Local Liaison Group Meeting No.4

Wednesday, 24 May 2017

Transport and Accessibility

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Regional Director

- Our brief
- The evidence base:
  - The statutory consultees that we are working with
  - The modelling tools being used
  - The baseline data that has been obtained
  - The forecast trip attraction that has been determined
  - The site access strategy that we've developed
  - The assessments that are being undertaken
  - The mitigation measures that are being designed
  - The milestones achieved

The modelling tools being used:

- Northamptonshire Strategic Transport Model (NSTM)

  - the Highway Authority's strategic traffic model

  - WSP's Local Model Validation Report (LMVR), March 2017

  - Forecast year 2031 with AM peak (0800-0900) and PM peak (1700-1800)

  - SATURN version 11.3.12

- VISSIM – a microsimulation traffic model

- Junctions9 – isolated uncontrolled junction modelling program

- LinSig – isolated or linked signal controlled junction modelling program

**Agreed with Northamptonshire County Council and Highways England**

The baseline data that has been obtained:

- NSTM coverage in vicinity of Rail Central site was previously limited
- Data collection exercise (June / July 2016)
  - 30 week-long automatic traffic counter (ATC) surveys
  - 2 four-week long ATC surveys
  - 28 automatic number plate recognition (ANPR) survey locations

Agreed with Northamptonshire County Council and Highways England

Survey Locations
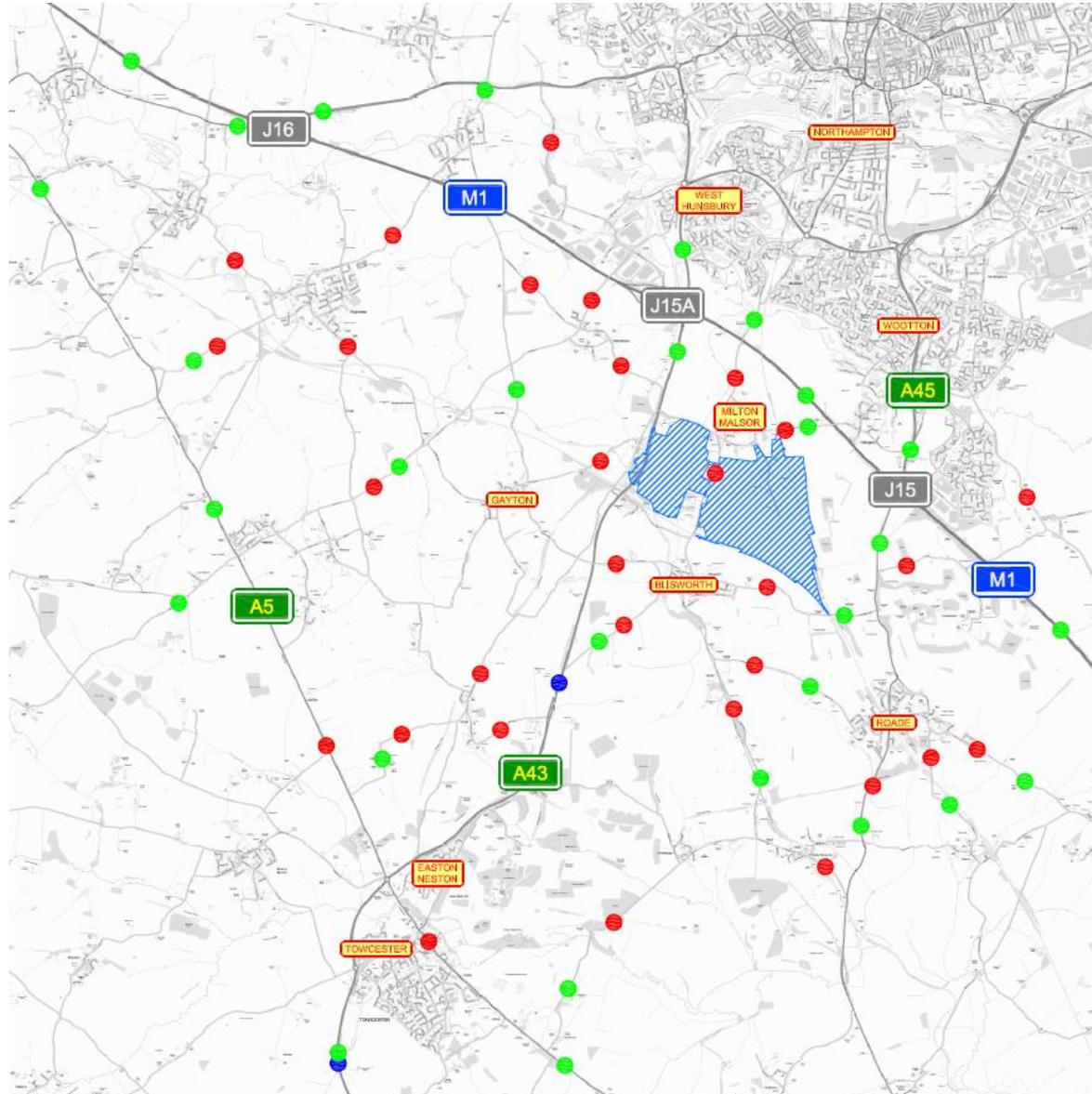
Legend:
- 🔴 Automatic traffic count locations (One Week)
- 🔵 Automatic traffic count locations (Four Weeks)
- 🟢 Automatic number plate recognition locations

Forecast Trip Attraction

○ Separate assessment of:

1. Heavy Goods Vehicle (HGV) movements

   - GB Freight Model – developed by MDS Transmodal (on behalf of the Department for Transport)

2. All other traffic

   - Based on trip attraction at a proxy sites (East Midlands Gateway, DIRFT and Radlett)

   - Method of travel

✓ **Agreed with Northamptonshire County Council and Highways England**

Daily Vehicle Movements

- 21,379 total vehicle movements

- 3,385 HGV arrivals and 3,385 HGV departures

- 7,363 other vehicle arrivals and 7,246 other vehicle departures

Agreed with Northamptonshire County Council and Highways England

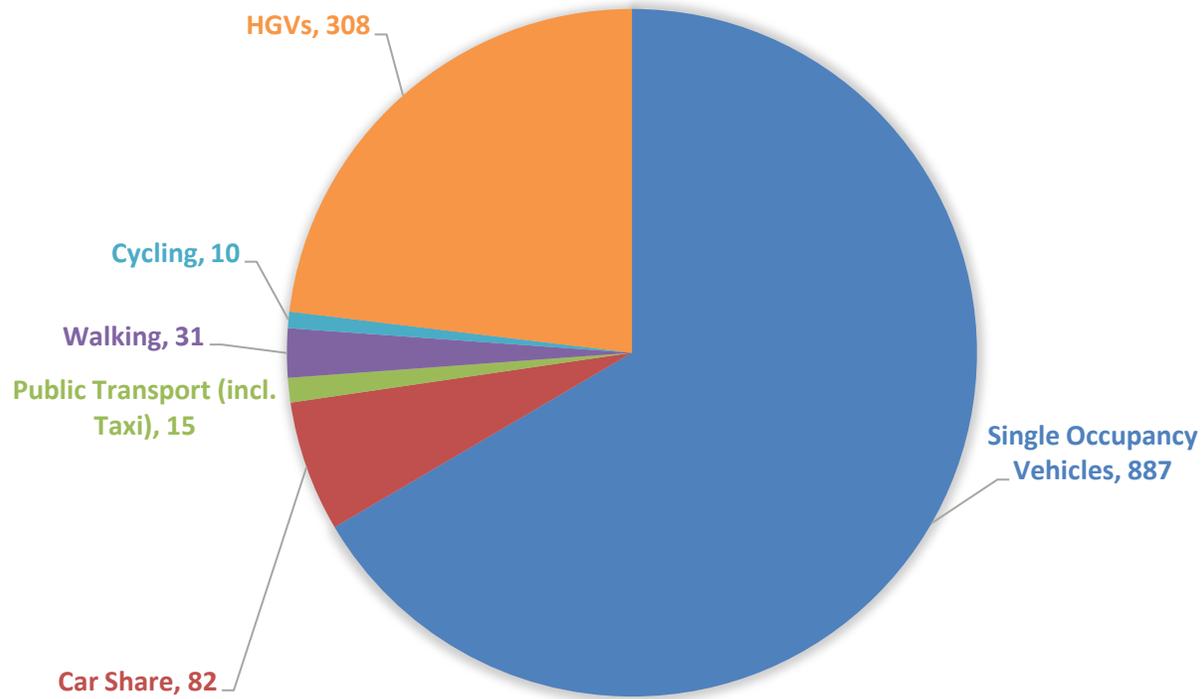# Peak Hour Vehicle Movements

- AM peak (0800-0900)
  - 1,237 total vehicle movements
  - 143 HGV arrivals and 165 HGV departures
  - 837 other vehicle arrivals and 92 other vehicle departures
- PM peak (1700-1800)
  - 1,570 total vehicle movements
  - 156 HGV arrivals and 178 HGV departures
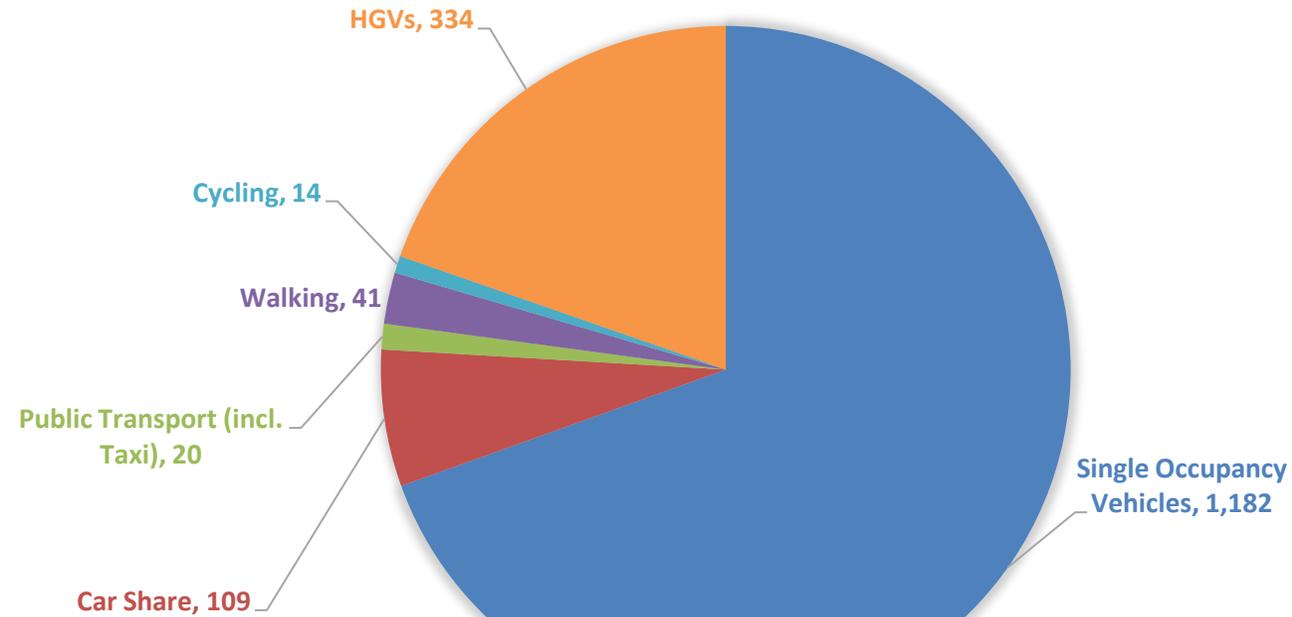 - 275 other vehicle arrivals and 961 other vehicle departures

Agreed with Northamptonshire County Council and Highways England

Peak Hour Person Trips

AM PEAK (0800-0900)

- HGVs, 308
- Cycling, 10
- Walking, 31
- Public Transport (incl. Taxi), 15
- Single Occupancy Vehicles, 887
- Car Share, 82

PM PEAK (1700-1800)

- HGVs, 334
- Cycling, 14
- Walking, 41
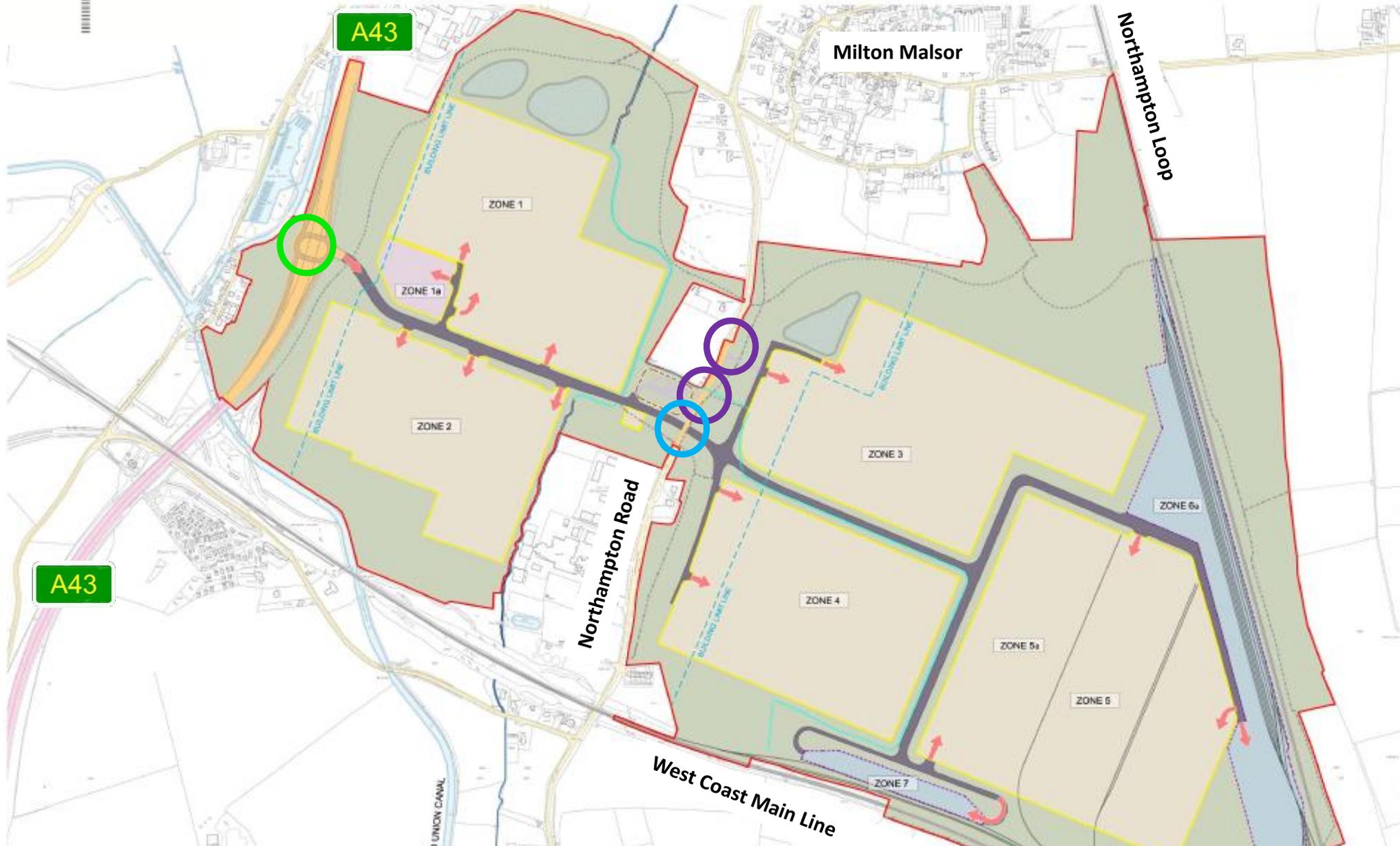- Public Transport (incl. Taxi), 20
- Single Occupancy Vehicles, 1,182
- Car Share, 109

Agreed with Northamptonshire County Council and Highways England

- A43 – *site traffic access*

  - New grade separated roundabout junction

- Northampton Road – *no site traffic access*

  - Underpass

  - Emergency Services' access

  - Pedestrian and cycle access

- New and higher frequency bus services

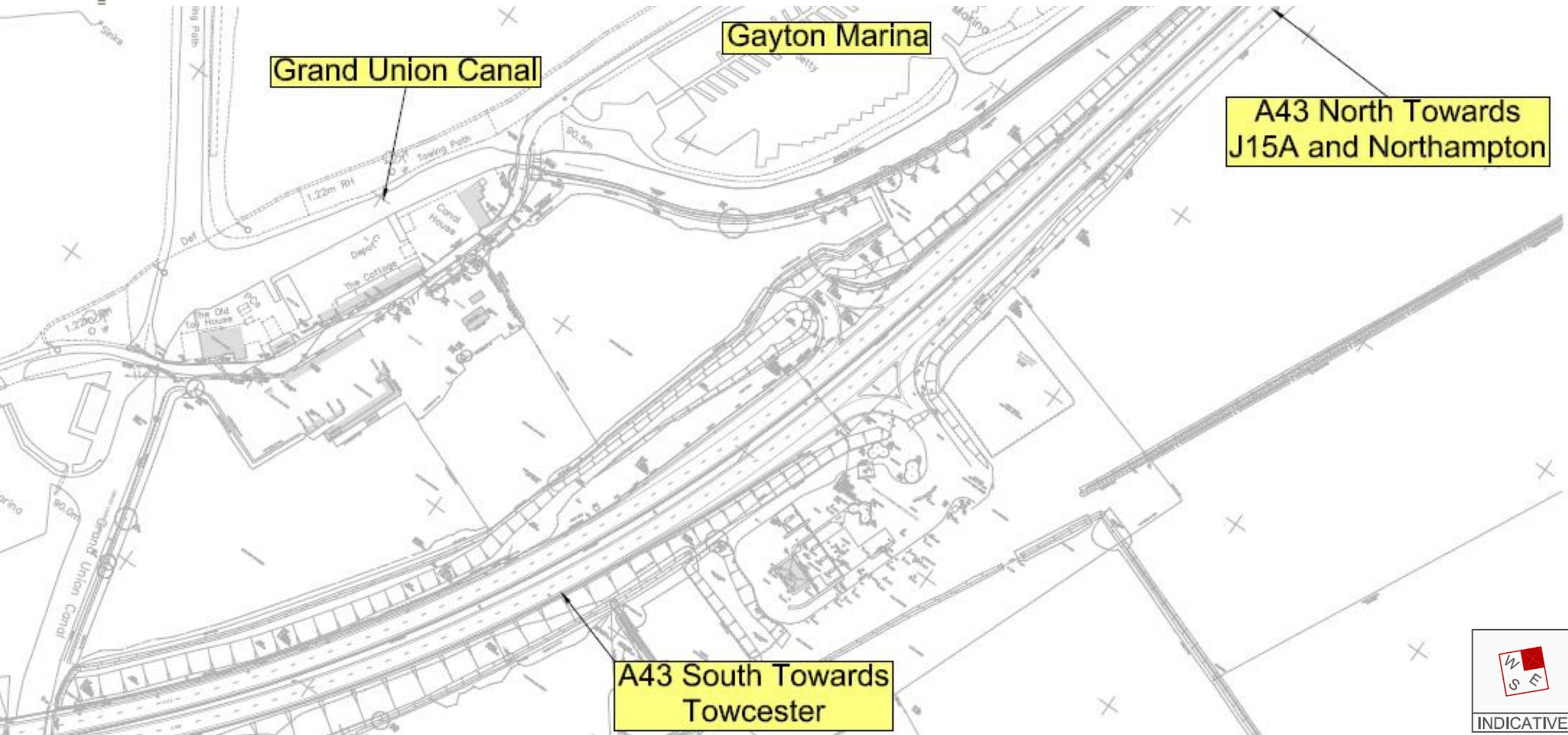- Travel Planning and sustainable travel initiatives

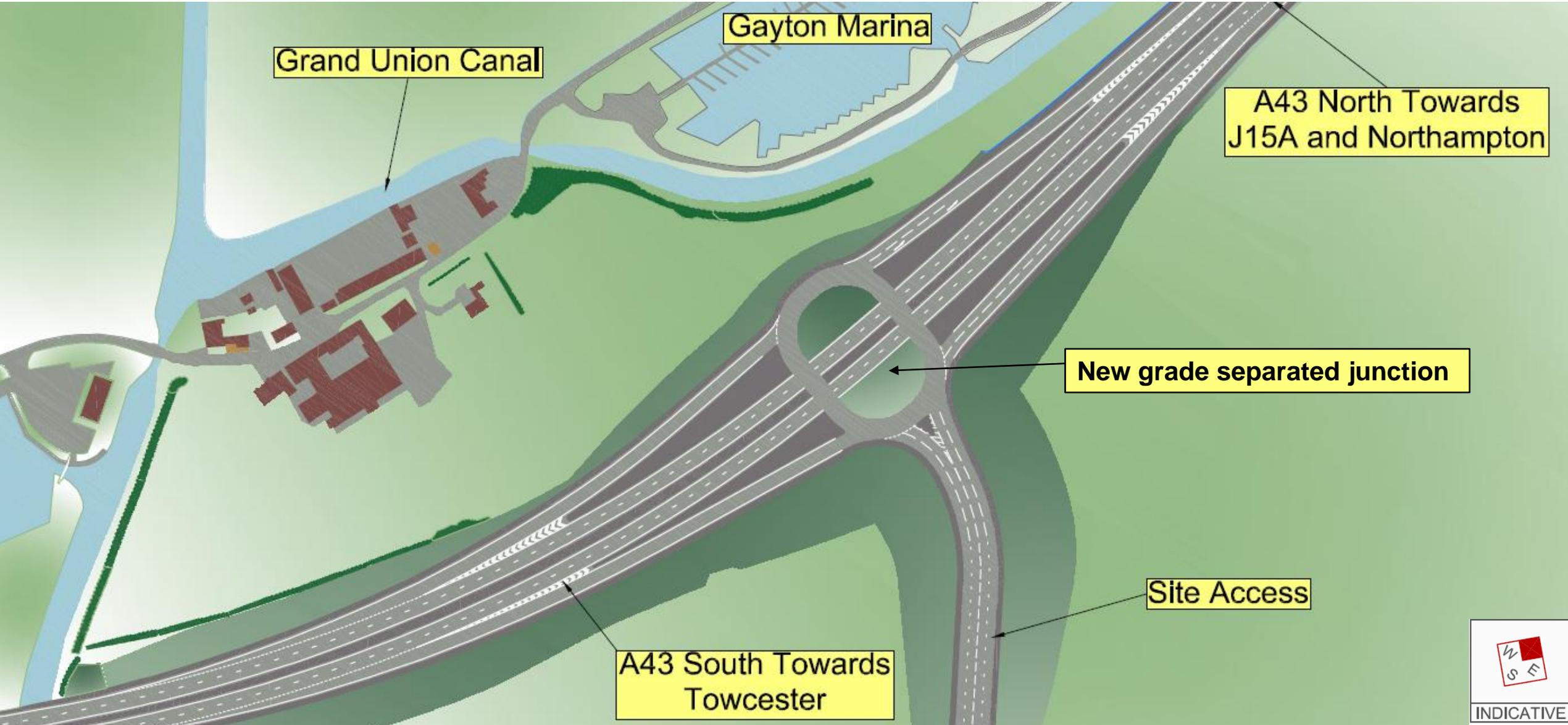**Agreed with Northamptonshire County Council and Highways England**

Parameters Plan

Rail Central
Northamptonshire

A43

Milton Malsor

Northampton Loop

ZONE 1

ZONE 1a

ZONE 2

Northampton Road

ZONE 3

ZONE 6a

A43

ZONE 4

ZONE 5a

ZONE 6

West Coast Main Line

ZONE 7

○ A43 Site Access Junction

○ Northampton Road Underpass

○ Emergency Vehicles' access

A43 Existing Arrangement

Gayton Marina

Grand Union Canal

A43 North Towards J15A and Northampton

A43 South Towards Towcester

INDICATIVE

A43 Proposed Site Access Junction

Grand Union Canal

Gayton Marina

A43 North Towards J15A and Northampton

New grade separated junction

Site Access

A43 South Towards Towcester

INDICATIVE

Northampton Road - Underpass

Rail Central
Northamptonshire

Key

Footpath Connections

Emergency Services' access

Key

Footpath Connections

Northampton Road – Pedestrian and cycle access

Pedestrian and cycle access

Key

Footpath Connections

Forecast traffic flows and junction turning movements predicted by the NSTM (by WSP on behalf of NCC):

- Modelling scenarios:
  - 2021 (opening year) and 2031 (design year)
  - Future Forecast Flows (including all of Northamptonshire's District and Borough Council's Local Plan allocations)
  - Future Forecast Flows + Rail Central
  - Future Forecast Flows + Rail Central + M1 J15A improvements

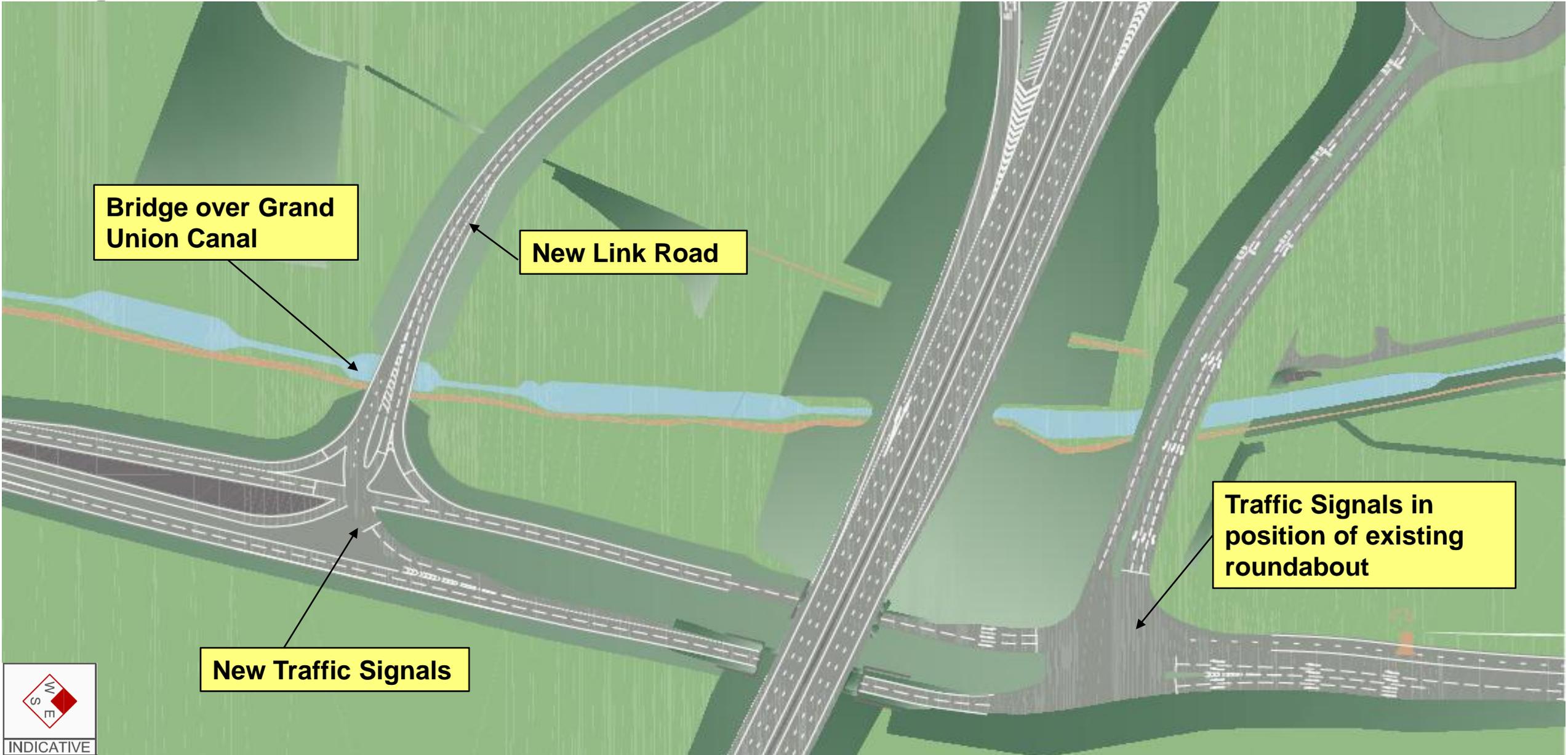**Agreed with Northamptonshire County Council and Highways England**

Rail Central
Northamptonshire

Grand Union Canal
(Northampton Arm)

Birmingham, Leicester
and the North

Motorway Service
Area

A43

M1 North

Towcester and the A5

A5123

London and the South

M1 South

Northampton

INDICATIVE

Rail Central
Northamptonshire
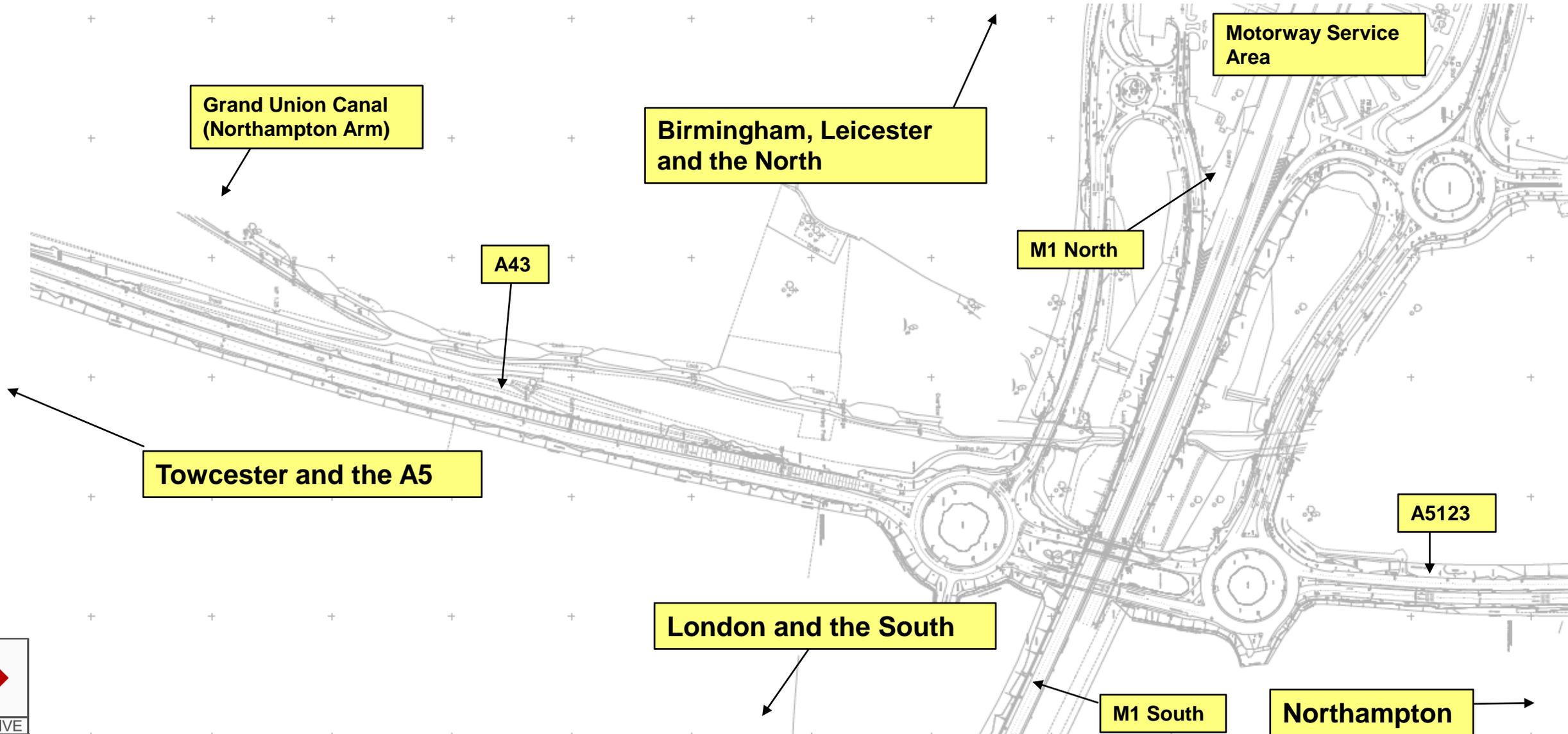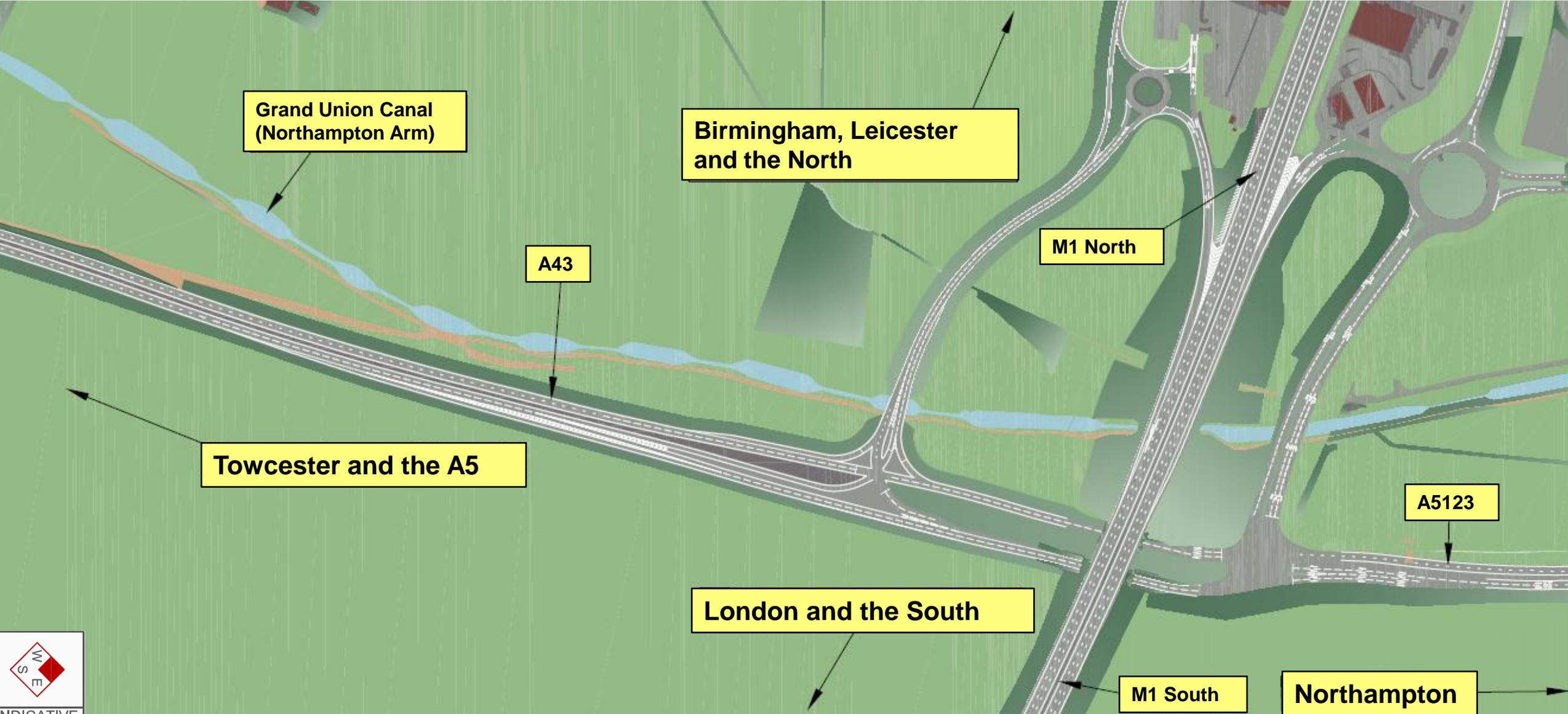
Bridge over Grand Union Canal

New Link Road

Traffic Signals in position of existing roundabout

New Traffic Signals

INDICATIVE
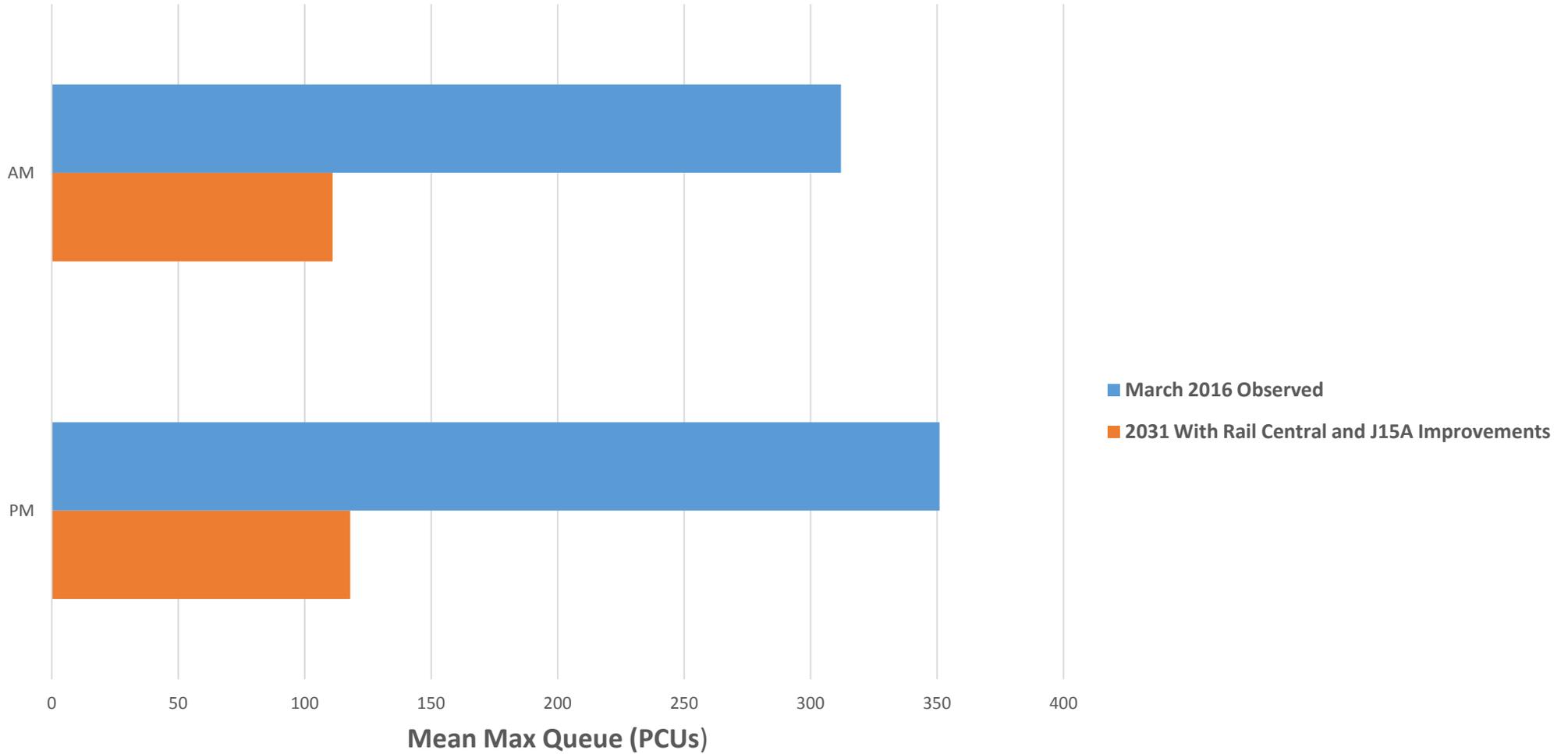
Study Area

Plus the following junctions:
14- A43 / A5 Tove Roundabout
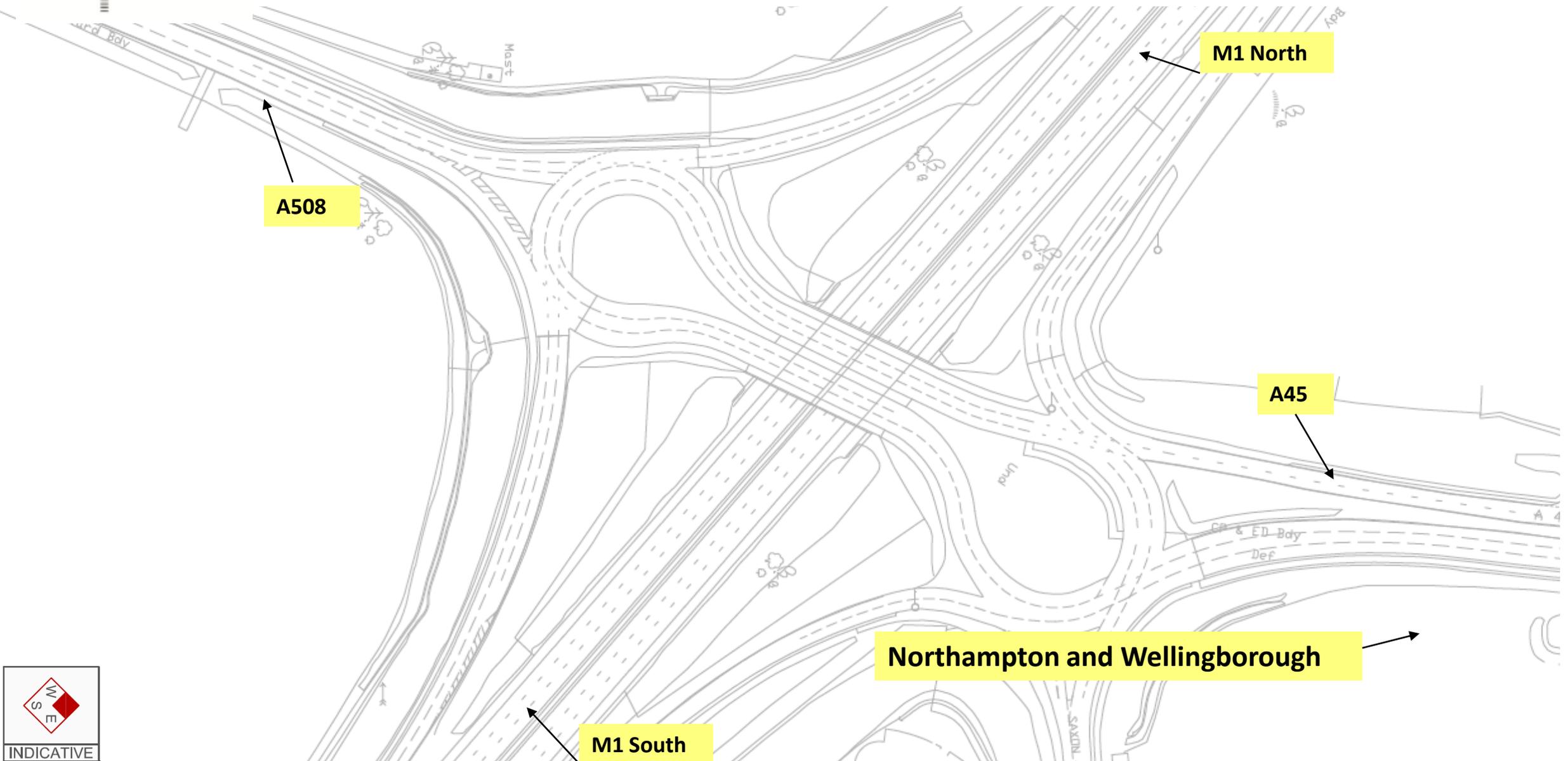
15- A43 Abthorpe Roundabout

16- A5 / A508 Stony Stratford Roundabout

Agreed with Northamptonshire County Council and Highways England

Rail Central
Northamptonshire
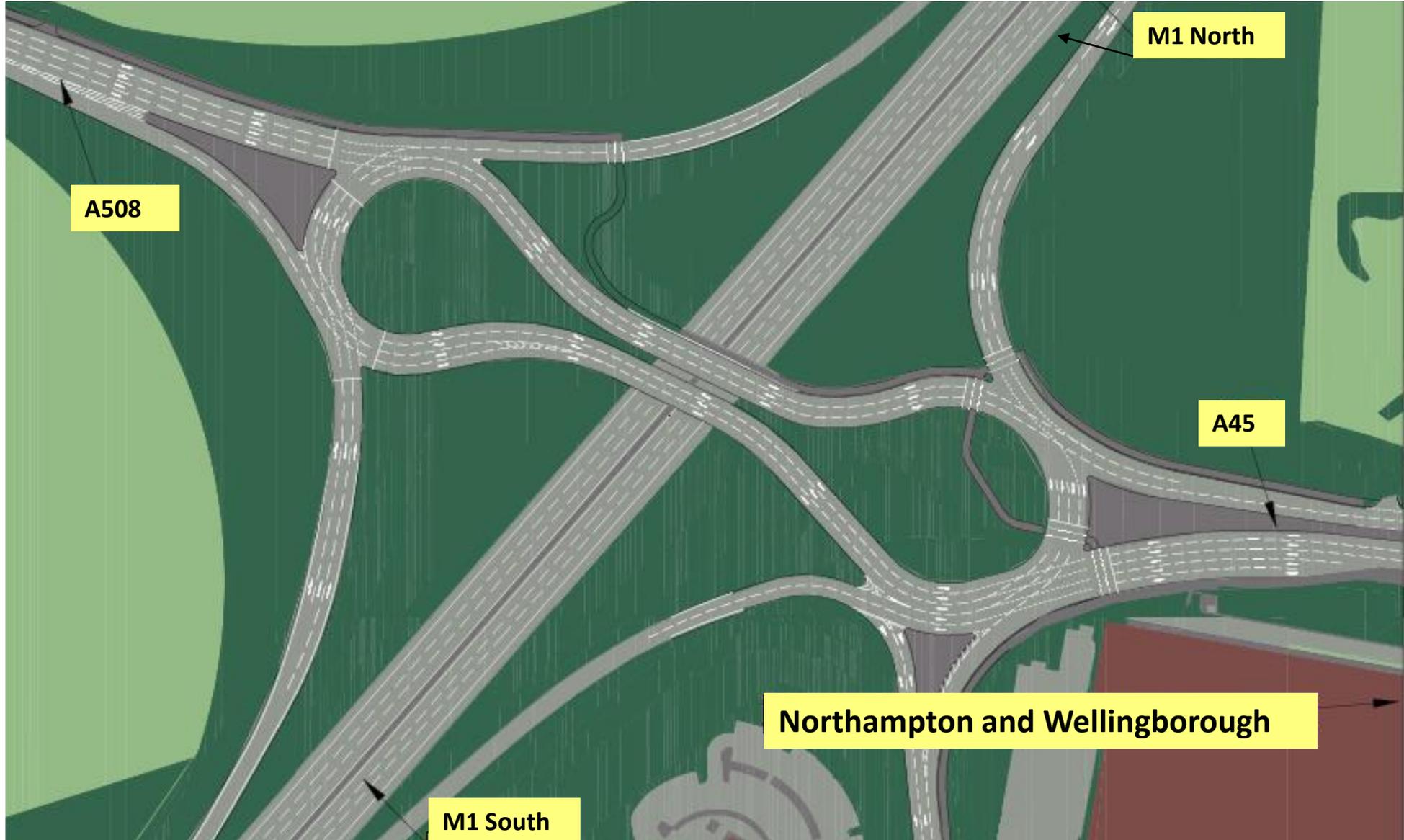
M1 North

A508

A45

Northampton and Wellingborough

M1 South

INDICATIVE

Queen Eleanor Roundabout Existing Layout

A45 North

A508

Hardingstone Lane

Ambulance Station

Mere Way
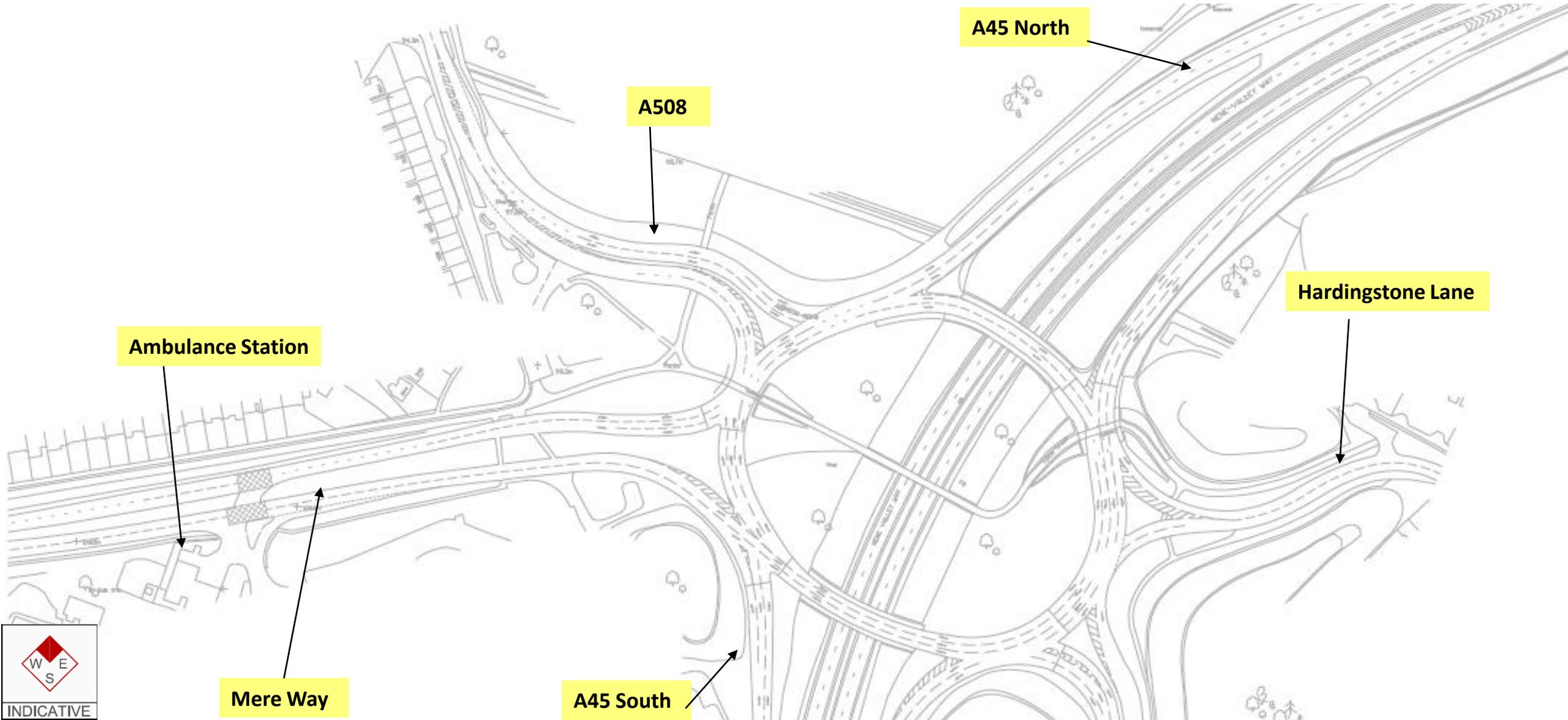
A45 South

Queen Eleanor Roundabout Improvement

A45 North

A508

Hardingstone Lane

Ambulance Station

Mere Way

A45 South
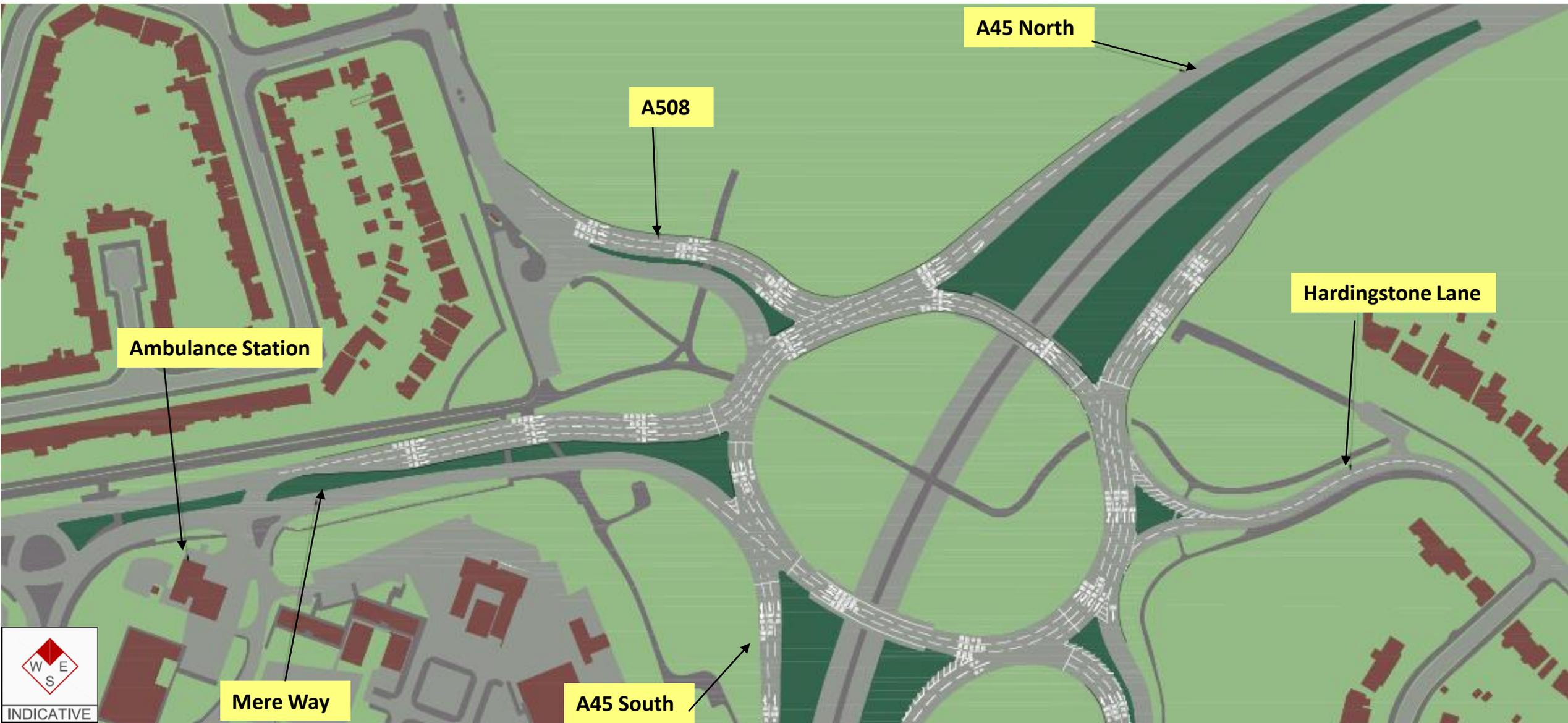
INDICATIVE

Tove Roundabout Existing Layout

Tove Roundabout Improvement
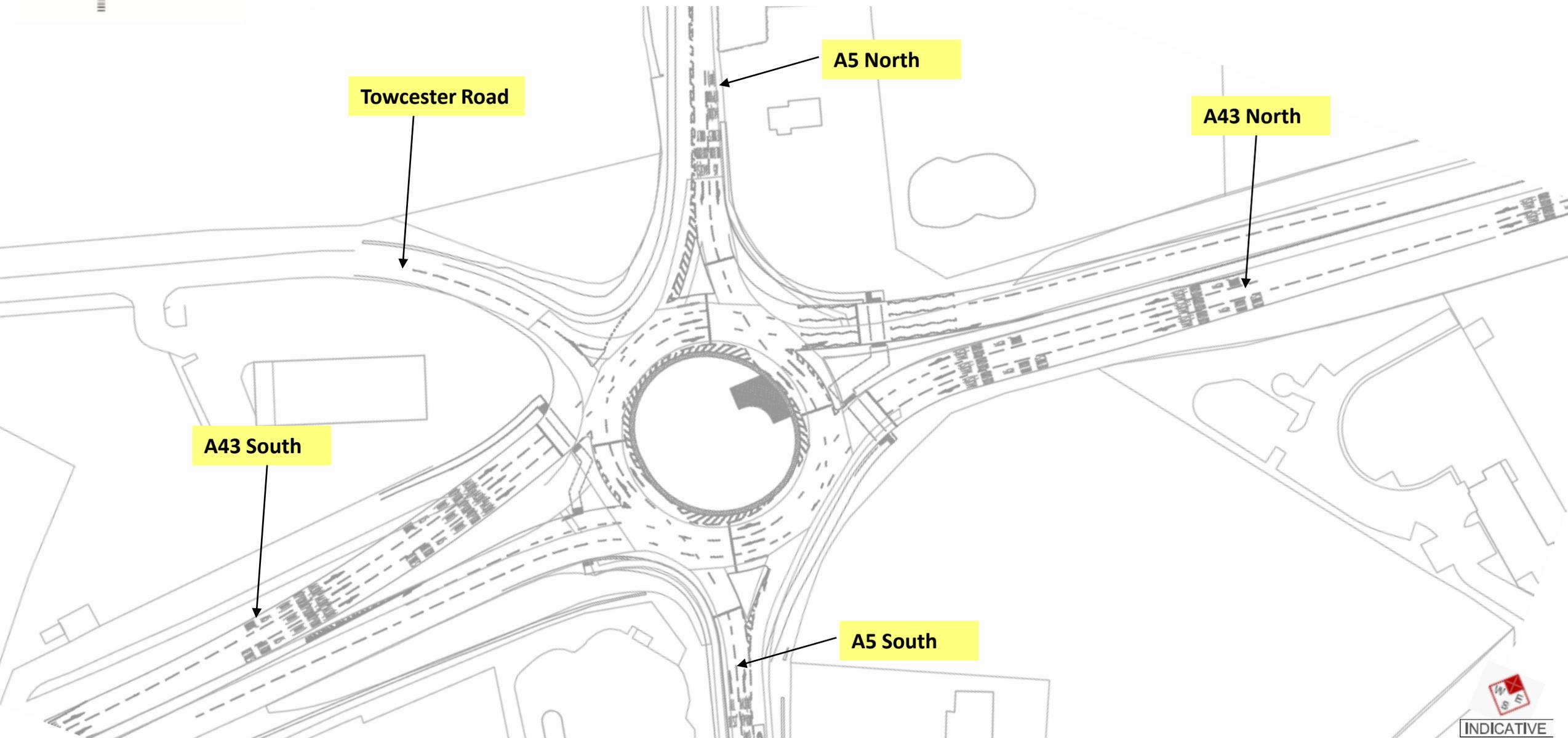
A5 North

Towcester Road

A43 North

A43 South

A5 South

Rail Central
Northamptonshire
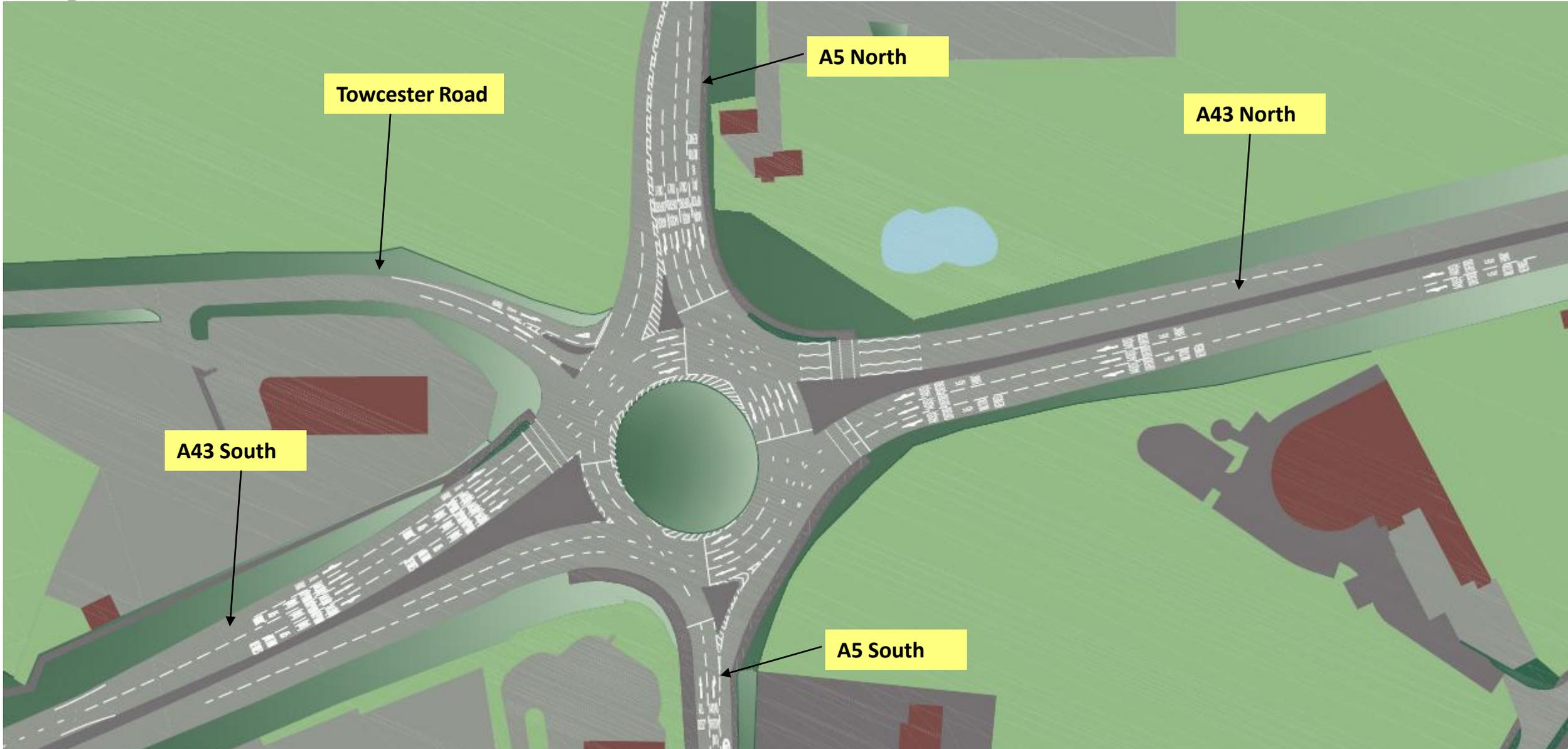
- Environmental Enhancement Schemes

  - Milton Malsor – presented to Milton Malsor Parish Council on 9th May 2017

  - Blisworth

Agreed with Northamptonshire County Council

Key Milestones Achieved

- ☑ Baseline assessment – i.e. update to NSTM
- ☑ The site access strategy
- ☑ Number of vehicles travelling to and from the site
- ☑ Distribution of vehicles on to the local and strategic highway network
- ☑ Method of travel
- ☑ Study area
- ☑ Approach to assessment

Next Steps to Stage Two Consultation

☐ Finalise highway mitigation schemes

☐ Agree Public Transport Strategy

☐ Finalise Travel Planning Measures

☐ Provide the final evidence base for the application for the Development Consent Order and its potential Examination

You will find a copy of this presentation in the Project Library section of the Rail Central website

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