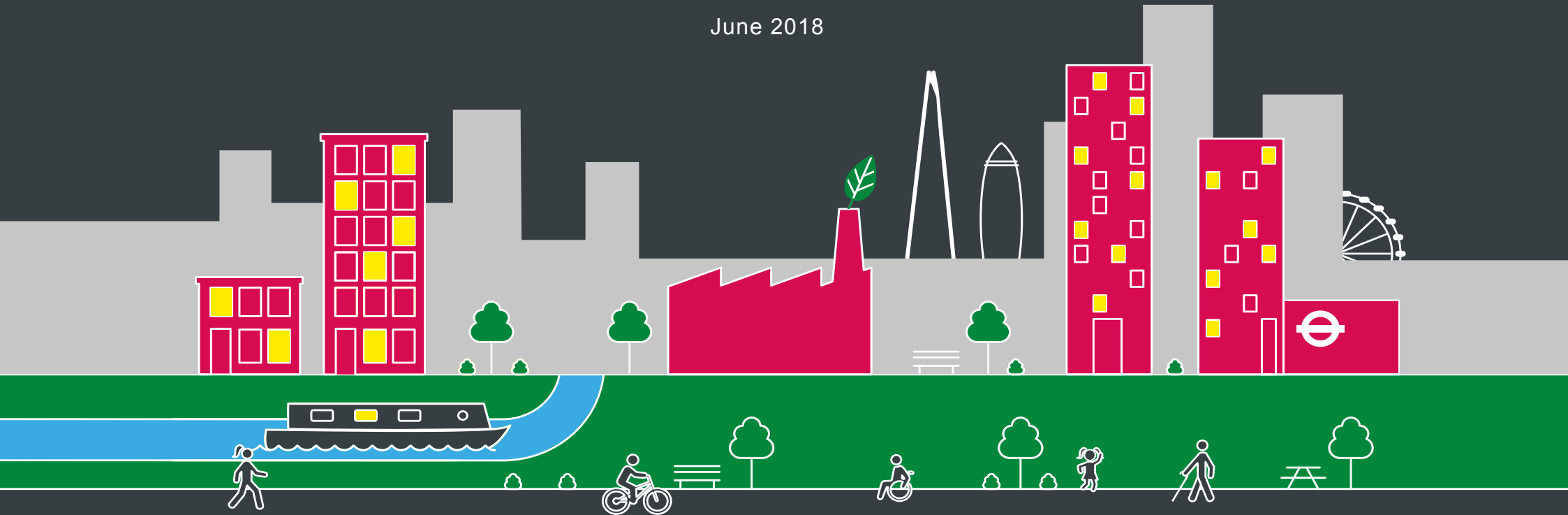


OPDC
OLD OAK AND
PARK ROYAL
DEVELOPMENT
CORPORATION

Infrastructure Delivery Plan (IDP)

LOCAL PLAN SUPPORTING STUDY

June 2018



MAYOR OF LONDON

27. Infrastructure Delivery Plan (IDP)

Document Title	Infrastructure Delivery Plan (IDP)
Lead Author	OPDC
Purpose of the Study	To identify the infrastructure required to support the regeneration of the area, including social, transport, utility and green infrastructure.
Key outputs	- Identifies the piece of infrastructure that is needed, where it is needed and when it is needed. - Provides details on the specification for the infrastructure. - Provides details of the key delivery body for the infrastructure - Identifies the cost of the infrastructure, where known and sources of funding.
Key recommendations	- Identifies a significant number of infrastructure requirements to support the regeneration of the area. - The majority of infrastructure identified relates to the core development area in Old Oak, but the IDP also identifies important infrastructure requirements for Park Royal - The study identifies those pieces of infrastructure which OPDC would look to secure through developer contributions (Section 106, Section 278 or Community Infrastructure Levy). - Maps are provided for those pieces of infrastructure that relate to particular locations of the area. - The IDP will be kept as a 'live' document and regularly updated to respond to any changes in infrastructure requirements.
Key changes made since Reg 19 (1)	The list of required infrastructure has been revised to reflect amendments to the Local Plan, and as a result of outputs from new/updated supporting studies.
Relations to other studies	Outputs cross-relate to the Integrated Water Management Strategy, Park Royal Transport Strategy, Development Infrastructure Funding Study, Utilities Study, Social Infrastructure Needs Study, North Acton Station Feasibility Study, Willesden Junction Station Feasibility Study, Sports Courts and Swimming Pools Study, A40 Study and Public Realm, Walking and Cycling Strategy.
Relevant Local Plan Policies and Chapters	All the policies and chapters of the Local Plan

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1 INTRODUCTION

1.1. The Infrastructure Delivery Plan (IDP) is an important document supporting the Local Plan. The IDP provides a list of infrastructure that Old Oak and Park Royal Development Corporation (OPDC) has identified as being required to support the delivery of policies in the Local Plan. In accordance with Strategic Policy SP10 and Delivery and Implementation Policy DI1, OPDC will work with a variety of stakeholders to deliver the appropriate infrastructure identified in OPDC's Local Plan and this IDP, to support the creation of a high quality new part of London.

1.2. Not all the infrastructure identified will be critical to enabling the successful regeneration of the area and OPDC will work with stakeholders to ensure that those pieces that are, are prioritised. It is also likely that items on the list will alter over time as the area is developed, infrastructure requirements are clarified, and technology and best practice change.

The IDP will therefore be a 'live' document that can be easily updated as and when infrastructure requirements change.

1.3. The IDP schedule specifies the infrastructure projects currently identified in the Local Plan and, where known, provides an estimate on the timeframe for delivery of a range of physical, social and green infrastructure projects across a number of infrastructure categories which have been divided into sub categories.

1.4. Where possible the projects listed in the schedule have been mapped. Each infrastructure type has a separate map to provide a spatial representation of the relevant projects. These maps can be found in the Appendix. Where the projects are area wide initiatives or there is no agreed site placement for infrastructure, the projects have not been mapped.

1.5. The IDP will be used by the OPDC to assist in the delivery of projects and assist in identifying and negotiating appropriate Section 106 contributions from developers and for the prioritisation of the use of other monies received as developer contributions e.g. Community Infrastructure Levy (CIL) by OPDC. This document may also be utilised as an evidence base document when applying for funding for infrastructure projects from other sources.

1.6. It is envisaged that the IDP (including the maps) will be updated annually and released alongside the Authority Monitoring Report (AMR). This will then enable OPDC to ensure that the timeframes for delivery and estimated costs are as current as possible to assist in the delivery of projects. Many of the costs currently included in the schedule are based on early feasibility work and not detailed design. The cost estimates are also not standardised and do not include any optimism bias. As the detailed design for each of the projects is undertaken and a more accurate estimation of the costs generated these will be provided as part of future updates to the IDP.

1.7. Paragraph 162 of the National Planning Policy Framework (NPPF) requires local planning authorities to work with other authorities and providers to assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy, telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands. They should also take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.

1.8. The infrastructure requirements set out in this IDP therefore reflect the infrastructure needed to provide for the growth and site allocations set out in the OPDC Local Plan (Regulation 19 (2) version). The OPDC Duty to Cooperate Statement provides information on how the OPDC has met the requirements for the duty to cooperate for Paragraph 162 of the NPPF. This can be found on OPDC's website.

Transport

Sub Categories:

- » Rail, Stations and Interchanges
- » Pedestrian and Cycle
- » Road Network
- » Bus Network

The transport projects provided in the IDP have been identified to support the level of development density being proposed in the OPDC Local Plan. The projects will also improve the local Public Transport Accessibility Level (PTAL) ratings and the overall connectivity to achieve the integration of the OPDC area into north west London and support the needs of development.

Utilities

Sub Categories:

- » Smart Technology
- » Decentralised Energy
- » Energy Network – Electricity
- » Energy Network – Gas
- » Potable Water Network
- » Foul and Surface Water Infrastructure
- » Flood and Water Management
- » Waste

The list of projects identified in the utilities section are those which will facilitate the development proposed within the OPDC Local Plan ensuring that the area functions in the long term.

Supporting Studies for Transport Projects

- A40 Study; Bus Strategy
- Construction and Logistics Strategy
- Development Infrastructure Funding Study (DIFS)
- North Acton Station Feasibility Study
- Old Oak Strategic Transport Study
- Park Royal Transport Strategy
- Park Royal Centre Development Framework Principles
- Public Realm, Walking and Cycling Strategy
- Old Oak North Development Framework Principles
- Scrubs Lane Development Framework Principles
- Victoria Road and Old Oak Lane Development Framework Principles
- Willesden Junction Station Feasibility Study

Supporting Studies for Transport Project

- Air Quality Study
- Circular and Sharing Economy Study
- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Integrated Water Management Strategy
- North Acton District Energy Study
- Smart Strategy
- Waste in Tall Buildings Study
- Waste Management Strategy
- Utilities Study

Green Infrastructure

Sub Categories:

- » Open Space
- » Canal
- » Play Space
- » Public Realm

The infrastructure items in the green infrastructure section are those that will provide amenity space for people and nature to create the quality of place that the OPDC Local Plan policies are seeking to deliver and ensure environmental benefits are achieved through new development.

Supporting Studies for Green Infrastructure Projects

- Cultural Principles
- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Park Royal Centre Development Framework Principles
- Public Realm, Walking and Cycling Strategy
- Old Oak North Development Framework Principles
- Scrubs Lane Development Framework Principles
- Sites of Importance for Nature Conservation Statement
- Victoria Road and Old Oak Lane Development Framework Principles

Social Infrastructure

Sub Categories:

- » Nursery
- » Schools
- » Health Facilities
- » Community & Sports Facilities
- » Emergency Services

The social infrastructure items focus on infrastructure that will assist in the creation of community and aim to provide the day to day infrastructure that provides for people living in the new neighbourhoods that the OPDC Local Plan aims to deliver. This infrastructure has been identified in partnership with delivery partners to ensure that the OPDC development does not place undue and prolonged strain on existing social infrastructure in the area.

Supporting Studies for Transport Projects

- Cultural Principles
- Development Infrastructure Funding Study (DIFS)
- Retail and Leisure Needs Study
- Social Infrastructure Needs Study
- Sports Courts and Swimming Pools Study

2 UNDERSTANDING THE SCHEDULE OF PROJECTS

- 2.1. The Project Reference Number (PRN) is unique for each project. Where possible and appropriate, the projects are mapped and the PRN correlates to the item on the map.
- 2.2. The Old PRN (2017) refers to the numbers that the projects were referred to in the previous version of OPDC IDP, which supported the Regulation 19 (1) OPDC Draft Local Plan which was consulted on in June 2017.
- 2.3. The infrastructure items are listed according to their categories as described in section 1. There is no prioritisation of projects in this version of the IDP. As the probable development pattern becomes better understood, pieces of critical or key infrastructure will be identified and recognised as priorities for delivery, this will be reflected in future updates to the IDP.
- 2.4. The Local Plan policy numbers and Local Plan Places refer to the policy numbers and places in the Regulation 19(2) version of the OPDC Local Plan (2018). The Local Plan Policies, Local Plan Places and the associated supporting text provide the justification for the projects.
- 2.5. The delivery phasing and costs of the projects set out in this schedule are estimates based on the best available information at the time of production of this document. Where the phasing and/or costs are unknown, NYC (not yet costed) and TBC (to be confirmed) have been utilised respectively. In many cases where the timeframe for delivery is currently unknown this is due to a number of reasons including the delivery being dependent on the relevant or surrounding sites being brought forward, many of which are not in public ownership. Several of the projects will be delivered beyond the current plan period i.e. after 2038 so there is a strong possibility that the detail of these projects will change.

INFRASTRUCTURE DELIVERY PLAN

SCHEDULE OF PROJECTS

3 TRANSPORT

- 3.1. As stated in the Local Plan, transport is the catalyst for the comprehensive regeneration of Old Oak and enhancing Park Royal. The number and diversity of the transport projects listed in the Infrastructure Schedule demonstrate the need to create and maintain connections across the area across all transport modes. Only through the successful delivery of these connections will the area be able to be comprehensively redeveloped and communities established. These projects will also assist in the integration of the area into the wider London transportation network and allow the area to thrive economically and socially.

Rail, Stations and Interchanges

3.2. The projects listed in this schedule relate to the improvement of access and capacity of the existing stations in the OPDC area especially North Acton and Willesden Junction and the creation of new stations, including the new Old Oak Common (HS2) Station and new Overground stations on both the North and West London Lines. Refer to Figure 1 in the Appendix for a map of these projects.

Supporting Studies for Rail, Stations and Interchanges Projects

- Development Infrastructure Funding Study (DIFS)
- North Acton Station Feasibility Study
- Old Oak Strategic Transport Study
- Park Royal Transport Strategy
- Public Realm, Walking and Cycling Study
- Willesden Junction Station Feasibility Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TR1	IT1	Station & Interchange	Willesden Junction Station Improvements	33	Developer cost/ planning contributions and/or service providers	T5	P11: Willesden Junction				
TR2	-	Railway	West London Line Viaduct	143	Developer cost/ planning contributions and/or service providers	T5	P2: Old Oak North				Excludes costs for Hythe Road Station delivery
TR3	IT2	Station & Interchange	Hythe Road Overground station (West London Line)	30	Developer cost/ planning contributions and/or service providers	T5	P2: Old Oak North				Costs for station delivery only assuming delivery of Viaduct
TR4	IT3	Station & Interchange	Old Oak Common Lane Overground Station (North London Line)	130	Developer cost/ planning contributions and/or service providers	T5	P8: Old Oak Lane & Old Oak Common Lane				
TR5	IT4	Station & Interchange	Old Oak Common Station	NYC	Service provider	T5	P1: Old Oak South				
TR6	-	Railway	Potential Chiltern Line Extension to Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T5	P1: Old Oak South				
TR7	IT5	Station & Interchange	Improvements to North Acton Station	20	Service provider	T5	P7: North Acton and Acton Wells				
TR8	IT6	Station & Interchange	Improvements to, and enhanced access to Harlesden Station	NYC	Developer cost/ planning contributions and/or service providers	T5	P4: Park Royal West				
TR9	-	Railway	West London Orbital Route	NYC	Service provider	T5	P8: Old Oak Lane and Old Oak Common Lane				

Pedestrian and Cycle

3.3. The aim of the policies for walking and cycling in the OPDC Local Plan are to improve the permeability of the area and create safe and attractive walking and cycling routes that both enhance the connectivity of the area and offer more sustainable transport options across the site. The projects identified in the schedule therefore create new routes to augment the permeability and improve existing routes to make these safer and more attractive to users in the future. Refer to Figure 2 in the Appendix for a map of these projects.

Supporting Studies for Pedestrian and Cycle Projects

- Development Infrastructure and Funding Study (DIFS)
- Environmental Standards Study
- Old Oak North Development Framework Principles
- Old Oak Strategic Transport Study
- Park Royal Development Framework Principles
- Park Royal Transport Strategy
- Public Realm, Walking and Cycling Study
- Scrubs Lane Development Framework Principles
- Victoria Road and Old Oak Lane Development Framework Principles

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP0	IT13	Pedestrian & Cycle	Improvements to Station Approach Road and underpass at Willesden Junction for pedestrian and cycle route from Old Oak Street.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P11: Willesden Junction				
TP1	-	Pedestrian & Cycle	Pedestrian / Cycle route connecting Old Oak Street to Harrow Road.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P11: Willesden Junction				
TP2	IT12	Pedestrian & Cycle	New pedestrian and cycle link from Old Oak Street to Scrubs Lane known as 'Ellisland Way'	3.8	Developer cost/ planning contributions and/or service providers	T2 / T3 / PIOC1	P10: Scrubs Lane				
TP3	IT68	Pedestrian & Cycle	Old Oak Street bridge over West Coast Mainline tracks	31.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P2: Old Oak North				Bridge
TP4	-	Pedestrian & Cycle	North-South pedestrian and cycle route connecting Harlesden Place, Hythe Road Station and Hythe Road East.	NYC	Developer cost/ planning contributions and/or service providers	T2	"P2: Old Oak North P11: Willesden Junction"				Maximum gradient along entire route not to exceed 1:20/5%. Will be delivered in conjunction with public realm and road projects.
TP5	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle routes along the length of Park Road	Costed as part of road projects for Park Road	Developer cost/ planning contributions and/or service providers	T1 / T2 / T3	"P1: Old Oak South P2: Old Oak North"				
TP6	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle routes along the length of Old Oak Street	Costed as part of road projects for Old Oak Street	Developer cost/ planning contributions and/or service providers	T1 / T2 / T3	"P1: Old Oak South P2: Old Oak North"				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP7	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle route along the length of Hythe Road (East and West)	Costed as part of road projects for Hythe Road	Developer cost/ planning contributions and/or service providers	T1 / T2 / T3	P2: Old Oak North				
TP8	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle link from Park Road to Old Oak Sidings Site	NYC	Developer cost/ planning contributions and/or service providers	T1 / T2 / T3	P2: Old Oak North				
TP9	-	Pedestrian & Cycle	Western pedestrian bridge crossing Grand Union Canal connecting the northern Canal Park to the Birchwood Nature Reserve.	NYC	Developer cost/ planning contributions and/or service providers	T2	P2: Old Oak North				
TP10	-	Pedestrian & Cycle	Eastern pedestrian bridge crossing Grand Union Canal connecting the northern Canal Park to the Birchwood Nature Reserve.	NYC	Developer cost/ planning contributions and/or service providers	T2	P2: Old Oak North				
TP11	IT44	Pedestrian & Cycle	Bridge, connecting Old Oak Street (at Hybrid Bridge junction) to Wormwood Scrubs.	30	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South				
TP12	IT9	Pedestrian & Cycle	Route through Old Oak Common Station to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South				Underpass or Overbridge (tbc). Cost based on worst case option.
TN13	IT10	Pedestrian & Cycle	Route to Wormwood Scrubs east of Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South				Underpass or Overbridge (tbc)
TN14	IT11	Pedestrian & Cycle	Route to Wormwood Scrubs west of Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South				Underpass or Overbridge (tbc)
TP15	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle route along the length of Wormwood Scrubs Street, east and west of Scrubs Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South				
TP16	IT45	Pedestrian & Cycle	Improvements and enhancements to pedestrian and cycle paths along Scrubs Lane, including segregated cycleway where feasible and appropriate.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP17	IT51	Pedestrian & Cycle	Improved walking access points to St. Mary's Cemetery	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane				
TP18	-	Pedestrian & Cycle	New pedestrian and cycle connection linking Scrubs Lane and development in Mitre Industrial Estate.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane				
TP19	IT63	Pedestrian & Cycle	Pedestrian/cycle access to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane				
TP20	IT52	Pedestrian & Cycle	New and improved pedestrian and cycle accesses to Wormwood Scrubs from east, west and southern areas.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs				
TP21	IT53	Pedestrian & Cycle	New and improved sensitive walking and cycling routes across Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs				
TP22	IT17	Pedestrian & Cycle	Shared pedestrian and cycle path (TfL Quietway) along southern edge of Wormwood Scrubs and new junction on Scrubs Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P12: Wormwood Scrubs				
TP23	IT48	Pedestrian & Cycle	New walking and cycling route along north of the Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P3: Grand Union Canal				
TP24	IT49	Pedestrian & Cycle	Improvements to towpath along south of the Grand Union Canal, including delivery of segregated cycleway where feasible and appropriate.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P3: Grand Union Canal				
TP25	IT54	Pedestrian & Cycle	Segregated cycle lane, footpath and public realm improvements along Old Oak Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane				
TP26	IT56	Pedestrian & Cycle	Cycle, pedestrian and public realm improvements along Old Oak Common Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP27	IT55	Pedestrian & Cycle	Segregated cycle lane, footpath and public realm improvements along Victoria Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP28	IT18	Pedestrian & Cycle	Pedestrian / Cycle Access through Old Oak Common Lane Station to Acton Wells	55.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				Underpass or Bridge Cost based on the bridge option
TP29	-	Pedestrian & Cycle	Delivery of high quality pedestrian and cycle routes along the length of Old Oak Street from Old Oak Common Lane Station to North Acton Station.	Costed as part of Old Oak Street Road projects	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP30	IT64	Pedestrian & Cycle	Bridge linking Acton Wells East and Jenner Avenue	2.3	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				Bridge
TP31	IT65	Pedestrian & Cycle	Pedestrian/ cycle bridge across Central Line to connect Victoria Estate to Old Oak Common Lane	10.8	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane				
TP32	IT57	Pedestrian & Cycle	New walking and cycling route from Brunel Road to Long Drive	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P8: Old Oak Lane & Old Oak Common Lane				
TP33	IT58	Pedestrian & Cycle	New walking and cycling crossing across Wales Farm Road from Jenner Avenue to Portal Way	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP34	IT59	Pedestrian & Cycle	Pedestrian/ cycle/ public realm improvements between Victoria Road and the A4000 adjacent to The Costume Store	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP35	IT60	Pedestrian & Cycle	Pedestrian/ cycle/ public realm improvements along Victoria Road south of North Acton Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP36	IT50	Pedestrian & Cycle	Improved and new walking and cycling connectivity across the A40 between Portal Way and West Acton.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP37	IT19	Pedestrian & Cycle	Pedestrian/cycle route – North Acton Southern Station Square to Wales Farm Rd via Portal Way.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP38	IT67	Pedestrian & Cycle	Public realm improvements to footpath connecting North Acton Station to Victoria Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP39	IT61	Pedestrian & Cycle	Access to North Acton station from Southern Station Square.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP40	IT62	Pedestrian & Cycle	Access to North Acton Station from Northern Station Square.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				
TP41	IT47	Pedestrian & Cycle	Providing or enhancing pedestrian and cycle access into and through North Acton cemetery	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells				To form part of improved connection between Park Royal Road and North Acton Station
TP42	-	Pedestrian & Cycle	New pedestrian and cycle connection from North Acton cemetery to Park Royal Road.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				To form part of improved connection from Park Royal Road between North Acton Station
TP43	IT66	Pedestrian & Cycle	Improvements along Chandos Road towards Park Royal (including improvements to walking, cycling, public realm).	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P5: Old Park Royal				
TP44	IT39	Pedestrian & Cycle	Chase Road on-street cycle lanes	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P5: Old Park Royal				
TP45	IT37	Pedestrian & Cycle	Park Royal Road on- and off-street cycle lane improvements	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre				
TP46	-	Pedestrian & Cycle	Pedestrian and cycle connections through ASDA site.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre				
TP47	IT46	Pedestrian & Cycle	New and enhanced pedestrian routes through Park Royal Centre, including improved junction crossing.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP48	-	Pedestrian & Cycle	Public pedestrian and cycle route through Central Middlesex Hospital	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre				Exact route to be determined – may be delivered as part of upgrade or realignment of existing vehicular route the site.
TP49	IT43	Pedestrian & Cycle	New/upgraded walking and cycling route through First Central.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP50	IT25	Pedestrian & Cycle	Improved pedestrian and cycle access towards Park Royal station from north	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP51	IT31	Pedestrian & Cycle	Improvements to existing footpaths and cycle paths to provide alternative pedestrian and cycle route linking Park Royal Station to Park Royal Centre.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TP52	IT29	Pedestrian & Cycle	Connect cycle paths through the roundabout at the junction of Coronation Road and Rainsford Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TP53	IT30	Pedestrian & Cycle	Connect cycle paths through the roundabout at the junction of Rainsford Road and Cumberland Avenue	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TP54	IT32	Pedestrian & Cycle	Delivery of new alternative pedestrian and cycle route from Park Royal Centre to Westley Playing Fields.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre				Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TP55	-	Pedestrian & Cycle	New pedestrian and cycle link connecting Wesley Avenue to Grand Union Canal, along north of Wesley Playing Fields	NYC	Developer cost/ planning contributions and/or service providers	T2/T3	P4: Park Royal West				Forms part of continuous Cycle Quietway from Park Royal Station to Grand Union Canal.
TP56	IT33	Pedestrian & Cycle	New link to canal towpath at Volt Avenue.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP57	IT34	Pedestrian & Cycle	Improved link to canal towpath at Steele Road (incl. parking restrictions on approach)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP58	IT35	Pedestrian & Cycle	Completion of cycle path along Rainsford Road to Twyford Abbey Road, and connection to towpath	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP59	IT41	Pedestrian & Cycle	Cycle route improvements along Coronation Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP60	IT42	Pedestrian & Cycle	Cycle route improvements along Acton Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP61	IT36	Pedestrian & Cycle	Improved cycle lanes across Harlesden Bridge	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP62	IT24	Pedestrian & Cycle	Abbey Road Junction improvement with toucan crossings for cyclists, (south of Grand Union Canal at junction of Abbey Rd/Twyford Abbey Rd)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP63	IT23	Pedestrian & Cycle	Abbey Road Pedestrian and cycle safety improvements with toucan crossings for cyclists (at Premier Park Rd/Abbey Rd roundabout)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP64	IT22	Pedestrian & Cycle	Abbey Road Junction improvements with toucan crossings for cyclists (at junction in between Premier Park Rd/ Abbey Rd roundabout and A406)	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP65	IT21	Pedestrian & Cycle	Improvements to existing pedestrian and cycle links from Abbey Road to north and Stonebridge Park Station	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West				
TP66	IT40	Pedestrian & Cycle	Generalised pedestrian safety improvements, Park Royal	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide				
TP67	IT26	Pedestrian & Cycle	New cycle networks across the Old Oak core area.	15	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide				
TP68	IT27	Pedestrian & Cycle	Provision of cycle hire facilities	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TP69	IT28	Pedestrian & Cycle	Legible London wayfinding and signage.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide				
TP70	IT40	Pedestrian & Cycle	Generalised pedestrian safety improvements, Park Royal	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide				

Road Network

- 3.4. Road network enhancements will assist to deliver a navigable network across the area that improves both the north-south and east-west movement of vehicles including freight vehicles and buses. It is intended that all the road network projects listed below will also provide improvements to the associated pedestrian, cycle and public realm components of the transport network but to avoid duplication have not been repeated in the pedestrian /cycle and public realm sections of this document above – though specific mention has been made to pedestrian and cycle routes along Park Road and Old Oak Street. Refer to Figure 3 in the Appendix for a map of these projects.

Supporting Studies for Road Network Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Old Oak North Development Framework Principles
- Old Oak Strategic Transport Study
- Park Royal Development Framework Principles
- Public Realm, Walking and Cycling Study
- Park Royal Transport Strategy
- Scrubs Lane Development Framework Principles
- Victoria Road and Old Oak Lane Development Framework Principles

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV1	-	Road Network	Delivery of road infrastructure across Old Oak North between structures and crossings.	45.6	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide				Relates to delivery of associated primary and secondary road infrastructure across Old Oak North, exclusive of key crossings and junction projects listed below.
TV2	-	Road Network	Park Road from Old Oak Common Lane to Park Bridge.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Highways & Junction. Initial section being delivered as part of the Oaklands development.
TV3	<i>IT76</i>	Road Network	Park Bridge - all modes bridge over Grand Union Canal.	34.4*	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Bridge project. To allow for access only traffic.
TV4	<i>IT94</i>	Road Network	Park Road from Park Road bridge to underpass under West London Line.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV5	<i>IT95</i>	Road Network	Park Road underpass under West London Line.	29.4*	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Underpass. Must allow for bus clearance.
TV6	-	Road Network	Park Road from West London Line underpass to junction with Old Oak Street.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV7	-	Road Network	Signalised junction at juncture of Park Road and Old Oak Street.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV8	-	Road Network	Park Road from junction with Old Oak Street to Laundry Bridge.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV9	IT14	Road Network	Laundry Bridge, connecting Old Oak North & Scrubs Lane along Park Road.	30.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane				Bridge
TV10	IT69	Road Network	Old Oak Street between junction with Park Road and junction with Hythe Road West.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction – underpass of viaduct to be delivered as part of project TN2
TV11	-	Road Network	Junction of Old Oak Street and Hythe Road West.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV12	IT70	Road Network	Old Oak Street between junctions with Hythe Road West and Hythe Road East.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV13	-	Road Network	Junction of Old Oak Street and Hythe Road East.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV14	IT71	Road Network	Old Oak Street between junction with Hythe Road East and Old Oak Street bridge.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV15	IT72	Road Network	Old Oak Street bridge (Hybrid Bridge) over Grand Union Canal, connecting Old Oak North and South.	22.7	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Bridge.
TV16	IT73	Road Network	Old Oak Street from Old Oak Street bridge to Old Oak Common Station.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Highways & Junction
TV17	IT74	Road Network	Old Oak Street from Old Oak Common Station to Old Oak Common Lane Overground Station	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Highways & Junction
TV18	-	Road Network	Potential extension of Hythe Road from Park Road to Old Oak Sidings Waste Site	NYC	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV19	-	Road Network	Hythe Road "West" – connecting Park Road and Old Oak Street along Canal Park.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junctions
TV20	-	Road Network	Hythe Road "East" – realignment and upgrades to existing Hythe Road route, connecting Old Oak Street the underpass.	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways and Junctions
TV21	IT77	Road Network	Upgraded Hythe Road underpass for to cater for buses, access only vehicular traffic and improved pedestrian and cycle link.	14	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Underpass
TV22	-	Road Network	Improvements and enhancements to Old Oak Sidings Haul Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TV23	IT90	Road Network	Traffic capacity enhancements on Scrubs Lane: Mitre Bridge to Harrow Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Highways & Junction
TV24	-	Road Network	New junction and juncture of Park Road and Scrubs Lane	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Highways & Junction
TV25	-	Road Network	Improvements and enhancement to existing junction of Hythe Road and Scrubs Lane	Costed as part of TV1	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Highways & Junction
TV26	IT89	Road Network	Modify Mitre Bridge and Scrubs Lane Overbridge to accommodate pedestrian/ cycleway	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Bridge
TV27	IT88	Road Network	Transport capacity enhancements on Scrubs Lane adjacent to Wormwood Scrubs.	NYC	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Highways & Junction
TV28	IT92	Road Network	Junction onto Scrubs Lane to access to Mitre Bridge Industrial Estate and North Pole East.	9.9	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane				Highways & Junction
TV29	IT79	Road Network	Delivery of new Wormwood Scrubs Street.	NYC	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Highways & Junction – to provide for access only traffic.

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV30	IT91	Road Network	New Junction at Old Oak Common Lane junction to proposed Wormwood Scrubs Street north of Wormwood Scrubs	4.5	Developer cost/ planning contributions and/or service providers	T1	P12: Wormwood Scrubs				Highways & Junction
TV31	IT87	Road Network	Upgrade of Old Oak Common Lane under Great Western & Chiltern lines underpasses	11.6	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Underpass
TV32	-	Road Network	New road providing access to Old Oak Common Station development site from Old Oak Common Lane.	NYC	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South				Highways & Junction
TV33	IT84	Road Network	Transport capacity enhancements on Old Oak Common Lane: Brunel Rd to Oaklands intersection (including improving safety and capacity of Central Line, Great Western & Chiltern lines underpasses)	5	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV34	IT85	Road Network	Junction capacity and safety improvements on Old Oak Common Lane at intersection with Park Road	4.5	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV35	IT86	Road Network	Transport capacity and safety enhancement, Old Oak Common Lane: Oaklands intersection to Atlas Junction	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV36	IT81	Road Network	Atlas Junction (Victoria Rd, Old Oak Common Lane, Old Oak Lane & Atlas Rd) Improvements to increase capacity and safety	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV37	IT82	Road Network	Traffic capacity enhancements on Old Oak Lane	10	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV38	IT114	Road Network	Enhancements to the Old Oak Lane bridge over the canal.	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Bridge
TV39	IT100	Road Network	Junction enhancements between Old Oak Lane and Chanel Gate Road from Channel Gate.	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV40	IT83	Road Network	Increase capacity of Old Oak Lane bridge of West Coast mainline	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV41	IT107	Road Network	Upgrade of Willesden Junction Station Approach.	16.1	Developer cost/ planning contributions and/or service providers	T1	P11: Willesden Junction				Highways & Junction
TV42	IT105	Road Network	Enhancements to existing access road from Old Oak Lane (Channel Gate Road)	4.9	Developer cost/ planning contributions and/or service providers	T1	P9: Channel Gate				Highways & Junction
TV43	-	Road Network	Extension of Channel Gate Road to road bridge over Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	T1	P9: Channel Gate				Highways & Junction
TV44	IT97	Road Network	Victoria Road capacity enhancements including widening (if required) to Old Oak Lane and low rail overbridge headroom increased.	50	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				Highways & Junction
TV45	IT80	Road Network	Traffic capacity enhancements on Wales Farm Rd	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells				Highways & Junction
TV46	IT115	Road Network	Junction off of Old Oak Street and connection through to Victoria Rd.	NYC	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane				
TV47	IT116	Road Network	Continuation of Old Oak Street through Old Oak Common Lane Station and connecting to Victoria Rd.	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells				Underpass or Bridge connection through Old Oak Common Lane Station
TV48	-	Road Network	Enhancements to Schools Road.	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells				
TV49	IT117	Road Network	Improvements to Jenner Avenue and provision as public route.	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells				May be delivered as pedestrian and cycle route.
TV50	IT99	Road Network	A40 junction improvements - Gypsy Corner	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells				Highways & Junction

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV51	IT108	Road Network	Traffic calming measures in Bashley Road. Chandos Road and Chase Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P5: Old Park Royal				Highways & Junction
TV52	IT103	Road Network	Road and bridge connection Chase Road / Volt Ave over Dudding Hill line	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV53	IT103	Road Network	Road and bridge connection Chase Road / Volt Ave over Dudding Hill line	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV54		Road Network	Improvements and enhancements to Chandos Road.	NYC	Developer cost/ planning contributions and/or service providers	T1	"P4: Park Royal West P5: Old Park Royal"				Highways & Junction
TV55	IT109	Road Network	Safety and traffic calming scheme at Chase Road mini roundabouts	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV56	IT102	Road Network	Junction improvement of Chase Road and Volt Avenue	4.9	Developer cost/ planning contributions and/or service providers	T1	P5: Old Park Royal				Highways & Junction
TV57	-	Road Network	Improvements and enhancements to Park Royal Road and Abbey Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction – contributes towards delivery of enhanced "Big X" in Park Royal.
TV58	-	Road Network	Improvements and enhancements to Coronation Road and Acton Lane	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction – contributes towards delivery of enhanced "Big X" in Park Royal.
TV59	IT96	Road Network	Coronation Road/Park Royal Road/Abbey Road/Acton Lane junction realignment and improvements.	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre				Highways & Junction
TV60	-	Road Network	Improvements to existing road to south of Asda site to provide access to new development.	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre				Highways & Junction
TV61	-	Road Network	New route through Central Middlesex Hospital.	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre				Highways & Junction

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TV62	IT110	Road Network	Enhancements to North Acton Lane/ Barretts Green Road	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV63	IT111	Road Network	Enhancements to Abbey Road/ A406 slip	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV64	IT98	Road Network	A40 & A406 junction improvements - Hanger Lane gyratory	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West				Highways & Junction
TV65	IT101	Road Network	Junction improvements in surrounding areas (locations not yet identified, asset outside of OPDC boundary)	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide				Highways & Junction
TV66	IT101	Road Network	Junction improvements in surrounding areas (locations not yet identified, asset outside of OPDC boundary)	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide				Highways & Junction
TV67	IT112	Road Network	Altering carriageway widths to allow for more generous pavement widths	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide				Highways & Junction
TV68	IT113	Road Network	Other junction improvements in Old Oak and Park Royal.	NYC	Developer cost/ planning contributions and/or service providers	T1	Non-specific and/or Area-wide				Highways & Junction

Bus Network

- 3.5. Improvements to the bus network in the area will be designed to improve accessibility as well as permeability through the OPDC area. Providing a safe and frequent bus service will encourage the increase of use of the public transport system to and from the area; thereby lessening the need to use private vehicles.

Supporting Studies for Bus Network Projects

- Bus Strategy
- Development Infrastructure Funding Study (DIFS)
- Public Realm, Walking and Cycling Study
- Park Royal Transport Strategy
- Old Oak Strategic Transport Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
TB1	<i>IT119</i>	Bus Network	Bus operating revenue support for new services and compensation during construction	26.65	Developer cost/ planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB2	<i>IT120</i>	Bus Network	New bus routes and bus infrastructure including bus stops, bus stands, welfare and maintenance facilities, bus gates, bus priority measures and bus-only routes	26.65	Developer cost/ planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB3	-	Bus Network	Extension of route 218 to Harlesden +4 to 5 vehicles.	£1.25 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB4	-	Bus Network	Extension of route 302 to Old Oak North. +3-4 vehicles,	1.0 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB5	-	Bus Network	Extension of route 7 to Central Middlesex Hospital via Old Oak 24 hours a day. +4-5 vehicles,	1.65 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB6	-	Bus Network	Reroute 218 and 302 to HS2 via Eastern Assurance Link. -2 vehicles	0.5 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				This will supersede the pre Old Oak Common Station re reroutes of the 218.
TB7	-	Bus Network	Short reroute to 228. +1 vehicle	0.25 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				
TB8	-	Bus Network	Short extensions of routes 72 and 283 from Brunel Industrial Estate. +2 vehicles	0.5 (per annum)	planning contributions and/or service providers	T6	Non-specific and/or Area-wide				

4 UTILITIES

- 4.1. Due to the current densities and uses in the area and the projected development, there is a need to upgrade and extend much of the essential utilities infrastructure that underlies the everyday functioning of an urbanised area. See Figure 4 in the Appendix for a map of Utilities projects.

Smart Technology

- 4.2. The ability of the OPDC area to be an innovative and technologically adaptable part of London is reliant on the delivery of smart city technology, the detail of which is set out in policies EU4 and EU11 of the Draft Local Plan. The projects identified in the Infrastructure Schedule encourage developers and service providers to ensure that high quality and high speed telecommunications infrastructure and the provision of Air Quality Monitoring systems are delivered.

Supporting Studies for Smart Technology Projects

- Air Quality Study
- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Utilities Study
- Public Realm, Walking and Cycling Strategy

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU1	IU1	Smart Technology	Provide high quality/high speed wireless, broadband and other telecommunications infrastructure that can be easily accessed and upgraded over time (phased to match development timing).	NYC	Developer cost/ planning contributions and/or service providers	EU11	Non-specific and/or Area-wide				Ducting across all places especially on the strategic road network.
NU2	-	Smart Technology	Strategic telecommunications network	NYC	Developer cost/ planning contributions and/or service providers	EU11	Non-specific and/or Area-wide				
NU3	-	Smart Technology	Open access network of strategic duct infrastructure in Old Oak North through the provision of individual ducts and chambers, located beneath key routes.	NYC	Developer cost/ planning contributions and/or service providers	EU11	P2: Old Oak North				
NU4	IU2	Smart Technology	Air Quality Monitoring Stations and diffusion tubes across area	NYC	Developer cost/ planning contributions and/or service providers	EU4	Non-specific and/or Area-wide				

Decentralised Energy

4.3. The reduction of carbon emissions is an important policy requirement of the London Plan and is recognised in the Draft Local Plan Policies EU9 and EU10. As a result both site specific and strategic delivery of decentralised energy are identified in the Infrastructure Schedule.

Supporting Studies for Decentralised Energy Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- North Acton District Energy Study
- Old Oak North Development Framework Principles
- Utilities Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU5	<i>IU3</i>	Decentralised Energy	Site Specific Decentralised Energy Delivery	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO, or public sector (OPDC/GLA)	EU10	Non-specific and/or Area-wide				"Energy network - Heat Subsidiary policy approach. Phased with development phasing for Old Oak North and Scrubs Lane. Car Giant requires heat from 2023. "
NU6	-	Decentralised Energy	Car Giant West Energy Centre	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	P2: Old Oak North				Heat networks should operate at a primary flow temperature of 70oC and primary return temperature of 40oC. Refer to the Old Oak North Development Framework Principles for further specification.
NU7	-	Decentralised Energy	Scrubs Lane Energy Centre	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	P10: Scrubs Lane				Heat networks should operate at a primary flow temperature of 70oC and primary return temperature of 40oC. Refer to the Old Oak North Development Framework Principles for further specification.
NU8	<i>IU4</i>	Decentralised Energy	Strategic Area-wide District Heat Network	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	Non-specific and/or Area-wide				"Represents Preferred Policy Approach. Phased in line with development, buildings can operate on temporary gas boilers. Heat networks should operate at a primary flow temperature of 70oC and primary return temperature of 40oC. Refer to the Old Oak North Development Framework Principles for further specification."

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU9	-	Decentralised Energy	North Acton on site energy solutions	NYC	Developer cost	EU10	P7: North Acton				Area wide network not currently appropriate. Each developer should provide on-site heating solutions and enable connection to a strategic network at a future date. All ducting should be future proofed.
NU10	-	Decentralised Energy	Strategic Area-wide District Heat Network – heat extraction from sewer network	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	P2: Old Oak North				Heat networks should operate at a primary flow temperature of 70oC and primary return temperature of 40oC. Refer to the Old Oak North Development Framework Principles for further specification.
NU11	-	Decentralised Energy	Strategic Area-wide District Heat Network – heat extraction from other sources	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	Non-specific and/or Area wide				To be determined, but could include energy from waste, ground source heat pumps, air source heat pumps, aquifers and heat recovery from the Grand Union Canal.

Energy Network – Electricity and Gas

- 4.4. There is a need to ensure the supply of gas and electricity to the area and ensure that the improvements to supply occur as and when necessary to ensure the continuity and surety of supply to meet the requirements of development.

Supporting Studies for Energy Network – Electricity and Gas Projects

- Development Infrastructure and Funding Study (DIFS)
- Utilities Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU12	IU5	Energy Network - Electricity	Maintenance, renewal and replacement of electricity supply infrastructure	NYC		EU10	Non-specific and/or Area-wide				
NU13	IU6	Energy network - Electricity	New substations either situated at the centre or on the periphery of the area. Number and size of substations yet to be determined.	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide				
NU14	-	Energy network – Electricity	Old Oak North Substation	NYC	Dependent on land ownership and delivery model but could include, developer, third party ESCO or public sector (OPDC/GLA)	EU10	P2: Old Oak North				
NU15	-	Energy network – Electricity	Upgrade of electrical power supply at Atlas Road substation from 45MVA to 60MVA.	NYC	Developer cost/ planning contributions and/or service providers	EU10	P9: Channel Gate				Dependent on acceptance of a Connection Variation Offer from HS2
NU16	-	Energy network - Cooling	On- site cooling solutions for sites in OON	NYC	Developer cost	EU10	P2: Old Oak North				
NU17	-	Energy network - Cooling	Area wide cooling network solutions	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide				On-site cooling solutions required for OON, but area wide solutions may be suitable for other places.
NU18	IU7	Energy network - Gas	Maintenance, renewal and replacement of gas supply infrastructure	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide				

Potable Water Networks

- 4.5. While it is recognised that all development should minimise the potable water demand created in the area it is inevitable that there will be an increase in demand for potable water in the OPDC area. As such the Draft Local Plan Policy EU3 and the Infrastructure Schedule encourage the reinforcement of potable water supply.

Supporting Studies for Potable Water Network Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Integrated Water Management Strategy
- Utilities Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU19	IU8	Potable water network	Water supply and reinforcement of strategic supplies and continuous renewal	NYC	Service provider (Thames Water)	EU3	Non-specific and/or Area-wide				
NU20	IU9	Potable water network	Combined rainwater harvesting and greywater recycling systems provided, in particular within commercial developments	NYC	Developer cost	EU3	Non-specific and/or Area-wide				

Foul and Surface Water Infrastructure

4.6. While the OPDC are not a Lead Local Flood Authority there remains a responsibility for developers to conform to the requirements of the individual borough Surface Water Management Plans. This is therefore recognised in the Infrastructure Schedule, as are the works for the Tokyngton and Stonebridge Flood Alleviation Scheme.

Supporting Studies for Foul and Surface Water Infrastructure Projects

- Development Infrastructure Funding Study (DIFS)
- Integrated Water Management Strategy
- Environmental Standards Study
- Utilities Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU21	IU10	Foul and Surface Water Infrastructure	Maintenance/ renewal of sewerage infrastructure and new sewerage infrastructure to support growth	NYC	Developer cost/ planning contributions and/or service providers	EU3	Non-specific and/or Area-wide				
NU22	IU11	Foul and Surface Water Infrastructure	On plot Sustainable Drainage Systems to restrict discharge to greenfield runoff rates	NYC	Developer cost	EU3	Non-specific and/or Area-wide				Subsidiary Policy Approach
NU23	IU12	Foul and Surface Water Infrastructure	Strategic sustainable urban drainage systems within areas of Public Open Space to attenuate runoff from adopted roads	NYC	Developer cost/ planning contributions and/or service providers	EU3	Non-specific and/or Area-wide				Preferred Policy Approach
NU24	IU13	Foul and Surface Water Infrastructure	Sustainable Urban Drainage systems connected to the Grand Union Canal	NYC	Developer cost/ planning contributions and/or service providers	EU3	Non-specific and/or Area-wide				Preferred Policy Approach
NU25	IU14	Foul and Surface Water Infrastructure	New outfalls to the Grand Union Canal and Improvements to the canal to improve conveyance capacity	NYC	Developer cost/ planning contributions and/or service providers	EU3	P3: Grand Union Canal				Preferred Policy Approach
NU26	-	Foul and Surface Water Infrastructure	Reroute of Stamford Brook Sewer along the north of the Canal in OON	NYC	Developer cost/ planning contributions and/or service providers	EU3	P2: Old Oak North				

Flood and Water Management

4.7. While the OPDC are not a Lead Local Flood Authority there remains a responsibility for developers to conform to the requirements of the individual borough Surface Water Management Plans. This is therefore recognised in the Infrastructure Schedule, as are the works for the Tokyngton and Stonebridge Flood Alleviation Scheme.

Supporting Studies for Flood and Water Management Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Integrated Water Management Strategy
- Utilities

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU27	IU15	Flood and Water Management	Tokyngton and Stonebridge Flood Alleviation Scheme	0.1	Developer cost/ planning contributions and/or service providers	EU3	N/A				
NU28	IU16	Flood and Water Management	Works associated with Flood Risk Management especially those associated with development	NYC	Developer cost	EU3	Non-specific and/or Area-wide				

Waste

- 4.8. The management of waste will be a challenge for the OPDC area and as such there are matters listed on the Infrastructure Schedule to assist in the management of waste that is generated across the OPDC area.

Supporting Studies for Waste Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Waste Apportionment Study
- Waste in Tall Buildings Study
- Waste Management Strategy
- Waste Technical Paper

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
NU29	IU17	Waste	Onsite waste infrastructure to segregate/ store/ compact/ process waste generated from within sites.	NYC	Developer cost	EU6	Non-specific and/or Area-wide				
NU30	IU18	Waste	Strategic waste collection / recycling and processing system (vacuum or underground) including onsite connections to facility.	NYC	Developer cost/ planning contributions and/or service providers	EU6	Non-specific and/or Area-wide				Need for and type of strategic waste system yet to be determined.

5 GREEN INFRASTRUCTURE

5.1. To deliver a successful comprehensive development, OPDC recognises the necessity in investing in natural capital. This therefore requires the delivery of a high quality and robust integrated network of parks, green, civic, and other open spaces. This network of green infrastructure will assist in the mitigation of a range of environmental impacts such as flood risk and the urban heat island effect. It will also provide places for the community to meet, play, exercise and relax. Refer to Figure 5 in the Appendix for a map of the green infrastructure projects.

Open Space

5.2. In the creation of this new part of London the provision of open space and the ability of the population to access open space will be extremely important and contribute to the success of the area in a number of ways including social cohesion, health and wellbeing, as well as general environmental and biodiversity benefits. There are a range of open space projects identified in the Infrastructure Schedule. There are those that identify existing open space that would benefit from enhancement and the creation of new open spaces. Some spaces will be designed to perform more of a civic function while others are intended for green space. The general intent of the delivery of open space is supported by Policies EU1 and EU2 of the regulation Draft Local Plan and the individual projects are identified in the relevant Place Policies in Chapter 4 of the Plan.

Supporting Studies for Open Space Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Old Oak North Development Framework Principles
- Park Royal Development Framework Principles
- Public Realm; Walking and Cycling Strategy
- SINC Statement
- Scrubs Lane Development Framework Principles
- Victoria Road and Old Oak Lane Development Framework Principles
- Precedents Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI1	GI1	Open Space	A new Grand Union Canal Local Park provided between Old Oak North and Old Oak South of a minimum 2 hectares in size, including the Birchwood Nature Reserve.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North				
GI2	GI2	Open Space	Enhancements to Mary Seacole Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI3	GI3	Open Space	Enhancements to Old Oak Community Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI4	GI4	Open Space	Enhancements to Cerebos Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				
GI5	GI5	Open Space	Enhancements to Midland Terrace Play Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				
GI6	GI6	Open Space	Enhancements to North Acton Cemetery	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI7	GI7	Open Space	Enhancements to existing open space (Diageo Lake & Gardens, Lakeside Drive and other green spaces)	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West				
GI8	GI8	Open Space	Enhancements to Wesley Estate Public Open Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West				
GI9	GI9	Open Space	Sensitive enhancements to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P12: Wormwood Scrubs				
GI10	GI10	Open Space	Biodiversity improvements on railway sidings and embankments	NYC	Developer cost/ planning contributions and/or service providers	EU2	Non-specific and/or Area-wide				
GI11	GI11	Open Space	The Old Oak North Local Park of a minimum 2 hectares in size across Old Oak.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North				
GI12	GI12	Open Space	Rolls Royce Yard	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North				
GI13	GI13	Open Space	A Local Park of a minimum 2 hectares in size (comprising spaces across the Elizabeth Line depot and areas surrounding the Old Oak Common station including station squares	NYC	Developer cost/ planning contributions and/or service providers	EU1	P1: Old Oak South				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI14	GI14	Open Space	Harrow Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI16	GI16	Open Space	Hythe Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI17	GI17	Open Space	Mitre Yard open space integrated with Mary Seacole Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI18	GI18	Open Space	Mitre Wharf canal side open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI19	GI19	Open Space	Open space adjacent to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane				
GI20	GI20	Open Space	Brunel Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				
GI21	GI21	Open Space	Acton Wells Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI22	GI22	Open Space	Victoria Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI23	GI23	Open Space	Portal Way Squares	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI24	GI24	Open Space	North Acton Station Square South	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI25	GI25	Open Space	North Acton Station Square North	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI26	GI26	Open Space	School Road Square and Public Realm	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI27	GI27	Open Space	Willesden Junction Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P11: Willesden Junction				
GI28	GI28	Open Space	New public open space within ASDA site.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P6: Park Royal Centre				
GI29	GI29	Open Space	Grand Union Canal pocket parks.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P3: Grand Union Canal				
GI30	GI30	Open Space	Linear Spaces along Secondary and Primary Routes	NYC	Developer cost/ planning contributions and/or service providers	EU1	Non-specific and/or Area-wide				
GI31	GI31	Open Space	Securing contributions towards and/or provision of public art.	NYC	Developer cost/ planning contributions and/or service providers	TCC5	Non-specific and/or Area-wide				
GI32	GI32	Open Space	Contributions towards and/ or delivery of new publicly accessible open space and/or enhancements of existing public open spaces not included above to address policy requirements.	NYC	Developer cost/ planning contributions and/or service providers	EU1/D9	Non-specific and/or Area-wide				
GI33	GI33	Open Space	Contributions towards and/or the delivery of new biodiversity and/or enhancements towards existing biodiversity assets.	NYC	Developer cost/ planning contributions and/or service providers	EU2	Non-specific and/or Area-wide				
GI34	GI34	Open Space	Contributions towards and/or the delivery of urban greening along streets and public realm. Including the integrations of SuDs / rain gardens/ and other linear planting along all green streets.	NYC	Developer cost/ planning contributions and/or service providers	EU2/ EU3/ D4	Non-specific and/or Area-wide				
GI35	-	Open Space	Improvements and enhancements to existing public open space at Central Middlesex Hospital	NYC	Developer cost/ planning contributions and/or service providers	EU1	P6: Park Royal Centre				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI36	<i>GI36</i>	Open Space	Integrating green spaces and other green infrastructure along Old Oak Street (south) and other streets	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2/ D2	P1: Old Oak South				
GI37	<i>GI37</i>	Open Space	New multi-functional canal basins and waterspace	NYC	Developer cost	EU1/EU2	P2: Old Oak North				
GI38	<i>GI38</i>	Open Space	Linear open spaces along Victoria Road, Wales Farm Road, Chase Road, Old Oak Street and new streets	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells				
GI39	<i>GI39</i>	Open Space	New and improved spaces within Atlas Junction neighbourhood centre	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				
GI40	<i>GI40</i>	Open Space	Canalside spaces on the Willesden Junction Maintenance Depot, and other canalside locations within the Atlas Junction cluster including the Triangle Open Space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane				
GI41	<i>GI41</i>	Open Space	Linear spaces along Old Oak Lane, Old Oak Common Lane, Victoria Road and new walking and cycling focused streets across the area	NYC	Developer cost/ planning contributions and/or service providers	EU1/T2/T3	P8: Old Oak Lane & Old Oak Common Lane				
GI42	<i>GI42</i>	Open Space	New public open space (First Central, Lakeside Drive/ Coronation Road)	NYC	Developer cost/ planning contributions and/or service providers	EU1	P4: Park Royal West				Project to be delivered as part of planning permission for Lakeside Drive (November 2017).
GI43	<i>GI43</i>	Open Space	Southern Station Square	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2	P1: Old Oak South				
GI44	<i>GI44</i>	Canal	New and improved wharves, docking, mooring and ancillary facilities at appropriate locations along Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2	P3: Grand Union Canal				

Play Space

- 5.3. Studies have continually shown the importance of play for physical, mental and emotional wellbeing across all age groups. The importance of this form of Green Infrastructure is acknowledged in the Draft Local Plan with Policy D9: Play Space dedicated to its provision for all ages. This requirement is therefore reflected in the IDP Schedule with 4 different projects which overall ensure delivery of play space for all age groups.

Supporting Studies for Play Space Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Precedents Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI45	<i>GI45</i>	Play Space	Contributions towards and/or delivery of play space for children under 5.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide				
GI46	<i>GI46</i>	Play Space	Contributions towards and/or delivery of play space for children of 5 - 11 years old.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide				
GI47	<i>GI47</i>	Play Space	Contributions towards and/or delivery of play space for young people (12+).	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide				
GI48	<i>GI48</i>	Play Space	Contributions towards and/or delivery of play space for people all ages.	NYC	Developer cost/ planning contributions and/or service providers	D9	Non-specific and/or Area-wide				

Public Realm

- 5.4. Public realm plays an important role in the accessibility and permeability of the area. It provides for legibility of space as well as an intermediary space between various other functions such as roads and built form. Public realm itself has a multi-use functionality where the space can provide for a combination of the following: recreation, social interaction, nature, safe non-motorised movement, climate change mitigation, and utilities. It also has the potential to ensure the success of the area in regards to 'making a place' and providing identity through innovative design and the provision of public art.

Supporting Studies for Public Realm Projects

- Development Infrastructure Funding Study (DIFS)
- Environmental Standards Study
- Old Oak North Development Framework Principles
- Park Royal Development Framework Principles
- Public Realm; Walking and Cycling Strategy
- Precedents Study
- Scrubs Lane Development Framework Principles
- Victoria Road and Old Oak Lane Development Framework Principles

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
G149	<i>G149</i>	Public Realm	Public realm/ green infrastructure enhancements on Victoria Road/ Wales Farm Rd gyratory system.	NYC	Developer cost/ planning contributions and/or service providers	D2	P7: North Acton and Acton Wells				
G150	<i>G150</i>	Public Realm	Public realm / green infrastructure enhancements on Victoria Road, Wales Farm Rd to Old Oak Common Lane	NYC	Developer cost/ planning contributions and/or service providers	D2	P7: North Acton and Acton Wells				
G151	<i>G151</i>	Public Realm	Public realm/ green infrastructure enhancements on Old Oak Lane	NYC	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane				
G152	<i>G152</i>	Public Realm	Public realm/ green infrastructure enhancements on Old Oak Common Lane: Brunel Rd to Oaklands intersection	5.0	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane				
G153	<i>G153</i>	Public Realm	Public realm /green infrastructure enhancements, Old Oak Common Lane: Oaklands intersection to Atlas Junction	NYC	Developer cost/ planning contributions and/or service providers	D2	P8: Old Oak Lane & Old Oak Common Lane				
G154	<i>G154</i>	Public Realm	Public realm/ green infrastructure enhancements on Scrubs Lane adjacent to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	D2	P10: Scrubs Lane				
G155	<i>G155</i>	Public Realm	Public realm/ green infrastructure enhancements on Scrubs Lane: Mitre Bridge to Harrow Rd	NYC	Developer cost/ planning contributions and/or service providers	D2	P10: Scrubs Lane				

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
GI56	<i>G/56</i>	Public Realm	Contributing towards and / or delivering public realm / green infrastructure particularly along key routes towards stations.	NYC	Developer cost/ planning contributions and/or service providers	D2	P4: Park Royal West				
GI57	<i>G/57</i>	Public Realm	Old Oak Common Lane Station Square	NYC	Developer cost/ planning contributions and/or service providers	EU1/D2	P7: North Acton and Acton Wells				
GI58	-	Public Realm	New public open space / public realm provision surrounding Park Royal Central junction following junction alignment.	NYC	Developer cost and/or planning contributions	EU1/D2	P5: Park Royal Centre				To be delivered as part of junction realignments and as publicly accessible open space.

6 SOCIAL INFRASTRUCTURE

- 6.1. Social infrastructure provides for the long term wellbeing of a community. It encompasses education, health, community space, leisure and sports facilities as well as facilities for emergency services. Together these infrastructure items will provide the physical spaces that will allow for the development and maintenance of community cohesiveness by encouraging social interaction, promoting learning and health, as well as the provision of other supporting facilities for those living, working and visiting the area. While the social infrastructure items are listed separately in the Infrastructure Schedule, there is recognition that the most feasible delivery model may be to co-locate the facilities, i.e. a leisure centre, community centre and a library may all be located within the same building; or a school may share sports facilities with the wider community.

Education

6.2. The projects in the Infrastructure Schedule for education cover early years, primary and secondary (including sixth form) provision. OPDC's Social Infrastructure Needs Study has assessed the requirement for education needs arising from development within the plan period and how this should be catered for. The study recommends that sufficient capacity exists in existing local schools to cater for student numbers arising from the earlier phases of development, but new facilities will be required from 2027 onwards. These projects are supported by Policy TCC4 of the second revised Draft Local Plan.

Supporting Studies for Education Projects

- Development Infrastructure Funding Study (DIFS)
- Social Infrastructure Needs Study
- Precedents Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
SI1	-	Nursery	Super Nursery (120 Children) at Old Oak North.	NYC	Developer/ Service Provider	TCC4	P2: Old Oak North				
SI2	-	Nursery	Super Nursery (120 Children) at North Acton.	NYC	Developer/ Service Provider	TCC4	P7: North Acton and Acton Wells				
SI3	-	Nursery	Super Nursery (120 Children) at Old Oak South.	NYC	Developer/ Service Provider	TCC4	P1: Old Oak South				
SI4	-	Nursery	Super Nursery (120 Children) – location yet to be determined.	NYC	Developer/ Service Provider	TCC4	NYC				
SI5	-	Schools	Use of surplus capacity in existing primary schools located within LBHF	NYC	Planning Contributions / Service Provider	TCC4	N/A				Sufficient capacity will be available in existing primary schools to meet the needs arising from phases 1 and 2 of the Local Plan period, mainly through identified capacity in LBHF.
SI6	-	Schools	4FE primary school (840 pupils)	NYC	Developer/ Planning Contributions / Service Provider	TCC4	P2: Old Oak North				To be provided on Car Giant site allocation. Required by 2030. If delivered as a Free School, then project would be funded by the ESFA.
SI7	-	Schools	Lack of current capacity identified in secondary schools therefore OPDC will begin to monitor on-site provision from Phase 1 whilst	NYC	Planning Contributions / Service Provider	TCC4	N/A				The growth in pupil numbers moving into the secondary phase, means that existing secondary schools are unlikely to have available existing capacity to help meet needs arising from the early phases of development.
SI8	-	Schools	9FE secondary school (1350 pupils)	NYC	Developer/ Planning Contributions / Service Provider	TCC4	P7: North Acton and Acton Wells				In 2027, the secondary school demand reaches a stage to support the opening of a secondary school to be delivered at Acton Wells East site allocation.

Health

- 6.3. The items identified in the Infrastructure Schedule for health focus on primary health provision. Other types of health provision may be required as development proposals come forward and the OPDC gains a better understanding of the future population. OPDC's Social Infrastructure Needs Study recommends that existing capacity at Park Royal Medical Practice, and expansion of existing facilities in the surrounding area, would satisfy demand from the early phases of development but that a new on-site health facility will be required within the Local Plan period. These projects are supported by Policy TCC4 of the Draft Local Plan.
- 6.4. The health infrastructure needs in the table below (paragraph 6.5) have been identified through discussions with relevant health providers and local authorities. Given the timescales for the Local Plan and the changing nature of health provision in west London, there is a strong likelihood Charing Cross Hospital will also play an important role in meeting this need.
- 6.5. Central Middlesex and Hammersmith hospitals no longer have A&E departments so Charing Cross Hospital will be essential in meeting the acute health care needs of an expanded population in the OPDC area.

Supporting Studies for Health Projects

- Development Infrastructure Funding Study (DIFS)
- Social Infrastructure Needs Study
- Precedents Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
SI9	-	Health facilities	Expansion of Park Royal Medical Practice (Primary Care Centre).	1.9	Planning Contributions	TCC4	P6: Park Royal Centre				15,000 additional patients and 600sqm of floorspace. This facility is located within Central Middlesex Hospital and additional floorspace would utilise surplus capacity at the Hospital.
SI10	-	Health facilities	Off-site expansion of Hammersmith Centre for Health.	0.4	Planning Contributions	TCC4	Non-specific and/or Area-wide				6,000 additional patients with an additional 200sqm of space. This facility is located within Hammersmith Hospital.
SI11	-	Health facilities	Off-site expansion of Willesden Centre for Health and Care.	1	Planning Contributions	TCC4	Non-specific and/or Area-wide				8,000 - 10,000 additional patients with an additional 500sqm.
SI12	-	Health facilities	Off-site expansion of Cloister Road Surgery.	1.1	Planning Contributions	TCC4	Non-specific and/or Area-wide				3,500 patients with an extension of 145sqm.
SI13	SI17	Health facilities	New Health Hub facility. Opening at 1,088 sqm in 2024 and expanding to 1,564 by 2038.	NYC	Planning Contributions	TCC4	P2: Old Oak North				To be delivered on the Car Giant site allocation.

Community, Leisure and Sport

6.6. The provision of the community facilities that are intended to provide a range of community services are listed in the Infrastructure Schedule. These may change in location as the development proposals come forward and OPDC gains a better understanding of delivery timescales and geographical requirement for these facilities within the OPDC area. These projects are supported by Policies TCC4 and TCC6 of the Draft Local Plan.

Supporting Studies for Community, Leisure and Sport Projects

- Development Infrastructure Funding Study (DIFS)
- Social Infrastructure Needs Study
- Precedents Study
- Sports Courts and Swimming Pools Study

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
SI14	<i>SI20</i>	Community Centre	2,600 sqm Community Centre in Old Oak North	NYC	Planning Contributions	TCC4	P2: Old Oak North				Exact location within Old Oak North yet to be determined.
SI15	<i>SI21</i>	Community Centre	2,600 sqm Community Centre in Old Oak South	NYC	Planning Contributions	TCC4	P1: Old Oak South				Exact location within Old Oak South yet to be determined.
SI16	<i>SI18</i>	Leisure and Sports Centre	Concessions access Leisure/ Sports Centre 1	NYC	Developer cost/or service providers	TCC4 / TCC6	P1: Old Oak South				Could alternatively be provided in one large facility
SI17	<i>SI19</i>	Leisure and Sports Centre	Concessions access Leisure/ Sports Centre 2	NYC	Developer cost/or service providers	TCC4/ TCC6	P2: Old Oak North				
SI18	-	Leisure and Sports Facility	Provision of Public Drinking Foundations	NYC	Developer cost/or service providers	TCC4/ TCC6	Non-specific and/or Area-wide				Should be delivered as part of the public realm along key routes, public open spaces and other appropriate locations.

Emergency Services

6.7. The provision of emergency services in the area will be dependent on the requirements of the Ambulance, Fire and Police Services. The projects listed in the Infrastructure Schedule are OPDC's current understanding of their needs. However the provision of space for these services may alter over time as their delivery models change. The OPDC will remain flexible in the delivery of infrastructure for the emergency services to ensure that they are able to meet the requirements of the growing population in a manner that best suits the services involved. These projects are supported by Policy TCC4 of the second Draft Local Plan.

Supporting Studies for Emergency Services Projects

- Social Infrastructure Needs Study
- Development Infrastructure Funding Study (DIFS)

PRN	Old PRN (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								0-10 Years	10-20 Years	20+ Years	
SI19	-	Emergency Services	Dedicated Ward Office (Police) 1		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide				Exact sites to be determined. Can be co-located with other social infrastructure facilities.
SI20	-	Emergency Services	Dedicated Ward Office (Police) 2		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide				
SI21	-	Emergency Services	Dedicated Ward Office (Police) 3		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide				
SI22	SI25	Emergency Services	Potential intensification of existing Fire Station	NYC	Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide				Work with emergency services to determine delivery triggers
SI23	SI26	Emergency Services	625 sqm extension to existing ambulation station.	NYC	Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide				

APPENDIX

INFRASTRUCTURE MAPS

Figure 1: Rail, Stations and Interchanges Projects

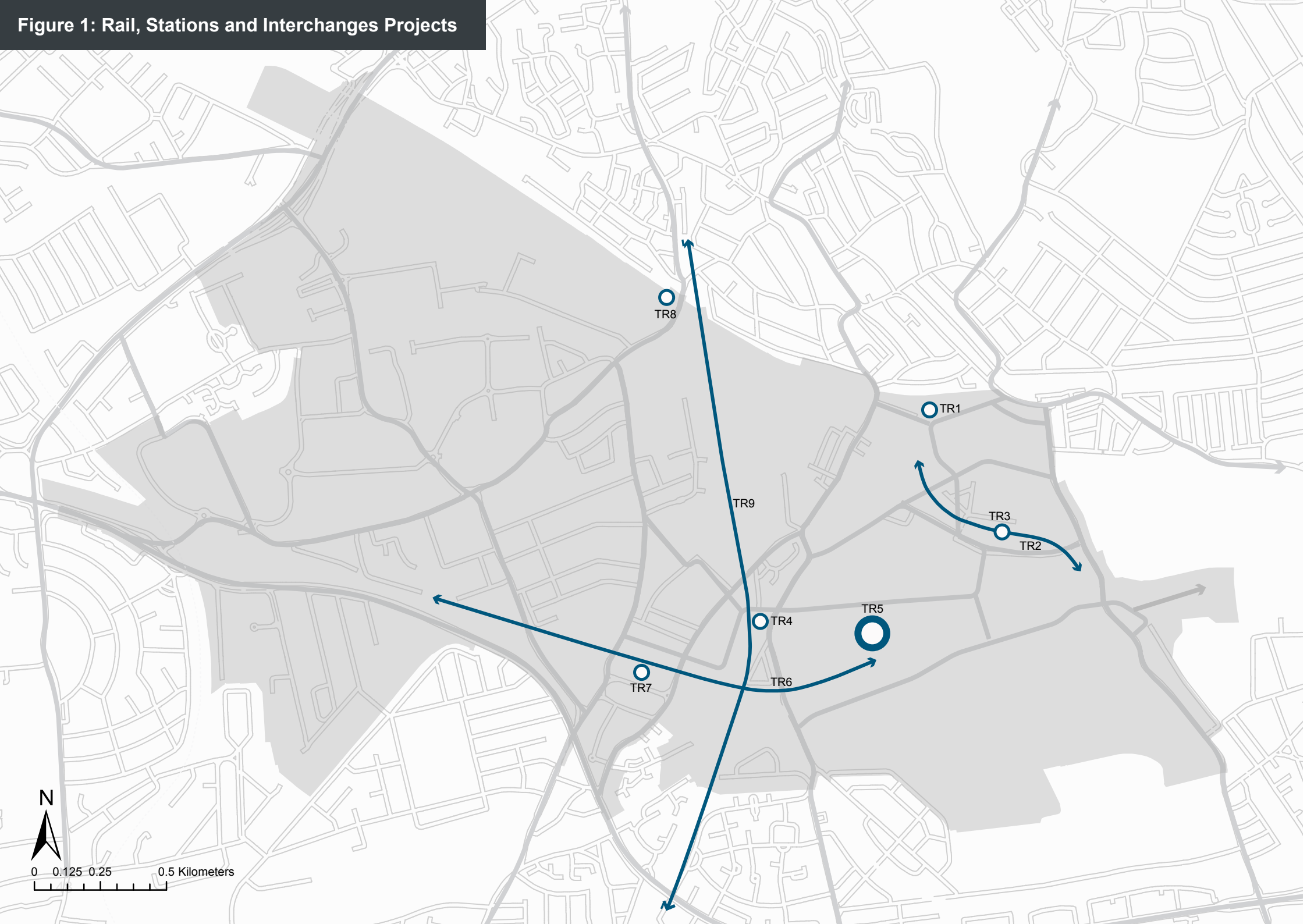


Figure 2: Pedestrian and Cycle Projects

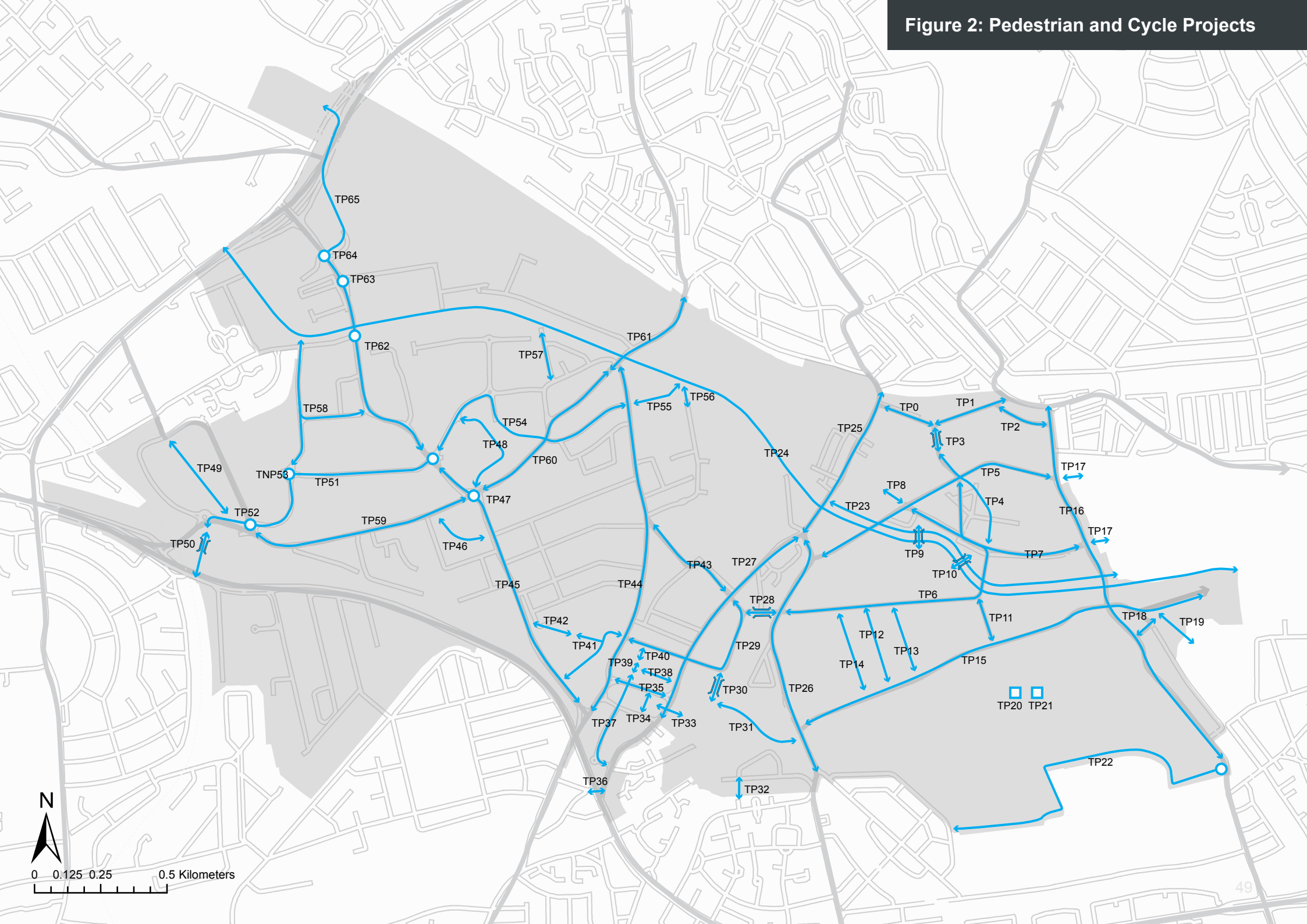


Figure 3: Road Network Projects

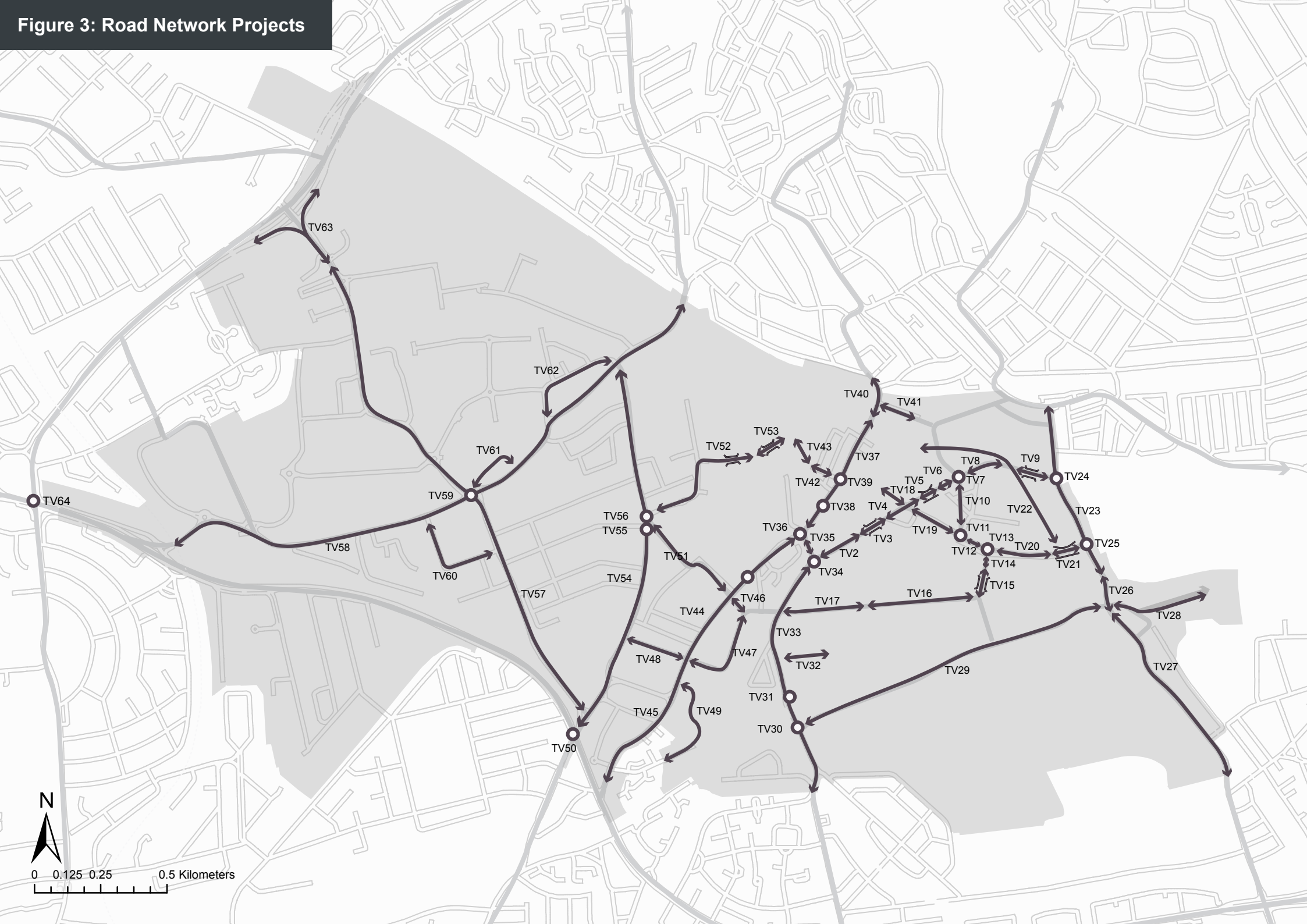


Figure 4: Utilities Projects

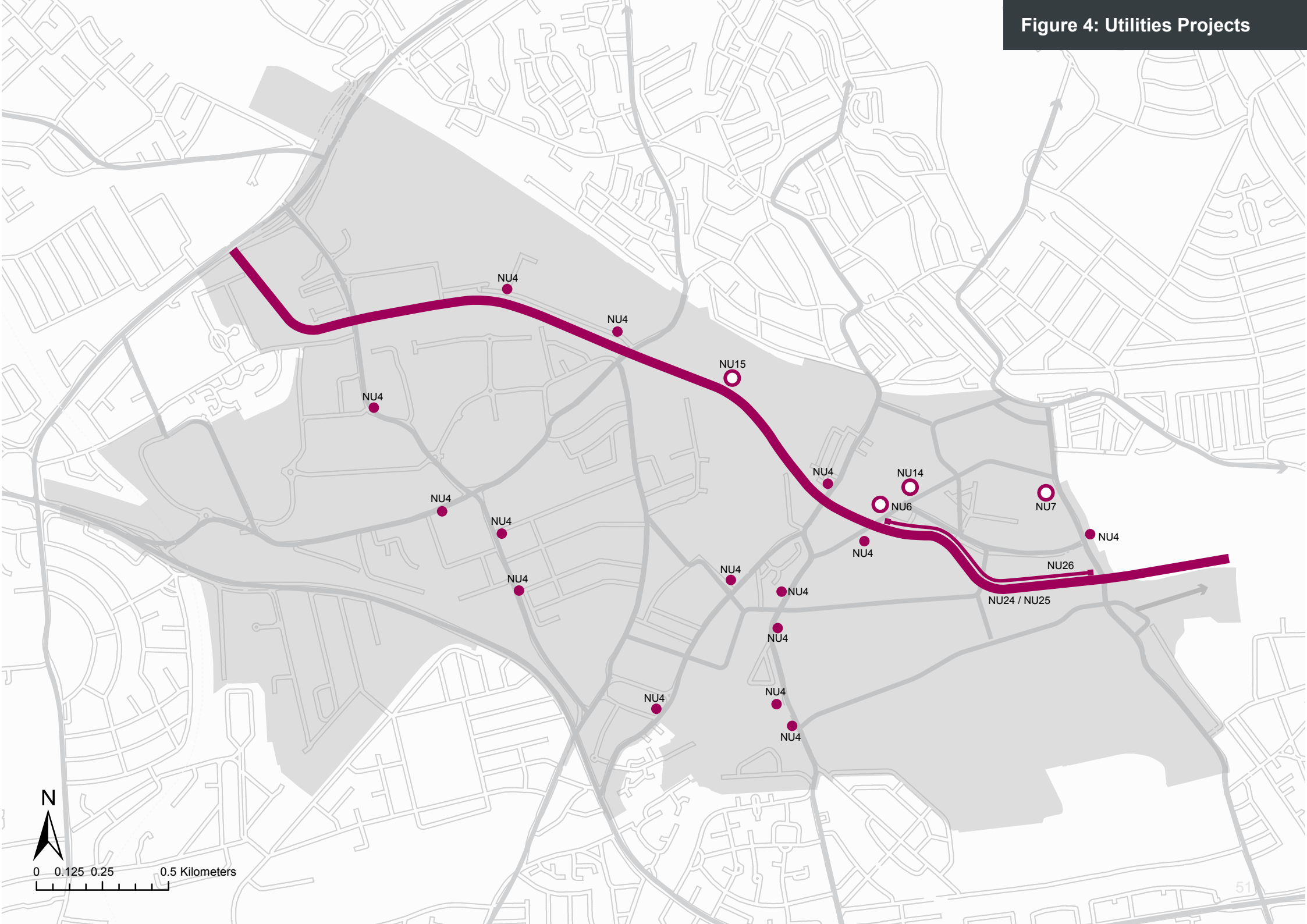


Figure 5: Green Infrastructure Projects

