Scenario 1: Low density

3,500 dwellings

				Local Plan Phase 3									Local Plan Phase 4								Local Plan Phase 5						
Site	**Plot**	**Development type**	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
National Grid	b	Homes (mkt+affd):	265					53	53	53	53	53							
	b	Workspace/office sq m (GEA):	742										742						
	b	Retail/soc/community sq m (GEA):	400										400						
Ballymore	c,h	Homes (mkt+affd):	1,458					292	292	292	292	292							
	c,h	Workspace/office sq m (GEA):	4,237								2,119	2,119							
	c,h	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Sainsbury's	d,f,g	Homes (mkt+affd):	928										186	186	186	186	186		
	d,f,g	Workspace/office sq m (GEA):	2,521								1,261	1,261							
	d,f,g	Retail/soc/community sq m (all; GEA at Sainsbury):	12,056					4,019	4,019	4,019									
North Pole	h,j,k,l,m,n,c	Homes (mkt+affd):	850								170	170	170	170	170				
	h,j,k,l,m,n,c	Workspace/office sq m (GEA):	2,500													1250	1250		
	h,j,k,l,m,n,c	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Total		Homes (mkt+affd):	3,500					345	345	345	515	515	356	356	356	186	186		
		Workspace/office sq m (GEA):	10,000								3,379	3,379	742			1,250	1,250		
		Retail/soc/community sq m (all; GEA at Sainsbury):	13,256					4,019	4,019	4,019			1,200						

Scenario 2: Medium density

4,200 dwellings

				Local Plan Phase 3									Local Plan Phase 4								Local Plan Phase 5						
Site	**Plot**	**Development type**	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
National Grid	b	Homes (mkt+affd):	315					63	63	63	63	63							
	b	Workspace/office sq m (GEA):	742										742						
	b	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Ballymore	c,h	Homes (mkt+affd):	1,733					347	347	347	347	347							
	c,h	Workspace/office sq m (GEA):	4,237								2,119	2,119							
	c,h	Retail/soc/community sq m (Sainsbury GEA):	400										400						
Sainsbury's	d,f,g	Homes (mkt+affd):	1,103										221	221	221	221	221		
	d,f,g	Workspace/office sq m (GEA):	2,521								1,261	1,261							
	d,f,g	Retail/soc/community sq m (all; GEA at Sainsbury):	12,056					4,019	4,019	4,019									
North Pole	h,j,k,l,m,n,c	Homes (mkt+affd):	1,050								210	210	210	210	210				
	h,j,k,l,m,n,c	Workspace/office sq m (GEA):	2,500													1,250	1,250		
	h,j,k,l,m,n,c	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Total		Homes (mkt+affd):	4,200					410	410	410	620	620	431	431	431	221	221		
		Workspace/office sq m (GEA):	10,000								3,379	3,379	742			1,250	1,250		
		Retail/soc/community sq m (all; GEA at Sainsbury):	13,256					4,019	4,019	4,019			1,200						

Scenario 3: High density

5,000 dwellings

				Local Plan Phase 3									Local Plan Phase 4								Local Plan Phase 5						
Site	**Plot**	**Development type**	**Total**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
National Grid	b	Homes (mkt+affd):	375					75	75	75	75	75							
	b	Workspace/office sq m (GEA):	742										742						
	b	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Ballymore	c,h	Homes (mkt+affd):	2,063					413	413	413	413	413							
	c,h	Workspace/office sq m (GEA):	4,237								2,119	2,119							
	c,h	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Sainsbury's	d,f,g	Homes (mkt+affd):	1,313										263	263	263	263	263		
	d,f,g	Workspace/office sq m (GEA):	2,521								1,261	1,261							
	d,f,g	Retail/soc/community sq m (all; GEA at Sainsbury):	12,056					4,019	4,019	4,019									
North Pole	h,j,k,l,m,n,c	Homes (mkt+affd):	1,250								250	250	250	250	250				
	h,j,k,l,m,n,c	Workspace/office sq m (GEA):	2,500													1,250	1,250		
	h,j,k,l,m,n,c	Retail/soc/community sq m (all; GEA at Sainsbury):	400										400						
Total		Homes (mkt+affd):	5,000					488	488	488	738	738	513	513	513	263	263		
		Workspace/office sq m (GEA):	10,000								3,379	3,379	742			1,250	1,250		
		Retail/soc/community sq m (all; GEA at Sainsbury):	13,256					4,019	4,019	4,019			1,200						

CHP and heat network

What infrastructure is needed?

Infrastructure costs for development wide heat network. This assumes heat network has to be delivered as per GLA policy (which requires that developers prioritise connection to existing or planned decentralised energy networks where feasible - see London Plan Chapter 5). The study has assessed other local networks but the nearest existing heat network to the site is the Pimlico network over 6km as the crow flies. There are two planned networks nearby, the closest of these being the proposed Hammersmith & Fulham heat network which is approx 1.4 km via the road network to the southern boundary of North Pole. However connecting to this proposed network, should it come forward could be at least £3m in pipework infrastructure costs (at £2000/m installed). Therefore for the purposes of this assessment, to respond to the GLA policy, we have considered the provision on an on site heat network.

The heat network infrastructure has been assumed to comprise 3 elements:
- HN01) Energy Centre
- HN02) Primary Heat Pipework
- HN03) Primary Heat Substations

At this stage of the project and initial, highlevel cost estimates have been made for these elements across the three scenarios.

Currently assumed to be a single energy centre serving the entire development located in the National Grid area. The scale of the energy centre is subject to a number of factors which are beyond the scope of the current study. However the size of the demand connected to the network will be a factor so the size and cost of energy centre will vary across the difference development scales and densities in Scenarios 1-3.

How can infrastructure be paid for?

At this stage it is assumed that the developer will have to fund the network. It is possible that an ESCO may deliver the network and recoup the cost through future customer charging.

Notes, issues and recommendations

Other key assumptions

- No (gas) re-inforcement included but from engagement with National Grid, based on the current development assumptions, this would not be required.
- Assume gas CHP energy centre with gas boiler back up
- No allowance for (physical) private electric wire which may or may not be part of CHP scheme
- Demand based on residential elements only. No allowance for commercial elements at this stage. Residential demand will make up the vast majority of total heat demand/load
- Peak loads based on diversified loads using CIBSE Heat networks: Code of Practice for the UK CP1 2015. Assessed a 1.8kW peak heat demand per dwelling for energy centre sizing
- North Pole scenarios (A and C) include £1m contingency for rail crossing
- Secondary/internal pipework/HIUs costs are EXCLUDED (nothing beyond primary heat substations)

Costs have currently been phased in line with development programme. In practice some of the heat infrastructure costs (energy centre, pipework) may be delivered in advance of development built out and connection so timings should be reviewed once further details are known.

Onsite primary infrastructure

Project name	Energy centre
Project ref	HN 01
About the project	The costs associated with the energy centre. Currently assumed to be a single energy centre serving the entire development located in the National Grid area. The scale of the energy centre is subject to a number of factors which are beyond the scope of the current study. However the size of the demand connected to the network will be a factor. · No (gas) re-inforcement included · No allowance for (physical) private elect wire which may or may not be part of CHP scheme · Demand based on resi only. No allowance for commercial elements at this stage. · Peak loads based on diversified loads using CIBSE Heat networks: Code of Practice for the UK (2015) which assumes 1.8kW peak heat demand per dwelling for energy centre sizing Assuming heat network has to be delivered (as per GLA policy, which requires that developers prioritise connection to existing or planned decentralised energy networks where feasible (see London Plan Chapter 5)
What priority?	1) critical enabling
Which lead organisation?	Developer
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																	
	Gross cost (£000s)	6681					658	658	658	982	982	679	679	679	354	354		
	Cost attrib National Grid (£000s)	506					101	101	101	101	101							
	Cost attrib Ballymore (£000s)	2782					556	556	556	556	556							
	Cost attrib Sainsbury's (£000s)	1770										354	354	354	354	354		
	Cost attrib North Pole (£000s)	1622								324	324	324	324	324				
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	6681					658	658	658	982	982	679	679	679	354	354		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario																	
	Gross cost (£000s)	8017					782	782	782	1182	1182	822	822	822	421	421		
	Cost attrib National Grid (£000s)	601					120	120	120	120	120							
	Cost attrib Ballymore (£000s)	3307					661	661	661	661	661							
	Cost attrib Sainsbury's (£000s)	2104										421	421	421	421	421		
	Cost attrib North Pole (£000s)	2004								401	401	401	401	401				
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	8017					782	782	782	1182	1182	822	822	822	421	421		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario																	
	Gross cost (£000s)	9544					931	931	931	1408	1408	978	978	978	501	501		
	Cost attrib National Grid (£000s)	716					143	143	143	143	143							
	Cost attrib Ballymore (£000s)	3937					787	787	787	787	787							
	Cost attrib Sainsbury's (£000s)	2505										501	501	501	501	501		
	Cost attrib North Pole (£000s)	2386								477	477	477	477	477				
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	9544					931	931	931	1408	1408	978	978	978	501	501		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	Primary heat pipework
Project ref	HN 02
About the project	Other key assumptions to note · £1m contingency for rail crossing · Secondary/internal pipework/HIUs costs are EXCLUDED (nothing beyond primary heat substations) Assuming heat network has to be delivered (as per GLA policy, which requires that developers prioritise connection to existing or planned decentralised energy networks where feasible (see London Plan Chapter 5)
What priority?	1) critical enabling
Which lead organisation?	Developer
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																	
	Gross cost (£000s)	4854					478	478	478	714	714	493	493	493	257	257		
	Cost attrib National Grid (£000s)	368					74	74	74	74	74							
	Cost attrib Ballymore (£000s)	2022					404	404	404	404	404							
	Cost attrib Sainsbury's (£000s)	1286										257	257	257	257	257		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1179								236	236	236	236	236				
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	4854					478	478	478	714	714	493	493	493	257	257		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Scenario 2	Project details for this scenario																	
	Gross cost (£000s)	4854				473	473	473	716	716	498	498	498	255	255			
	Cost attrib National Grid (£000s)	364				73	73	73	73	73								
	Cost attrib Ballymore (£000s)	2002				400	400	400	400	400								
	Cost attrib Sainsbury's (£000s)	1274									255	255	255	255	255			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1214							243	243	243	243	243					
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	4854				473	473	473	716	716	498	498	498	255	255			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario																	
	Gross cost (£000s)	4854				473	473	473	716	716	498	498	498	255	255			
	Cost attrib National Grid (£000s)	364				73	73	73	73	73								
	Cost attrib Ballymore (£000s)	2002				400	400	400	400	400								
	Cost attrib Sainsbury's (£000s)	1274									255	255	255	255	255			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1214							243	243	243	243	243					
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	4854				473	473	473	716	716	498	498	498	255	255			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Primary heat substations																
Project ref		HN 03																
About the project		Peak loads based on diversified loads using CIBSE. Both hot water and heating included and currently assessed a 1.98kW peak heat demand per dwelling for heat substation sizing.																
		Assuming heat network has to be delivered (as per GLA policy, which requires that developers prioritise connection to existing or planned decentralised energy networks where feasible (see London Plan Chapter 5)																
What priority?		1) critical enabling																
Which lead organisation?		Developer																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	Project details for this scenario																	
	Gross cost (£000s)	1027				101	101	101	151	151	104	104	104	54	54			
	Cost attrib National Grid (£000s)	78				16	16	16	16	16								
	Cost attrib Ballymore (£000s)	428				86	86	86	86	86								
	Cost attrib Sainsbury's (£000s)	272									54	54	54	54	54			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	250							50	50	50	50	50					
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1027				101	101	101	151	151	104	104	104	54	54			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario																	
	Gross cost (£000s)	1233				120	120	120	182	182	126	126	126	65	65			
	Cost attrib National Grid (£000s)	92				18	18	18	18	18								
	Cost attrib Ballymore (£000s)	509				102	102	102	102	102								
	Cost attrib Sainsbury's (£000s)	324									65	65	65	65	65			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	308							62	62	62	62	62					
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1233				120	120	120	182	182	126	126	126	65	65			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario																	
	Gross cost (£000s)	1468				143	143	143	216	216	150	150	150	77	77			
	Cost attrib National Grid (£000s)	110				22	22	22	22	22								
	Cost attrib Ballymore (£000s)	605				121	121	121	121	121								
	Cost attrib Sainsbury's (£000s)	385									77	77	77	77	77			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	367							73	73	73	73	73					
	Cost attrib to Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1468				143	143	143	216	216	150	150	150	77	77			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Electricity

What infrastructure is needed?

From initial correspondence with UK Power Networks (UKPN), they believe that the Kensal Canalside Development could be supplied from their existing Primary substation located approximately 4Km from the development area.
In order to distribute the electricity between the primary substation and end users, UKPN will install new 11kV HV rings and provide several local substations. Further distribution would be provided through installation of high voltage 11kV HV cabling and LV cabling.

To serve development on the south of the railway, it is proposed that cabling would cross a proposed utility bridge in conjunction with access to the station.
It may be necessary to establish two additional primary substations (132/11kV) each will require a land take of 1,200m2 to distribute the new electricity requirements to the study area. The location will be entirely dependent on load consultation, land availability and legal requirements.

This level of detail will be established as the masterplan is developed and consolation with UKPN is progressed.
Electrical plant removal works may be required as part of the site remediation process, including the removal or relocation of localised distribution substations within the development areas and the diversion of the associated HV and LV network. The extent of the works required will be established when the masterplan is developed and consultation with UKPN is progressed.

How can infrastructure be paid for?

At this stage it is assumed that the cost of this infrastructure would be pro-rata'd (based on capacity requirements) between the relevant developers

There may be opportunity to share the benefits of the network reinforcement, depending on need in the local area at the time of commencement and also the final expected demand of the proposed Kensal Canalside development. This would allow further developers to off-set the infrastructure cost.

There could also be opportunity to discuss proposals with Independent Distribution Network Operators (IDNOs), as it might be possible to off-set start-up costs with future revenue. This is typically an option when retaining a single IDNO to provide and supply a single utility, or otherwise joint utilities (typically gas and electricity) which could result in a greater cost off-set, but less flexibility for the developer. This would require in depth engagement and full understanding of all benefits and weaknesses.

Notes, issues and recommendations

The electricity costs can be partitioned into the following categories:
• On-site primary infrastructure (primary substation);
• Off-site 11kV (HV) cable networks infrastructure;
• On-site distribution infrastructure 11kV (HV) distribution substations, 11kV (HV) cable network and LV cable networks (<400V);

All costs are estimated based on a high level review of demand, layout of the site and the current status of the local electricity network. Whilst the proposals are considered to be robust, there is scope for change of costs and required infrastructure in the time period prior to commencement.

It is recommended that engagement with UKPN/ IDNOs is undertaken at an early stage in order to fully understand the reinforcement requirements, including the footprint of the primary substation and delivery duration. From past experience a primary substation could require a significant lead-in time due to manufacturing of approximately 18-24 months (excluding design and planning).

Onsite primary infrastructure

Project name	Onsite 33kv primary substation
Project ref	UE01
About the project	Required if Point of connection from existing Main Susbstation (MSS) is not available
What priority?	1) critical enabling
Which lead organisation?	UK Power Networks (LPN)
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																		
	Gross cost (£000s)	3000				320	320	320	320	320	440	240	240	240	240				
	Cost attrib National Grid (£000s)	150	5			25	25	25	25	25	25								
	Cost attrib Ballymore (£000s)	1050	35			175	175	175	175	175	175								
	Cost attrib Sainsbury's (£000s)	1200	40			120	120	120	120	120	120	120	120	120	120				
	Cost attrib North Pole (£000s)	600	20								120	120	120	120	120				
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	3000				320	320	320	320	320	440	240	240	240	240				
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 2	Project details for this scenario																		
	Gross cost (£000s)	3000				297	297	297	297	297	447	267	267	267	267				
	Cost attrib National Grid (£000s)	60	2			10	10	10	10	10	10								
	Cost attrib Ballymore (£000s)	1020	34			170	170	170	170	170	170								
	Cost attrib Sainsbury's (£000s)	1170	39			117	117	117	117	117	117	117	117	117	117				
	Cost attrib North Pole (£000s)	750	25								150	150	150	150	150				
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	3000				297	297	297	297	297	447	267	267	267	267				
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 3	Project details for this scenario																		
	Gross cost (£000s)	3000				295	295	295	295	295	445	270	270	270	270				
	Cost attrib National Grid (£000s)	150	5			25	25	25	25	25	25								
	Cost attrib Ballymore (£000s)	900	30			150	150	150	150	150	150								
	Cost attrib Sainsbury's (£000s)	1200	40			120	120	120	120	120	120	120	120	120	120				
	Cost attrib North Pole (£000s)	750	25								150	150	150	150	150				
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	3000				295	295	295	295	295	445	270	270	270	270				
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		

Off-site distribution infrastructure

Project name	HV cable network from existing MSS to the site
Project ref	UE02
About the project	Required if Point of connection from existing MSS is available
What priority?	1) critical enabling
Which lead organisation?	UK Power Networks (LPN)
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																		
	Gross cost (£000s)	8500				8500													
	Cost attrib National Grid (£000s)	1275	15			1275													
	Cost attrib Ballymore (£000s)	3400	40			3400													
	Cost attrib Sainsbury's (£000s)	3825	45			3825													
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	8500				8500													
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 2	Project details for this scenario																		
	Gross cost (£000s)	8500				8500													
	Cost attrib National Grid (£000s)	595	7			595													
	Cost attrib Ballymore (£000s)	3740	44			3740													
	Cost attrib Sainsbury's (£000s)	4165	49			4165													
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	8500				8500													
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 3	Project details for this scenario																		
	Gross cost (£000s)	8500				8500													
	Cost attrib National Grid (£000s)	850	10			850													
	Cost attrib Ballymore (£000s)	3400	40			3400													
	Cost attrib Sainsbury's (£000s)	4250	50			4250													
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		

Scenario 1	Project details for this scenario																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	8500				8500														
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Project name		LV cable network																		
Project ref		UE03																		
About the project		Quantity varies between scenarios based on load																		
What priority?		1) critical enabling																		
Which lead organisation?		UK Power Networks (LPN)																		
Project delivery risk																				
Strategic/site specific? Which site?		Strategic cross-site																		
Scenario		**Total (£000s)**	**%**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	
Scenario 1	Project details for this scenario	Specific to each scenario requirements																		
	Gross cost (£000s)	250				27	27	27	27	27	37	20	20	20	20					
	Cost attrib National Grid (£000s)	13	5			2	2	2	2	2	2									
	Cost attrib Ballymore (£000s)	88	35			15	15	15	15	15	15									
	Cost attrib Sainsbury's (£000s)	100	40			10	10	10	10	10	10	10	10	10	10					
	Cost attrib North Pole (£000s)	50	20								10	10	10	10	10					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	250				27	27	27	27	27	37	20	20	20	20					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 2	Project details for this scenario	Specific to each scenario requirements																		
	Gross cost (£000s)	300				30	30	30	30	30	45	27	27	27	27					
	Cost attrib National Grid (£000s)	6	2			1	1	1	1	1	1									
	Cost attrib Ballymore (£000s)	102	34			17	17	17	17	17	17									
	Cost attrib Sainsbury's (£000s)	117	39			12	12	12	12	12	12	12	12	12	12					
	Cost attrib North Pole (£000s)	75	25								15	15	15	15	15					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	300				30	30	30	30	30	45	27	27	27	27					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 3	Project details for this scenario	Specific to each scenario requirements																		
	Gross cost (£000s)	350				34	34	34	34	34	52	32	32	32	32					
	Cost attrib National Grid (£000s)	18	5			3	3	3	3	3	3									
	Cost attrib Ballymore (£000s)	105	30			18	18	18	18	18	18									
	Cost attrib Sainsbury's (£000s)	140	40			14	14	14	14	14	14	14	14	14	14					
	Cost attrib North Pole (£000s)	88	25								18	18	18	18	18					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	350				34	34	34	34	34	52	32	32	32	32					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Components																				
Project name		Pocket 11kV Substations																		
Project ref		UE04																		
About the project		Quantity varies between scenarios based on load																		
What priority?		1) critical enabling																		
Which lead organisation?		UK Power Networks (LPN)																		
Project delivery risk																				
Strategic/site specific? Which site?		Strategic cross-site																		
Scenario		**Total (£000s)**	**%**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	
Scenario 1	Project details for this scenario																			
	Gross cost (£000s)	760				81	81	81	81	81	111	61	61	61	61					
	Cost attrib National Grid (£000s)	38	5			6	6	6	6	6	6									
	Cost attrib Ballymore (£000s)	266	35			44	44	44	44	44	44									
	Cost attrib Sainsbury's (£000s)	304	40			30	30	30	30	30	30	30	30	30	30					
	Cost attrib North Pole (£000s)	152	20								30	30	30	30	30					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	760				81	81	81	81	81	111	61	61	61	61					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 2	Project details for this scenario																			
	Gross cost (£000s)	880				87	87	87	87	87	131	78	78	78	78					
	Cost attrib National Grid (£000s)	18	2			3	3	3	3	3	3									
	Cost attrib Ballymore (£000s)	299	34			50	50	50	50	50	50									
	Cost attrib Sainsbury's (£000s)	343	39			34	34	34	34	34	34	34	34	34	34					
	Cost attrib North Pole (£000s)	220	25								44	44	44	44	44					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	880				87	87	87	87	87	131	78	78	78	78					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 3	Project details for this scenario																			
	Gross cost (£000s)	1040				102	102	102	102	102	154	94	94	94	94					
	Cost attrib National Grid (£000s)	52	5			9	9	9	9	9	9									
	Cost attrib Ballymore (£000s)	312	30			52	52	52	52	52	52									
	Cost attrib Sainsbury's (£000s)	416	40			42	42	42	42	42	42	42	42	42	42					
	Cost attrib North Pole (£000s)	260	25								52	52	52	52	52					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	1040				102	102	102	102	102	154	94	94	94	94					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Disconnections and diversionary works																				
Project name		HV Cable Network																		
Project ref		UE04																		
About the project		Quantity varies between scenarios based on load																		
What priority?		1) critical enabling																		
Which lead organisation?		UK Power Networks (LPN)																		
Project delivery risk																				
Strategic/site specific? Which site?		Strategic cross-site																		
Scenario		**Total (£000s)**	**%**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	
Scenario 1	Project details for this scenario																			
	Gross cost (£000s)	400				43	43	43	43	43	59	32	32	32	32					
	Cost attrib National Grid (£000s)	20	5			3	3	3	3	3	3									
	Cost attrib Ballymore (£000s)	140	35			23	23	23	23	23	23									
	Cost attrib Sainsbury's (£000s)	160	40			16	16	16	16	16	16	16	16	16	16					
	Cost attrib North Pole (£000s)	80	20								16	16	16	16	16					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	400				43	43	43	43	43	59	32	32	32	32					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 2	Project details for this scenario																			
	Gross cost (£000s)	450				45	45	45	45	45	67	40	40	40	40					
	Cost attrib National Grid (£000s)	9	2			2	2	2	2	2	2									
	Cost attrib Ballymore (£000s)	153	34			26	26	26	26	26	26									
	Cost attrib Sainsbury's (£000s)	176	39			18	18	18	18	18	18	18	18	18	18					
	Cost attrib North Pole (£000s)	113	25								23	23	23	23	23					
	Cost attrib Other (£000s)																			
	Mainstream funding assumed (£000s)																			
	S106/S278 funding sought (£000s)																			
	Developer funding assumed (£000s)	450				45	45	45	45	45	67	40	40	40	40					
	MUSCO/ESCO/utility funding assumed (£000s)																			
	Other funding assumed (£000s)																			
Scenario 3	Project details for this scenario																			

Scenario 1	Project details for this scenario												
	Gross cost (£000s)	500		49	49	49	49	49	74	45	45	45	45
	Cost attrib National Grid (£000s)	25	5	4	4	4	4	4	4				
	Cost attrib Ballymore (£000s)	150	30	25	25	25	25	25	25				
	Cost attrib Sainsbury's (£000s)	200	40	20	20	20	20	20	20	20	20	20	20
	Cost attrib North Pole (£000s)	125	25						25	25	25	25	25
	Cost attrib Other (£000s)												
	Mainstream funding assumed (£000s)												
	S106/S278 funding sought (£000s)												
	Developer funding assumed (£000s)	500		49	49	49	49	49	74	45	45	45	45
	MUSCO/ESCO/utility funding assumed (£000s)												
	Other funding assumed (£000s)												

Gas

What infrastructure is needed?

From initial correspondence with Cadent, it has been identified that there is currently sufficient capacity in the local gas network, with no need for any network reinforcement works.

It has been confirmed by Cadent, based on the current gas network the proposed development could be served directly from the existing low pressure (LP) and medium pressure (MP) gas network via a pressure reducing station (PRS). Where connections to the existing MP mains are required, a PRS would be priovided in a suitable location and would reduce to LP gas and distribute to the development areas.

How can infrastructure be paid for?

At this stage it is assumed that the cost of this infrastructure would be pro-rata'd between the relevant developers.

There could also be opportunity to discuss proposals with independent network operators (IDNOs), as it might be possible to off-set start-up costs with future revenue. This is typically an option when retaining a single IDNO to provide and supply a single utility, or otherwise joint utilities (typically gas and electricity) which could result in a greater cost off-set, but less flexibility for the developer. This would require in depth engagement and full understanding of all benefits and weaknesses.

Notes, issues and recommendations

The gas costs can be partitioned into the following categories:
• On-site distribution infrastructure (LP gas mains);
• Components (PRS);

All costs are estimated based on a high level review of demand, layout of the site and the current status of the local gas network. Whilst the proposals are considered to be robust, there is scope for change of costs and required infrastructure in the time period prior to commencement.

It is recommended that engagement with Cadent, is undertaken at an early stage to confirm that capacity is still available at the time of commencement, or whether any reinforcement is required.

In addition it is recommended that engagement with Cadent Gas/IDNOs are undertaken at an early stage in order to understand the most beneficial supply strategy (eg whether ad-hoc, but flexible arrangements are made on a plot by plot basis, or whether a strategy could be agreed to serve the entire site at the expense of future flexibility).

On-site distribution infrastructure

Project name	LP pipe network
Project ref	UG01
About the project	Required in all scenarios. Lengths pro-rata'd per load each year.
What priority?	1) critical enabling
Which lead organisation?	National Grid Gas
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																		
	Gross cost (£000s)	150				25	25	2	17	17	36		14	14					
	Cost attrib National Grid (£000s)	24	16			8	8				8								
	Cost attrib Ballymore (£000s)	74	49			15	15		15	15	15								
	Cost attrib Sainsbury's (£000s)	12	8			2	2	2	2	2									
	Cost attrib North Pole (£000s)	41	27								14		14	14					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	150				25	25	2	17	17	36		14	14					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 2	Project details for this scenario																		
	Gross cost (£000s)	165				35	35	4	22	22	36		6	6					
	Cost attrib National Grid (£000s)	36	22			12	12				12								
	Cost attrib Ballymore (£000s)	94	57			19	19		19	19	19								
	Cost attrib Sainsbury's (£000s)	18	11			4	4	4	4	4									
	Cost attrib North Pole (£000s)	17	10								6		6	6					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	165				35	35	4	22	22	36		6	6					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 3	Project details for this scenario																		
	Gross cost (£000s)	175				29	29	3	20	20	42		16	16					
	Cost attrib National Grid (£000s)	28	16			9	9				9								
	Cost attrib Ballymore (£000s)	86	49			17	17		17	17	17								
	Cost attrib Sainsbury's (£000s)	14	8			3	3	3	3	3									
	Cost attrib Canalside House (£000s)																		
	Cost attrib North Pole (£000s)	47	27								16		16	16					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	175				29	29	3	20	20	42		16	16					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		

Components

Project name	Pressure Reducing Station (PRS)
Project ref	UG02
About the project	Required in all scenarios.
What priority?	1) critical enabling
Which lead organisation?	National Grid Gas
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario																		
	Gross cost (£000s)	150				31	31	6	21	21	30		5	5					
	Cost attrib National Grid (£000s)	30	20			10	10				10								
	Cost attrib Ballymore (£000s)	75	50			15	15		15	15	15								
	Cost attrib Sainsbury's (£000s)	30	20			6	6	6	6	6									
	Cost attrib North Pole (£000s)	15	10								5		5	5					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	150				31	31	6	21	21	30		5	5					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 2	Project details for this scenario																		
	Gross cost (£000s)	150				33	33	6	23	23	29		3	3					
	Cost attrib National Grid (£000s)	30	20			10	10				10								
	Cost attrib Ballymore (£000s)	83	55			17	17		17	17	17								
	Cost attrib Sainsbury's (£000s)	30	20			6	6	6	6	6									
	Cost attrib North Pole (£000s)	8	5								3		3	3					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	150				33	33	6	23	23	29		3	3					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 3	Project details for this scenario																		
	Gross cost (£000s)	150				31	31	6	21	21	30		5	5					
	Cost attrib National Grid (£000s)	30	20			10	10				10								
	Cost attrib Ballymore (£000s)	75	50			15	15		15	15	15								
	Cost attrib Sainsbury's (£000s)	30	20			6	6	6	6	6									
	Cost attrib North Pole (£000s)	15	10								5		5	5					
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	150				31	31	6	21	21	30		5	5					
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		

Components

Project name	MP Diversion works
Project ref	UG03
About the project	Required in all scenarios.
What priority?	1) critical enabling

Scenario 1	Project details for this scenario																		
Which lead organisation?		Cadent																	
Project delivery risk																			
Strategic/site specific? Which site?		Strategic cross-site																	
Scenario		**Total (£000s)**	**%**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	Project details for this scenario																		
	Gross cost (£000s)	200				100	100												
	Cost attrib National Grid (£000s)	200	100			100	100												
	Cost attrib Ballymore (£000s)																		
	Cost attrib Sainsbury's (£000s)																		
	Cost attrib Canalside House (£000s)																		
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	200				100	100												
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 2	Project details for this scenario																		
	Gross cost (£000s)	200				100	100												
	Cost attrib National Grid (£000s)	200	100			100	100												
	Cost attrib Ballymore (£000s)																		
	Cost attrib Sainsbury's (£000s)																		
	Cost attrib Canalside House (£000s)																		
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	200				100	100												
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		
Scenario 3	Project details for this scenario																		
	Gross cost (£000s)	200				100	100												
	Cost attrib National Grid (£000s)	200	100			100	100												
	Cost attrib Ballymore (£000s)																		
	Cost attrib Sainsbury's (£000s)																		
	Cost attrib Canalside House (£000s)																		
	Cost attrib North Pole (£000s)																		
	Cost attrib Other (£000s)																		
	Mainstream funding assumed (£000s)																		
	S106/S278 funding sought (£000s)																		
	Developer funding assumed (£000s)	200				100	100												
	MUSCO/ESCO/utility funding assumed (£000s)																		
	Other funding assumed (£000s)																		

Telecoms

What infrastructure is needed?

Openreach (OR)
Fibre to the Premise (FTTP) will be offered free to the developer for all residential sites greater than 30 units by OR.

Virgin Media (VM)
VM offer a similar fibre technology to OR called Hybrid Fibre Coaxial (HFC), which uses coaxial cables to connect to buildings, and provides a high-speed connection.

Distribution will be provided from adjacent cabling and joint boxes. To serve development on the south of the railway, it is proposed that cabling would cross a proposed utility bridge in conjunction with access to the station.

How can infrastructure be paid for?

Telecoms materials such as joint box covers (standard conceret infill) and ducts are typically provided free issue to the developer by Openreach or Virgin Media.
The cost of builders work in connection (trenching, backfill, laying of ducts and construction of chambers) could be pro-rata'd between the relevant developers.
For larger residential developers it is sometimes possible to negotiate for the telecoms provider to pay the developer per dwelling connected and this should be reviewed further. We have assumed this position here.

Notes, issues and recommendations

All telecoms costs are associated with BWIC for new duct networks and are estimated based on a high level review the site layout.
Whilst the proposals are considered to be robust, there is scope for change of costs and required infrastructure in the time period prior to commencement.
Given that an entirely new duct network will be established, it is highly likely that the most up-to-date telecommunications systems will implemented. However, it will be advantageous for RBKC to engage with OR, VM and other telecoms providers early to ensure that the site forms part of their future investment plans.

On-site distribution infrastructure

Project name	Distribution cables and cabinets
Project ref	UT01
About the project	Required in all circumstances.
What priority?	1) critical enabling
Which lead organisation?	Openreach and Virgin Media
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scenario 1	Project details for this scenario																	
	Gross cost (£000s)	300				32	32	32	32	32	44	24	24	24	24			
	Cost attrib National Grid (£000s)	15	5			3	3	3	3	3	3							
	Cost attrib Ballymore (£000s)	105	35			18	18	18	18	18	18							
	Cost attrib Sainsbury's (£000s)	120	40			12	12	12	12	12	12	12	12	12	12			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	60	20								12	12	12	12	12			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)	300				32	32	32	32	32	44	24	24	24	24			
	Other funding assumed (£000s)																	
Scenario 2	Project details for this scenario																	
	Gross cost (£000s)	350				35	35	35	35	35	52	31	31	31	31			
	Cost attrib National Grid (£000s)	7	2			1	1	1	1	1	1							
	Cost attrib Ballymore (£000s)	119	34			20	20	20	20	20	20							
	Cost attrib Sainsbury's (£000s)	137	39			14	14	14	14	14	14	14	14	14	14			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	88	25								18	18	18	18	18			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)	311				35	35	35	35	35	52	31	31	31	31			
	Other funding assumed (£000s)																	
Scenario 3	Project details for this scenario																	
	Gross cost (£000s)	400				39	39	39	39	39	59	36	36	36	36			
	Cost attrib National Grid (£000s)	20	5			3	3	3	3	3	3							
	Cost attrib Ballymore (£000s)	120	30			20	20	20	20	20	20							
	Cost attrib Sainsbury's (£000s)	160	40			16	16	16	16	16	16	16	16	16	16			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	100	25								20	20	20	20	20			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)	482				39	39	39	39	39	59	36	36	36	36			
	Other funding assumed (£000s)																	

Potable Water

What infrastructure is needed?

It is expected that there is sufficient capacity in the local network to serve the site.

To serve the site, it is anticipated that two off-site water mains will require up-sizing to provide sufficient water quantity. This includes 210m of 300mm dia. water main in Ladbroke Grove upsizing to 450mm dia. and 220m of 150mm dia. water main upsizing to 300mm in Ladbroke Grove and Barlby Road.

Water will then be distributed on the site via water mains of diameters between 63mm and 200mm dia.

Water main diversion works will be required as part of the site remediation process, and this would include the diversion of 160m of 150mm dia. main across the Ballymore land.

How can infrastructure be paid for?

At this stage it is assumed that the cost of this infrastructure would be pro-rata'd between the relevant developers.

Notes, issues and recommendations

The water costs can be partitioned into the following categories:
• On-site distribution infrastructure (on-site water mains);

All costs are estimated based on a high level review of demand, layout of the site and the current status of the local water network. Whilst the proposals are considered to be robust, there is scope for change of costs and required infrastructure in the time period prior to commencement.

On-site distribution infrastructure

Project name	Installation of on-site water mains
Project ref	UPW-03
About the project	Required in all scenarios. Lengths pro-rata'd per load each year
What priority?	1) critical enabling
Which lead organisation?	Thames Water
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	%	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scenario 1	Project details for this scenario																	
	Gross cost (£000s)	500				55	55	55	55	55	78	37	37	37	37			
	Cost attrib National Grid (£000s)	50	10			8	8	8	8	8	8							
	Cost attrib Ballymore (£000s)	200	40			33	33	33	33	33	33							
	Cost attrib Sainsbury's (£000s)	135	27			14	14	14	14	14	14	14	14	14	14			
	Cost attrib North Pole (£000s)	115	23								23	23	23	23	23			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)	500				55	55	55	55	55	78	37	37	37	37			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding assumed (£000s)																	
Scenario 2	Project details for this scenario																	
	Gross cost (£000s)	550				62	62	62	62	62	84	39	39	39	39			
	Cost attrib National Grid (£000s)	55	10			9	9	9	9	9	9							
	Cost attrib Ballymore (£000s)	220	40			37	37	37	37	37	37							
	Cost attrib Sainsbury's (£000s)	165	30			17	17	17	17	17	17	17	17	17	17			
	Cost attrib North Pole (£000s)	110	20								22	22	22	22	22			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)	550				62	62	62	62	62	84	39	39	39	39			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding assumed (£000s)																	
Scenario 3	Project details for this scenario																	
	Gross cost (£000s)	600				63	63	63	63	63	93	48	48	48	48			
	Cost attrib National Grid (£000s)	30	5			5	5	5	5	5	5							
	Cost attrib Ballymore (£000s)	240	40			40	40	40	40	40	40							
	Cost attrib Sainsbury's (£000s)	180	30			18	18	18	18	18	18	18	18	18	18			
	Cost attrib North Pole (£000s)	150	25								30	30	30	30	30			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Developer funding assumed (£000s)	600				63	63	63	63	63	93	48	48	48	48			
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding assumed (£000s)																	

Waste

What infrastructure is needed?

Although current waste policy states that a dedicated facility is required on-site, given the land constraints and the existing facilities in RBKC it is unrealistic
This is very valuable land next to a Crossrail station, and RBKC already has existing waste facilities that should be set up to accommodate growth within the borough. Without a detailed on-site waste or anaerobic digestion plant viability study (which is beyond the scope of this study, and indeed of planning policy) we must make some assumptions based on the level of existing provision and land availability. Rather than assume that a dedicated facility is provided on site, we have assumed that the site makes a contribution towards off-site provision. Our rationale for this, which remains unchanged from the 2016 DIFS, is set out here.

There is a Materials Recovery Facility in Wandsworth where material is taken to
RBKC forms part of the Western Riverside Waste Alliance (MRWA) which consists of four London boroughs and has contracts in place with Cory Environmental for the management of waste. To help to facilitate this, a Materials Recovery Facility (MRF) of a nominal capacity of around 84,000 tonnes has been brought online at Smugglers Wharf Wandsworth. Materials are delivered to this facility by lorry and following the recovery of suitable materials any residual waste is transfer loaded onto barges for the final disposal of residual waste at Cory's London Belvedere Energy from Waste Plant.

Education of the public will have a part to play in reducing waste
RBKC is responsible for the collection of domestic waste and notwithstanding any efforts to educate the public to avoid producing waste it is probable that any net increase in population and economic activity will increase the amount of waste produced. Any increased tonnages of both unrecoverable and recoverable materials will impact directly upon the RBKC collection service and other supplementary services such as the provision of Household Waste Recycling Centres.

The existing contracts should have provision for dealing with additional waste
A waste plan must take some view on the levels of waste management provision within the borough and whether any facilities are needed. If capacity is available at existing sites then this will benefit all parties due to economies of scale and sale of secondary materials. Whilst we are not currently privy to the contract with Cory it is likely that there will be growth clauses within it designed to cover the cost of processing additional waste quantities arising from for example population growth and one would expect that the contract is sufficiently robust such that additional costs would be covered by the additional rating revenue derived although this should be investigated. However what is not clear is what the unforeseen impact may be on existing services. For example if the existing MRF has spare capacity then it could most probably absorb the additional input of collected recyclables ,but if it is at capacity then changes at least to its planning permission may be required if for example an additional shift or an extension in working hours is required to process the waste. Additionally the storage of more residual waste may be necessary as its onward transmission may be influenced by tidal and navigational restrictions.

It is unlikely that there is currently capacity within the collection system
More fundamentally however it is unlikely that there is currently spare collection capacity within the collection system and given that urban areas are difficult to collect from this may necessitate additional collection capacity in the form of Refuse Collection Vehicles. It is assumed that private concerns such as businesses will need to enter into a commercial contract with waste collectors. In addition, following a discussion with RBKC we understand that there is insufficient depot space within the north of the borough to meet the future growth. There would therefore need to be provision for a new waste depot to support future growth. It would be unreasonable to assume that Kensal Canalside growth would be required to pay for the new facility, however, a contribution may be required. We have therefore assumed a contribution in our costings, pro-rata with build-out. The precise level of contribution will need review.

How can infrastructure be paid for?

We assume that the costs will be through S106 contributions.

Notes, issues and recommendations

We assume on-site storage capacity for waste for each property, and servicing access to the properties, forms part of the development build costs.

Waste	
Project name	Waste collection contribution
Project ref	n/a
About the project	This sum represents a contribution towards the provision of new waste collection services for householders. Commercial users would make their own private arrangements.
What priority?	3) high priority
Which lead organisation?	Royal Borough of Kensington and Chelsea
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Allowance for an RCV Depot																
	Gross cost (£000s)	1750					171	171	171	258	258	179	179	179	92	92		
	Cost attrib National Grid (£000s)	131					26	26	26	26	26							
	Cost attrib Ballymore (£000s)	722					144	144	144	144	144							
	Cost attrib Sainsbury's (£000s)	459										92	92	92	92	92		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	438								88	88	88	88	88				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1750					171	171	171	258	258	179	179	179	92	92		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Allowance for an RCV Depot																
	Gross cost (£000s)	2100					205	205	205	310	310	215	215	215	110	110		
	Cost attrib National Grid (£000s)	158					32	32	32	32	32							
	Cost attrib Ballymore (£000s)	866					173	173	173	173	173							
	Cost attrib Sainsbury's (£000s)	551										110	110	110	110	110		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	525								105	105	105	105	105				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	2100					205	205	205	310	310	215	215	215	110	110		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Allowance for an RCV Depot																
	Gross cost (£000s)	2500					244	244	244	369	369	256	256	256	131	131		
	Cost attrib National Grid (£000s)	188					38	38	38	38	38							
	Cost attrib Ballymore (£000s)	1031					206	206	206	206	206							
	Cost attrib Sainsbury's (£000s)	656										131	131	131	131	131		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	625								125	125	125	125	125				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	2500					244	244	244	369	369	256	256	256	131	131		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Sewerage, Drainage and SUDS

What infrastructure is needed?

It is assumed that no off-site works are required in order to discharge surface and foul water effluent from the site into the local network.

The site is proposed to drain via gravity for both surface and foul water and will therefore require varying sizes of sewers.

In order to reduce flood risk, attenuation and discharge control facilitates will be provided to reduce the site discharge rate to greenfield rates, which is currently required through planning policy. Due to expected land cost, it is expected that this attenuation volume would be provided underground in storage tanks, beneath car parking and public open space, rather than within large overground attenuation ponds, which would reduce developable area.

There is a large (1327mm x 838mm) foul water trunk sewer/ culvert running north to south bisecting the site. This will need to be diverted in order to reduce obstruction for the proposed future development.

It is proposed to retain the sectionof the foul water trunk sewer which underpasses the canal and Network Rail land, and to divert 415m of the culvert that crosses the Ballymore land. So no new infrastructure is required to cross the railway to access the southern North Pole site.

How can infrastructure be paid for?

It is assumed that the cost of this infrastructure would be pro-rata'd between the relevant developers.

Notes, issues and recommendations

The drainage costs can be partitioned into the following categories:
• On-site distribution infrastructure (foul water pipes);
All costs are estimated based on a high level review of site development area and estimated discharge rates. Whilst the proposals are considered to be robust, there is scope for change of costs and required infrastructure in the time period prior to commencement.

It is recommended that at the early stages of design, levels and layouts are reviewed in order to prepare overarching drainage strategies, to ensure that no pumping stations are required, or to ensure that masterplanning is undertaken in a way which removes the need for such infrastructure.

On-site distribution infrastructure

Project name	Foul water pipe network
Project ref	UFW-01
About the project	Required in all scenarios. Lengths pro-rata'd per load each year.
What priority?	1) critical enabling
Which lead organisation?	Thames Water
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scenario 1	Project details for this scenario																
	Gross cost (£000s)	500			57	57	57	57	57	77	35	35	35	35			
	Cost attrib National Grid (£000s)	50			8	8	8	8	8	8							
	Cost attrib Ballymore (£000s)	200			33	33	33	33	33	33							
	Cost attrib Sainsbury's (£000s)	150			15	15	15	15	15	15	15	15	15	15			
	Cost attrib North Pole (£000s)	100								20	20	20	20	20			
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)	500			57	57	57	57	57	77	35	35	35	35			
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																
Scenario 2	Project details for this scenario																
	Gross cost (£000s)	550			58	58	58	58	58	85	44	44	44	44			
	Cost attrib National Grid (£000s)	28			5	5	5	5	5	5							
	Cost attrib Ballymore (£000s)	220			37	37	37	37	37	37							
	Cost attrib Sainsbury's (£000s)	165			17	17	17	17	17	17	17	17	17	17			
	Cost attrib North Pole (£000s)	138								28	28	28	28	28			
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)	550			58	58	58	58	58	85	44	44	44	44			
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																
Scenario 3	Project details for this scenario																
	Gross cost (£000s)	600			63	63	63	63	63	93	48	48	48	48			
	Cost attrib National Grid (£000s)	30			5	5	5	5	5	5							
	Cost attrib Ballymore (£000s)	240			40	40	40	40	40	40							
	Cost attrib Sainsbury's (£000s)	180			18	18	18	18	18	18	18	18	18	18			
	Cost attrib North Pole (£000s)	150								30	30	30	30	30			
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)	600			63	63	63	63	63	93	48	48	48	48			
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																

Project name	North Pole sewer diversion
Project ref	UFW-02
About the project	Required as part of the GWML bridge and wider enabling works for the North Pole site; assumed that work will take place in 2023/2024 (in line with bridge delivery)
What priority?	1) critical enabling
Which lead organisation?	Thames Water
Project delivery risk	
Strategic/site specific? Which site?	North Pole

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Scenario 1	Project details for this scenario																
	Gross cost (£000s)	5000				2500	2500										
	Cost attrib National Grid (£000s)																
	Cost attrib Ballymore (£000s)																
	Cost attrib Sainsbury's (£000s)																
	Cost attrib North Pole (£000s)	5000				2500	2500										
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)																
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																
Scenario 2	Project details for this scenario																
	Gross cost (£000s)	5000				2500	2500										
	Cost attrib National Grid (£000s)																
	Cost attrib Ballymore (£000s)																
	Cost attrib Sainsbury's (£000s)																
	Cost attrib North Pole (£000s)	5000				2500	2500										
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)																
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																
Scenario 3	Project details for this scenario																
	Gross cost (£000s)	5000				2500	2500										
	Cost attrib National Grid (£000s)																
	Cost attrib Ballymore (£000s)																
	Cost attrib Sainsbury's (£000s)																
	Cost attrib North Pole (£000s)	5000				2500	2500										
	Cost attrib Other (£000s)																
	Mainstream funding assumed (£000s)																
	S106/S278 funding sought (£000s)																
	Developer funding assumed (£000s)																
	MUSCO/ESCO/utility funding assumed (£000s)																
	Other funding assumed (£000s)																

Transport

What infrastructure is needed?

Transport infrastructure is critical to the delivery of the Kensal Canalside site. We have summarised our thinking in the summary and conclusions of the DIFS report.

The main infrastructure improvements put forward as part of this development is as follows:
- Pedestrian and cycle bridges
- Bridges across GWML
- Junction improvements and highway realignment

Unlike the 2016 DIFS, the Crossrail station is treated as a sensitivity on the basecase scenarios i.e. we are not assuming that the station will be delivered. Or, if it is, it may come forward beyond the timescales of this study.

How can infrastructure be paid for?

The transport infrastructure for this site, in particular the Crossrail station, is aimed to be paid for through the value of the development. Due to the Canalside location and hopeful proximity to the Crossrail station, it is believed that there will be a very high value attached to each unit and therefore the unit sales will be able to pay for the cost of the development.

Notes, issues and recommendations

In terms of the transport infrastructure, in principle, the costs involved have been split based on residential quantum across the landholdings. However, the attribution of cost to the North Pole site depends on benefits arising; for example, the new vehicle access to the canalside site (north of the railway line) does not benefit the North Pole, therefore no cost is apportioned.

All Bus infrastructure costs have been allocated to 2022 as it is envisaged that all bus infrastructure would be required from the first day of occupation of the site.

All Bus Service costs have been spread over a five year period as this is the likely period of time TfL would require contributions for.

For Crossrail sensitivity, all costs have been spread across 2023 and 2024. Crossrail must be installed in 2024 in order to align with track possessions, the building of the HS2 line and the completion of the station at Old Oak Common.

Any offsite costs regardless of mode have been applied to "Other".

Rail (Crossrail/ Overground)

Project name	Crossrail
Project ref	NR.01
About the project	New Crossrail station located on the northern side of the GWML providing 4-6 trains per hour frequency on the Elizabeth Line. The station would include: two 250m long covered platforms including waiting areas and passenger/train driver information systems; supporting track and signalling works; footbridge with escalators/steps/and lifts to connect the platforms; station building incorporating ticket office/hall, ticket machines, toilets, gateline; and station forecourt to provide bus/taxi, pick-up/drop-off, rail replacement buses and emergency vehicle access. Note there will need to be a fence/wall build to the appropriate standard to separate the development site (north and south) with the railway. We have not included this in our costs, but have assumed that this forms part of the Crossrail works.
What priority?	4) desirable
Which lead organisation?	Royal Borough of Kensington and Chelsea
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Crossrail station																	
	Gross cost (£000s)	150000				75000	75000											
	Cost attrib National Grid (£000s)	11250				5625	5625											
	Cost attrib Ballymore (£000s)	61875				30938	30938											
	Cost attrib Sainsbury's (£000s)	39375				19688	19688											
	Cost attrib North Pole (£000s)	37500				18750	18750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	150000				75000	75000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	See Scenario 1																	
	Gross cost (£000s)	150000				75000	75000											
	Cost attrib National Grid (£000s)	11250				5625	5625											
	Cost attrib Ballymore (£000s)	61875				30938	30938											
	Cost attrib Sainsbury's (£000s)	39375				19688	19688											
	Cost attrib North Pole (£000s)	37500				18750	18750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	150000				75000	75000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	See Scenario 1																	
	Gross cost (£000s)	150000				75000	75000											
	Cost attrib National Grid (£000s)	11250				5625	5625											
	Cost attrib Ballymore (£000s)	61875				30938	30938											
	Cost attrib Sainsbury's (£000s)	39375				19688	19688											
	Cost attrib North Pole (£000s)	37500				18750	18750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	150000				75000	75000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Bus infrastructure

Project name	Bus infrastructure
Project ref	BI.01 and BI.02
About the project	New bus gate, bus stops and two extra bus stands. The exact location and specifications will be determined through detailed design/development of site layout.
What priority?	2) essential mitigation
Which lead organisation?	Transport for London
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1																		
	Gross cost (£000s)	500					500											
	Cost attrib National Grid (£000s)	38					38											
	Cost attrib Ballymore (£000s)	206					206											
	Cost attrib Sainsbury's (£000s)	131					131											
	Cost attrib North Pole (£000s)	125					125											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	500					500											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2																		
	Gross cost (£000s)	500					500											
	Cost attrib National Grid (£000s)	38					38											
	Cost attrib Ballymore (£000s)	206					206											
	Cost attrib Sainsbury's (£000s)	131					131											
	Cost attrib North Pole (£000s)	125					125											
	Cost attrib Other (£000s)	0					0											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	500					500											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3																		
	Gross cost (£000s)	500					500											
	Cost attrib National Grid (£000s)	38					38											
	Cost attrib Ballymore (£000s)	206					206											
	Cost attrib Sainsbury's (£000s)	131					131											
	Cost attrib North Pole (£000s)	125					125											
	Cost attrib Other (£000s)	0					0											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	500					500											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Bus Services																		
Project name		Bus service enhancement (including realignment)																
Project ref		BS.01																
About the project		Requirement based on additional demand generated by new residents, resulting in the need to acquire additional buses. Costs based on £450,000/bus, spread over five years.																
What priority?		1) critical enabling																
Which lead organisation?		Transport for London																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	10 additional buses																	
	Gross cost (£000s)	4500					900	900	900	900	900							
	Cost attrib National Grid (£000s)	338					68	68	68	68	68							
	Cost attrib Ballymore (£000s)	1856					371	371	371	371	371							
	Cost attrib Sainsbury's (£000s)	1181					236	236	236	236	236							
	Cost attrib North Pole (£000s)	1125					225	225	225	225	225							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	4500					900	900	900	900	900							
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	12 additional buses																	
	Gross cost (£000s)	5400					1080	1080	1080	1080	1080							
	Cost attrib National Grid (£000s)	405					81	81	81	81	81							
	Cost attrib Ballymore (£000s)	2228					446	446	446	446	446							
	Cost attrib Sainsbury's (£000s)	1418					284	284	284	284	284							
	Cost attrib North Pole (£000s)	1350					270	270	270	270	270							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	5400					1080	1080	1080	1080	1080							
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	14 additional buses																	
	Gross cost (£000s)	6300					1260	1260	1260	1260	1260							
	Cost attrib National Grid (£000s)	473					95	95	95	95	95							
	Cost attrib Ballymore (£000s)	2599					520	520	520	520	520							
	Cost attrib Sainsbury's (£000s)	1654					331	331	331	331	331							
	Cost attrib North Pole (£000s)	1575					315	315	315	315	315							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	6300					1260	1260	1260	1260	1260							
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Cycling																		
Project name		Parking - On street																
Project ref		CP.01, CP.02, CP.03 and CP.04																
About the project		On-Street cycle parking provision based on London Plan Minimum standards to accommodate short and long stay visitors to the development. Camden Stands are assumed with 2 space per stand.																
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	CP.01																	
	Gross cost (£000s)	34					34											
	Cost attrib National Grid (£000s)	3					3											
	Cost attrib Ballymore (£000s)	14					14											
	Cost attrib Sainsbury's (£000s)	9										9						
	Cost attrib North Pole (£000s)	9								9								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	34					17			9		9						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	CP.02																	
	Gross cost (£000s)	38					38											
	Cost attrib National Grid (£000s)	3					3											
	Cost attrib Ballymore (£000s)	16					16											
	Cost attrib Sainsbury's (£000s)	10										10						
	Cost attrib North Pole (£000s)	10								10								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	28					19			10		10						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	CP.03																	
	Gross cost (£000s)	42					42											
	Cost attrib National Grid (£000s)	3					3											
	Cost attrib Ballymore (£000s)	17					17											
	Cost attrib Sainsbury's (£000s)	11										11						
	Cost attrib North Pole (£000s)	11								11								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	42					20			11		11						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Cycle parking docking stations																
Project ref		CP.05 and CP.06																
About the project		Provide Cycle Hire 2 Docking Stations within Kensal Canalside. The Docking Station would be approximately 25m by 2m which provides the minimum space required for a viable docking station of 27 points.																
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	CP.05																	
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)	79					79											
	Cost attrib Ballymore (£000s)	435					435											
	Cost attrib Sainsbury's (£000s)	277					277											
	Cost attrib North Pole (£000s)	264					264											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	CP.06																	
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)	79					79											
	Cost attrib Ballymore (£000s)	435					435											
	Cost attrib Sainsbury's (£000s)	277					277											
	Cost attrib North Pole (£000s)	264					264											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	CP.05																	
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)	79					79											
	Cost attrib Ballymore (£000s)	435					435											
	Cost attrib Sainsbury's (£000s)	277					277											
	Cost attrib North Pole (£000s)	264					264											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Cycle Routes - Quietway																
Project ref		CR.01																
About the project		New Quietway Route proposals linking North West London with Central London via Harrow Road, Ladbroke Grove or the Grand Union Canal. Costs adjusted to November 2019.																
What priority?		4) desirable																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	CR.01																	
	Gross cost (£000s)	8789					8789											
	Cost attrib National Grid (£000s)	659					659											
	Cost attrib Ballymore (£000s)	3626					3626											
	Cost attrib Sainsbury's (£000s)	2307					2307											
	Cost attrib North Pole (£000s)	2197					2197											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	8789					8789											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	CR.01																	
	Gross cost (£000s)	8789					8789											
	Cost attrib National Grid (£000s)	659					659											
	Cost attrib Ballymore (£000s)	3626					3626											
	Cost attrib Sainsbury's (£000s)	2307					2307											
	Cost attrib North Pole (£000s)	2197					2197											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	8789					8789											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	CR.01																	
	Gross cost (£000s)	8789					8789											
	Cost attrib National Grid (£000s)	659					659											
	Cost attrib Ballymore (£000s)	3626					3626											
	Cost attrib Sainsbury's (£000s)	2307					2307											
	Cost attrib North Pole (£000s)	2197					2197											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	8789					8789											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Highways																		
Project name		Ladbroke Grove/Canal Way																
Project ref		H.01																
About the project		New signalised junction that realigns Kensal Road to create a cross road layout and with staggered pedestrian crossing facilities o the east, south and west arms. The junction has been designed to accommodate traffic demands generated from the high density development scenarios and the consented Wornington Green development.																
What priority?		1) critical enabling																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	H.01																	
	Gross cost (£000s)	879					879											
	Cost attrib National Grid (£000s)	88					88											
	Cost attrib Ballymore (£000s)	483					483											
	Cost attrib Sainsbury's (£000s)	308					308											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	750					750											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.01																	
	Gross cost (£000s)	879					879											
	Cost attrib National Grid (£000s)	88					88											
	Cost attrib Ballymore (£000s)	483					483											
	Cost attrib Sainsbury's (£000s)	308					308											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	750					750											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	H.01																	
	Gross cost (£000s)	879					879											
	Cost attrib National Grid (£000s)	88					88											
	Cost attrib Ballymore (£000s)	483					483											
	Cost attrib Sainsbury's (£000s)	308					308											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	750					750											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Ladbroke Grove/Barlby Road																
Project ref		H.02																
About the project		New signalised junction with pedestrian crossing facilities on the west and south arms.																
What priority?		1) critical enabling																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		North Pole																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	H.02																	
	Gross cost (£000s)	586					586											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	586					586											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	586					586											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.02																	
	Gross cost (£000s)	586					586											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	586					586											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	586					586											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	H.02																	
	Gross cost (£000s)	586					586											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	586					586											

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	586					586											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	New road and pedestrian bridge (over GWML)
Project ref	H.03
About the project	New road and pedestrian bridge over the Great Western Mainline connecting the Kensal Canalside and North Pole Sites. The bridge has a width of approximately 140m including ramps. The width is based on two traffic lanes of 6.5m and two footways of 2.5 each. Costs taken from Alan Baxter Bridge Feasibility Report.
What priority?	1) critical enabling
Which lead organisation?	Network Rail
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	H.03																	
	Gross cost (£000s)	11000					11000											
	Cost attrib National Grid (£000s)	825					825											
	Cost attrib Ballymore (£000s)	4538					4538											
	Cost attrib Sainsbury's (£000s)	2888					2888											
	Cost attrib North Pole (£000s)	2750					2750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	11000					11000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.03																	
	Gross cost (£000s)	11000					11000											
	Cost attrib National Grid (£000s)	825					825											
	Cost attrib Ballymore (£000s)	4538					4538											
	Cost attrib Sainsbury's (£000s)	2888					2888											
	Cost attrib North Pole (£000s)	2750					2750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	11000					11000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	H.03																	
	Gross cost (£000s)	11000					11000											
	Cost attrib National Grid (£000s)	825					825											
	Cost attrib Ballymore (£000s)	4538					4538											
	Cost attrib Sainsbury's (£000s)	2888					2888											
	Cost attrib North Pole (£000s)	2750					2750											
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	11000					11000											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	Canal Way
Project ref	H.04
About the project	Widened and extended road between Ladbroke Grove to accommodate general traffic including HGVs and Buses. Includes 200m section of road, the width of the road is 15m at its narrowest and widening to 20m on the approach to the junction with Ladbroke Grove. A roundabout junction providing access to the Sainsburys superstore and a turnaround for bus routes serving the site; and cycle lanes and bus stops.
What priority?	1) critical enabling
Which lead organisation?	Royal Borough of Kensington and Chelsea
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	H.04																	
	Gross cost (£000s)	2813			2813													
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)	1719			1719													
	Cost attrib Sainsbury's (£000s)	1094			1094													
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2813			2813													
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.04																	
	Gross cost (£000s)	2813			2813													
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)	1719			1719													
	Cost attrib Sainsbury's (£000s)	1094			1094													
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2813			2813													
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	H.04																	
	Gross cost (£000s)	2813			2813													
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)	1719			1719													
	Cost attrib Sainsbury's (£000s)	1094			1094													
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2813			2813													
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	Barlby Street
Project ref	H.05
About the project	New road through North Pole site including controlled pedestrians crossing facilities - The road extends from Barlby Road to Sutton Way but does not provide a vehicular access to Scrubs Lane. - The width of the road (including footways) is 15-18m. - The road includes a new bus stop and 2.5m wide footways on each side of the road.
What priority?	1) critical enabling
Which lead organisation?	Royal Borough of Kensington and Chelsea
Project delivery risk	
Strategic/site specific? Which site?	North Pole

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	H.05																	
	Gross cost (£000s)	3750								3750								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	3750								3750								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	3750								3750								
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.05																	
	Gross cost (£000s)	3750								3750								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	3750								3750								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	3750								3750								
	MUSCO/ESCO/utility funding assumed (£000s)																	

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Other funding sought (£000s)																	
Scenario 3	H.05																	
	Gross cost (£000s)	3750								3750								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	3750								3750								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	3750								3750								
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Barlby Street/Barlby Road																
Project ref		H.06																
About the project		New signalised junction at the end of Barlby Street with full pedestrian crossing facilities. - The junction needs to maintain a vehicular access to adjacent railway land.																
What priority?		1) critical enabling																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	H.06																	
	Gross cost (£000s)	469								469								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	469								469								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	469								469								
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	H.06																	
	Gross cost (£000s)	469								469								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	469								469								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	469								469								
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	H.06																	
	Gross cost (£000s)	469								469								
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)	469								469								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	469								469								
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Walking																		
Project name		Grand Union Canal																
Project ref		W.01																
About the project		Improved pedestrian route along the Grand Union Canal towpath adjacent to the development. Towpath could be shared with cyclists depending on the wider suitability of the route (tbc). The scheme would provide: - 5m wide towpath; and - sealed gravel surfacing.																
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.01																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	2344					2344											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	2344					2344											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.01																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	2344					2344											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	2344					2344											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.01																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	2344					2344											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	2344					2344											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Grand Union Canal																
Project ref		W.02																
About the project		Improved pedestrian route along the Grand Union Canal towpath between the site (Ladbroke Grove road bridge) and Paddington Station. Measures to be confirmed but could include resurfacing and widening of the towpath where achievable. See walking plan for extents of route to be improved.																
What priority?		4) desirable																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.02																	
	Gross cost (£000s)	6446					6446											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	6446					6446											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	6446					6446											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.02																	
	Gross cost (£000s)	6446					6446											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	6446					6446											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	6446					6446											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.02																	
	Gross cost (£000s)	6446					6446											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	6446					6446											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	6446					6446											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Little Wormwood Scrubs recreation ground																
Project ref		W.03																
About the project		New walking and cycle route through/ adjacent to Little Wormwood Scrubs recreation ground to provide a connection between the proposed footbridge (See W6) and Scrubs Lane. Works would include: - New sections of footpath (3m wide); and - Improved (resurfaced/ new lighting) sections of existing footway/ path.																
What priority?		3) high priority																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.03																	
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1055					1055											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2																		
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1055					1055											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.03																	
	Gross cost (£000s)	1055					1055											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1055					1055											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1055					1055											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Kensal Green Cemetery																
Project ref		W.04																
About the project		Enhanced footpaths between the new bridges (see W5 & W7) and Harrow Road. Works to include: - resurfacing; - potential widening; and - appropriate street lighting.																
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Ballymore																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.04																	
	Gross cost (£000s)	1172					1172											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1172					1172											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1172					1172											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.04																	
	Gross cost (£000s)	1172					1172											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1172					1172											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1172					1172											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.04																	
	Gross cost (£000s)	1172					1172											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	1172					1172											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1172					1172											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Little Kensal Green to Kensal Cemetery																
Project ref		W.05																
About the project		New footbridge over the Grand Union Canal linking Kensal Canalside to footpaths through the Kensal Green Cemetery. - Approx. 4.0 m wide shared use pedestrian & cycle bridge. - Approx. 50m including ramps. - Positioned within National Grid site.																
What priority?		1) critical enabling																
Which lead organisation?		N/A																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.05																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.05																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.05																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Canal Square to Kensal Green Cemetery																
Project ref		W.06																
		Second new footbridge over the Grand Union Canal linking through the Kensal Green Cemetery.																
		- Approx. 4.0m wide shared pedestrian & cycle bridge.																
		- Approx. 50m length including ramps.																
About the project																		
What priority?		1) critical enabling																
Which lead organisation?		N/A																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.07																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.07																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.07																	
	Gross cost (£000s)	2344					2344											
	Cost attrib National Grid (£000s)	234					234											
	Cost attrib Ballymore (£000s)	1289					1289											
	Cost attrib Sainsbury's (£000s)	820					820											
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	2344					2344											
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Harrow Road toucan crossing																
Project ref		W.07																
		New Toucan controlled crossing on Harrow Road to facilitate better access to bus stops and easier crossing movements near the Cemetery gates.																
		Located just to the east of the Wakeman Road junction - see walking plan for approximate location of crossing.																
About the project																		
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.08																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.08																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.08																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Harrow Road toucan crossing																
Project ref		W.08																
		New Toucan controlled crossing on Harrow Road to facilitate better access to bus stops and easier crossing movements near the Cemetery gates.																
		Located just to the east of the Wakeman Road junction - see walking plan for approximate location of crossing.																
About the project		No crossing facilities mentioned at Ladbroke Grove/Harrow Road Junction as a proposed scheme is already in place at this location.																
What priority?		2) essential mitigation																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.09																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	W.09																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.09																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Scrubs Lane toucan crossing																
Project ref		W.09																
About the project		New Toucan controlled crossing on Scrubs Lane to facilitate better access to bus stops and Wormwood Scrubs Park.																
What priority?		3) high priority																
Which lead organisation?		Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.11																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2																		
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.11																	
	Gross cost (£000s)	59					59											
	Cost attrib National Grid (£000s)																	
	Cost attrib Ballymore (£000s)																	
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)	59					59											
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	59					59											
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Kensal Canalside and North Pole London Signs																
Project ref		W.10																
About the project		Provide Legible London signs as follows: - up to 4 signs within Kensal Canalside - up to 2 signs with North Pole																
What priority?		1) critical enabling																
Which lead organisation?		Transport for London																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	W.12																	
	Gross cost (£000s)	82					62			21								
	Cost attrib National Grid (£000s)	6					6											
	Cost attrib Ballymore (£000s)	34					34											
	Cost attrib Sainsbury's (£000s)	22					22											
	Cost attrib North Pole (£000s)	21								21								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	82					62			21								
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2																		
	Gross cost (£000s)	82					62			21								
	Cost attrib National Grid (£000s)	6					6											
	Cost attrib Ballymore (£000s)	34					34											
	Cost attrib Sainsbury's (£000s)	22					22											
	Cost attrib North Pole (£000s)	21								21								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	82					62			21								
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	W.12																	
	Gross cost (£000s)	82					62			21								
	Cost attrib National Grid (£000s)	6					6											
	Cost attrib Ballymore (£000s)	34					34											
	Cost attrib Sainsbury's (£000s)	22					22											
	Cost attrib North Pole (£000s)	21								21								
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	82					62			21								
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Education

What infrastructure is needed?

In this section we deal with Primary and Secondary school provision as two projects. Primary schooling includes nursery places and secondary schooling includes sixth form places.

Assessing the future school requirements

The requirement for school places is driven by the annual birth rate, the current school population, movement into and out of the local authority area, housing development, cross border travel to attend schools and the provision of private school places. For the purpose of this assessment we have assumed that some of the demand will be able to be absorbed by existing schools provision, but that new provision will be required.

There are two levels we have considered:

• Primary schools are organised in classes of 30 pupils (there is a statutory maximum of 30 pupils for 4 to 7 years). One class is one Form Entry (FE). Taking the 30 pupils across 7 years of primary school means that primary schools are built in blocks of 210 places. We have assumed that primary schools include an allowance for nursery places and these are additional to primary places. We assume that one FE addition would therefore bring additional capacity for up to 30 children every year after delivery.

• A single secondary school FE is 150 (30 x 5 classes). Adding sixth form (60 students) raises the FE to 210. We consider ages 11 to 18 for our secondary school assessment. We assume that one FE addition would therefore bring additional capacity for up to 30 children every year after delivery.

Growth estimates have been determined using the GLA Calculator

Growth has been apportioned according to growth in the trajectory and for each scenario. We have applied percentage discounts to account for children attending private school (50% for nursery and secondary/sixth form, 10% for primary), and sixth form continuance rates (62.5%). As the OA is right on the boundary of RBKC, we have assumed that up to 20% of children would cross into other boroughs to attend school.

New school provision

We have offset growth estimates against planned school provision. All primary schools are considered near to the site, and are within the borough. Barlby Primary is expected to accommodate 10 new primary spaces a year from 2021, following its upgrade currently under construction. St Francis de Assisi and Oxford Gardens Primary are expected to expand by half an FE each. For these we have therefore assumed additional capacity for 15 primary age children at each. We have assumed that these extensions will be in place when build out of the OA is expected to begin (2024). After discounts are applied, and estimates are offset against this planned provision, the total number of children for which there will be state primary educational needs is estimated as follows:

Lower density scenario: 220, approximately 1 FE

Medium density scenario: 339, approximately 1.5 FE

High density scenario: 473, approximately 2 FE

The costs for 100% of both these schools - £2.5m for St Francis de Assisi, £1m for Oxford Gardens – has been incorporated into the DIFS in 2024. These high level costs were provided by RBKC. We have not incorporated the small expansion of Barlby Primary into our costs as it will have been delivered prior to the build out of the OA.

Two borough secondary schools – Kensington Aldridge Academy and All Saints Catholic College – are expected to expand by 1 FE each. We have assumed that these expansions would be delivered by 2021. We assume that this means capacity for 30 secondary children will open up at each school every year. When this capacity is offset against growth, across all scenarios, it will be accommodated within these expansions, provided that places are available from 2024.

RBKC informed us that the 1FE expansion at All Saints College is expected to cost £3m. In the absence of an equivalent figure for a similar expansion at Kensington Aldridge Academy, we have assumed the same cost. As not all of the capacity enabled by these expansions is fully filled by development at the OA, we have taken a proportional approach (38% for the lower, 46% for the medium, and 54% for the high density scenario), apportioned over the DIFS trajectory.

How will future school provision be provided?

For primary schools we recommend a combination of extensions and new schools across the different growth scenarios. The lower density scenario would require a 1FE expansion to a nearby school around 2031. The medium density scenario would require a 1FE expansion in 2028, and a 0.5 FE expansion in 2031. The high density scenario would require a new 2FE primary school by 2031.

Contributions to identified potential expansion projects are recommended for secondary schools.

How can infrastructure be paid for?

Additional school places are currently funded from three main funding streams

The funding streams available for schools are:

• Developer contributions to meet growth related needs (for instance through S106 or CIL). There is a presumption by the DfE that all authorities will ask developers for a contribution of funds or land or buildings to assist with the impact on the local education infrastructure;

• Dedicated Schools Grant received from the Department for Education (DfE) to meet existing need. This is split into three blocks, the Schools Block, the Early Years Block, and High Needs Block; and

• Various ad hoc funding bids stemming from the DfE.

We assume that new schools and expansions will receive DfE Dedicated Schools Grant Funding

The main source of revenue for state-funded schools in England is the Dedicated Schools Grant (DSG). For this study we have assumed that mainstream funders (DfE) will pay 50% towards the capital requirement arising from growth. With development S106 picking up the remaining 50%.

The provision, management and funding of education infrastructure is going through changes at present

There is some uncertainty as to how and where future school provision will be due to the formation of Academies and Free Schools at both primary and secondary level. The role of the Education authority is changing, and whilst it has responsibility for existing schools, it may not for new schools. These changes in funding and management of schools could introduce opportunities for new mainstream mechanisms for providing schools in the future.

Notes, issues and recommendations

In determining the likely provision for education facilities for each scenario, we have made a number of key assumptions which have been discussed with RBKC. Were information has not been provided we have filled in the gaps with assumptions, all of which are outlined in the sections above.

In addition the following should be noted.

• The education capacity data should be treated as a snapshot in time as the situation will be constantly changing.

• Regular reviews of the DIF will be required to reflect the changing landscape in education provision and funding.

Early Years and Primary

Project name	Extensions to primary schools - already planned and new proposed extensions, potential new primary school
Project ref	E01
About the project	The FE number differs between scenarios and is detailed within each scenario section. Assume that the cost for schools is split between S106/CIL and mainstream funding.
What priority?	1) critical enabling
Which lead organisation?	Various (developers, academies, free schools)
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Scenario 1 would require a 1FE expansion by 2031 to accommodate growth. This is after capacity created by extensions to local schools is taken into account. Costs for these extensions have been entered into the DIFS at 2024.																
	Gross cost (£000s)	8500					3500							5000				
	Cost attrib National Grid (£000s)	644					265							379				
	Cost attrib Ballymore (£000s)	3540					1458							2082				
	Cost attrib Sainsbury's (£000s)	2253					928							1325				
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	2064					850							1214				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	4250					1750							2500				
	S106/S278 funding sought (£000s)	4250					1750							2500				
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Scenario 2 would require a new 2 FE primary school by 2031 to accommodate growth. This is after capacity created by extensions to local schools is taken into account. Costs for these extensions have been entered into the DIFS at 2024.																
	Gross cost (£000s)	11000					3500				5000			2500				
	Cost attrib National Grid (£000s)	825					263				375			188				
	Cost attrib Ballymore (£000s)	4538					1444				2063			1031				
	Cost attrib Sainsbury's (£000s)	2888					919				1313			656				
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	2750					875				1250			625				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	5500					1750				2500			1250				
	S106/S278 funding sought (£000s)	5500					1750				2500			1250				
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Scenario 3 would require a 1FE expansion by 2028, and a half-FE expansion in 2031 to accommodate growth. This is after capacity created by extensions to local schools is taken into account. Costs for these extensions have been entered into the DIFS at 2024.																
	Gross cost (£000s)	12200					3500							8700				
	Cost attrib National Grid (£000s)	915					263							653				
	Cost attrib Ballymore (£000s)	5033					1444							3589				
	Cost attrib Sainsbury's (£000s)	3203					919							2284				
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	3050					875							2175				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	6100					1750							4350				
	S106/S278 funding sought (£000s)	6100					1750							4350				
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Secondary

Project name	Extensions to secondary schools - Kensington Aldridge Academy and All Saints Catholic College
Project ref	E02
About the project	Gross costs for each scenario are based on a proportion of the costs to upgrade Kensington Aldridge Academy and All Saints Catholic College, each assumed to be £3m each. The capacity created at each is enough to accommodate growth in the OA in all scenarios. The extent to which those places are taken up by children from the OA, varies. The lower the number of children in the scenario, the lower the proportion of the costs of the extensions are given to costs for that scenario.
What priority?	1) critical enabling
Which lead organisation?	Various (developers, academies, free schools)
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	38% of the capacity created by the secondary school extensions would be filled by students from Kensington Canalside OA. The extensions are assumed to both cost £6m. Gross costs are therefore assumed to be 38% of £6m, or £2.287m.																
	Gross cost (£000s)	2287					225	225	225	336	336	232	232	232	121	121		
	Cost attrib National Grid (£000s)	173					35	35	35	35	35							
	Cost attrib Ballymore (£000s)	952					190	190	190	190	190							
	Cost attrib Sainsbury's (£000s)	606										121	121	121	121	121		

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	555								111	111	111	111	111				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	1143					113	113	113	168	168	116	116	116	61	61		
	S106/S278 funding sought (£000s)	1143					113	113	113	168	168	116	116	116	61	61		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	46% of the capacity created by the secondary school extensions would be filled by students from Kensington Canalside OA. The extensions are assumed to both cost £6m. Gross costs are therefore assumed to be 46% of £6m, or £2.746m.																
	Gross cost (£000s)	2746					268	268	268	405	405	281	281	281	144	144		
	Cost attrib National Grid (£000s)	206					41	41	41	41	41							
	Cost attrib Ballymore (£000s)	1133					227	227	227	227	227							
	Cost attrib Sainsbury's (£000s)	721										144	144	144	144	144		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	686								137	137	137	137	137				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	1373					134	134	134	203	203	141	141	141	72	72		
	S106/S278 funding sought (£000s)	1373					134	134	134	203	203	141	141	141	72	72		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	54% of the capacity created by the secondary school extensions would be filled by students from Kensington Canalside OA. The extensions are assumed to both cost £6m. Gross costs are therefore assumed to be 54% of £6m, or £3.263m.																
	Gross cost (£000s)	3263					318	318	318	481	481	334	334	334	171	171		
	Cost attrib National Grid (£000s)	245					49	49	49	49	49							
	Cost attrib Ballymore (£000s)	1346					269	269	269	269	269							
	Cost attrib Sainsbury's (£000s)	857										171	171	171	171	171		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	816								163	163	163	163	163				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	1632					159	159	159	241	241	167	167	167	86	86		
	S106/S278 funding sought (£000s)	1632					159	159	159	241	241	167	167	167	86	86		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Emergency Services

What infrastructure is needed?

This section covers fire, police and ambulance provision. The development is not of a sufficient scale to require the siting of individual stations or offices. Kensal Canalside is therefore expected to be served by sites outside the red line of the development. Information presented here has been obtained from publicly available sources. We are using existing provision levels to estimate future possible future requirements.

We anticipate extensions to existing fire stations
RBKC currently has three fire stations at North Kensington, Kensington, and Chelsea. To calculate provision at Kensal Canalside we looked at existing pattern of service provision across the four boroughs and considered the growth in resident population as a proxy for estimating the additional infrastructure needs. The Local Infrastructure Delivery Plan (update, February 2017) states that the current operational capacity of the fire service should be able to accommodate growth in RBKC. It goes onto say that the fire service are not looking for new stations, but for old stations to be upgraded or expanded. We have taken this into account in our approach.

We anticipate extensions to existing ambulance stations
Ambulance provision is a function of the number of incidents, the number of ambulances and hospital provision. For this assessment however, we have looked at the service provision for the population of London, and have apportioned to the growth in scenarios A to D. As we expect to see 117,000 people per station, the growth at Kensal Canalside will not result in any new ambulance stations. We therefore assume that extensions/ upgrades are required in proportion to the growth in each scenario.

We do not anticipate a contribution towards new police services infrastructure
The GLA's MOPAC/MPS Public Access Strategy (2017) sets out a significant shift in public access to policing. The nearest police station in RBKC that operates a 24-hour front counter is Kensington Police Station. The front counter at the Notting Hill Police Station has closed, according to the Met Police website. While there does not appear to be any planned expansion of physical infrastructure provision, instead there has been a focus in recent years on funding of additional staff resources through the Council, for example the RBKC Community Policing Team. Priorities may change again in the future, but in the absence of a plan to invest in physical infrastructure we have assumed the contribution to this to be nil.

How can infrastructure be paid for?

In line with the rest of the country, funding for emergency services in London continues to be impacted by cuts to public sector funding. This forms a significant backdrop to the future planning of capital service needs.
We assume that capital costs of space for enhancement of facilities are met through a combination of S106/CIL and mainstream funding. At this stage it is not possible to estimate what proportion of the funding will be met by mainstream, but for the purpose of this exercise we assume a third of the funding comes from mainstream.

Notes, issues and recommendations

In determining the likely provision for emergency services facilities for each scenario, we have made a number of key assumptions.
• We assume that CCTV facilities will be inherent in the development costs and have not calculated a specific level of provision required.
• Community facilties in the development could include local help point (police contact point). This has not been costed here, and is assumed to form part of the community centre costs.
• Due to the low levels of provision required for growth associated with the scenarios, we assume that the extensions will be phased towards the end of development build out.
• Delivery risk has been set as Amber due to funding cuts in emergency services.

Fire																			
Project name		Fire station extension (enhancement to existing facilities)																	
Project ref		ES02																	
About the project		We have assumed reinforcement/ extension to fire station. The extensions are small and have been costed based on an approximately average cost per sqm, this has been apportioned to landowners based on residential unit numbers. We assume the costs would be sought through S106 and mainstream fire service capital funding. As extension is small, assume required for towards end of development build out.																
What priority?		2) essential mitigation																	
Which lead organisation?		London Fire Brigade																	
Project delivery risk																			
Strategic/site specific? Which site?		Strategic cross-site																	
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	Project details for this scenario	Fire station extension of approx. 130 sqm.																
	Gross cost (£000s)	791									395	395						
	Cost attrib National Grid (£000s)	60									30	30						
	Cost attrib Ballymore (£000s)	329									165	165						
	Cost attrib Sainsbury's (£000s)	210									105	105						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	192									96	96						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	261									130	130						
	S106/S278 funding sought (£000s)	530									265	265						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Fire station extension of approx. 160 sqm.																
	Gross cost (£000s)	973									487	487						
	Cost attrib National Grid (£000s)	73									36	36						
	Cost attrib Ballymore (£000s)	401									201	201						
	Cost attrib Sainsbury's (£000s)	255									128	128						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	243									122	122						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	321									161	161						
	S106/S278 funding sought (£000s)	652									326	326						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Fire station extension of approx. 190 sqm.																
	Gross cost (£000s)	1156									578	578						
	Cost attrib National Grid (£000s)	87									43	43						
	Cost attrib Ballymore (£000s)	477									238	238						
	Cost attrib Sainsbury's (£000s)	303									152	152						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	289									144	144						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	381									191	191						
	S106/S278 funding sought (£000s)	774									387	387						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Ambulance																			
Project name		Ambulance station extension (enhancement to existing service provision)																	
Project ref		ES03																	
About the project		We have assumed reinforcement/ extension to ambulance station. The extensions are small and have been costed based on an approximately average cost per sqm, this has been apportioned to landowners based on residential unit numbers. We assume that S106 contributions and Department for Health funding will be sought for capital expenditure.																
What priority?		2) essential mitigation																	
Which lead organisation?		London Ambulance Service																	
Project delivery risk																			
Strategic/site specific? Which site?		Strategic cross-site																	
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	Project details for this scenario	Ambulance station extension of approx. 80sqm.																
	Gross cost (£000s)	397									199	199						
	Cost attrib National Grid (£000s)	30									15	15						
	Cost attrib Ballymore (£000s)	165									83	83						
	Cost attrib Sainsbury's (£000s)	105									53	53						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	96									48	48						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	131									66	66						
	S106/S278 funding sought (£000s)	266									133	133						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Ambulance station extension of approx. 100sqm.																
	Gross cost (£000s)	497									248	248						
	Cost attrib National Grid (£000s)	37									19	19						
	Cost attrib Ballymore (£000s)	205									102	102						
	Cost attrib Sainsbury's (£000s)	130									65	65						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	124									62	62						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	164									82	82						
	S106/S278 funding sought (£000s)	333									166	166						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Ambulance station extension of approx. 110sqm.																
	Gross cost (£000s)	546									273	273						
	Cost attrib National Grid (£000s)	41									20	20						
	Cost attrib Ballymore (£000s)	225									113	113						
	Cost attrib Sainsbury's (£000s)	143									72	72						
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	137									68	68						
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	180									90	90						
	S106/S278 funding sought (£000s)	366									183	183						
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Health Services

What infrastructure is needed?

In this section we look at the primary healthcare needs arising from development at Kensal Canalside.

All scenarios have different levels of growth however we have assessed the projected need as requiring one new standalone GP practice in every scenario. The difference, is the potential for a small overprovision in the Lower growth scenario, and a small underprovision in the High growth scenario.
A rough rule of thumb used in calculating primary health care needs across the country is that there should be one GP, together with supporting staff, for every 1,800 people. A modern GP practice would expect to provide 6 GPs, therefore serving around 10,800 people. We have not made an assumption on whether the new facility would be provided on-site or off-site.

Funding for GP surgeries is assumed to align with demand
A practice will most efficiently be constructed in a single phase and it will be inefficient if the space is not filled, and so we have timed delivery towards the end of the OA being built-out. Taking an estimate of the population in the area for each scenario, we expect to see the demand for between 5, 6, and 7 GPs, for the Lower, Medium, and High growth scenarios, respectively. The practice would be required in 2031 (for Lower and Medium), and 2030 (for High).

How can infrastructure be paid for?

The funding line assumes that provision would be built by a developer, but leased back to the NHS to at least cover the developer's costs. If we do assume that a development and lease-back deal can be agreed, we assume that half of the capital costs of the GP practice are supported through S106. This is because CCG capital and revenue funding is cash limited, so it is vital that additional funding is provided through alternative means. In effect, then, we assume that developers will pay 50% of the upfront costs for the development of each surgery, and S106 will pay 50%. The developer's share of the costs (including financing) will be repaid by the public sector over time. We assume that, because the developer's development and financing costs are paid ultimately by the NHS, that this is cost neutral to the developer.

Notes, issues and recommendations

The GP practice is assumed to be able to accommodate up to 6 GPs in a three-storey building containing a lift core. Land costs are excluded and other key exclusions apply.
The proportion of social housing and the mix of housing types and sizes, particularly family housing will affect health demands. Our updated estimated population calculations have been derived from the GLA calculator. The results are consistent with the same estimates produced for other social infrastructure topics in this DIFS.

Primary care (GPs)

Project name		Primary health care facilities, generic GP surgery extension																	
Project ref		HS01																	
About the project		New GP surgery required for 6 GPs																	
What priority?		2) essential mitigation																	
		West London Clinical Commissioning																	
Which lead organisation?		Group																	
Project delivery risk																			
Strategic/site specific? Which site?		Strategic cross-site																	
Scenario		**Total (£000s)**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Scenario 1	Project details for this scenario	Assuming a population of 8801, there would be 5 GPs required to support the population. The GP practice would have capacity for 6 GPs, so if fully utilised would represent a small but acceptable overprovision. We assume this would be required in 2032.																
	Gross cost (£000s)	5691													5691			
	Cost attrib National Grid (£000s)	431													431			
	Cost attrib Ballymore (£000s)	2370													2370			
	Cost attrib Sainsbury's (£000s)	1508													1508			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1382													1382			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	5691													5691			
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Assuming population of 10562, there would be 6 GPs required to support the population. We assume this would be required in 2032.																
	Gross cost (£000s)	5691													5691			
	Cost attrib National Grid (£000s)	427													427			
	Cost attrib Ballymore (£000s)	2348													2348			
	Cost attrib Sainsbury's (£000s)	1494													1494			
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1423													1423			
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	5691													5691			
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Assuming population of 12574, there would be 7 GPs required to support the population. The GP practice has been costed for 6 GPs only, so would represent a small but acceptable underprovision.We assume this would be required in 2031, as this is when 6 GPs would be required from.																
	Gross cost (£000s)	5691												5691				
	Cost attrib National Grid (£000s)	427												427				
	Cost attrib Ballymore (£000s)	2348												2348				
	Cost attrib Sainsbury's (£000s)	1494												1494				
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1423												1423				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	5691												5691				
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Leisure and Sports

What infrastructure is needed?

This covers the provision of public open space, play space and sports space.

- Public open space comprises mainly green/ urban open space e.g. parks, civic squares.
- Play space and sports space comprises indoor and outdoor sports provision, e.g. play space, sports halls and pitches.

A number of high quality plazas have been allowed for within the development, along with Little Kensal Green woodland

Good quality public realm and public open space is very important to raise values, and to provide outdoor space for the users of Kensal Canalside. The Allies and Morrison masterplan (2013) identified a range of specific provision for public open space. A revised masterplan is yet to be determined however, on the adivce of RBKC, we have included the same open space sites that were included in the 2016 version of the DIFS, with the caveat that the location and design (and therefore proportions) of these spaces may change. If a proposed public space has been removed, we assume a commensurate space will be located elsewhere. We have made a clear distinction between what we expect to be provided as part of the development costs, and what constitutes public open space. Our general approach is that if it falls within a developer plot then it should be provided as part of the development (and the values should reflect this), and if it falls between developer plots then it is considered a separate infrastructure costs. The exceptions to this approach is where there is a key link or space that knits the development together and is an important part of the overall masterplan. An example of this is the public space immediately to the north and to the south of the new Crossrail site. We include this as a separate infrastructure item.

We have made an allowance for play space for 5 to 11 year olds, and for children aged 12+

The Shaping neighbourhoods Play and Informal recreation SPG provides guidance on the space required for playspace. The proposed benchmark standard of a minimum of 10 sq.m. per child regardless of age. Using the number of children estimated from GLA Population Yields, we have estimated the amount of playspace needed to support the growth at Kensal Canalside. Playspace for children under 5 (Doorstep play space) is assumed to be located in communal amenity spaces within individual developments and funded directly by developers, so it has not been included here.

How can infrastructure be paid for?

Mainstream pubic funding is unlikely to be committed to open space. It is therefore considered that funding for these items will come from direct development costs and S106 contributions. We explain our assumptions in more detail for each infrastructure project.

Notes, issues and recommendations

In determining the likely provision for education facilities for each scenario, we have made a number of key assumptions.

- We exclude the canal basin as included in the masterplan. Instead we assume that the pubic open space where the basin is located is to a good standard with paved and green areas.
- We use the GLA Population Yield Calculator estimate the number of children in each age group. It is noted that the age groups in the calculator does not align exactly with these age groups but they align approximately. The GLA Population Yield assumptions are consistent with those used for other social infrastrucure categories.

Public open space

Project name	Kensal square, 1,850 sqm open space
Project ref	LS01
About the project	Identified on the masterplan between Ballymore and National Grid site. This project is the same across all scenarios. As public open space can raise the value of developments, assume delivered early in the development phasing for Ballymore and National Grid. Assume 2 years construction for space.
What priority?	3) high priority
Which lead organisation?	National Grid and Ballymore
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	600					300	300										
	Cost attrib National Grid (£000s)	300					150	150										
	Cost attrib Ballymore (£000s)	300					150	150										
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	600					300	300										
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	600					300	300										
	Cost attrib National Grid (£000s)	300					150	150										
	Cost attrib Ballymore (£000s)	300					150	150										
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	600					300	300										
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	600					300	300										
	Cost attrib National Grid (£000s)	300					150	150										
	Cost attrib Ballymore (£000s)	300					150	150										
	Cost attrib Sainsbury's (£000s)																	
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)																	
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	600					300	300										
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	Canal Square and Kensal Green Basin
Project ref	LS02
About the project	Identified on the 2013 masterplan between Ballymore and Sainsbury's. Public open space can raise the value of developments and should therefore be delivered as early as possible in the development. As land is required from both the Ballymore and Sainsbury's site have phased to be delivered with the Sainsbury's site in 2026. Benefits of this project will be seen across all development sites, therefore assumed split according to the proportional split of dwellings in each of the three scenarios, which contain slight variations and are present in the calculations below. Assume 2 years construction for space.
What priority?	3) high priority
Which lead organisation?	Ballymore
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1500										750	750					
	Cost attrib National Grid (£000s)	114										57	57					
	Cost attrib Ballymore (£000s)	625										312	312					
	Cost attrib Sainsbury's (£000s)	398										199	199					
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	364										182	182					
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1500										750	750					
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1500										750	750					
	Cost attrib National Grid (£000s)	113										56	56					
	Cost attrib Ballymore (£000s)	619										309	309					
	Cost attrib Sainsbury's (£000s)	394										197	197					
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	375										188	188					
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1500										750	750					
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1500										750	750					
	Cost attrib National Grid (£000s)	113										56	56					
	Cost attrib Ballymore (£000s)	619										309	309					
	Cost attrib Sainsbury's (£000s)	394										197	197					
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	375										188	188					
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	1500										750	750					
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Project name	Southern landing point of Crossrail bridge
Project ref	LS03
About the project	Identified on the 2013 masterplan as a public space within the North Pole site, and adjacent to the southern landing point of the Crossrail bridge. This will form a key connection between the northern part of the site and southern part of the site and will provide an alternative railway crossing to Ladbroke Grove. Public open space can raise the value of developments and should therefore be delivered as early as possible in the development. As land is required from both the North Pole depot, this project has been phased for early delivery as part of the North Pole site. Benefits of this project will be seen across all development sites, therefore assumed split according to the proportional split of dwellings in each of the three scenarios, which contain slight variations and are present in the calculations below. Assume 2 years construction for space.
What priority?	3) high priority
Which lead organisation?	North Pole
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	400								200	200							
	Cost attrib National Grid (£000s)	30								15	15							

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib Ballymore (£000s)	167								83	83							
	Cost attrib Sainsbury's (£000s)	106								53	53							
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	97								49	49							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	400								200	200							
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	400								200	200							
	Cost attrib National Grid (£000s)	30								15	15							
	Cost attrib Ballymore (£000s)	165								83	83							
	Cost attrib Sainsbury's (£000s)	105								53	53							
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	100								50	50							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	400								200	200							
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	400								200	200							
	Cost attrib National Grid (£000s)	30								15	15							
	Cost attrib Ballymore (£000s)	165								83	83							
	Cost attrib Sainsbury's (£000s)	105								53	53							
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	100								50	50							
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)																	
	Direct Developer delivery assumed (£000s)	400								200	200							
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Little Kensal Green enhancements, including lighting, footpath and benches.																
Project ref		LS04																
About the project		Little Kensal Green is identified as a 3,980 sqm public open space on the 2013 masterplan. The masterplan shows it as a wooded area that will be connected to Kensal Green Cemetery in the north by a pedestrian bridge and link through to Little Wormwood Scrubs in the south by a pedestrian bridge (note: bridges not included in these costings). It is assumed that this are would have woodland, green landscaping, lighting, street furniture, and footpath. The site is wholly contained within the National Grid site, it is therefore assumed it comes forward early in the development of the National Grid site. Costs have been attributed to all developers using residential build out proportions.															
What priority?		4) desirable																
Which lead organisation?		RBKC																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1100					367	367	367									
	Cost attrib National Grid (£000s)	83					28	28	28									
	Cost attrib Ballymore (£000s)	458					153	153	153									
	Cost attrib Sainsbury's (£000s)	292					97	97	97									
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	267					89	89	89									
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1100					367	367	367									
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1100					367	367	367									
	Cost attrib National Grid (£000s)	83					28	28	28									
	Cost attrib Ballymore (£000s)	454					151	151	151									
	Cost attrib Sainsbury's (£000s)	289					96	96	96									
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	275					92	92	92									
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1100					367	367	367									
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	No scenario specific variation for this project.																
	Gross cost (£000s)	1100					367	367	367									
	Cost attrib National Grid (£000s)	83					28	28	28									
	Cost attrib Ballymore (£000s)	454					151	151	151									
	Cost attrib Sainsbury's (£000s)	289					96	96	96									
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	275					92	92	92									
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1100					367	367	367									
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Sports and leisure facilities																		
Project name		Facilities for ages 5 to 11 (onsite and offsite)																
Project ref		LS05																
About the project		We have assumed that half of facilities for this age group would be located on development sites in communal amenity spaces, and half would be provided in public amenity spaces. Offsite costs would be sought from CIL while onsite costs form part of typical externals budget. Assumed funding split of 50% developer direct funding and 50% CIL. Specific playspace developments are not known and so costs have been phased proportionately according to the trajectories for each scenario.															
What priority?		4) desirable																
Which lead organisation?		Developers																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Expect around 6199sqm of play space split between communal amenity spaces (on developer sites) and public amenity spaces																
	Gross cost (£000s)	2789					275	275	275	410	410	283	283	283	148	148		
	Cost attrib National Grid (£000s)	211					42	42	42	42	42	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	1162					232	232	232	232	232	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	739					0	0	0	0	0	148	148	148	148	148		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	677					0	0	0	135	135	135	135	135	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1395					137	137	137	205	205	142	142	142	74	74		
	Direct Developer delivery assumed (£000s)	1395					137	137	137	205	205	142	142	142	74	74		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Expect around 7438sqm of play space split between communal amenity spaces (on developer sites) and public amenity spaces																
	Gross cost (£000s)	3347					326	326	326	494	494	343	343	343	176	176		
	Cost attrib National Grid (£000s)	251					50	50	50	50	50	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	1381					276	276	276	276	276	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	527					0	0	0	0	0	176	176	176	176	176		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	837					0	0	0	167	167	167	167	167	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1674					163	163	163	247	247	172	172	172	88	88		
	Direct Developer delivery assumed (£000s)	1674					163	163	163	247	247	172	172	172	88	88		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Expect around 8855sqm of play space split between communal amenity spaces (on developer sites) and public amenity spaces																
	Gross cost (£000s)	3985					389	389	389	588	588	408	408	408	209	209		
	Cost attrib National Grid (£000s)	299					60	60	60	60	60	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	1644					329	329	329	329	329	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	1046					0	0	0	0	0	209	209	209	209	209		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	996					0	0	0	199	199	199	199	199	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1992					194	194	194	294	294	204	204	204	105	105		
	Direct Developer delivery assumed (£000s)	1992					194	194	194	294	294	204	204	204	105	105		
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Project name		Facilities for 12+																
Project ref		LS06																
About the project		Facilities for over 12s (offsite): we assume that all provision for over 12s is offsite, and is thus seeking funding from S106 as a strategic cross-site cost.																
What priority?		4) desirable																
Which lead organisation?		Developers / Royal Borough of Kensington and Chelsea																
Project delivery risk																		
Strategic/site specific? Which site?		Strategic cross-site																

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Expect approx 5511 sqm of playspace																
	Gross cost (£000s)	4574					450	450	450	672	672	465	465	465	242	242		

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
	Cost attrib National Grid (£000s)	346					69	69	69	69	69	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	1905					381	381	381	381	381	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	1212					0	0	0	0	0	242	242	242	242	242		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1111					0	0	0	222	222	222	222	222	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	4574					450	450	450	672	672	465	465	465	242	242		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Expect 6614 sqm of playspace																
	Gross cost (£000s)	5489					535	535	535	810	810	563	563	563	288	288		
	Cost attrib National Grid (£000s)	412					82	82	82	82	82	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	2264					453	453	453	453	453	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	1441					0	0	0	0	0	288	288	288	288	288		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1372					0	0	0	274	274	274	274	274	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	4913					535	535	535	810	810	563	563	563				
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Expect 7873 sqm of playspace																
	Gross cost (£000s)	6535					637	637	637	964	964	670	670	670	343	343		
	Cost attrib National Grid (£000s)	490					98	98	98	98	98	0	0	0	0	0		
	Cost attrib Ballymore (£000s)	2696					539	539	539	539	539	0	0	0	0	0		
	Cost attrib Sainsbury's (£000s)	1715					0	0	0	0	0	343	343	343	343	343		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1634					0	0	0	327	327	327	327	327	0	0		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	6535					637	637	637	964	964	670	670	670	343	343		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Community Facilities

What infrastructure is needed?

In this section we cover community facilities, including libraries and adult learning and skills.

A community centre is provided as part of the 2013 masterplan, this could include adult learning and skills

The precise requirement for community centres depends on local needs. We have developed our own assumptions taken from experience elsewhere to determine appropriate recommendations for provison. In our experience, requirements can vary from 0.2sqm to 1sqm per housing unit. For this assessment we have adopted a requirement of 0.4sqm per dwelling as a guide. The Kensal Canalside OA includes approx. 13,250 sqm of non-residential space including retail, community and social space (excluding Sainsbury's). In the 2013 masterplan, this space is located on the North Pole site (Scenarios A and C), but some form of community provision would need to apply to all scenarios. Considerable efficiencies could be achieved by the landowners working together. We anticipate that some of this space may be combined to provide a small community hub across the development, this could include adult learning and skills, youth services, or other community services. Therefore in the phasing for community centre, we assume the cost of this space is applied across each development plot (National Grid, Ballymore, Sainsbury's and North Pole).

Cost for enhancement to existing libraries is assumed

We do not suggest that a library is included within the community centre. It is the responsibility of each library authority (in accordance with the Public Libraries and Museum Act 1964) to determine how to deliver public library services in the context of local need. Library provision is changing rapidly and it is not possible to predict how these facilities will be used in 10 to 20 years time; the term 'library' may be effectively redundant by then. Our work elsewhere has found that a typical library is around 750sqm, and there is typically 30sqm of library per 1000 people. This means that Kensal Canalside would need to have a population of 25,000 people before it could support its own library facility. As we do not reach this trigger point in any of the scenarios, we instead we assume off-site refurbishment to existing libraries. The Local Infrastructure Delivery Plan (update, 2017) highlights Kensal library as requiring potential upgrades. Although we also understand that RBKC are currently planning a new library facility in the borough, which these costs could be attributed to.

How can infrastructure be paid for?

We assume that the library extension and community facilities are paid for through S106. The Royal Borough of Kensington and Chelsea is in receipt of funding from the Skills Funding Agency to deliver its Adult and Family Learning Services and also some services for young people, so there could be some mainstream funding, however we have excluded this here.

Notes, issues and recommendations

Innovative solutions to the creation and multi-use of open space and sports provision will be essential. In addition to maximising the efficiency of existing provision.
As work progresses, a detailed open space, sports and play strategy will need to be assembled to ensure that a more coordinated approach is prepared and followed.

Libraries

Project name	Kensal library requires more space, ideally on ground floor level – expansion into an adjacent shop unit, for facilities such as IT, activity place, soft seating area.
Project ref	CF01
About the project	Extensions required, as driven by the delivery of new dwellings towards the end of the DIFS period.
What priority?	4) desirable
Which lead organisation?	Royal Borough of Kensington and Chelsea Library Services
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Assume Kensal library extension of approx. 264 sqm.																
	Gross cost (£000s)	1319														1319		
	Cost attrib National Grid (£000s)	100														100		
	Cost attrib Ballymore (£000s)	549														549		
	Cost attrib Sainsbury's (£000s)	350														350		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	320														320		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1319														1319		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Assume Kensal library extension of approx. 317 sqm																
	Gross cost (£000s)	1583														1583		
	Cost attrib National Grid (£000s)	119														119		
	Cost attrib Ballymore (£000s)	653														653		
	Cost attrib Sainsbury's (£000s)	416														416		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	396														396		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1583														1583		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Assume Kensal library extension of approx. 377 sqm																
	Gross cost (£000s)	1885														1885		
	Cost attrib National Grid (£000s)	141														141		
	Cost attrib Ballymore (£000s)	777														777		
	Cost attrib Sainsbury's (£000s)	495														495		
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	471														471		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)																	
	S106/S278 funding sought (£000s)	1885														1885		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	

Community facilities/ Adult learning and skills

Project name	Flexible co-located public and third sector service delivery buildings, adult learning and skills centre, customer contact points.
Project ref	CF02
About the project	It is difficult to assess exact needs due to evolving patterns of service delivery and long-term nature of growth. Long-term implications of public sector austerity measures, including capital expenditure plans, are also difficult to assess. Provision is driven by the growth in residential dwellings. Based on experience elsewhere we assume one sqm of community space is required for 0.4 dwellings. We have also assumed that each community centre would be 500sqm, although in reality efficiencies could be gained from building larger facilities.
What priority?	4) desirable
Which lead organisation?	Royal Borough of Kensington and Chelsea
Project delivery risk	
Strategic/site specific? Which site?	Strategic cross-site

Scenario		Total (£000s)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Scenario 1	Project details for this scenario	Scenario 1 generates a requirement for 1500 sqm of community space (including a small overprovision on the terms described above). Assume the provision of 3 x 500 sqm community centres in 2027, 2030, 2035. This has been apportioned to the developers on the basis of the housing split.																
	Gross cost (£000s)	6000								2000			2000					2000
	Cost attrib National Grid (£000s)	454								151			151					151
	Cost attrib Ballymore (£000s)	2499								833			833					833
	Cost attrib Sainsbury's (£000s)	1590								530			530					530
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1457								486			486					486
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	3000								1000			1000					1000
	S106/S278 funding sought (£000s)	3000								1000			1000					1000
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 2	Project details for this scenario	Scenario 2 generates a requirement for 1500 sqm of community space (including a small underprovision on the terms described above). Assume the provision of 3 x 500 sqm community centres in 2026, 2028, 2031. This has been apportioned to the developers on the basis of the housing split.																
	Gross cost (£000s)	6000							2000		2000			2000				
	Cost attrib National Grid (£000s)	450							150		150			150				
	Cost attrib Ballymore (£000s)	2475							825		825			825				
	Cost attrib Sainsbury's (£000s)	1575							525		525			525				
	Cost attrib Canalside House (£000s)																	
	Cost attrib North Pole (£000s)	1500							500		500			500				
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	3000							1000		1000			1000				
	S106/S278 funding sought (£000s)	3000							1000		1000			1000				
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	
Scenario 3	Project details for this scenario	Scenario 3 generates a requirement for 2000 sqm of community space. Assume this is provided as four 500sqm community centre in 2026, 2028, 2030, 2033. This has been apportioned to the developers on the basis of the housing split.																
	Gross cost (£000s)	8000							2000		2000		2000			2000		
	Cost attrib National Grid (£000s)	600							150		150		150			150		
	Cost attrib Ballymore (£000s)	3300							825		825		825			825		
	Cost attrib Sainsbury's (£000s)	2100							525		525		525			525		
	Cost attrib Canalside House (£000s)	0																
	Cost attrib North Pole (£000s)	2000							500		500		500			500		
	Cost attrib Other (£000s)																	
	Mainstream funding assumed (£000s)	4000							1000		1000		1000			1000		
	S106/S278 funding sought (£000s)	4000							1000		1000		1000			1000		
	Direct Developer delivery assumed (£000s)																	
	MUSCO/ESCO/utility funding assumed (£000s)																	
	Other funding sought (£000s)																	