

BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS



Miners Road, Llay, Wrexham

Stage 1 Road Safety Audit

March 2021

MINERS ROAD
LLAY
WREXHAM

MAGELLAN AEROSPACE LTD

STAGE 1 ROAD SAFETY AUDIT

Report by: Adam Bradley

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Consulting Civil & Transportation Planning Engineers
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Ref: 21-119-001.02

Date: March 2021

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Road Safety Audit Location Plan

Appendix BGH2

Photographs taken during the Site Visit.

1.0 INTRODUCTION

- 1.1 This Report comprises a Stage 1 Road Safety Audit (RSA) as defined in the Chartered Institution of Highways and Transportation (CIHT) document 'CIHT SoRSA Road Safety Audit Guidelines 2020' and the Department for Transport (DfT) Standard 'GG119 Road Safety Audit'.
- 1.2 This RSA is concerned with the proposed access arrangements to serve new employment premises, from Miners Road, Llay, Wrexham. This Audit was carried out in March 2021.
- 1.3 Access to the site (in only) will be taken via the existing priority T junction (subject to minor modifications) from Miners Road, which currently serves the adjacent Magellan Aerospace Ltd premises. The proposed amendments to the existing in only access include widening of the internal carriageway to provide sufficient space for HGV's and oversized HGV's to turn into the site. Egress from the proposed site (out only) will be via a new formed access with Miners Road some 95 metres to the west of the existing in only access. This exit will become the only exit from the site for all vehicles. The arrangements provide a looped route within the site.
- 1.4 The Audit Team comprised:-
- Road Safety Audit Team Leader**
Andrew Cooper (MEng, BSc (Hons), CertComp)
Associate Engineer
Bryan G Hall Consulting Civil and Transportation Planning Engineers
- Road Safety Audit Team Member**
Adam Bradley (BSc (Hons))
Senior Engineer
Bryan G Hall Consulting Civil and Transportation Planning Engineers
- 1.5 The Audit took place at the Leeds office of Bryan G Hall and comprised an examination of the information provided by the Designer of the scheme. The Audit Team have not been advised of any departures from standard. The information provided to the Audit Team in correspondence of 19th January 2021 is listed below:-
- DPL SK010 – Site Access Layout With Visibility Splay
 - DPL SK011 – Site Access Layout Swept Path Analysis 16.5m FTA Design Artic
 - DPL SK012 – Site Access Layout Swept Path Analysis Trombone Trailer Artic

- 1.6 The Audit team visited the site of the proposed highway works, together, on the morning of Monday 8th March 2021. During the site visit the weather was clear / bright and the road surface was dry. Traffic volumes on Miner Road were considered moderate and pedestrian / cycle activity low.
- 1.7 There was a significant level of activity associated with the '2Agriculture' animal feed plant on the opposite side of the Miners Road carriageway (directly opposite the proposed employment site). A steady flow of delivery vehicles entering the site, as well as waiting / parking on the carriageway of Miners Road until such a time they were permitted to enter the animal feed plant was noted during the Audit site visit. There are no Traffic Regulation Orders (TRO's) on Miners Road to restrict waiting or parking of vehicles.
- 1.8 The terms of reference of the RSA are as described in GG119. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance to any other criteria. For the avoidance of doubt, only items requiring comment are included in the Audit.

2.0 ITEMS RAISED IN THIS STAGE 1 ROAD SAFETY AUDIT

- 2.1 All items raised within this Stage 1 RSA are shown on the annotated plan at **Appendix BGH1**.

Problem A

- 2.2 HGV parking on Miners Road in the vicinity of the proposed exit only junction.

Summary

Manufacturer '2Agriculture' is an animal feed producer and operates from an existing plant on Miners Road, located directly opposite the proposed site.

During the site visit there were a significant number of HGV's parked on the eastbound carriageway of Miners Road waiting to access the 2Agriculture facility. This is demonstrated by the photographs taken during the RSA site visit at **Appendix BGH2**. These HGV's remained in place for the duration of the site visit with the number of vehicles parking increasing accordingly during this period. It was apparent that the HGV's were in a queue to access the 2Agriculture facility.

The length of HGV parking on Miners Road result in the effective carriageway (in close proximity of the proposed exit) being reduced to shuttle type running along the proposed site frontage. This could result in a number of difficulties in respect to road safety, such as:-

- The reduced effective carriageway width may result in difficulty for large vehicles when exiting the proposed site. This may increase the likely-hood of vehicles having to undertake multi point manoeuvres on the carriageway or 'bumping' up onto footway in order to exit the site;
- The parking may lead to drivers having to pass the waiting HGV's, placing them on the wrong side of the carriageway of Miners Road and for extended periods of time. This will place passing vehicles directly adjacent to the proposed egress, increasing the potential for conflict, and;
- Because of the restriction to visibility which the waiting HGV's create, drivers travelling eastbound or leaving the 2Agriculture plant may not have sufficient visibility of slow-moving HGV's utilising the full width of Miners Road, when entering the site. This could result in an increase in the potential for head on or side on collisions type collisions with the manoeuvring vehicles.

Recommendation

Demonstrate the existing on street HGV parking is not detrimental to the operation of the proposed access and egress arrangement. For example, through further swept path analysis, plotting of forward visibility splays on the link etc. Should it be found that the parking effects the proposals, measures should be introduced to reduce the potential for conflict between vehicles on Miners Road.

Problem B

- 2.3 Visibility from proposed egress.

Summary

Driver visibility to oncoming vehicles from the proposed exit only junction appear to be obscured by existing trees and street furniture on Miners road. This matter is compounded by the issues raised in Problem A. An example of this is shown in the photographs at **Appendix BGH2**. Because of this, emerging drivers may not have sufficient sight of oncoming vehicles, resulting in drivers entering Miners Road when it is inappropriate to do so and increasing the likelihood of collisions as the driver leaves the site.

Recommendation

Ensure there are no physical obstructions to the required visibility envelope from the proposed egress to approaching vehicles on Miners Road.

Problem C

- 2.4 Pedestrian movements across proposed exit only access.

Summary

The proposed egress is excessive in width and includes a hatched area which allows for the swept path / over running of larger HGV's when leaving the site. The excessive width will result in longer crossing times / exposure to vehicles.

The hatched area may also be misconstrued as a safe area for pedestrians to use as a refuge when waiting to cross the egress. It will not just be HGV's utilising the egress and all vehicles will be permitted to utilise the full width of the egress when leaving the site. This may lead to an increase in the potential for vehicle to pedestrian type incidents.

Recommendation

Ensure the egress arrangements accommodate all modes of travel, including measures to aid vulnerable users cross.

Problem D

2.5 Cyclists

Summary

The first 50 metres of Miners Road, from its junction with B5373 Rackery Lane has the benefit of shared footway cycleways measure (to both sides of the carriageway). Beyond this point, cyclists are required to re-join the carriageway. The proposed facility will intensify the number of oversized and standard HGV's using the road in the vicinity of these facilities. This intensification has the potential to have a detrimental effect on the safety of cyclists given they are required to share the same road space, but with a greater number of larger vehicles.

Recommendation

Introduce measures to improve the safety of cyclists, i.e. the provision of advisory cycle lanes on the carriageway.

General Comments

- 2.6 No street lighting design has been provided as part of the Audit Brief package. It is therefore not possible to comment on the suitability of the lighting proposals in the context of the RSA Problems outlined above.
- 2.7 No speed data has been provided for existing vehicles using Miners Road. On site observations would suggest that the speed of vehicles in the vicinity of both access locations are in excess of the 30mph speed limit from the main road.
- 2.8 Existing road markings and the carriageway surface of Miners Road (in the vicinity of the existing site access and egress) have worn over time, meaning markings are no longer visible and the carriageway surface is uneven. These matters will require addressing at detailed design stage.
- 2.9 No signage drawings have been provided at this stage, but it is considered that No Entry signage will be required at the exit only priority junction.

3.0 AUDIT STATEMENT

3.1 We certify this audit has been carried out in accordance with GG119.

Road Safety Audit Team Leader

Andrew Cooper (MEng, BSc (Hons), CertComp)

Associate Engineer

Bryan G Hall Consulting Civil and Transportation Planning Engineers

Signed:



Date: 22.03.2021

Road Safety Audit Team Member

Adam Bradley (BSc (Hons))

Senior Engineer

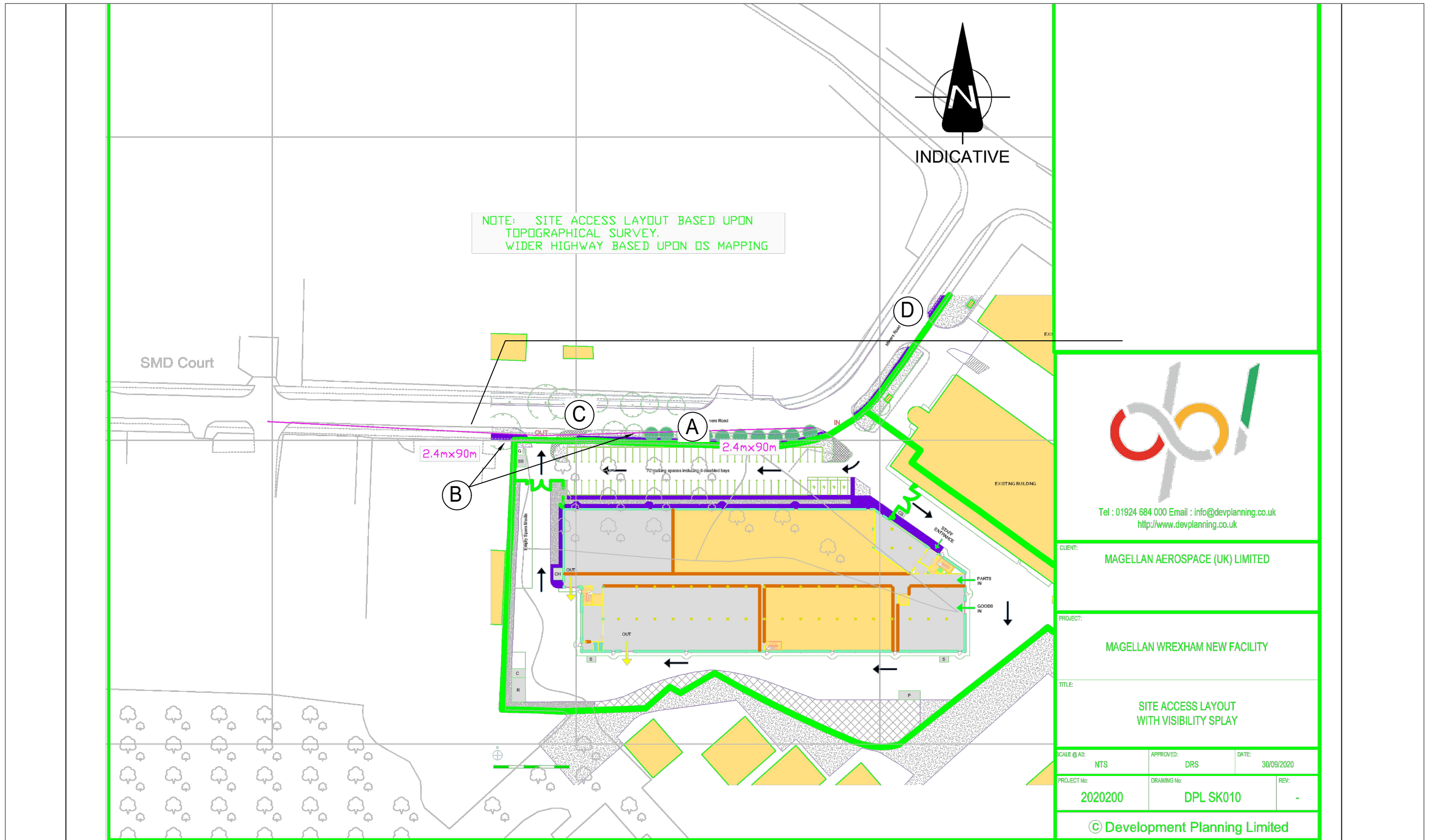
Bryan G Hall Consulting Civil and Transportation Planning Engineers

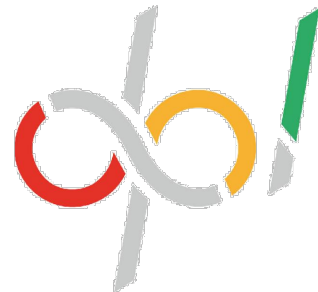
Signed:



Date: 22.03.2021

APPENDIX BGH 1




Tel : 01924 684 000 Email : info@devplanning.co.uk
http://www.devplanning.co.uk

CLIENT: MAGELLAN AEROSPACE (UK) LIMITED		
PROJECT: MAGELLAN WREXHAM NEW FACILITY		
TITLE: SITE ACCESS LAYOUT WITH VISIBILITY SPLAY		
SCALE @ A3: NTS	APPROVED: DRS	DATE: 30/09/2020
PROJECT No: 2020200	DRAWING No: DPL SK010	REV: -
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Title: STAGE 1 RSA LOCATION PLAN

Status: FOR INFORMATION

Scale: NTS
Size: A3 - 420 x 297

Drawn: DG
Chkd: AB
Appvd: -

Rev:	Date:	Amendment:	DRN	CHK	APR
Client: MAGELLAN AEROSPACE LTD					
Project: MINERS ROAD, WRAY, WREXHAM STAGE 1 RSA					
Drawing No: 21/119/RSA/001			Revision: -		
Job No: 21-119			Date: 18.03.2021		

APPENDIX BGH 2

BRYAN G HALL

CONSULTING CIVIL & TRANSPORTATION PLANNING ENGINEERS

Project Name:	Miners Road, Llay, Wrexham		
Client:	Magellan Aerospace Ltd		
Subject:	Stage 1 Road Safety Audit		
BGH Reference:	21-119-001.01		
Date:	19 th March 2021		
RSA Team Member:	Adam Bradley	RSA Team Leader:	Andrew Cooper



1. Looking west on Miners Lane from existing access. HGV's parked on Miners Lane.



2. Looking west on Miners Lane from existing access. Shuttle running on Miners Lane due to HGVs parking



3. Looking east on Miners Road. HGV's parked opposite proposed egress.



4. Looking west on Miners Lane. HGV's parked on Miners Lane opposite proposed egress

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5. Visibility to the east of proposed egress



6. Visibility to the west of proposed egress

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