

Park West to Heuston
Kylemore Road Bridge (OBC5A)

Requirements
 -Four tracks
 -OHLE in northern tracks
 -Electrical clearance for electrification
 -Keep current functionality of roads
 -Bridge Design Requirements (Standards)
 -LUAS loading passive provision

Intervention	Assessment	
-	-	

Baseline intervention (not subject to)

Option 0: Do Nothing	Engineering	Feasibility	Constructability Geometrical fitness for intervention Safety
		Requirements	Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+
	Economy Environment		

Leave As Is		Fail	<p>Four Tracking Project Requirement not achieved. Electrification Project Requirement not achieved. Overhead Electrical Clearance Requirement not achieved.</p> <p>LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
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Option 1: Do Minimum	Engineering	Feasibility	Constructability Geometrical fitness for intervention Safety
		Requirements	Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+
	Economy Environment		

Four Tracking Electrification No Pway or Structural Intervention		Fail	<p>Four Tracking Project Requirement not achieved. Electrification Project Requirement not achieved. Overhead Electrical Clearance Requirement not achieved.</p> <p>LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
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Option 2	Engineering	Feasibility	Constructability Geometrical fitness for intervention Safety
		Requirements	Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading Investment guidelines and programme for DART+
	Economy Environment		

Four Tracking Electrification Additional Tracks in Opening Made at side of Existing Structure (i.e. through wingwalls).		Fail	<p>There is insufficient space to provide the openings required.</p> <p>LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
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				Intervention		Assessment		
Requirements				-	-			
Baseline intervention (not subject to)				-	-			
Options Level 1 (PC 2)	Option 3	Engineering	Feasibility Constructability Geometrical fitness for intervention Safety	Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+	Four Tracking Electrification Bridge Reconstruction Road Levels Increase ONLY to absorb vertical clearance		Fail	This Option would require a minimum road level increase of 1.14m (approx). This road level increase at OBC5A would require extensive works to the junctions on the north and south side. LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiacne.
			Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+					
			Feasibility Constructability Geometrical fitness for intervention Safety					
Option 4	Engineering	Feasibility Constructability Geometrical fitness for intervention Safety	Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+	Four Tracking Electrification Bridge Reconstruction Track Lowering ONLY to absorb vertical clearance		Fail	This Option would require a minimum track lowering of 1.1m (approx.). This level of track lowering is not feasible at OBC5A. LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiacne.	
		Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+						
		Feasibility Constructability Geometrical fitness for intervention Safety						
Option 5	Engineering	Feasibility Constructability Geometrical fitness for intervention Safety	Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+	Four Tracking Electrification Bridge Reconstruction Vertical clearance absorbed by Increased Road Levels (50%) and Track Lowering (50%)		Fail	This Option would require a minimum track lowering of 0.6m (approx) This Option would require a minimum road levels increases of 0.6m (approx) LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiacne.	
		Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+						
		Feasibility Constructability Geometrical fitness for intervention Safety						
		Economy Environment						

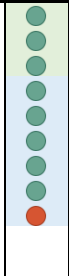
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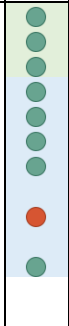
Intervention	-	-	Assessment
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Baseline intervention (not subject to)

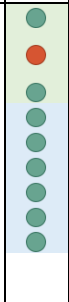
Option 6	Engineering	Feasibility	Constructability Geometrical fitness for intervention
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+
	Economy Environment		

Option 6	Engineering	Feasibility	Constructability Geometrical fitness for intervention		Fail	<p>This Option would require a minimum 0.55m (approx.) track lowering.</p> <p>This Option would require a minimum 0.55m (approx.) road level increase LUAS Loading Passive Provision is not achieved. Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+			
	Economy Environment					

Option 7	Engineering	Feasibility	Constructability Geometrical fitness for intervention
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+
	Economy Environment		

Option 7	Engineering	Feasibility	Constructability Geometrical fitness for intervention		Fail	<p>This Option would require a minimum road level increase of 1.29m (approx.). This road level increase at OBC5A would require extensive works to the junctions on the north and south side.</p> <p>Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+			
	Economy Environment					



Option 8	Engineering	Feasibility	Constructability Geometrical fitness for intervention
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+
	Economy Environment		

Option 8	Engineering	Feasibility	Constructability Geometrical fitness for intervention		Fail	<p>This Option would require a minimum track lowering of 1.29m (approx.). This level of track lowering is not feasible at OBC5A.</p> <p>Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
		Requirements	Safety Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+			
	Economy Environment					

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Baseline intervention (not subject to	Intervention	-	-	Assessment
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Option 9	Engineering	Feasibility Constructability Geometrical fitness for intervention Safety	Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+	Four Tracking Electrification Bridge Reconstruction LUAS Provision Vertical clearance absorbed by Increased Road Levels (50%) and Track Lowering (50%)		Pass	This Option would require a minimum track lowering of 0.65m (approx.). This Option would require a minimum road level increase of 0.65m (approx.)
		Economy Environment					
Option 10	Engineering	Feasibility Constructability Geometrical fitness for intervention Safety	Requirements Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Passive provision for LUAS loading only Investment guidelines and programme for DART+	Four Tracking Electrification Bridge Reconstruction LUAS Provision Vertical clearance absorbed by Increased Road Levels and Track Lowering (Other than 50/50 split)		Pass	This would require a minimum track lowering of 0.6m (approx.). This would require a minimum road level increase of 1.06m (approx.).
		Economy Environment					