

## EXHIBIT LIST

Reference No: HOL/10018

Petitioner: EUSTON STANDARD PACK

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Page 1 of 15

No	Exhibit Name	Page
1	<a href="#">P2198 Overview of Utilities.pdf</a>	2 - 9
2	<a href="#">P2199 Indicative locations of Utilities.pdf</a>	10 - 15





# Utilities Overview

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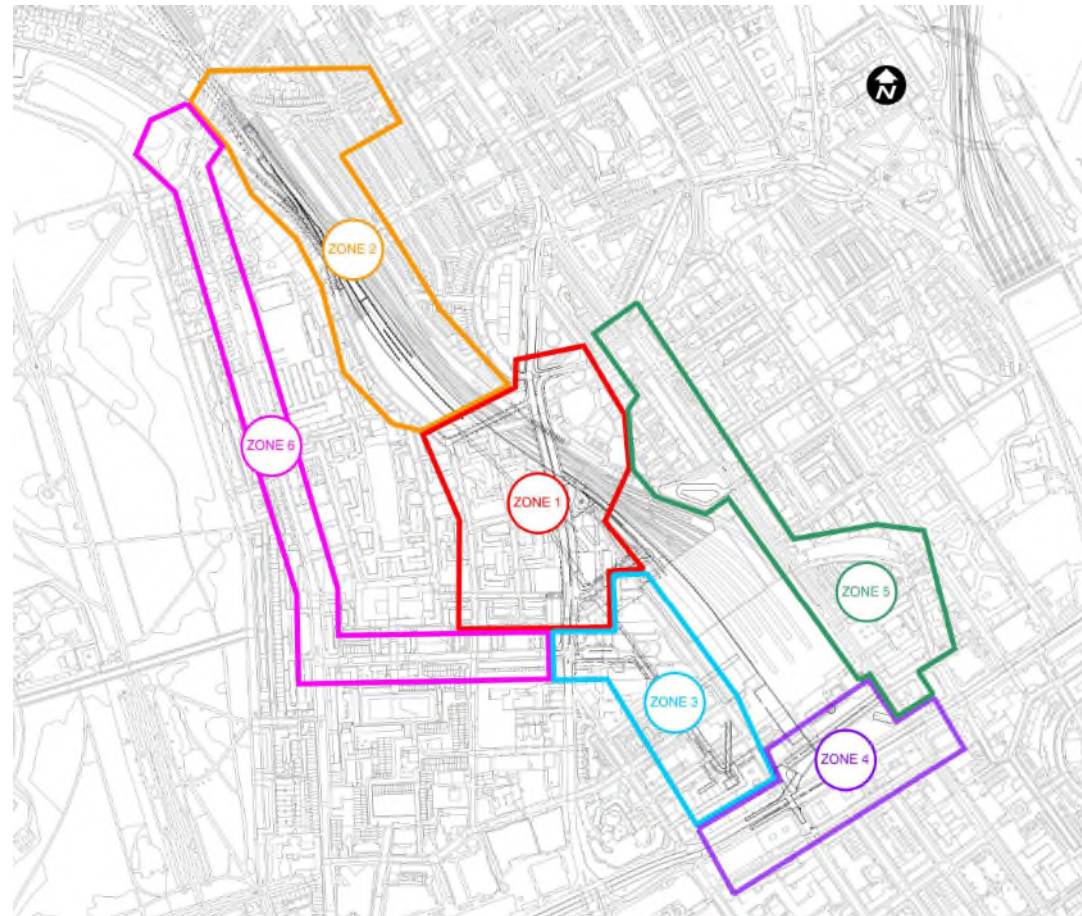
# Utility Works - General

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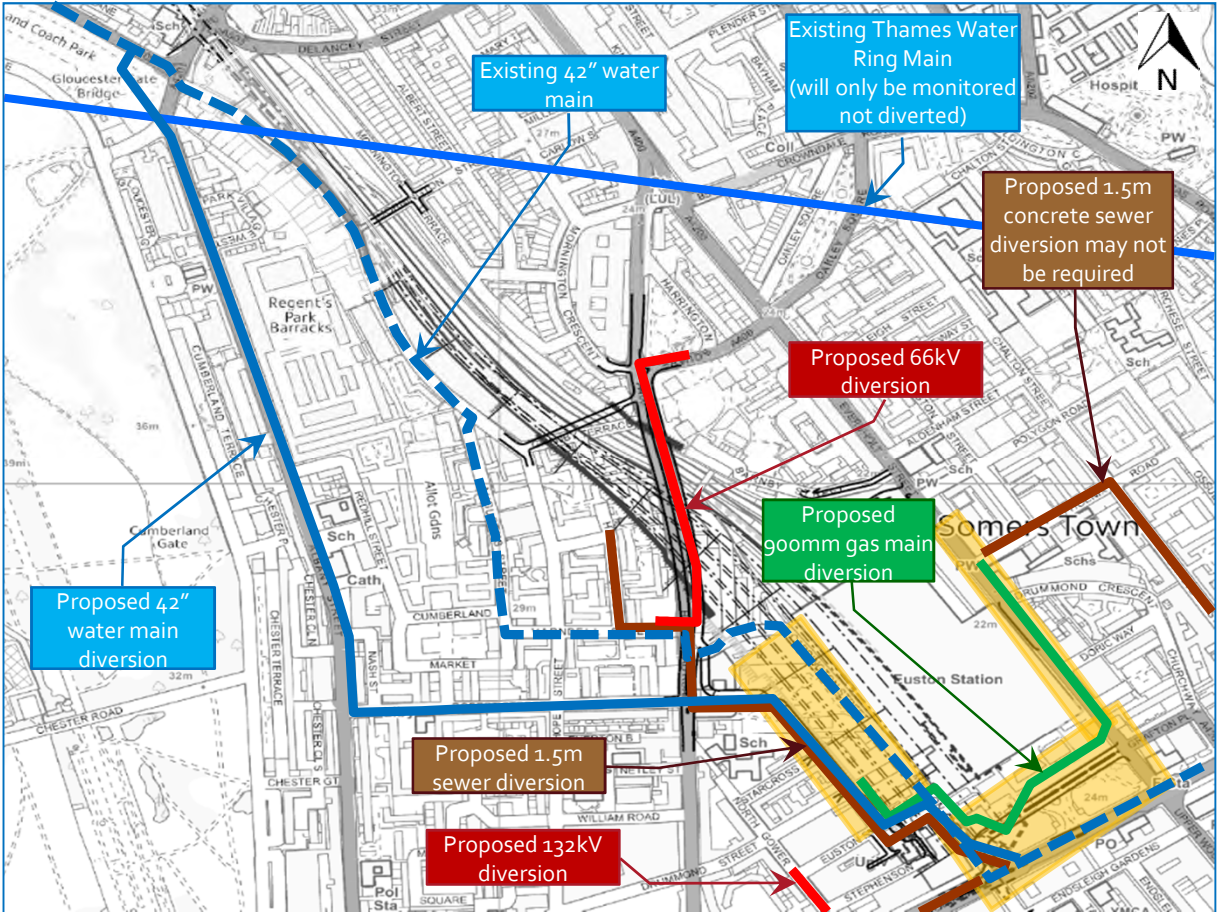
- The majority of utility works will take place during core working hours although there will be a requirement for some night-time working (e.g. when crossing major roads);
- Rolling worksite with a typical length of 50m will be used;
- There will be partial closure of roads resulting in traffic controls with single way working maintaining pedestrian access;
- Some roads have been safeguarded for potential utility diversions in the event that the proposed utility diversion routes are unachievable.

# Utility works zones

- **Zone 1**
  - A400 Hampstead Road
  - Granby Terrace Bridge
  - Augustus / Stanhope / Varndell Street
- **Zone 2**
  - Park Village East
  - Mornington Street Bridge
  - Delancey St / Mornington Terrace
- **Zone 3**
  - Cobourg Street
  - Cardington Street
  - Melton Street
- **Zone 4**
  - Euston Road
  - Euston Square Gardens
  - Euston Station Bus Station
- **Zone 5**
  - Eversholt Street
  - Bus Depot
- **Zone 6**
  - Prince Albert Road
  - Regent's Park / Gloucester Gate
  - Albany Street and Robert Street



# AP3 Major utility works



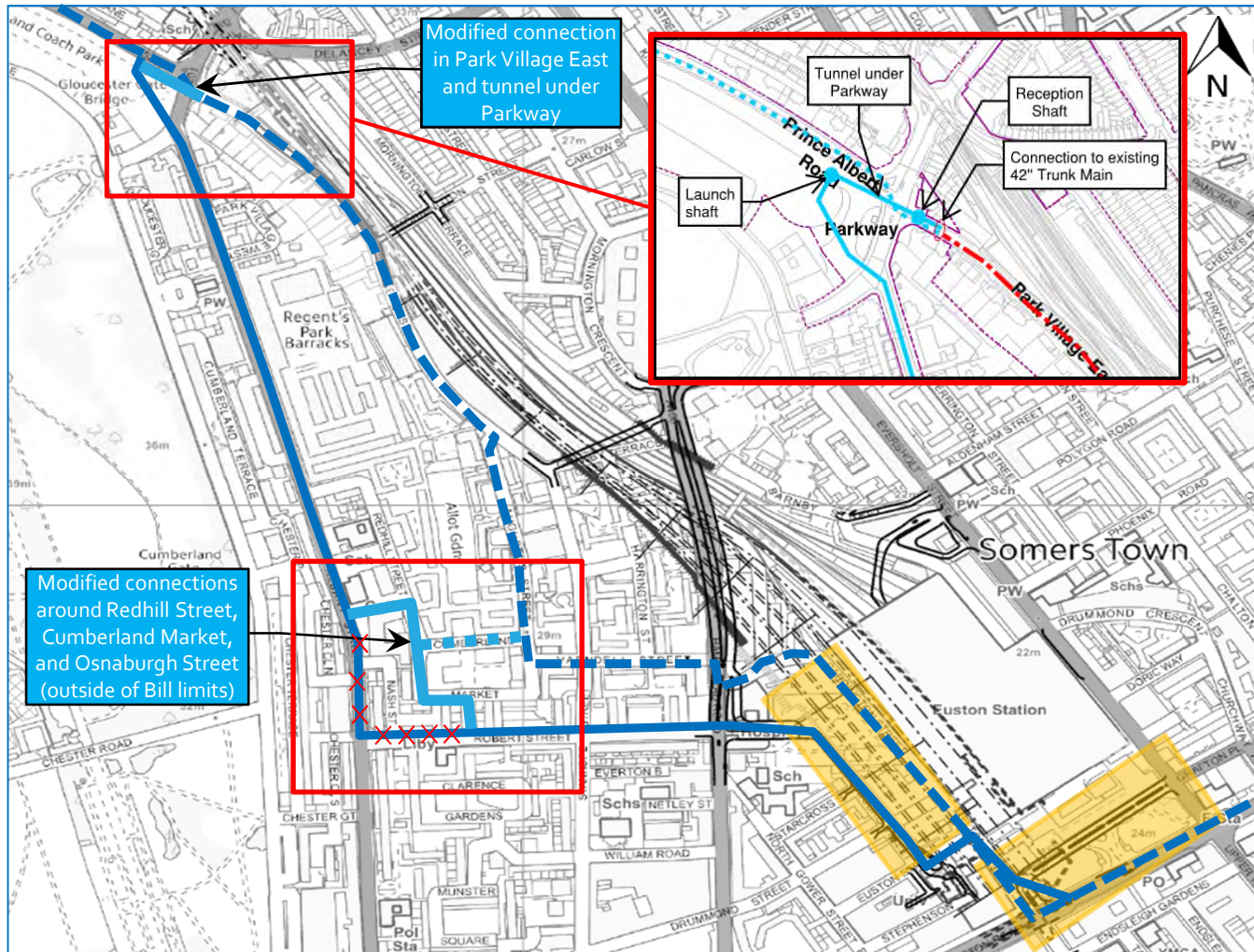
Legend  
utility types

- Gas
- Water
- Sewer
- Electric

Note: Only major utility diversions are shown above. Other utility diversions around Euston area are also required.



# Thames Water Revised 42-inch Water Main Proposal

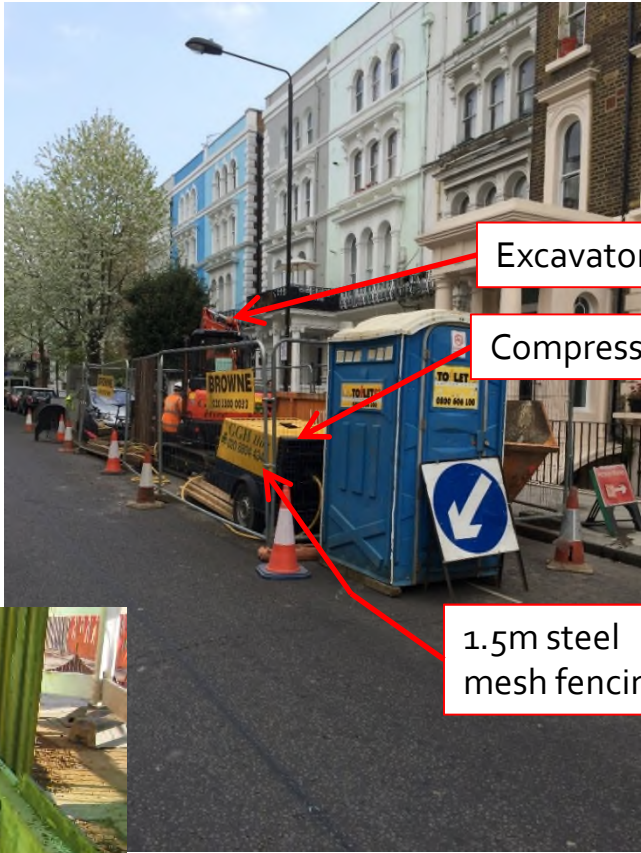


# Utility works – implementation



Single Lane working

Typical trench support



Excavator

Compressor

1.5m steel mesh fencing

Rolling work site ~50m



# Utility company coordination

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- Q2 2012 – Obtained utility record drawings;
- Q2 2012 – Held introductory meetings with utility companies;
- Q3 2012-Q3 2013 – Extensive consultation;
  - Temporary and permanent mitigation identified;
  - Land requirements identified;
  - Asset specific and business operation requirements;
  - Cost and programme estimates.
- Q2 2014-Q3 2015 – Agreed off-site utility reinforcements due to OSD demands.
- Q1 2015-Q4 2016 – Liaison with utility companies to develop options into coordinated network designs.



# Future benefits of utilities works

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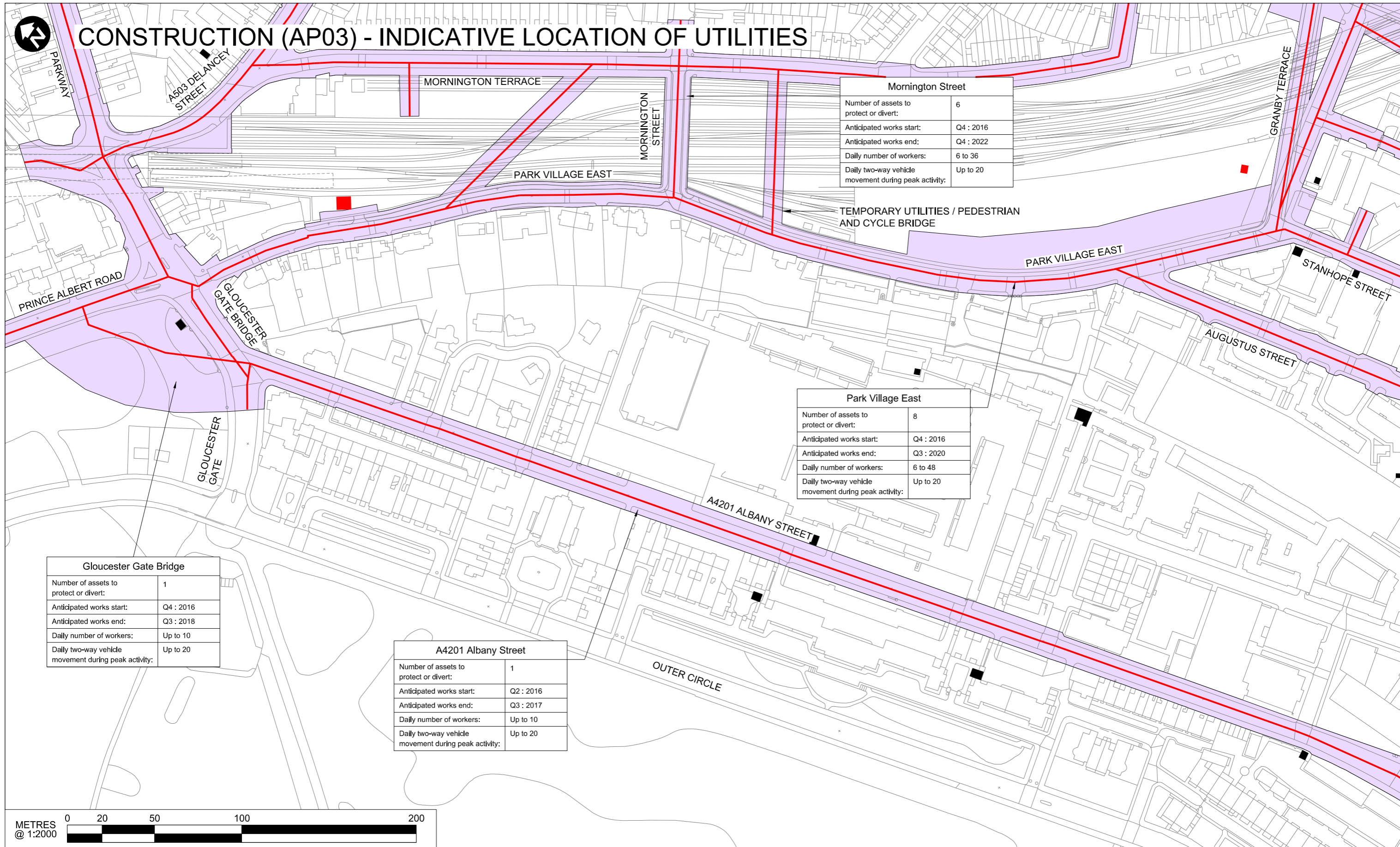
- Replacement of utility assets:
  - Improved resilience/robustness of utility supplies;
  - Reduced utility maintenance/repairs/gas & water leaks; and
  - Reduced likelihood of flooding (new/enlarged sewers).
- Availability of utility CAD data:
  - Improved asset management;
  - Improved coordination of utilities works; and
  - Leading to less disruption to public/traffic.







# CONSTRUCTION (AP03) - INDICATIVE LOCATION OF UTILITIES



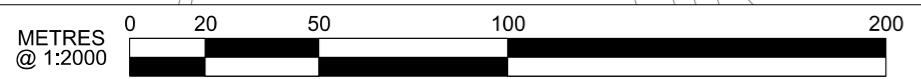
Mornington Street	
Number of assets to protect or divert:	6
Anticipated works start:	Q4 : 2016
Anticipated works end:	Q4 : 2022
Daily number of workers:	6 to 36
Daily two-way vehicle movement during peak activity:	Up to 20

Park Village East	
Number of assets to protect or divert:	8
Anticipated works start:	Q4 : 2016
Anticipated works end:	Q3 : 2020
Daily number of workers:	6 to 48
Daily two-way vehicle movement during peak activity:	Up to 20

Gloucester Gate Bridge	
Number of assets to protect or divert:	1
Anticipated works start:	Q4 : 2016
Anticipated works end:	Q3 : 2018
Daily number of workers:	Up to 10
Daily two-way vehicle movement during peak activity:	Up to 20

A4201 Albany Street	
Number of assets to protect or divert:	1
Anticipated works start:	Q2 : 2016
Anticipated works end:	Q3 : 2017
Daily number of workers:	Up to 10
Daily two-way vehicle movement during peak activity:	Up to 20

TEMPORARY UTILITIES / PEDESTRIAN AND CYCLE BRIDGE



- Legends/Notes:
- Land potentially required for utility works
  - Proposed substation
  - Existing substation
  - Indicative proposed utility diversions

Registered in England  
 Registration No. 06791686  
 Registered office:  
 One Canada Square,  
 London, E14 5AB

Creator/Originator  
 Ove Arup & Partners International Ltd

Zone	Euston Section		Project/Contract	Euston Station Design	
Design Stage	DESIGN-FOR-PETITION		Discipline/Function	Utilities	
Drawing Title	Park Village East Area		Drawn	Checked	Approved
	Indicative Location of Utilities		CR		
	Date	Scale	Size		
	24/11/2015	AS SHOWN	A3		
	Drawing No.	Rev.			
	C220-ARP-UT-DPL-01A-000115-PET000000	P00.1			





# CONSTRUCTION (AP03) - INDICATIVE LOCATION OF UTILITIES

Doric Way	
Number of assets to protect or divert:	1
Anticipated works start:	Q3 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	Up to 6
Daily two-way vehicle movement during peak activity:	Up to 20

Chalton Street	
Number of assets to protect or divert:	1
Anticipated works start:	Q3 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	Up to 6
Daily two-way vehicle movement during peak activity:	Up to 20

Phoenix Road	
Number of assets to protect or divert:	1
Anticipated works start:	Q3 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	Up to 6
Daily two-way vehicle movement during peak activity:	Up to 20

Lancing Street	
Number of assets to protect or divert:	1
Anticipated works start:	Q3 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	Up to 6
Daily two-way vehicle movement during peak activity:	Up to 20

A4200 Eversholt Street	
Number of assets to protect or divert:	12
Anticipated works start:	Q3 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	6 to 72
Daily two-way vehicle movement during peak activity:	Up to 20

Euston Square	
Number of assets to protect or divert:	2
Anticipated works start:	Q1 : 2017
Anticipated works end:	Q1 : 2020
Daily number of workers:	6 to 12
Daily two-way vehicle movement during peak activity:	Up to 20



- Legends/Notes:
- Land potentially required for utility works
  - Proposed substation
  - Existing substation
  - Indicative proposed utility diversions

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Zone	Euston Section		
Design Stage	DESIGN-FOR-PETITION		
Drawing Title	Somers Town Area		
	Indicative Location of Utilities		
Project/Contract	Euston Station Design		
Discipline/Function	Utilities		
Drawn	CR	Checked	Approved
Date	23/11/2015	Scale	AS SHOWN
		Size	A3
Drawing No.	C220-ARP-UT-DPL-01A-000125-PET000000		Rev.
			P00.1

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Scale with caution as distortion can occur.