

## Appendix 3: Pedestrian priority

Pedestrian Priority areas 1 and 2 with the footprint of the Bank on Safety scheme in blue/block colour is shown in Figure 1.

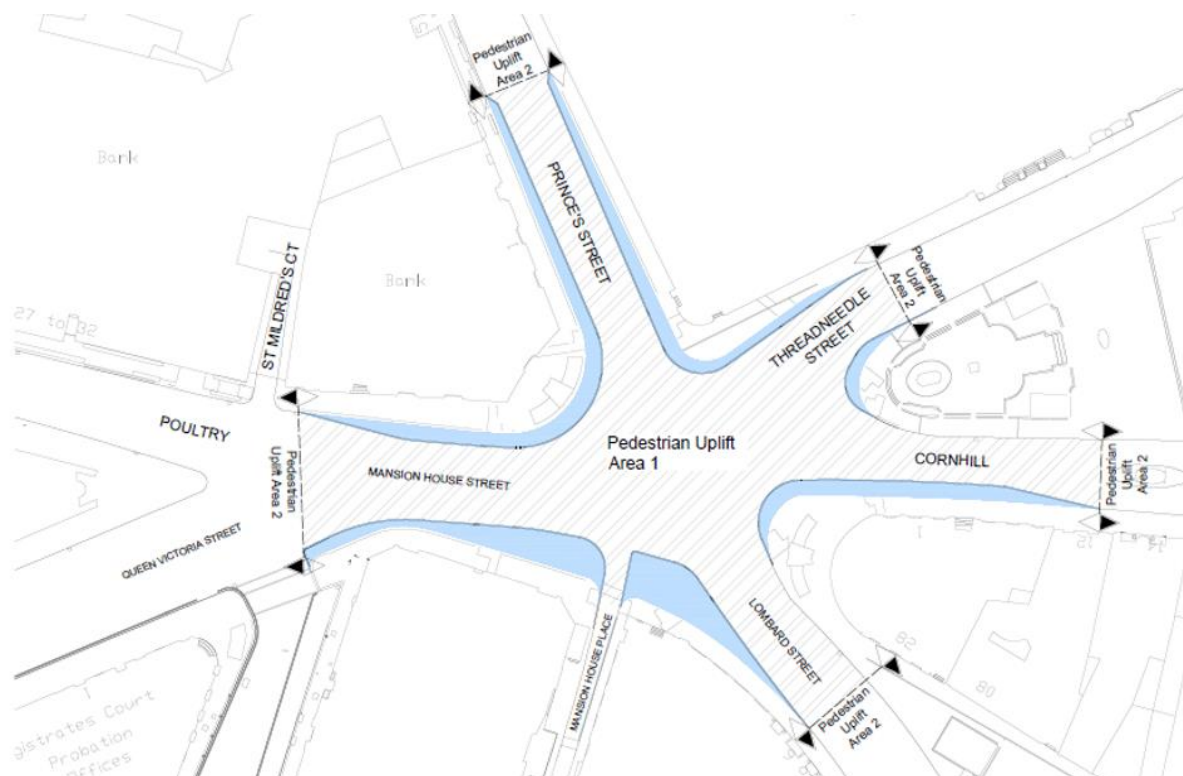


Figure 1 – pedestrian areas 1 and 2, as used in the main report, outlined.

### Reprioritised space

Since reporting the possible increases in footway space at G3. Options 1, 2 and 3 have been reviewed and revised to develop designs that mitigate the majority of the large bus journey time increases. This has been done whilst aiming to maintain significant benefits for people who walk by footway widening and providing shorter crossing distances. The results of these changes are highlighted in the tables below.

Table 1 provides the potential increase in space that could be reprioritised for pedestrian use as reported in the Gateway 3 report in May 2020. The total includes the recently completed Bank on Safety scheme which provides an additional 600m<sup>2</sup>. This shows the total to the formal area available for pedestrians in 2018 prior to any changes taking place

Table 1: Possible total Incremental increase in space that could be reprioritised as reported at G3

Option	Bank on Safety (m <sup>2</sup> ) Area 1	All Change at Bank (m <sup>2</sup> ) Area 1	All Change at Bank (m <sup>2</sup> ) Area 2	Total area of combined schemes
1	600	703	1060	<b>2363</b>
2	600	531	882	<b>2013</b>

3	600	552	683	<b>1835</b>
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With the design changes that have taken place to accommodate the mitigation measures within the junction to bring the forecast journey time impacts down to remain within the budget and timeframe of the project, Table 2 provides the revised areas that could be reprioritised to pedestrians.

Table 2: Possible total Incremental increase in space that could be reprioritised as reported at G4

Option	Bank on Safety (m <sup>2</sup> ) Area 1	All Change at Bank (m <sup>2</sup> ) Area 1	All Change at Bank (m <sup>2</sup> ) Area 2	Total area of combined schemes
1	600	619	912	<b>2131</b>
2	600	479	641	<b>1720</b>
3	600	402	551	<b>1553</b>

When considering the additional space to be provided by the All Change at Bank project (excluding the 600m<sup>2</sup> temporarily provided by the Bank on Safety scheme) Table 3 compares the Gateway 3 to the Gateway 4 estimates. This is for the combined Area 1 and 2 spaces.

Table 3: possible reprioritised space reported at G3 and G4 in addition to the Bank on Safety 600m<sup>2</sup>

Option	All Change at Bank combined increase at G3 (m <sup>2</sup> )	All Change at Bank combined increase at G4 (m <sup>2</sup> )
1	1,763	1,531
2	1,413	1,120
3	1,235	953

Table 4 shows the percentage change for each of the three options and for each area between the Gateway 3 estimates and the Gateway 4 estimates.

Table 4:

Option	All Change at Bank Area 1 (m <sup>2</sup> )	All Change at Bank Area 2 (m <sup>2</sup> )	Combined increase (m <sup>2</sup> )	% change to G3 Area 1	% change to G3 Area 2	% change to G3 Combined increase
1	619	912	1,531	-12	-14	-13
2	479	641	1,120	-10	-27	-21
3	402	551	953	-27	-19	-23

### Crossing Distances

With widening the footways and tightening the geometry of the junction, the formal pedestrian crossing distances are changed. A comparison of crossing distances has been made and the results are in the table below.

The results show that all 3 of the design options provide shorter crossing distances when compared against the recently constructed Bank on Safety scheme. There are seven formal pedestrian crossings across the junction.

Table 5: Pedestrian Crossing distance comparisons

	Bank on Safety (m)	Option 1 (m)	Option 2 (m)	Option 3 (m)
Poultry	12.6	7.4	7.4	4.7
Mansion House Street	11.0	6.4	6.4	6.8
Princess Street	8.4	4.0	7.9	8.2
Threadneedle Street	10.1	4.0	4.0	9.0
Cornhill	8.8	8.0	8.0	9.2
King William Street	10.2	9.9	9.9	9.9
Queen Victoria Street	13.2	9.7	9.7	8.8

A comparison of crossing widths has also been made. The width of a crossing impacts the pedestrian comfort level of the crossing. The results are in the Table 6. All three of the designs have been developed and achieve the same width in each option. They have been compared to the improved crossing widths achieved in the Bank on Safety Scheme. Any of the options will achieve an increase in width of between approximately 25 to 88 percent.

Table 6: proposed Crossing widths at Bank

	Bank on Safety (m)	Option 1 (m)	Option 2 (m)	Option 3 (m)	Comparison of options against BoS (% increase)
Poultry	3.2	6.0	6.0	6.0	88
Mansion House Street	4.8	7.0	7.0	7.0	46
Princess Street	4.8	8.0	8.0	8.0	67
Threadneedle Street	4.0	6.0	6.0	6.0	50
Cornhill	4.0	6.0	6.0	6.0	50
King William Street	4.8	6.0	6.0	6.0	25
Queen Victoria Street	2.8	4.0	4.0	4.0	43

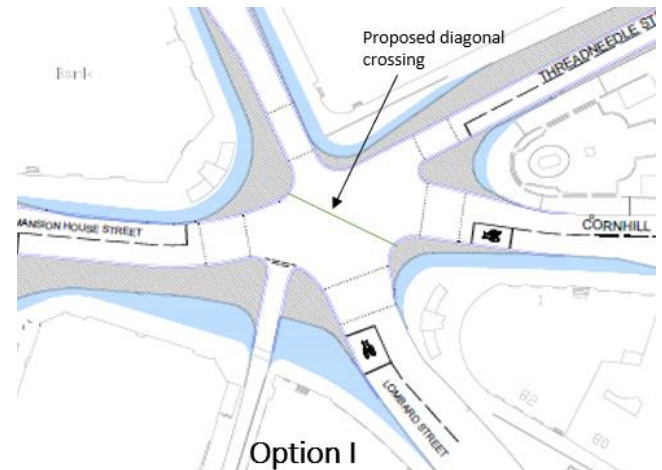
The potential of installing a diagonal crossing at Bank was investigated and the crossing distances are shown in the table 7.

A diagonal crossing would help to relieve congestion on footways, particularly where pedestrian volumes are high; provide a reduction of walking distances and times, particularly where pedestrians would otherwise use two crossings to reach their intended destination.

Table 7: Diagonal crossing distances at Bank

	Crossing distance (metres)	Additional crossing times (seconds)
Option 1	18	8
Option 2	24	11
Option 3	21	9

Location for diagonal crossing



## Pedestrian Comfort Levels

Table 8 below provides the calculated pedestrian comfort levels at 17 locations around Bank. The columns show the results at each location for before any changes were made at Bank (2018 PCL's), after Bank on Safety footway changes were made (2020 estimated PCL's) and then the estimated comfort levels for each of the three options. All PCL's assume 2018 pedestrian flows.

Table 8 highlights areas of footway where despite the current work, comfort levels are still likely to be very uncomfortable and therefore the All Change at Bank project has looked to relieve these areas in its design. These are shaded Blue. Those that meet or exceed the Transport strategy aim of B+ are shaded Green, and those that are close to are shaded yellow.

Sites 7 and 8 are really outside the scope of the revised project area (January 2019 report), however the project team are looking at ways that improvements could be made and whether they could be afforded within the project budget. A temporary scheme has been implemented as part of the COVID -19 transport recovery measures and will be monitored.

The numbered sites are shown on Figure 2.

Table 8: Pedestrian comfort levels – Pre/ Post Bank on Safety Scheme and proposed options

Site description	Site plan reference	Pre-Scheme Peak hr flow worst case PCL	Bank on Safety Peak hr flow worst case PCL	Option 1 Peak hr flow worst case PCL	Option 2 Peak hr flow worst case PCL	Option 3 Peak hr flow worst case PCL
Princes Street western footway	1	E	C-	C+	C-	C-
Princes Street eastern footway	2	D	C+	B	C+	C+
Threadneedle footway	3	E	E	B-	C-	E
Cornhill RE footway	4	B-	B-	B-	B-	B-
Cornhill southern footway east	5	C+	C+	C+	C+	C+
Cornhill southern footway west	6	B	A-	A-	A-	A-
Lombard 1	7	F	F	F	F	F
Lombard 2	8	F	F	F	F	F
Lombard 3	9	C	C	C	C	C
Lombard 4	10	C-	C-	C	C-	C-
MH1	11	D	B+	A-	A-	A-
MH2	12	E	C-	B+	B+	B+
MH3	13	B-	B+	B+	B+	B+
MH4	14	D	B-	B+	B	B
QVS1	15	A-	A-	A	A	A
QVS2	16	A	A	A	A	A+
Poultry 1	17	C+	C+	B	B	B



Figure 2 site reference plan for locations of Pedestrian comfort levels.

