## Appendix 5 – Risk Assessment

No	Item of Risk	Potential Impact	Inherent Risk		Control Measures	Control Measure	Residual Risk	
			Impact	Likelihood		Managed by	Impact	Likelihood
1	Resourcing capacity and ability to programme in necessary stats diversions by the statutory undertakers in line with the works programme.	Delay to works commencing, extended works programme and cost overruns. NPIF funding lost if not used by end of March 2018	High	Medium	On-going stakeholder consultation and dialogue has already reduced the amount of works required. Co-ordination meetings being held to agree programming of remaining works. The appointed Contractor will be contracted to plan, manage and coordinate Statutory Undertaker diversions in accordance with the specific requirements detailed in the contract.	Project Manager, Contractor	Medium	Medium
2	Unidentified Statutory Undertakers equipment.	Cost and time overruns. NPIF funding lost if not used by end of March 2018	High	High	We have undertaken Ground Penetration Radar (GPR) surveys of the site, and further recent trial pits. Close liaison with the Statutory Undertakers to ensure accurate information is available to the Contractor. Flag up through Early Warning Notice procedure and work collectively to mitigate impact on the project cost / programme.	Project Manager	Medium	Low
3	Construction cost and/or programme increases after works have commenced on site (e.g. late amendments to design/earthorks solution or Lighting foundation details)	Funding above the allocated contingency sum not identified. NPIF funding lost if not used by end of March 2018	Medium	Low	Detailed estimates have been used to build up scheme costs including contingency provision. Continued discussions required with the site team, Contractor to mitigate risks and raise early warnings. If contingency is not enough apply value engineering and consider descoping.	Project Manager, Site team, Contractor	Low	Low
4	Disruption to road users and impact on businesses during the construction stage.	Delays to highway users/ loss of trade.	High	High	The Contractor is to work with the Project Manager and Traffic Management Services to further investigate traffic management controls to implement the works with least overall impact to users. Undertake as much of the earthworks operations as possible before implementing the lane closure to remove the retaining wall and complete infill. Introduce pro-active traffic monitoring during the works. Businesses/members of the public to be informed prior to start of works of the likely disruption, the diversion routes and advised to use other modes of transport.	Project Manager, Traffic Management Services, Contractor	Medium	Medium
5	Impact of other highway proposals on securing road space	Delay to works commencing & extended programme due to working hour restrictions that may be imposed.	High	High	Close liaison with Traffic Manager to coordinate these works with Paradise and Metro etc. Work closely with the other delivery partners manage impact to the highway users. We need to complete the earthworks by Christmas to avoid loss of NPIF funding.	Project Manager, Traffic Management Services	High	Medium
6	Disruption to businesses during the construction stage.	Loss of trade.	High	High	There will be ongoing dialogue with the businesses in the areaa throughout the works and access will be maintained. Careful planning, phasing and consideration to be made of the construction programme to ensure disruption is kept to a minimum. Under current legislation there is no provision for compensation for loss of trade as a result of works carried out by highway authorities.	Project Manager, Traffic Management Services, Contractor	Low	Low
7	Outdoor/Signature digital sign relocation (problems/delays)	Delays earthworks operations	High	Medium	Working with sign owner to agree works, but they are currently in a Planning appeal process to get a larger sign. This may not fit within agreed location if appeal won.	Project Manager / Site supervisors/Contractor	Medium	Medium
8	Asbestos found within subways	Prevents proposed improvement works or delays them.	High	Medium	This does not affect the main earthworks / TM but may delay or prevent the proposed PFI upgrade of the subways. It may also delay or prevent the CCTV future proofing provsion (see below)	Contractor	Medium	Medium
9	CCTV Requirements not covered	Costs exceed budget	Medium	Low	Working with BCC CCTV team and Amey to move the existing camera <u>and</u> fund 'future proofing' provision for cameras (e.g. ducting / chambers) within the current works. Revenue budget for additional cameras is not available, currently, but scheme will look to minimise unnecessary future capital costs	Project Manager / Site supervisors/Contractor	Low	Low
10	Change to PFI programme means works cannot be coordinated	Increased impact on road users and reduced cost benefit of joint working	Medium	Low	Amey are working to ensure that <u>all</u> proposed works on the junction are coordinated	Project Manager / Contractor	Low	Low