

North Tyneside Local Plan

Murton Gap and Killingworth Moor Site Specific Infrastructure Delivery Plan

June 2016

Contents

Exe	ecutive Summary	
2)	Introduction	3
3)	Policy Context	5
4)	Definition, scope and prioritisation of Infrastructure	8
5)	Murton Site Specific Infrastructure	12
,	Transport	
	Community Hubs and Facilities	22
	Schools and Education	25
	Surface Water Management	29
	Green and Social Infrastructure	31
	Energy and Utilities	36
	Waste Management	38
	Summary of Infrastructure Delivery Requirements	38
6)	Killingworth Moor	41
	Transport	43
	Community Hubs Facilities	50
	Schools and Education	53
	Surface Water Management	56
	Green and Social Infrastructure	58
	Energy and Utilities	62
	Waste Management	63
	Summary of Infrastructure Delivery Requirements	64
7)	Viability Assessment Testing	67

Executive Summary

This Site Specific Infrastructure Delivery Plan (IDP) provides an assessment of the infrastructure required to support the development of Murton Gap and Killingworth Moor, identified as strategic allocations in the North Tyneside Local Plan. It is informed by a range of current evidence that guides the requirements and deliverability of the Local Plan and the strategic sites, and plays an important part in demonstrating that the Local Plan can be delivered. Supported by the Concept Framework and Outline Delivery Framework, as proposed detailed Development Frameworks and masterplans are prepared, the infrastructure requirements identified within this IDP will remain open to review.

North Tyneside currently meets the infrastructure needs from new development on an application by application basis and has adopted a guidance document on planning obligations (LDD8). The Community Infrastructure Levy (CIL) was introduced under the CIL Regulations 2010 and subsequent amendments. North Tyneside has not yet introduced a CIL but aligned with introduction of the Local Plan and review of LDD8 Planning Obligations SPD, will be setting out a programme for its preparation and adoption for some forms of infrastructure. CIL is not expected to create additional costs for the strategic sites to those identified in this IDP.

Murton Gap - The Murton Strategic Allocation (Sites 35 to 41) is identified for provision of approximately 3,000 homes, and convenience retail provision of approximately 1,000sqm. The Local Plan, requires 25% of homes to be affordable subject to site specific circumstances and economic viability. The anticipated phasing of housing and infrastructure are summarised as follows:

Housing Delivery	1,020	726	1,254
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032
Murton Link Road	Phase 1		
A186 Earsdon Rd Roundabout	Phase 1		
A191 Roundabout Rake Lane	Phase 1		
A191 Roundabout New York Rd	Phase 1		
New York Road Access	Phase 1		
Bridge over Metro line	Phase 1		
Westminster Ave	Phase 1		
Norham Rd/Park Lane	Phase 1		



Housing Delivery	1,020	726	1,254
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032
Tynemouth Pool		Phase 2	
New Bus Service	Phase 1	Phase 2	Phase 3
Metro Station	Phase 1	Phase 2	
CIL infrastructure contribution	Phase 1	Phase 2	Phase 3
On site, pedestrian and cycle connections.	Phase 1	Phase 2	Phase 3
Off site Pedestrian and Cycle Connections	Phase 1	Phase 2	Phase 3
Off site Pedestrian and Cycle Connections	Phase 1	Phase 2	Phase 3
Community Facilities	Phase 1	Phase 2	Phase 3
Healthcare		Phase 2	
Primary School	Phase 1	Phase 2	
Secondary School	Phase 1	Phase 2	Phase 3
Drainage Infrastructure	Phase 1	Phase 2	Phase 3
Sport & Recreation	Phase 1	Phase 2	Phase 3
Environment, Public Realm / Culture	Phase 1	Phase 2	Phase 3
Play, Parks and Green Space	Phase 1	Phase 2	Phase 3

Killingworth Moor – The Killingworth Moor Strategic Allocation (Sites 22 to 26) is identified for provision of approximately 2,000 homes, and convenience retail provision of approximately 500sqm. The Local Plan, requires 25% of homes to be affordable subject to site specific circumstances and economic viability. The anticipated phasing of housing and infrastructure are summarised as follows:

Housing Delivery	850	650	500
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032
Killingworth Link Road	Phase 1	Phase 2	
A19 Underpass Tunnel	Phase 1		
Killingworth Way Roundabout	Phase 1		
Killingworth Lane Junction		Phase 2	
Forest Gate Junction		Phase 2	
A19 Killingworth Interchange		Phase 2	
Wheatsheaf Roundabout		Phase 2	
Great Lime Rd / Killingworth Village		Phase 2	
New Bus Service	Phase 1	Phase 2	Phase 3
Metro Station	Phase 1	Phase 2	
CIL infrastructure contribution	Phase 1	Phase 2	Phase 3
On site pedestrian and cycle connections	Phase 1	Phase 2	Phase 3
Off site pedestrian and cycle connections	Phase 1	Phase 2	Phase 3
Off site pedestrian and cycle connections	Phase 1	Phase 2	Phase 3
Community Facilities	Phase 1	Phase 2	Phase 3
Healthcare	Phase 1	Phase 2	Phase 3
Primary School	Phase 1	Phase 2	
Secondary School	Phase 1	Phase 2	Phase 3
Drainage Infrastructure	Phase 1	Phase 2	Phase 3
Sport & Recreation	Phase 1	Phase 2	Phase 3
Public Realm	Phase 1	Phase 2	Phase 3
Play, Parks and Green Space	Phase 1	Phase 2	Phase 3



2) Introduction

Purpose of this Infrastructure Delivery Plan

- 2.1 Infrastructure is essential to support growth and to ensure that future development is accompanied by the necessary services and facilities. The National Planning Policy Framework (NPPF) requires the Council to proactively plan for and, where able, help deliver the necessary infrastructure to support new development.
- 2.2 This Site Specific Infrastructure Delivery Plan (IDP) provides an assessment of the infrastructure required to support the development of two sites; Murton Gap and Killingworth Moor, identified as strategic allocations in the North Tyneside Local Plan. Bringing these sites forward for sustainable developments requires a thorough assessment of future infrastructure requirements.
- 2.3 This Infrastructure Delivery Plan (IDP), builds upon the Borough wide North Tyneside IDP, that latest draft of which was prepared in October 2015¹. This site specific IDP provides detailed information regarding the planning, estimated costs and delivery of Murton Gap and Killingworth Moor, and the important infrastructure required to support the development of approximately 5,000 new homes across both sites.
- 2.4 It is informed by a range of current and up to date evidence prepared to inform the requirements and deliverability of the Local Plan and the strategic sites. This includes evidence of housing needs and market requirements, economic growth, retail provision and site specific studies particularly considering highway and transport impacts and education provision. All the proposed requirements within this Infrastructure Delivery Plan have also been tested through a site specific Viability Appraisal².
- 2.5 The approach to development and delivery of the strategic sites has been informed by an indicative Concept Framework completed in 2015 and an Outline Delivery

² Murton Gap and Killingworth Moor Viability Assessments, 2016, Capita North Tyneside



¹ North Tyneside Infrastructure Delivery Plan, 2016, Capita North Tyneside

Framework³. These consider the indicative spatial priorities for development of the sites to ensure development responds appropriate to their context and delivering overall improvements to the character, accessibility and attractiveness of the local area; and set out the framework and process for the future planning and delivery of the sites. Together with the policies and proposals of the Local Plan itself, this Infrastructure Delivery Plan should be read in conjunction with those documents.

- 2.6 Given that both sites will be built out over a number of years, this site specific IDP will be a live document and will be maintained and updated by North Tyneside Council. This will ensure the overall deliverability of both sites in accordance with the principals of sustainable development that guide the emerging Local Plan. This site specific IDP plays an important part in demonstrating that the Local Plan can be delivered in supporting sustainable communities.
- 2.7 This site specific IDP looks to determine what infrastructure is needed i.e. transport, education, social and community facilities at Murton Gap and Killingworth Moor. It also seeks to understand how the infrastructure will be provided and, by whom, focussing on phasing and delivery. It will consider the range of mechanisms available through the planning process to secure at the right time, the necessary infrastructure to address the impacts of development. This includes the use of Section 106 contributions, within the limits of legislative restrictions on pooling 5 or more applications for the delivery of a single infrastructure project and Community Infrastructure Levy. The IDP will outline a delivery programme for the provision of infrastructure that reflects the findings of parallel studies considering the economic viability of the Strategic Sites.

³ Murton Gap and Killingworth Moor Outline Development Framework, Arup, 2016



3) Policy Context

National background

3.1 The National Planning Policy Framework ("NPPF")⁴ was published in March 2012 and replaced virtually all previous national guidance, including the varied and multiple 'Planning Policy Statements'. The NPPF is clear there should be a presumption in favour of sustainable development where there is no conflict with the development plan and places the provision of necessary infrastructure to enable development as an integral part of the plan making process.

Regional background

The North East Local Enterprise Partnership (NELEP) and the North East Combined Authority (LA7)

- 3.2 The potential contribution of regionally significant development opportunities in North Tyneside can actively support the North East's objective for ambitious growth in jobs and the creation of attractive and successful residential communities.
- 3.3 The North East Local Enterprise Partnership was established in 2011 (with representation from both the public and private sector). It is a business-led, strategic vehicle, responsible for promoting and developing economic growth in the North East and is funded by the seven local authorities and Government. The North East LEP led the development of the North East Strategic Economic Plan (North East SEP)⁵ that currently sets the context for the regions growth priorities.
- 3.4 The North East Combined Authority (NECA) was established in April 2014 brings together the Local Authorities of County Durham, Gateshead, Newcastle, North Tyneside, Northumberland, South Tyneside and Sunderland. The NECA, for which at the time of writing there is an ongoing dialogue regarding devolution of funding and governance leading to election of a North East Mayor programmed for 2017, will have a range of devolved powers to stimulate economic growth, job creation, skills

⁵NE Strategic Economic Plan: http://nelep.co.uk/whatwedo/strategic-economic-plan/



⁴ NPPG and the National Planning Practice Guidance (NPPG): http://planningguidance.planningportal.gov.uk/

development and improved transport links. NECAs core objective is to create the best possible conditions for growth in jobs, investment and living standards.

3.5 The NECA provides key political leadership to work alongside and share the joint priorities of the NELEP and both will have a key role for the distribution of public funding for major infrastructure in the North East.

Local background

North Tyneside Strategic Partnership: Our North Tyneside - 2015 to 2018

Our North Tyneside⁶ sets the overall direction and long-term vision for the economic, social and environmental wellbeing of North Tyneside over four years and provides an overview of activities that all the major public bodies in the Borough will deliver. 'Our North Tyneside' sets out four overarching priorities as the focus of the Council Plan (2014-18) – Our People, Our Places, Our Economy and Our Partners.

Emerging North Tyneside Local Plan

- 3.7 Consultation on the first draft of the North Tyneside Local Plan took place between November 2013 and January 2014. Further consultation as part of the preparation of the Local Plan was held in February 2015. Final consultation on the Local Plan, the Pre-submission Consultation Draft commenced on 2nd November 2015 for a period of 6 weeks. The Council intend to submit the Local Plan to the Secretary of State in May 2016. Final adoption of the Local Plan, following a successful examination in public, is anticipated in early 2017.
- 3.8 The evidence of growth that has informed the Local Plan indicates a requirement to significantly boost the number of homes delivered in the Borough; alongside supporting investment in employment land and retail facilities.
- 3.9 North Tyneside has identified in its emerging Local Plan a requirement to provide for some 17,388 additional homes between 2011 and 2032. At March 2016 over 4,700

⁶ Council Plan, Our North Tyneside http://my.northtyneside.gov.uk/category/368/our-north-tyneside-plan



1.1

6

homes already benefit from planning permission and approximately 2,200 homes have already been built. As a result, there is a need for at least an additional 10,488 homes across North Tyneside, to provide the homes required for current and future residents.

- 3.10 The proposed development at Murton Gap is identified as delivering approximately 3,000 homes, whilst Killingworth Moor is expected to deliver approximately 2,000 homes in addition to 17 hectares of employment land. The development capacity of these sites is a significant proportion of the overall needs for housing growth within North Tyneside up to 2032. Ensuring development at both sites creates safe, sustainable and attractive places for existing and future residents to live is therefore of crucial importance to the future of North Tyneside as a whole.
- 3.11 The Murton and Killingworth sites require a thorough and robust understanding of the need for all infrastructure, services and facilities on the sites including the needs for new school provision, open space, public transport provision, retail, health and community facilities. Any new housing schemes in the Borough must make sure that they balance the requirement to make contributions to the supporting infrastructure, economy and environment, whilst ensuring that the schemes remain economically viable and deliverable by the developer.



4) Definition, scope and prioritisation of Infrastructure

What is Infrastructure?

- 4.1 Infrastructure has a very broad definition, and can cover anything from large scale transport schemes down to streetscape improvements and river course restoration.
 Paragraph 216 of the Planning Act 2008 defines infrastructure as including:
 - (a) roads and other transport facilities,
 - (b) flood defences,
 - (c) schools and other educational facilities,
 - (d) medical facilities,
 - (e) sporting and recreational facilities,
 - (f) open spaces, and
 - (g) affordable housing
- 4.2 Affordable housing was removed from the definition of infrastructure in the Community Infrastructure Levy Regulations 2010.

Planning Obligations and Developer Contributions

- 4.3 North Tyneside currently meets the infrastructure needs from new development on an application by application basis. When conditions attached to a planning consent are not sufficient to meet this need, a planning obligation can then be used. Planning obligations and developer contributions ensure infrastructure can meet the impacts of development such as increasing population and can include payments for infrastructure provision, land transfers and landscaping maintenance agreements. Each contribution must be:
 - Necessary to make the development acceptable in planning terms;
 - Directly related to the development; and
 - Fairly and reasonably related in scale and kind to the development.



- 4.4 North Tyneside Council has adopted a guidance document on planning obligations (LDD8)⁷, setting out when we would ask for contributions and the formula to determine how much we would request. It covers:
 - Health
 - Green spaces (including allotments)
 - Children's play
 - Sports facilities
 - Education

- Employment and training
- Affordable housing
- Highways
- Community facilities
- Culture and public art.
- 4.5 **Section 106 Agreements -** Section 106 agreements are a form of planning obligation and are a legally binding agreement between the applicant and the Council.
- 4.6 Section 106 agreements are used to mitigate the impacts of a proposed development which would not otherwise be considered acceptable in planning terms.
- 4.7 Section 278 Agreements Particularly for highway requirements arising from development the use of s278 agreements applied through conditions upon development are utilised. These agreements between the Highway Authority and developer set out works to the highway identified as necessary, which are then carried out by the developer responsible.
- 4.8 **Community Infrastructure Levy** The Community Infrastructure Levy (CIL)⁸ was introduced under the CIL Regulations 2010⁹ and subsequent amendments. This legislation now restricts the pooling of more than five Section 106 agreements for the same project or infrastructure. This pooling limit started in April 2010. Currently no pooling limits have been breeched within North Tyneside. CIL is a tool for Local Authorities to help deliver infrastructure to support the development of the area. CIL can be chargeable on any development which creates additional floor space, with some exceptions such as social housing.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197687/Community_Infrastructure_Levy_2013.pdf http://www.legislation.gov.uk/uksi/2010/948/contents/made http://www.pas.gov.uk/3-community-infrastructure-levy-cil/-/journal_content/56/332612/15149/ARTICLE



http://www.northtyneside.gov.uk/pls/portal/NTC_PSCM.PSCM_Web.download?p_ID=510019

- 4.9 Funding collected through CIL is to be used on infrastructure needed to support development in the area, focusing primarily on the provision of new infrastructure. North Tyneside has not yet introduced a CIL but aligned with introduction of the Local Plan and review of LDD8 Planning Obligations SPD, will be setting out a programme for its preparation and adoption CIL for some forms of infrastructure.
- At this time, a "Regulation 123" infrastructure list, that would be informed by the North Tyneside IDP and this site specific IDP, would be compiled stating projects and infrastructure to be funded through the levy. Any item that is on the list cannot be then included as part of a Section 106 agreement. Both section 106 and CIL help to provide the infrastructure requirements of new development in different ways. It is not anticipated at this stage that introduction of CIL would introduce additional financial costs upon the Strategic Sites to those estimated within this site specific IDP. A likely CIL will consider matters such as funding for education provision across the Borough and maintenance and management of open space, requirements that are included as specific costs within this IDP. In such circumstances where potential CIL contributions being developed or proposed may overlap with specific requirements for the Strategic Sites measures to avoid the risk of "double dipping" will be included, In such circumstances it is probable that a zero rate area for the boundary of the Strategic Site allocations would be proposed.

Priorities and developer contributions

4.11 Murton Gap and Killingworth Moor are in close proximity and there are interdependencies in terms of strategic transport, social and green infrastructure. It is imperative, therefore, that both sites are considered collectively, as well as individually, to ensure the proposals are co-ordinated to address issues beyond each individual site. Whilst both sites provide sustainable locations for new development, as major new areas of development in the area additional infrastructure needs do arise and must be addressed for the impacts of the developments to be acceptable. In particular ensuring the timely delivery of new road and public transport infrastructure and introduction of new primary and secondary school places to accommodate growth are high priorities for this site specific IDP and likely to be essential requirements. Other elements of the infrastructure needed may be



identified as desirable for meeting overall needs but more negotiable if issues are identified within the overall viability of the scheme, tested through a range of scenarios identified in the Site Specific Viability Assessments previously referred to.



5) Murton Site Specific Infrastructure

- 5.1 Within the emerging Local Plan, the Murton Strategic Allocation (Sites reference 35) to 41) is identified to deliver approximately 3,000 homes during the plan period, and convenience retail provision of approximately 1,000sqm. The homes provided should consist of a mix of tenures, types and sizes informed by evidence of housing needs for the Borough. The Local Plan, informed by current evidence of the economic viability of housing, requires 25% of homes to be affordable. The proposed affordable housing policy set out within the Pre-submission Draft Local Plan is clear that the specific proportion of affordable housing provision for each site would have regard to the specific circumstances and economic viability of the site. The Viability Assessment work undertaken alongside this site specific IDP has considered the application of a 25% target and an additional sensitivity scenario with zero affordable housing. At this stage, the Council's view is that this evidence would support delivery of the preferred target on Murton Gap. It is acknowledged that this position may alter as further detailed evidence of the nature and costs for development and infrastructure becomes available; and the implications of national policy changes, such as the delivery of Starter Homes are developed and taken into account.
- Housing mix Whilst the specific mix of housing provision that will be provided on the site is not fixed and will continue to evolve until planning applications are approved an indicative mix of development has been assumed. This mix has been based upon examples of development elsewhere within North Tyneside and the basis employed for this assessment is set out below in Table 1.

Table 1: Murton Gap assumed dwelling mix scenario

Dwelling Size (bedrooms)	Est. Homes	Market	Afford	able
1 bed dwelling	353	204	149	(42%)
2 bed dwelling	628	215	413	(66%)
3 bed dwelling	1049	899	150	(14%)
4 bed dwelling	970	932	38	(4%)
Total	3,000	2,250	750	(25%)



5.8 Table 2 below calculates the proportion of affordable housing that would be delivered if all homes were General Needs, not including any specific requirements for specialist homes and provided at a rate of 25% of the scheme as a whole. The Council is aware of significant needs for a more specialist housing provision, particularly for the growing elderly population of North Tyneside. These options are currently being developed by the Council's Housing Strategy Team.

Table 2: Murton Gap affordable housing mix (General Needs Option)

Property type & size	Proportion of General Needs affordable Homes across the sites	Potential Number of Rented Affordable Units	Potential Number of Intermediate Affordable Units	Total
1 bed bungalows	5%	28	9	37
2 bed bungalows	15%	84	28	112
1 bed flats	15%	84	28	112
2 bed flats	10%	56	19	75
2 bed houses	30%	168	58	226
3 bed houses	20%	112	38	150
4 bed houses	5%	29	9	38
Total	100%	561	189	750

North Tyneside Strategic housing Market Assessment (Arc4) and Housing Assessment, (NTC Housing Team)

5.9 **Phasing and delivery** - The anticipated phasing and rate of housing delivery upon which the infrastructure requirements identified are based on, are as follows:

Delivery Phase	Phase 1	Phase 2	Phase 3
Housing Delivery	1,020	726	1,254
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032

- 5.10 Concept Framework objectives The Local Plan policy approach and outlined indicative requirements for development of the Murton Site are informed by the Murton Gap and Killingworth Moor Concept Framework¹⁰. This Concept Framework provided a set of Objectives for development of the Murton site:
 - To deliver high quality residential environments that exploit their physical location.
 - To connect with and integrate the green environment and corridors.

¹⁰ Murton Gap and Killingworth Moor Concept Framework, Pick Everard, October 2015



- There is the opportunity to increase the sustainability and attractiveness of existing settlements through the delivery of sensitive development, infrastructure and environments.
- It is possible to create good strategic highways links, good community connections and promote transport modal shift using the Metro, buses, pedestrian routes and cycle ways.
- Access to existing community facilities and local centres facilitate early phase residential delivery, initially borrowing from and ultimately enhancing their vitality and success.
- This is the only site that could deliver a strategic highway link to alleviate pressure on the wider transport system.

Transport

Primary Highways

- 5.11 The North Tyneside Highway Impacts Report¹¹ has informed development of the Concept Framework and defined a requirement for primary road infrastructure including a strategic north-south highway link and access junctions at the A186 and the A191. This is to relieve congestion in the wider network, providing a 'preferred route' for vehicles currently passing through Shiremoor and Monkseaton and is essential if the road network is to accommodate the additional traffic arising through development at Murton. The North Tyneside Highway Impacts report provides further advice regarding the costs and benefits of this route.
- It is additionally noted that this primary link, to the north beyond the metro line is required to extend into the North Tyneside Green Belt. Due to the essential nature of the link road this route has been assessed as local transport infrastructure that is required in the green belt and is therefore not considered inappropriate development (paragraph 90 National Planning Policy Framework). Further analysis of this is provided within the North Tyneside Green Belt Assessment 2015¹².

North Tyneside Green Belt Land Assessment, October 2015 http://www.northtyneside.gov.uk/pls/portal/NTC_PSCM.PSCM_Web.download?p_ID=559129



¹¹ North Tyneside Council Local Plan Highway Impact Study, 2016, Capita North Tyneside

- 5.13 To the north access is proposed from A186, south of the village of Earsdon, close to the existing roundabout of the A186 and A192. To the south access is proposed from the A191, to the west of New York village, avoiding the existing rural lanes to Murton village.
- 5.14 The A186 / A191 strategic link road is treated as an additional requirement to enhanced road standards above the estate road infrastructure that would otherwise be required to access the whole of the site for development. The estimated cost for delivery of the link road is therefore based on the additional cost arising to deliver a route capable of providing a strategic link.

Secondary Highways

- 5.15 An illustrative 'secondary highway network is proposed within the Indicative Concept Plan. This allows for phased delivery options and the parallel delivery of separate development parcels. This network is proposed to ensure the internal linkages compliment the primary highway link road and access and enables a flexible approach to phasing maximising the number of potential development parcels that can be supported. The highway network also reflects the strategic priorities outlined within the Concept Framework connected to preserving the integrity of Murton village as a distinct place.
- 5.16 Across the secondary highway network vehicular traffic will be constrained or halted at certain points to control the potential volume of traffic entering and exiting the site at any given junction and its dispersal onto the wider road network.
- 5.17 For access to the north the network connects with the primary highway link road and subsequent primary junction with the A186. The network provides several options for connecting with the wider road network at the sites southern boundary, in addition to the primary highway route. Two secondary access points are preferred:
 - A junction that connects with the existing A191 underpass in New York;
 and,
 - A junction at the existing roundabout on Rake Lane, opposite the North Tyneside General Hospital.



Delivering Highway Infrastructure

- 5.18 The Transport Impact Assessment has identified a significant amount of highways infrastructure that will be required during the first five year phase of development, informed by the developers proposed rate of housing delivery.
- 5.19 To ensure impacts upon the wider highway network are limited before significant growth in traffic results in severe impacts for the Borough, a priority is the completion of the Earsdon to New York Road link road. This will require delivery concurrently with the first phase of housing development and completion with a full route in place by 2022/23. This will also include delivery of a road bridge over the metro line and suitable junction arrangements at the A186 at Earsdon and at the A191 at New York. Creation of a new access for the new link road at New York Road is likely to be the first stage in delivering the primary highway infrastructure, enabling access to the site and commencement of housing delivery from the south.
- 5.20 Meanwhile, to enable concurrent delivery of development parcels during Phase 1, the creation of suitable access junctions at the Murton Lane junction with Westminster Avenue in New York, and the Rake Lane Hospital access will also be required during the first years of the development.
- 5.21 Meanwhile, a range of off-site works will be required that development at Murton will need to ensure delivery, through section 278 agreements with the Council as Highway Authority, or through section 106 contributions.
- This includes the road infrastructure surrounding the A191 New York roundabout required to access the site and the new north-south link road. Due to the increase in traffic in this area arising from the development and completion of the new connection road enhancements will be necessary between Park Lane and Norham Road to avoid severe impacts upon the network and ensure the road infrastructure performs its wider strategic role of channelling traffic headed to Newcastle from the site and the north east of North Tyneside to Norham Road and the Coast Road. Further minor enhancements will be required at the junction of Norham Road with



Westminster Avenue. This reflects the secondary access provided from Murton Lane to Westminster Avenue at New York village.

5.23 The Highway Impact Report further identifies a need for off-site highway improvements at the Foxhunters and Tynemouth Pool junctions. The need for improvements to Foxhunters are not considered to be fully the result of development at Murton Gap, with the strategic link road and a proposed restriction to the number of homes able to access the A191 Rake Lane secondary access minimising the impact of the development of Murton Gap upon the junction. As such potential costs for improving the Foxhunter junction are not included in this report. Issues arising at Tynemouth Pool are more closely aligned to development at Murton however and a section 106 contribution is proposed. At this time a robust estimate of the contribution required from the Murton Gap development has been made. However, once the full off-site developer contributions model has been developed this figure may be amended. O here are less substantial than would be required without the proposed link road. These impacts have been assessed as materialising during Phase 2 of the development build out.

Table 3: Murton Gap Highway Infrastructure Requirements

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	/ Desirable	Source – Probable Delivery
Murton Link Road	£5,200,000			Essential	Developer – s278
A186 Earsdon Rd Roundabout	£3,600,000			Essential	Developer – s278
A191 Roundabout Rake Lane	£2,090,000			Essential	Developer – s278
A191 Roundabout New York Rd	£2,000,000			Essential	Developer – s278
New York Road Access	£900,000			Essential	Developer – s278
Bridge over Metro line	£2,000,000			Essential	Developer – s278
Westminster Ave	£300,000			Essential	Developer – s278



Delivery Phase Anticipated Years		Phase 2 2023 - 2027	Phase 3 2028 - 2032	Essential / Desirable	Source -
Norham Rd/Park Lane	£1,750,000				Developer – s278 / s106
Tynemouth Pool		£1,615,000		Essential	Developer –

*N.B. Current cost estimate for this highway infrastructure reflects cost tested by the Viability Assessment but is currently indicative and may change prior to issue of draft report.

Public Transport Provision

- 5.24 **Bus -** Provision will be made for bus access throughout the primary and secondary highway network with the inclusion of bus only access at certain points where access for car users will be limited to manage traffic impacts. Access to bus services and facilities are a critical component for sustainable transport and creating a modal shift from the car to public transport. The location of routes and stops will be determined by phases of development, uses, infrastructure delivery, commerciality etc... and should have a close relationship to likely travel patterns and density of development within the site.
- 5.25 The Public Transport Study¹³ has identified the provision of a new bus service linking Murton Gap and Killingworth Moor with key employment and retail centres. This is likely to require subsidy from the development to ensure that sustainable modes of travel are a suitable and attractive option for residents of new properties.
- 5.26 Metro The potential of a Metro station at Murton Gap benefits from support in principal from Nexus, pending overall demonstration through a business case for the viability of the facility. The trip rate benefits arising from inclusion of a Metro station have been incorporated into the Highway Impacts report.
- 5.27 Further feasibility work to understand the precise costs and benefits of a Metro station at this location and public transport provision in general is covered within a

¹³ Murton Gap and Killingworth Moor Public Transport Study, 2016, Capita North Tyneside



Murton and Killingworth Public Transport Study. Whilst further work will be necessary to develop a full business case for Metro Station provision, if a metro were not included as part of development proposals at Murton Gap, an equivalent level of public transport patronage would be sought through enhanced bus service provision. Ultimately, it may not prove possible to achieve the same reduction in private vehicle trip rates without a Metro Station and in those circumstances any additional local highway or strategic road network implications would also require mitigation. In accordance with the overall implications of ensuring the deliverability of the Murton Gap site, the impact of such a change upon the economic viability of the scheme would be considered.

- 5.28 The potential location of a new Metro station is on the northern boundary and to the west of the potential road bridge spanning the existing Metro. The Metro station could significantly reduce numbers of secondary school children travelling by car and commuters particularly travelling to Newcastle city centre.
- 5.29 Potential provision of a Metro station at Murton may also provide an opportunity to allow for a park-and-ride facility to accommodate commuter vehicles from the north, although such provision is not included as a specific infrastructure requirement. Bus routes would be required to link with any Metro station and connect new and existing residential zones, via a link route within the site.
- 5.30 In addition to the site specific requirements for public transport provision North Tyneside Council in working with its partners Nexus may in the future look to introduce a Community Infrastructure Levy charge for the enhancement of overall public transport infrastructure, or specifically key schemes identified for example within the Tyne and Wear Metro Strategy. Whilst such requirements are currently undeveloped and further work would be required to consider the potential introduction of some form of CIL rate aligned to public transport an additional cost has been included in this IDP and the Viability Assessment.

Delivering Public Transport Infrastructure



- 5.31 To ensure take up of public transport provision at new development sites the availability of the service early in the development is generally considered essential to gain patronage from new residents before firm patterns of travel are established. It is therefore anticipated that the bus service would be required along side the early delivery of homes with the network clearly based upon the extent of development of the site at the time. It is therefore anticipated that a section 106 contribution to subsidise the delivery of a bus service for the site will be required during the first few years of development as residents begin to occupy the site. This funding will be required to continue until established as a viable commercial service.
- 5.32 This principle of early delivery would apply equally to the provision of a new Metro station. However, with the only potential location for the station fixed by the metro line it will not be feasible for the metro station to be delivered until at least completion of the link road bridge over the metro. Additionally, the financial impact of delivering a metro station is acknowledged and it would not be practical or realistic to require such delivery until Phase 2 of the scheme overall.
- 5.33 At this time it is anticipated that the provision of a new metro station would be funded by the development, and the full cost of this has been tested within the Viability Assessment. However, the North Tyneside Council recognises the wider strategic role of new metro provision and will continue to explore options to secure additional public funding that may become available via routes such as the Local Enterprise Partnership and North East Combined Authority to supplement developer contributions to the new Metro station.

Table 4: Murton Gap Public Transport Infrastructure Requirements

	Phase 1 2018 - 2022	Phase 2 2023 - 2027	Phase 3 2028 - 2032	Essential / Desirable	Source -
New Bus Service	£600,000	£1,000,000	£1,000,000		Developer – s106 agreement
Metro Station	£1,700,000	£3,300,000			Developer / Public funding – s106
CIL infrastructure contribution	£244,800	£174,240	£300,960	n/a	CIL (pending introduction)



Cycleways, Bridleway and Pedestrian Routes

- 5.34 The site is crossed with an established network of public rights of way and other non motorised links, which connect existing mixed-use centres with Murton village, neighbouring communities and beyond. A Pedestrian and Cycling Study¹⁴ has been developed that complements the outline approach set out within the Pick Everard Concept Framework.
- 5.35 This study establishes in some further detail key principles for pedestrian and cycle routes through the site and connections to neighbouring communities. This highlights a preferred range of on-site routes and off site enhancements to ensure good, clear, safe routes for pedestrians and cyclists. The following routes, are cross-referenced against mapping available within the Murton and Killingworth Moor Pedestrian and Cycling Study and include:

5.36 Primarily on-site connections at:

- EX2 Link along the southern perimeter of the Murton Gap site along A191
 connecting the new infrastructure installed with the Murton Gap development;
- EX5 Existing bridleway improvements and shared use provision adjacent to Park Lane in South Shiremoor to provide direct link between Murton Gap site and Northumberland Park Metro station linking with NCN Route 10 to Cobalt Business Park and beyond;
- EX7 Proposed signage and traffic free path with crossing on Park Lane to provide a link between the Murton Gap site, Shiremoor Centre and Shiremoor Metro station;
- EX8 Proposed signage and traffic free path connecting the Murton Gap site
 with A192 Earsdon Road at Monkseaton Drive improving connectivity to the
 existing network to Wellfield, Wellfield Middle School, Beaumont Park housing
 estate and providing access to the Coast via NCN Route 1; and
- EX9 Proposed signage on Cauldwell Avenue, Cauldwell Lane and Drumoyne Gardens to provide improved cycle provision between the Murton Gap site, Monkseaton Town Centre, Monkseaton Middle School and beyond.

¹⁴ Add reference when work Cycling Study is available.



5.37 Primarily off-site connections at:

- EX1 –Link between proposed A191 corridor cycle route and proposed improvements to Coast Road cycle route - Provision of shared use footway / cycleway adjacent to A192 Preston North Road with associated crossings to connect the two major pedestrian and cycle improvement schemes and Murton Gap site;
- EX3 –Link through village connecting A191 New York Road with A191 Rake Lane. Potential minor amendments to traffic and parking restrictions to provide more of a village feel making it safer for cycling and walking;
- EX4 Link between proposed A191 corridor cycle route and proposed improvements to Coast Road cycle route – Provision of shared use footway / cycleway adjacent to Norham Road North to provide a second connection between the two major pedestrian and cycle improvement schemes and Murton Gap site;
- EX6 Existing bridleway improvements, traffic free path and crossing to provide connectivity between the two strategic sites at Northumberland Park Metro station;
- 5.38 Based upon these proposed connections, the Pedestrian and Cycle Study provides estimated costs for the delivery for the on-site and off-site infrastructure.

Table 5: Murton Gap Cycle and Pedestrian Infrastructure Requirements

Delivery Phase Anticipated Years	Phase 1 2018 - 2022	Phase 2 2023 - 2027	Phase 3 2028 - 2032	Essential / Desirable	Source -
On site, pedestrian and cycle connections.	£834,442	£593,926	£1,025,872	Essential	Developer – on site condition
Off site Pedestrian and Cycle Connections	£214,114	£152,399	£263,235	Essential	Developer – s106
Off site Pedestrian and Cycle Connections	£319,896	£227,691	£393,284	Desirable	Developer – s106

Community Hubs and Facilities

5.39 A key objective is to provide access for new residents to key facilities and services within easy walking distance. Whilst the development of the site should support the sustainability of existing facilities adjacent to the site at New York and Monkseaton in



particular, the inclusion of such facilities within new mixed-use community hubs can provide a focal point for the development and provide services such as a local shop, doctors or dentists or some other form of community facility. Such a centre is unlikely to be commercially viable during the early years of development and until appropriate facilities can be supported and provided on site new residents will need to benefit from high quality access to existing provision nearby. The Retail Requirements Assessment¹⁵ provides an outline of the scale of retail provision that may be appropriate at Murton indicating the site could support provision of about 1,000sqm of convenience retail by 2032.

- 5.40 The precise scale, mix of uses and locations of new community hubs and facilities are indicative and will be further established through later Detailed Development Framework preparation and masterplan submission.
- 5.41 Provision of community hubs themselves are not a costed infrastructure requirement as they simply outline an opportunity for an alternative land use within the overall development.

Community Facilities

5.42 Existing facilities have the potential to serve early phases of development and to create community connections between existing and new residents. At present no specific requirements have been identified for the provision of facilities such as community rooms or buildings. However, appropriate off-site contributions towards facilities that would experience greater pressure as a result of the development is anticipated and an estimated cost assumption has been calculated.

Table 6: Murton Gap Community Facilities

rabio of marton cap oc		aomao			
Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 -	2023 - 2027	2028 - 2032	/	Source -
	2022			Desirable	Probable
					Delivery
Community Facilities (e.g.	£183,831	£130,844	£226,004	Desirable	Developer -
Library, community room					s106
on site or off-site					

¹⁵ North Tyneside Local Plan Retail Requirements Assessment, Capita, 2015



contribution to			
enhancement and			
maintenance.)			

Healthcare

5.43 The expected increase in population across Murton Gap by 2032 will clearly place increased demand on existing general practice services. Based on maintaining the current model of delivering GP services, the following estimate provided by the North Tyneside Clinical Commissioning Group (CCG) and NHS England¹⁶ has been made. This considers the increase in workforce and premises capacity that is projected to be needed to ensure that the increased population all have access to general practice services.

Table 7: Murton Gap Health facilities detailed outline of provision requirements

Move to a recommended patient per FTE GP ratio of 1,500 patients per FTE GP (based on weighted list size)	
Raw list size increase (number of potential patients)	7,064
Weighted list size increase	7,253
Increase in GP workforce FTE	3.5
Estimated increase in premises m ²	438

- 5.44 This indicates that a contribution of approximately 438m² of additional floorspace would be required due to the increase in patients arising from the development. At this time the CCG are continuing to review the model for health care provision in North Tyneside. This is leading to a degree of uncertainty over the specific space requirements for meeting future patients' needs. Consequently there is not a specific preference for provision of a new GP surgery on the site but rather for a contribution to be administered by the CCG and NHS England for addressing requirements within North Tyneside.
- 5.45 To reflect this, in addition to the advice provided by the CCG and the estimates of overall potential requirements for health provision informed by the North Tyneside Planning Obligations SPD the proposed requirements for health care provision are set out below.

¹⁶ Local Plan – GPs Impact Assessment, North Tyneside CCG and NHS England, October 2015



^{1.1}

Table 8: Murton Gap Health Care Infrastructure Requirements

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 -	2023 - 2027	2028 - 2032	/	Source -
	2022			Desirable	Probable
					Delivery
Healthcare		£1,095,820		Essential	Developer -
					s106

5.46 Potential options for future provision at Murton Gap could consequently include enhanced provision to existing facilities elsewhere, the creation of a small branch surgery to a wider practice to meet the needs of residents on the site, or the relocation of an existing practice (potentially in currently ageing or inappropriate accommodation) to a new facility at Murton Gap. Any such facility would be brought forward following consideration of all potential additional sources of funding and form part of overall efforts to modernise and enhance health care delivery. It would additionally be expected that if such new accommodation were created the inclusion of services such as physiotherapy, speech therapy etc... could be considered.

Schools and Education

5.47 Schools are a crucial element of the local infrastructure and therefore the growth and contraction of local provision of school places must be considered alongside the development of the Local Plan and in particular its impacts on future housing provision. The Education Impact Assessment, October 2015 and Full Updated Education Impact Report, May 2016¹⁷ makes an assessment of pupil generation arising from the proposed development of homes identified in the Local Plan.

Secondary School Provision

5.48 The assessment concludes that where the available capacity in secondary schools, after maximum expansion, falls below 10% new secondary school place provision would be required in the Borough. The location of the Secondary School is driven by an assessment of forecast pupil distribution and the existing arrangement of secondary schools and catchment areas. This analysis is explained within the

¹⁷ Local Plan Education Needs Impact Assessment, 2016, North Tyneside Council



Education Needs Impact Assessment. New secondary school provision would be located within Killingworth Moor, rather than Murton Gap.

- However, a financial contribution from development at Murton will be required to support provision of secondary facilities at Killingworth Moor to address the sites' impact upon overall pupil numbers in North Tyneside.
- 5.50 The current evidence for growth in secondary school pupils over the Plan Period, and the relationship to schools capacity is identified within the Education Impact Report. This is summarised in Table 9 below.

Table 9: Overall pupil capacity for forecast growth

Table of Orelan paper capacity for forecast grown							
	2015/16	2018/19	2020/21	2022/23	2024/25		
School Places Capacity	14,606	14,606	14,606	14,606	14,606		
95% of Capacity	13,876	13,876	13,876	13,876	13,876		
90% of Capacity	13,145	13,145	13,145	13,145	13,145		
Baseline Pupil Projection	12,031	12,479	13,082	13,368	13,406		
Pupil Projection + Housing	12,083	12,767	13,537	13,932	13,953		

Source: North Tyneside Local Plan Education Impact Assessment, North Tyneside Council

5.51 Table 9 illustrates that by 2020/21 the impact of pupil growth and housing development would see the total pupil population exceed the net capacity for North Tyneside as a whole at 90% of capacity to allow range and choice for pupils and in build resilience to change.

Primary School

- 5.52 The Education Impact Assessment identifies a new primary school is identified as required at Murton. The primary school should be located to the west of the site located to respect the distribution of current catchment areas and potential future changes aligned with delivery of a new secondary school.
- 5.53 The trigger point to open dialogue for the delivery of additional primary school places, either by the reintroduction of mothballed capacity, or new provision would be when the annual birth rate reduces the projected surplus places to a level of less



than 10%. A new primary provision would require a 4 year programme in terms of planning, commissioning, construction and opening.

5.54 The current evidence for growth in primary school pupils over the Plan Period, and the relationship to schools capacity is identified within the Education Impact Report.

This can be summarised as follows:

Table 10: Total primary pupil capacity (with 90% and 95% limits) and projected

pupil growth

papii gi oirai						
	2015/16	2016/17	2017/18	2018/19	2019/20	
Total Pupil Capacity	17,167	17,167	17,167	17,167	17,167	
95% of Pupil Capacity	16,309	16,309	16,309	16,309	16,309	
90% of Pupil Capacity	15,450	15,450	15,450	15,450	15,450	
Baseline Pupil Projections	15,603	15,690	15,689	15,756	15,608	
Baseline Projection + Housing	15,723	15,973	16,150	16,436	16,487	

Source: North Tyneside Local Plan Education Impact Assessment, North Tyneside Council

Delivering new school places

- 5.55 As set out above the trigger for progressing with plans for the delivery of new schools will be informed by monitoring of the Local Authorities Pupil projections. As can be seen in Table 10, projections, at this time, illustrate that there is already a shortfall in primary school places at 90% of capacity. With no sufficient existing capacity, on a net basis for the Borough as a whole there is therefore an identified requirement for primary school provision. Based upon the current phasing and rate of delivery it is anticipated that a new primary school would be required to open early in Phase 2. The primary school will serve the needs of residents of Murton and it is anticipated will be delivered by the development.
- 5.56 The Education Impact Assessment also identifies a requirement to open a new secondary school at Killingworth Moor by the end of Phase 1. This is recognised as a strategic infrastructure requirement for the Borough, and consequently the Education Report proposes the pooling of 5 section 106 contributions from a range of major schemes focused around the A19(T) and the settlements of Backworth, Shiremoor and Holystone.



- 5.57 This would include a contribution from Murton Gap and Killingworth Moor. An additional contribution from Community Infrastructure Levy (for which the strategic site allocations will be set at a zero rate) will be considered for smaller development sites in the Borough.
- 5.58 North Tyneside Council officers are currently exploring opportunities for loan or grant funding to enable the early delivery of secondary school provision within imposing significant costs upon development. This enables the section 106 contribution from Murton Gap to be phased in keeping with the rate of delivery of new homes.

Table 11: Murton Gap Education provision

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	/ Desirable	Source – Probable Delivery
Primary School	£2,200,000	£2,200,000		Essential	Developer – s106
Secondary School	£2,983,225	£2,123,354	£3,667,611	Essential	Developers – s106 (strategic site), CIL contribution



Surface Water Management

- 5.60 Flood risk mitigation measures at Murton have been identified through a range of evidence base documents that reflect joint working between the North Tyneside Council Flood Risk Team, Capita North Tyneside, Northumbrian Water Ltd and the Environment Agency. An area based Flood Risk Assessment¹⁸ has been prepared that provides some initial directions to the type and scale of measures that could be taken:
- 5.61 **Layout -** The development layout should incorporate the provision of surface drainage through features such as ditches or streams so that surface water from the land is channelled into attenuation features or suitable watercourses / culverts, keeping residents within and around Murton Gap safe during extreme and intense rainfall events.
- Adopting a multi-purpose green corridor is proposed as a drainage strategy for site within the Broad Scale Flood Risk Assessment for Murton Gap. This would provides the opportunity to create a multi-stage channel with multiple distributed surface water attenuation features through the centre of the site and would be capable of being accommodated within the identified Concept Framework included within the Local Plan. Use of this approach provides an increased area / buffer to manage overland flows on site, provide an amenity space for residents and visitors and increase the site's biodiversity. Incorporation of a suitable feature into future layout and design of the site, capable of functioning to the capacity required will therefore be important to according with the flood risk and water management policy of the emerging Local Plan.
- 5.63 Sustainable Drainage Systems (SuDS) should be incorporated into the development layout to the greatest extent possible. SuDS Infiltration Mapping data identified within Appendix D of the Draft Broad Scale Flood Risk Assessment for Murton Gap and future site investigations should guide the placement of infiltrating

¹⁸ Draft Broad Scale Flood Risk Assessment: Murton Gap, Capita, August 2015



^{1.1} _____

SuDS to the most beneficial locations on site. Non-infiltrating SuDS like rainwater harvesting and green roofs should be used where infiltration is not feasible.

- Surface Water Management A strategic opportunity to integrate development of the site at Murton with wider strategic solutions to surface water management, and removal of rainfall from the combined sewer is identified as a primary infrastructure opportunity. Joint working with Northumbrian Water Ltd (NWL) and the Environment Agency has helped identify this opportunity. The overall solution redirects surface watercourses that currently enter the limited capacity sewerage network at Briarvale, Monkseaton to a large capacity culvert adjacent to North Tyneside General Hospital. Additional connections at points between Marden Quarry and the North Sea at Cullercoats enable the connection of the Murton Gap site with rain outfalls at the coast.
- 5.65 Ensuring development on site complements and supports this infrastructure solution will remove a significant surface water and sewerage flooding risk for existing residents at Monkseaton, provide an outlet for surface water from the development site and create additional headroom capacity at Howdon Waste Water Treatment Works for foul water treatment.
- Sustainable Drainage Features Management and Maintenance The Council is currently exploring options for the future management and maintenance of Surface Water Drainage features under its role as Local Lead Flood Authority. At this time, the Council does not have a formal position of adopting new SuDS with specific arrangements for each scheme agreed with the developer or applicant as proposals are put forward. Other options for future maintenance and management of SuDS, in addition to their potential adoption by the Council, may include ongoing management by the developer or appointment of a 3rd party management company. It is probable under each of the options some form of cost recovery by the landowner or developer such as land charge on new households would be necessary. Therefore, whilst management and maintenance of SuDS must be considered in any drainage strategy developed for the site, for the purposes of this Infrastructure Delivery Plan the requirement will not lead to an additional infrastructure cost for the development.



Delivering drainage infrastructure

- 5.67 It is assumed for the purposes of this Site Specific IDP and the site Viability
 Assessment that much of the drainage infrastructure required for the site will be
 delivered as part of the general estates and landscaping costs expected for the
 scheme. However, it is also recognised that some additional uplift in standards and
 provision may be sought to ensure the objectives and matters set out above are
 addressed.
- 5.68 Consequently an assessment has been made of further drainage infrastructure provision that may be required through a planning condition seeking a section 106 agreement. Any such contribution is anticipated to be phased across the life of the development.

Table 12: Murton Gap Drainage Infrastructure - Flood and Surface Water Management

	Phase 1 2018 - 2022		2028 - 2032	Desirable	Source -
Drainage Infrastructure	£816,000	£580,800	£1,003,200		Developers – s106

Green and Social Infrastructure

- 5.69 Green infrastructure is fundamental to ecology and biodiversity and for the creation of the development's Unique Selling Point (USP). It is integrated to:
 - Provide the necessary protection for ecology and biodiversity.
 - Create high quality, attractive environments for new development.
 - Promote healthy lifestyles and well-being.
 - Create pedestrian, cycle and bridleway connections between existing and new communities.
- 5.70 Providing green infrastructure as an integral part of new development is considered to be beneficial in many ways. For larger sites, green infrastructure networks should be considered as a key element of the vision, design and layout and should include



as many functions as possible. The Murton Gap Open Space Assessment¹⁹, undertook an assessment of needs at Murton that have informed this Site Specific IDP.

Open Space

- 5.71 Development of the Murton site has been identified as requiring:
- 5.72 **Equipped areas for play** a Neighbourhood or Strategic Equipped Area for Play (a NEAP or SEAP) of between 1,000sqm to 11,600sqm would be required in addition to a smaller Local Equipped Area for Plan (LEAP) of 600sqm to 800sqm.
- 5.73 Parks A minimum requirement is for provision of park space towards the centre of the site, with additional provision to address any gaps where new housing delivery would fall outside defined catchment areas. A strategic and Concept Plan requirement for open space and parkland includes the opportunity to incorporate a Country Park through the centre of the site (around Murton village) that would ensure accessibility for residents to public open space.
- Natural and Semi-Natural Green Spaces At present, only very small parts of the northern and western areas of the site fall within the catchment of existing provision. Provision should aim to match or exceed the Borough average of 35.8% of households within catchment. Possible duplication with landscapes delivered as part of SuDS or other measures need to be considered.
- 5.75 General Green Space Much of the suggested site falls within the catchment of existing green space and other forms of provision would additionally improve General Green Space. Not all existing space is of an acceptable quality. A site north of Murton Village and a site on New York Road are both of poor quality. If development relies on this existing space contributions would be required for their improvement.

¹⁹ Murton Gap Open Space Assessment, Capita North Tyneside, July 2015



^{1.1}

- 5.76 **Playing Pitches** In net terms, additional playing pitches are not required to meet the needs of the Borough or this site. However, development does increase usage of existing facilities and support to improve / enhance those would be required.
- 5.77 **Allotments** The delivery of one allotment per 27 households is proposed as appropriate to ensure that new homes do not worsen the current over-demand. For 3,000 homes this would be 111 allotments.
- 5.78 **Management and Maintenance** Prior to development, an agreement will be required with the developers and the Council to ensure the maintenance and management of any open space provision will be resourced. This may be via a commuted sum from the developers, a residents' maintenance fee, an agreement that developers retain direct (or in-direct through a third party) responsibility for maintenance in perpetuity, or the formation of a residents' trust.
- 5.79 General guidance for costs of green spaces, playing pitches, and allotments and its management and maintenance are provided based upon the Councils' section 106 contributions.
- 5.80 **Ecology and Biodiversity** There is no designated wildlife or biodiversity habitat within the Murton site. An extended Phase 1 habitat Survey²⁰ suggests that as predominantly agricultural land habitats are mostly of low ecological value, with few features of any specific ecological interest. Habitats present within the site include arable, improved grassland, hedgerows, broadleaf trees, scrub habitats and areas of ruderal vegetation. The creation of a roosting areas for Golden Plover connected to the delivery of another housing site, Station Road East, would require resolution to enable development of Murton to proceed. Work is currently ongoing to establish and agree an alternative site and is not expected to present a long term obstacle to development.
- 5.81 The provision of biodiversity enhancement to mitigate and avoid potential loss of biodiversity is a key requirement placed upon any future development. For Murton

²⁰ Extended Phase 1 Habitat Survey Report, Land at Murton, BSG, October 2015



Gap, as the site lies within 6km of the Northumbria Coast Special Protection Area (an International wildlife site designation) the Habitat Regulation Assessment and Appropriate Assessment (HRA/AA) has identified the need to ensure appropriate mitigation is provided to address potential increases in visitors to the Coast that may cause disturbance to qualifying bird species. As such the requirement for Suitable Alternative Natural Green Spaces (SANGS) has been highlighted through the HRA/AA and has been referenced within the strategic policy S4.4(a) for Murton Gap. This requirement should be considered through the appropriate design and layout of the Murton Gap site itself, but may additionally require enhancements to existing natural and semi natural environments – including Silverlink Biodiversity Park and Rising Sun Country Park. For further information, a note has been prepared by North Tyneside Council that sets out "Guidelines for the provision of SANGS within North Tyneside"²¹.

5.82 Existing habitats, wildlife corridors and green infrastructure should be incorporated within, and are a policy requirement, for further development frameworks and detailed masterplans. Landscaping within the site should include a diverse range of habitats, including open mosaic habitats, that will encouraged a greater diversity of species to inhabit the site than is currently present.

Delivering Green Infrastructure

5.83 The phasing and timing of delivery of Green Infrastructure and provision of potential mitigations for biodiversity species and habitats will generally be require to align with the build out of the development parcels themselves. It is therefore assumed within the delivery framework that phasing for delivery of such infrastructure needs will arise throughout the site. Meanwhile, where contributions will be towards enhancement or maintenance of infrastructure elsewhere a phased approach that ensure contributions are proportionate to development undertaken and their impacts is considered the most appropriate.

²¹ Guidelines for the provision of Suitable Accessible Natural Green Spaces in North Tyneside, Capita North Tyneside



^{1.1}

Table 13: Murton Gap Green Infrastructure and play facilities

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	/ Desirable	Source – Probable
					Delivery
Sport & Recreation	£862,129	£613,633	£1,059,911	Desirable	Developers – s106
Environment, Public Realm / Culture (Public Art etc)	£258,066	£183,683	£317,270	Desirable	Developers – s106
Play, Parks, Green Space and Biodiversity (SANGS)	£673,794	£479,583	£828,371	Desirable	Developers – s106



Energy and Utilities

- 5.85 Following consultation with existing service providers, the 'Utilities Assessment'²² highlights the outcome of an initial assessment of the Impact of the development and network Capacity.
- 5.86 Following the information received from the utility providers there are no reasons to suggest there would be any significant restrictions to the development proposed at Murton Gap based on existing or future utility infrastructure. This position will need to be kept under review as further detailed proposals are developed.
- 5.87 Overall there is limited detail from the utility providers at this early stage in the development process. It would be anticipated that a Stage 2 commission would provide a more in depth analysis of future infrastructure requirements and budget estimates. However, at this stage the following estimates and assumptions about requirements can be made:
- 5.88 Water Sustainable surface water drainage should be encouraged. As already discussed a Northumbria Water Ltd project at Marden Quarry could have a bearing on the surface water drainage proposals and future assessments should consider the dynamics between them.
- 5.89 Electric Northern Power Grid were able to provide an estimate of costs for future infrastructure works. Given the early stage of proposals this is based on a series of assumptions, which must be treated with caution. Significantly, there was no identification of issues with local capacity in the electricity network and development would not require local network reinforcement. As further details regarding development options become available Northern Power Grid will be able to provide a more detailed assessment.

²² Part 1 Utilities Impact and Capacity Assessment, October 2015, Capita North Tyneside.



^{1.1}

- 5.90 Gas The National Grid, responsible for gas network and distribution in this area did not identify any capacity constraints to servicing the sites. However, at this stage they were unable to provide a budget estimate for servicing properties.
- 5.91 Renewable / Low Carbon Energy Solutions The Local Plan does not set requirements upon construction beyond agreed building regulations for the energy performance of homes and energy generation. However, an option exists to encourage renewable energy generation and North Tyneside Council are exploring the options for, and the feasibility of a district heating network linking with the strategic allocations of Killingworth Moor and Murton Gap.
- 5.92 As further feasibility work is developed the potential costs of pursuing such an option will be refined and incorporated into the Site Specific IDP as a desirable infrastructure cost. It is additionally anticipated that such proposals if brought forward would be based upon a financially viable proposition whilst the equivalent costs for electric and gas networks would require review if such an infrastructure option be pursued.

Delivering utilities and energy infrastructure

5.93 At this stage assessment of utilities requirements has established general needs for new infrastructure that may be provided. However, these costs have not been identified as significantly beyond typical development costs. Additionally, no specific Local Plan policy requirement is placed upon the development to enhance the sustainability of the scheme. Therefore, no additional costs or infrastructure are identified within this Site Specific IDP, whilst for the purposes of the Viability Assessment an standard assumption would be applied to allow for the cost of such infrastructure provision.



Waste Management

- 5.95 It is anticipated that no new municipal waste management facility will be required in North Tyneside before 2022. This Site Specific IDP shall be regularly updated to include any further anticipated requirements for waste infrastructure.
- 5.96 The Urban Mines 'Tyne and Wear Commercial and Industrial Waste Survey'²³ confirms that there is sufficient capacity to manage and treat residual waste until 2030 under current arrangements.
- 5.97 As with the potential Renewable / Low Carbon Energy Solutions the feasibility for innovative waste management and collection techniques are to be encouraged at Murton and are being explored by North Tyneside Council. Any additional cost to implement such a solution would be considered as a desirable cost as the options for this approach are developed. It is additionally anticipated that such proposals if brought forward would be based upon a financially viable proposition.

Summary of Infrastructure Delivery Requirements

5.98 Table 14 sets out a consolidated schedule of key infrastructure requirements for the Murton Gap Site.

Table 14: Murton Gap Key Infrastructure Requirements

Delivery Phase	Phase 1	Phase 2	Phase 3	All Phases	Essential	Funding
Housing Delivery	1,020	726	1,254	3,000	/ Desirable	Source – Probable
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	2018 - 2032	Desirable	Delivery
Murton Link Road	£5,200,000			£5,200,000	Essential	Developer – s278
A186 Earsdon Rd Roundabout	£3,600,000			£3,600,000	Essential	Developer – s278
A191 Roundabout Rake Lane	£2,090,000			£2,090,000	Essential	Developer – s278

²³ http://www.northtyneside.gov.uk/browse-display.shtml?p_ID=529692&p_subjectCategory=809



Phase 1	Phase 2	Phase 3	All Phases		
1,020	726	1,254	3,000	Essential /	Funding Source –
2018 - 2022	2023 - 2027	2028 - 2032	2018 - 2032	Desirable	Probable Delivery
£2,000,000			£2,000,000	Essential	Developer – s278
£900,000			£900,000	Essential	Developer – s278
£2,000,000			£2,000,000	Essential	Developer – s278
,			·		Developer – s278
£1,750,000			£1,750,000	Essential	Developer – s278 / s106
	£1,615,000		£1,615,000	Essential	Developer – s106
£600,000	£1,000,000	£1,000,000	£2,600,000	Essential	Developer – s106 agreement
£1,700,000	£3,300,000		£5,000,000	Essential	Developer / Public funding – s106
£244,800	£174,240	£300,960	£720,000	n/a	CIL (pending introduction)
£834,442	£593,926	£1,025,872	£2,454,240	Essential	Developer – on site condition
£214,114	£152,399	£263,235	£629,748	Essential	Developer – s106
£319,896	£227,691	£393,284	£940,871	Desirable	Developer – s106
£183,831	£130,844	£226,004	£540,679	Desirable	Developer – s106
	1,020 2018 - 2022 £2,000,000 £900,000 £300,000 £1,750,000 £1,750,000 £1,700,000 £244,800 £244,800 £319,896	1,020 726 2018 - 2022 2023 - 2027 £2,000,000 £900,000 £300,000 £1,750,000 £1,750,000 £1,615,000 £1,700,000 £1,700,000 £1,700,000 £244,800 £244,800 £244,800 £2593,926 £214,114 £152,399 £319,896 £227,691	1,020 726 1,254 2018 - 2022 2023 - 2027 2028 - 2032 £2,000,000	1,020 726 1,254 3,000 2018 - 2022 2023 - 2027 2028 - 2032 2018 - 2032 £2,000,000 £2,000,000 £2,000,000 £900,000 £900,000 £2,000,000 £300,000 £1,750,000 £1,750,000 £1,750,000 £1,615,000 £1,615,000 £1,700,000 £3,300,000 £2,600,000 £1,700,000 £3,300,000 £5,000,000 £244,800 £174,240 £300,960 £720,000 £834,442 £593,926 £1,025,872 £2,454,240 £214,114 £152,399 £263,235 £629,748 £319,896 £227,691 £393,284 £940,871 £183,831 £130,844 £226,004 £540,679	1,020 726 1,254 3,000 Essential Desirable 2018 - 2022 2023 - 2027 2028 - 2032 2018 2018 2018 2018 2018 2018 2018 201



Delivery Phase	Phase 1	Phase 2	Phase 3	All Phases	Essential	Funding
Housing Delivery	1,020	726	1,254	3,000	/ Desirable	Source – Probable
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	2018 - 2032	Desirable	Delivery
						s106
Primary School	£2,200,000	£2,200,000		£4,400,000	Essential	Developer – s106
Secondary School	£2,983,225	£2,123,354	£3,667,611	£8,774,190	Essential	Developers – s106 (strategic site), CIL contribution
Drainage Infrastructure	£816,000	£580,800	£1,003,200	£2,400,000	Essential	Developers – s106
Sport & Recreation	£862,129	£613,633	£1,059,911	£2,535,673	Desirable	Developers – s106
Environment, Public Realm / Culture (Public Art etc)	£258,066	£183,683	£317,270	£759,019	Desirable	Developers – s106
Play, Parks and Green Space	£673,794	£479,583	£828,371	£1,981,748	Desirable	Developers – s106

n.b. All prices identified are subject to change as detailed costs, budgets and delivery mechanisms are assessed.



6) Killingworth Moor

- 6.1 Within the emerging Local Plan, Killingworth Moor Strategic Allocation (Sites reference 22 to 26) is identified for provision of approximately 2,000 homes during the plan period. These homes will be a mix of housing tenures, types and sizes informed by the latest evidence of the housing needs of the Borough. The Local Plan, informed by current evidence of economic viability, requires 25% of homes to be in affordable tenures. The proposed affordable housing policy set out within the Pre-submission Draft Local Plan is clear that the specific proportion of affordable housing provision for each site would have regard to the specific circumstances and economic viability of the site. The Viability Assessment work undertaken alongside this site specific IDP has considered the application of a 25% target and a sensitivity scenario with zero affordable housing. At this stage, the Council's view is that this evidence would support delivery of the preferred target on Killingworth Moor. It is acknowledged that this position may alter as further detailed evidence of the nature and costs for development and infrastructure becomes available; and the implications of national policy changes, such as the delivery of Starter Homes are developed and taken into account. At Killingworth Moor, the Local Plan also proposes the inclusion of 17 hectares of employment land, and convenience retail provision of approximately 500sqm.
- 6.2 **Housing mix** The anticipated mix of housing provision that this infrastructure delivery plan and supporting evidence has been based upon is as follows:

Table 15: Killingworth Moor assumed dwelling mix scenario

		<u>J</u>		
House Size (bedrooms)	Est. Homes	Market	Affordabl	e
1 bed dwelling	91	16	75	(82%)
2 bed dwelling	524	224	300	(57%)
3 bed dwelling	730	630	100	(14%)
4 bed dwelling	655	630	25	(4%)
Total	2,000	1,500	500	(25%)

6.3 Table 16 below calculates the proportion of affordable housing that would be delivered if all homes were General Needs, not including any specific requirements for specialist homes. The Council is aware of significant needs for a more specialist housing provision, particularly for the growing elderly population of North Tyneside.



These options are currently being developed by the Council's Housing Strategy team.

Table 16: Killingworth Moor affordable housing mix (General Needs Option)

Property type & size	Proportion of GN affordable Homes across the sites	Potential Number of Rented Affordable Units	Potential Number of Intermediate Affordable Units	Total
1 bed bungalows	0%	0	0	0
2 bed bungalows	10%	38	12	50
1 bed flats	15%	56	19	75
2 bed flats	15%	56	19	75
2 bed houses	35%	131	44	175
3 bed houses	20%	75	25	100
4 bed houses	5%	19	6	25
Total	10%	375	125	500

North Tyneside Strategic housing Market Assessment (Arc4) and Housing Assessment, (NTC Housing Team)

6.4 **Phasing and delivery -** The anticipated phasing and rate of housing delivery upon which the infrastructure requirements identified are based on, are as follows:

Delivery Phase	Phase 1	Phase 2	Phase 3
Housing Delivery	850	650	500
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032

- 6.5 **Concept Framework objectives** The Local Plan policy approach and outlined indicative requirements for development of the Killingworth Moor Site are informed by the Murton Gap and Killingworth Moor Concept Framework²⁴. Specific objectives for Killingworth Moor identified in the Murton Gap and Killingworth Moor Concept Framework²⁵ and Plan include:
 - To deliver high quality residential environments that exploit their physical location.
 - To connect with and integrate green environments and corridors.

²⁵ Murton Gap and Killingworth Moor Concept Framework, Pick Everard, October 2015



^{1.1}

- There is the opportunity to increase the sustainability and attractiveness of existing settlements through the delivery of sensitive development, infrastructure and environments.
- It is possible to create good strategic highways links, good community connections and promote transport modal shift using the Metro, buses, pedestrian routes and cycle ways.
- Access to existing community facilities and local centres facilitate early phase residential delivery, initially borrowing from and ultimately enhancing their vitality and success.

Transport

Primary Highways

- 6.6 The North Tyneside Highway Impacts Report²⁶ has informed the Concept Framework and calculated the requirement for primary road infrastructure including a strategic north-south highway link and access junctions at Killingworth Way A1056 to the north and Great Lime Road B1505 to the south. The north-south route would be essential to secure adequate highway access to the site and would additionally alleviate the potential impact of development at this site upon Killingworth Village and the impact of growth upon the junction of the B1317 Killingworth Lane and B1505 Great Lime Road. The North Tyneside Highway Impacts Report provides further advice regarding the costs and benefits of this route.
- 6.7 The A1056 / B1505 strategic link road is treated as an additional requirement for enhanced road standards above the estate road infrastructure that would otherwise be required to access the whole of the site for development. The estimated cost for delivery of the link road is therefore based on the additional cost arising to deliver a route capable of providing a strategic link.

Secondary Highways

²⁶ North Tyneside Council Local Plan Highway Impacts Report, 2016, Capita North Tyneside



^{1.1}

- An underpass, connecting the Killingworth Moor site with the A186 is defined within the Highway Impact Report and a key requirement for taking site traffic and potential secondary education trips away from the primary Holystone A19(T) / A191 roundabout junction. This link under the A19(T), must not become a route for through-traffic.
- 6.9 A further, secondary access point will exist where the primary north-south route intersects with the B1317, providing a further alternative route across the A19(T).



Delivering Highway Infrastructure

- 6.10 The Transport Impact Assessment has identified a significant amount of highways infrastructure that will be required during the first five year phase of development, informed by the developers proposed rate of housing delivery.
- 6.11 Unlike at Murton, completion of the strategic link road to its full length from Killingworth Way to Great Lime Road is not a priority during the first phase of development at Killingworth Moor. Currently within the Transport Impact Report completion of a final element north west of Killingworth Lane would be required during Phase 2. Creation of access junctions at Killingworth Way are required during Phase 1, whilst mitigation of the existing access at Forest Gate / Great Lime Road will be required by Phase 2.
- 6.12 Meanwhile, off-site works have been identified as required at Wheatsheaf
 Roundabout and at the Killingworth Village / Great Lime Road junction and would be
 required during Phase 2.

Table 17: Killingworth Moor Highway Infrastructure Requirements

Table 17. TallingWorld			_		
Delivery Phase	Phase 1	Phase 2	Phase 3	Essential /	Funding
Housing Delivery	850	650	500	Desirable	Source –
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032		Probable
					Delivery
Killingworth Link Road	£4,752,000	£1,584,000		Essential	Developer –
					s278
A19 Underpass Tunnel	£2,000,000			Essential	Developer –
					s278
Killingworth Way	£1,500,000			Essential	Developer –
Roundabout					s278
Killingworth Lane		£400,000		Essential	Developer –
Junction					s278
Forest Gate Junction		£250,000		Essential	Developer –
					s278
A19 Killingworth		£3,500,000		Essential	Developer /
Interchange					Public
					funding –
					s278



Delivery Phase	Phase 1	Phase 2	Phase 3	Essential /	Funding
Housing Delivery	850	650	500	Desirable	Source –
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032		Probable
					Delivery
Wheatsheaf		£400,000		Essential	Developer –
Roundabout					s278 / s106
Great Lime Rd /		£350,000		Essential	Developer –
Killingworth Village					s278 / s106

Public Transport Provision

- 6.13 **Bus -** Provision will be made for bus and cycle access throughout the primary and secondary highway network with the inclusion of bus only access at certain points where access for car users will be limited to manage traffic impacts. Access to bus services and facilities are a critical component for sustainable transport and creating a modal shift from the car to public transport. The location of routes and stops will be determined by phases of development, uses, infrastructure delivery, commerciality etc... and should have a close relationship to likely travel patterns and density of development within the site.
- 6.14 The Public Transport Study²⁷ has identified the provision of a new bus service linking Murton Gap and Killingworth Moor with key employment and retail centres. This is likely to require subsidy from the development to ensure that sustainable modes of travel are a suitable and attractive option for residents of new properties.
- 6.15 Metro The potential of a Metro station at Killingworth Moor benefits from support in principal from Nexus, pending overall demonstration through a business case for the viability of the facility. The trip rate benefits arising from inclusion of a Metro station have been incorporated into the Highway Impacts report.
- 6.16 Further feasibility work to understand the precise costs and benefits of a Metro station at this location and public transport provision in general is covered within a Murton and Killingworth Public Transport Study. Whilst further work will be necessary to develop a full business case for Metro Station provision, if a metro were not included as part of development proposals at Killingworth Moor, an equivalent level of public transport patronage would be sought through enhanced bus service

²⁷ Local Plan Public Transport Needs, 2016, Capita North Tyneside



provision. Ultimately it may not prove possible to achieve the same reduction in private vehicle trip rates without a Metro Station and in those circumstances any additional local highway or strategic road network implications would also require mitigation. In accordance with the overall implications of ensuring the deliverability of the Killingworth Moor site, the impact of such a change upon the economic viability of the scheme would be considered.

- 6.17 The potential location of a new Metro station is on the south-eastern boundary of the strategic site adjacent to Holystone village and the Benton Square industrial estate.

 This would enable access to the existing employment and residential areas.
- 6.18 The Metro station could significantly reduce the numbers of secondary school children travelling by car (with provision of a secondary school at Killingworth Moor identified as a strategic requirement for North Tyneside) and commuters particularly travelling to Newcastle city centre.
- In addition to the site specific requirements for public transport provision North
 Tyneside Council in working with its partners Nexus may in the future look to
 introduce a Community Infrastructure Levy charge for the enhancement of overall
 public transport infrastructure, or specifically key schemes identified for example
 within the Tyne and Wear Metro Strategy. Whilst such requirements are currently
 undeveloped and further work would be required to consider the potential
 introduction of some form of CIL rate aligned to public transport an additional cost
 has been included in this IDP and the Viability Assessment.

Delivering Public Transport Infrastructure

6.20 To ensure take up of public transport provision at new development sites the availability of the service early in the development is generally considered essential to gain patronage from new residents before firm patterns of travel are established. It is therefore anticipated that the bus service would be required along side the early delivery of homes with the network clearly based upon the extent of development of the site at the time. It is therefore anticipated that a section 106 contribution to subsidise the delivery of a bus service for the site will be required during the first few



years of development as residents begin to occupy the site. This funding will be required to continue until established as a viable commercial service.

- This principle of early delivery would apply equally to the provision of a new Metro station. However, with the only potential location for the station fixed by the metro line it will not be feasible for the metro station to be delivered until at least access is afforded via a secondary link road connecting to the A19(T) underpass. Additionally, the financial impact of delivering a metro station is acknowledged and it would not be practical or realistic to require such delivery until Phase 2 of the scheme overall.
- 6.22 At this time, it is anticipated that the provision of a new metro station would be funded by the development, and the full cost of this has been tested within the Viability Assessment. However, the North Tyneside Council recognises the wider strategic role of new metro provision and will continue to explore options to secure additional public funding to supplement developer contributions to the new Metro station and will continue to explore options to secure additional public funding that may become available via routes such as the Local Enterprise Partnership and North East Combined Authority to supplement developer contributions to the new Metro station.

Table 18: Killingworth Moor Public Transport Infrastructure Requirements

able 10. Rinnighoral moor Lablic Transport initiastracture Requirements						
Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	/ Funding	
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	Desirable	Source – Probable Delivery	
New Bus Service	£600,000	£1,000,000	£1,000,000	Essential	Developer – s106	
Metro Station	£2,125,000	£2,875,000		Essential	Developer – s106	
CIL infrastructure contribution	£267,750	£204,750	£157,500	n/a	CIL (Pending introduction)	

Cycleways, Bridleway and Pedestrian Routes

6.23 The site is crossed with many existing public rights of way, including Waggonways, and other non motorised links, which connect with adjacent communities and provide



clear structure to the transport framework. A Walking and Cycling Strategy²⁸ has been developed that complements the outline approach set out within the Pick Everard Concept Framework.

- 6.24 This study establishes in some further detail key principles for pedestrian and cycle routes through the site and connections to neighbouring communities. This highlights a preferred range of on-site routes and off site enhancements to ensure good, clear, safe routes for pedestrians and cyclists.
- 6.25 These routes include the following both on-site and off-site connections:
 - EX10 Existing bridleway improvements with signage to provide a link between the proposed new Metro station at the Killingworth Moor site with Industrial Estate and Holystone Village. The proposals connect with existing infrastructure in Holystone Village providing a link to the A191 corridor cycle route, new housing development at Scaffold Hill and Rising Sun Country Park with a link to a potential new pedestrian and cycle crossing of the A19 to Cobalt Business Park:
 - EX12 Existing bridleway improvements to provide signage for improved north – south link for pedestrians and cyclists between Killingworth Village and Great Lime Road to the west of the Killingworth Moor site;
 - EX13 Proposed traffic free path with toucan crossing of B1317 Killingworth
 Road to provide a pedestrian and cycle leisure route connecting Killingworth
 Moor site with George Stephenson High School and Lakeside Leisure Centre
 and pool in Killingworth;
 - EX14 Existing bridleway improvements to the NCN Route 10 which runs along the north west boundary of the Killingworth Moor site to improve access from the north of the site to the A1056 and the Killingworth centre;
 - EX15 Proposed traffic free path adjacent to A1056 Killingworth Way to provide link to the northern boundary of Killingworth Moor between the principal highway access junction and NCN Route 10 / green corridor to Killingworth Centre; and

²⁸ Add reference when work Cycling Study is available.



^{1.1}

- EX16 Proposed traffic free path adjacent to B1317 Killingworth Lane to provide link for pedestrians and cyclists from Killingworth over the A19 to Backworth Village connecting with existing infrastructure to Seghill and Northumberland to the north.
- 6.26 Based upon these proposed connections, the Pedestrian and Cycle Study provides estimated costs for the delivery for the on-site and off-site infrastructure.

Table 19: Killingworth Moor Cycle and Pedestrian Infrastructure Requirements

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	/ Desirable	Source – Probable Delivery
On site pedestrian and cycle connections	£1,196,618	£915,061	£703,893	Essential	Developer – on site condition
Off site pedestrian and cycle connections	£314,711	£240,661	£185,124	Essential	Developer – s278 / s106
Off site pedestrian and cycle connections	£126,847	£97,001	£74,616	Desirable	Developer – s278 / s106

Community Hubs Facilities

A key objective is to provide access for new residents to key facilities and services within walking distance. Whilst the development of the site should support the sustainability of existing facilities adjacent to the site at Northumberland Park and Killingworth town centre in particular, the inclusion of such facilities within new mixed-use community hubs can provide a focal point for the development and provide services such as a local shop, doctors or dentists or some other form of community facility. Such a centre is unlikely to be commercially viable during the early years of development and until appropriate facilities can be supported and provided on site new residents will need to benefit from high quality access to existing provision nearby. The Retail Requirements Assessment²⁹ provides an outline of the scale of retail provision that may be appropriate at Murton indicating the site could support provision of about 500sqm of convenience retail by 2032.

²⁹ North Tyneside Local Plan Retail Requirements Assessment, Capita, 2015



^{1.1}

- The precise scale, mix of uses and locations of new community hubs and facilities are indicative and will be further established through later more Detailed

 Development Framework preparation and masterplan submission.
- 6.29 Provision of community hubs themselves are not a costed infrastructure requirement as they simply outline an opportunity for an alternative land use within the overall development.

Community Facilities

6.30 Existing facilities have the potential to serve early phases of development and to create community connections between existing and new residents. At present no specific requirements have been identified for the provision of facilities such as community rooms, buildings or facilities such as libraries. However, appropriate off-site contributions towards facilities that would experience greater pressure as a result of the development is anticipated and an estimated cost assumption has been calculated.

Table 20: Killingworth Moor Community Facilities

abic 20. Talling world moor Community Labilities							
Delivery Phase	Phase 1	Phase 2	Phase 3	Essential	Funding		
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	/	Source -		
•				Desirable	Probable		
					Delivery		
Community Facilities	£153,000	£117,000	£90,000	Desirable	Developer -		
(e.g. Library, community					s106		
room on site or off-site							
contribution to							
enhancement and							
maintenance.)							

Healthcare

6.31 The expected increase in population across Killingworth Moor by 2032 will clearly place increased demand on existing general practice services. Based on maintaining the current model of delivering GP services, the following estimate provided by the North Tyneside Clinical Commissioning Group (CCG) and NHS England³⁰ has been made. This considers the increase in workforce and premises capacity that is

³⁰ Local Plan – GPs Impact Assessment, North Tyneside CCG and NHS England, October 2015



projected to be needed to ensure that the increased population all have access to general practice services.

Table 21: Killingworth Moor Health facilities detailed outline of provision requirements

Move to a recommended patient per FTE GP ratio of 1,500 patients per FTE GP (based on weighted list size)	
Raw list size increase	4,386
Weighted list size increase	4,503
Increase in GP workforce FTE	3.1
Estimated increase in premises m ²	385

- This indicates that a contribution of approximately 385m² would be required from the development. At this time the CCG are continuing to review the model for health care provision in North Tyneside. This is leading to a degree of uncertainty over the specific space requirements for meeting future patients' needs. Consequently there is not a specific preference for provision of a new GP surgery on the site but rather for a contribution to be administered by the CCG and NHS England for addressing requirements within North Tyneside.
- 6.33 To reflect this, in addition to the advice provided by the CCG and the estimates of overall potential requirements for health provision informed by the North Tyneside Planning Obligations SPD the proposed requirements for health care provision are set out below.

Table 22: Killingworth Moor Health Care Infrastructure Requirements

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential /	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	Desirable	Source -
					Probable
					Delivery
Healthcare	£408,003	£312,002	£240,002	Essential	Developer –
					s106

6.34 Potential options for future provision at Killingworth Moor could consequently include enhanced provision to existing facilities elsewhere, the creation of a small branch surgery to a wider practice to meet the needs of residents on the site, or the relocation of an existing practice (potentially in currently ageing or inappropriate accommodation) to a new facility at Killingworth Moor. Any such facility would be



brought forward following consideration of all potential additional sources of funding and form part of overall efforts to modernise and enhance health care delivery. It would additionally be expected that if such new accommodation were created the inclusion of services such as physiotherapy, speech therapy etc... could be considered.

Schools and Education

6.35 Schools are a crucial element of the local infrastructure and therefore the growth and contraction of local provision of school places must be considered alongside the development of the Local Plan and in particular its impacts on future housing provision. The Education Impact Assessment, October 2015 and Full Updated Education Impact Report, May 2016³¹ makes an assessment of pupil generation arising from the proposed development of homes identified in the Local Plan. This pupil growth, when compared with forecasts identified by the Office of National Statistics (ONS) indicates that there will be a net gain in the pupil population in 2032.

Secondary School Provision

- 6.36 The assessment concludes that where the available capacity in secondary schools, after maximum expansion, falls below 10% a new secondary school place provision would be required in the Borough. The location of the Secondary School is driven by an assessment of forecast pupil distribution and the existing arrangement of secondary schools and catchment areas. This analysis is explained further within the Education Needs Impact Assessment. New secondary school provision has been identified for Killingworth Moor. The Indicative Concept Plan included within the proposed Local Plan broadly identifies an area for the school between the residential core and the employment zone. In locating a school on the site the following considerations have been identified:
 - Located within walking distance of the new Metro station, on a community through-route and bus route;
 - Co-located with the Primary School (see section below);

North Tyneside Local Plan: Impact Upon Education Provision, 2016, North Tyneside Council



^{1.1}

- · Located close to employment uses;
- Located where natural surveillance and safe streets can be achieved, with road frontage presence and high visibility.
- 6.37 Whilst it has been identified that the location of a secondary school would be at Killingworth Moor, a financial contribution from development at Murton Gap and additional development schemes across North Tyneside would be required. This reflects the strategic nature of secondary education needs and the joint impact of development across the Borough leading to the requirement.
- 6.38 The current evidence for growth in secondary school pupils over the Plan Period, and the relationship to schools capacity is identified within the Education Impact Report. This is summarised in Table 23 below.

Table 23: Overall pupil capacity for forecast growth

	2015/16	2018/19	2020/21	2022/23	2024/25
School Places Capacity	14,606	14,606	14,606	14,606	14,606
95% of Capacity	13,876	13,876	13,876	13,876	13,876
90% of Capacity	13,145	13,145	13,145	13,145	13,145
Baseline Pupil Projection	12,031	12,479	13,082	13,368	13,406
Pupil Projection + Housing	12,083	12,767	13,537	13,932	13,953

Source: North Tyneside Local Plan Education Impact Assessment, North Tyneside Council

6.39 Table 23 illustrates that by 2020/21 the impact of pupil growth and housing development would see the total pupil population exceed the net capacity for North Tyneside as a whole at 90% of capacity to allow range and choice for pupils and in build resilience to change.

Primary School

6.40 The Education Impact Assessment identifies the need for a new primary school at Killingworth Moor. This primary school would be a local facility, within walking distance of key family housing areas. The primary school is to be co-located with the secondary school.



- The trigger point to open dialogue for the delivery of additional primary school places, either by the reintroduction of mothballed capacity, or new provision would be when annual birth rate reduces the projected surplus places to a level of less than 10%. A new primary provision would require a 4 year programme in terms of planning, commissioning, construction and opening.
- 6.42 The current evidence for growth in primary school pupils over the Plan Period, and the relationship to schools capacity is identified within the Education Impact Report.

 This can be summarised as follows:

Table 24: Total primary pupil capacity (with 90% and 95% limits) and projected pupil growth

Jacoba Garana	2015/16	2016/17	2017/18	2018/19	2019/20
Total Pupil Capacity	17,167	17,167	17,167	17,167	17,167
95% of Pupil Capacity	16,309	16,309	16,309	16,309	16,309
90% of Pupil Capacity	15,450	15,450	15,450	15,450	15,450
Baseline Pupil Projections	15,603	15,690	15,689	15,756	15,608
Baseline Projection + Housing	15,723	15,973	16,150	16,436	16,487

Source: North Tyneside Local Plan Education Impact Assessment, North Tyneside Council

Delivering new school places

- As set out above, the trigger for progressing with plans for the delivery of new schools will be informed by monitoring of the Local Authorities Pupil projections. As can be seen in Table 24, projections, at this time, illustrate that there is already a shortfall in primary school places at 90% of capacity. With no sufficient existing capacity, on a net basis for the Borough as a whole there is therefore an identified requirement for primary school provision. Based upon the current phasing and rate of delivery, it is anticipated that a new primary school would be required to open early in Phase 2. The primary school will serve the needs of residents of Killingworth Moor and it is anticipated will be delivered by the development.
- 6.44 The Education Impact Assessment also identifies a requirement to open a new secondary school at Killingworth Moor by the end of Phase 1. This is recognised as a strategic infrastructure requirement for the Borough, and consequently the Education Report proposes the pooling of 5 section 106 contributions from a range



of major schemes focused around the A19(T) and the settlements of Backworth, Shiremoor and Holystone.

- This would include a contribution from Murton Gap and Killingworth Moor. An additional contribution from Community Infrastructure Levy (for which the strategic site allocations will be set at a zero rate) will be considered for smaller development sites in the Borough.
- 6.46 North Tyneside Council has officers are currently exploring loan or grant funding to enable the early delivery of secondary school provision within imposing significant costs upon development. This enables the section 106 contribution from Murton Gap to be phased in keeping with the rate of delivery of new homes.

Table 25: Killingworth Moor Education provision

Delivery Phase	Phase 1	Phase 2	Phase 3	Essential /	Funding Source –
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	Desirable	Probable Delivery
Primary School	£2,200,000	£2,200,000		Essential	Developer – s106
Secondary School	£2,572,144	£1,966,934	£1,513,026		Developers – s106 (strategic site), CIL contribution

Surface Water Management

- 6.47 Flood risk mitigation measures at Killingworth Moor have been identified through a range of evidence base development and joint working between North Tyneside Council Flood Risk Team, Capita North Tyneside, Northumbrian Water Ltd and the Environment Agency. An area based Flood Risk Assessment³² has been prepared that provides some initial directions to the type and scale of measures that could be taken:
- 6.48 **Layout** The development layout should incorporate the provision of surface drainage features within the layout, so that surface water from the land is channelled into the attenuation features and suitable watercourses, keeping residents within and around the Killingworth Moor safe during extreme and intense rainfall events.

³² Draft Broad Scale Flood Risk Assessment: Killingworth Moor, Capita, August 2015



- 6.49 **Sustainable Drainage Systems** (SuDS) should be incorporated into the development layout to the greatest extent possible. SuDS Infiltration Mapping data identified within Appendix D of the Draft Broad Scale Flood Risk Assessment for Killingworth Moor and future site investigations should guide the placement of infiltrating SuDS to the most beneficial locations on site. Non-infiltrating SuDS like rainwater harvesting and green roofs should be used where infiltration is not feasible.
- 6.50 Surface Water Management The Killingworth Moor site is adjacent to the Forest Hall Letch watercourse, which is a tributary to the Ouseburn watercourse. A project led by the Tyne Rivers Trust, including the Environment Agency, Northumbrian Water Ltd, Local Authorities and Groundwork is underway across the Ouseburn catchment with a view to addressing issues of water quality. This could lead to particular opportunities at the Killingworth Moor site through appropriate water management. Ensuring development on site complements and supports this objective will be beneficial to the sustainability of the scheme as a whole. Wider surface water management to address flood risk and support Northumbria Water Ltd current project for separating surface water from the sewerage network will also be key. Whilst Killingworth Moor discharges into the Ouseburn it will be important to ensure drainage infrastructure installed does not increase the volume of non-foul water that enters the sewerage network and finds its way to Howdon Waste Water Treatment Works
- 6.51 Flood Risk A small proportion of the site to its southern boundary falls under designated Flood Zone 3 a and 3b. Development is not proposed in this area but essential infrastructure, such as the north-south link road will be required to cross this flood zone. The implications and suitability of this are considered within the North Tyneside Flood Risk Sequential Test and Exceptions Test³³.
- 6.52 **Sustainable Drainage Features Management and Maintenance –** The Council is currently exploring options for the future management and maintenance of Surface Water Drainage features under its role as Local Lead Flood Authority. At this time,

³³ North Tyneside Sequential and Exceptions Test, 2016 Update, Capita North Tyneside



the Council does not have a formal position of adopting new SuDS with specific arrangements for each scheme agreed with the developer or applicant as proposals are put forward. Other options for future maintenance and management of SuDS, in addition to their potential adoption by the Council, may include ongoing management by the developer or appointment of a 3rd party management company. It is probable under each of the options some form of cost recovery by the landowner or developer such as land charge on new households would be necessary. Therefore, whilst management and maintenance of SuDS must be considered in any drainage strategy developed for the site, for the purposes of this Infrastructure Delivery Plan the requirement will not lead to an additional infrastructure cost for the development.

Delivering drainage infrastructure

- 6.53 It is assumed for the purposes of this Site Specific IDP and the site Viability Assessment that much of the drainage infrastructure required for the site will be delivered as part of the general estates and landscaping costs expected for the scheme. However, it is also recognised that some additional uplift in standards and provision may be sought to ensure the objectives and matters set out above are addressed.
- 6.54 Consequently an assessment has been made of further drainage infrastructure provision that may be required through a planning condition seeking a section 106 agreement. Any such contribution is anticipated to be phased across the life of the development.

Table 26: Killingworth Moor Drainage Infrastructure – Flood and Surface Water Management

Delivery Phase Housing Delivery Anticipated Years	850		500		Funding Source – Probable Delivery
Drainage Infrastructure	£850,000	£650,000	£500,000	Essential	Developers – s106

Green and Social Infrastructure



- 6.55 Green Infrastructure is fundamental to ecology and biodiversity and for the creation of the development's Unique Selling Point (USP). It is integrated to:
 - Provide the necessary protection for ecology and biodiversity;
 - Create high quality, attractive environments for new development;
 - Promote healthy lifestyles and well-being;
 - Create pedestrian, cycle and bridleway connections between existing and new communities.
- 6.56 Providing green infrastructure as an integral part of new development is considered to be beneficial in many ways. For larger sites, green infrastructure networks should be considered as a key element of the vision, design and layout and should include as many functions as possible. The Killingworth Moor Open Space Assessment³⁴, undertook an assessment of needs at Killingworth Moor that have informed this Site Specific IDP.

Open Space

- 6.57 The Killingworth Moor proposal has been identified as requiring:
- 6.58 **Equipped areas for play** a Neighbourhood or Strategic Equipped Area for Play (a NEAP or SEAP) of between 1,000sqm to 11,600sqm would be required within the north-central part of the site in order to ensure sufficient provision. Due to the overall shape of the site residents to the north and west may not fall into the catchment of even the largest equipped play area. A smaller Local Equipped Area for Plan (LEAP) of 600sqm to 800sqm) may consequently be required in this area.
- 6.59 **Parks** only the southernmost part of the site adjacent to Palmersville Metro and a small area adjacent to Killingworth Lane falls within the catchment of an existing park. Therefore additional park provision is expected to be required. The provision of one park, again due to the overall shape of the site is unlikely to address in full any deficit so more than one smaller park could be considered.

³⁴ Killingworth Moor Open Space Assessment, Capita North Tyneside, July 2015



- 6.60 **Natural and Semi-Natural Green Spaces** The proposed site benefits from full or partial coverage from a number of existing natural and semi natural green spaces including the Rising Sun Country Park, Fenwick Eccles and the Waggonway network. As with Murton, the potential for duplication of such provision with landscapes delivered as part of SuDS or other measures need to be considered.
- 6.61 **General Green Space** Much of the suggested site falls within the catchment of existing green space, all of which is of an acceptable quality. However, more green space would be required within the central and most northern parts of the site to ensure that the percentage of properties within catchments does not drop.
- 6.62 **Playing Pitches** In net terms, additional playing pitches are not required to meet the needs of the Borough or this site. However, development will increase usage of existing facilities and support to improve / enhance those would be required.
- 6.63 **Allotments** The delivery of one allotment per 27 households is proposed as appropriate to ensure that new homes do not worsen the current over-demand. For 2,000 homes this would be 75 allotments.
- 6.64 **Management and Maintenance** Prior to development, an agreement will be required between the applicant and the Council to ensure and the maintenance and management of any open space provision will be resourced. This may be via a commuted sum from the developers, a residents' maintenance fee, an agreement that developers retain direct (or in-direct through a third party) responsibility for maintenance in perpetuity, or the formation of a residents' trust.
- 6.65 General guidance for costs of green spaces, playing pitches, and allotments and its management and maintenance are provided based upon the Council's Section 106 contributions.
- 6.66 Ecology and Biodiversity There are no designated wildlife or biodiversity habitat within the Killingworth Moor site. However, the Killingworth Waggonway Plantation and Killingworth High Pit Site of Local Conservation Interest is located less than 300m outside of the strategic allocation within an area proposed in the Local Plan as



a Local Green Space designation. Whilst it will be important for appropriate caution and mitigation measures to be implemented as required it is therefore unlikely that any direct impacts upon designated sites will result from the construction phase of the development.

- 6.67 If SuDS are proposed on site they should be used to create new areas of wildlife habitat, including areas of inundation grassland, damp grassland and shallow reed beds. Trees and hedgerows around the site boundary should be retained where possible. The provision of biodiversity enhancement to mitigate and avoid potential loss of biodiversity, is a key requirement placed upon any future development.
- 6.68 Existing habitats, wildlife corridors and green infrastructure should be incorporated within the masterplan. Landscaping within the site should include a diverse range of habitats, including open mosaic habitats, that will encouraged a greater diversity of species to inhabit the site than is currently present.

Delivering Green Infrastructure

The phasing and timing of delivery of Green Infrastructure and provision of potential mitigations for biodiversity species and habitats will generally be required to align with the build out of the development parcels themselves. It is therefore assumed within the delivery framework that phasing for delivery of such infrastructure needs will arise throughout the site. Meanwhile, where contributions will be towards enhancement or maintenance of infrastructure elsewhere a phased approach that ensure contributions are proportionate to development undertaken and their impacts is considered the most appropriate.

Table 27: Killingworth Moor Green Infrastructure and play facilities

			· • • • • • • • • • • • • • • • • • • •		
Delivery Phase	Phase 1	Phase 2	Phase 3	Essential /	Funding
Housing Delivery	850	650	500	Desirable	Source –
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032		Probable
					Delivery
Sport & Recreation	£718,440	£549,396	£422,612	Desirable	Developers – s106
Public Realm	£215,055	£164,454	£126,503	Desirable	Developers – s106
Play, Parks and Green	£561,495	£429,379	£330,291	Desirable	s106
Space					agreement



Energy and Utilities

- 6.70 Following consultation with existing service providers, the 'Utilities Assessment³⁵ highlights the outcome of an initial assessment of the Impact of the development and network Capacity.
- 6.71 Following the information received from the utility providers there are no reasons to suggest there would be any significant restrictions to the development proposed at Killingworth Moor based on existing or future utility infrastructure. This position will need to be kept under review as further detailed proposals are developed.
- 6.72 Overall there is limited detail from the utility providers at this early stage in the development process. It would be anticipated that a Stage 2 commission would provide a more in depth analysis of future infrastructure requirements and budget estimates. However, at this stage the following estimates and assumptions about requirements can be made:
- 6.73 Water Sustainable surface water drainage should be encouraged. As already discussed a Northumbria Water Ltd project at Marden Quarry and Killingworth Lake could have a bearing on the surface water drainage proposals for both sites and future assessments should consider the dynamics between them.
- 6.74 Electric Northern Power Grid were able to provide an estimate of costs for future infrastructure works. Given the early stage of proposals this is based on a series of assumptions, which must be treated with caution. Significantly, there was no identification of issues with local capacity in the electricity network were identified and development would not require local network reinforcement. As further details regarding development options become available Northern Power Grid will be able to provide a more detailed assessment.

¹³⁵ Part 1 Utilities Impact and Capacity Assessment, October 2015, Capita North Tyneside.



^{1.1}

- 6.75 **Gas** The National Grid, responsible for gas network and distribution in this area did not identify any capacity constraints to servicing the sites. However, at this stage they were unable to provide a budget estimate for servicing properties.
- 6.76 Renewable / Low Carbon Energy Solutions The Local Plan does not set requirements upon construction beyond agreed building regulations for the energy performance of homes and energy generation. However, an option exists to encourage renewable energy generation and North Tyneside Council are exploring the options for, and the feasibility of a district heating network linking with the strategic allocations of Killingworth Moor and Murton Gap.
- As further feasibility work is developed the potential costs of pursuing such an option will be refined and incorporated into the Site Specific IDP as a desirable infrastructure cost. It is additionally anticipated that such proposals if brought forward would be based upon a financially viable proposition whilst the equivalent costs for electric and gas networks would require review if such an infrastructure option be pursued.

Delivering utilities and energy infrastructure

At this stage assessment of utilities requirements has established general needs for new infrastructure that may be provided. However, these costs have not been identified as significantly beyond typical development costs. Additionally, no specific Local Plan policy requirement is placed upon the development to enhance the sustainability of the scheme. Therefore, no additional costs or infrastructure are identified within this Site Specific IDP, whilst for the purposes of the Viability Assessment an standard assumption would be applied to allow for the cost of such infrastructure provision.

Waste Management

6.79 It is anticipated that no new municipal waste management facility will be required in North Tyneside before 2022. This Site Specific IDP shall be regularly updated to include any further anticipated requirements for waste infrastructure.



- 6.80 The Urban Mines 'Tyne and Wear Commercial and Industrial Waste Survey' confirms that there is sufficient capacity to manage and treat residual waste until 2030 under current arrangements.
- As with the potential Renewable / Low Carbon Energy Solutions the feasibility for innovative waste management and collection techniques are to be encouraged at Killingworth Moor and are being explored by North Tyneside Council. Any additional cost to implement such a solution will be included as a desirable cost as the options for this approach are developed. It is additionally anticipated that such proposals if brought forward would be based upon a financially viable proposition.

Summary of Infrastructure Delivery Requirements

Table 28 sets out a consolidated schedule of key infrastructure requirements for the Killingworth Moor Site.

Table 28: Killingworth Moor Key Infrastructure Requirements

Housing Delivery	850	650	500	All Phases	Essential	Funding
Anticipated Years	2018 - 2022	2023 - 2027	2028 - 2032	2018 - 2032		Source – Probable Delivery
Killingworth Link Road	£4,752,000	£1,584,000		£6,336,000	Essential	Developer – s278
A19 Underpass Tunnel	£2,000,000			£2,000,000	Essential	Developer – s278
Killingworth Way Roundabout	£1,500,000			£1,500,000	Essential	Developer – s278
Killingworth Lane Junction		£400,000		£400,000	Essential	Developer – s278
Forest Gate Junction		£250,000		£250,000	Essential	Developer – s278
A19 Killingworth Interchange		£3,500,000		£3,500,000	Essential	Developer / Public funding – s278
Wheatsheaf Roundabout		£400,000		£400,000	Essential	Developer – s278 / s106

^{1.1}

³⁶ http://www.northtyneside.gov.uk/browse-display.shtml?p_ID=529692&p_subjectCategory=809



Housing Delivery	850	650	500	All Phases	Essential	Funding
Anticipated Years			2028 - 2032		/	Source – Probable Delivery
Great Lime Rd / Killingworth Village		£350,000		£350,000	Essential	Developer – s278 / s106
New Bus Service	£600,000	£1,000,000	£1,000,000	£2,600,000	Essential	Developer – s106
Metro Station	£2,125,000	£2,875,000		£5,000,000	Essential	Developer – s106
CIL infrastructure contribution	£267,750	£204,750	£157,500	£630,000	n/a	CIL (Pending introduction)
On site pedestrian and cycle connections	£1,196,618	£915,061	£703,893	£2,815,572	Essential	Developer – on site condition
Off site pedestrian and cycle connections	£314,711	£240,661	£185,124	£740,496	Essential	Developer – s278 / s106
Off site pedestrian and cycle connections	£126,847	£97,001	£74,616	£298,464	Desirable	Developer – s278 / s106
Community Facilities (e.g. Library, community room on site or off- site contribution to enhancement and maintenance.)	£153,000	£117,000	£90,000	£360,000	Desirable	Developer – s106
Healthcare	£408,003	£312,002	£240,002	£960,007	Essential	Developer – s106
Primary School	£2,200,000	£2,200,000		£4,400,000	Essential	Developer – s106



Housing Delivery	850	650	500	All Phases	Essential	Funding
Anticipated Years		2023 - 2027	2028 - 2032	2018 - 2032	/ Desirable	Source – Probable Delivery
Secondary School - contribution	£2,572,144	£1,966,934	£1,513,026	£6,052,104	Essential	Developers – s106 (strategic site), CIL contribution
Drainage Infrastructure	£850,000	£650,000	£500,000	£2,000,000	Essential	Developers – s106
Sport & Recreation	£718,440	£549,396	£422,612	£1,690,448	Desirable	Developers – s106
Public Realm	£215,055	£164,454	£126,503	£506,012	Desirable	Developers – s106
Play, Parks and Green Space	£561,495	£429,379	£330,291	£1,321,165	Desirable	agreement

n.b. All prices identified are subject to change as detailed costs, budgets and delivery mechanisms are assessed.



7) Viability Assessment Findings

- 7.1 The Viability Assessment³⁷ for both Murton Gap and Killingworth Moor has been published and made available alongside this Site Specific IDP. This viability assessment has tested the potential impacts of each of the infrastructure requirements identified within this IDP, in addition to further development scenarios such as the nature of affordable housing provision and inclusion of the desirable Section 106 requirements.
- 7.2 Broadly the output of the viability assessment has demonstrated that both Murton Gap and Killingworth Moor could be developed with the infrastructure requirements as identified and costed at this time with a reasonable return and uplift over and above the existing use value of each site. As further detailed understanding of the nature of development and costs of infrastructure are developed, this position will continue to be reviewed. However, it is the view of the Council at this time that both Murton Gap and Killingworth Moor are capable of being delivered in general accordance with the policy requirements of the Local Plan and the infrastructure provision set out within this IDP. The sites are consequently considered suitable for allocation within the Local Plan and the costs identified considered reasonable in the context of National Planning Policy Framework (NFFP) and the expectations of paragraph 173 of NPPF in particular that delivery of sites should not be threatened by the scale of obligations and policy burdens.
- 7.3 The viability assessment identifies that with a suitable profit for the developer the land value realised by the strategic allocations of the Local Plan would generate a significant uplift over the Existing Use Value. The viability assessment considers that the return arising as a result of the development of these sites can be considered sufficient to motivate a willing landowner and a willing developer to bring forward the allocation for development during the Local Plan period.

³⁷ Murton Gap and Killingworth Moor Viability Assessment Report, June 2016, Capita North Tyneside.



^{1.1}