

Le Fanu-Kylemore
Le Fanu Road Bridge (OBC7)

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

Intervention	Assessment		
-	-	-	

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	
	Economy		Investment guidelines and programme for DART+
	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>Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
--------------------	--	-------------	---

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	
	Economy		Investment guidelines and programme for DART+
	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>Compatible with the investment guidelines and programme for DART+ No impact on Environmental sites of National of International signifiante.</p>
---	--	-------------	---

Le Fanu-Kylemore
Le Fanu Road Bridge (OBC7)

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

Baseline intervention (not subject to options)	Intervention	-	-	Assessment
--	---------------------	---	---	-------------------

Option 2	Engineering	Feasibility	Constructability Geometrical fitness for intervention Safety		Fail	There is insufficient space to provide the openings required.
	Requirements	Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads Investment guidelines and programme for DART+	Four Tracking Electrification Additional Tracks in opening made at side of Existing Structure (i.e. through wingwalls).			
	Economy		Investment guidelines and programme for DART+			Compatible with the investment guidelines and programme for DART+
	Environment					No impact on Environmental sites of National or International significance.

Option 3	Engineering	Feasibility	Constructability Geometrical fitness for intervention Safety		Fail	This Option would require a minimum road level increase of 1.1m. This road level increase at OBC7 would require extensive works to the junctions on the north and south side. The vertical profile of the road would not be in accordance with design standards. The vertical gradients would not be in accordance with the National Cycle Manual.
	Requirements	Four tracking Park West-Heuston Electrification of DART+ tracks Vertical electrical clearance in structures Bridge Design Requirements (Standards) Keep current functionality of roads	Four Tracking Electrification Bridge Reconstruction Road Levels Increase ONLY to absorb vertical clearance			
	Economy		Investment guidelines and programme for DART+			Compatible with the investment guidelines and programme for DART+
	Environment					No impact on Environmental sites of National or International significance.

				Le Fanu-Kylemore			
				Le Fanu Road Bridge (OBC7)			
				Intervention		Assessment	
Requirements				-Four tracks -OHLE in northern tracks -Electrical clearance for electrification -Keep current functionality of roads -Bridge Design Requirements (Standards)			
Baseline intervention (not subject to options)				-		-	
Options Level 1 (PC 2)	Option 4	Engineering	Feasibility Constructability Geometrical fitness for intervention	Four Tracking Electrification Bridge Reconstruction Track Lowering ONLY to absorb vertical clearance		Fail	This Option would require a minimum track lowering of 1.1m. This level of track lowering is not feasible at LeFanu Road.
			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 Investment guidelines and programme for DART+				
Options Level 1 (PC 2)	Option 5	Engineering	Feasibility Constructability Geometrical fitness for intervention	Four Tracking Electrification Bridge Reconstruction Road Levels Increased to a Profile Above Which Road Departures Would be Required. Track Lowering also required.		Pass	This Option would require a minimum track lowering of 0.2m combined with a minimum road level increase of 1.0m .
			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 Investment guidelines and programme for DART+				
		Economy					
		Environment					

				Le Fanu-Kylemore			
				Le Fanu Road Bridge (OBC7)			
Requirements				-Four tracks -OHLE in northern tracks -Electrical clearance for electrification -Keep current functionality of roads -Bridge Design Requirements (Standards)			
Baseline intervention (not subject to options)				Intervention		Assessment	
				-		-	
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	Four Tracking Electrification Bridge Reconstruction Vertical clearance absorbed by Increased Road Levels (50%) and Track Lowering (50%)		This Option would require a minimum track lowering and road raising of 0.6m.	
		Investment guidelines and programme for DART+				This Option would require a minimum track lowering and road raising of 0.6m.	
	Economy	Investment guidelines and programme for DART+				Compatible with the investment guidelines and programme for DART+	
	Environment					No impact on Environmental sites of National of International signifiante.	

Le Fanu-Kylemore

Le Fanu Road Bridge (OBC7)

Requirements

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


Intervention	Assessment
--------------	------------

-	-
---	---

Requirements

Baseline intervention (not subject to options)

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

<p>Four Tracking Electrification Bridge Reconstruction</p> <p>Vertical clearance absorbed by Increased Road Levels and Track Lowering (Options considered excluding a 50/50 split)</p> <p>INCLUDING CONCEPT DESIGN</p>		Fail
---	--	------

This Option would require a minimum track lowering of 1.4m and a minimum road level increase of 0.8m. This level of track lowering is not feasible at LeFanu Road.

This Option would require a minimum track lowering of 1.4m and a minimum road level increase of 0.8m.

Compatible with the investment guidelines and programme for DART+

No impact on Environmental sites of National or International significance.

				Le Fanu-Kylemore		
				Le Fanu Road Bridge (OBC7)		
Requirements				-Four tracks -OHLE in northern tracks -Electrical clearance for electrification -Keep current functionality of roads -Bridge Design Requirements (Standards)		
Baseline intervention (not subject to options)				Intervention		Assessment
				-	-	-
Option 8	Engineering	Feasibility 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	Four Tracking Electrification Remove Road Bridge and Replace with a Pedestrian Bridge / Pedestrian & Cycle Bridge		Fail In this Option the road bridge would not be reinstated. The existing road functionality would not be maintained. Pedestrian and cyclist provision only.
		Investment guidelines and programme for DART+				
	Economy					
	Environment					

Le Fanu-Kylemore

Le Fanu Road Bridge (OBC7)

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

Intervention	Assessment		
--------------	------------	--	--

Baseline intervention (not subject to options)	-	-	
--	---	---	--

Option 9	Engineering	Feasibility	Constructability Geometrical fitness for intervention	● ● ● ● ● ● ●	Fail	This Option would require a minimum track lowering and road raising of 1.73m. This level of track lowering is not feasible at LeFanu Road.
		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			
	Economy		Investment guidelines and programme for DART+			Compatible with the investment guidelines and programme for DART+
	Environment					No impact on Environmental sites of National of International signifiante.

Four Tracking Electrification Bridge Reconstruction (Truss)