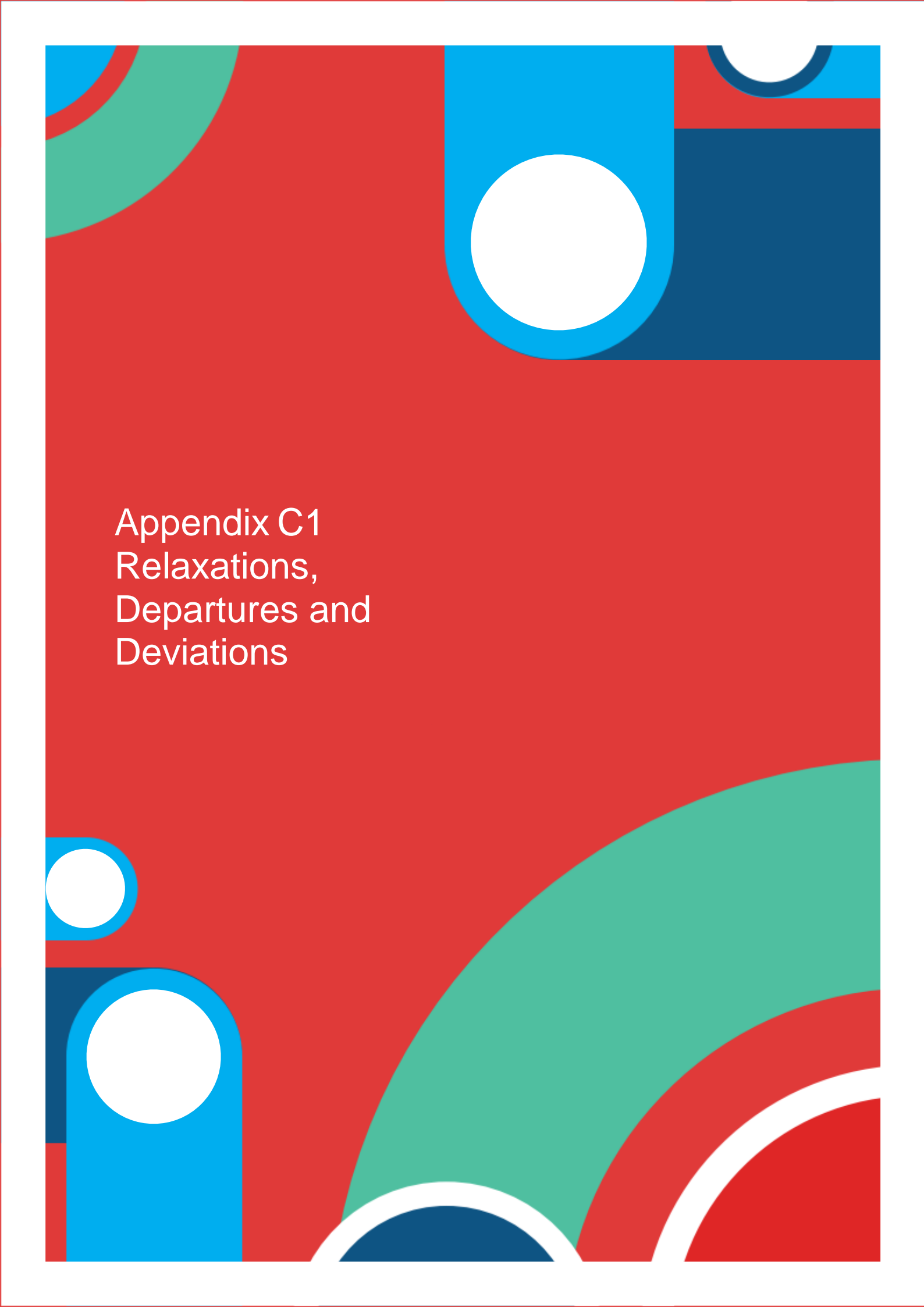
The background of the page is a vibrant red. It is decorated with several abstract geometric shapes: a large white circle with a blue border in the upper right; a smaller white circle with a blue border in the lower left; a large green semi-circle in the bottom right; and various other shapes in blue, green, and white scattered throughout the corners and edges.

Appendix C
Relaxations,
Departures and
Deviations

The background is a vibrant red color. It features several abstract geometric shapes: a large white circle with a blue border in the upper right; a smaller white circle with a blue border in the lower left; a large green semi-circle in the bottom right; and various other shapes in blue, green, and white, some with white outlines, scattered throughout the composition.

Appendix C1
Relaxations,
Departures and
Deviations

Ref. No.	Departure Reference	Scheme	Route	Phased Project	Designer	Zone	Alignment Number	Mainline?	Chainage Start	Chainage End	Direction	Location Description	Design Speed (km/h)	Relaxation / Departure / Deviation	Departure Category (Road Design, Structures, etc)	Departure Type (e.g. Horizontal Geometry, Vertical Geometry, Cross Section etc.)	Standard Required	Item	Departure / Deviation Justification	Additional Information and Supporting Documentation List	Drawing No.
Zone 1																					
Zone 2																					
1	BCIDB-JAC-DFS-0013-02-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	A01	Yes	A 535	A 560	City-Bound	Leeson Street Lower	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows to 1.5m Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows locally to 1.5m at pinch point on Leeson Street canal bridge. Ties in to existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0002
2	BCIDB-JAC-DFS-0013-02-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	A01	Yes	A 536	A 558	Bray-bound	Leeson Street Lower	50	Deviation	Road Design	Vertical Alignment	DMURS Table 4.3	Vertical alignment - K2.0 crest curve Minimum required = K4.7	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0002
3	BCIDB-JAC-DFS-0013-02-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	B01	No	B 78	B 115	Bray-bound	Sussex Road	50	Deviation	Road Design	Stopping Sight Distance	DMURS Figure 4.66	Stopping Sight Distance - Southbound clashes with existing building boundary	Existing deviation - Existing road layout maintained	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0003
Zone 3																					
4	BCIDB-JAC-DFS-0013-03-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1310	A 1310	Bray-bound	Swan Place Junction	50	Deviation	Road Design	Visibility	DMURS Figure 4.63	Visibility - Splay clashes against existing boundary wall	Existing deviation - Existing side road layout maintained	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0004
5	BCIDB-JAC-DFS-0013-03-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1450	A 1450	Bray-bound	Bloomfield Avenue Junction	50	Departure	Road Design	Intervisibility	DN-GEO-03044 Para. 2.10 - 2.18	Intervisibility - Splay clashes against existing boundary wall	Existing deviation - Existing side road layout maintained	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0005
6	BCIDB-JAC-DFS-0013-03-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A2115	A2310	Bray-Bound	Donnybrook Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - pinch points at various locations approximately 1.5m Permitted Reduction - 1.8m, Desired - 2.0m	Various pinch point locations along Donnybrook Road	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
7	BCIDB-JAC-DFS-0013-03-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A2115	A2310	City-Bound	Donnybrook Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath varies - pinch points at various locations approximately 1.5m Permitted Reduction - 1.8m, Desired - 2.0m	Various pinch point locations along Donnybrook Road	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
8	BCIDB-JAC-DFS-0013-03-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2105	A 2130	Bray-bound	Donnybrook Road	50	Deviation	Road Design	Horizontal Alignment	DMURS Table 4.3	Horizontal Alignment - 64m radius. Min required = 104m with adverse camber of 2.5%, 82 with superelevation of 2.5%	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
9	BCIDB-JAC-DFS-0013-03-006	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2160	A 2205	Bray-bound	Donnybrook Road	50	Deviation	Road Design	Horizontal Alignment	DMURS Table 4.3	Horizontal Alignment - 56m radius. Min required = 104m with adverse camber of 2.5%, 82 with superelevation of 2.5%	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
10	BCIDB-JAC-DFS-0013-03-007	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2520	A 2580	Bray-bound	Donnybrook Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath narrows locally at to 1.5m. Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to 1.5m to tie in to existing bridge boundary, to match existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0008
Zone 4																					
11	BCIDB-JAC-DFS-0013-04-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A 3480	A 3780	Bray-bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.5m-3.0m Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.5m as alignment matches existing kerblines and boundary wall to avoid land take in front of residential properties.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0011 / 0012
12	BCIDB-JAC-DFS-0013-04-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A3625	A3650	City-Bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - pinch point approximately 1.5m. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.5m	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0012
Zone 5																					
Zone 6																					
Zone 7																					
13	BCIDB-JAC-DFS-0013-07-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A 5720	A 5780	City-bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.5m-2m Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.5m	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0018
Zone 8																					
14	BCIDB-JAC-DFS-0013-08-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A 7050	A 7600	City-Bound	N11 Stillorgan Road	60	Departure	Road Design	Cross-Section	DN-GEO-03036, Table 4.4, Urban Dual 2 Lane	Traffic Lane Widths - NB Traffic Lanes 3.0m Minimum Required - 3.65m	Traffic Lanes narrow to 3.0m to match existing lane widths along this stretch of the scheme. This is an existing departure with limited space to develop due to constraints along the boundary with Glendalbyn Road. Designing out the existing departure would negatively impact the ability of BusConnects to provide adequate cycle and footpath facilities.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0022 / 0023
15	BCIDB-JAC-DFS-0013-08-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A7155	A7172	City-Bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows to 1.6m to tie into existing Minimum required - 1.8m, Desired - 2.0m	Footpath narrows locally to tie into existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0022
16	BCIDB-JAC-DFS-0013-08-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A7155	A7172	Bray-Bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows to 1.6m to tie into existing Minimum required - 1.8m, Desired - 2.0m	Footpath narrows locally to tie into existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0022
17	BCIDB-JAC-DFS-0013-08-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A7192	A7320	City-Bound	St Bridges Road	60	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally to 1.2m at pinch point Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows locally at pinchpoint to match existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0022
Zone 9																					
18	BCIDB-JAC-DFS-0013-09-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z9	A01	Yes	A7645	A7760	Bray-Bound	N11 Stillorgan Road	60	Deviation	Road Design	Cross-Section	DMURS Table 4.34	Cross-Section - Footpath narrows locally to 1.5m over 15m due to existing boundary Minimum required - 1.8m, Desired - 2.0m	Footpath narrows locally to tie into existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0023
Zone 10																					
19	BCIDB-JAC-DFS-0013-10-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z10	A01	Yes	A 9745	A 9840	City-bound	N11 Stillorgan Road	80	Departure	Road Design	Cross-Section	DN-GEO-03036 Table 4.5	Cross-Section - NB Cycleways vary - approximately 1.45m - 2.25m. Minimum required - 1.75m, Desired width 2.0m	Cycletrack locally narrowed to approximately 1.45m northbound at pinch points, matching to existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0029
20	BCIDB-JAC-DFS-0013-10-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z10	A01	Yes	A 9745	A 9840	Bray-bound	N11 Stillorgan Road	80	Departure	Road Design	Cross-Section	DN-GEO-03036 Table 4.5	Cross-Section - SB Cycleways vary - approximately 1.65m - 2.0m. Minimum required - 1.75m, Desired width 2.0m	Cycletrack locally narrowed to approximately 1.65m southbound at pinch points, matching to existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0029
Zone 11																					
Zone 12																					
21	BCIDB-JAC-DFS-0013-12-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z12	A01	Yes	A 11485	A 11672	Bray-bound	N11 Bray Road	80	Departure	Road Design	Stopping Sight Distance	DN-GEO-03031 Table 10.3	Forward Sight Distance - Northbound clashes with existing boundary wall and trees. SSD Required - 160m, SSD Achieved - 120m	Existing deviation - Visibility improved on approach to junction from existing road layout.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0033
Zone 13																					
Zone 14																					

Ref. No.	Departure Reference	Scheme	Route	Phased Project	Designer	Zone	Alignment Number	Mainline?	Chainage Start	Chainage End	Direction	Location Description	Design Speed (km/h)	Relaxation / Departure / Deviation	Departure Category (Road Design, Structures, etc)	Departure Type (e.g. Horizontal Geometry, Vertical Geometry, Cross Section etc.)	Standard Required	Item	Departure / Deviation Justification	Additional Information and Supporting Documentation List	Drawing No.
22	BCIDB-JAC-DFS-0013-14-001	Bus Connects	IC13 - Bray to	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z14	A01	Yes	A13100	A13330	City-Bound	Wyattville West Slip Road	60	Deviation	Road Design	Cross-Section	DMURS Table 4.34	Cross-Section - Footpath narrows to 1.6m for approx 50m along Wyattville West Slip Road to match existing. Desired width 1.8m	Footpath narrows to match existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0037
23	BCIDB-JAC-DFS-0013-14-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z14	A01	No	A 13755	A 13790	City-bound	Bray Road	50	Deviation	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack varies - approximately 1.4m-2m Minimum required 1.5m, Desired width 2.0m	Cycletrack locally narrows over a length of 40m to 1.4m before joining combined road off-mainline along Bray Road.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0039/0040
24	BCIDB-JAC-DFS-0013-14-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z14	A01	Yes	A 14180	A 14640	Bray-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.6m-2m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.6m to match existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0041/0042
Zone 15																					
25	BCIDB-JAC-DFS-0013-15-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	E01	No	E 20	E 80	City-bound	Stonebridge Road	30	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.2m-2m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.2m as alignment matches existing kerblines and boundary wall to avoid land take	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0042
26	BCIDB-JAC-DFS-0013-15-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	E01	No	E 205	E 260	City-bound	Stonebridge Road	30	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.6m-5m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.6m as alignment matches existing kerblines and boundary wall to avoid land take	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0053
27	BCIDB-JAC-DFS-0013-15-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	A01	Yes	A 14810	A 15075	City-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.6m-2m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.6m in front of Applegreen petrol station to match existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0042/0043
28	BCIDB-JAC-DFS-0013-15-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	H01	No	H 45	H 80	City-bound	Corbawn Lane	30	Deviation	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack varies - approximately 1.2m Desired width 1.5m	Cycletrack narrows to 1.2m to tie-in to combined traffic lane.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
29	BCIDB-JAC-DFS-0013-15-006	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	A01	Yes	A15115	15160	Bray-bound	Dublin Road	30	Deviation	Road Design	Cross-Section	DMURS Figure 4.55	Cross-Section - Traffic Lane width narrows to 2.2-3m at pinch point Minimum required - 2.75, Desired - 3.0m	Traffic lane width narrows at pinch point to accommodate the cycle track and avoid impact to the Bridge	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
30	BCIDB-JAC-DFS-0013-15-007	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	A01	Yes	A15160	A15800	City-Bound	Dublin Road	30	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows to 1.6m locally at pinchpoint Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows locally at pinchpoint	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
31	BCIDB-JAC-DFS-0013-15-008	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	A01	Yes	A 15175	A 15194	Bray-bound	Dublin Road	30	Deviation	Road Design	Vertical Alignment	DMURS Table 4.3	Vertical alignment - K2.58 crest curve Minimum required = K4.7	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
Zone 16																					
32	BCIDB-JAC-RFS-0013-16-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15495	A 15510	City-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.8m with a 1.5m pinch point to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows to approximately 1.8m over 15m in length with a 1.5m pinch point to tie into existing boundary.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0044
33	BCIDB-JAC-DFS-0013-16-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15800	A 15865	City-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.5m-3.5m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.6m due to alignment of existing boundary wall at Sherington Lodge.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0045
34	BCIDB-JAC-DFS-0013-16-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15880	A 15880	Bray-bound	Olcovar Estate Access	50	Departure	Road Design	Intervisibility	DN-GEO-03044 Para. 2.10 - 2.18	Intervisibility - Splay clashes against existing boundary fencing and trees.	Existing deviation - Existing side road layout maintained	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0045
35	BCIDB-JAC-DFS-0013-16-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15925	A 16035	Bray-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.5m-2m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.5m due to alignment of existing boundary wall at Crinken College.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0045/0046
Zone 17																					
36	BCIDB-JAC-DFS-0013-17-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z17	A01	Yes	A 16645	A 16710	Bray-bound	Dublin Road	50	Deviation	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.65m-2m Minimum required - 1.8m, Desired - 2.0m	Footpath narrows to a pinchpoint of 1.65m matching existing kerblines to minimise landtake and tree loss at Saint James' Lodge. Ties in to existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0047
Zone 18																					
37	BCIDB-JAC-DFS-0013-18-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z18	A01	Yes	A 17900	A 17900	Bray-bound	Chapel Lane Junction	50	Departure	Road Design	Intervisibility	DN-GEO-03044 Para. 2.10 - 2.18	Intervisibility - Splay clashes against existing building boundaries.	Existing deviation - Existing side road layout maintained	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0051
38	BCIDB-JAC-DFS-0013-18-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z18	A01	Yes	A 18460	A 18512	City-bound	Castle Street	50	Deviation	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack varies - approximately 1.2m-1.8m Minimum required 1.5m, Desired width 2.0m	Cycletrack narrows locally to 1.2m over a 10m length on road at Castle Street Shopping Centre due to boundary constraints at entrance off Lower Dargle Road. This is to avoid landtake at Belton Terrace.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0052

Ref. No.	Departure Reference	Scheme	Route	Phased Project	Designer	Zone	Alignment Number	Mainline?	Chainage Start	Chainage End	Direction	Location Description	Design Speed (km/h)	Relaxation / Departure / Deviation	Departure Category (Road Design, Structures, etc)	Departure Type (e.g. Horizontal Geometry, Vertical Geometry, Cross Section etc.)	Standard Required	Item	Relaxation Justification	Additional Information and Supporting Documentation List	Drawing No.
						Zone 1						Zone 1									
						Zone 2						Zone 2									
1	BCIDB-JAC-RFS-0013-02-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	B01	No	B10	B 75	Bray-bound	Leeson Street Upper	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Raised Cycle Track width of 1.5m - 1.75m, Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to between 1.5m - 1.75m over a length of 60m behind combined bus and coach stop to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0002
2	BCIDB-JAC-RFS-0013-02-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	A01	Yes	A 640	A 690	City-bound	Leeson Street Upper	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Raised Cycle Track width of 1.5m, Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 40m behind bus stop and coach stop to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0002
3	BCIDB-JAC-RFS-0013-02-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z2	A01	Yes	A 1015	A 1050	Bray-bound	Leeson Street Upper	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Raised Cycle Track width of 1.5m, Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows locally to 1.5m over a length of 10m to tie into existing kerbs and avoid impacting trees.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0004
						Zone 3						Zone 3									
4	BCIDB-JAC-RFS-0013-03-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1615	A 1690	Both	Morehampton Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Raised Cycle Track width varies. Southbound: 1.8m-2m, Northbound: 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows locally to 1.8m over a length of 30m southbound to tie into existing kerbs and narrows locally to 1.5m over a length of 40m northbound on approach to and behind combined bus stop to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0005/ 0006
5	BCIDB-JAC-RFS-0013-03-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1730	A 1790	Both	Morehampton Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Raised Cycle Track width varies. Southbound: 1.5m, Northbound: 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 60m northbound and southbound to tie into existing kerbs	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0006
6	BCIDB-JAC-RFS-0013-03-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1790	A 1840	City-Bound	Morehampton Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath 1.8m wide. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows to 1.8m over a length of 50m due to space constraints	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0006
7	BCIDB-JAC-RFS-0013-03-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1790	A 1910	Bray-bound	Morehampton Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycletrack varies - approximately 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 150m to tie into existing kerbs	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0006
8	BCIDB-JAC-RFS-0013-03-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 1910	A 2000	Both	Morehampton Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycletrack varies - approximately 1.5m. NB Cycletrack narrows at pinch point to 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 40m SB to tie into existing kerbs and narrows to 1.5m over a length of 90m NB on the approach to and behind combined bus stop to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0006
9	BCIDB-JAC-RFS-0013-03-006	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2025	A 2045	City-Bound	Donnybrook Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack 1.5-2m wide. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 20m due to space constraints	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
10	BCIDB-JAC-RFS-0013-03-007	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2089	A 2098	Bray-bound	Morehampton Road	50	Permitted Reduction	Road Design	Stopping Sight Distance	DMURS Figure 4.2	Forward Sight Distance - SB Mainline SSD - 36m. Desired min SSD - 49m	Forward Sight Distance is as per existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
11	BCIDB-JAC-RFS-0013-03-008	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2115	A 2250	Both	Donnybrook Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycletrack varies - approximately 1.75. Narrows at pinch point to 1.5m. NB Cycletrack varies - approximately 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5m over a length of 135m SB and 60m NB to tie into existing kerbs. Cycletrack narrows at pinch points to between 1.3 - 1.5m width.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
12	BCIDB-JAC-RFS-0013-03-009	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z3	A01	Yes	A 2195	A 2213	Bray-bound	Donnybrook Road	50	Permitted Reduction	Road Design	Stopping Sight Distance	DMURS Figure 4.3	Forward Sight Distance - SB Mainline SSD - 36m. Desired min SSD - 49m	Forward Sight Distance is as per existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
						Zone 4						Zone 4									
13	BCIDB-JAC-RFS-0013-04-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A2310	A2360	Bray-Bound	Donnybrook Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m at pinch point. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally to avoid impacting existing tree	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0007
14	BCIDB-JAC-RFS-0013-04-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A2360	A2460	City-Bound	Donnybrook Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m at pinch point to allow full footpath width. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally to provide full width footpath	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0008
15	BCIDB-JAC-RFS-0013-04-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A2520	A2580	City-Bound	Donnybrook Road	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.7m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track tapers from full width to reduced through junction	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0008
16	BCIDB-JAC-RFS-0013-04-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A2630	A2650	City-Bound	Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.6m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally at pinchpoint	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0008
17	BCIDB-JAC-RFS-0013-04-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A 3220	A 3315	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally at existing footbridge - approximately 1.8m. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrowed to approximately 1.8m over a length of 1m at pinch point, at existing footbridge	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0010
18	BCIDB-JAC-RFS-0013-04-006	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A3220	A3315	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	NDA: Building for Everyone Figure 1.6	Cross-Section - Footpath narrows locally at pinch point to 1.2m to avoid impacting trees. Absolute Minimum - 1.2m over 2m, Desired - 2.0m	Footpath narrows locally at pinchpoint to retain tree	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0010
19	BCIDB-JAC-RFS-0013-04-008	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A 3315	A 3365	City-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack narrows locally at bus stop - approximately 1.65m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.65m over a length of 30m behind bus stop.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0011
20	BCIDB-JAC-RFS-0013-04-007	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A3315	A3365	City-Bound	Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally at pinch point to 1.8m to avoid impacting trees. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows locally at pinchpoint	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0011
21	BCIDB-JAC-RFS-0013-04-009	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z4	A01	Yes	A 3625	A 3715	Both	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB and SB Cycletrack narrows - approximately 1.5m-2.0m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.5 for a length of 100m NB in front of residential properties and behind bus stops to tie in to existing kerb.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0011/ 0012
						Zone 5						Zone 5									
						Zone 6						Zone 6									
22	BCIDB-JAC-RFS-0013-06-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z6	A01	Yes	A4975	A5025	City-Bound	Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycletrack narrows locally to 1.8m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows to 1.8m to restrict landtake	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0037
23	BCIDB-JAC-RFS-0013-06-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z6	A01	Yes	A 5550	A 5595	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycletrack narrows locally at bus stop - approximately 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows over a length of 45m to 1.5m behind bus stop.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0015/ 0016
24	BCIDB-JAC-RFS-0013-06-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z6	A01	Yes	A 5595	A 5695	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycletrack varies - approximately 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	SB Cycletrack narrows over a length of 100m to 1.5m to provide for minimum footpath along length. Cross section is constrained by existing building and kerb lines.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0017

Ref. No.	Departure Reference	Scheme	Route	Phased Project	Designer	Zone	Alignment Number	Mainline?	Chainage Start	Chainage End	Direction	Location Description	Design Speed (km/h)	Relaxation / Departure / Deviation	Departure Category (Road Design, Structures, etc)	Departure Type (e.g. Horizontal Geometry, Vertical Geometry, Cross Section etc.)	Standard Required	Item	Relaxation Justification	Additional Information and Supporting Documentation List	Drawing No.
25	BCIDB-JAC-RFS-0013-06-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z6	A01	Yes	A 5695	A 5780	City-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath narrows locally to match existing - approximately 1.8m Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows over a length of 45m to approximately 1.8m to tie in to existing building and kerb lines.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0018
26	BCIDB-JAC-RFS-0013-06-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z6	A01	Yes	A5720	A5780	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally at pinchpoint	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0017
Zone 7												Zone 7									
27	BCIDB-JAC-RFS-0013-07-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A 5900	A 6100	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycleway varies - approximately 1.5 - 2.0m, 1.5m at pinch point. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows over a length of 200m to approximately 1.5 - 1.8m to match existing. Widening will require land take and impact to properties	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0018/0019
28	BCIDB-JAC-RFS-0013-07-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A6360	A6800	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows over a length of 400m to approximately 1.5 m to match existing, with the intention to retain existing infrastructure and avoid excessive landtake	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0019
29	BCIDB-JAC-RFS-0013-07-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A6360	A6800	City-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack narrows over a length of 400m to approximately 1.5 m to match existing, with the intention to retain existing infrastructure and avoid excessive landtake	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0019
30	BCIDB-JAC-RFS-0013-07-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A6550	A6710	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally at pinch point at back of bus stop to 1.8m Permitted Reduction - 1.8m, Desired - 2.0m	Cross-Section - Footpath narrows locally at pinch point at back of bus stop to 1.8m near to proposed Patrician Villas Subway Minimum required - 1.8m, Desired - 2.0m	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0019
31	BCIDB-JAC-RFS-0013-07-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z7	A01	Yes	A6360	A6710	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally to 1.8m to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Cross-Section - Footpath narrows locally at pinch point at back of bus stop to 1.8m near to proposed Patrician Villas Subway Minimum required - 1.8m, Desired - 2.0m	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021
Zone 8												Zone 8									
32	BCIDB-JAC-RFS-0013-08-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A6830	A6930	Bray-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.75m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows to 1.75m locally to match existing and retain footpath	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021
33	BCIDB-JAC-RFS-0013-08-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A 6930	A 7050	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - SB Cycleway varies - approximately 1.5m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack locally narrowed over a length of 120m to approximately 1.5m - 1.65m.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021/0022
34	BCIDB-JAC-RFS-0013-08-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A6930	A7480	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally to match existing 1.5m to retain existing infrastructure over 400m length	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021
35	BCIDB-JAC-RFS-0013-08-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	Side Road	No	A7172	A7192	Side Road	Glenalbyn Road	60	Relaxation	Road Design	Cross-Section	DN-GEO-03036, Table 4.4, Urban Dual 2 Lane	Traffic Lane Widths - Carriageway width 4m approx Minimum Lane Width Required - 3m. Min 2.75m	Carriageway narrows to 4.0m to match existing lane widths along this stretch of the scheme. This is an existing departure with limited space to develop due to constraints along the boundary with Glenalbyn Road. Designing out the existing departure would negatively impact the ability of BusConnects to provide adequate cycle and footpath facilities.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0022
36	BCIDB-JAC-RFS-0013-08-005	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A7500	A7600	City-Bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.75m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally to match existing 1.75m at this pinch point at the bus stop. Widening will require major impact to the retaining wall and associated utilities	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021
37	BCIDB-JAC-RFS-0013-08-006	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	7650	7750	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycletrack narrows to 1.5m Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycle Track narrows locally to 1.5m or impact to the retaining wall and associated utilities	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0021
38	BCIDB-JAC-RFS-0013-08-007	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z8	A01	Yes	A7955	A8145	Bray-Bound	Belmont Terrace	60	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - Footpath narrows locally to 1.8m to avoid impacting properties. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath narrows locally to 1.8m to avoid impacting properties.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0024
Zone 9												Zone 9									
39	BCIDB-JAC-RFS-0013-09-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z9	A01	Yes	A 8225	A 8315	City-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB Cycleways varies - approximately 1.5m - 2.0m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack locally narrowed to approximately 1.5m at pinch point behind bus stops to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0024/0025
40	BCIDB-JAC-RFS-0013-09-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z9	A01	Yes	A8355	A8455	Bray-bound	N11 Stillorgan Road	60	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - Cycleways varies - approximately 1.5m - 2.0m. Absolute Minimum - 1.5m locally, Desired width 2.0m	Cycletrack locally narrowed to approximately 1.5m at pinch point behind bus stops to reduce cyclist speed.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0024/0025
Zone 10												Zone 10									
41	BCIDB-JAC-RFS-0013-10-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z10	A01	Yes	A 9447	A 9495	Bray-bound	N11 Stillorgan Road	80	Relaxation	Road Design	Vertical Alignment	DN-GEO-03031 Table 10.3	Vertical alignment - K30.0 crest curve Minimum required = K55.0 desirable minimum, k30.0 1 step below, as per DN-GEO-03031 Table 10.3	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0028
42	BCIDB-JAC-RFS-0013-10-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z10	A01	Yes	A 9634	A 9648	Bray-bound	N11 Stillorgan Road	80	Relaxation	Road Design	Vertical Alignment	DN-GEO-03031 Table 10.3	Vertical alignment - K30.0 crest curve Minimum required = K55.0 desirable minimum, k30.0 1 step below, as per DN-GEO-03031 Table 10.3	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0028
43	BCIDB-JAC-DFS-0013-10-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z10	A01	Yes	A9745	A9840	City-Bound	N11 Stillorgan Road	80	Relaxation	Road Design	Cross-Section	DN-PAV- 03026 Table 2.3	Cross-Section - Footpath ends behind bus stop. Narrows locally to 1.5m at shared landing. Extreme Limit - 1.3m, Required - 2.0m	Footpath narrows locally at pinchpoint to 1.5m	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0028
Zone 11												Zone 11									
Zone 12												Zone 12									
44	BCIDB-JAC-RFS-0013-12-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z12	A01	Yes	A 12060	A 12175	Bray-bound	N11 Bray Road	80	Relaxation	Road Design	Vertical Alignment	DN-GEO-03031 Table 10.3	Vertical alignment - K45.317 crest curve Minimum required = K55.0 desirable minimum, k30.0 1 step below as per DN-GEO-03031 Table 10.3	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0035
45	BCIDB-JAC-RFS-0013-12-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z12	A01	Yes	A 14185	A 13196	Bray-bound	Dublin Road	50	Permitted Reduction	Road Design	Stopping Sight Distance	DMURS Figure 4.3	Forward Sight Distance - SB Mainline SSD - 36m. Desired min SSD - 49m	Forward Sight Distance is as per existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0035
Zone 13												Zone 13									
Zone 14												Zone 14									
46	BCIDB-JAC-DFS-0013-14-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z14	A01	Yes	A13485	A13755	City-Bound	N11 Bray Road	80	Relaxation	Road Design	Cross-Section	DN-PAV- 03026 Table 2.3	Cross-Section - Footpath narrows to 1.6m to match existing on approach to Cherrywood Road Extreme Limit - 1.3m, Required - 2.0m	Footpath narrows to match existing	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0040

Ref. No.	Departure Reference	Scheme	Route	Phased Project	Designer	Zone	Alignment Number	Mainline?	Chainage Start	Chainage End	Direction	Location Description	Design Speed (km/h)	Relaxation / Departure / Deviation	Departure Category (Road Design, Structures, etc)	Departure Type (e.g. Horizontal Geometry, Vertical Geometry, Cross Section etc.)	Standard Required	Item	Relaxation Justification	Additional Information and Supporting Documentation List	Drawing No.
47	BCIDB-JAC-RFS-0013-14-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z14	A01	Yes	A13700	A13855	Bray-bound	N11 Bray Road	80	Relaxation	Road Design	Horizontal Alignment	DN-GEO-03031 Table 10.3	Horizontal Alignment - 441m radius. Min required = 510m desirable minimum, 360 1 step below as per DN-GEO-03031 Table 10.3	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0039/ 0040
Zone 15																					
48	BCIDB-JAC-RFS-0013-15-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	A01	Yes	A14715	A14755	Bray-bound	Dublin Road	50	Permitted Reduction	Road Design	Horizontal Alignment	DMURS Table 4.3	Horizontal Alignment - 92m radius. Min required = 104m with adverse camber of 2.5%, 82 with superelevation of 2.5%	Matches existing alignment. Improving it has an adverse affect on the adjacent boundaries and would require additional land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0042
49	BCIDB-JAC-RFS-0013-15-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	G01	No	G 145	G 175	North-bound	Shanganagh Road	30	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - approximately 1.8m to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
50	BCIDB-JAC-RFS-0013-15-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z15	H01	No	H 45	H 80	City-bound	Corbawn Lane	30	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - 2 way cycle track - 3.0m. Minimum required - 2.5m, Desired - 3.25m	3.0m 2-way cycle track is provided over a length of 45m to avoid land take.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
Zone 16																					
51	BCIDB-JAC-RFS-0013-16-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15175	A 15205	Bray-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.8m to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0043
52	BCIDB-JAC-RFS-0013-16-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 15605	A 15630	Bray-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.8m to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows over a length of 30m to approximately 1.8m to tie into existing boundary.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0044 / 0045
53	BCIDB-JAC-RFS-0013-16-004	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z16	A01	Yes	A 16020	A 16040	Bray-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - SB Footpath varies - approximately 1.8m to match existing. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows over a length of 20m to approximately 1.8m to tie into existing boundary.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0046
Zone 17																					
54	BCIDB-JAC-RFS-0013-17-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z17	A01	Yes	A 16120	A 16140	City-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - pinch point of approximately 1.8m. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrowed to 1.8m pinch point to tie into existing boundary wall	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0046
55	BCIDB-JAC-RFS-0013-17-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z17	A01	Yes	A 16220	A 16230	City-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath varies - pinch point of approximately 1.8m. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrowed to 1.9m pinch point to tie into existing boundary wall	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0046
56	BCIDB-JAC-RFS-0013-17-003	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z17	A01	Yes	A 16975	A 16990	City-bound	Dublin Road	50	Permitted Reduction	Road Design	Cross-Section	DMURS Figure 4.34	Cross-Section - NB Footpath approximately 1.8m. Permitted Reduction - 1.8m, Desired - 2.0m	Footpath locally narrows over a length of 15m to 1.8m to tie into existing boundary wall.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0048/ 0049
Zone 18																					
57	BCIDB-JAC-RFS-0013-18-001	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z18	A01	Yes	A 18165	A 18290	Both	Castle Street	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB and SB Cycletrack varies - approximately 1.75m. Minimum required 1.5m, Desired width 2.0m	Cycletrack locally narrows over a length of 125m to 1.75m to accommodate the bus stop and minimising impact to the adjacent proposed development site	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0052
58	BCIDB-JAC-RFS-0013-18-002	Bus Connects	CBC13 - Bray to CC	Stage (ii) Preliminary Design	Jacobs Engineering Ireland Ltd.	Z18	A01	Yes	A 18355	A 18480	Both	Castle Street	50	Permitted Reduction	Road Design	Cross-Section	National Cycle Manual Section 7.2	Cross-Section - NB and SB Cycletrack varies - approximately 1.5m. Minimum required 1.5m, Desired width 2.0m	Cycletrack locally narrows over a length of 125m to 1.5m to tie in to existing.	Drawing No	BCIDB-JAC-GEO_GA-0013_XX_00-DR-CR-0052

The background is a vibrant red field with several abstract geometric elements. In the top-left corner, there is a green quarter-circle and a blue semi-circle. In the top-right, a white circle is partially visible within a blue shape. A large white circle is centered in the upper-middle section, surrounded by a blue ring. In the bottom-left, there is a blue shape with a white circle inside, and a larger blue shape with a white circle inside. In the bottom-right, there is a large green semi-circle and a red semi-circle with a white outline. The text is positioned on the left side of the page.

Appendix C2
Design Compliance
Certificate

DESIGN COMPLIANCE CERTIFICATE

Scheme Name: Bray to City Centre Core Bus Corridor Scheme

Scheme Location:

Bray to City Centre Core Bus Corridor Scheme which has an overall length of approximately 18.5km and commences at the junction of Leeson Street Lower and Earlsfort Terrace on St. Stephen’s Green. The Proposed Scheme is routed via Leeson Street Lower and Upper, Sussex Road and continues along Morehampton Road and Donnybrook Road, through Donnybrook Village and on to the Stillorgan Road, serving the proposed UCD Bus Interchange via the Stillorgan Road Overbridge at Belfield. The Proposed Scheme then continues on the Stillorgan Road, which carries on to the Bray Road to Loughlinstown Roundabout, and then is routed via the Dublin Road to St. Anne’s Church and then continues south through Shankill village, Wilford Junction and along the Dublin Road until it terminates on Castle Street in Bray, on the north side of the River Dargle crossing, in the County of Dublin and County of Wicklow within the Dublin City Council (DCC), Dun Laoghaire-Rathdown County Council (DLRCC) and Wicklow County Council (WCC) administrative areas.

I, Ruchi Sharma, CERTIFY that reasonable professional skill, care and diligence has been taken by us with a view to securing that the above works have been designed and completed (delete as required) in conformity with the requirements of Department of Transport Circular NGSG 02-2022 and the associated National Table.

The following key and relevant design standards and guidelines were utilised and complied with:

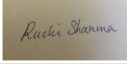
No	Item
	Section 2.2 of the Preliminary Design Report (linked below) which outlines the design standards and guidelines utilised and complied with. https://brayscheme.ie/

I confirm that works which are not in compliance with the appropriate standard or national table have had Relaxations or Departures applied in accordance with the requirements of circular NGSG 02-2022 and are hereby attached to this Certificate.

Refer to Appendix C of the Preliminary Design Report which lists the Departures and Derogations from standards (linked below). This Schedule of Departures and Derogations is also Appended to this Compliance Certificate.

<https://brayscheme.ie/>

This certificate shall be retained on file for inspection or submission to the TII, NTA or DoT as required.

Signed  Dated 19/05/2023.

Title Scheme Lead.

Organisation JACOBS Engineering Ireland Limited.

Qualification: BEng, MS University Year 1998.

Qualification: CEng, Engineers Ireland Year 2012.