



					DART+ West -	MCA Stage 2																
					Ashtown Level Cros	ssing Assessment																
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4 & 4b	Option 6														
					Under Rail and Canal Mill Lane: This option would entail re-routing Ashtown Road along its old alignment (rer Royal Canal) on Mil Lane and passing under both the raikway and the Royal Canal) on Mil Lane and passing under both the raikway and the Royal Canal. The option can accommodate a cross section of a 5.m carriageway with 2m footpaths on both sides and 2.5m two- way cycle tack on the eastern side. An adgrade turning head and drog-off Will be provided to the south of Ashtown Station. The length of the occile is approximately 155m on the enothern side and 300m south of the rail line. The option would drop to an approximate level of 27.5m above MSI, at the crossing point. On the southern side a separate pedestrian and cycleil link and link to the riding solution are proposed to maintain access 5m ron-motorised use These would have cross section of 4.0m. It is familie to read at this backion. and the diplacible lock on the canal and the canal is at the same approximate level at backs. This point on would require some proprive acqualition and modifications to existing accesses.	Overbridge on Mill Lene This option would entail re-routing Ashtown Road along is of alignment; the Royal Canai) on Mil Lane and passing over both the railway carriageway with 2th footpaths on both addes and 25m bac-way cycle tracks on the eastern side. An aligned built in both addes and 25m bac-way cycle tracks on the safety and the cycles and would and the provided to the south of Ashtown Station. The length of the cycles is approximately 300m each side of the rail line and canail. The dycles would in the on an approximately 400m each side of the rail line and canail. The dycles would in the on an approximate dock level of 52m. Ob which is a at level of 450m OD at the crossing point. On the southern side a separate podestitin and or cycles link and link to be ringit pachate approace to namitina access from mitoriade use these would have cross section of 4.5m. It is feasible for cross at this location, and used in the duckle lock on the canail and the canail is at the same approminate level as the adjuent in the duckle lock on the canail and the canail is at the same approximate level as the adjuent more thanks. This cyclor would require some procepts variabilism and modifications to existing accesses. It would pass through the grounds of the lated Astion House.	This option is considered in combination with Option 4 descibed with 4 a, and also includes a pedestrian cycle overbridge structure with a 4m wide cross section (Option 40) over the carala and arilawy. In include the demoiltion of the existing cable stuyed bothridge at the level crossing and the station foothridge to provide space for the proposed bridge. The program of the proposed bridge would cross the rail and Canal at a level of space MSL where the rail is at a level of 39.4m above MSL and the canal at a level of 39.4m above MSL.	This option would cross the nativey and canal approximately 250% east of the esting level crossing ill incorporates a highly canners plan loyar which facilitates a link to the existing Anthona road at the train station. The link would twense the green area between Anthona Station and Martin Sawage Park and would clinb to cross over the railway and canal to be into the new circulation roads through the Pelletistoon Development. The option can accommodate a cross section of a 55 m cartageway with 2m tooptam's and canal with approach gradents of the effect on the station part of the crossing is approximately 42 m above MSL and the canal at 353 makes MSL and canal with approach gradents of the end with 2m too with the crossing is approximately 42 m above MSL and the canal at 435 makes MSL with the drage with one the lanka at 55 m, above MSL. The road level crossing is approximately 42 m above MSL and the canal is above MSL with the radie canal. The approach can also wall do can be constructed with open embanitments to provide a softer texture to the scheme. The provision of lankcage data making approach and have also more tand acquisition. There would also be impacts on Marin Sawage park tome to SI Oliver Punker's GAA club be the south and would be located within zoned housing development and within the Advanov. Platestates MSL to the node of the all line and canal.														
					Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options														
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Construction cost impacts are high due to direct impacts on canal and existing rail and more difficult construction. Land costs lower than option to east into zoned lands.	This option requires a crossing of the canal and railway on slewand an extended road alignment through the listed Ashton House property to facilitate a tie in to the north of the canal and railway.	Additional pedestrian / cycle overbrdge required in Ashtown. Some realignment and improvement works required on River Road. A two or three span bridge configuration is anticipated here requiring construction activity between the canal and the railway	Construction costs lowest for option but impact on zoned lands to the north and impact on sports facilities to the south would result in higher costs.														
																			Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
1	Economy	1.2	Long Term Maintenance costs	ts Ongoing annual maintenance costs associated with varied options	A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs.	A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs. The likely need for elevated approach ramps along the northern approach to the bridge from the level cosing results in an additional ongoing maintenance cost.	A fixed bridge will reduce maintenance requirements over a level crossing or other mechanical solution. Bridge option would determine overall maintenance costs, 2No. In this case.	An overbridge would increase the maintenance requirements over a level crossing, though it would not be significantly more so than other options														
					Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options														
		1.3	Traffic Functionality /economic benefit	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Improvement in journey times; potential for induced trips; potential to increase congestion at Ashtown Roundabout as a result of induced traffic.	Improvement in journey times; potential for induced trips; potential to increase congestion at Ashtown Roundabout as a result of induced traffic.	Some increase in journey time; potential for induced trips. Journey Time deterioration - 7% on opening we existing, 19% on opening we replacement note Traffic diversions in the peak hour - 867 No. 2.1km minimum	Inprovement in journey times: potential for induced trips: potential to increase congestion on surrounding road network as a result of induced traffic.														
				Impact on scope for and ease of	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options														
		2.1	2.1	Transport Integration	Interchange between modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.	Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. The route is largely on the desire line of transport customers. Cycle track provided	Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. The route is largely on the desire line of transport customers. Cycle track provided	Improved interchange between modes: subject to satisfactory access to train station platforms. General reduction in journey times. Bus services may be impacted as a result of the proposed diversion along the narrow River Road. Cycle track provided.	Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. There may be severance to existing connectivity on the northern side of the canal and railways as a result of the construction of the required approach ramps. Slightly more circuitous route for pedestrians & cyclists. Cycle track provided.													
					Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options														
2	Integration	2.2	Land Use Integration	Impact on land use strategies and regional and local plans. Assessment of support for land use factors local land use and planning, Inclusion of project in relevant local planning documents.	Underbridge online option on mill lane: At local planning policy level, a small section of this option is located on DCC (DP) lands close to Ashtown Station, zoned 211 and also contains the conservation area of the Royal Canal. The remainder of this option is located in FDP area: relevant zoning includes "High Technology" (to the south of the Canal) and travel north the canal into the start of a large area of land Zonnel 'High Amenity'. This option based of once: [API' 35] and is likely to angoin or canall likely and transport planning integration. Subject to further design and traffic data.	Overbridge on Mill Lane: Al local planning policy level, Option 3 is similar to Option 2, however its entire extent is located within the FDP area only relevant contrain inclusion. They fill rechnology (to be such of the Cana), This roots and the second option of the second of the Cana). The inclusion of the Cana), This roots Amenity (rane work of a work of the cana), the inclusion of the Cana). The inclusion of the cana), the inclusion of the cana), the inclusion of the cana), the inclusion of the cana). The inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana inclusion of the cana is the second of the cana	At local level, the majority Option 4 is located within lands zoned by Fingal DP as "High Amenity. The route travels close to the boundary of the existing Coolimien Ruby Okub and adjoent to the Photom Park Rulina and adjoent to the Photom Adjoent and the Photom Park Rulina Amenity Zoned land would ge against Objective NHS1 (FCDP) "Protect High Amenity areas from napporprist development and reinforce their character, distinctiveness and sense of place". However, in terms of future land use factors. Option 4 could care a direct link may base objective (LAP13B - Name Road Parkwa) Local Area Plan) and also linking into LAP13D. Copion 4 be action would result in a direct potestima and the Adotom - Photoment LAP 2014. This has some comparative disadvartage due to the impact on zoned high amenity lands.	Option 6 is located entirely within the DCDP area. This option is located on lands zoned 211 'canel, coastal and river amentited' associated with the royal canal and travels along the north edge of the existing Matrin Savage Park (GAA) pitch (22 cane) - recreational, amenity and open space). North of the Canal it travels through currently a greenfield site, zoned for residential use in the Pelletstown Action Area Pian 2014. This option possignitum the LAP residential zoning. Option 6 will have an impact on the functionality of the GAA amenity linear and will also impact on the future zoned residential and . On the north side of the canal. Option 6 is noted through a permitted residential devolgement (DCC Ref. 3605/1, ABP ref. PLSN.248373). This option will have a profound impact on this approved development.														





			Alternative level crossing options are mostly	Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
	2.3	Geographical Integration	neutral in respect of Geographical Integration due to localised nature of the level crossings.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.
				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
	2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, KSES, GDA Transport Strategy).
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
	3.1	Noise and Vibration	Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	Moves traffic to rear of apt block from current road layout. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be more significant due to the excavation required. 198 dwellings within 100m.	Moves traffic to rear of apt block from current road layod. This option will introduce additional noise to the rear apartments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. Construction phase of this option will be less aligned than Option 2 due to less escanation required. 150 dwellings within 100m.	Operational traffic impacts will affect 2.dwallings. Pedastrian crossing will have impacts during construction. 148 dwallings within 100m of both vehicular route and pedastrian crossing. Only 2 properties within 100m of the vehicular route.	Moves traffic to near of apt block from current noed layout. This option will introduce additional noise to the rear opertments while also decreasing road traffic noise levels to the apartments currently facing the front of the apartment block. 220 dwellings within 100m.
			Estimated number of number of receptors	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
	3.2	Air Quality and Climate	within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	Moves traffic to rear of apt block from current road layout. 130 dwellings within 50m where traffic has been moved from front to back. Embodied carbon for new bridge. Potential for construction phase dui impact in on significant when miligation measures are put in place.	John of bour vehicular route and pedestrian crossing. Potential for construction	during construction. Only 1 property within 50m of the vehicular route of operational traffic. Two congrate bridges will increase embedied earbor for	Moves traffic to new route away from current route and therefore impacts on properties. 91 dwellings within 50m. This option also brings additional traffic to proximity of a school (highly sensitive receptor). Potential for construction phase dust impact is not significant when mitgation measures are put in place.
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
	3.3	Landscape and Visual (including light)	Key landscape characteristics affected: Impact on landscape character, Impacts on landscape features, protected landscapes Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Option will have a very significant impact on boundary trees/woodlands, entrance gates and lodge at Ashton (Ashtown) House, a protected bucket of Ashton Hyper Structure (No. 680). Longton Bridge are cannot in the homely and loteflind as a Nature prove forment Area in the Fingal Development Plan. Very significant fusual impact for setting of 10th Lock on Royal Canal. Significant impact to setting of 10th Lock on Royal Canal. Significant impact for Ashtown Stables, Further dealin quirat do for full assessment of tikely significant impacts.	Option will have a very significant impact on boundary trees/veodiands, entrance gates and lodge at Ashton (Ashtown) House, a protected structure (No. 660). Lands of Ashton House and the corridor of the Royal Canal west of Longford Bridge are zoned High Amenity and identified as a Nature Development Area in the Fraged Development Rav. Very significant visual impact for setting of Yoh hedgerows leading to railway - significant impact for Ashtoon Stables. Further design detail required for further detailed assessment.	Iandscape character of River Road and Iands north to the Tolka River. The majority of the lands are liad cut in mature parkland with trees, walks, and boundary woodland - all of which will be impacted by the alignment. The lands and the control of the Royal Canal are zoned High Amenity and identified as a Nature Development Area in the Fingal Development Plan. Three and Woodland preservation objectives in Fingal Development Plan. Three aNW doordand preservation call and on open space north of Martin Savage Park. The bridge overswings the canal in a visually incongrouss manner. Royal canal control is a conservation area in the Dublin City.	Option will have a significant impact on boundary treashedgerous along the railway (canal corrisor (a conservation area in the Dublin City Development Pien). Option will have a very significant impact on pace and Oliver Plusket's CAA clubphothes at Matrin Sarage Park. Cate and the set of the difference of the set of the set of the set of the set of the difference of the set of the set of the set of the set of the residential development on north set of caral - with very significant implications for the permitted layout (DCC Ref. 366615, ABP ref. PLAST3 - Active planning applications (25672), One Control With have very significant to properties at Anyther of the set of the permitted layout (DCC Ref. 366674), IOCA. Very of the set of the set of Matrin Sarage Open Space and the Royal Canal.
				Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
	3.4	Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	This option is hydrologically connected to European sites downstream in the Totka Estuary and Duclin Bay. There is no risk of Likely Significant Effects to this or any other European alte. There is potential for impacts to Royal Canal PMA anising from nous, artificial lighting and impacts to water quality during construction. Demolition of old Mill ane buildings may impact bats.	This option is hydrologically connected to European sites downstream in the Thick Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European site. There is potential for impacts to Royal Canal PMHA arising from noise, artificial physicing and impacts to water Quality Auring construction. Demolition of old MII lane buildings may impact bats. Loss of woodland habitat is anticipated.	This option is hydrologically connected to European sites downstream in the Tolke Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European site. There is potential for impacts to Royal Canai pHA4 arising from noise, artificial lighting and impacts to vate quality during construction. Loss of woodland, marsh, treeline and hedgerow habitat is anticipated.	This option is hydrologically connected to European sites downstream in the Toka Estuary and Dublin Bay. There is potential for impacts to Royal Canal pNHA arising from noise, artificial lighting and impacts to water casility during construction. Permanent loss of habitat and distructions of Light-bellind Barer Goose (Qualifying Interest of SPAs) which are known forage in significant numbers at Ashtown Playing Pitches.
Environment				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
	3.5	Gultural, Archaeological and Architectural Heritage	ural Heritage Number of designated sites/structures (by	Ashton House (RPS 0690). Indirect impacts on mill and outbuildings (RPS 091) and Pelletstown House (structure of architectural merit). Potential indirect impacts on Roval Canal (RPS No. 944a) and the Roval Canal 10th	House (RPS No. 0690). Indirect impacts on mill and outbuildings (RPS No. 691) and Pelletstown House (structure of architectural merit). Potential indirect impacts on Roval Canal (RPS No. 944a) and the Roval Canal 10th Lock (RPS	Direct impacts on River Tolka and former demesne landscapes associated with Ashtrook (RPS No. 941) & Ashtrown Lodge. Potential for indirect impacts on the Royal Canal (RPS No. 944a). Potential to encounter on archaeological deposits that may survive in undeveloped areas.	No direct impacts predicted upon sites/structures subject to statutory protection. Potential for indirect impacts on the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.
	Environment	2.4 3.1 3.2 3.3 3.3 3.4 2.4	2.4 Other Government Policy Integration 3.1 Noise and Vibration 3.2 Air Quality and Climate 3.2 Air Quality and Climate 3.3 Landscape and Visual (including light) 3.4 Biodiversity (flora and fauna) Environment 2.5	2.3 Geographical integration Integration with the other Government Policy Integration with the other Government policy such as the NPF and RSES. 2.4 Other Government Policy Integration Integration with the other Government policy such as the NPF and RSES. 3.1 Noise and Vibration Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will have an increased risk of percenting a noise impact. However, qualater criteria are also used where necessary to differentiate between the options. 3.2 Air Quality and Climate Estimated number of number of receptors within 100m of the works. Option acceptor and therenaite between the options. 3.2 Air Quality and Climate Estimated number of number of receptors with a proceed as part of apprisal. Options closer to more sensitive locations will have an increased risk of opercenting a noise impact. However, qualative criteria are also used where necessary to differentiate between the options. 3.3 Landscape and Visual (including proceed as part of apprisal. Options closer to more sensitive locations will have an indicaspe characteristics affected; impacts on indicaspe characteristics affected; impacts on properties are also used where necessary to differentiate and apprisate on proceed species. Indicating are have and the sensitive proceed wave, terms and the sensitive proceed wave, terms and the indicaspe is an indicaspe characteristics affected; impacts on properties and the sensitive protected wave, terms and the indicaspe is an indicaspe characteristics affected; impact on indicaspe characteristics affected; impact on protects developed and protect developed. New Veres. 3.4 Biodiversity (fl	2.3 Geographical integration Margination problem in the conservation in the conservation in the conservation in the conservation integration. Conservation integration 2.4 Other Government Policy integration Integration. with the other Government Policy integration integration. Conservation integration. Conservation integration. 3.1 Noise and Vibration Integration. with the other Government Policy into a last NPF and RSES. Conservation integration. Conservation integration. 3.1 Noise and Vibration Estimated number of sensitive products with an origination with the other integration with the other integratin with the other integratin with the other integration w	2.3 Geographical integration Provide a decision of points and starter of the starter	1 Composite integrand Control integrand integrand in the basis of grand in



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				Some comparative disadvantage over other options	- Some comparative advantage over other options	Some comparative disadvantage over other options	. Some comparative advantage over other options
	3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Underpass excavations pose potential risk to Groundwater quality.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overtridge. Has some comparative advantage over other options.	Works in the vicinity of the river Tolka are within floodplain creating potential increase in flood risk to neighbouring lands. Creates potential pathway for pollutants to Tolka River resulting on negative impacts to Water Quality. This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge.	This option has the potential to impact on water quality of the Royal Canal during the construction phase of the overbridge. Has some comparative adventage over other options.
				Significant comparative disadvantage over other options	- Significant comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
	3.7	Agriculture and Non-Agricultural	Overall impact on land take & property. Number of properties to be impacted/acquired. Ltkely temporary or permanent severance effects, etc.	The non-agricultural impact will involve the acquisition of one residential property and a commercial property. The agricultural impact will have a profound impact on an equine holding (Adhtown Riding Stables).	The non-agricultural impact will involve the acquisition of one residential property and a commercial property. The agricultural impact will have a protound impact on an equine holding (Ashtown Riding Stables).	Direct impacts on non-agricultural property include impacts to property ourtilage (garden) and community / amenity lands. Minor direct impact on agricultural property.	Option 6 will have direct impacts on amenity lands with a significant impact on the use of one sports pitch (St. Oliver Plunkett GAA club) and permitted planning permission which is yet to be developed. (DCC Ref. 3666/15, ABP ref. PL20N.246373 - Active planning application 2566/20))
				Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
	3.8	Geology and Soils (including Waste)	Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. Soil developed/removed. Existing information relating to potential to encounter contaminated land. High-evel assessmen based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	Underbridge option means that some materials may arise, which could possibly be suitable for reuse elevathere on the project (Minor positive). This is balanced by an associated impact of interfering with the canal and existing railway, which may require specific materials be imported. Involves other geotechnical risks to design and construction which would require further studies and design information.	Overbridge options require increased fill import to the alle (Minor negative).	Overbridge options require increased fill import to the site (Minor negative). Chance of additional earthworks requirements on approach to river to the Tolka River (Minor negative).	Some made ground on-site. Overbridge options require increased fill import to the site (Minor negative).
			Overall likely impact on existing sources of electromagnetic radiation.	Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
	3.9	Radiation and Stray Current		It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EM perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hube etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabing, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing subtations, hule etc. along the line will be changed or impacted by the selection of any of the options and EMI perspective. All De-Sharehing options are comparable to the EMI perspective at this stage in the assessment.
				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
	4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Road traffic diverted distance route is 572m (1.1x diversion route). Local pedicycle access maintained along ramped access through underpass, -340m diversion.	Road traffic diverted distance route is 750m (1.4 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access maintained along ramped access over proposed bridge - ~400m diversion	Road traffic diverted distance route is 2.5km (1.4 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle access maintained along ramped access over proposed bridge - ~400m diversion	Diverted distance route is 650m (1.4 x diversion route).
				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station
				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
	4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance route is 572m (1.1x diversion route). Option slightly better than other options as the diversions for non motorised users are shorter.	This option does not cause community severence. This option does not significantly affect access to community amenities Diverted distance route is 750m (1.4 x diversion route).	Diverted distance route 2.5km (4.8k diversion route) but exisiting vehicular route severed. Local access is maintained for non motorised users Community facilities affected by reduced access include Shopping facilities, Ginaffe Childcare, Patiestown Educate Together National School North of the railway and Halfway House, Anthown PSO 1000ce St Dominics College, Meaghers Pharmacy, Daughters of Charity - south of the railway.	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance route is 650m (1.3 x diversion route).
				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
	5.1	Rail Safety			This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing removal	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing removal	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing removal





					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
5	Safety	5.2	Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route is 572m (1.1x diversion route).	Diverted distance route is 750m (1.4x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users.	Diverted distance route 2.5km (4.8k diversion route) but exisiting vehicular route severed. With the incorporation of a pedestrian / cycle bridge in this option, any impact on pedestrians, cyclists and vulnerable road users is significantly reduced. Detur ~400m	Diverted distance route is 650m (1.3 x diversion route).
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
6	Physical Activity	6.1	Connectivity to adjoining cycli facilities	Analysis of the extent that the scheme connects with cycle tracks.	This option supports good linkage between existing and proposed cycle facilities. The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities. The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option supports good linkage between existing and proposed cycle facilities. The quality of access to the train station for pedestrians and cyclists is good in respect of this option.
	Physical Activity				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		6.2	Permeability and local access opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Diversion for cyclists when level crossing closed 0.4km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.	Diversion for cyclists when level crossing closed 0.65km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
			-					
		Criter	ria		Option 2	Option 3	Option 4 & 4b	Option 6
1		Econo	my		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
2		Integra	tion		Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
3	Environment		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options	· Significant comparative disadvantage over other options		
4	Accessibility and social inclusion				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
5	Safety				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
6	Physical Activity				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
	Preferred				Yes	No	No	No
						1		



DART+ West - MCA Stage 2										
				Coolmine Level Crossi	ng Assessment					
Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 1	Option 3	Option 6	Option 9			
				This online option is proposed along the existing Codmine Road to north of the alian eard can alian along Capenetistown Road to the south. The option extends for 245m to the north and 210m to the south, accommodating a cross section of a 6.5m carrangeway with this option to accommodate dedicated cycle tracks without increasing the overall road bodyrin and impact on the adjacent properties further. The high side of railway is currently at a level of 6.5m above MSL at the easing level to carrain with the proposed overhridge structure the high side of railway is currently at a level of 6.5m above MSL at the easing level the proposed overhridge structure minimum clearance required for the electrification of the rail minimum clearance required for the electrification of the rail her alway vould here embandments in the order of 6.4 metres high adjacent to them; and at an elevation of approximately 7.3m would be required to appare available for each approach here high adjacent to properties in the order of 4.8 metres high adjacent to them; and at an elevation of approximately 7.3m would be required to approximately require the provision of hom be high, construction is likely to require the provision of his the high construction is likely to require the provision of hom be high construction is likely to require the provision of his to high construction is likely to require the provision of his top the embandments. Limbidities of the level Kitter of his program the vertice the demonstruction of the listed Kitter Kitter and the south approximately require the demonstruction of the level of kitter of the south second the south approximately the south second kitter of the south approximately require the demonstruction of the listed kitter of the south approximately require the demonstruction of the listed kitter of the south approximate the demonstruction of the listed kitter of the south approximate the demonstruction of the listed kitter of the south approximate the demonstruction of the li	New Overbridge Connecting St. Machta's Grove to Luttrelipark Road.	Overbridge to East of Coolmine Road.	Option 9 provides for the closure of Coolmine Level Crossing and construction of a pedestrian and cyclist bridge in the vicinity of the level crossing (OPTION 30 consisting road network. The proposed upgrade include: - Develation Read Junicity Develation Read Continne Read Junicity Develations (Castlekinock Read Junction; and Portentown Read //Develationn Read Junction.			
				Some comparative disadvantage over other options	Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options			
	1.1	Construction and Land Cos	Assessment of cost of construction of option, land costs and temporary works	The capital cost of this option is negatively affected by the need to construct the works white maintaining traffic on the Coolmine Road and by the need to provide need ramps for cyclists and vulnerable road users	The capital coat of this option is negatively affected by the need to construct a pedestrian cycle bridge on Codmine Road in addition to the offline road bridge	The capital cost of this option is negatively affected by : - the need to construct the works while maintaining traffic on the Coolmine Road; - the incorporation of significant curvature in the plan alignment which results in wider read construction; - the construction of a wide bridge over the station and the canal; - the construction of an elevated structure over the train station carpark; - the likely acquisition of 6No. house private dwellings.	Additional cost is incurred for this option due to the need to upgrade the local road network to accommodate diverted traffic consequent on closure of the level crossing.			
	1.2	Long Term Maintenance costs		Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options			
Economy				Ongoing annual maintenance costs associated with varied options	An overbridge would reduce maintenance requirements over a level crossing. Bridge option would determine overall maintenance costs.	An overbridge would reduce maintenance requirements over a level crossing. Bridge option would determine overall maintenance costs .	An overbridge likely to be Steel bridge to reduce deck thickness to allow for approach gradients .	Maintenance coats low - 15k ex VAT per year		
				Some comparative advantage over other options	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options			
	1.3	1.3	1.3	1.3	Traffic Functionality /economic benefit	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Improvement in journey times; potential for induced trips; potential to increase congestion on surrounding road network as a result of induced traffic.	Inprovement in journey times; potential for induced trips; potential to increase congestion on surrounding road network as a result of induced traffic.	Improvement in journey times; potential for induced trips; potential to increase congestion on surrounding road network as a result of induced traffic.	64% reduction in traffic volumes @ Junction North of Level Crossing; 1% incease in traffic at Junction south of level crossing; Junctions upgraded to address delays Diversion 2km for road traffic from Junction North to Junction South
	2.1 Transport Integration 2.1 Transport Integration 2.1 Unput to the operation of the operation of the operation of the operation of the operation. New interchange nodes and facilities, Reduced with interchanges. Modal shift figures during construction and operations changes to journey times to transport nodes.			Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options			
			Improved interchange between modes, subject to satisfactory access to train station platforms. General reduction in journey times. There may be severance to existing connectivity on the approaches to the bridge over the canal and railway as a result of the construction of the required approach ramps. Access to the train station car park will be difficult. Primary cycle route, according is GDA Cycle Network Plan, but no room for cycle facilities on new bridge.	approach ramps. Coolmine Road is primary cycle route in GDA	Improved interchange between modes, subject to satisfactory access to train station platforms, General reduction in journey times. There may be severance to existing connectivity on the exponencies to the bridge over the canal and railway as a result of the construction of the required approach range. Access to the train station car park will be difficult and the capacity of the existing car park will be significantly reduced. Codmire Roads in primary cyler curve in GDA Cycle Network Plan - Cycle track provided on overbridge	General improvement in connectivity and journey times for pedestrians & cyclists: Disimprovements to interchange caused by reduced access to the train station car park from the north.				





					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
2	Integration	2.2	Land Use Integration	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	Direct impacts the FCDP Objective 142 : "Preserve the existing pedestrian and vehicular right of way at the Codmine Level Crossing". A major negative in terms of the local policy context Herrative pedestimant dryce infrastructure provided therefore it meets the 'indicativecycle' waking' network at this coation (FDP). Land use factors: The area is a low-density suburban, well established residential area. There are no LAPs, Masterplans for the area.	Direct impacts the FCDP Objective 142 : "Preserve the existing pedestrian and vehicular right of way at the Cootmine Level Crossing". A major negative in terms of the local policy context. Alternative pedestriant and cycle infraturus provided therefore It Alternative pedestriant and cycle infraturus provided therefore It Direct impact to the FDP map band" Specific Objective 141 Prohibit mean table the science II. way out the price of the trough an established residential area concerting to existing rand network accounter with the vendo Court. Station Court way and St. Mochas Groover- depending on table was this Groover- depending on table was the amas. Land use forces: The area is a low-entry of these zoned established residential area, there are no LAPs, Masterplans for the area.	Direct impacts the FCDP Objective 142: "Preserve the existing potestrian and vehicular right of way at the Coolmine Level Crossing". A major negative in terms of the local policy context. Alternative pedestrian and cycle infrastructure provided therefore it meets the inclicative/cycled walking' network at this location (FDP). Option 6 travels through the existing Coolmine Train Station carpark that the basis of the there is the state of the state of the there is the there is the state of	Direct impacts the FCDP Objective 142: "Preserve the existing pedestrian and vehicular right of way at the Coolmine Level Crossing". A major negative in terms of the local policy context. Alternative pedestrian and cycle infrastructure provided therefore it media the inflactive/cycled The vider road network models are likely DP hange transport and infegration patterns in the area. Land use factors: The area is a low- density suburban, well established residential area, there are no LAPs, Masterplans that will be impacted.
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		2.3 Geographical Integration Alternative level crossing options are mostly neutral in respect of Geographical Integration due to localised nature of the level crossings. As a consequence all options are rated comparable to one another. 2.4 Other Government Policy Integration Integration with the other Government policy such as the NPF and RSES.		No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.	
					Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
					This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy).	This option supports the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy).	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme NPF, RSES, GDA Transport Strategy). Further design detail required relating to the potential negative impacts to the train station carpark and associated planning and landuse integration factors.	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF, RSES, GDA Transport Strategy)
		However, qualative criteria are also used			Some comparative advantage over other options	Significant comparative disadvantage over other options	Some comparative disadvantage over other options	Significant comparative advantage over other options
				more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the	Online option will have no additional impacts to the current situation. 316 dwellings within 100m.	Moves traffic to new location and will impact different properties to the current crossing. 434 dwellings within 100m.	Moves traffic to new location and will impact different properties to the current crossing. 159 dwellings within 100m.	Removes vehicular traffic from the crossing and will therefore reduce noise impacts on the local environment. 171 dwellings within 100m. Traffic levels increase on the diversion roudes where road videning and junction reconfiguration is proposed.
				Estimated number of number of receptors within 50m reviewed as part of appriasal.	Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options	Significant comparative advantage over other options
		3.2	Air Quality and Climate	Options closer to more sensitive locations will have an increased risk of chalocations will quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	during operational phase. Potential for construction phase dust	Moves traffic to new location and will impact different properties to the current crossing. 216 dwellings within 50m. Potential for construction phase dual impact is not significant when mitigation measures are put in place.	current crossing. 49 dwellings within 50m.	Removes vehicular traffic and the construction phase is minimal. No traffic distribution data available to assess impact on new receptors therefore assessment only considers current receptors close to the level crossing. 42 dwellings within 50m, Potential of construction phase dust impact is not significant when mitigation measures are put in place.
					Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.3 Landscape and Visual (including light) Indicate fractions, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.		Online overbridge option is likely to have significant impact on visual setting of adjoining molecular discoversion at Kirkpatrick Drive. Sheepmoor Lave, Delivend Grove and Riverscool Halu, Significant visual impact for setting of Kirkpatrick Rafige - a protected structure and hence for Objective CH43 of Engal Development Flam. Levely significant impact due to removal of roadside tree-lined hedgerows leading to railway / canal. Further information required regarding junction proposal/arrangement for Sheepmoor Lane and Kirkpatrick Drive.	Overbridge option will have very significant landscape and visual impact on open space zoned lands between St. Mochtar Rockfield, Stationcourt Way/Kirbpatrick and through reverved. Very significant visual impact for residential properties at St. Mochta's, Rockfield, Stationcourt Way/Halt, Kirbpatrick and Roversol. Demolition of residential property at Sheegmoor Lane. Tree and vegetation loss and significant visual impact in crossing the Royal Carolin and hence for Objective CH43 of Fingal Development Plan.	Overbridge option will have very significant visual impact on residential properties at Delwood, Cherry Drive and Rosehaven. Very significant landscape and visual impact on corridor of Royal Canal, setting of Kringenick Bridge and hence for Objective CH43 of Fingal Development Plan. Demolition of residential properties at Delwood Grove.	Some loss of trees and vegatation. Visual impact for nearest properties at Deknood Grove. Sheepmoor Lane and Cherry Drive and along Royal Canal. Some impact on trees and gene spaces in vicinity of road works at Diswellstown Road / Clonalls acad Junchico. Diswellstown Road Junction; Diswellstown Road / Porterstown Road Junction; and Park Lodge / Castleknock Road Junction.	
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		3.4	Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	This option is hydrologically connected to European sites downstream in the Toke Estuary and Dublin Bay There is no risk of Livel Systificant Effects to this or any other European site. There is potential for impacts to Royal Carant pNHA arising construction. Widening of Coolmine Road on north side could set in lines of matter ash trees on the west side of read next to canal. This could be avoided if road is widened at eastern a and displacement of fauna as well as impact well are unally in the caraat. As the new structure over the railway and caralis and displacement of fauna as well are will be minimin habitat loss and less impact on the overall integrity of the pNHA.	This option is hydrologically connected to European sites downstream in the Toka Estuary and Dublin Bay. There is no risk of Linkly Significant Effects to this or any other European from noise, afficient all philon and impacts to water quality during construction. New structure over the caral will fragment the ecological corridor. The construction of the pedestrian and cyclist bridge could result in tree loss north and south of the mand. Loss of woodland, scrub, amonity grassland, cattlered tees and parkland is anticipated. Demolition of property on the north side of the canal on Shepprone. Lane could distutb and displace fusma	This option is hydrologically connected to European sites downstream in the Tolka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this or any other European site. There is potential for impacts to knyaic Canal pHVA arising from roise, artificial giving and impacts to water quality during construction. Large new structure over the canal which will fragment the eccological construction of diversitiant and acrub habitat is anticipated.	This option is hydrologically connected to European sites downstream in the Totka Estuary and Dublin Bay. There is no risk of Likely Significant Effects to this orany other European sile. There is potential for impacts to Royal Canal pNHA arising from noise, artificial lighting and impacts to water quality during construction. The construction of the podestrian and cyclist bridge will result in the loss north of the canal and potentially lighting the ecological control. Road improvements will result in minor loss of trees, shrubs and grassy verges along existing roads.





3	Environment				Significant comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
				Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs,		Significant comparative advantage over other options	orginicant comparative advantage over other options	olginican comparative advantage over other options
		3.5	Cultural, Archaeological and Architectural Heritage	Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Potential direct impact on Kirkpatrick Bridge (RPS 0607) that spans over the Royal Canal. Potential indirect impact to the Royal Canal (RPS No. 0994). Indirect impact to the Royal Canal (RPS No. 0994a).	Indirect impact to the Royal Canal (RPS No. 994a).	Potential indirect impact to the Royal Canal (RPS No. 994a).	Potential indirect impact to the Royal Canal (RPS No. 994a).
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		3.6	Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Option likely have minimal impact on flood regime. Potential for minor impact on surface water quality during construction. Likely minimal impact on groundwater quality.	Option likely to have minimal impact on flood regime. Potential for minor impact on surface water quality during construction. Likely minimal impact on groundwater quality.	Option likely have minimal impact on flood regime. Potential for minor impact on surface water quality during construction. Likely minimal impact on groundwater quality.	Option likely have minimal impact on flood regime. Potential for minor impact on surface water quality during construction though removal of vehicular traffic heavy to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.
				Overall impact on land take & property.	Significant comparative advantage over other options	Some comparative disadvantage over other options	Significant comparative disadvantage over other options	Some comparative advantage over other options
		3.7 Agriculture and Non- Agricultural		Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	This option will reconfigure local access onto Codmine / Carpernterstown Road. Direct impacts will include impacts to existing boundary and green areas.	This option will reconfigure local access for Riverwood Court and St. Mochta's Green/Stationcourt Way. The non-agricultural impact will involve the acquisition of one residential property under Option 3	This option will involve the acquisition of four residential properties on the north side of the rail line. There will be a significant impact on the Coolmine Station car park.	This option will impact on Coolmine Station are park resulting in a reduction in car spaces. The proposed local road upgrades will involve minor landtake of private lands resulting in loss of care parking and boundary impacts all WoodfreeX Court and properties on the Castleknock Road. Boundary impacts and loss of mature trees, hedgerow and grassed area are porposed at Laurel Lodge Park, Poterstorn Road and Delweitistow Road.
				Soils and Geology and likely impact on geological resources based on	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.8	Geology and Soils (including Waste)	geological resoluces based on preliminarylikely construction details. Soil or topsoil resources to be developed/removed based on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	Overbridge options require fill import to the site for construction over existing roadway (Minor negative). Potential for ground contamination is considered to unsubject to further investigation. No pils or quarties are present. Comparative advantage is considered as construction is proposed on existing route and unlikely to encounter new areas of soft ground or contamination.	Overbridge options require fill import to the sile for construction in open ground (Miror regative). Potential for ground contamination is considered to, subject to further investigation. No pils or quarries are present.	Some existing made ground cover on-site (requires walkover survey / investigation). This overbridge option requires increased fill import to the site, more than other options and yet fill would be onto ground that has been built on already (Minor negative). Potential for ground contamination is considered low, subject to further investigation. No pits or quarries are present.	Cycle/pedestrian overbridge option requires less fill import to the site. Also provides for construction over existing readway (Minor negative). Potential for ground contamination is considered low, subject to further investigation. No pis or quarrise are present. Comparative advantage is considered as construction is proposed on existing route and unlikely to encounter new areas of soft ground or contamination.
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the alection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.
			Impact on Vulnerable	Impacts on low income groups, non-car	Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		4.1	Groups	owners, mobility impaired, visually impaired and people with a disability.	No significant diversion for traffic. Options enhances access, particularly for vulnerable groups through the incorporation of shallow rises and gradients, enhancement of pedestrian, cycle and mobility impaired access.	No significant diversion for traffic. Options enhances access, particularly for vulnerable groups through the incorporation of shallow rises and gradients, enhancement of pedestrian, cycle and mobility impaired access.	No significant diversion for traffic. Options enhances access, particularly for vulnerable groups through the incorporation of shallow rises and gradients, enhancement of pedestrian, cycle and mobility impaired access.	No significant diversion for traffic. Options enhances access, particularly for vulnerable groups through the incorporation of shallow rises and gradients, enhancement of pedestrian, cycle and mobility impaired access.
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
4	Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	This option does not cause community severence. This option does not affect access to community amenities	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance noute 1.5km (3.3x diversion route)	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance route 821 m (1.2x diversion route).	The enhancement of the local road network to address traffic delays due to divited traffic diversions curtails diversions to 2km for cars. Pedestrians and cyclists have good access
			I		1			





					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.
					There is no significant construction activity along the railway associated with the level crossing	There is no significant construction activity along the railway associated with the level crossing	There is no significant construction activity along the railway associated with the level crossing	There is no significant construction activity along the railway associated with the level crossing
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
5	Safety	5.2	Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	This option closes the level crossing - removes a significant hazard to transport users; This option will not significantly divert traffic.	This option closes the level crossing - removes a significant hazard to transport users; This option will not significantly divert traffic. This option incorrates good segregation for pedestrians, cyclists and cars from railway traffic.	This option closes the level crossing – removes a significant hazard to transport users; This option normarks and significantly divert traffic. This option incorrates good segregation for pedestrians, cyclists and cars from railway traffic.	This option closes the level crossing - removes a significant hazard to transport users; This option will result in traffic diversions of up to 2.0km but does not cause increased congestion on the local road network. This option incorrest good segregation for pedestrians, cyclists and cars from railway traffic.
					Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
					This option closes the level crossing. It provides a new link along approximately the same line as the original;	This option closes the level crossing. It provides a new link along approximately the same line as the original;	This option closes the level crossing. It provides a new link along approximately the same line as the original;	This option removes the level crossing. It replaces pedestrian and cycle access with a pedestrian cycle bridge. Other vulnerable road users are diverted onto the improved road network.
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	5% for vulnerable road users.	A pedestrian cycle bridge is envisaged with gradients constrained to a maximum of 5% for vulnerable road users. The junction strategy for vulnerable road users is unaffected by this	Nested ramps are envisaged to constrain gradients to a maximum of 5% for vulnerable road users. The junction strategy for vulnerable road users is unaffected by this option;	Diverted road users will be required to negotiate up to 6No additional junctions including traffic light junctions and roundabouts, typically turning left travelling southbound, right if travelling northbound.
					option; This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	option; This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	This option incorporates good segregation for pedestrians, cyclists and cars from railway traffic.	Enhanced facilities to current best practice are envisaged. This options partially provides for segregation on the diversion routes for vulnerable road users.
				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options	
		6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	This option supports good linkage between existing and proposed cycle facilities	This option supports good linkage between existing and proposed cycle facilities	This option supports good linkage between existing and proposed cycle facilities	This option supports good linkage between existing and proposed cycle facilities
	Physical Activity		cycling racintics		The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	The quality of access to the train station for pedestrians and cyclists is good in respect of this option.
6								
Ĩ	Thysical Activity				Comparable to other options	Comparable to other options	Comparable to other options	Comparable to other options
Ĩ	T Hysical Activity		Bermeability and local	Journey Time and lengths of diversions for active modes and numbers affected.	Comparable to other options Cross Railway journey = 0.3km over the proposed bridge.	Comparable to other options Cross Railway journey = 0.3km over the proposed bridge.	Comparable to other options Cross Railway journey = 0.3km over the proposed bridge.	Comparable to other options Cross Railway journey = 0.3km over the proposed bridge.
	- Hysical Activity	6.2	Permeability and local access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km
		6.2		active modes and numbers affected. Analysis of the connectivity between level	Cross Railway journey = 0.3km over the proposed bridge.	Cross Railway journey = 0.3km over the proposed bridge.	Cross Railway journey = 0.3km over the proposed bridge.	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km
		6.2		active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing than tasking is the Royal canc. This access is	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal cancel. This access is	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing trait station is the Royal canal. This accors is maintained by the proposed	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km 1 The principal high amenity greenspace in the vicinity of the existing train station is the Royal cenal. This access is maintained by the proposed
		6.2 Criteria	access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing than tasking is the Royal canc. This access is	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal cancel. This access is	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing trait station is the Royal canal. This accors is maintained by the proposed	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km 1 The principal high amenity greenspace in the vicinity of the existing train station is the Royal cenal. This access is maintained by the proposed
1			access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing tran tasken. This access is maintained by the proposed bridge scheme.	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal cancel. This access is maintained by the proposed bridge scheme. Option 3	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing trail station is the Royal canal. This access is maintained by the proposed bridge scheme.	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km 1 The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
		Criteria	access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing tran tasken. This access is maintained by the proposed bridge scheme. Option 1	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal cancel. This access is maintained by the proposed bridge scheme. Option 3	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing trail station is the Royal canal. This access is maintained by the proposed bridge scheme. Option 6	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km 1 The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme.
1		Criteria	access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train tasking the start in this access is maintained by the proposed bridge scheme. Option 1 Significant comparative disadvantage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclicits when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the assisting train station is the Royal cannot. This access is maintained by the proposed bridge scheme. Option 3 Significant comparative disadvantage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options	Cross Ralway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high and greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Option 9 Significant comparative advantage over other options
1		Criteria Econom Integratic Environme	access opportunity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the outsing tran station is the Royal anal. This access is maintained by the proposed bridge scheme. Option 1 Significant comparative disadventage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclicts when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the assing tran rails in the Royal cance. The proposed bridge scheme. Option 3 Significant comparative disadvantage over other options Some comparative advantage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing that ation is the Royal canal. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options Some comparative disadvantage over other options	Cross Ralway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high endpartment of the existing train station is the Royal cross is maintained by the proposed bridge scheme. Option 9 Significant comparative advantage over other options Come comparative advantage over other options
1 2 3		Criteria Econom Integratic Environme	access opportunity access opportunity y on	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train tasking the stratement of the second s	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal cancel. This access is maintained by the proposed bridge scheme. Option 3 Significant comparative disadvantage over other options Some comparative disadvantage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amonity greenspace in the vicinity of the existing trait ation is the Royal canal. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options Some comparative disadvantage over other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity generapace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Option 9 Significant comparative advantage over other options Some comparative advantage over other options Significant comparative advantage over other options
1 1 2 3 4	Accessibil	Criteria Economy Integratic Environme ity and sou	access opportunity y un cial inclusion	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train tasks in the Koyd care. Diversion is the Koyd care. Diversion of the proposed bridge scheme. Diversion of the proposed bridge scheme. Diversion of the constraints of the constraints of the constraints of the proposed bridge scheme. Diversion of the constraints o	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The prinped high amenity greenspace in the vicinity of the asisting train station is the Royal cant. This access is maintained by the proposed bridge scheme. Option 3 Significant comparative disadvantage over other options Some comparative advantage over other options Dignificant comparative disadvantage over other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing trait ation is the Royal canal. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options Some comparative disadvantage over other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high and greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Option 9 Significant comparative advantage over other options Significant comparative advantage over other options Significant comparative advantage over other options Comparable to other options
1 2 3 4 5	Accessibil	Criteria Econom Integratic Environme ity and sou Safety	access opportunity y un cial inclusion	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train astic is the Kryd canal. This access is maintained by the proposed bridge scheme. Coption 1 Significant comparative disadvantage over other options Some comparative advantage over other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the double of the proposed bridge scheme. Coption 3 Coption 3 Significant comparative disadvantage over other options Some comparative disadvantage over other options Comparable to other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing brail addon is the Royal candi. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options Some comparative disadvantage over other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Coption 9 Significant comparative advantage over other options Significant comparative advantage over other options Comparable to other options Comparable to other options Comparable to other options
1 2 3 4 5	Accessibil	Criteria Econom Integratic Environme ity and sou Safety	access opportunity y y in cial inclusion iivity	active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train astic is the Kryd canal. This access is maintained by the proposed bridge scheme. Coption 1 Significant comparative disadvantage over other options Some comparative advantage over other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the double of the proposed bridge scheme. Coption 3 Coption 3 Significant comparative disadvantage over other options Some comparative disadvantage over other options Comparable to other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing brail addon is the Royal candi. This access is maintained by the proposed bridge scheme. Option 6 Significant comparative disadvantage over other options Some comparative disadvantage over other options Comparable to other options Comparable to other options	Cross Railway journey = 0.3km over the proposed bridge. Diversion for cyclists when level crossing closed 0.3km The principal high amenity greenspace in the vicinity of the existing train station is the Royal canal. This access is maintained by the proposed bridge scheme. Coption 9 Significant comparative advantage over other options Significant comparative advantage over other options Comparable to other options Comparable to other options Comparable to other options







	DART+ West - MCA Stage 2 Porterstown Level Crossing Assessment										
					Porterstown Le	vel Crossing Assessment					
	Paramet	er		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 3	Option 4			
						Pedestrian / Cycle Bridge with Nested Ramps in Sports Ground and Grounds of Disused School		n Pedestrian / Cycle Bridge with Nested Ramps (Same as Option 2 except s. the northern ramps and abutment are to the east of the Porterstown Road)			
						Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options			
			1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs and temporary works	The costs presented here are the capital costs for the proposed bridge structure and those of turnign facilities to be provided or closure of the proposed road. An estimated of land acquisition costs is also included.	bridge structure and those of turnign facilities to be provided on	The costs presented here are the capital costs for the proposed bridge structure and those of turnign facilities to be provided on closure of the proposed road. An estimated of land acquisition costs is also included.			
						Comparable to other options	Comparable to other options	Comparable to other options			
	1 Econom		1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	The maintenance costs are associated with regular inspection and maintenance of the bridge structure.	The maintenance costs are associated with regular inspection and maintenance of the bridge structure. No additional maintenance cost is allocated to the realigned sectio of Porterstown Road as this is currently in the charge of Fingal county Council and it is likely to remain so.	The maintenance costs are associated with regular inspection and maintenance of the bridge structure.			
				Traffic Functionality /economic benefit		Comparable to other options	Comparable to other options	Comparable to other options			
			1.3		Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Displacement of traffic onto alternative routes; increase in journe times for local residents, New Link road already serves for commuter traffic.	Displacement of traffic onto alternative routes; increase in journey times for local residents, New Link road already serves for commute traffic.	Displacement of traffic onto alternative routes; increase in journey times for focal residents, New Link road already serves for commuter traffic.			
						Comparable to other options	Comparable to other options	Comparable to other options			
		:	2.1	Transport Integration	Impact on scope for and ease of interchange between modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.			Reasonable access provided for pedestrians and cyclists. No access al provided for other transport modes. Integration with the Fingal Royal Canal greenway is supported.			
						Comparable to other options	Comparable to other options	Comparable to other options			
:	2 Integratio	n	2.2	Land Use Integration	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	This Option does not support Fingal DP map-based Specific Objective 137: "Preserve the existing padestrian and vehicular right of way at the level crossing at Porterstown". However, ar alternative right of way for pedestrians is being provided as part this option supports the future development of lands zoned for Residential Area ³ as part of the future Kelystown LAP by maintaining pedestrian and cycle access at this location. The Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a 'Future train station and' or Metro West node' on the southern side of the tracks on Porterstown Road.	of way at the level crossing at Portersitown". However, an alternative right draw for podestrians and also the development of cycling infrastructure is provided therefore would support the 'indicative-Cycle/Pedestrian access' at the existing level crossing location (gradients & length not taken into consideration). This option supports the future development of lands zoned for "Residential Area" as part of the future Kellystown LAP by maintaining pedestrian and cycles access at this location. Ne Draft	This option supports the future development of lands zoned for "Residential Area" as part of the future Kellystown LAP by maintaining pedestrian and cycle access at this location. The Draft LAP supports the DART Expansion programme. The LAP includes the potential development of a Future train station and/ or Metro West node' on the southern side of the tracks on Porterstown Road.			
					Alternative level crossing options are mostly neutral in	Comparable to other options	Comparable to other options	Comparable to other options			
			2.3	Geographical Integration	respect of Geographical Integration due to localised nature of the level crossings. As a consequence all options are rated comparable to one another.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.			





					Comparable to other options	Comparable to other options	Comparable to other options
		2.4	Other Government Policy Integration	Integration with Government Policy, Smarter Travel, Investment Programmes, rail safety, electrification etc	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.	This option would support the delivery of the DART Expansion programme in the higher level national and regional planning policy documents.
				Estimated number of sensitive properties within 100m of the	Comparable to other options	Comparable to other options	Comparable to other options
		3.1	Noise and Vibration	works. Options closer to more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	27 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.	13 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.	8 dwelling within 100m. Note that only construction stage impacts expected as this is a pedestrian crossing.
					Comparable to other options	Comparable to other options	Comparable to other options
		3.2	Air Quality and Climate	Estimated number of number of receptors within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	4 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing.Potential for construction phase dust impact is not significant when mitigatior measures are put in place. No traffic distribution data available assess impact on new receptors therefore assessment only considers current receptors close to the level crossing.	carbon due to additional construction material required. Potential for	4 dwelling within 50m. Note that only construction stage impacts expected as this is a pedestrian crossing. Potential for construction phase dust impact is not significant when mitigation measures are put in place. No traffic distribution data available to assess impact on new receptors therefore assessment only considers current receptors close to the level crossing.
				Key landscape characteristics affected; Impact on	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.3	Landscape and Visual (including light)	landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Significant impact on trees to north of canal - which provide screening for residential property. Significant visual impact for old cottages at level crossing. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over pNHA also an RPS.	Significant structure resulting in significant landscape and visual impact on roadside trees and hedgerows. Significant visual impact for old cottages at level crossing and for properties on Porterstown Road, north of the canal. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over.pNHA also an RPS.	Significant impact on trees to north of canal - which provide screening for residential property. Significant visual impact for old cottages at level crossing. Visual impact on setting of Keenan bridge, with proposed bridge elevated directly over pNHA also an RPS
			Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		3.4			Hydrologically connected to South Dublin Bay and River Tolica Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impacts to bats foraging and roosting in existir bridge, buildings and trees enarby. Loss of trees and vegetait at new bridge crossing and adjacent to canal there is potent for impact on the canal.	Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Potential impacts to bats foraging and roosting in existing bridge, buildings and trees nearby. Loss of trees at new bridge	Potential indirect impacts on the setting of the Crossing keeper's cottage (RPS 699). This is due to proximity of proposed ramp. The option will also cross the canal (RPS 944a) and is adjacent to Kenana Bridge (RPS 968), so the potential remains that the new structure will have indirect negative impacts on same.
		3.5			Comparable to other options	Comparable to other options	Comparable to other options
3	Environment		3.5	Cultural, Archaeological and Architectural Heritage	Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Potential indirect impacts on the setting of the school house (RF 700), the crossing keeper's cottage (RPS 689), the Royal Cana (RPS 944a) and Kennar's Bridge (RPS 689), so the potential remains that the new structure will have indirect negative impac on same. Potential for direct impacts on previously unrecorder archaeological deposits that have the potential to survive within the greenfield areas. The impacts relate to the main spans crossing the canal and railway and the nested ramps to north west and south east. Due to the height of the school house (RPS 700) it is considere that there is insufficient variation in impact of the proposed options on the protected structure to warrant rating them differently.	Potential indirect impacts on the setting of the school house (RPS 700), the crossing keeps'c schateg (RPS 694), the Royal Canal s (RPS 944a) and Kennar's Bridge (RPS 698), so the potential remains that the new structure will have indirect negative impacts or same. Potential for direct impacts on previously unrecorded archaeological deposits that have the potential to survive within th greenfield areas. The impacts relate to the main spans crossing th canal and railway and the linear approach ramps to north and sout dbue to the height of the school house (RPS 700) it is considered th
					Comparable to other options	Comparable to other options	Comparable to other options
		3.6	6 Water Resources	Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Option likely to have minimal impact on flood regime. Potential f minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.	Option likely to have no significant effect on flood regime. Potential for minor impact on surface water quality during construction though removal of vehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwate quality.	Option likely to have no significant effect on flood regime. Potential for min impact on surface water quality during construction though removal of yehicular traffic likely to have a positive impact on water quality of Royal Canal overall. Likely minimal impact on groundwater quality.
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.7 A	Agriculture and Non-Agricultural	Overall impact on land take & property. Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	Option 2 will have a direct impact on non-agricultural lands in us as a car park for St. Mochta's GAA club.	Option 3 will impact on lands used by St. Mochta's GAA club, St. B Mochta's FC and St. Mochta's National School	Option 4 will have a direct impact on non-agricultural lands in use as a ca- park for St. Mochta's GAA club.





				Soils and Geology and likely impact on geological resources	Comparable to other options	Comparable to other options	Comparable to other options
		3.8	Geology and Soils (including Waste)	based on preliminary/likely construction details. Soil or topsoil resources to be developed/removed based on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	No significant effects.	No significant effects.	No significant effects.
					Comparable to other options	Comparable to other options	Comparable to other options
		3.9 Radiation and Stray Current	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire	It is assumed that the routing of the cabling, the location of existin substations, hubs etc. along the line will be changed or impacted b the selection of any of the options over the entire project. All Do- Something options are comparable from an EMI perspective at this stage in the assessment.	substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something
					Comparable to other options	Comparable to other options	Comparable to other options
		4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	High Quality access for vulnerable groups proposed with thhe inclusion of bridge infrastructure in this option.	High Quality access for vulnerable groups proposed with thhe inclusion of bridge infrastructure in this option.	High Quality access for vulnerable groups proposed with thhe inclusion of bridge infrastructure in this option.
				Quantification of increased service levels to the vulnerable	Comparable to other options	Comparable to other options	Comparable to other options
	Accessibility & Social	4.2 Stations Accessibility			It is considered that alterations at Porterstown will not significant affect access to stations in the locality	It is considered that alterations at Porterstown will not significantly affect access to stations in the locality	It is considered that alterations at Porterstown will not significantly affect access to stations in the locality
4	inclusion				Comparable to other options	Comparable to other options	Comparable to other options
		4.3	.3 Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired0.35km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway. Sool Cholim and Lutreistown Community College and Centre south of the railway. St Mochta's National School and the Healthwell Clinic, north of the railway. Removal of the level crossing require detour for access to each of them.	Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include St Mochta's football grounds south of the railway, Scoll Cholm and J utrelstown Community Collece and Centre south of the	Uross kaiway journey = ni as crossing remains in piace, = lui access remains for pedestrians and cyclistis on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km The principal affected amenities in the vicinity of the level crossing include horthoris forbid arcunde cavit of the railway. Soci Cholm and
					Comparable to other options	Comparable to other options	Comparable to other options
		5.1	Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	All overbridges have a significant advantage as they are a great crossing alternative	All overbridges have a significant advantage as they are a great crossing alternative	All overbridges have a significant advantage as they are a great crossing alternative
					Comparable to other options	Comparable to other options	Comparable to other options
5	Safety	5.2	Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.	Closure of the level crossing with no additional road access proposed, traffic will be diverted onto the adjacent viaduct resulting a slight increase in traffic.
					Comparable to other options	Comparable to other options	Comparable to other options
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	High Quality access for vulnerable road users proposed with thh inclusion of bridge infrastructure in this option.		High Quality access for vulnerable road users proposed with thhe inclusion of bridge infrastructure in this option.





					Comparable to other options	Comparable to other options	Comparable to other options
		6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	Severance overcome by provision of direct replacement.	Severance overcome by provision of direct replacement.	Severance overcome by provision of direct replacement.
					Comparable to other options	Comparable to other options Comparable to other options	
6	Physical Activity	6.2	Permeability and local access opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions	Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km	remains for pedestrians and cyclists on closure of the level crossing	Cross Railway journey = nil as crossing remains in place; Full access remains for pedestrians and cyclists on closure of the level crossing. Diversion for cars when level crossing closed 1.1km. Diversion for pedestrians, cyclists and mobility impaired - ~0.35km
				related to active mode	The principal affected amenities in the vicinity of the level crossing include the Royal canal and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.	include the Royal canal, and the amenity zoned lands south west of	The principal affected amenities in the vicinity of the level crossing include the Royal canal,and the amenity zoned lands south west of the level crossing. Removal of the level crossing require detour for access to each of them.
			Criteria		Option 2	Option 3	Option 4
1		Econ	omy		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
2		Integr	ation		Comparable to other options	Comparable to other options	Comparable to other options
3		Enviro	nment		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
4	Accessibility and social inclusion				Comparable to other options	Comparable to other options	Comparable to other options
5	Safety				Comparable to other options	Comparable to other options	Comparable to other options
6	Physical Activity				Comparable to other options	Comparable to other options	Comparable to other options
	Preferred				Yes	No	No





				DART+ West	- MCA Stage 2		
				Clonsilla Level Cro	ossing Assessment		
	Parameter		Criteria	Sub-Criteria (Quantitative/ Qualitative)	Option 1	Option 2	Option 4
					Pedestrian Cycle Bridge only at Level Crossing / Station (delivered contingent on road bridge crossing at Barberstown)	Overbridge with approach roadworks 200m to the east of crossing	Overbridge 210m to the west of crossing
					Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative disadvantage over other options
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs and temporary works	The provisions here include low key works to close the level crossing and the construction of a new pedestrian / cycle bridge	This option includes the costs of urban roadworks across green fieldsto cross the railway and canal via raised embankment and single span bridge. Includes 2No, Junctions and the acquisition of 6No houses.	This option includes costs above Option 2 for additional at grade roadworks and a longer bridge structure and land acquisition associated with same. It also includes a premium for the cost of online construction which applies to the works North of the canal. This option does not require the acquisition of any houses.
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied options	Maintenance costs low - 15k ex VAT per year for bridge structure	The inspection and maintenance costs are associated with the roadworks and the bridge	An overbridge would increase the maintenance requirements over a level crossing, though it would not be significantly more so than other options.
	Economy	1.3	Traffic Functionality /economic benefit	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
					Displacement of mobility impaired and cycle traffic onto ramped alternative routes; increase in journey times for local residents. Removal of vehicular access over the level crossing results in displaced flows - 680 vehicles AM peak hour and 704 vehicles PM peak hour. Additional traffic delay will result along adjacent access routes -	Some improvement in journey time; potential for induced trips; diversion required for local residents.	Some improvement in journey time: potential for induced trips; diversion required for local residents.
					1% AM peak hour and 1% PM peak hour. Benchmark journey times will increase by up to 3%,		
				Impact on scope for and ease of interchange between	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
		2.1	Transport Integration	modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.	Severance of access to train station car parking from south of the railway. Would require significant re-routing of proposed 52 bits route (BitsConpacts) Diversion of vehicular access to	Improved facilities for pedestrians and cyclists on new road link. Diversion of vehicular access to Royal Canal greenway along a more circuitous route. Slightly more circuitous route for cyclists to access station from the south. Would require slight re-routing of proposed L52 bus route (BusConnects), and a looped route back to continue to directly serve Coolmine Station, as per existing plan.	Improved facilities for pedestrians and cyclists on new road link, although less extensive than other options. Slightly more circuitous route for cyclists to access station from the south. Removal of direct local access to Royal Canal greenway, although alternative access provided via slightly circuitous route. Would require slight re-routing of proposed LS2 bus route. Bould require slight re-routing of proposed LS2 vorte (BusConnects), although it would still directly serve Coolmine Station, as per existing plan
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
2	Integration	2.2	Land Use Integration	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	discrete and impacts less HA and OS zoned lands when compared	which is also zoned as a Strategic Development Zone (SD2) Other relevant zonings that apply include Open Space, established residential, town centre and district. It is also within a wider 'urban Framework Pilan' area as per the Fingal DP map-based Zoning Objectives. The Draft Kellystown LAP 2020 (south of the railway) indicates that this Option would be located in an area identified for openwith residential either side of the proposed online road option. Further consultion would be required with FCC if this is chosen as	Options 4 impacts zonned 'High Amenity' and 'Open Space' and would include vehicular, pedestrian and cycle access. The Draft Kelystown LAP 2020 is currently being developed on the opposite side of the road and would need to be take account of this as part of the movement strategy. Further consultation would be required with the movement strategy.





							1 Internet
				Alternative level crossing options are mostly neutral in respect of Geographical Integration due to localised nature	Comparable to other options	Comparable to other options	Comparable to other options
		2.3	Geographical Integration	of the level crossings. As a consequence all options are rated comparable to one another.	No significant effect on geographical integration.	No significant effect on geographical integration.	No significant effect on geographical integration.
					Comparable to other options	Comparable to other options	Comparable to other options
		2.4	Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NSO4), RSES & GDA Transport Strategy).	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy).	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy).
				Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		3.1	Noise and Vibration	have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	Pedestrian crossing only will have no operational noise impact. 27 properties within 100m.	This option constructs a new crossing point and therefore moves vehicular traffic closer to dwellings not currently exposed to vehicular traffic. 86 dwellings within 100m.	38 dwellings within 100m. Slightly preferred over option 2 due to lower number of properties within 100m
				Estimated number of number of receptors within 50m	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		3.2	Air Quality and Climate	reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary	locally. Traffic redistribution not considered. 8 property within	25 dwellings within 50m. Due to longer length and overbridge, there would be a higher volume of embodied carbon in this option. Potential for construction phase dust impact is not significant when mitigation measures are put in place. Potentia for construction phase dust impact is not significant when mitigation measures are put in place.	dust impact is not significant when mitigation measures are
				Key landscape characteristics affected; Impact on landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		3.3	Landscape and Visual (including light)		Proposed structure will impact some trees at entrance to Beech Park. Significant impact on residential properties on Clonsilla Road Larch Grove and Weaver's Walk north of the canal, and along the east side of Clonsilla Road south of canal (including Greenmount House). Impact on tree-lined corridor on northern side canal where structure will oversail the canal.	Overbridge option will remove a number of residential properties at Larch Grove. Very significant impact on residential properties on Clonsilla Read/ Larch Grove and Weaver's Walk north of the canal, and along the east side of Clonsilla Read south of canal (Including Greenmount House). Significant impact on tree-lined corridor of canal/railway. Junction with Porterstown Road may impact boundary of Luttrelistown Castle estate (an architectural conservation area, and a protected structure). Tree Preservation Objectives within Luttrelistown estate. Note also impacts for Option 1.	Impact on trees north of the canal - which are subject to Tree Preservation Objectives. Passes through Beech Park. Lands south of the railway are zoned high Amenity. Very significant impact on tree-lined cortidor of canal and entrance to Porter's Gate. Visual impact on canal side properties at end of western ramp.
			Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	Some comparative advantage over other options	Some comparative disadvantage over other options	 Some comparative advantage over other options
3	Environment	3.4			Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of likely significant effects. Potential impacts to Royal Canal pNHA. Minor habitat loss in comparison to other options.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of likely significant effects. Potential impacts to Royal Canal pNHA. Loss of woodland, treeline, hedgerow amenity grassland and wet grassland habitats.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of likely significant effects. Potential impacts to Royal Canal pNHA. Loss of treeline and wet grassland tail. Direct impacts to veteran beech tree in the field where option runs through.
					Significant comparative disadvantage over other options	- Significant comparative advantage over other options	Significant comparative disadvantage over other options
		3.5	Cultural, Archaeological and Architectural Heritage	Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Potential Indirect impacts on Callaghan Bridge (RPS No. 708), the Royal Canal (RPS No. 944a) and Cionsilla Overbridge and Signal Box (RPS No. 707). Requires the construction within the footprint of the royal canal and localised narrowing of the canal.	Direct impacts on demesne landscapes associated with Greenmount and Kellystown. Potential indirect impact on the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within undeveloped areas.	Direct impact on demesne landscape associated with Courtyard, Beech Park House (RPS No. 709). Potential indirect impact on the Royal Canal (RPS No. 944a). Potential to encounter archaeological deposits that may survive within greenfield areas.
		3.6	6 Water Resources		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
				Overall potential significant effects on water resource attributes likely to be affected during construction and operation.	Potential Positive impact on surface water quality during operation by removing vehicular traffic borne pollutants . Potential negative impact on surface water quality during construction phase. Option has some comparative advantages over other options.	Potential negative impact on surface water quality during operational phase. Potential negative impact on surface and groundwater quality during construction phase. Has some comparative disadvantage over other options.	Proposed route indicated to have increased flood risk compared to other options. Petrelial negative impacts to surface water quality during operational phase. Potential negative impact on surface and groundwater quality during construction phase. Has some comparative disadvantage over other options.





				Overall impact on land take & property. Number of	Significant comparative advantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options
		3.7	Agriculture and Non-Agricultural	properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	Options 1 will have a direct impact involving a small area of amenity lands in Beech Park.	Under Options 2, the non-agricultural impact will involve the acquisition of five residential properties. The agricultural impact will result in landtake and land severance on a livestock farm holding.	Option 4 will have direct impact on amenity lands in Beech Park.
	-	3.8		Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. Soil or topsoil resources to be developed/removed based	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
			Geology and Soils (including Waste)	on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High- level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	Less fill import requirements compared to other options.	Similar fill import requirements compared to other option.	Similar fill import requirements compared to other option.
					Comparable to other options	Comparable to other options	Comparable to other options
		3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	existing substations, hubs etc. along the line will be changed or	It is assumed that the routing of the cabing, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do-Something options are comparable from an EMI perspective at this stage in the assessment.
				Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		4.1	Impact on Vulnerable Groups		Road traffic diverted distance route is 5.5km (12 x diversion route) steep gradients on north side of option will be a disadvantage to vulnerable road users. Local ped/cycle	Local ped/cycle access maintained along ramped access over proposed bridge.	Local ped/cycle access maintained along ramped access over proposed bridge.
					access maintained along ramped access over proposed bridge - ~340m diversion	Road traffic diverted distance route is 572m (1.1x diversion route).	Road traffic diverted distance route 894m (2.0x diversion route)
				Quantification of increased service levels to the vulnerable groups.	Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
4	Accessibility & Social inclusion	4.2	Stations Accessibility		in proximity to a station	Station Accessibility is addressed for all level crossing options in proximity to a station This option does not significantly affect access to the station	Station Accessibility is addressed for all level crossing options in proximity to a station Shortest diversion route 894m (2.0x diversion route)
					Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		4.3	Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	Diverted distance for vehicular traffic 5.5km (12 x diversion route), proposed pedestrian / cycle bridge maintains local non wehicular access. Community facilities, St Josephs Medical Centre, St Mary's Church, ZNo. Montessori School - north of the railway andThe Coartyard Beechpark, Westmanstom Sports and Conference Centre, Dublin Falconry and Luttrelistown Castle Resort - south of the railway.	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance route is 572m (1.1x diversion route).	This option does not cause community severence. This option does not curtail access to community amenities Diverted distance route 894m (2.0x diversion route)
		5.1			Comparable to other options	Comparable to other options	Comparable to other options
			Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety.
							There is no significant construction activity along the railway





					Significant comparative disadvantage over other options	Significant comparative advantage over other options	Significant comparative advantage over other options
5	Safety	5.2	Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	Closing the crossing with no alternative would result in diversion of road traffic onto longer routes but would avoid congestion at the level crossing.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.
					Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	This option closes the level crossing - removes a signficant hazard to transport users; Pedestrians, Cyclists and vulnerable road users are, however, accommodated at the level crossing by the proposed bridge.	This option replaces access for pedestrians, cyclists and vulnerable road users via the proposed bridge but at more remote location than Option 1. Diverted distance route 758m (1.6x diversion route).	This option replaces access for pedestrians, cyclists and vulnerable road users via the proposed bridge but at more remote location than Option 1. Diverted distance route 894m (2.0x diversion route).
		_{6.1} C	Connectivity to adjoining cycling facilities		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
					This option supports good linkage between existing and proposed cycle facilities The quality of access to the train station for pedestrians and cyclists is good in respect of this option.	This option provides replacement pedestrian and cycle access with associated linkage to existing and proposed facilities along a diverted route - diversion - 500m	This option provides replacement pedestrian and cycle access with associated linkage to existing and proposed facilities along a diverted route - diversion - 600m
6	Physical Activity				Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
		6.2	Permeability and local access opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Clonsilla Road. Diversion for cyclists when level crossing closed is 0.35km. The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the amenity zoned lands and golf courses south of the level crossing. This option retains access to the amenities effectively	This option provides replacement pedestrian and cycle access with associated linkage to existing and proposed facilities along a diverted route - diversion - 500m The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the amenity zoned lands and golf courses south of the level crossing. This option retains access to the amenities	This option provides replacement pedestrian and cycle access with associated linkage to existing and proposed facilities along a diverted route - diversion - 600m The principal high amenity greenspaces in the vichity of the existing train station include the Royal canal, the amenity zoned lands and golf courses south of the level crossing. This option retains access to the amenities

	Criteria	Option 1		Option 2	Option 4
1	Economy		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
2	Integration		Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
3	Environment		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
4	Accessibility and social inclusion		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
5	Safety		Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
6	Physical Activity		Some comparative advantage over other options	Some comparative disadvantage over other options	Some comparative disadvantage over other options
	Preferred		Yes	No	No





				DART+ W	/est - MCA Stage 2		
				Barberstown Le	vel Crossing Assessment		
	Parameter	Criteria		Sub-Criteria (Quantitative/ Qualitative)	Option 2	Option 4	Option 5
					Road realignment with skewed roadbridge over canal and railway circa 130m southwest of level crossing. Pedestrian / Cycle facilities provided for along diverted road. Level Crossing closed. Turnback facilities provided at railway	Road realignment with square roadbridge over canal and railway circa 180m southwest of level crossing. Pedestrian / Cycle facilities provided for along diverted road. Level Crossing closed. Turnback facilities provided at railway	Pedestrian / cycle Bridge at Crossing, Turnback facilities at railway, Level Crossing Closed, No replacement road access
					Significant comparative disadvantage over other options	Significant comparative disadvantage over other options	Significant comparative advantage over other options
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs and temporary works	This option includes the costs of urban roadworks across green fields to cross the railway and canal via raised embankment and a single span bridge. Includes 2No, roundabouts.	This option includes the costs of urban roadworks across green fields to cross the railway and canal via raised embankment and a single span bridge. Includes 2No, roundabouts.	Construction costs of this option will be comparative to other options as the provision of a pedestrian cycle bridge within the canal environs will require significant temporary and permanent works. The cost to cacuire land will be lower than other options providing full access
	Economy	1.2 Long Term		Ongoing annual maintenance costs associated with varied options	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
			Long Term Maintenance costs		An overbridge would reduce maintenance requirements over a level crossing. Bridge option would determine overall maintenance costs.	An overbridge would reduce maintenance requirements over a level crossing. Bridge option would determine overall maintenance costs.	A pedestrian/cyclist overbridge would require minimal maintenance in short term with regular inspections and remedial works in the long term. The long term maintenance low compared to other options.
1		1.3	Traffic Functionality /economic benefit	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
					Some improvement in journey time: potential for induced trips; diversion required for local residents.	Some improvement in journey time; potential for induced trips; diversion required for local residents.	Displacement of mobility impaired and cycle traffic onto ramped alternative routes, increase in journey times for local residents. Removal of vehicular access over the level crossing results in displaced flows - 1218 vehicles AM peak hour and 1110 vehicles PM peak hour. Additional traffic delay will result along adjacent access routes - 7% AM peak hour and 5% PM peak hour. Benchmark journey times will increase by up to 8%,
				Impact on scope for and ease of interchange	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		2.1 Transport Integration	between modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.		Some improvement in journey time; Shared pedestrian & cycle facility; Access to Royal Canal Cycle Route retained, albeit via slightly more circuitous route.		





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					Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
2	Integration	2.2	Land Use Integration	Impact on land use strategies and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local planning documents.	Option 2 is located within a section of land zoned for "High Amenity" by the Fingal DP, the option also travels across Open Space zoned land and the GDA Cycle Network (along the Royal Canal). It then travels north west into an areas designated (map based zoning objective LAP 13.4) for the Barrhill LAP 2019. The introduction of a new road infrastructure into a High Amenity area is considered to be a major negative impact and would be inconsistent with this landuse zoning. However, it travels on the edge of this zoning and in proximity to the existing road network and could provide a direct connection into the LAP lands. Subject to further studies this option could have the potential to facilitate land use and transport planning integration.	Option 4 is located within a section of land zoned for "High Amenity" by the Fingal DP. This option travels into the LAP 13.A Barnhill LAP through zoned open space lands as part of the Barnhill LAP. This option links to the Barnhil - Ongar road network and could support overall land use and transport planning integration over the long-term.	Option 5 is located within a small section of land zoned for "Open Space" by the Fingal DP. The introduction of a new infrastructure into a Open Space area is inconsistent with the "Open Space" landuse zoning objective. Subject to further transport studies, this option could have the potential to support sustainable transport planning integration.
	_			Alternative level crossing options are mostly neutral in respect of Geographical Integration due to localised nature of the	Comparable to other options	Comparable to other options	Comparable to other options
		2.3	Geographical Integration	level crossings. As a consequence all options are rated comparable to one another.	No significant effect on geographical integration.	No significant effect on geographical integration.	No impact on Geographical Integration
		2.4	Other Government Policy Integration	Integration with the other Covernment policy	Comparable to other options	Comparable to other options	Comparable to other options
				such as the NPF and RSES.	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy).	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NSO4), RSES & GDA Transport Strategy).	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy).
				Estimated number of sensitive properties within 100m of the works. Options closer to more sensitive locations will have an	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.1	Noise and Vibration	increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options	New overbridge will have some construction phase impacts, however, only 1 dwelling within 100m.	New overbridge will have some construction phase impacts, however, 8 dwellings within 100m.	Removes vehicular traffic which will reduce the noise levels in the locality. 2 dwellings within 100m
	-	3.2		Estimated number of number of receptors within 50m reviewed as part of appriasal. Options closer to more sensitive locations will have an increased risk of changes in air quality during construction or operational phases. However, qualative criteria are also used where necessary to differentiate between the options.	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
			Air Quality and Climate		One dwelling within 50m. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	4 dwellings within 50m. Longer route means potentially more embodied energy with respect to construction materials. Potential for construction phase dust impact is not significant when mitigation measures are put in place.	1 dwelling within 50m. Removes vehicle traffic locally therefore reducing local impact. Traffic data not available at time of assessmment therefore no assessment of traffic redistribution has been undertaken. Potential for construction phase dust impact is not significant when mitigation measures are put in place.
					Comparable to other options	Comparable to other options	Comparable to other options
		3.3	Landscape and Visual (including light)	Key landscape characteristics affected; Impact on landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Option to avoid potential impact on boundary to Luttrellstown Castle estate (the latter is an architectural conservation area, and a protected structure). Tree Preservation Objectives for lands north of Luttrellstown estate. Significant landscape and visual impact on Royal Canal corridor. Significant visual impact for two residential properties to north/northwest of eastern roundabout.	Significant landscape and visual impact for boundary to Luttrellstown Castle estate (the latter is an architectural conservation area, and a protected structure). Tree Preservation Objectives within Luttrellstown estate. Significant landscape and visual impact on Royal Canal corridor. Significant visual impact for residential properties, one to northwest of eastern roundabout, and one southwest of western roundabout.	Significant visual impact for three dwellings (including canalside cottage) in close proximity. Potential significant impact on Royal Canal and on associated trees and vegetation.
					Comparable to other options	Comparable to other options	Comparable to other options
		3.4	Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Loss of treeline, hedgerow and agricultural grassland habitats.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Loss of treeline, hedgerow and agricultural grassland habitats.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA. Loss of hedgerow and agricultural grassland habitats.





				Overall effect on cultural, archaeological and architecture heritage resource. Likely effects		Comparable to other options	Comparable to other options
3	Environment	3.5	Cultural, Archaeological and Architectural Heritage	on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Potential indirect impacts on the Royal Canal (RPS No. 944a) and Peckenham bridge (RPS 0711) and Luttrellstown ACA. Potential to encounter archaeological deposits that may survive in undeveloped areas.	Indirect impacts on the Royal Canal (RPS No. 944a) and Luttrelistown ACA. Potential to encounter archaeological deposits that may survive in undeveloped areas.	Potential indirect impacts on Royal Canal (RPS 944a).Potential to encounter archaeological deposits that may survive in undeveloped areas.
					Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
		3.6	Water Resources	resource attributes likely to be affected during construction and operation.	Proposed route indicated to have increased flood risk compared to other options. Potential negative impact on surface and groundwater quality during potentianal phase. Potential negative impact on groundwater quality during construction phase.	Proposed route indicated to have increased flood risk compared to other options. Potential negative impact on surface and groundwater quality during operational phase. Potential negative impact on groundwater quality during construction phase.	Potential negative minor impact on surface and groundwater quality during construction phase. Potential positive impact on surface water quality during operational phase due to removal of traffic-related pollutants.
				Overall impact on land take & property.	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
		3.7	Agriculture and Non-Agricultural	Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	Under Option 2, there will be a direct impact on agricultural lands used for equine stock resulting in landtake and severance.	Under Option 4, there will be a direct impact on agricultural lands used for equine stock resulting in landtake and severance. There is a lower impact on agriculture than Option 2	Option 5 will involve minor landtake of agricultural lands on one property.
				Soils and Geology and likely impact on geological resources based on preliminary/likely construction details. Soil or topsoil resources to be developed/removed based on cut or fill requirements and potential for soft ground which may also need replaced. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.	Comparable to other options	Comparable to other options	Comparable to other options
	3	3.8	Geology and Soils (including Waste)		This option includes for the importation of fill for the construction of embankments. Topsoil is likely to be reused. There is no evidence of contamination in the site.	This option includes for the importation of fill for the construction of embankments. Topsoil is likely to be reused. There is no evidence of contamination in the site.	This option includes for the importation of fill for the onstruction of embankments. Topsoil is likely to be reused. There is no evidence of contamination in the site.
	_		Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	Comparable to other options	Comparable to other options	Comparable to other options
		3.9			It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. Both Options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. Both Options are comparable from an EMI perspective at this stage in the assessment.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. Both Options are comparable from an EMI perspective at this stage in the assessment.
					Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		4.1	Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Diverted distance route 587m (2.0x diversion route).	Diverted distance route 948m (3.3x diversion route).	Shortest diversion route 4.8km (16x diversion route).
					Comparable to other options	Comparable to other options	Comparable to other options
4	Accessibility & Social inclusion		Stations Accessibility		It is considered that alterations at Barberstown will not significantly affect access to stations in the locality	It is considered that alterations at Barberstown will not significantly affect access to stations in the locality	It is considered that alterations at Barberstown will not significantly affect access to stations in the locality





				Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
		4.3 Social Inclusion	Service levels impacts including severance of community groups; Severance from community facilities consequent on an option.	Diverted distance route 587m (2.0x diversion route).	Diverted distance route 948m (3.1x diversion route)	Pedestrian, and cyclist and non motorised road users catered for. Community facilities affected by reduced access include Shopping facilities, Ongar Community Centre, Stone Ideas, 2No. Educate Together Schools - northwest of the railway and Shackleton Gardens, Westmanstown Sports and Conference Centre, Dublin Falconry and Luttrellstown Castle Resort - south of the railway.
				Comparable to other options	Comparable to other options	Comparable to other options
		5.1 Rail Safety	Safety for Rail users – removal of Level crossings is considered a significant safety enhancement	All overbridges have a significant advantage as they are a great crossing alternative.	All overbridges have a significant advantage as they are a great crossing alternative.	All overbridges have a significant advantage as they are a great crossing alternative.
				Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
5	Safety	5.2 Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	Providing a segregated crossing would have a significant advantage as vehicular traffic is not crossing the live rail.	Closing the crossing would have a disadvantage on vehicular traffic as traffic will have to be diverted
				Comparable to other options	Comparable to other options	Comparable to other options
		5.3 Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Diverted distance route 587m (2.0x diversion route).	Diverted distance route 948m (3.1x diversion route)	No diversionI for pedestrian and cyclists
				Comparable to other options	Comparable to other options	Comparable to other options
		6.1 Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	This option supports good linkage to proposed cycle facilities	This option supports good linkage to proposed cycle facilities	This option supports good linkage to proposed cycle facilities
				Comparable to other options	Comparable to other options	Comparable to other options
6	Physical Activity	6.2 Permeability and local access opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Barberstown Link Road. Diversion for cyclists when level crossing closed 0.30km The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the amenity zoned lands, golf courses and allotments south of the level crossing. This access is maintained by the proposed bridge scheme.	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Barberstown Link Road. Diversion for cyclists when level crossing closed 0.30km The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the amenity zoned lands, golf courses and allotments south of the level crossing. This access is maintained by the proposed bridge scheme.	Cross Railway journey = nil as the proposed option is along the plan alignment of the existing Coolmine Road. Diversion for cyclists when level crossing closed 0.30km The principal high amenity greenspaces in the vicinity of the existing train station include the Royal canal, the amenity zoned lands, golf courses and allotments south of the level crossing. This access is maintained by the proposed bridge scheme.





	Criteria	Option 2	Option 4	Option 5
1	Economy	Some comparative disadvantage over other options	Some comparative disadvantage over other options	Some comparative advantage over other options
2	Integration	Significant comparative advantage over other options	Significant comparative advantage over other options	Significant comparative disadvantage over other options
3	Environment	Some comparative disadvantage over other options	Some comparative advantage over other options	Some comparative advantage over other options
4	Accessibility and social inclusion	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
5	Safety	Some comparative advantage over other options	Some comparative advantage over other options	Some comparative disadvantage over other options
6	Physical Activity	Comparable to other options	Comparable to other options	Comparable to other options
	Preferred	No	Yes	No





				DART+ West - MCA Sta	ge 2	
				Blakestown Level Crossing A	ssessment	
	Parameter (Criteria	Sub-Criteria (Quantitative/ Qualitative)	Do Minimum	Option 1
					Closure of the existing crossings with no alternative provided. All traffic would be diverted to alternative routes around the crossing location.	Pedestrian Cycle Bridge with Nested Ramps at the Level Crossing
		1.1	Construction and Land Cost	Assessment of cost of construction of option, land costs, acquisition costs and temporary works	Significant comparative advantage over other options This option includes the costs of urban roadworks across green fields to cross the railway and canal via raised embankment and two single span bridges. Includes 2No, roundabouts and the acquisition of two houses.	Significant comparative disadvantage over other options Construction costs of this option will be comparative to other options as the provision of a pedestrian cycle bridge within the canal environs will require significant temporary and permanent works. The cost to acquire land will be lower than other options providing full access
1	Economy	1.2	Long Term Maintenance costs	Ongoing annual maintenance costs associated with varied optionsmoving them	Some comparative advantage over other options The closure of the level crossing would remove the maintenance requirement of the level crossing.	Some comparative disadvantage over other options An overbridge would increase decrease maintenance requirements and operating costs over a level crossing.
					Comparable to other options	Comparable to other options
		1.3	1.3 benefit time lengths	Benefits to vehicular traffic through reduction in journey time lengths and delays through removal of level crossings. Consideration of potentially longer routes for traffic.	Displacement of traffic onto alternative routes; increase in journey times for local residents.	Displacement of traffic onto alternative routes; increase in journey times for local residents.
				Impact on scope for and ease of interchange between	Some comparative disadvantage over other options	Some comparative advantage over other options
		2.1 Transport Integration		modes. Impact on the operation of other transport services both during construction and in operation. New interchange nodes and facilities; Reduced walking and wait times associated with interchanges. Modal shift figures during construction and operations. Changes to journey times to transport nodes.	Reduction in local permeability. Reduced access to Royal Canal Cycle Route.	Reduction in local permeability. Access to Royal Canal Cycle Route maintained





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2 Inte	egration	2.2	Land Use Integration	Impact on land use strategies and regional and local plans. Assessment of support for land use factors local land use and planning. Inclusion of project in relevant local and regional planning documents.	Comparable to other options Supports the KCDP 2017-2023 particularly Movement and transport objective PT07 KCDP Transport Objective PT07 which seeks to promote and support the upgrding of the Maynooth Rail line. Leixlip LAP 2020-2023 recognises the level crossings will be required to be removed. Collinstown Masterplan is to be developed. The future Masterplan is required to be removed. Collinstown Masterplan is to be developed. The future Masterplan is required to aclude the associated transportation studies. Therefore, based on existing land use patterns and the existing policy context (in support of DART Exp), neither the closure of the level crossing or the provision of pedestrian access at the level crossing is likely to significantly influence this comparative assessment in terms of planning/ integration factors at this stage in the assessment.	Comparable to other options Supports the KCDP 2017-2023 particularly Movement and transport objective PT07 KCDP Transport Objective PT07 which seeks to promote and support the upgrding of the Maynooth Rail line. Leixlip LAP 2020-2023 recognises the level crossings will be required to be removed. Collinstown Masterplan is to be developed. The future Masterplan is required to be removed. Collinstown Masterplan is to be developed. The future Masterplan is required to include the associated transportation studies. Therefore, based on existing land use patterns and the existing policy context (in support of DART Exp), neither the closure of the level crossing or the provision of pedestrian access at the level crossing is likely to significantly influence this comparative assessment in terms of planning/ integration factors at this stage in the assessment.
	-	2.3	Geographical Integration	Impact on improvement of external links. Desire to link various geographical – mostly neutral due to localised	Comparable to other options	Comparable to other options
	_	2.5	Geographical megration	nature of the level crossings. Overall electrification scheme would be highly positive.	No significant effect on geographical integration.	No significant effect on geographical integration.
		2.4			Comparable to other options	Comparable to other options
			Other Government Policy Integration	Integration with the other Government policy such as the NPF and RSES.	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NSO4), RSES & GDA Transport Strategy). However would not meet Smarter Travel policy.	This option would support the delivery of the higher level national and regional planning policies regarding the DART Expansion programme (NPF- (NS04), RSES & GDA Transport Strategy). However would not meet Smarter Travel policy.
				Estimated number of sensitive properties within 100m of	Comparable to other options	Comparable to other options
		3.1	Noise and Vibration	the works. Options closer to more sensitive locations will have an increased risk of generating a noise impact. However, qualative criteria are also used where necessary to differentiate between the options.	Removes vehicle traffic emissions. Likely to have some short-term construction impacts.	Removes vehicle traffic emissions. Likely to have some short-term construction impacts.
					Comparable to other options	Comparable to other options
		3.2	Air Quality and Climate	Local air quality effects. No of number of receptors within 50m.	Removes vehicle traffic therefore requiring longer trips on alternative routes for some traffic, however removes localised traffic impacts. Some short-term construction impacts.	Removes vehicle traffic therefore requiring longer trips on alternative routes for some traffic, however removes localised traffic impacts. Some short-term construction impacts.
					Significant comparative advantage over other options	Significant comparative disadvantage over other options
		3.3 Landscape and Visual (including light)		Key landscape characteristics affected; Impact on landscape character; Impacts on landscape features, protected landscapes. Key visual characteristics affected; Impacts on properties, amenities, protected views, key views.	Loss of local connectivity. Minimal impact on existing landscape or visual characteristics - no likely significant landscape or visual impacts.	Significant visual impact on setting of 13th Lock / Deey Bridge (a protected structure and protected view in Kildare Development Plan) and one residential property north of lock.





					Some comparative advantage over other options	Some comparative disadvantage over other options
		3.4	Biodiversity (flora and fauna)	Potential compliance/conflict with biodiversity objectives; Indirect impacts on protected species, designated sites; Overall effect on nature conservation resource.	No direct impacts.	Hydrologically connected to South Dublin Bay and River Tolka Estuary SPA. No risk of LSE. Potential impacts to Royal Canal pNHA arising from the construction of new pedestrian bridge.
3	Environment	3.5	Cultural, Archaeological and Architectural Heritage	Overall effect on cultural, archaeological and architecture heritage resource. Likely effects on RPS, National Monuments, SMRs, Conservation areas, etc. Number of designated sites/structures (by level of designation) directly impacted by scheme (landtake)	Some comparative advantage over other options	Some comparative disadvantage over other options
5					No direct impacts likely positive effects to Deey bridge and 13th Lock due to removal of traffic.	Potential indirect impacts on Deey Bridge (and Lock) (RPS No. B06- 14). Potential to encounter unknown archaeological deposits that may survive in undeveloped areas.
				Overall potential significant effects on water resource	Some comparative advantage over other options	Some comparative disadvantage over other options
		3.6	Water Resources	attributes likely to be affected during construction and operation.	Removes vehicular traffic borne pollutants. Minimal construction phase impacts are likely. Some comparative advantages over other options.	Potential negative impact on surface and groundwater quality during construction phase.
					Some comparative advantage over other options	Some comparative disadvantage over other options
		3.7	Agriculture and Non-Agricultural	Overall impact on land take & property. Number of properties to be impacted/acquired. Likely temporary or permanent severance effects, etc.	There is no impact on agricultural or non-agricultural property.	There will be a limited direct impact on both agricultural and non- agricultural property. There is no impact on access to lands though there will be increased travel for vehicular journeys to / from R148.
				Soils and Geology and likely impact on geological	Some comparative advantage over other options	Some comparative disadvantage over other options
		3.8	Geology and Soils (including Waste)	resources based on preliminary/likely construction details. Soil resources to be developed/removed. Existing information relating to potential to encounter contaminated land. High-level assessment based on the likely structures/ works required and the potential for ground contamination due to historic landfills, pits and quarries.		No significant direct impacts as minimal earthworks are required.
					Some comparative advantage over other options	Some comparative disadvantage over other options
		3.9	Radiation and Stray Current	Overall likely impact on existing sources of electromagnetic radiation.	No change from an EMI perspective therefore advantage over other options.	It is assumed that the routing of the cabling, the location of existing substations, hubs etc. along the line will be changed or impacted by the selection of any of the options over the entire project. All Do- Something options are comparable from an EMI perspective at this stage in the assessment.
		4.1	4.1 Impact on Vulnerable Groups	Impacts on low income groups, non-car owners, mobility impaired, visually impaired and people with a disability.	Some comparative disadvantage over other options	Some comparative advantage over other options
						Provision of a pedestrian / cycle bridge addresses any local disruption caused by closing the level crossing. Usage is, however low.





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4	4 Accessibility & Social inclusion	4.2	Stations Accessibility	Quantification of increased service levels to the vulnerable groups.	Comparable to other options It is considered that alterations at Blakestown will not significantly affect access to stations in the locality	Comparable to other options It is considered that alterations at Blakestown will not significantly affect access to stations in the locality
					Comparable to other options	Comparable to other options
		4.3	Social Inclusion	Quantification of service levels impacts including severance to all groups (Severance of local communities through removal of level crossings without connection would fair worst under this heading).	Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cars, pedestrians and cyclists when level crossing closed 0.7km to ease, 1.6km to west. There are no community facilities affected by closure of this level crossing.	Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cars, pedestrians and cyclists when level crossing closed 0.7km to ease, 1.6km to west. There are no community facilities affected by closure of this level crossing.
					Comparable to other options	Comparable to other options
	Safety	5.1	Rail Safety	Safety for Rail users – removal of LC positive in this respect	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing	This option removes the railway level crossing, a characteristic which is considered positive from the perspective of railway safety. There is no significant construction activity along the railway associated with the level crossing
5		5.2	Vehicular Traffic Safety	Quality of Access for these road users, lengths of diversions, removal of interface with rail and other modes of transport	Comparable to other options	Comparable to other options
5					Closing the level crossing with no replacement infrastructure will divert traffic onto the local road network resulting in diversions of between 0.7km and 1.6km. These are considered incidental for road traffic	Closing the level crossing with no replacement infrastructure will divert traffic onto the local road network resulting in diversions of between 0.7km and 1.6km. These are considered incidental for road traffic
		5.3	Pedestrian, Cyclist and Vulnerable Road user Safety	Quality of Access for these road users. removal of interfaces	Some comparative disadvantage over other options	Some comparative advantage over other options
					No cycle tracks on the immedately surrounding road network, but the closure of the level crossing would reduce access to the Royal Canal Greenway. See also Transport Integration above.	Original Distance from access to farm to R148 junction 270m retained.
	Physical Activity	6.1	Connectivity to adjoining cycling facilities	Analysis of the extent that the scheme connects with cycle tracks.	Some comparative disadvantage over other options	Some comparative advantage over other options
					No cycle tracks on the immediately surrounding road network, but the closure of the level crossing would reduce access to the Royal Canal Greenway. See also Transport Integration above.	Severance overcome by provision of direct replacement.
		ty 6.2	Permeability and local access opportunity	Journey Time and lengths of diversions for active modes and numbers affected. Analysis of the connectivity between level crossing and green areas/key attractions related to active mode	Some comparative disadvantage over other options	Some comparative advantage over other options
6					Cross Railway journey = nil as crossing remains in place; Inaccessible when crossing is closed. Diversion for cars, pedestrians and cyclists when level crossing closed 0.6km East and 1.6km West The principal affected amenities in the vicinity of the level crossing include the Royal canal north of the level crossing. Removal of the level crossing will require detour for access.	Severance overcome by provision of direct replacement.





	Criteria	Do Minimum	Option 1
1	Economy	Significant comparative advantage over other options	Significant comparative disadvantage over other options
2	Integration	Significant comparative disadvantage over other options	Significant comparative advantage over other options
3	Environment	Some comparative advantage over other options	Some comparative disadvantage over other options
i	Accessibility and social inclusion	Some comparative disadvantage over other options	Some comparative advantage over other options
5	Safety	Some comparative disadvantage over other options	Some comparative advantage over other options
6	Physical Activity	Some comparative disadvantage over other options	Some comparative advantage over other options
	Preferred	Yes	No