# ARUP CORDEROY Chandler KESS

# Coleraine - Derry Renewals Project - Cost Plan (Economic Appraisal) - Summary of Options

Scenario	Description	QRA %	OB %	Total Risk %	Total Cost (Q3 2011)	Total Cost (Q3 2023)
Baseline	Coleraine / Derry Cost Plan (Economic Appraisal) with overall QRA and OB equal to 20% Omitting Bellarena Loop	6.4%	13.6%	20.0%	£ 76,313,238	N/A
Baseline (Option A)	Coleraine / Derry Cost Plan (Economic Appraisal) with overall QRA and OB equal to 20% Omitting Bellarena Loop and bridge works	6.6%	13.4%	20.0%	£ 73,457,596	N/A
Option 1	Coleraine / Derry Cost Plan (Economic Appraisal) with overall QRA and OB equal to 20% Including Bellarena loop with DDA compliant station to facilitate half hourly future service	6.0%	14.0%	20.0%	£ 81,573,017	N/A
Option 1 (Option A)	Coleraine / Derry Cost Plan (Economic Appraisal) with overall QRA and OB equal to 20% Including Bellarena loop with DDA compliant station to facilitate half hourly future service Omitting bridge works	6.2%	13.8%	20.0%	£ 78,718,652	N/A
Heavy Maintenance	Coleraine / Derry Cost Plan (Economic Appraisal) with QRA and with OB equal to 20% Heavy Maintenance Option	10.7%	20.0%	30.7%	£ 63,826,659	N/A
Heavy Maintenance Year 12	Cost at Year 12 to meet Baseline scenario (at Q3 2009 cost) Cost at Year 12 to meet Option 1 scenario (at Q3 2009 cost)	13.6% 12.9%	20.0% 20.0%	33.6% 32.9%	£ 51,688,697 £ 57,053,249	

#### Scope and conceptual estimate

The Project Brief sets out the baseline scope and Conceptual Estimate as follows: -

Renewal of track and signalling infrastructure. Restore PSR to 2001 levels (i.e. 70mph). Upgrade line speed to 90mph where possible. Provide infrastructure for hourly service. Complete essential works on Portrush Branch.

The conceptual estimate, prepared for the NTT Project Economic Appraisal was  $\pounds$ 73.2m at 2012 prices and excluded the following items: -

Future proofing the half hourly capacity. Works to the Portrush Branch. Works in connection with station relocations.

#### **Heavy Maintenance Option**

The Heavy Maintenance option assumes the following: -

Full renewal between Coleraine & Castlerock due to poor formation Remaining route will utilise "crop and weld" option except at Eglinton Loop Eglinton Loop will be constructed as full relay; no loop at Bellarena No S&C replacement at Coleraine Assume full signalling renewal No future proofing for station relocations

Year 12 at Q3 2023 assume 3% inflation for 12 years from Q3 2011 costs

# Coleraine / Derry Cost Plan (For Economic Appraisal) Baseline with overall QRA and OB equal to 20%

			Arup
Advance Works (excl ducting & weld)		Inc	below
P Way			
Remove existing Rails & Sleepers		£	288,369
Excavate Ballast		£	1,785,980
Bottom Ballast		£	1,561,492
Lay Sleepers		£	6,749,214
Lay Rail CWR		£	8,054,181
Welding		£	1,442,321
Top Ballast		£	5,386,106
Tamping / Stressing		£	1,127,168
Single passing loops (Eglinton, Bellarena)			above
Switches and Crossings		£	709,009
Slab Track at CODA Follow-up Works		L	61,388
Remove Loop (Bellarena)		-£	818,252
		-2	010,202
Civils Worls			
Remove Castlerock loop		£	41,073
UWCs & LC works		£	1,379,554
Ducts / Trunking		£	2,647,319
Drainage - materials		£	1,349,561
Cess Walkway		£	1,202,825
Culverts		£	87,549
REB's			below
Fencing		£	106,120
<b>.</b>		~	
Bridges		£	1,684,466
Tuppole		£	
Tunnels		L	-
Property			
Bellarena Station (Demolition works)		£	-
Bellarena Halt (New construction)		£	
Castlerock Station		£	29,129
Temporary Relocation of Signalling		£	79,590
Derry Extended Platform		£	-
Park and ride facility		£	-
Labour		Inc	rates above
<b>•</b> • • • •		•	
Sub-total		£	34,954,160
Sub-total Electrification & Plant		£ £	<b>34,954,160</b> 185,709
Electrification & Plant		£	185,709
Electrification & Plant Telecommunications		£	185,709
Electrification & Plant Telecommunications Sub-total		£	185,709 1,704,280
Electrification & Plant Telecommunications		£	185,709 1,704,280
Electrification & Plant Telecommunications Sub-total Signalling		£	185,709 1,704,280 36,844,149
Electrification & Plant Telecommunications Sub-total Signalling		£	185,709 1,704,280 36,844,149
Electrification & Plant Telecommunications Sub-total Signalling Signalling Costs		£	185,709 1,704,280 36,844,149 9,005,497
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl		£	185,709 1,704,280 36,844,149 9,005,497 inc. above
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total		£ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works		£ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges	1.0%	£ £ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning	1.0%	£ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training	1.0% 0.5%	£ £ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares	1.0% 0.5% 1.0%	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5%	£ £ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above	1.0% 0.5% 1.0%	<b>£ £ £ £</b>	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 349,542 inc. above
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5% 1.0%	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 349,542 inc. above
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0% 1.0%	£         £           £         £           £         £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 349,542 inc. above 52,366,166 5,236,617
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant	1.0% 0.5% 1.0% 1.0%	£         £           £         £           £         £	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,617 57,602,783
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM	1.0% 0.5% 1.0% 1.0% 10%	E E E E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below inc. below
Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E E E E E E E E E E E E E E E E E E E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below 3,456,167
Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultants - PM / CM Preparation @ Supervision @	1.0% 0.5% 1.0% 1.0% 10%	E         E <the< th=""> <the< th=""> <the< th=""> <the< th=""></the<></the<></the<></the<>	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below inc. below 3,456,167 1,152,056
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling costs  Civils, provide bases for signals incl Sub-total  Preliminaries - Civils works  Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total  Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E <the< th=""> <the< th=""> <the< th=""> <the< th=""></the<></the<></the<></the<>	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,6167 57,602,783 inc. below inc. below 3,456,167
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant - PM / CM Preparation @ Provision @ Provision of temporary bus service Land costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E <the< th=""> <the< th=""> <the< th=""> <the< th=""></the<></the<></the<></the<>	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below inc. below 3,456,167 1,152,056
Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	3         3	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,6167 57,602,783 inc. below inc. below inc. below inc. below 3,456,167 1,152,056 926,355
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Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling costs  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below in
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Signalling costs  Civils, provide bases for signals incl Sub-total  Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design consultant Other Consultants - PM / CM Preparation @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,166 5,236,166 5,236,167 1,152,056 926,355 - t required 63,137,360 4,024,983
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling costs  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below in
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Signalling costs  Civils, provide bases for signals incl Sub-total  Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design consultant Other Consultants - PM / CM Preparation @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,166 5,236,166 5,236,167 1,152,056 926,355 - t required 63,137,360 4,024,983
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50 TOTAL	1.0% 0.5% 1.0% 1.0% 10% n / ILEX 6% 2% 6.4%	E         E	185,709 1,704,280 36,844,149 9,005,497 inc. above 45,849,647 5,243,124 349,542 174,771 50,000 349,542 349,542 inc. above 52,366,166 5,236,617 57,602,783 inc. below inc. below inc. below inc. below 1,152,056 926,355 - t required 63,137,360 4,024,983 67,162,343

#### **Baseline Estimate**

To enable comparison the baseline estimate contains the same exclusions as the conceptual estimate. Options are provided to allow the inclusion of the additional works as set out within the Project Brief.

#### Baseline Estimate = £76.4m

Full renewal of track and signalling between Coleraine and

Derry Nominal 70mph running with 90mph between Downhill and Foyle Bridge.

Passing loop at Eglinton to allow hourly service.

Retain existing station at Bellarena

# Coleraine / Derry Cost Plan (For Economic Appraisal) Baseline with overall QRA and OB equal to 20% Bridge Works removed

Bridge Works removed					
Advance Works (excl ducting & weld)		Inc	Arup below		
P Way		0	000.000		
Remove existing Rails & Sleepers Excavate Ballast		£	288,369 1,785,980		
Bottom Ballast		£	1,785,980		
Lay Sleepers		£	6,749,214		
Lay Rail CWR		£	8,054,181		
Welding		£	1,442,321		
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Follow-up Works					
Remove Loop (Bellarena)		-£	818,252		
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REB's					
Fencing		£	106,120		
Bridges		£	-		
Tunnels		£	-		
Property					
Bellarena Station (Demolition works)		£	-		
Bellarena Halt (New construction) Castlerock Station		£	- 29,129		
Temporary Relocation of Signalling		£	79,590		
Derry Extended Platform		£			
Park and ride facility		£	-		
Labour		Inc	c rates above		
Labour					
Sub-total		£			
			33,269,694		
Sub-total		£	33,269,694		
Sub-total Electrification & Plant Telecommunications		£	<b>33,269,694</b> 185,709 1,704,280		
Sub-total Electrification & Plant Telecommunications Sub-total		£	<b>33,269,694</b> 185,709		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling		£	33,269,694 185,709 1,704,280 35,159,684		
Sub-total Electrification & Plant Telecommunications Sub-total		£ £ £	<b>33,269,694</b> 185,709 1,704,280		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling		£ £ £	33,269,694 185,709 1,704,280 35,159,684		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Costs		£ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl		£ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Sub-total	15.00%	£ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges	15.00%	£ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning		£ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 322,697 166,348		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training	1.0% 0.5%	£ £ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000		
Sub-total Electrification & Plant Telecommunications Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares	1.0% 0.5% 1.0%	£ £ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,900,454 332,697 166,348 50,000 332,697 332,697		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 322,697 166,348 50,000 332,697 332,697 inc. above		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5% 1.0% 1.0%	£ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,900,454 332,697 166,348 50,000 332,697 332,697		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,007 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio	1.0% 0.5% 1.0% 1.0%	<b>£</b> £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 322,697 166,348 50,000 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design allowance for proposed new statio	1.0% 0.5% 1.0% 1.0%	<b>£</b> £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultant PM / CM	1.0% 0.5% 1.0% 1.0% 10%	<b>£</b> £ £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	<b>£</b> £ £ £ £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below 3,324,425		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultant PM / CM	1.0% 0.5% 1.0% 1.0% 10%	£         £           £         £           £         £           £         £           £         £           £         £           £         £           £         £           £         £	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	3         3	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below 3,324,425 1,108,142		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design Consultants Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	3         3	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below 3,324,425 1,108,142 926,355		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Design Consultant Other Consultants - PM / CM Preparation @ Supervision of temporary bus service Land costs Cother Employer's costs Tamper Purchase	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 166,348 50,010 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. bel		
Sub-total  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new statio Design consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 0.5% 1.0% 1.0% 1.0%	<b>5 3 4 4 4 4 4 4 4 4 4 4</b>	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 166,348 50,000 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. bel		
Sub-total Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultants - PM / CM Preparation @ Supervision of temporary bus service Land costs Cother Employer's costs Tamper Purchase	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E         E	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 166,348 50,010 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. bel		
Sub-total  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Design allowance for proposed new statio Design Consultant Other Consultants - PM / CM Preparation @ Supervision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50 TOTAL	1.0% 0.5% 1.0% 1.0% 1.0% n / ILEX 6% 2%	<b>ਦ</b> ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ ਦ	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 166,348 50,370,075 5,038 5,0390,087 5,0390,087 5,0390,087 5,0390,087 5,0390,087 5,0300,0800,087 5,0300,0800,080 5,000,0800,0800,0800,080 5,000,0800,08		
Sub-total Electrification & Plant Electrification & Plant Telecommunications Sub-total Signalling Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultant Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 1.0% 1.0% 1.0% 1.0% 6.6%	<b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b>	33,269,694 185,709 1,704,280 35,159,684 9,005,497 inc. above 44,165,181 4,990,454 332,697 166,348 50,000 332,697 332,697 inc. above 50,370,075 5,037,007 55,407,082 inc. below inc. below inc. below 3,324,425 1,108,142 926,355 - t required 60,766,004 4,024,983		

To enable comparison the baseline estimate contains the same exclusions as the conceptual estimate. Options are provided to allow the inclusion of the additional works as set out within the Project Brief.

Bridge works removed

## Baseline Estimate = £73.5m

Full renewal of track and signalling between Coleraine and

Derry Nominal 70mph running with 90mph between Downhill and Foyle Bridge. Passing loop at Eglinton to allow hourly service.

Retain existing station at Bellarena

26/05/2010

# Coleraine / Derry Cost Plan (For Economic Appraisal) Option 1 with overall QRA and OB equal to 20%

			Arup
Advance Works (excl ducting & weld)		Inc	below
P Way			
Remove existing Rails & Sleepers		£	288,369
Excavate Ballast		£	1,785,980
Bottom Ballast		£	1,561,492
Lay Sleepers Lay Rail CWR		£	6,749,214 8,054,181
Welding		£	1,442,321
Top Ballast		£	5,386,106
Tamping / Stressing		£	1,127,168
Single passing loops (Eglinton, Bellarena)		Inc	above
Switches and Crossings		£	709,009
Slab Track at CODA		£	61,388
Follow-up Works			
Civils Worls			
Remove Castlerock loop		£	41,073
UWCs & LC works		£	1,379,554
Ducts / Trunking		£	2,647,319
Drainage - materials		£	1,349,561
Cess Walkway		£	1,202,825
Culverts		£	87,549
REB's		Inc £	below 106 120
Fencing		Ĺ	106,120
Bridges		£	1,684,466
Tunnels		£	-
Property			
Bellarena Station (Demolition works)		£	45,523
Bellarena Halt (New construction)		£	1,176,500
Castlerock Station		£	29,129
Temporary Relocation of Signalling		£	79,590
Derry Extended Platform		£	-
Park and ride facility		£	-
Labour		Inc	rates above
Sub-total		£	36,994,435
Electrification & Plant		£	185,709
		L	165,709
Telecommunications		£	1,704,280
Telecommunications Sub-total		£	1,704,280
			38,884,424
Sub-total			
Sub-total Signalling		£	38,884,424
Sub-total Signalling Signalling costs		£	38,884,424 10,265,648
Sub-total Signalling		£	38,884,424
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total	15.00%	£	38,884,424 10,265,648 inc. above
Sub-total Signalling Signalling costs Civils, provide bases for signals incl	15.00%	£	38,884,424 10,265,648 inc. above 49,150,072
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning		£ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training	1.0% 0.5%	£ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares	1.0% 0.5% 1.0%	£ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 369,944
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above	1.0% 0.5% 1.0% 1.0%	<b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b> <b>£</b>	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 369,944 inc. above
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 369,944 inc. above 56,044,043
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 369,944 inc. above 56,044,043 5,604,404
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447
Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 369,944 inc. above 56,044,043 5,604,404
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	£ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision @	1.0% 0.5% 1.0% 1.0% 10%	£ £ £ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below 1,232,969
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision femporary bus service	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	E E E E E E E E E E E E E E E E E E E	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below 3,698,907
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision @         Provision of temporary bus service         Land costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	3         3	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below 1,232,969
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision of temporary bus service         Land costs         Other Employer's costs	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	3         3	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 1,232,969 926,347 -
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision of temporary bus service         Land costs         Other Employer's costs         Tamper Purchase	1.0% 0.5% 1.0% 1.0% 10% n / ILEX		38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 3,698,907 1,232,969 926,347 - required
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision femporary bus service         Land costs         Other Employer's costs         Tamper Purchase         Sub-total	1.0% 0.5% 1.0% 1.0% 10% n / ILEX 6% 2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 3,698,907 1,232,969 926,347 - required 67,506,670
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision of temporary bus service         Land costs         Other Employer's costs         Tamper Purchase         Sub-total         Risk @ P50	1.0% 0.5% 1.0% 1.0% 10% n / ILEX	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 3,698,907 1,232,969 926,347 - required 67,506,670 4,024,983
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision of temporary bus service         Land costs         Other Employer's costs         Tamper Purchase         Sub-total	1.0% 0.5% 1.0% 1.0% 10% n / ILEX 6% 2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 3,698,907 1,232,969 926,347 - required 67,506,670
Sub-total         Signalling         Signalling costs         Civils, provide bases for signals incl         Sub-total         Preliminaries - Civils works         Method Related Charges         Testing & Commissioning         Training         Spares         Unmeasured Items         Preliminaries - Signalling works incl above         Sub-total         Contractor's Fee         Sub-total         Design allowance for proposed new statio         Design Consultant         Other Consultants - PM / CM         Preparation @         Supervision of temporary bus service         Land costs         Other Employer's costs         Tamper Purchase         Sub-total         Risk @ P50	1.0% 0.5% 1.0% 1.0% 10% n / ILEX 6% 2% 6.0%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	38,884,424 10,265,648 inc. above 49,150,072 5,549,165 369,944 184,972 50,000 369,944 inc. above 56,044,043 5,604,404 61,648,447 inc. below inc. below inc. below inc. below 3,698,907 1,232,969 926,347 - required 67,506,670 4,024,983

## Option 1 estimate = £81.6m

As Baseline but including additional loop and signalling at Bellarena to facilitate future half hourly service and construction of a twin platform DDA compliant halt

Note 1: requires upgrading of current AHB to Full Barrier CCTV Crossing at Bellarena.

Note 2: includes the demoltion of the existing Bellarena Station which will be replaced by a new station

Advance Works (excl ducting & weld)			Arup Inc below			
· · · ·						
P Way		£	200 260			
Remove existing Rails & Sleepers Excavate Ballast		£	288,369 1,785,980			
Bottom Ballast		£	1,561,492			
Lay Sleepers		£	6,749,214			
Lay Rail CWR		£	8,054,181			
Welding		£	1,442,321			
Top Ballast		£	5,386,106			
Tamping / Stressing		£	1,127,168			
Single passing loops (Eglinton, Bellarena)			above			
Switches and Crossings		£	709,009			
Slab Track at CODA		£	61,388			
Follow-up Works						
· ·						
Civils Worls						
Remove Castlerock loop		£	41,073			
UWCs & LC works		£	1,379,554			
Ducts / Trunking		£	2,647,319			
Drainage - materials						
Cess Walkway		£ 1,202,825				
Culverts		£ 87,549				
REB's		Inc below				
Fencing		£ 106,120				
Bridges		£	-			
Tunnels		£				
Property						
Bellarena Station (Demolition works)		£	45,523			
Bellarena Halt (New construction)		£	1,176,500			
Castlerock Station		£	29,129			
Temporary Relocation of Signalling		£	79,590			
Derry Extended Platform		£	-			
Park and ride facility		£	-			
Labour		Inc rates above				
Sub-total		£	35,309,969			
Electrification & Plant		£	185,709			
Telecommunications		£	1,704,280			
Sub-total		£	37,199,959			
Signalling		~	,,			
Signalling costs			40.005.040			
		£	10,265,648			
		2				
Civils, provide bases for signals incl			inc. above			
Civils, provide bases for signals incl Sub-total		£	inc. above 47,465,607			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works	15.00%	£	inc. above 47,465,607 5,296,495			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges	1.0%	£ £	inc. above 47,465,607 5,296,495 353,100			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning		£ £ £	inc. above 47,465,607 5,296,495 353,100 176,550			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training	1.0% 0.5%	£ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares	1.0% 0.5% 1.0%	£ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items	1.0% 0.5%	£ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above	1.0% 0.5% 1.0%	£ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 353,100 inc. above			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 353,100 inc. above 54,047,951			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0%	£ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 inc. above 54,047,951 5,404,795			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM	1.0% 0.5% 1.0% 1.0% 10%	£ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @	1.0% 0.5% 1.0% 1.0% 10% / ILEX	£ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @ Supervision @	1.0% 0.5% 1.0% 1.0% 10%	£ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below 3,567,165 1,189,055			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant - PM / CM Preparation @ Supervision @ Provision of temporary bus service	1.0% 0.5% 1.0% 1.0% 10% / ILEX	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs	1.0% 0.5% 1.0% 1.0% 10% / ILEX	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below 3,567,165 1,189,055			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs	1.0% 0.5% 1.0% 1.0% 10% / ILEX	E E E E E E E E E E E E E E	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below inc. below			
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Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 0.5% 1.0% 1.0% 10% / ILEX 6% 2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below 3,567,165 1,189,055 926,347 - required 65,135,313			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultants - PM / CM Preparation @ Supervision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 10% / ILEX	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below inc. below 3,567,165 1,189,055 926,347 - required 65,135,313 4,024,983			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 0.5% 1.0% 1.0% 10% / ILEX 6% 2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below 3,567,165 1,189,055 926,347 - required 65,135,313			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50 TOTAL	1.0% 0.5% 1.0% 1.0% 10% / ILEX 6% 2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below			
Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station Design Consultants - PM / CM Preparation @ Supervision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% / ILEX / ILEX 6% 2% 6.2%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	inc. above 47,465,607 5,296,495 353,100 176,550 50,000 353,100 353,100 353,100 inc. above 54,047,951 5,404,795 59,452,746 inc. below inc. below inc. below inc. below 3,567,165 1,189,055 926,347 - required 65,135,313 4,024,983			

#### Option 1 estimate = £78.8m

As Baseline but including additional loop and signalling at Bellarena to facilitate future half hourly service and construction of a twin platform DDA compliant halt

## Bridge works removed

Note 1: requires upgrading of current AHB to Full Barrier CCTV Crossing at Bellarena.

Note 2: includes the demoltion of the existing Bellarena Station which will be replaced by a new station

# Coleraine / Derry Cost Plan (For Economic Appraisal) Heavy Maintenance Option

			Arup
Advance Works (excl ducting & weld)		inc.	below
D.W. New Ormstmutter			
P Way - New Construction Remove existing Rails & Sleepers		£	56,800
Excavate Ballast		£	351,784
Bottom Ballast		£	307,567
Lay Sleepers		£	1,329,391
Lay Rail CWR		£	1,586,430
Welding Top Ballast		£	284,094
Tamping / Stressing		£	222,018
Single passing loops (Eglinton, Bellarena)		~	222,010
Switches and Crossings		£	354,504
Slab Track at CODA		£	61,388
Follow-up Works			
P Way - Crop & Weld			
Crop and weld works with new ballast		£	11,920,787
o:			
Civils Worls Remove Castlerock loop		£	41,073
UWCs & LC works		£	1,379,554
Ducts / Trunking		£	2,647,319
Drainage - materials		£	265,823
Cess Walkway		£	1,202,825
Culverts		£	87,549
REB's		0	400 400
Fencing		£	106,120
Bridges	-	£	92,672
Tunnels		£	-
Property Bellarena Station		£	
Bellarena Halt		£	-
Castlerock Station		£	29,129
Temporary Relocation of Signalling		£	79,590
Derry Extended Platform		£	-
Park and ride facility		£	-
I = h =		la e	
Labour		Inc	c rates above
Sub-total		_	00 407 040
		£	23,467,313
			23,467,313
Electrification & Plant		£	185,709
Electrification & Plant		£	185,709
Electrification & Plant		£	185,709
Electrification & Plant Telecommunications Sub-total Signalling		£	185,709 1,704,280 25,357,302
Electrification & Plant Telecommunications Sub-total		£	185,709
Electrification & Plant Telecommunications Sub-total Signalling		£	185,709 1,704,280 25,357,302
Electrification & Plant Telecommunications Sub-total Signalling		£	185,709 1,704,280 25,357,302
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs		£	185,709 1,704,280 25,357,302
Electrification & Plant Telecommunications Sub-total Signalling Civils, provide bases for signals incl Sub-total		£	185,709 1,704,280 25,357,302 9,005,497 34,362,799
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works	15.00%	£ £ £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges	1.0%	£ £ £ £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning		£ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training	1.0% 0.5%	£ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning	1.0%	£ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337
Electrification & Plant Telecommunications Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares	1.0% 0.5% 1.0%	£ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337 50,000 234,673 234,673
Electrification & Plant Telecommunications Sub-total Signalling Signalling costs Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337 50,000 234,673 234,673 38,754,252
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling costs  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 38,754,252 3,875,425
Electrification & Plant  Telecommunications  Signalling Signalling Civils, provide bases for signals incl Sub-total  Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 34,754,252 3,875,425 42,629,677
Electrification & Plant  Telecommunications  Sub-total Signalling Signalling costs  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 38,754,252 3,875,425
Electrification & Plant  Electrification & Plant  Telecommunications  Signalling Signalling Signalling costs  Civils, provide bases for signals incl Sub-total  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX	1.0% 0.5% 1.0% 1.0%	£ £ £ £ £ £ £ £	185,709 1,704,280 25,357,302 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 34,754,252 3,875,425 42,629,677
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultant - PM / CM Preparation @	1.0% 0.5% 1.0% 1.0% 7.5%	£     £       £     £	185,709 1,704,280 25,357,302 9,005,497 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 38,754,252 3,875,4252 3,975,4252
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Testing & Commissioning  Training  Spares  Unmeasured Items  Preliminaries - Signalling works incl above  Sub-total  Contractor's Fee  Sub-total  Consultants - PM / CM  Preparation @  Supervision @	1.0% 0.5% 1.0% 1.0%	E E E E E E E E E E E E E E E E E E E	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 234,673 38,754,252 3,875,425 3,875,425 3,875,425 12,629,677 inc. below inc. below inc. below 3,197,226 1,278,890
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above  Sub-total  Contractor's Fee  Sub-total  Consultant  Other Consultant  Prevision @  Provision of temporary bus service	1.0% 0.5% 1.0% 1.0% 7.5%	E     E     E       E     E	185,709 1,704,280 25,357,302 9,005,497 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 38,754,252 3,875,4252 3,975,4252
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Testing & Commissioning  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total  Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @  Provision @  Provision of temporary bus service Land costs	1.0% 0.5% 1.0% 1.0% 7.5%	E         E	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 234,673 38,754,252 3,875,425 3,875,425 3,875,425 12,629,677 inc. below inc. below inc. below 3,197,226 1,278,890
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Civils, provide bases for signals incl Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs	1.0% 0.5% 1.0% 1.0% 7.5%	E         E	185,709 1,704,280 25,357,302 9,005,497 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 38,754,252 3,875,4252 3,875,4252 3,875,4252 3,875,4252 3,875,4252 1,278,890 926,355 -
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Testing & Commissioning  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total  Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @  Provision @  Provision of temporary bus service Land costs	1.0% 0.5% 1.0% 1.0% 7.5%	E         E	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 234,673 38,754,252 3,875,425 3,875,425 3,875,425 12,629,677 inc. below inc. below inc. below 3,197,226 1,278,890
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total  Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @  Provision @  Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 7.5%	E         E	185,709 1,704,280 25,357,302 9,005,497 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 38,754,252 42,629,677 inc. below 3,197,226 1,278,890 926,355 926,355 926,355 926,355 926,355 926,355 926,355 927 927 927 927 927 927 927 927
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above  Sub-total  Contractor's Fee  Sub-total  Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @  Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase  Sub-total	1.0% 0.5% 1.0% 1.0% 7.5% 3.0%	£         £	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 234,673 38,754,252 3,875,425 42,629,677 10,c below inc. below inc. below inc. below inc. below 1,278,890 926,355 
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total Signalling Signalling Signalling costs  Civils, provide bases for signals incl Sub-total Preliminaries - Civils works Method Related Charges Testing & Commissioning Training Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50 TOTAL	1.0% 0.5% 1.0% 1.0% 10% 7.5% 3.0%	E         E	185,709 1,704,280 25,357,302 9,005,497 34,362,799 3,520,097 234,673 117,337 50,000 234,673 234,673 38,754,252 3,875,425 3,875,425 3,875,425 42,629,677 inc. below inc. below inc. below 3,197,226 1,278,890 926,355 
Electrification & Plant  Electrification & Plant  Telecommunications  Sub-total  Signalling  Signalling costs  Civils, provide bases for signals incl  Sub-total  Preliminaries - Civils works  Method Related Charges  Training  Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total  Contractor's Fee Sub-total  Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @  Provision @  Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 0.5% 1.0% 1.0% 7.5% 3.0%	E         E	185,709 1,704,280 25,357,302 9,005,497 9,005,497 3,520,097 234,673 117,337 50,000 234,673 117,337 50,000 234,673 38,754,252 42,629,677 inc. below inc. below 3,197,226 1,278,890 926,355 927,355 927,3

# Heavy Maintenance Option estimate = £63.9m

The Heavy Maintenance option provides a full renewal between

Coleraine and Castlerock. The remainder of the line will undergo HM using a "crop & weld" approach, except for the construction of a new passing loop at Eglinton to future proof for the hourly service.

#### Note 4

Proposal assumes that this will reinstate a maximum speed of 70mph between Coleraine and Derry/Londonderry.

#### Note 5

No future proofing to provide future loop or station at Bellarena The existing facilities will be retained

# Coleraine / Derry Cost Plan (For Economic Appraisal) Heavy Maintenance Option - Year 12 costs to match Baseline Scenario

Advance Works (excl ducting & weld)         P Way - New Construction         Remove existing Rails & Sleepers         Excavate Ballast         Bottom Ballast         Lay Sleepers         Lay Rail CWR         Welding         Top Ballast         Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Slab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P Way - Crop & Weld         Crop and weld works with new ballast         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Tunnels         Property         Bellarena Atation         Bellarena Kation         Bellarena Kation         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Derry Extended Platform         Park and ride facility         Labour         Electrification & Plant		inc.i	Arup below 227,200 1,407,136 1,230,267 5,317,564 6,345,720 1,136,375 4,243,600 888,072 - - - - - - - - - - - - -
Remove existing Rails & Sleepers         Excavate Ballast         Bottom Ballast         Lay Sleepers         Lay Rail CWR         Welding         Top Ballast         Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Slab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Dery Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	1,407,136 1,230,267 5,317,564 6,345,720 1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Remove existing Rails & Sleepers         Excavate Ballast         Bottom Ballast         Lay Sleepers         Lay Rail CWR         Welding         Top Ballast         Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Slab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Dery Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	1,407,136 1,230,267 5,317,564 6,345,720 1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Excavate Ballast Bottom Ballast Lay Sleepers Lay Rail CWR Welding Top Ballast Tamping / Stressing Single passing loops (Eglinton, Bellarena) Switches and Crossings Slab Track at CODA Follow-up Works Delete Bellarena Loop (P-Way) PWay - Crop & Weld Crop and weld works with new ballast Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Property Bellarena Station Bellarena Station Bellarena Station Civing Dery Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	1,407,136 1,230,267 5,317,564 6,345,720 1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Bottom Ballast         Lay Sail CWR         Welding         Top Ballast         Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Slab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         Fencing         Bridges         Funnels         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Derry Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	1,230,267 5,317,564 6,345,720 1,136,375 4,243,600 888,072 
Lay Sleepers Lay Rail CWR Welding Top Ballast Tamping / Stressing Single passing loops (Eglinton, Bellarena) Switches and Crossings Slab Track at CODA Follow-up Works Delete Bellarena Loop (P-Way) P Way - Crop & Weld Crop and weld works with new ballast Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Funnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Dery Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	5,317,564 6,345,720 1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Lay Rail CWR Welding Top Ballast Top Ballast Tamping / Stressing Single passing loops (Eglinton, Bellarena) Switches and Crossings Slab Track at CODA Follow-up Works Delete Bellarena Loop (P-Way) PWay - Crop & Weld Crop and weld works with new ballast Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Funnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	6,345,720 1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - -
Welding       Top Ballast         Tamping / Stressing       Single passing loops (Eglinton, Bellarena)         Switches and Crossings       Silab Track at CODA         Follow-up Works       Delete Bellarena Loop (P-Way)         P Way - Crop & Weld       Crop and weld works with new ballast         Crop and weld works with new ballast       Civils Worls         Bemove Castlerock loop       UWCs & LC works         Ducts / Trunking       Drainage - materials         Cess Walkway       Culverts         Culverts       REB's         Fencing       Property         Bellarena Station       Bellarena Station         Bellarena Halt       Castlerock Station         Temporary Relocation of Signalling       Derry Extended Platform         Park and ride facility       Elabour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	1,136,375 4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Top Ballast         Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Slab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         Fencing         Bridges         Tunnels         Property         Bellarena Station         Bellarena Halt         Castlerock Station of Signalling         Derry Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	4,243,600 888,072 531,757 - - - - - - - - - - - - - - - - - -
Tamping / Stressing         Single passing loops (Eglinton, Bellarena)         Switches and Crossings         Silab Track at CODA         Follow-up Works         Delete Bellarena Loop (P-Way)         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Derry Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	888,072 531,757 - - - - - - - - - - - - - - - - - -
Single passing loops (Eglinton, Bellarena) Switches and Crossings Slab Track at CODA Follow-up Works Delete Bellarena Loop (P-Way)  P Way - Crop & Weld Crop and weld works with new ballast  Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges  Funnels  Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	
Slab Track at CODA Follow-up Works Delete Bellarena Loop (P-Way) P Way - Crop & Weld Crop and weld works with new ballast Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Tunnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	
Follow-up Works         Delete Bellarena Loop (P-Way)         P Way - Crop & Weld         Crop and weld works with new ballast         Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Derry Extended Platform         Park and ride facility         Labour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Delete Bellarena Loop (P-Way)  P Way - Crop & Weld  Crop and weld works with new ballast  Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing  Bridges  Tunnels  Property Bellarena Station Bellarena Station Bellarena Station Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility  Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
P Way - Crop & Weld Crop and weld works with new ballast Civils Worls Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Tunnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Crop and weld works with new ballast  Civils Worls  Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges  Tunnels  Property Bellarena Station Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour  Sub-total  Culverta		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Crop and weld works with new ballast  Civils Worls  Remove Castlerock loop UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges  Tunnels  Property Bellarena Station Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour  Sub-total  Culverta		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Civils Worls         Remove Castlerock loop         UWCs & LC works         Ducts / Trunking         Drainage - materials         Cess Walkway         Culverts         REB's         Fencing         Bridges         Property         Bellarena Station         Bellarena Halt         Castlerock Station         Temporary Relocation of Signalling         Derry Extended Platform         Park and ride facility         Labour         Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Remove Castlerock loop     UWCs & LC works       Ducts / Trunking     Drainage - materials       Cess Walkway     Cluverts       Cess Walkway     REB's       Fencing     Progety       Bellarena Station     Bellarena Halt       Castlerock Station     Temporary Relocation of Signalling       Derry Extended Platform     Park and ride facility       Labour     Eubour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Remove Castlerock loop     UWCs & LC works       Ducts / Trunking     Drainage - materials       Cess Walkway     Cluverts       Cess Walkway     REB's       Fencing     Progety       Bellarena Station     Bellarena Halt       Castlerock Station     Temporary Relocation of Signalling       Derry Extended Platform     Park and ride facility       Labour     Eubour		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
UWCs & LC works Ducts / Trunking Drainage - materials Cess Walkway Culverts REB's Fencing Bridges Tunnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Ducts / Trunking     Drainage - materials       Cess Walkway     Colverts       Culverts     REB's       Fencing     Image - materials       Bridges     Image - materials       Property     Bellarena Station       Bellarena Station     Image - materials       Castlerock Station     Image - materials       Derry Extended Platform     Park and ride facility       Labour     Image - materials		£ £ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Cess Walkway Culverts REB's Fencing Bridges Tunnels Property Bellarena Station Bellarena Halt Castlerock Station Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £ £ £ £	601,412 87,549 106,120
Culverts REB's Fencing Fencing Bridges Tunnels Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £ £ £ £ £ £ £ £	87,549 106,120
REB's       Fencing         Fencing       Image: Constraint of the second		£ £ £ £ £ £ £	106,120
Fencing  Bridges  Tunnels  Property Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility  Labour  Sub-total		£ £ £ £ £ £	
Bridges     Image: Constraint of the second se		£ £ £ £ £ £	
Tunnels     Image: Constraint of the second se		£ £ £ £	1,684,466 - - - - -
Tunnels     Image: Constraint of the second se		£ £ £ £	
Property Bellarena Station Bellarena Station Castlerock Station Castlerock Station Castlerock Station Castlerock Station Derry Extended Platform Park and ride facility Castlerock Castlero		£ £ £	-
Property Bellarena Station Bellarena Station Castlerock Station Castlerock Station Castlerock Station Castlerock Station Derry Extended Platform Park and ride facility Castlerock Castlero		£ £ £	-
Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £	-
Bellarena Station Bellarena Halt Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £	-
Castlerock Station Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£ £	-
Temporary Relocation of Signalling Derry Extended Platform Park and ride facility Labour Sub-total		£	-
Derry Extended Platform Park and ride facility Labour Sub-total		_	
Derry Extended Platform Park and ride facility Labour Sub-total		f	-
Labour Sub-total			-
Sub-total		£	-
Sub-total			
		Inc	rates above
Electrification & Plant		£	24,870,528
		£	62 672
		L	63,672
Telecommunications		£	-
		_	
Sub-total		£	24,934,200
Signalling			
Signalling costs (Bellarena Loop)		£	-
Signalling costs (Reconnection & testing)		£	847,352
Civila, provide bases for signals incl		<u> </u>	
Civils, provide bases for signals incl Sub-total		£	25,781,552
Preliminaries - Civils works	15.00%		3,730,579
Method Related Charges	15.00%		248,705
Testing & Commissioning	0.50%		124,353
Training	0.00 /0	£	50,000
Spares	1.00%		248,705
Unmeasured Items	1.00%		248,705
Preliminaries - Signalling works incl above		Ē	,
Sub-total		£	30,432,600
Contractor's Fee	10%	_	3,043,260
Sub-total		£	33,475,859
Design allowance for proposed new station / ILEX			inc. below
Design Consultant			inc. below
Other Consultants - PM / CM			inc. below
Preparation @	7.5%		2,510,689
Supervision @	.3 11%		
Dravision of tomporany bug convice	0.070		
Provision of temporary bus service	5.070	£	926,355
Land costs	0.070	£	
Land costs Other Employer's costs	0.070	£ £	926,355
Land costs Other Employer's costs Tamper Purchase	0.070	£ £ £ Not	926,355 - - t required
Land costs Other Employer's costs Tamper Purchase Sub-total		£ £ Not £	926,355 - - t required 37,917,180
Land costs Other Employer's costs Tamper Purchase	14%	£ £ Not £	926,355 - - t required 37,917,180 5,156,735
Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50		£ £ Not £	926,355 - - t required 37,917,180
Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50		£ £ Not £ £	926,355 - - t required 37,917,180 5,156,735

## Heavy Maintenance Year 12 Additional Costs = £51.7m

This assumes track that was previously underwent Heavy Maintenance is now fully renewed. No new loop is provided at Bellarena

## Note 6

Assume that a further percentage of culverts will require work as per HM Option

#### Note 7

Figure for cess walkway assumes that 50% re-construction will be required following Year 12 Works

#### Note 8

Assumes that further fencing works will be required

Note 9

Assumes that further bridge waterproofing will be required

Note 10 Inflation is assumed to be 3%

# Note 11

Assumes that bridge works deferred from Year 0 will be required at this stage

# Coleraine / Derry Cost Plan (For Economic Appraisal) Heavy Maintenance Option - Year 12 costs to match Option 1 Scenario

Advance Works (excl ducting & weld)		inc	Arup .below
			.below
P Way - New Construction			
Remove existing Rails & Sleepers		£	227,200
Excavate Ballast		£	1,407,136
Bottom Ballast		£	1,230,267
Lay Sleepers		£	5,317,564
Lay Rail CWR		£	6,345,720
Welding Top Ballast		£	1,136,375 4,243,600
Tamping / Stressing		£	888,072
Single passing loops (Eglinton, Bellarena)		~	000,072
Switches and Crossings		£	531,757
Slab Track at CODA		£	-
Follow-up Works		£	-
Provide Bellarena Loop (P-Way)		£	818,252
P Way - Crop & Weld		~	
Crop and weld works with new ballast		£	-
Civils Worls			
Remove Castlerock loop		£	
UWCs & LC works		£	-
Ducts / Trunking	t	£	-
Drainage - materials	İ	£	1,063,291
Cess Walkway	İ	£	601,412
Culverts	İ	£	87,549
REB's	İ		
Fencing		£	106,120
-			
Bridges		£	1,684,466
Tunnels		£	-
Description			
Property Bellarena Station		c	45 522
Bellarena Halt		£	45,523
		£	1,176,500
Castlerock Station		£	-
Temporary Relocation of Signalling		£	-
Derry Extended Platform Park and ride facility		£	-
		L	-
Labour		Ind	c rates above
Sub-total		£	26,910,803
Electrification & Plant		£	63,672
		~	
Telecommunications		£	-
Sub-total		£	26,974,475
Signalling		~	20,014,410
Signalling costs (Bellarena Loop)		£	1,260,151
Signalling costs (Reconnection & testing)		£	847,352
g g a second d doaring,	İ — — — — — — — — — — — — — — — — — — —	Ē	,00L
Civils, provide bases for signals incl			
Sub-total		£	29,081,978
Preliminaries - Civils works	15.00%	£	4,036,620
Method Related Charges	1.0%	£	269,108
Testing & Commissioning	0.5%	£	134,554
Training		£	50,000
	1.0%	£	269,108
Spares		£	269,108
Spares Unmeasured Items	1.0%		
Spares Unmeasured Items Preliminaries - Signalling works incl above		6	0 4 4 1 0 10
Spares Unmeasured Items Preliminaries - Signalling works incl above <b>Sub-total</b>	1.0%	£	34,110,477
Spares Unmeasured Items Preliminaries - Signalling works incl above <b>Sub-total</b> Contractor's Fee		£	3,411,048
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total	1.0%		3,411,048 37,521,525
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX	1.0%	£	3,411,048 37,521,525 inc. below
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant	1.0%	£	3,411,048 37,521,525 inc. below inc. below
Spares Unmeasured Items Preliminaries - Signalling works incl above <b>Sub-total</b> Contractor's Fee <b>Sub-total</b> Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM	1.0%	£	3,411,048 37,521,525 inc. below inc. below inc. below
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @	1.0% 10% 7.5%	£ £	3,411,048 37,521,525 inc. below inc. below inc. below 2,814,114
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @	1.0%	££	3,411,048 37,521,525 inc. below inc. below 2,814,114 1,125,646
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service	1.0% 10% 7.5%	E E E	3,411,048 37,521,525 inc. below inc. below 2,814,114
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs	1.0% 10% 7.5%	E E E E	3,411,048 37,521,525 inc. below inc. below inc. below 2,814,114 1,125,646
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs	1.0% 10% 7.5%	E E E E E E E	3,411,048 37,521,525 inc. below inc. below 2,814,114 1,125,646 926,355
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase	1.0% 10% 7.5%	E E E E E E E	3,411,048 37,521,525 inc. below inc. below inc. below 2,814,114 1,125,646 926,355 - - -
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total	1.0% 10% 7.5%	£ £ £ £ £ £ £ £	3,411,048 37,521,525 inc. below inc. below 2,814,114 1,125,646 926,355 
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design allowance for proposed new station / ILEX Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase	1.0% 10% 7.5% 3.0%	£ £ £ £ £ £ £ £ £ £	3,411,048 37,521,525 inc. below inc. below 1,814,114 1,125,646 926,355 - - - - - - - - - - - - -
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 10% 7.5% 3.0%	£ £ £ £ £ £ £ £ £	3,411,048 37,521,525 inc. below inc. below inc. below 2,814,114 1,125,646 926,355 
Spares Unmeasured Items Preliminaries - Signalling works incl above Sub-total Contractor's Fee Sub-total Design Consultant Other Consultants - PM / CM Preparation @ Supervision @ Provision of temporary bus service Land costs Other Employer's costs Tamper Purchase Sub-total Risk @ P50	1.0% 10% 7.5% 3.0%	£ £ £ £ £ £ £ £ £	3,411,048 37,521,525 inc. below inc. below inc. below 2,814,114 1,125,646 926,355 

#### Heavy Maintenance Option estimate = £57m

This assumes track that was previously underwent Heavy Maintenance is now fully renewed. This includes the provision of a new loop at Bellarena

## Note 12

Assume that a further percentage of culverts will require work as per HM Option

Note 13 Figure for cess walkway assumes that 50% re-construction will be required following Year 12 Works

#### Note 14

Assumes that further fencing works will be required

Note 15 Assumes that further bridge waterproofing will be required

Note 16 Inflation is assumed to be 3%

# Note 17

Assumes that bridge works deferred from Year 0 will be required at this stage