

# Appendix B

## **NORTHAMPTON GATEWAY**

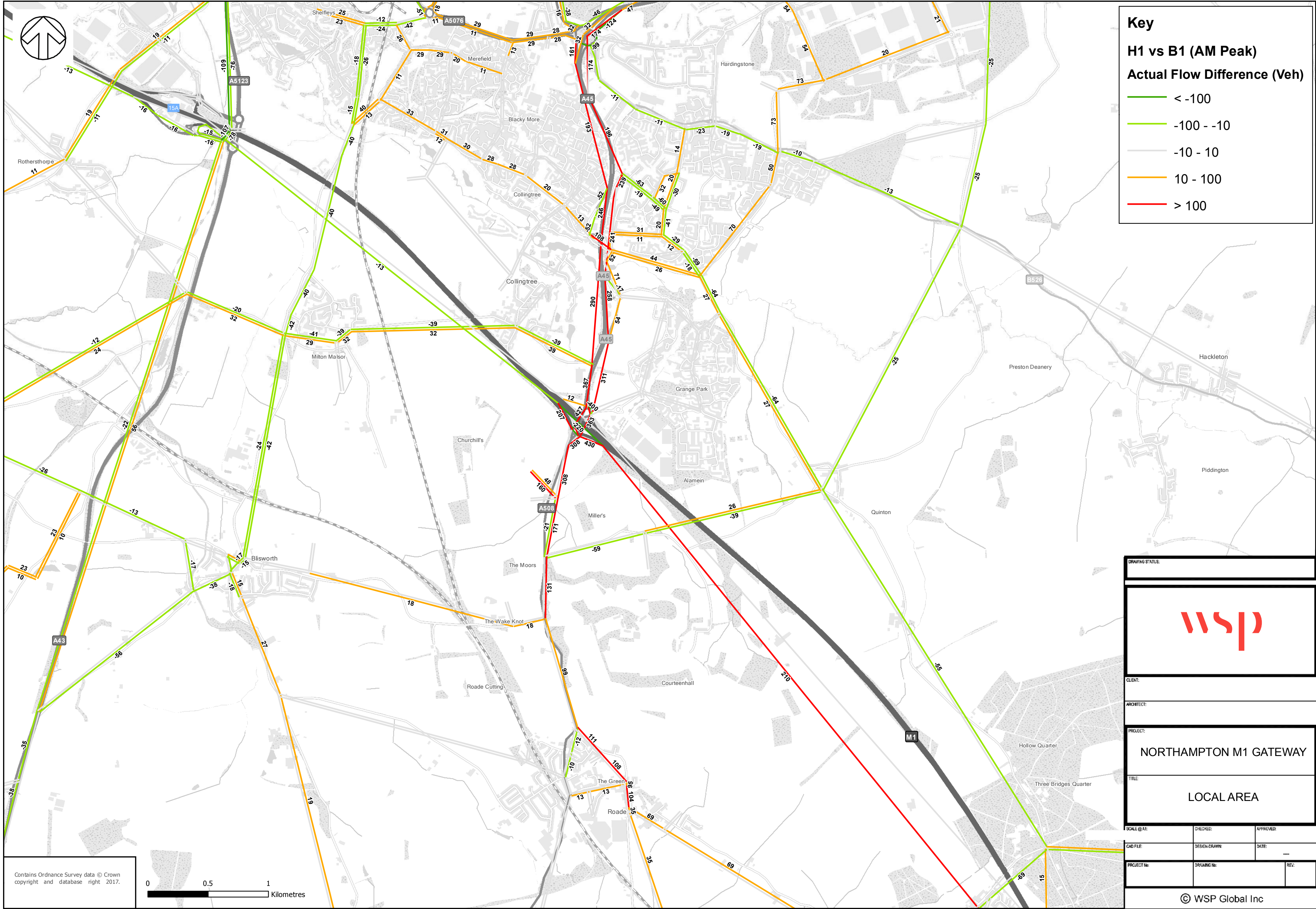
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## **DEVELOPMENT CASE WITH MITIGATION MODEL OUTPUTS**

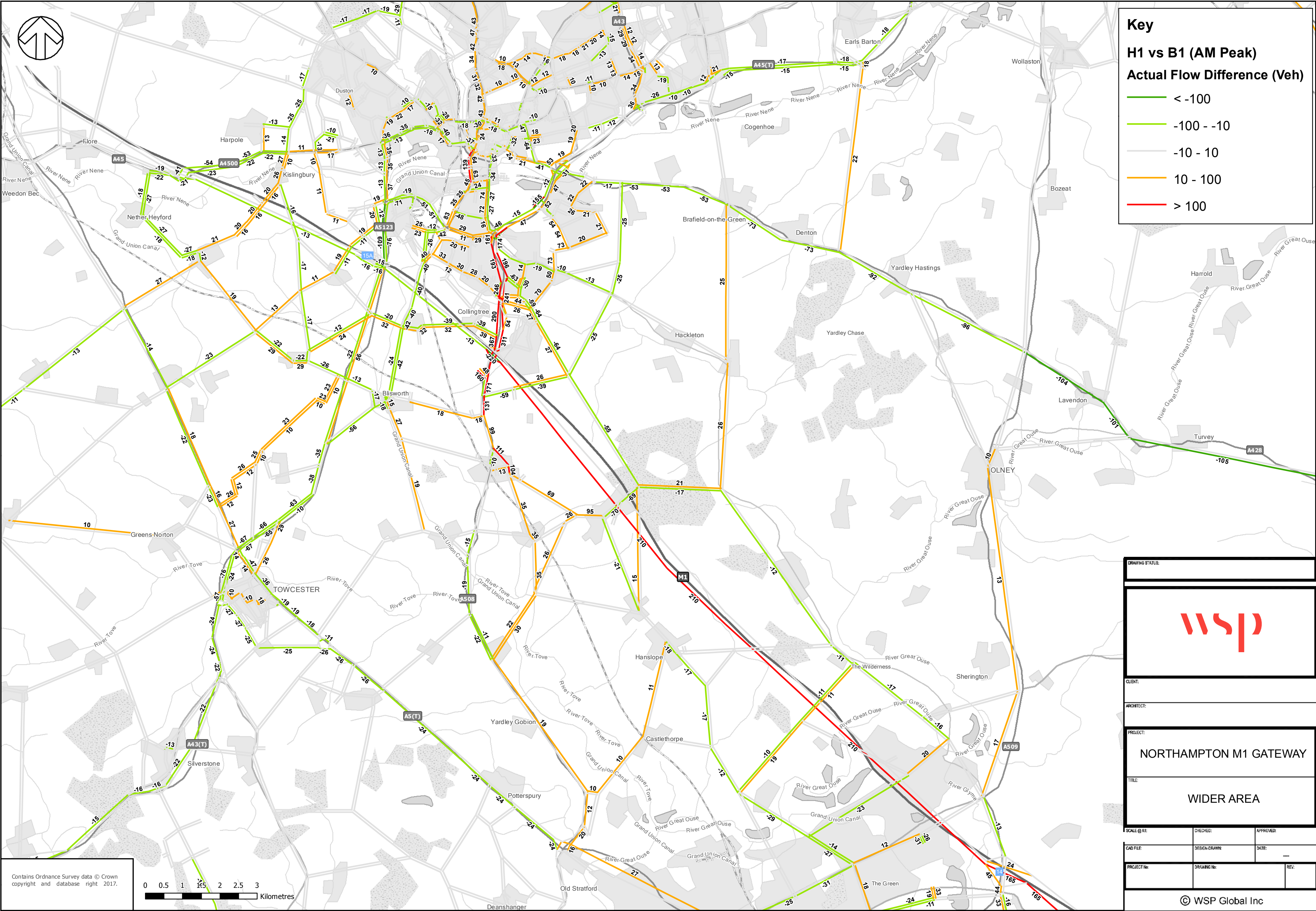
|                                                               |    |
|---------------------------------------------------------------|----|
| Development case with mitigation actual flow difference plots | 2  |
| Development case with mitigation reassignment plots           | 15 |
| Development case with mitigation VCR plots                    | 28 |





|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>LOCAL AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN-DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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**Key**

**H1 vs B1 (AM Peak)**

**Actual Flow Difference (Veh)**

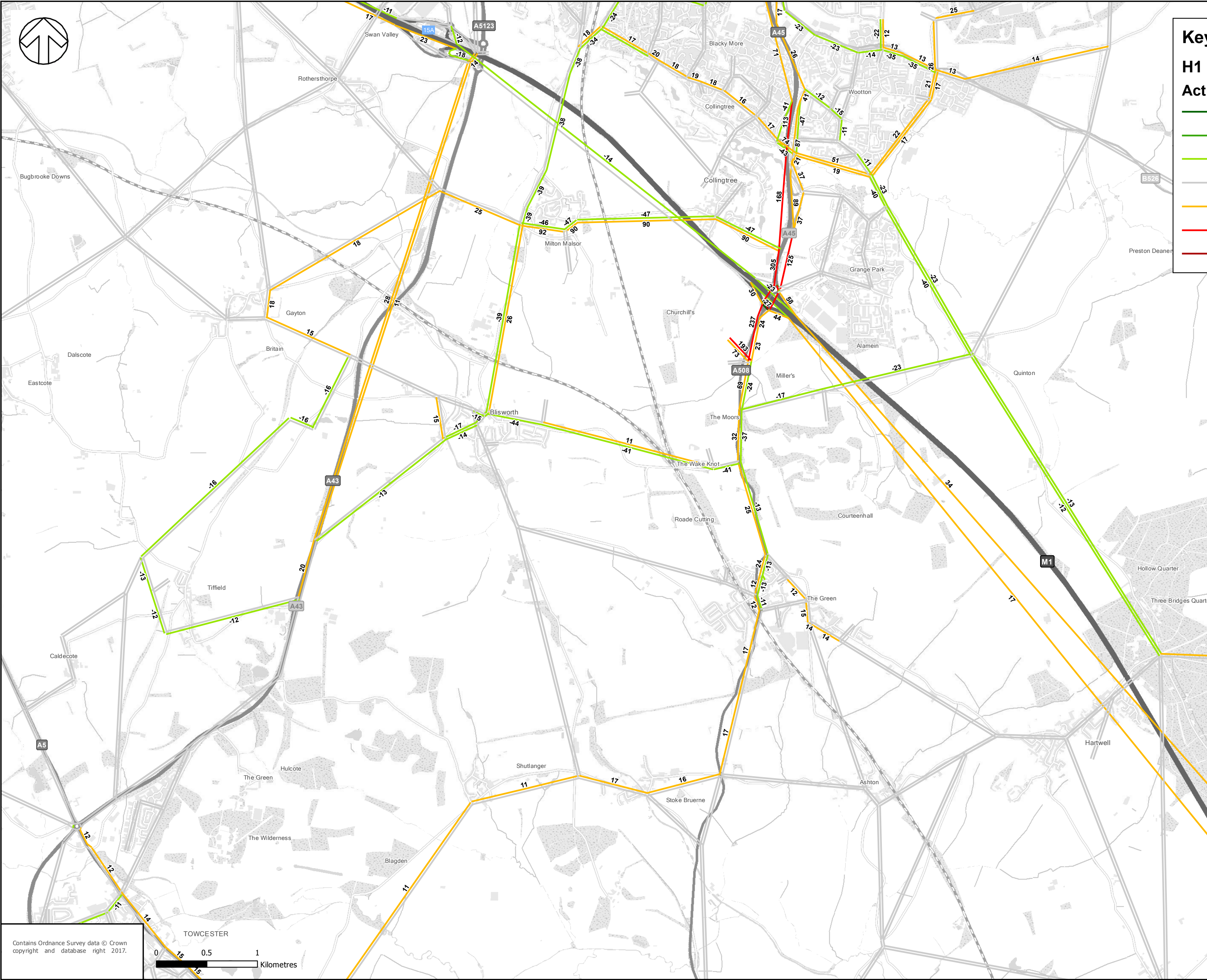
- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>WIDER AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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File: Q:\WSP\_UK\WSP\_D\Basing\Northants Multi Modal Transport Model\Analysis\Map Documents\Northampton Gateway\Difference Plots\Actual Flow Diff local 16112017.mxd

Drawn By: UKWMS001



**Key**  
**H1 vs B1 (PM Peak)**  
**Actual Flow Difference (Veh)**

< -500

-500 - -100

-100 - -10

-10 - 10

10 - 100

100 - 500

> 500

DRAWING STATUS:

CLIENT:

ARCHITECT:

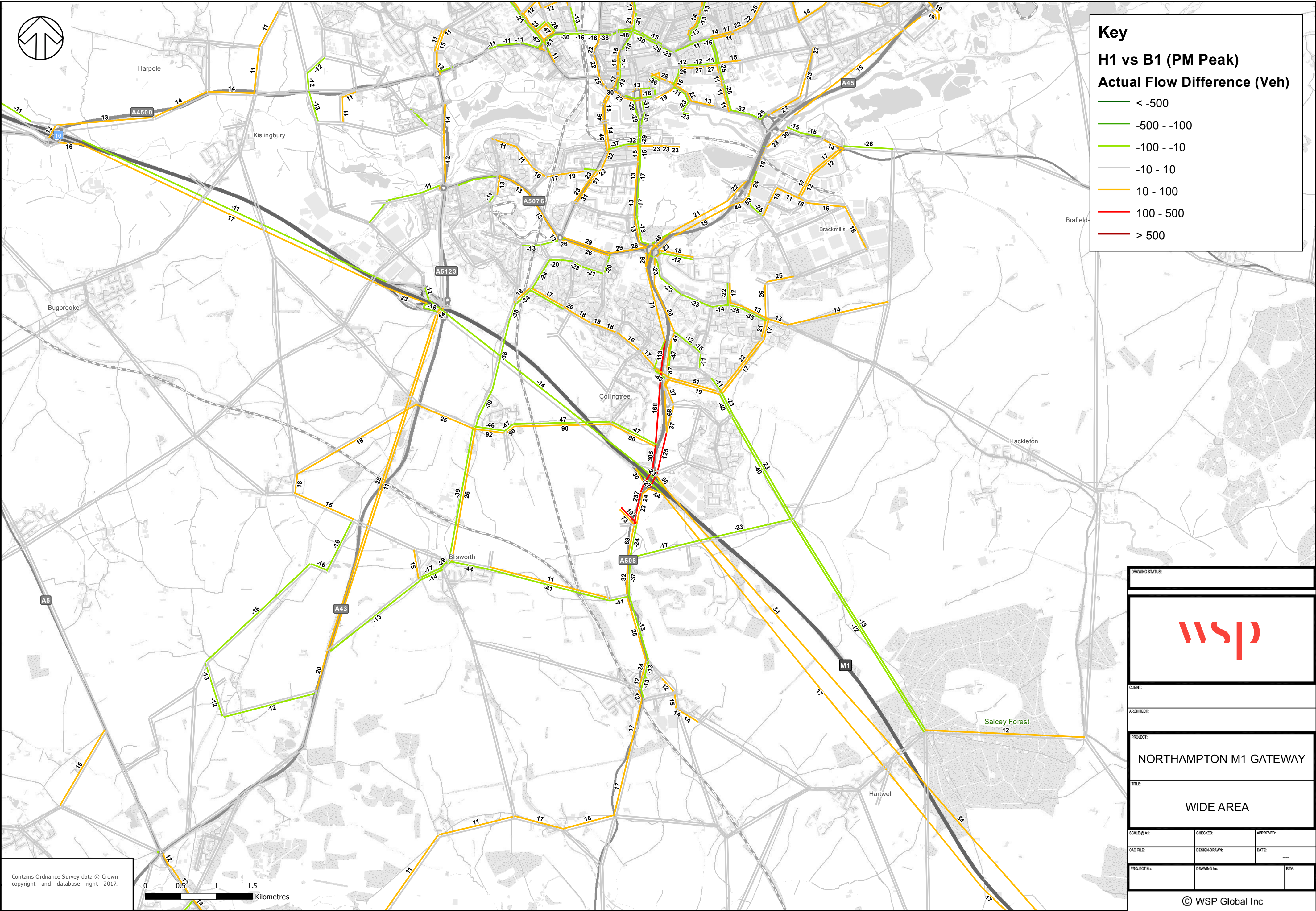
PROJECT:  
NORTHAMPTON M1 GATEWAY

TITLE:  
LOCAL AREA

|             |                 |           |
|-------------|-----------------|-----------|
| SCALE @ A1: | CHECKED:        | APPROVED: |
| CAD FILE:   | DESIGN DRAWING: | DATE:     |
| PROJECT No: | DRAWING No:     | REV:      |

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0 0.5 1 1.5 Kilometres

**Key**

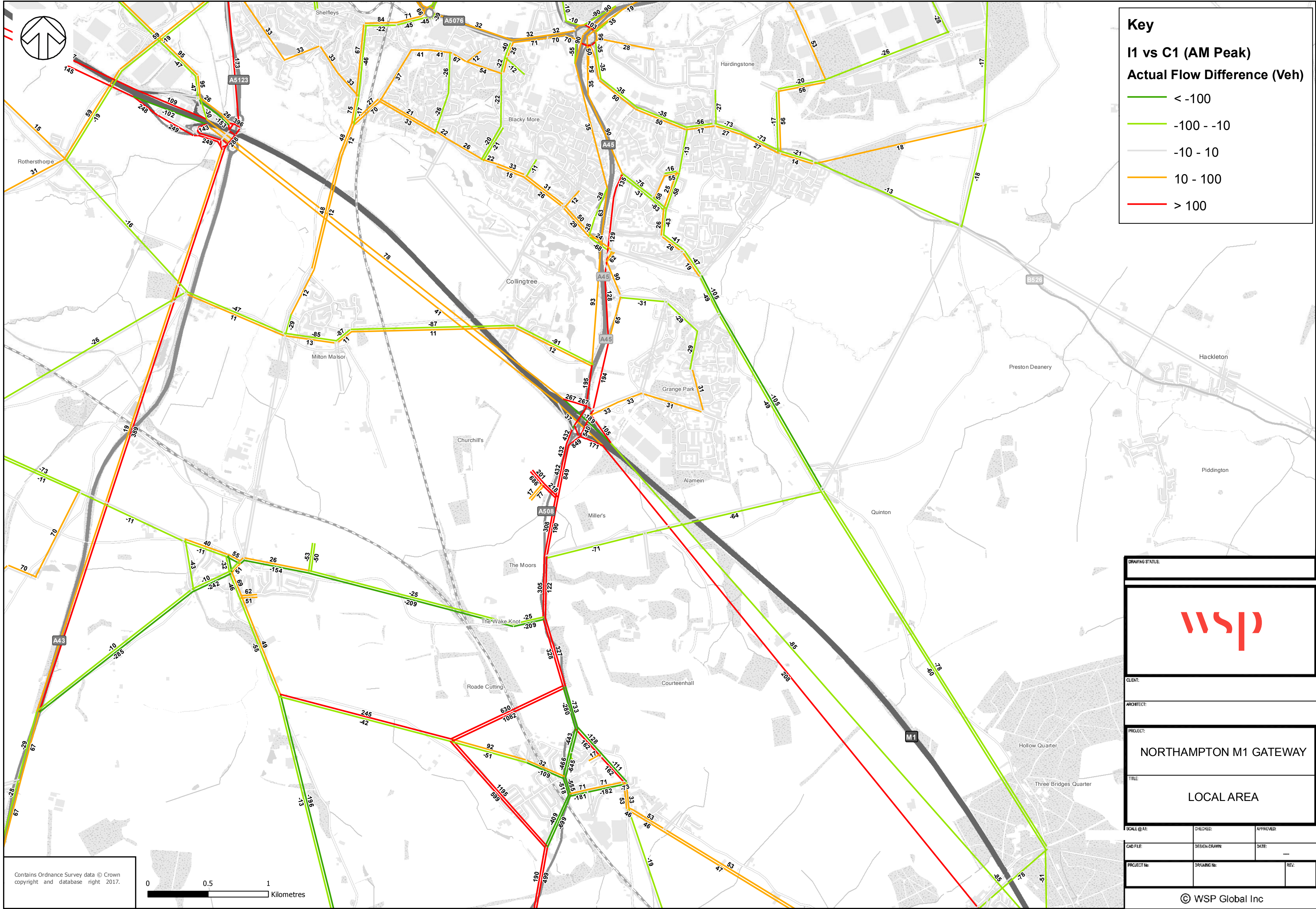
**H1 vs B1 (PM Peak)**

**Actual Flow Difference (Veh)**

- < -500
- 500 --100
- 100 --10
- 10 - 10
- 10 - 100
- 100 - 500
- > 500

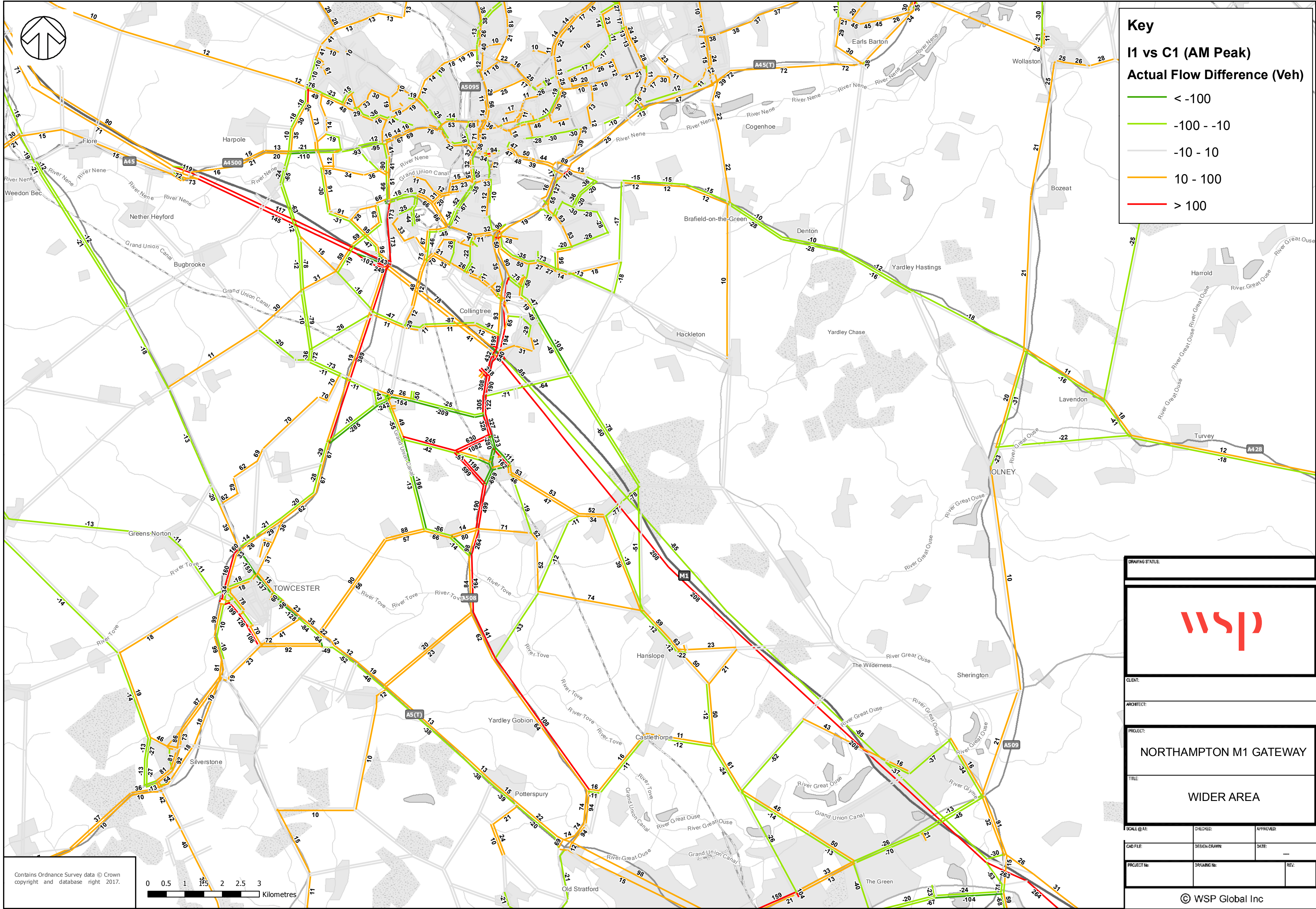
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| CLIENT:                                                                               |                 |           |
| ARCHITECT:                                                                            |                 |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |                 |           |
| TITLE:<br><b>WIDE AREA</b>                                                            |                 |           |
| SCALE@A1                                                                              | CHECKED:        | APPROVED: |
| CAD FILE:                                                                             | DESIGN/DRAWING: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:     | REV:      |
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|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>LOCAL AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN-DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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**Key**  
**I1 vs C1 (AM Peak)**  
**Actual Flow Difference (Veh)**

< -100

-100 - -10

-10 - 10

10 - 100

> 100

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:  
NORTHAMPTON M1 GATEWAY

TITLE:  
WIDER AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN DRAWN:

DATE:

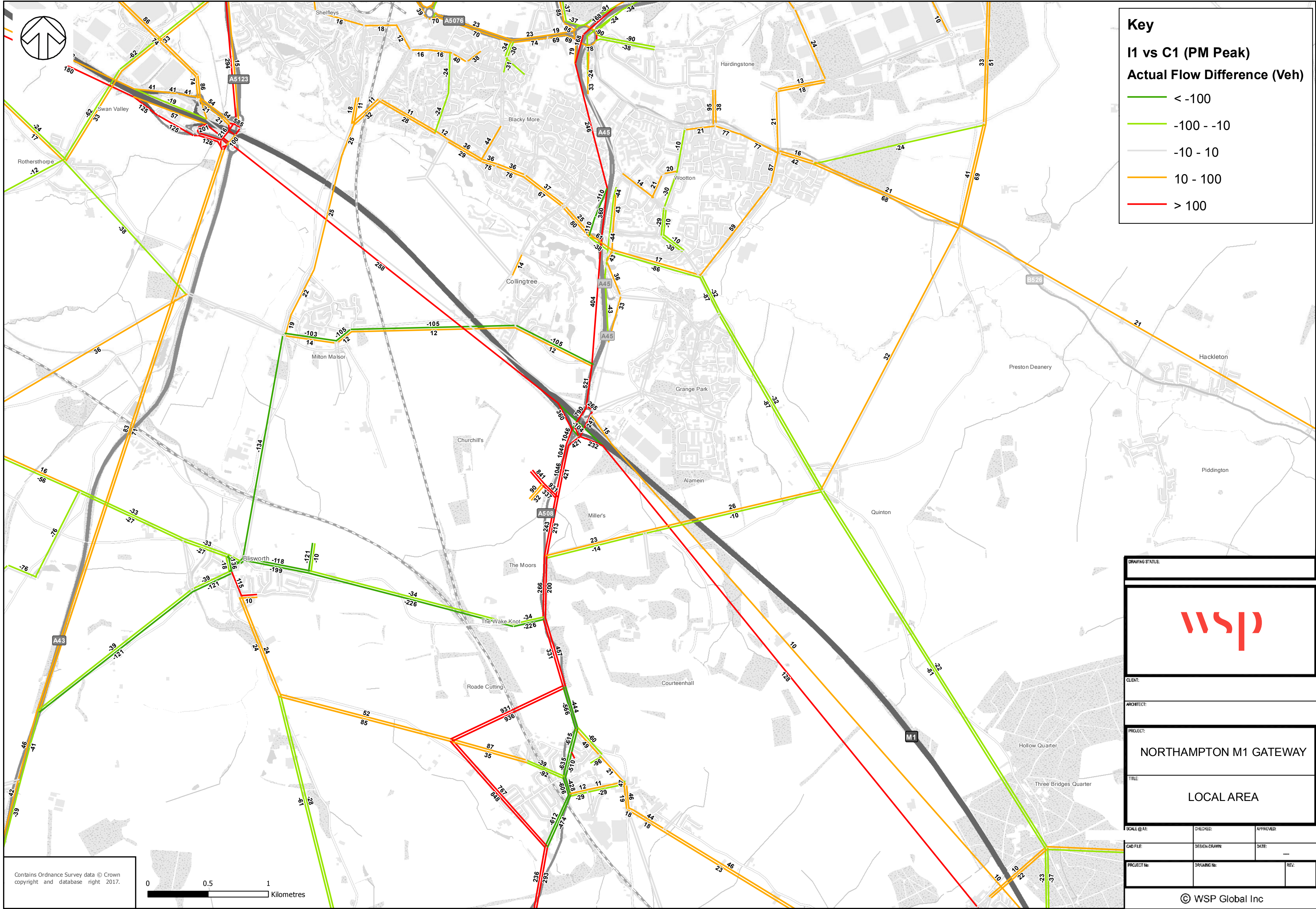
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DRAWING No:

REV:

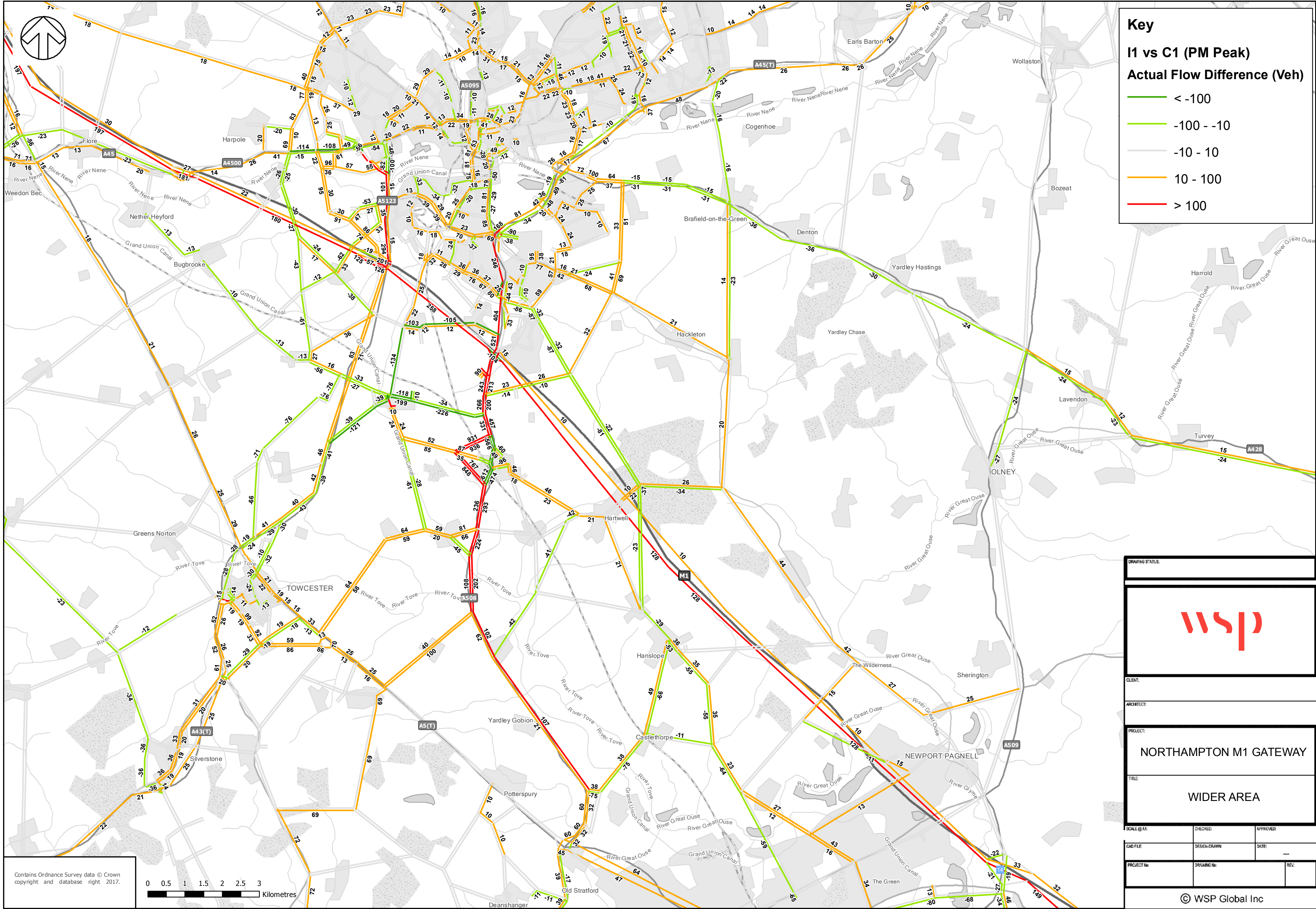
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|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>LOCAL AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN-DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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**Key**  
**I1 vs C1 (PM Peak)**  
**Actual Flow Difference (Veh)**

< -100

-100 - -10

-10 - 10

10 - 100

> 100

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDER AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN DRAWN:

DATE:

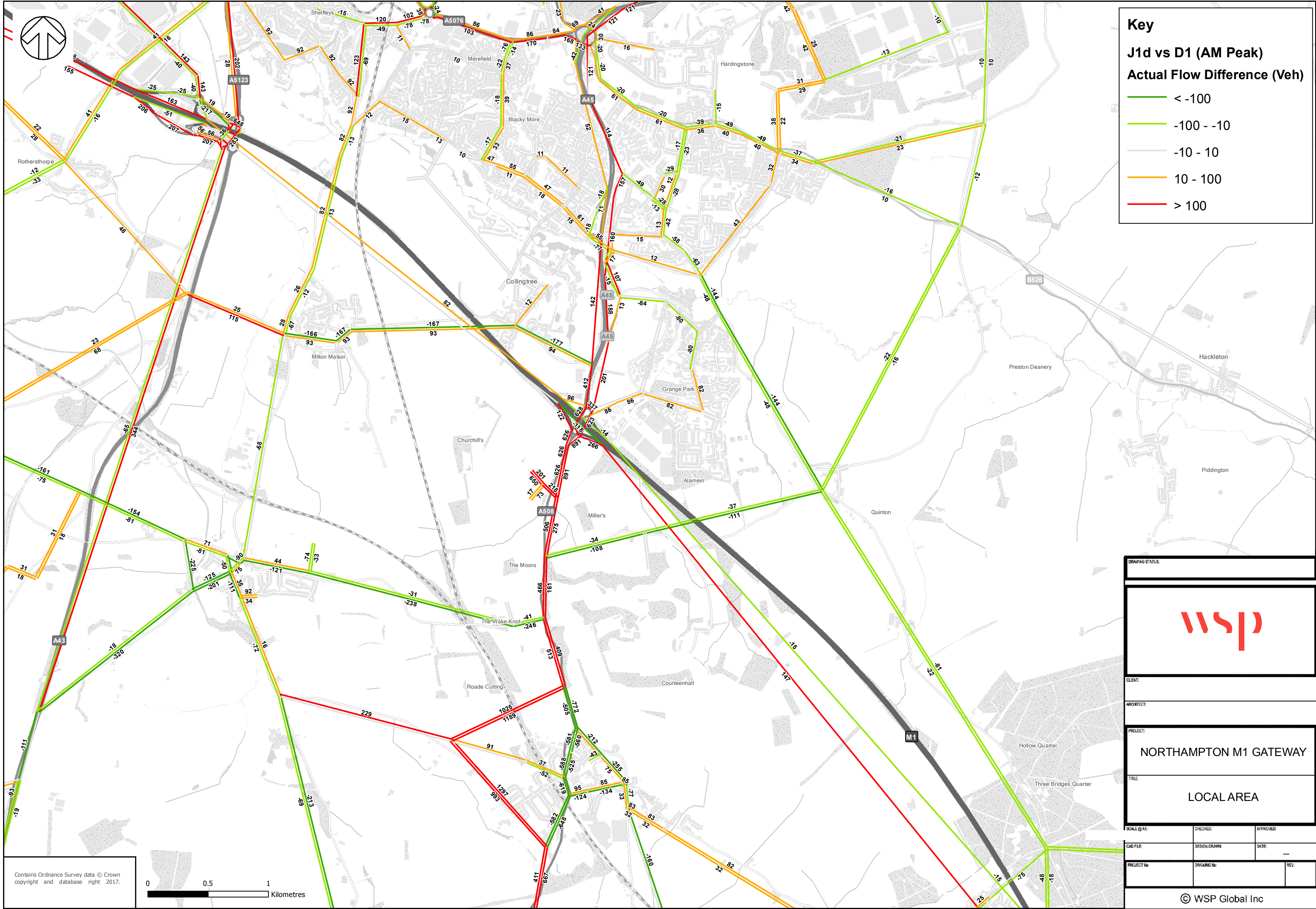
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DRAWING No:

REV:

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Key

J1d vs D1 (AM Peak)

Actual Flow Difference (Veh)

< -100

-100 - -10

-10 - 10

10 - 100

> 100

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

LOCAL AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

PROJECT No:

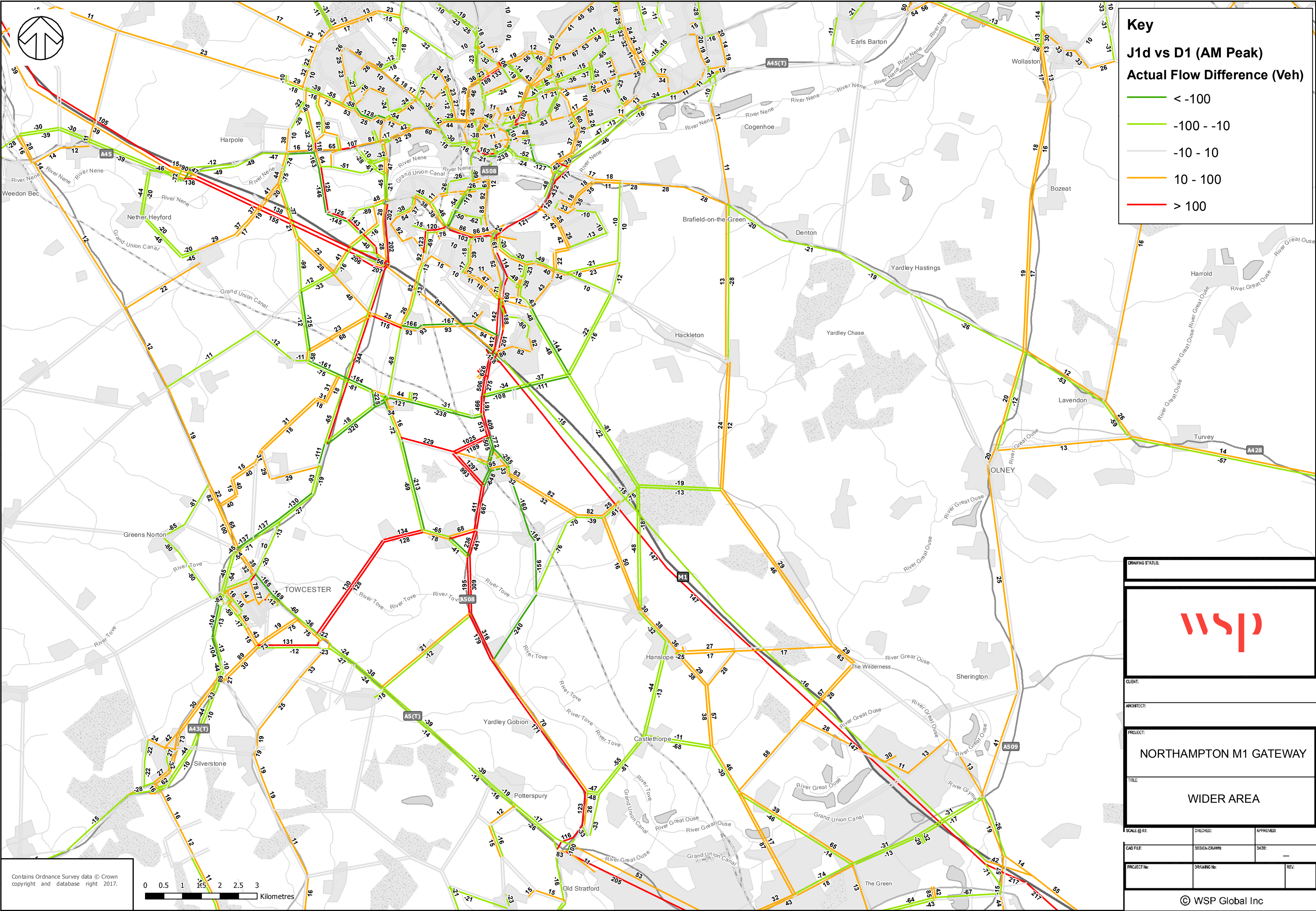
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REV:

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File: Q:\WSP\_UK\WSP\_D\Basing\Northants Multi Modal Transport Model\Analysis\Map Documents\Northampton Gateway\Difference Plots\J1d\_vs\_D1\J1d\_D1\_Flow\_Diff\_Wider\_Area\_Veh\_22112017.mxd  
Drawn By: ukrdt001



**Key**

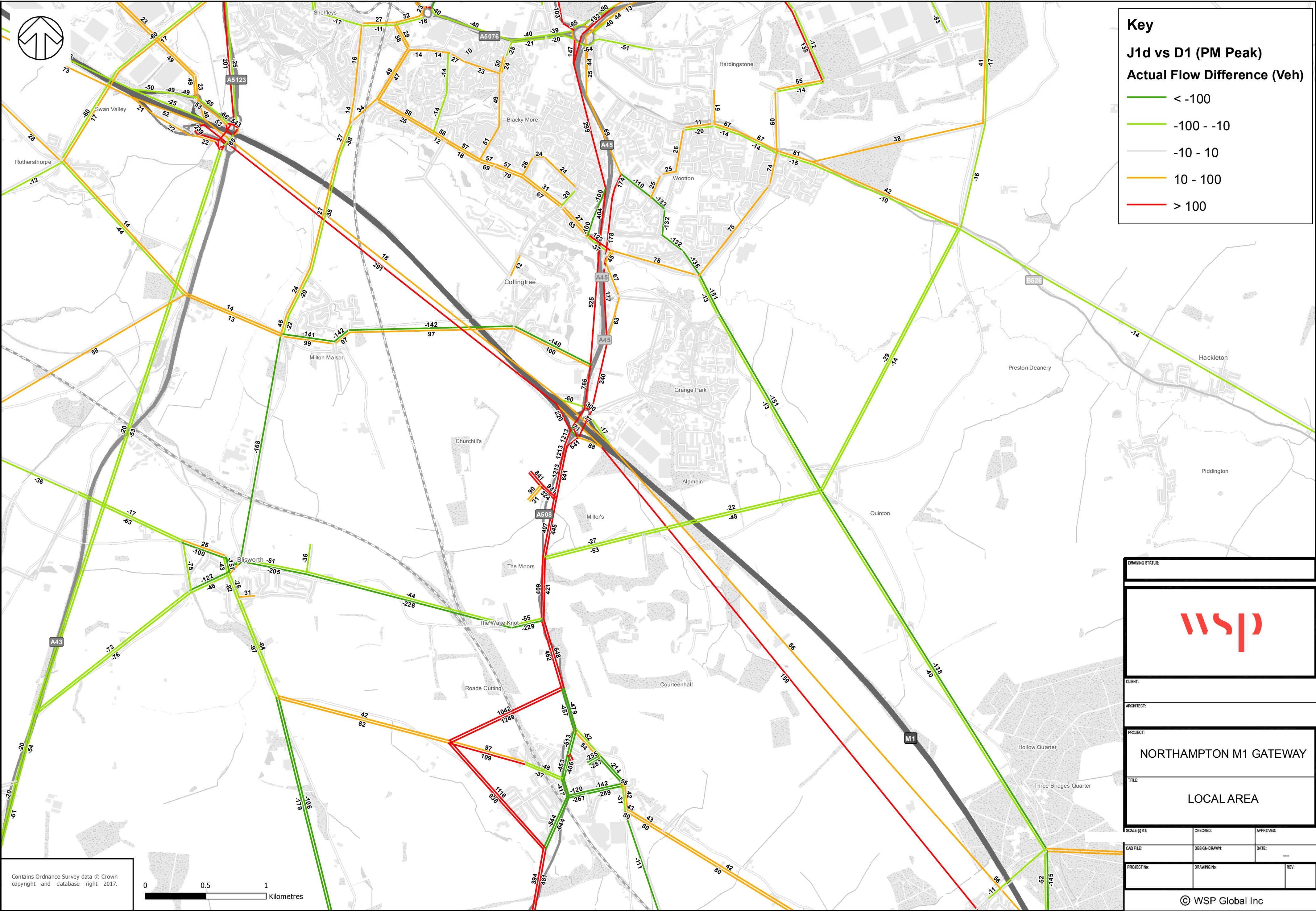
**J1d vs D1 (AM Peak)**

**Actual Flow Difference (Veh)**

- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>WIDER AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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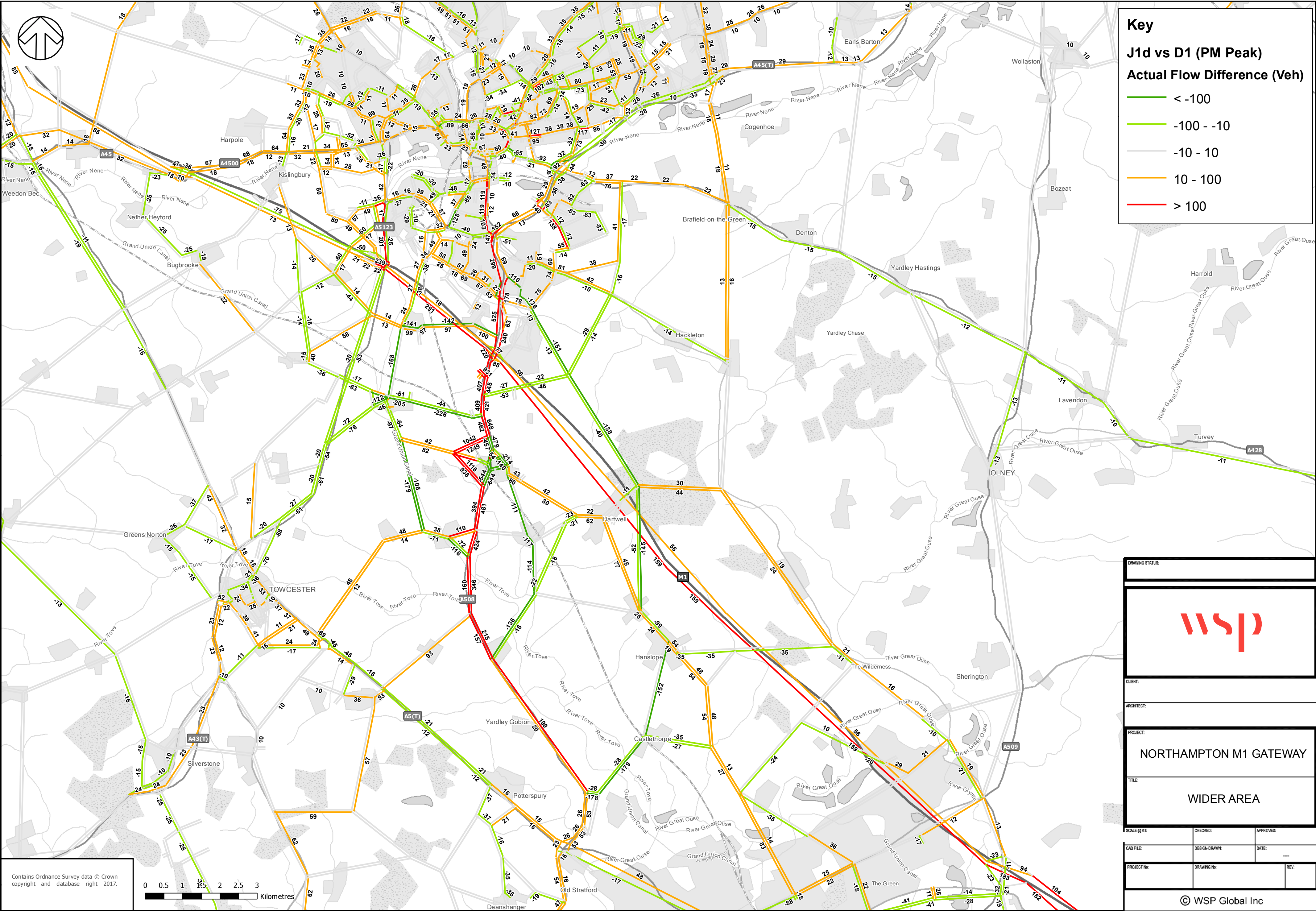




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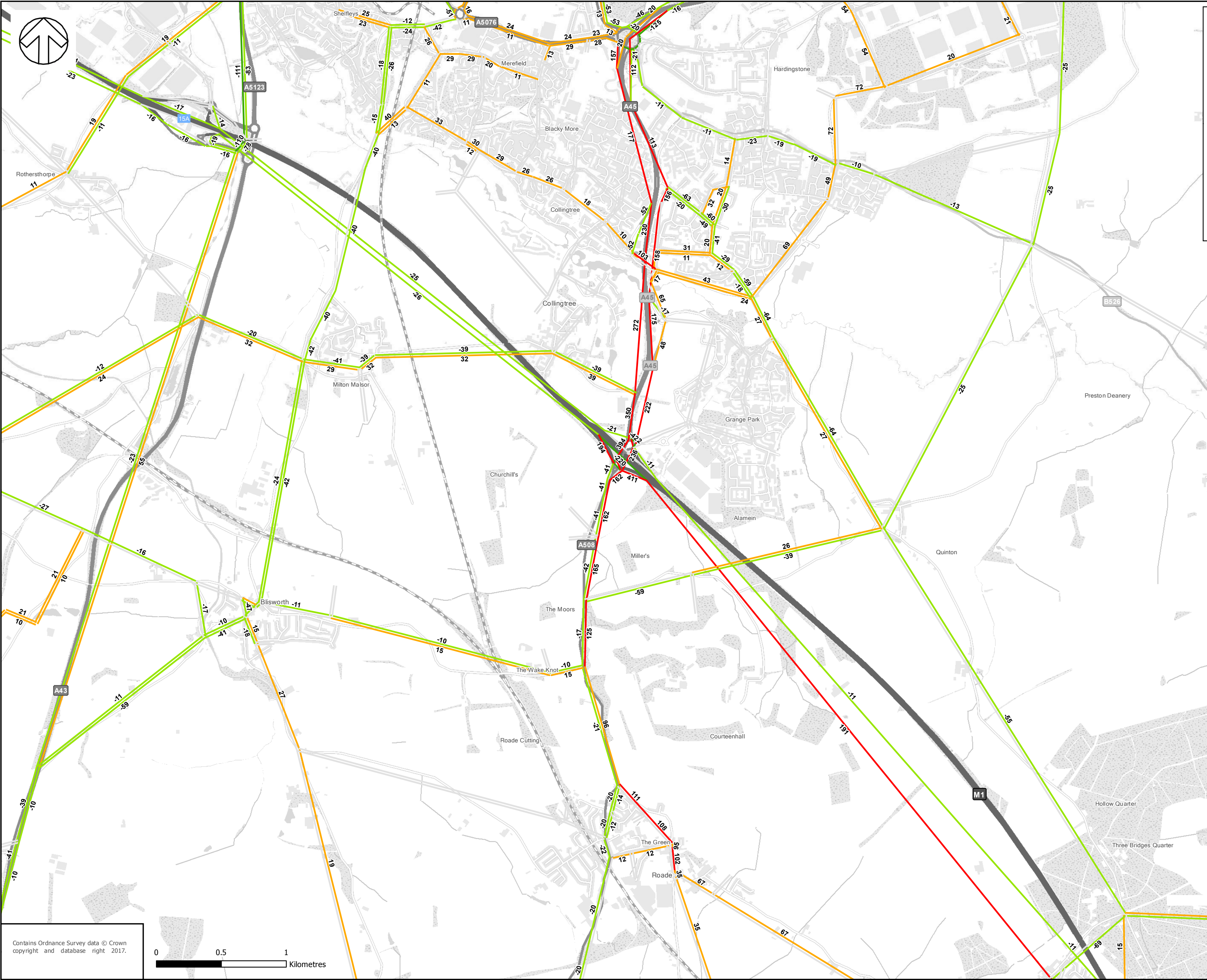
0 0.5 1 Kilometres





|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>WIDER AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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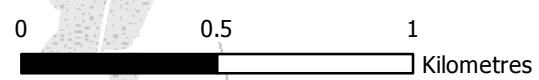
**Key**

**H1 vs B1 (AM Peak)**

**Actual Flow Reassign (Veh)**

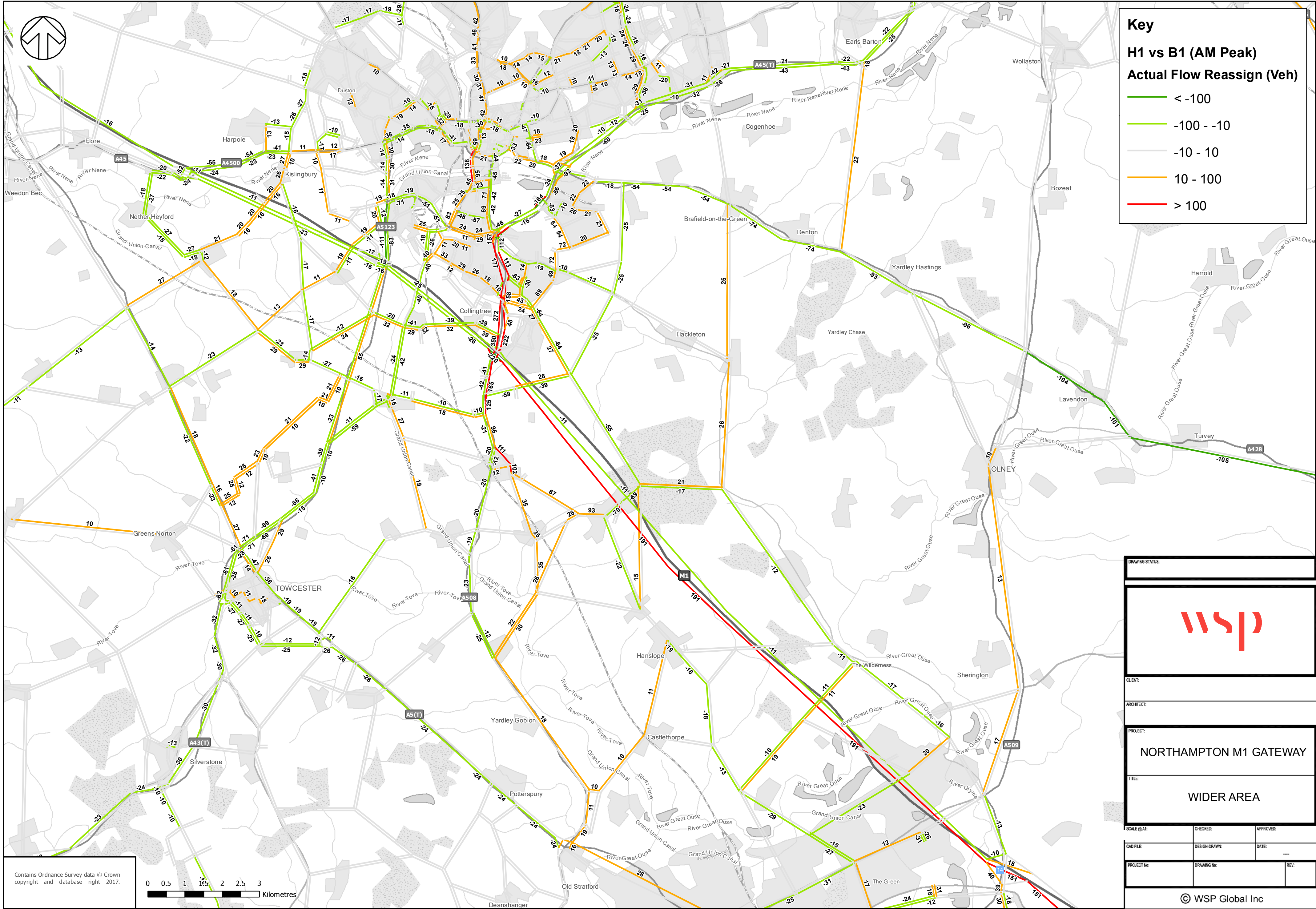
- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

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|                                           |               |           |
|-------------------------------------------|---------------|-----------|
| DRAWING STATUS:                           |               |           |
|                                           |               |           |
| CLIENT:                                   |               |           |
| ARCHITECT:                                |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b> |               |           |
| TITLE:<br><b>LOCAL AREA</b>               |               |           |
| SCALE @ A1:                               | CHECKED:      | APPROVED: |
| CAD FILE:                                 | DESIGN-DRAWN: | DATE:     |
| PROJECT No:                               | DRAWING No:   | REV:      |
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**Key**

**H1 vs B1 (AM Peak)**

**Actual Flow Reassign (Veh)**

- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

DRAWING STATUS:

**wsp**

CLIENT:

ARCHITECT:

PROJECT:

**NORTHAMPTON M1 GATEWAY**

TITLE:

**WIDER AREA**

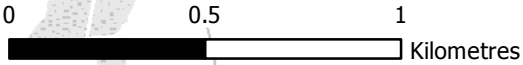
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| SCALE @ A1: | CHECKED:      | APPROVED: |
| CAD FILE:   | DESIGN DRAWN: | DATE:     |
| PROJECT No: | DRAWING No:   | REV:      |

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**Key**

**H1 vs B1 (PM Peak)**

**Actual Flow Reassign (Veh)**

- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

|                        |               |           |
|------------------------|---------------|-----------|
| DRAWING STATUS:        |               |           |
|                        |               |           |
| CLIENT:                |               |           |
| ARCHITECT:             |               |           |
| PROJECT:               |               |           |
| NORTHAMPTON M1 GATEWAY |               |           |
| TITLE:                 |               |           |
| LOCAL AREA             |               |           |
| SCALE @ A1:            | CHECKED:      | APPROVED: |
| CAD FILE:              | DESIGN-DRAWN: | DATE:     |
| PROJECT No:            | DRAWING No:   | REV:      |





Key

H1 vs B1 (PM Peak)

Actual Flow Reassign (Veh)

< -100

-100 - -10

-10 - 10

10 - 100

> 100

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDER AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

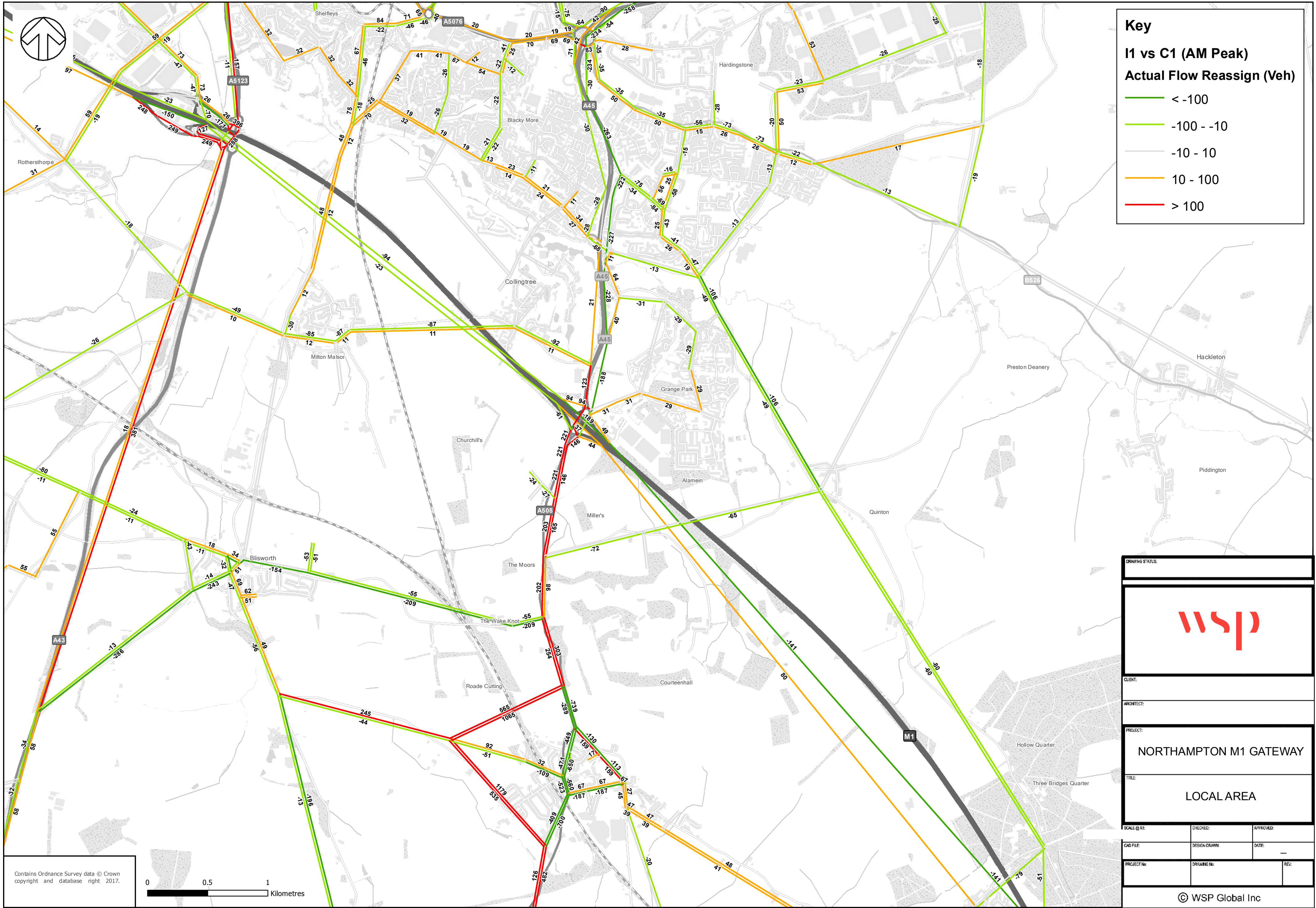
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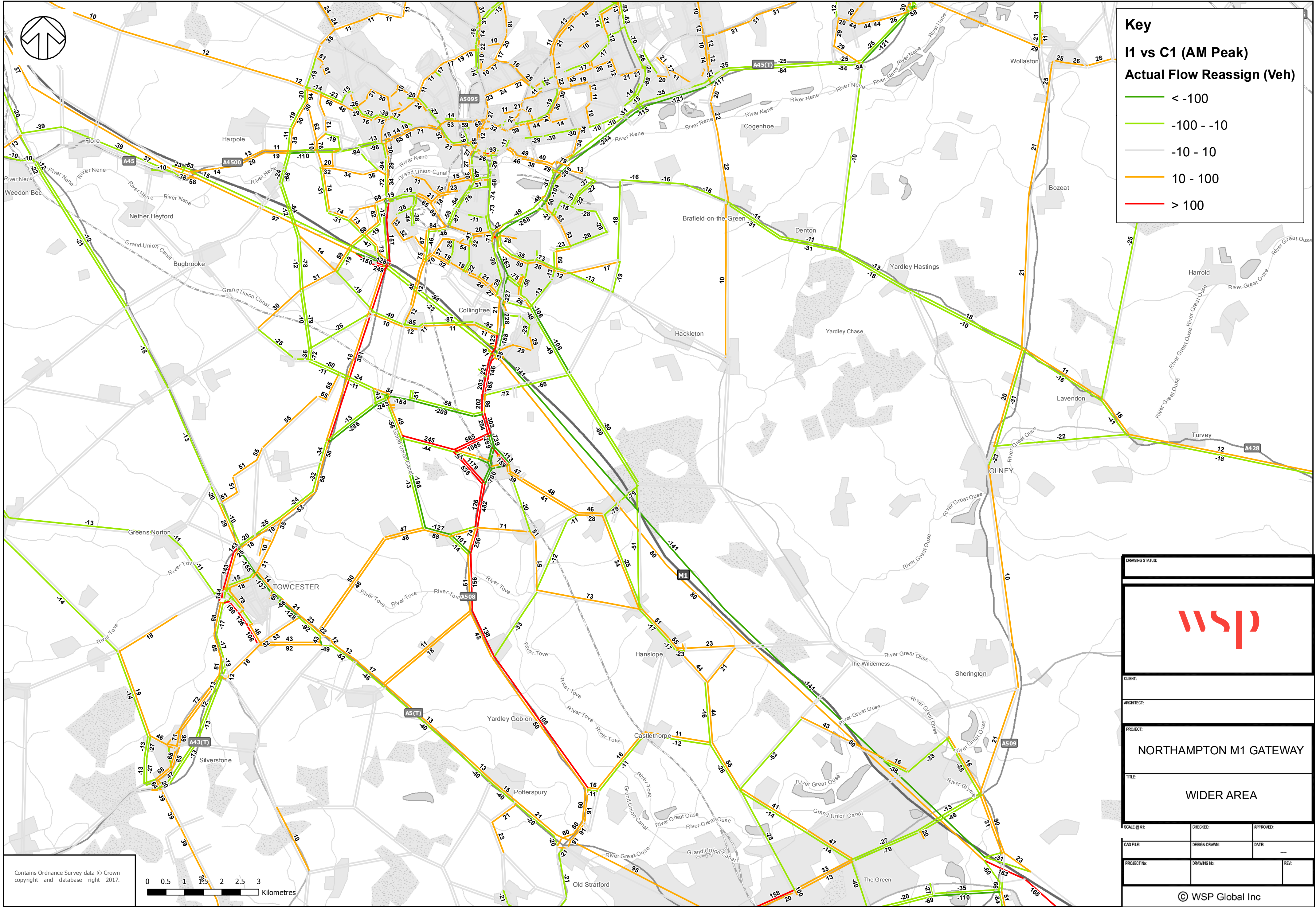
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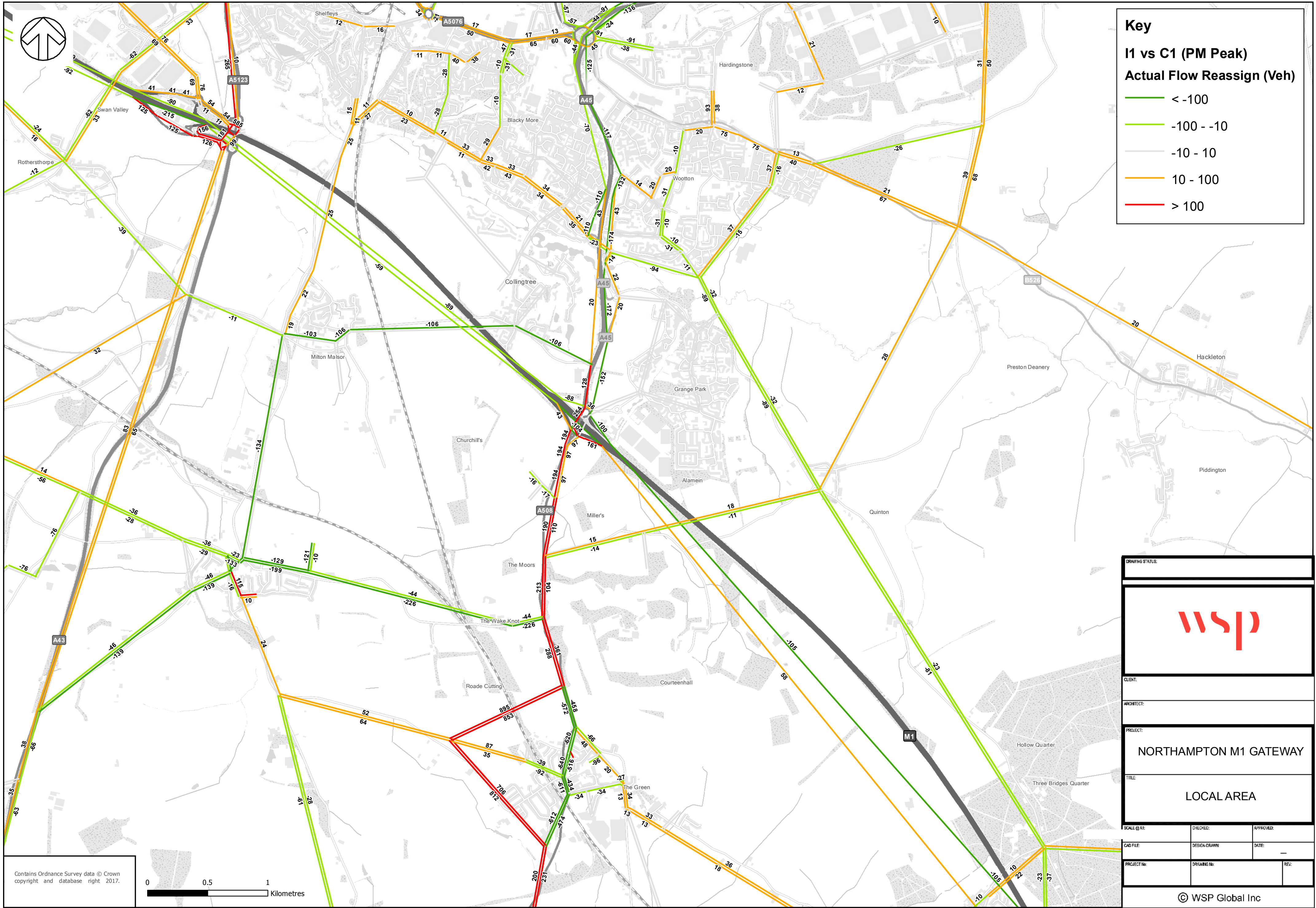




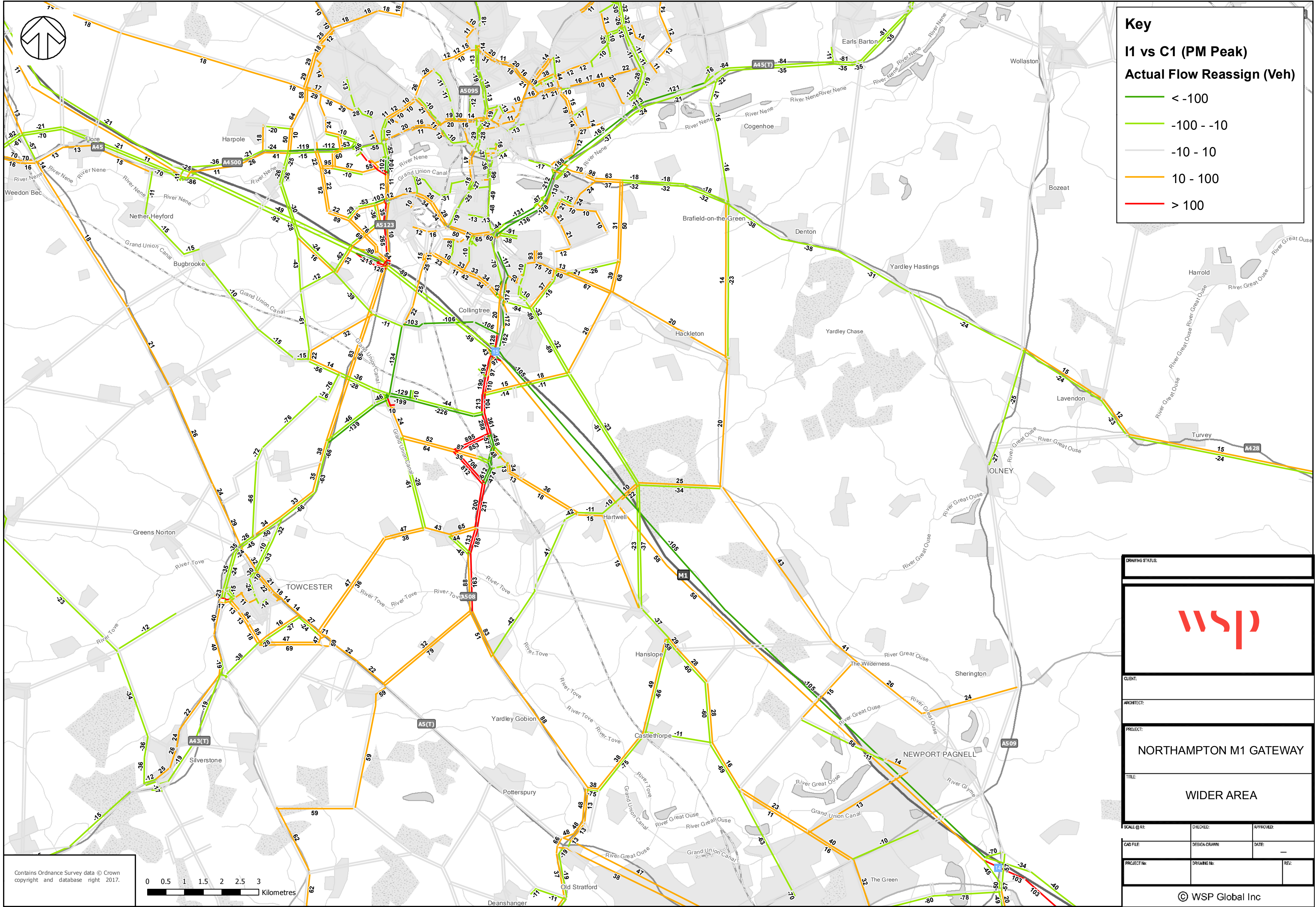




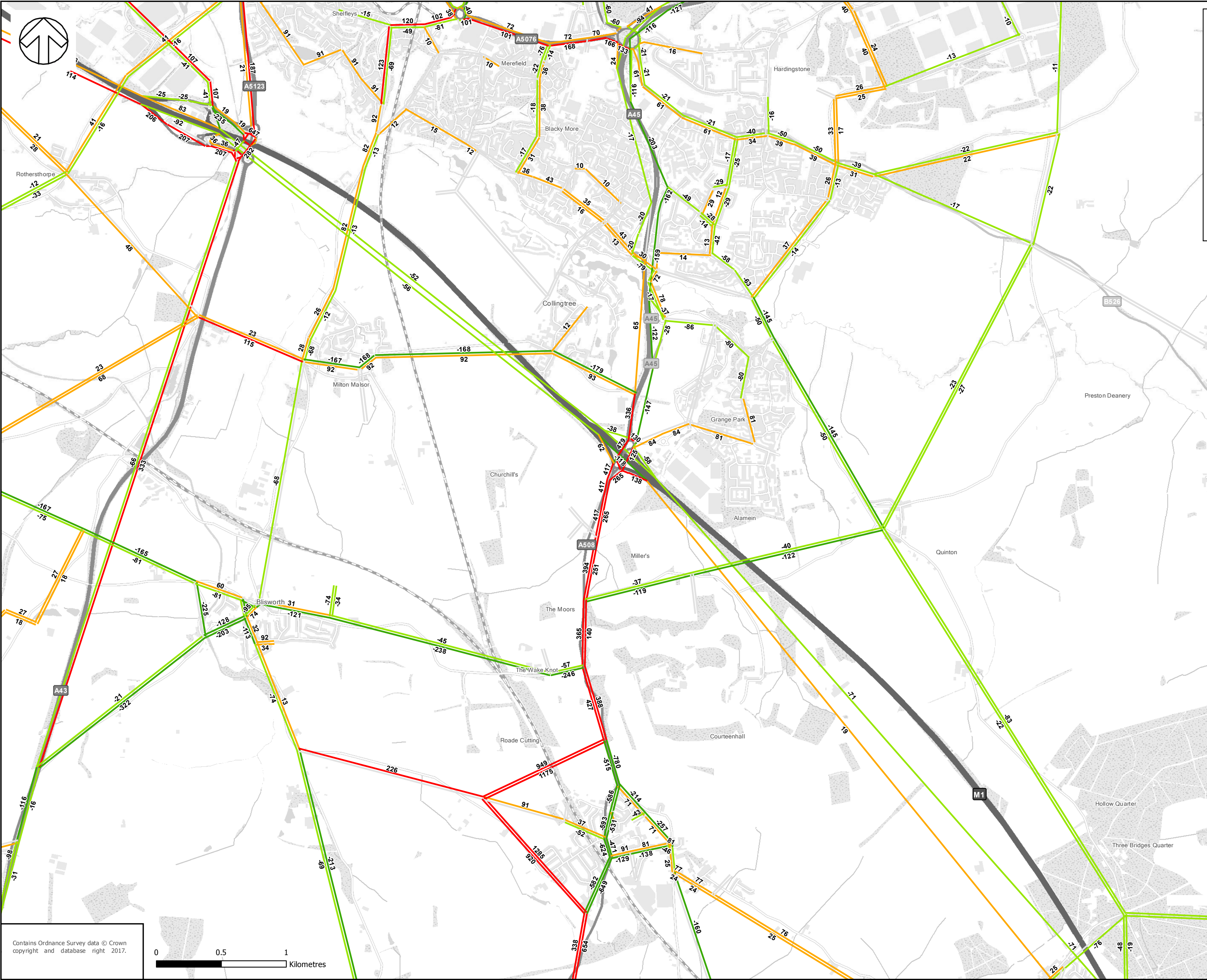












Key

J1d vs D1 (AM Peak)

Actual Flow Reassign (Veh)

< -100

-100 - -10

-10 - 10

10 - 100

> 100

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

LOCAL AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

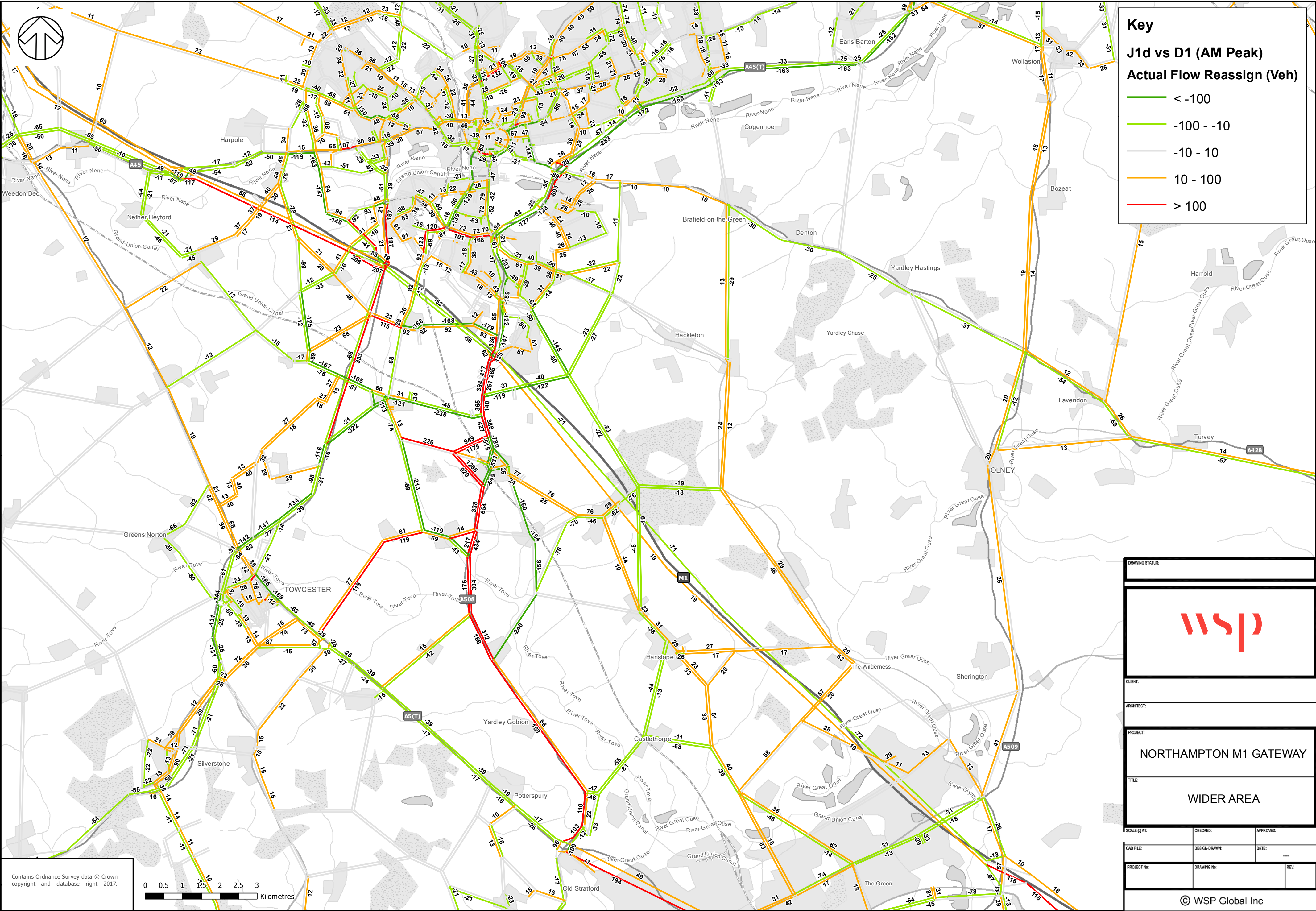
PROJECT No:

DRAWING No:

REV:

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**Key**

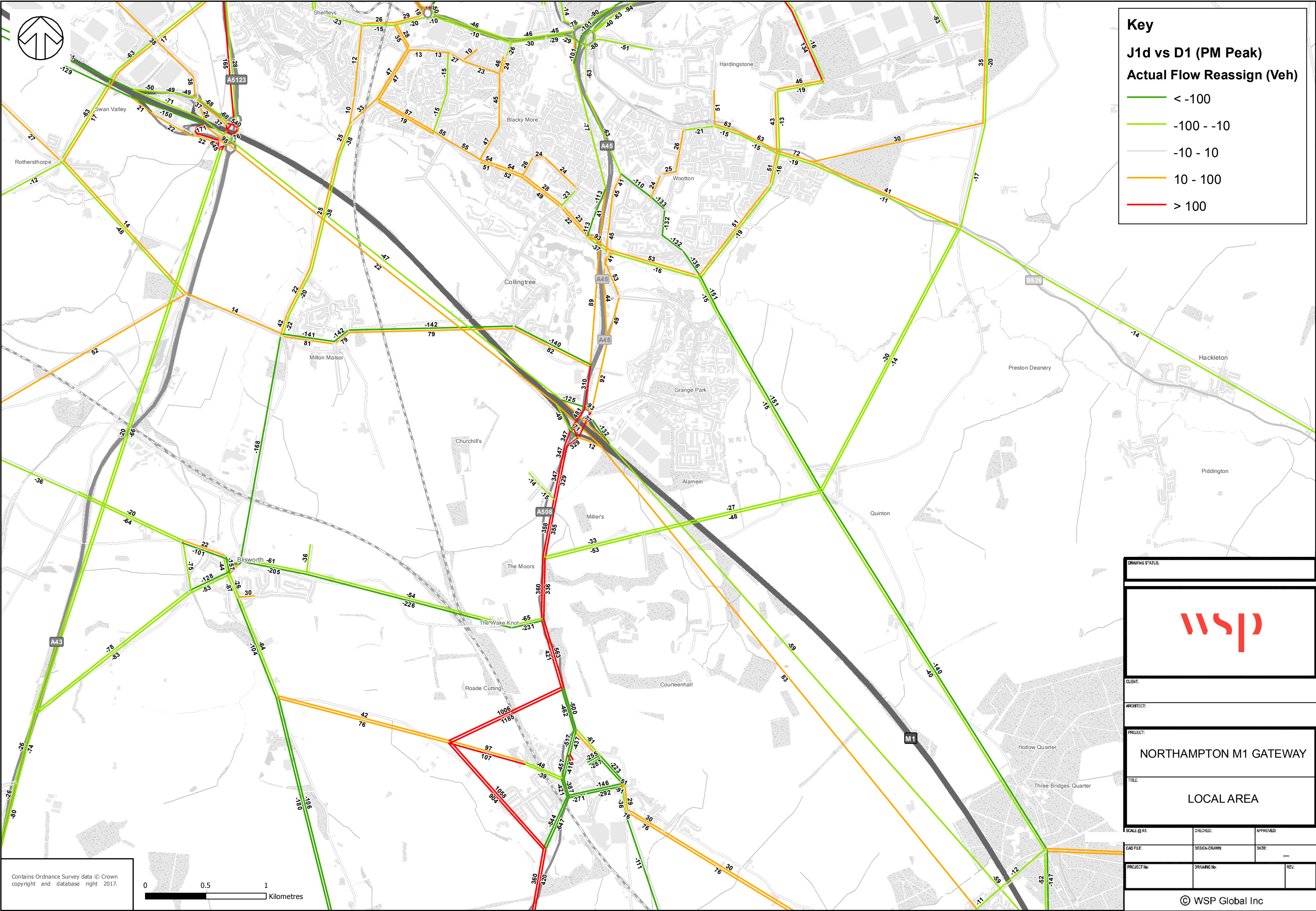
**J1d vs D1 (AM Peak)**

**Actual Flow Reassign (Veh)**

- < -100
- 100 - -10
- 10 - 10
- 10 - 100
- > 100

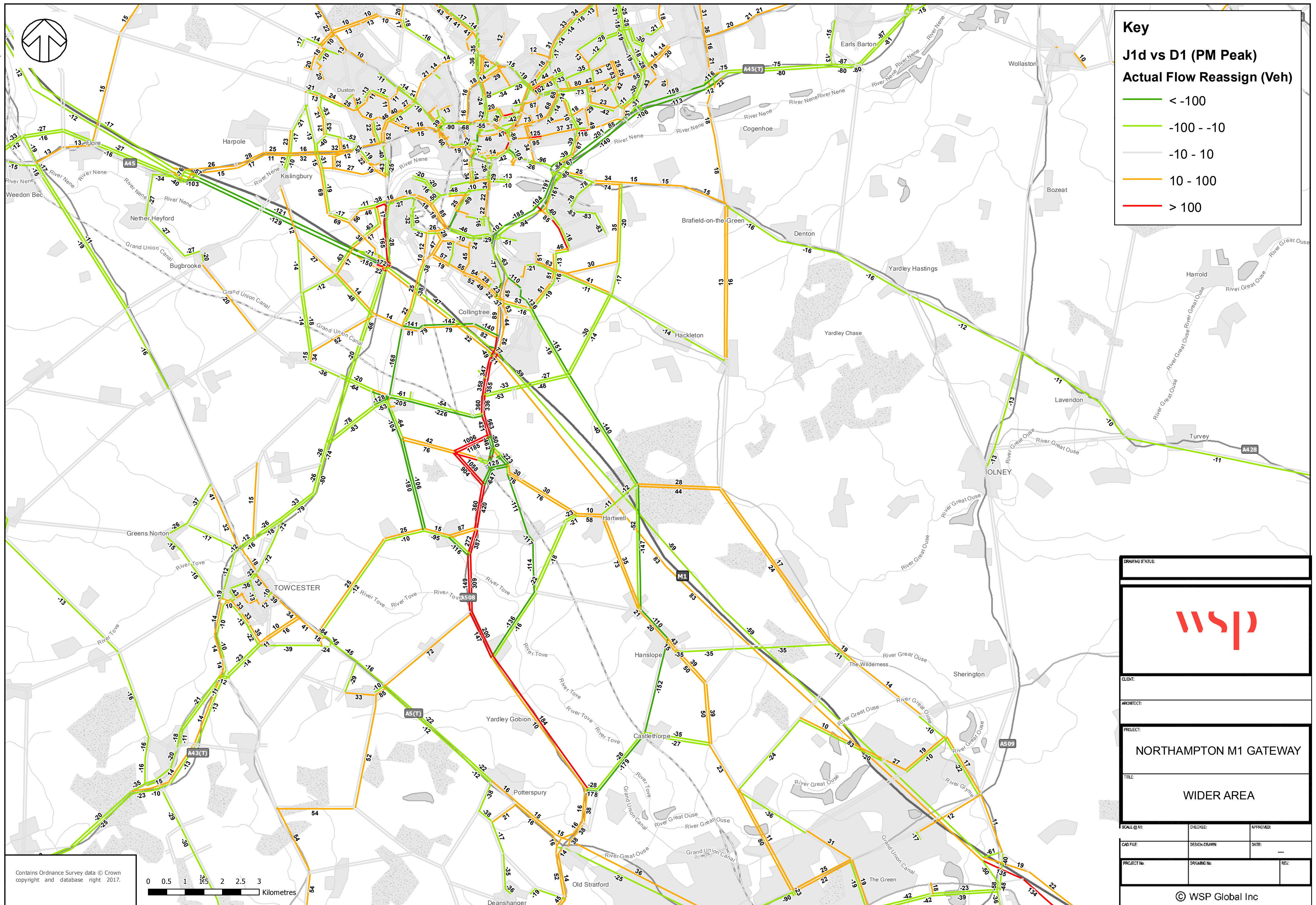
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| ARCHITECT:                                                                            |               |           |
| PROJECT:<br><b>NORTHAMPTON M1 GATEWAY</b>                                             |               |           |
| TITLE:<br><b>WIDER AREA</b>                                                           |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN DRAWN: | DATE:     |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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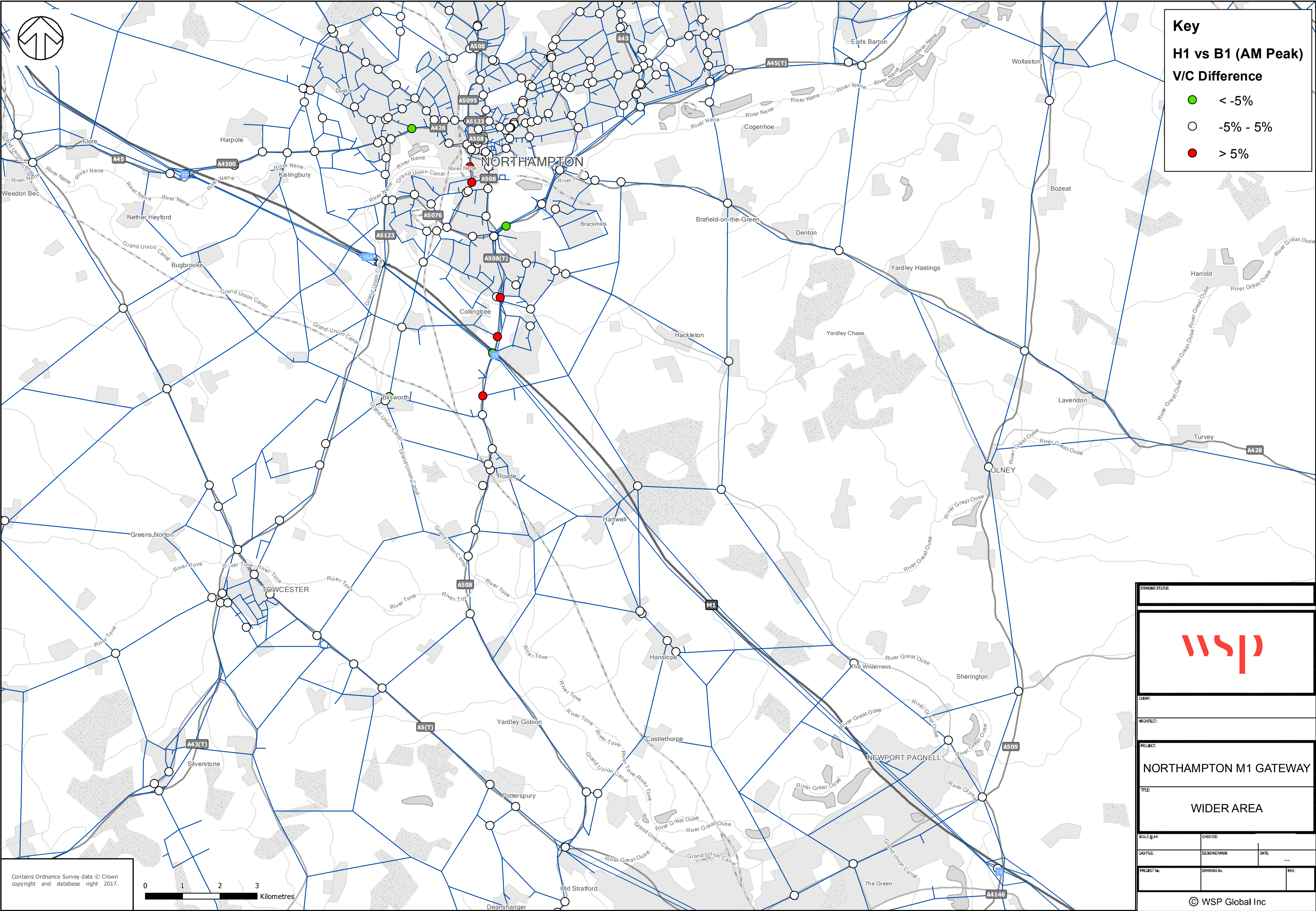


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Key

H1 vs B1 (AM Peak)

V/C Difference

< -5%

-5% - 5%

> 5%

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDER AREA

SCALE @ A1:

CHECKED:

DATE:

CAD FILE:

DESIGN/DRAWN:

REV:

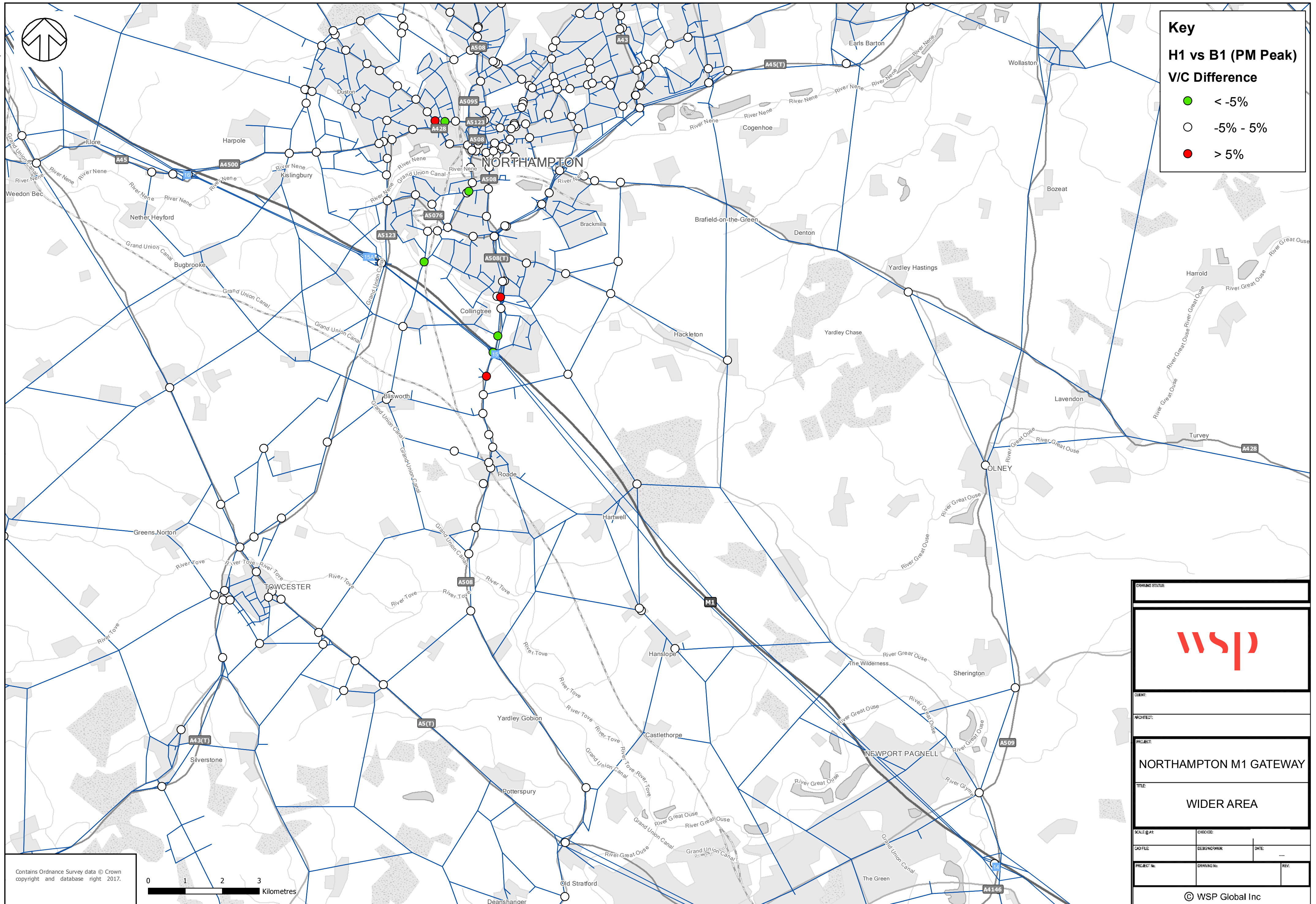
PROJECT No:

DRAWING No:

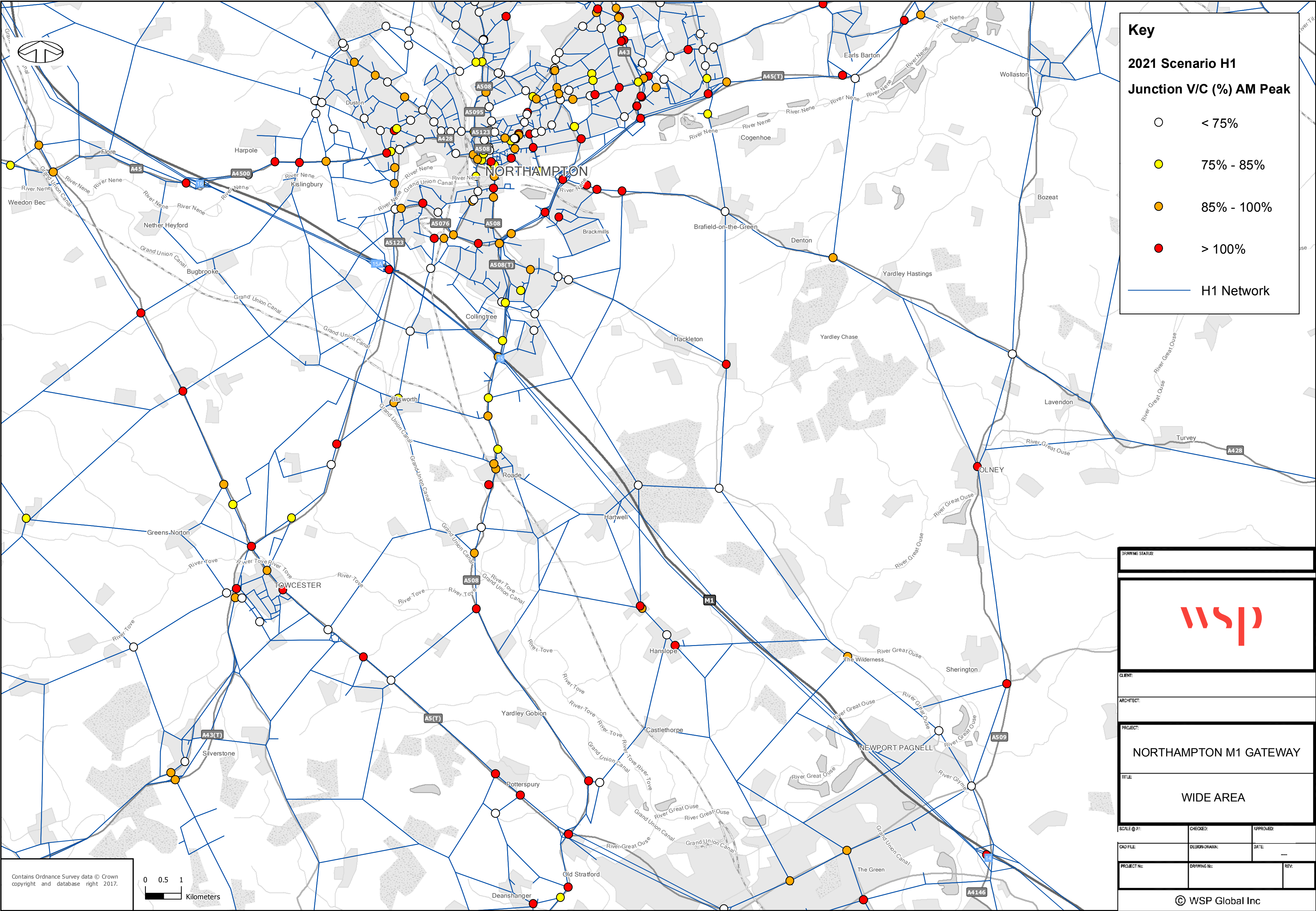
REV:

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Key

2021 Scenario H1

Junction V/C (%) AM Peak

< 75%

75% - 85%

85% - 100%

> 100%

H1 Network

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDE AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

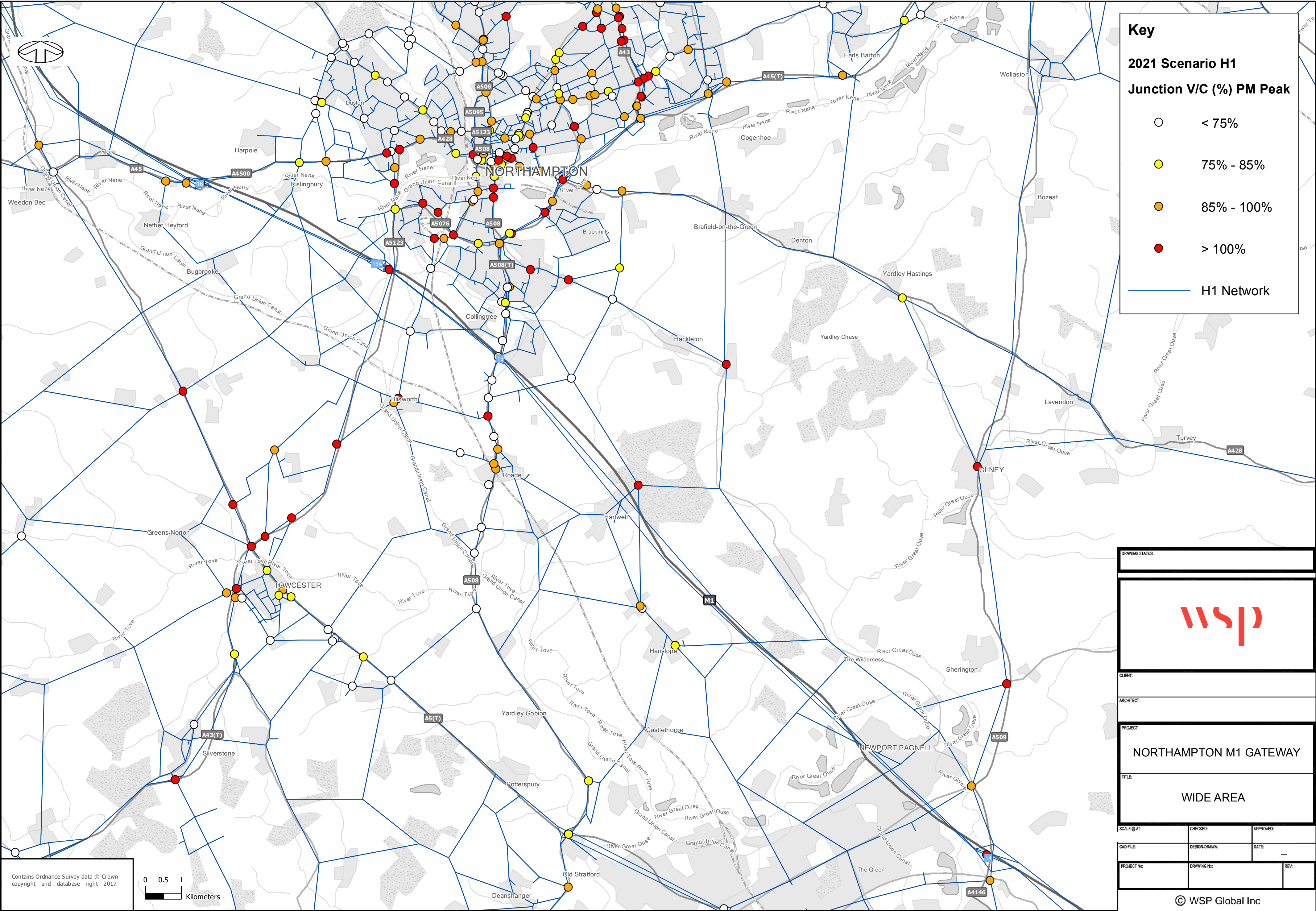
PROJECT No:

DRAWING No:

REV:

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**Key**

**2021 Scenario H1**

**Junction V/C (%) PM Peak**

< 75%

75% - 85%

85% - 100%

> 100%

H1 Network

DRAWING STATUS:



CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

WIDE AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

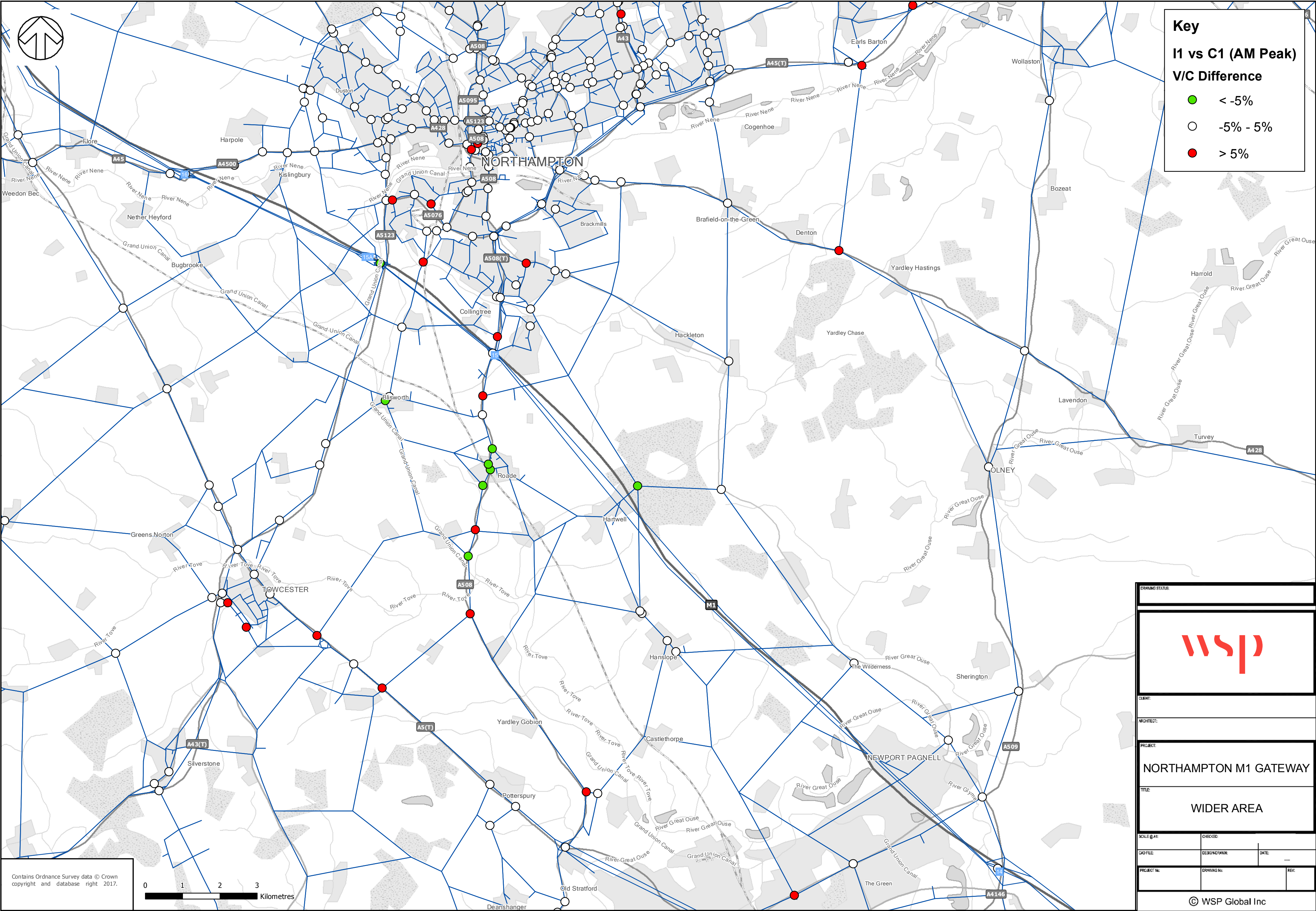
PROJECT No:

DRAWING No:

REV:

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Key

I1 vs C1 (AM Peak)

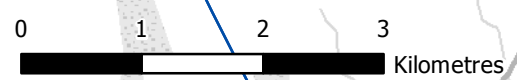
V/C Difference

< -5%

-5% - 5%

> 5%

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DRAWING STATUS

CLIENT

ARCHITECT

PROJECT

NORTHAMPTON M1 GATEWAY

TITLE

WIDER AREA

SCALE @ A1

CHECKED

DATE

CAD FILE

DESIGN/DRAWN

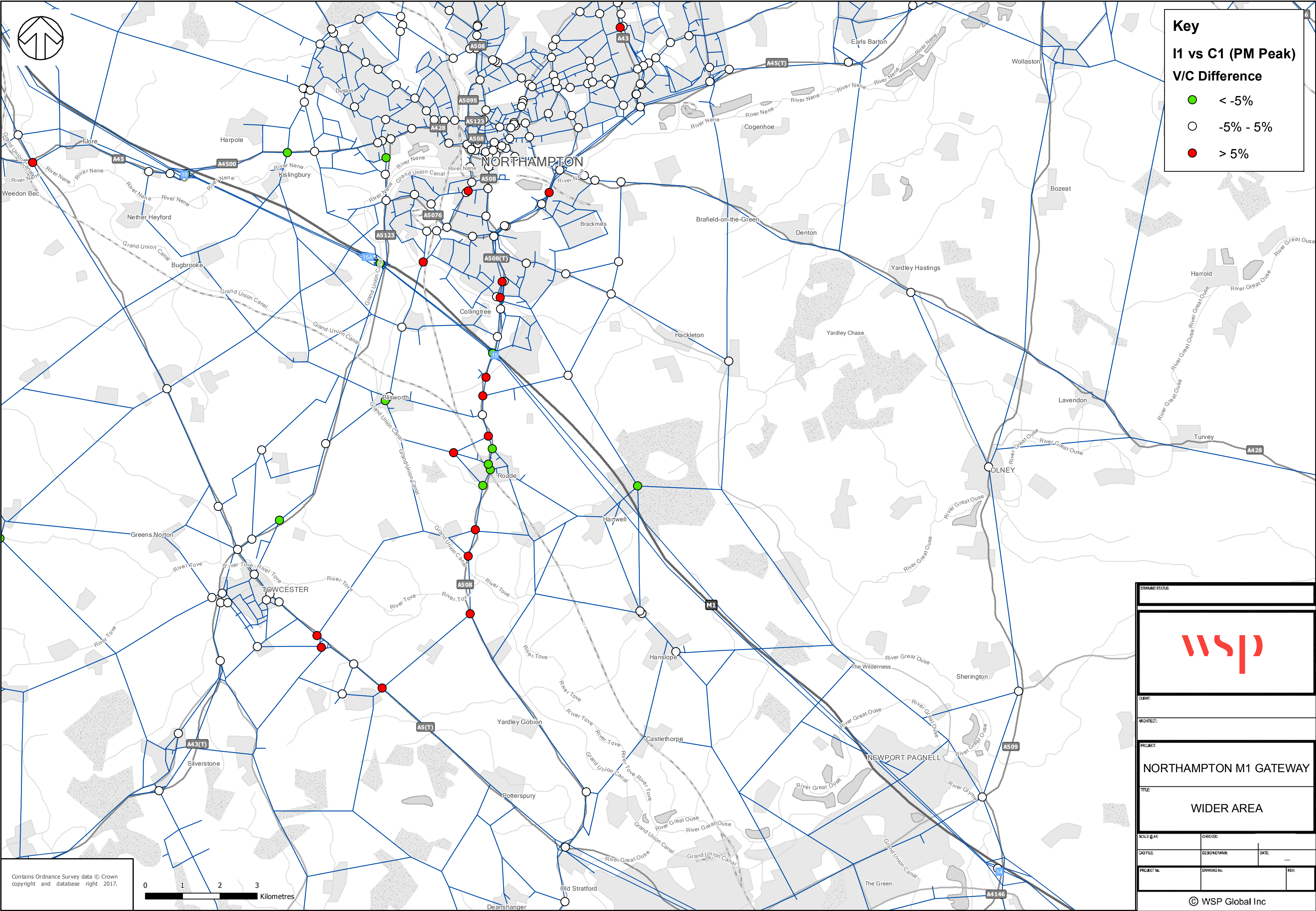
PROJECT NO

DRAWING NO

REV

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Key

I1 vs C1 (PM Peak)

V/C Difference

< -5%

-5% - 5%

> 5%

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DRAWING STATUS

CLIENT

ARCHITECT

PROJECT

NORTHAMPTON M1 GATEWAY

TITLE

WIDER AREA

SCALE @ A1:

CHECKED:

DATE:

CAD FILE:

DESIGN/DRAWN:

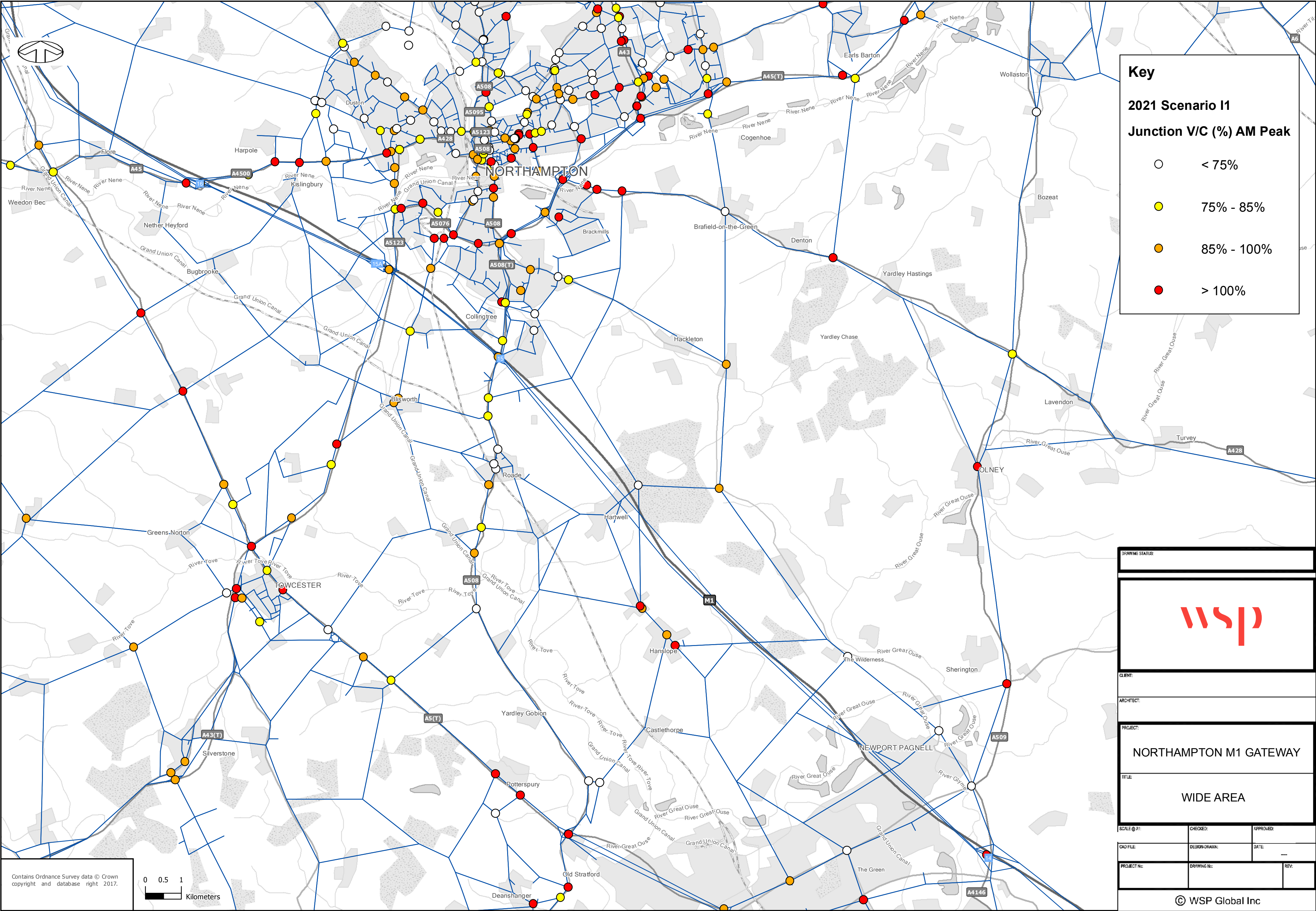
REV:

PROJECT NO:

DRAWING NO:

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**Key**

**2021 Scenario I1**

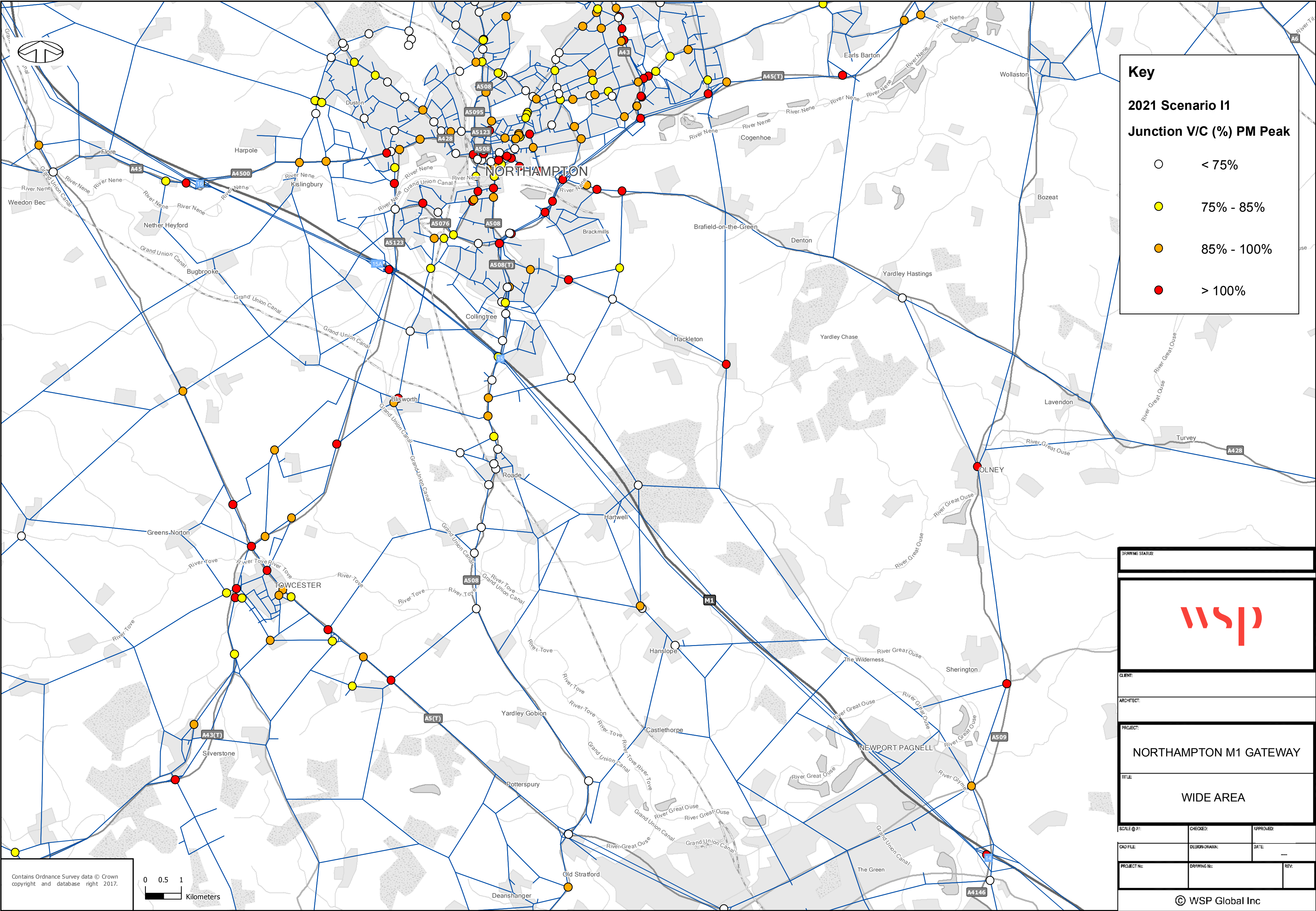
**Junction V/C (%) AM Peak**

- < 75%
- 75% - 85%
- 85% - 100%
- > 100%

|                                                                                       |               |           |
|---------------------------------------------------------------------------------------|---------------|-----------|
| DRAWING STATUS:                                                                       |               |           |
|  |               |           |
| CLIENT:                                                                               |               |           |
| ARCHITECT:                                                                            |               |           |
| PROJECT:                                                                              |               |           |
| NORTHAMPTON M1 GATEWAY                                                                |               |           |
| TITLE:                                                                                |               |           |
| WIDE AREA                                                                             |               |           |
| SCALE @ A1:                                                                           | CHECKED:      | APPROVED: |
| CAD FILE:                                                                             | DESIGN-DRAWN: | DATE: --- |
| PROJECT No:                                                                           | DRAWING No:   | REV:      |
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Drawn By: UKWMS001



Key

2021 Scenario I1

Junction V/C (%) PM Peak

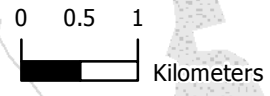
< 75%

75% - 85%

85% - 100%

> 100%

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DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDE AREA

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

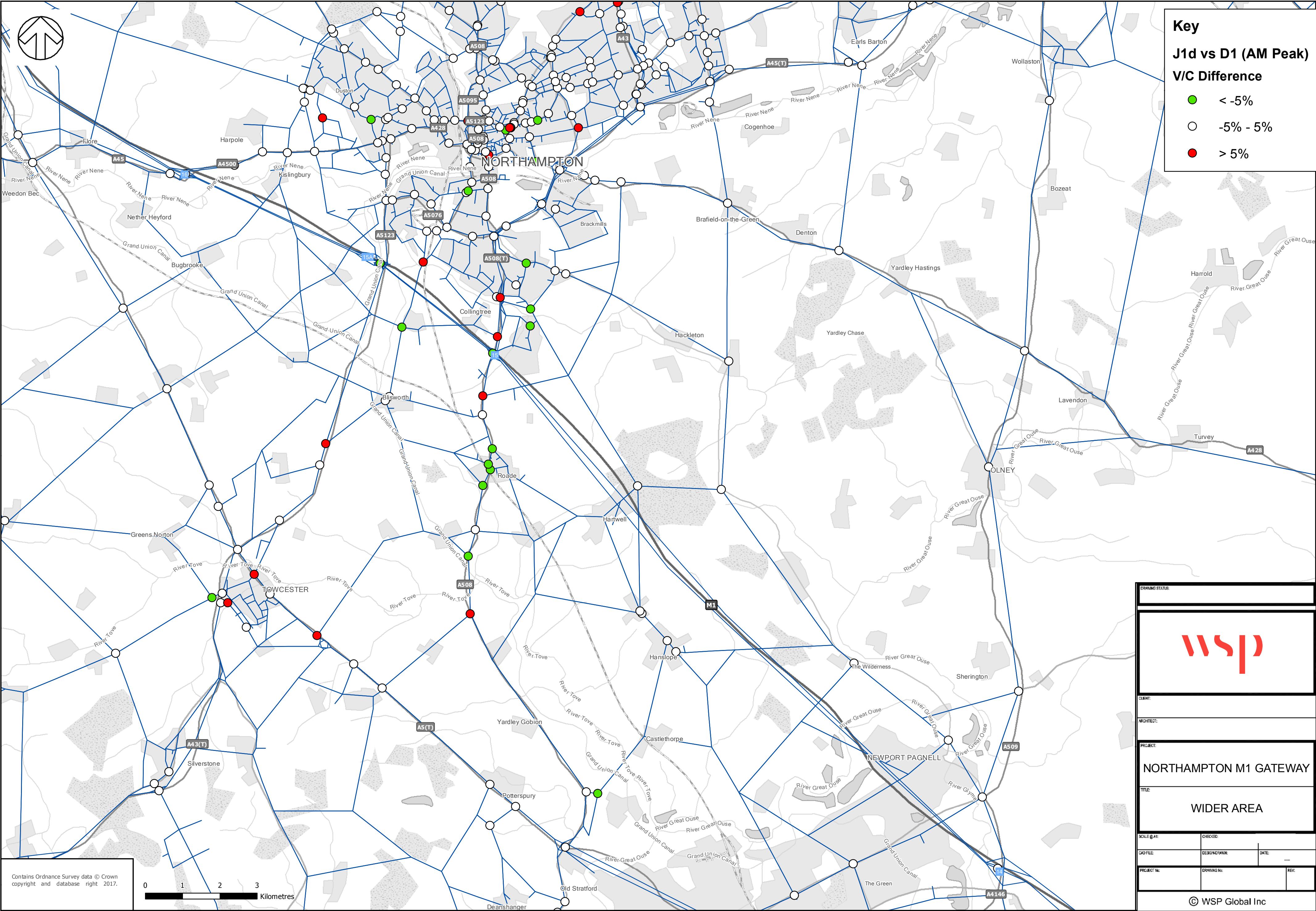
PROJECT No:

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Key

J1d vs D1 (AM Peak)

V/C Difference

< -5%

-5% - 5%

> 5%

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NORTHAMPTON M1 GATEWAY

TITLE

WIDER AREA

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CHECKED:

DATE:

CAD FILE:

DESIGN/DRAWN:

REV:

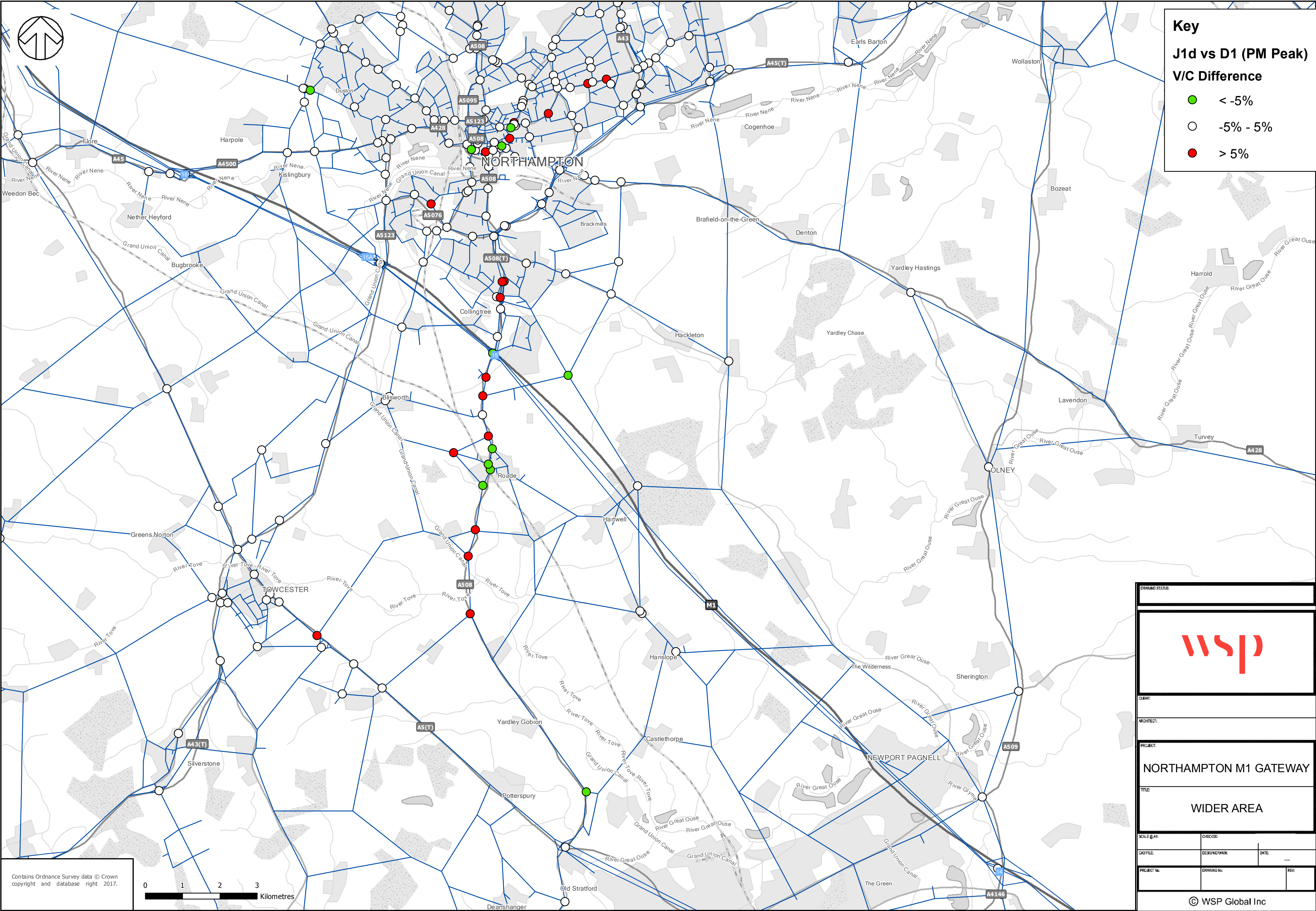
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**Key**

**J1d vs D1 (PM Peak)**

**V/C Difference**

- < -5%
- -5% - 5%
- > 5%

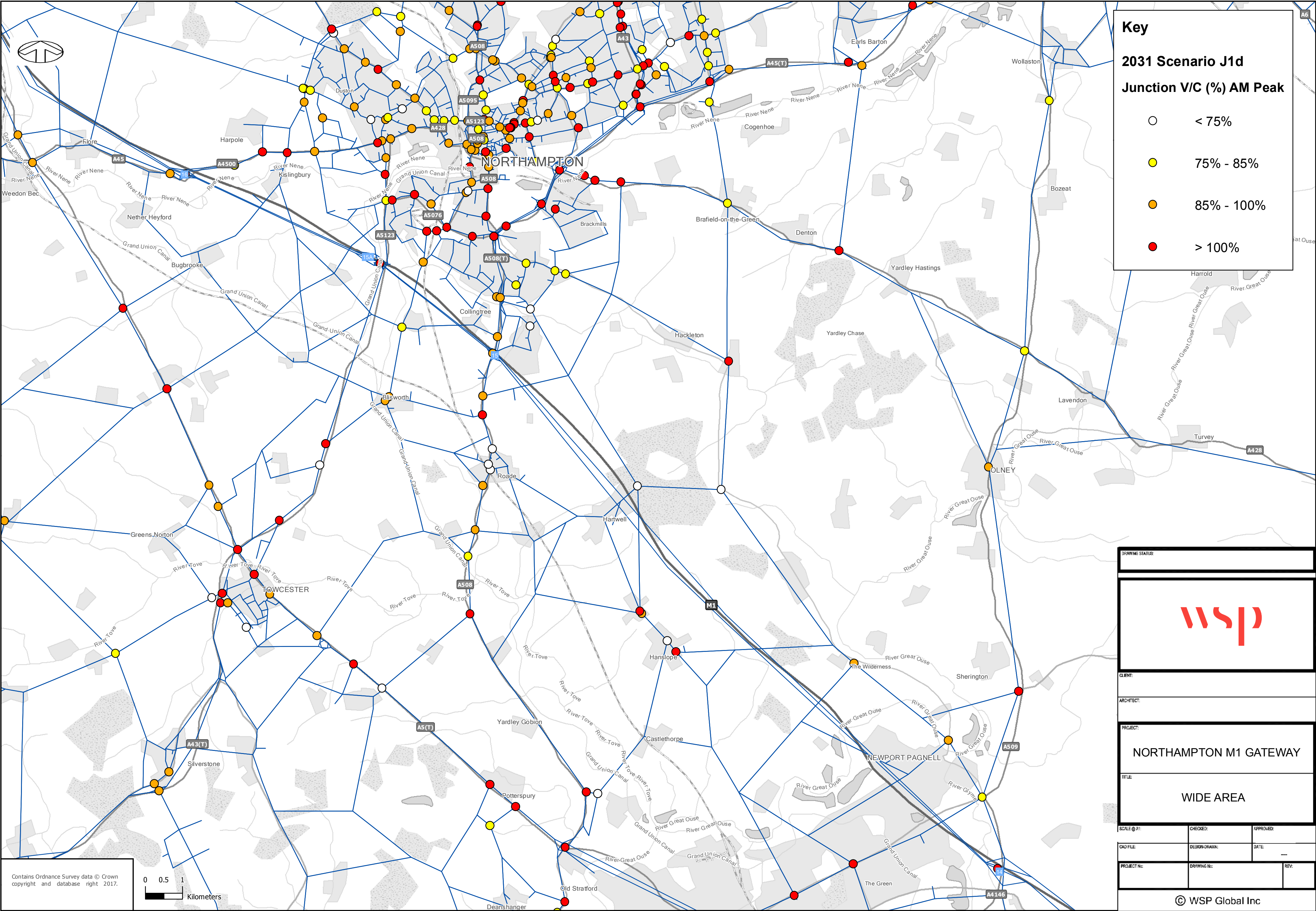
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|                                                                                       |               |       |
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| DRAWING STATUS:                                                                       |               |       |
|  |               |       |
| CLIENT:                                                                               |               |       |
| ARCHITECT:                                                                            |               |       |
| PROJECT:                                                                              |               |       |
| NORTHAMPTON M1 GATEWAY                                                                |               |       |
| TITLE:                                                                                |               |       |
| WIDER AREA                                                                            |               |       |
| SCALE @ A1:                                                                           | CHECKED:      | DATE: |
| CAD FILE:                                                                             | DESIGN/DRAWN: | DATE: |
| PROJECT NO:                                                                           | DRAWING NO:   | REV:  |
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Drawn By: UKWMS001



Key

2031 Scenario J1d

Junction V/C (%) AM Peak

< 75%

75% - 85%

85% - 100%

> 100%

DRAWING STATUS

CLIENT:

ARCHITECT:

PROJECT:

NORTHAMPTON M1 GATEWAY

TITLE:

WIDE AREA

SCALE @ A1:

CHECKED:

APPROVED:

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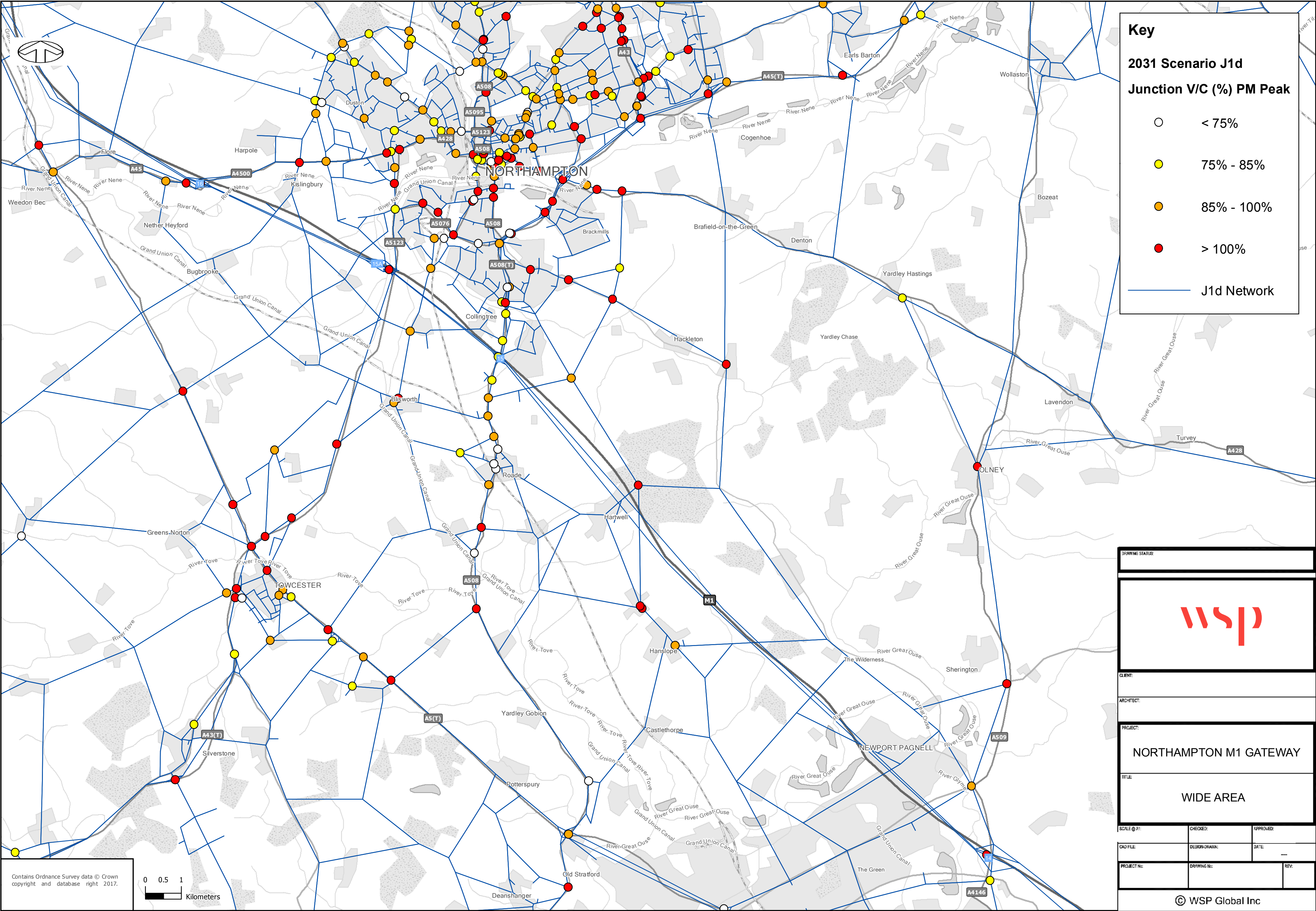
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**Key**

**2031 Scenario J1d**

**Junction V/C (%) PM Peak**

< 75%

75% - 85%

85% - 100%

> 100%

J1d Network

DRAWING STATUS:

CLIENT:

ARCHITECT:

PROJECT:

**NORTHAMPTON M1 GATEWAY**

TITLE:

**WIDE AREA**

SCALE @ A1:

CHECKED:

APPROVED:

CAD FILE:

DESIGN-DRAWN:

DATE:

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DRAWING No:

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