Flintshire Deposit Local Development Plan 2015 - 2030

Background Paper 3
Infrastructure Plan

September 2019

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CYNGOR Sir y Fflint
Flintshire
COUNTY COUNCIL

Flintshire Local Development Plan
Deposit Plan 2015 – 2030

INFRASTRUCTURE PLAN (2019)

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Flintshire Infrastructure Plan (IP)

Part 1

1. Introduction

1.1 This Infrastructure Plan (IP) is a "live document" which sites alongside Flintshire's Local Development Plan (LDP). It covers the plan period from 2015 to 2030 and identifies the means to improve and provide infrastructure required to support and sustain the County's planned level of growth. It will also potentially support a Community Infrastructure Levy (CIL) charging schedule the consideration for which will follow in due course once the LDP has been adopted. The information contained in this document is accurate at the time of preparation June 2019).

1.2 The provision of new infrastructure is an important element of planning for new development as it is recognised that new development should where appropriate bring with it the timely provision of new supporting community facilities and necessary services. Whilst it is recognised that some significant elements of infrastructure may take years to complete, the Plan's Strategy seeks to ensure that each phase of new development is tied to the provision of necessary infrastructure with each stage of development being able to demonstrate an acceptable level of supporting facilities. This may include the early provision of new facilities along with maximising the potential contribution of existing nearby facilities providing there is capacity and acceptable accessibility.

1.3 This (IP) is directly related to the following Deposit Flintshire LDP policies:

STR3: Strategic Sites
STR4: Principles of Sustainable Development Design and Placemaking
STR5: Transport and Accessibility
STR6: Services, Facilities and Infrastructure
STR11: Provision of Sustainable Housing Sites
STR: 16 Natural Built Environment, Green Networks and Infrastructure
PC6: Active travel
PC7: Passenger Transport
PC10: New Transport Schemes
PC12: Community Facilities
HN1: New Housing Development Proposals
HN3: Affordable Housing
EN1: Sports Recreation and Cultural Facilities and Activities
EN2: Green Infrastructure
EN14: Flood Risk
EN15: Water Resources

1.4 The provision and timing of site specific infrastructure is linked to the Housing Trajectory and site specific requirements for allocations contained in appendix 2.

It will be regularly reviewed to ensure that the LDP is supported by an accurate and up-to-date evidence base and is directly linked to the LDP Monitoring Framework.

1.5 This document has been informed by and emerged out of a process of constructive dialogue with both internal and external stakeholders and organisations responsible for the provision of infrastructure across the County Borough, in order to ensure that stakeholders are engaged in the provision and planning of the infrastructure required to support the Plan's strategy. (The key stakeholders consulted with are included in appendix 1). The information provided, helps to demonstrate the viability and deliverability of the sites allocated in the Plan.

1.6 Further continued dialogue and consultation findings will help develop the detail of required infrastructure along with funding opportunities including the roles of Community Infrastructure Levy (CIL) contributions for strategic projects, Section 106 Agreement contributions for local priorities together with identifying other potential funding streams from the public and private sectors. In addition is highly likely that the Council will enter into Statements of Common Ground (SoCG) with developers and infrastructure providers in due course, which will update and clarify the information contained in this document.

2. Purpose of the Document

2.1 Although there is no statutory requirement to prepare an Infrastructure Plan in Wales, given the scale of growth planned for within Flintshire over the Plan period, the Infrastructure Plan usefully forms part of the evidence base for the Deposit LDP. There is a need to ensure that the plan will deliver, this forms part of the Tests of Soundness for the Plan (i.e. is there support from the relevant infrastructure providers both financially and in terms of meeting relevant timescales).

2.2 The IP is not a shopping list for developer contributions, nor does it capture every individual project being planned by the Council or external service providers. It recognises that there are other plans and strategies that exist which provide more detail about what, how and when key elements of infrastructure will be delivered, and strongly draws on these to inform this Infrastructure Plan. In addition, the scale, nature and timing of development over the Plan period will influence the phasing of associated infrastructure. As such, it will be necessary for infrastructure providers to work in partnership with developers to ensure that new development and necessary infrastructure are delivered in a co-ordinated and timely manner over the lifetime of the LDP. That said it is not always possible to identify in advance when development will take place and as such some infrastructure provision will of its nature be reactionary, based on the circumstances and capacity existing at the time.

2.3 The IP establishes the scale of infrastructure that currently exists to provide a context, and seeks to identify the means by which capacity can be increased to accommodate new development. The IP also sets out the types of infrastructure that would also be required to deliver any windfall sites over the plan period, but given their nature cannot, at this stage, identify the detailed associated infrastructure requirements for such sites.

2.4 Where possible, the IP identifies the organisations responsible for providing the infrastructure, the means, financial and otherwise, by which this infrastructure will be provided and when it is anticipated provision will be made over the plan period. Although it should be noted that some providers cannot be more specific about definitive costs and sites currently as they are working these through their own due process in terms of options development and engagement with local communities as needed.

2.5 The intention is not that the IP will duplicate any other LDP documents, nor will it supersede the existing financial plans and investment programmes of infrastructure providers. Rather it is hoped that the IP will serve as a broad framework and mechanism within which infrastructure providers can consider and plan for an anticipated level of future development as set out in the Deposit LDP. As such it is hoped that this process will form one component of a coordinated approach to infrastructure planning and provision through the alignment of LDP implementation and delivery within the aims and objectives of other organisations.

3. Infrastructure Plan – Structure and Content

3.1 The types of infrastructure are presented in a series of chapters (Part 2) which identifies using a common format:

- The lead organisations/agencies responsible for delivery;
- Contextual Information;
- Existing provision across the County;
- Links to Neighbouring Authorities;
- Key Issues;
- Infrastructure Requirements;
- Estimated phasing and delivery;
- Existing and potential funding sources;
- Opportunities to share facilities.

3.2 The infrastructure requirements that have been identified for the site allocations in the deposit plan are set out in Appendix 1. Where possible, the estimated timing of infrastructure delivery is identified, along with the potential capital costs associated with each infrastructure item and who will likely lead on the provision.

3.3 While care has been taken in the preparation of this document to ensure that the information is accurate, there may be additional infrastructure requirements and

services which are identified through on-going stakeholder liaison and as a result of the more detailed Development Management process for the site allocations in due course.

4. Defining the Types and Categories of Infrastructure

Types of infrastructure

4.1 Infrastructure planning and provision is essential in ensuring sustainable growth is delivered in a way that enhances the area. It is necessary to ensure that growth can be provided without having a detrimental impact on environmental or social capacity and if it does, how the planning system can seek to offset or mitigate any impact.

4.2 Infrastructure does not simply mean transport, it covers a multitude of issues such as education, health, environmental capacity, access to open spaces, sport and recreation, culture, water supply and sewerage, energy provision, waste management and air quality amongst others.

4.3 The Planning Act 2008, Part 3, provides a wide definition of what constitutes infrastructure. In the case of this assessment, Flintshire County Council have adopted a pragmatic approach to show that there are no major 'show stoppers' to the delivery of allocations identified in the plan and/or in the case of the two strategic sites, this has either already been provided or is planned to take place. Table 1 below sets out the types of infrastructure that this IP covers which is detailed further in part 2 of the document.

Table 1 Types of Infrastructure	
Transport and Highways	Walking and Cycling Networks Rail & Public Transport Network Road Network
Education	Nursery, Primary, Secondary, and Sixth Form
Health	Primary Care facilities Community clinics and hospitals Mental health services
Environmental Management	Flood Risk and Surface Water Management
Utility Services	Water and Waste Water Gas Electricity Telecommunications

Categories of Infrastructure

4.4 For the purposes of the plan, infrastructure items have been divided into two categories as set in table 2 below. These categories are directly linked to the phasing and timing of site delivery as estimated in the housing trajectory contained in the LDP written statement and are particularly relevant in relation to the Strategic Sites (SS) identified, but in particular the delivery and phasing of the Northern Gateway SS.

Table 2 Categories of Infrastructure
Enabling Infrastructure (to facilitate development) – Those items which will need to be delivered prior to, or from the commencement of the relevant phases of development.
Necessary infrastructure (to make development acceptable in planning terms) - Items which need to be phased and implemented alongside new development, to ensure that areas are served with appropriate facilities over time.

4.5 Allocation site development proformas are shown in Appendix 2 of this document which identify the essential infrastructure parameters for each site necessary for them to come forward. Further details as they emerge will be incorporated into the Infrastructure Plan as it is updated in future years as part of the formal LDP monitoring process.

4.6 The non-strategic housing allocations, identified in policy HN1: Housing Allocations of the deposit plan are not reliant on any enabling infrastructure for their delivery. Necessary infrastructure, in line with the tests identified in regulations will be sought on a site by site basis with an overview of site specific infrastructure provided in the allocation site development pro-formas contained in Appendix 2.

5. Infrastructure Funding

5.1 A commitment to working in partnership between service and infrastructure providers, national/local government and the development industry will maximise resources/funding opportunities and ensure that infrastructure can be delivered in a co-ordinated, efficient and timely manner. Infrastructure provision may also involve joint working between neighbouring authorities, where infrastructure needs cross administrative boundaries and where there are regional solutions to specific projects.

5.2 There are a number of potential funding sources to deliver the required infrastructure. The opportunities for these funding streams will depend upon the nature of the infrastructure proposed, legislative and statutory obligations, the

availability of alternative funding and other local factors. An indication of potential funding sources have been identified below, including but are not limited to:

- Council Funding
- Welsh Government Funding (which is detailed further in the relevant infrastructure type section contained in part 2 below)
- UK Government Funding
- Regional Growth Bid
- European Funding
- Statutory Undertakers
- Private Finance
- Voluntary Sector
- Developer(s)
- Section 106 and CIL Funding (once the LDP is adopted)
- Grants

5.3 However the key ones to deliver the site allocations identified in the LDP are Welsh Government Funding, Developers, Section 106 contributions and statutory undertakers, and potentially CIL.

6. Developer Contributions

Section 106 Agreements

6.1 Section 106 agreements are used as a form of planning obligation to overcome obstacles which may otherwise prevent planning permission from being granted. As stated in Planning Policy Wales contributions from developers may be used to offset the negative consequences of development, to help meet local needs, or to secure benefits which will make development more sustainable. Planning obligations can be entered into between local planning authorities and developers to:

- restrict development or use of the land;
- require operations or activities to be carried out in, on, under or over the land;
- require the land to be used in a specified way; or
- to require payments to be made to the authority either in a single sum or periodically .

6.2 Amongst other factors, planning obligations should be sought only where they are:

- Necessary;
- relevant to planning;
- directly related to the proposed development;
- fairly and reasonable related in scale and kind to the proposed development; and
- reasonable in all other aspects.

Community Infrastructure Levy (CIL)

6.3 Currently, the Council negotiates developer contributions and planning obligations on a site by site basis through Section 106 of the Planning Act and for, highway works, Section 278 of the Highways Act. In April 2010 The Community Infrastructure Levy Regulations (as amended) came into effect. The Community Infrastructure Levy (CIL) is a means by which developers make a financial contribution towards the provision of necessary infrastructure. A Local Authority can only progress a CIL when they have an adopted development plan. Whilst a decision has not been made as to whether CIL is a viable or practical proposition in Flintshire, it can only come into place following the adoption of the LDP in any event.

6.4 The amount of CIL which can be levied will be determined following the preparation, consultation and approval of a Draft Charging Schedule and will be subject to an independent Public Inquiry (Examination). The balance between infrastructure funded through CIL and that which can be funded through other mechanisms (including planning obligations and site master planning) is informed by viability testing and on-going dialogue with developers, central and national government and other funding sources.

6.5 The levy can therefore be an important tool in helping to pay for the infrastructure required to support new development. Importantly, however the levy cannot be used to remedy pre-existing deficiencies unless the new development makes the deficiency more severe. The Regulations make clear that CIL is not to be used for general local authority expenditure (or to meet existing deficiencies), but is intended primarily to provide for new or improved infrastructure to meet projected growth set-out in development plans. There are also negative effects from CIL that particularly relate to the pooling limitations on the use of S106 as an alternative funding mechanism, as this can prevent otherwise perfectly acceptable development from coming forward.

6.6 A CIL for Flintshire County Council may be prepared following the adoption of the LDP.

Part 2

1. Introduction

1.1 This section of the IP provides an overview of the types of infrastructure that are identified in Table 1 (part 1) and identifies, for each type of infrastructure the following information where applicable:

- The lead organisations/agencies responsible for delivery;
- Contextual Information (where necessary);
- Existing provision across the County;
- Links to Neighbouring Authorities;
- Key Issues;
- Infrastructure Requirements;
- Estimated phasing and delivery (if known);
- Funding sources;
- Opportunities to share facilities (where appropriate).

2. Transportation and Highways

a) Walking and Cycling

Lead Organisations/Agencies:

- Flintshire County Council
- Welsh Government

Context

2.1 There is strong strategic support for increasing walking and cycling at all levels of Welsh Government; from the North Wales Joint Local Transport Plan through to the Welsh National Transport Strategy. There is a clear recognition, in strategic terms, of the contribution that walking and cycling can make to Welsh society and the need to increase active travel to address current issues in transport poverty, air pollution, public health, climate change and the economy.

2.2 Transport accounts for 14% of greenhouse gas emissions in Wales, with road transport contributing more than 90 percent of emissions. The Active Travel Act estimates 30% of car journeys in Wales could be made by active travel. The average emissions saving for each car journey that is replaced by cycling or walking is estimated at 918gm and 224gm CO2 emissions respectively. Providing the means to walk or cycle instead of using the car can play a valuable part in meeting Welsh climate change targets.

2.3 Integration of rail services with other local transport modes is key and forms part of the Welsh Governments commitment to the development of an integrated transport network for North East Wales. Deeside has been identified as a key strategic transport hub and there is a commitment to invest in existing

infrastructure and to maximise opportunities for improved accessibility and integration transport modes including national/regional/local bus services and walking and cycling.

The Active Travel Act (Wales) 2013

2.4 The Active Travel (Wales) Act 2013 "The Act" came into force in September 2014. Its purpose is to enable more people to undertake active travel for short journeys instead of using motorised vehicles where it is suitable for them to do so. 'Active Traveller' and 'Walkers and Cyclists' means people who walk, people who use pedal cycles (including electronic bicycles/e-bikes but excluding motorised cycles) and people who use mobility aids (including motorised wheelchairs and mobility scooters).

2.5 The Act requires all Local Authorities in Wales to produce an:

- Existing Route Map (ERM) showing walking and cycling routes (Active Travel Routes) that are suitable for making Active Travel Journeys and meet the required standard set out in Welsh Governments Active Travel Design Guidance.

- Integrated Network Map (INM) showing proposals for new and improved walking and cycling facilities to be delivered over a 15 year plan period.

2.6 The Act also requires new road schemes (including road improvement schemes) to consider the needs of pedestrians and cyclists at the design stage. An active travel route must be within a designated locality in a local authority area. In Flintshire the following settlements are within the designated localities specified by Welsh Ministers: Buckley, Broughton, Connahs Quay, Deeside Industrial Park, Flint, Gorsedd, Holywell, Hope, Leeswood, Mold, Northop Hall, Penyffordd, Sandycroft, Shotton and Walwen.

Existing Provision

2.7 **Existing Route Map** – Flintshire has an extensive cycle and walking network depicted on the existing walking and cycling provision that meets the standards required in the Active Travel Design Guidance. In producing this first Existing Route Map (ERM) Flintshire County Council concentrated on arterial walking and cycling routes that provide access from a large residential area to a school, employment site, transport hub, health facility, shopping and retail facility within each designated settlement.

2.8 A series of draft ERM's were developed, Flintshire County Council undertook a 12 week consultation exercise on these maps and the responses received helped shape the Existing Route Map which was approved by Welsh Ministers in 2016.This is now published on the Council's web site.

2.9 The existing cycling provision within Flintshire is mainly within the Deeside area including Shotton, Connahs Quay Sandycroft, Broughton and Deeside Industrial Park. The routes are a mixture of shared use off road, shared use adjacent to carriageway and cycle lanes within carriageway and are suitable for both leisure and commute journeys.

2.10 Flintshire has an extensive footway network within urban and rural settlements but there is a lack of footway connectivity between settlements suitable for active travel journeys. The public rights of way network does provide connectivity between settlements, however these routes do not meet the standards required by the Active Travel Act to be promoted for everyday active travel journeys and are therefore mainly used for leisure purposes.

Links to Neighbouring Authorities

2.11 Sustrans NCN5 is a long distance cycling route connecting Reading in the South of England to Holyhead in North Wales. Through Flintshire there is a traffic free route connecting Chester to Bagillt, an inland on-road route then continues between Bagillt via Gorsedd and Gronant to Prestatyn.

2.12 Sustrans Route 568 begins at Chester and runs north of the River Dee to Hawarden Bridge where it intersects with NCN5 for a short distance then crosses Burton Marsh into Burton and Neston.

2.13 Sustrans Route 563 is mainly a traffic-free route and connects NCN5 at Garden City to Little Stanney and Ellesmere Port.

2.14 The Wales Coastal Path within Flintshire stretches for approximately 40km between Chester and Gronant connecting coastal towns and communities. The extensive public rights of way network connects Flintshire to all surrounding neighbouring Authorities.

2.15 **Integrated Network Map** – A 15 year aspirational plan for new and improved walking and cycling infrastructure. The Integrated Network Map (INM) sets out a vision to improve infrastructure for walkers and cyclists across the County over a 15 year period. Flintshire County Council developed the County's draft Integrated Network Map together with draft schedules utilising the network planning and design principles contained within the Welsh Governments Active Travel Design Guidance. The proposals are a mixture of provision for walking, cycling and shared use facilities and provide opportunities for Active Travel Journeys to various services and facilities, but many also offer recreational provision.

2.16 As with the Existing Route Map the responses received through a consultation process helped shape the Integrated Network Map and schedule which was approved by Welsh Ministers in 2018 and is now published on the Council's website.

Key Issues

2.17 There are opportunities to increase mode share by public transport and active travel. A high proportion of commuter trips are less than 5km and could potentially be undertaken by active travel modes.

2.18 The uptake of walking and cycling is impacted upon by a number of issues, such as volumes and speeds of traffic, safety concerns, a lack of appropriate infrastructure, the quality and condition of paths and crossing points together with ancillary items such as signage, seating, lighting, cycle parking, information boards and cycle storage. There are opportunities to remove barriers to walking and cycling.

2.19 **Travel to work (Personal Travel in Wales – 2012)** In Wales 81% of journeys to work are by car (this has remained broadly unchanged for 10 years), 10% walk,4% use buses, 2% take the train, 1% cycle and 1% use other means

2.20 The Planning Process can offer an opportunity to increase levels of walking and cycling to address these issues by ensuring new and improved infrastructure is provided to link new developments to key services and facilities where appropriate to do so.

Infrastructure Requirements

a) 2.21 Many of the walking and cycling infrastructure proposals contained on Flintshire County Council's Integrated Network Map relate to the allocations identified in the LDP. The Integrated Network Map Schedules gives details of all the following improvement schemes

https://www.flintshire.gov.uk/en/PDFFiles/Roads-and-Travel/Active-Travel-Docs/INM-Revised-Schedule-2.pdf :

Sustainable Access between Mold and Deeside Enterprise Zone: To provide new and improved walking and cycling routes between Mold and Deeside Enterprise Zone linking the communities of Mold, Buckley, Penyffordd and Broughton, Saltney, Sandycroft and links into existing railway stations Buckley & Penyffordd. The routes identified for new and improved walking and cycling facilities will link into the extensive existing cycle network within Deeside Enterprise Zone (NCN5 & National Route 568). The provision of these infrastructure improvements will provide sustainable integrated transport solutions for access to employment opportunities not only within the Deeside Enterprise Zone but also beyond into the Wirral, Liverpool, Chester and Wrexham. There are key opportunities to support the above improvements from the sites allocated in Policy PE1 General Employment Land Allocations for example at Chester Aerospace, Broughton, Manor Lane Hawarden Park Extension, Broughton, Mold Business Park, Mold Chester Road East, Queensferry, River Lane, Saltney and the Key Strategic Sites at Northern Gateway and Warren Hall.

b) Sustainable Access linking local settlements: The INM development process identified a need to link local settlements within Flintshire to create a cohesive walking and cycling network and support active travel journeys. At present the

precise routes have not been identified as Feasibility Studies will be required to determine precise alignment and works. There are opportunities, however, to support the delivery of future proposals to link Mold and Flint, Mold to Northop Hall, Mold to Ewloe and sections of the incomplete Dee Coastal Path. Also possible links from the sites allocated in Policy PE1 General Employment Land Allocations for example at Broughton Chester Aerospace, Mostyn Adjacent Mostyn Docks and Housing Allocations sites Policy HN1 Holywell Rd/Green Lane, Ewloe and Cae Isa, New Brighton.

c) Local Active Travel Links: The INM includes infrastructure improvement proposals to support active travel journeys to access local services and facilities by local residents. There are key opportunities to support these improvements from the sites allocated in PE1 General Employment Land Allocations Drury New Rd Buckley, Greenfield Business Park Phase II, Greenfield, Greenfield Business Park Phase III, Greenfield, Antelope Ind Est, Rhydymwyn and Policy HN1 New Housing Development Proposals Well St Buckley, Broad Oak Holding Mold Rd Connah's Quay, Highmere Drive Connah's Quay, Ash Lane Hawarden and Wrexham Rd Abermorddu .

d) Green Corridors: To provide sustainable access between Rhydymwyn Industrial Estate and Mold along the disused railway with opportunities to provide measures to also support biodiversity. The route would also serve well as a recreational facility in addition to employment access within the Industrial Estate and access to services and facilities within Mold. There are key opportunities to support these improvements from the site allocated LDP policy PE1 General Employment Land Allocations Antelope Ind Est Rhydymwyn.

2.22 Local Authorities are required under the Active Travel (Wales) Act 2013 to resubmit their INM's every three years which will allow for amendments to be made to the Maps to reflect proposals contained within the LDP. This is an opportunity to closer align development and active travel infrastructure improvements.

Estimated Phasing and Delivery

2.23 Phasing and delivery of the infrastructure relates to the Categories of Infrastructure that are detailed in table 2 (part1) above. The provision of active travel infrastructure is necessary on all sites. This infrastructure should be implemented at the earliest opportunity to benefit planned and existing communities.

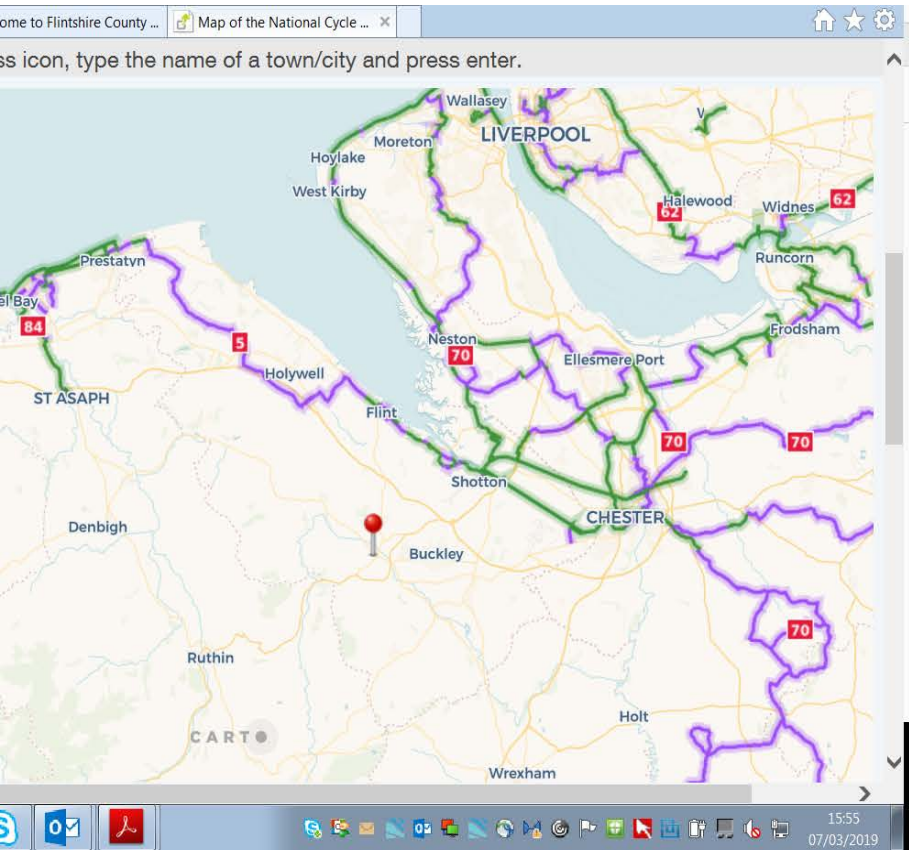
Funding Sources

2.24 Where the need for walking and cycling infrastructure arises as a result of the allocations identified in the plan, on and off site provision will be secured through site master planning processes and by way of developer contributions where necessary in accordance with LDP policy STR6 Services Facilities and Infrastructure.

2.25 Other, walking and cycling projects, which are unrelated to the development of allocations identified in the plan are likely to be funded by other means such as Welsh Governments' Local Transport Fund, Safe Routes in Communities Grant, Active Travel Fund and through collaborative projects with other stakeholders.

http://www.flintshire.gov.uk/en/Resident/Streetscene/Active-Travel.aspx

Sustrans Routes in Flintshire



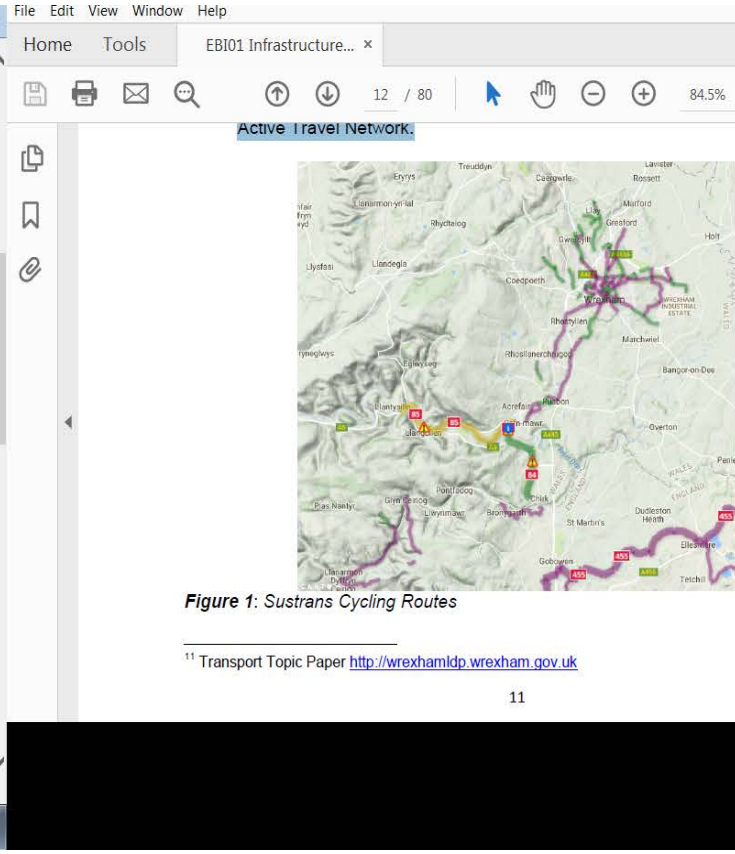


***Figure 1**: Sustrans Cycling Routes*

[11] Transport Topic Paper http://wrexhamldp.wrexham.gov.uk

11

b) Buses

Lead Organisations/Agencies

- Flintshire County Council
- Welsh Government (Transport for Wales)
- Public Transport Operators (bus companies)

Context

2.26 Public transport needs to be more attractive as an alternative to travelling by private car. Infrastructure improvements which reduce bus journey times and improve the reliability of services are supported within the Welsh Government's National Transport Plan and the Joint North Wales Local Transport Plan. These improvements are also required in order to encourage public transport operators to invest in their fleet and improve the frequency and capacity of the services they provide.

2.27 Integration of rail services with other local transport modes is key and forms part of the Welsh Governments commitment to the development of an integrated transport network for North East Wales. Deeside has been identified as a key strategic transport hub and there is a commitment to invest in existing infrastructure and to maximise opportunities for improved accessibility and integration transport modes including national/regional/local bus services and walking and cycling.

Existing Provision

2.28 Flintshire is relatively well served by an extensive network of bus services although in recent years, the number and frequency of services has reduced due to the loss of a number of local bus operators. The majority of local services in Flintshire are currently operated by Arriva Bus Wales.

Links to Neighbouring Authorities

2.29 Key regional bus services take the following routes: Deeside to Chester; Mold; Flint; Ruthin, Denbigh and Wrexham.

Key Issues

2.30 Over the last decade the number of local bus operators and services being provided in Wales has fallen significantly. Locally the loss of a number of operators in recent years has had a marked impact on network coverage with the level of services being provided both commercially and supported much reduced. There are opportunities via the housing and employment allocations to improve services as necessary as part of a package of sustainable transport solutions, some of which are directly linked to policy STR5 Transport and Accessibility and PC7 Passenger Transport in the LDP.

Infrastructure Requirements

2.31 The Deeside Plan 2016 articulates how the growth aspirations for North Wales and for the Mersey Dee Area can be realised and includes details of an integrated transport solution for the area. This plan includes the following improvements:

Bus Network – Key Interventions

- Significantly improved bus journey times along the A548 and B5129 through the introduction of bus prioritisation measures and the provision of a dedicated Bus Lanes from Queensferry to Shotton Lane;
- The provision of a dedicated Bus/Train Hub at Shotton Station;
- The provision of a Bus/Shuttle Bus interchange Hub at Garden City;
- The provision of a regular, scheduled Shuttle Bus Service operating on dedicated 'Bus and Cycle Only' routes linking Zones 1 to 4 and Northern Gateway via a route across, this service will interact with the Deeside Parkway Railway Station, Park and Ride Facility and the Bus Shuttle Interchange. The service will be provided by Flintshire's existing low emission buses
- Implementation of a fully Integrated Ticketing arrangement across all bus operators within the legally supported Bus Quality Partnership operating on the Strategic Core Network

The key interventions will provide a long term sustainable transport solution to successfully integrate all modes of transport and cater for the demands of each, whilst maintaining and promoting at its heart, a sustainable, affordable and environmentally friendly Public Transport Service with links to all of Flintshire and the wider region

Estimated Phasing and Delivery

2.32 Phasing and delivery of the infrastructure relates to the categories of infrastructure that are detailed in table 2 (part 1) above. The provision of bus infrastructure is likely to be necessary on all sites; particularly linking to key destinations and will be of particular relevance to the two Strategic Sites. This infrastructure should be implemented at the earliest opportunity to benefit planned and existing communities and should be integrated with other highway and public transport improvements.

Funding Sources

2.33 Funding of bus infrastructure/services will be sourced from the Welsh Government, Network Rail (Bus Services Support Grant, Local Transport Fund/Local Transport Network Fund), developer contributions and the Council's General Capital Fund.

c) Rail Network

Lead Organisations/Agencies

- Network RailVirgin Trains and Transport For Wales
- UK Government
- Welsh Government
- Flintshire County Council
- Local Community Transport
- Merseytravel

Context

2.34 In spite of services not being significantly improved in terms of frequency for over ten years rail services in Flintshire can be considered successful. In Flintshire there are two main rail lines, the Chester to Holyhead route and the Wrexham Bidston line. Since 2006/2007 rail passenger levels have fluctuated but overall there has been an increase by over 60% on the Wrexham Bidston line. (ORR stats)

2.35 The rail share of travel to work is relatively low for the County, but this reflects the use of rail mainly for out of area travel as opposed to within the local area. However the increasing importance of links to the north-west to access employment is recognised by growth forecasts produced by Network Rail in their Welsh Routes Study (2015). This study forecasts that passenger demand from the North Wales Coast Route to North West England will increase by 25% up to the year 2023.

2.36 Extending service provision, developing new rail stations and improving access to existing stations / associated facilities is supported within the Welsh Government's National Transport Finance Plan 2018 and the Joint Local Transport Plan 2015. The outcome of the Wales and Borders franchise process will also directly influence a number of these issues which lie outside of and are unrelated to the LDP process.

2.37 In addition, significant investment in rail infrastructure is being sought through the Growth Track (GT) 360 Prospectus, enabling economic growth in the North Wales and Mersey Dee region, linking to the Northern Powerhouse and European routes. The vision for transport via GT360 is for quicker, cleaner, more frequent and comfortable journeys to the right place at the right time and is supported by a number of objectives which include:

- High quality and well connected hubs, centres in themselves;
- State of the art rolling stock;
- A great customer and business experience;
- International connectivity to global markets; and
- Growing passenger and freight markets.

2.38 Supporting the hubs in the GT360 prospectus is the recently published 'Moving North Wales Forward: Our vision for North Wales and the North East Wales Metro' which was published by Welsh Government in March 2017. This document sets out the potential to deliver economic growth in the North Wales region via a modern, high quality transport system, connecting business to markets and ensuring that investment in the transport system in this part of Wales is a competitive and connected part of the Northern Powerhouse. The metro concept is routed in providing public transport improvements in rail, bus and active travel, connecting people to jobs and services to help them reach their potential:

- Public transport work journeys, door to door within an hour;
- Connected, modern public transport offering alternatives to the car.

2.39 £50 million has been committed by Welsh Government to move forward plans for the North East Wales Metro; relevant to Flintshire is the development of the Integrated Transport Hubs and Improved Rail Access, Deeside development of options to improve access by rail, bus and active travel to key employment sites in Deeside.

Existing Provision

2.40 There are currently Eight commuter railway stations located across the county; Flint and Shotton (Low Level) on the North Wales Coast Main Line and Hope, Penyffordd, Buckley, Hawarden, Shotton (High Level) and Hawarden Bridge on the Borderlands Line. These are all owned by Network Rail and managed by Transport for Wales who operate all of the services at these stations apart from Virgin Trains which calls at Flint as part of the Direct Holyhead to London Euston Service.

Transport for Wales operates direct hourly return services between Wrexham Central and Bidston, which calls at the Borderlands Line stations; note Hawarden Bridge is a 'call stop'. Commuter patronage has continued to increase on the Borderlands Line throughout the last decade, therefore through the rationalisation of existing services along the line, FCC has aspirations to develop increased commuter patronage.

Services call at Flint station and Shotton (Low Level) on the North Wales Coast Main Line to destinations such as Chester, Crewe, Manchester Airport, Birmingham International and Cardiff; to the East and Holyhead and Llandudno to the West.
Connecting services in Chester, Manchester Piccadilly and Shrewsbury are available to a range of other destinations.

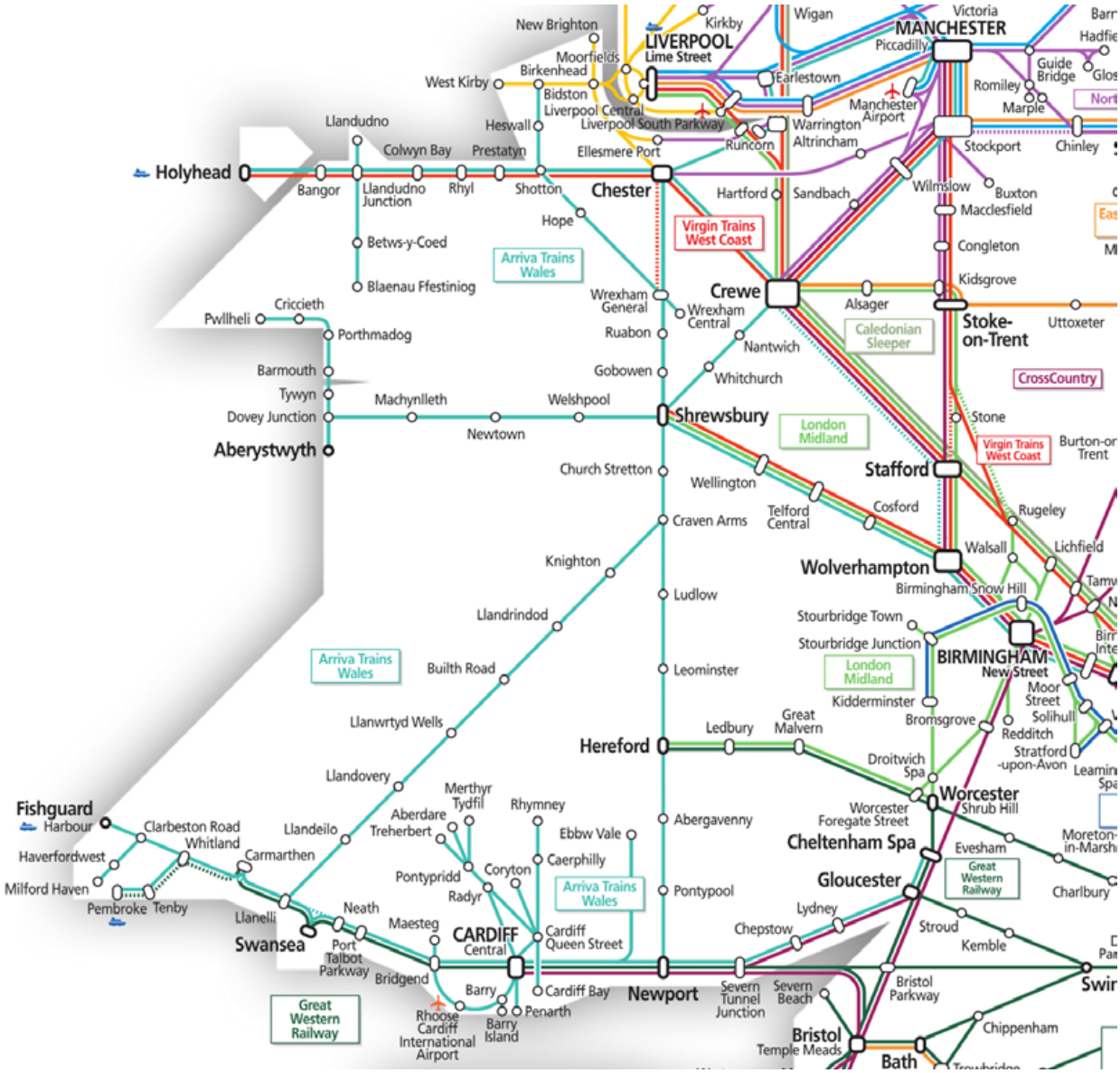


Figure 2: Flintshire County Rail Routes and Regional Network Connectivity

Links to Neighbouring Authorities

2.41 Strategic rail issues are promoted through regional collaboration via the Mersey Dee Alliance (MDA) and North Wales Economic Ambition Board (NWEAB). These bodies promote the regions rail needs and emphasise the importance of connectivity to the North West of England, Manchester Airport and the Northern Powerhouse concept. The key issues and infrastructure requirements needed in Flintshire discussed below must also be seen with the context of infrastructure needed at the sub-regional level promoted by the MDA and NWEAB e.g. electrification of the coastal line and links to HS2.

Key Issues

2.42 Regional growth is constrained by transport infrastructure, the economies of North Wales, Deeside, Merseyside and Manchester are closely linked and the road networks in this part of the country are operating at maximum capacity during peak times. This is exacerbated by investment in public transport infrastructure lagging road investment making it relatively less attractive. Rail investment will support the North Wales Mersey Dee area by unlocking economic potential through enhanced links into the North West.

2.43 There is a lack of accessible and seamless ticketing between modes which hinders encouragement of modal shift and limits travel horizons, particularly for more deprived communities. The lack of ticket integration between different bus and rail operators for example contributes to the relative unattractiveness of public transport for some people.

2.44 Many large and small stations across the regional rail network require improvements to access and passenger facilities. Network Rail is currently working with Transport for Wales to deliver better stations.

Infrastructure Requirements

2.45 There are no rail infrastructure requirements that are directly related the delivery of the housing allocations however rail improvements will benefit the overall growth of the area and other policy objectives in the LDP. The Deeside Plan 2016 shows how the growth aspirations for North Wales and for the Mersey Dee Area can be realised and includes details of an integrated transport solution for the area. The plan includes the following rail service improvements:

Rail Improvements – Key Interventions

- Rail improvements at Shotton Station – Linking the High Level and Low Level stations;
- Road improvements at Shotton Station – provision of Shuttle Bus/Train Hub;
- The provision of a new railway station ‘Deeside Parkway’ on the Borderlands, Wrexham/Bidston line;
- Main East – West Coast line stop at Shotton, providing an improved business link from DIP into the North West of England and London;
- Improved parking infrastructure along Borderlands line, particularly Penyffordd Station – providing the option for a ‘Park and Train’ link into DIP;
- Significantly improved frequency and quality of service on Wrexham -Bidston Line;
- Tram Trains, Light Rail or Battery powered train option, provided by the extension of the Merseyrail services currently operating from Bidston.
- Ticketing improvement options currently being reviewed include cross boundary ticketing between Merseytravel and Transport for Wales operational areas.

Estimated Phasing and Delivery

2.46 The Deeside Plan identifies a number of projects that are ongoing within the authority in relation to rail infrastructure. Whilst these are not directly related to the delivery of the allocations identified in the LDP they are likely to take place over the lifetime of the plan and will contribute to the delivery of the LDP vision and objectives.

Funding Sources

2.47 Funding sources for countywide, regional and national rail infrastructure includes the Department for Transport, Network Rail and the Welsh Government. Additional funding opportunities include Local Transport Fund, Local Transport Network Fund, Flintshire County Council Capital funding and developer contributions.

d) Road Network

Lead Organisations/Agencies

- Flintshire County Council
- Welsh Government
- North and Mid-Wales Trunk Road Agency
- Transport For Wales
- Developers

Figure 3 The North Wales Local Transport Plan Area

Context

2.48 Car use dominates travel to work and travel generally in the Flintshire County Council area. This is illustrated by the travel to work figures, in North Wales 75.1% of people travel to work by car which is higher than the average for Wales of 74.2% and in Flintshire this figure is even higher at to 79.5% which is up from 2001 Census data which was 77%.

2.49 The A483/A55 corridor is of key importance to the county and the region as a catalyst for wider economic growth. The economy of the wider region is diverse with key sectors being manufacturing, energy and tourism as well as public sector jobs. The designated Enterprise Zone at Deeside has ambitions to be recognised as a centre for advanced manufacturing and technology excellence on a world scale. Deeside covers more than 2,000 hectares and is strategically located for markets in the North West of England and the Midlands. (Source North Wales Local Transport Plan 2015- 2020).

2.50 The A55 is also a strategic Trans-European Network Transport (TEN-T) route; international routes benefit the North Wales economy with expenditure in the region and offering strategic access to markets for businesses. (Source NWLTP)

2.51 As well as routes having a strategic function for cross border connections, within the region the trunk road network and the main connections to it are vital for providing access to jobs and services. There are substantial movements of people for jobs between and within local authorities on a daily basis.

Key Issues

- A ''critical point in time'' has been reached in terms of national infrastructure decisions e.g. WG's announcement that the Red route is their preferred option for the A494/A55, National Rail Franchise outcome and the emerging Regional Bus Strategy etc.;
- Worsening traffic congestion in DIP and along the Deeside corridor;
- Staff recruitment and retention issues for businesses within DIP with one of the reasons being quoted as the lack of an effective transport system into the Park;
- Opportunities arising from the development of the Northern Gateway scheme;
- On-highway parking issues within DIP, creating both safety and access/egress problems for businesses;
- Anti-social behaviour from truck parking on both DIP and along the North Wales, A55 Corridor.

2.52

Our goal is to work towards planning, providing and promoting a well maintained, safe, integrated and sustainable transport network for the future. This is essential to support our wider social, economic and environmental goals to provide a well-connected and accessible county.

See Bus Network Key Interventions.

The methodology used to establish an integrated transport solution for the DIP will be utilised as a best practice example which will be replicated across the County as a whole at key Strategic location, thus supporting economic growth potential

Infrastructure Requirements

2.53 The Joint North Wales Local Transport plan identifies a number of interventions to improve transport network resilience, capacity and safety enhancements/ pinch-point improvements, improved integration with strategic public transport services, improved links to employment and improved access to services.

2.54 For Highways improvements in Flintshire this plan identifies:

- Transport Network Resilience Improvements - A494/55 Route into Wales improvement to local highways networks

- Capacity and Safety Enhancements /Pinch points improvements - A550/ B5373 Junction Improvements – Hope; Improve transport connectivity to the A55/A483 Trunk Road highway network; Mold to Flint and the A548 improvements;

- Integration with Public Transport Services - Improved links to employment; Local strategic links to the DIP/EZ Deeside Industrial Park and Enterprise zone; Broughton Shopping centre access improvements; B5129 Sandycroft to Chester and Broughton Airbus (cycleway).

2.55 The Deeside Plan 2016 articulates how the growth aspirations for North Wales and for the Mersey Dee Area can be realised and includes details of an integrated transport solution for the area. The plan includes the following highways improvements:

Highway Improvements – Key interventions

- Deeside Park and Ride;
- Introduce Traffic Regulation Orders within DIP to restrict on-street parking– improving road safety whilst maintaining access to businesses;
- Introduction of traffic signals on the A548 / Parkway roundabout to reduce congestion at peak times
-
- Northern Gateway Bus and Cycle link road into the DIP;
- Improvements to Penyffordd Station and other stations along the Borderlands Line to facilitate Park and Ride;
- Construction of the preferred route for the A494/A55 link – The ‘Red Route’;

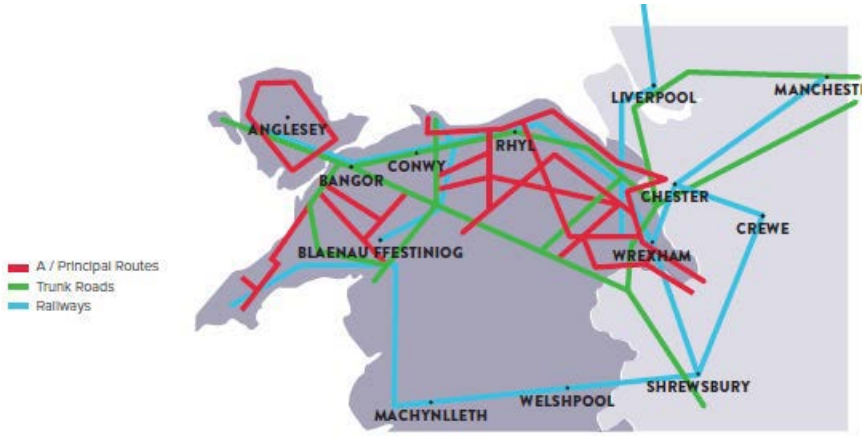
- Construction of the Rail/Road/Bus Hub including the 'Park/Rail and Ride' facility - providing DIP access from the proposed Deeside Parkway station adjacent to the existing A548;
- Potential Truck Stop and Service Station at the same location on the A548;
- Junction 36A Broughton.

Cross Border Studies -

Cheshire West and Chester Council have recently commissioned a study to investigate a new road alignment as a replacement to the previous Chester Western Relief Road. This Study 'Chester to Broughton Growth Corridor' will look at linking Chester to Broughton and the A55 and therefore enhance connectivity between Cheshire West, Chester and North Wales, offering relief to congested sections of the road network and providing the potential to facilitate new development sites and improved access to employment opportunities.

Existing Provision

Figure 4: Existing road network



Links to Neighbouring Authorities

2.56 The A55 trunk road is a strategic link to north Wales and to Chester and via the A55 to the North West and North Wales coastal area providing employment and business opportunities. Regional transport issues are promoted through the Joint Local Transport Plan and via the Mersey Dee Alliance and North Wales Economic Ambition Board.

Estimated Phasing and Delivery

2.57 The Deeside Plan details a number of projects within the authority area in relation to highway infrastructure improvements. This plan also details the anticipated timescales for delivery of each of the improvements on a Short term i.e. less than 5 years, medium term from 5 to 15 years and long term 15 to 30 years. Some of the improvements such as the Northern Gateway link road are directly related to an allocation for housing. Others are not directly related to the delivery of the allocations identified in the LDP and they are likely to take place over the lifetime of the plan and will contribute to the delivery of the LDP vision and objectives.

Funding Sources

2.58 Funding sources include WG via the NTFP, developers, the local transport finance plan, regional transport grant and developer contributions.

3. Schools: Nursery, Primary, Secondary, and Sixth Form Education

Lead organisations /Agencies

- Flintshire County Council
- Developers

Context

3.1 Flintshire County Council has a responsibility to review and modernise school provision, to make sure that it is providing the best possible opportunities for learners, so that they can achieve their full potential.

3.2 The Council needs to ensure there are a sufficient number of school places, of the right type, in the right locations. This is not straightforward in that there are a large number of surplus school places in some areas of the County, whilst other areas don't have enough places to meet the local demand. In other areas, school populations are sustained by children and young people from outside the local area through parental preference. The need to maintain a large number of ageing school buildings and the supporting infrastructure is unsustainable. Therefore, the Council is reviewing school provision to:

- ensure our education provision is both high quality and sustainable;
- improve the quality of school buildings and facilities; and
- provide the right number of school places, of the right type, in the right locations.

3.3 This task involves:

- forecasting pupil numbers;
- managing the supply of school places;
- managing demand through admissions and appeals procedures;
- ensuring that a framework is in place to secure improvement through school organisational change.

Links to the Unitary Development Plan.

3.4 Regular meetings are held with the Planning Department which consider Strategic Planning of the Council's school investment programme, linking specifically to the Local Development plan as far as it is practicable to do so.

Schools Admissions

3.5 Parents may express a preference for any school they wish and the Council has to try to meet that preference, if there are spaces available at the school. When considering school place applications, the Council must observe the provisions of the statutory School Admissions Code which states that admission authorities should admit up to the school's admission number.

3.6 The Admission Number (AN) for each school relates to the number of children that can be admitted to each year group during the school year. The AN for each school is calculated using the capacity assessment method in the Welsh Government's guidance document 'Measuring the Capacity of Schools in Wales'

3.7 The Council will not consider increasing capacity of school/s based on parental preference. Instead, the Council keeps this under regular review based on evidence of sustained local demand.

Existing Provision

3.8 The following table identifies the number and designation of Flintshire schools:

Flintshire Schools	
Primary Community (English)	45
Primary Community (Welsh)	5
Primary Church in Wales Controlled	1
Primary Church in Wales Aided	7
Primary Catholic Aided	5
Primary Foundation	1
Secondary Community (English)	9
Secondary Community (Welsh)	1
Secondary Catholic Aided	1
Special School Primary	1
Special School Secondary	1

School Places

3.9 Places available and overall capacity of Flintshire schools.

Primary School Places		
Primary Schools in Flintshire as at September 2018 Entry	**School Places available at entry to Reception**	**Overall Whole School Capacity (not including Nursery)**
Primary Community (English)	1504	10685
Primary Community (Welsh)	133	946
Primary Church in Wales Controlled	15	111
Primary Church in Wales Aided	138	973
Primary Catholic Aided	152	1081
Primary Foundation	28	201
OVERALL TOTAL	**1970**	**13997**

Secondary School Places		
Secondary Schools in Flintshire as at September 2018 Entry	**School Places available at entry to Secondary**	**Overall Whole School Capacity (including 6th Form)**
Secondary Community (English)	1589	9038
Secondary Community (Welsh)	120	711
Secondary Catholic Aided	166	969
OVERALL TOTAL	**1875**	**10718**

Oversubscribed Schools

3.10 The Council (like other Council's) have a number of popular schools, for which expressions of parental preference exceed the number of places available. In such cases the Admission policy criteria is applied which results in the vast majority of parental preferences continuing to be met.

Unfilled places in Schools

3.11 A National review into the costs of administering education in Wales recommended that Local Authorities should aim to retain no more than 10% surplus places overall within their school portfolio's and the Welsh Government accepted this recommendation.

Primary School Unfilled places (Sept 2018)	
Primary Schools	**Unfilled Places at September 2018**
Primary Community (English)	1012
Primary Community (Welsh)	213
Primary Church in Wales Controlled	70
Primary Church in Wales Aided	141
Primary Catholic Aided	257
Primary Foundation	9
OVERALL TOTAL	**1702**

Secondary School Unfilled places (Sept 2018)	
Secondary Schools in Flintshire as at September 2018 Entry	**Unfilled Places at September 2018**
Secondary Community (English)	969
Secondary Community (Welsh)	174
Secondary Catholic Aided	261
OVERALL TOTAL	**1404**

Links to Neighbouring Authorities

3.12 The Welsh Government schools Admissions code does not recognise County Boundaries. Therefore, the Council share information with neighbouring

Authorities to assist in school place planning, In any event, LA's cannot set aside school places, as they are assigned based on the School's Admission Code and local policy.

Key issues

3.13 The Council will seek to acquire contributions in accordance with current local planning guidance note requirements. Any, shortfall in school places arising from existing housing developments will be from Council funding or other funding sources. Contribution requests would be based upon circumstances known/data available at the time of developments. Consideration will also be given to developers building schools to agreed quality and performance standards.

3.14 For the purposes of the Infrastructure Plan, the pupil yields and requirements arising from greenfield and brownfield sites are calculated on the basis of houses rather than flats or apartments. For the purposes of the Infrastructure Plan, the pupil yields and requirements arising from greenfield and brownfield sites will be considered either on the basis of known information such as the details of the site design or if detailed information is not available the pupil yield will be considered based on housing rather than flats or apartments.

3.15 Where the scale of developments are not sufficiently large to support the building of new primary or secondary schools, careful consideration will need to be given to the timing of and combining contributions from multiple developments, including the provision of any land for construction. Development proposals (particularly for the Strategic Sites identified in the LDP) will need to be considered on a site by site basis over the course of the plan period in order to take account of (1) any changes to local provision at the time preceding an applications and (2) any existing capacity within schools in the area incorporating the proposed development sites.

3.16 The Developer Contributions to Schools allows for costs to be calculated based on the pupils likely to be generated within, Primary, Secondary and Post 16 using the published multiplication factors. Pupil number projections methodology are aligned with other authorities across the region and are completed twice per year and are linked to school data returns, namely, January PLASC and September statistical returns.

3.17 The capacity assessments are conducted using the Welsh Government's measuring the Capacity of Schools in Wales's template. This process also produces the schools Admission number, which is directly correlated to the schools capacity.

Potential pupil yield from Housing developments

3.18 The Council will seek contributions towards the cost of additional or improvement facilities in line with the guidance note (SPG Note No.23) relating to Developer Contributions to Education. The following formula based on regional research is

used to derive the potential pupil yield from new housing developments and thereafter to establish potential developer contributions:

A. The number of qualifying dwelling units in the development (5 or more or over 0.2 hectare)

B. The number of school age children likely to be generated by each dwelling unit:

- 0.24 per primary age pupil
- 0.174 per secondary age pupil

(e.g. 10 dwellings for primary age pupils x 0.24 = 2.4 pupils generated from the development)

C. The average cost of providing a school place.

The Council will review its processes should CIL be implemented in Flintshire following LDP adoption.

Infrastructure Requirements

School Modernisation Progress

3.19 The school modernisation programme in Flintshire has been in place since 2010. Since then, the Council has undertaken a major programme of school organisational change proposals. These have included the closure of one nursery school, three primary schools, one secondary school, the development of four federal arrangements across the primary and secondary sector, the rationalisation of post 16 provision in the north of the County resulting in a partnership arrangement with Coleg Cambria, the extension of primary Welsh medium provision, the building of two new primary schools and an award winning 3-16 learning campus and other major remodelling projects.

3.20 Another primary school build is scheduled for completion in July 2019, which finalises the 21st Century schools Band A programme, bringing the total funding envelope for this initial tranche to £64.2m.

3.21 The Council no longer has any separate infants and juniors schools. Although two schools remain on split sites. In one area a new school is being constructed which addresses the spilt site issue and will be completed by July 2019.

Funding Sources

Estimated Phasing and Delivery

Capital investment In Schools funding sources

3.22 The Council is able to review capacity of schools contained within its investment programme. Welsh Government 21st Century Schools Capital Investment

Programme is a long term strategic investment in the educational estate throughout Wales. It is a unique collaboration between Welsh Government, the Welsh Local Government Association (WLGA), local authorities, colleges and dioceses.

3.23 The Programme is funded by both WG and LA's based on agreed intervention rates and is set out as follows:

Band A - 2014-2019
Band B - 2019- 2024
Band C - 2024 -2029 (not confirmed by WG)
Band D - 2029- 2034 (not confirmed by WG)

Council Funded Programme

The Council's Capital programme is funded 100% by the Council and compliments the 21st Century schools investment programme

21St Century Schools investment Programme Band B (2019- 2025)

3.24 The Council's Strategic Outline Programme (SOP) was submitted and approval by WG. The total Band B funding envelope requested by the Council as outlined in its SOP submission to WG was £85,420,000.00, including an expression of interest that one project (£25m) which could be suitable for a Mutual Investment Model (MIM). The 21st Century schools programme covers the portfolio of Flintshire's schools regardless of their designation.

3.25 The original SOP included a number of proposed projects/areas, these are subject to Cabinet approval (there could be changes as the programme evolves) and WG business case process approval before investment is released

3.26 The SOP is linked to the Council's Welsh in Education Strategic Plan. (WESP) The Band B programme also focuses on schools within the Welsh Medium (WM) sector, linking in with the Council's desire to ensure that WM is given priority and linking into the National Welsh Language Strategy.

3.27 In addition, Voluntary Aided schools are maintained jointly by the County Council and either the Church in Wales or the Roman Catholic Church. Aided schools also have access to separate capital funding streams directly through the Welsh Government. The Council continues to work in partnership with the Diocesan Authorities to ensure that Aided schools are appropriately located have adequate capacity and are fit for purpose.

3.28 The Council's Supplementary Planning Guidance Note (SPG Note No23) identifies the circumstances in which developer contributions to Education provision are necessary. The Council will seek to acquire contributions when the required triggers as noted in guidance note are met.

3.29 Whilst, S106 Contributions are important and assist towards addressing the shortfalls in teaching accommodation, facilities and associated resources. However, in some cases, they may not be sufficient to address the wider accommodation issues at a particular schools derived from local development. In such cases the Council would need to review whether any additional funding is required and aligned with additional funding sources.

Opportunity to share school facilities

3.30 The Council will seek opportunities' to share sites/buildings with other services where additional funding is available and where it's appropriate to consider opportunities. This could include:

- Libraries
- Community facilities
- Leisure
- Adult Education/College
- Integrated Childcare
- Forest school initiatives
- Health Care and or Local Police facilities

4. Health

Figure 4: Cluster areas for Flintshire within the context of the wider North Wales area.

Lead Organisations/Agencies

- Betsi Cadwaladr University Health Board (HB)

Context

4.1 In population terms, Flintshire is the most densely populated county in North Wales. Flintshire has a comparatively young population, with around 17% of the population aged 15 years and younger. However, 20% of residents are aged 65 years and over and 2% aged 85 years and over; by 2030, the total population is predicted to rise to 155,840, with 26% aged 65 years and over and 5% aged 85 years and over.

4.2 Betsi Cadwaladr University Health Board (HB) is responsible for promoting the health and well-being of the population and providing or commissioning healthcare services to meet the population's needs. Flintshire has a general profile of health that is better than the average for Wales; however, there are many areas where residents experience poorer health. There is, as with similar communities in North Wales, a growing older population that will need care and support from health services in the future along with other groups in the community. More information can be found at Public Health Wales - Flintshire

4.3 Betsi Cadwaladr University Health Board is the largest health organisation in Wales, providing a full range of primary, community, mental health and acute hospital services for a population of around 678,000 people across the six counties of North Wales (Anglesey, Gwynedd, Conwy, Denbighshire, Flintshire, and Wrexham). The Health Board is also responsible for ensuring access to NHS

primary care services including General Practitioners (GPs), Community Pharmacists, Dentists and Optometrists.

Existing Provision

4.4 The HB manages three main hospitals along with a network of community hospitals, health and well-being centres, clinics, mental health units and community team bases. The Health Board also coordinates the work of 109 GP practices and NHS services provided by dentists, optometrists and pharmacists in North Wales.

4.5 The population in Flintshire is supported by hospital services provided at Ysbyty Glan Clwyd (Bodelwyddan, Denbighshire) and Wrexham Maelor Hospital, and also services commissioned from the Countess of Chester NHS Foundation Trust.

4.6 Primary Care and Community Services within FCC include:

- Community hospitals in Holywell, Deeside and Mold
- 26 General Practices including 6 branch surgeries), 17 NHS dental premises (separate practices),16 optometry premises and 30 pharmacy outlets.

4.7 There are three Area management teams within the Health Board, with primary and community services for Flintshire being managed within the East area. The county area is split into a further 3 areas for provision of primary and community services: North West Flintshire (which includes Holywell and Flint), North East Flintshire (Connah's Quay, Shotton, Queensferry and Broughton) and South Flintshire (which includes Mold, Buckley and surrounding areas).

Links to Neighbouring Authorities

4.8 The HB provides primary, community and secondary health care for people living in North Wales. It also serves a wider population including residents of parts of Cheshire who are registered with North Wales GP practices or use some of the hospital services in the area.

Key Issues

Future strategy for health and healthcare services

4.9 The aim of the Health Board is to become more of a "wellness" service rather than an "illness" service and to work with individuals, families and carers and communities as well as partners in public services and the third sector to plan for the future needs of people living in North Wales. The Board will work in partnership to support everyone in staying fit and healthy throughout life. In particular, the Board will work with partners in the Public Services Boards to develop and deliver local well-being plans which address the four domains of well-being – economic, environmental, social and cultural.

4.10 In March 2018, the Health Board approved its long term strategy, Living Healthier, Staying Well (LHSW), setting out the vision for health, well-being and healthcare

over the next ten years. In March 2019 the Board approved our estate strategy which responds to LHSW and provides the vision and framework for the future development and utilisation of our estate and how we will work with partners to maximise the benefits of our collective property portfolios.

4.11 The Health Board currently has one of the largest property portfolios in Wales comprising 137 properties ranging in age from Denbigh Infirmary which was founded in 1813 to the Flint Health and Well-being Centre opened in 2018. The existing estate poses significant challenges with respect to its age, condition, resilience and suitability to support modern care to the extent that it is not viable in the long term and is unable to support the future vision of care described within LHSW. Our estate must therefore change to meet the changing needs of our population**.**

4.12 The priorities identified within the strategy programmes are consistent with the approach to ensuring well-being and community resilience. Within this, the provision of care and support close to home to support people in staying independent is an important element. It is important that the Health Board works closely with Flintshire County Council in the development of proposed plans for growth which take account of the capacity and infrastructure needed for resilient primary, community and hospital healthcare services.

4.13 The key documents driving service modelling and provision are:

- Healthier Wales – Our Long Term Plan for Health and Social Care (WG, 2018)
- Living Healthier, Staying Well (LHSW) strategy (approved March 2018)
- BCU HB three year outlook (approved March 2019)
- The Estates Strategy (approved March 2019)

4.14 LHSW provides the basis of the strategic framework for our future estate that will be designed to support health and well-being, primary and community services through a network of well-being centres. This network will be supported by three acute hospital campuses providing acute and specialist care together with key support services (clinical and non-clinical).

4.15 The size and capacity of the future estate will reflect the shift in care closer to home and new models of working. The future estate will be designed to reduce our impact upon the environment, to be sustainable and to support the wider economic, social and cultural wellbeing of North Wales.

4.16 The Health Board is committed to working with partner organisations, including local authorities and the voluntary sector, to develop integrated solutions that make the best use of our collective property assets irrespective of ownership.

4.17 It is in this context that the Board is seeking to work together with the Local Development Plan process to ensure plans are strategically aligned and recognise

opportunities to work together to improve well-being, develop resilient communities and take opportunities for joint working to support this.

Primary Care Facilities

4.18 These facilities will support the expansion and renewal of primary care at the heart of the community with a focus on GP practice services, but with opportunities for other primary care services such as dentistry and pharmacy to co-locate.

4.19 Where possible, the HB will work with practices on the development of new premises and the improvement of existing premises. It will encourage practices in local areas to work together (including taking the opportunity to co-locate with other practices in new buildings). This will enable practices to offer an extended and more flexible range of services to their patients.

4.20 The HB has taken on the direct management of the running of some GP practices in the County and where appropriate will continue to directly manage additional practices in the future.

4.21 Some of the GP premises in Flintshire are working at or near their patient list size and often there is not sufficient capacity within existing premises to accommodate the level and distribution of population growth projected in the deposit LDP.

4.22 The HB seeks to ensure that sites for new facilities reflect the spatial distribution of need, the importance of accessibility and create opportunities for different service providers to share facilities.

Infrastructure Requirements

Primary Care Facilities:

4.23 There is often little scope for expansion within existing GP premises but this may still be an option for some practises. Within Flintshire, a number of new primary care facilities have been developed over recent years, including, for example, Buckley, Connah's Quay, and the Flint Health and Well-being Centre (opened in 2018.) Development of the primary care estate needs to reflect the vision of LHSW and facilitate the emphasis of self-care and care closer to home and the integrated working models which will be required to support it. Purpose built and improved premises will also be of great importance in promoting North Wales as an attractive environment in which to pursue a career in general practice.

4.24 Within Flintshire, there will be a focus on areas which are consistent with the main service areas identified within the Flintshire LDP preferred strategy (including Flint, Holywell, Connah's Quay, Deeside, Shotton and Mold) whilst ensuring that the needs of people living in surrounding areas are also met. The current analysis of demand relative to the existing estate, its age, condition and functional suitability

indicates a need for development investment in a number of areas, including Queensferry and Shotton.

4.25 There are potential implications for health service providers on both sides of the border as a result of the location of the two Strategic Sites at Northern gateway and Warren Hall. Significant population growth in these areas is likely to increase demand on both primary and secondary care services provided by HB, the West Cheshire Clinical Commissioning Group and the Countess of Chester Hospital NHS Foundation Trust.

4.26 The HB is working towards a GP to patient ratio of 1:2,000, together with a full team of primary care professionals including nursing, pharmacy, therapy and other disciplines, social care and third sector. When applied to the level of population growth identified in the Deposit LDP, this would equate to the need for an additional 6-9 General Practitioners.

4.27 The early implementation of new facilities where there is significant growth anticipated would benefit existing communities and ensure that there is sufficient capacity to support the local population.

4.28 For growth associated with the development of Strategic Sites, provision will need to be carefully phased, in order to achieve a balance between having a critical mass of population to ensure the viability of new facilities and ensuring that new residents are not left without facilities for a disproportionate period of time.

Funding Sources

4.29 Where funded by public capital allocation the capital cost of Primary Care Facilities is subject to business case process managed via the HB's Estate Improvement Group. This forms part of the BCUHB capital submission to the Welsh Government under the programme for health service improvement. The capital programme is subject to limitation according to availability and prioritisation across the all Wales programme.

4.30 Within the context of the Deposit Local Development Plan there is the potential for the provision of land and / or the development of Primary Care Facilities to form part of the master planning of Strategic Sites.

4.31 The Health Board will seek developer contributions under section 106 and in accordance with local planning guidance where infrastructure is required in order to ensure adequate infrastructure for the growth in population. Capital requirements will be assessed on the basis of Welsh Health Building Notes, including WHBN 36 - General medical practice premises in Wales.

5. Environmental Management
Flood Risk and Surface Water Management

Lead Organisations/Agencies

- Flintshire County Council (Lead Local Flood Authority)
- Natural Resources Wales (NRW) – Fluvial defences
- Welsh Water / Dwr Cymru – Sewer network

Lead Organisations/Agencies

- Flintshire County Council - as a Lead Local Flood Authority, is responsible for taking the lead in managing flood risk from all local sources, including surface water, groundwater and ordinary watercourses. In addition as the SuDS Approving Body (SAB) the Council is responsible for the approval of surface water drainage schemes and the adoption of approved schemes serving more than one property.

- Natural Resources Wales (NRW) – is responsible for managing flood risk from main rivers and the sea, and has a strategic overview role over all flood and coastal erosion risk management

- Welsh Water / Dwr Cymru - as the water supply and sewage treatment company serving the Flintshire area is responsible for flood risk from the public sewer and water supply networks

Context

5.1 Although the plan has adopted an approach of allocating sites away from areas currently identified as being at risk of flooding, it is inevitable that our understanding of flood risk will evolve over time, especially when considering the increased risk of flooding into the future associated with climate change. The risks associated with surface water flooding and runoff can impact on developments where other tidal or fluvial risks are not apparent. Without sustainable management of surface water generated from new and existing development this risk will increase.

5.2 As Lead Local Flood Authority, Flintshire Council has produced a Local Flood Risk Management Strategy (LFRMS) which sets out the approach to flood risk management within the county.

5.3 The following sources of flood risks are recognised within the county and may need to be taken into consideration in the context of future planned development.

- Tidal or coastal flooding occurs when coastal defences are unable to contain the normal predicted high tides or where a high tide combines with a storm surge resulting in the flooding of normally dry, low lying land with seawater. Flintshire has approximately 30km of coastline along the Dee estuary with the adjacent low lying land at risk of tidal flooding. This risk is managed to varying degrees by coastal defences ranging from natural systems such as dunes and saltmarsh to manmade defences such as large earth embankments and sea walls.

  The consequences of tidal flooding can be particularly significant and tends to carry the greatest risk to life and damage to property and infrastructure. Flood events can be larger in magnitude than fluvial or surface water flood events with greater potential for deeper and faster floodwater, particularly when considering a breach of a raised coastal defence.

- Fluvial flooding describes flooding from any watercourse, be it a larger 'main river' such as the River Dee or River Alyn or smaller often unnamed rivers, streams and brooks. Fluvial flood risk is arguably the most commonly recognised and best understood source of flood risk. It is a natural event and usually occurs when the capacity of a watercourse cannot contain the volume of water entering it, and water overflows its banks. The resultant flood water can be both deep and fast flowing and can cause widespread inundation of the flood plain. It may also carry debris, which can increase the damage.

  Fluvial flooding occurring in the natural environment generally has limited impact. The risk and consequences are increased where development has taken place, be this inappropriate development within a flood plain, or from constricting to the natural river channel thereby reducing capacity and increasing the likelihood and frequency of flooding. This is a particular problem where watercourses have been modified or culverted without regards for blockage or failure. The impacts of fluvial flooding can be even more significant and the risk to life increased if a flood defence, built to contain high river flows, fails or breaches with little warning.

- Surface water flooding occurs following locally intense rainfall when the rate of rainfall exceeds the rate that water can infiltrate the ground or soil and flows overland on the surface. In the urban context it usually means that surface water runoff rates exceed the capacity of drainage systems to remove it. Due to its localised nature, it is often very difficult to forecast surface water flooding accurately, with very little lead time available for issuing warnings. Surface water flooding can result in locally deep, fast flowing water and can cause disruption to travel networks, flooding of land and properties, and a pose a risk to life. Surface water flooding is identified as a significant source of flooding within the county.

Existing Provision

5.4 A number of significant flood protection schemes and defences are in place to manage flooding associated with the Dee Estuary and larger 'main river' watercourses such as the River Alyn. These are predominately managed by NRW. Numerous smaller schemes and structures are in place across the county's network of ordinary watercourses. Those owned by Flintshire County Council are predominantly managed and maintained by the Streetscene Department with many others falling under the responsibility of private riparian owners. As a Highway Authority, the council also manages and maintains a large network of highway drainage infrastructure which plays a significant role in managing surface water flooding across the county.

Links to Neighbouring Authorities

5.5 Flood risk, in particular tidal and fluvial flooding is not defined by political boundaries. Flintshire County Council works with neighbouring local authorities, as well as North Wales Councils Emergency Planning Service (NWCEPS), NRW and local utility providers to provide flood risk management services.

Key Issues

5.6 The management of surface waters generated from both existing and new impermeable surfaces is essential to insure no increase in flood risk to people and property within the County. It is essential that all new development takes every opportunity to incorporate sustainable techniques to manage surface water.

5.7 As of January 7th 2019, Schedule 3 of the Flood and Water Management Act (FWMA) 2010 requires surface water drainage for new developments to comply with mandatory National Standards for sustainable drainage (SuDS) systems. These must be approved by the local authority acting in its SuDS Approving Body (SAB) role before construction work begins. The SAB has a duty to adopt compliant systems serving more than one property. This will have a significant impact on the way in which new developments are drained with requirements to achieve multiple benefits including flood risk, water quality, amenity, and biodiversity over the lifetime of a development.

5.8 The provision of new flood risk assets is not essential to the delivery of the plan, but additional infrastructure may be required to reduce the risk to existing communities as the understanding of local flood risk evolves over the life of the plan. This may be particularly relevant where large scale development is proposed within an area where the existing infrastructure is known to be problematic and/or where there is a known history of flooding problems.

5.9 Maintenance of the existing and new highway drainage systems will need to adapt to cater for new adopted highways and incorporation of more sustainable drainage techniques.

Infrastructure Requirements

5.10 Flood risk associated with a changing climate will increase into the future. To mitigate this increase in risk from surface water flooding all new development should be accompanied by an appropriate surface water management plan, incorporating the principles of water sensitive urban design and best practice for the inclusion of sustainable drainage solutions. This will ensure flood risk to both new and existing development is considered as a development constraint at an early stage and should involve liaison with the SAB who will ultimately be required to assess, approve and potentially adopt the final solution. The early consideration of surface water flow routes and conveyance through sites should help inform development proposals and site layouts will be compatible with the new approach to more sustainable drainage in Wales.

Estimated Phasing and Delivery

5.11 Inclusion of surface water management planning at the earliest stage within the development planning process will ensure appropriate provision is made to effectively and sustainably manage surface water flooding. This will also facilitate the inclusion of multi-use spaces within developments to manage flood risk whilst providing additional water quality, biodiversity and amenity benefits. All surface water issues will be dealt with at the planning application stage and it is unlikely that any of the allocations identified in the plan require any enabling flood or water infrastructure to enable the delivery of the sites in advance of development commencing.

Funding Sources

5.12 Schedule 3 of the Flood and Water Management Act (2010) requires the developer to develop and provide a means of sustainable funding for the SAB to manage and maintain adopted surface water management schemes for the lifetime of development.

5.13 Potential funding sources for wider flood alleviation works or infrastructure improvements within the county include Flintshire Council capital, Natural Resources Wales, developer contributions and the Welsh Government's flood defence grant in aid programme.

Opportunities to Share Facilities

5.15 Sustainable drainage systems and flood mitigation measures should form an integral part of other Council projects, including highway schemes, parks, open spaces and biodiversity projects.

5.16 The opportunity for a shared or regional or semi regional SAB model should be considered as a means of sharing facilities.

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5.16 Flood mitigation projects could potentially be shared with external bodies and partner risk management authorities such as neighbouring LLFAs, Dwr Cymru/Welsh Water, Natural Resources Wales in additional to private stakeholders such as key local employers

6. Utility Services

a) Water supply and Wastewater

Lead Organisations/Agencies

- Dwr Cymru Welsh Water

Why is the Infrastructure Needed?

- Water Industry Act 1991
- Dwr Cymru/Welsh Water is responsible for taking away, treating and properly disposing of wastewater

Existing Provision

6.1 Welsh Water is the statutory water and sewerage undertaker that supplies over three million people in Wales and some adjoining parts of England. Owned by Glas Cymru, a single purpose company with no shareholders, it is run solely for the benefit of customers.

6.2 Welsh Water, on behalf of their customers and in line with their principal responsibilities as set out under Section 37 (water) and 94 (sewerage) of the Water Industry Act 1991 (as amended), owns, operates, maintains, improves and extends the system of public sewers, water mains and associated apparatus together with treatment works and pumping stations and has corresponding statutory duties to ensure effectual drainage and for making available supplies of water.

6.3 Flintshire's domestic foul sewage flows are treated at the following Waste Water Treatment Works (WwTW):

Waste Water Treatment Works	Settlement Served
Buckley Alltami Road	Alltami
Buckley Ty Gwyn	Buckley, Leeswood, Pontyblyddyn, Pontybodkin, Coed Talon
Caerwys	Caerwys, Afonwen
Connahs Quay	Connahs Quay, Northop Hall
Flint	Flint, Flint Mountain, Oakenholt
Greenfield	Bagillt, Greenfield, Holywell, Halkyn, Pentre Halkyn
Hope	Penyffordd
Lixwm	Lixwm, Rhesycae, Ysceifiog
Llanasa	Berthengam, Ffynnongroyw, Llanasa, Gronant, Gwespyr, Talacre
Mold	Gwernymynydd, Mold, Mynydd Isa, Nercwys, New Brighton, Sychdyn
Mostyn	Brynford, Carmel, Gorsedd, Mostyn
Nannerch	Nannerch
Northop	Northop
Pantymwyn	Cilcain, Pantymwyn
Queensferry	Queensferry, Shotton, Ewloe, Hawarden, Sandycroft, Mancot, Drury, Burntwood
Rhosesmor	Rhosesmor
Rhydymwyn	Rhydymwyn, Hendre
Trelawnyd	Gwaenysgor, Trelanwyd, Marian
Treuddyn	Treuddyn
Whitford	Whitford

Links to Neighbouring Authorities

6.4 Welsh Water supply water and manage waste water in Denbighshire, and manage waste water only in Cheshire West and Chester and Wrexham County.

Key Issues

6.5 Welsh Water is a ‘specific consultation body’ in the plan process and as such the Council have worked in close collaboration with Welsh Water throughout the LDP preparation process. Given the density and location of the proposed development in the Flintshire LDP, water and sewerage infrastructure will be required to support development at the appropriate time. The phasing and delivery of infrastructure works will need to be planned to enable and support growth whilst operating within environmental controls.

Infrastructure Requirements

Wastewater Treatment Works (WwTW)

6.6 It is anticipated that additional capacity will need to be provided at the following WwTWs at some point during the LDP period to ensure that all the development can be accommodated.

a) Buckley Ty Gwyn
b) Queensferry

Public sewerage networks and water mains

6.7 In those locations where insufficient hydraulic capacity exists within the sewerage or water network to accommodate proposed growth, there may be a requirement for developers to fund the undertaking of hydraulic modelling assessments (HMA) to establish suitable connection points and / or necessary reinforcement works to the network to enable the sites to connect. It is anticipated that additional capacity may be required in the sewerage network in Broughton, Ewloe, Hawarden, Mold and New Brighton.

6.8 Due to the uncertainty of the demand arising from employment uses it is not possible to predict waste water flows from the employment allocations, these would be dependent on specific end users and would be further assessed at the pre-planning or planning application stage.

6.9 Potential developers also need to be aware that where sites are crossed by public sewers and water mains, protection measures in the form of easement widths or a diversion of the pipe would be required which may impact upon the development density achievable on site.

Funding Sources

6.10 Welsh Water's capital investment is undertaken through a five-yearly Asset Management Plan (AMP) programme. The AMP6 programme is currently being delivered which covers investment for the period 2015-2020, this will be followed by AMP7 for the investment period 2020-25, AMP8 for 2025-2030. Funding for capital investment is raised through customers' bills.

6.11 Welsh Water is required to put forward a business plan for investment for each AMP cycle and to ensure that customer's money is invested appropriately they rely on adopted LDPs with allocated development sites to give certainty of growth. The industry regulator, Ofwat, will not support investment for infrastructure to serve unconfirmed growth. As such there is potential for disparity in the timeframes of AMPs and LDPs and instances where 'lead-in' times are necessary to bring an infrastructure project and associated funding to fruition.

6.12 Where shortfalls in funding occur and there is no capacity in the local network of assets to accommodate new growth, the developer can either wait for Welsh Water to fund the necessary reinforcement works through future AMP investment or pay

for the works themselves. Ofwat expects developers to play their part in financing growth and new development, and that existing Welsh Water customers should not burden the full costs of infrastructure provision.

6.13 Sewerage and water required for any potential development can be acquired through the requisition provisions of sections 98-101 of the Water Industry Act 1991 (as amended). Welsh Water, as the statutory water and sewerage undertaker, has a duty under the WIA91 to comply with a requisition notice served for the provision of a new sewer and/or associated apparatus which is required for domestic purposes only.

6.14 The benefit to a developer of being able to use the requisition process is that the cost of a scheme is offset by the income generated to Welsh Water through customer bills from the development over a period of 12 years. Should the income that Welsh Water receives be greater than the cost of the scheme, then there is a nil contribution from the developer. Conversely, should the income received fall short of the scheme cost, a developer would be required to make up the shortfall.

6.15 Funding to deliver reinforcement works at a WwTW cannot be requisitioned, but can be delivered via a developer's contribution secured through Section 106 of the Town and Country Planning Act 1990.

b) Water Supply

Lead Organisations/Agencies

- Hafren Dyfrdwy

Why is the Infrastructure Needed?

- Water Industry Act 1991
- Hafren Dyfrdwy is responsible for providing a continuous supply of drinking water

Existing Provision

6.16 The Flintshire areas is made up of two Water resource zones (WRZ): Wrexham WRZ which is supplied by 3 water treatment works with Llwyn Onn (Wrexham) being the main works. Saltney WRZ which receives a bulk supply from Severn Trent.

Links to Neighbouring Authorities

6.17 Hafren Dyfrdwy manage water for the Flintshire, Denbighshire, Wrexham and Powys areas. There are also links to the Severn Trent area, specifically the Chester West and Chester area.

Key Issues

6.18 Given the density and location of the proposed development in the Flintshire LDP, water infrastructure will be required to support development at the appropriate time. The phasing and delivery of infrastructure works will need to be planned to enable and support growth whilst operating within environmental controls. Hafren Dyfrdwy's planning for new developments is based on development meeting the building regulations standard of 110 litres per person per day.

Infrastructure Requirements

6.19 Infrastructure requirements will be specific to each individual scheme and will be influenced by the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme.

6.20 Potential developers also need to be aware that where sites are crossed by water mains, protection measures in the form of easement widths or a diversion of the pipe would be required which may impact upon the development density achievable on site.

Funding Sources

6.21 Some of the infrastructure works required to deliver the sites would fall within the remit of Hafren Dyfrdwy's Regulatory Capital Investment Programme, which is agreed in five yearly cycles. The next round of funding, detailed in the company's Asset Management Plan, AMP7, will be approved in 2019/2020 (to cover the period 2020-2025).

6.22 Hafren Dyfrdwy included the expected growth for the next 25 years based on local authorities' development plan information but where development will create a need for extra facilities in advance of an Undertaker's Regulatory Investment, it may be reasonable for developers to meet or contribute towards the cost of providing such facilities. The industry regulator, Ofwat, does not support the investment for infrastructure to serve unconfirmed growth and therefore there is potential for disparity in timeframes between AMPs and LDPs.

6.23 Infrastructure costs will be specific to each individual scheme and will be influenced by; the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme. As such is it is not possible to attribute an estimated costing to this infrastructure item at this time.

c) Gas

Lead Organisations/Agencies

- National Grid
- Wales and West Utilities

Why is the Infrastructure Needed?

6.24 The network provider has a duty to develop and maintain an efficient, coordinated and economical transmission system for the conveyance of gas.

Existing Provision

6.25 Wales and West Utilities are the owner, operator and developer of the local gas distribution system in most of Wales including Wrexham.

Links to Neighbouring Authorities

6.26 The National Grid owns and operates the high pressure gas transmission system in England, Scotland and Wales.

Key Issues

6.27 New gas transmission infrastructure developments (pipelines and associated installations) are periodically required to meet increases in demand and changes in patterns of supply.

d) Electricity

Lead Organisations/Agencies

- National Grid
- SP Energy Networks

Why is the Infrastructure Needed?

6.28 The National Grid under the Electricity Act 1989 has a statutory duty to develop and maintain an efficient, coordinated and economical transmission system of electricity. SP Energy Networks are the local distributer connecting the National Grid to individual properties. They are responsible for restoring supply, making new connections and maintaining the performance of the network.

Existing Provision

6.29 The National Grid operates the national electricity transmission network across Great Britain and owns / maintains the network in England and Wales, providing electricity supplies from generating stations to local distribution companies.

6.30 Separate regional companies own and operate the electricity distribution networks that comprise overhead lines and cables at 132k volts and below. It is the role of these local distribution companies to distribute electricity to homes and businesses. The local electricity distribution company is SP Networks.

6.31 The National Grid's high voltage electricity overhead transmission lines / underground cables within Flintshire County Council's administrative area, form an essential part of the electricity transmission network in England and Wales.

Links to Neighbouring Authorities

6.32 The National Grid operates the national electricity transmission network across Great Britain and owns and maintains the network in England and Wales. SP Networks cover mid and north Wales, Cheshire and Merseyside.

Key Issues

6.33 Proposals for new electricity projects often involve transmission reinforcements remote from the generating site, such as new overhead lines or new development at substations. If there are significant demand increases across a local distribution electricity network area, then the local network distribution operator may seek reinforcements at an existing substation or a new grid supply point. In addition, the National Grid may undertake development works at its existing substations to meet changing patterns of generation and supply.

6.34 Connection considerations in relation to Renewable Energy Installations are discussed further in the Flintshire Renewable Energy Assessment.

Infrastructure Requirements

6.35 Developers will be expected to liaise with SP Networks to ensure that off site and on site works to facilitate a new electricity supply are carried out if needed and to ensure that any necessary upstream reinforcement works are carried out.

6.36 Where necessary, the developer should identify that sufficient land has been set aside within their development site to accommodate electricity supply infrastructure required to address any identified deficit.

6.37 One of the main issues in relation to the demand for electricity in the future is the increased use of Electric Vehicles (EV). Scottish Power estimate that to date, (May 2019) the UK is approximately 2 to 3 years away from a mass uptake in the use of EV and that this plan needs to identify this as an issue. All new housing developments should incorporate the infrastructure to enable the widespread use of home charging EV's. The costs currently incurred by developers in making connections to developments are likely to increase threefold due to this stance by SPEN, and indicative connection costs for housing allocations are shown in the table appended to this document. It is also worth noting that if any large office blocks, factories, or commercial facilities start converting their car parking spaces to include EV Charging Points then the figures in the table could change.

Estimated Phasing and Delivery

6.38 Infrastructure requirements will be specific to each individual scheme and will be influenced by the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme.

Funding Sources

6.39 Where development will create the need for new or upgraded infrastructure, which is either required in advance of, or falls outside the remit of the service providers investment programme, the developer will be expected to meet or contribute towards the cost of providing such infrastructure.

6.40 Costs will be specific to each individual scheme and will be influenced by; the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme.

e) Telecommunication

Lead Organisations/Agencies

- British Telecom
- Flintshire County Council, Through the Growth Deal Bid (with Key Partners in Business, Higher Education and Further Education)

Why is the Infrastructure Needed?

6.41 British Telecom (BT) has a Universal Service Obligation to provide telephone lines to all buildings. The Superfast Cymru project is bringing access to high speed broadband to the majority of homes and businesses in Wales that cannot get it through the private sector's own commercial programmes.

Existing Provision

6.42 BT provides broadband connectivity throughout the County Borough, though availability of SuperFast (>80Mbit/sec download) or Ultrafast (>100Mbit/sec download) varies across the County and is dependent on suppliers upgrading cabinets and existing infrastructure.

6.43 BT, via their Borough subsidiary BT Openreach, provides wholesale services to other organisations, for example TalkTalk and Sky etc. to provide broadband and telephone services.

6.44 BT telephone exchanges connect to cabinets throughout the County, from these cabinets there are connections to Distribution Points (DPs) which then have connectivity to premises via overhead cables or underground ducts. The final connectivity is via a copper connection, but this technology is changing to fibre optic cable.

6.45 The provision of telecommunication services is now unregulated so other providers could provide services if commercially viable.

Links to Neighbouring Authorities

6.46 The telecommunications network covers the whole of Great Britain with several international connections. International connections currently route via the Internet Exchanges in London, Leeds and Manchester.

Key Issues

6.47 Existing providers are well placed to deal with growth in the urban areas and provide capacity. However, some areas, especially rural areas are behind in broadband provision for a number of technical and commercial reasons.

Infrastructure Requirements

6.48 Developers will be expected to liaise with BT to ensure that off site and on site works to facilitate new telecommunications infrastructure are carried out if needed and to ensure that any necessary upstream reinforcement works are carried out.

6.49 Where necessary, the developer should ensure that sufficient land has been set aside within their development site to accommodate telecommunications infrastructure required to address any identified need.

Estimated Phasing and Delivery

6.50 Infrastructure requirements will be specific to each individual scheme and will be influenced by the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme.

Funding Sources

6.51 Where development will create the need for new or upgraded infrastructure, which is either required in advance of, or falls outside the remit of the service providers investment programme, the developer will be expected to meet or contribute towards the cost of providing such infrastructure.

6.52 Costs will be specific to each individual scheme and will be influenced by; the time at which the development comes forward, the scale of the proposed development and any associated works that have been carried out in the time preceding the scheme. As such is it is not possible to attribute an estimated costing to this infrastructure item at this point in time.

Appendix1:

Key Stakeholders contacted

Highways:
Active Travel – FCC Sue Price
Rail and Bus – FCC Ceri Hansom, Lisa Bullock Network Rail, Lois Park Transport For Wales
Road – FCC Anthony Stanford

Education - FCC Damian Hughes, Paula Vogt

Health Betsi Cadwaladr University Health Board - Sally Baxter

Environmental Management - FCC Ruairi Barry

Utility Services
Waste Water Dwr Cymru - Dewi Griffiths
Water Supply Dwr Cymru - Dewi Griffiths and Hafren Dyfydwy Elaine Ring, Helen Everitt
Gas - Wales and West Utilities, Ben Jones
Electricity
Scottish Power - Rachel Shorney, National Grid - Hannah Lorna Bevins Spencer Jefferies
Telecommunications - Ginny Hall, Mono Consultants

	Appendix 2 **Flintshire Local Development Plan Deposit Plan 2015 2030.** **Infrastructure Plan (2019)** **2023**
	Key Strategic Sites
	Key Strategic Site Northern Gateway **STR3A Northern Gateway Mixed Use Development Site: Employment, housing, commercial, community facilities:** **i. 1,325 new homes, including affordable** **ii. 72.4 hectares of B2/B8 employment land** **iii. Commercial development hub adjacent to A550** **iv. District Centre(s) to serve local convenience needs** **v. Strengthened and raised River Dee flood defences** **vi. Provision of internal road infrastructure** **vii. Provision of land and a contribution to extending Sealand CP School** **viii. Sustainable drainage/flood management solution** **ix. Provision of green infrastructure network** **x. Sensitive re-use of John Summers Listed buildings and grounds** Active Travel Reference Dip 9/10 and 11 Scottish Power Energy Networks 1x new 33kV Substation - approx. £1m to £5million (new houses only) Timescale overview at April 2019 (when initial completions are likely) - 2021
	STR3B Warren Hall Mixed Use Development Site: Employment and housing: **i. 300 new homes, including affordable** **ii. B1 and high quality B2 employment land** **iii. Commercial hub involving hotel, leisure, local centre and retail** **iv. Strategic landscaping and green infrastructure network**

	v. Sustainable transport links with nearby settlements and a link with the section of the Mold – Deeside Active Travel route between Penymynydd and Broughton. Active Travel Reference BR2/2 Scottish Power Energy Networks 4 x new 11kV Substation - approx. £320k to £500k (new houses only) Timescale overview at April 2019 (when initial completions are likely) - 2023
	Tier 1 Main Service Centres
	Site Name: BUC 031 Well Street Buckley 5.3 ha 159 units

Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2021	
Water	Dwr Cymru Welsh Water - The site sits within the Buckley Ty Gwyn WwTW Catchment area. The public sewerage network can accept potential foul flows from this development site. A water supply can be provided for this site.	Dwr Cymru Welsh Water or earlier through developer contributions			Necessary
Highways	Additional information has been submitted by Waites as part of an earlier SHARP scheme. Whilst the principle of residential development has been accepted the proposed detailed layout was considered unacceptable. A junction layout that will limit additional movements onto the rural section of Well Street will be required along with roads laid out to adoptable standard and appropriate cycle provision.	As part of the Planning application process.			Necessary

	Access onto Well Street to be designed so as to prevent right turn and use of rural roads to the south / retention and enhancement of strong hedgerow and landscaped boundaries. Active Travel Route BU15 is for a walking route between Mynydd Isa and Buckley along the A549 Mold Road, and links in with other routes in both Mynydd Isa and Buckley. The proposed measure is to resurface footways and provide dropped crossings with tactiles. The site needs to ensure suitable pedestrian links to this route. Bus routes – Bryn Awelon / Well St is served by LT4 a local bus service serving Buckley. Nant Mawr Rd is served by service 5 and 13 and Mold Rd is also served by service 4 / 4s and by service X4. The development will need to ensure suitable pedestrian links can be provided to these service routes.				
Contamination	Although agricultural land (grade 3b) the site may require assessment from potential presence of contaminants given past uses/activity.				Necessary
Drainage	Attenuation needed. Drain to the south east corner possible to incorporate a SUDS system within the POS area.				Necessary
Ecology	Improved Agricultural land with limited protected species records. Any development would need to assess the Ecology of the site and provide an Ecological Impact Assessment with appropriate avoidance and mitigation measures. Retention and enhancement of strong hedgerow and landscaped boundaries.				Necessary

	Refer to FCC Planning Guidance SPG8a in respect of the possible presence of Great Crested Newts.				
Public Open Space	Centrally located area of POS to be in the region of 8,900m2 of designated play and recreation space.	Private Sector	The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions - Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	40 % affordable housing contribution which equates to 64 units.	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	2x new 11kV Substation - approx. £160k to £200k	Developer contributions	As per housing trajectory		Necessary
	Site Name: (CON 002) Broad Oak Holding, Mold Road, Connahs Quay. 1.3 ha 37 units				

Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2021	
Water	• The public sewerage network can accept potential foul flows from this development site. • A water supply can be provided for this site. • Potential developers need to be aware that this site is crossed by a water main and protection measures in the form of an easement width or a diversion of the main would be required, which may impact upon the housing density achievable on site.	Public and Private Sector			Necessary
Highways	No objection to the inclusion of this land that is now subject to planning application 058053.				Necessary
Contamination	No contamination referenced.				Necessary
Drainage	Drainage requirements as per decision of planning application 058053				Necessary
Ecology	Site is within 20m of Deeside and Buckley newt sites SAC. Refer to SPG 8a Great Crested Newt Mitigation Requirements: Any development would need to assess all the Ecological issues of the site and impacts on the adjacent designated SAC and provide an Ecological Impact Assessment with measures to avoid, mitigate, compensate, enhance and manage wildlife features. The Section 106 Agreement required payment of £40,000 for the enhancement and maintenance of the piece of land in close proximity to the site owned by FCC for wildlife and informal recreation.				Necessary

Public Open Space	The Authority would require an area of POS to be in the region of 1,850m2 of designated play and recreation space. In light of the fact the proposed POS layout is reduced and there is an adjacent POS on the neighboring development, the POS on the nearby Fairoaks development and this proposal should be shared and opened up to maximise its play value to the residents, this should take the form of removing the hedging or a section of hedging to at least provide access through. If this can be achieved the POS proposal would be acceptable but there will also be a need to provide an additional off-site contribution in lieu of the reduced POS on this proposal. The s106 agreement includes a payment of £5500 in lieu of shortfall of onsite provision for teenage recreation at Hillside Avenue Play Area, CQ. Also required that a Management Company is incorporated for the future management and maintenance of the on-site public open space and communal landscaping areas.	Private sector	The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied.		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions – Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale		Necessary

			for payments.		
Affordable Housing	A Section 106 Agreement controlled provision of 2no. 3 bed homes and 2 no. 2 bed homes for affordable rent and 2 no. 2 bed homes to be sold at 70% of market value and all affordable homes to be made available to persons on the affordable housing register.	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	Probable LV network reinforcement - up to £50K				Necessary
	(CON 093) Highmere Drive, Connah's Quay 5ha 150 units				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2021	
Water	• The public sewerage network can accept potential foul flows from this development site. • A water supply can be provided for this site.				Necessary
Highways	Suitable for some development an assessment of the adequacy of Highmere Drive and the junction of Highmere Drive/Ffordd Llanarth to establish the suitability to cater for full development. The applicant should be requested to provide additional information at this time. It was previously suggested that a secondary/emergency access may be possible via Degas Close but it has become apparent that there is potential for a second access across council owned land onto Courbet Drive.				Necessary

	Active Travel Reference CQ2/1. The close proximity of National Cycle Route 5 is identified; an improvement scheme CQ2/1 is included on the Flintshire Active Travel Integrated Network Map (a financial contribution towards the costs of this scheme is likely to be required as part of any development)				
Contamination	No contamination referenced.				Necessary
Drainage	The site is capable of draining surface water subject to approved SuDs.				Necessary
Ecology	The Site is 500m from the Deeside and Buckley newt sites SAC with GCN records. Refer to SPG The site has a number are TPOs, potential for Great crested newts, badgers and nesting birds. Any development would need to assess all the Ecological issues of the site and impacts on the adjacent designated SAC and provide an Ecological Impact Assessment with measures to avoid, mitigate, compensate, enhance and manage wildlife features				Necessary
Public Open Space	A centrally located area of POS to be in the region of 8,400m2 of designated play and recreation space. The provision is to include an equipped play area with a range of age specific play items.		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places	Developer contributions	Section 106 Agreement		Necessary

	in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	- Private and public Sector	will need to be signed at the time of the planning application which will set out the timescale for payments.		
Affordable Housing	35% affordable housing on site which equates to 53 units	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	2 x new 11kV Substation – approx. £160k to £200k				Necessary
	FLI007/015 Northop Road Flint 9.3ha 170 units				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2021	
Water	Welsh Water has made representations on this proposed site through planning application 058314. The public sewerage network can accept potential foul flows from this development site. A water supply can be provided for this site.				Necessary
Highways	Subject to a previous pre-application enquiry; no significant concern. As site is subject to two current, but undetermined applications,				Necessary

	negotiating with developers to achieve a single point of access to the site.				
Contamination	Agricultural Land Quality Actual loss of 5.62ha grade 2 and predicted loss of 0.29ha grade 3a. Total predicted loss of 5.91ha BMV land. No contamination referenced.				Necessary
Drainage	The site has a boundary with Swinchiards Brook. It should therefore be possible to design and implement a sustainable drainage scheme that is compliant with the mandatory standards introduced in Wales in Jan 2019.				
Ecology	The site, itself, is Improved Agricultural land to the east of Swinchiard Brook with hedgerows and trees and very limited species records but with potential for amphibians, badgers and nesting birds. Stanley Wood WS occurs to the west of the site. Any development needs to assess the Ecology of the site and provide an Ecological Impact Assessment with appropriate avoidance and mitigation measures. Site has undergone extensive surveys – large badger sett and GCN also recorded.				Necessary
Public Open Space	POS to be in the region of 9,600 m2 of designated play and recreation space. The provision is to include an equipped play area with a range of age specific play items. Level ground is required for ball games, running and free play on this size of development that area should be 4500m2 out of total of 9,600m2.		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied.		Necessary

Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions – Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	15% affordable housing which equates to 26 units	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	Site Capacity on the SP Energy information is 280 units so the requirement is 3 x 11 kV Substation approx. £250 - £300K. But the new site capacity is 170 so that is likely to the 2x 11kV Substation approx. - £160 to £200 k.				Necessary
	MOL020/57 Maes Gwern, Mold 5.7ha 160 units Due to date of consent cannot be included as a commitment in the April 2018 housing balance sheet so therefore allocate. Developer commenced on site so viability and deliverability demonstrated.				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2020	
Water	Foul connection achieved and water supply available.				Necessary

Highways	The consented scheme provides for linkages to pedestrian and cycling routes, particularly to ensure improved access to town centre. Active Travel Reference N/A				Necessary
Contamination	No contamination referenced.				Necessary
Drainage	Discharged drainage condition Jan 2019				Necessary
Ecology	Consented scheme provides a 30m buffer to badger sett and a badger tunnel at one of the vehicular access points.				Necessary
Public Open Space	Consented scheme provides for 0.42ha of open space (0.04ha equipped play area / 0.08ha community orchard / 0.29ha public open space in 3 locations within site). Normally a £110,000 contribution would need to be made but as Council owned site no S106 – condition requiring details as to how open space requirement will be addressed.		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		Necessary
Education	Committee report references Ysgol Bryn Coch having capacity of 599 but presently 601 pupils attending. Proposals would give rise to 37 children attending which would equate to a commuted sum of £453,509. As a Council owned site a Sect 106 was not possible and this was controlled by a condition requiring approval of details as to how the development would address the capacity issues at the school.	Developer contributions – Private and public Sector	Planning condition will set out the timescale for payments.		Necessary
Affordable Housing	The consented scheme provided for 48 affordable units – condition requiring exact provision.	On-site provision	As per housing trajectory		Necessary

Scottish Power Energy Networks	No information				Necessary
MOL044/045 Land Between Denbigh Road / Gwernaffield Road Mold MOL008/044/045)					
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2023	
Water	• There are isolated incidents of flooding in the public sewerage network that may need to be resolved to allow development to proceed. Potential developers can either wait for Welsh Water to resolve the flooding, subject to funding being approved by our regulator Ofwat, or progress the improvements through the sewerage requisition provisions of the Water Industry Act 1991 of Section 106 of the Town & County Planning Act 1990. It will be necessary for developers to fund the undertaking of a hydraulic modelling assessment (HMA) of the sewerage network to determine the point of connection to the public sewerage system. • Potential developers need to be aware that this site is crossed by strategic 19" and 20" water mains and an easement width would be required which may impact upon the housing density achievable on site. • A water supply can be provided for this site.				Necessary
Highways	Previously recommended that a full Transport Assessment was required and advised that this				Necessary

	would be best developed in conjunction with site MO+L008 New access onto Denbigh Road (over and above what would normally be required to serve the site, which has the potential to serve further parcels of land) / retention and enhancement of strong site boundaries particularly along western edge of site potential to contribute to the delivery of Mold flood alleviation scheme / no residential development on land between Denbigh Rd and Pool House Lane.				
Contamination	MOLO044 Land opposite Pool House, Denbigh Road, Mold Former flushing lagoon/sluice/tailings or settlement pond for historic tinplate works. Land contamination assessment in support of any application for planning permission. MOLO045 Land west of Beechwood Close and Alwyn Close, Mold Land likely to be affected by elevated levels of lead and heavy metals in superficial soils. Land contamination assessment in support of applications for planning permission. Although developers own study disputes this given trace levels of lead from historic mining activity.				Necessary
Drainage	The Mold flood alleviation requirements should be explained clearly, in order to understand the potential of the development to assist in implementing its scheme. Scheme be designed so as to dovetail with Mold Flood Alleviation Scheme.				Necessary

Ecology	Improved Agricultural land with limited protected species records other than Otter and foraging Pipistrelle bats. Site has potential interest for Badgers and nesting birds. Any development would need to assess the Ecology of the site and provide an Ecological Impact Assessment with appropriate avoidance and mitigation measures.				Necessary
Public Open Space	POS to be in the region of 4,500m2 of designated play and recreation space. The provision is to include an equipped play area with a range of age specific play items		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied.		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions - Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	40% affordable housing which equates to 98 units	On-site provision	As per housing trajectory		Necessary

Scottish Power Energy Networks	3 x new 11kV Substation – approx. £250 k to £300k				Necessary
	Tier 2 Local Service Centres				
	EWL017/020 Holywell Road/Green Lane, Ewloe 9.9 ha 298 units (EWL017/020)				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2023	
Highways	Holywell Road Site - Considered suitable subject to a Transport Assessment. Improvements to junction Holywell Rd and Mold Rd to increase capacity. Green Lane Site - Previously considered unsuitable as a stand alone site due to restrictions of the Green Lane junction. Can be considered in conjunction with site EWL017 whereby. part of site EWL016 (same ownership as EWL017) can be used to provide improvements to Green Lane / Mold Rd junction with improved pedestrian provision. Active Travel Reference F6, A feasibility Study is required to establish the extent of the route, once this has been carried out contributions will be assessed. Until then developers should be aware of the route when designing the housing scheme.				Necessary
Contamination	Coal mine workings noted in area. Potential for noise from A55. Survey required.				Necessary
Drainage	Capable of achieving a SuDS compliant solution.				Necessary

Ecology	Deeside and Buckley Newt Site SAC/Connahs Quay Ponds and Woodlands SSSI occurs 250m to the north primarily designated for GCN. New Inn Brook Wood 26NE03 occurs to the west of the site. The site, itself, is Improved Agricultural land with hedgerows and trees and gorse scrub. There are no records specific to the site but there is potential e.g. for great crested newts, bats, badgers and nesting birds. Any development would need to assess the Ecology of the site and provide an Ecological Impact Assessment with appropriate avoidance and mitigation measures. The proximity of the SAC means indirect impacts would also have to be considered. Refer to FCC Planning Guidance SPG No 8 Nature Conservation and Planning and specifically for this site SPG No 8a Great Crested Newt Mitigation Requirements.				Necessary
Public Open Space	**Green Lane site** - POS requirement is in the region of 4,200m2 of designated play and recreation space. Note if the POS on this development can be incorporated into the existing Circular drive play area then the provision of an equipped play area could be combined with Circular drive play area. **Holywell Road site** - Centrally located area of POS to be in the region of 12,600m2 of designated play and recreation space. an equipped , a Neighbourhood play area with a range of age specific play items, Provision of Information/ advisory signs stipulating who		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		Necessary

	manages the site; The play and recreation area requires a link pathway system around the perimeter of open space for inclusive access, seating areas including picnic tables are required in the play area and at locations around the open space creating social areas for all users of the open space, litter bins and bike rack, a Multi-use games area suitable for tennis, five-a-side football and basketball dimensions 30 x 16m, a Sports field 110 metres x 60 metres				
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions - Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	40% affordable housing on site which equates to 119 units	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	3 x 11 kV Substation – approx. £250k to £300k Probable LV network reinforcement up to £50k				Necessary
	(HWN005) Ash Lane Hawarden 9.6 ha 288 units				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial	Status(Necessary or Enabling)

				completions are likely)	
				2023	
Water	There are isolated incidents of flooding in the public sewerage network that may need to be resolved to allow development to proceed. Potential developers can either wait for Welsh Water to resolve the flooding, subject to funding being approved by our regulator Ofwat, or progress the improvements through the sewerage requisition provisions of the Water Industry Act 1991 of Section 106 of the Town & County Planning Act 1990. It will be necessary for developers to fund the undertaking of a hydraulic modelling assessment (HMA) of the sewerage network to determine the point of connection to the public sewerage system. . A water supply can be provided for this site.	.			Necessary
Highways	Active Travel Reference MA2/13 Contribution connection to an enhanced route may be required.				Necessary
Contamination	No contamination referenced.				Necessary
Drainage	Drainage solutions needs to be designed to accommodate down stream capacity.				Necessary
Ecology	The Clwydian Ecology report is acceptable as a preliminary ecological appraisal of the site and is in line with the Cofnod information that I have. Conclusion The habitats present on site are not of high ecological value and the protected species likely to be associated with these habitats can be taken into account within the development, following				Necessary

	further surveys/impact assessment together with relevant avoidance and mitigation.				
Public Open Space	Centrally located area of POS, 16,100m2 of designated play and recreation space. To include an equipped Neighbourhood play area with a range of age specific play items .The provision is to include litter bins and bike racks. The provision is to include a Multi-use games area suitable for tennis, five-a-side football and basketball dimensions 30 x 16m with a hardwearing tarmacadam surface. The provision is to include a Sports field 110 metres x 60 metres graded level and with field drainage installed to a specification by the Authority		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions - Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	40% affordable housing which equates to 115 units	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	3 x new 11kV Substation – approx. £250 to £300 k				Necessary
	(HCAC 004) Wrexham Road HCAC 3.5 ha 80 units				

Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2023	
Water	Welsh Water has made representations on this proposed site through planning application 058163. The public sewerage network can accept potential foul flows from this development site. Welsh Water does not supply water to this area. Contact Hafren Dyfydwy.				Necessary
Highways	Considered suitable subject to on-site and off-site public transport and active travel improvement No Active Travel Reference Hop1/3 and Hop 1/2. The route is a well-used short cut from Abermorddu and Caergwrle to Castell Alun School. It requires improvements to make it suitable for Active Travel Standards. The route connects to the site along existing footways.				Necessary
Contamination	No contamination referenced.				Necessary
Drainage	Suitable SuDS compliant, scheme achievable.				Necessary
Ecology	The site is dominated by semi-improved and unimproved grassland of ecological value with overgrown, ancient, species rich hedges. Two streams flow across the site from the eastern boundary merging at the south western corner of the wet woodland. The water within the streams is clear and fast flowing but there is also lying water and localised marsh adjacent to the eastern boundary.				Necessary

	The adjacent Wildlife Site includes the steep slopes with acid grassland, bracken and bluebells, plus the wet woodland and the species rich marshy grassland and some of these habitats and associated species such as bluebells, pignut, ragged robin and common spotted orchid have extended into the site. The current application has provided insufficient ecological information and does not demonstrate that the ecology and the associated impacts associated with the development of the site have been properly assessed. **The provision of adequate ecological mitigation is likely to affect the developable area/housing density.**				
Public Open Space	POS to be in the region of 4,200m2 of designated play and recreation space. Note if the POS on this development can be incorporated into the existing Llys Clark play area then the provision of an equipped play area could be combined with Llys Clark play area. The provision is to include an equipped play area with a range of age specific play items		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied.		Necessary
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to	Developer contributions – Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning		Necessary

	Education which details the formula used to calculate these contributions.		application which will set out the timescale for payments.		
Affordable Housing	30% affordable housing which equates to 24 units	On-site provision	As per housing trajectory		Necessary
Scottish Power Energy Networks	1 x new 11kV Substation – approx. £80k to £100k				Necessary
	Tier 3 Sustainable villages				
	NEW 004 /013 Cae Isa, New Brighton 3.5 ha 105 units				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Necessary or Enabling)
				2021	
Water	It will be necessary for developers to fund the undertaking of a hydraulic modelling assessment (HMA) of the sewerage network to determine the point of connection to the public sewerage system. Potential developers need to be aware that this site is crossed sewers and protection measures in the form of an easement width or a diversion of the sewers would be required, which may impact upon the housing density achievable on site. A water supply can be provided for this site.	Private Sector			Necessary
Highways	Transport Assessment required **the applicant should be requested to provide additional**				Necessary

	information at this time. Whilst possible to provide access to this site, options are limited by capacity constraints of the nearby traffic signal controlled junction. Active Travel ref F5 A feasibility Study is required to establish the extent of the route, once this has been carried out contributions will be assessed. Until then developers should be aware of the route when designing the housing scheme.				
Contamination	Noise survey required. Landfill area. Land contamination assessment will be required in support of any application for planning permission. Landfill - The site is close to 2 Mynydd Bychan an inert site and Rear of Sharps Car Hire a closed former municipal landfill.				Necessary
Drainage	No obvious problems but negotiations needed with developer and adjoining landowners. Ensure drainage issues experienced in neighboring development are not affected by this allocation.				Necessary
Ecology	The site, is Agricultural land with hedgerows and trees, marshy land previously referenced. There are no records specific to the site but there is potential e.g. for bats, badgers, amphibians, reptiles and nesting birds. Any development would need to assess the Ecology of the site and provide an Ecological Impact Assessment with appropriate avoidance and mitigation measures				Necessary
Public Open Space	A centrally located area of POS to be in the region of 5,800m2 of designated play and recreation space, to include an equipped play area with a range of age specific play items.		The open space/play area needs to be ready for public		Necessary

			use when 50% of the developmen t is sold or occupied.		
Education	Pupil numbers fluctuate over time so the trigger for contributions and the number of surplus places in any particular school will vary. For guidance on Education Contributions consult the Flintshire County Councils Supplementary Planning Guidance Note No23 Developer Contributions to Education which details the formula used to calculate these contributions.	Developer contributions – Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	42 units based on 40% viability	On-site provision	As per housing trajectory		Necessary
SP Energy Networks	Probable LV network reinforcement up to £100,000				Necessary
	PEN 038 Chester Road Penymynydd **Redrow scheme allowed on appeal (055590). Due to date of consent cannot be included as a commitment in the April 2018 housing balance sheet so therefore allocate. Developer commenced on site so viability and deliverability demonstrated.**				
Type of Infrastructure	Description	Delivery Method	Anticipated Timescale of Delivery	Timescale overview at April 2019 (when initial completions are likely)	Status(Nec essary or Enabling)

				2020	
Water	Number of options for sewer network reinforcement have been provided, the implementation of one of these options would enable the development to connect in to the public sewer network without causing detriment to the local community or environment. Support application on basis that appropriately worded conditions are used in the determination of the planning application.				Necessary
Highways	Consented scheme provides £4,000 towards amendments to a traffic order (extension of 30mph speed restriction)				Necessary
Contamination	No contamination referenced.				Necessary
Drainage	A Drainage scheme in terms of foul and surface water (as conditioned on the planning approval decision arising from an appeal decision) has been agreed in principle and remains subject to final technical approval of Dwr Cymru – Welsh Water.				Necessary
Ecology	Consented scheme provides £20,000 towards wildlife enhancement to land off site.	Developer contributions - Private Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary

Public Open Space	Consented scheme provides on-site provision including MUGA and the creation of a management company to ensure the creation and maintenance of green spaces.		The open space/play area needs to be ready for public use when 50% of the developmen t is sold or occupied		
Education	Consented scheme provides £343,196 to Penyffordd Primary School and £591,008 to Castell Alun High School.	Developer contributions – Private and public Sector	Section 106 Agreement will need to be signed at the time of the planning application which will set out the timescale for payments.		Necessary
Affordable Housing	Consented scheme provides 20 units shared equity, 7 gifted units and commuted sum of £450,000.	On-site and commuted sum provision	As per housing trajectory		Necessary