

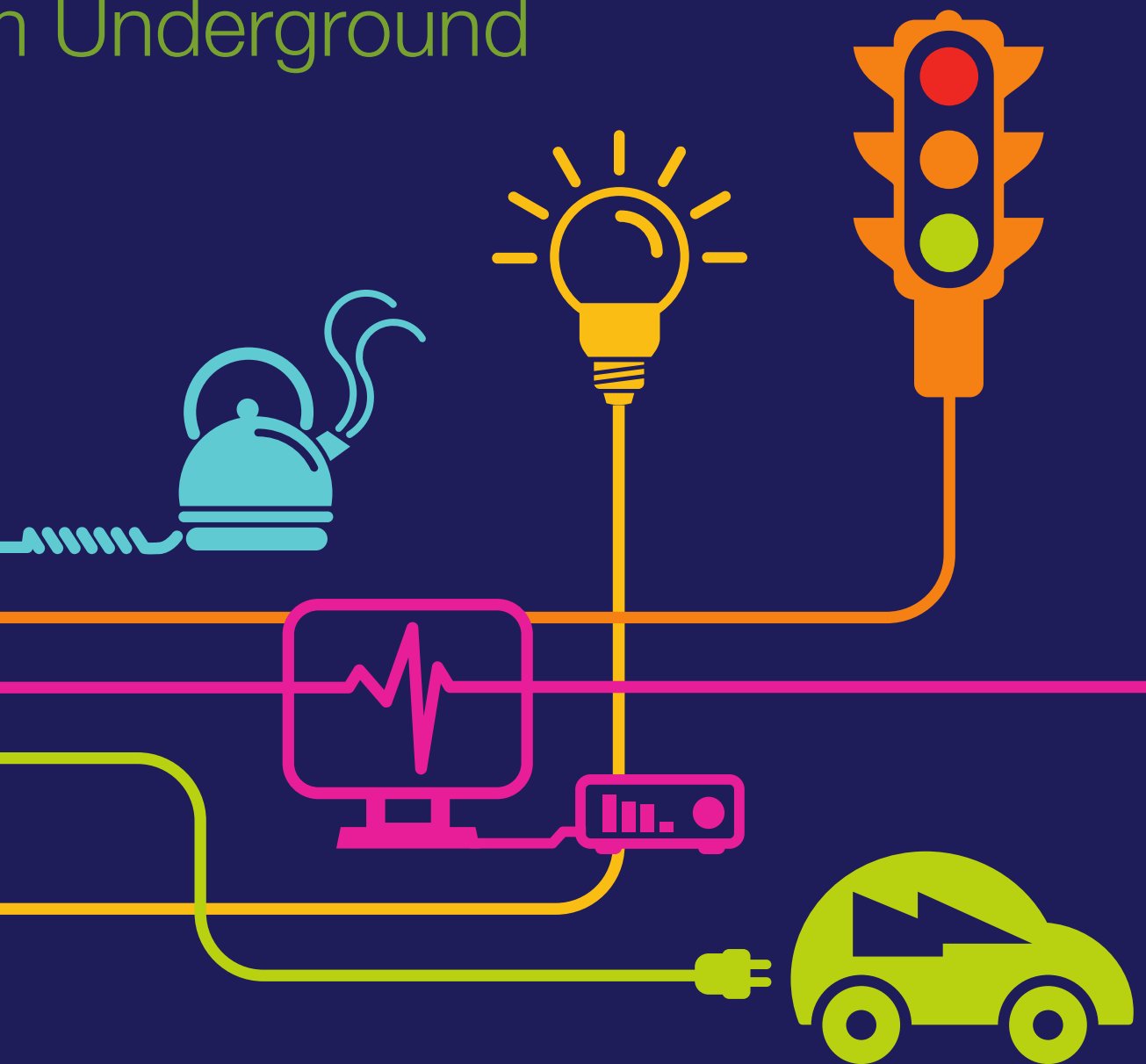
DOCUMENT 5.15.2.14

Assessment of Vibration Effects from Underground Tunnelling Works

Chapter 15 – Appendix 14

National Grid (North Wales Connection Project)

Regulation 5(2)(a) including (l) and (m) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





North Wales Connection Project

Volume 5

Document 5.15.2.14 Appendix 15.14 Assessment of Vibration Effects from Underground Tunnelling Works

National Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

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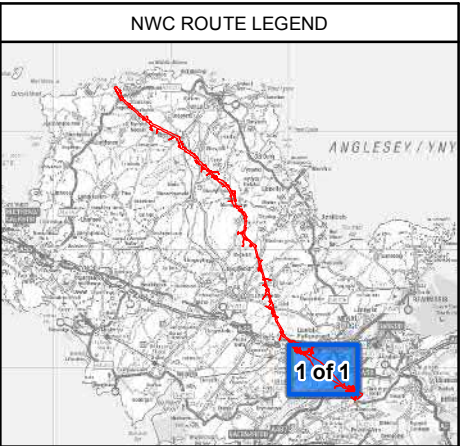
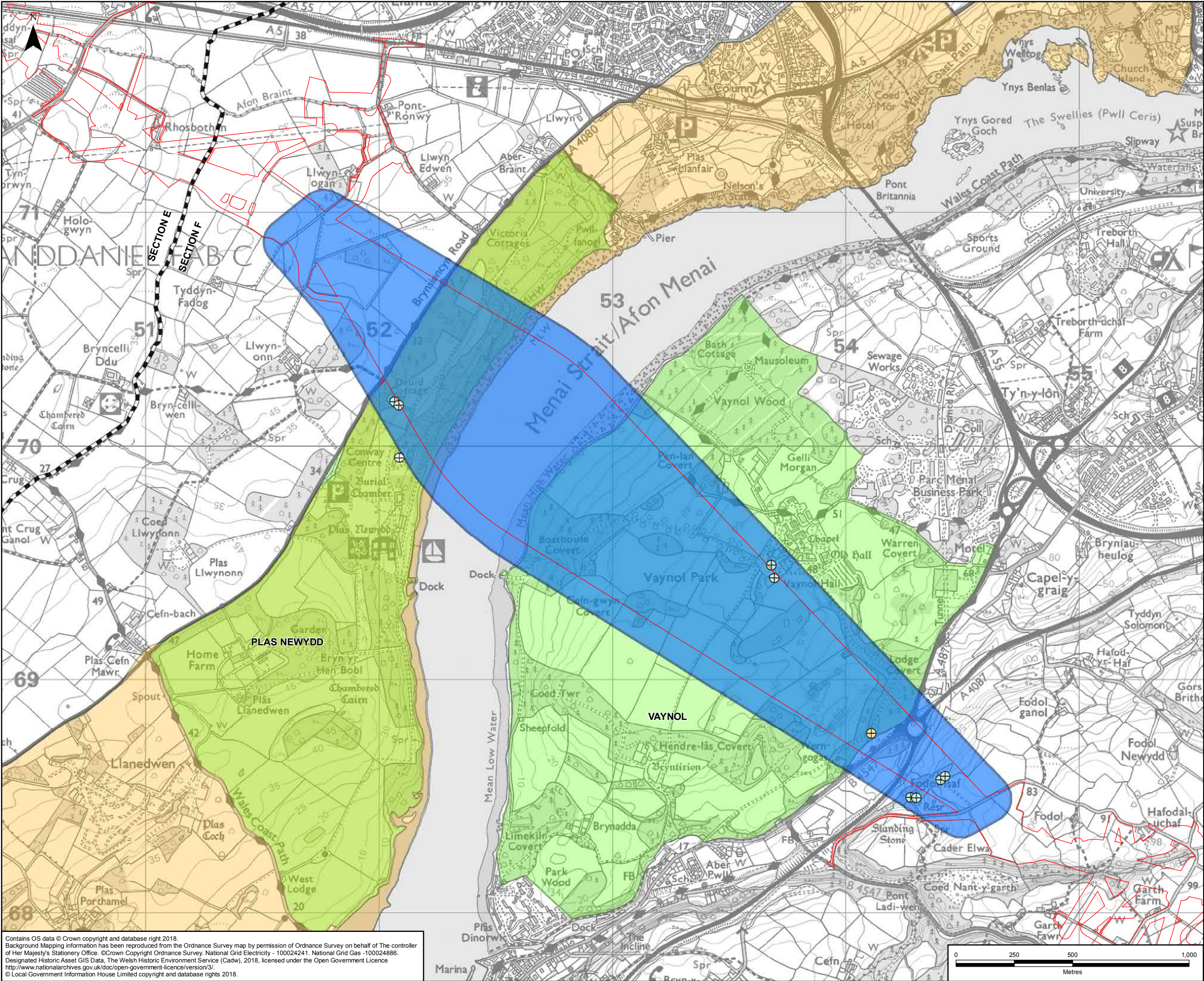
1. TBM Method (Scenarios 1 and 2)

TBM Method						
Receptors within 50 m of horizontal LoD	Receptor Classification	Receptor Sensitivity	Within horizontal LoD	Distance to horizontal LoD (m)	Approx. distance to vertical LoD (m)	Magnitude of Effect
R5/03211	Dwelling	Medium	Yes	0	50	Very Low
R5/03236	Dwelling	Medium	Yes	0	50	Very Low
C5/00525	Other Educational Establishment	Medium	No (ancillary buildings are)	30	40	No Effect
R5/06982	Detached	Medium	Yes	0	15	Low
R5/07068	Detached	Medium	No	36	30	Very Low
R5/07079	Detached	Medium	No	37	30	Very Low
R5/07156	Detached	Medium	Yes	0	55	Very Low
R5/07169	Caravan	Medium	Yes	0	55	Very Low
R5/06605	Self Contained Flat (Includes Maisonette / Apartment)	Medium	Yes	0	55	Very Low
R5/06585	Detached	Medium	No	8	55	Very Low
AONB	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	No Effect
Plas Newydd (Users of)	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	No Effect
FAENOL	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	No Effect

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Figure A

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LEGEND

ORDER LIMITS

SECTION OUTLINES

SIGNIFICANCE OF EFFECT:

- MINOR
- NEGLIGIBLE
- NO EFFECT

VIBRATION STUDY AREA: UNDERGROUND TUNNELING WORKS

REGISTERED HISTORIC PARK AND GARDEN - PARK BOUNDARY (MEDIUM SENSITIVITY)

ANGLESEY AREA OF OUTSTANDING NATURAL BEAUTY (MEDIUM SENSITIVITY)

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A	10/11/2017	ENVIRONMENTAL STATEMENT	JF	SH	PE
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nationalgrid					
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Document Number: 5.15.2.14					
Document Title: FIGURE A SIGNIFICANCE OF VIBRATION EFFECTS FROM UNDERGROUND TUNNELLING WORKS - TUNNEL BORING MACHINE METHOD (SCENARIOS 1 AND 2) SECTION E & F					
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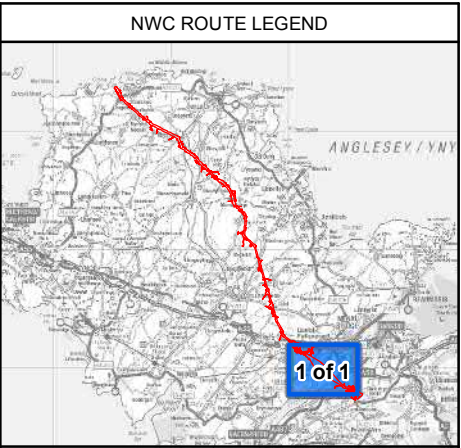
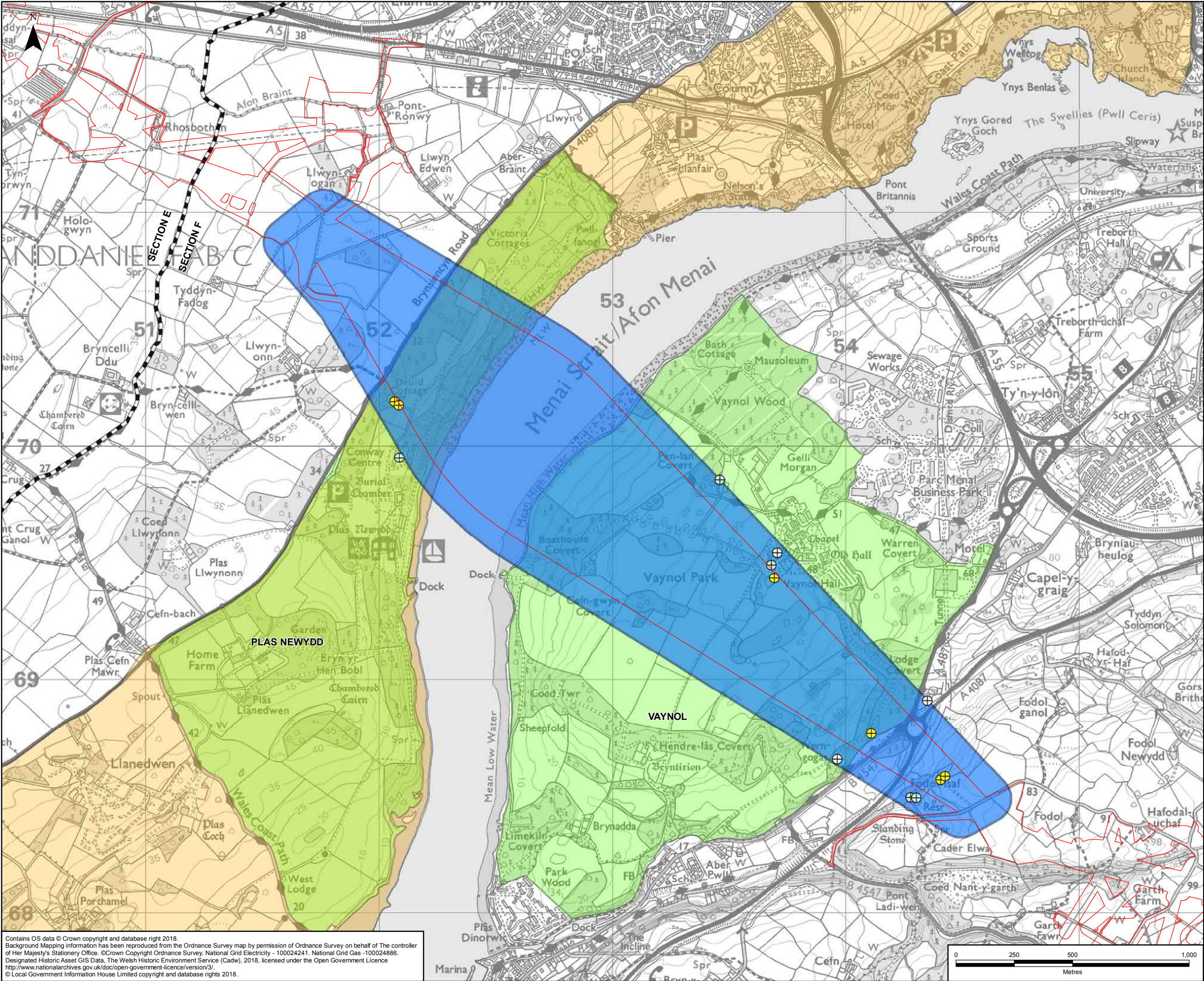
2. D&B Method (Scenario 3)

D&B Method						
Receptors within 100 m of horizontal LoD	Receptor Classification	Receptor Sensitivity	Within horizontal LoD	Distance to horizontal LoD (m)	Approx. distance to vertical LoD (m)	Magnitude of Effect
C5/00525	Other Educational Establishment	Medium	No (ancillary buildings are)	30	40	Very Low
C5/00917	Indoor / Outdoor Leisure / Sporting Activity / Centre	Low	No	100	25	No Effect
C5/00918	Restaurant / Cafeteria	Low	No	100	25	No Effect
R5/03211	Dwelling	Medium	Yes	0	50	Low
R5/03236	Dwelling	Medium	Yes	0	50	Low
R5/06139	Detached	Medium	No	100	25	Very Low
R5/06585	Detached	Medium	No	5	55	Very Low
R5/06605	Self Contained Flat (Includes Maisonette / Apartment)	Medium	Yes	0	55	Low
R5/06893	Detached	Medium	No	75	45	No Effect
R5/06982	Detached	Medium	Yes	0	15	Low
R5/07067	Self Contained Flat (Includes Maisonette / Apartment)	Medium	No	50	30	Very Low
R5/07068	Detached	Medium	No	35	30	Very Low
R5/07079	Detached	Medium	No	35	30	Very Low
R5/07156	Detached	Medium	Yes	0	55	Low
R5/07169	Caravan	Medium	Yes	0	55	Low
R5/13354	Detached	Medium	No	65	55	No Effect
AONB	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	Very Low
Plas Newydd (Users of)	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	Very Low
FAENOL	Public / Village Hall / Other Community Facility	Medium	Yes	0	40	Very Low

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Figure B

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LEGEND

- ORDER LIMITS
- SECTION OUTLINES
- SIGNIFICANCE OF EFFECT:
- MINOR
- NEGLIGIBLE
- NO EFFECT
- VIBRATION STUDY AREA: UNDERGROUND TUNNELING WORKS
- REGISTERED HISTORIC PARK AND GARDEN - PARK BOUNDARY (MEDIUM SENSITIVITY)
- ANGLESEY AREA OF OUTSTANDING NATURAL BEAUTY (MEDIUM SENSITIVITY)

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A	10/11/2017	ENVIRONMENTAL STATEMENT	JF	SH	PE
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