

Technical Note

Project: Swansea University Material Import

Subject: Haulage Routes and Method Statement for Traffic Movements

Client:	St. Modwen	Version:	
Project No:	05774-PJA-TN-002	Author:	Barney Irlam
Date:	16/08/2022	Approved:	Charlotte Smith

I Introduction

This technical note has been produced to detail the haulage routes, vehicle movements and methodology for the loading of material at the donor site and unloading at the receiver site, defined below.

Proposals on the Hendrefoilan site, the 'donor' site, are for cut and fill earthworks to create a suitable plot for residential development. As part of these earthworks there will be some reuse of materials on the site of origin, but the cut-fill balance indicates an estimated excess of 16,000m³ of material will be generated.

The Swansea Bay Campus site, the 'receiver site', is currently partially redeveloped. At the western end of the completed development the land requires raising in response to a flood consequence assessment.

Excess materials produced from the cut-fill exercise at the Hendrefoilan site are proposed for re-use at the Swansea Bay Campus site. Materials will comprise natural glacial soils consisting of clays, silts, sands, gravels, and bedrock.

I.1 Donor Site

The donor site is centred on National Grid Reference (NGR) 261015, 193459 in the city of Swansea. The site is an irregular parcel of land, approximately 1.7 hectares in size and is accessed

off Hendrefoilan Drive. Formerly comprising Swansea university student accommodation, the site is currently undergoing redevelopment for residential properties. The first phase of redevelopment has been completed. The next phase of development is currently underway, the demolition of the former student accommodation has been completed and earthworks are due to commence shortly.

1.2 Receiver Site

The receiver site is centred on National Grid Reference (NGR) 269509, 192805 located to the south of Fabian Way approximately 3.5km to the east of Swansea. The site is an irregular parcel of land, approximately 3.5 hectares in size, and is accessed off Baldwins Crescent. The site lies to the west of the Swansea University Bay Campus and is currently undeveloped.

2 Material Movements

The cut-fill proposals drawing for the donor site in Hendrefoilan show a 24,619m³ cut, of which 11,227m³ will be reused on the site of origin, creating a surplus of 13,392m³.

An additional 2,600m³ surplus is anticipated to be generated from foundation and drainage excavations during construction at the donor site.

A bulking factor of 1.15 has been applied to the surplus volume of material so it is anticipated that once excavated there will be approximately 18,400m³ material to export from the donor site.

Assuming a typical 20 tonne haulage road lorry will carry approximately 10m³ of soil per load, this equates to approximately 1,840 full vehicle loads. The haulier has anticipated approximately 60 loads per day. Assuming material movements occur between 8am and 5pm, over a 9-hour period, this would equate to 6.7 vehicle movements per hour or approximately one every 10 minutes.

Based on this number of vehicle movements the duration of the material movement would be approximately 6 weeks.

The material will not be moved during periods of heavy rain due to the likely deterioration of the material caused by handling it in wet conditions. Therefore, depending on weather conditions the duration of the works could be extended.

2.1 Haulage Route

The proposed haulage route is shown on PJA Drawing 05746-SK-9007-0 and described in Table 1.

Table 1: Haulage Route Directions

Distance (miles)	Directions
0.0	Head south-east on Hendrefoilan Drive
0.1	At the roundabout, take the first exit onto Gower Rd/A4118
0.7	Turn right onto Sketty Park Road
0.4	At the roundabout, take the second exit onto Sketty Lane/A4216
0.6	Turn left onto Mumbles Road/A4067
2.5	Continue onto Fabian Way/A483
1.9	Take the exit towards Blazers Caravans
0.1	Continue onto Baldwins Crescent passing under the A483
0.1	Turn left into St Modwen's development site at Swansea University Bay Campus

3 Loading/Unloading Procedure

Lorries will be loaded at the donor site by an excavator. Lorries will stop next to the stockpile to be loaded. The excavator will be used to clear the area in between loading lorries. As stated in the Earthwork Specification for the donor site, *'The Contractor shall, where necessary, provide wheel washing facilities as part of the temporary accommodation. Wheel washing facilities shall be located at the exit from the site and clean effectively the wheels and under-body of all vehicles and plant leaving the site before travelling on the public highway'*

Lorries will end tip at the receiver site, where materials will be formed into stockpiles by an excavator. At no point will lorries drive over tipped material. The ground surface at the receiver site comprises a compact granular surface and is not expected to create unacceptable levels of mud on lorry wheels and subsequently on roads adjacent to the site. However, the works will be monitored, and if required, wheel washing facilities will be deployed at the receiver site.



NOTES

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9

N

E

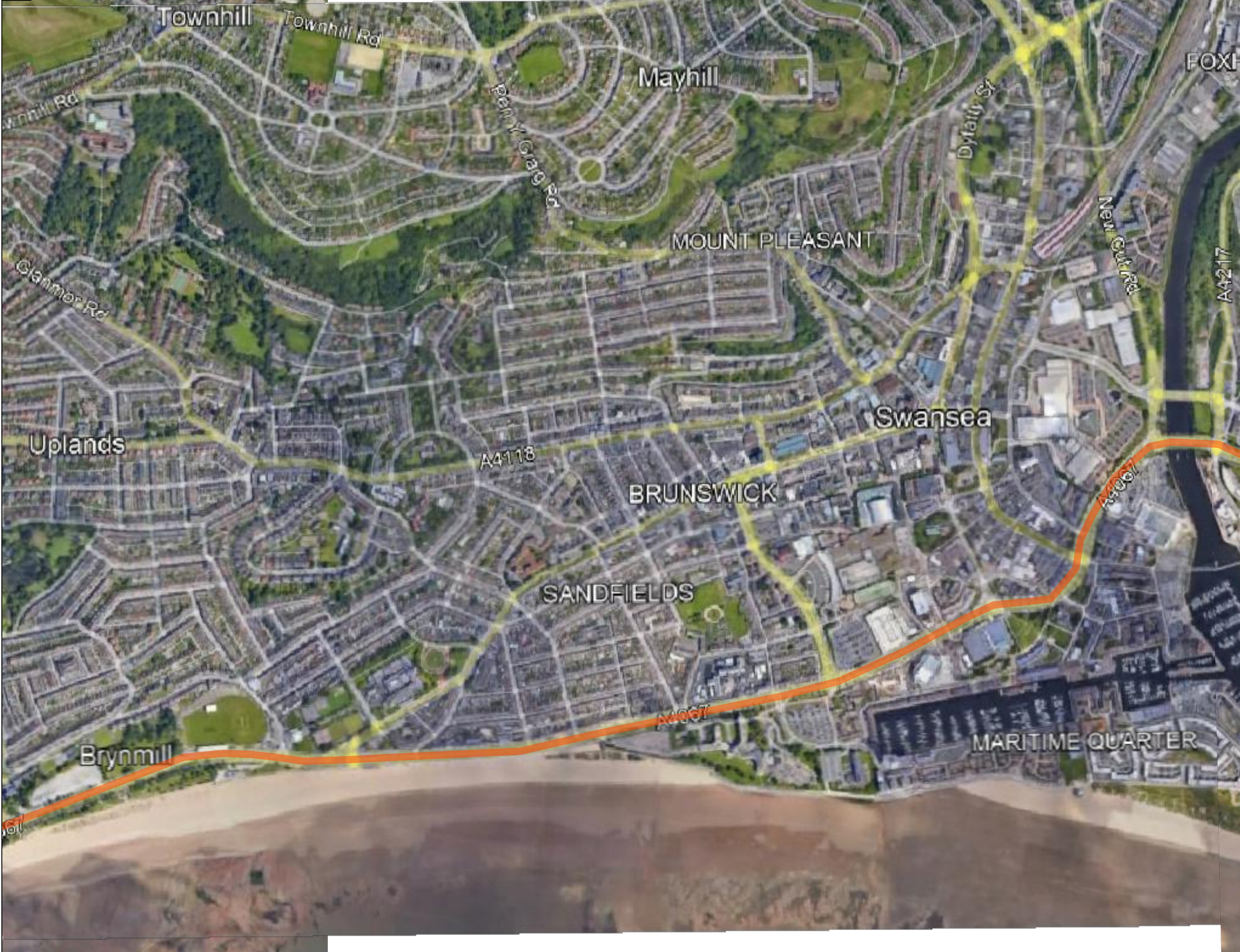
S

W

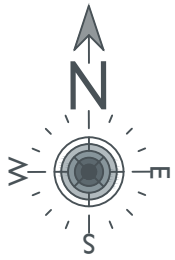
Haulage Route

REV	DATE	REVISION NOTE	BY
PJA Seven House - High Street Longbridge - Birmingham B31 2UQ - Tel: 0121 475 0234 Birmingham - Bristol Exeter - London - Reading pja.co.uk CLIENT St. Modwen PROJECT Swansea University Bay Campus Material Import DRAWING TITLE Hendrefoilan to Swansea University Haulage Route (pg 1 of 4) DRAWING ISSUE STATUS INFORMATION PJA JOB No. SUB-CODE DRAWING NO. REVISION 05746 - SK - 9007 - 0 Revision Letter : P - Prelim / A - Approval / T - Tender / C - Construction BIM DRAWING REFERENCE SCALE DRAWN REVIEWED DATE A3@NTSBI MP 08/08/22			

Copyright © 2022 James Associates Ltd. All Rights Reserved. 002



NOTES
These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9



 Haulage Route

REV

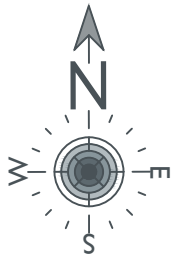
DATE

REVISION NOTE

BY



NOTES
These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9



Haulage Route

REV	DATE	REVISION NOTE	BY



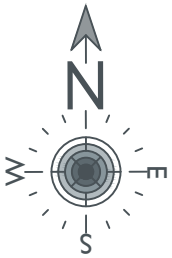
Seven House - High Street
Longbridge - Birmingham
B31 2UQ - Tel: 0121 475 0234
Birmingham - Bristol
Exeter - London - Reading
pja.co.uk

CLIENT	St. Modwen
PROJECT	Swansea University Bay Campus Material Import
DRAWING TITLE	Hendrefoilan to Swansea University Haulage Route (pg 3 of 4)
DRAWING ISSUE STATUS	
INFORMATION	
PJA JOB No.	05746
SUB-CODE	- SK -
DRAWING NO.	9007
REVISION	- 0
Revision Letter : P - Prelim / A - Approval / T - Tender / C - Construction	
BIM DRAWING REFERENCE	
SCALE	A3@NTS
DRAWN	BI
REVIEWED	MP
DATE	08/08/22

Copyright © 2022 PJA Associates Ltd. All Rights Reserved.



NOTES
These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9



 Haulage Route

REV	DATE	REVISION NOTE	BY
PJA  Seven House - High Street Longbridge - Birmingham B31 2UQ - Tel: 0121 495 0234 Birmingham - Bristol Exeter - London - Reading pja.co.uk			
CLIENT			
St. Modwen			
PROJECT			
Swansea University Bay Campus Material Import			
DRAWING TITLE			
Hendrefoilan to Swansea University Haulage Route (pg 4 of 4)			
DRAWING ISSUE STATUS			
INFORMATION			
PJA JOB No.	SUB-CODE	DRAWING NO.	REVISION
05746	- SK -	9007	- 0
Revision Letter : P - Prelim / A - Approval / T - Tender / C - Construction			
BIM DRAWING REFERENCE			
SCALE	DRAWN	REVIEWED	DATE
A3@NTS	BI	MP	08/08/22