

Appendix S: Junction mitigation designs

Part 1: Spitfire Roundabout Mitigation Layout Design

Part 2: A335/Wide Lane Junction Mitigation Layout Design

Part 1: Spitfire Roundabout Mitigation Layout Design



- NOTES:**
- THIS DRAWING IS BASED ON:
TOPOGRAPHIC SURVEYS:
'UTILITY SURVEY', GREENHATCH GROUP DRAWING NO. 42270_T_UG REV0 DATED DEC 2021, PROVIDED BY MSA on 24 OCT 2024.
'Widelane-Track Topo-survey SURV001', PROVIDED BY BLOC GROUP ON 22 NOV 2024.
'SPITFIRE ROUNDABOUT SOUTHAMPTON', BRUNEL SURVEYS LTD DRAWING NO. 17972-200-01 DATED JUNE 2017, PROVIDED BY BLOC GROUP ON 22 NOV 2024.
OS BASE MAPPING:
EMPASITE DRAWING NO.
OS_MasterMap_Topography_Layer_989487_1252669_OS_Mastermap_OS LICENCE NO. 0100031673, PROVIDED BY EMPASITE ON 05 DEC 2024.
HCC HIGHWAY BOUNDARY DRAWING:
DRAWING NO. 21754829 03, PROVIDED BY BLOC GROUP ON 28 OCT 2024.
DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT REFER TO THE PROJECT MANAGER FOR CLARIFICATION.
 -

- KEY:**
- EXISTING LAYOUT (TOPOGRAPHICAL SURVEY/OS BASE)
 - HAMPSHIRE COUNTY COUNCIL HIGHWAY BOUNDARY

P1	09DEC25	REVISED FOR UPDATED SUBMISSION	CJM	CJM	MHU
P0	02MAY25	ORIGINAL ISSUE	CJM	CJM	MHU
REV	DATE	DESCRIPTION	DES	CHK	APP



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Client:
BLOCWORK (EASTLEIGH) LLP & SIAL

Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

Drawing Title:
SPITFIRE ROUNDABOUT
EXISTING LAYOUT

Status:
FIT FOR INFORMATION

Size:
A1

Scale:
1:250

Suitability
S2

Rev.
P1

Drawing No.
24733101-STR-HGN-100-DR-D-00501



- NOTES:**
- THIS DRAWING IS BASED ON:
TOPOGRAPHIC SURVEYS:
'TOPOGRAPHIC SURVEY', GREENHATCH GROUP
DRAWING NO. 42270_T_UG REV3 DATED 06 OCT 2025.
'WideLane-Track Topo-survey SURV001', PROVIDED
BY BLOC GROUP ON 22 NOV 2024.
'SPITFIRE ROUNDABOUT SOUTHAMPTON', BRUNEL
SURVEYS LTD DRAWING NO. 17972-200-01 DATED
JUNE 2017, PROVIDED BY BLOC GROUP ON 22 NOV
2024.
OS BASE MAPPING:
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1252669_OS_Mastermap, OS LICENCE NO.
0100031673, PROVIDED BY EMAPSITE ON 05 DEC
2024.
HCC HIGHWAY BOUNDARY DRAWING:
DRAWING NO. 21754829 03, PROVIDED BY BLOC
GROUP ON 28 OCT 2024.
BLOCWORK FREEHOLD OWNERSHIP:
HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP882317, 25 MAY 2024.
AIRPORT FREEHOLD OWNERSHIP:
HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP628421, TITLE HP411185. (PART)
BASED ON: SAVILLS 'PLAN 1', REF: APPENDIX 1 -
AIRPORT SITE TITLE PLAN.
SoSFT OWNERSHIP:
SECRETARY OF STATE FOR TRANSPORT LAND BASED
ON HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP774610.
BASED ON: SAVILLS 'PLAN 1', REF: APPENDIX 1 -
AIRPORT SITE TITLE PLAN.
DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT
REFER TO THE PROJECT MANAGER FOR
CLARIFICATION.

- KEY:**
- EXISTING LAYOUT
(TOPOGRAPHICAL SURVEY/OS BASE)
 - HAMPSHIRE COUNTY COUNCIL
HIGHWAY BOUNDARY
 - SECRETARY OF STATE FOR TRANSPORT
OWNERSHIP
 - HSBC HOUSE OWNERSHIP
 - PREMIER INN OWNERSHIP
 - RED LINE PLANNING BOUNDARY
 - EXISTING SHARED-USE FOOTWAY
 - PROPOSED SHARED-USE FOOTWAY
 - PROPOSED ISLAND
 - PROPOSED PEDESTRIAN / CYCLE BRIDGE:**
BRIDGE STRUCTURE
4m WIDE SHARED USE BRIDGE
 - INDICATIVE EXTENT OF FOOTWAY
REQUIRING REMOVAL TO ACCOMMODATE
TWO-WAY HGV FLOWS ON WIDE LANE
BRIDGE (REFER TO BURROWS GRAHAM
DRAWINGS FOR DETAILS)

REV	DATE	DESCRIPTION	DES	CHK	APP
P1	12JAN26	MINOR ROAD MARKING CHANGES	CJM	CJM	MHU
P0	06NOV25	ORIGINAL ISSUE	CJM	CJM	MHU



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Client:
BLOCWORK (EASTLEIGH) LLP & SIAL

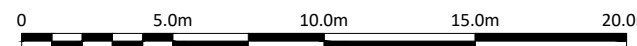
Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

Drawing Title:
**PROPOSED SPITFIRE ROUNDABOUT
MITIGATION & UNCONTROLLED
CROSSING**

Status:
FIT FOR INFORMATION

Size: A1	Scale: 1:250	Suitability S2	Rev. P1
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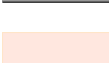
Drawing No.
24733101-STR-HGN-100-SK-D-01301



NOTES:

1. **THIS DRAWING IS BASED ON:**
TOPOGRAPHIC SURVEYS:
"TOPOGRAPHIC SURVEY", GREENHATCH GROUP
DRAWING NO. 42270 _T_ UG REV3 DATED 06 OCT
2025.
"WideLane-Track Topo-survey SURV001", PROVIDED
BY BLOC GROUP ON 22 NOV 2024.
"SPITFIRE ROUNDABOUT SOUTHAMPTON", BRUNEL
SURVEYS LTD DRAWING NO. 17972-200-01 DATED
JUNE 2017, PROVIDED BY BLOC GROUP ON 22 NOV
2024.
OS BASE MAPPING:
EMPAISITE DRAWING NO.
OS_MasterMap_Topography_Layer_989487_
1252669_OS_Mastermap, OS LICENCE NO.
0100031673, PROVIDED BY EMPASITE ON 05 DEC
2024.
HCC HIGHWAY BOUNDARY DRAWING:
DRAWING NO. 21754829 03, PROVIDED BY BLOC
GROUP ON 28 OCT 2024.
BLOCKWORK FREEHOLD OWNERSHIP:
HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP882317, 25 MAY 2024.
AIRPORT FREEHOLD OWNERSHIP:
HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP628421, TITLE HP411185. (PART)
BASED ON: SAVILLS 'PLAN 1', REF: APPENDIX 1 -
AIRPORT SITE TITLE PLAN.
SoSt OWNERSHIP:
SECRETARY OF STATE FOR TRANSPORT LAND BASED
ON HM LAND REGISTRY OFFICIAL PLAN, REF: TITLE
HP774610.
BASED ON: SAVILLS 'PLAN 1', REF: APPENDIX 1 -
AIRPORT SITE TITLE PLAN.
2. **DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT
REFER TO THE PROJECT MANAGER FOR
CLARIFICATION.**

KEY:

- | | |
|---|--|
|  | EXISTING LAYOUT
(TOPOGRAPHICAL SURVEY/OS BASE) |
|  | HAMPSHIRE COUNTY COUNCIL
HIGHWAY BOUNDARY |
|  | SECRETARY OF STATE FOR TRANSPORT
OWNERSHIP |
|  | HSBC HOUSE OWNERSHIP |
|  | PREMIER INN OWNERSHIP |
|  | RED LINE PLANNING BOUNDARY |
|  | EXISTING SHARED-USE FOOTWAY |
|  | PROPOSED SHARED-USE FOOTWAY |
|  | EXISTING (RETAINED) ISLAND |
| <u>PROPOSED PEDESTRIAN / CYCLE BRIDGE:</u> | |
|  | BRIDGE STRUCTURE |
|  | 4m WIDE SHARED USE BRIDGE |
|  | INDICATIVE EXTENT OF FOOTWAY
REQUIRING REMOVAL TO ACCOMMODATE
4m WIDE HGV FLOWS ON WIDE LANE
BRIDGE (REFER TO BURROWS GRAHAM
DRAWINGS FOR DETAILS) |

P2	12JAN26	MINOR ROAD MARKING CHANGES	CJM	CJM	MHU
P1	06NOV25	MINOR AMENDMENTS	CJM	CJM	MHU
P0	27OCT25	ORIGINAL ISSUE	CJM	CJM	MHU
REV	DATE	DESCRIPTION	DES	CHK	APP

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Client: **BLOCWORK (EASTLEIGH) LLP & SIAL**

Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

Drawing Title:

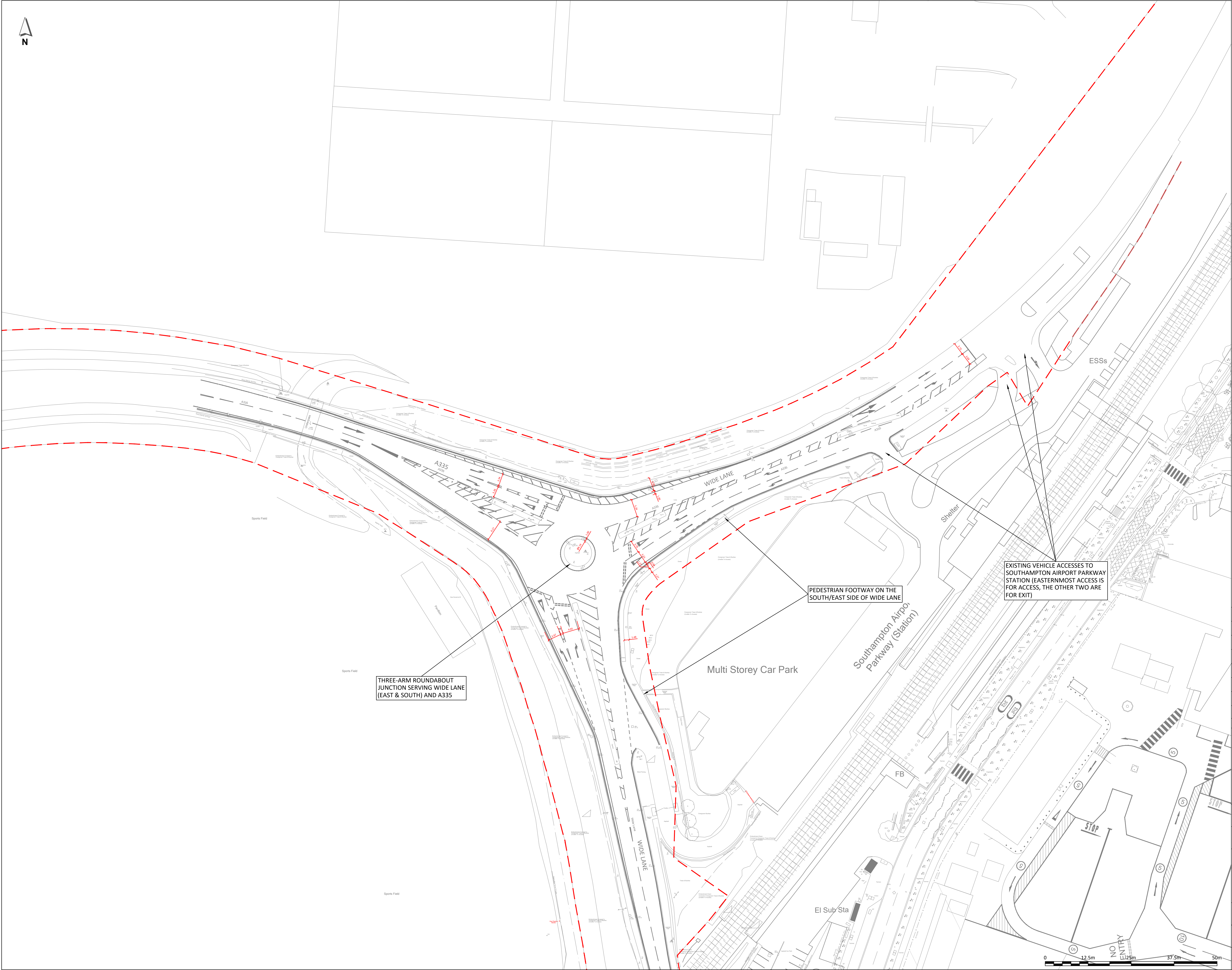
PROPOSED SPITFIRE ROUNDABOUT MITIGATION & SIGNALISED CROSSING

Status: **FIT FOR INFORMATION**

Size: A1	Scale: 1:250	Suitability S2	Rev. P2
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Drawing No.
24733101-STR-HGN-100-SK-D-01102

Part 2: A335/Wide Lane Junction Mitigation Design



- NOTES:**
- THIS DRAWING IS BASED ON:
TOPOGRAPHIC SURVEYS:
'UTILITY SURVEY', GREENHATCH GROUP DRAWING NO. 42270 T_UG REV0 DATED DEC 2021, PROVIDED BY MSA on 24 OCT 2024.
'WideLane-Track Topo-survey SURV001', PROVIDED BY BLOC GROUP ON 22 NOV 2024.
'SPITFIRE ROUNDABOUT SOUTHAMPTON', BRUNEL SURVEYS LTD DRAWING NO. 17972-200-01 DATED JUNE 2017, PROVIDED BY BLOC GROUP ON 22 NOV 2024.
OS BASE MAPPING:
EMPASITE DRAWING NO.
OS_MasterMap_Topography_Layer_989487_1252669_OS_Mastermap, OS LICENCE NO. 0100031673, PROVIDED BY EMAPSITE ON 05 DEC 2024.
HCC HIGHWAY BOUNDARY DRAWING:
DRAWING NO. 21754829 03, PROVIDED BY BLOC GROUP ON 28 OCT 2024.
DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT REFER TO THE PROJECT MANAGER FOR CLARIFICATION.
 -

- KEY:**
- EXISTING LAYOUT (TOPOGRAPHICAL SURVEY/OS BASE)
 - HAMPSHIRE COUNTY COUNCIL HIGHWAY BOUNDARY

P01	21MAY25	MINOR AMENDMENTS	CJM	CJM	MHU
P0	08APR25	ORIGINAL ISSUE	CJM	CJM	MHU
REV	DATE	DESCRIPTION	DES	CHK	APP

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Client:
BLOCWORK (EASTLEIGH) LLP & SIAL

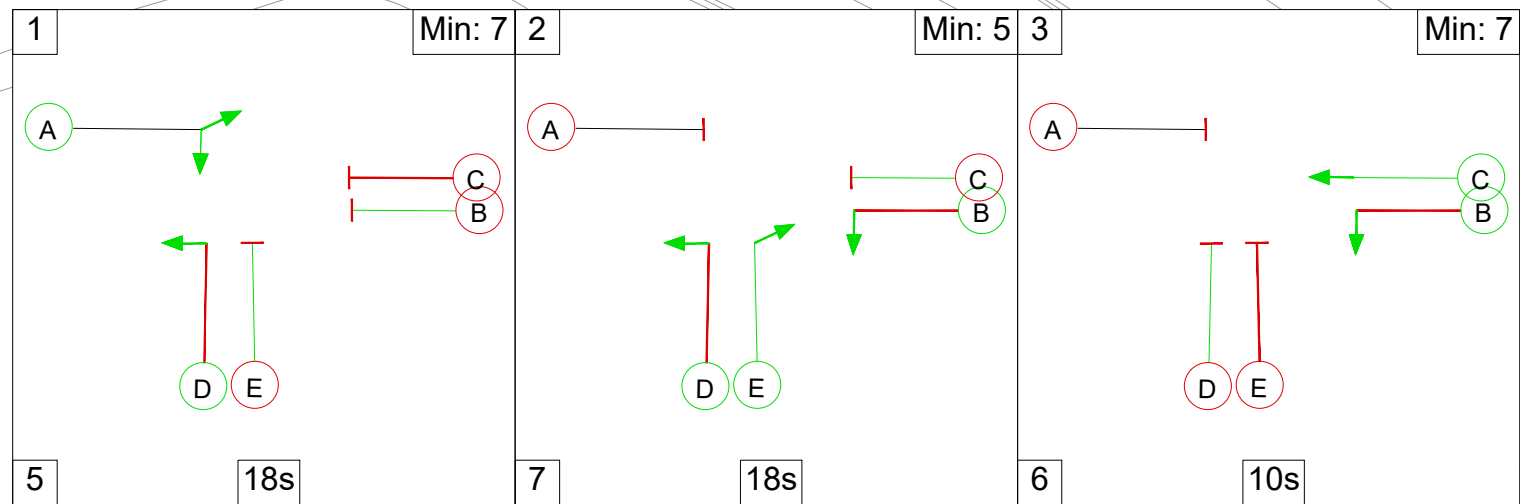
Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

Drawing Title:
**WIDE LANE ROUNDABOUT
EXISTING JUNCTION LAYOUT**

Status:
FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	1:500	S2	P01

Drawing No.
24733101-STR-HGN-100-DR-D-00301

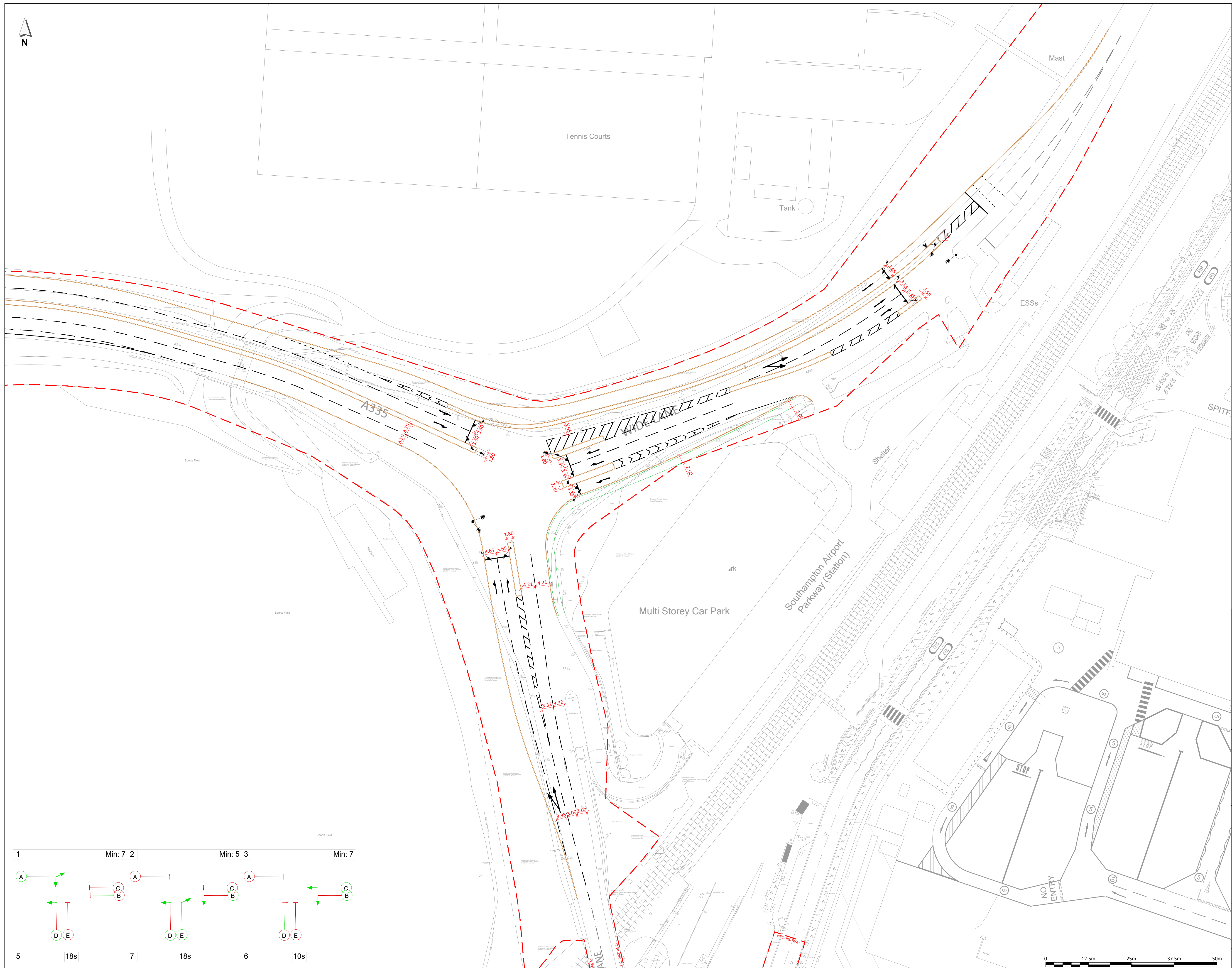


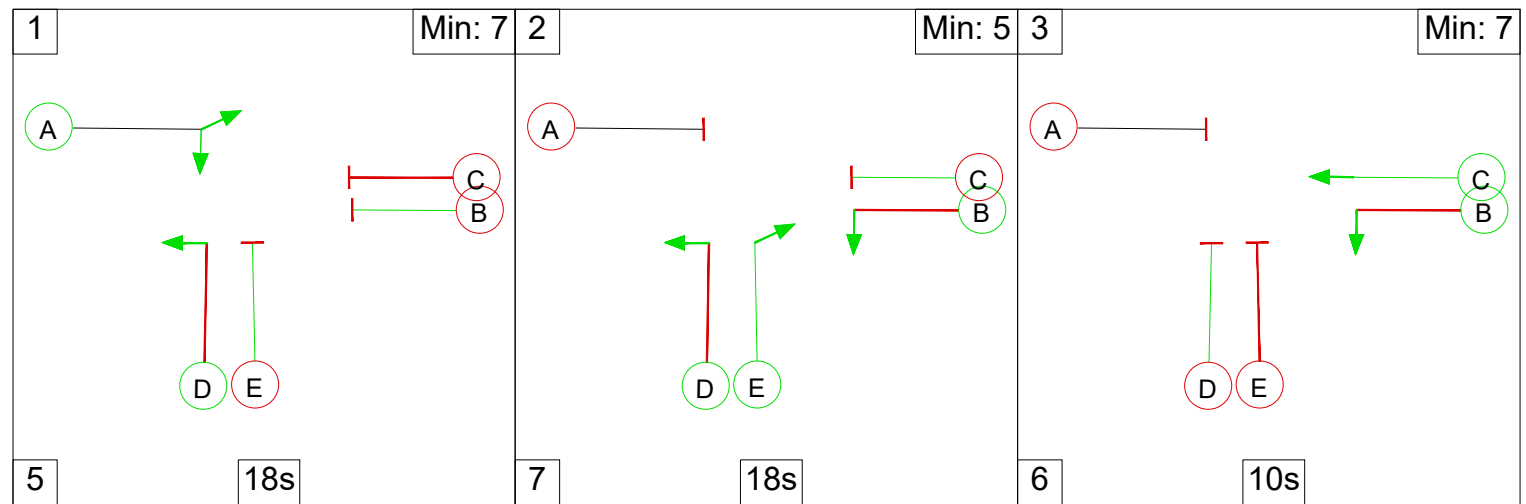
NOTE:
THIS DESIGN IS A HIGH-LEVEL INDICATIVE
CONCEPT DESIGN TO UNDERSTAND THE
OVERALL ALIGNMENT AND LAND
IMPLICATIONS.
NOTE THAT THIS DESIGN IS BASED ON OS
MAPPING IN PLACES, AND HAS THEREFORE
NOT CONSIDERED EXISTING UTILITIES,
CURRENT INFRASTRUCTURE, LIGHTING,
CIVILS, DRAINAGE, TREES/ECOLOGY, OR
THE DETAILED TIE-IN OF EXISTING
ACCESSES/CROSSINGS.

- KEY:**
-  EXISTING LAYOUT
(TOPOGRAPHICAL SURVEY/OS BASE)
 -  HAMPSHIRE COUNTY COUNCIL
HIGHWAY BOUNDARY
 -  PROPOSED KERB
 -  PROPOSED EDGING KERB / BACK OF
FOOTWAY
 -  PROPOSED WHITE ROAD MARKING
 -  PROPOSED TRAFFIC SIGNAL

P0	07DEC25	ORIGINAL ISSUE	CJM	CJM	JWL
EV	DATE	DESCRIPTION	DES	CHK	APP

			
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Project Title:			
NAVIGATOR QUARTER, SOUTHAMPTON			
Drawing Title:			
WIDE LANE ROUNDABOUT PROPOSED JUNCTION MITIGATION OVERVIEW			
Status:			
FIT FOR INFORMATION			
Size:	Scale:	Suitability	Rev.
A1	1:1000	S2	P0
Drawing No.			
24733101-STR-HGN-100-SK-D-01200			





Technical drawing of a vehicle chassis showing dimensions and components. The drawing includes a side view of the chassis with various dimensions and labels. The dimensions are as follows:

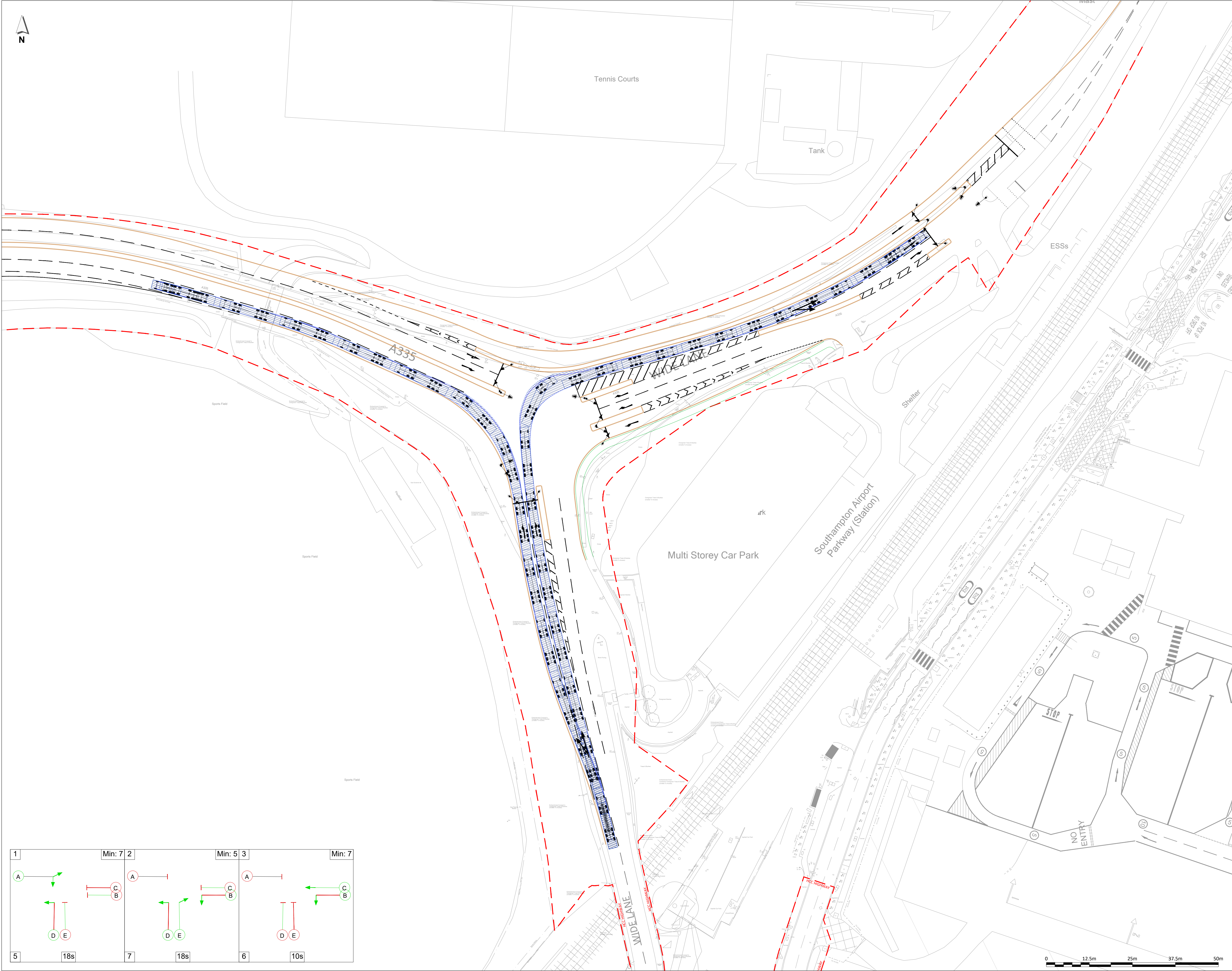
- Overall Length: 16.500m
- Overall Width: 2.500m
- Overall Body Height: 3.632m
- Min Body Ground Clearance: 0.396m
- Track Width: 2.500m
- Lock to Lock Time: 6.00s
- Kerb to Kerb Turning Radius: 6.870m

The drawing also shows the wheel tracks and the chassis envelope. The labels include:

- Max Legal Articulated Vehicle (16.5m)
- Overall Length
- Overall Width
- Overall Body Height
- Min Body Ground Clearance
- Track Width
- Lock to Lock Time
- Kerb to Kerb Turning Radius
- Wheel Tracks
- Chassis Envelope

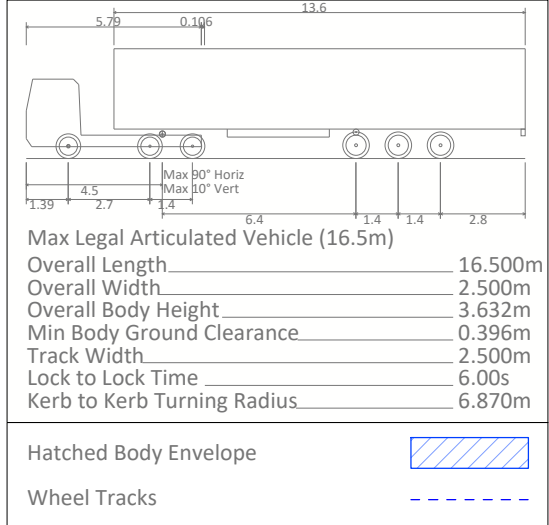
P1	07DEC25	UPDATED BASED ON HCC COMMENTS	CJM	CJM	JWL
P0	28OCT25	ORIGINAL ISSUE	CJM	CJM	JWL
REV	DATE	DESCRIPTION	DES	CHK	APP

Drawing No. 24733101-STR-HGN-100-SK-D-01202



- NOTES:**
- THIS DRAWING IS BASED ON:
TOPOGRAPHIC SURVEYS:
'UTILITY SURVEY', GREENHATCH GROUP DRAWING NO. 42270_T_UG REV0 DATED DEC 2021, PROVIDED BY MSA on 24 OCT 2024.
'Widelane-Track Topo-survey SURV001', PROVIDED BY BLOC GROUP ON 22 NOV 2024.
'SPITFIRE ROUNDABOUT SOUTHAMPTON', BRUNEL SURVEYS LTD DRAWING NO. 17972-200-01 DATED JUNE 2017, PROVIDED BY BLOC GROUP ON 22 NOV 2024.
OS BASE MAPPING:
EMPASITE DRAWING NO.
OS_MasterMap_Topography_Layer_1068056_1345409_OS_Mastermap, OS LICENCE NO. AC0000808122, PROVIDED BY EMAPSITE ON 04 DEC 2025.
HCC HIGHWAY BOUNDARY DRAWING:
DRAWING NO. 21754829 03, PROVIDED BY BLOC GROUP ON 28 OCT 2024.
DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT REFER TO THE PROJECT MANAGER FOR CLARIFICATION.
 -

- KEY:**
- EXISTING LAYOUT (TOPOGRAPHICAL SURVEY/OS BASE)
 - HAMPSHIRE COUNTY COUNCIL HIGHWAY BOUNDARY
 - PROPOSED KERB
 - PROPOSED EDGING KERB / BACK OF FOOTWAY
 - PROPOSED WHITE ROAD MARKING
 - PROPOSED TRAFFIC SIGNAL



P1	07DEC25	UPDATED BASED ON HCC COMMENTS	CJM	CJM	JWL
P0	28OCT25	ORIGINAL ISSUE	CJM	CJM	JWL
REV	DATE	DESCRIPTION	DES	CHK	APP

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Client:
BLOCWORK (EASTLEIGH) LLP & SIAL

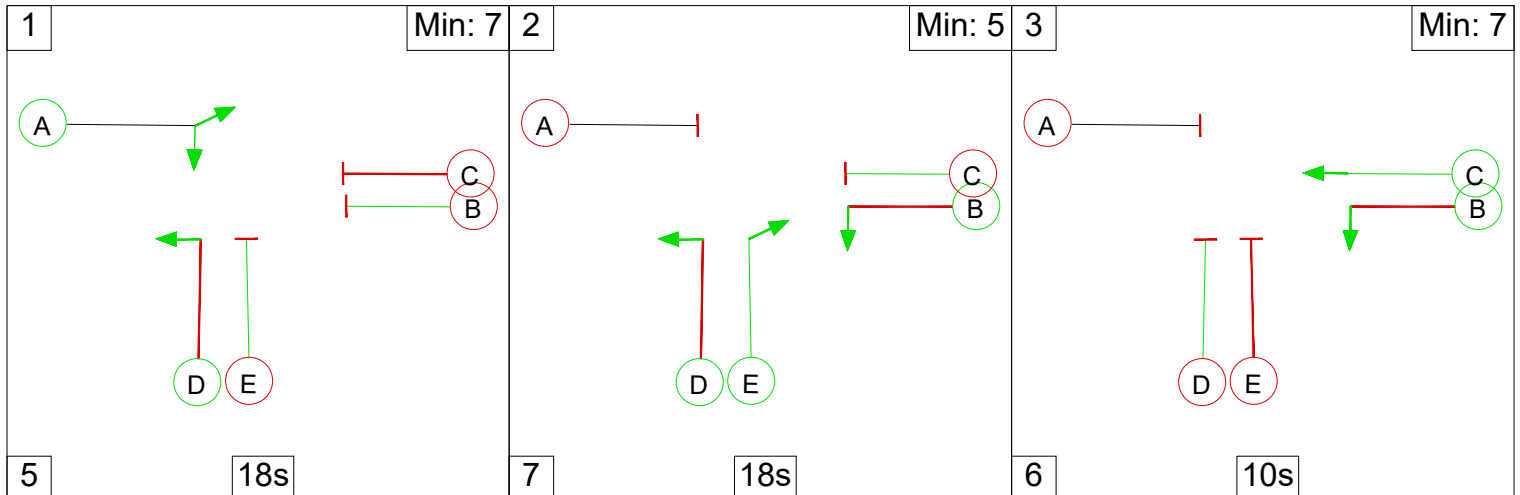
Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

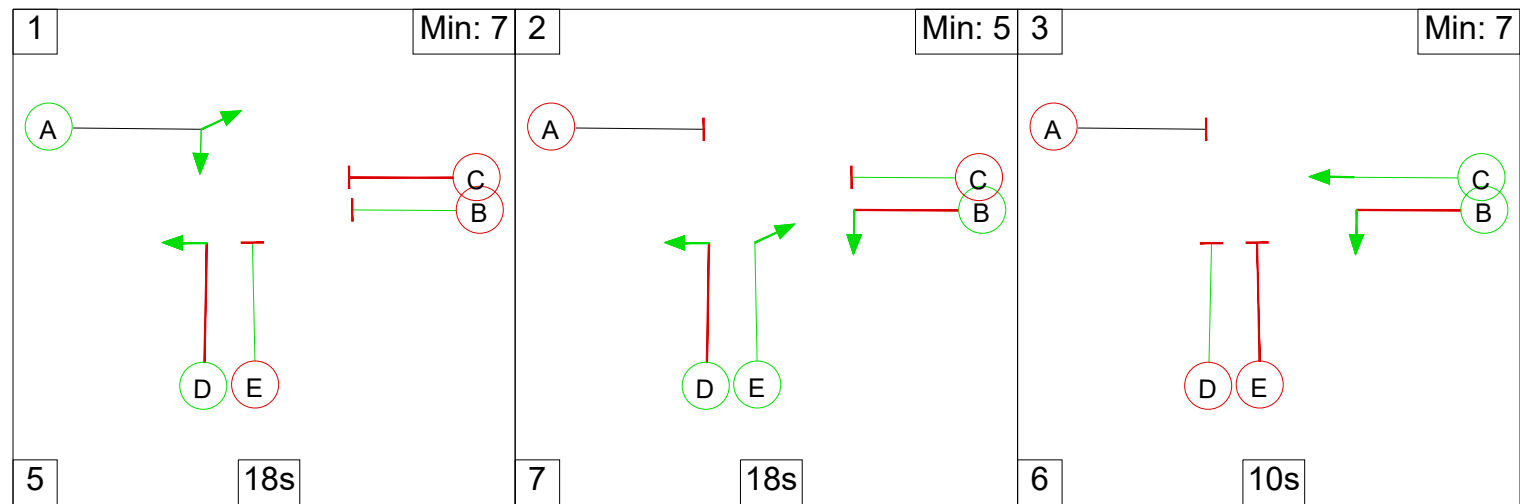
Drawing Title:
**WIDE LANE ROUNDABOUT
PROPOSED JUNCTION MITIGATION
SWEEP PATH ANALYSIS
SHEET 2**

Status:
FIT FOR INFORMATION

Size:	Scale:	Suitability	Rev.
A1	1:500	S2	P1

Drawing No.
24733101-STR-HGN-100-SK-D-01203





Technical drawing of a Max Mag Articulated Vehicle (16.5m) showing side profile and dimensions. The drawing includes a side view of the vehicle with a truck unit at the front and a trailer unit. Key dimensions are labeled: overall length 16.5m, overall width 2.500m, overall body height 3.632m, min body ground clearance 0.396m, track width 2.500m, kerb to lock time 6.00s, and kerb to kerb turning radius 6.870m. A table below the drawing lists these dimensions.

Max Mag Articulated Vehicle (16.5m)	
Overall Length	16.500m
Overall Width	2.500m
Overall Body Height	3.632m
Min Body Ground Clearance	0.396m
Track Width	2.500m
Kerb to Lock Time	6.00s
Kerb to Kerb Turning Radius	6.870m

Legend:

- Hatched Body Envelope (Blue hatched area)
- Wheel Tracks (Dashed line)

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Drawing No.
24733101-STR-HGN-100-SK-D-01204