

5.	Site Details	
5.1	What name would you like the site to be known by? (Please note if the site is currently included within the ALDP2017 please use the OP site number)	Cloverhill OP2 (part of)
5.2	Site Address	Land at Cloverhill, Bridge of Don
5.3	Postcode	
5.4	Have you any information for the site on the internet? If so please provide the web address:	No <i>Details:</i>
5.5	Is the site currently being marketed?	No, site will be in the ownership of the bidder in a matter of months <i>Details:</i>
5.6	Site Location Map (Please include an OS Map with the Boundary of the site clearly marked)	<i>Details:</i> Site location plan enclosed.
5.7	Please provide the National Grid reference of the site.	NJ947116
5.8	What is the current use of the site?	Agricultural and adjacent housing
5.9	Has there been any previous development on the site? If yes please provide details	No <i>Details:</i>

6. Legal and Planning History			
6.1	Please indicate the relationship to the Proposer or Person / Organisation they are working on behalf of, has with the site.	Sole owner	
		Part owner	
		Option to purchase	✓
		No legal interest	
6.2	Is the site under option to a developer?	Yes <i>Details:</i> The site is under option to the bidder	
6.3	Is the proposed site included in the ALDP2017?	Yes <i>Details:</i> zoned for employment use, proposed to change zoning to residential that includes some employment and community uses	
6.4	Is the proposed site included in the Aberdeen City Centre Masterplan?	No <i>Details:</i>	
6.5	Has the site been subject of previous discussions with the Council or any agent there of?	No	
6.6	Has the site been subject of previous Planning Applications? (Please provide a planning reference)	No	
6.7	Has the site been subject of a previous Bid to a previous LDP? (Please provide the bid reference number)	Not recently <i>Details:</i>	
6.8	Are there any legal restrictions on the title deeds such as rights of way, way leaves etc.	None that impact on deliverability <i>Details:</i>	
6.9	Are there any other legal factors that might prevent or restrict development? (e.g. ransom strips / issues with accessing the site etc.)	No <i>Details:</i>	

7.	Your Proposal (Please provide as much detail as possible on your site proposal)		
7.1	Proposed Use	Housing	✓
		Employment	✓
		Mixed Use	
		Retail	
		Other (Please Specify)	Community type use – see masterplan
7.2	Do you have a specific occupier in mind for the site?	No, but in discussions with RSLs and housebuilders Details:	
7.3	Site Area (hectares)	22.7Ha	
	Housing		
7.4	Approx. no of units.	Approximately 500 - 600 units	
7.5	Proposed Mix and Number (Number of Flats / Terraced / Semi-detached / detached etc.)	To be confirmed but mix to be provided	
7.6	Affordable Housing Percentage	25%	
7.7	Affordable Housing Partner (Details of any partner organisation, Registered Social Landlord etc.)	In discussion Details:	
7.8	Tenure (Details of tenure type, Private Rental Sector / private sale / Housing for the elderly etc.)	Private and mixed-tenure affordable/low-cost housing	
	Employment		
7.9	Business and Office	Business uses appropriate to residential Areas – exact mix to be determined through a full masterplanning process and related to market conditions.	
7.10	General Industrial	N/A	
7.11	Storage and distribution	N/A	
7.12	Other Please specify	Community uses/care home	
	Mixed Use (Please provide as much detail as possible on each use class)		
7.13	Housing	No of units and type:- approximately 500- 600 units, variety of units sizes and configurations	
7.14	Employment	Business uses appropriate to residential Areas – exact mix to be determined through a full masterplanning process and related to	

		market conditions.
7.15	Retail	Local retail/services provided in central locations – see masterplan
	Retail	
7.16	Approx. floor area	Local scale

	Other (Please Specify examples could include retailing, tourism, renewable energy, sports, leisure and recreation, institutions and education.)	
7.17	Details of proposal	See masterplan
7.18	Approx. floor area	N/A

8.	Engagement and Delivery	
8.1	Has the local community been given the opportunity to influence/partake in the development proposal?	<p>If there has been any community engagement please provide details of the way in which it was carried out and how it has influenced your proposals. If no consultation has yet taken place please detail how you will do so in the future.</p> <p>Not Yet <i>Details:</i> Engagement expected as part of MIR process.</p>
8.2	Will the proposed development be phased?	<p>Yes <i>Details:</i> Initial phases at west of site moving east</p>
8.3	Expected development start post adoption of the plan in 2022	Years 0-2, following PPP and MSC process
8.4	Expected development completion	Year 10, representing 60-80 homes per annum
8.5	Is finance in place and if so what form? (Secured Loan, Grant Funding etc.)	<p>Yes <i>Details:</i> The project will be funded from existing internal resources.</p>
8.6	Are there any other issues with the delivery of the site that we should be made aware of? (These should include any issues which may prevent or impact on the deliverability of the site.)	<p>No <i>Details:</i></p>

9.	Sustainable Development and Design		
9.1	Have you applied principles of sustainable siting and design to your site? The City Council has produced a Sustainability Checklist which provides guidance on the principles of sustainable siting and design and other issues which can be found on www.aberdeencity.gov.uk . Please provide the following information:		
	Orientation		
9.2	Exposure:- (does the site currently have)	Little shelter from northerly winds	
		Some shelter from northerly winds	✓
		Good shelter from northerly winds	
9.3	Aspect:- (is the site mainly)	North facing	
		East or west facing	
		South, south west or south east facing	Generally flat
9.4	Slope:- (do any parts of the site have a gradient greater than 1 in 12?)	Yes	No
		If yes approx. what area (hectares or %)	
		No	
	Flooding & Drainage		
9.5	Flooding (is any part of the site at risk of flooding or has it previous flooded, if so provide detail You can view the SEPA flood maps at http://map.sepa.org.uk/floodmap/map.htm)	Yes (If yes please use the SEPA flood maps to determine the risk)	
		Little or No Risk	✓
		Low to Medium Risk	
		Medium to High Risk	
		If yes approx. what area (hectares or %)	
		No	
9.6	Has a flooding strategy been developed for the site?	N/A Details:	
9.7	Have discussions been had with the Council's flooding team?	No Details:	
9.8	Have discussion been had with Scottish Water?	Yes <i>Details:</i> See bid document for details	
9.9	Is there waste water capacity for the proposed development? http://www.scottishwater.co.uk/business/Connections/Connecting-your-property/Asset-Capacity-Search)?	Yes <i>Details:</i> At Nigg WWTW	
9.10	Is there water capacity for the proposed development?	Yes <i>Details:</i>	

	http://www.scottishwater.co.uk/business/Connections/Connecting-your-property/Asset-Capacity-Search)?	See bid document for details	
	Land Use, Built and Cultural Heritage		
9.11	Built and Cultural Heritage (would the development of the site lead to the loss or disturbance of archaeological sites or vernacular or listed buildings?)	Significant loss or disturbance	
		Some potential loss or disturbance	
		No loss or disturbance	✓
9.12	Natural conservation (would the development of the site lead to the loss or disturbance of wildlife habitats or species?)	Significant loss or disturbance	
		Some potential loss or disturbance	
		No loss or disturbance	✓
9.13	Landscape features (would the development of the site lead to the loss or disturbance of linear and group features of woods, tree belts, hedges and stone walls?)	Significant loss or disturbance	
		Some potential loss or disturbance	
		No loss or disturbance	✓
9.14	Landscape fit (would the development be intrusive into the surrounding landscape?)	Significant intrusion	
		Slight intrusion	
		No intrusion	✓ site already allocated
9.15	Relationship to existing settlements (how well related will the development be to existing settlements?)	Unrelated (essentially a new settlement)	
		Partially related	
		Well related to existing settlement	✓
9.16	Land use mix (will the development contribute to a balance of land uses, or provide the impetus for attracting new facilities?)	No contribution	
		Some contribution	
		Significant contribution	✓
9.17	Contamination (are there any contamination or waste tipping issues with the site?)	Significant contamination or tipping present	
		Some potential contamination or tipping present	
		No contamination or tipping present	✓

9.18	Will the site impact on any water courses?	No Details	No, watercourse on site has been integral to the design approach		
9.19	Does the development site contain carbon-rich soils or peatland? http://www.snh.gov.uk/planning-and-development/advice-for-planners-and-developers/soils-and-development/cpp/	Not applicable, site is allocated for development Details			
9.20	Is the development site within the airport safety exclusion zone?	No Details:			
9.21	Is the development site within the airport 57dB LAeq noise contours?	No Details			
9.22	Land use conflict (would the development conflict with adjoining land uses or have any air quality or noise issues?)	Significant conflict			
		Some potential conflict			
		No conflict	✓ buffers to be provided if necessary		
9.23	If there are significant conflicts, what mitigation measures are proposed?	Details:			
Transport and Accessibility					
9.24	Has contact been made with the Council's transport team?	Yes Details: positive discussions regarding new access following de-trunking of A90			
9.25	Is access required onto a Trunk road and if so has contact been made with Transport Scotland?	No, A90 is to be de-trunked Details:			
9.26	Accessibility (is the site currently accessible to bus, rail, or major road network?)		Bus Route	Rail Station	Major Road
		More than 800m		✓	
		Between 400-800m			
		Within 400m	✓		✓
9.27	Proximity to services and facilities (How close are any of the following?)		400m	400-800m	>800m
		Community facilities	✓ On site post development		
		Local shops	✓		
		Sports facilities	✓		
		Public transport networks	✓		

		Primary schools		✓	
9.28	Footpath and cycle connections (are there any existing direct footpath and cycle connections to	No available connections			
		Limited range of connections			

	community and recreation facilities or employment? Give the Core Path number if core path is present https://www.aberdeencity.gov.uk/services/environment/core-paths-plan)	Good range of connections Enhanced provision proposed.	✓ Core path 107 and AP1
9.29	Proximity to employment opportunities (are there any existing employment opportunities within 1.6km for people using or living in the development you propose?)	None	
		Limited	
		Significant	✓
	Infrastructure		
9.30	Physical Infrastructure (does the site have connections to the following utilities?)	Electricity	✓ available locally
		Gas	✓ available locally
9.31	Does the development have access to high speed broadband?	Yes Details: Up to 76Mb	
9.32	Does the development include a Heat Network/District Heating Scheme?	No Details:	
9.33	How is the development proposing to satisfy the Councils Low and Zero Carbon Policy?	Details: Through detailed design, incorporating where appropriate L+ZC technology.	
9.34	Are there any further physical or service infrastructure issues affecting the site?	No Details:	
	Public open space		
9.35	Will the site provide the required level of open space as per the current LDP (Please provide details of your calculations)	Yes Details: See attached document	
9.36	What impact will the development have on the Green Space Network?	Enhance the Network	✓
		Not Impact on the Network	
		Negatively impact the Network	
		Please justify your response: See attached bid document	

10.	Education	
10.1	Have discussions been had with the Council's Education Department?	No <i>Details:</i>
10.2	Is there currently education capacity for the proposed development? https://www.aberdeencity.gov.uk/services/education-and-childcare/schools-and-education/schools-pupil-roll-forecasts	Yes / No <i>Details:</i> Greenbrae Primary School is already over capacity but new primary school capacity can be reviewed in light of future allocations with appropriate contributions sought to deliver improved or new facilities. Bridge of Don Academy has capacity for the foreseeable future.

11.	Community benefits	
	Community benefits can include new community facilities (such as local shops, health, education, leisure and community facilities), affordable housing, green transport links and open spaces. Include elements which you anticipate may be required as developer contributions from the development. (Please note, specific contributions will have to be negotiated with the Council on the basis of the proposal.)	
11.1	Does the development proposal give any benefits to the community? If so what benefits does the development bring, and how would they likely be delivered?	Yes <i>Details:</i> <ul style="list-style-type: none"> • Improved connectivity east to west; • Improved pedestrian/cycle safety; • Additional mainstream and affordable housing; • Delivery of new aspirational core path elements; • New local facilities/community facilities and employment opportunities

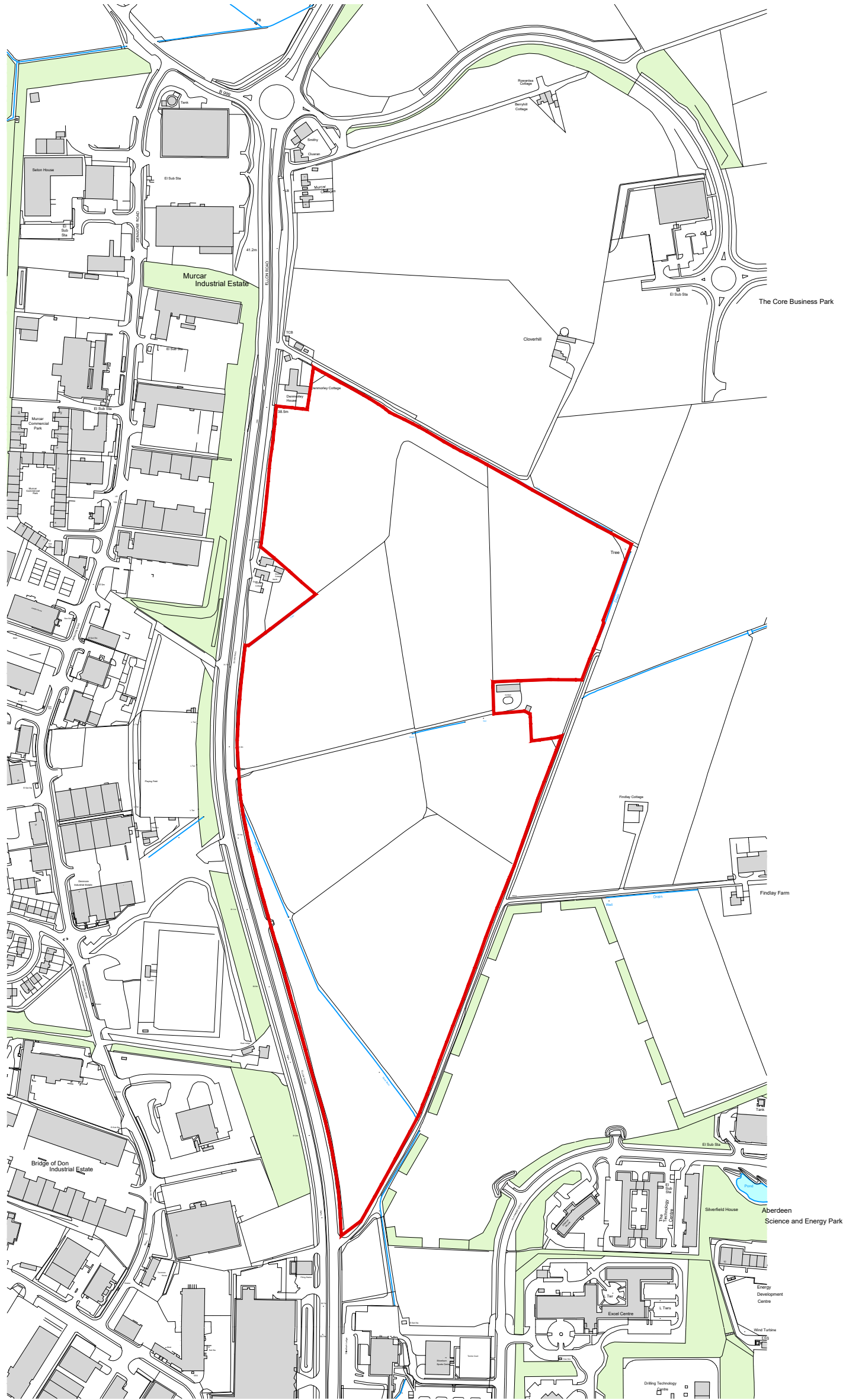
12.	Masterplan Development Framework	
12.1	If you have prepared a framework or masterplan showing a possible layout for the site, please include it with this form.	Yes <i>Details:</i> Please see bid document enclosed with input from professional advisor team.

13.	Additional attachments		
	No site is going to be perfect and the checklist above will inevitably raise some potential negative impacts from any development. Where negative impacts are identified, please provide details of their nature and extent and of any mitigation that may be undertaken. Listed below are examples of further information that may be included in your submission;		
		Included	Not Applicable

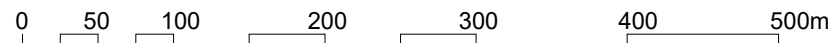
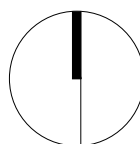
13.1	Contamination Report		✓
13.2	Flood Risk Assessment		✓
13.3	Drainage Impact Assessment	✓	
13.4	Habitat/Biodiversity Assessment		Included in masterplan

13.5	Landscape Assessment		Included in masterplan
13.6	Transport Assessment	✓	
13.7	Other as applicable (e.g. trees, noise, dust, smell, retail impact assessment etc. please state)		✓

14.	Development Viability		
14.1	Taking into account all the information provided above, and the requirements of the Aberdeen Local Development Plan 2017 and supporting Supplementary Guidance, please confirm that you have assessed the financial viability of your proposed development and found it to be viable for development in the timeframe set out above.	I confirm that I consider the site to be viable as per the details provided above.	✓
		Please provide details of viability: Henry Boot Developments Limited and Wraith Real Estate Limited are experienced in delivering large scale mixed-use developments. Significant due diligence has been undertaken on the site and the viability of this proposal has been considered carefully prior to progressing the bid. The site will be entirely within the ownership of the bidders and the necessary finances are available to ensure delivery.	



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LAND AT CLOVERHILL, ABERDEEN

LOCAL DEVELOPMENT PLAN BID / MAY 2018

HENRY BOOT DEVELOPMENTS LIMITED / WRAITH REAL ESTATE LIMITED

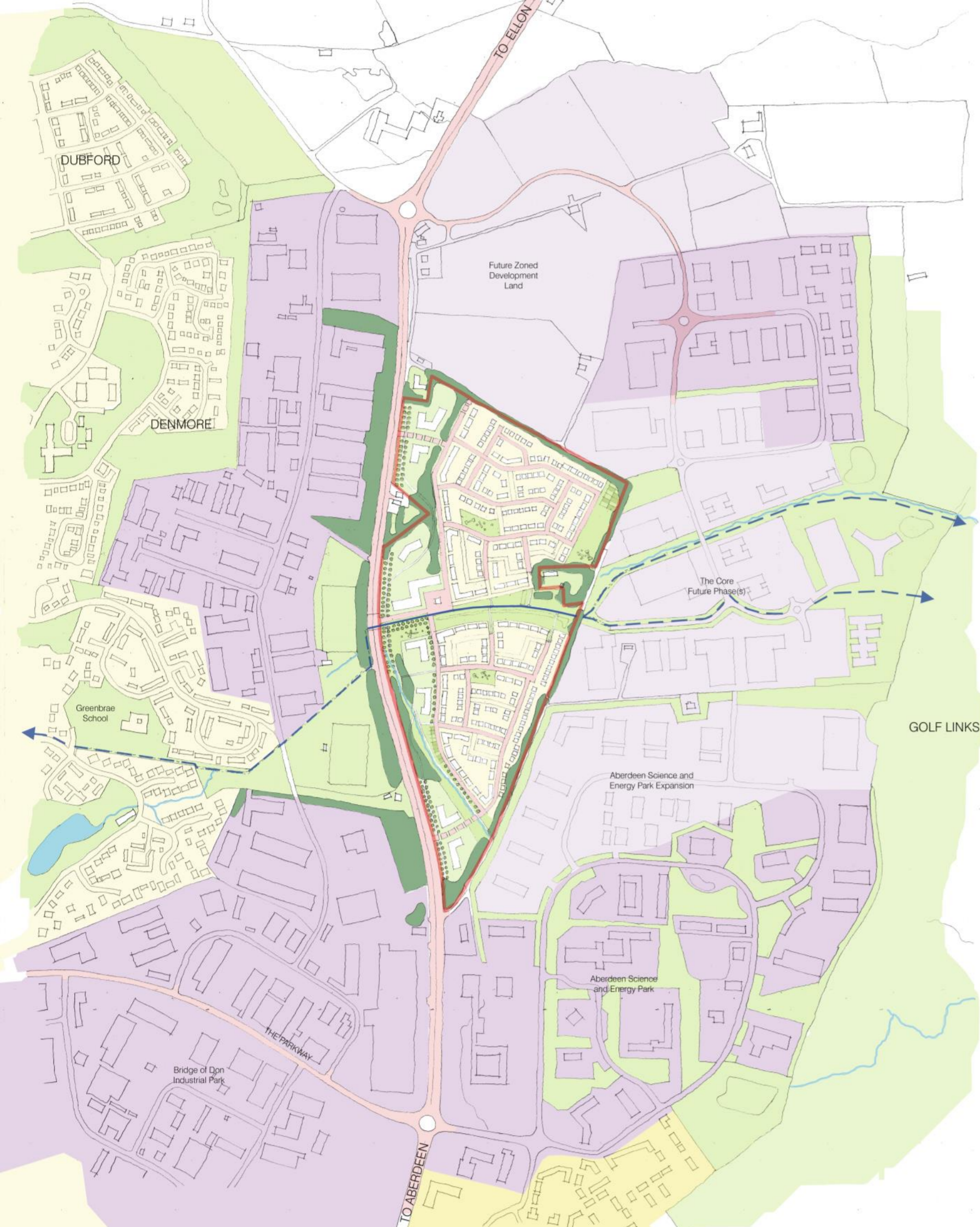
HALLIDAY FRASER MUNRO

FAIRHURST

 **brindley**
ASSOCIATES

 **northern**
ecological
Services
ecological consultants

 **Cameron Archaeology**



DUBFORD

DENMORE

Future Zoned
Development
Land

The Core
Future Phase(s)

Greenbrae
School

GOLF LINKS

Aberdeen Science and
Energy Park Expansion

Aberdeen Science
and Energy Park

Bridge of Don
Industrial Park

THE PARKWAY

TO ABERDEEN

TO ELLON

1. VISION

Purpose of Document

The purpose of this document is to support the Local Development Plan bid submission for Land at Cloverhill, which has been prepared on behalf of Henry Boot Developments Limited and Wraith Real Estate Limited by Halliday Fraser Munro Architects and Planning Consultants, with support from Fairhurst, Brindley Associates, Northern Ecological Services and Cameron Archaeology.

Opportunity

Cloverhill offers a clear opportunity to create a new community that connects with the Bridge of Don and the employment uses adjacent. Its location in an area close to local services, employment opportunities, public transport routes and recreational opportunities places it in an ideal position to support sustainable and healthy lifestyles. Moving from an employment zoning to a mainly housing designation will not only allow this development to help the City achieve its housing requirements but do so quickly post the adoption of the new LDP. As a zoned site the presumption in favour of development has already been established.

This bid document explains the site potential and demonstrates the benefits of shifting towards a residential use in this location.

Cloverhill Key Benefits

- * Providing support to local business use
- * Creation of work/live communities
- * Enhancing the visual appeal and viability of neighbouring commercial land
- * Providing community facilities to support the wider area
- * Form a key part of a wider mixed-use community

Multi-disciplinary Team

Developers Henry Boot Developments and Wraith Real Estate Limited have employed a multi-disciplinary team to assist with the preparation of this bid submission:

Architect / Planning Consultant: Halliday Fraser Munro

HALLIDAY FRASER MUNRO

Civil / Structural Engineer: Fairhurst

FAIRHURST

Landscape Architect: Brindley Associates

brindley
ASSOCIATES

Ecology: Northern Ecological Services



Archaeology: Cameron Archaeology

Cameron Archaeology

“The Vision for Cloverhill is to create a new sustainable community, sitting between the Bridge of Don and Aberdeen beach, providing a high quality, sustainable and healthy lifestyle for its residents, businesses and the wider community.”

2. SITE DESCRIPTION

Location

Bridge of Don has grown to be one of Aberdeen's largest suburbs and is a popular place to live. This site is located to the east of the main residential area, between it and the coast, whilst the Core Business Park offers an eastern boundary to this site.

New retail (for example, M&S food, Home Bargains and Costa) are now available just to the north of the site and employment opportunities sit to the west and south. Land to the north is allocated as LR1 – Land Release for a further potential 27 Hectares of Employment Land between 2027 and 2035. Extensive local infrastructure improvements have been completed or will be completed prior to the LDP being adopted in 2021. These include the AWPR, the Third Don Crossing, Murcar Roundabout improvements and Haudagain Roundabout improvements.

The de-trunking of the A90 adjacent to the site will have a major positive impact on the opportunity presented by this site and supports its rezoning. Once the AWPR is open the de-trunked A90 can provide direct access to the site via a new junction that will also allow for improved and safe access to the site for pedestrians and cyclists. Linking the site safely across the A90 will help the Council achieve the local aspirational Core Path links and could contribute towards vastly improved access to the coastline for the existing community. A speed limit reduction on the A90 post the road being de-trunked will make this road considerably safer and easier to achieve appropriate crossing opportunities

Locationally, therefore, the site sits within the urban area, on a site zoned for development and close to residential, employment and the coastal recreational areas.

The site area extends to approximately 56 acres.

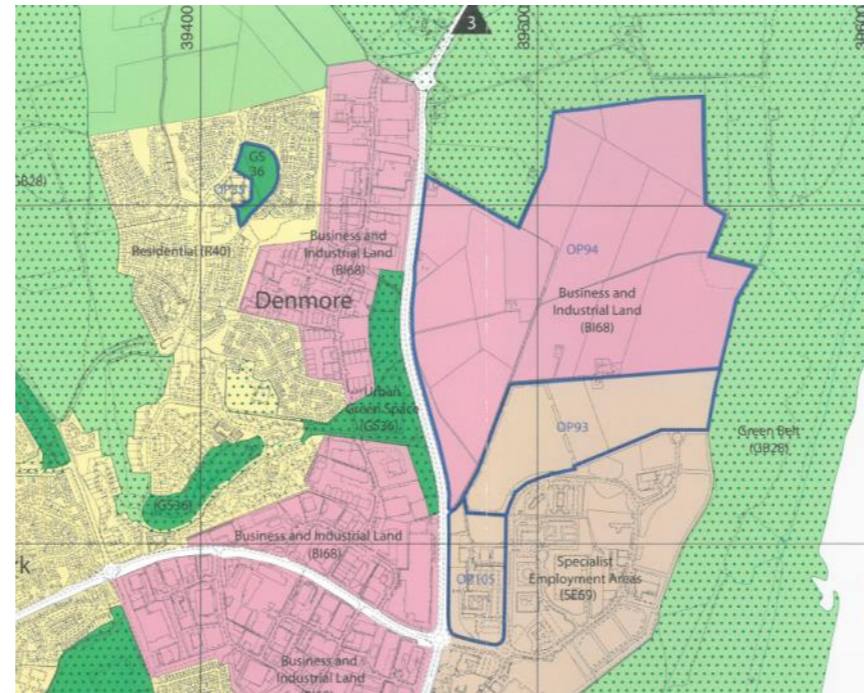


3. PLANNING CONTEXT

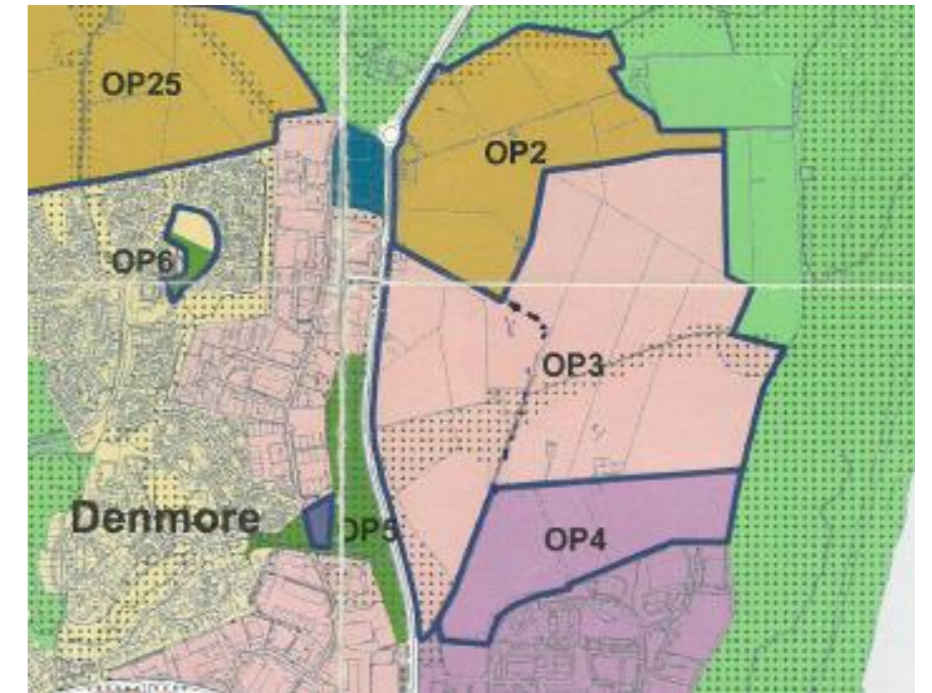
Planning Context

The site has been zoned for Business and Industrial Use since 2008. It was originally zoned to cover the period of 2000 to 2010 and considered to have a lifespan of between 15 and 20 years depending on market demand. The City's development land requirements are clearly in a different place than the case in 2008 and this site is now more appropriately considered for new uses.

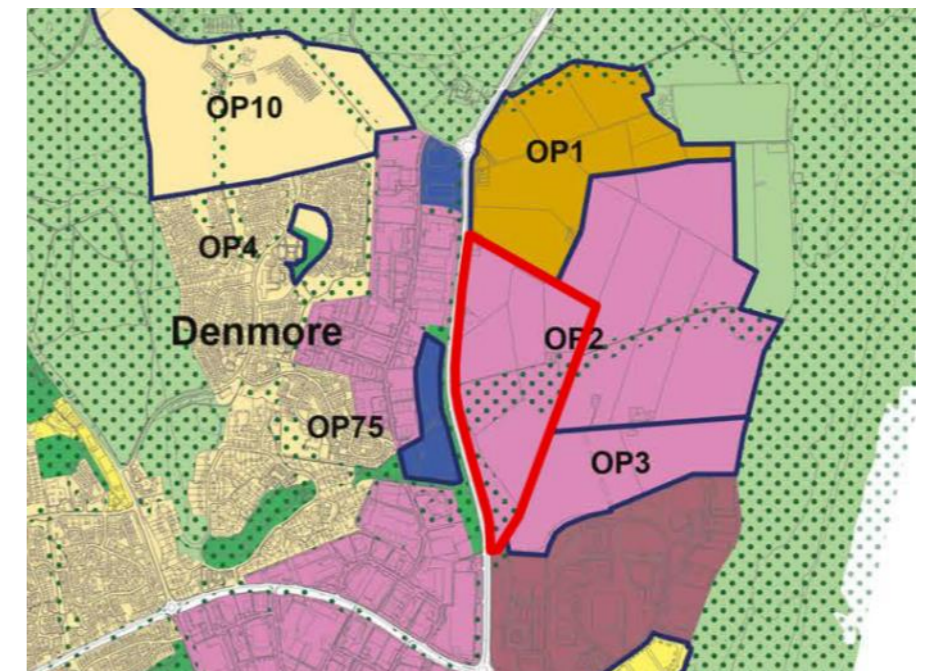
The site remains a key development site for the City given its prominent location on a key public transport corridor within the urban area.



Green Spaces New Places 2008



ALDP 2012



ALDP 2017

3. PLANNING CONTEXT

Employment Land Audit

Rezoning Cloverhill would not impact on the City’s marketable supply of employment land

The 2016/2017 Employment Land Audit (ELA) identifies the wider OP2 area, including this site, as “marketable” employment land. Land at Phase 1 of the The Core Business Park can be described as “marketable” as it benefits from planning consent and is partially developed. That is not the case for Cloverhill. This site has no planning permission in place for employment uses and is in separate ownership from The Core. As a result the ELA should perhaps have identified Cloverhill as “established” employment land rather than forming part of the “marketable” employment land supply.

The 2016/2017 ELA has also identified:

- * “The Strategic Development Plan requirements for employment land supply are as follows:
- * 60ha of marketable land available in Aberdeen City
- * 60ha of marketable land available in the Strategic Growth Areas of Aberdeenshire
- * At least 20ha of this marketable land to be suitable for high quality business use/company headquarters

The targets for the supply of marketable employment land in both Aberdeen City and Aberdeenshire continue to be significantly exceeded and the overall employment land supply provision is generous. Over 20ha of the total marketable land available is considered suitable for high quality business use and/or company headquarters.” (Source: 2016/2-17 Employment Land Audit)

Cloverhill at 22 hectares represents less than 10% of the overall marketable supply although it would retain some employment uses as part of its mix. Reallocating it from that supply would still retain over 200 hectares of marketable employment land. That is equivalent to 335% of the Strategic Development Plan requirement. Rezoning Cloverhill for residential uses would not therefore impact on the City’s marketable supply of employment land or undermine the overall employment land strategy.



Energetica Vision

Energetica

Energetica is about creating integrated, energy efficient communities that support innovation and employment.

The site also sits at the southern end of the Energetica Corridor.

*“Energetica provides attractive opportunities to invest in business facilities, leisure and housing with unique place-making planning guidance that will **deliver energy efficient, high quality housing and communities among the best in the world.** It is an integral part of Aberdeen City and Shire’s work to strengthen its position as a global energy hub, building on the region’s rich oil and gas heritage with opportunities for carbon capture and storage, hydrogen, onshore and offshore renewable energy.” (Source, Aberdeenshire Council website, May 2018)*

Energetica is therefore about more than employment. It’s about creating integrated, energy efficient communities that support innovation and employment. Developing this site for a residential based mixed-use community in the form suggested in this bid would complement the Energetica concept.

3. PLANNING CONTEXT

Housing land

Housing land allocations have been lagging behind their anticipated delivery rates, creating a clear backlog that now needs new housing sites to help deliver new homes in the affordable and mainstream sectors.

Cloverhill can make a significant contribution towards this shortfall.

The joint Strategic Development Plan Main Issues Report is currently out for consultation. That states that the Councils (Aberdeen and Aberdeenshire) have delivered approximately 2,750 houses less than the SDP requirement and 3,000 houses short in delivering affordable housing. That’s around 600 houses less than required every year.

It states:

“Between 2011 and 2016, a total of 11,433 homes were built (2,769 fewer than the Strategic Development Plan requirement). Private-sector completions were 165 units more than the requirements identified in the Housing Need and Demand Assessment (2011) but delivery of affordable housing fell almost 3,000 units short of the need that was identified.”

Source: SDP MIR 2018

Independent analysis of housing land delivery in the City on key sites identifies a significantly worse housing delivery record. This is demonstrated in the following table. It identifies the key development sites in the City, their original anticipated housing numbers and the actual delivery over a 10 year period, all based on the Council’s Housing Land Audits. It shows that of the 11,150 houses originally proposed on these sites just over 2,000 (approximately 10%) have been delivered over the last 10 years.

The evidence points to slower delivery rates on a site by site basis. To improve delivery the City needs to allocated more sites in different locations and encourage a greater range of developers. Allocating sites up to 100 houses will not fulfil this long-term housing backlog. Larger sites with realistic delivery timeframes should form part of the Council’s land-use strategy to deliver more housing, more effectively and more often.

Comparison of Major Housing Proposals in 2012 LDPs against actual delivery									
City	site	ref	2007-2016	Cumulative 2015	shortfall	Cumulative 2016	shortfall 2016	Cumulative 2017	shortfall 2017
	Grandhome	OP12	2600	0	2600	0	2600	0	2600
	Dubford	OP25	550	190	360	309	241	397	153
	Stoneywood	OP24	500	133	367	231	269	514	-14
	Craibstone South	OP28	750	0	750	0	750	0	750
	Rowett South	OP30	1000	0	1000	0	1000	0	1000
	Greenferns Landward	OP31	750	0	750	0	750	0	750
	Maidencraig	OP43 & O	750	5	745	24	726	60	690
	Greenferns	OP45	600	0	600	0	600	0	600
	Countesswells	OP58	2150	0	2150	4	2146	154	1996
	Oldfold	OP62	400	0	400	25	375	50	350
	Loirston	OP77	1100	0	1100	0	1100	0	1100
	TOTALS		11150	328	10822	593	10229	1175	9054
			percentage delivered	2.9%		5.3%		10.5%	

3. PLANNING CONTEXT

Housing Strategy and Allocations

Aberdeen remains the strategic centre for housing development for the City region. It is the main focus for growth and the SDP MIR clearly identifies future housing need and a requirement for additional release of housing land across the City and Shire. The City and Shire vision is to create an attractive, resilient, prosperous and sustainable European City Region and an excellent place to live.

The SDP Main Issues Report has set a target of 2,100 new homes every year between 2021 and 2025 and 2,200 new homes annually between 2026 and 2030. Beyond 2030 a further growth scenario is anticipated. Table 6 of the SDP MIR is set out below.

The proposed housing allowance is for 13,000 new homes in the City over the next 22 years. Historical data suggests a clear shortfall in the delivery rate from existing housing allocations with larger allocations taking significantly longer to deliver than was originally anticipated. That being the case housing delivery will continue to fall short of housing need. Alternative sites in locations that offer attractive and popular places where people would like to live should be allocated to complement the existing housing land supply.

Table 6: Proposed Allowances (land to be identified beyond the 2016 effective supply)				
	2016 to 2030	2031 to 2035	2036 to 2040	Total
Aberdeen Housing Market Area	4,200	5,700	6,300	16,200
Rural Housing Market Area	1,300	1,700	2,500	5,500
Total	5,500	7,400	8,800	21,700
Split as follows:				
Aberdeen City Council	3,500	4,700	4,800	13,000
Aberdeenshire Council	2,000	2,700	4,000	8,700

Extract from 2018 SDP MIR - Table 6 – Proposed Allowances (Housing)

Core Path Network

It's also worthwhile noting the Aspirational Core Path identified in the current LDP which runs east to west through this site and links Bridge of Don with the beach and coast. Allocating this site for residential use would encourage a faster development process that could provide this link through the site to the neighbouring land. More importantly the development, with a new access off of the A90, could facilitate a safe and convenient crossing point across that de-trunked road with its associated reduced speed limit. This is a key element of the proposed development.

Design Aspirations

The Scottish Government are pursuing both a housing delivery and design quality agenda and this is being carried through in local design policies. On the latter they have and continue to promote the 6 essential qualities of place:

- * Distinctiveness
- * Welcoming
- * Safe a pleasant
- * Easy to move around
- * Adaptable
- * Resource efficient

These qualities have been considered in the development of this proposal.

4. SITE ANALYSIS

Site Boundaries

The site is bound to the north and east by a private track and agricultural land (zoned for development). It is bound to the west by the Ellon Road, to the south by land associated with the Aberdeen Energy Park expansion and to the east by agricultural land associated with future phases of The Core Business Park.

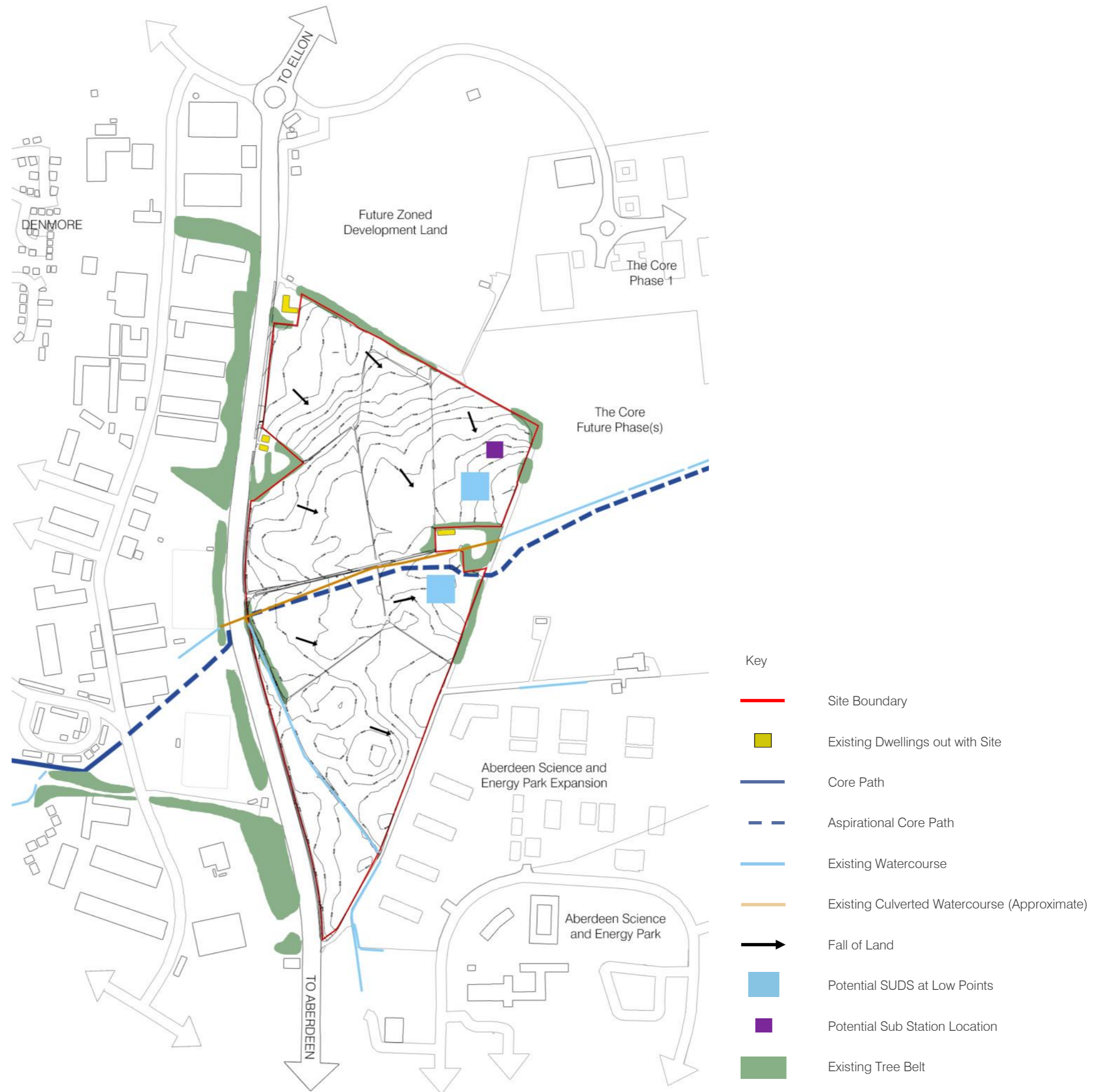
Transportation

Fairhurst have carried out a full Transport Appraisal of the site. A summary of the key transportation headlines are provided below:

Existing Road Network

The site is bound to the west by the A90 Ellon Road which is a dual carriageway Trunk Road that provides a link to / from Balmedie, Ellon, Peterhead and serves other settlements along its route as far north as Fraserburgh. To the south, the A90 Ellon Road connects with the A956 Ellon Road via a roundabout junction with the A90 Parkway and routes towards Aberdeen City Centre, the Harbour and southern areas of Aberdeen City. From the roundabout with the A956 Ellon Road, the A90 Parkway continues west where it intersects with the A96 at the Haudagain Roundabout. In addition, Gordon Brae routes south from the A90 Parkway / Whitestripes Avenue roundabout and forms the route to the recently constructed 3rd Don crossing / Diamond Bridge. The crossing allows traffic from the suburbs of Danestone, Grandhome and western areas of Bridge of Don to reach the city centre without having to route via the A90 / A96 Haudagain Roundabout and A90 / A956 Ellon Road.

The AWPR is located approximately 3 miles to the north of the site and will be a new orbital route around the west side of Aberdeen. Its construction is anticipated to provide 'a much needed fast and safe



4. SITE ANALYSIS

route around Aberdeen'. One of the key benefits of the AWPR is the traffic reduction on routes around northern and western Aberdeen. Reductions in daily traffic levels at Bridge of Don are projected to be as much as 18%, which will improve the efficiency of the Ellon Road corridor.

Existing Pedestrian and Cycle Networks

The A90 Ellon Road supports pedestrian footways on its north and south bound carriageway and provides the site a link towards areas such as Bridge of Don, Dubford and Denmore as well as further southbound travel towards the city centre. At-grade pedestrian crossings are currently located on the A90 Ellon Road on the approaches to the roundabouts to the north and south of the site. Committed infrastructure improvements associated with the Core Business Park include the upgrade of the northern crossing to a Toucan crossing.

Existing cycling infrastructure largely replicates provision for pedestrians as many of the facilities are shared by pedestrians and cyclists. Cycle paths on the A90 Ellon Road are currently for shared use and therefore support travel on foot and bicycle.

Existing Public Transport Networks

The site has excellent access to regular bus services that operate along the Ellon Road corridor and from the Bridge of Don Park and Ride. The nearest bus stops on the A90 Ellon Road are currently located around 200m north of the site while the Bridge of Don park and ride is situated around 850m to the south of the site. Further services are accessible from Denmore Road to the west of the A90 Ellon Road and are within 400m walking distance of the site. All services within the vicinity of the site route to, or through, the city centre and so offer interchange opportunities with several other bus services operating via Union Street.

Bus lanes are provided on the A956 Ellon Road southbound carriageway which then filters out south of the junction with North Donside Road. Further intermittent bus lanes are provided as Ellon Road becomes King Street after the bus gate at the Beach Esplanade junction.

Ecology

Northern Ecological Services have carried out an Extended Phase 1 habitat survey and found that the site comprises an improved agricultural landscape of overall low ecological value and no significant adverse ecological impacts are anticipated as a result of development at this site.

Archaeology

Cameron Archaeology have carried out a Desk Based Assessment and found nothing of significance on site. If allocated, it is expected that further investigation would form part of a planning application process.

Topography

A detailed topographic survey has been undertaken across the proposed development area. There are no topographic constraints to the development. It is anticipated that the general topography of the development will remain largely as existing, with limited requirement for bulk earthworks.

Ground Conditions

A full ground investigation has been undertaken by Fairhurst across the development area to study the soils and to determine if there are any geotechnical or environmental constraints. The soils are generally granular and do not represent a constraint to development. It is

expected that standard foundations and road construction will be adequate for the proposed development. No general environmental constraints were identified in the investigation.

Drainage

Fairhurst have undertaken a Drainage Appraisal for the site and a summary of their findings is included below.

Wastewater

There are no public wastewater services within the site. New foul sewers will be provided, in accordance with Scottish Water's specification, throughout the proposed development. These sewers will discharge to a new pumping station constructed within the site, which will pump foul water flows to the existing public network. Scottish Water have confirmed that sufficient capacity currently exists at Nigg PFI Waster Water Treatment Works to service the development.

Surface water

There are existing watercourses crossing the site, along with existing surface water sewers. New surface water sewers will be provided, in accordance with Scottish Water's specification, throughout the proposed development. Sustainable Drainage System (SuDS) will be provided, including source control measures where practicable. Surface water sewers will discharge to a number of extended detention basins, which will provide treatment and attenuation of the surface water run-off. The basins will discharge at a controlled rate, not greater than the greenfield run-off rate, to the existing watercourses which flow through the site.

Land drainage

The existing land drainage system will be respected where practicable and diverted where necessary to ensure the

4. SITE ANALYSIS

surrounding land is unaffected and that the proposed development is adequately drained.

Existing Utilities

Fairhurst have assessed the utility availability for the site and a summary of their findings is included below.

Water

An existing water main runs along the A90 which bounds the western side of the site. Smaller diameter connections service the existing properties within the site area. This existing water main does not present a constraint to the development. Supply will be taken from the existing infrastructure to service the development.

Gas

There is a medium pressure gas main extending along the A90 on the western boundary. The existing gas main does not present a constraint to the development. New gas mains would be provided within the proposed development site and these would be fed from the existing gas supply network.

Electric

There are existing supplies to the existing properties. These generally follow site boundary lines. These will either be respected by the development layout or diverted and do not present a constraint to the development. Supply will be taken off the existing electricity network and extend through the development to service the site.

Telecoms

There are various telecom connections to the existing dwellings within the site boundaries. These will either be respected by the development layout or diverted. It is understood that the existing telecoms network can be readily extended to serve the development.



View looking north east from central existing track



View looking south along Ellon Road



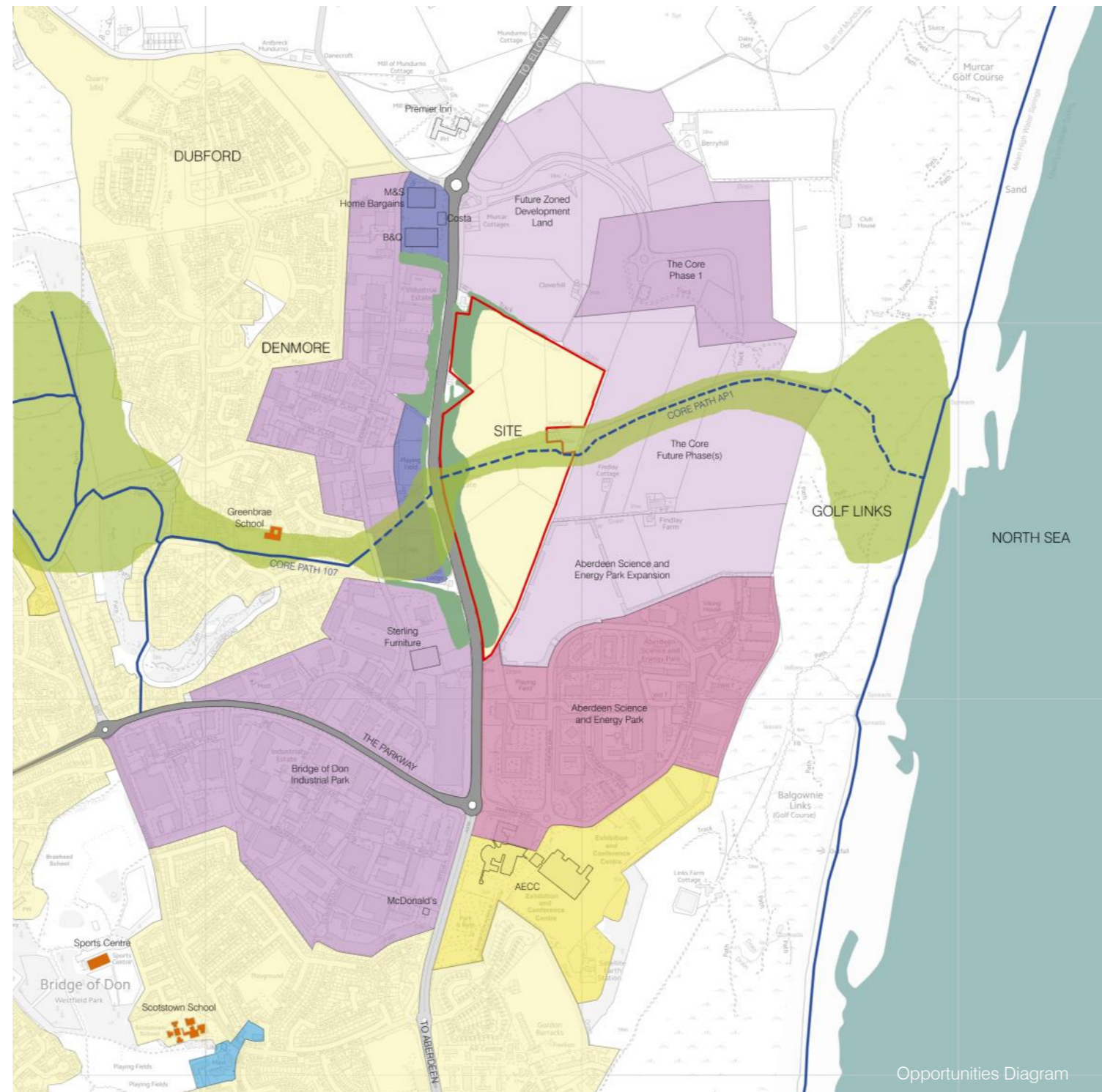
View looking south along path of Silver Burn

5. OPPORTUNITIES

Site Opportunities

The adjacent diagram combines an analysis of the site in the form of land allocation and use, with potential opportunities (listed below).

- * Support Aberdeen City's housing land / supply and reduce over-supply of employment land
- * Enhance connectivity between the existing residential neighbourhoods of Denmore and Dubford, the site and the coast
- * Change in the land allocation of the site to predominantly residential use, to support surrounding employment centres
- * Improve approach into Aberdeen
- * Contribute towards delivery of core path network
- * Contribute towards delivery of landscape corridor between Denmore and the Golf Links
- * Create a sustainable development with a mix of uses
- * Follow the existing urban pattern of residential and commercial uses along Ellon Road
- * Slow traffic on Ellon Road
- * Enhance visual amenity along Ellon Road, with landscaped boulevard
- * Provide 'safe route to school' across Ellon Road at core path intersection
- * Provide opportunity for public transport links through the site



Key	
	Business + Industrial
	Future Development Land—Business + Industrial
	Beach + Leisure
	Specialist Employment Areas
	Mixed Use Areas
	Residential Areas (Existing Land + Potential)
	Commercial Centres
	School / Community Use
	Site Boundary
	Core Path
	Aspirational Core Path
	Potential East—West Green Corridor
	Potential Landscape Boulevard to Ellon Rd

6. SITE POTENTIAL

Land Use

Building on the Vision for Cloverhill, the opportunity exists to create a sustainable mixed use development, which respects existing urban patterns and land use.

Mixed Use Landscaped Boulevard

The creation of a strong landscaped boulevard to Ellon Road would complement the existing mature planting on the west bank of the carriageway and create a welcoming approach to Aberdeen.

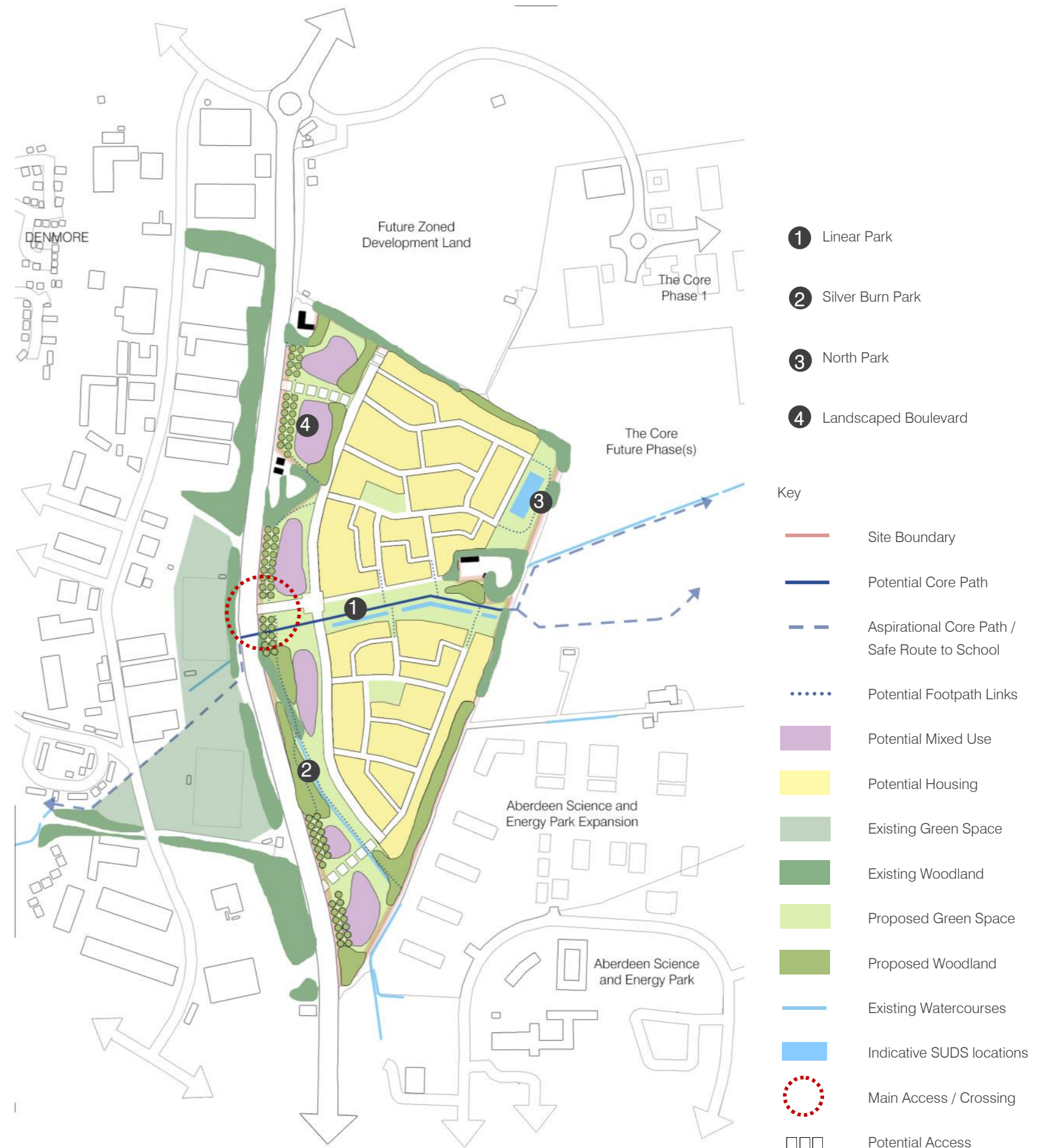
Business, retail and community uses would be appropriate for this zone, for the following reasons:

- * Follows existing pattern of employment uses along Ellon Road
- * Opportunity for 'public frontage' to Ellon Road
- * Opportunity for pavilion style buildings within park setting
- * Offers a degree of privacy and screening from Ellon Road, for residential areas
- * Creation of formal urban edge to development
- * Opportunity for shared amenity spaces for community or employment uses

Development Pockets

Opportunities exist to create manageable development pockets via a network of green corridors and spaces. The centrally located Linear Park provides a north / south subdivision, emphasising the importance of the aspirational core path link between the existing residential neighbourhoods of Denmore and Dubford and the City's coastline.

Housing areas would benefit from a more sheltered position, set back from Ellon Road, and remain fully accessible via a network of streets, lanes and paths.



6. SITE POTENTIAL

Connectivity

A core path link, which crosses the Linear Park (identified by Aberdeen City Council as aspirational 'AP1') could contribute towards an important link between the existing commercial and residential neighbourhoods west of the Ellon Road and the City's coastline.

Three opportunities for access (of which two would be selected) have been identified on the Ellon Road (illustrated on the adjacent diagram). The primary access could be centrally located, providing a focal point along Ellon Road and at the entrance to the Linear Park and core path link. A pedestrian crossing could be provided at the main access with the A90 Ellon Road to ensure safe crossing and routes to school. All junctions would be designed to create a sense of arrival and build on the concept of a Landscaped Boulevard.

Streets are broken into a clear hierarchy of: Main Street, Secondary Streets and Lanes, to help create a sense of place and define individual character areas.

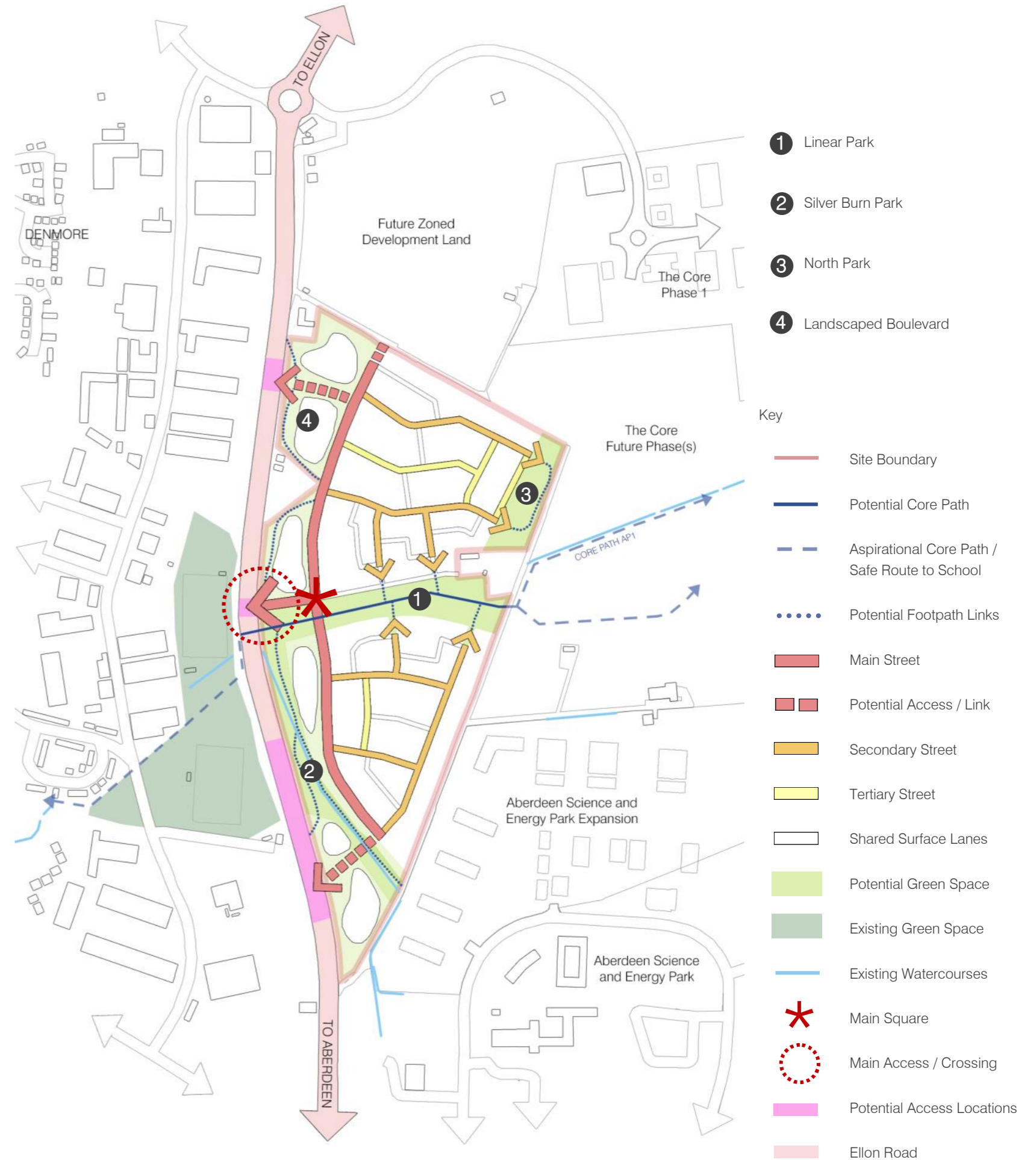
The Main Street connects the core elements of the site, including:

- * Main urban square
- * Central green space (Linear Park)
- * Three potential access points on Ellon Road
- * Mixed use and residential areas

Secondary Streets and Shared Surface Lanes connect the Main Street with a wider network of green spaces, including the:

- * Silver Burn Park
- * North Park
- * Landscaped Boulevard

In addition to the core path link, a network of paths and cycle ways enhance the site's wider connectivity and provide safe routes through the site, particularly along Ellon Road and potential routes to primary or secondary schools.



6. SITE POTENTIAL

Landscape

The site offers opportunities for a variety of green spaces, which differ in scale, character and function.

The Landscaped Boulevard represents an opportunity to create a sense of arrival into Aberdeen, whilst retaining the existing identity of the area—both in terms of land use and landscape. A strong tree line would complement the existing mix of mature trees and hedgerows on the west boundary of Ellon Road.

The Linear Park follows the line of Aberdeen City Council's aspirational core path AP1 and could make an important contribution to public open space for this site, with an east west orientation and strong urban boundary to the north and south. The addition of a hardscaped urban space at the entrance to the site, such as the Main Square, could suit a small scale retailer or food outlet and provide a focal point within the park setting.

The Silver Burn, an existing watercourse, represents an important ecological asset of the site, offering immediate benefits to wildlife and the wider community. A park in this location could create an important amenity for adjacent mixed use and residential areas and act as a landscape buffer to Ellon Road by reducing potential noise and air pollution.

The north east corner of the site offers a potential drainage solution, which could be integrated within a wider, usable park setting, offering an additional amenity space for residents in the northern half of the site.

A mix of functions could be accommodated within each open space including informal play areas, growing spaces, recreational areas, cycle paths and footpaths.



7. CONCEPT

Vision

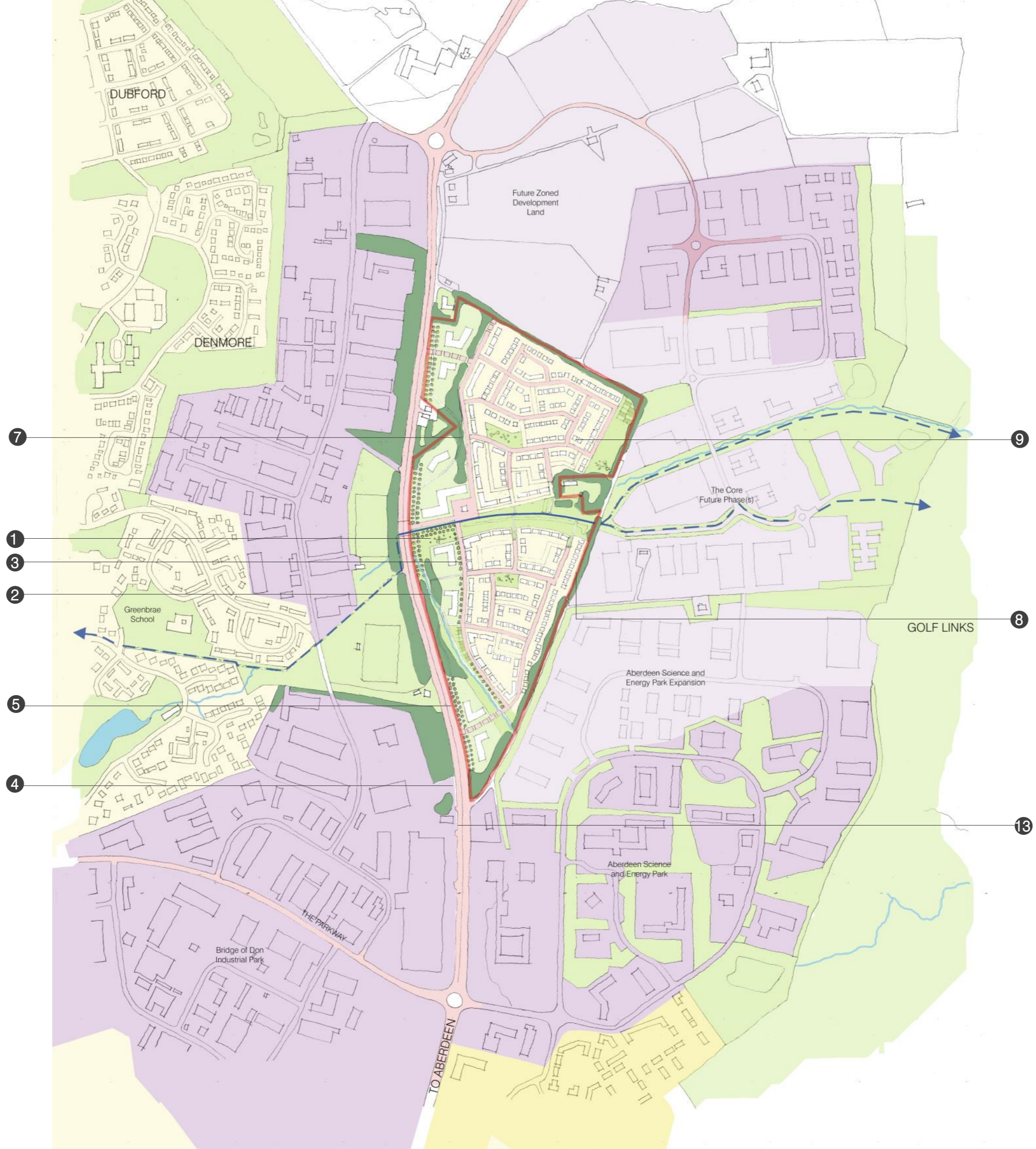
The Vision for Cloverhill is to create a new sustainable coastal community, sitting between the Bridge of Don and Aberdeen beach, providing a high quality, sustainable and healthy lifestyle for its residents, businesses and the wider community.

Development Framework

The site benefits from an agreed development framework. That framework recognises the limited importance in landscape terms of the site. The element of the framework most relevant to this bid is the Parkland Fringe / Landscape Boulevard to Ellon Road.

Key Elements

1. Landscaped Boulevard—Opportunity for mixed use zone on Ellon Road, with strong landscape delineation. Follows existing land use patterns and shelters residential use. Buildings and landscape enhance the arrival sequence into Aberdeen and the site.
2. Linear Park—Centrally located park forms core element of public open space and contributes towards an aspirational connection between existing residential neighbourhoods, the site and Aberdeen coastline (identified by Aberdeen City Council in their core path network).
3. Main Square—A main square provides an urban focal point within the Linear Park and is located on a key crossroad in the street framework.
4. Access—Three potential access points have been identified on Ellon Road. The Primary access would be centrally located at a key core path / pedestrian crossing point. Secondary accesses could be provided to the north or south, with options for these to be formed as left in / left out arrangements.
5. Silverburn Park—A secondary park offers a distinct and ecologically diverse public open space within the identified Landscape Boulevard zone.
6. SUDS—Potential SUDS areas could be integrated within the landscaped Linear Park and North Park.
7. Main Street—Avenue on the edge of the Landscape Boulevard links potential access points, open spaces and mixed use and residential areas
8. Cycle / Pedestrian Movement—Pedestrian movement has been prioritised, with a particular focus on potential movement from west to east (following the aspirational core path AP1).
9. Street Hierarchy—Secondary streets connect the Main Street with key open spaces, whilst lanes enhance connectivity and remove cars from key frontages.
10. Housing—The site could support a mix of housing types and tenures, including affordable and low cost options. Approximately 500-600 new homes could be accommodated with other uses contained within the Landscaped Boulevard.
11. Community Benefits—The site could offer benefits for the wider community in the form of open space, new footpath connections and land for community facilities.
12. Public Transport—The development would provide opportunities for increased public transport frequencies or new public transport routes to be developed internally within the site.
13. Ellon Road—The speed limit on the A90 Ellon Road would be reduced to 40mph and the character of the road would replicate that of the existing 40mph A956 Ellon Road to the south of the site. The Primary access junction could incorporate pedestrian crossing provision ensuring safe crossing of the A90 Ellon Road from the site.



8. TRANSPORTATION

External Road Network

The construction of the AWPR around the City offers an exceptional development opportunity at Cloverhill. The AWPR will include a grade separated interchange approximately 3 miles north at Blackdog, which will offer easy access to destinations around the periphery of the City.

In Autumn 2018 the AWPR is due to open which will allow for the de-trunking of the A90 Ellon Road where it passes the site to the west. With daily traffic levels projected to reduce by as much as 18%, the efficiency of the Ellon Road corridor will improve. The reduced traffic flows would allow capacity to be released for new development at Cloverhill.

The aspiration for the proposed site is to create a sustainable development, which builds upon and respects existing urban patterns and land use. In order to support this aspiration the speed limit on the A90 Ellon Road would be reduced to 40mph and the character of the road would replicate that of the existing 40mph A956 Ellon Road to the south of the site.

New vehicle junctions will provide access to the site along the A90 Ellon Road. The Primary access would be a centrally located signalised junction incorporating pedestrian crossing facilities at a key core path / pedestrian crossing point of the A90 Ellon Road. Secondary accesses could be provided to the north or south of the site with options for these to be formed as left in / left out arrangements.

Internal Road Network

Within the site a clear hierarchy of streets will help create a strong sense of place and aid movement through the new development allowing for strategic North-South and East-West movements to be developed. Good street design can promote a better quality of living for everyone. Street design should meet the six qualities of successful places; Distinctive, Safe & Pleasant, Easy to Move Around, Welcoming, Adaptable and Resource Efficient.

Street design has been approached following the street design hierarchy looking at street structure, then layout, followed by detail. At all times this has aimed to consider place before movement, with the needs of pedestrian, cyclists and public transport considered before those of other vehicles.

Street layout has been considered in tandem with land use and in addition to the core streets there will be further streets, lanes and shared surfaces within the development areas which will be designed in accordance with 'Designing Streets' policy and appropriate standards/requirements of Aberdeen City Council.

Pedestrian and Cycle Networks

Pedestrian and cycle access into the development shall largely replicate that of the vehicle access with further provision via the core path link and a secondary network of paths and cycle ways that will enhance connectivity and provide safe routes through the site.

The signalised access junction will incorporate pedestrian crossing phases on all arms of the junction ensuring safe crossing of the A90 Ellon Road. Committed infrastructure improvements associated with the Core Business Park includes the provision of a Toucan crossing to replace the existing at-grade crossing on the A90 Ellon Road to the north of the site. This will further enhance the sites accessibility for pedestrians and cyclists and ensure safe crossing opportunities are provided for all pedestrians and cyclists travelling to / from the site following known desire lines.

Public Transport Networks

The site has excellent access to regular bus services that operate along the Ellon Road corridor and from the Bridge of Don Park and Ride. The introduction of additional bus stops on the A90 Ellon Road will ensure that the entire site is located within 400m walking distance of bus stops and services in accordance with planning policy

The vehicle access strategy and internal street network will be designed to ensure that buses would be able to enter and exit via the proposed access junctions. The development will create opportunities for increased frequencies or new service routes to be developed internally within the site. The access strategy ensures that this could be done efficiently without the need for any significant diversion of existing services that currently route via the A90 Ellon Road and Denmore Road.



9. CHARACTER AREA 1

Main Square

The Main Square, located within the heart of the proposal, on the Main Street and within the Linear Park, offers the opportunity for:

- * An urban public space on the edge of the park
- * A formally landscaped space
- * A means of traffic calming at a primary junction
- * A wayfinding marker
- * A south-facing amenity space

Linear Park

The Linear Park represents the focal green space within the proposal, and could bring the following benefits:

- * Formal soft landscape
- * Contribution to core path link and informal foot and cycle path network
- * Avenue tree planting at entrance
- * South facing public open space
- * Integrated SUDS area
- * Bench seating
- * Children's play area
- * Overlooking by residential and mixed use development
- * Strong urban boundary to north and south
- * Building frontage

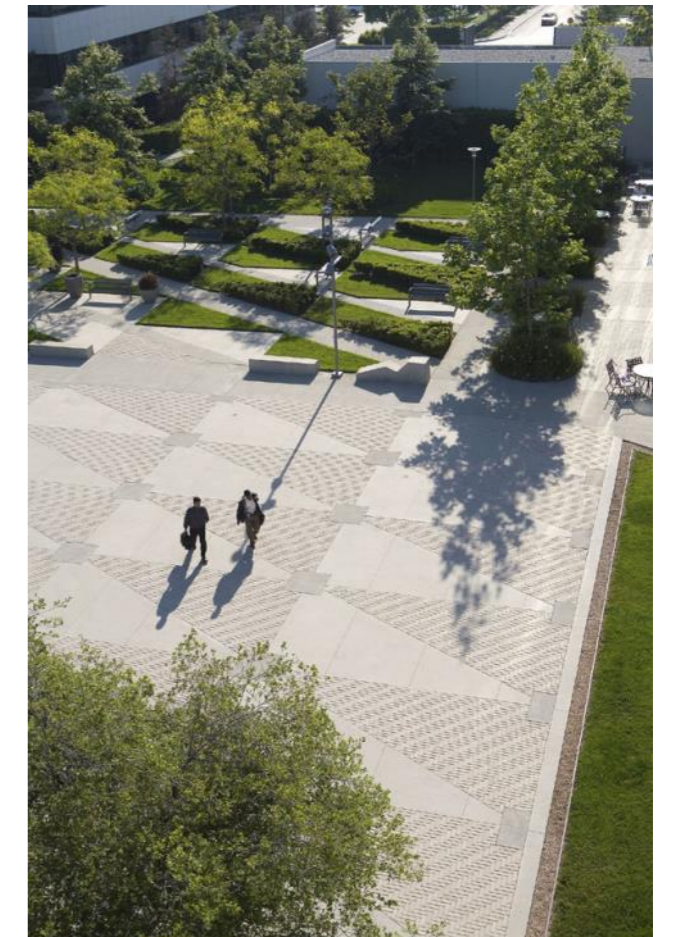


Avenue tree planting

Main Square

Linear Park

Children's play



10. CHARACTER AREA 2

Silver Burn

The Silver Burn, which runs down the south west edge of the site, offers an opportunity for an ecologically rich public open space for the benefit of residents and the wider Bridge of Don community. This area could feature:

- * Natural, soft landscaped space
- * Network of informal gravel paths for pedestrians and cyclists
- * Mix of shaded and bright areas
- * Series of stream crossings of varying scales (for vehicles and pedestrians)
- * Space for allotments
- * Amenity space for adjacent mixed uses and residential areas
- * Building frontage



Space for allotments

Informal path network

Mixed use buildings

Silver Burn



11. PHASING + DELIVERABILITY

Phasing

Although this is a single bid the site can be developed in appropriate phases. Initial phases will need to be at the access and egress points where significant infrastructure improvements may require a proportionately larger phase. Developing these areas will ensure that the east west connections and access are established to allow wider public benefits to be delivered early in the development process.

Density and Use Viability Appraisal

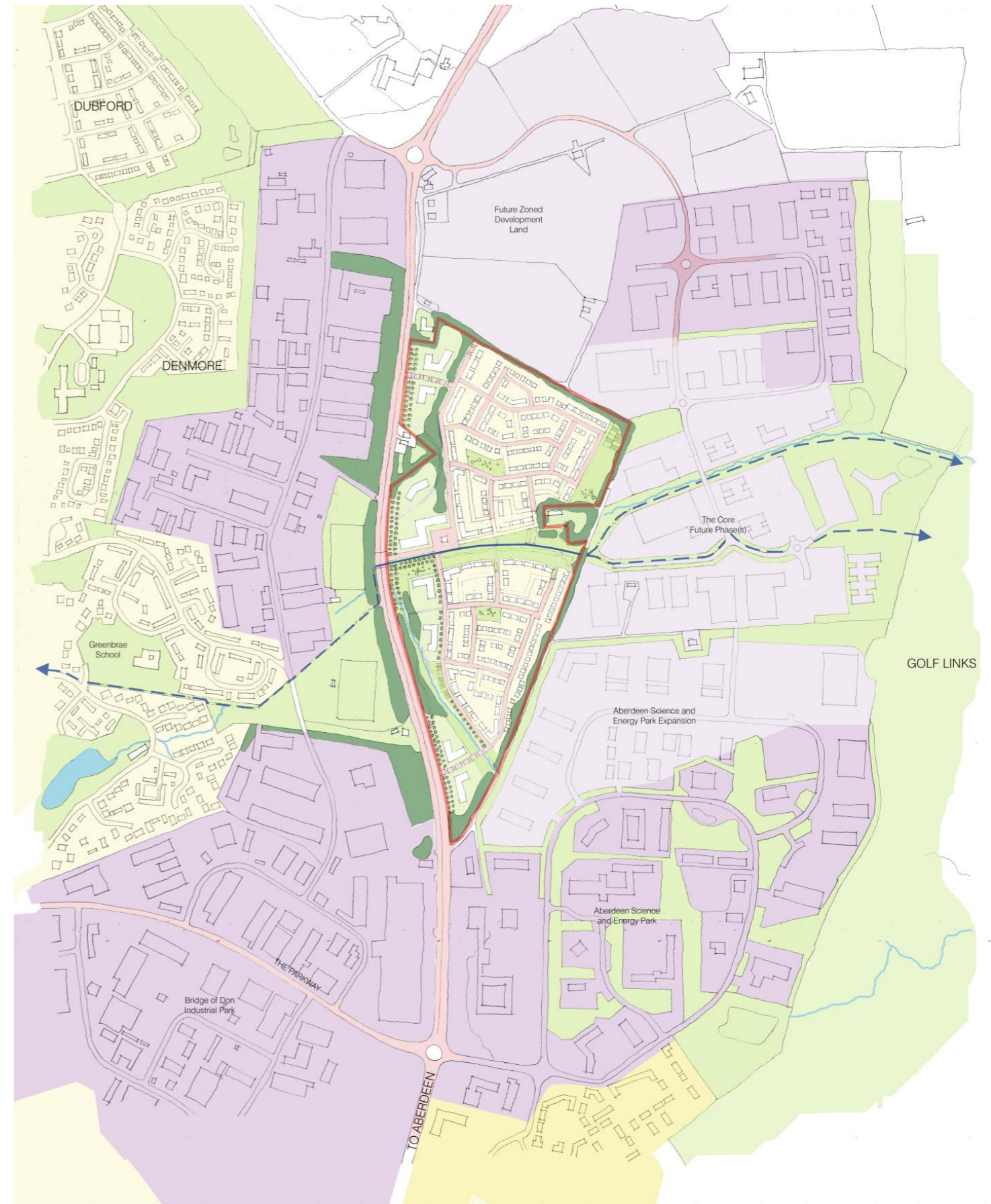
Following initial density appraisals, the site can accommodate approximately 500-600 units with space for other uses.

The residential mix has been assessed on a mix of detached, semi-detached, terrace, assisted living, and flatted units of varying scales.

Other uses could include, for example, a nursery, care home, office accommodation and retail space.

Deliverability

The applicants have a strong track record of large scale development and have the knowledge and finances required to ensure delivery of the proposed project.



12. SUMMARY

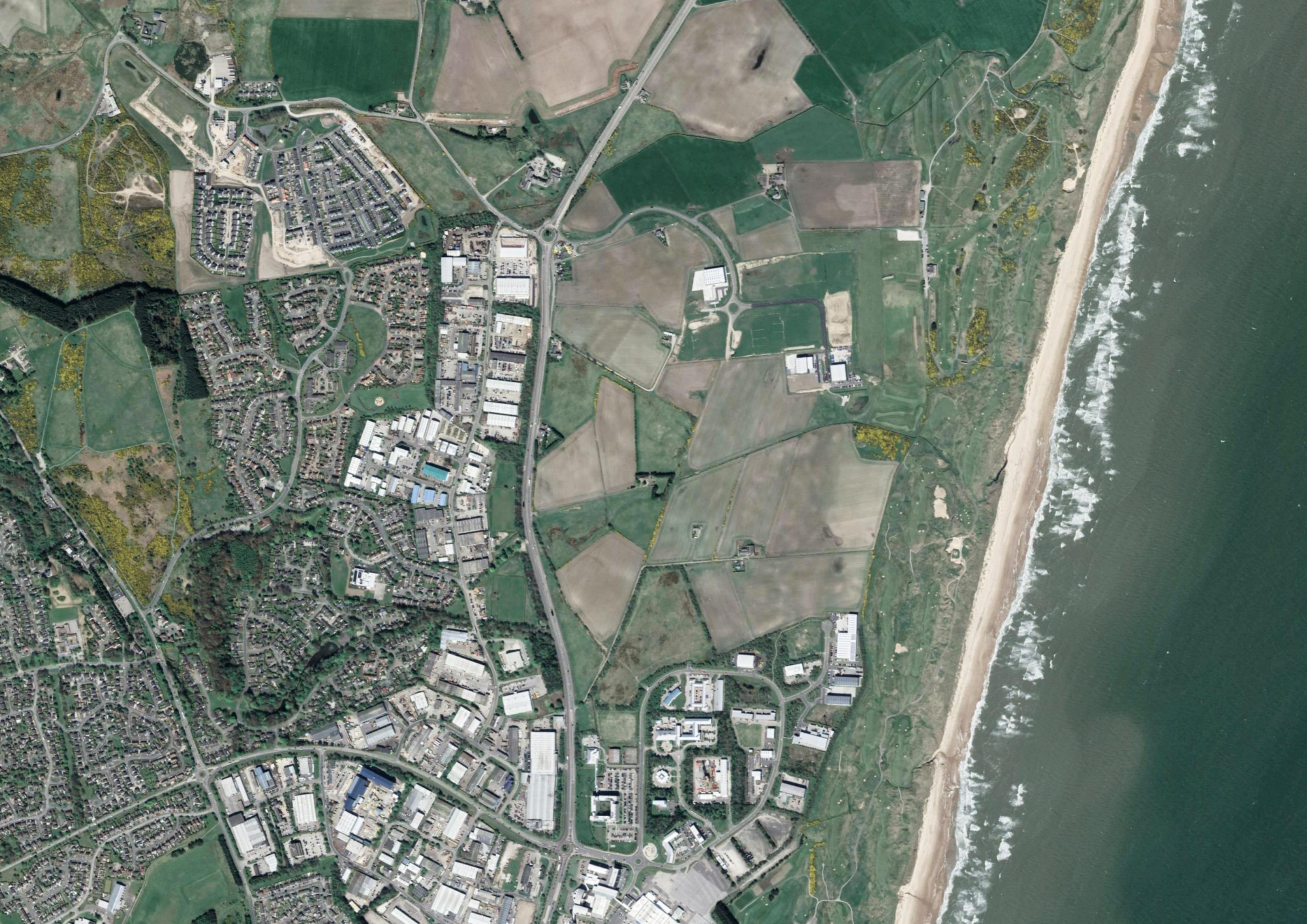
This bid for the rezoning of an existing land allocation has examined site specific context, technical analysis and topic based issues around employment and housing land. The outcome of that review supports a bid for altering the land-use zoning of this site to predominantly residential uses with a mix of employment and community uses.

There is no imperative to retain this land for employment, the City has over 300% of its requirement. There is, however, both a recognition and requirement to supplement the existing housing allocations with new and deliverable allocations in order to meet future housing need. This site could provide between 500-600 new homes. It could also open up better and safer east west access across the A90, link existing communities to the coast and major employment areas and provide additional local facilities to serve the wider community.

The site has no real constraints and has the backing of an experienced developer ensuring that, should it be allocated, it will be delivered.

“Cloverhill could bring the following advantages

- * Providing support to local business use;
- * Creation of work / live communities;
- * Enhancing the visual appeal and viability of neighbouring commercial land;
- * Providing community facilities to support the wider area;
- * Form a key part of a wider mixed-use community;
- * Making use of an existing allocated site for alternative uses;
- * A new deliverable housing site to complement the existing supply;
- * Significant new affordable housing delivery;
- * Excellent proximity to employment uses and public transport networks;
- * A mix of uses on site to help create a new attractive, sustainably located and resilient community (including employment, retail and community uses);
- * Safe and convenient pedestrian and cycle access across the A90 at a new junction that would allow residents to access the wider area and the existing community;
- * Significantly improved access to the core path network and the wider coastal landscape;
- * An integral green network;
- * Protection of the amenity of existing houses on site”



Land at Cloverhill, Local Development Plan Bid, Aberdeen

Transport Appraisal

May 2018



FAIRHURST

CONTROL SHEET

CLIENT: Henry Boot Developments Limited & Wraith Real Estate Limited

PROJECT TITLE: Land at Cloverhill, Local Development Plan Bid, Aberdeen

REPORT TITLE: Transport Appraisal

PROJECT REFERENCE: 123823

DOCUMENT NUMBER: 123823 / TApp01

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	Approved by	M Peters			15/05/18	
Revision Record	Rev.	Date	Status	Description	Signature	
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					Checked	M Peters
					Approved	M Peters
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					Checked	M Peters
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					Checked	M Peters
					Approved	M Peters
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This document has been prepared in accordance with procedure OP/P02 of the Fairhurst Quality and Environmental Management System

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Appendices

APPENDIX A	Indicative Masterplan Layout
APPENDIX B	Public Transport Accessibility Map Safe Routes to School Map

1 Introduction

1.1 General

1.1.1 This Transport Appraisal has been prepared on behalf of Henry Boot Developments Limited & Wraith Real Estate Limited in support of a Local Development Plan (May 2018) bid at Cloverhill, Aberdeen.

1.1.2 The purpose of this report is to provide an overview of the site's accessibility in accordance with transport planning guidance, with a view to demonstrating that it is in a location which will encourage travel in a sustainable manner, reducing car dependency. The report also considers vehicular access to the site and opportunities to improve the surrounding road network in conjunction with its development.

1.1.3 This report considers access to the development site by all modes giving priority to access by non-motorised modes in line with policy objectives to encourage their use, whilst the analysis also focuses on arrangements for vehicular access.

1.2 Site Location

1.2.1 The site is located to the north of the Bridge of Don area within the Aberdeen City boundary, close to the residential areas of Denmore and Dubford. The site location is shown by the indicative Masterplan layout, contained in Appendix A.

1.2.2 The site is bound to the north by a private track and agricultural land (zoned for development). It is bound to the west by the Ellon Road, to the south by land associated with the Aberdeen Energy Park expansion and to the east by agricultural land associated with future phases of The Core Business Park.

1.2.3 New retail (M&S food, Home Bargains and Costa) are now available just to the north of the site and employment opportunities sit to the west and south. Land to the north is allocated as LR1 – Land Release for a further potential 27 Hectares of Employment Land between 2027 and 2035.

1.3 Development Proposal

1.3.1 The site area extends to approximately 56 acres and has the capacity to accommodate a large scale development. The site is zoned as Business and

Industrial land in the 2017 LDP (Site OP2) and therefore as a previously zoned site the presumption on favour of development has already been established.

- 1.3.2 Cloverhill offers a clear opportunity to create a new coastal community that connects with the Bridge of Don and the employment uses adjacent. Its location in an area close to local services, employment opportunities, public transport routes and recreational opportunities place it in an ideal position to support sustainable and healthy lifestyles. Moving from an employment zoning to a predominantly housing designation will not only allow this development to help the City achieve its housing requirements but do so quickly post the adoption of the new LDP.
- 1.3.3 The 2018 LDP bid proposes a sustainable mixed-use residential development incorporating business, retail and community uses which respects existing urban patterns and land use.
- 1.3.4 The site could be developed in appropriate phases with initial phases located at the access and egress points where significant infrastructure improvements may require a proportionately larger phase. Developing these areas will ensure that the east-west connections and access are established to allow wider public benefits to be delivered early in the development process.
- 1.3.5 Following initial density appraisals, the site can accommodate approximately 500 - 600 units with ancillary mixed use opportunities. The residential mix has been assessed on a mix of detached, semi-detached, terrace, assisted living, and flatted units of varying scales. The mixed use land could accommodate, for example, a nursery, care home, office accommodation and retail.

2 Site Accessibility Review

2.1 The Site

2.1.1 The site at Cloverhill lies to the north of Bridge of Don in northern Aberdeen. It has frontage on to the A90 Ellon Road and is situated directly north of Aberdeen Energy Park. The site is surrounded by sections of land that have been allocated within the 2017 LDP.

2.2 Existing Road Network

2.2.1 The site is fronted to the west by the A90 Ellon Road which is a 70mph dual carriageway Trunk Road that provides a link to / from Balmedie, Ellon, Peterhead and serves other settlements along its route as far north as Fraserburgh. To the south, the A90 Ellon Road connects with the A956 Ellon Road via a roundabout junction with the A90 Parkway and routes towards Aberdeen City Centre, the Harbour and southern areas of Aberdeen City.

2.2.2 From the roundabout with the A956 Ellon Road, the A90 Parkway continues west where it intersects with the A96 at the Haudagain Roundabout. Gordon Brae routes south from the A90 Parkway / Whitestripes Avenue roundabout and forms the route to the recently constructed 3rd Don crossing / Diamond Bridge. The crossing allows traffic from the suburbs of Danestone, Grandhome and western areas of Bridge of Don to reach the city centre without having to route via the A90 / A96 Haudagain Roundabout and A90 / A956 Ellon Road.

2.2.3 In Autumn 2018 the Aberdeen Western Peripheral Route (AWPR) is due to open which will allow for the de-trunking process of the A90, where it passes through Aberdeen, to commence. This will include the A90 Ellon Road that bounds the site to the west.

2.2.4 To the south, The A956 Ellon Road routes towards Aberdeen City Centre, the Harbour and southern areas of Aberdeen City and is the main route between the city centre and the A90 to the north. The A956 Ellon Road is a dual carriageway which has a 40mph speed limit. The speed limit decreases to 30mph, 70m north of the A956 Ellon Road / North Donside Road Roundabout.

2.3 Pedestrian and Cycling Networks

- 2.3.1 The pedestrian desire line from the site will mainly be to the west and south towards Bridge of Don and continuing south towards the city centre.
- 2.3.2 Bordering the site to the west the A90 Ellon Road supports pedestrian footways on its north and south bound carriageway. The A90 Ellon Road provides the site a link towards residential areas such as Bridge of Don, Dubford and Denmore as well as further southbound travel towards the city centre. Local amenities such as schools, shops, banks, post office and leisure facilities can be accessed to the south and west of the site in Bridge of Don.
- 2.3.3 Existing cycling infrastructure largely replicates provision for pedestrians as many of the facilities are shared by pedestrians and cyclists. Paths present on the A90 Ellon Road which borders the site to the west are currently for shared use and therefore support travel on foot and bicycle.
- 2.3.4 An aspirational Core Path is shown to route east through the centre of the site providing pedestrian and cycle links to Murcar Links Golf Club and the beach. The aspirational Core Path continues west across the A90 into the Bridge of Don area and connects with Core Path 107 to the south of the residential areas of Denmore and Dubford and routes directly to Greenbrae Primary School.

2.4 Public Transport Networks

- 2.4.1 The site has excellent access to regular bus services that operate along the Ellon Road corridor and from the Bridge of Don Park and Ride. Planning Policy suggests that for accessibility to public transport the recommended guidelines are less than 400m to bus services. The nearest bus stops on the A90 Ellon Road are currently located around 200m north of the site while the Bridge of Don park and ride is situated around 850m from the southern boundary of the site.
- 2.4.2 Further services are accessible from Denmore Road to the west of the A90 Ellon Road and are within 400m walking distance of the site.
- 2.4.3 All services identified within the vicinity of the site route to, or through, the city centre and so offer interchange opportunities with several other bus services operating via Union Street. In addition, Union Square acts as an interchange point with bus and train services routing to local, regional and nationwide destinations.

- 2.4.4 A bus lane is provided on the southbound carriageway from the A956 Ellon Road / A90 Parkway roundabout in addition to the two lanes available for motor vehicles. The bus lane filters out approximately 100m south of the junction with North Donside Road with two lanes continuing south towards the city centre. Further intermittent bus lanes are provided as Ellon Road becomes King Street after the bus gate at the Beach Esplanade junction.
- 2.4.5 It is considered that the site has excellent public transport accessibility. A range of different public transport routes and services serve the site, accessing many areas of Aberdeen and beyond into Aberdeenshire. There is a high frequency of services with the site being located adjacent to a major public transport corridor; Ellon Road, and within a reasonable walking distance of the Bridge of Don Park and Ride.

2.5 Committed Transport Infrastructure

- 2.5.1 The AWPR will be a new orbital route around the west side of Aberdeen described as *'the most important infrastructure project taking place in the North East (which) will bring a range of substantial benefits to the region'*. Its construction is anticipated to provide *'a much needed fast and safe route around Aberdeen which links with the existing major roads and key locations such as the airport, park and ride sites and the major industrial estates around the City'*.
- 2.5.2 The AWPR is located approximately 3 miles to the north of the site and is due to open in Autumn 2018. The AWPR will provide a much needed fast and safe route which links with the existing major roads and key locations such as the airport, Park and Ride sites and the major industrial estates and business parks around the City. One of the key benefits of the AWPR is the expected traffic reduction on various orbital routes around northern and western Aberdeen.
- 2.5.3 Traffic movements around the Cloverhill site are expected to be fundamentally influenced by the strategic road infrastructure. Studies have projected a reduction in daily traffic levels at Bridge of Don by as much as 18%, which will improve the efficiency of the road network, particularly the Ellon Road corridor. The reduced traffic flows would allow capacity to be released for new development at Cloverhill.
- 2.5.4 The construction of the AWPR around the City offers an exceptional development opportunity at Cloverhill. The AWPR will include a grade separated interchange approximately 3 miles north at Blackdog, which will offer easy access to destinations around the periphery of the City.

3 Site Access Strategy

3.1 Road Access

- 3.1.1 The construction of the AWPR around the City offers an exceptional development opportunity at Cloverhill. The AWPR will include a grade separated interchange approximately 3 miles north at Blackdog, which will offer easy access to destinations around the periphery of the City.
- 3.1.2 In Autumn 2018 the AWPR is due to open which will allow for the de-trunking process of the A90 to commence where it passes through Aberdeen. This will include the A90 Ellon Road that bounds the site to the west. With daily traffic levels at Bridge of Don projected to reduce by as much as 18%, the efficiency of the road network will improve, particularly the Ellon Road corridor. The reduced traffic flows would allow capacity to be released for new development at Cloverhill
- 3.1.3 The aspiration for the proposed site is to create a sustainable mixed use development, which builds upon and respects existing urban patterns and land use. In order to support this aspiration the speed limit on the A90 Ellon Road would be reduced to 40mph and the character of the road would replicate that of the existing 40mph A956 Ellon Road to the south of the site.
- 3.1.4 New vehicle junctions will provide access to the site along the A90 Ellon Road. The Primary access would be a centrally located signalised junction incorporating pedestrian crossing facilities at a key core path / pedestrian crossing point of the A90 Ellon Road. Secondary accesses could be provided to the north or south of the site with options for these to be formed as left in / left out arrangements.
- 3.1.5 As a result, traffic accessing the development would be split between the two junctions with delay to the main A90 Ellon Road minimised.
- 3.1.6 Within the site a clear hierarchy of streets will help create a strong sense of place and aid movement through the new development allowing for strategic North-South and East-West movements to be developed. Good street design can promote a better quality of living for everyone. Street design should meet the six qualities of successful places; Distinctive, Safe & Pleasant, Easy to Move Around, Welcoming, Adaptable and Resource Efficient.

3.1.7 Street design has been approached following the street design hierarchy looking at street structure, then layout, followed by detail. At all times this has aimed to consider place before movement, with the needs of pedestrian, cyclists and public transport considered before those of other vehicles.

3.1.8 Street layout has been considered in tandem with land use and in addition to the core streets there will be further streets, lanes and shared surfaces within the development areas which will be designed in accordance with 'Designing Streets' policy and appropriate standards/requirements of Aberdeen City Council.

3.1.9 The Main Street connects the core elements of the masterplan:

- Main urban square
- Central green space (Linear Park)
- Two access points on Ellon Road
- Mixed use development
- Residential areas

3.1.10 Secondary Streets connect the Main Street with a wider network of green spaces:

- Linear Park (central and primary green space)
- Silverburn Park (existing burn character area)
- North Park (SUDS area)
- Children's Play Parks
- Growing Spaces

3.1.11 Minor Lanes offer opportunities to remove cars from key frontages and enhance vehicle and pedestrian connectivity.

3.2 Pedestrian / Cycle Access

3.2.1 Pedestrian and cycle access into the development shall largely replicate that of the vehicle access with further provision via the core path link and a secondary network of paths and cycle ways that will enhance connectivity and provide safe routes through the site.

3.2.2 Alongside the north and southbound carriageways of the A90 Ellon Road there are currently shared use footways. These footways are well lit and will therefore allow for

an excellent level of accessibility through sustainable modes to and from the Cloverhill site.

- 3.2.3 Existing at-grade pedestrian crossings are already provided in advance of the roundabouts on the A90 Ellon Road to the north and south of the site with committed proposals for the Core Business Park to upgrade the northern crossing to a Toucan crossing once the A90 Ellon Road has been de-trunked and the speed limit reduced.
- 3.2.4 The signalised access junction will incorporate pedestrian crossing phases on all arms of the junction ensuring safe crossing of the A90 Ellon Road from the site.

3.3 Public Transport Access

- 3.3.1 The site has excellent access to regular bus services that operate along the Ellon Road corridor and from the Bridge of Don Park and Ride. Services are also accessible from Denmore Road to the west of the A90 Ellon Road. Public transport access from the site can therefore be achieved to the north and south of the site.
- 3.3.2 All services within the vicinity of the site currently route to, or through, the city centre and so offer interchange opportunities with several other bus services operating via Union Street. This would continue to be the case with development of the Cloverhill site.
- 3.3.3 Figure 3-1 in Appendix B illustrates the existing bus services and bus stops that are close to the Cloverhill site.
- 3.3.4 The introduction of additional bus stops on the A90 Ellon Road will ensure that the entire site is located within 400m walking distance of bus stops and services in accordance with planning policy.
- 3.3.5 The vehicle access strategy and internal street network will be designed to ensure that buses would be able to enter and exit via the proposed access junctions. The development will create opportunities for increased frequencies or new service routes to be developed internally within the site. The access strategy ensures that this could be done efficiently without the need for any significant diversion of existing services that currently route via the A90 Ellon Road and Denmore Road.

3.4 Safe Routes to School

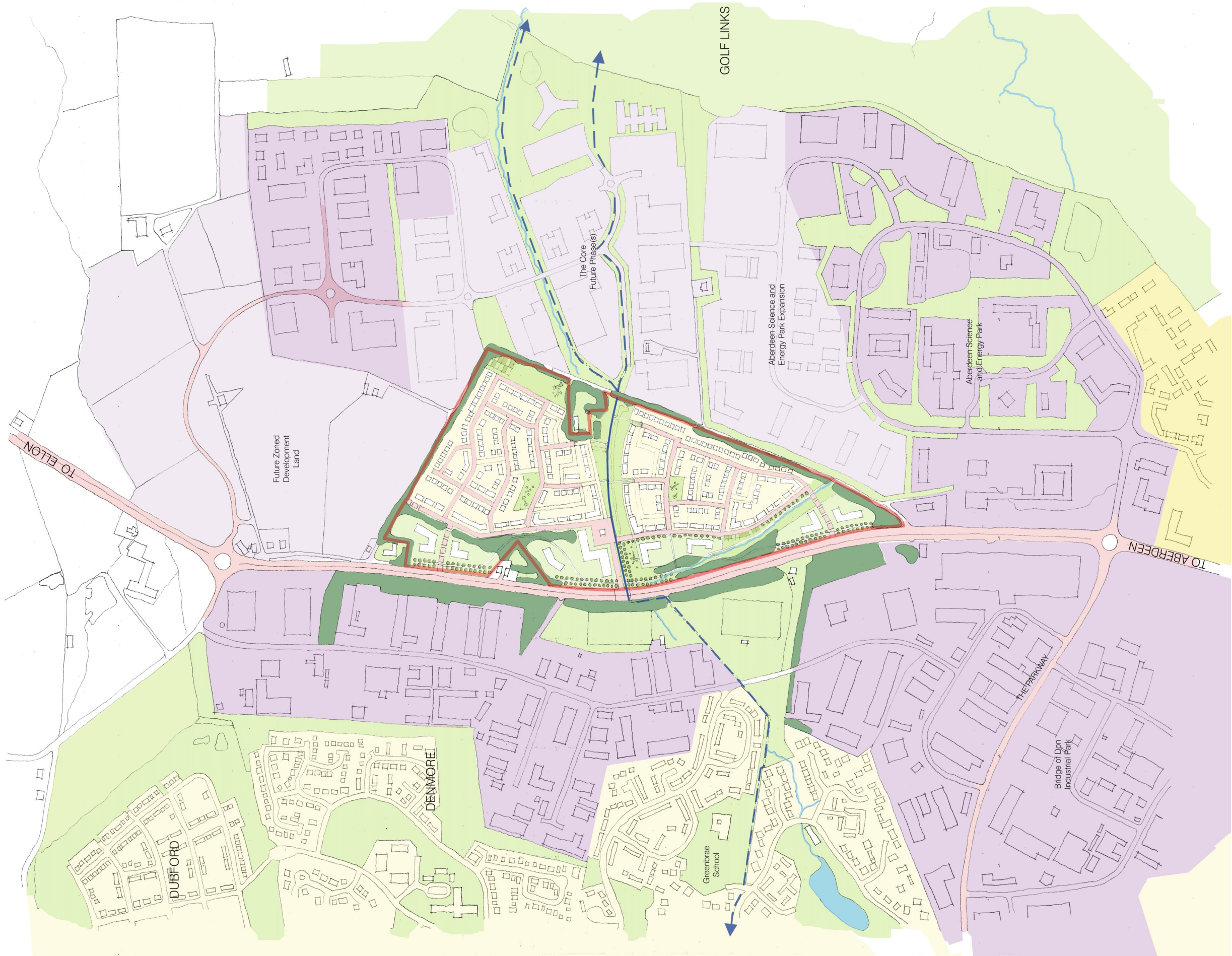
- 3.4.1 Safe routes to both Greenbrae Primary School and Bridge of Don Academy are achievable from the site at Cloverhill. Figure 3-2 in Appendix B illustrates the safe routes detailed below.
- 3.4.2 Upon leaving the site via the proposed central access, pedestrians travelling to Greenbrae Primary School will be able to cross the A90 Ellon Road via the pedestrian crossing incorporated into the proposed signalised junction and continue west via the aspirational Core Path that links to Denmore Road and connects with Core Path 107.
- 3.4.3 On reaching Denmore Road, pedestrians require crossing onto either Core Path 107 and continuing west to the school or crossing onto Greenbrae Drive and accessing the front of the school. Greenbrae Drive is a residential street, well-lit and served with footways on both sides of the carriageway. A 20mph zone covers Greenbrae Drive and all the surrounding residential streets and currently provides access to the school.
- 3.4.4 Access to Bride of Don Academy can be achieved by crossing the A90 Ellon Road at the proposed signalised site access junction and then traveling southbound on the shared use footway. On reaching the A90 Parkway, pedestrians can continue west until reaching the A90 Parkway / B997 roundabout where a signalised crossing can be used to access the B997 Scotstown Road. Crossing Scotstown Road via the existing Zebra crossing, pedestrians would continue in a westerly direction along Braehead Way to access Bridge of Don Academy.
- 3.4.5 Bridge of Don Academy can also be accessed by continuing west along Core Path 107 after crossing Denmore Road. On reaching Fassiefern Avenue, pedestrians can continue onto Lochside Road and head in a south-westerly direction where a connection with the A90 Park Way can be formed just to the east of the A90 Parkway / B997 roundabout.
- 3.4.6 Braehead Primary School is located adjacent to Bridge of Don Academy and can therefore also be accessed via the same safe routes as described above.
- 3.4.7 Oldmachar Academy, Middleton Park School and Glasheburn school are all located further to the west and accessed via Jesmond Drive. The junction of Jesmond Drive / Scotstown Road is signalised with pedestrian crossings on each arm of the junction.

3.4.8 The safe routes described above link with the existing safe network of streets and footpaths that serve the Bridge of Don area and will continue to do so for pedestrians travelling to / from the Cloverhill site.

Appendix A
HFM Masterplan 11085 SK(00)07_A

Project Title:
123823 Land at Cloverhill, Local
Development Plan Bid, Aberdeen

Drawing Title:
Indicative Masterplan Layout



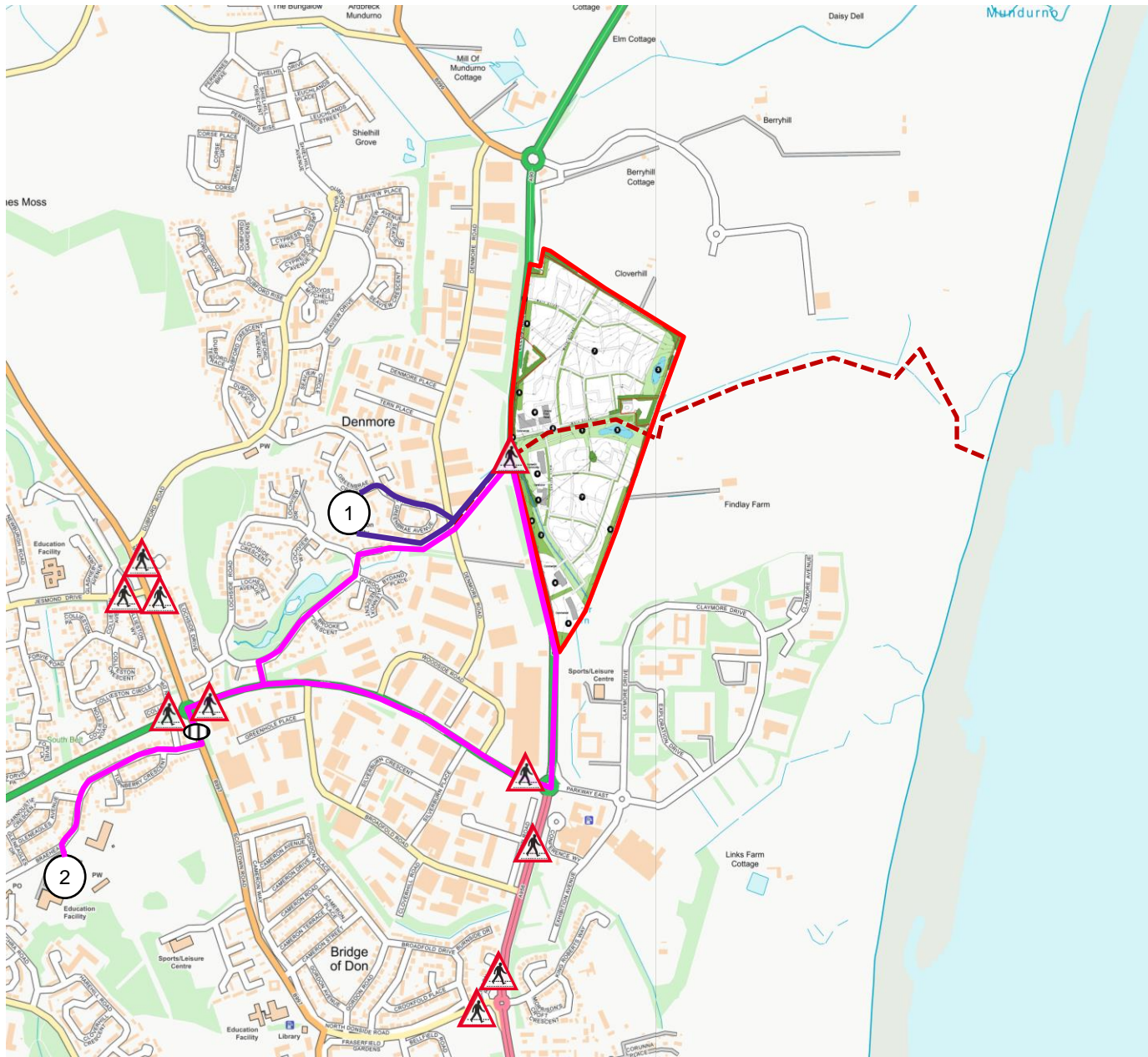
Client:	Drawn by: MP
	Date: 25/05/18
	88 Queens Road Aberdeen AB15 4YQ
	T: 01224 321222 F: 01224 323201

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Appendix B
Public Transport Accessibility Map
Safe Routes to School Map

Project Title:
123823: Land at Cloverhill, Local
Development Plan Bid, Aberdeen

Drawing Title:
Figure 3-2: Safe Routes to School



KEY:

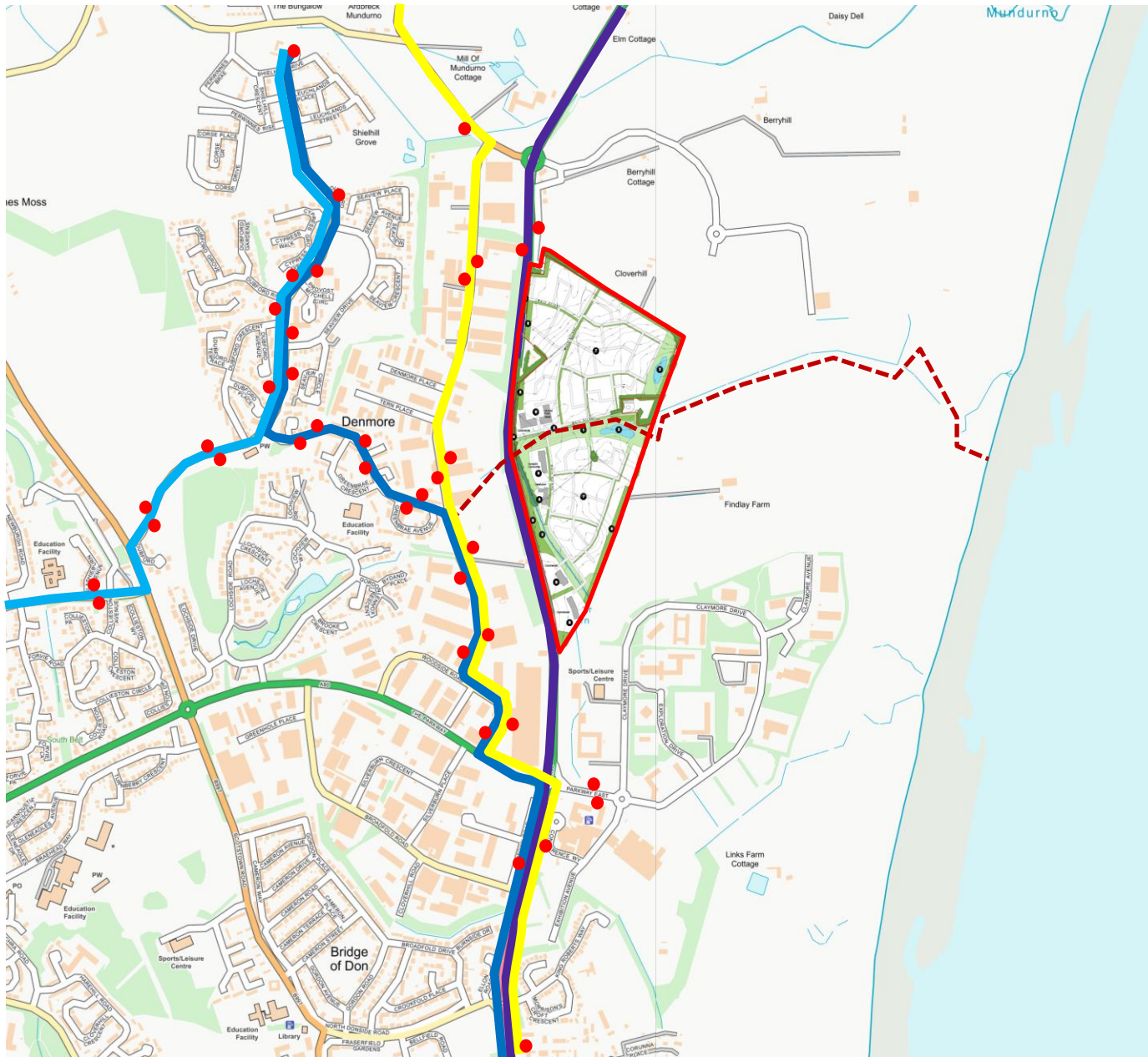
-  Cloverhill Site
-  Greenbrae Primary School
-  Bridge of Don Academy
- Route to Greenbrae Primary School
- Route to Bridge of Don Academy
- Aspirational Core Path
-  Signalised Crossing
-  Zebra Crossing

Client:	Drawn by: LW
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Project Title:
123823: Land at Cloverhill, Local
Development Plan Bid, Aberdeen

Drawing Title:

Figure 3-1: Public Transport
Accessibility



KEY:

-  Cloverhill Site
-  First Aberdeen – 8
-  Stagecoach –
60,61,62,62A,63,67,68
,N62,X60,X67,X68
-  First Aberdeen – X40
-  Stagecoach – 290,291
-  Bus Stop
-  Aspirational Core Path

Client:	Drawn by: LW
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FAIRHURST

Drainage Statement

Local Development Plan Bid at Murcar, Cloverhill, Aberdeen

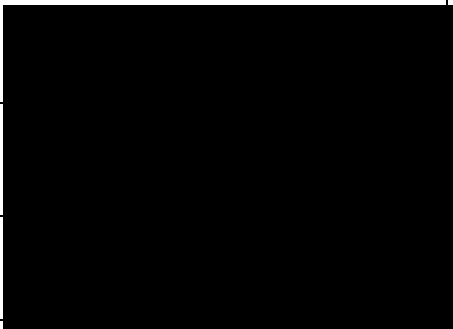
May 2018

Issue 1



FAIRHURST

CONTROL SHEET**CLIENT:** Wraith Real Estate Limited**PROJECT TITLE:** Local Development Plan Bid at Murcar, Cloverhill, Aberdeen**REPORT TITLE:** Drainage Strategy**PROJECT REF:** 123823**Issue and Approval Schedule:**

ISSUE 1	Name	Signature	Date
Prepared by	J Stark		May 2018
Reviewed by	K Thomson		May 2018
Approved by	A Scott-Kiddie		May 2018
Issue details	Final		

Revision Record:

Issue	Date	Status	Description	By	Chk	App
2						
3						
4						
5						
6						
7						
8						

This report has been prepared in accordance with procedure OP/P03 of W A Fairhurst and Partners' Quality Assurance System.

Contents

Drainage Strategy

4

Drainage Statement

This document has been prepared in accordance with the guidance given in the following documents:-

- Water Assessment and Drainage Assessment Guide – Working SUDS Party.
- Planning Advice Note (PAN) 61: Planning and Sustainable Urban Drainage Systems, issued by the Scottish Executive Development Department, July 2001.
- The SUDS Manual – (CIRIA C753).
- SEPA’s Regulatory Method (WAT-RM-08) Sustainable Urban Drainage Systems
- Sewers for Scotland, Third Edition, April 2015

The Development Proposal

This proposed site is 22.6 hectare development site located at Mucar, Cloverhill, Aberdeen. The development will comprise of approximately 500-600 residential properties along with ancillary mixed use opportunities.

The development is located to the east of Ellon Road, Aberdeen, at OS Grid Reference NJ 94812 11670. The site is bounded to the west by the existing Ellon Road dual carriageway as well as various cottage properties; the remainder of the site is bounded by existing greenfields and Ironfield to the east.

Existing Drainage

There are no existing adoptable foul or combined sewers located within the bounds of the development site. There is an existing 525mm diameter surface water sewer located at the southernmost point of the development which discharges into the Silver Burn.

There are existing foul and surface water sewers located within the vicinity. The existing foul sewers will be utilised as a discharge point for the foul flows from this development.

The Silver Burn is located at the southern point of the development site, this existing watercourse falls in a southern direction towards the existing commercial/industrial development on Claymore Drive.

There is also an existing 1050mm diameter culvert which flows from west to east and follows the same alignment as the access track which provides access to the existing property known as Ironfield. This existing culverted watercourse discharges into an open channel on the eastern boundary of the development.

Additional investigation works will require to be undertaken on all existing watercourses to establish the route and levels in advance of any design works being progressed.

Foul Drainage Strategy

Scottish Water have confirmed through the PDE process that there is sufficient capacity within the Nigg PFI Waste Water Treatment Works to service the anticipated flows from the development. They have advised that a Drainage Impact Assessment is required to determine the adequacy of the existing sewer network upstream of the treatment works.

New gravity foul sewers will be provided to serve all of the proposed properties within the new development; these sewers will be located within the proposed development access roads, shared driveways and areas of open space.

Each individual plot will be connected into the new foul sewer infrastructure via a disconnection chamber.

Due to the topography of the site, it will not be possible to gravity connect the proposed foul sewers into the surrounding foul infrastructure, therefore a new Waste Water Pumping Station will be provided at the low point of the development. This WWPS will pump the flows at a rate to be agreed with Scottish Water into the existing foul/combined sewer infrastructure within the surrounding area. The location of the connection point will be agreed with Scottish Water once the masterplan layout has been developed.

All infrastructure associated with the foul drainage will be designed and installed in accordance with Sewers for Scotland, Third Edition, April 2015.

Surface Water Drainage Strategy

The development site will be split into catchments; the various catchments will be derived based on the existing topography and location of the existing watercourses, whilst also taking into consideration the proposed development layout.

Each catchment will be provided with an extended detention basin, which will be located at the low point of the catchment. The basins will be positioned to suit the site topography as well as ensuring that the flows from the extended detention basin can be discharged into one of the surrounding watercourses/culverts.

A grass conveyance swale will be provided downstream of each of the proposed extended detention basins to provide a level of treatment to the surface water flows before they discharge into the existing watercourses.

New surface water sewers and road drains will be provided to serve all of the proposed properties and development access roads within the new development, these new gravity sewers will be located within the proposed access roads, shared driveways and area of open space.

Each individual plot will be connected into the new foul sewer infrastructure via a disconnection chamber.

All private driveways and areas of parking spaces will be constructed incorporating porous paving and stone filled filter trenches. These porous areas and stone filled filter trenches will discharge the collected surface water flows into surface water soakaways where practicable or alternatively into the new gravity surface water sewers or road drains.

All infrastructure associated with the surface water drainage will be designed and installed in accordance with Sewers for Scotland, Third Edition, April 2015 and the SUDS Manual CIRIA (C753).

Any of the ancillary mixed use opportunities will be provided with independent surface water treatment and attenuation utilising SUDS features such as grass swales, porous paving,

stone filled filter trenches, cellular storage etc. prior to discharging into the surface water sewers.

SUDS will be provided within each individual plot and will provide attenuation and treatment in accordance with the Simple Index Approach as per the guidance provided within the SUDS Manual CIRIA (C753).

Any proposed surface water attenuation feature will be designed in order to ensure that all surface water generated by the critical 30 year plus climate change, rainfall return event, is accommodated within surface water flooding occurring.

As part of any detailed drainage design for the development, sensitivity testing will be undertaken for the drainage system for all rainfall events up to and including the 200 year rainfall event, plus climate change. Thereafter any site levels will be set in order to prevent water entering any proposed or existing building or restricting access for any emergency vehicles.

All surface water flows from the development will be restricted to best mimic the natural performance of the greenfield site. The surface water flows from the development as a whole will be restricted to the flows as follows:

- 10 year rainfall event = 71.7 litres per second
- 30 year rainfall event = 93.9 litres per second
- 200 year rainfall event = 138.96 litres per second

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