

WASTE RECOVERY PLAN

Morfa, Trearddur Bay, Anglesey, LL65 2TY

Eaden Homes Limited

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Oaktree Environmental Ltd
Waste, Planning & Environmental Consultants



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1.0	20/03/2017	RS	CG	Application submission to NRW

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1 Introduction

1.1 General

1.1.1 This Waste Recovery Plan has been prepared for submission to Natural Resources Wales (NRW) in support of an Environmental Permit application for the Use of Waste in Construction for the completion of the formation level of a parcel of land at Morfa, Trearddur Bay, Anglesey, LL65 2TY in preparation for the layout and erection of 45 dwellings and layout for a further 38 plots at the site.

1.1.2 Oaktree Environmental Ltd have been engaged to act as consultants for Eaden Homes Limited and to assist in the preparation of this Waste Recovery Plan. Contact details for Oaktree Environmental are as follows:

Oaktree Environmental Ltd	Contact:	Richard Sims
Unit 5, Oasis Park	Position:	Director
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Winsford Industrial Estate	Fax:	01606 861182
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1.2 Site Details

1.2.1 The site is located at Morfa, Trearddur Bay, Anglesey, LL65 2TY. The National Grid Reference for the site is 225863 379158. The existing profiles of the site are shown on Drawing No. 3609/2234/03. The applicant proposes to create the landform presented in Drawing No. 3609/2234/04 (Final Levels Plan) to raise land levels to facilitate the consented residential development at the site.

1.2.2 The site currently comprises open land. As part of the consented residential development it will be necessary to raise the land levels to above 3.4mAOD in order to mitigate the risk posed by flooding to the consented development. To facilitate the raising of land levels at the site it is necessary to import approximately 20,000m³ of material.

- 1.2.3 The site area is calculated as being approximately 5.69 hectares.
- 1.2.4 The site comprises open ground. No made ground is recorded as present at the site based on the information presented on the British Geological Survey (BGS) website. It is understood that inert material has been deposited at the site for the purpose of raising ground levels under a U1 exemption. The superficial deposits at the site are recorded as being tidal flat deposits comprising silt and clay. The bedrock geology at the site is recorded as comprising mica schists and psammities (metamorphosed sandstones) of the New Harbour group which is of Precambrian and Cambrian Age.
- 1.2.5 The site is located close to the coast. Based on information presented on the BGS website the site overlies the Upper Cambrian (including Tremadoc) rock unit which is classified as being a low productivity aquifer. Based on the proximity of the coast to the site it is considered that the site is not in a sensitive location with respect to groundwater receptors.
- 1.2.6 The site is crossed by a stream running generally north to south and thence to the Inland Sea.
- 1.2.7 The site is within a Zone 3 groundwater source protection zone and a minor aquifer high groundwater vulnerability zone. Aquifer maps show the site has a superficial deposits designation of Secondary A.

1.3 **Planning Status**

- 1.3.1 The site was granted permission on 6th January 1983 by Ynys Mon Borough Council for the '*layout and detailed plans for the erection of 45 dwellings and layout for a further 38 plots on land at Morfa, Trearddur Bay, making a total of 83 dwelling units in all*'. A copy of the extant planning permission for the site appears in Appendix II of this Waste Recovery Plan.
- 1.3.2 The approved plan in the planning permission (Drawing Reference: 801G/13, included in Appendix I of this document) shows levels to an arbitrary grid. It has been confirmed by Kevin Dogan (Senior Assistant Engineer) at Isle of Anglesey County

Council that the finished floor level (i.e. the 'formation level') for the construction of the dwellings, can be converted to 3.4mAOD relative to Ordnance datum. This formation level is to be reached through the importation of suitable construction materials. A copy of the email exchange with the Council in this regard appears in Appendix III of this document.

1.4 **Environmental Permitting Status**

- 1.4.1 To date, the land levels of the site have been increased via importation of such materials under a series of waste exemptions. It is intended to complete these preparatory works for the consented development using the importation of materials under an Environmental Permit for the deposit of waste to land as a recovery operation.
- 1.4.2 It is proposed that the land raising is undertaken in accordance with the Standard rules SR2010No7_50Kte environmental permit for Use of Waste in Construction (up to 50,000 tonnes) in the form of a Tier 2 Bespoke Permit due to the site's proximity to the Beddmanarch-Cymyran Site of Special Scientific Interest (SSSI) to the north east. The thickness of the imported wastes will not exceed 2 metres in compliance with guidance presented on the Gov.UK website¹ and as the operation comprises the raising of land levels waste will not be deposited more than 2m below the surrounding ground levels.

¹ <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>

2 Construction Details

2.1 General

2.1.1 Existing and proposed ground level profiles and cross sections are shown on Drawing Nos. 3609/2234/03, 3609/2234/04 & 3609/2234/05 respectively.

2.1.2 The consented housing development requires the land to be raised to the formation level of 3.4mAOD to accord with the approved plan (i.e. Drawing Reference: 801G/13) shown in Appendix I of this document.

2.1.3 The consented landform includes the culverting of the stream which flows generally north to south through the site. Under the current design proposals it is proposed that the stream remains unculverted. However, it is possible that Eaden Homes Limited may wish to amend the design to include the culverting of the stream in the future. In this instance, the Waste Recovery Plan will be reviewed and revised as necessary through consultation with Natural Resources Wales.

2.2 Site Management

2.2.1 The importation of materials for the construction works proposed will only be commenced once the site has gained the appropriate Environmental Permit.

2.2.2 The permitted activities will be assigned a Technically Competent Manager with the appropriate Certificate of Technical Competence (COTC) who will be legally qualified to oversee all aspects of the site restoration works to ensure that they are carried out effectively and in accordance with the EP and other relevant environmental regulations. The site will be inspected every day by the site manager who will be fully conversant with the planning permission and the Environmental Permit for the site. All details of defects, problems and repairs carried out will be recorded in the site diary which will be available for inspection by the Local Planning Authority ("LPA") and Natural Resources Wales (NRW) on request.

2.2.3 All operations on site will be carried out in accordance with the relevant requirements of the Health and Safety at Work Act 1974 and the company health and safety policy. Conditions of site use for employees, visitors and contractors will be available to all visitors who will be required to sign in and out of the site when making visits for any purposes. Educational visits by minors and visitors with a physical impairment which may jeopardise compliance with site health and safety rules, thus, they will be escorted around the site in an authorised vehicle. Anyone not complying with the conditions of site use will be asked to leave the site immediately or forcibly removed in the event of a serious violation which could potentially endanger site users, the surrounding environment or be a breach of the planning and/or permitting conditions for the site.

2.2.4 It is envisaged that the landraising part of the scheme will take 6 - 12 months to complete.

2.2.5 Access and egress to the application site will be from Lon Towyn Capel.

2.3 **Operating Hours**

2.3.1 It is envisaged that the proposed restoration works and delivery of suitable materials to the site will not be carried outside the following hours* (subject to planning approval):

Monday to Friday	07:00 – 18.00
Saturday	07.00 – 13.00
Sunday/Bank holidays	No operations

**Note: The only activities on site which will be allowed to continue outside of these hours will be those associated with emergency plant maintenance works.*

2.4 **Plant /Equipment Summary**

2.4.1 The site is a small-scale, temporary project and will only require the use of the items of plant listed in Table 1 below. One plant operator qualified to operate both

machines for the movement and placement of material and will be on site whilst construction materials are being received.

Table 1: List of Plant & Equipment

ITEM	NUMBER	FUNCTION
<i>360° excavator</i>	<i>1</i>	<i>Waste movement/compaction/ soil stripping/replacement</i>
<i>Tracked Dozer</i>	<i>1</i>	<i>Movement/compaction and reprofiling of soils</i>
<i>Roller</i>	<i>1</i>	<i>Compaction of soils (if required)</i>
<i>Water bowser</i>	<i>1</i>	<i>Dust suppression</i>

The above list may be subject to change. Additional plant will be hired to cover any busy periods. The excavator and dozer will not be operated simultaneously.

2.4.2 No weighbridge facilities will be available at the site, however, the suitable inert and excavation waste materials will be delivered to site in 8-wheeled tipper vehicles with a load capacity of 20 tonnes which will be used for recording quantities.

2.4.3 A small site office / lock-up cabin will be installed near the entrance to the site in which the following will be stored:

- i) The Waste Recovery Plan;
- ii) The Environmental Permit;
- iii) The site's Environmental Management System (to be agreed with Natural Resources Wales);
- iv) Site diary (to record all inspections / visitors to the site);
- v) Record forms for waste in/out and carrier details;
- vi) Waste transfer notes for all incoming loads; and,
- vii) Accident Book

2.5 **Material s Handling & Emplacement Plan**

2.5.1 A 360° excavator will be used to deposit and spread the soils. A disc harrow or spring tine cultivator will be used to break up any soil clods which have not settled after the placement of soil.

2.5.2 Material suitability – the following materials will be deemed unsuitable and therefore will not be used:

- Material containing wood, peat, lignite or other organic substances
- Materials from swamps, marshes and bogs
- Logs, stumps and perishable or biodegradable material
- Material in a frozen or water-logged condition
- Material susceptible to combustion
- Contaminated soils
- Material which by virtue of its particle size, shape or hazardous chemical or physical nature cannot be properly handled or effectively compacted.

2.5.3 Formation preparation:

- Unsuitable material (as defined in 3.6.1 above) shall be removed from the base of the area to be filled
- The area to be raised shall be graded to falls to allow surface water run-off

2.5.4 Placing of deposited material:

- Material will be placed and compacted in near horizontal layers not exceeding 500 mm thickness.
- The material will be deposited in the driest condition possible.
- The degree of compaction employed shall be sufficient to remove any large voids and to produce a coherent mass to provide the required landform upon which to construct the consented housing development.
- The fill (deposit of material for the land raise) shall as far as practicable be brought up at a uniform rate, so that parts of the site reach finished levels at the same time. Slopes steeper than 1 in 3 should be avoided.
- Cobbles, boulders, rock or waste fragments whose largest dimension is greater than two-thirds the loose layer thickness shall not be incorporated into the scheme

- No fill shall be placed and left uncompacted at the end of a working day. Compacted fill shall be graded to falls to ensure free run-off of rainwater without ponding.
- Where material is being placed over sloping ground the natural ground shall be benched with the maximum vertical height of each bench not exceeding 500mm.

2.5.5 The fall across from the existing yard to the outer edge of the new yard area will be approximately 250mm to ensure surface water runoff and thus prevent ponding on the sand school surface.

3 Benefit of Proposed Works

3.1 Need

- 3.1.1 The importation of suitable materials to raise the development platform to a formation level of 3.4mAOD is required in order to fulfil the requirements of the extant planning consent for the site in preparation for the construction of the dwellings.

3.2 Beneficial use of material

- 3.2.1 The materials to be used in the construction works are suitable for the proposed use and, through recovery, have advantages associated with their use. The use of suitable construction, demolition and excavation wastes, through deposition of these materials to land as a recovery operation, will ensure these wastes are diverted away from landfill, pushing them up the waste hierarchy in compliance with UK and European regulatory framework, guidelines and standards.

4 Classification of Waste and Waste Acceptance

4.1 Waste types

4.1.1 It is intended that the construction works are to be carried out using predominantly excavated materials from local construction, demolition and excavation sites in order to achieve a suitable soil profile for lawn establishment following the land raising works.

4.1.2 The predominant types of wastes to be imported may therefore include any of the following:

- 01 04 08 waste gravel and crushed rocks
- 01 04 09 waste clays and sands
- 17 05 04 soil and stones
- 19 12 09 soil and stones
- 20 02 02 soil and stones

4.1.3 Some coarser materials may be utilised for the temporary surfacing of access tracks which are likely to include:

- 17 01 01 concrete
- 17 01 02 bricks
- 17 01 03 tiles and ceramics
- 17 01 07 mixture of concrete, bricks, tiles and ceramics

4.1.4 Suitable materials, placement and compaction suitable materials, should meet the requirements of the following fill materials classified in the Specification for Highway Works (2005):

- a) General Granular Fill (Class 1a – 1c);
- b) General Cohesive Fill (Class 2a – 2e);
- c) Landscape Fill (Class 4);
- d) Selected Granular Fill (Class 6F2, 6F5, 6H).

- 4.1.5 These classes cover a full grading range. Oversize material (max. 350mm diameter) will be permitted provided they do not comprise more than 50% of the total material input by weight.
- 4.1.6 If any additional waste codes additional to those listed are regarded as suitable for the restoration scheme and are listed in the standard rules permit the applicant may consider after discussion with Natural Resources Wales and the Waste Recovery Plan will be updated as necessary.
- 4.1.7 The waste importation operations will be controlled by a reputable waste haulier/operator to ensure the works are carried out according to the procedures outlined in this Waste Recovery Plan. The following section details the acceptance procedures to be adopted for all wastes received at the site in order to ensure the wastes are fit for purpose and to fully assess any associated pollution risks.

4.2 **Waste importation and acceptance**

- 4.2.1 The waste importation operations will be controlled by site operators to ensure the works in respect of the completion of the formation level are carried out according to the following procedures.
- 4.2.2 Guidance will be given by the site operator to all employees, sub-contractors, other waste carriers and customers regarding the waste types which are acceptable at the site (i.e. a copy of the relevant authorisations for the site such as the Environmental Permit and Planning Permission). Where waste is brought in under sub-contractor or is delivered by other known hauliers then the carrier registration details will be taken. All haulage operators bringing waste to the site will be periodically checked with Natural Resources Wales to ensure that they are registered. The procedures below will be followed prior to the receipt of soils on site.
- 4.2.3 For the protection of the operator and site supervisor any loads containing soil from an industrial site/area must be accompanied by written documentation by way of waste analysis to demonstrate that the soil is not contaminated.

- 4.2.4 To ensure compliance with the permit requirements (basic characterisation of the waste) and that only clean loads are accepted, the following information will be requested from waste producers (if relevant) at the start of each contract. The operator reserves the right to refuse such loads and contact Natural Resources Wales where necessary (prior to acceptance of the loads) to ensure that the load is acceptable.
- a) A site investigation report, including borehole logs (if available).
 - b) Waste analyses (if available), including leachability tests.
 - c) Name and address of the site from which the waste was excavated/ produced.
 - d) Detailed waste description including EWC code.
- 4.2.5 All incoming vehicles are required to report to a designated representative of the site operator. The details of the load will be recorded and the duty of care note/company documentation will be further checked by the operator to ensure that the load is acceptable at the site, including a visual check prior to the vehicle proceeding to the tipping area. Any deviation from the procedures or problems with any loads will result in tipping facilities being suspended for the offending company. Loads which are not acceptable within the above terms will be rejected and returned to the producer.
- 4.2.6 The nature of bulk loads makes full inspection difficult until the load is deposited. If unauthorised waste is discovered the load will not be tipped and will be rejected by the operator and returned to the producer. If the load is acceptable the driver will be instructed to deposit it at the working area. If the load is unacceptable after visual inspection it will be reloaded and removed from the site.
- 4.2.7 The following details will be recorded for every load of waste deposited at the site:
- a) The date and time of delivery.
 - b) The name and address of the waste producer.
 - c) The type and quantity of waste (in tonnes).
 - d) The carrier's name/driver name.

- e) Vehicle registration No.
- f) Signature of person inspecting the waste.

4.2.8 The details will be recorded on specific forms and/or controlled waste transfer notes.

4.2.9 The following details will be recorded for all deposits of unauthorised waste at the site and will be forwarded to Natural Resources Wales at the discretion of the operator:

- a) Date and time of deposit.
- b) A description of the waste.
- c) The quantity of waste (in tonnes or cubic metres).
- d) Name, address and telephone No. of waste producer.
- e) The carrier's name, registration number and vehicle registration.
- f) Reason for the rejection of waste and action taken.

4.3 **Non-conforming/Rejected Material**

4.3.1 If any unacceptable materials are found they will be placed in a designated rejected waste skip. Unauthorised waste will be removed to a suitably authorised facility and accompanied by the necessary paperwork.

5 **REQUIRED AMOUNT OF WASTE**

5.1 **Amount of waste necessary to achieve intended benefit**

- 5.1.1 The area of the site which is subject to this Waste Recovery Plan is approximately 5.69 hectares.
- 5.1.2 Existing and proposed ground level profiles and cross sections are shown on Drawing Nos. 3609/2234/03, 3609/2234/04 & 3609/2234/05 respectively.
- 5.1.3 The total volume of imported materials required to complete the landraising works has been calculated to be 19,328 m³ using detailed triangulation of both existing and proposed profiles in Digital Terrain Modelling (DTM) software developed by NRG Survey systems.
- 5.1.4 The area of the site where the imported waste is to be spread is approximately 5.69 hectares which would mean that the average depth of imported materials across the whole site would be < 1m.
- 5.1.5 Using Natural Resources Wales/WRAP conversion factor of 1.25, the weight of material required to complete the construction works would be 24,160 tonnes. However, there is a vast disparity of appropriate conversion factors between regulators and industry. It is widely accepted by Natural Resources Wales and Planning Authorities that a 20-tonne tipper vehicle carries 8m³ per load and, in this instance, the conversion factor would be 2.5, requiring a total of 48,320 tonnes of imported materials to complete the works.
- 5.1.6 As has been used in other projects of this nature, a “middle-ground” conversion limit has been accepted by Natural Resources Wales for soils and stones as being 1.7. Using this more reasonable conversion factor, **the amount of material required to complete the works would be 32,585 tonnes**. This figure has been used to inform the Waste Recovery Plan and permit application and for all subsequent waste returns submitted.

- 5.1.7 The amount of material required for the completion of the proposed works is the minimum amount necessary to achieve the 3.4mAOD development platform as required by the extant planning consent.
- 5.1.8 The use of waste material for the completion of the restoration works is consistent with Regulation 12 of the Waste (England & Wales) Regulations 2011 and will assist in pushing the material up the Waste Hierarchy and avoiding disposal.

6 ALTERNATIVE TO NON-WASTE MATERIAL

6.1 Revenue from completion of works

6.1.1 A breakdown of costs associated with the completion of the full housing development has been provided in the spreadsheet which appears in Appendix IV of this document.

6.1.2 As mentioned in Section 2.1.3, the proposed landform submitted as part of this application retains the stream which runs generally north to south through the development site where the extant planning permission shows this stream to be culverted. The applicant may end up culverting this stream at a later stage but, for the purposes of this Waste Recovery Plan, the cost analysis has been carried out using the worst-case scenario for potential revenue and has assumed that leaving the stream channel open will reduce the total number of units (i.e. dwellings) from 83 to 65.

6.1.3 The costs analysis shows that the sales value of the proposed development, based on 65 units with differing plot sizes, would be £12,025,000.00. After the build cost (including drainage and infrastructure costs) and sales costs, the projected net revenue from the development will be £3,753,750.00.

6.1.4 The developer has sought a quotation for supply of materials from non-waste sources from Clive Hurt Plant Hire Ltd which appears at Appendix V of this document. The two non-waste sources of suitable materials (and associated costs are described below):

- a) Limestone 6F5 – the cost for supply and levelling of this material is £27.50 per cubic metre which would equate to a total cost of £550,000 (when rounded up to 20,000m³ of required material).
- b) Virgin clay (overburden) – the cost for supply and levelling of this material is £18.70 per cubic metre which would equate to a total cost of £374,000 (when rounded up to 20,000m³ of required material).

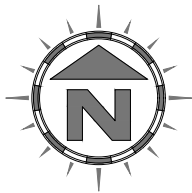
- 6.1.5 For the avoidance of doubt the quotation for each material encompasses all delivery, handling and levelling works required to construct the site to the 3.4mAOD formation level using either of the non-waste sources.
- 6.1.6 The above calculation therefore proves that the completion of the development using non-waste materials would only reduce the profitability figure by 10-15%.

7 **CONCLUSION**

- 7.1.1 This document has been produced in order to justify that the proposed construction of formation level of 3.4mAOD in preparation for the construction of a housing development at **Morfa, Trearddur Bay, Anglesey, LL65 2TY** using suitable waste materials should be classified as a waste recovery activity, rather than a waste disposal activity.
- 7.1.2 The site has an extant planning permission to raise the land levels to the formation level of 3.4mAOD as discussed in earlier sections of this Waste Recovery Plan.
- 7.1.3 The use of waste materials presents a valid alternative to using virgin or non-waste products as a method for completion of the works.
- 7.1.4 The proposed operations meet all criteria required for recovery of waste materials at the site and also provide the opportunity to push the construction, demolition and excavation waste up the waste hierarchy through recovery, diverting them away from disposal by landfill.

Appendix I

Drawings



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Drawing No: 3609/2234/01 Rev: -

Title: SITE LOCATION PLAN

Site: Morfa, Trearddur Bay, Anglesey

Client: Eaden Homes Ltd

Date: 16 March 2017 Job: 3609

Drawn: RS Checked: - Client: 2234

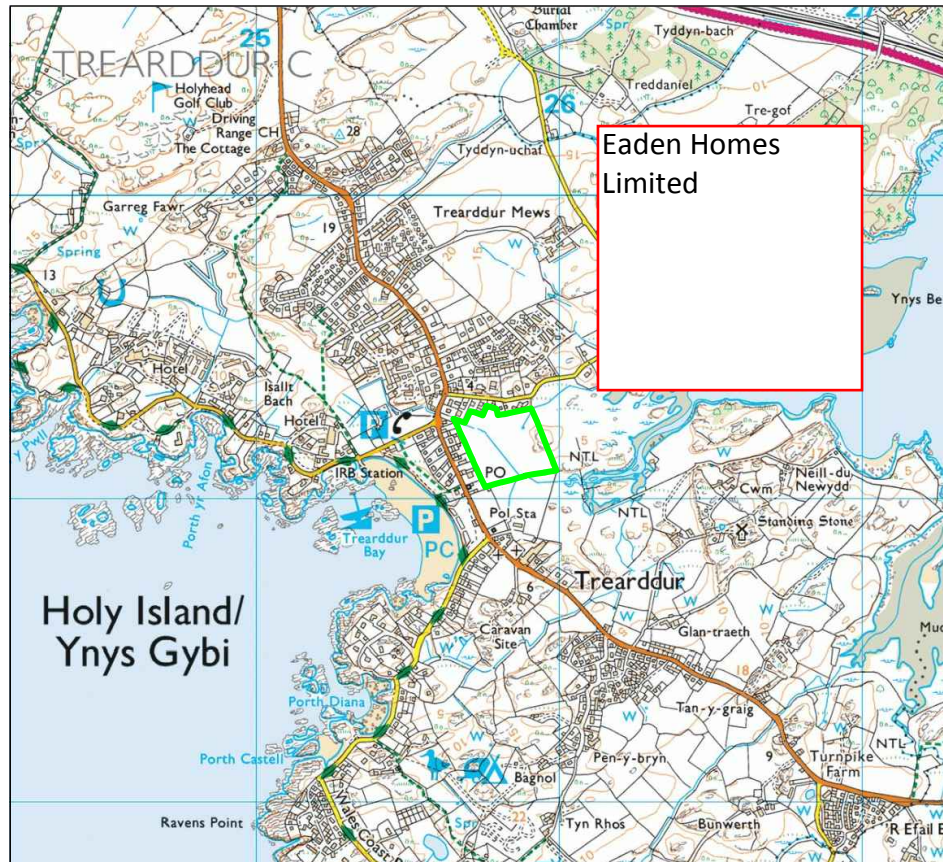
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KEY:
— Permit boundary

Notes:
(1) Drawing for indication only.
(2) Do not scale from this drawing.
(3) All measurements must be verified on site.

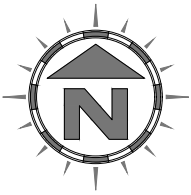
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Rev:	Date:	Init:	Description:
-	16/03/17	RS	Initial drawing



Scale Bar (1:25,000)

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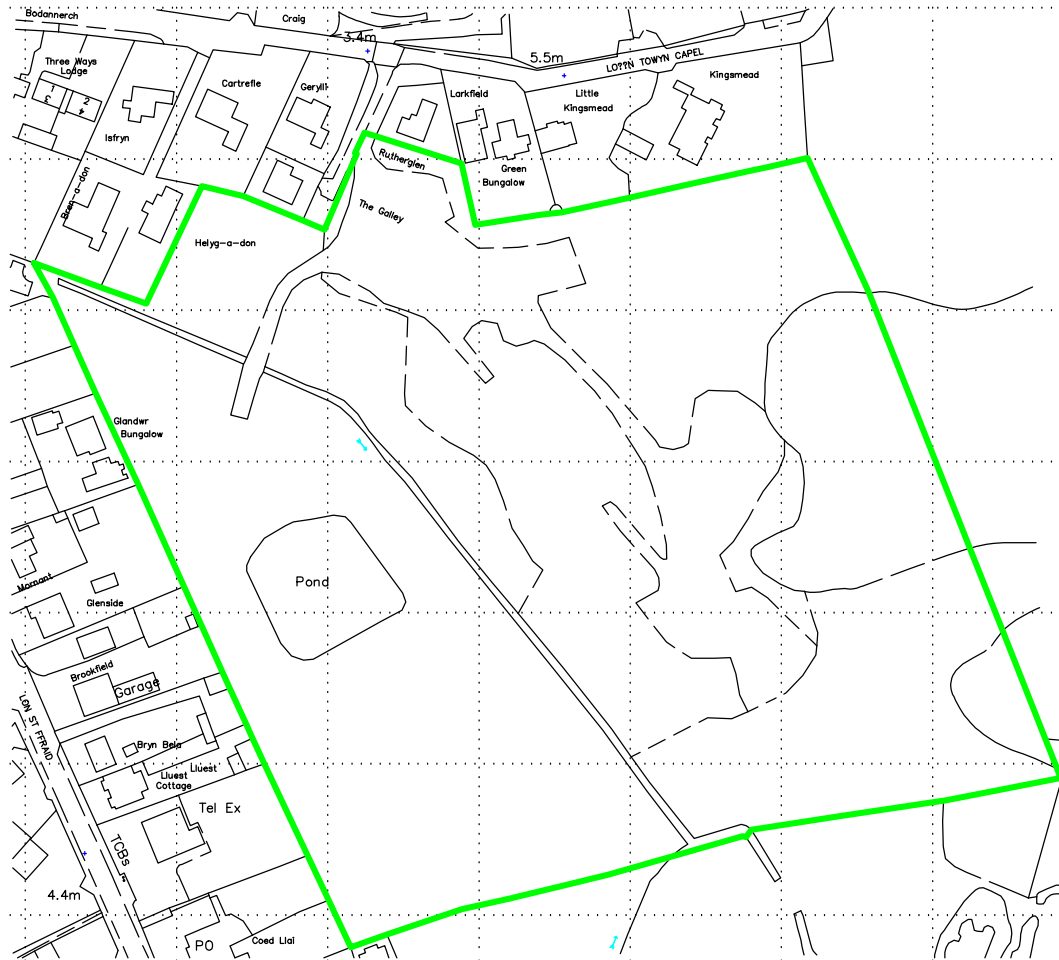
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Drawing No:	3609/2234/02	Rev:	-
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Title:	PERMIT BOUNDARY PLAN
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Site:	Morfa, Trearddur Bay, Anglesey
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Client:	Eaden Homes Ltd
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Date:	16 March 2017	Job:	3609
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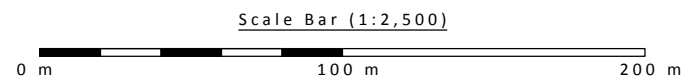
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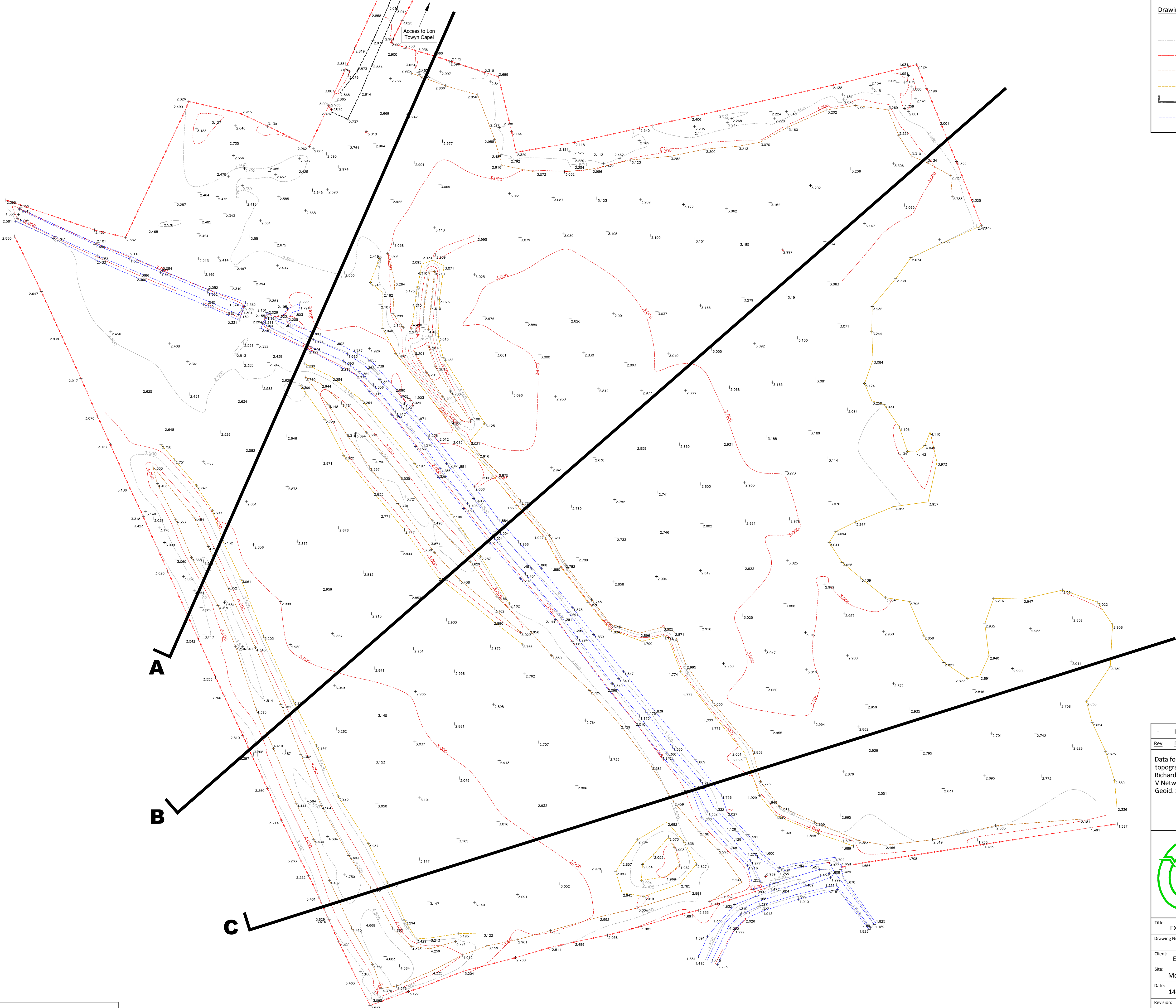
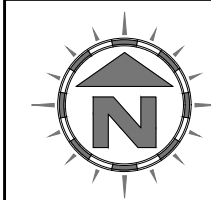
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KEY:
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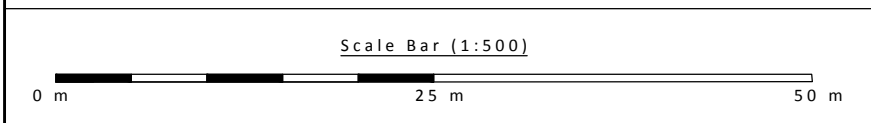
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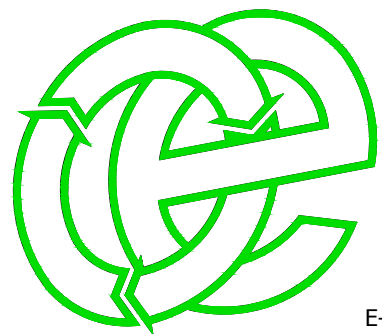
Drawing Legend:

- Contours (1 metre)
- Contours (0.5 metre)
- Fencing
- Top of bank
- Bottom of bank
- Section locations (see Drawing No. 3609/2234/05)
- Ditch / channel



-	Initial drawing	09/07/15
Rev	Description	Date

Data for Existing Levels plan (as shown) was gathered during a topographical survey of study site undertaken in January 2017 by Richard Sims of Oaktree Environmental Ltd using a Topcon HIPER V Network Rover using the OSTN02 grid projection and OSGM02 Geoid. Spot levels shown in mAOD.

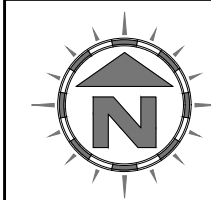


Oaktree Environmental Ltd
Waste Management and Environmental Consultants

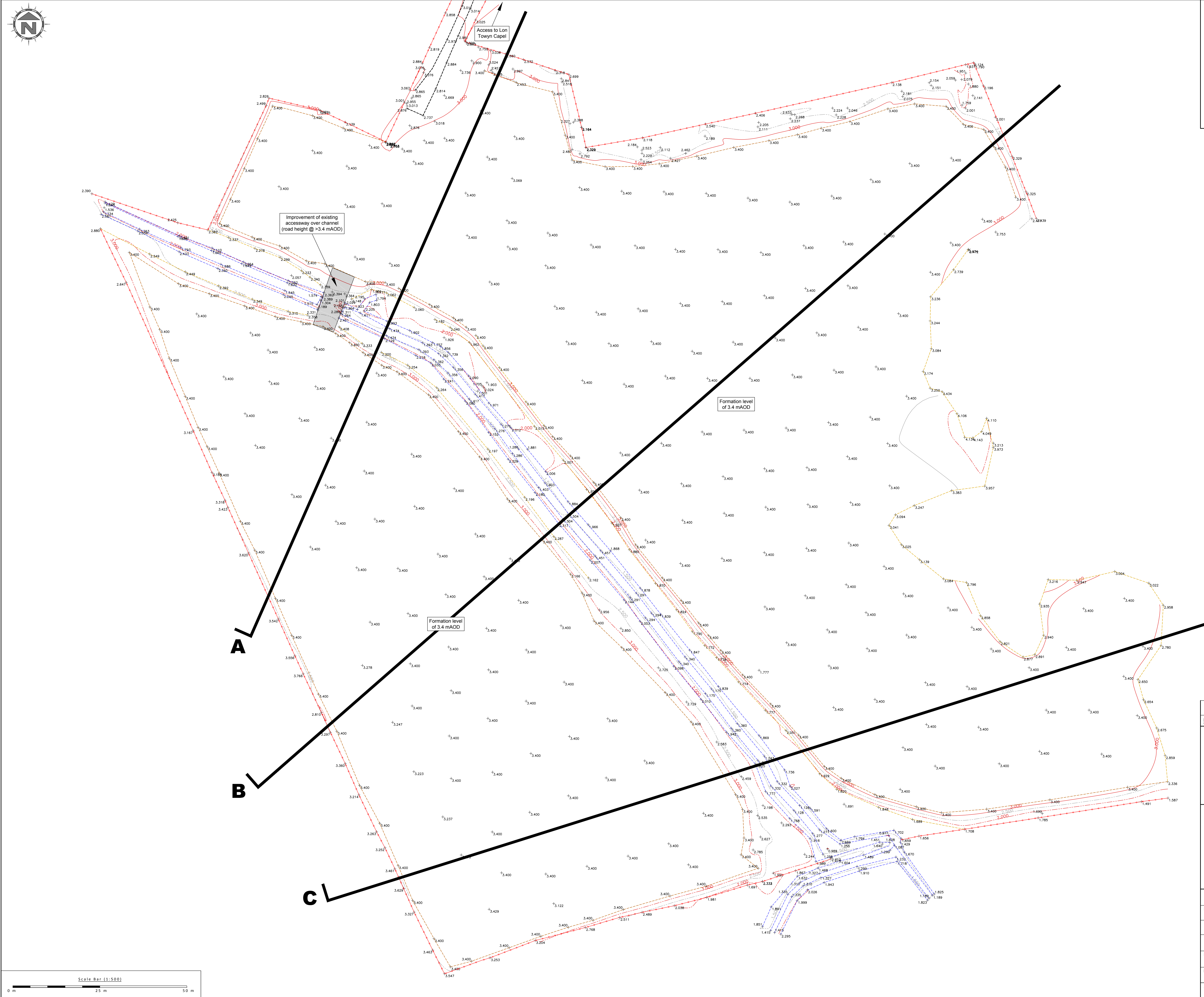
Unit 5, Oasis Park, Road One
Winsford Industrial Estate
Winsford, Cheshire CW7 3RY

Tel: 01606 558833 Fax: 01606 861182
E-mail: sales@oaktree-environmental.co.uk

Title: EXISTING LEVELS PLAN		
Drawing No: 3609/2234/03		
Client: Eaden Homes Ltd		
Site: Morfa, Trearddur Bay, Anglesey		
Date: 14 March 2017	Printed At: A1	Scale: 1:500
Revision: -	Drawn By: RS	Checked: -
Job No: 3609	Client No: 2234	



- Drawing Legend:
- Contours (1 metre)
 - Contours (0.5 metre)
 - Fencing
 - Top of bank
 - Bottom of bank
 - Section locations (see Drawing No. 3609/2234/05)
 - Ditch / channel



-	Initial drawing	09/07/15
Rev	Description	Date

Data for Final Levels Plan (as shown) is based on surveyed levels presented on the Existing Levels Plan (Drawing No. 3609/2234/03). Spot levels shown in mAOD.

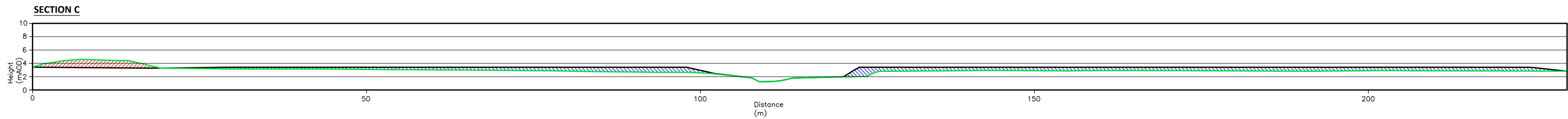
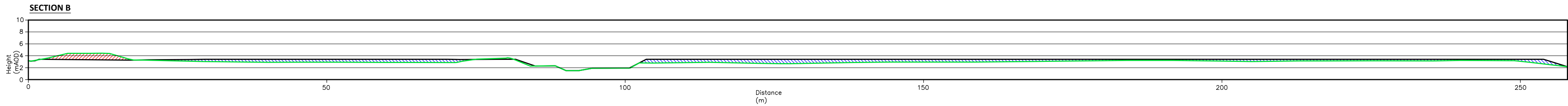
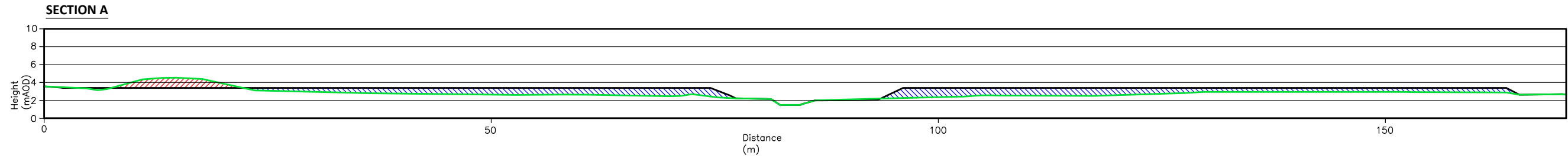


Oaktree Environmental Ltd
Waste Management and Environmental Consultants

Unit 5, Oasis Park, Road One
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Winsford, Cheshire CW7 3RY

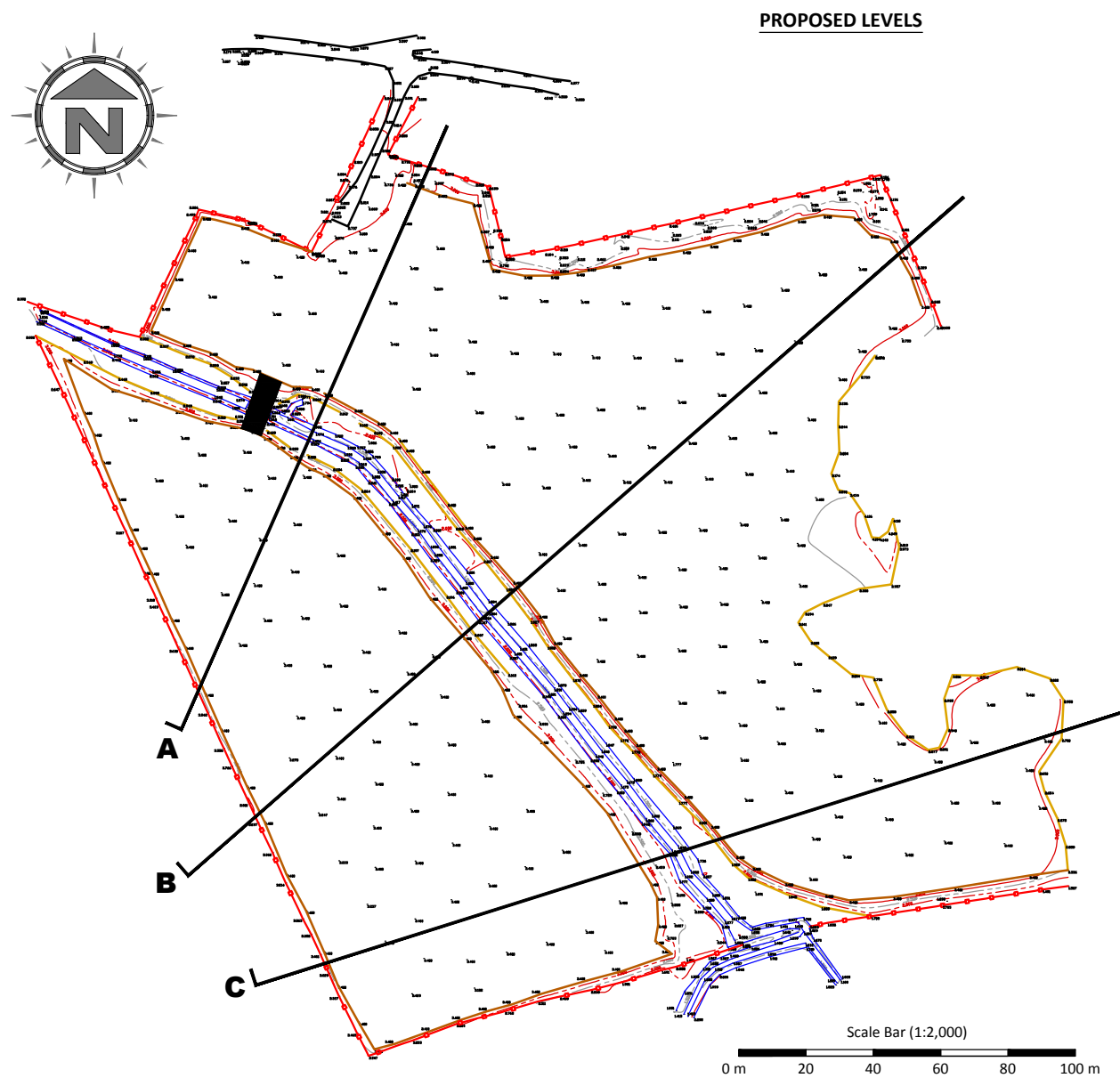
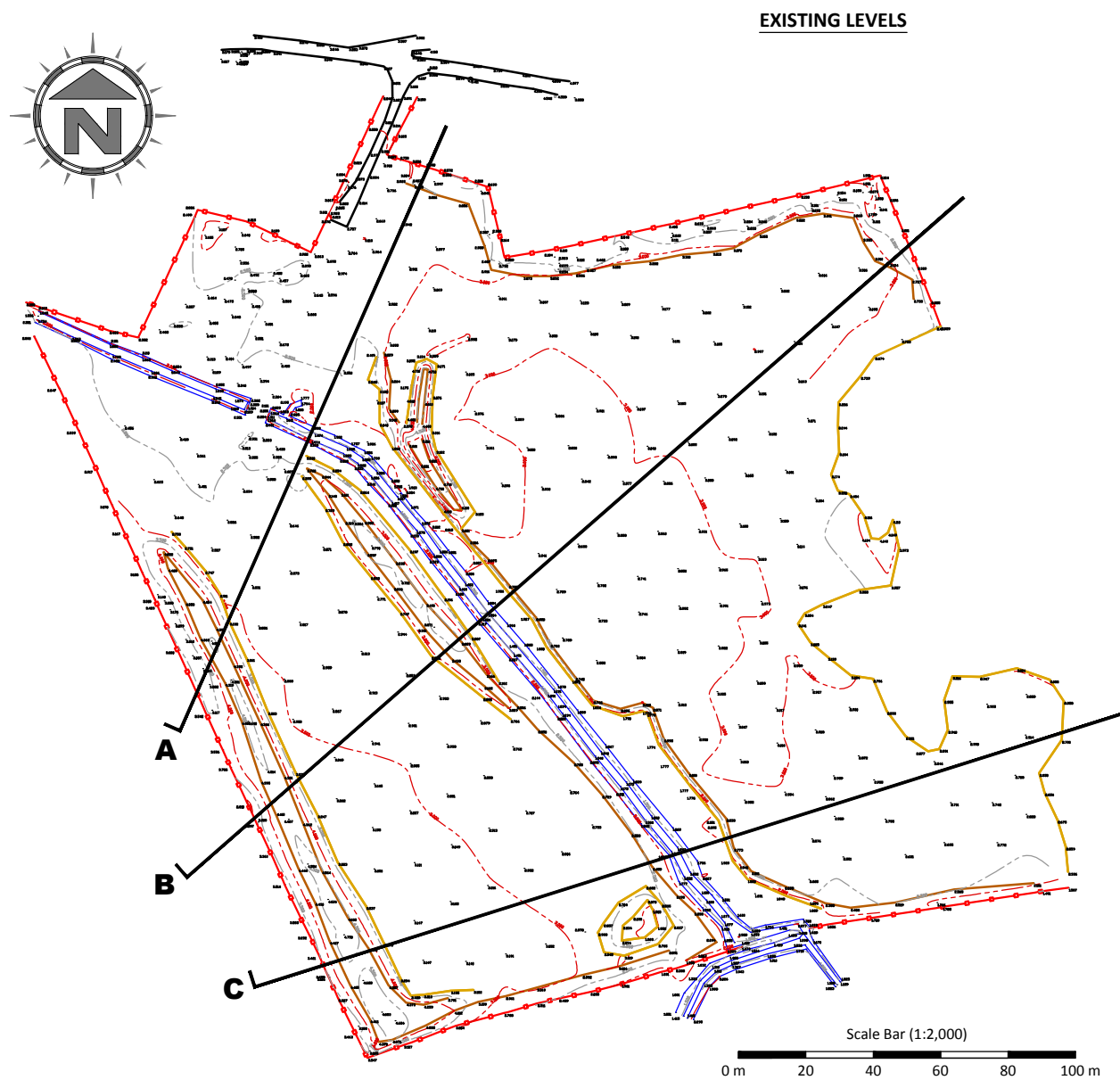
Tel: 01606 558833 Fax: 01606 861182
E-mail: sales@oaktree-environmental.co.uk

Title: FINAL LEVELS PLAN		
Drawing No:	3609/2234/04	
Client:	Eaden Homes Ltd	
Site:	Morfa, Trearddur Bay, Anglesey	
Date:	14 March 2017	Printed At: A1 Scale: 1:500
Revision:	-	Drawn By: RS Checked: -
Job No:	3609	Client No: 2234



Key (Sections):

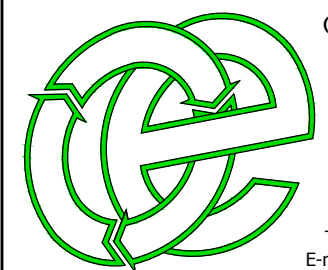
- Existing ground profile
- Proposed ground profile
- Cut
- Fill



-	Initial drawing	15/03/17
Rev	Description	Date

Notes:

- Existing levels are shown in detail on the Existing Levels Plan (Drawing Ref: 3609/2234/03).
- Proposed levels are shown in detail on the Proposed Levels Plan (Drawing Ref: 3609/2234/04).



Oaktree Environmental Ltd
Waste Management and Environmental Consultants
Unit 5, Oasis Park, Road One
Winsford Industrial Estate
Winsford, Cheshire CW7 3RY
Tel: 01606 558833 Fax: 01606 861182
E-mail: sales@oaktree-environmental.co.uk

Title: SECTIONS PLAN		
Drawing No: 3609/2234/05		
Client: Eaden Homes Ltd		
Site: Morfa, Trearddur Bay, Anglesey		
Date: 15 March 2017	Printed At: A2	Scale: 1:500 (Shown)
Revision: -	Drawn By: RS	Checked: -
Job No: 3609	Client No: 2234	

LOCATION PLAN

ROBERT DAVIES AREA
CHARTERED ARCHITECT
16 LONDON ROAD
HOLYHEAD
GWYNEDD LL65 2NW
TEL HOLYHEAD (0407) 2771

NOTES AND LEGEND

- LANDSCAPED FEATURES - DETAILS TO BE AGREED WITH LOCAL AUTHORITY
- GROUND COVER AND SHRUBS FOR COMMUNAL MAINTENANCE SPECIES TO BE AGREED WITH LA
- REMAINING AREAS TO BE GRASSED
- ALL AREAS WITHIN THE CURTLAGE OF THE DWELLINGS TO BE MAINTAINED BY THE OWNERS
- HARD LANDSCAPED AREAS - MATERIALS TO BE AGREED WITH LA
- FOUL
- SURFACE WATER

YNYS MONJILE OF ANGLESEY
BOROUGH COUNCIL
Town and Country Planning Act 1971
PERMISSION GRANTED
DATE 18.7.82 BY COUNCIL
for conditions, if any see notice of decision

27.98
27.98
0.55 W.285
1/318 = 12m/s
32.98 PLANT SPECIES APPROVED
24.2794 1/318 = 12m/s

Client
MUN. DMS 40 JLOIT

Job title
DEVELOPMENT AT MORA
TREADDUR BAY
ANGLESEY

DRAINAGE

Scale 1:1 Date Drawn 8/8

PROTECTED CONSENT

Appendix II

Copy of Extant Planning Permission

BOROUGH COUNCIL OF YNYS MÔN - ISLE OF ANGLESEY

Application No. 1/20/V/1317n

Town and Country Planning Act 1971
Town and Country Planning General Development Order 1977

To McGinn, Jones & Lloyd,
c/o R. Davies Esq., A.R.I.B.A.,
Isnant,
Glynne Road,
Bangor.

In pursuance of its powers under the above-mentioned Act and Order the
BOROUGH COUNCIL OF YNYS MÔN - ISLE OF ANGLESEY (hereinafter called "the
Council") as Local Planning Authority hereby permits:-
Layout and detailed plans for the erection of 45 dwellings and layout for a further
38 plots on land at Morfa, Trearddur Bay, making a total of 83 dwelling units in all,

in accordance with the plan(s) and application submitted to the Council on
6th January, 19 82 subject to the condition(s) specified hereunder:-

- (1) The development to which this permission relates shall be begun not later than
the expiration of ~~five~~ ~~xxxxxx~~ years beginning with the date of this
permission.
2. The submission to and approval by the local planning authority of a detailed layout
plan (of that part of the overall development not forming part of the detailed layout
of 45 dwellings) of the remaining approved area to a scale of 1/500th indicating
thereon the position and width of all proposed new streets, roads and carriageways,
their relationship to existing roadways and the division of the land into plots; the
layout shall indicate the proposed use of each such plot and the siting of any
buildings proposed to be erected thereon and shall indicate the levels of the land
before and after development and the height of each such building on the land; the
layout plan shall also indicate the proposed lines of water supply, drains and sewers
and all shall be approved by the local planning authority before any detailed plans
for the development of individual plots are submitted.

over/...

The reasons for the Council's decision to grant permission for the development
subject to compliance with the conditions hereinbefore specified are:-

- (1) Condition 1 is imposed pursuant to the requirements of Section 41 of the
Town and Country Planning Act 1971.

The remaining conditions have been imposed to ensure that the development will be
satisfactory from an amenity and architectural point of view and to comply with the
requirements of the Highway Authority in the interests of road safety.

DATED 29th day of April, 19 83.

Signed

P. J. Powell

Director of Planning

Borough Council Office,
Llangefni, Anglesey,
Gwynedd LL77 7TW

(Address to which all communications should be sent)

†Cross out if not applicable.

IT IS IMPORTANT THAT YOU SHOULD READ THE NOTES ON THE REVERSE OF THIS FORM

development shall be carried out in stages as indicated on approved plan A, the development of one state to be completed before any development is commenced on the next stage, unless the prior agreement in writing of the local planning authority has been obtained.

4. The buildings shall be sited in the positions indicated on the approved plan.
5. The type and colour of the roofing tiles and facing bricks proposed to be used in the construction of the buildings shall be submitted to and approved in writing by the local planning authority before any development is commenced.
6. The development permitted by Article 3 Class I, Class II (1 and 2) Class XVIII - E (i) and (ii) and XVIII - I (1) and (ii) and Class XXII of Schedule 1 to the Town and Country Planning General Development Orders 1977 to 1981 is hereby excluded.
7. That no boats, caravans or trailers be stored within individual curtilages or in the designated landscaped areas as indicated on approved plan B.
8. That buildings permitted by this consent shall be erected strictly in accordance with the plans attached to this permission.
9. That details of boundary walls, fences or other means of enclosure shall be submitted and approved in writing by the Director of Planning prior to work commencing on the erection of the dwellings on the estate.
10. To carry out that part of the landscaping scheme relating to tree and shrub planting, which falls within each phase of the phasing scheme (approved plan A) during the first planting season following the completion of construction works on the dwellings comprised in that phase or during such other planting season as may be agreed in writing by the Director of Planning and such planting shall be carried out to the reasonable satisfaction of the Director of Planning and to maintain all planted materials for a period of ten years from the date of planting, replacing all planted materials which are destroyed, damaged or which die off during the said period to the reasonable satisfaction of the Director of Planning.
11. To carry out that part of the landscaping scheme relating to the treatment of ground surfaces and grassed areas which falls within each phase of the phasing scheme within eighteen months of the date of completion of construction works of the dwellings comprised in that phase or from such other date as may be agreed in writing by the Director of Planning and such ground surfaces and grassed areas shall thereafter be regularly mowed and otherwise maintained to the satisfaction of the Director of Planning.
12. That the landscape details submitted with regard to the detailed layout be implemented in accordance with approved plan B and that the landscape scheme be carried out in accordance with the provisions of conditions 10 and 11.
13. That details of the hard landscape shall be submitted and approved in writing by the Director of Planning prior to work commencing on the erection of the dwellings on the estate.
14. The estate road(s) and its access shall be designed and constructed in accordance with Design in Gwynedd: Residential Roads and Technical Appendix : Roads.
15. The estate road and the drainage of the site shall be constructed as shown on Plans 801g/13 and 801g/10.
16. The estate road(s) shall be completed to a rolled and blinded hardcore finish with the surface water drainage system complete and in perfect working order before any work is commenced on the dwellings which it serves.
17. The estate road(s) shall be kerbed and the carriageway and footways finally surfaced and lighted before the last dwelling on the estate is occupied or within two years of the commencement of the work on the site whichever is the sooner.
18. Where development is proposed in phases or stages the previous phase shall be completed to the entire satisfaction of the Local Planning Authority before the development of a subsequent phase or stage is permitted.

DATED 29th

day of April,

1983

Ynys Mon Borough Council,
Llangefni,
Gwynedd. LL77 7TW.

Signed.....*[Signature]*.....
Director of Planning

Appendix III

Copy of Email Exchange with Isle of Anglesey Council Pertaining to Agreement of the Formation Level for the Development

Richard Sims

From: Richard Sims
Sent: 20 March 2017 10:36
To: Chris Greenwood
Subject: FW: Morfa, Trearddur Bay

Hi Chris,

As discussed.

Regards,

Richard Sims BSc MSc | Director



Oaktree Environmental Ltd

Registered in UK – Company No. 04850754



M: 07886 564606 T: 01606 558833 – Lime House, Road Two, Winsford, Cheshire CW7 3QZ

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From: Kevin Dogan [<mailto:KevinDogan@ynysmon.gov.uk>]
Sent: 06 October 2016 08:59
To: Iwan W. Jones <IwanJones@ynysmon.gov.uk>
Cc: Adam Caldwell <a.caldwell@datrys.coop>
Subject: RE: Morfa, Trearddur Bay

Iwan,

Further to your e-mail correspondence relating to the above matter, I have now had the opportunity to clarify some of the details with the consulting engineers.

As a consequence, I can confirm that the methodology employed to convert the site/finished floor levels, as shown on the original approved drawings, so that they are now relative to ordnance datum, appears to be reasonable.

I trust these observations are of assistance and apologise for the delay in responding.

Regards,

Kevin Dogan

Kevin Dogan
Uwch Beiriannydd Cynorthwyol - Senior Assistant Engineer,
Adran Briffyrdd - Highways Department
Gwasanaeth Priffyrdd, Gwastraff ag Eiddo – Highways, Waste and Property Service
Cyngor Sir Ynys Mon - Isle of Anglesey County Council
LL77 7TW.
Tel: 01248 752366
Ebost/Email: KevinDogan@anglesey.gov.uk

From: Iwan W. Jones
Sent: 08 September 2016 17:12
To: Kevin Dogan
Subject: FW: Morfa, Trearddur Bay

Hi Kevin,

I refer to the above site and email below sent by the agent acting on behalf of the developer.

A planning application was approved at the site for residential development in 1983.

Over a period of time inert material has been deposited on the land. The developer are of the opinion that the work are done in accordance with the approved level of land, under the original planning consent.

The plans approved under the original planning permission is relatively old and unclear. Nevertheless, the engineer acting on behalf of the developer has provided his findings below.

I propose to respond to him by stating something similar as 'Based on your methodology the Local Planning Authority has no reason to contradict your findings'.

However, prior formally responding I would be grateful for your professional thought regarding his findings. Do they seem logical to you?

Many thanks,
Iwan

From: Adam Caldwell [<mailto:a.caldwell@datrys.coop>]
Sent: 26 August 2016 10:28
To: Iwan W. Jones
Subject: Morfa, Trearddur Bay

Dear Iwan,

I write in relation to the proposed development at Trearddur Bay of which we have had previous discussions. As the planning enforcement officer I presume it's you that I need to discuss this with. If not please point me in the right direction.

We are working our way through numerous flood modelling criteria and we wish to model the flood impact on the development that received planning permission in 1983.

In order to do so we wish to agree the Finished Floor level of the dwellings associated with that application. Having looked through all the records in the office a few months back when we met, I concluded that the planning permission was granted on the basis that the drawings showed a level relative to a local datum rather than ordnance datum.

I have since been converting the local datum back to ordnance datum using levels that would be deemed to have remained unchanged since the 1980's. Effectively the invert of the ditch on the site is my comparison value and it cannot have been raised otherwise would not function.

The 750mm culvert in the planning application of 1983 was proposed to be laid at 1 in 600 and its invert would align with the ditch invert at the time.

SW6 on the planning drawings appears to be at the boundary and states a value of 28.430.

A comparison of position of this level in the ditch at this boundary indicates that the level to ordnance datum is approx 1.78m A.O.D.

If $1.78 + 28.430$ then the ffl of 30.050 equates to 3.4m A.O.D.

As of last year following the topographic survey being undertaken, the levels of the site east of the ditch lie at approximately 2.8 – 3.2mA.O.D whilst the levels of the site west of the ditch lie at approximately 2.0 – 3.0mA.O.D.

Can we please come to an agreement of this level of 3.4mA.O.D so we can undertake our flood modelling as required by Natural Resources Wales.

Regards,

Adam Caldwell
MEng (Hons)



MODELU DYLUNIO PEIRIANNEG
MODEL DESIGN ENGINEERING

Office (Caernarfon)
01286 671027

www.datrys.net

Appendix IV

Morfa Development Cost Analysis

Top line Morfa figures

Number of units	65		Not culverting the stream reduces the number from 83 to 65, 27 smaller detailer house and 38 larger plots
Average sale cost	£185,000	£12,025,000	Prices, if on the market today would start at £150,000 and the larger plots would go up to £300,000
Average size m2	1,000		house size varies from 60m2 to 160m2
Ave. Cost per unit	£100,000	£6,500,000	allow £1000 per m2 for build with out infastructure and drainage costs, detailed plot only need meet building reg from 1983
Drainage costs		£520,000	allowing £8k per unit
Infrastructure costs		£650,000	allowing £10k per unit
Infill costs			tbc
Sales Value		£12,025,000	
Build cost		£7,670,000	
Sales costs		£601,250	allowing 5% sales cost
Profitability		£3,753,750	

Appendix V

Quotation for supply and levelling of limestone 6F5 and virgin clay (overburden) from Clive Hurt Plant Hire Ltd

Richard Sims

From: Glyn Morris [glyn@grayswaste.com]
Sent: 08 March 2017 10:25
To: Richard Sims
Cc: Matthew Davis
Subject: FW: morfa SUBSTITUTION TEST

From: Paula [<mailto:Paula@cmpplanthire.co.uk>]
Sent: 08 March 2017 09:44
To: Glyn Morris
Subject: FW: Meeting

Regards

Paula Jones

On Behalf of
Clive Hurt Plant Hire Ltd
T/A CMP
Rhuddlan Bach Quarry
Brynteg
Anglesey
LL78 7JJ
Tel: 01248 851010
Fax: 01248 851012
Email: paula@cmpplanthire.co.uk



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From: Paula
Sent: 08 March 2017 09:01
To: 'glynmorris@grayswaste.com' <glynmorris@grayswaste.com>
Subject: Meeting

Good morning Glyn,

Re our meeting on Monday afternoon
Subject – Substitution test for recovery plan at Morfa, Treaddur Bay.

To supply & level 20,000 limestone 6F5 @ £27.50/m3

To supply & level 20,000 Virgin Clay (Overburden) @ £18.70/m3

I trust this meets with your approval , should you require any further information please do not hesitate to contact me.

Regards

Chris Parry

On Behalf of
Clive Hurt Plant Hire Ltd
T/A CMP
Rhuddlan Bach Quarry
Brynteg
Anglesey
LL78 7JJ
Tel: 01248 851010
Fax: 01248 851012