen in many ancient monuments throughout the British Isles and has been designed to link West Park to its larger heritage.



Economic Benefits

The National Planning Policy Framework clearly emphasises the role of new residential developments in achieving economic growth.

Housing makes a significant contribution to the regional and local economy. The new homes at West Park Garden Village will generate initial benefits through employment and spending associated with the construction process. These positive impacts will be experienced for long afterwards and can provide an important source of local and

social benefits for the new community. As the new homes are occupied a range of local benefits will be generated, from spending power to Council Tax revenues, these will help to sustain local shops and services.

A wide range of family housing will help maintain and grow the local population, providing an essential revenue for key services such as local schools, health care and childcare facilities.



Sustainability

West Park Garden Village aims to create a sustainable living environment factoring the social, environmental and economic needs of current and future generations of the community.

The following sustainable design principles have been adopted bringing together ideas to create enjoyable places to live, work and play while greatly reducing energy use and carbon / greenhouse emissions:

- All new homes will be built in line with current code for sustainable homes standards and government standards.
- Sustainable surface water drainage systems and water conservation measures to be incorporated.
- Utilisation of existing landscaping within the site.
- Encouraging and preserving ecological and wildlife habitats throughout the site.
- Promoting health & wellbeing through recreational spaces.
- Lowering emissions through prime pedestrian, cycle and public transport connections.
- Promoting recycling and use of renewable energy both within dwellings and the public realm.

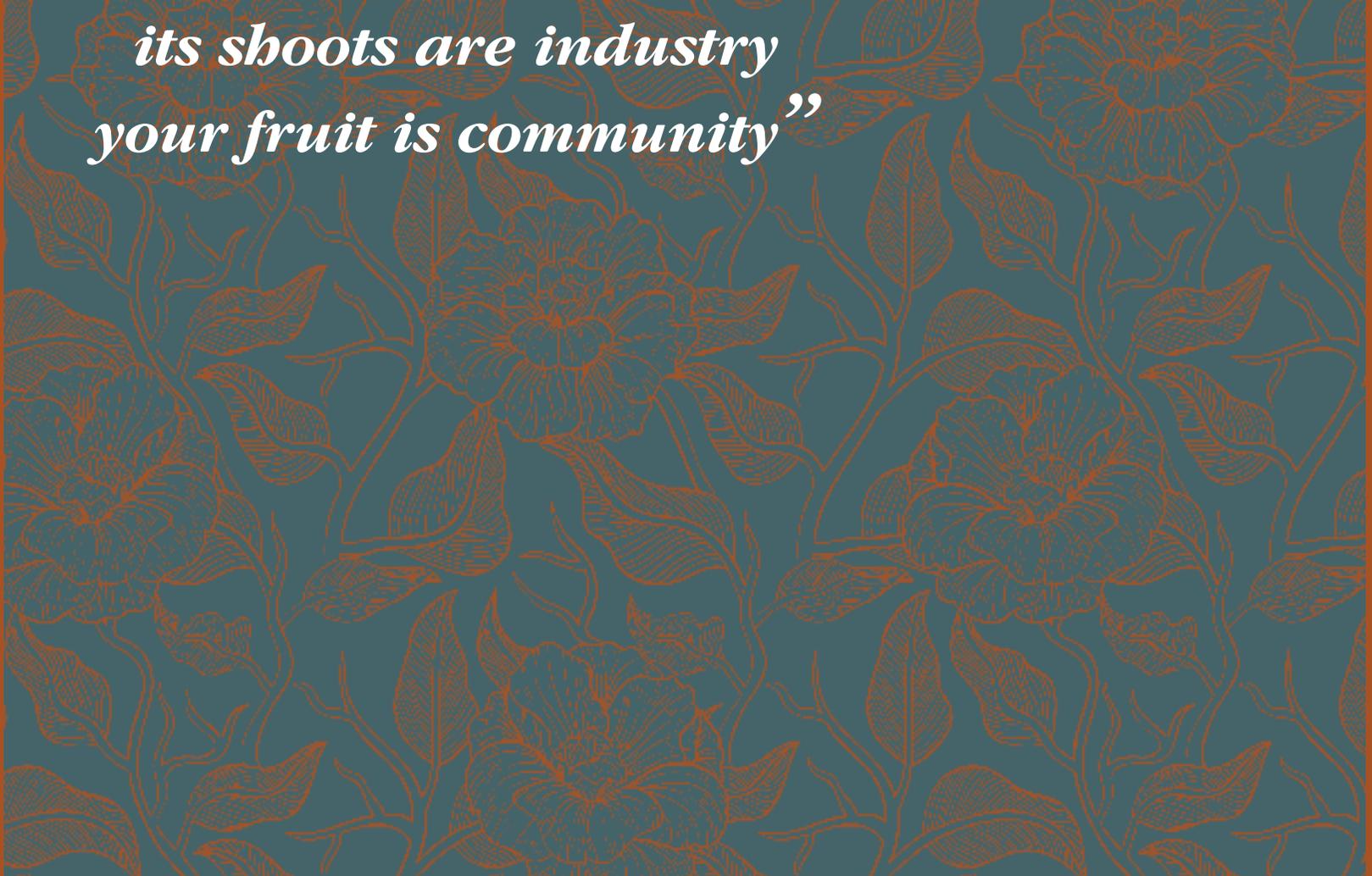
Levy

Community involvement is an important factor in ensuring housing estates and landscaping become places to enjoy and value. It is the intention to provide a new residents group who will meet to discuss important issues relating to West Park Garden Village including events, new projects and the running of the nature park.

As part of the community involvement a levy will be set up in order to fund long-term management, maintenance and improvements to the green infrastructure and amenities. This levy will form part of a legal agreement written into the deeds of all the residential and commercial properties. Local residents will be invited to become involved in the park and the Community Group based on the existing arrangements at West Park which funds the 'Friends of West Park' group.



*“take root in memory
its shoots are industry
your fruit is community”*



Deliverability

Ecology

Ecological Consultants have been actively involved with the project, offering advice and guidance to ensure the site continues to provide a natural habitat for a variety of species.

Numerous surveys were carried out in order to establish and identify what wildlife was present on site, these included Bat, Bird (including Barn Owl), Great Crested Newt, Pond and further vegetation surveys.

The development has made use of existing field boundaries, hedgerows and retains most of the trees, with infilling of gaps and sensitive management. Additional planting of native species plants and trees within the site will enhance the potential for wildlife in the area.

Green corridors are incorporated throughout the development. They will create links within the site and to the wider countryside, benefitting both the local environment and species within. Land set aside to the west of the site will also provide potential habitat for wildlife, allowing a visual buffer between the site and the road to the west.

The habitat creation for birds and bats within the site will also increase the diversity of species within the local area.



Archaeology

Desk Based Assessment (DBA), identifies the sites of archaeological or historic significance in or close to the site and assesses that significance.

In recent years archaeological investigations have taken place both within the site and also on its margins to the east and north, ahead of residential and commercial development. The results of these investigations demonstrate the presence of later prehistoric and Romano-British activity in the area, at Faverdale and at West Park, on the site of the new hospital.

However, the distribution of remains is inconsistent: an investigation in the northern part of the study area failed to find any archaeological deposits of significance; whereas the excavation at Faverdale produced good evidence of relatively high-status Iron Age and Romano-British occupation.

The DBA concludes that there is a high potential for some archaeological remains to be present within parts of the site, and so recommends a programme of geophysics to inform discussions during the planning application as to whether any further field evaluation and/or mitigation works may be required.



Traffic Impact

The development proposals have been subject to a full technical review of traffic impact and required mitigation. This has included formal traffic surveys, trip analysis and a developed traffic impact assessment.

Bussey & Armstrong along with Darlington Borough Council Highways and the Highways Agency are looking at impacts at local and regional level along the A1(M) corridor and local junctions. Highways design is in accordance with the Tees Valley Design Guide and Specification as well as its associated reference documents.

Edward Pease Way to the east of the development site is a 7.3 metres (m) wide carriageway secondary distributor road (cat 3b) and was sized previously to take account of future development and flexibility. It currently terminates at a roundabout outside West Park Hospital site.

It is a desire and benefit of the development to extend this wide tree-lined boulevard road to connect to a new roundabout on Newton Lane. These works shall include improvement of a short section of Newton Lane to widen the carriageway and provide pedestrian access to the roundabout.

A further section of 7.3m carriageway will extend into the Stag House Farm site providing access and terminating at the south west corner of the site. Speed limits on all new highways shall be a maximum of 30mph. As part of the development it is proposed to step the speed limit entering the town on Newton Lane by reducing the section to the south of the A1(M) crossing to initially 40mph and subsequently 30mph at Stag House Farm itself, prior to the new roundabout.

The provision of the link between Edward Pease Way and Newton Lane provides a viable opportunity for improved public transport and bus provision.

Roads within housing developments will follow the recommended highway design standards. On both Stag House Farm and Mount Pleasant Farm sites a 6.7m wide carriageway link road (cat 4a) will be provided. This gives access for bus routes and provides secondary access for future maintenance. On the Mount Pleasant site it also provides the opportunity to access sport facilities and future education facilities should these be developed.

On the Stag House Farm site the secondary link road could loop to form a junction back onto the main distributor.

On the Mount Pleasant site the link road will enter the development at a ghost turn right hand junction from Edward Pease Way when driving from the existing roundabout on the A68. This will reconnect to the new section of boulevard at the south end of the site.



Noise & Air Quality

An extensive noise survey was carried out across the entire development site during both the day and night-time period in order to assess the impacts from vehicles on the A1(M), A68, Newton Lane and Edward Pease Way.

For residential areas of the site fronting onto the A1(M) and A68 the use of acoustic fencing or landscaped earth bunds will be required to reduce the noise exposure of external areas and residential façades.

It is proposed that dwellings adjacent to sources of road traffic noise will be orientated to provide screening to external garden areas therefore meeting the required guidance values for amenity without the need for further mitigation.

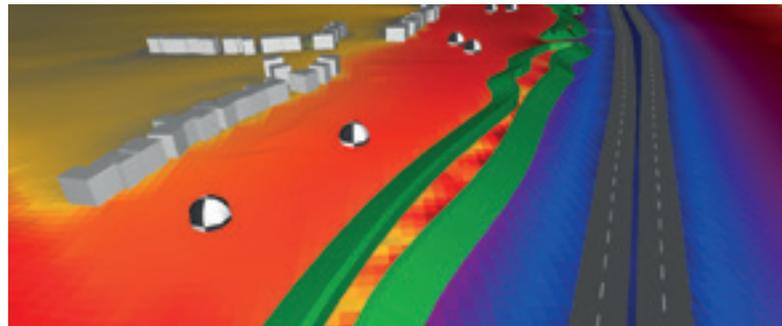
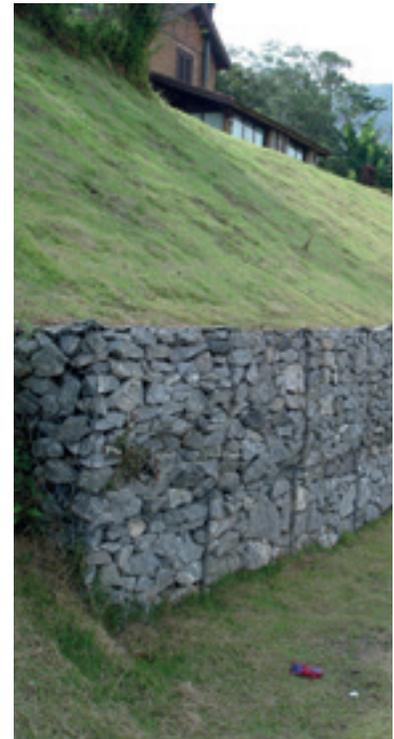
Internal ambient noise level criteria conducive to resting and sleeping conditions will be met through the implementation of adequate glazing and ventilation. Nearest to the A1(M) glazing and ventilation with a higher specification than standard double glazing units will be required to meet internal criteria.

The impact of road traffic noise upon the development for educational purposes and the potential for sport pitch use to influence levels of external amenity for future residents, will be minimised through the use of buffers zones.

Predicted traffic growth on the surrounding road network has been taken into consideration when calculating the required acoustic mitigation.

The noise assessment demonstrates that with the implementation of required mitigation measures suitable levels of amenity for future residents at the West Park Garden Village can be met at the proposed development site.

Air quality was also a consideration within the site, therefore specialist consultants were brought in to carry out comprehensive monitoring, modelling and assessment of ambient air quality to determine that the extent of the development, in particular alongside the A1(M) fell within the acceptable parameters.



Ground Investigations

The site is currently agricultural farmland with two principle features of farm buildings at Stag House and Mount Pleasant.

The adjacent West Park site developed by Bussey and Armstrong Projects Ltd shows topsoil over shallow soft to firm clay drift deposits.

Both the Stag House and Mount Pleasant sites have been subject to a Phase 1 geotechnical desk study which form a preliminary risk assessment in accordance with Environment Agency guidance document CLR 11 2004 as well as appropriate statutory standards. These investigations have established land history and uses, environmental settings, possible mining activity, previous land use which may give rise to concern with contamination and risk from contamination and gas.

A summary of findings is noted as:

Mining – Not applicable.

Hydrology – The only watercourse identified is the unnamed feature to the west of the site, adjacent to the A1(M).

Flooding – No historic records of flooding or extreme flooding.

Radon gas – No radon protection measures required.

Preliminary contamination assessment – Low levels of contamination are anticipated generally associated with farming in terms of fertilizer and pesticides. Local areas to the existing farmsteads which may exhibit fuels and demolition waste. Made ground is potentially to be found within highways embankments and within the track bed to the south.

Preliminary gas assessment – Limited potential is identified potentially around farmsteads, a small former tip to the west of the site, boundary features and the previously remediated chemical works to the south east.

Potential contamination based on the relatively large size of the site and its historical farmland use, is minor.



Drainage

Surface water drainage from the site will be discharged following the hierarchy of drainage preferences set out in accordance with NPPF and Building Regulation guidance and will take the form of a true SuDS under Sewers for Adoption, incorporating above ground ponds and underground tanks.

Initial ground investigation information, local knowledge and testing on the adjacent West Park development, would appear to rule out the option of soakaways due to underlying clay sub soil. The use of extensive open water features however will allow a degree of natural percolation and evaporation but this will be unlikely to form the final surface water design solution.

A number of meetings have taken place and a formal pre-development enquiry has been submitted and responded to with Northumberland Water Ltd (NWL). NWL will adopt the onsite domestic drainage pipework network within a phased development plan.

It is proposed the adopted surface water drainage network pipework will discharge in two principle locations following a SuDS design approach. The northern part of the site will utilise the formal

defined ditches to discharge to the existing water course to the north west boundary. The existing ditches will be increased to provide attenuation and supplemented with a below ground attenuation tank due to the constraining flat levels. Water from the attenuation tank will be pumped to the drainage ditches under a controlled flow via an adopted pumping station.

It is proposed drainage to the southern part of development will be attenuated at the lower points on site via swales and ponds which will form an architectural feature alongside the former Barnard Castle rail track bed which is now redundant. This also provides a development buffer to the existing housing on Branksome Estate.

Foul water drainage design is currently being developed in partnership with NWL with outfall connections to existing sewers in Newton Lane and Jedburgh Drive.



Statutory Services

Service records of all utilities have been obtained and extensive discussion taken place with NWL regarding water supply and Northern Power Grid regarding electricity diversion and supply.

The site has a number of utility services features and the project will provide the opportunity to remove a number of unsightly overhead features and to bury these within defined services corridors. These corridors will provide green features and open space through the development. Principle utility features include three major large diameter NWL water services pipelines running across the site from Lartington and Broken Scar to Teesside.

Two separate HV (high voltage) electric overhead pylon cable routes of 11kV and 33kV cross the site. To the north east of the site a section of the 33kV cabling has already been grounded and buried alongside Edward Pease Way. As part of the development initial application meetings have taken place to propose the removal of pylons and bury cables within a new easement running on the eastern side of the eastern water main easement.

Smaller BT overhead pole mounted cables are also present. These can be retained or diverted as required. Water supply to the site will be taken from the 225 metre diameter water main along Edward Pease Way which has sufficient capacity. Initial discussions confirm that there are no issues with water supply from this distribution main.

Electricity supply will be made direct from the grounded 11kV HV main via a number of strategic sub stations which will transform power as required.

Gas supply will be provided from the existing network within the West Park development to the East of Edward Pease Way. Final connection details and main design is to be finalised with Northern Gas Networks.

Telecommunications infrastructure exists within the curtilage of Edward Pease as far as the roundabout at West Park Hospital and it is the intent that the development is serviced from this network.



Flood Risk

The overall site is generally flat and bounded to the west by the A1(M), rising to the north onto the A68 with the existing West Park development to the east. The site is dissected by two principle topographic features – a rolling high point within the Mount Pleasant site running east to west, where it connects with the second feature of the country road, Newton Lane. Generally, topography of the Stag House Farm section of the site falls gently to the south away from the Road. Currently the site comprises agricultural grazing and arable greenfield.

The entire site lies within Environment Agency defined Flood Zone 1. The site therefore has an annual flood risk of 1 in 1000 years or greater from the risk of fluvial flooding.

To the western boundary an unnamed watercourse runs to the south meandering from the east side of the A1(M) to the west within the Mount Pleasant Farm site and returning back onto the site at the south west corner of the Stag House Farm development. Traditional historic hedgerows are present on site which have parallel open ditch field drains as a typical feature. These field ditches direct

surface water toward the river feature. A number of these ditches are defined drainage features and it is the design intent that these ditches are enhanced and formalised where possible to maintain drainage and flood protection following a SuDS approach.

Discharge to watercourse will be attenuated through natural and created swales, wetland features and landscaping features, supplemented by engineered drainage where required to ensure that discharge to the local watercourse will not be greater than existing.

Smaller development areas noted to be lower lying and wetter which have exhibited some local standing water during heavy storms will be retained as undeveloped green space and local wildlife wetland. Where possible, the topography of the site shall be maintained and utilised to aid the drainage of not only impermeable surfacing but also the natural drainage of the retained green zones.

Flood risk is low

Flood from fluvial sources is considered to be low in accordance with the National Planning Policy Framework and the Environment Agency guidance.

KEY

	FLOOD ZONE 3
	FLOOD ZONE 2
	MAIN RIVER





seed to

root to

trunk to

branch to

fruit to

leaf to

Conclusion



Conclusion

Bussey & Armstrong and Darlington Borough Council have taken inspiration from the 'Garden Cities' of the early 20th century to create a desirable, imaginative and creative place to live. The seeds of the development were planted by Bussey & Armstrong in the adjacent West Park Village development, with its high quality housing, carefully designed village centre and thirty acre undulating parkland that provides a haven for many species of flora and fauna.

Within the West Park Garden Village these themes of high quality, 'Architect' designed homes set within a diverse ecological parkland setting continue, designed to create a desirable place to live... called 'Placemaking'.

'Placemaking' has a cost attached, but this cost is more than offset by the benefits achieved. It creates a tight knit, cohesive social fabric within which a neighbourhood community can thrive because of easier access to the necessary facilities such as schools, shops, medical services and, importantly, well-managed public open space.

Darlington has a long and rich tradition of 'Placemaking', stretching back to many Victorian developments and the later adoption of Garden City principles, with tree-lined avenues and numerous urban parklands.

Both Bussey and Armstrong and Darlington Borough Council are striving to create a sustainable and desirable place to live and strongly believe that 'Placemaking' at the West Park Garden Village will provide the necessary framework.



westpark Garden Village

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