

PROPOSALS FOR A NEW MOTORWAY REST AREA ON LAND AT JUNCTION 16 OF THE M4, WILTSHIRE - RESPONSE TO WILTSHIRE COUNTY COUNCIL COMMENTS APPLICATION REF: PL/2023/09142 – OCTOBER 2024 (3728)

Eddisons have been instructed to advise on the highways and transportation issues relating to proposals for a new Motorway Rest Area (MRA), located on land at Junction 16 of the M4 in Wiltshire.

This note will set out a consideration of Wiltshire County Council's (WCC) formal consultation response dated 26th August 2024. It follows a meeting which was held with WCC to discuss the outstanding highways matters on the 13th September 2024.

The WCC comments are provided in **Appendix 1**.

Road Maintenance and Repair Budget

The Local Authority has requested that the applicant acknowledges, and provides further consideration of, the potential impact on highways infrastructure. In particular, WCC are interested in the perceived additional 'burden' that will be placed on the Local Highway Authorities highway maintenance budget and whether this has been fully considered and accounted for.

It is acknowledged and accepted by MOTO that they will cover construction costs and commuted sums for new and amended access infrastructure. This will be secured by an appropriate Section 278 condition to be agreed with the local highway authority.

Any additional funding for the maintenance of peripheral roads that may be subject to higher traffic volumes will be allocated by central government in line with standard practice funding allocation for all adopted highways in the UK. Importantly, all roads which the development is forecast to impact on are 'adopted' and, therefore, funding for the maintenance and repair of these roads is allocated to local authorities in accordance with the below:

- Local authorities in the UK submit reports and data on their road conditions, traffic stats and management practices to central government in order to determine the allocation of road maintenance funding.

- In England, DfT studies suggest that around 60-70% of local roads maintenance budgets are typically funded by central government through various grants, while the remaining 40-30% comes from local authority resources such as business rates and council tax .
- The key report and set of statistics Local Authorities provide is generally referred to as the “Single Data List (SDL)” return for roads. This submission, along with other plans and data, forms the basis for funding decisions by the Department for Transport (DfT).
- Local Authorities undertake regular surveys such as the Road Condition Survey Indicator which is used to assess the state of local roads, the worse the condition of the road network in a local authority's area, the more likely it is to receive higher funding.
- Central government uses traffic statistics as part of the formula for allocating funding, such as the Highways Maintenance Block Grant, which is distributed to local authorities for road repairs and maintenance.
- Authorities managing roads with higher traffic volumes, particularly heavy vehicles, are allocated more funding due to increased wear and tear.
- Authorities responsible for more roads tend to receive more funding.

As such, the implementation of the development will result in increased business rates which is a direct economic benefit which will contribute towards road maintenance budgets. In addition, any increase in traffic on the local highway network, particularly an increase in heavy goods vehicles, will result in increased funding from central government in accordance with standard Government funding allocation.

On this basis, upon implementation, the development will already be contributing towards any increased maintenance associated with higher traffic volumes associated on the roads.

As the development proposals will facilitate an increase in the authorities road maintenance budget through central government funding mechanisms, it is considered that any request for additional funding on these grounds is not necessary and would not pass the test for being a necessary and reasonable planning condition. In addition, Moto could not be expected to pay a contribution (or road tax) in perpetuity as this would not be enforceable, precise or relevant to the development being permitted. Such a payment term would be unreasonable and would exceed the anticipated life of the development. Eddisons are also not aware of any specific planning policy which supports this request and, as such, it is considered that such a condition could be challenged at appeal. With reference to Section 59 of the Highways Act, it is also considered that this act does not apply as HGV traffic associated with a typical Motorway Rest Area cannot be considered ‘extraordinary’ traffic. Section 59 of the Highways Act is typically applied to short term, rare vehicle movements, such as, construction related traffic which does not apply to typical development traffic.

Notwithstanding the above, it is typical for a development of this nature to undertake a highways condition survey before construction commences. This condition survey will establish the existing state of the highway impacted by construction traffic. This condition survey will be repeated on completion of the development and any highway defects, which are attributed to the developments construction process will be rectified and returned to the pre-commencement state. The applicant is willing to undertake a condition survey which can be the subject of an appropriate construction related planning condition.

Access Design Compliance and Criteria

This section of the note will address the additional technical comments raised by WCC which include:

- a) The compliance of the proposed roundabout with the Design Manual for Roads and Bridges (DMRB).
- b) The feasibility of a potential signalised arrangement.
- c) The suitability of the signage proposals for a road safety audit stage 1 (RSA 1).

Design Criteria

A four-arm roundabout with an ICD of 55.0 metres has been proposed, as any reduction in ICD would render the roundabout non-compliant with DMRB standards, necessitating a departure from standards and potentially introducing safety concerns related to vehicle tracking and entry path curvature.

To confirm, the fourth arm is required to maintain a farm access into the adjacent field. This farm access cannot be provided within the MRA due to National Highways Policy which prevents access into other developments through a roadside facility. It is also not considered practical to create a new farm access further along the B4005 to provide access into the field, due to level differences and the impact on the established buffer zone planting. It should be noted that the fourth arm has been designed to accommodate farm vehicles only and any change of use associated with the adjacent site would be subject to an entirely separate planning application.

To ensure compliance to the Geometric Design of Roundabouts (CD 116), the relevant geometric criteria for the proposed roundabout are listed in the table below. This table should be reviewed in conjunction with the roundabout proposals shown in plan **3728-F04 Rev I**.

NORMAL ROUNDABOUT DESIGN CHECKLIST - CD 116						
DESIGN FEATURE	DESIGN REQUIREMENTS	ARM A	ARM B	ARM C	ARM D	NOTES
EFFECTIVE ENTRY WIDTH (e)-KERB TO MARKING	3-4.5M, 3-3.5M APPROPRIATE AT MULTILANE ENTRIES	7.0m	7.0m	7.0m	3.5m	COMPLIES
TOTAL ENTRY WIDTH (Te)-KERB TO KERB	3 - 10.5M (SINGLE CW) 7.3 - 15M (DUAL CW)	8.0m	9.0m	8.0m	4.0m	COMPLIES
ENTRY RADIUS (r)	10 - 100M (20M IDEAL)	14m	30m	34m	10m	COMPLIES
ICD (D)	28M MIN	55m	55m	55m	55m	COMPLIES
ENTRY PATH CURVATURE (DEFLECTION)	NO GREATER THAN 100M RADIUS	100	62m	100m	48m	COMPLIES
CIRCULATORY CARRIAGEWAY	1.0 - 1.2 X MAX. KERBED ENTRY WIDTH	9.5m	9.5m	9.5m	9.5m	COMPLIES
EXIT RADIUS	15M - 100M (40M IDEAL)	25m	80m	39m	15m	COMPLIES
EXIT WIDTH	SIMILAR TO TOTAL ENTRY WIDTH OR SINGLE CARRIAGEWAY BETWEEN 7-7.5M TWO-LANE DUAL CARRIAGEWAY 10-13M IF LONG SPLITTER ISLAND USED	6.5m	7.0m	7.0m	4.5m	COMPLIES

Alternative Arrangements

Alternative access arrangements, such as a signalised junction, have been considered. The following points outline why a signalised junction would not be suitable for this location in these circumstances.

The existing area predominantly utilises roundabouts throughout the network. The proposed roundabout aligns with the character of these existing junctions.

A signalised junction would require a similar amount of land as the roundabout, as it would need to provide multiple lanes in advance of the stop lines to accommodate left-turning HGVs approaching the proposed MRA, this would increase land take alongside the requirement to provide additional widths for the signal heads. The turning lanes would necessitate the removal of the existing hedgerow for large extents of frontage adjacent to the site, impacting on hedging and greenspace on approach to the MRA. In contrast, the proposed roundabout minimises hedgerow loss and includes a green area within its central ICD which can be utilised for green landscaping.

Moreover, a signalised junction would have a greater environmental impact, requiring powered signal heads and controllers throughout the junction for its lifespan. This would result in higher energy, maintenance and operating costs compared to the roundabout. In addition, traffic would be regularly halted at any signalised arrangement, as part of the signal timings, thus increasing vehicle emissions. It is considered a free-flowing roundabout is preferable in this location to keep traffic moving along the B4005 and the roundabout has been demonstrated to operate within its theoretical capacity with minimal queueing and delay.

Signing

The criteria for reviewing signage provision at the site has been referenced in general from guidance set out in the Department For Transport Circular 01/2022.

More specific guidance on sign-face types and their locations relative to motorway service areas has been sourced from the National Highways publication 09/2013 “Guide To The signing of Roadside Facilities” (GTSRF). This has been confirmed as the current up to date guidance from the Roadside Facilities team at National Highways.

The increase in the number of signs is in accordance with the guidance mentioned above and the requirements for the proposed MRA. Any proposal to enlarge the existing ADS signage would necessitate minor modifications, as illustrated in plan **3728-F10**. These modifications may include adding a panel to the existing sign or incorporating a flag-type sign, as specified in the guidance.

In summary, the signage strategy in advance of the MRA is appropriate to adequately direct all traffic from the M4 to the proposed facility. The signage design has been fully considered and is suitable for inclusion as part of an RSA 1. The construction details for any new signs, improvements to existing signage and potential locations will need to be agreed at the detailed design stage with National Highways which can be subject to an appropriately worded condition. The signage will be subject to an RSA Stage 1/2, 3 and 4 to be agreed with National Highways.

Summary

This note has set out a consideration of WCC’s formal consultation response.

It is concluded that the proposals remain acceptable in highway terms subject to appropriate conditions to be agreed with the Local Highway Authority.

Enclosures

***Appendix 1 – WCC Consultation Response.
Drawing Numbers 3728-F04 Rev I, and 3728-F10.***

APPENDICES

APPENDIX 1

MEMORANDUM

To: Development Management

From: Sustainable Transport

Ref: PL/23/09142

Ref: C/23/09142

Date: 26th August 2024

PL/23/09142 Outline application (with Access to be determined) for development of a new Motorway Rest Area (MRA) to provide up to 241 car parking spaces; up to 63 Heavy Goods Vehicle (HGV) parking spaces; coach and caravan parking; amenity building; fuel filling station; new roundabout access from B4005; and associated landscaping, infrastructure and ancillary works

Submissions Reviewed

Technical Note July 2024 (3728)

Relevant Planning & Guidance

National Planning Policy Framework – September 2023
LTN1/20 – Cycle Infrastructure Design
Wiltshire Active Travel Design Standards
Wiltshire Active Travel Parking Standards
DMRB
Manual for Streets
Wiltshire Draft LCWIP
Wiltshire Draft Design Guide

Further Information & holding position

The technical note does not sufficiently take into consideration or address the intention of the proposals to create a route for motorway traffic leaving the National Strategic Road Network and entering the local highway network for the purpose of serving a motorway service facility with Heavy Goods Vehicle (HGV) parking.

Whilst the note draws attention to the recently reconstructed motorway junction it does not give adequate acknowledgement or weight to the fundamental infrastructure burden of placing additional traffic, including a significant proportion of HGV movements. The impact on road infrastructure in terms of deterioration of infrastructure and reduction in lifespan of road surfacing and overall construction are key concerns that would be added onto a section of the local highway network, creating an intensified maintenance burden from a facility that has little to no economic relationship with the local highway network that it will burden.

The additional infrastructure burden has been accepted to some level within the note, but it is considered that there is still a failure to recognise that the local maintaining authority would inherit an increased maintenance burden with no change in its overall maintenance budgets to serve all existing highways in their current condition for which a dedicated strategy and policy is in place.

The outcome of placing additional maintenance burdens on existing routes that do not result in any foreseeable increase in budget sums would have to be a key concern for any competent authority with limited resources. In this instance the intention for an off line facility that makes use of a local road, opposed to either online or directly served from a motorway junction (for example Gordano services M5 junction 19) would have to be recognised as a reasonable concern with a significant liability element attached due to the proposed type of use.

There would have to be some consideration for stating that any continuation of motorway levels of movement, that would otherwise not be on local roads should be deemed as extraordinary and therefore invoke the powers of S59 under the Highways Act 1980. However, to support planning in the absence of such an agreement which would have a clear impact on viability as financial sums would be a significant oversight if not addressed now.

There is a concern, relating to the technical note that the impacts are being passed down and that in time when the road has deteriorated and needs resurfacing or reconstruction that the shortened lifespan of highway construction is a burden to be carried by the maintenance provider. Given the clear note that there is no wider economic benefit or input to maintenance from this development without a form of agreement to protect the harm increased liability for maintenance even in a small part is unsustainable.

Access

The concerns in relation to maintenance and liability extend to the proposed 55m ICD roundabout which the technical note advises is the smallest roundabout that can achieve the design standards of DMRB.

For that position to hold, if looking at the motorway junction itself and the proposed access point then the route connecting must also be, without departure to DMRB standard. The presumption being that DMRB is the de facto standard for connecting an off-line motorway services back onto the motorway.

In terms of general experience there would need to be to motorists a clear and observable sense of going in the right direction and the route having the context and character of one that leads to and from a 55m ICD and grade separated motorway junction. A disparity in the short connecting route in terms of quality, design and lifespan would be an avoidable matter.

Access Proposal

In the absence of any rationale or optioneering to demonstrate that a smaller or simpler form of junction cannot accommodate the proposed levels of movement there is a concern in relation to accepting the 55m ICD roundabout.

Whilst there would have to be some level of pragmatism relating to HGV movements, which would only occur as a consequence of the access the number and frequency and relatively low speed of movements would have an impact on any form of

junction. A signalised arrangement would also be a maintenance concern but could be a smaller form of junction. Given that the site is unlikely to require a ghost right turn in if gaps on the B4005 allow given that movements are more likely to come from the east for staff movements and not for use of the site.

The majority of the issue appears to be the farm access introduction which is reliant within the note on its own approval and therefore should not be shown or presented on the submissions aside from satisfying that its safe and suitable access is retained.

There is some merit to noting that perhaps this is not the right location for access for this proposal if the agricultural access is also dependent on a permission. On other words if the farm access must be moved then that permission, or rather the need for it as its access is now unsafe and unsuitable essentially calls into question the validity of a new access from this location on the B4005 where there are currently no issues.

As highlighted, the main concern relating to maintenance burden is coming forward without economic recompense to the maintaining authority. It is not possible to foresee if the agricultural access would always be agricultural but then there would be other factors say for housing adjacent to a motorway and motorway services in a location that is unsustainable in transport terms and reliant on car use.

Overall the response for only the motorway services does not appear to be correct against its impacts and intentions and requires further redress.

Staff Travel

It would be beneficial to understand from Moto the effectiveness of staff travel plans given the obvious challenges in walking, cycling and public transport due to the location.

It is perceived that there would be better value in alternative measures opposed to any meaningful potential for modal shift to sustainable modes at this location for staff.

However, the access elements should be retained simply to recognise the lack of choice some staff may have in transport mode option. Whilst the NPPF requires a genuine choice of modes there is a higher likelihood for low income jobs that car ownership (and possibly due to age) is not feasible or sustainable therefore negating an element of choice.

Signing

The signing is noted but should be designed sufficient to enable a Stage 1 safety audit can consider the implications of increasing sign numbers and sizes at a motorway junction and on routes leading to and from.

Transport contributions

In the event that the development proposal proceeds transport contributions will be required for: -

Offsite pedestrian and cycle accessibility.

Any contribution would be separate to agreements to ensure that the B4005 is maintained to the appropriate standard with no unreasonable burden on the authority.

Highways Position

Insufficient information – The current submission does not demonstrate sufficient information to establish an overall recommendation.

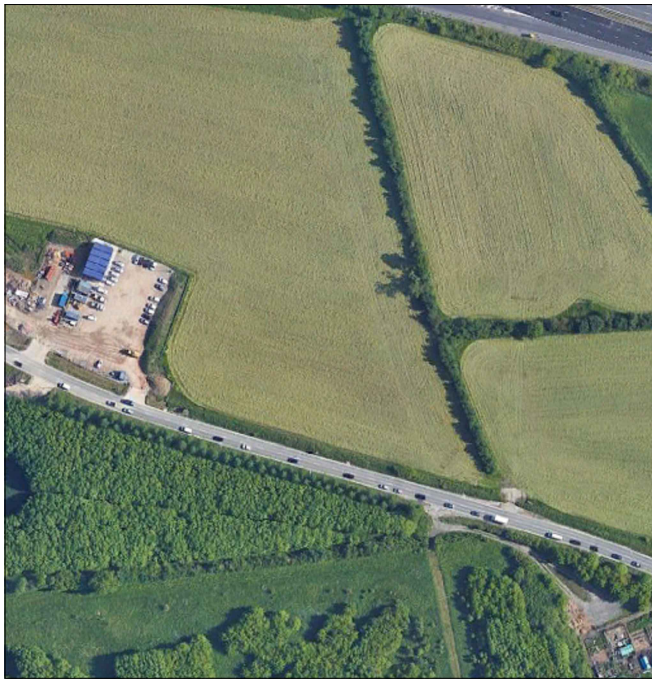
It is considered that the local context and infrastructure issues have not been satisfactorily addressed by this proposal to overcome concerns relating to ensuring that walking and cycling are prioritised as an outcome of this proposal, which is a position reflected in the NPPF, Core Strategy and emerging Local Plan.

This position remains from the previous response having considered the technical note as submitted.

Chris Mead
Sustainable Transport

Email: christopher.mead@wiltshire.gov.uk

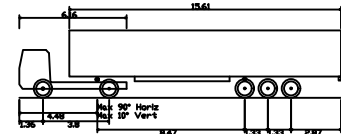
DRAWINGS



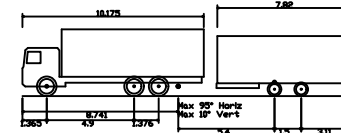
NORTH SOUTH AERIAL VIEW



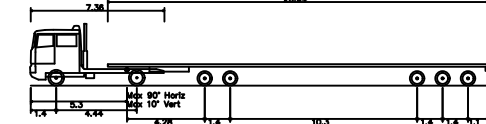
ADOPTED HIGHWAY PLAN



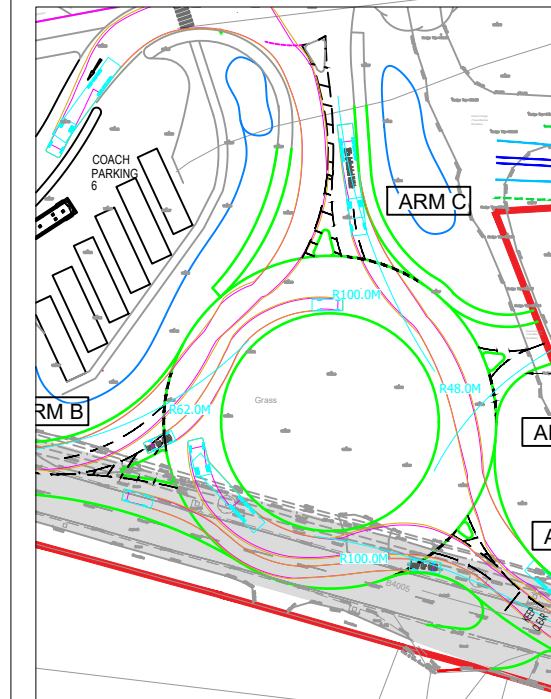
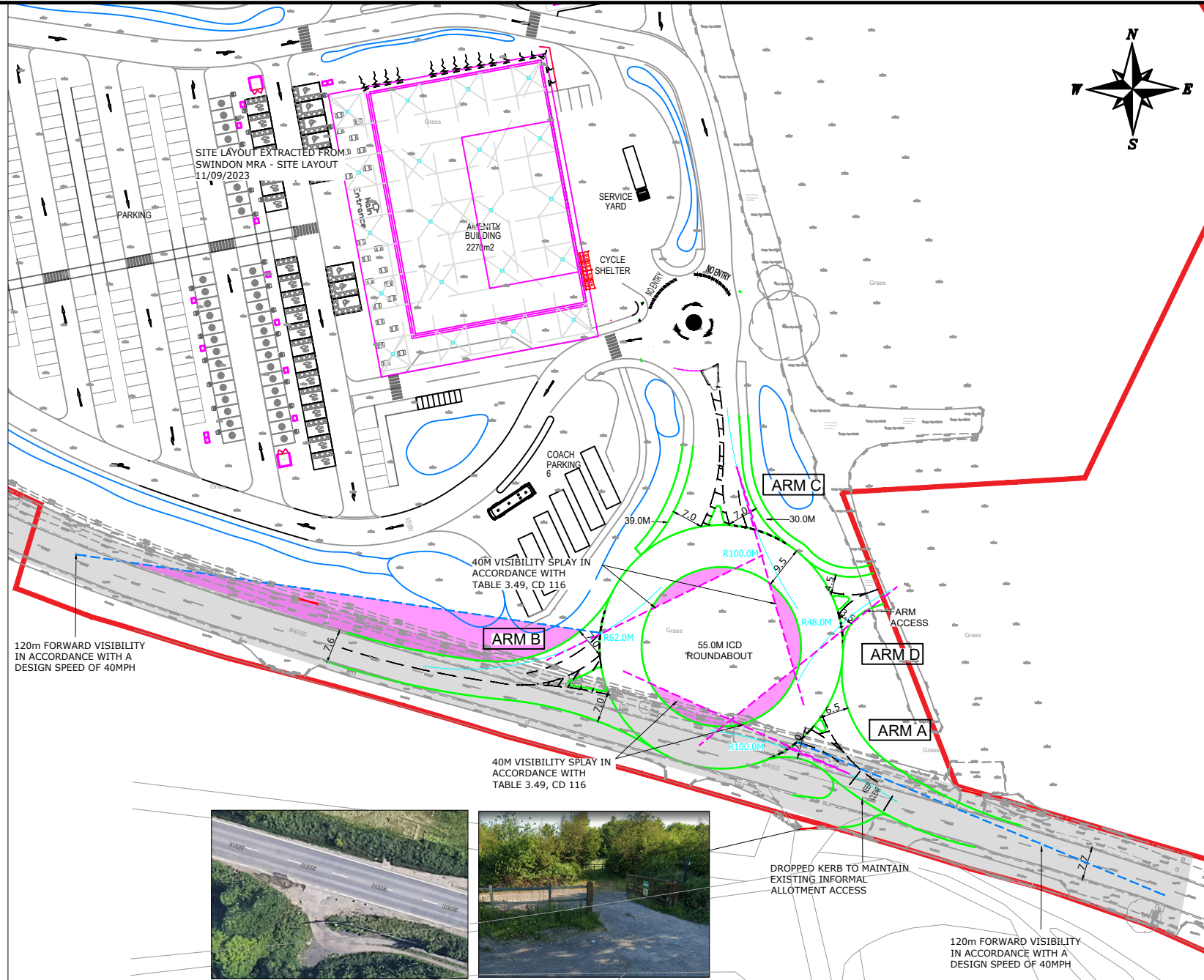
18.5m Articulated Vehicle
Overall Length 18.480m
Overall Width 2.550m
Min Body Height 3.500m
Min Body Ground Clearance 0.500m
Max Track Width 2.700m
Lock to lock time 4.0s
Kerb to Kerb Turning Radius 9.600m



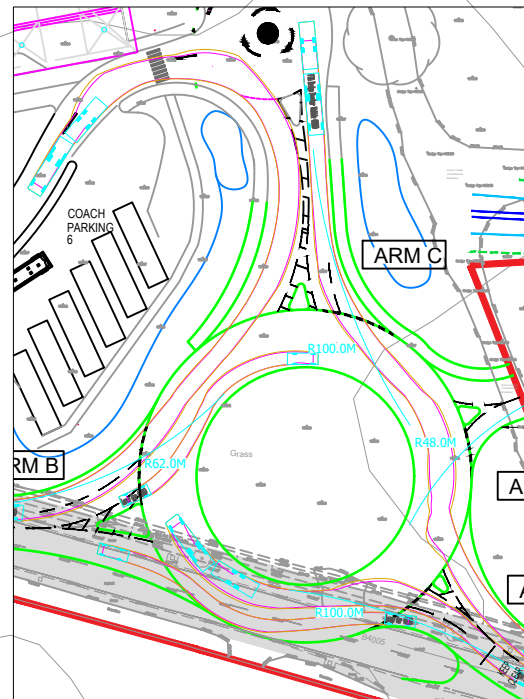
18.75m Drawbar Vehicle (2016)
Overall Length 18.751m
Overall Width 2.550m
Min Body Height 3.500m
Min Body Ground Clearance 0.500m
Max Track Width 2.700m
Lock to lock time 4.0s
Kerb to Kerb Turning Radius 10.000m



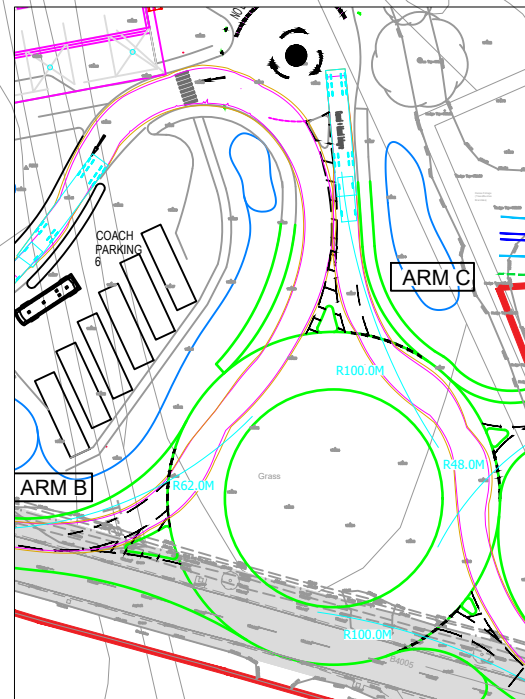
Abnormal Load Vehicle
Overall Length 25.180m
Overall Width 4.250m
Overall Body Height 4.406m
Min Body Ground Clearance 0.500m
Max Track Width 2.490m
Lock to lock time 6.00s
Kerb to Kerb Turning Radius 13.820m



18.5M FTA



DRAWBAR VEHICLE



ABNORMAL LOAD VEHICLE

NOTES

PLAN 3

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

- INDICATIVE SITE BOUNDARY
- DENOTES NEW KERBS
- EXISTING ADOPTED HIGHWAY
- AREAS WHERE VEGETATION IS TO BE KEPT BELOW 0.26M

LOCAL AUTHORITY: WILTSHIRE COUNCIL
TOTAL AREA OF SITE: 7.27Ha

NORMAL ROUNDABOUT DESIGN CHECKLIST - CD 116						
DESIGN FEATURE	DESIGN REQUIREMENT	ARM A	ARM B	ARM C	ARM D	NOTES
EFFECTIVE ENTRY WIDTH (to KERB TO MARKING)	3-4.5M, 5-3.5M APPROPRIATE AT MULTILANE ENTRIES	7.0m	7.0m	7.0m	3.5m	COMPLIES
TOTAL ENTRY WIDTH (to KERB TO MARKING)	3 - 10.5M (SINGLE CW) 7.3 - 15M (DUAL CW)	8.0m	9.0m	8.0m	4.0m	COMPLIES
ENTRY RADIUS (r)	10 - 100M (20M IDEAL)	14m	30m	34m	10m	COMPLIES
ICD (D)	28M MIN	55m	55m	55m	55m	COMPLIES
ENTRY PATH CURVATURE (DEFLECTION)	NO GREATER THAN 100M RADIUS	100	62m	100m	48m	COMPLIES
CIRCULATORY CARBONAGEWAY	1.0 - 1.2 X MAX KERBED ENTRY WIDTH	9.5m	9.5m	9.5m	9.5m	COMPLIES
EXIT RADIUS	15M - 100M (40M IDEAL)	25m	80m	39m	15m	COMPLIES
EXIT WIDTH	DEPENDING ON TOTAL ENTRY WIDTH OR SINGLE CARBONAGEWAY 6.5M - 7.0M (SINGLE CARBONAGEWAY 6.5M - 7.0M)	6.5m	7.0m	7.0m	4.5m	COMPLIES

ROUNDABOUT GEOMETRY

H G F E	VISIBILITY ADDED ROUNDABOUT DESIGN TABLE ALLOTMENT ACCESS LOCATION SHOWN FOR SUBMISSION	LB LB HL MTC	MTC JC MTC	MAR 24 DEC 23 OCT 23 OCT 23
REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

MOTO

PROJECT:

MOTO
SWINDON

DRAWING TITLE:

PROPOSED SITE ACCESS PLAN

SCALES:

1:1250 @ A3

DRAWN:

LB

CHECKED:

MC

DATE:

MAY 23

Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@crofts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:

3728-F04

REVISION:

I

Eddisons | Incorporating
Croft



PROPOSED SIGN TO DIA NP2918.2 TO BE LOCATED 2 MILES IN ADVANCE OF THE EASTBOUND JUNCTION 16 EXIT. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.

M4 EASTBOUND SIGNAGE



PROPOSED SIGN TO DIA NP2919.3 TO BE LOCATED 1.5 MILES IN ADVANCE OF THE EASTBOUND JUNCTION 16 EXIT. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



PROPOSED SIGN TO DIA NP2920.2 TO BE LOCATED AT THE START OF THE DIVERGE. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



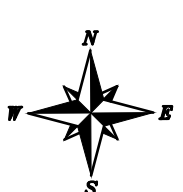
PROPOSED SIGN TO DIA NP2910.2 TO BE LOCATED ON THE EXIT NOSING. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



EXISTING SLIP ROAD ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA'.

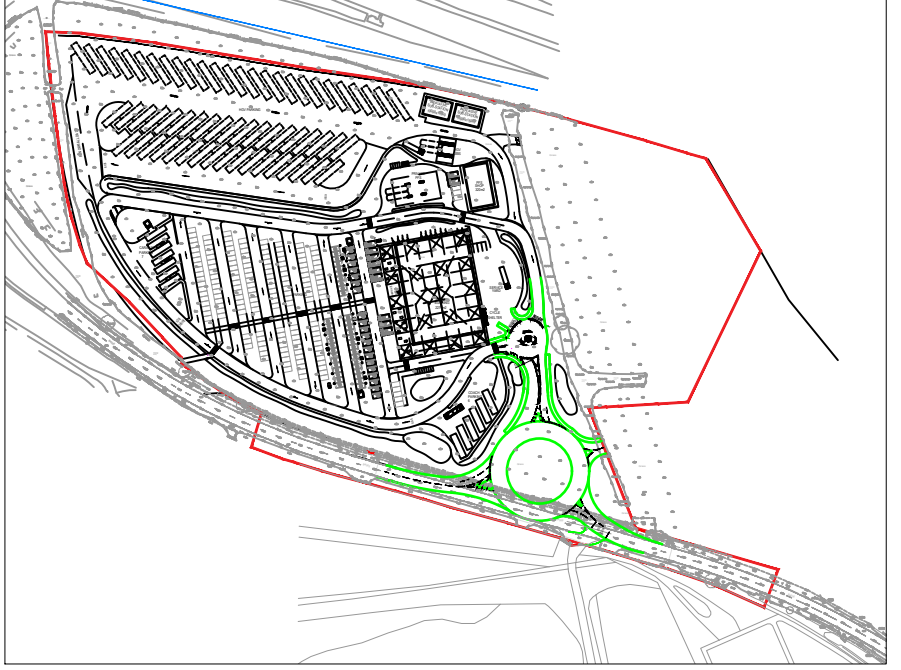


EXISTING LANE ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA'.



NOTES

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY. THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.



SITE LAYOUT NTS



EXISTING LANE ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA'.



EXISTING ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA' OR SHOW FLAG TYPE SIGN AS PROVIDED IN GUIDANCE.



EXISTING ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA' FLAG TYPE SIGN AS PROVIDED IN GUIDANCE.

M4 WESTBOUND SIGNAGE

120M FORWARD VISIBILITY TO PEDESTRIAN CROSSING.



EXISTING SLIP ROAD ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA'.

295M FORWARD VISIBILITY TO ROUNDABOUT



PROPOSED SIGN TO DIA NP2910.2 TO BE LOCATED ON THE EXIT NOSING. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



PROPOSED SIGN TO DIA NP2920.2 TO BE LOCATED AT THE START OF THE DIVERGE. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



PROPOSED SIGN TO DIA NP2919.3 TO BE LOCATED 1.5 MILES IN ADVANCE OF THE WESTBOUND JUNCTION 16 EXIT. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



PROPOSED SIGN TO DIA NP2918.2 TO BE LOCATED 2 MILES IN ADVANCE OF THE WESTBOUND JUNCTION 16 EXIT. EXACT LOCATION TO BE AGREED WITH NATIONAL HIGHWAYS.



EXISTING LANE ADS SIGNS TO BE UPGRADED TO SHOW 'REST AREA'.



REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

MOTO

PROJECT:

MOTO SWINDON

DRAWING TITLE:

SWINDON MRA SIGNAGE PLAN

SCALES: 1:1000 @ A0

DRAWN: LB CHECKED: MTC DATE: MAR 24

Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@eddisons.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 3728-F10 REVISION: -

Eddisons