Appendix C

Bridge of Don Park and Ride - Full Option Assessment

All elements to be valued on a scale of 3 to -3 (i.e. 7 point scale).

			Option 1 - Do Nothing
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	-3	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. The loss of the P&R provision along the A90 (N) trunk road corridor does not support either of these strategies, in fact it works in direct opposition to them.
	Deliver overall environmental benefits	-1	The loss of this provision reduces the sustainable transport options for the existing users and any future, potential users. This adds to congestion on the existing network.

Reduce negative environmental impacts to a minimal level when developing infrastructure, including provision of appropriate mitigation measures	0	As the existing car park infrastructure will remain in place until the site is required to be redeveloped, the impacts of this option are neutral.
Environment Safety	-1	The potential for increased volumes of traffic on an already congested
		network will have safety implications for road users. Also driver mileage increases leading to a greater likelihood of accidents.
Security	0	The site is currently serviced by lighting and CCTV. Height restrictive barriers have been installed to prevent access to large vehicles. These provisions will no longer be required if the service is abandoned.
Accessibility to sustainable modes	-2	Work is required to improve access for sustainable modes directly from Ellon Road. At present all those entering the site must use Parkway East. A foot/cycle path from Ellon Road would be achievable and would increase access however the cost/benefit of providing infrastructure for a limited period would not present best value to the Council and funding is unlikely to be awarded. Loss of the No. 40 bus service would result in reduced sustainable options for all existing park and ride users and workers in the adjacent
		Business Park.
Integration with the transport network	0	No impact
Engineering / construction difficulty	0	No impact

ublic acceptability of otions	-1	The loss of an existing service to customers and the negative impact on the surrounding network from the subsequent increase in vehicle numbers will likely receive a negative public response
easibility and fordability	0	There are low cost implications from this option. Possible costs would include decommissioning site and customer cabin. Temporarily increasing access by active transport modes. Increased wear and tear on the remaining road network due to increased volumes of traffic using network.
upport of economic spirations	-1	The continued use of the existing site may be restrictive to the future development opportunities for the AECC site as a whole. A tendering process will be progressed over the next couple of years to procure a development partner to work with the Council on the maximisation of the site's value. In the event of the site being redeveloped the facility will be lost. This will result in increased vehicle journeys on the network in creasing congestion on a busy network, increasing costs to business and not meeting the aspirational needs of the network.
npact of AWPR on oposals	-1	The AWPR reduces the volume of traffic on the network in the vicinity of the existing Park and Ride site. The loss of the car park will result in vehicles returning to the network and reducing the positive impact of the AWPR.

			Option 2a - Do Minimum
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	1	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. The maintenance of the existing volume of park and ride provision promotes the use of sustainable modes however it does not met the aspiration to expand these.
	Deliver overall environmental benefits	0	This option maintains the existing level of Park and Ride provision and therefore has a neutral impact. There is potential to improve access for active modes to the site further reducing congestion on the existing network.
	Reduce negative environmental impacts to a minimal level when developing	0	As the existing car park infrastructure will remain in place until the site is required to be redeveloped, the impacts of this option are neutral.

infrastructure, including provision of appropriate mitigation measures Environment		
Safety	0	No impact. Though improved access for active modes may provide some increased safety for users.
Security	0	The site is currently serviced by lighting and CCTV. Height restrictive barriers have been installed to prevent access to large vehicles.
Accessibility to sustainable modes	1	Work is required to improve access for sustainable modes directly from Ellon Road. At present all those entering the site must use Parkway East. A foot/cycle path from Ellon Road would be achievable and would increase access.
Integration with the transport network	0	No impact
Engineering / construction difficulty	0	No impact
Public acceptability of options	1	The maintenance of the existing level of service would be viewed favourably by existing users and would have no detrimental effect on the existing network.
Feasibility and affordability	1	There are low cost implications from this option. Increasing access by active transport modes will incur minimal infrastructure costs.
Support of economic aspirations	0	The continued use of the existing site may be restrictive to the future development opportunities for the AECC site as a whole. A tendering process will be progressed over the next couple of years to procure a development partner to work with the Council on the maximisation of the site's value. The maintenance of the facility will continue to provide benefits to the existing network and reduce delays on the congested network.

		This option itself does not provide for an increase in provision and therefore has a neutral impact.
Impact of AWPR o proposals	n 0	The AWPR reduces the volume of traffic on the network in the vicinity of the existing Park and Ride site. The AWPR provides greater linkage around Aberdeen however the distance from the existing site to the new AWPR junction may not lead to a great attraction from surrounding areas to the car park.

			Option 2b - Do Minimum with multi storey
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	1	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. The maintenance of the existing volume of park and ride provision promotes the use of sustainable modes however it does not met the aspiration to expand these.
	Deliver overall environmental benefits	0/1	This option maintains the existing level of Park and Ride provision and therefore has a neutral impact. There is potential to improve access for active modes to the site further reducing congestion on the existing network. The construction of new multi storey infrastructure will have a negative impact on some environmental aspects however construction mitigation will minimise these as the site has previously been developed.
	Reduce negative environmental	0/-1	The construction of a multi storey car park will have some negative environmental impacts however these will be minimised through

impacts to a minimal level when developing infrastructure, including provision of appropriate mitigation		construction mitigation and the site has previously been developed and is set within an urban/ industrial environment.
measures		
Environment	0	No impost Though improved access for active modes may provide come
Safety	0	No impact. Though improved access for active modes may provide some increased safety for users.
Security	0	The site is currently serviced by lighting and CCTV. Height restrictive barriers have been installed to prevent access to large vehicles.
Accessibility to sustainable modes	1	Work is required to improve access for sustainable modes directly from Ellon Road. At present all those entering the site must use Parkway East. A foot/cycle path from Ellon Road would be achievable and would increase access.
Integration with the transport network	0	No impact
Engineering / construction difficulty	0	No impact
Public acceptability of options	1	The maintenance of the existing level of service would be viewed favourably by existing users and would have no detrimental effect on congestion on the existing road network.
Feasibility and affordability	-2	The cost of constructing a multi storey car park within the existing site boundary has significant cost implications and would maintain not increase on the existing provision therefore may be difficult to justify as a cost/ benefit ratio. Increasing access by active transport modes will incur minimal infrastructure costs.
Support of economic	0	The continued use of the existing site may be restrictive to the future

aspirations		development opportunities for the AECC site as a whole. A tendering process will be progressed over the next couple of years to procure a development partner to work with the Council on the maximisation of the site's value. The maintenance of the facility will continue to provide benefits to the existing network and reduce delays on the congested network. This option itself does not provide for an increase in provision and therefore has a neutral impact.
Impact of AWPR on proposals	0	The AWPR reduces the volume of traffic on the network in the vicinity of the existing Park and Ride site. The AWPR provides greater linkage around Aberdeen however the distance from the existing site to the new AWPR junction may not lead to a great attraction from surrounding areas to the car park.

			Option 3 - Blackdog
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	1	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. The maintenance of the existing volume of park and ride provision promotes the use of sustainable modes however it does not met the aspiration to expand these.
	Deliver overall environmental benefits	1	This option maintains the existing level of Park and Ride provision however it reduces the total distance travelled by road traffic creating environmental benefits in terms of reduced fuel consumption and congestion.
	Reduce negative environmental impacts to a minimal level when developing	-1	This site will be constructed on land currently used for agriculture but zoned for development. Mitigation will be put in place to prevent environmental damage e.g. proposed use of suds and landscaping.

infrastructure, including provision of appropriate mitigation measures Environment		
Safety	1	Reduced vehicle miles may increase driver safety. Facilities within the car park would be expected to include lighting. The multiple use of the site i.e. the adjacent hotel and foodhall, will provide greater footfall in the area and greater perceived levels of safety for car park users.
Security	1	The site would be expected to be serviced by lighting and CCTV. Extra security would be provided by the use of the site 24 hours a day i.e. adjacent to hotel.
Accessibility to sustainable modes	1	Blackdog is remote from other settlements though the core path network does come in close proximity to the site and there are residential properties in walking/ cycling distance. Bus services are available from the nearby A90 (N).
Integration with the transport network	2	The site is proposed close to a new junction onto the proposed Aberdeen Western Peripheral Route and will therefore have radial links round Aberdeen, to other park and ride sites as well as access to the A90 (N) trunk road network. The site is in close proximity to the core path network.
Engineering / construction difficulty	-2	The site is proposed to be constructed by a developer in tandem with a foodhall and hotel. The site will only be constructed if the AWPR goes ahead and the junction is constructed as currently proposed. At this time legal challenges are causing delays to the delivery of the AWPR and therefore the construction timescale for this site is undetermined.
Public acceptability of options	0/-1	This site could receive positive feedback from the public as it is a multi use site and the only option to provide users with a dual purpose for using the site.

		It is unlikely that Bridge of Don users would travel to Blackdog to use the service as they currently do at the existing site (approx. 30% of users) therefore some existing customers would be lost. It may also cause conflict with the existing customer base at Ellon Park and Ride if there was felt to be a perceived benefit to users to remain in their cars to Blackdog rather than park in Ellon.
Feasibility and affordability	1	Whilst there have only been very informal discussions carried out to date with the developer it is anticipated that the construction works would be carried out at their expense and terms would be required to ensure the use of the site for park and ride is preserved and affordable.
Support of economic aspirations	0	This option alone maintains the existing level of facility and will therefore continue to provide benefits to the existing network and reduce delays on the congested network. This option itself does not provide for an increase in provision and therefore has a neutral impact.
Impact of AWPR on proposals	-2	This option is dependent on the delivery of the AWPR and will not be able to proceed until the new junction is in place.

			Option 4a - Berryhill/ Cloverhill with 250 spaces
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	-1	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. This option does maintain some level of park and ride provision but at less than half of the existing provision. This does not build on the success of the existing site or provide for future expansion.
	Deliver overall environmental benefits	-1	This option does not reduce the volume of traffic on the existing road network and reduces the potential for increasing further P&R use.
	Reduce negative environmental impacts to a minimal level when developing infrastructure,	-1	This site will be constructed on land currently used for agriculture but zoned for development. Mitigation will be put in place to prevent environmental damage e.g. proposed use of suds and landscaping.

including provision of appropriate mitigation measures		
Environment		
Safety	0	Facilities within the car park would be expected to include lighting. The low volume of parking would suggest limited footfall throughout the day and lower perceived safety.
Security	0	The site would be expected to be serviced by lighting and CCTV.
Accessibility to sustainable modes	1	Murcar is relatively close to Bridge of Don settlements with the core path network in close proximity to the site and residential properties in walking/ cycling distance. Bus services are available from the nearby A90 (N).
Integration with the transport network	2	The site would have access to the A90 (N) trunk road network from the Murcar Roundabout and potentially through the Business and Energy Park to Exhibition Road. The site is in close proximity to the core path network.
Engineering / construction difficulty	-2	The site is proposed as part of the development to expand the existing Business and Energy Park. A long access road is required to the first phases of the Park and significant changes would be required to adjust the existing round about to accommodate the change of flows at the junction.
Public acceptability of options	1	Bridge of Don users may be willing to travel to Murcar to use the service as they currently do at the existing site (approx. 30% of users) though some existing customers may be lost. The opportunity to reach the site before reaching the queues at the Parkway / Ellon Road Roundabout may also appeal to users.
Feasibility and affordability	-2	Whilst there have only been very informal discussions carried out to date with the developer it has been suggested a significant contribution to the construction works of the site or the access road would be required in

		order that the site provide some value to the developer. Further
		discussions would be required to ascertain the extent of these potential
		costs either initial capital or long term revenue.
Support of economic	-1	This option itself leads to a loss in provision and therefore has a negative
aspirations		impact on the potential network benefits.
Impact of AWPR on	0	This option is independent on the delivery of the AWPR however it would
proposals		be reasonably close to the new junction and may provide links radially to
		other park and ride sites.

			Option 4b - Berryhill/ Cloverhill with 500 spaces
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.		The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	0	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. This option maintains the existing level of park and ride provision but does not build on the success of the existing site or provide for future expansion.
	Deliver overall environmental benefits	0	This option maintains the benefits to the existing road network of the current site and the vehicle distances travelled at present.
	Reduce negative environmental impacts to a minimal level when developing infrastructure,	-1	This site will be constructed on land currently used for agriculture but zoned for development. Mitigation will be put in place to prevent environmental damage e.g. proposed use of suds and landscaping.

including provision of appropriate mitigation measures Environment		
Safety	0	Facilities within the car park would be expected to include lighting.
Security	0	The site would be expected to be serviced by lighting and CCTV.
Accessibility to sustainable modes	1	Murcar is relatively close to Bridge of Don settlements with the core path network in close proximity to the site and residential properties in walking/ cycling distance. Bus services are available from the nearby A90 (N).
Integration with the transport network	2	The site would have access to the A90 (N) trunk road network from the Murcar Roundabout and potentially through the Business and Energy Park to Exhibition Road. The site is in close proximity to the core path network.
Engineering / construction difficulty	-2	The site is proposed as part of the development to expand the existing Business and Energy Park. A long access road is required to the first phases of the Park and significant changes would be required to adjust the existing round about to accommodate the change of flows at the junction.
Public acceptability of options	1	Bridge of Don users may be willing to travel to Berryhill to use the service as they currently do at the existing site (approx. 30% of users) though some existing customers may be lost. The opportunity to reach the site before reaching the queues at the Parkway / Ellon Road Roundabout may also appeal to users.
Feasibility and affordability	-2	Whilst there have only been very informal discussions carried out to date with the developer it has been suggested a significant contribution to the construction works of the site or the access road would be required in order that the site provide some value to the developer. Further discussions would be required to ascertain the extent of these potential

		costs either initial capital or long term revenue.
Support of economic	1	This option itself maintains the existing level of park and ride provision
aspirations		and therefore maintains the existing network benefits.
Impact of AWPR on	0	This option is independent of the delivery of the AWPR however it would
proposals		be reasonably close to the new junction and may provide links radially to
		other park and ride sites.

			Option 5 - Satellite Sites
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.	2	The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network. The use of satellite sites in local communities should lead to greater patronage of existing bus services and therefore increased potential for expansion of these services.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	2	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. This option potentially creates double the existing level of park and ride provision enabling increased benefits in terms of user choices and reduced network congestion.
	Deliver overall environmental benefits	3	This option has the potential to substantially reduce congestion by removing vehicles from the network before they reach the city network and encouraging modal shift. Improving journey times for all vehicles.
	Reduce negative environmental impacts to a minimal level when developing infrastructure,	-2	The sites proposed are currently used for agriculture or recreation but zoned for development. No site has been identified as yet for the Potterton corridor and therefore these environmental impacts cannot be determined. Mitigation will be put in place to prevent environmental damage e.g. proposed use of suds and landscaping.

including provision of appropriate mitigation measures Environment		
Safety	0	Facilities within the car park would be expected to include lighting. As 2 of the sites would be proposed to be smaller sites there would be reduced footfall which may impact on the perceived safety of the site however the proximity to residential areas would have a positive impact.
Security Accessibility to sustainable modes	2	The site would be expected to be serviced by lighting and CCTV. Using local bus services and improved links to sustainable modes would have a positive impact. This option is anticipated to have a positive impact on modal change.
Integration with the transport network	2	The sites being located on the 3 main corridors into the city from the north means that the park and ride sites are local and integrated within easy access for commuters.
Engineering / construction difficulty	-2	The sites all require new build which may have engineering difficulties. Access to the Scotstown Road site may be difficult to achieve from the existing road due to visibility, network speeds and existing site boundaries/ vegetation etc. A site has yet to be identified for the Potterton corridor and therefore cannot be determined at this stage. The Blackdog site requires the construction of the proposed AWPR junction prior to the development of the site. This is currently experiencing delays due to legal challenges.
Public acceptability of options	2	These sites will enable users to access Park and Ride car parks along their commuting corridors and have the potential to lead to improved local bus services for communities. Existing Bridge of Don P&R users may also still be able to access these services. There may be local opposition to the construction of a car park at Scotstown Road depending access provisions to the site.

Feasibility and affordability	-2	As previously detailed the Blackdog site is developer led but dependent the delivery of the AWPR. The Scotstown site has previously been identified for sheltered housing and access to the site may be problematic. No site has been identified for the Potterton corridor at this time.
Support of economic aspirations	2	This option expands the existing level of park and ride provision and therefore supports the economic aspirations of the north of the city particularly in relation to the sustainability of the Energetica Corridor.
Impact of AWPR on proposals	1	Elements of this option are dependent of the delivery of the AWPR and several of the routes to the proposed sites would be impacted by the changes to the road network as a result of the AWPR. The proximity of the sites to the AWPR would enable services and users to benefit from radial journeys.

			Option 6 - AECC Car Park
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.	2	The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network. The use of the existing car park at AECC would reduce congestion on the network and promote modal change.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	2	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. This option potentially creates double the existing level of park and ride provision enabling increased benefits in terms of user choices and reduced network congestion.
	Deliver overall environmental benefits	3	This option has the potential to substantially reduce congestion by removing vehicles from the network before they travel into the city network and by encouraging modal shift. Improving journey times for all vehicles.
	Reduce negative environmental impacts to a minimal level when developing	2	The use of the existing car park reduces the need for new construction and existing infrastructure can be used to access the site.

infrastructure, including provision of appropriate mitigation measures		
Environment		
Safety	2	Facilities within the car park would be expected to include lighting. The increased volume of the site would provide for a greater footfall which could lead to an increased perceived feeling of safety.
Security	1	The site would be expected to be serviced by lighting and CCTV.
Accessibility to	2	Access can be more directly achieved than that of the current site and
sustainable modes		improvements could be achieved for sustainable modes.
Integration with the	1	The site is well located on the existing network however adjacent
transport network		junctions are subject to congestion at peak times.
Engineering / construction difficulty	2	Minimal new construction is required to provide an accommodation block and turning area for buses.
Public acceptability of options	2	Use of this site would enable the public to see better usage of the AECC car park as the majority of events are held at night leaving the car parks empty during the day. Approx. 30% of current users are from the Bridge of Don and they would likely continue to use this site as no further diversion is required.
Feasibility and affordability	2	As the majority of the infrastructure is in place this is an affordable option, particularly when compared to sites which require to be started from scratch. There may be a financial implication for the AECC in its plan to promote the site for a developer partner however the provision of sustainable transport options at the site will be of benefit overall.
Support of economic aspirations	2	This option expands the existing level of park and ride provision and therefore supports the economic aspirations of the north of the city particularly in relation to the sustainability of the Energetica Corridor.
Impact of AWPR on	0	The proximity of the site to AWPR may lead to some linkages with other

proposals	radial routes but this option is not dependent on the provision of the
	AWPR nor impacted by the proposed changes to the surrounding
	network.

			Option 10 - Existing Park and Ride Car Park plus Blackdog
Transport planning Objectives	Support the implementation of the Local Development Plans in a manner which contributes to reduced congestion and improved journey times, and benefits public transport users.	2	The Aberdeen City and Shire Structure Plan aims to make most efficient use of the transport network. The use of the existing car park and Blackdog would provide increased opportunities to reduce congestion on the network and promote modal change.
	Support the Regional and Local Transport Strategies by encouraging modal shift from private car use to public transport and active travel modes	2	The RTS looks to expand P&R provision and the LTS to promote the use of sustainable transport modes. This option potentially creates double the existing level of park and ride provision enabling increased benefits in terms of user choices and reduced network congestion.
	Deliver overall environmental benefits	3	This option has the potential to substantially reduce congestion by removing vehicles from the network before they travel into the city network and by encouraging modal shift. Improving journey times for all vehicles.
	Reduce negative environmental impacts to a minimal level when developing	0	The use of the existing car park reduces the need for new construction and existing infrastructure can be used to access the site. The Blackdog site requires new build and major infrastructure to access the site.

infrastructure, including provision of appropriate mitigation measures Environment		
Safety	2	Facilities within the car park would include lighting.
Security	2	The site would be expected to be serviced by lighting and CCTV. The existing site has been fitted with height restrictive barriers to prevent access by unsuitable vehicles. Blackdog site will benefit from its dual use as it is adjacent a foodhall and there will be increased footfall throughout the day.
Accessibility to sustainable modes	2	Access can be improved for sustainable modes to both sites.
Integration with the transport network	2	The sites are well located on the existing network however adjacent junctions are subject to congestion at peak times.
Engineering / construction difficulty	1	No construction is required at the existing site. The Blackdog site is being developed as part of a major development and is reliant on the AWPR which is currently subject to delay due to legal matters.
Public acceptability of options	1	Approx. 30% of current users are from the Bridge of Don and they would likely continue to use this site as no further diversion is required. Blackdog would be seen as a dual use site due to the presence of the foodhall/ hotel which may help with public acceptance. The presence of 2 P&R car parks along the same corridor as Ellon P&R may lead to concerns from the public. Care would be required to ensure no deterioration in the success of Ellon P&R.
Feasibility and affordability	1	Use of the existing site is both feasible and affordable. The Blackdog site is developer led and terms would have to be agreed prior to taking these works forward. At present it is understood that minimal input would be required to secure use of this site. Blackdog is also closely linked to the

		provision of the AWPR junction and therefore timescales for delivery cannot currently be determined.
Support of economic aspirations	2	This option expands the existing level of park and ride provision and therefore supports the economic aspirations of the north of the city particularly in relation to the sustainability of the Energetica Corridor.
Impact of AWPR on proposals	2	The Blackdog option is dependent on the provision of the AWPR however it stands to benefit most from its proximity to the new route as it will link radial?ly with other proposed and existing P&R sites.

Bridge of Don Park and Ride – Site Options

