

STRIDE TREGLOWN

**Environmental Statement Health
Check**

CISM

Swansea University

Stride Treglown job no.	152296
Prepared by	JPR
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Revisions

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1. Introduction

1.1. Introduction

1.1.1 The proposed development involves the construction of a new Centre for Integrative Semiconductor Materials (CISM) building at Swansea University's Bay Campus.

1.1.2 CISM is a proposed new facility to bring together semiconductor and advanced materials platforms to research and develop new technologies and products.

1.2. Background

1.2.1 Outline planning application P2010/0222 for "*University campus including innovation park, mixed academic, research and development facilities (Use Class B1) , university residential accommodation and ancillary student/staff facilities, parking and landscaping (Outline planning application with all matters reserved)*" was accompanied by an Environmental Statement (URS, March 2010) which provided a comprehensive assessment of the various environmental and technical considerations relevant to the development of the Swansea Bay Campus. The application was approved on 31st August 2012.

1.2.2 A Section 73 application (P2018/0491) to "*vary conditions 3 and 4 (To allow an extension of time for the submission of reserved matters in relation to the remaining phases of the development) of Planning Permission P2010/0222 for the erection of a university campus originally approved on the 31/08/12*" was accompanied by a Supplementary Environmental Statement (URS, July 2018) which provided a review of the original ES to determine whether an extension of the time to implement the development associated with this Section 73 application could result in any different or new environmental impact. The application was approved on 18th October 2019.

1.2.3 As part of pre-application discussions it was requested that a full application for the Centre for Integrative Semiconductor Materials (CISM) building include a Health Check of the Environmental Statement to establish whether the conclusions of the EIA remain relevant and up to date.

2. Landscape and Visual Impact

- 2.1.1 Chapter 9 of the Environmental Statement provides a detailed assessment of the landscape and visual impacts of the proposals and is supported by photomontages from key views identified by the Council.
- 2.1.2 The assessment identified the potential impacts of the Bay Campus development as a whole and concluded that the long-term permanent landscape and visual effects would be moderate/minor and were not significant. The assessment acknowledged that the site lies within an existing urban fringe location with industrial activity in the vicinity. The proposals were therefore seen to be absorbed into the existing built-up nature of the surrounding environment.
- 2.1.3 The Assessment was based on a maximum permitted building height for this plot of 17.5metres. While the proposed height of the building to the edge of the parapet is 17.8metres with roof top plant and flues projecting beyond this to a maximum height of nearly 23metres.
- 2.1.4 The north-south section illustrates the height of the building and associated flues in the context of the existing campus. The section highlights how the scale of these features is in keeping with the existing context and, while different from the approved scheme, the change is not significant.
- 2.1.5 The overall conclusions of the LVA are considered to remain unchanged and, as a consequence, the impact of the Campus as a whole will be moderate/minor.

3. Traffic, Transport and Access

- 3.1.1 Chapter 10 of the Environmental Statement provides an assessment of the impacts of the Proposed Development on the surrounding highway network, public transport, and cycling and pedestrian amenities. It is based on an assessment of the interaction between future development related movements and existing patterns of vehicular and pedestrian movements.
- 3.1.2 TRICS data was used to estimate the likely vehicle movements associated with the different element of the campus and the total car trip generation included in the Transport Assessment. The data was based upon the maximum permitted development at the campus to ensure the development was capable of accommodating the worst case scenario in relation to transport movements.

Land Use	08:00 – 09:00		17:00 -18:00	
	Arrivals	Departures	Arrivals	Departures
University Staff	286	30	36	228
University Students (Non-resident)	100	25	25	100
University Students (resident)	13	52	52	13
University Visitors	25	5	5	25
Company Building	21	2	3	16
Industry – Business Park	114	19	14	92
Industry - Industrial Unit	58	13	7	61
TOTAL	617	146	141	536

Copy of Table 6-9 of the Transport Assessment (Car Trip Generation)

- 3.1.3 The estimated car trip figures are incorporated into the Section 106 Agreement which applies a sanction should the peak hour trip generation figures exceed those included in the above table. The University have traffic counters to monitor such movements.
- 3.1.4 The worst case scenario was calculated based on the maximum permitted parameters of the site. In relation to light industrial/R&D the following parameters were included:
- Maximum Permitted = 20,000m²
 - Development Completed and Committed = 7,524m² (SMART 3321m² and ESRI 4203m²)
 - Remaining = 12,476m²
- 3.1.5 While the CISM project will increase the total number of movements on the site these will remain substantially below the worst case scenario figure tested. The CISM building will therefore not result in an impact in excess of that previously tested through the outline planning application. The EIA submitted with the outline application therefore remains robust.

4. Ecology

- 4.1.1 Chapter 11 of the Environmental Statement assesses the potential impacts on ecology and nature conservation arising from the proposed campus development.
- 4.1.2 Since the outline permission was approved, the application site has been developed and used as an amenity courtyard with hardstanding, native-species rich planting and University buildings. Any previous ecological interest in the site has therefore been removed to facilitate the development.
- 4.1.3 A Preliminary Ecological Appraisal (July 2019, Aecom) was therefore undertaken to assess the current status of the site. The report notes that the site comprises semi-improved grassland, poor semi-improved grassland, ephemeral short perennial, introduced shrub, other habitats (native shrub planting), amenity grassland, species-poor hedgerow, standalone trees and hardstanding. The Semi-improved grassland is a wildflower garden called 'Flora Industria', this has been seeded with a diverse mix of wildflowers and grasses as part of an initiative between Kew Gardens, Grow Wild and Swansea University via National Lottery grant funding in 2018. The Swansea University Biodiversity Officer states that 'This forms a hotspot for biodiversity on the campus' which is mostly comprised of hardstanding and buildings.
- 4.1.4 It is intended that the existing planting will be relocated elsewhere on the campus. This will have a negative impact at Site level, however, it is unlikely there will be an impact at a local level due to the limited extent of the habitats on Site and availability of alternative habitats of equal or greater value in the wider landscape. No significant impacts are envisaged.

5. Coastal Geomorphology

- 5.1.1 Chapter 12 of the Environmental Statement presents a technical assessment of the effect of the campus development upon the coastal geomorphological processes.
- 5.1.2 Condition 25 of the outline planning permission required the submission of a Monitoring and Mitigation Scheme. This was discharged on 4th January 2013.

- 5.1.3 The Monitoring and Mitigation requirements of the outline permission have been implemented as part of the wider consent for the Bay Campus. The proposals the subject of this application do not raise any further requirements.

6. Flood Risk

- 6.1.1 Chapter 13 of the Environmental Statement presents an assessment of the potential hydrological impacts of the Proposed Development, both within the Site and the immediate surrounding area.
- 6.1.2 The flood risk strategy for the site involves raising the ground level to 7.0m AOD and the finished floor level of buildings and roads to 7.4m AOD.
- 6.1.3 A Drainage and Flood Statement prepared by Aecom recognises that the site was previously designated as Zone C2 but that the 2009 Flood Consequences Assessment concluded that the site meets TAN15 requirements and it can be considered appropriate to deliver the proposed development.
- 6.1.4 The proposed drainage design assumed the finished floor level of the building to be 8.00m AOD. This value is in line and greater than the recommended value indicated in the 2009 FCA document.
- 6.1.5 The proposals are therefore consistent with the outline planning permission and raises no further requirements.

7. Ground Conditions and Hydrogeology

- 7.1.1 Chapter 14 addresses the potential impact of the Proposed Development on existing ground contamination and groundwater levels with respect to the environmental and controlled waters receptors and future users of the site.
- 7.1.2 The outline planning permission included the following conditions which address ground conditions and remediation.
- Condition 15 required the submission of a full assessment of the nature and extent of contamination including, a desk top study and intrusive investigation across the site. An assessment was required of the risks to a number of receptors and an appraisal of the remediation options and justification for the preferred option.
 - Condition 16 ensured that no development should take place until the Remediation Scheme and Verification Plan approved under Condition 15 is submitted to and approved by the LPA.
 - Condition 17 required implementation of the approved scheme and the subsequent reporting of the effectiveness of the remediation carried out.
 - Condition 19 required a monitoring and maintenance scheme to include monitoring the long-term effectiveness of the proposed remediation over a period of 5 years of its completion.
- 7.1.3 Information to discharge these conditions was submitted, with the verification and monitoring details (16 and 19) approved on 3rd September 2015.

- 7.1.4 A Technical Note (006 - 03/12/2019) has been produced by Aecom to provide a summary of the previous ground investigation reports. This notes that the remedial works were completed successfully in 2011, however groundwater monitoring is on-going and continues to show degrading conditions of residual contaminants.

8. Noise and Vibration

- 8.1.1 Chapter 15 of the Environmental Statement describes the assessment of potential noise and vibration impacts associated with the campus development.
- 8.1.2 The assessment identified that the dominant source of noise is the Fabian Way road corridor.
- 8.1.3 An Environmental Noise Survey (August 2019, Hunter Acoustics) for the CISM project concluded that the ambient noise levels on the site are controlled by road traffic from Fabian Way and also from fixed services plant on surrounding University buildings.
- 8.1.4 Hunter Acoustics do not identify any significant impacts and suggest limits for proposed new plant and recommendations for internal ambient noise.

9. Air Quality

- 9.1.1 Chapter 16 of the Environmental Statement provides an assessment of the potential impacts to local air quality resulting from the campus development.
- 9.1.2 An Addendum to the EIA was produced in July 2012 in support of the first phase reserved matters application for the Campus (reference P2012/0888). This noted that “there will be no on-site energy facilities therefore the in-combination effects of traffic and CHP emissions are no longer relevant. The effects of the operational development will be *limited to vehicle exhaust emissions only*”.
- 9.1.3 An Environmental Permitting Technical Note prepared by Atkins (27/11/2019) refers to a series of outstanding queries which would confirm whether the facility would be exempt from environmental permitting requirements due to its use as a research and development facility.
- 9.1.4 Based on the resolution of outstanding queries relating to the above, the air quality impacts associated with the development are likely to be limited to those arising from vehicle exhaust emissions. As per Section 3 on Transport, the number of peak hour vehicle movements falls below the assessment thresholds in the ES and the conclusions remain relevant.

10. Cultural Heritage and Archaeology

- 10.1.1 Chapter 17 of the Environmental Statement provides an assessment of the potential for significant impacts associated with the campus development terms of Cultural Heritage and Archaeology, drawing upon an archaeological desk-based assessment.

- 10.1.2 The assessment concluded that it is highly unlikely that any archaeological and palaeoenvironmental remains are present within the site. This is due to the location of the site and its previously developed uses.
- 10.1.3 There are no new allocations of Scheduled Ancient Monuments Listed Buildings or other heritage assets within or surrounding the site since the original assessment.
- 10.1.4 This assessment and the conclusions within the Environmental Statement therefore remain relevant.

11. Conclusions

- 11.1.1 The proposed development of the CISM Building represents a further development of the knowledge based economic strategy for the site and bringing together academic and commercial research and development on a single purpose built site.
- 11.1.2 As per the assessment above, the conclusions of the Environmental Statement are considered to remain unchanged.

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