

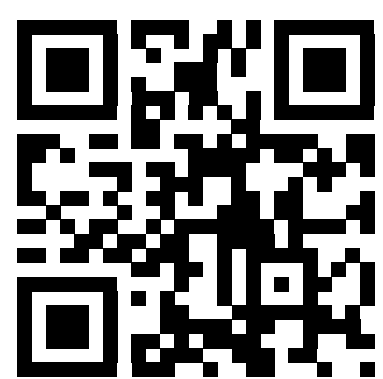
Welcome

A90/A96 Haudagain Improvement

This exhibition presents the preferred option for the Haudagain Improvement scheme and also explains the work undertaken so far.

Transport Scotland and Jacobs UK staff (wearing **blue** name badges) will be happy to assist with any queries you may have in relation to the junction improvement scheme.

A leaflet summarising the exhibition is also available for you to take away as well as a feedback form where we welcome your comments.



www.transportscotland.gov.uk/road/projects/A90-A96-Haudagain-Improvement



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Scheme background

This scheme involves an improvement at Haudagain roundabout, the junction between the A90 and A96 trunk roads.

Key stages in the development of the scheme to date include:

- **2008:** STAG appraisal undertaken by Aberdeen City Council (ACC) recommends Option 5 as the preferred route
- **2010:** Minister for Transport, Infrastructure and Climate Change confirms Option 5 as the preferred option
- **2013/2014:** Transport Scotland revisits the STAG appraisal to take account of ACC's updated development plans in the wider Aberdeen area. This work was carried out in accordance with the Design Manual for Roads and Bridges (DMRB)
- **2014:** Design and assessment work confirms that Option 5 remains the preferred option.

The scheme objectives are:

- To reduce congestion and unreliability by improving and sustaining base year 2004 journey times for commercial and public transport traffic until 2033
- Measures must minimise the risk of transport related accidents especially for vulnerable users in the vicinity of the junction to improve on 2002 - 2006 casualty levels
- To make socially-inclusive and healthy transport modes more attractive to use, including cycling, walking and public transport measures to be promoted in all measures
- To minimise traffic induced severance on communities by ensuring measures do not have a significant detrimental impact on 2004 walk time accessibility
- To contribute to the City Council's regeneration aims by complementing the development of the Logie/Manor area of Middlefield.

Scheme assessment process

The DMRB Stage 2 Assessment carried out in 2013/2014 involved the following work:

- **Surveys**
- **Review of existing traffic, environmental and engineering conditions**
- **Review and sifting of options**
- **Design and engineering assessment of options**
- **Environmental impact assessment and consideration of potential environmental mitigation**
- **Traffic modelling and assessment of options**
- **Preparation of DMRB Stage 2 Assessment Report**
- **Confirmation of Preferred Option.**



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Options sifting

Options sifting involved:

- **Review of the 41 options identified in the 2008 STAG report**
- **Identification of eight other potential options**
- **Assessment of options**
- **Review of option assessment at a sifting workshop.**

At the sifting workshop each option was reviewed considering the following criteria:

- **Operational performance (22 options discounted primarily under this criteria)**
- **Scheme objectives (one option discounted primarily under this criteria)**
- **Environmental impact (eight options discounted primarily under this criteria)**
- **Engineering complexity (11 options discounted primarily under this criteria)**
- **Cost (four options discounted primarily under this criteria).**

The outcome of the workshop determined that the following options be developed and assessed further:

- **Option 4 – signal-controlled crossroads**
- **Option 5 – new dual carriageway link road**
- **Option 13 – signalised roundabout.**











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Drawing number / Rev
B1557630/PE/01/001 Rev 0



Legend

-  Proposed Route
-  Proposed Central Reserve/Traffic Island
-  Proposed Verges
-  Proposed Embankment
-  Proposed Cutting
-  Proposed Footway or Footway/Cycleway
-  Proposed Detention Basin
-  Proposed bridge widening to accommodate upgrade to dual carriageway in the future

0	28/03/14	Issued for Public Exhibition.	SA	DGC	CH	AMM
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

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Project
**A90/A96 HAUDAGAIN
IMPROVEMENT**

Drawing title
**PUBLIC EXHIBITION - APRIL 2014
GENERAL PLAN
OPTION 4 - SIGNAL CONTROLLED
CROSSROADS**

Drawing status	FOR INFORMATION	
Scale	NTS @ A1	DO NOT SCALE
Jacobs No.	B1557630	
Drawing number	B1557630/PE/01/001	Rev 0

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Option 4 – signal-controlled crossroads

Option 4 would include the following:

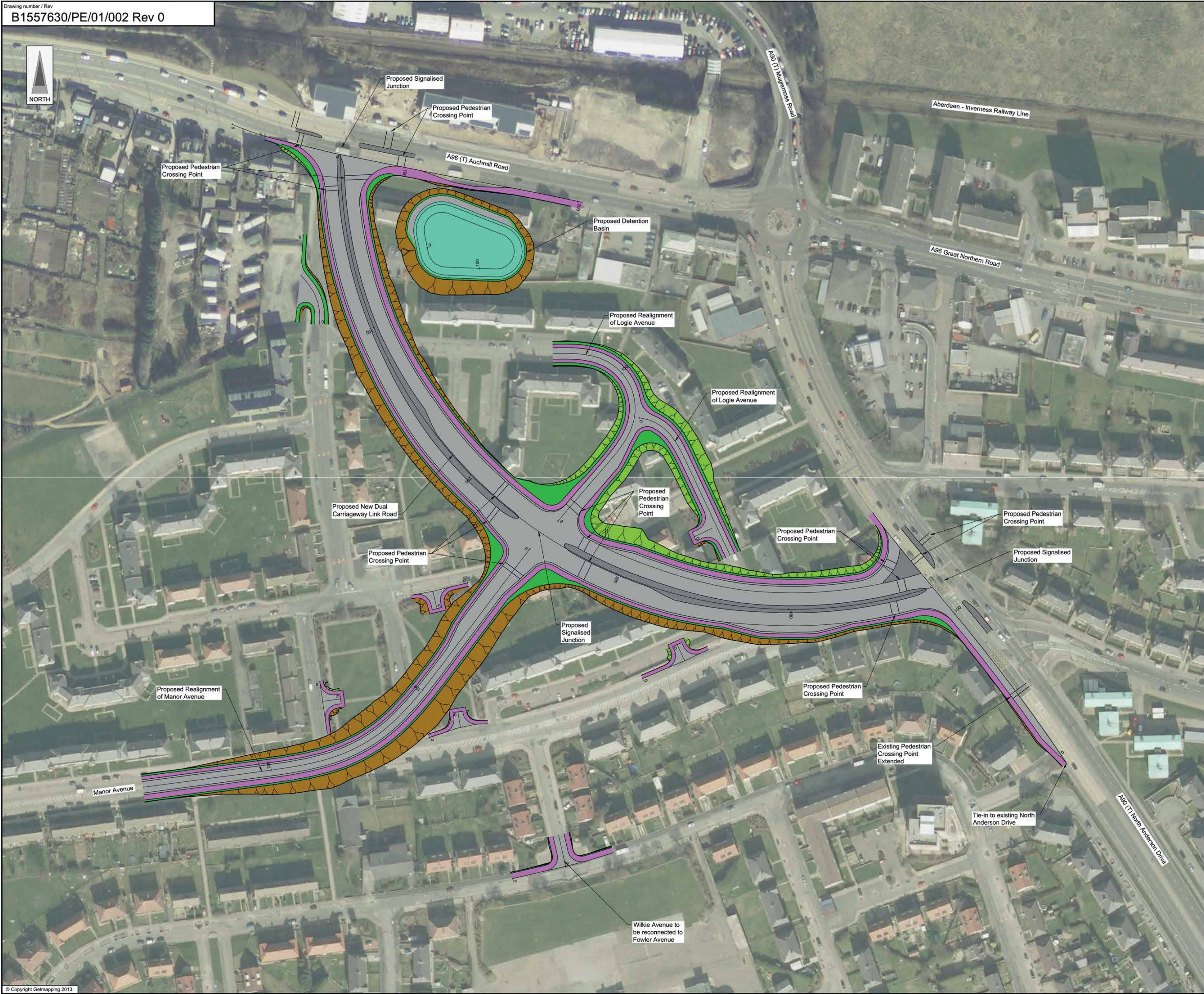
- **Existing roundabout replaced with a signal-controlled crossroads**
- **A90(T) Mugiemoos Road would be widened to provide two lanes in each direction close to the junction**
- **A96 Great Northern Road would be subject to minor modifications only**
- **A90(T) North Anderson Drive northbound carriageway would be widened to provide an additional two lanes on approach to the junction**
- **A96(T) Auchmill Road eastbound carriageway would be widened to provide an additional lane on approach to the junction.**

Other features:

- **A detention basin to store and treat surface water run-off from the road would be located to the north-west of the junction**
- **Mugiemoos Road Rail Bridge would be widened**
- **New footways and/or cycleways would be provided close to the junction**
- **Traffic signals at the crossroads would include pedestrian crossings.**



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- Legend
- Proposed Route
 - Proposed Central Reserve/Traffic Island
 - Proposed Verges
 - Proposed Embankment
 - Proposed Cutting
 - Proposed Footway or Footway/Cycleway
 - Proposed Detention Basin

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Client

Project

A90/A96 HAUDAGAIN IMPROVEMENT

Drawing title

**PUBLIC EXHIBITION - APRIL 2014
GENERAL PLAN
OPTION 5 - NEW DUAL
CARRIAGEWAY LINK ROAD**

Drawing status	FOR INFORMATION	
Scale	NTS @ A1	DO NOT SCALE
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Drawing number	B1557630/PE/01/002	
Rev	0	

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Option 5 – new dual carriageway link road

Option 5 would include the following:

- **New dual carriageway link road** approximately 500 metres in length
- **Three new signal-controlled junctions** would connect the new link road to the existing road network
- **Manor Avenue** would be realigned to tie-in to the new link road
- **Logie Avenue** would be realigned to tie-in to the new link road
- **Logie Place** would be closed and stopped up at its eastern extent
- **Logie Terrace** would be closed and stopped up at its southern extent
- **Manor Terrace** would be closed and stopped up

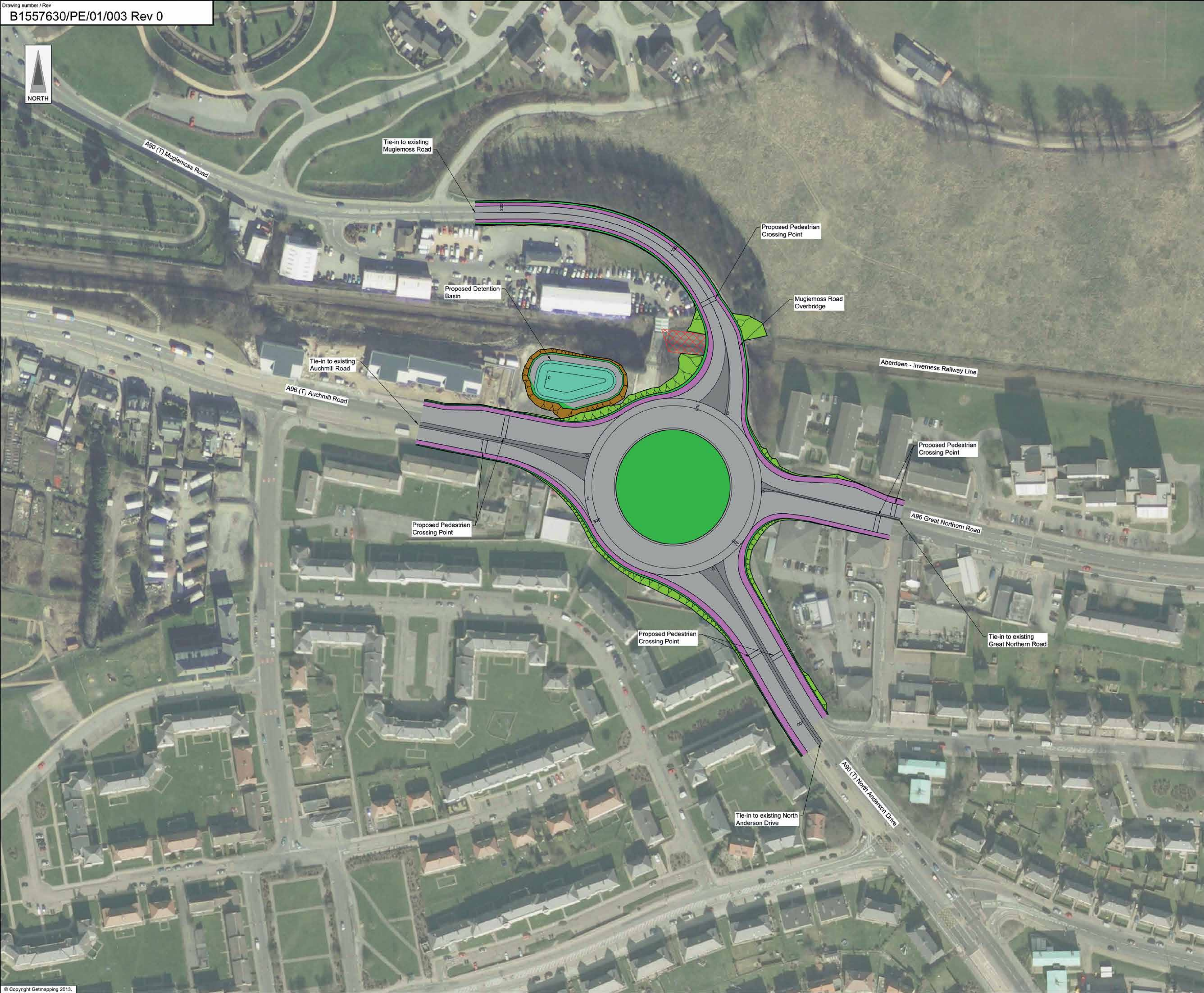
- **A new junction** would connect **Wilkie Avenue** to **Fowler Avenue** to maintain access to **Manor Avenue**.

Other features:

- **No works** are proposed at the existing **Haudagain** roundabout as part of **Option 5**
- **A detention basin** to store and treat surface water run-off from the road is proposed to the south of **Auchmill Road**
- **New footways and/or cycleways** are proposed next to the new link road and **Manor Avenue**
- **Traffic signals** would include pedestrian crossings.



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- Legend
- Proposed Route
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 - Proposed bridge widening to accommodate upgrade to dual carriageway in the future

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Project

A90/A96 HAUDAGAIN IMPROVEMENT

Drawing title

**PUBLIC EXHIBITION - APRIL 2014
GENERAL PLAN
OPTION 13 - SIGNALISED
ROUNDAABOUT**

Drawing status

FOR INFORMATION

Scale	NTS @ A1	DO NOT SCALE
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Jacobs No. B1557630

Drawing number

B1557630/PE/01/003

Rev

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Option 13 – signalised roundabout

Option 13 would include the following:

- **Existing roundabout would be upgraded with a larger signalised roundabout**
- **A90(T) Mugiemoos Road would be widened to provide two lanes in each direction close to the roundabout**
- **A96 Great Northern Road westbound carriageway would be widened in the vicinity of the new roundabout**
- **A90(T) North Anderson Drive northbound carriageway would be widened close to the new roundabout**
- **A96(T) Auchmill Road eastbound carriageway widened to provide an additional lane on the approach to the new roundabout.**

Other features:

- **A detention basin to store and treat surface water run-off from the road would be located to the north-west of the roundabout**
- **Mugiemoos Road Rail Bridge would be widened**
- **New footways and cycleways would be provided close to the roundabout**
- **Traffic signals at the roundabout would include pedestrian crossings.**



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Summary of engineering and economic assessment



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Details	Option 4	Option 5	Option 13
Road construction	770 metres of mainline carriageway (online)	480 metres mainline and 510 metres of side roads	820 metres of mainline carriageway (online)
Junction	Upgrade existing Haudagain junction	Three signalised junctions	Upgrade existing Haudagain junction
Major structural works	Widening required at Mugiemoos Road Rail Bridge	None	Widening required at Mugiemoos Road Rail Bridge
Non motorised user (NMU) facilities	As per existing	New shared footway / cycleway next to new link road and Manor Avenue	As per existing
Constructability	Significant disruption to road users predicted	Minimal disruption to road users predicted	Significant disruption to road users predicted
Value for money	Very high value for money	Very high value for money	Medium value for money

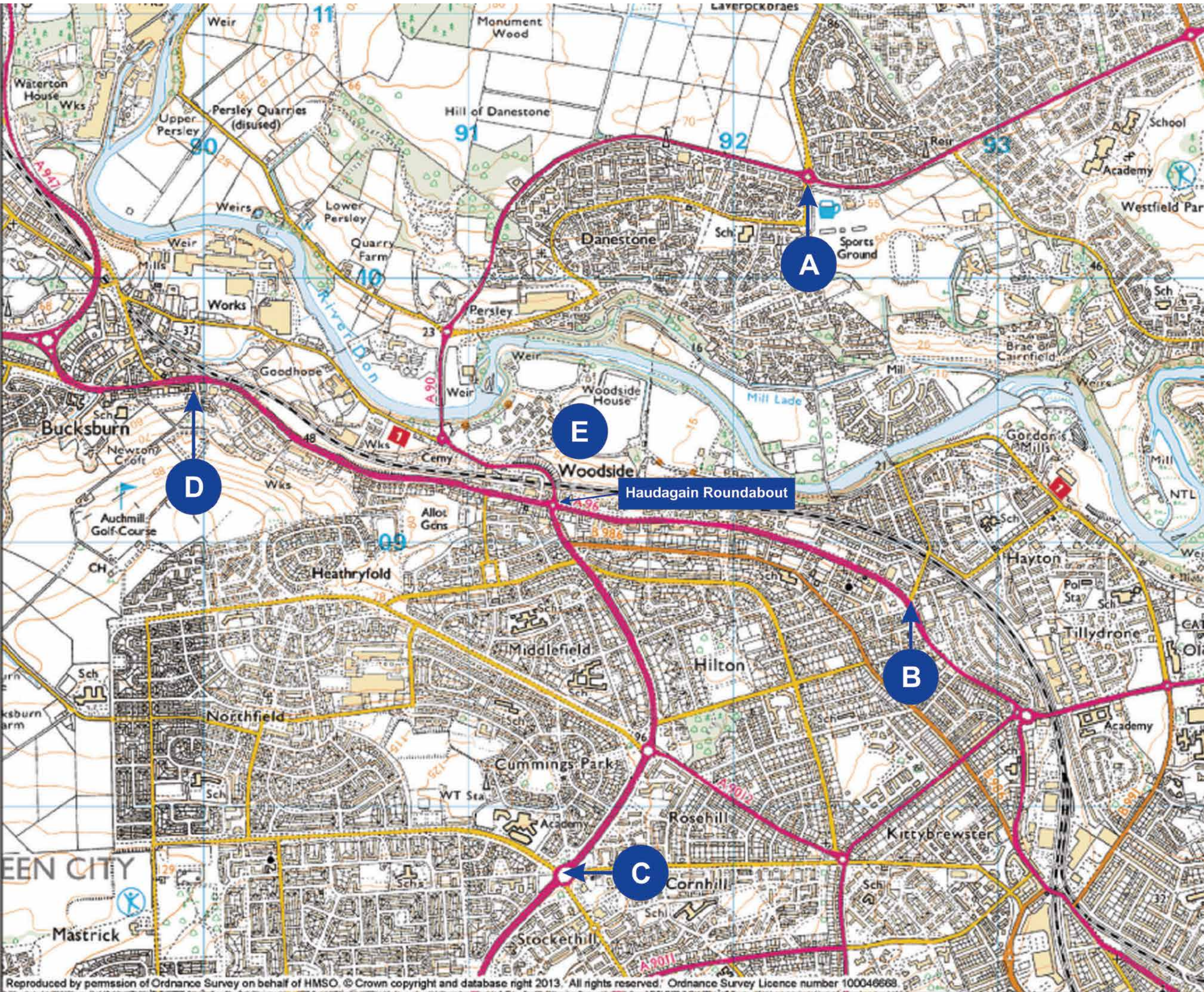
Summary of traffic assessment



The assessment of the junction’s performance considered whether the objective to improve and maintain 2004 journey times until 2033 would be met.

Journey times

Locations A, B, C and D shown below are the start and end points of the journey time routes. Location E is Haudagain junction through which all journey time routes pass, except for Option 5 where south to west and west to south movements travel via the new link road.



Total average journey times for all traffic movements through Haudagain in minutes for Options 4, 5 and I3 are provided below.

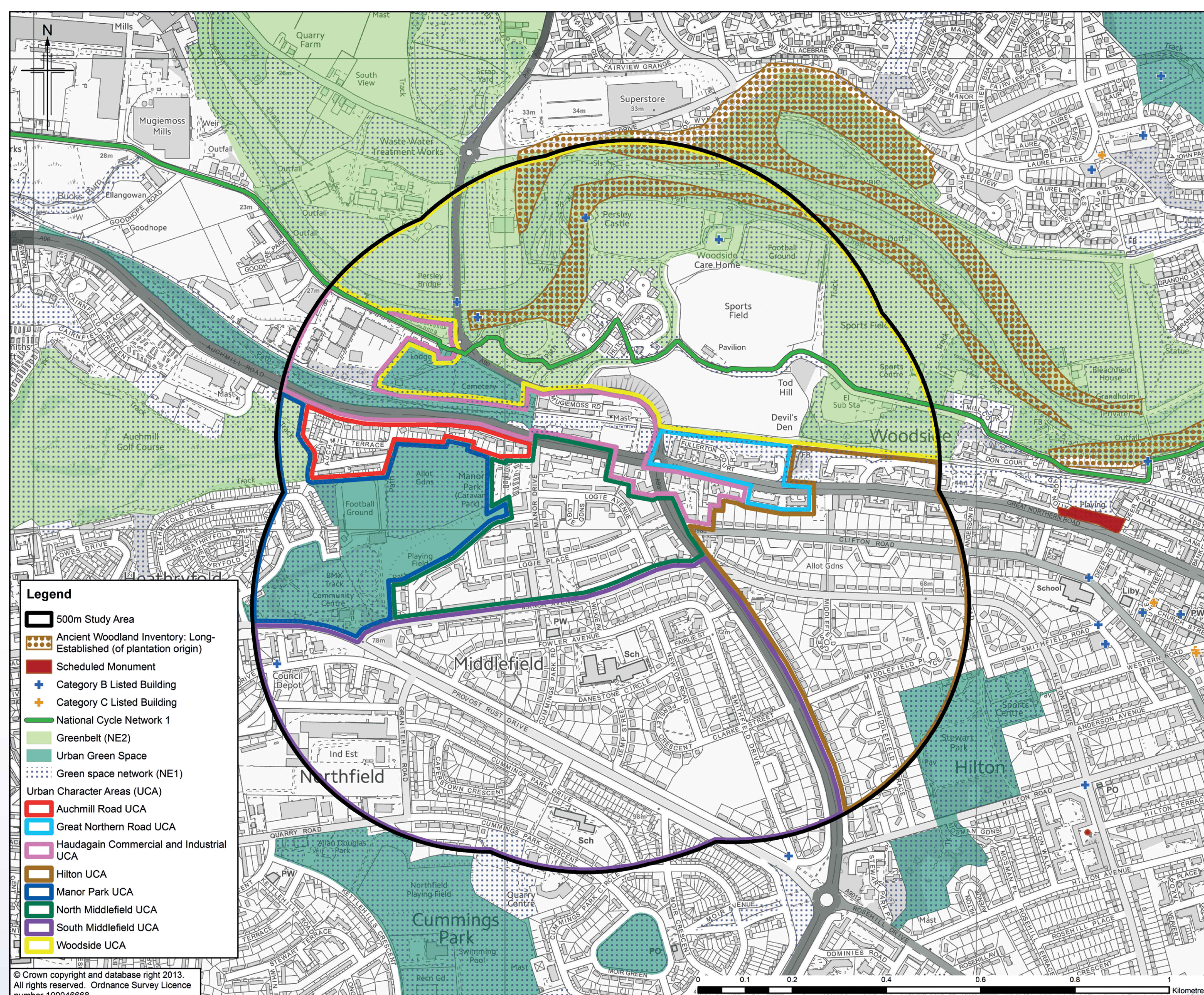
	Period	Base Year (2004)	Base Year (2018)	Base Year (2033)
Existing roundabout	AM	70.5	57.7	129.5
	PM	115	55.6	180.4
Option 4	AM		66.8	96.0
	PM		75.8	136.3
Option 5	AM		59.4	71.8
	PM		58.9	87.8
Option I3	AM		66.4	149.1
	PM		73.0	251.2

Environmental constraints

Consultations and studies allowed environmental constraints to be identified within the study area. Potential environmental impacts and mitigation were considered to ensure protection of the environment

Constraints identified include:

- **Residential and commercial properties**
- **Pedestrian/cycle networks**
- **Listed buildings**
- **Long established woodland**
- **Green space network**
- **Urban green space**
- **Green belt**
- **Urban Character Area – area of distinct and recognisable urban character.**



Summary of environmental assessment



Topic area	Option 4	Option 5	Option 13
Community and private assets	<ul style="list-style-type: none">Demolition of 17 residential / commercial premises, garden land-take from a further 11 residential properties and car park space from two commercial properties.	<ul style="list-style-type: none">Demolition of 131 residential / community premises and garden land-take from a further 108 residential properties.	<ul style="list-style-type: none">Demolition of 16 residential / community / commercial premises, garden land-take from 43 residential properties and car park space from two commercial properties.
Noise and vibration	<ul style="list-style-type: none">Potential for significant noise impacts on receptors such as residential properties and community facilities during construction and operation.	<ul style="list-style-type: none">Potential for significant noise impacts on receptors such as residential properties and community facilities during construction and operation.Fewest adversely affected receptors on scheme opening and most receptors anticipated to experience reduced noise levels.	<ul style="list-style-type: none">Potential for significant noise impacts on receptors such as residential properties and community facilities during construction and operation.
Landscape and visual	<ul style="list-style-type: none">Direct landscape impacts on four urban character areas and significant visual impacts on two residential built receptors and a cycle route.	<ul style="list-style-type: none">Direct landscape impacts on three urban character areas and significant visual impacts on 19 residential built receptors and a caravan park.	<ul style="list-style-type: none">Direct impacts on three urban character areas and significant visual impacts on five residential built receptors.
Geology and soils	<ul style="list-style-type: none">Negligible to slight/moderate geology, contaminated land and groundwater Impacts. Moderate surface water impacts.	<ul style="list-style-type: none">Negligible to slight/moderate geology, contaminated land, groundwater and surface water impacts.	<ul style="list-style-type: none">Negligible to slight/moderate geology, contaminated land and groundwater Impacts. Moderate surface water impacts.

No significant residual impacts were identified for the following assessment categories:

- Ecology
- Air quality
- Materials (resources and waste)
- Cultural heritage
- Road drainage and the water environment
- Effects on all travellers (vehicle travellers, pedestrians and cyclists).



Preferred option

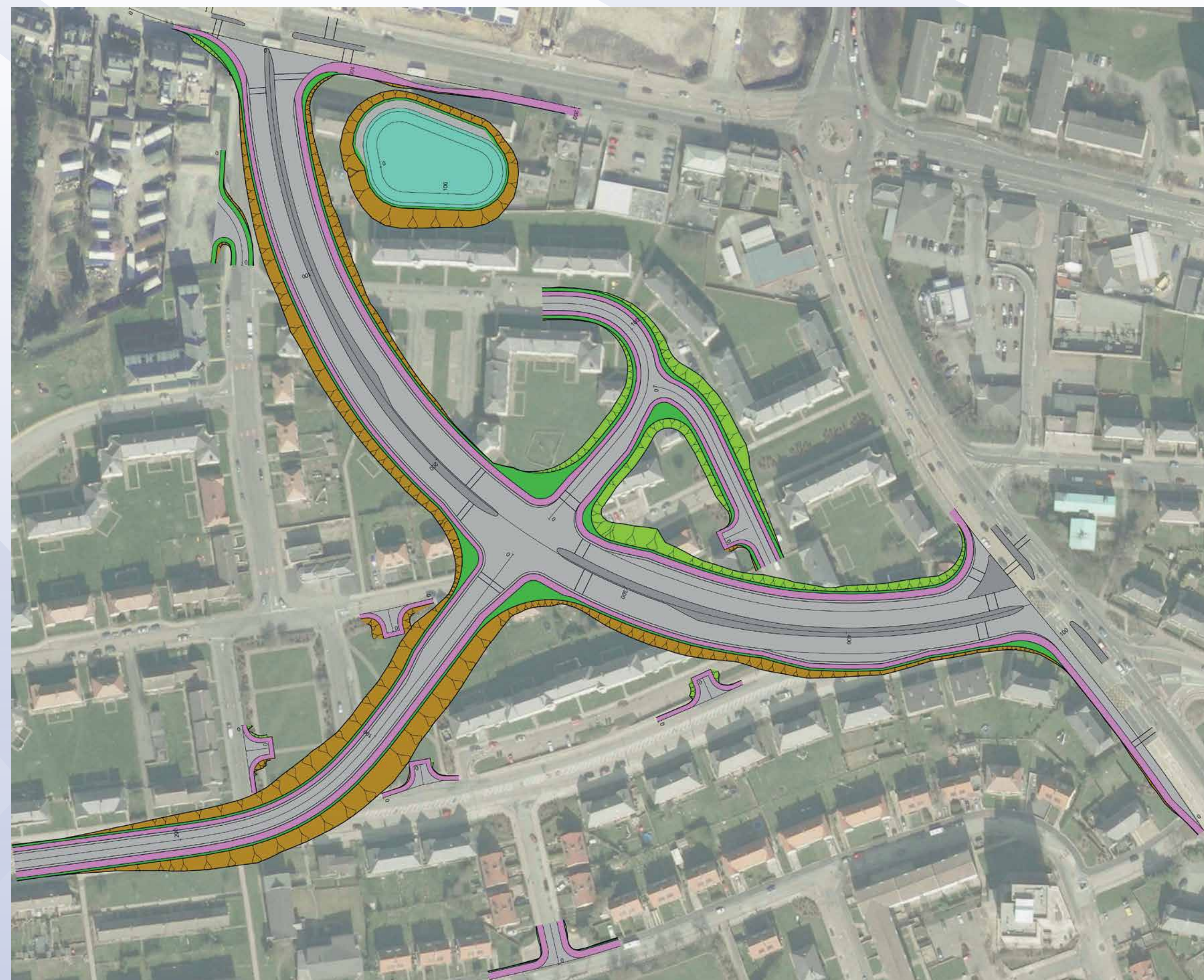
Option 5 remains the preferred route for the A90/A96 Haudagain Improvement scheme.

The new dual carriageway link road would:

- **Provide the best operational performance in terms of journey times, reducing congestion and improving journey time reliability at Haudagain**
- **Reduce the risk of transport related accidents by reducing congestion and reducing driver frustration**
- **Cater for socially inclusive and healthy transport modes e.g. walking and cycling**
- **Provide safe and efficient walking routes and crossing points for pedestrians and cyclists**
- **Cater for effective access to the Logie / Manor regeneration area at Middlefield.**



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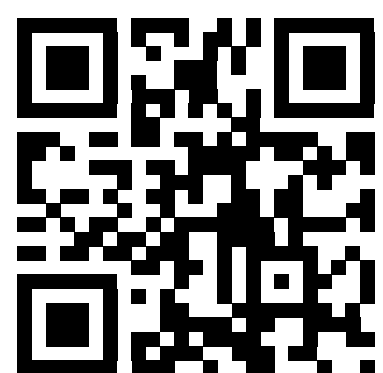
What happens next?

Key programme dates:

- **Completion of preferred option design and assessment – summer 2015**
- **Publication of the Draft Orders and Environmental Statement – summer 2015**
- **Preparation of construction stage tender documents – summer 2017**
- **Land acquisition – early 2018**
- **Anticipated construction start – spring 2018.**



We welcome your comments and feedback. Please take your time to consider the information presented and provide any feedback you may have on the feedback form provided by **6 June 2014**.



For further information on the Haudagain Improvement scheme please visit the Transport Scotland website:
www.transportscotland.gov.uk/road/projects/A90-A96-Haudagain-Improvement

Further information on Aberdeen City Council's Middlefield Regeneration project is available from John Quinn | Telephone: **01224 439 209** | Email: **jquinn@aberdeencity.gov.uk**