## Appendix D

First Fix Alignments Workshop Minutes



## **Meeting Notes**

## A96 Dualling East of Huntly to Aberdeen First Fix Alignments – Sifting Workshop

Purpose of Meeting	To review engineering, environmental and traffic constraints and opportunities for each first fix alignment option and sift any poorer performing alignment options out prior to the development of second fix end-to-end alignments.
Location:	Arup, 1 West Regent Street, Glasgow
Time/Date:	09.30 – 15.00, 19 April 2018
Attendees:	- Transport Scotland - Head of Planning and Design
	- Transport Scotland - A96 Dualling Design Manager
	- Transport Scotland - A96 East of Huntly to Aberdeen Project
	Manager
	– AmeyArup – Contract Director
	– AmeyArup – Contract Manager
	– AmeyArup – Deputy Contract Manager
	– AmeyArup – Roads and Infrastructure Manager
	<ul> <li>AmeyAmey – Roads and Infrastructure Manager</li> </ul>
	AmeyArup – Senior Roads and Infrastructure Engineer
	Engineer – AmeyArup – Senior Roads and Infrastructure Design
	– AmeyArup – Senior Roads and Infrastructure Design Engineer
	Engineer – AmeyArup – Senior Roads and Infrastructure Design
	– AmeyArup – Roads and Infrastructure Design Engineer
	<ul> <li>AmeyArup – Roads and Infrastructure Design Engineer</li> </ul>
	<ul> <li>– AmeyArup – Senior Geotechnical Specialist</li> </ul>
	– AmeyArup – Structures Manager
	– AmeyArup – Environmental and Landscaping Manager
	<ul> <li>– AmeyArup – Senior Environmental Specialist</li> </ul>
	– AmeyArup – EIA Co-ordinator
	– AmeyArup – Transportation Manager
	– AmeyArup – Senior Transportation Specialist
	– AmeyArup – Senior Transportation Specialist
	– AmeyArup – Senior GIS Specialist
	– AmeyArup – Stakeholder Co-ordinator.
Apologies:	
Circulation:	All attendees
Prepared by	

Date of circulation Date of next meeting



ltem	Notes	Actions
1.0	Introductions	
1.01	introduced the meeting and explained the purpose of the meeting. He stated that the assessment process of Corridor Option D01 would be explained in detail with an overview of the results of all other Corridor Options presented and discussed.	
2.0	Safety Moment	
2.01	detailed the effects of the drifting snow recently on the M90 and how we might need to consider drifting snow within the A96 dualling design. A time lapse video was shown of the snow drift and clearing procedure used on the M90.	
3.0	Progress to Date	
3.01	detailed the progress to-date and outlined the development of the Corridor Areas, Corridor Options and the development of First Fix Alignments. In noted that 16 Corridor Options had been identified and 80 First Fix Alignments developed within those Corridor Options with a combined total First Fix Alignment length of 1010km.	
3.02	<ul> <li>outlined the appraisal methodology, which used 7-point scale ranging from Major Adverse Impact to Major Beneficial Impact. The assessment metrics are based on Scheme Objectives and STAG criteria.</li> <li>outlined an example of how the geotechnical metric was developed based on the anticipated ground conditions (based on published geological maps) and the magnitude of the earthworks. Potential benefits come from possible locations where there are deposits of sands and gravels, which have potential to be re-used.</li> </ul>	
3.03	explained that plan and profile drawings were produced for each First Fix Alignment and highlighted how GIS had been used to help map and identify impacts with major constraints such as utilities.	
3.04	Each engineering discipline completed their appraisal for each First Fix Alignments. These were then combined to create an overall engineering appraisal. The assessment was then used to produce a graphical output for each First Fix Alignment.	
3.05	explained how the environmental appraisal had been carried out and detailed that each of the nine environmental topic leads had completed individual appraisals for each First Fix Alignment. A drawing based on the appraisal for each Corridor Option was produced to highlight key environmental issues/constraints. Stated that where multiple Major Adverse Impacts had been identified they were highlighted on the environmental appraisal drawings.	
3.06	detailed the environmental issues and stated how the Major Adverse Impacts had been identified. A materials appraisal was scoped out at this stage.	
3.07	As examples explained the environmental appraisal for Cultural Heritage for BN01 Corridor Option, Air Quality appraisal for OLI Corridor Option and People and Communities appraisal for BN01 Corridor Option. then gave a summary of the work undertaken by the ecology, water and landscape appraisals.	
3.08	stated no traffic modelling had been undertaken at this stage as there are no end to end routes. Therefore, the appraisal mirrored the appraisal undertaken at Corridor Options stage. All the First Fix Alignments developed produced benefits with no alignments providing adverse impacts. A desktop	



ltem	Notes	Actions
	study looking at journey times on existing A96 and proposed First Fix Alignments was undertaken to calculate journey time savings. explained that based on the STAG criteria, there is some differentiation in journey times within each Corridor Option due to the proximity of alignments to communities and properties.	
3.09	In terms of trip attraction, stated there was very limited differentiation between the First Fix Alignments within each Corridor Option and the First Fix Alignments more remote from the existing A96 are less likely to attract trips. Alignments closer to communities and landmarks may attract negative public attention. Alignments closer to LDP allocations may benefit traffic. stated that there was potential for the existing A96 to be used to facilitate greater NMU take-up with the offline dualling strategies.	
3.10	asked how accessibility is being measured without the junction strategy in place. stated that assumptions were made on the likely junction strategic locations, but this does not include where new local roads will be provided. stated that the working assumption is that where there is currently a connection, then a connection will be provided, and this is not a key differentiator between First Fix Alignments within a Corridor Option. stated that the number of side roads crossed had been included in the engineering assessment. stated that an appraisal would be required for side road provision when more detail on the junction strategy is available.	AmeyArup
4.0	Alignments within Corridor Option D01	
4.01	As an example, gave an overview of the First Fix Alignments in the D01 Corridor Option. Generally, the topography is quite rolling for each of the four alignments, but they differ in their structural, flooding and geotechnical impacts. For example, D01_001 a structure is required over the Urie with an approximate length of 250m long. A explained the colour ratings used on the engineering appraisal graphical output with blue being Neutral, yellow is Minor Adverse Impact, amber is Moderate Adverse Impact and red is Major Adverse Impact. The D01_002 alignment tracks the SSE pylon route which gives it a baseline of Minor Adverse Impact. Stated that D01_003 had the lowest quantity of earthworks and D01_002 had the highest quantity of earthworks. D01-004 has the best earthworks balance. Stated that the geotechnical appraisal for D01 was largely Neutral due to the relatively small earthworks with a maximum 19m deep cutting. The alignments avoid Durno and the Durno Roman Camp which is a Scheduled Monument. At Pitcaple the Durno Burn and the River Urie need to be crossed. Alignments D01_001 and D01_002 skirt the south of Pitcaple and require a 250m structure to cross the River Urie. Alignment D01_003 requires a 400m structure over the River Urie and alignment D01_004 requires a 1050m structure to cross the Durno Burn and River Urie. All four First Fix Alignments must cross the floodplain associated with the watercourses.	
4.02	asked how the tie in points had been considered as all the First Fix Alignments within the D01 Corridor Option merge at a single point at Colpy. explained that the linkages between Corridor Options would be considered during the development of the Second Fix Alignments. explained that this narrow tie in point at Colpy was due to the High Impact Areas previously identified prior to the Corridor Options Assessment. stated that the two ends of the D01 First Fix Alignment were the most challenging. asked that if an alignment had been appraised to have a large structure (Major Adverse Impact) at one location would the rest of the	



ltem	Notes	Actions
	alignment then be ruled out. explained that hybrid alignments had been identified based on all environmental and engineering appraisal.	
4.03	explained all First Fix Alignments in D01 Corridor Option cross the River Urie at the northern tie in. There are also impacts on the setting of the Garden and Designed Landscapes (GDL) and Scheduled Monuments creating a cluster of constraints in the northern section of the D01 Corridor Option. Alignment D01_001 clips the corner of the GDL, this will be reviewed as part of the Second Fix Alignment Development. The central sections of D01 First Fix Alignments run through prime agricultural land and come close to private properties. In highlighted the numerous constraints at Pitcaple including the Castle (Category A Listed Building), landscape and visual impacts, quarries, floodplain and watercourses creating a cluster of Major Adverse Impacts at this location.	AmeyArup
4.04	stated that due to the number of cross-discipline environmental constraints at Pitcaple it will be necessary to discuss these in more detail during the development of the Second Fix Alignments. Alignments D01_001 and D01_002 are the preferred alignments at Pitcaple from an environmental point of view.	AmeyArup
4.05	stated that there is clearly a large amount of work behind the appraisal and the graphical output was very useful.	
4.06	stated the conclusion from the engineering, environmental and traffic teams was to take D01_001 forward with some amendments to avoid the GDL and the localised peat in the northern section of the alignment. If stated that D01_001 is closest to the existing A96 within that Corridor Option and would provide the best connection to Insch and the railway station. If stated that focus will now be looking at how alignment D01_001 connects to other preferred First Fix Alignments from the adjacent Corridor Options.	
4.07	stated that we have presented more detail to the workshop for the alignments in D01 Corridor Option to explain the assessment process and we will not be showing as much detail on the other 17 Corridor Options.	
4.08	noted the assessment appeared to be similar for alignments D01_001 and D01_003. explained that the environmental setting of the non- designated GDL (which D01_003 impacts on) was one of the reasons why D01_001 was selected over D01_003. explained that the traffic appraisal identified D01_001 as the preferred alignment as it was closest to the existing A96. asked if there was a hybrid solution which had been looked at. explained that D01_001 is the shorter route, doesn't cross the power lines and is closer to Insch therefore a hybrid solution was not considered in D01 Corridor Option.	
4.09	presented the overall decision table and showed the commentary explaining why the decision on which alignment to progress had been taken. D01_001 is better performing and will be taken forward to Second Fix Alignment Development.	
4.10	asked if there were any Corridor Options where two First Fix Alignments had been taken through. explained that in some instances more than one First Fix Alignment had been taken through from a Corridor Option. asked if alignment D01_003 was better performing than the first Fix Alignments in other Corridors Options. explained this had not been done at this stage, as the assessment is a comparative assessment of the First Fix Alignments within individual Corridor Options and not a comparison of First Fix Alignments across the different Corridor Options. This will be considered when end to end alignments are assessed at Second Fix.	
5.0	Alignments within Corridor Option Online North (OLN)	



Item	Notes	Actions
5.01	Corridor Option OLN has eight First Fix Alignments with challenging topography. There are online options and options to the south and north of the existing A96. To the south, the topography is more favourable than the northern options. The northern options cross the hill at Bainshole and structures are required to cross the Glen Water with approximate lengths between 400 and 500m. Three options cross the Glen Water twice to achieve complaint geometry resulting in the need for two structures. Alignment OLN_006 went through the Hill of Skares however a tunnel would potentially be required due to the 80m cutting. First Fix Alignment OLN_007 and OLN_001 are the preferred alignments, however, First Fix Alignment OLN_008 will also be taken through to the development of Second Fix Alignments to facilitate more connections to the D Corridor Options.	
5.02	stated that all options go through the Wildcat Priority Area. At the southern tie in there are significant cuts which create a landscape and visual impact issue. The alignments also impact on the setting of Williamston House GDL and Scheduled Monuments in the southern section of OLN.	
5.03	explained that First Fix Alignments OLN_001 and OLN_007 are to be taken forward with OLN_001 linking to OLN_007 at the Hill of Foudland. First Fix Alignment OLN_008 to be taken forward and tested at second fix however it will require significant structures at height. The benefit of the alignments to the south is the existing A96 can be used for local traffic and the northern alignments are higher which could lead to more accidents in severe weather. The model that snow and winter resilience were known potential issue in this area. This would be considered as designs and appraisals progressed.	
5.04	is conscious about private properties on the online routes and how access will be maintained. <b>Second</b> stated that where an online route is viable it has been taken forward.	
6.0	Alignments within Corridor Option C North 1 (CN01)	
6.01	explained how the three C North Corridor Options had been identified, with CN01 following the railway line and CN03 closest to the existing A96. added that the southernmost CN01 options were 5km longer than the CN02 options. stated that Corridor Option CN01 was developed to try and find ground at a lower elevation. The first section in the north is within the Strathbogie valley and contains the river and associated floodplain. It also contains the railway line and challenging topography. There are major constraints at Gartly which requires crossing of the railway and river. Further south there is a GDL at Leith Hall and alignment CN01_001 goes out with the Strategic Environmental Assessment (SEA) boundary. stated that the SEA was 7km from the A96 therefore the CN01 First Fix Alignments are approximately 7 to 8 km from the existing A96.	
6.02	stated that the CN01 Corridor Option is not a preferred option from an environmental point of view. In the northern section, the key issue is landscape and visual impact with 16km of extensive earthworks, the First Fix Alignments are also within the floodplain and within the Wildcat Priority Area. The central section contains Leith Hall GDL and all the First Fix Alignments affect its setting. The Site of Special Scientific Interest (SSSI) south of Leith Hall forces CN01_001 out with the SEA boundary. There are several Scheduled Monuments in the central and southern section. There is also an impact on the Bennachie Special Landscape Area (SLA) in the southern section.	



ltem	Notes	Actions
	potential impacts of the First Fix Alignments within the CN01 Corridor Option.	
6.03	stated this demonstrates how far offline we need to go to avoid high ground. saked what the transportation view on the First Fix Alignments within CN01 given that we were taking the alignment further away from the existing A96. stated that a proportion of traffic may use the option however traffic may continue to use the existing A96.	
6.04	stated that the better performing First Fix Alignment for the CN01 Corridor Option, based principally on the Engineering appraisal, was a hybrid of CN01-004 through Strathbogie, switching to CN01-001 at Leith Hall before switching back to CN01-004 at Duncanston, south west of Insch. stated from an environmental perspective there is no better performing option.	
6.05	asked if traffic modelling would help to understand if the First Fix Alignments within the CN01 Corridor Option would attract traffic. said this could be investigated.	AmeyArup
6.06	highlighted two additional factors that the option is out with the SEA and would also influence any bypass of Huntly. Alignments within Corridor Option C North 2 (CN02)	
<b>7.0</b> 7.01	highlighted the engineering challenges with the river crossing in the north at Huntly with the significant earthworks in the middle section at Gartly Moor. Due to the earthworks First Fix Alignment CN02_004 was the preferred option in the central section as it was on slightly lower ground. stated the options have been pushed to this location due to high ground and properties in this area. sked if all the options have similar sized earthworks. stated that all the earthworks at Gartly Moor were similar but could possibly be refined during the Second Fix Alignment Development. stated all the elevations of the CN02 First Fix Alignments are higher than the existing A96. In the southern section, the First Fix Alignments start to drop down and there	
7.02	<ul> <li>is another pinch point between Insch and topography identified previously. To the south there are fewer constraints, so the alignments diverge until they reach the tie in point with the CS02 Corridor Option.</li> <li>stated there are a number of Major Adverse Impacts in CN02 due to the landscape and visual impact associated with the earthworks, the setting of the Bennachie SLA and Scheduled Monuments. In the northern section, there is the Wildcat Priority Area and air and noise pollution receptors at Huntly. In the central and southern sections, there are air and noise receptors at Insch and several scattered Scheduled Monuments.</li> </ul>	
7.03	highlighted issues at Gartly Moor and Insch and therefore CN02_001 was the preferred First Fix Alignment from the CN02 Corridor Option.	
8.0	Alignments within Corridor Option C North 3 (CN03)	
8.01	<ul> <li>explained that First Fix Alignments within the CN03 Corridor Option tie into the existing A96 at Foudland and extend to the pinch point at Bennachie where all CN and CS First Fix Alignments converge. In highlighted the challenging topography at Hill of Skares and the significant earthworks required to achieve compliant geometry. If questioned if we are benching into slopes rather straight than cuts. Confirmed it varied depending on the alignment. If stated that the alignment route and earthworks would be refined during the Second Fix Alignment Development.</li> <li>Identified the major gas main which crosses the First Fix Alignments at the Hill of Skares which results in CN03, 003 being the preferred alignment.</li> </ul>	
	the Hill of Skares which results in CN03_003 being the preferred alignment at this location before crossing over to CN03_001 north of Insch to avoid the railway.	



ltem	Notes	Actions
8.03	The principal environmental issues in the north are the landscape impact associated with the earthworks and the setting of Williamston House GDL. There are also air and noise impacts at Insch and Oyne. The southern section of the alignment is within the Bennachie SLA and the pinch point at Bennachie is a key environmental area which would require further appraisal during the Second Fix Alignment Appraisal.	AmeyArup
8.04	confirmed that Alignment CN03-003 was concluded to be the better performing First Fix Alignment from within the CN03 Corridor Option.	
9.0	Alignments within Corridor Option Online Central (OLC)	
9.01	explained that the OLC First Fix Alignments start at Colpy and terminate at Pitcaple. There are several HIAs including the two GDLs. The railway line, River Urie and Durno Burn watercourse crossings are also within the Corridor Option. A Major Adverse Impact has been identified for the OLC_002 First Fix Alignment because of the significant structure required to cross the watercourse and floodplain. The Corridor Option is constrained at Pitcaple by the railway line, Pitcaple castle and river. <b>The better performing</b> <b>First Fix Alignments are OLC_004 and a hybrid of OLC_007 and 004.</b> The OLC_004 First Fix Alignment is a predominantly online option from Colpy to the Oyne fork. South of Oyne the alignment crosses the railway line and stays south of the existing A96 and railway line tying into the existing A96 at Inveramsay. The potential impact on properties to be assessed and minimised.	AmeyArup
	During the Second Fix Alignment Development alignment options around the north of Pitcaple Castle to tie-in to a BN01 First Fix Alignments will be considered, due to the significant property constraints.	
9.02	stated that the two GDLs (Williamston and Newton) are major constraints and there are also numerous scattered Scheduled Monuments. Pitcaple is an area which has been identified as a major constraint and will require further review during the Second Fix Alignment Development.	
10.0	Alignments within Corridor Option C South 2 (CS02)	
10.01	explained that the CS02 Corridor Option was the southern half of Improvement Strategy C and Corridor CS01 had been ruled out during Corridor Options Assessment. If highlighted the significant earthworks at the Bennachie pinch point and major structures are required to cross the River Don (200 to 400m). There are also significant utilities throughout the Corridor Option including high pressure gas mains, a major substation with numerous pylons. If stated that AmeyArup do not consider that any First Fix Alignment options within CS02 are preferred from an engineering point of view.	
10.02	commented that all First Fix Alignments within the CS02 Corridor Option go through the Bennachie SLA so have major landscape and visual impacts. Landscape and visual impacts and flooding are the two key constraints within this Corridor Option. stated that at this stage the appraisal of environmental impacts does not consider mitigation. This would be undertaken at a later stage during the development of the preferred alignment.	
10.03	stated that the CS02 Corridor Option is remote from Inverurie and Kintore so may not attract trips from the existing A96.	
10.04	stated that due to the constraints at Thainstone and Port Elphinstone the CS02 First Fix Alignments do not tie into the existing dual carriageway until Kintore, so a section of the existing dual carriageway will not be re-used.	



ltem	Notes	Actions
10.05	confirmed that a hybrid option of CS02 and BS01 First Fix Alignments will be taken forward to the Second Fix Alignment Development.	
11.0	Alignments within Corridor Option B South (BS01)	
11.01	stated the BS01 Corridor Option could function as both an Option C and Option B South Corridor. Two of the First Fix Alignments go through land allocated in the Local Development Plan (LPD) and have significant crossings of the River Don. The two outer BS01 First Fix Alignments could also function as CS02 alignments.	
11.02	stated that the southern First Fix Alignments are within the Bennachie SLA. The crossing of the River Don and the visual impact of a bridge structure (up to 900m) is also a Major Adverse Impact. Two of the First Fix Alignments run through the Local Development Plan (LDP) housing land allocation which has planning permission. There is a planning condition that only 300 houses can be built without a grade separated junction at Inverurie.	
11.03	showed the gap between the Scheduled Monument and Crichie that could be used if it is not feasible to go through the LDP land allocation, however, there are a number of scattered Scheduled Monuments to the north.	
11.04	<ul> <li>stated that the planning aspect of the LDP residential land allocation needs to be looked at and what proposals the developer has at this stage.</li> <li>stated it will be necessary to consider the implications of any planning permission conditions. AmeyArup to review planning permission conditions in greater detail and try to obtain the proposed plans for grade separation of the existing junction.</li> </ul>	AmeyArup
11.05	stated that there may be a need to speak to the District Valuer about the option through the LDP. To manage the potential risk of going through the LDP land adjacent to the existing A96, it was concluded that two First Fix Alignments should be taken through from the BS01 Corridor Option. First Fix Alignment BS01-001 is preferred as this would form a southern bypass closest to Inverurie, subject to further review and development of the alignment to avoid the LDP land. The second option is an alternative hybrid alignment starting on BS01-002 at Kintore and thereby avoiding the LDP land before linking back to BS01-001 at Hill of Ardtannes.	AmeyArup
12.0	Alignments within Corridor Option Online Inverurie (OLI)	
12.01	highlighted this was an online improvement from Inveramsay to Port Elphinstone. Available width at sections through Inverurie is only 21m. The dual carriageway minimum cross section is 26m, so land will need to be taken to either side. stated that further work should be done to confirm the full impacts of an online option through Inverurie including the impacts of a grade separated junction at Blackhall Roundabout (Post Meeting Note – Refer to the Online at Inverurie – Dualling and Feasibility Appraisal Report).	AmeyArup
12.02	stated that OLI_002 runs through Inventory Battlefield site and crosses the River Urie twice. The OLI alignments will have a Major Adverse Impact on properties in Inverurie.	
12.03	stated Automatic Number Plate Recognition data suggests that a significant volume of traffic is generated from the north of Inverurie. Blackhall junction is the busiest on the network and there are doubts that a grade separated junction is physically feasible. Aberdeenshire Council have undertaken modelling which shows that a dual carriageway with grade separated junctions at either end created congestion in Inverurie. AmeyArup	AmeyArup



ltem	Notes	Actions
	to try an obtain information on the modelling previously undertaken by Aberdeenshire Council.	
12.04	It was concluded that due to the environmental impacts and particularly the direct effect on existing properties <b>no online improvement through</b> <b>Inverurie would be taken forward to Second Fix Alignment</b> <b>development. The feasibility of an online route will be confirmed to</b> <b>conclude the First Fix Alignment appraisal work</b> (Post Meeting Note – refer to the Online at Inverurie – Dualling and Feasibility Appraisal Report)	AmeyArup
13.0	Alignments within Corridor Option Online South (OLS)	
13.01	The OLS Corridor Option is the online section from Port Elphinstone to Craibstone. Seven areas of the existing dual carriageway have been identified where the geometric design is less than desirable minimum standards. Three structures need to be lowered to achieve high load category at Kintore. stated that overall there is no justification for routing away from the existing dual carriageway.	
13.02	stated there were no major environmental concerns with OLS, however, there are some Scheduled Monuments adjacent to the alignment.	
13.03	stated there was a higher accident rate at Tyrebagger due to junction movements. There are also resilience issues due to the gradient which causes difficulties for heavy vehicles.	
13.04	stated that the better performing First Fix Alignment within the OLS Corridor Option would be to remain online as much as possible (OLS-001).	
13.05	stated that a key issue at Tyrebagger will be grade separation/closure of central reservation gaps. The highlighted the key issue in this Corridor Option between Tyrebagger and the AWPR is the number of accesses and central reserve openings.	
14.0	Alignments within Corridor Option B North (BN01)	
14.01	explained that all BN01 First Fix Alignments had major constraints at Pitcaple and then another constraints crossing the floodplain at the Lochter Burn. The Corridor Option also contains Keith Hall GDL in the east of the Corridor Option and Bourtie House in the central section. All the alignments tie into the existing A96 at the same location due to the various constraints between Inverurie and Kintore. A structure up to 1km in length will be required to cross the River Don and its associated floodplain and railway line at this location.	
14.02	highlighted the environmental issues at Pitcaple. The Corridor Option also contains two Inventory Battlefield sites with the First Fix Alignments having impacts on their setting. There are also numerous Listed Buildings and a Major Adverse Impact on the setting of Keith Hall GDL. also highlighted the small scale LDP land allocation at Kinmuck and the A Listed Building at Balbithan House. There are also major issues associated with the visual impact of crossing the River Don.	
14.03	identified two First Fix Alignments are to be taken forward. BN01_004 which avoids Pitcaple and ties into all the D Corridor Option First Fix Alignments and a hybrid of First Fix Alignments BN01_003a, BN01_002 and BN01_001.	
14.04	stated that the closer the alignment was to Inverurie the more likely the new dual carriageway is to attract trips. The northernmost alignment may pick up more traffic from the A920 however traffic from the A920 will use any of the BN01 alignments. All also highlighted the large LDP land allocation to the north of Inverurie. Stated there is potential to use the current grade separated junction at Kintore.	



ltem	Notes	Actions
15.0	Alignments within Corridor Option B North Plus (BN+01)	
15.01	There is a major pipeline crossing the BN+01 Corridor Option and similarly to BN01 Corridor Option the Don, its floodplain and the railway line all need to be crossed by the First Fix Alignments. It was also noted that there are SSE power lines to the south of the railway line. It is considered feasible to cross the river and the railway line and get back under the power lines, however, it poses a significant constraint. From an engineering point of view the better performing First Fix Alignment is BN+01_002.	
15.02	highlighted the crossing of the River Don which is common to all the First Fix Alignments and would result in a significant visual impact. also noted that all First Fix Alignments go through the Aberdeenshire Canal which is a Scheduled Monument and three of the First Fix Alignments go through ancient woodland. stated from an environmental point of view the BN01 First Fix Alignments tie in to the A96 was preferable to the BN+01 First Fix Alignment tie in to the A96.	
15.03	stated that the BN+01 First Fix Alignments provides limited traffic benefits to Kintore and does not offer more direct connectivity to LDP allocations. From a traffic point of view First Fix Alignment BN+01_001 was the best performing within the Corridor Option, however, it does not provide a large amount of benefit compared to the existing A96.	
15.04	stated that First Fix Alignment BN+01_002 overall was the best performing within the Corridor Option, however, there is doubt in the merit of the BN+01 Corridor Option as it was developed an alternative to the BN01 Corridor Option if the tie in between the existing A96 and BN01 Corridor Option could not work. If BN01 Corridor Options tie-in works with a junction at the north of Kintore, there is no merit in considering BN+01 First Fix Alignments any further. All agreed that no First Fix Alignment from the BN+01 Corridor Option would be progressed to the Second Fix Alignment Development.	
16.0	Alignments within Corridor Option D02	
16.01	gave a brief description of the D02 Corridor Option First Fix Alignments and highlighted the area at Pitcaple where a slightly larger structure than D01 First Fix Alignments was required due to the increased width of floodplain to be crossed.	
16.02	highlighted the environmental issues with the setting of the Williamston House GDL and Scheduled Monuments in the north. The environmental issues at Pitcaple were also highlighted which included the geological SSSI, Pitcaple Castle and the working quarry.	
16.03	stated that the traffic appraisal for the D02 First Fix Alignments is like D01, but all the alignments are slightly further from the existing A96.	
16.04	stated First Fix Alignment D02_001 was the best performing and was to be taken through to the Second Fix Alignment Development. D02_001 is closest to the A96 and had the least environmental impact. It requires an amendment at the end of the alignment to reduce the length of structure, which will be considered as part of the Second Fix Alignment Development.	
17.0	Alignments within Corridor Option D03	
17.01	stated that the Corridor Option D03 First Fix Alignments generally follow the A920 corridor with alignment D03_003 tracking the route of the A920. Alignment D03_002 has a significant flood plain crossing and D03_003 interrupts access to the A920 along the length of the option.	



ltem	Notes	Actions
17.02	highlighted the setting issues with the Williamston House GDL, the biological SSSI at Wartle Moss, the B Listed Warthill House non-inventory	
17.03	GDL and the high-quality landscape around the settlement of Meikle Wartle. stated the traffic benefits are similar to D01 and D02 with alignment	
1996 1 <b>9</b> 96 1980 1987	D03_001 providing the best journey time savings.	
17.04	explained that a hybrid option of First Fix Alignment D03_001 was to be used switching to D03_002 to avoid Meikle Wartle and then switching to D03_003 to avoid the floodplain in the southern section.	
17.05	questioned if switching from First Fix Alignment D02-002 to D02-003 would impact on the Listed Building. stated that this detail will be looked at as part of the Second Fix Alignment development.	
18.0	Alignments within Corridor Option D Plus (D+01, D+02)	
18.01	explained how the Corridor Option D+01 First Fix Alignments take the dual carriageway around the north of Tillymorgan and start to the east of Huntly and are north of Bainshole. The options were looked at to avoid the constrained ground at Hill of Foudland, however, the First Fix Alignments have significant earthworks and valley structures in this Corridor Option. The northern most alignment D+01_004 is the best performing has the least earthworks impacts. Alignments asked what the road level of the First Fix Alignment D+01_004 is the performing Alignment D+01_004 is the best performing has the least earthworks impacts.	
18.02	From an environmental point of view there are significant landscape and visual issues associated with the large earthworks but with First Fix Alignment D+01_004 performing best from a landscape and visual perspective.	
18.03	stated that all First Fix Alignments offered minimum journey time savings.	
18.04	stated that a hybrid option was to be taken forward using First Fix Alignment D+01_004 and then transitioning into the D+01_003 at Fisherford to allow more compliant geometry to tie into the D Corridor Options.	
18.05	explained that Corridor Option D+02 had been developed to tie the First Fix Alignment within Corridor Option D+01 into the OLN Corridor Option, however, it requires significant structures. It was concluded that no First Fix Alignments from the D+02 Corridor Option would be progressed to the Second Fix Alignment Development.	
19.0	Health and Safety and CDM	
19.01	and have looked at some of the hazards that may affect the First Fix Alignment choice with reference being made to CIRIA guidance. To date 230 hazards have been identified including major cuttings, quantity of material, cuttings in side slopes. Interfaces with rivers, utilities and the railway line have been identified as major hazards. stated similar issues had been identified during the review as had been identified by the engineering team during their assessment.	AmeyArup
20.0	Key Issues	
20.01	First Fix Alignment OLN_008 (northern option) is to be taken forward to Second Fix Alignment develop to provide resilience and another link to the D Corridor Options. The alignment and links to the D Corridor Options are to be tested during Second Fix Alignment Development.	AmeyArup
20.02	asked how many times the existing A96 has been closed. Asked how many closures due to weather rather than accidents. It is reviewing records to try to determine this and currently consulting with BEAR Scotland. Inoted that virtual snow gates were trialled at Glens of Foudland, so the number of snow closures must be relatively low.	AmeyArup



ltem	Notes	Actions
20.03	stated that no First Fix Alignment from CN01 shall be taken forward to Second Fix Alignment Development but a separate study needs to be undertaken to confirm decision. (Post meeting note -refer to CN01 Further Investigation – Technical Note)	AmeyArup
20.04	It was agreed to retain First Fix Alignment OLC_007 as further work is required to determine the impact on properties with this alignment and if there is a better alternative to the south of the railway. Further work needs to be done on the linkages to the north of Pitcaple, which will be considered as part of the Second Fix Alignment Development.	AmeyArup
20.05	stated that the CS02 First Fix Alignments were not to be progressed to Second Fix Alignment development the BS01_004 First Fix Alignment was to be changed to a CS02 Corridor Option First Fix Alignment.	AmeyArup
20.06	<ul> <li>stated that if First Fix Alignments from OLI are to be taken through to Second Fix Alignment development it will impact on properties gardens and accesses. The fence to fence width just to the east of the Blackhall roundabout is 21m. The Blackhall Junction cannot be fully grade separated without impacting on properties.</li> <li>stated that more work was required to show the impacts of a grade separated junction to ensure the evidence is there to rule the First Fix Alignment out.</li> <li>noted that programme board will be keen to understand the rationale for deselecting the on-line option (Post Meeting Note: Refer to Online Dualling and Feasibility Appraisal Report).</li> </ul>	AmeyArup
20.07	It was agreed that the OLS options for localised offline dual carriageway sections do not merit abandoning the existing dual carriageway. The gradient at Tyrebagger is to be looked at in more detail to try and resolve gradient issues. Access to properties and local roads is also to be looked at in more detail.	AmeyArup
21.0	Any Other Business	
21.01	stated it was clear a lot of work had gone into getting the project to this point and thanked the team for this.	