Advanced Technology Centre, Vale of Glamorgan

Transport Assessment Addendum

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Table of Contents

Appendices

1.0 Introduction

1.1 SLR Consulting Ltd is retained by WEPco Limited to provide transport and highways advice in relation to the proposed Advanced Technology Centre (ATC) located near Cardiff Airport in Rhoose, Vale of Glamorgan (VoG). The ATC will be part of Cardiff and Vale College (CAVC).

1.2 A planning application was submitted to Vale of Glamorgan Council (VoGC) in April 2024 (planning application reference: 2024/00329/FUL - Land to the South of Blackton Lane and West of Port Road, Rhoose). A Transport Assessment (TA) and Travel Plan (TP) were submitted as part of the planning application submission.

1.3 This Transport Assessment Addendum (TAA) addresses all comments, observations and recommendations received from VoGC and their consultants Link Transport Planning (LTP), in response to the planning application.

Formal Highways Response

1.4 A formal highways response was received from VoGC on 27th June 2024 which included an independent review of the TA and TP, undertaken LTP. The comments received from VoGC and the LTP TA review are included at **Appendix A.**

1.5 The scope of the independent review undertaken by LTP is to provide a detailed review of the TA methodology, outputs, and mitigation strategy proposed to ensure that they are robust and appropriate for the development impact.

1.6 As agreed with VoGC, the TA review does the following:

- Review the TA to ensure that the applicable transport policy and legislation have been considered.
- Examine the TA site appraisal and identify any deficiencies relating to sustainable transport infrastructure that have not been addressed in the submission.
- Review the personal injury collision data and conclusions.
- Review the proposed site layout and access arrangements.
- Interrogate the trip generation, modal split, distribution, and assignment calculations.
- Interrogate the highway capacity analysis methodology and outputs, ensuring that they are technically sound and that any conclusions drawn are accurate and appropriate.
- Review the proposed mitigation against what would be expected for a site of this size, nature, and location. This will include commentary as to whether any identified mitigation is sufficient for the forecast impact and deliverable. This review will also consider the submitted school and residential travel plans.

1.7 The format of the Link TA review is as follows:

- Each category is interrogated, and a summary of key information is provided.
- Any discrepancies or items that require clarification are discussed, firstly with reference to ‘major observations’. These observations are considered to have a material impact

on the Transport Assessment conclusions and the planning application deliberation process.

- Any discrepancies or items that require clarification that are not considered 'major' are included in the 'minor observations' section of each category. These observations are unlikely to have any material impact on the conclusions of the Transport Assessment but would benefit from being rectified where feasible.
- At the end of each section, recommendations are provided for the Vale of Glamorgan to consider when formulating formal Highway Observations.

This Report

1.8 The TAA is structured as follows:

- **Chapter 2**: A response to the VoGC comments;
- **Chapter 3**: A response to the LTP TA Review;
- **Chapter 4**: Summary and Conclusion.

2.0 Vale of Glamorgan Highways Comments

2.1 James Aitken at VoGC provided comments on 27th June 2024 addressing the current proposals which are listed below (numbered 1 to 5), with the SLR response provided below.

2.2 The VoGC highways comments are included at **Appendix A.**

VoGC Comment 1

2.3 No drawings have been provided showing the locations and extents of the proposed active travel routes. These will need to be provided on a drawing for comment as wording within the TA would not be sufficient enough and would be ambiguous when agreeing detailed designs following planning consent. Cycle routes should be provided at minimum 3.5m wide with 1m buffer strip grass verges adjacent to the carriageway. Snippets have been shown in the TA however full plans will need to be provided and stand alone.

SLR Response

2.4 A drawing showing the location and extents of the active travel proposals along the site frontage has been provided at Appendix F of the submitted TA. The drawing shows the proposed 3m active travel link from the proposed bus stop on Port Road to the pedestrian and cycle entrance to the college.

2.5 The Active Travel Act Guidance (paragraph 8.17.9) advises that a minimum width of 3.0m is recommended where pedestrians and cyclists use the same surface. Table 11.5 of the Act advises that the recommended minimum width for shared use routes carrying up to 300 cyclists per hour is 3.0m.

2.6 The proposed width of the active travel route is appropriate given the location and the forecast level of use.

2.7 This point can be addressed at detailed design/S278 technical approval stage.

VoGC Comment 2

2.8 The indicative locations of the new bus stops and shelters will need to be provided on a plan. The exact locations and details can be agreed as part of a suitable worded condition however we should agree indicatively that two new stops are being proposed with suitable provisions including laybys, shelters etc.

SLR Response

2.9 A drawing showing the location of the proposed bus stop on Port Road has been provided at Appendix F of the submitted TA. It is understood that early discussions were held with officers at VoGC and it was advised that the preference would be to have a bus stop on the northern edge of the carriageway on Port Road only, so as not to impede traffic travelling towards the roundabout.

2.10 As stated in TA and as shown in the drawing at Appendix F, the new bus stop will be equipped with a bus shelter, seating and real time information screens. A 160mm raised bus stop kerb will also be provided.

VoGC Comment 3

2.11 Traffic regulation orders may be required to prevent parking and dropping off along Port Road to the South of the development site.

SLR Response

2.12 Following discussions with VoGC in a meeting on 11th July 2024, it is understood that there are Traffic Regulation Order (TRO) proposals for the unnamed road and the road leading to DNATA Catering to discourage on-street parking in the vicinity of the site.

VoGC Comment 4

2.13 Provide proposals of where service/delivery vehicles will drop off goods and ensure that reversing on site in close proximity to other members of the public/parking spaces is prevented. Swept paths should also be provided.

SLR Response

2.14 The internal layout and car parking areas have been reviewed by Arup and are included at Appendix G of the TA.

2.15 The tracking of the internal layout demonstrates that refuse and deliveries can track through the site without impacting on members of the public or the parking areas.

VoGC Comment 5

2.16 Any access road specified to be used by HGV's should be 7.3m wide. A access road and parking GA should be provided showing widths/geometry.

SLR Response

2.17 The width of the access road is 5.9m wide and, as stated in the TA, the existing road width is appropriate for the types and frequencies of vehicles accessing the site.

2.18 A general arrangement drawing of the site access junction has been included at Appendix G of the submitted TA, along with the swept path analysis. The swept path analysis has been updated to include an 11.2m refuse vehicle (shown in **Appendix B**), and concludes that the existing road width is sufficient to accommodate the types of vehicles accessing/egressing the site.

3.0 Link Transport Planning TA Review

3.1 As set out in Chapter 1, LTP has reviewed each section of the submitted TA and has provided recommendations for the Vale of Glamorgan to consider when formulating their formal Highway Observations.

3.2 A meeting was held between SLR and James Aitken from VoGC on Thursday 11th July 2024, to discuss the observations and recommendations raised by LTP in further detail.

3.3 In this Chapter, a response is provided from SLR to each of the recommendations provided by LTP for each section of the TA, following the meeting with VoGC.

Transport Policy

LTP Recommendation 1

3.4 Update the Transport Assessment policy section to include items listed in ‘minor observations.

SLR Response

3.5 A review of the following policy documents is provided below:

- Well-being of Future Generations (Wales) Act 2015
- Active Travel Act Guidance (2021)
- Vale of Glamorgan Corporate Plan 2020-2025
- Vale of Glamorgan Council Climate Change Challenge Plan 2021-2030
- Vale of Glamorgan Public Services Board Well-Being Plan 2023-2028.

Well-being of Future Generations (Wales) Act 2015

3.6 The Well-being of Future Generations Act 2015 legislation was enacted in 2015 and states that the indicators for journeys by walking, cycling or public transport are:

- A prosperous Wales
- A resilient Wales
- A healthier Wales
- A more equal Wales
- A globally responsible Wales

Active Travel Act Guidance (2021)

3.7 The Active Travel Act Guidance, published in July 2021 provides the mandate to deliver high quality active travel networks and schemes.

3.8 With respect to colleges, paragraph 1.2.11 states that:

The quality of provision for walking and cycling access for staff and pupils, or staff, patients and visitors respectively must be considered in all education and health related projects which bid for Welsh Government capital and revenue funding. This consideration will form part of the scrutiny and appraisal process of each proposal.

3.9 Additionally, paragraph 14.3.1 states that:

Washing and changing facilities are also helpful in enabling active travel, for example, the provision of showers at a longer-stay destinations, such as further education colleges and workplaces.

Vale of Glamorgan Corporate Plan 2020-2025

3.10 The corporate plan sets out four key objectives:

- To work with and for our communities
- To support learning, employment and sustainable economic growth
- To support people at home and in their community
- To respect, enhance and enjoy our environment.

3.11 The proposed development considers and complies with these objectives.

Vale of Glamorgan Council Climate Change Challenge Plan 2021-2030

3.12 Project Zero is the Vale of Glamorgan Council's response to the Climate Change Emergency. It brings together the wide range of work and opportunities available to tackle climate change, reduce the Council's carbon emissions to net zero by 2030 and encourage others to make positive changes.

3.13 The proposed development is designed to be sustainable and will encourage active travel and aim to reduce the reliance of private vehicles by virtue of its location and links to local facilities. A Travel plan will also be provided to support this.

Vale of Glamorgan Public Services Board Well-Being Plan 2023-2028

3.14 This plan, published by the Vale of Glamorgan Public Services Board (PSB) covers the has three wellbeing objectives, these are:

- A more resilient and greener Vale
- A more active and healthier Vale
- A more equitable and connected Vale.

3.15 The PSB has signed a Healthy Travel Charter and delivered on commitments related to public transport, walking and cycling, communications and leadership, agile working and ultra-low emission vehicles.

3.16 There are also commitments to:

- Reduce our emissions to mitigate the effects of climate change whilst adapting to its impacts.
- Be kinder to our environment.
- Become healthier.
- Become a carbon neutral public sector by 2030.

Site Appraisal

LTP Recommendation 2

3.17 Formal active travel audits for key routes in the vicinity, particularly between the site and Rhoose Cardiff International Railway Station, should be conducted to establish whether the site is accessible and attractive to a variety of users. The audit should also establish the suitability of existing cycle parking facilities at key amenities in Rhoose, including the Railway Station.

SLR Response

3.18 It was discussed and agreed in a meeting with VoGC on Thursday 11th July 2024 that a formal active travel audit would not be necessary for the proposed development.

3.19 An audit of the existing and proposed active travel routes in the vicinity of the site has been undertaken in Chapter 2 of the submitted Transport Assessment (TA). The review demonstrates that there are opportunities for pedestrians and cyclists to travel between the site and Rhoose using the existing active travel infrastructure.

3.20 Proposals for future cycle routes (proposed by VoGC) would provide a shared footway/cycleway on Port Road which would improve the viability of cycling to the site from Barry.

3.21 The availability of existing cycle parking spaces in Rhoose and at the railway station is not considered necessary given that ATC will be the origin and destination of trips.

3.22 An audit of nearby bus infrastructure has been included in Chapter 2 of the submitted TA. The nearest set of bus stops to the site are located on Port Road, approximately 350m south of the site. The bus stops are equipped with bus boarding kerbs, shelters, seating and timetable information.

LTP Recommendation 3

3.23 An audit of nearby bus stop infrastructure should be provided to identify required improvements to suitably cater for demand and encourage use.

SLR Response

3.24 Staff and students will be encouraged to use existing bus services where appropriate, a new bus stop is also proposed on Port Road, just to the east of the pedestrian and cycle access into the site.

3.25 As stated in TA and as shown in the drawing at Appendix F, the new bus stop will be equipped with a bus shelter, seating and real time information screens. A 160mm raised bus stop kerb will also be provided.

3.26 Therefore, it is considered that the existing and proposed bus stop infrastructure is suitable to cater for the likely demand of public transport users associated with the proposed development.

Development Proposals

LTP Recommendation 4

3.27 Additional swept path analysis is to be provided, to include HGVs. VoGC to confirm the required refuse collection vehicle size.

SLR Response

3.28 Additional swept path analysis has been undertaken based on a 11.2m refuse vehicle. The swept path analysis demonstrates that the 11.2m refuse vehicle can be accommodated at the site access. This is provided at **Appendix B.**

3.29 CAVC has confirmed that the 11.2m refuse vehicle will be the largest vehicle to service the site.

LTP Recommendation 5

3.30 A Delivery Management Plan should be provided for VoGC approval, and the maximum size of each vehicle category that can access the site and which manoeuvres are feasible should be stipulated.

SLR Response

3.31 It was agreed in the meeting with VoGC that a Delivery Management Plan could be subject to a planning condition. VoGC confirmed that it would be a pre occupation condition as opposed to a pre-commencement condition.

LTP Recommendation 6

3.32 Parking saturation surveys of the ICAT car park and local off-site public highway should be provided to demonstrate suitable overspill opportunities to cater for the shortfall in proposed on-site parking.

SLR Response

3.33 Further information with regards to the sustainable transport proposals is set out in a separate S106 letter due to be submitted to VoGC.

3.34 As stated in the TA, the ICAT campus is a part of CAVC and CAVC has agreed that staff and students will be able to use the ICAT car park if required. VoGC agreed that a saturation survey of the existing ICAT car park would not be required. It should also be noted that the car parking standards contained within the adopted VoGC Parking Standards Supplementary Planning Guidance (March 2019) are maximum standards.

3.35 It should also be noted that CAVC has provided additional information with regards to student numbers at the ATC site and has advised that approximately 50% of students at ATC will be full time students who are typically onsite for 3 days a week. Therefore, the car parking accumulation included within the TA is based on a worst case scenario and in reality, the number of students on site at any one time will be less than assessed in the TA.

LTP Recommendation 7

3.36 Further consideration is to be given to the proposed drop-off provision, with additional provision to potentially be provided away from the site entrance (e.g. at the sprinkler tank system) to facilitate drop-offs that do not require passage through areas of high user conflict.

SLR Response

3.37 The proposed drop off provision is shown in location L on the Illustrative Landscape Masterplan provided at Figure 4.1 and Appendix E of the submitted TA. The proposed drop off point is ideally located just to the west of the main entrance plaza (location A) to enable students to access the building without having to walk through the car park, thereby minimising conflict with cars/servicing vehicles.

3.38 The proposed drop-off provision is therefore considered to be appropriate. The sprinkler tank is to be served by a designated access road.

LTP Recommendation 8

3.39 The proposed active travel link from the site to the new bus stop on Port Road should be extended to connect to the existing active travel route on Port Road. The VoG Active Travel Officer should be consulted on the need to increase the width of this route, as the Active Travel Act Guidance suggests that primary shared-use routes should be 3.0m in width, with additional width provided for vertical features and carriageways with traffic travelling >30mph.

SLR Response

3.40 The proposed active travel link from the site will be provided to enable staff and students to access the new bus stop on Port Road. There are no proposals to extend the existing active travel route on Port Road along the frontage of the Holiday Inn hotel. As agreed with VoGC, this is not a reasonable request and does not provide a direct benefit to the development.

LTP Recommendation 9

3.41 The VoG Public Transport Officer should be consulted to establish the suitability of the proposed new bus stop in relation to the close proximity to existing bus stops on Port Road, particularly if commercial services are expected to use both.

SLR Response

3.42 It is currently anticipated that the new bus stop on Port Road will be served by bus services associated with the ATC campus only. Existing commercial bus services in the area are not expected to use this bus stop at this stage, although this may be taken into consideration in future through discussions with VoGC's Public Transport officer.

Trip Forecasting, Distribution & Assignment

LTP Recommendation 11

3.43 Undertake an additional sensitivity test of the 1600-1700 time period to reflect the development PM peak and potentially the highway network PM peak.

SLR Response

3.44 Development trips in the 1600-1700 time period have been combined with the network development peak of 1700-1800 and compared with the Base + Development 1700-1800 time period assessed within the submitted TA. The comparison of flows shows that the Base + Development scenario, assuming a network peak of 1700-1800 for the base traffic flows and a development peak of 1600-1700, would result in 52 additional vehicles at the Weycock Cross roundabout during the peak period, compared to the scenario assessed within the TA. This results in less than one additional vehicle per minute at the junction which is unlikely to impact the performance of the junction.

3.45 Furthermore, CAVC has subsequently advised that approximately 50% of students at ATC will be full time students and are typically onsite for 3 days a week, which has not been considered in the assessment within the TA. Therefore, in reality, the number of students on site at any one time will be less than assessed in the TA.

3.46 Therefore, the assessment in the TA is considered to be overly robust and a sensitivity test based on a development peak of 1600-1700 will not drastically alter the results of the modelling assessment.

Highway Impact Assessment

LTP Recommendation 12

3.47 The 2033 assessment title should be amended to reflect a base 2023 year. An additional future year assessment of +5 or +10 years should also be provided, with TEMPro growth applied. The requirement for mitigation should be based predominantly on the base year assessment. Suitable adjustments should be considered for background traffic and

development traffic forecasts to account for the Wales Transport Strategy modal shift and working from home aspirations. The focus should be on the impact at Weycock Roundabout which is noted to be highly sensitive to traffic increases.

SLR Response

3.48 In the July 11th meeting with VoGC, it was agreed that a future year assessment including TEMPro growth would not be required. The Model Farm development has been included as a committed development in the 2033 future year scenario, however the development currently has no planning status and there is no certainty that the site will come forward.

3.49 The junction modelling for the Weycock Cross roundabout included in the submitted TA (Table 7.5) demonstrates that the junction is reaching its theoretical capacity in the 2033 future year scenario as a result of the Model Farm development. Due to the inclusion of the Model Farm development as a committed development, the 2033 future year scenario could result in an overestimation of traffic flows for this scenario and is considered to be unrealistic.

Transport Implementation Strategy

LTP Recommendation 13

3.50 Propose mitigation to address deficiencies identified in the active travel audits that are recommended to be undertaken. These should focus on key site desire lines, especially between the site and Rhoose Cardiff International Railway Station, to ensure accessibility and attractiveness for various users.

SLR Response

3.51 Due to the location of the site, the proposed sustainable travel measures are centered around public transport provision. Further details on this are included in a separate S106 letter due to be submitted to VoGC.

3.52 Active travel audits have been undertaken as part of the TA and demonstrate that the existing infrastructure is sufficient to serve the likely active travel demand as a result of the proposed development.

LTP Recommendation 14

3.53 The TA notes that the VoGC had requested crossing points at the existing Port Road/Holiday Inn roundabout to be provided but the TA states that this is not considered appropriate. However, there is insufficient evidence presented to justify this statement and further assessment should be undertaken using ATAG.

SLR Response

3.54 There are existing informal crossing points at the existing Port Road/Holiday Inn roundabout, with dropped kerbs and tactile paving provided. The pedestrian refuge islands are of

sufficient width and visibility is sufficient at the crossing locations. There are also no perceived safety issues at the roundabout with pedestrians crossing.

3.55 As there are sufficient crossing facilities present at the roundabout, it is not proposed to offer any improvements such as controlled crossing points. This was agreed with VoGC in the meeting of 11th July 2024.

LTP Recommendation 15

3.56 Consult with the Vale of Glamorgan Active Travel Officer regarding the status of the proposed Weycock Roundabout to Cardiff International Airport Active Travel route. Match-funding should be provided by the development via S106 to enhance the route's prospect of wider funding and delivery.

SLR Response

3.57 It is understood that the VoGC has received detailed design funding for the proposed active travel route between Weycock Cross roundabout and the Dragons Tail roundabout.

3.58 Through discussions with the Active Travel Officer at VoG, it has been advised that the active travel route from Weycock Cross to Rhoose is the subject of a bid to WG and would be fully funded by them. There would therefore be no requirement from CAVC to provide any additional funding.

LTP Recommendation 16

3.59 An active travel link from the site to the existing active travel route to the south should be investigated and potentially delivered via a Section S278 agreement.

SLR Response

3.60 The proposed active travel link from the site is provided to enable staff and students to access the new bus stop on Port Road. There are no proposals to extend the existing active travel route on Port Road along the frontage of the Holiday Inn hotel. As agreed with VoGC, this is not a reasonable request and does not provide a direct benefit to the development.

LTP Recommendation 17

3.61 The nearest bus stops on Port Road should be audited and upgraded with real-time passenger information and improved litter management (waste bins) to cater for the increase in demand and to encourage bus usage, particularly relating to commercial services which may not utilise the proposed new bus stop at the site frontage. If a proposed new bus stop to service the site does not materialise, contingency should be put in place to upgrade the ICAT bus stop to include seating, shelter and a raised platform.

SLR Response

3.62 An audit of the bus stops on Port Road has been undertaken in the submitted TA which describes the stops being equipped with bus boarding kerbs, shelters, seating and timetable information. Whilst staff and students will be encouraged to use existing bus services where appropriate, a new bus stop is also proposed on Port Road, just to the east of the pedestrian and cycle access into the site.

3.63 Therefore, it is considered that the existing and proposed bus stop infrastructure is suitable to cater for the likely demand of public transport users associated with the proposed development.

LTP Recommendation 18

3.64 Seek S106 contributions to secure the short-term future of the CAVC Rider service and encourage improved commercial bus services to the site.

SLR Response

3.65 This point is explained in a separate S106 letter due to be submitted to VoGC.

LTP Recommendation 19

3.66 Subject to the outcome of the recommended parking saturation surveys of the ICAT car park and local off-site public highway, further measures should be considered to reduce car use, such as car share spaces or a site car club. Further consideration should also be given to traffic orders to discourage inappropriate on-street parking on surrounding roads.

SLR Response

3.67 The proposed development will also be supported by a Travel Plan for staff and students. The Travel Plan will focus on information provision for staff/students through a Welcome Pack and onsite notice boards. There will also be a Travel Plan Coordinator in place to implement the Travel Plan. The Travel Plan will be subject to annual monitoring for a period of 5 years.

3.68 In the meeting on 11th July 2024, VoGC confirmed that there are Traffic Regulation Order (TRO) proposals for the unnamed road and the road leading to DNATA Catering to discourage on-street parking in the vicinity of the site.

3.69 Specific Section 106 points are discussed under separate cover.

LTP Recommendation 20

3.70 The Travel Plan should be revised to include more ambitious targets and additional measures to reduce private car use. A reserve fund should be secured for further interventions if targets are not met.

SLR Response

3.71 As discussed with VoGC, it has been agreed that it is not appropriate or reasonable for the developer to provide a Travel Plan reserve fund to implement further intervention if targets are not met. VoGC advised that they have not imposed this requirement on similar types of development within the Vale of Glamorgan and agreed in the meeting on 11th July 2024 that it would not be appropriate for the proposed development to commit to a Travel Plan reserve fund.

3.72 The Travel Plan will focus on information provision for staff and students through a Welcome Pack and onsite notice boards. There will also be a Travel Plan Coordinator in place to implement the Travel Plan and the Travel Plan will be subject to annual monitoring for a period of 5 years.

4.0 Summary and Conclusions

Summary

4.1 This Transport Assessment Addendum (TAA) addresses the highways comments received from both the Vale of Glamorgan Council (VoGC) and Link Transport Planning (LTP) in relation to the planning application for an Advanced Technology Centre (ATC) located near Cardiff Airport in Rhoose.

4.2 The comments and recommendations from VoGC and LTP have been reviewed, and further information and justification has been provided in this TAA as requested, following discussions with VoGC in a meeting held on 11th July 2024.

4.3 This TAA includes the following updates and points of clarification based on the recommendations received from VoGC and LTP:

- An updated policy review to include policy documents listed in the LTP TA review; and
- Updated Swept Path Analysis to include an 11.2m refuse vehicle.

4.4 As agreed with VoGC, the following recommendations by LTP are not required:

- Formal active travel audits.
- Audit of nearby bus infrastructure.
- Parking saturation surveys.
- Additional sensitivity test of 16:00-17:00 time period.
- 2033 Future Year assessment using TEMPro traffic growth applied.
- Travel Plan Reserve Fund.
- Cycle parking saturation survey at Rhoose rail station.
- Enhancements to nearest bus stops to the site.
- Upgrades to existing crossing facilities at the Port Road/Holiday Inn roundabout.
- Active travel link from the site to the south to connect to the existing route on Port Road.

4.5 It has also been agreed with VoGC that a Stage 1/2 Road Safety Audit can be undertaken at detailed design stage, and a DSMP can be subject to a pre-occupation planning condition.

4.6 Further information with regards to sustainable transport proposals is included in a separate S106 letter due to be submitted to VoGC.

Conclusion

4.7 In conclusion, the comments and observations raised by VoGC and LTP have been sufficiently addressed within this TAA and through discussions with highways officers at VoGC.

4.8 The proposal to develop the ATC site at this location should therefore be encouraged.

Appendix A VoGC Response and LTP TA Review

Advanced Technology Centre, Vale of Glamorgan

Transport Assessment Addendum

WEPco Limited

SLR Project No.: 425.002058.00001

30 July 2024

Vale of Glamorgan Council

2024/00329/FUL – Land to the South of Blackton Lane and West of Port Road, Rhoose

Transport Assessment Review

Document Control

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Table of Contents

1. INTRODUCTION

1.1 Context

Link Transport Planning has been commissioned by the Vale of Glamorgan Council (VoG) to undertake a review of the Transport Assessment (TA) associated with the application at the site known as Land to the South of Blackton Lane and West of Port Road, Rhoose.

The application (reference 2024/00329/FUL) is listed on the planning register as follows:

> *'Development at land to the south of Blackton Lane and west of Port Road for a new Advanced Technology Centre for Cardiff and Vale College including landscaping, related infrastructure and engineering works'.*

The Transport Assessment submitted as part of the application and subject to review was undertaken by SLR and is dated 5 April 2024.

1.2 Scope

The purpose of this document is to provide a detailed review of the Transport Assessment methodology, outputs, and mitigation strategy to ensure that they are robust and appropriate for the development impact, with due consideration of current transport planning policy and Welsh Office Circular 13/97: Planning Obligations.

1.3 Format

This review adopts the following format:

1. Each Transport Assessment category is interrogated, and a summary of key information is provided.
2. Any discrepancies or items that require clarification are discussed, firstly with reference to 'major observations'. These observations are considered to have a material impact on the Transport Assessment conclusions and the planning application deliberation process.
3. Any discrepancies or items that require clarification that are not considered 'major' are included in the 'minor observations' section of each category. These observations are unlikely to have any material impact on the conclusions of the Transport Assessment but would benefit from being rectified where feasible.

4. At the end of each section, recommendations are provided for the Vale of Glamorgan to consider when formulating formal Highway Observations.

It must be noted that the categorisation of ‘minor’ or ‘major’ items is subjective and that the Vale of Glamorgan reserves the right to reclassify based on other considerations.

2. TRANSPORT POLICY

The TA provides commentary on the following documents:

- Planning Policy Wales (Edition 12 – 2024)
- Technical Advice Note 18: Transport
- Placemaking Wales – Placemaking Guide 2020
- Future Wales - The National Plan 2040 (2021)
- Llwybr Newydd: The Wales Transport Strategy (2021)
- Active Travel (Wales) Act 2013
- The Vale of Glamorgan Local Development Plan 2011-2026
- Vale of Glamorgan Local Transport Plan 2015-2030
- Vale of Glamorgan Parking Standards SPG (January 2019)

Major observations

None.

Minor observations

There are additional publications which are relevant to the application site but are not documented, including:

- Well-being of Future Generations (Wales) Act 2015
- Active Travel Act Guidance (2021)
- Vale of Glamorgan Corporate Plan 2020-2025
- Vale of Glamorgan Council Climate Change Challenge Plan 2021-2030
- Vale of Glamorgan Public Services Board Well-Being Plan 2023-2028

Transport Policy Recommendations

1. Update the Transport Assessment policy section to include items listed in ‘minor observations’.

3. SITE APPRAISAL

The TA identifies the site's location northeast of Cardiff Airport and to the northwest of Port Road. Land surrounding the proposed development includes a Cardiff Airport long stay car park to the south, an aircraft supply shop to the west, and agricultural land to the north and on the opposite side of Port Road to the southeast of the site.

Walking

- The TA states the pedestrian environment around the site includes continuous footways on both sides of the carriageway from the site access to the north, extending to the Cardiff Airport access roundabout south towards the Port Road/Holiday Inn Express roundabout.
- Dropped kerbs with pedestrian refuge islands, tactile paving, and adequate lighting are available at these roundabouts.
- However, Port Road northbound lacks pedestrian footways towards the A4226.
- A shared cycle/footway is present along Porthkerry Road southbound, connecting to the centre of Rhoose.
- The nearest Public Right of Way (PRoW) is along Porthkerry Road.
- The TA highlights that current pedestrian connectivity is insufficient for a reasonable walking commute from Barry. Future improvements, including a shared footway/cycleway on Port Road, are expected to enhance this route. Nevertheless, due to the site's remote location from existing residential settlements, it is anticipated that few users will travel by foot.

Cycling

- The TA claims the site has good cycling connectivity, with the nearest National Cycle Network (NCN) route 88 running along Porthkerry Road and towards the Cardiff Airport roundabout.
- Shared-use paths are available along Porthkerry Road towards Rhoose, segregating cyclists from 50mph traffic.
- Local on-road and off-road routes provide cycle connection opportunities from the NCN to Rhoose Cardiff International Airport Railway Station.
- The TA notes that Rhoose Cardiff International Airport station lacks cycle parking facilities.

Bus Provision

- The TA identifies local bus services (304, 905, and C1), providing around 4 buses per hour, connecting the site to Barry, Llantwit Major, Cardiff, and Rhoose Rail Station.

- The BREEAM accessibility score is noted to be relatively low, at 3.42.
- The closest bus stop is approximately 130m south of the site on Port Road, accessible via footways.

Rail Provision

- Rhoose Cardiff International Airport station is approximately 3.3km from the site, a 45-minute walk or 12-minute cycle.
- The station offers self-service ticket machines, a car park with 66 spaces, and customer information points but lacks cycle parking facilities.
- Rail services include hourly services to Bridgend and Cardiff Central on weekdays and Saturdays, with reduced frequency on Sundays.

Local Amenities

- Due to its location, many facilities will be provided on-site, including a café and social space to reduce the need for external travel.
- Proximity to off-site amenities is limited, with most located in Rhoose, greater than 3km away.

Collision Data

- The TA states that no inherent safety issues have been identified on the existing highway network.

Major observations

The site is noted to be near facilities and amenities, but proximity alone is insufficient to encourage sustainable travel. The Active Travel Act Guidance requires active travel infrastructure to be safe, comfortable, attractive, direct, and cohesive. The TA does not include formal active travel audits to assess site accessibility against these criteria. Local deficiencies that should be formally identified and considered by active travel audits include poor lighting on Porthkerry Road, which is detrimental to safety and perceptions of safety for prospective site users. The active travel audits should identify any missing dropped kerb and tactile paving crossings (if present) along the key desire lines. The audits should also establish whether there is suitable cycle parking at key amenities in Rhoose.

The Institution of Highways and Transportation (IHT) guidelines on providing for journeys on foot recommend maximum walking distances of 400 metres (approximately 5 minutes walk) as desirable, 800 metres (approximately 10 minutes walk) as acceptable, 1,200 metres (approximately 15 minutes walk) as the preferred maximum, and 2,000 metres (approximately 25 minutes walk) as the upper threshold for walking trips in urban areas, depending on trip purpose.

In the context of the site's location, it is observed that many key amenities, including food outlets, recreational facilities, and community services, are not within these recommended IHT walking distances. Specifically, the majority of amenities are in Rhoose, which is beyond the preferred maximum walking distance of 1,200 metres and even the upper threshold of 2,000 metres for walking trips. This significant distance means that the site does not meet the desirable or acceptable walking distances for most local facilities, limiting the site's attractiveness and convenience for pedestrians to and from Rhoose.

The proposed Advanced Technology Centre (ATC) is also situated too far from key catchments in Barry to be effectively served by walking or cycling. Given the distance, it is unlikely that students and staff will consider walking as a viable option for their daily commute, which is acknowledged in the TA. Furthermore, for daytime trips, such as during lunchtimes, there are limited nearby opportunities for students or staff to visit local amenities within a reasonable walking distance.

The identified nearest bus stops to the site on Port Road do not have real-time passenger information and would benefit from improved litter management (i.e. waste bins).

Public transport opportunities in the vicinity of the site are noted to be limited. While current CAVC Rider bus service funding exists, it does not cover all origin/destination zones associated with the proposed site demand. Future funding is also uncertain.

Minor observations

None

Site Appraisal Recommendations

2. Formal active travel audits for key routes in the vicinity, particularly between the site and Rhoose Cardiff International Railway Station, should be conducted to establish whether the site is accessible and attractive to a variety of users. The audit should also establish the suitability of existing cycle parking facilities at key amenities in Rhoose, including the Railway Station.
3. An audit of nearby bus stop infrastructure should be provided to identify required improvements to suitably cater for anticipated demand and encourage use.

4. DEVELOPMENT PROPOSALS

The TA states that the proposal is for an Advanced Technology College for Cardiff and Vale College, with a Gross Internal Floor Area (GIFA) of 13,228 sqm on greenfield land. The facility will host up to 1896 students and 85 Full-Time Equivalent (FTE) staff, including 28 non-teaching and 57 teaching staff.

The student number represents the total potential enrolment for the academic year, though not all students will be present on-site at the same time. Full-time students typically attend three days a week.

The TA states that the main education building will contain advanced engineering space, workshops for building services, construction and motor vehicle, higher education space including a 150-seat lecture theatre, recreational spaces, a learning and skills centre, four-court multi-purpose hall, general spaces, and café/reception.

Pedestrian and Cycle Access

- Access for pedestrians and cyclists will be established from Port Road.
- A 3-metre active travel link will connect the proposed bus stop on Port Road to the pedestrian and cycle entrance of the college.
- An additional pedestrian route will be provided from the northwest, linking to CAVC's International Centre for Aerospace Training (ICAT) campus.

Vehicular Access

- Vehicles will access the site from an unnamed road to the northwest, connected via the Cardiff Airport access roundabout.
- The proposed access road will be 6 metres wide.
- Servicing, refuse collection, and emergency vehicle access will also use this route.
- Within the site, two servicing areas are shown.
- VoGC has requested a swept path analysis for a 15m coach within the internal layout. However, the TA states that the use of coaches will be infrequent, primarily for occasional trips such as visits to London. Minibus and taxi trips, either for college-hired minibuses or visitors, are more likely and practical for the site.

Public Transport

- A new bus stop layby and bus stop are planned on Port Road, featuring a shelter, seating, and real-time information displays.

- The layout for the bus stop is still subject to discussions with the Vale of Glamorgan Council (VoGC).
- When coach access to the site is necessary, it is proposed that coaches and the CAVC Rider bus service (subject to ongoing Welsh Government funding) use the new bus stop on Port Road adjacent to the site.

Car Parking Provisions

- The development will include 294 standard car parking spaces, 32 of which will be designated for electric vehicles (EV) and 14 for accessible parking.
- Drop-off layby within the car park at the site entrance.
- There will also be 2 spaces allocated for minibuses.
- According to VoGC maximum standards, the site would require 456 parking spaces, resulting in a shortfall of 162 spaces.
- The TA justifies this reduction by considering the anticipated travel behaviours of staff and students and the availability of additional parking at the nearby ICAT campus.

Cycle Parking

- There will be 284 long-stay and 20 short-stay cycle parking spaces, covered and provided as two-tier racks.
- Cycle parking will be located at three points: east of the pedestrian/cycle access from Port Road, west of the main campus building, and south of the car parking area at the rear of the building.
- Showers and changing facilities will be available for cyclists within the ATC building.
- Based on minimum cycle parking standards, there is a requirement for 333 long-stay and 19 short-stay cycle parking spaces, leading to a shortfall of 48 long-stay spaces.
- The use of cycle parking will be monitored as part of the Travel Plan, with additional spaces provided if needed.

Additional Infrastructure

- Pedestrian crossings with dropped kerbs and tactile paving will be implemented within the car park.
- A designated drop-off/pick-up bay for minibuses and taxis is included in the site layout.

Major observations

The TA confirms that a 3-metre active travel link will connect the proposed bus stop on Port Road to the pedestrian and cycle entrance of the college. However, this will leave a gap in active travel provision for staff and students travelling to and from Rhoose (including the railway station). The new active travel link should be provided to connect to existing nearby active travel infrastructure on Port Road. Consideration should also be given to increasing the width of this route, as the Active Travel Act Guidance suggests that primary shared-use routes should be 3.0m in width, with additional width provided for vertical features and carriageways with traffic travelling >30mph.

Swept path analysis for refuse collections has been based on a 9.595m. The VoG typically requests that the refuse collection vehicle size used for swept path analysis be 11.2 metres in length, whilst Manual for Streets confirms that vehicles up to 11.6m are currently in operation in the UK. The VoG is to confirm if the submitted refuse collection vehicle specifications are suitable.

Furthermore, it is noted that no swept paths have been provided for HGVs (either rigid or articulated). This should be provided to establish the largest vehicle able to service the site.

The TA confirms that there is a significant shortfall in car parking, based on the adopted parking standards, which equate to 162 spaces.

Using Table 5.2 of the TA and applying the modal split from Tables 5.4 and 5.5 for car drivers, the table below provides a high-level interrogation of the TA data to understand the potential hourly car park accumulation. The analysis involves examining the arrivals and departures of students, staff, and visitors, with the assumption that 40% of students and 79% of staff and visitors travel by car. For each time period, the number of car users is calculated by breaking down the total arrivals and departures into these groups and applying the respective proportions. By summing the arriving cars and subtracting the departing cars, the net change in car park occupancy is determined.

Time Period	Arrivals by Car	Departures by Car	Net Accumulation	Cumulative Accumulation
07:00-08:00	37	5	32	32
08:00-09:00	234	35	198	231
09:00-10:00	95	30	65	295
10:00-11:00	56	30	26	321
11:00-12:00	56	47	9	330
12:00-13:00	51	64	-13	317
13:00-14:00	57	50	7	324
14:00-15:00	32	74	-42	282
15:00-16:00	35	82	-47	235
16:00-17:00	33	153	-120	115
17:00-18:00	27	90	-64	51
18:00-19:00	22	28	-7	44
19:00-20:00	8	22	-13	31
20:00-21:00	6	34	-27	4
21:00-22:00	2	7	-5	-1

Table 1: Car Park Accumulation Using Data Provided in the TA

As shown, there is potential for up to 330 vehicles to require car parking on-site, which is in excess of the proposed 294 provision.

The lack of car parking is also likely to significantly increase the number of drop-off/pick-up trips, yet the formal on-site drop-off/pick-up area equates to just two cars, which may be insufficient given the limited parking and high car passenger trips envisaged.

When justifying the proposed car parking shortfall, the TA states that staff and students will be able to use the car park of the nearby ICAT campus, which is also a part of CAVC. The car park of the site is located approximately 600m west of the site, across the roundabout west of the site. This allows the ICAT car park to be reasonably used by the ATC site. However, there is no assessment presented to confirm the additional parking associated with the ICAT campus, nor what the current levels of use are. There are concerns that there are already observed instances of overspill on-street parking, the source of which is not fully understood, and that additional demand associated with the proposal, coupled with the shortfall in parking, could result in local highway operational and safety problems.

Whilst the principle of limiting car parking to encourage sustainable travel patterns is acknowledged, it must be considered in the context of potential on-site, or off-site, highway safety issues which can result from under provision. Further, significant deficiencies have been identified in the local active travel network, and there is no guarantee that CAVC Rider bus services will continue beyond the current financial year, both of which undermine efforts to encourage sustainable travel patterns. S106 contributions to secure the short-term future of the CAVC Rider service and to encourage improved commercial services to the site are deemed essential to make this site compliant with transport planning policy.

It is also noted that the proposed new northbound bus stop on Port Road is less than 250 metres from the existing bus stops further southwest. Bus stops should be spaced to balance accessibility needs with operational efficiency. Too many stops can slow down bus services and reduce overall efficiency, and this matter should be discussed with the VoG Public Transport Officer.

Minor observations

It is noted that the proposed cycle parking is below the adopted standards. However, the TA proposal to monitor usage as part of the Travel Plan is considered an acceptable strategy.

Development Proposals Recommendations

4. Additional swept path analysis is to be provided, to include HGVs. VoGC to confirm the required refuse collection vehicle size.
5. A Delivery Management Plan should be provided for VoGC approval, and the maximum size of each vehicle category that can access the site and which manoeuvres are feasible should be stipulated.
6. Parking saturation surveys of the ICAT car park and local off-site public highway should be provided to demonstrate suitable overspill opportunities to cater for the shortfall in proposed on-site parking.
7. Further consideration is to be given to the proposed drop-off provision, with additional provision to potentially be provided away from the site entrance (e.g. at the sprinkler tank system) to facilitate drop-offs that do not require passage through areas of high user conflict.
8. The proposed active travel link from the site to the new bus stop on Port Road should be extended to connect to the existing active travel route on Port Road. The VoG Active Travel Officer should be consulted on the need to increase the width of this route, as the Active Travel Act Guidance suggests that primary shared-use routes should be 3.0m in width, with additional width provided for vertical features and carriageways with traffic travelling >30mph.
9. The VoG Public Transport Officer should be consulted to establish the suitability of the proposed new bus stop in relation to the close proximity to existing bus stops on Port Road, particularly if commercial services are expected to use both.

5. TRIP FORECASTING, DISTRIBUTION & ASSIGNMENT

The TA utilises both TRICS assessment and first principles assessment to forecast trip generation, distribution, and assignment.

TRICS Assessment

- The TRICS assessment used an occupancy assumption of 100% students, equating to 1896 students, resulting in:
    - AM peak (08:00-09:00): 0.111 trips per student (arrivals), 0.019 trips per student (departures), totalling 245 trips (2-way).
    - PM peak (17:00-18:00): 0.236 trips per student (arrivals), 0.671 trips per student (departures), totalling 156 trips (2-way).

First Principles Assessment

- This assessment assumes an 80% occupancy for students (1517 students), while staff (85) and visitors (100) are assumed to be at 100% occupancy.
- The vehicle trip generation during peak periods using TRICS profiles shows:
    - AM peak (08:00-09:00): 528 arrivals and 80 departures, totalling 608 trips (2-way).
    - PM peak (17:00-18:00): 61 arrivals and 205 departures, totalling 266 trips (2-way).
- A sensitivity analysis is also provided, which considers 100% occupancy, resulting in 323 two-way vehicle movements in the AM peak and 141 two-way movements in the PM peak. However, the TA demonstrates that an 80% occupancy is robust.

Mode Split

- Mode split for students was calculated based on postcode data and settlement type, resulting in:
    - Public Transport: 28%
    - Car Driver: 40%
    - Passenger in a car or van: 23%
    - Bicycle: 1%
    - On foot: 6%
    - Other: 1%

- For staff, the modal split was based on census data:
    - Car Driver: 79%
    - Public Transport: 6%
    - Passenger in a car or van: 7%
    - On foot: 5%
    - Bicycle: 1%

Vehicle Trip Forecasts

- Based on the 80% student attendance the forecast student/staff/visitor vehicle trips are:
    - AM peak (08:00-09:00): 233 arrivals, 35 departures, totalling 269 trips.
    - PM peak (17:00-18:00): 27 arrivals, 91 departures, totalling 118 trips.

Vehicular Trip Distribution and Assignment

- Trip distribution uses postcode data and professional judgement:
    - Staff and visitor trips are mainly distributed to Waycock East (43% or 91 trips), Waycock South (35% or 73 trips), and Waycock North (15% or 31 trips).
    - Student trips are primarily distributed to Waycock East (48% or 110 trips) and Waycock South (27% or 61 trips).

Major observations

The trip forecasting, distribution, and assignment methodology is logical and robust. However, it is unclear why the PM peak has been selected at 1700-1800. Excluding lunchtime (when many trips are likely to be on foot), the school PM peak is shown to be 1600-1700. When combined with the local highway network traffic data, the combined peak could be 1600-1700. Whilst the AM peak has higher overall development traffic, the movement patterns differ between the two which could lead to operational and safety concerns that have not yet been fully assessed.

Minor observations

None.

Trip Forecasting, Distribution & Assignment Recommendations

11. Undertake an additional sensitivity test of the 1600-1700 time period to reflect the development PM peak and potentially the highway network PM peak.

6. HIGHWAY IMPACT ASSESSMENT

The scope of Highway Impact Assessment was derived in collaboration with Vale of Glamorgan Council (VoGC), focusing on several key junctions:

- B4265/Fontygary Road
- Fontygary Road/Fonmon Road/Fontygary Leisure Park
- Rhoose Road/Readers Way/Porthkerry Road Roundabout
- Pentir Y De/Porthkerry Road
- Port Road/Airport Car Park Access Road Roundabout
- A4226/Port Road Roundabout
- Waycock Roundabout.

Data Collection and Methodology

  - Turning Count Surveys were used to establish baseline traffic flows at the key junctions.
  - Junctions 10 and LinSig were used for capacity analysis.
  - Assessment Periods are AM (08:00-09:00) and PM (17:00-18:00) peak hours

Assessment Scenarios

- **Scenario 1:** Baseline (2023 Traffic Surveys)
- **Scenario 2:** Future Year (2033)
- **Scenario 3:** Future Year (2033) + Development
- **Scenario 4:** Future Year (2033) + Development (Sensitivity)

Future Year Scenario

- The 2033 Future Year scenario incorporates the Model Farm development (planning ref: 2019/00871/OUT), a major mixed-use project part of the Cardiff Airport - St. Athan Enterprise Zone and plans to enhance the Port Road/A4226 roundabout.

Percentage Impact Assessment

- Junctions with over 5% impact from development traffic are subject to further detailed assessment.
- Significant impacts were noted at the Port Road/Model Farm/Airport Car Park, Port Road/A226 Roundabout, and Waycock Cross Roundabout.

Highway Network Modelling

- **Junction 1: Port Road/Holiday Inn Express Roundabout – ARCADY**
    - The junction modelling results indicate that the junction operates well within capacity under all scenarios. The highest RFC recorded is 0.49 in the PM peak of the 2033 Future Year + Development scenario, resulting in minimal queuing and delay.
- **Junction 2: Port Road/A4226/Model Farm Access – ARCADY**
    - Modelling results show the junction will operate within capacity across all scenarios. The highest RFC is 0.67 in the PM peak of the 2033 Future Year + Development scenario, which remains within operational limits.
- **Junction 3: Waycock Cross Roundabout – ARCADY**
    - The junction is forecast to operate within its theoretical capacity in the 2023 Baseline. However, it approaches capacity in the 2033 Future Year scenario, primarily due to the Model Farm development. The addition of the proposed development traffic increases congestion, with the RFC exceeding 1.0 in the AM peak of the 2033 + Development (Sensitivity) scenario.

Summary

The TA concludes that the proposed development will result in minimal additional delay and queuing at the assessed junctions under normal operational conditions. The development impact is considered manageable, with the most substantial impact at the Waycock Cross roundabout, which is expected to reach capacity mainly due to the Model Farm development.

Major observations

The TA highlights that the Waycock Cross Roundabout currently operates within theoretical capacity. The addition of Model Farm committed development traffic pushes the junction to near capacity and then post-development over capacity.

The weekday AM peak period is shown to be the most sensitive to further traffic increases. With the addition of development-generated traffic (based on 80% student occupancy), the application site is shown to increase queues on Port Road (East) from 13.2 PCUs to 97.7, with delay on the same arm rising from 51 seconds to 420.

There is also shown to be a significant impact on Pontypridd Road, with queues rising from 6.5 PCUs to 20.6 and delay from 25 seconds to 76 seconds.

The text correctly notes that traffic models cannot perfectly predict future conditions due to uncertainties and multiple variables. While models have limitations, they provide valuable insights into potential future scenarios and are essential tools for informed decision-making.

The potential for increased congestion at the Waycock Cross roundabout is a significant concern. The text suggests that highway capacity constraints should not prevent development, assuming that demand and queuing will not increase as predicted. The TA's reliance on the adaptability of people to minimise inconvenience, such as retiming journeys or switching modes, overlooks the limited availability of viable alternatives to car travel in this area.

Congestion will also impact bus services and the viability of commercial bus services in the future. The development must include clear strategies to enhance public transport services and active travel routes to mitigate anticipated congestion effectively.

Furthermore, reliance on CAVC rider services, contingent on Welsh Government funding, adds uncertainty to the transport strategy.

Minor observations

The decision to avoid the application of TEMPro growth on the 2033 assessment year has not been suitably justified in the TA. Whilst it is noted that committed development (Model Farm) has been added, there is no allowance for background traffic growth associated with anticipated population growth and potential increased car ownership and usage, despite policy efforts to reduce the latter. Recent trends indicate that traffic in Wales has continued to rise since the COVID-19 pandemic (https://roadtraffic.dft.gov.uk/regions/4).

However, it is accepted that any mitigation for an education facility should be based on an opening-year scenario and that the unknowns of future traffic growth should not be the focus of such decisions. On this basis, it would have been more appropriate to revise the 2033 assessment title to 2023 to reflect the methodology applied more accurately. Standard industry practice would then apply background growth for a +5 or +10 future year scenario, which would reassure the Highway Authority further of the potential future operation of local junctions.

Highway Impact Assessment Recommendations

12. The 2033 assessment title should be amended to reflect a base 2023 year. An additional future year assessment of +5 or +10 years should also be provided, with TEMPro growth applied. The requirement for mitigation should be based predominantly on the base year assessment. Suitable adjustments should be considered for background traffic and development traffic forecasts to account for the Wales Transport Strategy modal shift and working from home aspirations. The focus should be on the impact at Weycock Roundabout which is noted to be highly sensitive to traffic increases.

7. TRANSPORT IMPLEMENTATION STRATEGY

The Transport Assessment outlines the Transport Implementation Strategy (TIS) in accordance with the Welsh Government's Planning Policy Wales Technical Advice Note 18. This strategy sets objectives and targets to manage travel demand, infrastructure needs, and monitoring mechanisms.

Access Arrangements:

- **Pedestrian Access**: Via Port Road and the Cardiff Airport access roundabout.
- **Cycle Access**: Through the car park located in the northwest of the site, with dedicated cycle parking spaces near the active travel access on Port Road.
- **Drop-off/Pick-up Bay**: Provided within the site for minibus and taxi access. Coaches will utilise the new bus stop on Port Road.
- **Main Vehicular Access**: From the unnamed road to the northwest of the site, accessed from the Cardiff Airport access roundabout.
- **Servicing Route**: For refuse, delivery, fire, and maintenance vehicles, via the main access on the unnamed road.

Mode Share Target: The TA provides mode share targets to reduce car usage and increase public transport and walking:

- **Students**:
    - Reduce car vehicle trips by 2.5%.
    - Increase public transport trips by 2.5%.
- **Staff and Employees**:
    - Reduce single occupancy vehicle trips.
    - Increase car sharing trips. The actual mode share target for staff will be set after development completion and a travel survey within three months of occupation.

An Interim Travel Plan accompanies the planning application. The plan includes measures to promote sustainable travel options and manage travel demand. Key measures proposed in the Travel Plan include:

Flexible Working:

- Non-student facing staff are permitted to work up to 50% of their time from home.
- Lecturers can work from home one day a week, reducing the need for daily travel to the site.

Student Attendance:

- Full-time students will attend face-to-face lectures three days a week, reducing the number of students on-site at any given time.

Car Sharing Promotion:

- Employees and students over 18 will be encouraged to car share through schemes such as Liftshare. Information on the benefits and how to sign up will be included in the Travel Plan Welcome Pack.
- Measures to support car sharing may include:
    - Ensures participants have a guaranteed ride home in case of unforeseen problems.
    - Car sharers will have access to parking spaces closest to the buildings, with approved permits and monitored usage.

Measures to Promote Cycling and Walking:

- Safe and secure cycle parking located near the main entrance.
- Shower and changing facilities available on-site for cyclists and walkers to change and store their equipment.
- Distribution of cycling maps highlighting suitable routes and travel times.

Measures to Promote Public Transport:

- The CAVC Rider bus service provides free bus travel for CAVC students and staff between Cardiff city centre and CAVC sites, operating Monday to Friday between 08:00 and 18:00. Continuation of this service to new campuses is subject to Welsh Government funding.
- Public transport information, including timetables and potential discounts such as the Welsh Young Persons Discounted Travel Scheme Card and 16-25 railcards, will be provided in publicly accessible locations, including communal noticeboards.

Business Travel and Parking:

- **Pool Cars**:
    - The Travel Plan will explore the implementation of a pool car scheme for staff business travel, with expected benefits including:
        - Reduced travel expenditure through centralised management of pool cars.
        - Improved vehicle maintenance via regular servicing of pool cars.

- Use of updated vehicle technology, including the latest fuel-efficient or electric vehicles.
- Ensured proper insurance coverage for all pool cars.
- Enhanced ability to manage and control travel-related expenses.

Additional measures and strategies within the Travel Plan will include continuous monitoring and evaluation of travel patterns, regular feedback from staff and students, and periodic updates to ensure the plan remains effective and responsive to changing circumstances.

Major observations

It is a common problem that it is difficult for Travel Plan Co-ordinators to secure funding for non-committed travel plan items after planning permission is secured. Therefore, it is recommended that the travel plan forms part of the S106 agreement and that a specified sum be allocated as a 'reserve fund' to enable the Travel Plan Co-ordinator to implement meaningful remedial measures should the sustainable modal targets not be achieved.

Planning Policy Wales (2024) confirms that:

> *'Planning authorities must support active travel by ensuring new development is fully accessible by walking and cycling. The aim should be to create walkable neighbourhoods, where a range of facilities are within walking distance of most residents, and the streets are safe, comfortable and enjoyable to walk and cycle.'*

Planning Policy Wales (2024) also directs that:

> *'In determining planning applications, planning authorities must ensure development proposals, through their design and supporting infrastructure, prioritise provision for access and movement by walking and cycling and, in doing so, maximise their contribution to the objectives of the Active Travel Act.'*

There are several potential areas of concern regarding existing sustainable transport infrastructure that are not discussed or proposed to be mitigated:

- Active Travel:
  - The TA does not include formal active travel audits to assess site accessibility, and there are anticipated to be further constraints to the site that have not been identified and mitigated. Formal active travel audits for key routes in the vicinity, particularly between the site and Rhoose Cardiff International Railway Station, should be conducted to ensure the site is accessible and attractive to a variety of users.

- No match-funding has been proposed to help deliver the Weycock Roundabout to Cardiff International Airport route. The VoG Active Travel Officer should be consulted on this item.
- The Active Travel Network Map (ATNM) confirms route limitations in the vicinity of the site. While the magnitude of the required improvements is beyond what could reasonably be expected to be delivered by this site alone, a proportionate contribution towards further route feasibility studies, design, and enhancements should be provided. A link from the site to the existing active travel route to the south should also be provided via S278.
- It is noted that the proposed cycle parking is below the adopted standards. The use of cycle parking will be monitored as part of the Travel Plan, with additional spaces provided if needed. This is deemed acceptable.
- The TA notes that the VoGC had requested crossing points at the existing Port Road/Holiday Inn roundabout to be provided but the TA states that this is not considered appropriate. However, there is insufficient evidence presented to justify this statement and further assessment should be undertaken using ATAG.

- Public Transport:
  - The nearest bus stops on Port Road lack real-time passenger information and would benefit from improved litter management (waste bins). The existing C1 stop at the ICAT building also lacks shelter, seating, raised platform and real time passenger information.
  - Public transport opportunities in the vicinity are limited. While current CAVC Rider bus service funding exists, it does not cover all origin/destination zones associated with the proposed site demand. S106 contributions should be sought to secure the short-term future of the CAVC Rider service and to encourage improved commercial services to the site. The VoG Public Transport Officer should be consulted on this item.
- Parking and Traffic Management:
  - There is a significant shortfall of car parking based on adopted standards, equating to 162 spaces. Information in the TA indicates that the provision could lead to overspill. Parking saturation surveys of the ICAT car park and local off-site public highway should be provided to demonstrate suitable overspill opportunities to cater to the shortfall in proposed on-site parking. Where overspill cannot be provided, strong

sustainable travel mitigation measures are required to discourage car use and traffic orders may be required to maintain highway safety.

- Travel Plan:
  - A revised Travel Plan should be provided to include more ambitious targets than currently proposed and with additional meaningful measures and commitments to reduce private car use. The travel plan should secure an appropriate reserve fund, which should be fully budgeted for and set aside to allow for further intervention if targets are not being met. This will help mitigate the impact of the development on surrounding streets. The travel plan should also cover the construction period.

Minor observations

None.

Transport Implementation Strategy Recommendations

13. Propose mitigation to address deficiencies identified in the active travel audits that are recommended to be undertaken. These should focus on key site desire lines, especially between the site and Rhoose Cardiff International Railway Station, to ensure accessibility and attractiveness for various users.
14. The TA notes that the VoGC had requested crossing points at the existing Port Road/Holiday Inn roundabout to be provided but the TA states that this is not considered appropriate. However, there is insufficient evidence presented to justify this statement and further assessment should be undertaken using ATAG.
15. Consult with the Vale of Glamorgan Active Travel Officer regarding the status of the proposed Weycock Roundabout to Cardiff International Airport Active Travel route. Match-funding should be provided by the development via S106 to enhance the route's prospect of wider funding and delivery.
16. An active travel link from the site to the existing active travel route to the south should be investigated and potentially delivered via a Section S278 agreement.
17. The nearest bus stops on Port Road should be audited and upgraded with real-time passenger information and improved litter management (waste bins) to cater for the increase in demand and to encourage bus usage, particularly relating to commercial services which may not utilise the proposed new bus stop at the site frontage. If a proposed new bus stop to service the site does not materialise, contingency should be put in place to upgrade the ICAT bus stop to include seating, shelter and a raised platform.
18. Seek S106 contributions to secure the short-term future of the CAVC Rider service and encourage improved commercial bus services to the site.
19. Subject to the outcome of the recommended parking saturation surveys of the ICAT car park and local off-site public highway, further measures should be considered to reduce car use, such as car share spaces or a site car club. Further consideration should also be given to traffic orders to discourage inappropriate on-street parking on surrounding roads.
20. The Travel Plan should be revised to include more ambitious targets and additional measures to reduce private car use. A reserve fund should be secured for further interventions if targets are not met.

Vale of Glamorgan
Highway Authority Observation Sheet

Planning Application Ref:	2024/00329/FUL
Observations By:	James Aitken
Date:	27 June 2024
Location:	Land to the South of Blackton Lane and West of Port Road, Rhoose
Proposal:	Development at land to the south of Blackton Lane and west of Port Road for a new Advanced Technology Centre for Cardiff and Vale College including landscaping, related infrastructure and engineering works
Case Officer:	Mr. Robert Lankshear

The development proposes the construction of a new education campus for Cardiff and Vale College on vacant land to the East of Cardiff Airport.

The Transport Assessment has been reviewed and the review report will be submitted with these observations. The highway authority agrees with the contents of the report and has the following additional comments on the layout:-

1. No drawings have been provided showing the locations and extents of the proposed active travel routes. These will need to be provided on a drawing for comment as wording within the TA would not be sufficient enough and would be ambiguous when agreeing detailed designs following planning consent. Cycle routes should be provided at minimum 3.5m wide with 1m buffer strip grass verges adjacent to the carriageway. Snippets have been shown in the TA however full plans will need to be provided and stand alone.

2. The indicative locations of the new bus stops and shelters will need to be provided on a plan. The exact locations and details can be agreed as part of a suitable worded condition however we should agree indicatively that two new stops are being proposed with suitable provisions including laybys, shelters etc.

3. Traffic regulation orders may be required to prevent parking and dropping off along Port Road to the South of the development site.

4. Provide proposals of where service/delivery vehicles will drop off goods and ensure that reversing on site in close proximity to other members of the public/parking spaces is prevented. Swept paths should also be provided.

5. Any access road specified to be used by HGV's should be 7.3m wide. A access road and parking GA should be provided showing widths/geometry.

Appendix B Updated Swept Path Analysis

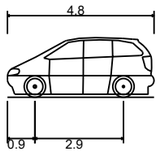
Advanced Technology Centre, Vale of Glamorgan

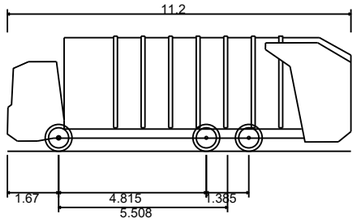
Transport Assessment Addendum

WEPco Limited

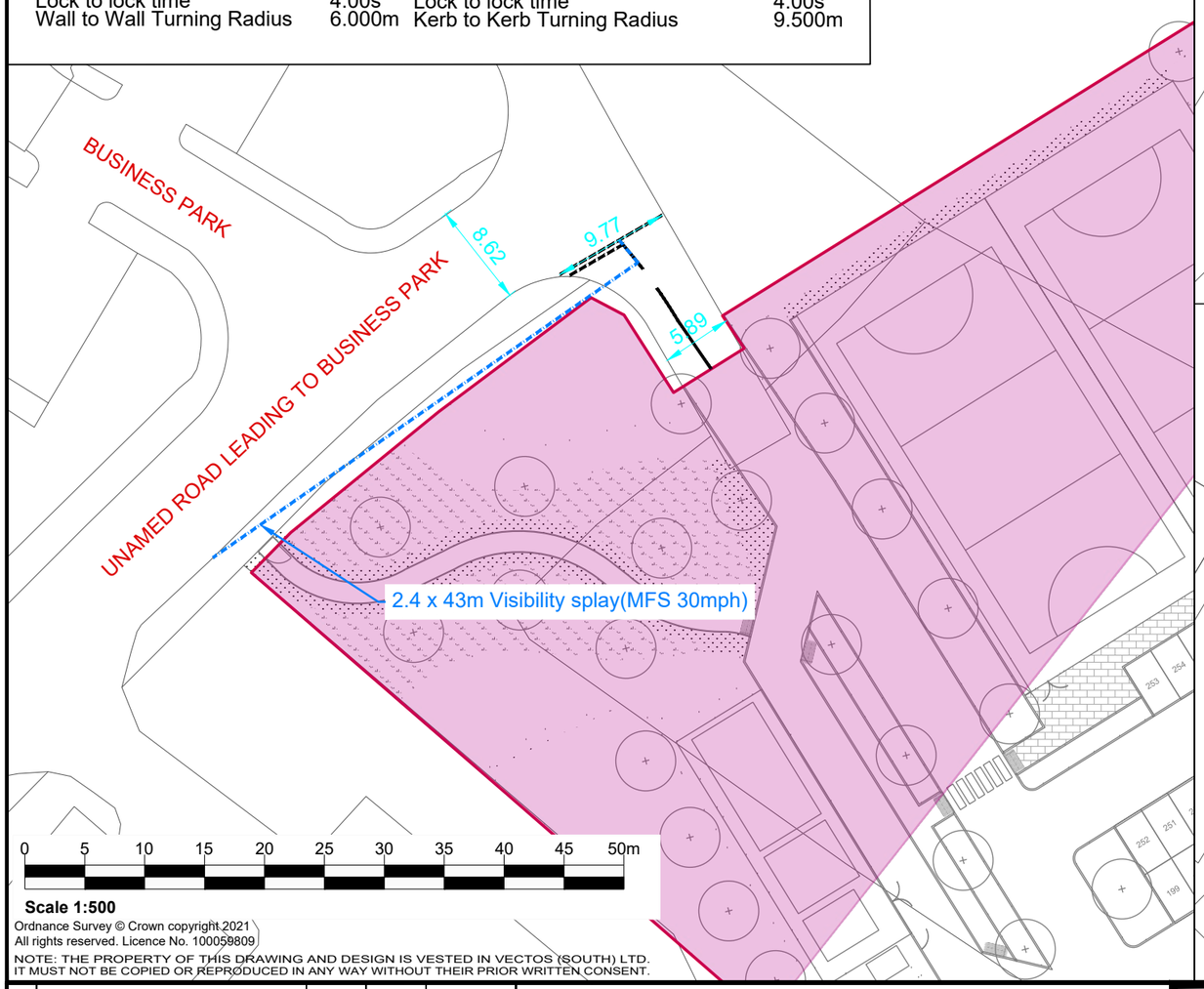
SLR Project No.: 425.002058.00001

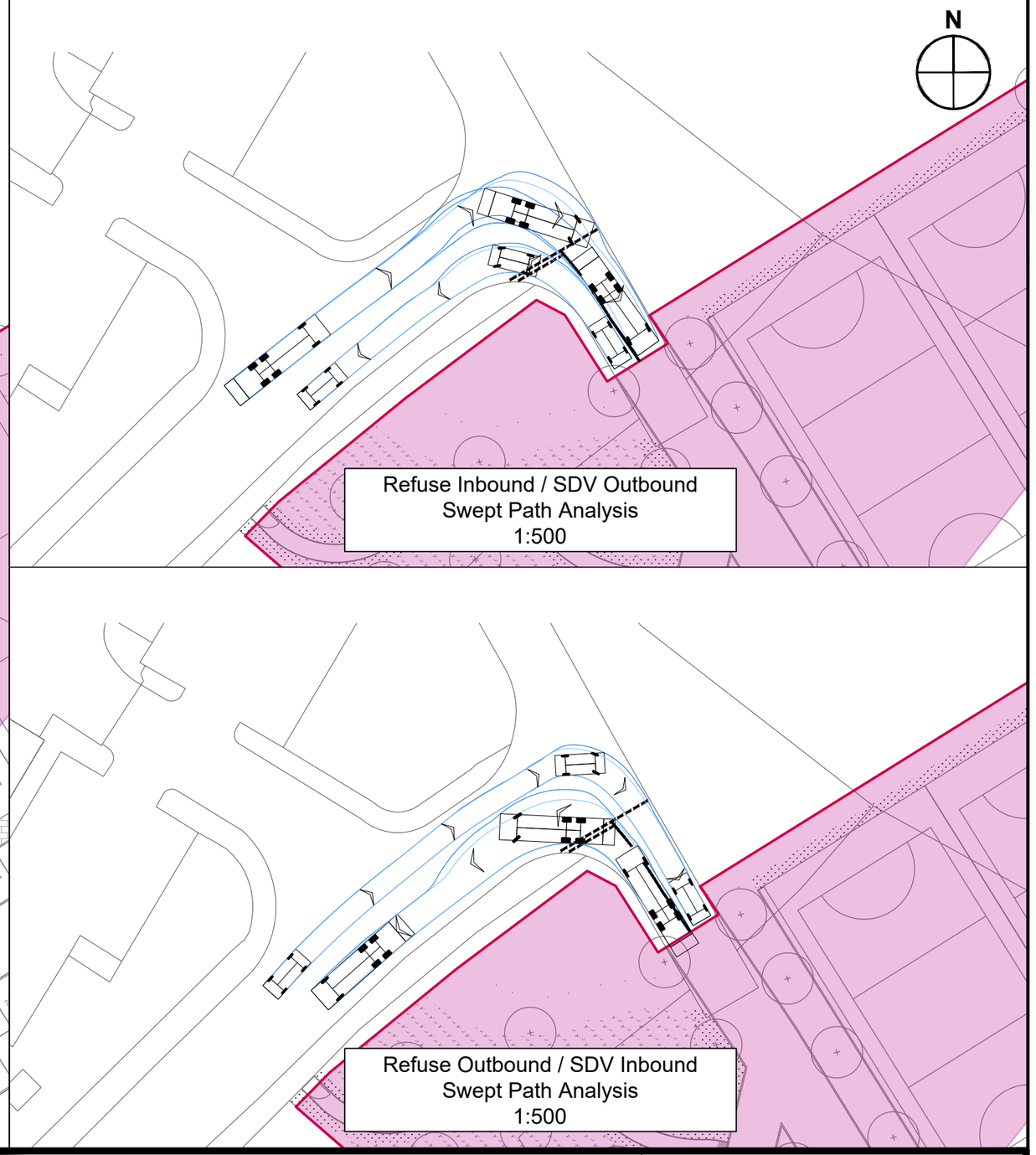
30 July 2024





Standard Design Vehicle (SDV)		Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	
Overall Length	4.800m	Overall Length	11.200m
Overall Width	2.000m	Overall Width	2.530m
Overall Body Height	1.950m	Overall Body Height	3.751m
Min Body Ground Clearance	0.100m	Min Body Ground Clearance	0.304m
Track Width	2.000m	Track Width	2.500m
Lock to lock time	4.00s	Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m	Kerb to Kerb Turning Radius	9.500m





REV.	DETAILS	DRAWN	CHECKED	DATE
A	Updated Masterplan	RJ	-	26.03.24
B	SPA Updated	LJ	CP	26.07.24

INFORMATION ONLY

Notes:

1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

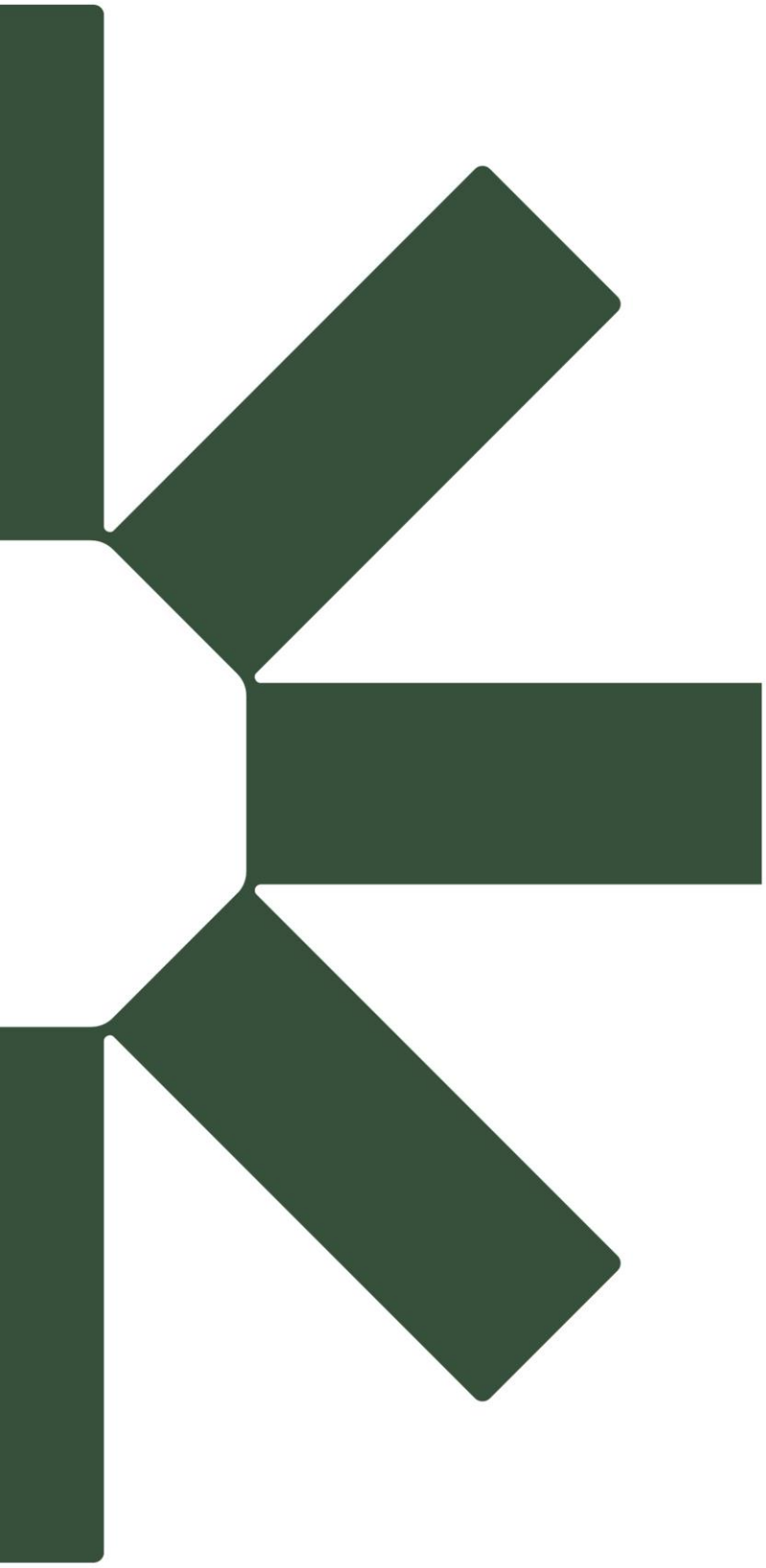
CAVC Advanced Technology Centre, Vale of Glamorgan

CAVC

PROPOSED SITE ACCESS GENERAL ARRANGEMENT VISIBILITY SPLAYS & SWEPT PATH ANALYSIS

DRAWN:	CHECKED:	DATE:	SCALES:	DRAWING NUMBER:	REVISION:
RJ	KR	12.12.23	1:500 at A3	237449_PD02	B

SLR



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