Old Oak and Park Royal Development Corporation

INFRASTRUCTURE DELIVERY PLAN

May 2018

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1.0 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 as identified below:

1.3.1 Transport

- Rail, Station and Interchange
- 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. The following studies have informed this list of 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 Masterplan; 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; and Willesden Junction Station Feasibility Study.

1.3.2 Utilities

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

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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. The following studies have influenced the utilities projects in the IDP: Air Quality Study; Circular and Sharing Economy Study; Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Integrated Water Management Strategy; Smart Strategy; Waste Management Strategy; and the Utilities Study.

1.3.3 Green Infrastructure

- 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 and improve the 'look and feel' of the area to create the quality of place that the OPDC Local Plan policies are seeking to deliver and additionally ensuring environmental benefit is achieved through the development. The studies that assisted in the identification of these projects are: Cultural Principles; Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Park Royal Centre Masterplan; Public Realm, Walking and Cycling Strategy; Old Oak North Development Framework Principles; Scrubs Lane Development Framework Principles; Sites of Importance for Nature Conservation Statement; and the Victoria Road and Old Oak Lane Development Framework Principles.

1.3.4 Social Infrastructure

- 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. The studies that aided in the identification of this section are: Cultural Principles; Development Infrastructure Funding Study (DIFS); Education and Health Needs Study; Retail and Leisure Needs Study; and the Sports Courts and Swimming Pools Study.

1.4 Where possible the projects listed in the schedule have been mapped. Figure 1 in the Appendix provides an overall spatial depiction of the infrastructure listed in the schedule. Each infrastructure type also has a separate map to provide a spatial representation of the relevant projects. These 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

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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. 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 the 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.

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2.0 Understanding the Schedule of Projects

2.1 The Local Plan Reference 2017 (LPR) is unique for each project. Where possible and appropriate, the projects are mapped and the LPR correlates to the item on the map. The appropriate map numbers appear in the last column of the schedule.

2.2 The Local Plan Reference 2016 refers to the numbers that the projects were referred to in the Regulation 18 OPDC Local Plan which was consulted on in February 2016.

2.3 The infrastructure items are listed according to their categories as described above. 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 updates to this document.

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 and 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.

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OPDC Infrastructure Schedule

3.0 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. The studies that informed the projects listed in the Infrastructure Schedule are: Development Infrastructure Funding Study (DIFS); Public Realm, Walking and Cycling Study; Willesden Junction Station Feasibility Study; North Acton Station Feasibility Study; Old Oak Strategic Transport Study and the Park Royal Transport Strategy. Refer to Figure 2 in the Appendix for a map of these projects.

Project Reference No. (2018)	Old Project Reference No. (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	
TN1	*IT1*	Station & Interchange	Willesden Junction Station Improvements	33	Developer cost/ planning contributions and/or service providers	T5	P11: Willesden Junction	Y	Y		
TN2		Railway	West London Line Viaduct	143	Developer cost/ planning contributions and/or service providers	T5	P2: Old Oak North	Y	Y		Excludes costs for Hythe Road Station delivery
TN3	*IT2*	Station & Interchange	Hythe Road Overground station (West London Line)	30	Developer cost/ planning contributions and/or service providers	T5	P2: Old Oak North		Y		Costs for station delivery only assuming delivery of Viaduct
TN4	*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		Y		
TN5	*IT4*	Station & Interchange	Old Oak Common Station	NYC	DfT	T5	P1: Old Oak South		Y		
TN6		Railway	Potential Chiltern Line Extension to Old Oak Common Station	NYC	Developer cost/ planning contributions and/or service providers	T5	P1: Old Oak South		Y	Y	
TN7	*IT5*	Station & Interchange	Improvements to North Acton Station	20	Developer cost/ planning contributions and/or service providers	T5	P7: North Acton and Acton Wells	Y	Y		
TN8	*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	Y	Y	Y	
TN9		Railway	West London Orbital Route	NYC	Developer cost/ planning contributions and/or service providers	T5	P8: Old Oak Lane and Old Oak Common Lane		Y	Y	

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. The projects have been identified through the evidence base documents that also support the OPDC Local Plan 2018 (Regulation19(2) version):

- Development Infrastructure and Funding Study (DIFS); Public Realm, Walking and Cycling Study; Environmental Standards Study, Old Oak Strategic Transport Study; Park Royal Transport Strategy and the Development Framework Principles documents.

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Refer to Figure 3 in the Appendix for a map of these projects.

Project Reference No. (2018)	Old Project Reference No. (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	
TN10	*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	Y	Y		
TN11	-	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		Y		
TN12	*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 / PlOC1	P10: Scrubs Lane	Y			
TN13	*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	Y	Y		Bridge
TN14	-	Pedestrian & Cycle	North-South pedestrian and cycle route connecting Willesden Junction, Hythe Road Station and Wormwood Scrubs.	NYC	Developer cost/ planning contributions and/or service providers	T2	P2: Old Oak North P11: Willesden Junction	Y	Y		Maximum gradient along entire route not to exceed 1:20/5%. Will be delivered in conjunction with public realm and road projects.
TN15	-	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	Y	Y		
TN16	-	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	Y	Y		
TN17	-	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	Y			
TN18	-	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	Y	Y		
TN19	*IT44*	Pedestrian & Cycle	Green 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		Y		
TN20	*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		Y	Y	Underpass or Overbridge (tbc). Cost based on worst case option.
TN21	*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		Y	Y	Underpass or Overbridge (tbc)
TN22	*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		Y	Y	Underpass or Overbridge (tbc)

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Project Reference No. (2018)	Old Project Reference No. (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	
TN23		Pedestrian & Cycle	Pedestrian and cycle access to development west of Old Oak Common Station from Old Oak Street	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P1: Old Oak South		Y	Y	
TN24	*IT45*	Pedestrian & Cycle	Improvements and enhancements to pedestrian and cycle paths along Scrubs Lane.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane	Y			
TN25	*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	Y			
TN26	-	Pedestrian & Cycle	New pedestrian and cycle connection linking Scrubs Lane and new road to Kensal Canalside.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane	Y	Y		
TN27	*IT63*	Pedestrian & Cycle	Pedestrian/cycle access to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P10: Scrubs Lane		Y	Y	
TN28	*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	Y	Y	Y	
TN29	*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		Y	Y	
TN30	*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	Y			
TN31	*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	Y	Y		
TN32	*IT49*	Pedestrian & Cycle	Improvements to towpath along south of the Grand Union Canal.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P3: Grand Union Canal	Y	Y		
TN33	*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	Y	Y		
TN34	*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		Y		
TN35	*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	Y	Y		
TN36	*IT18*	Pedestrian & Cycle	Pedestrian / Cycle Access between Western end of Old Oak Common Lane Station and Acton Wells	55.9	Developer cost/ planning contributions and/or service providers	T2 / T3	P7: North Acton and Acton Wells		Y		Underpass or Bridge Cost based on the bridge option

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Project Reference No. (2018)	Old Project Reference No. (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	
TN37	-	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		Y		
TN38	*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		Y	Y	Bridge
TN39	*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	Y	Y	Y	
TN40	*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	Y	Y		
TN41	*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	Y	Y		
TN42	*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	Y	Y		
TN43	*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	Y	Y		
TN44	*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		Y	Y	
TN45	*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	Y			
TN46	*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	Y	Y	Y	
TN47	*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	Y	Y		
TN48	*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		Y		
TN49	*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	Y			To form part of improved connection between Park Royal Road and North Acton Station
TN50	-	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	Y	Y		To form part of improved connection from Park Royal Road between North Acton Station

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Project Reference No. (2018)	Old Project Reference No. (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	
TN51	*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	Y	Y		
TN52	*IT39*	Pedestrian & Cycle	Chase Road on-street cycle lanes	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P5: Old Park Royal	Y	Y		
TN53	*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	Y	Y		
TN54	-	Pedestrian & Cycle	Pedestrian and cycle connections through ASDA site.	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P6: Park Royal Centre	Y	Y		
TN55	*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	Y	Y		
TN56	-	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	Y			Exact route to be determined – may be delivered as part of upgrade or realignment of existing vehicular route the site.
TN57	*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	Y			
TN58	*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	Y	Y		
TN59	*IT31*	Pedestrian & Cycle	Improvements to existing footpaths and cycle paths to provide alterative 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	Y	Y		Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TN60	*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	Y	Y		Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TN61	*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	Y	Y		Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TN62	*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	Y	Y		Forms part of alternative pedestrian and cycle route linking Park Royal Station to Grand Union Canal.
TN63	-	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	Y	Y		Forms part of continuous Cycle Quietway from Park Royal Station to Grand Union Canal.
TN64	*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	Y	Y		
TN65	*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	Y	Y		

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Project Reference No. (2018)	Old Project Reference No. (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	
TN66	*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	Y	Y		
TN67	*IT41*	Pedestrian & Cycle	Cycle route improvements along Coronation Road	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y		
TN68	*IT42*	Pedestrian & Cycle	Cycle route improvements along Acton Lane	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y		
TN69	*IT36*	Pedestrian & Cycle	Improved cycle lanes across Harlesden Bridge	NYC	Developer cost/ planning contributions and/or service providers	T2 / T3	P4: Park Royal West	Y	Y		
TN70	*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	Y	Y		
TN71	*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	Y	Y		
TN72	*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	Y	Y		
TN73	*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	Y	Y		
TN78	*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	Y	Y	Y	
TN79	*IT26*	Pedestrian & Cycle	New cycle networks across the Old Oak core area.	15.0	Developer cost/ planning contributions and/or service providers	T2 / T3	Non-specific and/or Area-wide	Y	Y	Y	
TN80	*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	Y	Y	Y	
TN81	*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	Y	Y	Y	
TN82	*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	Y	Y	Y	

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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. The identification of the projects is supported by the following studies:

- Development Infrastructure Funding Study (DIFS); Public Realm, Walking and Cycling Study; Environmental Standards Study; Old Oak Strategic Transport Study; Park Royal Transport Strategy, and the Development Framework Principles documents.

Refer to Figure 4 in the Appendix for a map of these projects.

Project Reference No. (2018)	Old Project Reference No. (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	
TN82	-	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	Y	Y		Relates to delivery of associated primary and secondary road infrastructure across Old Oak North, exclusive of key crossings and junction projects listed below.
TN83	-	Road Network	Park Road from Old Oak Common Lane to Park Bridge.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y			Highways & Junction. Initial section being delivered as part of the Oaklands development.
TN84	*IT76*	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	Y			Bridge project. To allow for access only traffic.
TN85	*IT94*	Road Network	Park Road from Park Road bridge to underpass under West London Line.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Highways & Junction
TN86	*IT95*	Road Network	Park Road underpass under West London Line.	29.4*	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Underpass. Must allow for bus clearance.
TN87	-	Road Network	Park Road from West London Line underpass to junction with Old Oak Street.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Highways & Junction
TN88	-	Road Network	Signalised junction at juncture of Park Road and Old Oak Street.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Highways & Junction
TN89	-	Road Network	Park Road from junction with Old Oak Street to Laundry Bridge.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y			Highways & Junction
TN90	*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	Y			Bridge
TN91	*IT69*	Road Network	Old Oak Street between junction with Park Road and junction with Hythe Road West.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction – underpass of viaduct to be delivered as part of project TN2
TN92	-	Road Network	Junction of Old Oak Street and Hythe Road West.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North				Highways & Junction
TN93	*IT70*	Road Network	Old Oak Street between junctions with Hythe Road West and Hythe Road East.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction
TN94	-	Road Network	Junction of Old Oak Street and Hythe Road East.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction

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Project Reference No. (2018)	Old Project Reference No. (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	
TN95	*IT71*	Road Network	Old Oak Street between junction with Hythe Road East and Old Oak Street bridge.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junction
TN96	*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	Y	Y		Bridge.
TN97	*IT73*	Road Network	Old Oak Street from Old Oak Street bridge to Old Oak Common Station.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Highways & Junction
TN98	*IT74*	Road Network	Old Oak Street from Old Oak Common Station to Old Oak Common Lane Overground Station	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South	Y	Y		Highways & Junction
TN99	-	Road Network	Hythe Road "West" – connecting Park Road and Old Oak Street along Canal Park.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways & Junctions
TN100	-	Road Network	Hythe Road "East" – realignment and upgrades to existing Hythe Road route, connecting Old Oak Street the underpass.	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Highways and Junctions
TN101	*IT77*	Road Network	Upgraded Hythe Road underpass for to cater for buses, access only vehicular traffic and improved pedestrian and cycle link.	14.0	Developer cost/ planning contributions and/or service providers	T1	P2: Old Oak North	Y	Y		Underpass
TN102	*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	Y	Y		Highways & Junction
TN103	-	Road Network	New junction and juncture of Park Road and Scrubs Lane	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction
TN104	-	Road Network	Improvements and enhancement to existing junction of Hythe Road and Scrubs Lane	Costed as part of TN82	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction
TN105	*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	Y	Y		Bridge
TN106	*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	Y	Y		Highways & Junction
TN107	*IT92*	Road Network	Junction onto Scrubs Lane to access to Mitre Bridge Industrial Estate at North Pole East.	9.9	Developer cost/ planning contributions and/or service providers	T1	P10: Scrubs Lane	Y	Y		Highways & Junction
TN108	*IT79*	Road Network	Delivery of new Wormwood Scrubs Street.	NYC	Developer cost/ planning contributions and/or service providers	T1	P1: Old Oak South			Y	Highways & Junction – to provide for access only traffic.
TN109	*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			Y	Highways & Junction

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Project Reference No. (2018)	Old Project Reference No. (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	
TN110	*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	Y	Y		Underpass
TN111	-	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		Y		Highways & Junction
TN112	*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)	5.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction
TN113	*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	Y	Y		Highways & Junction
TN114	*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	Y	Y		Highways & Junction
TN115	*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	Y	Y		Highways & Junction
TN116	*IT82*	Road Network	Traffic capacity enhancements on Old Oak Lane	10.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y	Y		Highways & Junction
TN117	*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	Y	Y	Y	Bridge
TN118	*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			Y	Highways & Junction
TN119	*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	Y	Y		Highways & Junction
TN120	*IT107*	Road Network	Upgrade of Willesden Junction Station Approach.	16.1	Developer cost/ planning contributions and/or service providers	T1	P11: Willesden Junction	Y	Y		Highways & Junction
TN121	*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		Y	Y	Highways & Junction
TN122	-	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		Y	Y	Highways & Junction
TN123	*IT97*	Road Network	Victoria Road capacity enhancements including widening (if required) to Old Oak Lane and low rail overbridge headroom increased.	50.0	Developer cost/ planning contributions and/or service providers	T1	P8: Old Oak Lane & Old Oak Common Lane	Y			Highways & Junction
TN124	*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	Y	Y		Highways & Junction

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Project Reference No. (2018)	Old Project Reference No. (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	
TN125	*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		Y		
TN126	*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		Y		Underpass or Bridge connection through Old Oak Common Lane Station
TN127	-	Road Network	Enhancements to Schools Road.	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells		Y		
TN128	*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	Y	Y		May be delivered as pedestrian and cycle route.
TN129	*IT99*	Road Network	A40 junction improvements - Gypsy Corner	NYC	Developer cost/ planning contributions and/or service providers	T1	P7: North Acton and Acton Wells	Y	Y	Y	Highways & Junction
TN130	*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	Y	Y		Highways & Junction
TN131	*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		Y	Y	Highways & Junction
TN132	*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		Y	Y	Highways & Junction
TN133		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	Y	Y		Highways & Junction
TN134	*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	Y	Y		Highways & Junction
TN135	*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	Y	Y		Highways & Junction
TN136	-	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	Y	Y		Highways & Junction – contributes towards delivery of enhanced “Big X” in Park Royal.
TN137	-	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	Y	Y		Highways & Junction – contributes towards delivery of enhanced “Big X” in Park Royal.
TN138	IT96	Road Network	Park Royal Road/Coronation Road junction improvements.	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre	Y	Y	Y	Highways & Junction
TN139	-	Road Network	New access road to south of Asda site	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre	Y	Y		Highways & Junction
TN140	-	Road Network	Realignment of existing vehicular route through Central Middlesex Hospital.	NYC	Developer cost/ planning contributions and/or service providers	T1	P6: Park Royal Centre	Y	Y		Highways & Junction
TN141	*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	Y	Y		Highways & Junction

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Project Reference No. (2018)	Old Project Reference No. (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	
TN142	*IT111*	Road Network	Enhancements to Abbey Road/ A406 slip	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y		Highways & Junction
TN143	*IT98*	Road Network	A40 & A406 junction improvements - Hanger Lane gyratory	NYC	Developer cost/ planning contributions and/or service providers	T1	P4: Park Royal West	Y	Y	Y	Highways & Junction
TN144	*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	Y	Y	Y	Highways & Junction
TN145	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	Y	Y	Y	Highways & Junction
TN146	*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	Y	Y	Y	Highways & Junction
TN147	*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	Y	Y	Y	Highways & Junction

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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. The studies used to inform the bus projects identified in the Infrastructure Schedule are:

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

Project Reference No. (2018)	Old Project Reference No. (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	
TN148	*IT119*	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	Y	Y	Y	
TN149	*IT120*	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	Y	Y	Y	
TN150	-	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	Y			
TN151	-	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	Y			
TN152	-	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	Y	Y		
TN153	-	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	Y	Y		This will supersede the pre Old Oak Common Station re reroutes of the 218.
TN154	-	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	Y	Y		
TN155	-	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	Y	Y		

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4.0 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 of much of the essential utilities infrastructure that underlies the everyday functioning of an urbanised area.

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 this is set out in policies EU4 and EU11 of the regulation 19 OPDC Local Plan 2017. The projects identified in the Infrastructure Schedule encourage the developers and the service providers to ensure that high quality and high speed telecommunications infrastructure and the provision of Air Quality Monitoring systems. The identification of these projects is supported by the following studies:

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

Refer to Figure 5 in the Appendix for a map depicting where it is planned for the air quality sensors to be placed within the OPDC area.

Project Reference No. (2018)	Old Project Reference No. (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	Y	Y	Y	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	Y	Y		Specification of 8 ducts per plot connecting to strategic network in OON
NU3	*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	Y	Y	Y	

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Decentralised Energy

4.3 The reduction of carbon emissions is an important policy requirement of the London Plan and is recognised in the regulation 19 OPDC Local Plan Policies EU9 and EU10 and as a result both site specific and strategic delivery of decentralised energy are identified in the Infrastructure Schedule. These requirements were identified from the Development Infrastructure Funding Study (DIFS); Environmental Standards Study, North Acton District Energy Study and the Utilities Study.

It is expected that where heat networks are provided they will operate at a primary flow temperature of 70oC and primary return temperature of 40oC. Building services systems in building should be designed to be compatible with the operating temperatures for any proposed area wide heat network as set out in the Infrastructure Delivery Plan. Services systems in buildings should be designed and commissioned to ensure low flow return temperatures under full and partial load conditions, to enable efficient heat network operation. Services systems in buildings should also be designed and installed to minimise heat losses, by minimising the length of distribution and ensuring high insulation standards.

Project Reference No. (2018)	Old Project Reference No. (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	0 -20 Years	20+ Years	
NU4	*IU3*	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	Y	Y		Energy network - Heat Subsidiary policy approach. Phased with development phasing for Old Oak North and Scrubs Lane. Car Giant requires heat from 2023.
NU5	-	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	Y	Y		
NU6	-	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	Y	Y		
NU7	*IU4*	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 .	Y	Y		–Represents Preferred Policy Approach. Phased in line with development, buildings can operate on temporary gas boilers
NU8	-	Decentralised Energy	North Acton on site energy solutions	NYC	Developer cost	EU10	P7: North Acton	Y			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.
NU9	-	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	Y	Y		
NU10	-	Decentralised Energy	Strategic Area-wide District Heath 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	Y	Y	Y	To be determined, but could include energy from waste, ground source heat pumps, or heat recovery from the Grand Union Canal.

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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. This is supported by regulation 19 OPDC Local Plan Policy EU10 and identified in the Infrastructure Schedule which in turn is supported by the findings of the Development Infrastructure and Funding Study (DIFS); and the Utilities Study.

Project Reference No. (2018)	Old Project Reference No. (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	
NU11	*IU5*	Energy Network - Electricity	Maintenance, renewal and replacement of electricity supply infrastructure	NYC		EU10	Non-specific and/or Area-wide	Y	Y	Y	
NU12	*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	Y	Y	Y	
NU13	-	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	Y			
NU14	-	Energy network - Cooling	On- site cooling solutions for sites in OON	NYC	Developer cost	EU10	P2: Old Oak North	Y	Y		
NU15	-	Energy network	Area wide cooling network solutions	NYC	Developer cost/ planning contributions and/or service providers	EU10	Non-specific and/or Area-wide	Y	Y	Y	On-site cooling solutions required for OON, but area wide solutions may be suitable for other places.
NU16	*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	Y	Y	Y	

Potable Water Network

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 regulation 19 OPDC Local Plan Policy EU3 and the Infrastructure Schedule encourage the reinforcement of potable water supply. This is supported by the Development Infrastructure Funding Study (DIFS); Environmental Standards Study; Integrated Water Management Strategy and Utilities Study.

Project Reference No. (2018)	Old Project Reference No. (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	
NU17	*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	Y	Y	Y	
NU18	*IU9*	Potable water network	Combined rainwater harvesting and greywater recycling systems provided within commercial developments	NYC	Developer cost	EU3	Non-specific and/or Area-wide	Y	Y	Y	

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Foul and Surface Water Infrastructure

4.6 There are indications that the current infrastructure will struggle to accommodate the additional flows of foul and surface water projected to be generated by the proposed OPDC development. As a result the Infrastructure Schedule identifies a range of interventions to assist in the management of flow as well as the provision of new sewerage infrastructure. These proposed interventions are supported by regulation 19 OPDC Local Plan Policy EU3 and the following studies: the Development Infrastructure Funding Study (DIFS); the Integrated Water Management Strategy; and the Utilities Study.

Project Reference No. (2018)	Old Project Reference No. (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	*IU10*	Foul and Surface Water Infrastructure	Maintenance/ renewal of sewerage infrastructure and new sewerage infrastructure to support growth	NYC		EU3	Non-specific and/or Area-wide	Y	Y	Y	
NU20	*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	Y	Y	Y	Subsidiary Policy Approach
NU21	*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	Y	Y	Y	Preferred Policy Approach
NU22	*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	Y	Y	Y	Preferred Policy Approach
NU23	*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	Y	Y	Y	Preferred Policy Approach
NU24	-	Foul and Surface Water Infrastructure	Reroute existing sewer north of Canal in OON	NYC	Developer cost/ planning contributions and/or service providers	EU3	P2: Old Oak North	Y			

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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. Both of these are supported by Policy EU3 of the regulation 19 OPDC Local Plan 2017 and the following studies: Development Infrastructure Funding Study (DIFS); Integrated Water Management Strategy; Environmental Standards Study; and the Utilities Study.

Project Reference No. (2018)	Old Project Reference No. (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	
NU25	*IU15*	Flood and Water Management	Tokyngton and Stonebridge Flood Alleviation Scheme	0.1	Developer cost/ planning contributions and/or service providers	EU3	N/A	Y	Y		
NU26	*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	Y	Y	Y	

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. These projects are supported by Policy EU6 of the regulation 19 OPDC Local Plan 2017 and the following studies; Development Infrastructure Funding Study (DIFS); Waste Apportionment Study; Waste Management Strategy; Waste Technical Paper; and the Environmental Standards Study.

Project Reference No. (2018)	Old Project Reference No. (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	*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	Y	Y	Y	
NU28	*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	Y	Y	Y	Type of strategic waste system yet to be determined.

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5.0 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 6 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 19 OPDC Local Plan and the individual projects are identified in the relevant Place Policies in Chapter 4 of the Plan. The following studies also support the delivery of these projects: Development Infrastructure Funding Study (DIFS); Environmental Standards Study, Public Realm; Walking and Cycling Strategy; SINC Statement; Scrubs Lane Development Framework Principles, Victoria Road and Old Oak Lane Development Framework Principles; and the Precedents Study

Project Reference No. (2018)	Old Project Reference No. (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	Y	Y		
GI2	*GI2*	Open Space	Enhancements to Mary Seacole Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y			
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	Y	Y		
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	Y	Y		
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	Y	Y		
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	Y	Y		
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	Y			
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	Y	Y		

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Project Reference No. (2018)	Old Project Reference No. (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 +	
GI9	*GI9*	Open Space	Sensitive enhancements to Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P12: Wormwood Scrubs	Y	Y	Y	
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	Y	Y	Y	
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	Y	Y		
GI12	*GI12*	Open Space	Rolls Royce Yard	NYC	Developer cost/ planning contributions and/or service providers	EU1	P2: Old Oak North	Y	Y		
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		Y		
GI14	*GI14*	Open Space	Harrow Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y			
GI16	*GI16*	Open Space	Hythe Road cluster open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y			
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	Y			
GI18	*GI18*	Open Space	Mitre Wharf canal side open space	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y			
GI19	*GI19*	Open Space	Open space adjacent to Little Wormwood Scrubs	NYC	Developer cost/ planning contributions and/or service providers	EU1	P10: Scrubs Lane	Y	Y	Y	
GI20	*GI20*	Open Space	Brunel Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P8: Old Oak Lane & Old Oak Common Lane	Y			
GI21	*GI21*	Open Space	Acton Wells Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells		Y		
GI22	*GI22*	Open Space	Victoria Gardens	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y		

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Project Reference No. (2018)	Old Project Reference No. (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 +	
GI23	*GI23*	Open Space	Portal Way Squares	NYC	Developer cost/ planning contributions and/or service providers	EU1	P7: North Acton and Acton Wells	Y	Y		
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	Y			
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		Y		
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	Y	Y		
GI27	*GI27*	Open Space	Willesden Junction Square	NYC	Developer cost/ planning contributions and/or service providers	EU1	P11: Willesden Junction	Y	Y		
GI28	*GI28*	Open Space	New public space the south-east of Park Royal Central junction following junction alignment.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P6: Park Royal Centre	Y			
GI29	*GI29*	Open Space	Grand Union Canal pocket parks.	NYC	Developer cost/ planning contributions and/or service providers	EU1	P3: Grand Union Canal	Y	Y		
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	Y	Y	Y	
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	Y	Y	Y	
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	Y	Y	Y	
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	Y	Y	Y	

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Project Reference No. (2018)	Old Project Reference No. (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 +	
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	Y	Y	Y	
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	Y	Y		
GI36	*GI36*	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	Y	Y	Y	
GI37	*GI37*	Open Space	New multi-functional canal basins and waterspace	NYC	Developer cost	EU1/EU2	P2: Old Oak North	Y	Y	Y	
GI38	*GI38*	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	Y	Y	Y	
GI39	*GI39*	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	Y	Y		
GI40	*GI40*	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	Y	Y		
GI41	*GI41*	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	Y	Y	Y	
GI42	*GI42*	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	Y			Project to be delivered as part of planning permission for Lakeside Drive (November 2017).
GI43	*GI43*	Open Space	Southern Station Square	NYC	Developer cost/ planning contributions and/or service providers	EU1/EU2	P1: Old Oak South			Y	
GI44	*GI44*	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	Y	Y	Y	

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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 regulation 19 OPDC Local Plan 2017 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. The following studies support Policy D9 and the inclusion of the projects on the Infrastructure Schedule; Development Infrastructure Funding Study (DIFS); the Environmental Standards Study, and the Precedents Study.

Project Reference No. (2018)	Old Project Reference No. (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	GI45	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	Y	Y	Y	
GI46	GI46	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	Y	Y	Y	
GI47	GI47	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	Y	Y	Y	
GI48	GI48	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	Y	Y	Y	

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. The following studies support Policy D2 of the OPDC Local Plan 2017 (Regulation19 version) and the projects identified in the Infrastructure Schedule; Development Infrastructure Funding Study (DIFS); Environmental Standards Study, Public Realm; Walking and Cycling Strategy; and the Precedents Study.

Project Reference No. (2018)	Old Project Reference No. (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	
GI49	GI49	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	Y	Y		
GI50	GI50	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	Y	Y		

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Project Reference No. (2018)	Old Project Reference No. (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	
GI51	GI51	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	Y	Y		
GI52	GI52	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	Y	Y	Y	
GI53	GI53	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		Y		
GI54	GI54	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	Y	Y		
GI55	GI55	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	Y	Y		
GI56	GI56	Public Realm	Contributing towards and / or delivering public realm / green infrastructure particularly along primary routes around Park Royal, Stonebridge and Harlesden stations	NYC	Developer cost/ planning contributions and/or service providers	D2	P4: Park Royal West	Y	Y		
GI57	GI57	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		Y	Y	
GI58	-	Public Realm	New public space the south-east of Park Royal Central junction following junction alignment.	NYC	Developer cost and/or planning contributions	EU1/D2	P5: Park Royal Centre	Y			

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6.0 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. Policy TCC4 of the second revised draft Regulation 19 (2) Local Plan and the following studies support the inclusion of these projects in the Infrastructure Schedule:

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

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 Regulation 19 (2) Local Plan and the following studies:

- Development Infrastructure Funding Study (DIFS); Social Infrastructure Needs Study and the Precedents Study.

Project Reference No. (2018)	Old Project Ref (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	Y			
SI2	-	Nursery	Super Nursery (120 Children) at North Acton.	NYC	Developer/ Service Provider	TCC4	P7: North Acton and Acton Wells	Y			
SI3	-	Nursery	Super Nursery (120 Children) at Old Oak South.	NYC	Developer/ Service Provider	TCC4	P1: Old Oak South	Y	Y		
SI4	-	Nursery	Super Nursery (120 Children) – location yet to be determined.	NYC	Developer/ Service Provider	TCC4	NYC		Y		
SI5	-	Schools	Use of surplus capacity in existing primary schools located within LBHF	NYC	Planning Contributions / Service Provider	TCC4	N/A	Y			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		Y		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	Y	Y		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	Y			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. If delivered as a Free School, then project would be funded by the ESFA.

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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 Need Study recommends that existing capacity at Central Middlesex Hospital, and expansion of existing facilities in the Harlesden 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 second revised draft Regulation 19 (2) Local Plan and the following studies:

- Development Infrastructure Funding Study (DIFS); Social Infrastructure Needs Study and the Precedents Study.

Project Reference No. (2018)	Old Project Ref (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								Years 0-10	Years 10 -20	20 + Years	
SI9	-	Health facilities	Use of surplus capacity at Central Middlesex Hospital.	NYC	N/A	TCC4	P6: Park Royal Centre	Y			
SI10	-	Health facilities	Off-site expansion of Willesden Centre for Health and Care and Cloister Road Surgery.	NYC	Planning Contributions	TCC4	Non-specific and/or Area-wide	Y			
SI11	*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	Y	Y		To be delivered on the Car Giant site allocation.

Community, Leisure and Sport

6.4 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 second revised draft Regulation 19 (2) Local Plan and the following studies:
Development Infrastructure Funding Study (DIFS); Social Infrastructure Needs Study; Precedents Study and the Sports Courts and Swimming Pools Study.

Project Reference No. (2018)	Old Project Reference No. (2017)	Infrastructure Sub-Category	Project Description	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								Years 0-10	Years 10 -20	20+ Years	
SI12	*SI20*	Community Centre	2,600 sqm Community Centre in Old Oak North	NYC	Planning Contributions	TCC4	P2: Old Oak North	Y			Exact location within Old Oak North yet to be determined.
SI13	*SI21*	Community Centre	2,600 sqm Community Centre in Old Oak South	NYC	Planning Contributions	TCC4	P1: Old Oak South		Y		Exact location within Old Oak South yet to be determined.
SI14	*SI18*	Leisure and Sports Centre	Concessions access Leisure/ Sports Centre 1	NYC	Developer cost/or service providers	TCC4 /TCC6	P1: Old Oak South		Y		Could alternatively be provided in one large facility
SI15	*SI19*	Leisure and Sports Centre	Concessions access Leisure/ Sports Centre 2	NYC	Developer cost/or service providers	TCC4/ TCC6	P2: Old Oak North	Y	Y		

Emergency Services

6.5 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 revised draft Regulation 19 (2) Local Plan and the following supporting studies:

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

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Project Reference No. (2018)	Old Project Reference No. (2017)	Infrastructure Sub-Category	Project Description)	Current Estimated Cost (£ M)	Funding Source	Local Plan Policy	Local Plan Place Area / Policy	Phasing			Comments
								Years 0-10	Years 10 -20	20+ Years	
SI16	-	Emergency Services	Dedicated Ward Office (Police) 1		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide	Y	Y	Y	Exact sites to be determined. Can be easily co-located with other social infrastructure facilities.
SI17	-	Emergency Services	Dedicated Ward Office (Police) 2		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide	Y	Y	Y	
SI18	-	Emergency Services	Dedicated Ward Office (Police) 3		Developer cost/ planning contributions and/or service providers	TCC4	Non-specific and/or Area-wide	Y	Y	Y	
SI19	*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	Y	Y	Y	Work with emergency services to determine delivery triggers
SI20	*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	Y	Y	Y	

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Appendix –

Infrastructure Maps

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Figure 1: Rail, Stations and Interchange Projects

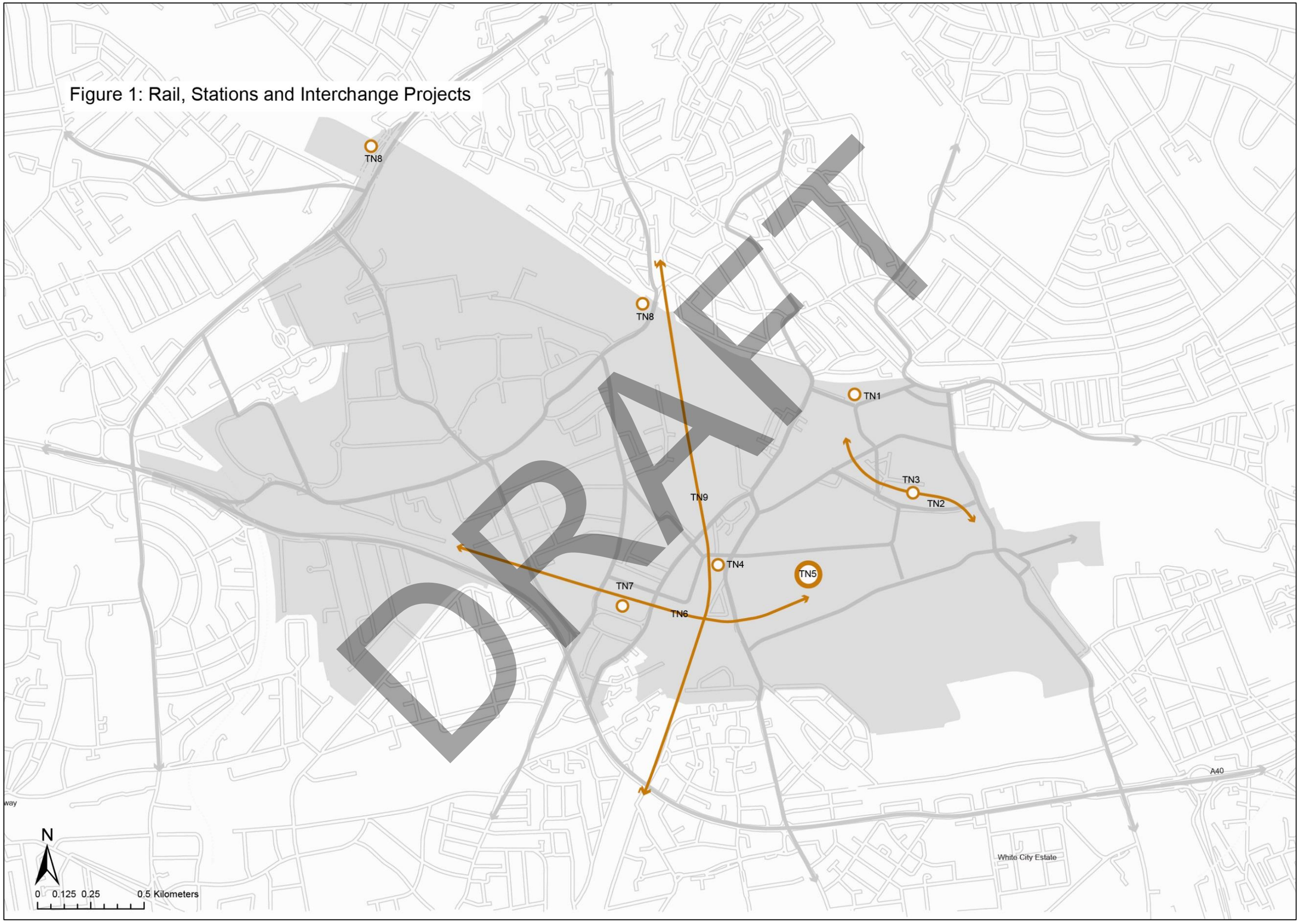


Figure 2: Pedestrian and Cycle Projects

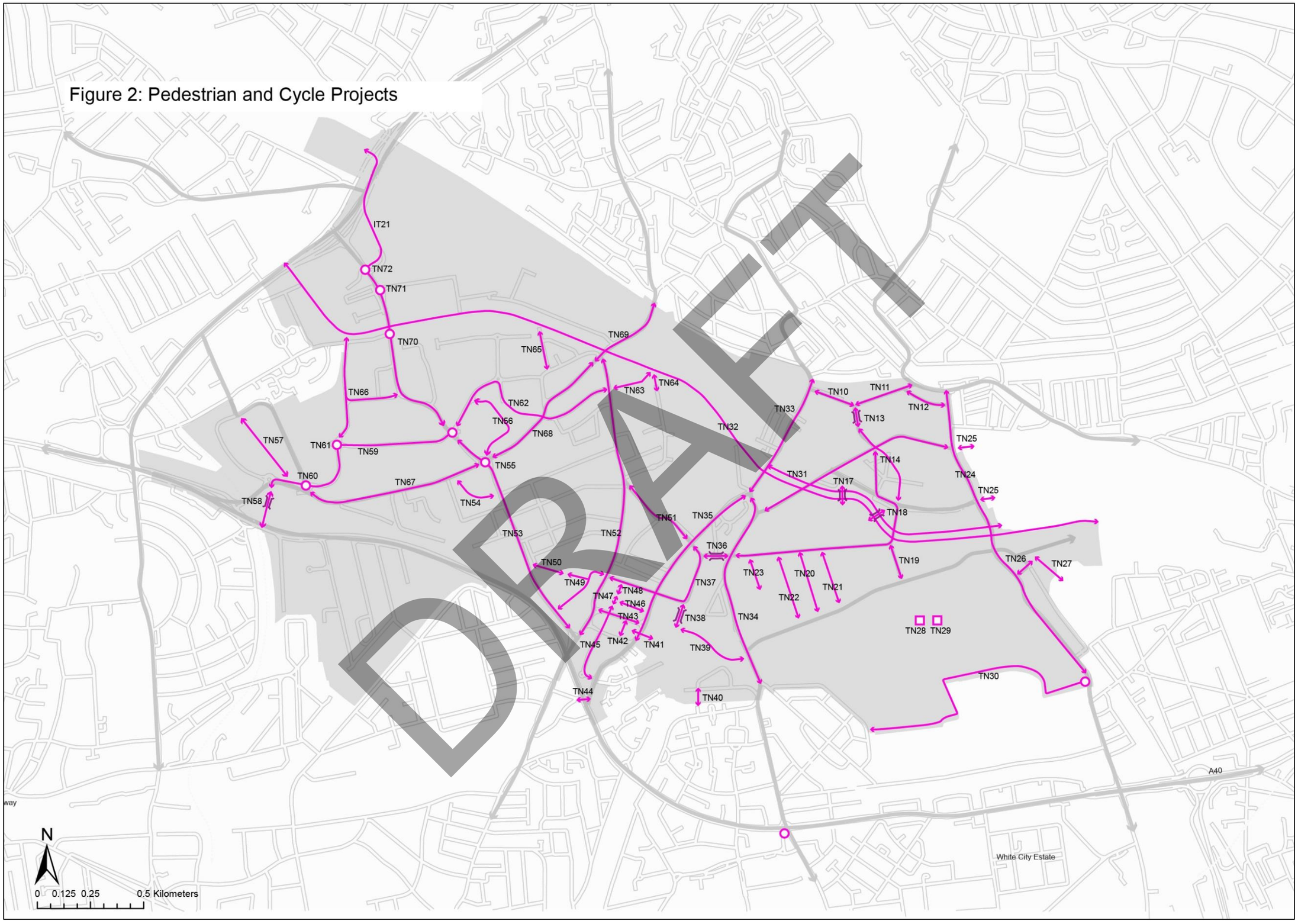


Figure 3: Road Network Projects

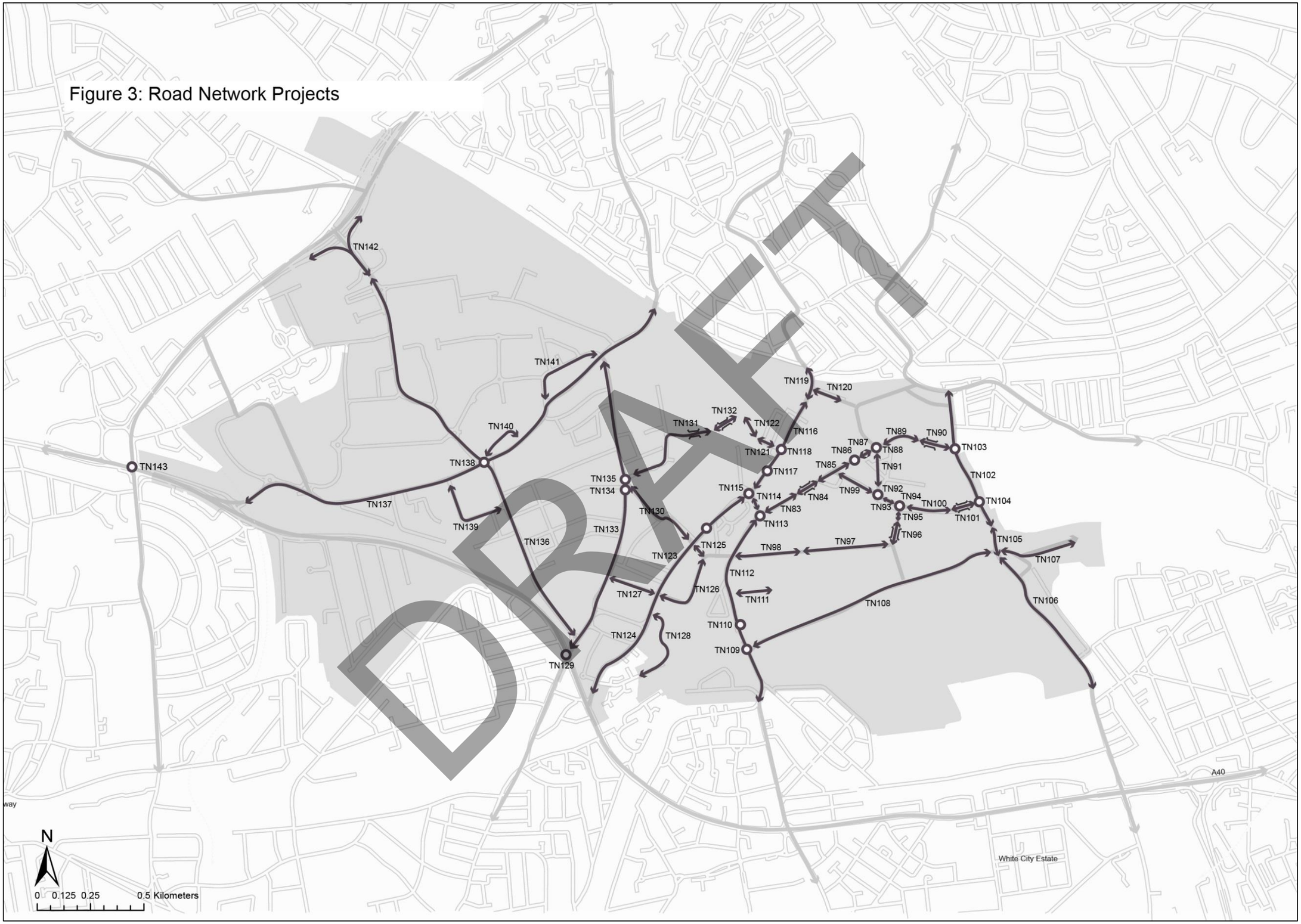


Figure 4: Utilities Projects

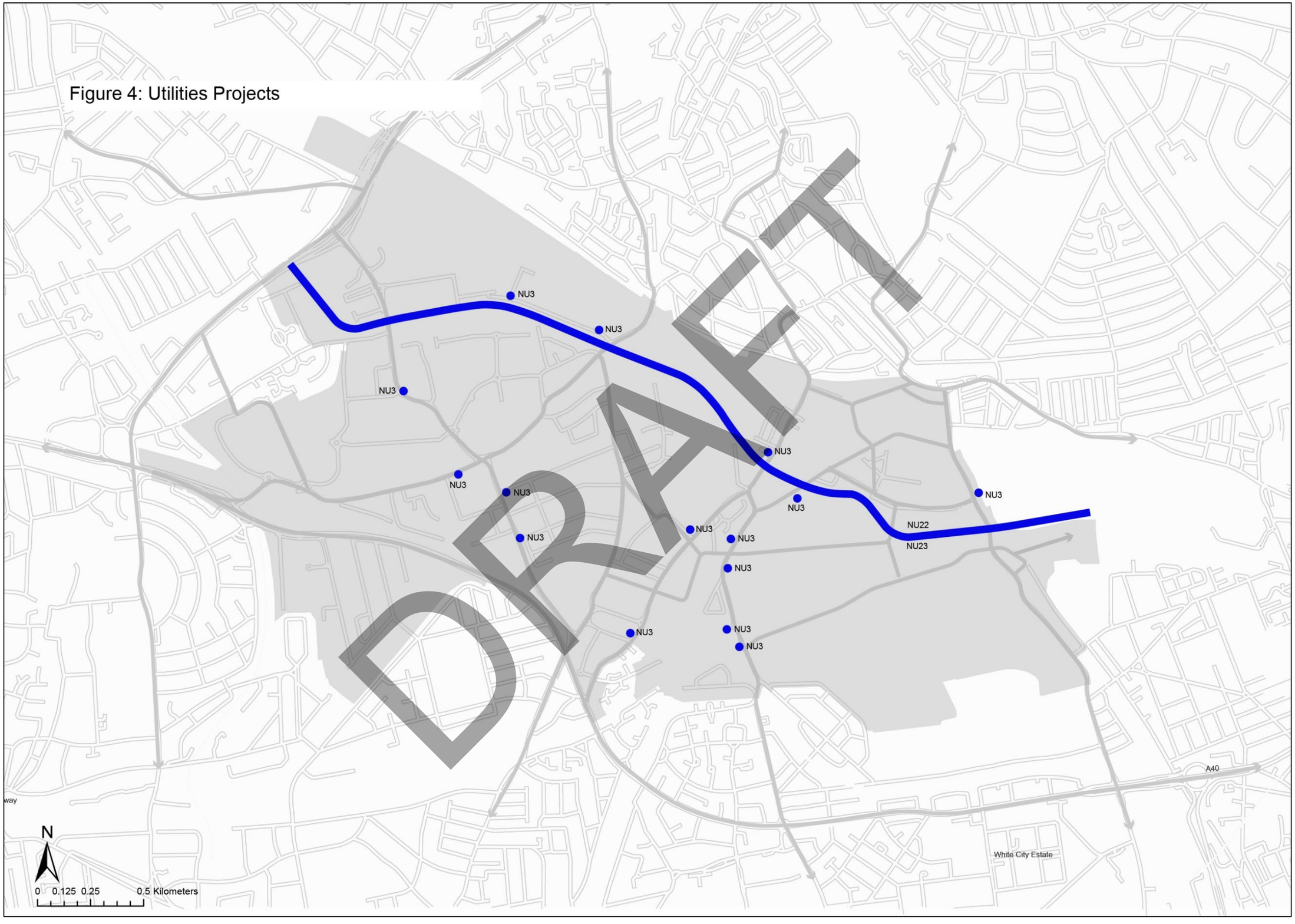


Figure 5: Green Infrastruture Projects

