A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

ENVIRONMENTAL STATEMENT
VOLUME 2: FIGURES

July 2019



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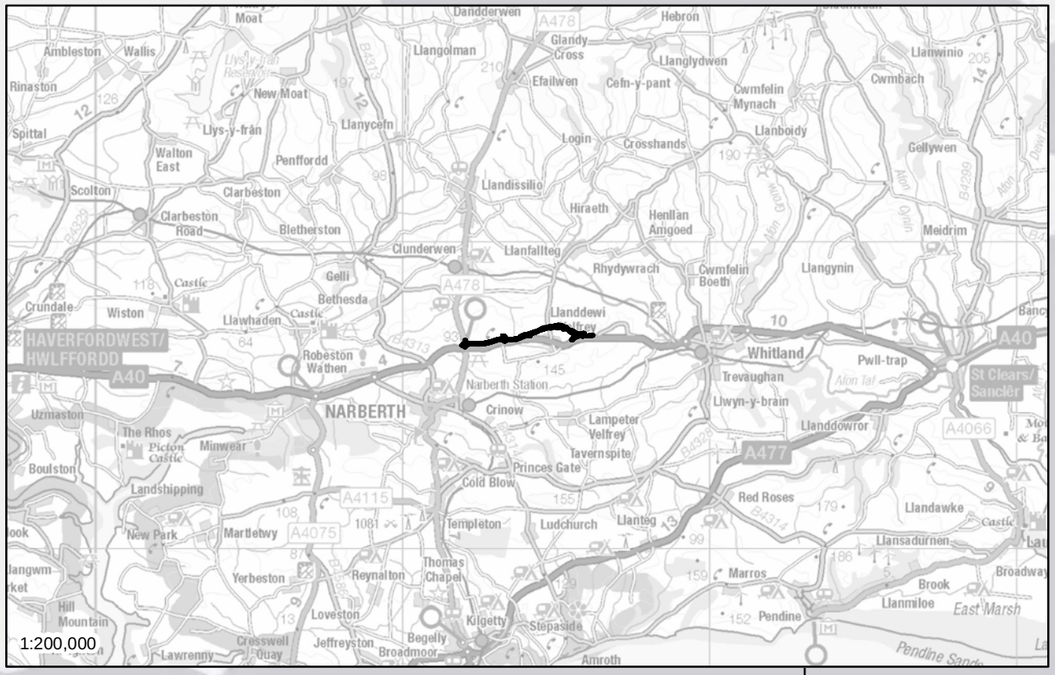

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LEGEND

PROPOSED ALIGNMENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	18/09/18	UPDATE FOLLOWING COMMENTS	EB	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 1.1
SCHEME LOCATION

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:1,000,000

Rev	By	Chkd	Appd	Auth
P02	EB	AS	TE	GD
	Date 18/09/18	Date 18/09/18	Date 18/09/18	Date 18/09/18

Name
A40LVP - RML - GEN - SWI - DR - J - 0001
Project | Originator | Volume | Location | Type | Role | Number

A3

A B C D E F G H

1 2 3 4

PEMBROKESHIRE

CARMARTHENSHIRE

0 2 4 Kilometres

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Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster

LEGEND

PROPOSED ALIGNMENT

COMMUNITY COUNCIL BOUNDARIES

COUNTY BOUNDARY

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P01	12/09/18	FIRST ISSUE	EB	MR	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 2.1
ADMINISTRATIVE AREA

Suitability

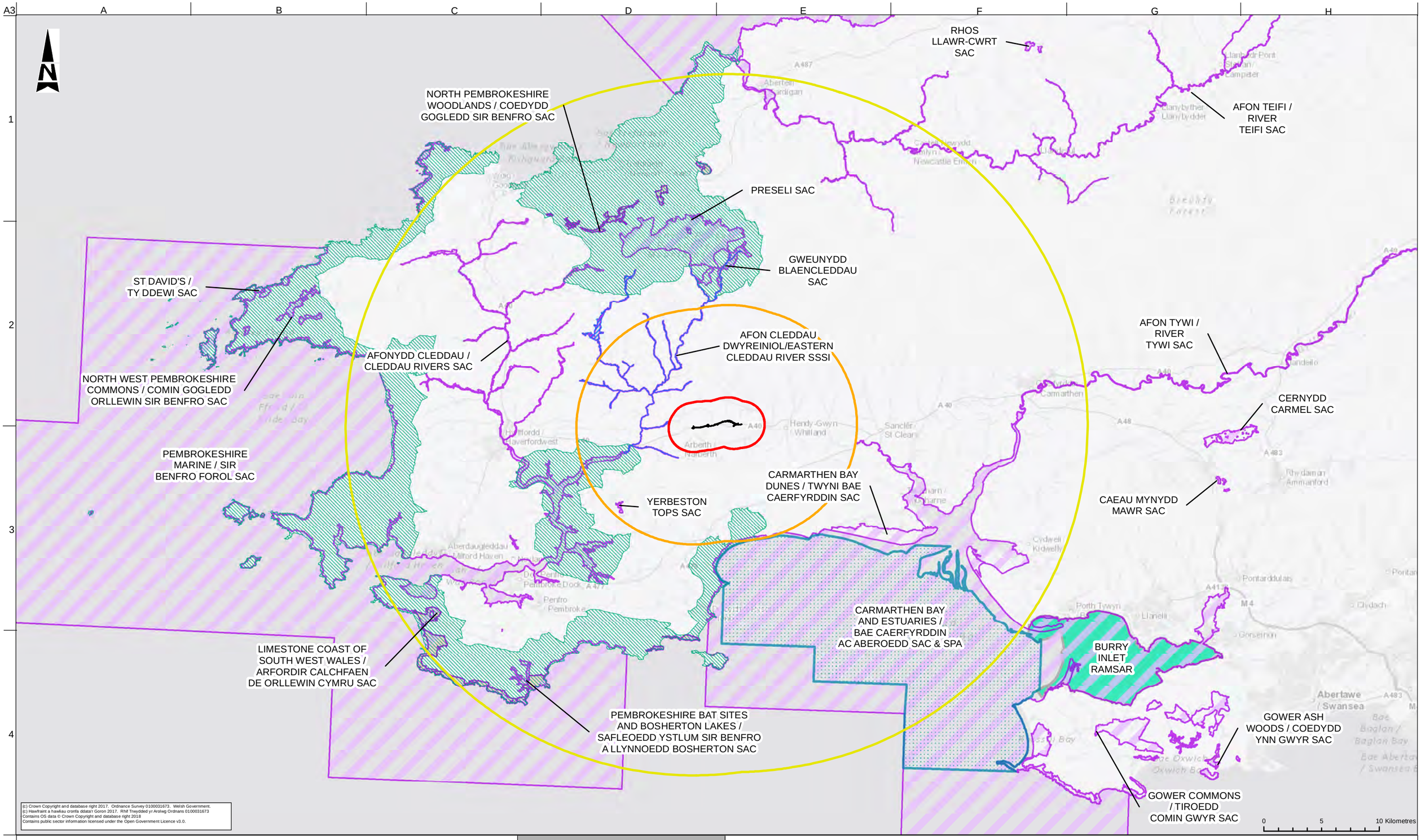
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:100,000

Rev	By	Chkd	Appd	Auth
P01	EB	MR	TE	GD
	Date 12/09/18	Date 12/09/18	Date 12/09/18	Date 12/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	ELS	SWI	DR	C	0005



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LEGEND

- PROPOSED ALIGNMENT
- 2KM BUFFER
- 10KM BUFFER
- 30KM BUFFER
- PEMBROKESHIRE COAST NATIONAL PARK
- SSSI
- SAC
- SPA
- RAMSAR
- BAT SAC

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	21/01/19	UPDATE FOLLOWING COMMENTS	EB	GJ	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS MOTT MACDONALD ARUP RICHARDS

Drawing Title: FIGURE 2.2 STATUTORY DESIGNATIONS AND KEY ENVIRONMENTAL CONSTRAINTS IN THE VICINITY OF THE SCHEME

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:300,000

Rev	By	Chkd	Appd	Auth
P03	EB	GJ	TE	GD
	Date 21/01/19	Date 21/01/19	Date 21/01/19	Date 21/01/19

Name: A40LVP - ARP - EGN - SWI - DR - LE - 0005

Project | Originator | Volume | Location | Type | Role | Number

A3



Legend

- Waterbody
- Watercourse
- Scheduled Ancient Monument
- Listed Building
- NMRW Feature
- Public Right of Way
- Residential Property
- Community Facility

Note:
Proposed road layout and earthworks shown as white line on aerial photograph

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	ISSUED FOR COLLABORATION	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 2.3
GEOGRAPHICAL CHARACTERISTICS AND ENVIRONMENTAL CONSTRAINTS

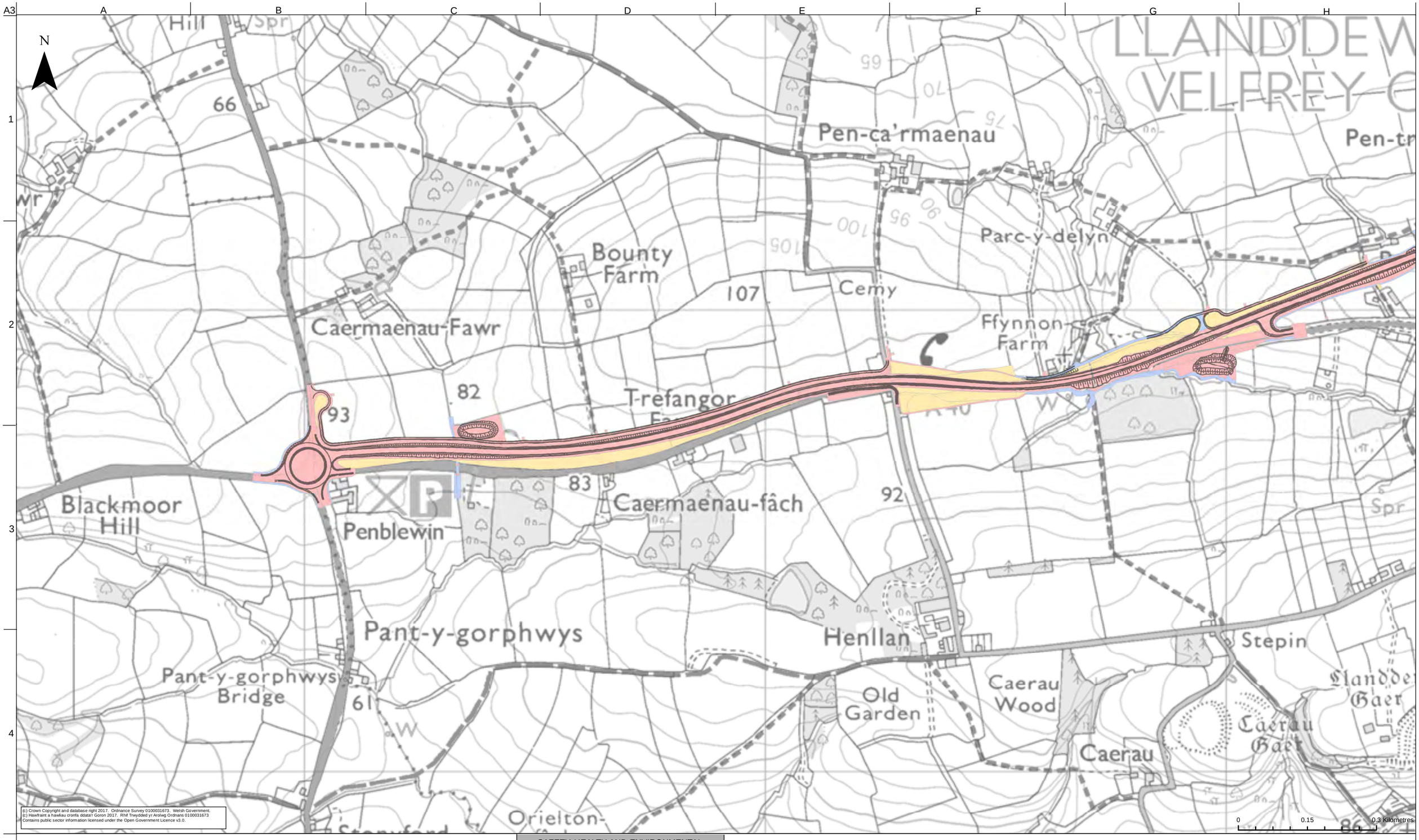
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: N/A

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 21/01/19	Date 21/01/19	Date 22/01/19	Date 22/01/19

Name
A40LVP - RML - EGN - SWI - DR - LE - 0002
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



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LEGEND

- NEW SECTION OF TRUNK ROAD
- PERMANENT HIGHWAY LAND WITHIN FENCELINE, INCLUDING WATER TREATMENT AREAS
- TEMPORARY CONSTRUCTION LAND & EASEMENTS FOR ACCESS AND MAINTENANCE
- OTHER PERMANENT LAND TAKE E.G. MITIGATION PLANTING

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	21/01/19	UPDATE FOLLOWING COMMENTS	EB	GJ	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

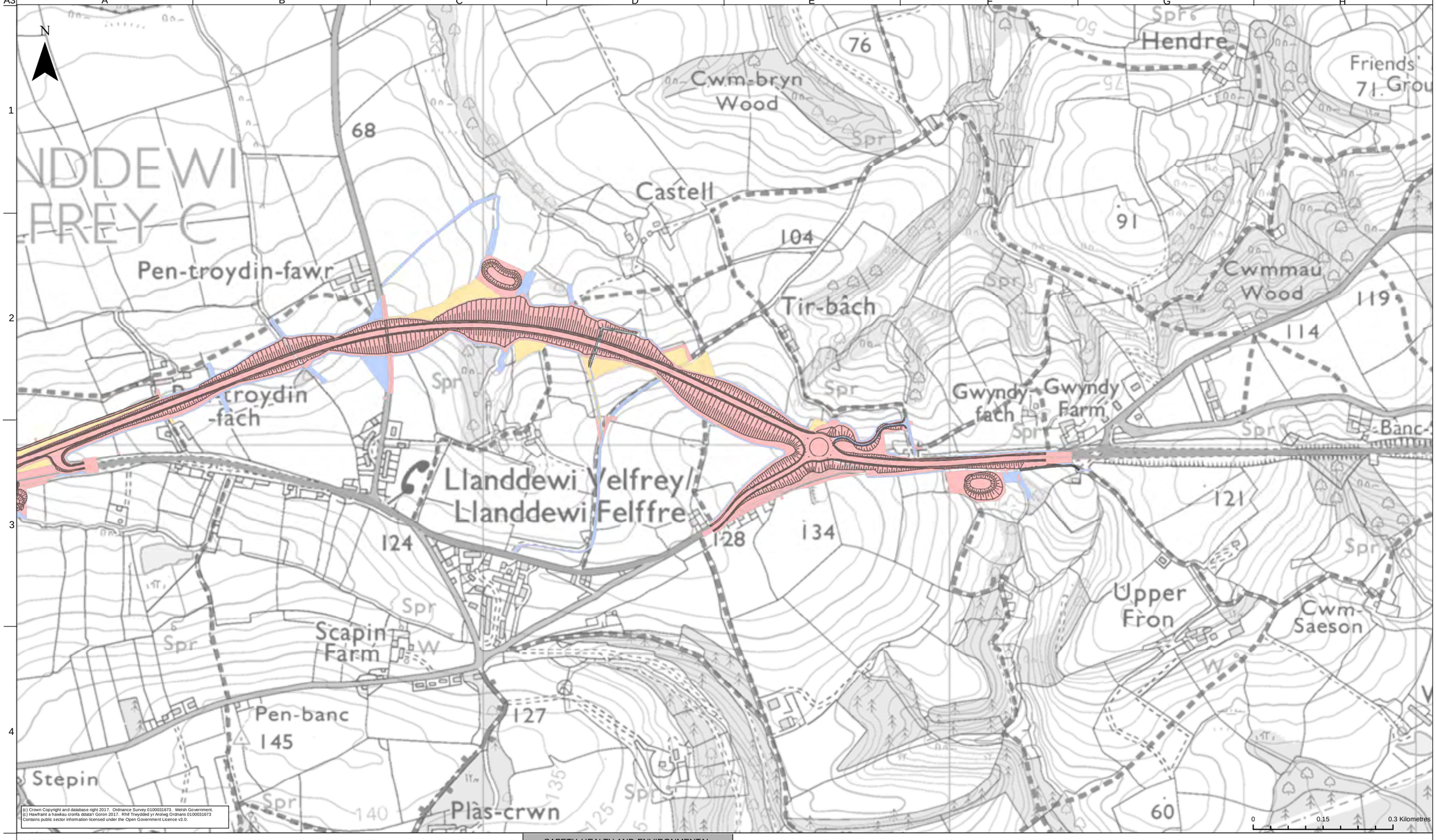
Drawing Title
FIGURE 2.4A
TOTAL PERMANENT LANDTAKE
OF THE SCHEME SHEET 1 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:7,500

Rev	By	Chkd	Appd	Auth
P02	EB	AS	TE	GD
	Date 21/01/19	Date 21/01/19	Date 21/01/19	Date 21/01/19

Name
A40LVP - ARP - EGN - SWI - DR - ZL - 0001
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- NEW SECTION OF TRUNK ROAD
- PERMANENT HIGHWAY LAND WITHIN FENCELINE, INCLUDING WATER TREATMENT AREAS
- TEMPORARY CONSTRUCTION LAND & EASEMENTS FOR ACCESS AND MAINTENANCE
- OTHER PERMANENT LAND TAKE E.G. MITIGATION PLANTING

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	21/01/19	UPDATE FOLLOWING COMMENTS	EB	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 2.4B
TOTAL PERMANENT LANDTAKE
OF THE SCHEME SHEET 2 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:7,500

Rev	By	Chkd	Appd	Auth
P03	EB	AS	TE	GD
	Date 21/01/19	Date 21/01/19	Date 21/01/19	Date 21/01/19

Name
A40LVP - ARP - EGN - SWI - DR - ZL - 0002

Project | Originator | Volume | Location | Type | Role | Number



View north along the Llanfallteg Road to Preseli Hills from Llanddewi Velfrey



The A40 on the Llanddewi Velfrey ridge 800m to the east of the village centre.



View north from a field close to Blaen-pen-troydin over Ty Bach Wood.
Showing the characteristic pattern of wet woodland in small wet valleys between plateaus of pasture.



View of the Llanddewi Velfrey Ridge from 1.5km from an unclassified road.
Showing the characteristic pattern of pastures enclosed by hedges and hedgebacks.



View west of the A40 through Llanddewi Velfrey from beside the war memorial



The A40 and Bethel Chapel



View of the A40, east, through Llanddwei Velfrey with the former public house to the left and the war memorial right of centre.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).
Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	21/09/18	FIRST ISSUE	GJ	TE	TE	GD
P02	21/01/19	UPDATED FOLLOWING WG COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS | M MOTT MACDONALD | ARUP | RICHARDS

Drawing Title
FIGURE 2.5A
PHOTOGRAPHS ILLUSTRATING THE IMMEDIATE SETTING OF THE SCHEME SHEET 1 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: N/A

Rev	By	Chkd	Appd	Auth
P02	EB	TE	TE	GD
	Date 21/01/19	Date 21/01/19	Date 21/01/19	Date 21/01/19

Name: **A40LVP - ARP - ELS - SWI - DR - C - 0001**
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



View of the A40 west of Llanddewi Velfrey towards Ffynnon Wood



Ffynnon Chapel, a Listed building close to the A40



Henllan Lodge to the west of Ffynnon Wood



View of the A40 on embankment west through Ffynnon Wood



The minor public road from south from Henllan Lodge junction with the A40



View east towards Ffynnon Wood along the A40 from near Penblewin

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log).
Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	21/09/18	FIRST ISSUE	GJ	TE	TE	GD
P02	21/01/19	UPDATED FOLLOWING WG COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 2.5B
PHOTOGRAPHS ILLUSTRATING THE IMMEDIATE SETTING OF THE SCHEME SHEET 2 OF 2

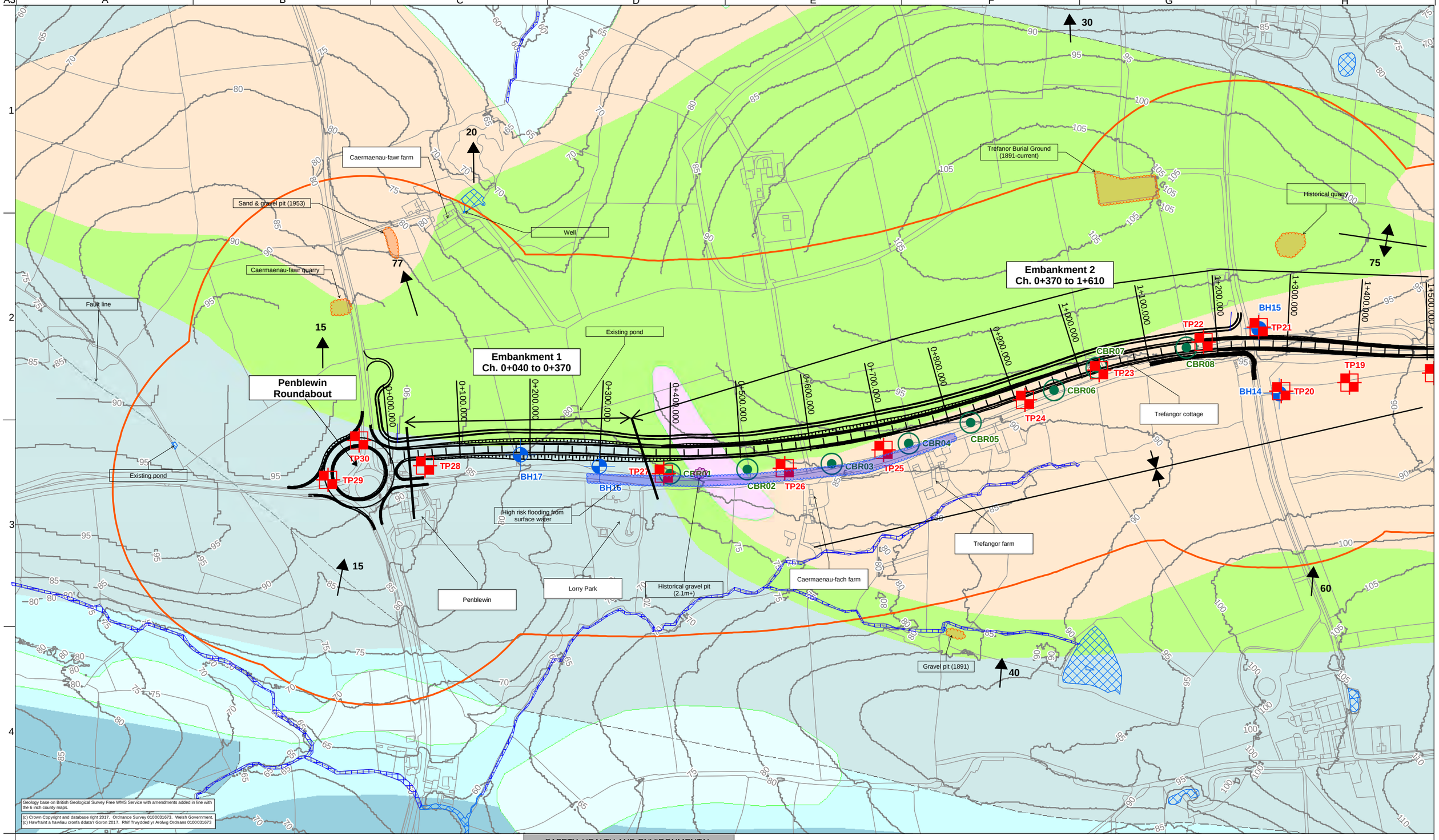
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
N/A

Rev	By	Chkd	Appd	Auth
P02	EB	TE	TE	GD
	Date 21/01/19	Date 21/01/19	Date 21/01/19	Date 21/01/19

Name
A40LVP - ARP - ELS - SWI - DR - C - 0002
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



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LEGEND

- PROPOSED ALIGNMENT
- WATER FEATURE

GEOLOGY

- PORTFIELD & HAVERFORD FORMATIO
- SLADE & REDHILL FORMATION
- TILL DIAMICTON
- HAVERFORD MUDSTONE FORMATION
- GLACIOFLUVIAL DEPOSITS

EXISTING EXPLORATORY HOLES

- CBR
- BOREHOLE
- TRIAL PIT
- QUARRY
- AREA IN CUTTING
- COUNTY MAP FEATURE

- ANTICLINE, LONG BAR INDICATES LINE OF AXIS
- SYNCLINE, LONG BAR INDICATES LINE OF AXIS
- FAULT
- DIP and ANGLE
- SPRING
- MEDIUM OR HIGH FLOODING RISK FROM SURFACE WATER
- STUDY AREA

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	18/01/19	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	MC	TE	GD
P03	15/11/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	AP	MC	GD
P02	13/09/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	AP	TE	GD
P01	18/12/17	FOR REVIEW	IM	MC	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 6.1A
FEATURES AND CONSTRAINTS PLAN
SHEET 1 OF 3

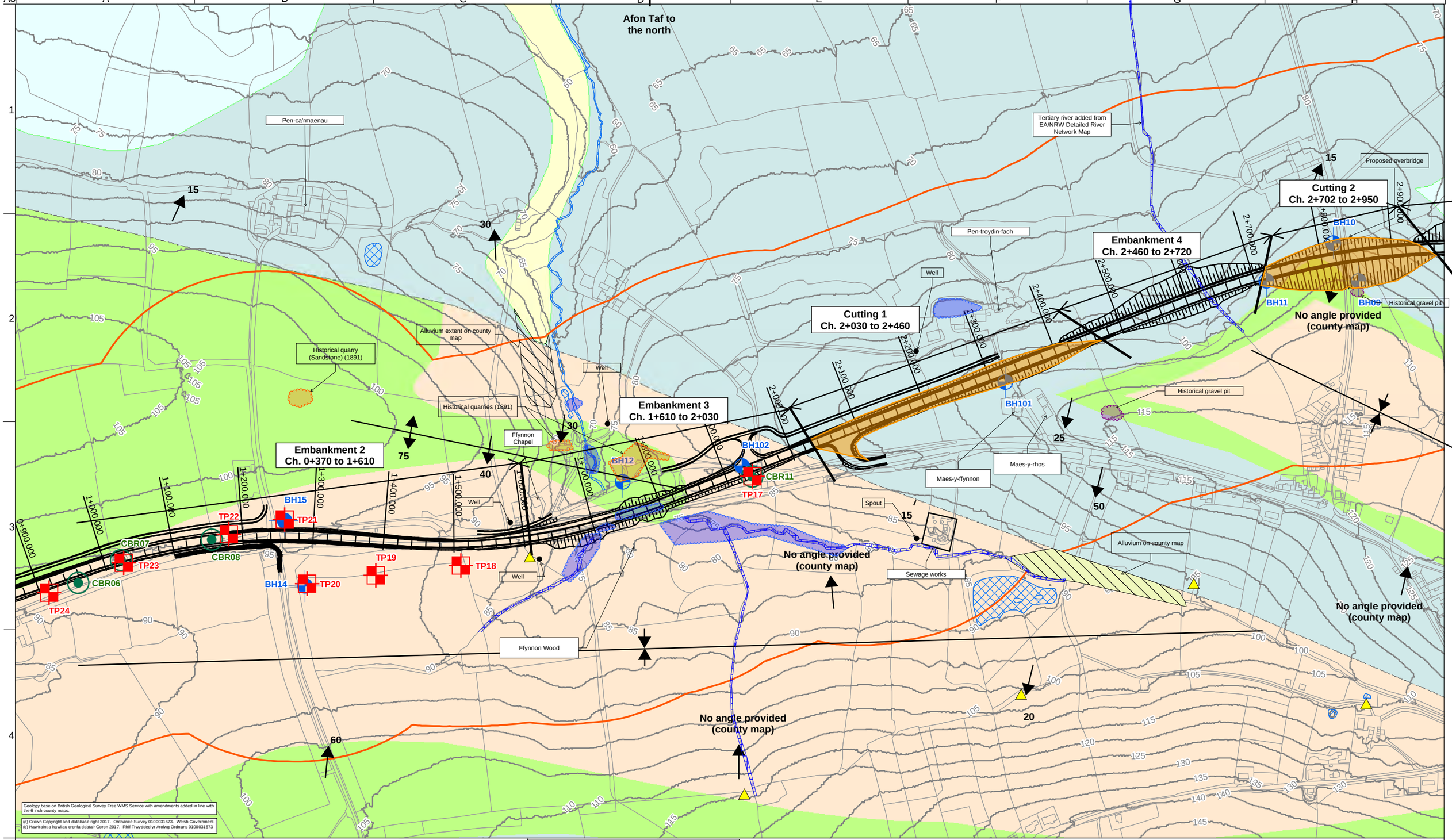
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	IM	MC	TE	GD
	Date	Date	Date	Date
	18/01/2019	18/01/2019	18/01/2019	18/01/2019

Name
A40LVP - ARP EGT - SWI - DR - C - 0001

Project	Originator	Volume	Location	Type	Role	Number



LEGEND

- PROPOSED ALIGNMENT
- WATER FEATURE

GEOLOGY

- PORTFIELD & HAVERFORD FORMATION
- SLADE & REDHILL FORMATION
- TILL DIAMICTON
- HAVERFORD MUDSTONE FORMATION
- GLACIOFLUVIAL DEPOSITS
- ALLUVIUM

EXISTING EXPLORATORY HOLES

- CBR
- BOREHOLE
- TRIAL PIT
- QUARRY
- AREA IN CUTTING
- COUNTY MAP FEATURE

- ANTICLINE, LONG BAR INDICATES LINE OF AXIS
- SYNCLINE, LONG BAR INDICATES LINE OF AXIS
- FAULT
- DIP and ANGLE
- SPRING
- MEDIUM OR HIGH FLOODING RISK FROM SURFACE WATER
- STUDY AREA

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	18/01/19	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	MC	TE	GD
P03	15/11/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	AP	MC	GD
P02	13/09/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	AP	TE	GD
P01	18/12/17	FOR REVIEW	IM	MC	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARUP, ARCADIS, MOTT MACDONALD, RICHARDS

Drawing Title: FIGURE 6.1B FEATURES AND CONSTRAINTS PLAN SHEET 2 OF 3

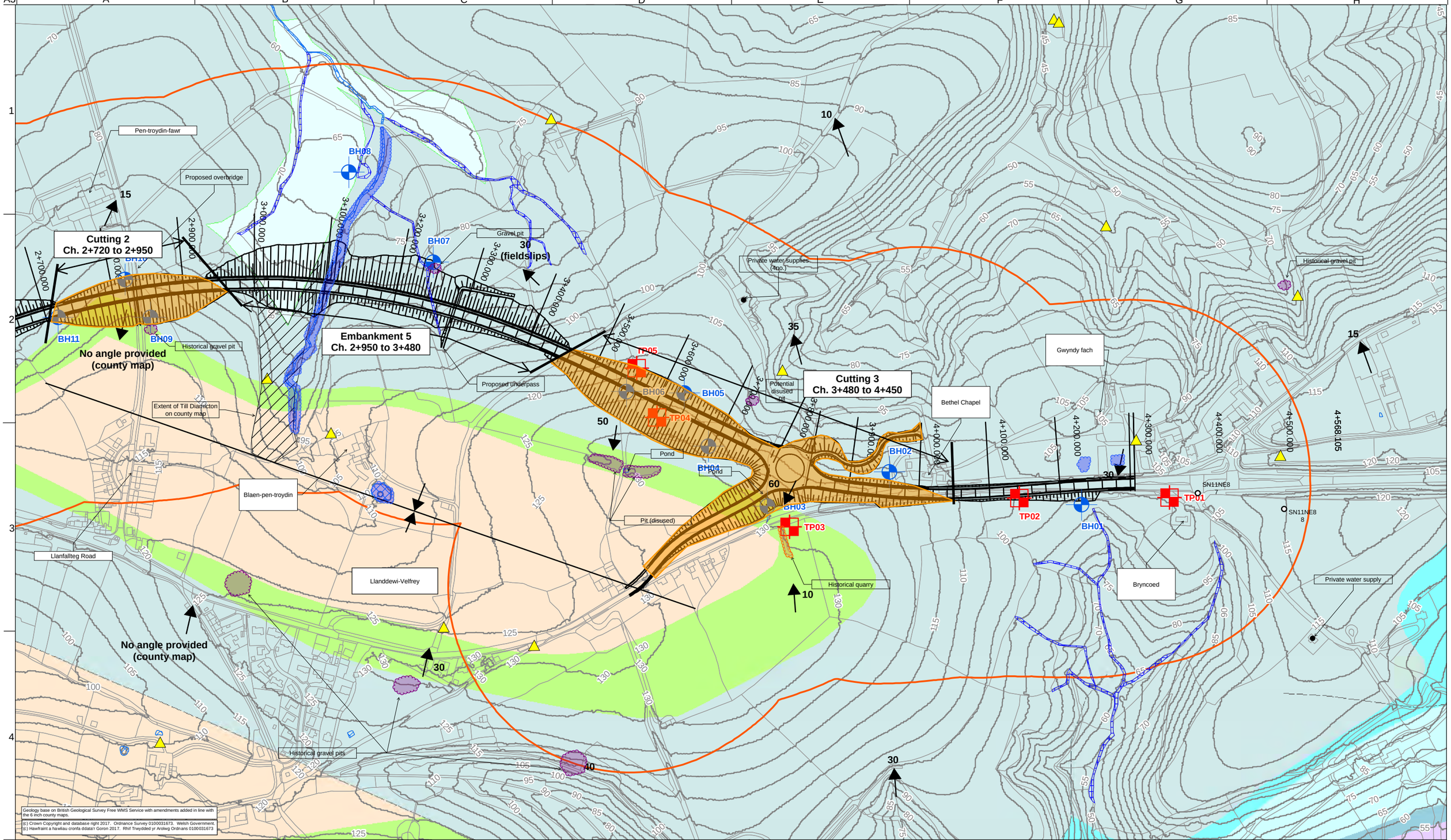
Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P04	IM	MC	TE	GD
	Date 18/01/2019	Date 18/01/2019	Date 18/01/2019	Date 18/01/2019

Name: A40LVP - ARP - EGT - SWI - DR - C - 0002

Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- WATER FEATURE

GEOLOGY

- PORTFIELD & HAVERFORD FORMATION
- SLADE & REDHILL FORMATION
- TILL DIAMICTON
- HAVERFORD MUDSTONE FORMATION
- GLACIOFLUVIAL DEPOSITS

EXISTING EXPLORATORY HOLES

- CBR
- BOREHOLE
- TRIAL PIT
- QUARRY
- AREA IN CUTTING
- COUNTY MAP FEATURE

- ANTICLINE, LONG BAR INDICATES LINE OF AXIS
- SYNCLINE, LONG BAR INDICATES LINE OF AXIS
- FAULT
- DIP and ANGLE
- SPRING
- MEDIUM OR HIGH FLOODING RISK FROM SURFACE WATER
- STUDY AREA

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following signficant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	18/01/19	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	MC	TE	GD
P03	15/11/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	MC	TE	GD
P02	13/09/18	TO ADDRESS COMMENTS FROM CLIENT'S AGENT	IM	AP	TE	GD
P01	18/12/17	FOR REVIEW	IM	MC	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 6.1C
FEATURES AND CONSTRAINTS PLAN
SHEET 3 OF 3

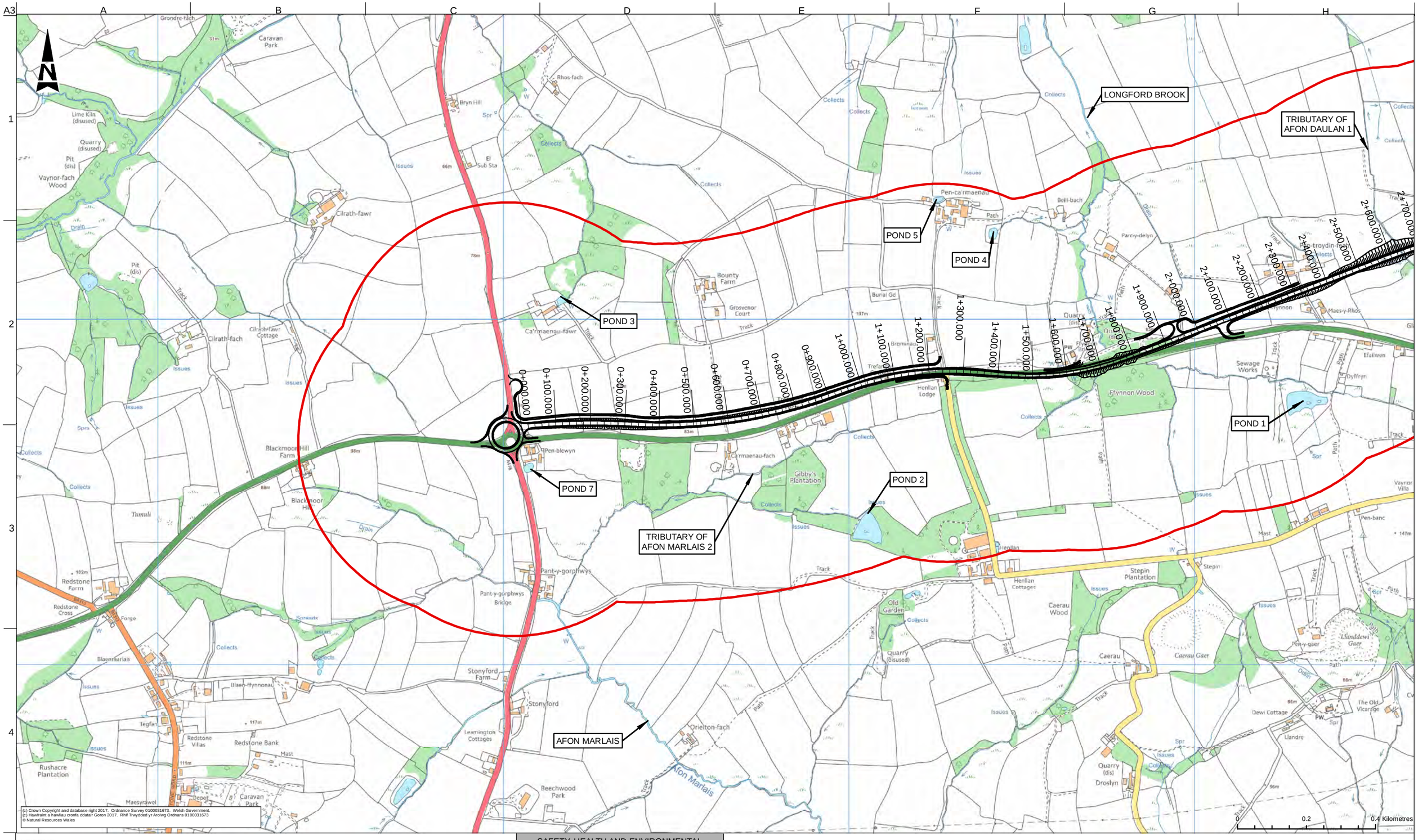
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

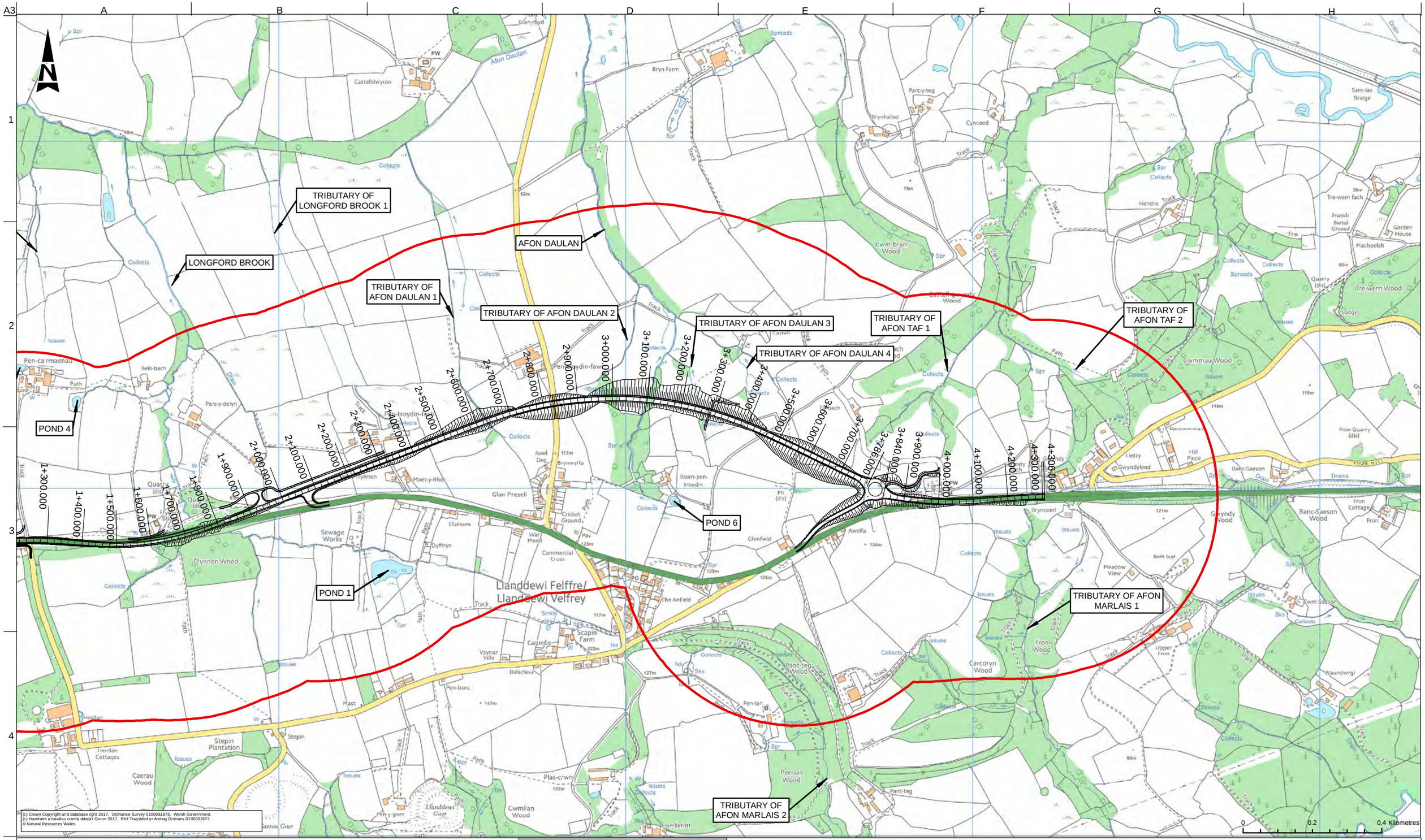
Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	IM	MC	TE	GD
	Date	Date	Date	Date
	18/01/2019	18/01/2019	18/01/2019	18/01/2019

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP - ARP	EGT	-	SWI	-	DR - C	- 0003


LONGFORD BROOK
TRIBUTARY OF AFON DAULAN 1
POND 5
POND 4
POND 3
POND 7
POND 2
POND 1
TRIBUTARY OF AFON MARLAIS 2
AFON MARLAIS
0+000.000
0+100.000
0+200.000
0+300.000
0+400.000
0+500.000
0+600.000
0+700.000
0+800.000
0+900.000
1+000.000
1+100.000
1+200.000
1+300.000
1+400.000
1+500.000
1+600.000
1+700.000
1+800.000
1+900.000
2+000.000
2+100.000
2+200.000
2+300.000
2+400.000
2+500.000
2+600.000
2+700.000
Grondre-fach
Caravan Park
Lime Kiln (disused)
Quarry (disused)
Pit (dis)
Vaynor-fach Wood
Bryn Hill
Rhos-fach
El Sub Sta
Cilrath-fawr
Cilrath-fach
Cilrath-fawr Cottage
Pit (dis)
Bounty Farm
Grosvenor Court
Ca'rmaenau-fawr
Pen-ca'rmaenau
Bell-bach
Parcy-delyn
Burial Gd
Brynmair
Trefan
Henllan Lodge
Pen-blewyn
Ca'rmaenau-fach
Gibby's Plantation
Blackmoor Hill Farm
Blackmoor Hill
Tumuli
Redstone Farm
Redstone Cross
Forge
Blaenmarlais
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Stonyford Farm
Stonyford
Blaen-ffynnonau
Tegfan
Redstone Villas
Redstone Bank
Mast
Rushacre Plantation
Maesyrowel
Depot
Caravan Park
Leamington Cottages
Orielton-fach
Afon Marlais
Beechwood Park
Old Garden
Quarry (disused)
Caerau Wood
Caerau
Caerau Gaer
Henllan Cottages
Stepin Plantation
Stepin
Llanddewi Gaer
Pen-y-caer
Dewi Cottage
The Old Vicarage
Llandre
Quarry (dis) Droslyn
Sewage Works
Efailwen
Dyffryn
Ffynnon Wood
Vaynor Vills
Pen-banc
Mast
Maes-y-Rhos
Ffynnon
Collects
Issues
Track
Path
Drain
Spr
Sprds
Quarry
Pit
Tumuli
Mast
Depot
Forge
Caravan Park
Cottage
Cottages
Vills
Pen-banc
Llanddewi Gaer
Pen-y-caer
Caerau Gaer
Caerau Wood
Old Garden
Dewi Cottage
The Old Vicarage
Llandre
Quarry (dis) Droslyn
Sewage Works
Efailwen
Dyffryn
Ffynnon Wood
Henllan Cottages
Stepin Plantation
Stepin
Pen-ca'rmaenau
Bell-bach
Parcy-delyn
Ca'rmaenau-fawr
Ca'rmaenau-fach
Pen-blewyn
Henllan Lodge
Gibby's Plantation
Blackmoor Hill Farm
Blackmoor Hill
Redstone Farm
Redstone Cross
Blaenmarlais
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Stonyford Farm
Stonyford
Blaen-ffynnonau
Tegfan
Redstone Villas
Redstone Bank
Rushacre Plantation
Maesyrowel
Leamington Cottages
Orielton-fach
Afon Marlais
Beechwood Park
Bounty Farm
Grosvenor Court
Burial Gd
Brynmair
Trefan
Cilrath-fawr
Cilrath-fawr Cottage
Cilrath-fach
Lime Kiln (disused)
Quarry (disused)
Pit (dis)
Vaynor-fach Wood
Bryn Hill
Rhos-fach
El Sub Sta
Caravan Park
Grondre-fach



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LEGEND

PROPOSED ALIGNMENT

500M BUFFER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P06	19/11/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

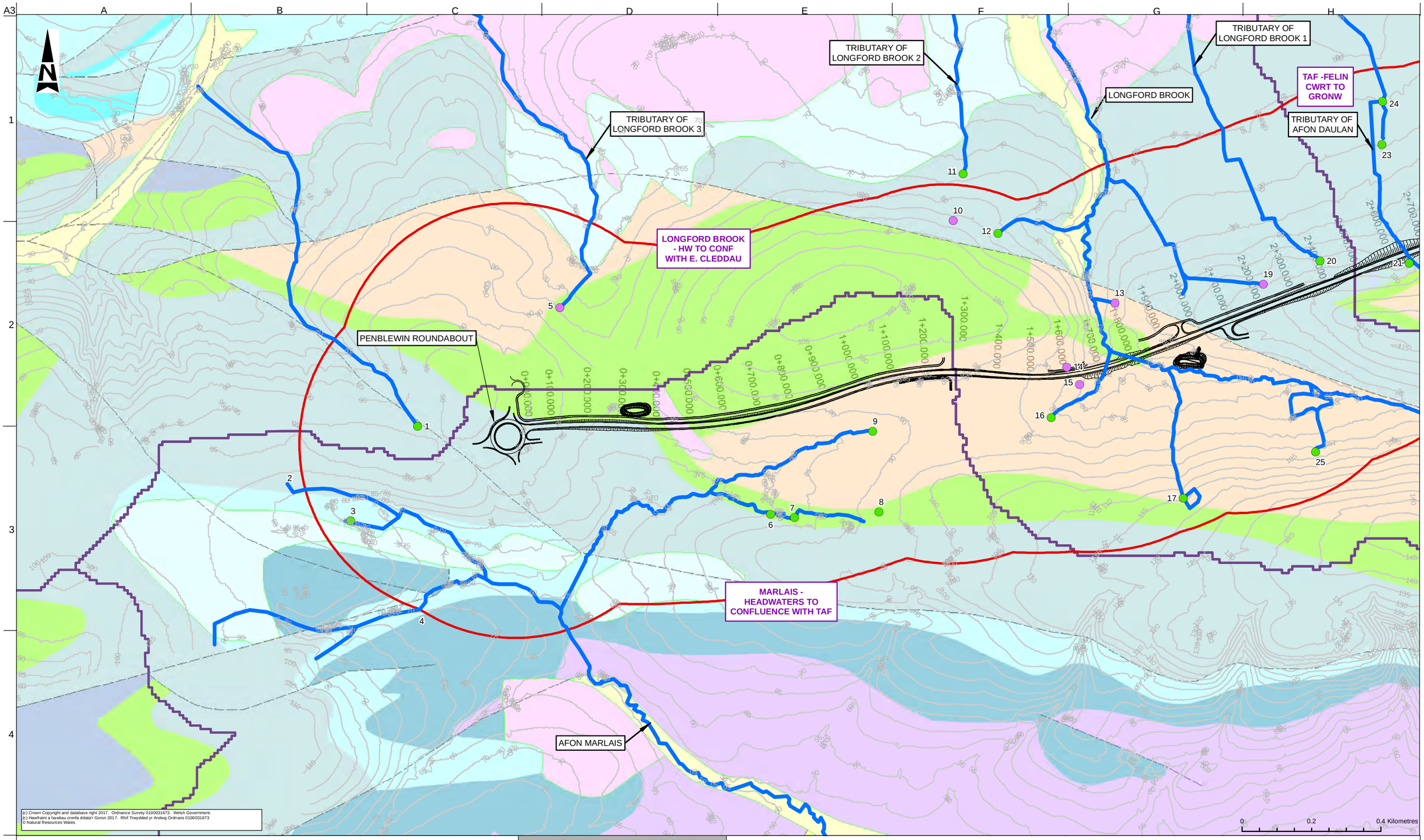
Drawing Title
FIGURE 7.1B
SURFACE WATER FEATURES
SHEET 2 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P06	EB	TS	TE	GD
	Date 19/11/18	Date 19/11/18	Date 19/11/18	Date 19/11/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0002
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- COLLECT/SPRING/ISSUE
- WELL
- PROPOSED ALIGNMENT
- WATER FEATURE
- 500M BUFFER
- WFD SURFACE WATER BODIES
- GLACIAL TILL
- MYDRIM SHALES & LIMESTONE
- SLADE & REDHILL FORMATION
- LLANDEILO LIMESTONE
- HAVERFORD MUDSTONE FORMATION
- PORTFIELD & HAVERFORD MUDSTONE FORMATION
- GLACIOFLUVIAL DEPOSITS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	17/09/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

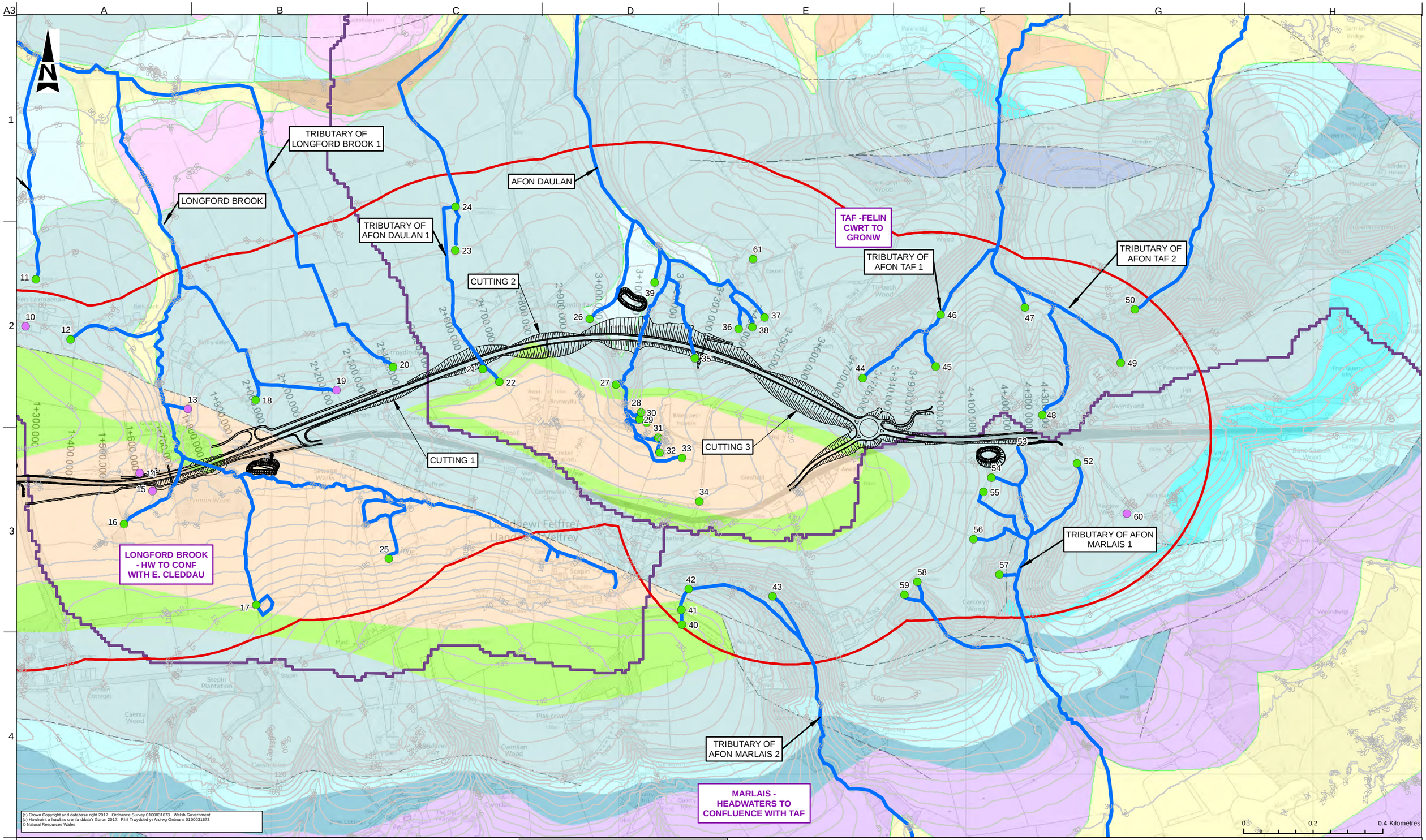
Drawing Title
FIGURE 7.2A
GROUND AND WATER FEATURES
SHEET 1 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	EB	TS	TE	GD
	Date 17/09/18	Date 17/09/18	Date 17/09/18	Date 17/09/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0007
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- COLLECT/SPRING/ISSUE
- WELL
- PROPOSED ALIGNMENT
- WATER FEATURE
- 500M BUFFER
- WFD SURFACE WATER BODIES
- GLACIAL TILL
- MYDRIM SHALES & LIMESTONE
- SLADE & REDHILL FORMATION
- LLANDEILO LIMESTONE
- HAVERFORD MUDSTONE FORMATION
- PORTFIELD & HAVERFORD MUDSTONE FORMATION
- GLACIOFLUVIAL DEPOSITS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	18/12/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 7.2B
GROUND AND WATER FEATURES
SHEET 2 OF 2

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	EB	TS	TE	GD
	Date 18/12/18	Date 18/12/18	Date 18/12/18	Date 18/12/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0006
Project | Originator | Volume | Location | Type | Role | Number

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4

AFON DAULAN

DRAINAGE AREA = BASIN A
IMPERMEABLE AREA = 2.21HA
PERMEABLE AREA = 0.398HA
OUTFALL TO UNNAMED DITCH,
A TRIBUTARY OF THE AFON MARLAIS 2

DRAINAGE AREA = BASIN B
IMPERMEABLE AREA = 2.219HA
PERMEABLE AREA = 0.391HA
OUTFALL TO LONGFORD BROOK

DRAINAGE AREA = BASIN C
IMPERMEABLE AREA = 2.444HA
PERMEABLE AREA = 0.411HA
OUTFALL TO UNNAMED
TRIBUTARY OF AFON DAULAN 1

DRAINAGE AREA = BASIN D
IMPERMEABLE AREA = 1.305HA
PERMEABLE AREA = 0.456HA
OUTFALL TO UNNAMED
TRIBUTARY OF AFON MARLAIS

TRIBUTARY OF AFON DAULAN 2

TRIBUTARY OF AFON DAULAN 1

TRIBUTARY OF AFON DAULAN 3

TRIBUTARY OF AFON MARLAIS 1

TRIBUTARY OF AFON MARLAIS 2

CULVERT 1

CULVERT 2

CULVERT 3

CULVERT 4

CULVERT 5

LONGFORD BROOK

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0 0.25 0.5 Kilometres

LEGEND

DRAINAGE PONDS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P06	18/12/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS | MOTT MACDONALD | ARUP | RICHARDS

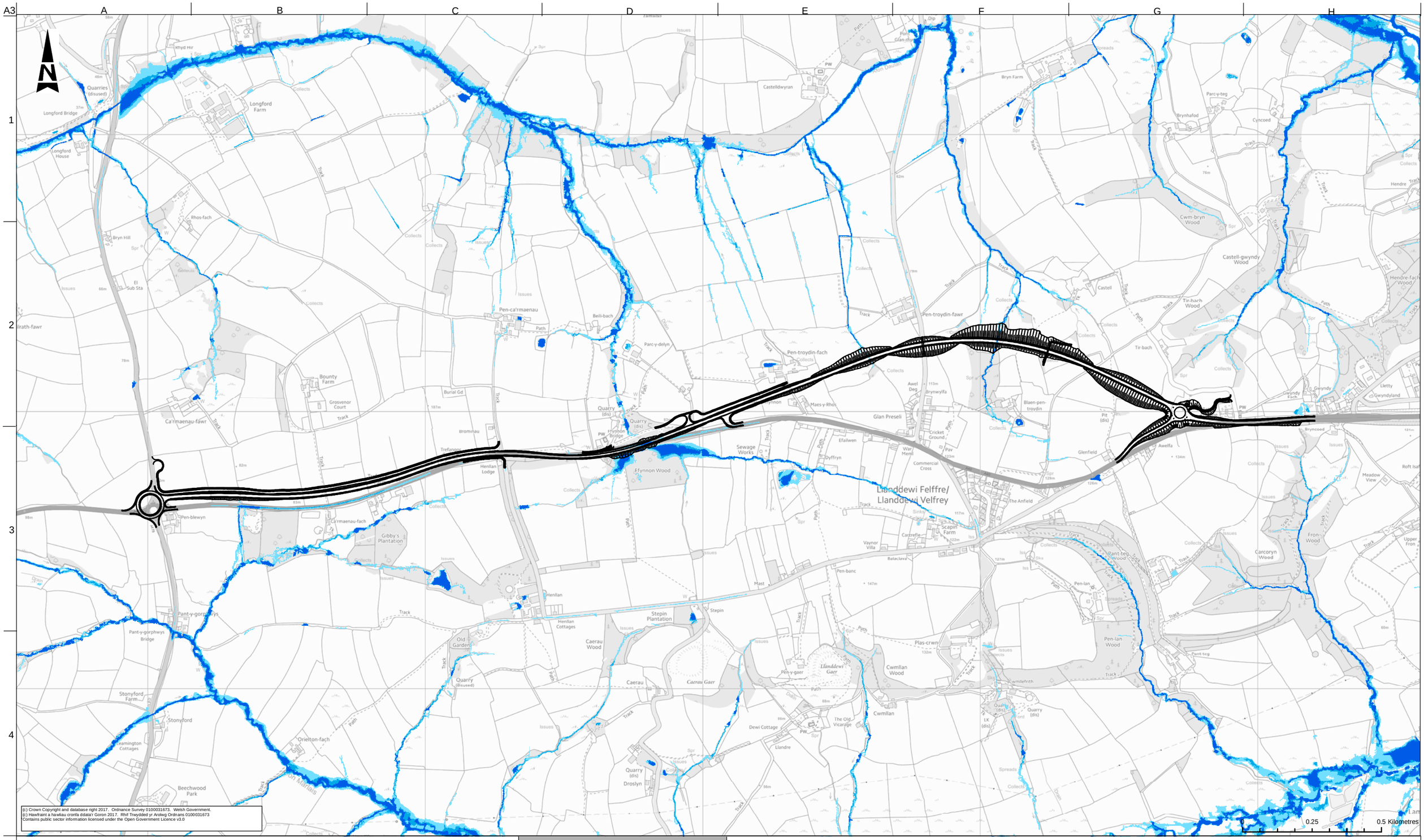
Drawing Title
FIGURE 7.3
PROPOSED HIGHWAYS
DRAINAGE CATCHMENTS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P06	EB	TS	TE	GD
	Date 18/12/18	Date 18/12/18	Date 18/12/18	Date 18/12/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0005
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- LOW RISK
- MEDIUM RISK
- HIGH RISK

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	17/09/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

ARCADIS
MOTT MACDONALD

Delivery Team
ARUP
RICHARDS

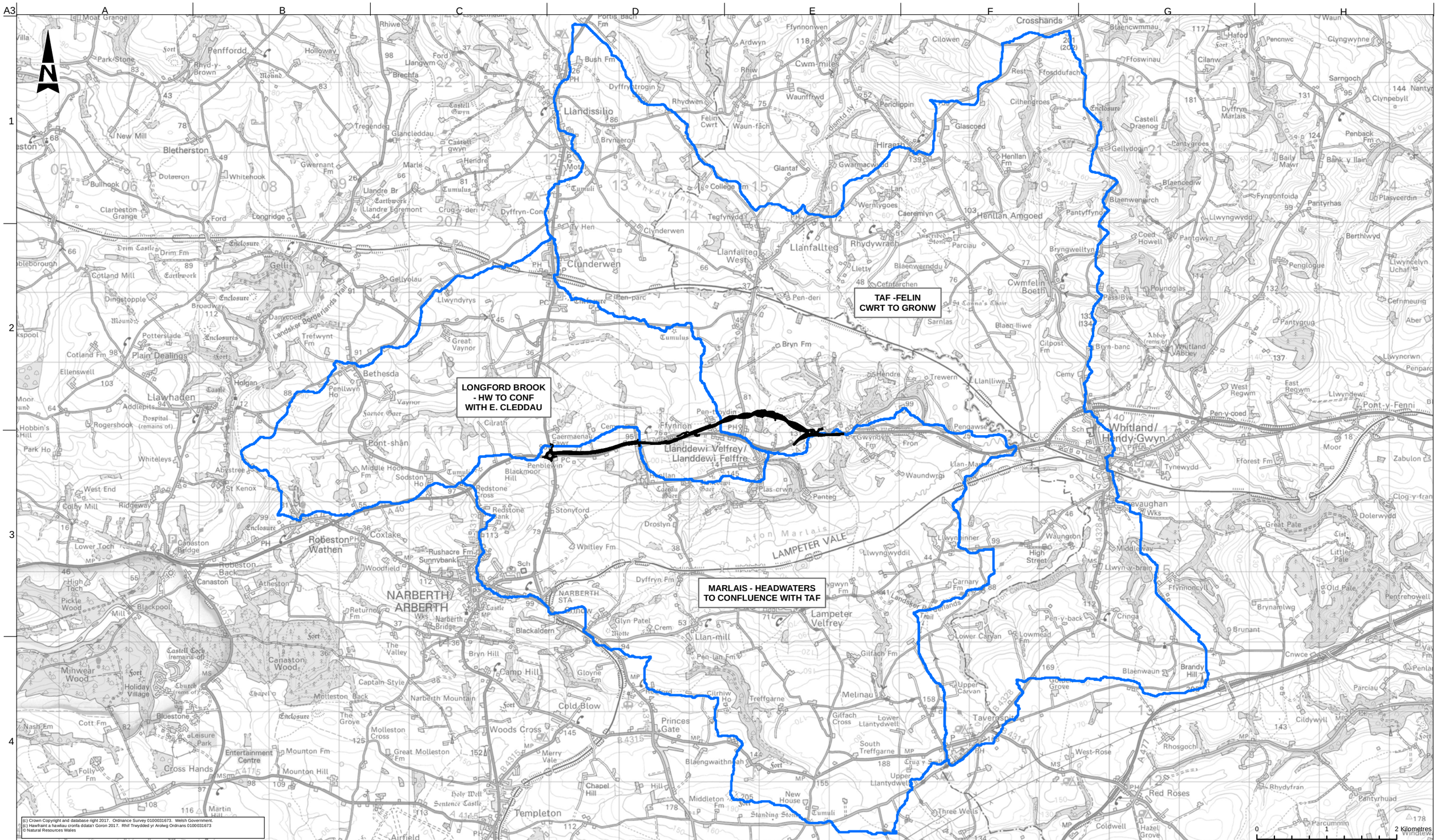
Drawing Title
FIGURE 7.4
SURFACE WATER FLOOD RISK

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	TS	TE	GD
	Date 17/09/18	Date 17/09/18	Date 17/09/18	Date 17/09/18

Name
A40LVP - ARP - EWE - SWI - DR - D - 0001
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

PROPOSED ALIGNMENT

WFD SURFACE WATER BODIES

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	17/09/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

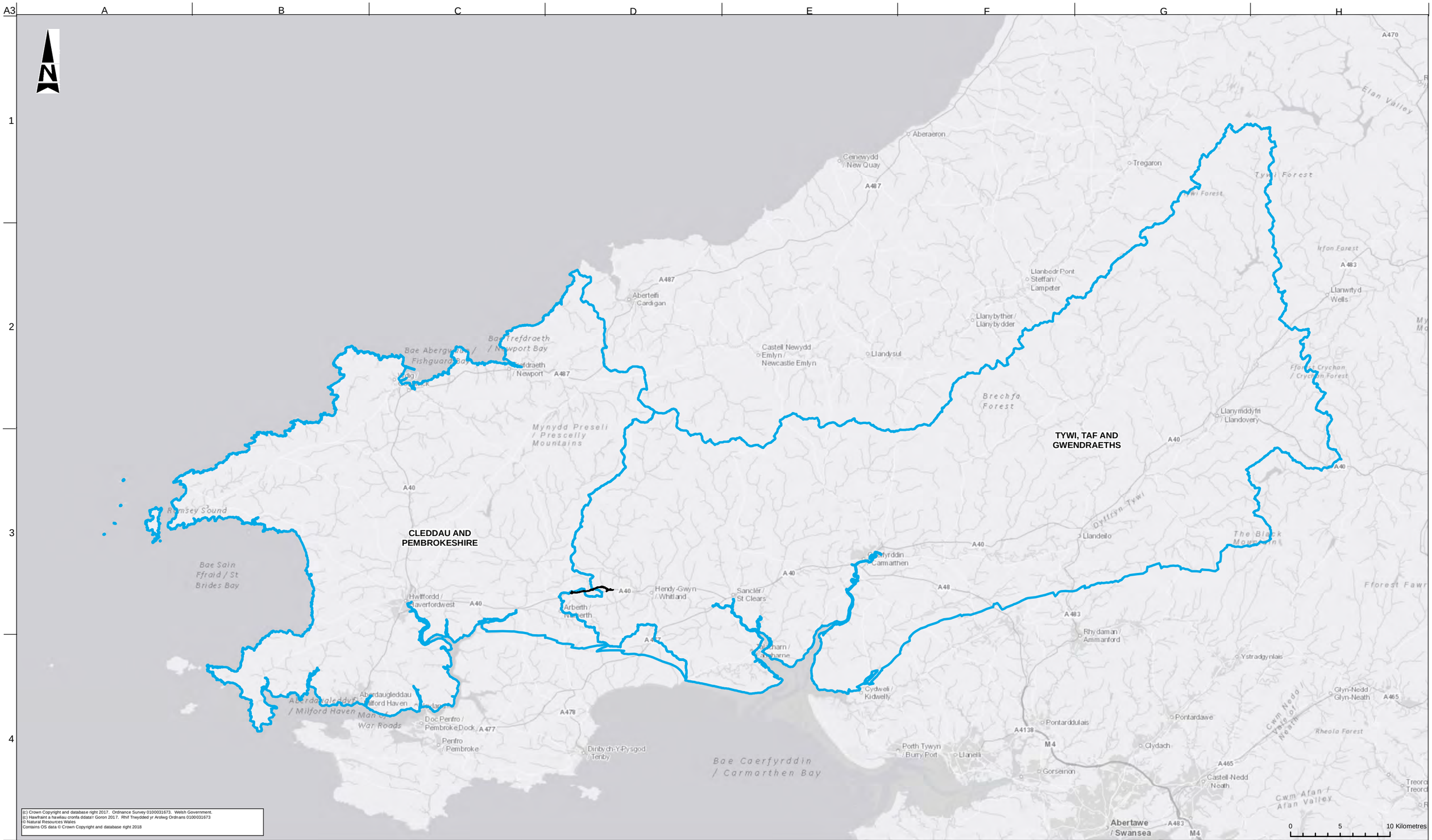
Drawing Title
FIGURE 7.5A
WFD SURFACE WATER BODIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:50,000

Rev	By	Chkd	Appd	Auth
P03	EB	TS	TE	GD
	Date 17/09/18	Date 17/09/18	Date 17/09/18	Date 17/09/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0001
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

PROPOSED ALIGNMENT

WFD GROUND WATER BODIES

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	17/09/18	UPDATE FOLLOWING COMMENTS	EB	TS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

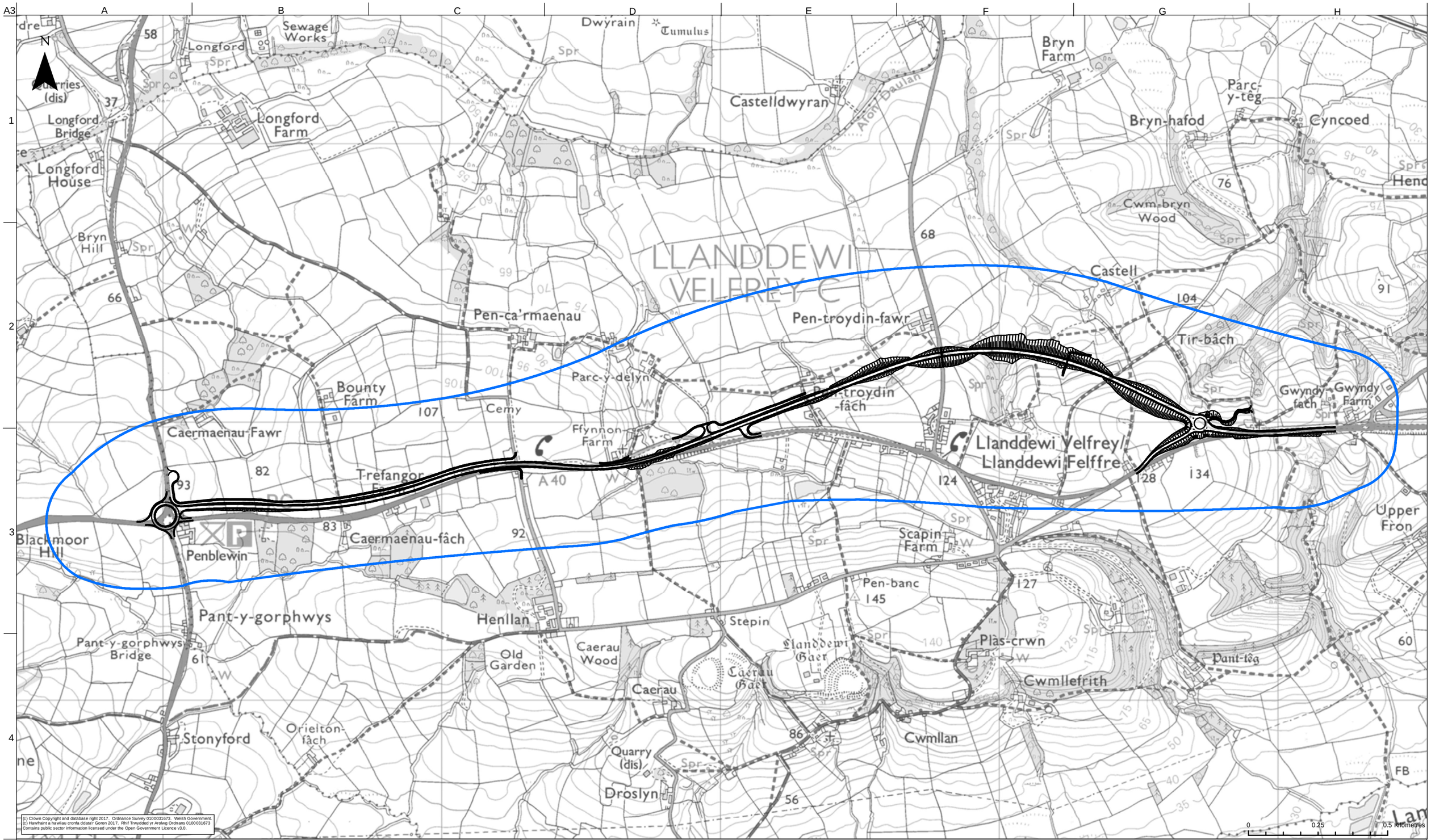
Drawing Title
FIGURE 7.5B
WFD GROUND WATER BODIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:350,000

Rev	By	Chkd	Appd	Auth
P03	EB	TS	TE	GD
	Date 17/09/18	Date 17/09/18	Date 17/09/18	Date 17/09/18

Name
A40LVP - ARP - EWE - SWI - DR - C - 0004
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

PROPOSED ALIGNMENT

STUDY AREA

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	10/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.1
ECOLOGICAL SURVEY AREA

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P02	EB	PW	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - EGN - SWI - DR - LE - 0003

Project	Originator	Volume	Location	Type	Role	Number

A3

A B C D E F G H

1 2 3 4

LEGEND

PROPOSED ALIGNMENT

NVC SURVEY LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	10/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.2
NATIONAL VEGETATION CLASSIFICATION SURVEY LOCATIONS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:15,000

Rev	By	Chkd	Appd	Auth
P02	EB	PW	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

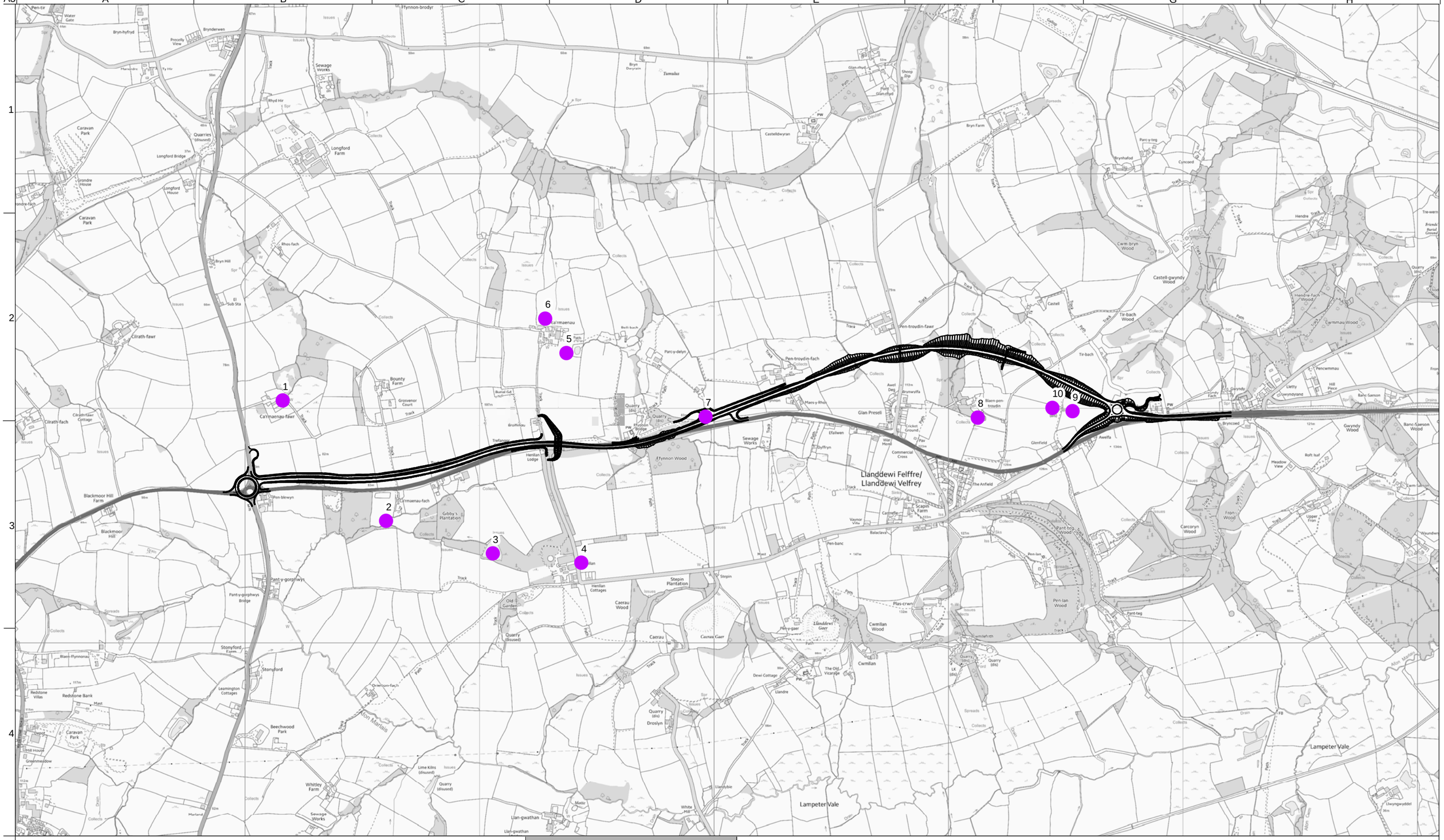
Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0043

A3

A B C D E F G H

1 2 3 4


1
2
3
4
5
6
7
8
9
10
Llanddewi Felffre/
Llanddewi Velfrey
Lampeter Vale
Carmaenau-fawr
Carmaenau
Carmaenau-fach
Pen-troydin-fawr
Pen-troydin-fach
Blaen-pen-troydin
Glan Presell
Glenfield
Bryncoed
Pencwmmau
Cwm-bryn Wood
Castell-gwyndy Wood
Hendre-fach Wood
Cwmmau Wood
Tir-bach Wood
Tir-bach
Pen-blewyn
Blackmoor Hill Farm
Blackmoor Hill
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Stonyford
Stonyford Farm
Redstone Bank
Redstone Villas
Beechwood Park
Caravan Park
Whitley Farm
Llan-gwathan
Caerau
Caerau Wood
Caerau Gaer
Cwmllan
Llandre
Droslyn
Pen-lan Wood
Carcoryn Wood
Pant-teg Wood
Pant-teg
Cyncoed
Brynhafod
Bryn Farm
Castelldwyran
Longford Farm
Longford House
Longford Bridge
Caravan Park
Grondre House
Bryn Hill
Rhos-fach
Cilrath-fawr
Cilrath-fach
Cilrath-fawr Cottage
Bounty Farm
Grosvenor Court
Sewage Works
Quarries (disused)
Ffynnon-brodyr
Brynderwen
Bryn-hyfryd
Water Gate
Pen-tir
Ty Hir
Rhyd Hir
Tumulus
Bryn Dwyrain
Glan-rhyd
Sheep Dip
Pond
Alon Daulan
Parc-y-teg
Hendre
Castell
Parc-y-delyn
Pen-troydin-fawr
Pen-troydin-fach
Awel Deg
Brynwylfa
Mans-y-Rhos
Cricket Ground
Awelfa
Meadow View
Roft Isaf
Gwyndy Wood
Banc-Saeson
Banc-Saeson Wood
Llwyndyland
Llwyndyland Fach
Llety
Hill Piece
Gwyndy
Gwyndy Fach
Ffynnon Wood
Henllan Lodge
Henllan Cottages
Stepin Plantation
Stepin
Old Garden
Quarry (disused)
Lime Kilns (disused)
Gibby's Plantation
Trefaynon
Brufiolau
Dyffryn
Efailwen
Commercial Cross
War Memorial
Scapin Farm
Vaynor Villa
Balaclava
Pen-banc
Plas-crwn
Pen-y-gaer
Llanddewi Gaer
The Old Vicarage
Dewi Cottage
Pen-lan
Oriel-con-fach
Llwyngwyddel
Lampeter Vale
Alon Marlais
Alon Gaen
Alon Mallen
Quarry (disused)
Quarry (dis)
Quarry (dis)
Quarry (dis



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LEGEND

——— PROPOSED ALIGNMENT

BUILDING SURVEY LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	15/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.4A
BUILDING SURVEY LOCATION
SHEET 1 OF 3

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3

1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 15/11/18	Date 15/11/18	Date 15/11/18	Date 15/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	**ARP**	**VES**	**SWI**		**DR**	**LE - 0045**

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



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LEGEND

——— PROPOSED ALIGNMENT

BUILDING SURVEY LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	11/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	ME

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS | MOTT MACDONALD | ARUP | RICHARDS

Drawing Title

FIGURE 8.4B
BUILDING SURVEY LOCATION
SHEET 2 OF 3

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	EB	PW	TE	GD
	Date 11/09/18	Date 11/09/18	Date 11/09/18	Date 11/09/18

Name

A40LVP - ARP - VES - SWI - DR - LE - 0108

Project | Originator | Volume | Location | Type | Role | Number

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



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LEGEND

——— PROPOSED ALIGNMENT

BUILDING SURVEY LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	04/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS | MOTT MACDONALD

Delivery Team

ARUP | RICHARDS

Drawing Title

FIGURE 8.4C
BUILDING SURVEY LOCATION
SHEET 3 OF 3

Suitability

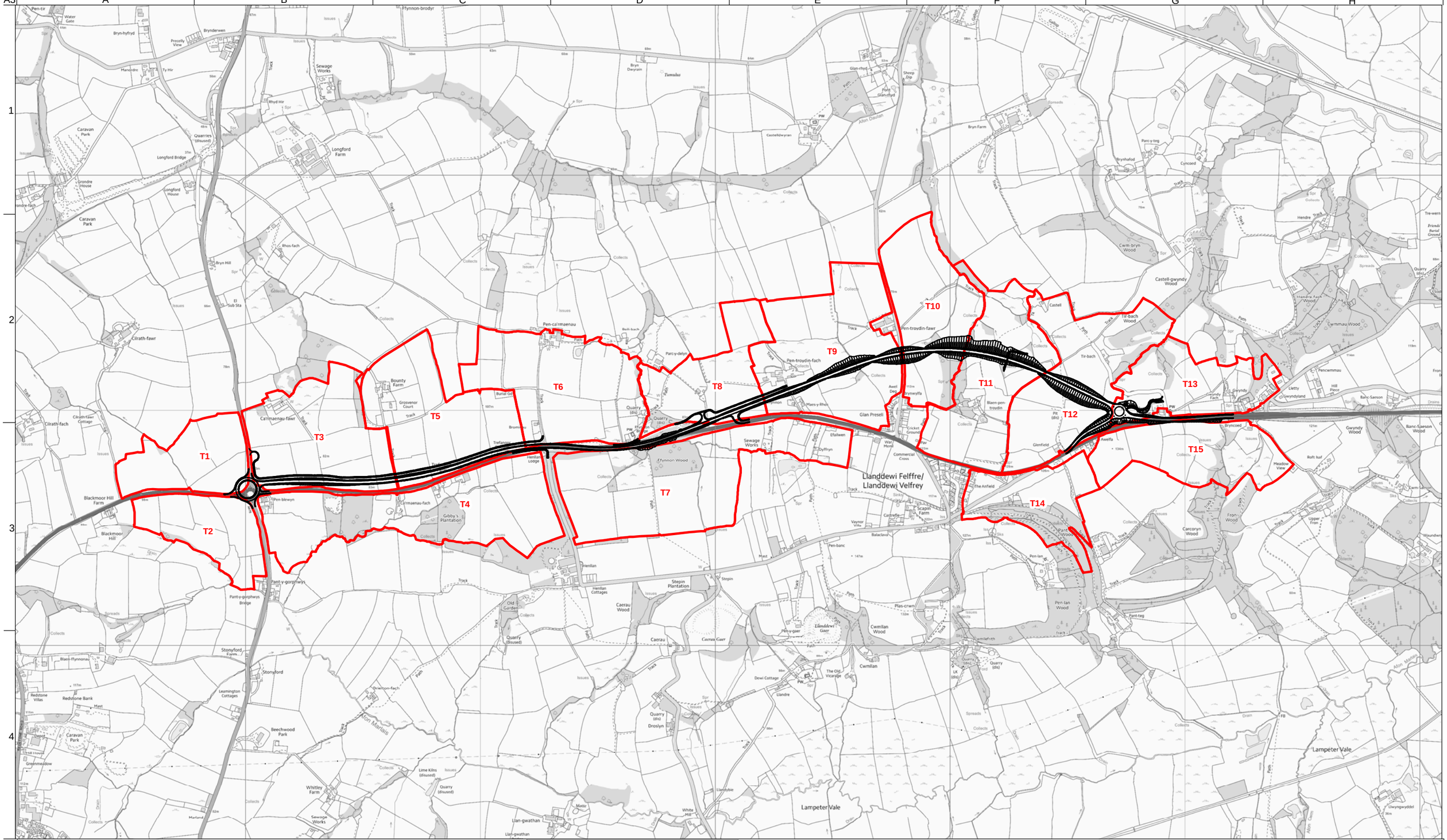
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	EB	PW	TE	GD
	Date 04/09/18	Date 04/09/18	Date 04/09/18	Date 04/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0109



LEGEND

PROPOSED ALIGNMENT

BAT ACTIVITY TRANSECT AREAS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	11/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.5
BAT ACTIVITY TRANSECTS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:15,000

Rev	By	Chkd	Appd	Auth
P02	EB	PW	TE	GD
	Date 11/09/18	Date 11/09/18	Date 11/09/18	Date 11/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0046



LEGEND

——— PROPOSED ALIGNMENT

- 2016 BAT ACTIVITY STATIC MONITORING LOCATIONS
- 2017 BAT ACTIVITY STATIC MONITORING LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	11/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.6
BAT ACTIVITY STATIC MONITORING LOCATIONS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:15,000

Rev	By	Chkd	Appd	Auth
P03	EB	PW	TE	GD
	Date 11/09/18	Date 11/09/18	Date 11/09/18	Date 11/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0047



LEGEND

PROPOSED ALIGNMENT

DORMOUSE NEST TUBE LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	11/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS

MOTT MACDONALD

Delivery Team

ARUP

RICHARDS

Drawing Title

FIGURE 8.7
DORMOUSE NEST TUBE LOCATIONS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:15,000

Rev	By	Chkd	Appd	Auth
P03	EB	PW	TE	GD
	Date 11/09/18	Date 11/09/18	Date 11/09/18	Date 11/09/18

Name

A40LVP - ARP - VES - SWI - DR - LE - 0048

Project | Originator | Volume | Location | Type | Role | Number



LEGEND

PROPOSED ALIGNMENT

RIPARIAN MAMMAL SURVEY LOCATIONS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	11/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.8
RIPARIAN MAMMAL SURVEY LOCATIONS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P02	EB	PW	TE	GD
	Date 11/09/18	Date 11/09/18	Date 11/09/18	Date 11/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0082



LEGEND

——— PROPOSED ALIGNMENT

——— REPTILE SURVEY LOCATIONS

FOR PHASE 1 SYMBOLOGY PLEASE REFER TO FIGURES 8.10A, 8.10B AND 8.10C

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.9
REPTILE SURVEY LOCATIONS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	PW	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

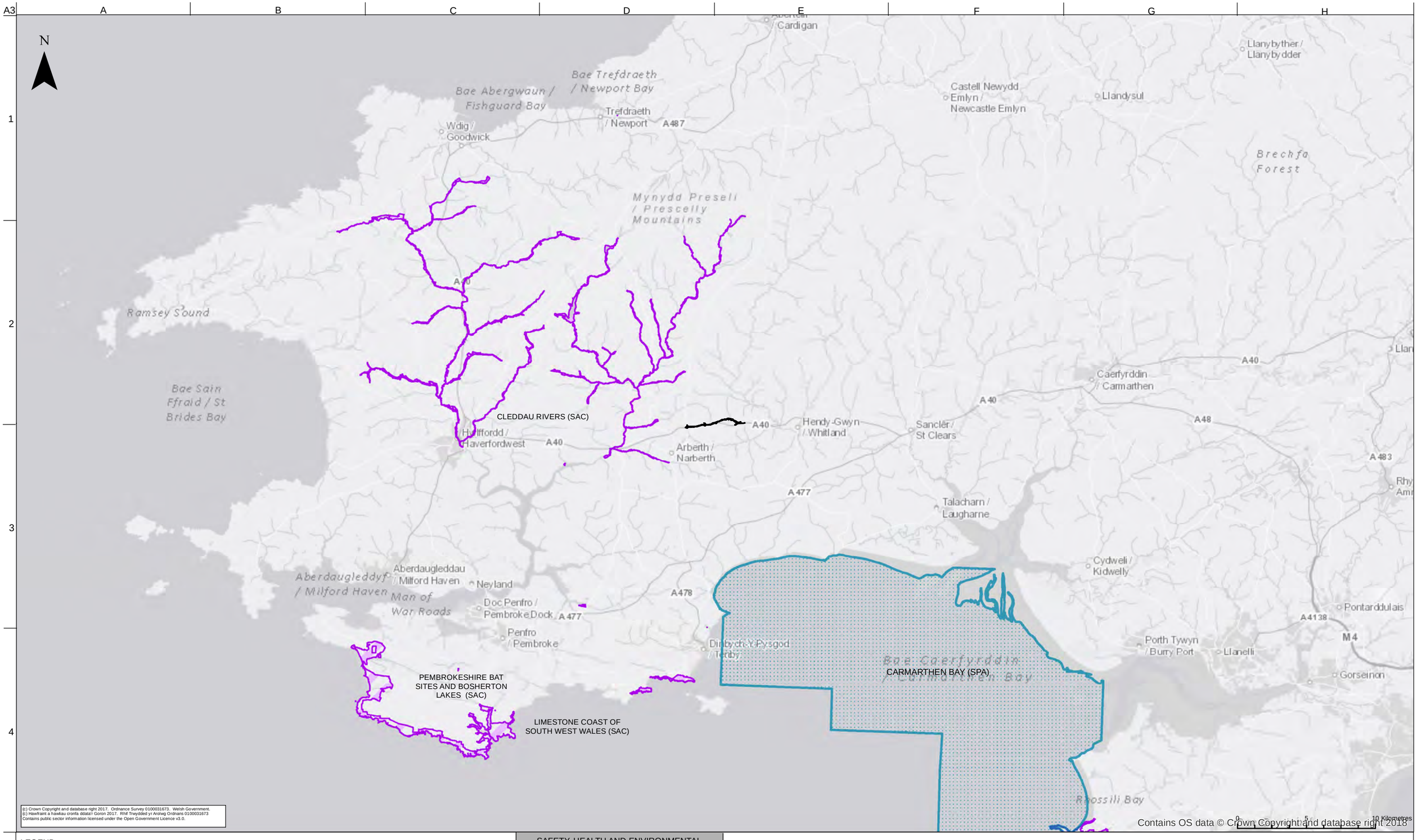
Name: A40LVP - ARP - VES - SWI - DR - LE - 0060

Project | Originator | Volume | Location | Type | Role | Number

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4

N



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LEGEND

- PROPOSED ALIGNMENT
- SPECIAL AREAS OF CONSERVATION
- SPECIAL PROTECTION AREA (SPA)

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS | MOTT MACDONALD | ARUP | RICHARDS

Drawing Title
FIGURE 8.10
EUROPEAN DESIGNATED SITES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

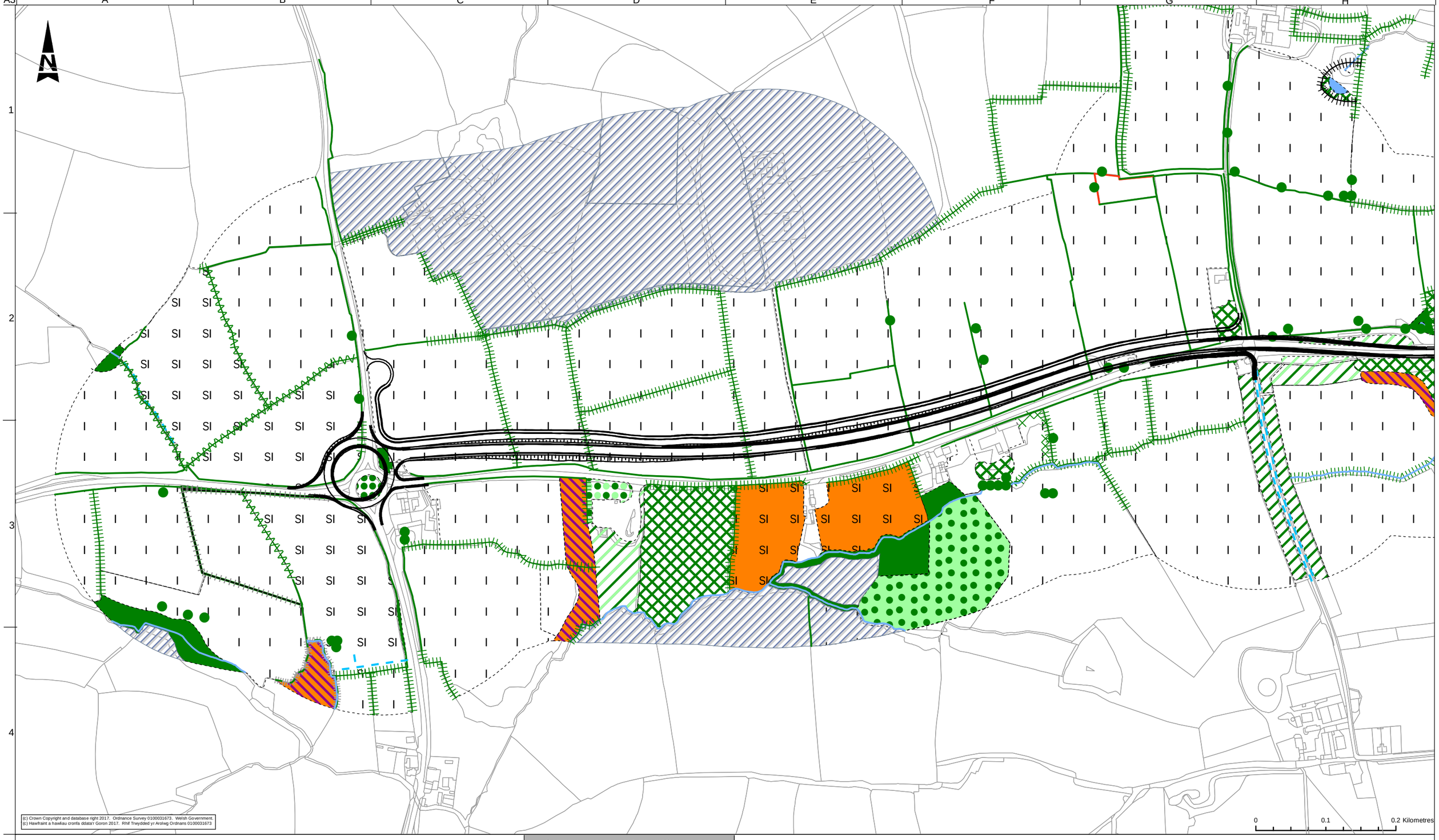
Scale at A3
1:250,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - EGN - SWI - DR - LE - 0002
Project | Originator | Volume | Location | Type | Role | Number

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



LEGEND

- PROPOSED ALIGNMENT
- DRY DITCH
- FENCE
- RUNNING WATER
- DEFUNCT HEDGE - SPECIES POOR
- HEDGE WITH TREES - SPECIES POOR
- INTACT HEDGE - SPECIES POOR
- SPECIES POOR INTACT HEDGE WITH FENCE
- DEFUNCT HEDGE - NATIVE SPECIES RICH
- INTACT HEDGE - NATIVE SPECIES RICH
- WALL
- BROADLEAVED WOODLAND - SEMI-NATURAL
- BROADLEAVED WOODLAND - PLANTATION
- CONIFEROUS WOODLAND - PLANTATION
- MIXED WOODKAND - SEMI-NATURAL
- A1.3.2 - Mixed woodland - plantation
- SCRUB - DENSE / CONTINUOUS
- BROADLEAVED PARKLAND / SCATTERED TREES
- MIXED PARKLAND / SCATTERED TREES
- NEUTRAL GRASSLAND - SEMI-IMPROVED
- IMPROVED GRASSLAND
- MARSH / MARSHY GRASSLAND
- POOR SEMI-IMPROVED GRASSLAND
- STANDING WATER
- NO ACCESS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.11A
PHASE 1 SURVEY
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0038
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- SCRUB - SCATTERED
- BROAD-LEAVED PARKLAND / SCATTERED TREES
- DRY DITCH
- FENCE
- RUNNING WATER
- DEFUNCT HEDGE - SPECIES POOR
- HEDGE WITH TREES - SPECIES POOR
- INTACT HEDGE - SPECIES POOR
- WALL

DESCRIPTION

- BROADLEAVED WOODLAND - SEMI-NATURAL
- BROADLEAVED WOODLAND - PLANTATION
- CONIFEROUS WOODLAND - PLANTATION
- MIXED WOODKAND - SEMI-NATURAL
- A1.3.2 - Mixed woodland - plantation
- SCRUB - DENSE / CONTINUOUS
- NEUTRAL GRASSLAND - SEMI-IMPROVED
- IMPROVED GRASSLAND
- MARSH / MARSHY GRASSLAND
- C1.1 - Bracken - continuous
- STANDING WATER
- RUNNING WATER
- J1.2 - Cultivated/disturbed land - amenity grassland

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	ME

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS

MOTT MACDONALD

Delivery Team

ARUP

RICHARDS

Drawing Title

FIGURE 8.11B
PHASE 1 SURVEY
SHEET 2 OF 3

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

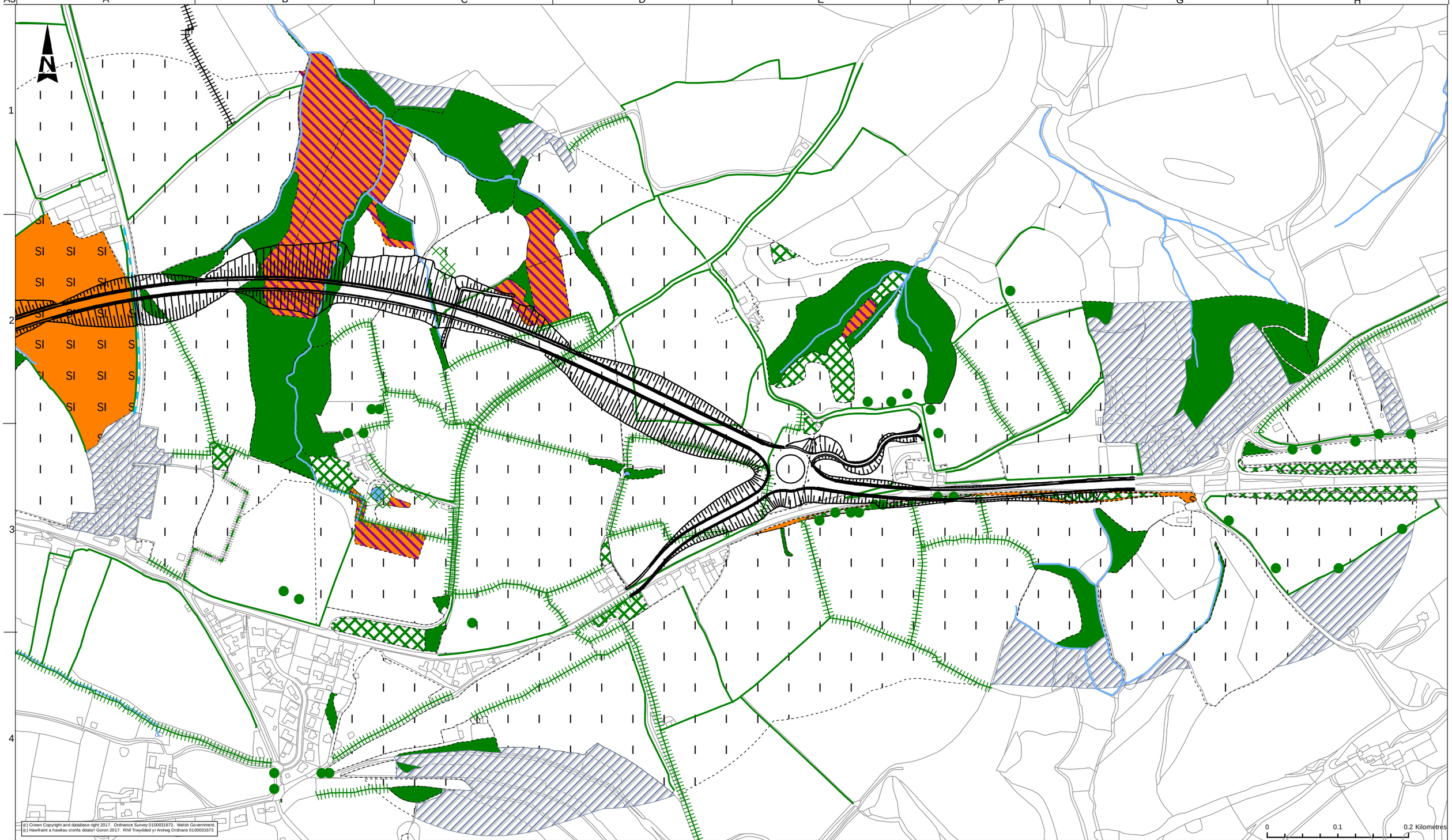
Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	ME
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name

A40LVP - ARP - VES - SWI - DR - LE - 0039

Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- SCRUB - SCATTERED
- BROAD-LEAVED PARKLAND / SCATTERED TREES
- DRY DITCH
- FENCE
- RUNNING WATER
- DEFUNCT HEDGE - SPECIES POOR
- HEDGE WITH TREES - SPECIES POOR
- INTACT HEDGE - SPECIES POOR
- BROADLEAVED WOODLAND - PLANTATION
- BROADLEAVED WOODLAND - SEMI-NATURAL
- IMPROVED GRASSLAND
- MARSH / MARSHY GRASSLAND
- NEUTRAL GRASSLAND - SEMI-IMPROVED
- SCRUB - DENSE / CONTINUOUS
- STANDING WATER
- NO ACCESS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.11C
PHASE 1 SURVEY
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

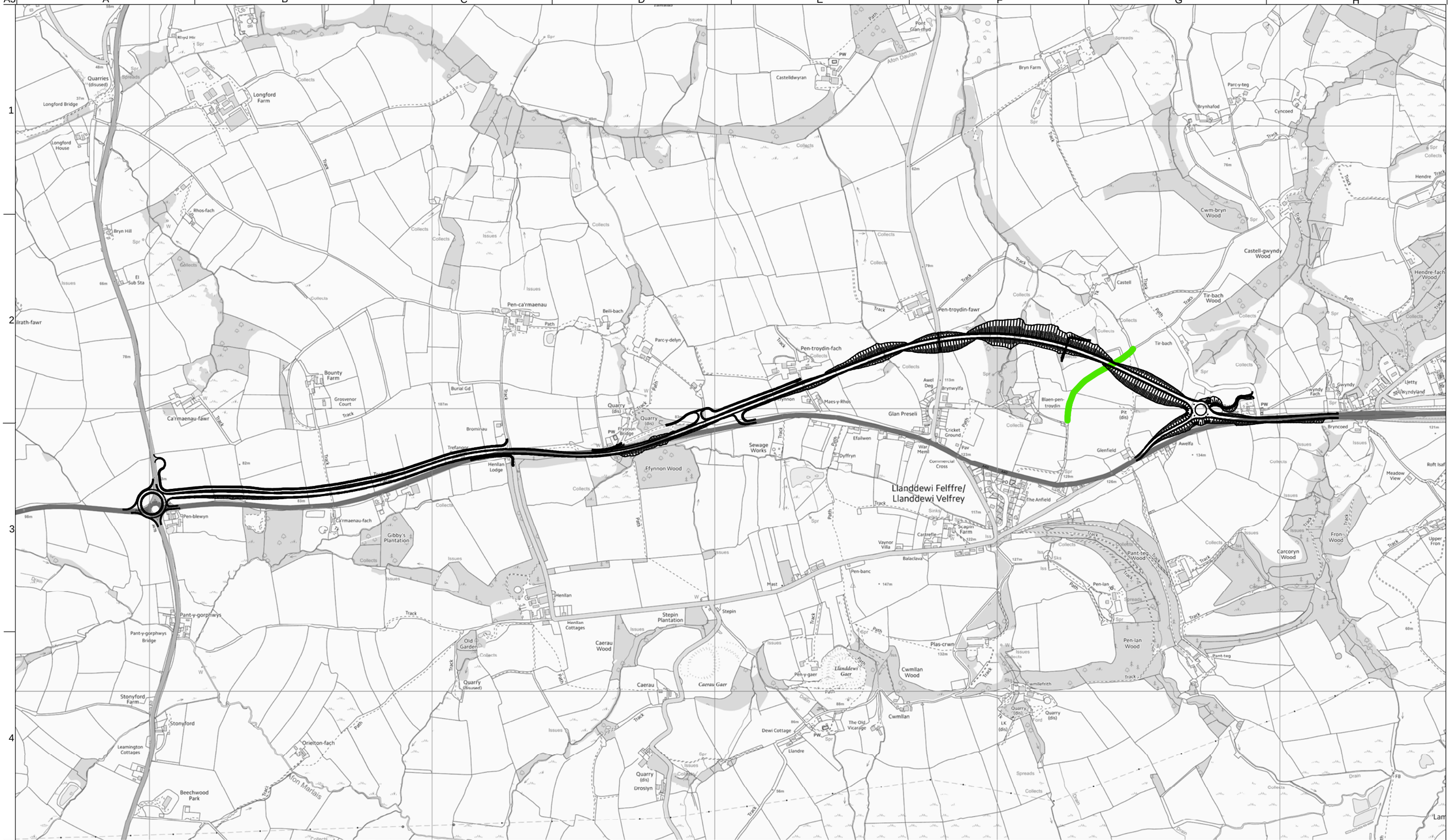
Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0040
Project | Originator | Volume | Location | Type | Role | Number

A3

A B C D E F G H

1 2 3 4



LEGEND

PROPOSED ALIGNMENT

IMPORTANT HEDGEROW

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.12
HEDGEROW SURVEY RESULTS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:12,500

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0083



LEGEND

- PROPOSED ALIGNMENT
- GRASSLAND (SPECIES RICH)
- MARSHY GRASSLAND
- WET WOODLAND

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title

FIGURE 8.13
NATIONAL VEGETATION CLASSIFICATION SURVEY RESULTS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0084

A3

A B C D E F G H

1 2 3 4


Llanddewi Felffre/
Llanddewi Velfrey
Lampeter Vale
Carmaenau
Carmaenau-fawr
Carmaenau-fach
Cilrath-fawr
Cilrath-fach
Pen-troydin-fawr
Pen-troydin-fach
Parcy-delyn
Glan Preseli
Efailwen
Sewage Works
Commercial Cross
Cricket Ground
Glenfield
Awelfa
Blaen-pen-troydin
Tir-bach
Castell-gwyndy Wood
Cwm-bryn Wood
Cwmmau Wood
Pencwmmau
Llwyndyland
Bryncoed
Gwyndy Wood
Banc-Saeson Wood
Meadow View
Roft Isaf
Fron Wood
Carcoryn Wood
Upper Fron
Pant-teg Wood
Pen-lan Wood
Cwmllan
Plas-crwn
Pen-y-gaer
Llanddewi Gaer
Caerau Wood
Caerau
Caerau Gaer
Stepin Plantation
Henllan Cottages
Henllan Lodge
Pen-blewyn
Gibby's Plantation
Effynon Wood
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Blackmoor Hill Farm
Blackmoor Hill
Stonyford Farm
Stonyford
Redstone Villas
Redstone Bank
Leamington Cottages
Beechwood Park
Caravan Park
Orielton-fach
Aon Marlais
Whitley Farm
Lime Kilns (disused)
Quarry (disused)
Old Garden
Henllan
Llandyfaelog
Llandyfaelog Fach
Llandyfaelog Church
Llandyfaelog Church (site of)
Llandyfaelog Church Cemetery
Llandyfaelog Church Cemetery (Extension)
Llandyfaelog Church Cemetery (Extension)
Llandyfaelog Church Cemetery (Extension)

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



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LEGEND

BAT TREE ROOST RESULTS

Moderate

Bat roost potential - trees

- Confirmed
- High
- Moderate
- Low
- Negligible

PROPOSED ALIGNMENT

BAT ROOST POTENTIAL

bat_potential

- High
- Low

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS | MOTT MACDONALD

Delivery Team

ARUP | RICHARDS

Drawing Title

FIGURE 8.15A
BAT ROOST SUITABILITY RESULTS
SHEET 1 OF 3

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3

1:5,000

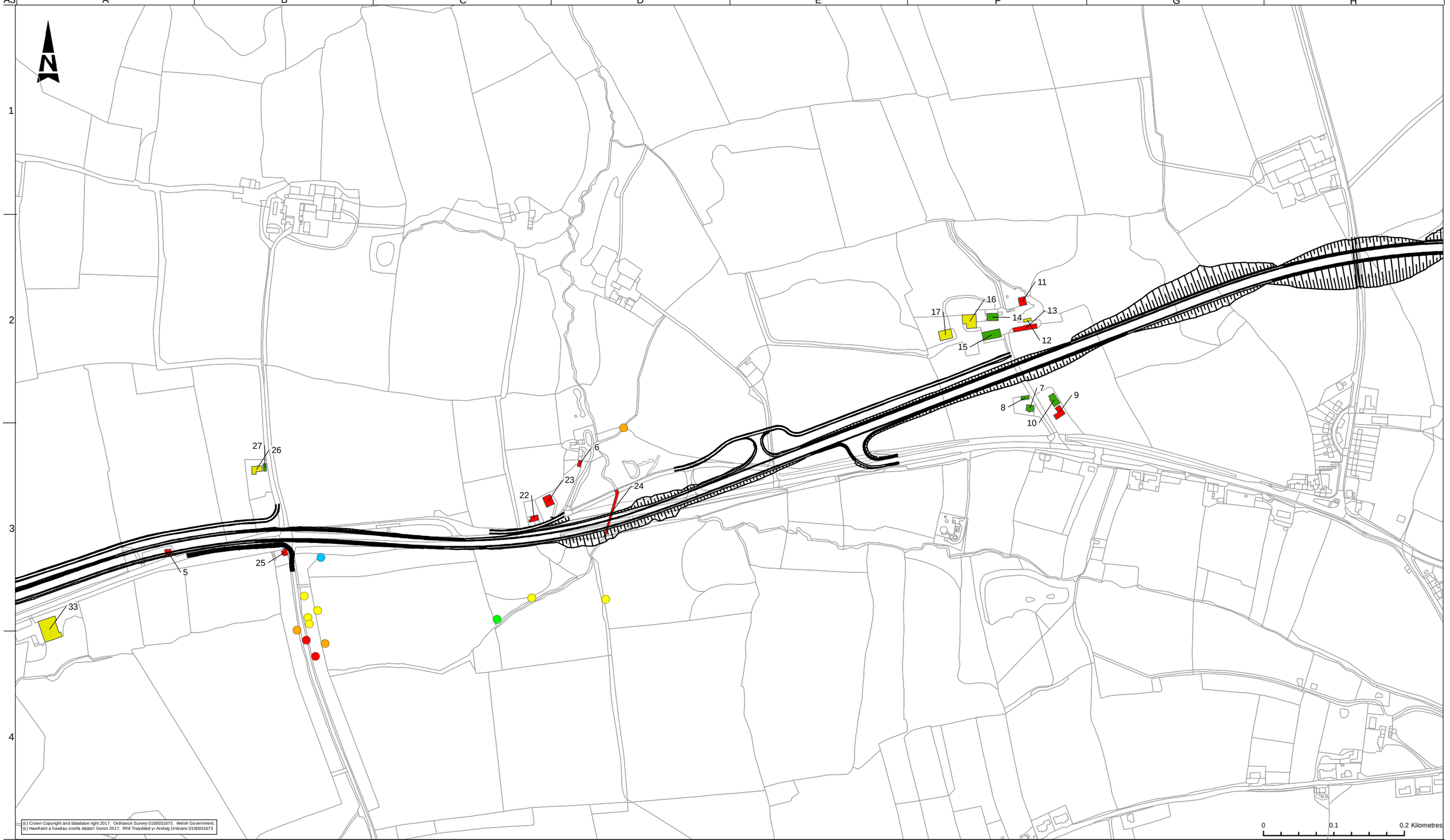
Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0148

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



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LEGEND

BAT TREE ROOST RESULTS

Bat roost potential - trees

- Confirmed
- High
- Moderate
- Low
- Negligible
- PROPOSED ALIGNMENT

BAT ROOST POTENTIAL

bat_potential

- High
- Low
- Moderate

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.15B
BAT ROOST SUITABILITY RESULTS
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P02	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0149
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

BAT TREE ROOST RESULTS

Bat roost potential - trees

- High
- Moderate
- Low
- Negligible
- PROPOSED ALIGNMENT

BAT ROOST POTENTIAL

bat_potential

- High
- Low
- Moderate

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS

MOTT MACDONALD

Delivery Team

ARUP

RICHARDS

Drawing Title

FIGURE 8.15C
BAT ROOST SUITABILITY RESULTS
SHEET 3 OF 3

Suitability

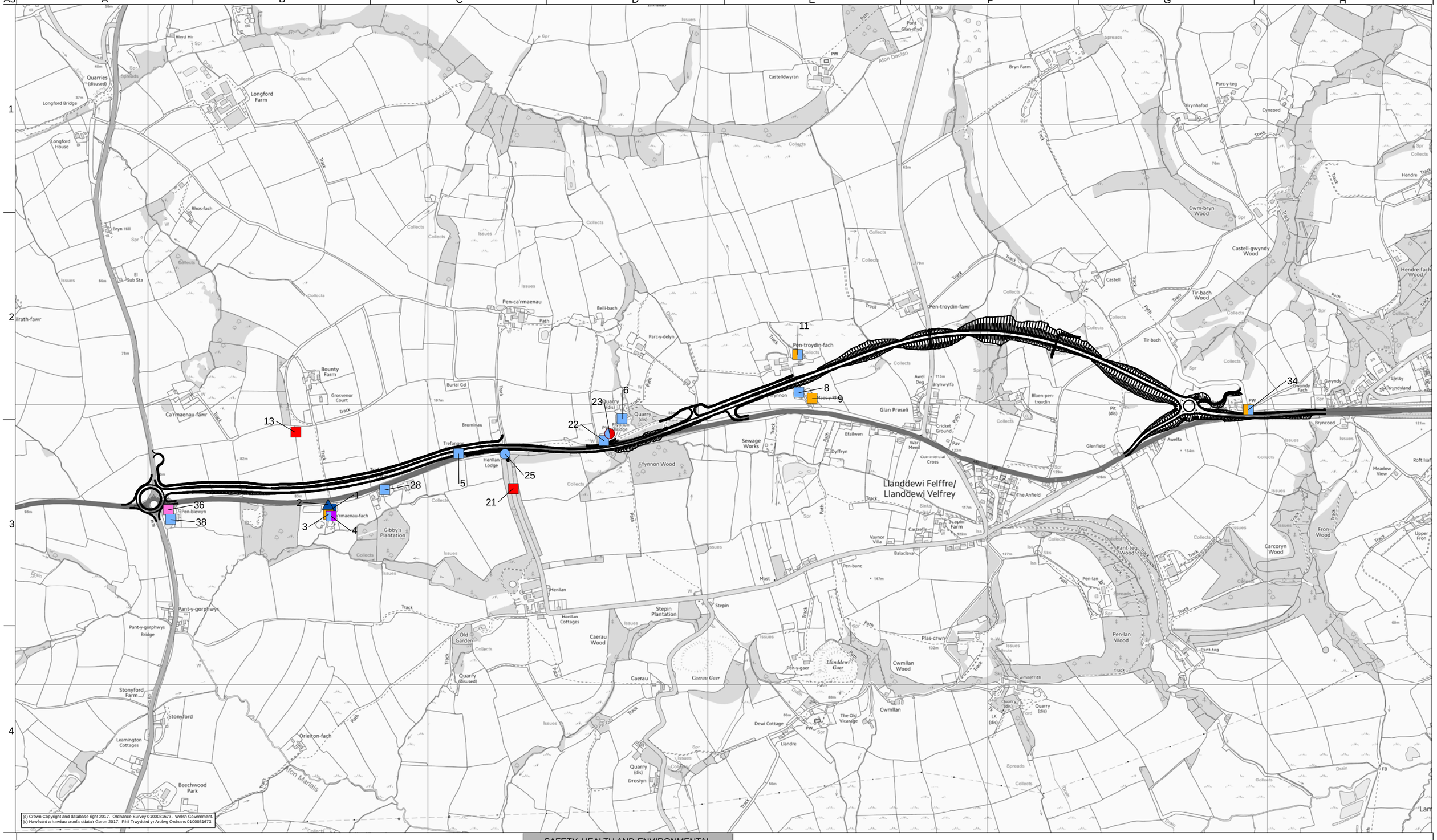
S4 | **SUITABLE FOR STAGE APPROVAL**

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P02	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	**ARP**	**VES**	**SWI**	-	**DR**	**LE - 0150**



1 2 3 4 5 6 8 9 11 13 21 22 23 25 28 34 36 38

LEGEND

ROOST TYPE
- DAY ROOST
- MATERNITY ROOST
- POSSIBLE ROOST

SPECIES
- Pipistrelle sp.
- Common pipistrelle
- Soprano pipistrelle
- Myotis sp.
- Unknown
- Long-eared sp.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.16
BAT ROOST SURVEY
RESULTS SUMMARY

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P02	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0189
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

PROPOSED ALIGNMENT

PIPISTRELLE SPECIES

NYCTALUS SPECIES

INDICATIVE SUNRISE: 05:14:18
INDICATIVE SUNSET: 19:23:09

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

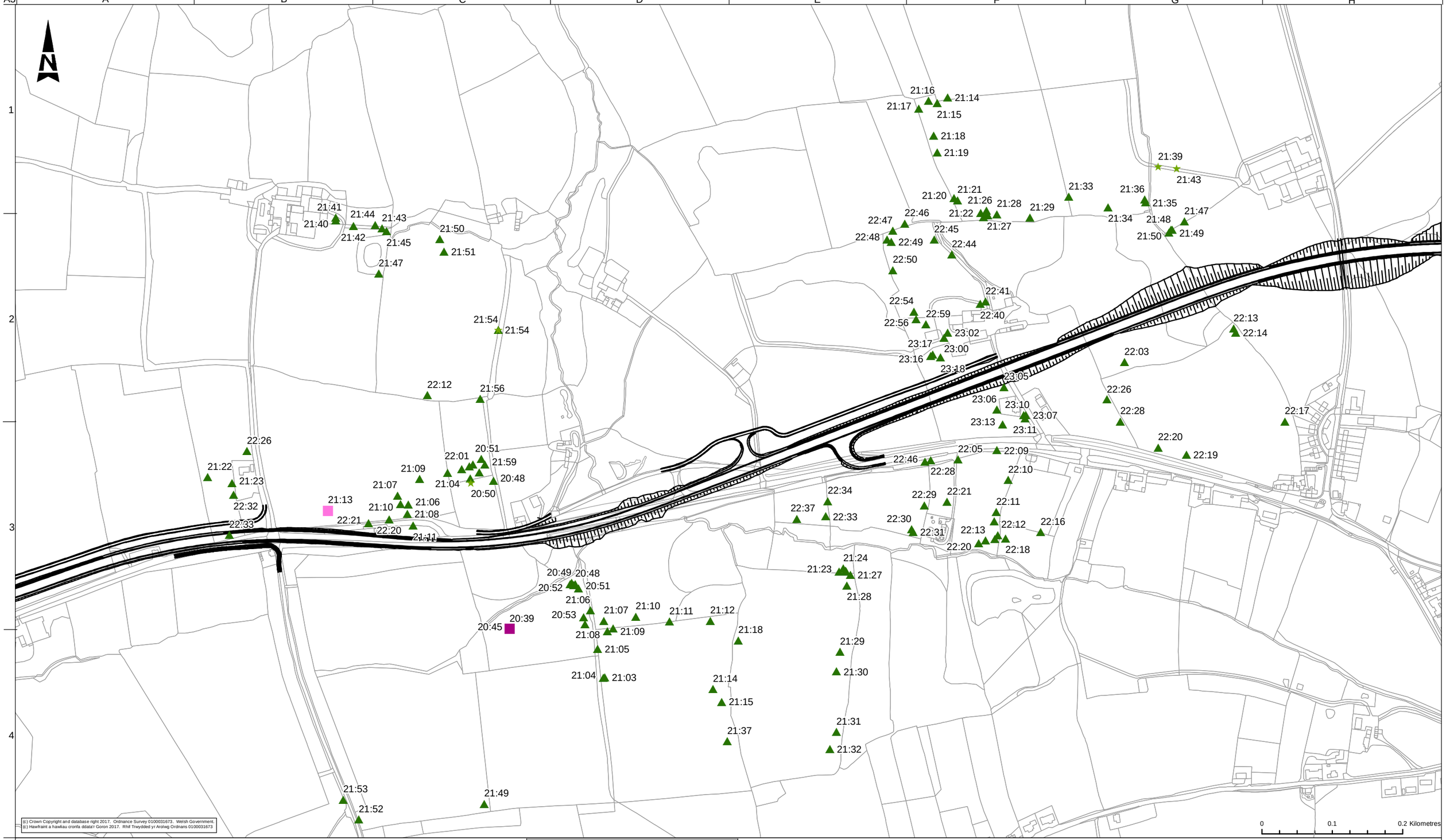
Drawing Title
FIGURE 8.17A
BAT ACTIVITY TRANSECT RESULTS APRIL
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0059
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- ★ MYOTIS SPECIES
- ▲ PIPISTRELLE SPECIES
- ■ NOCTULE
- ■ NYCTALUS SPECIES

INDICATIVE SUNRISE: 05:14:18
INDICATIVE SUNSET: 19:23:09

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

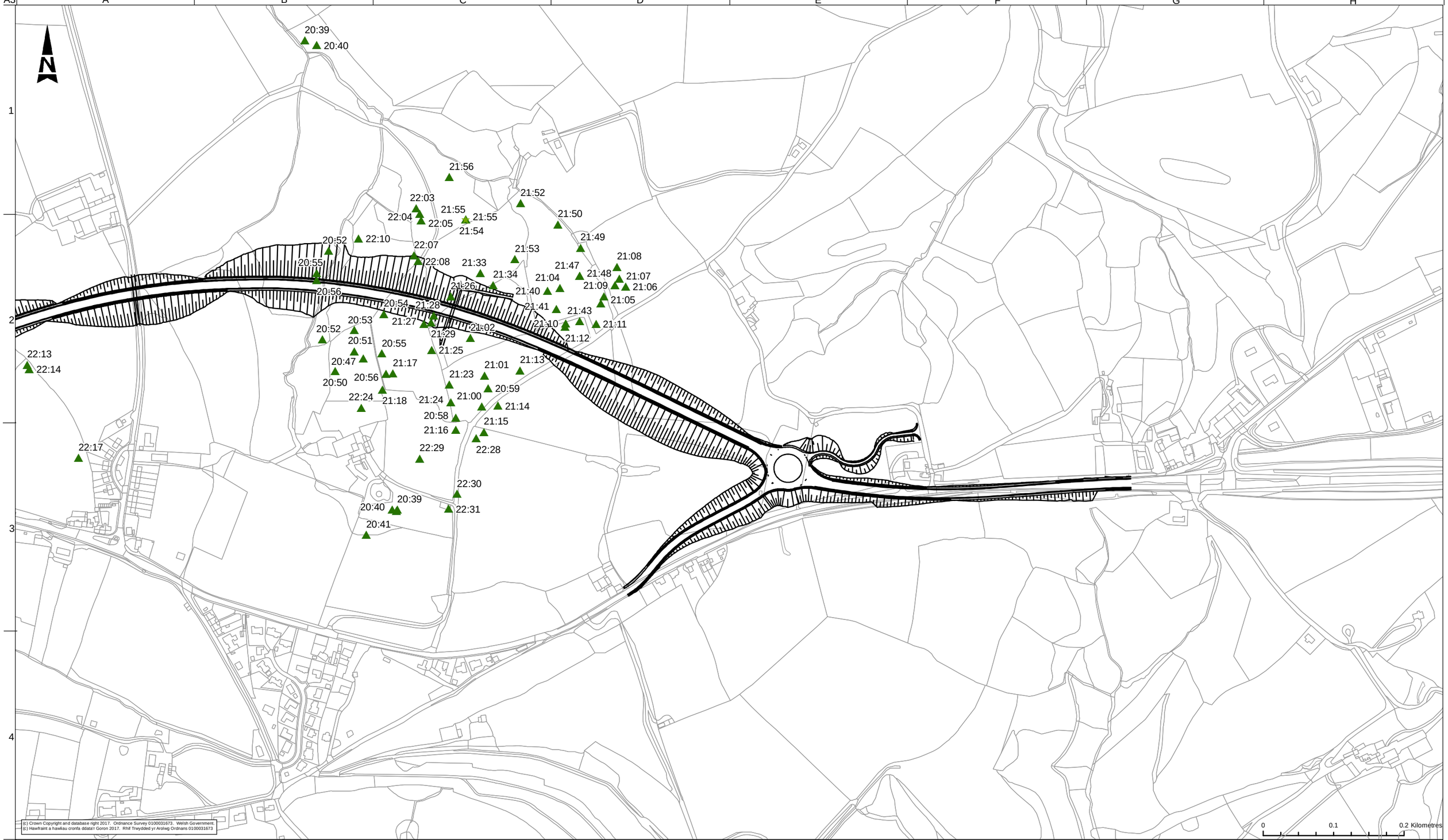
Drawing Title
FIGURE 8.17B
BAT ACTIVITY TRANSECT RESULTS APRIL
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0062
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

PROPOSED ALIGNMENT

★ MYOTIS SPECIES

▲ PIPISTRELLE SPECIES

INDICATIVE SUNRISE: 05:14:18
INDICATIVE SUNSET: 19:23:09

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

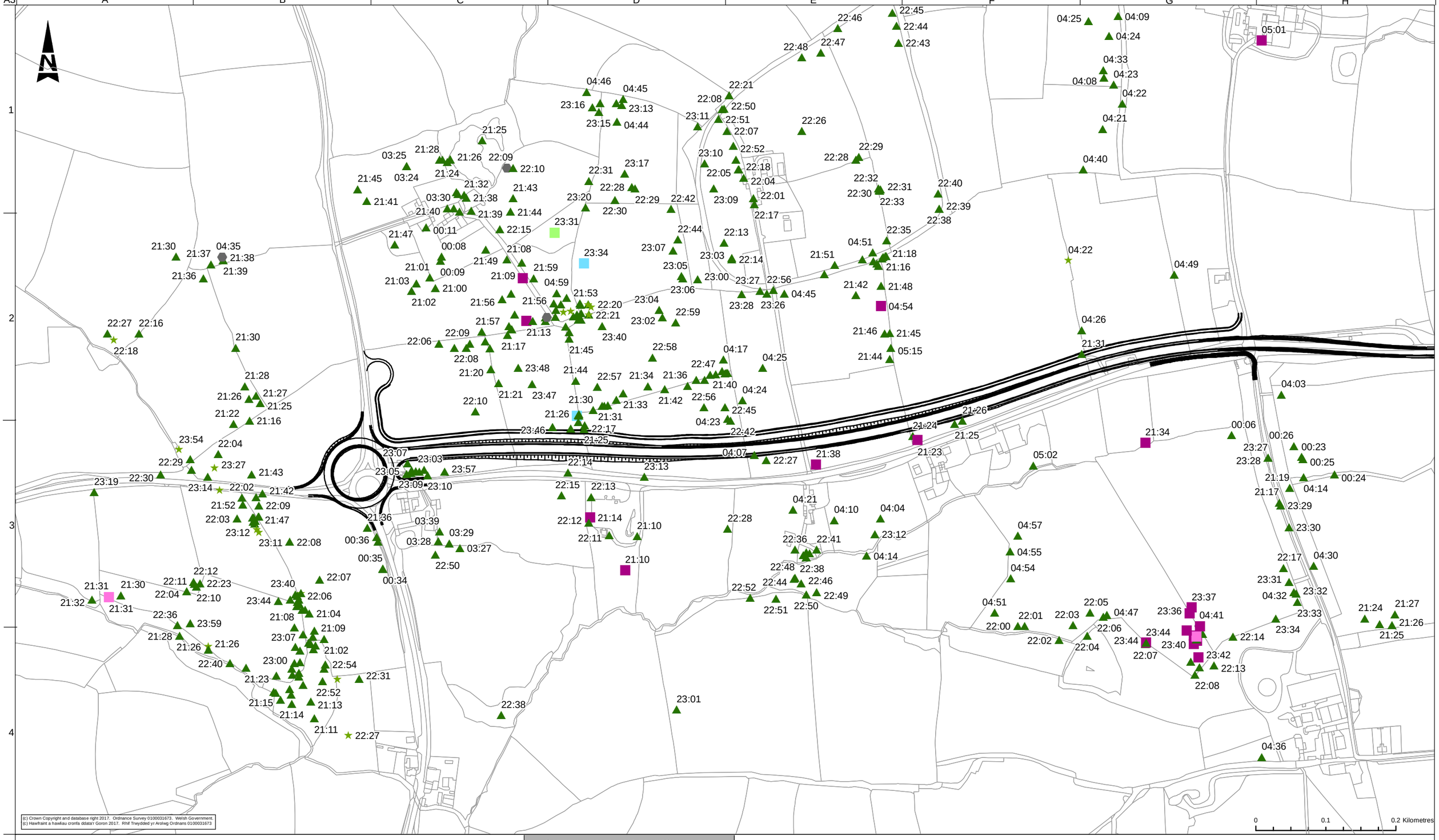
Drawing Title
FIGURE 8.17C
BAT ACTIVITY TRANSECT RESULTS APRIL
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0063
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 04:25:35
INDICATIVE SUNSET: 20:05:27

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

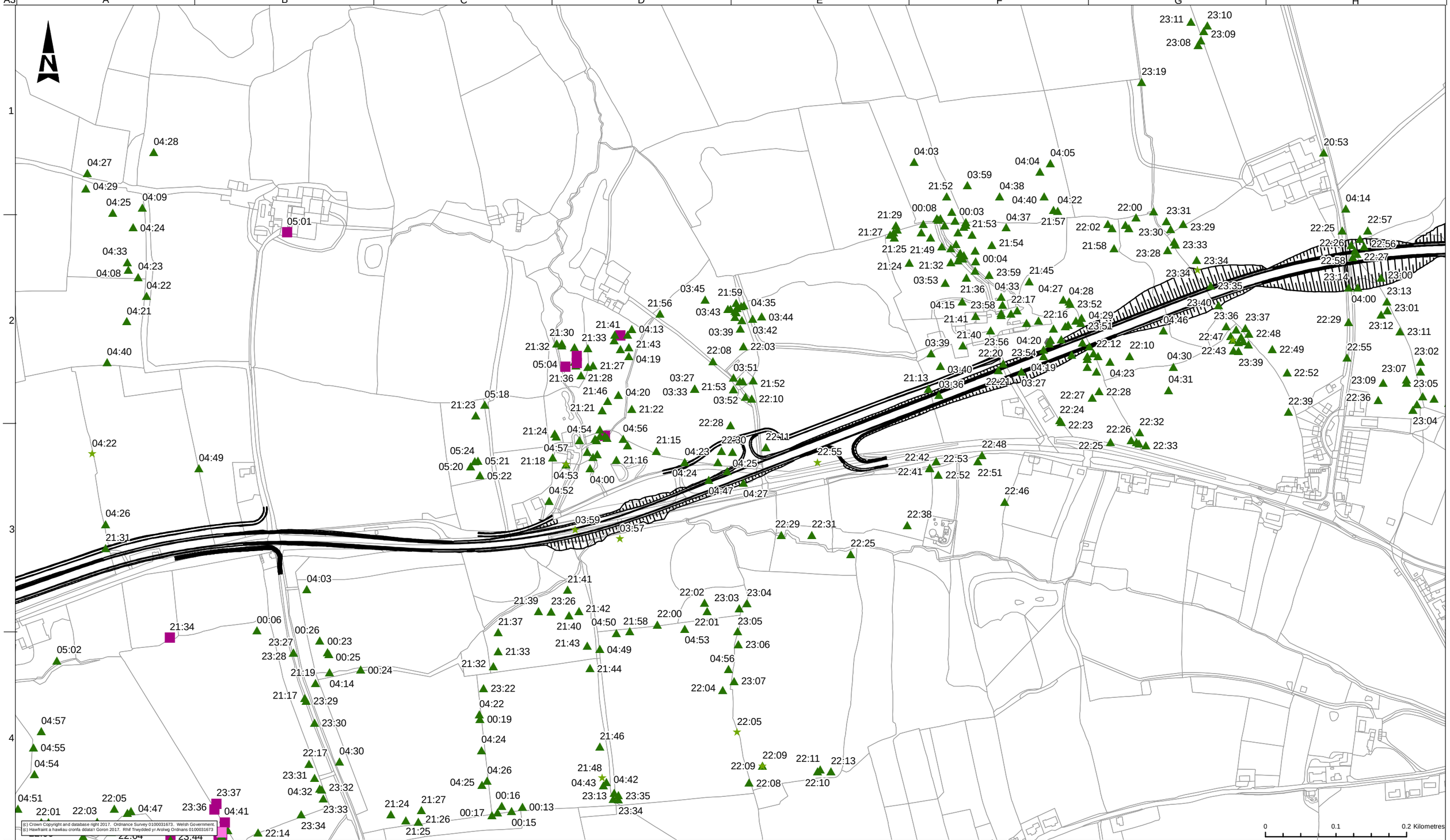
Drawing Title
FIGURE 8.18A
BAT ACTIVITY TRANSECT RESULTS MAY
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0064
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- NOCTULE
- NYCTALUS SPECIES

INDICATIVE SUNRISE: 04:25:35
INDICATIVE SUNSET: 20:05:27

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

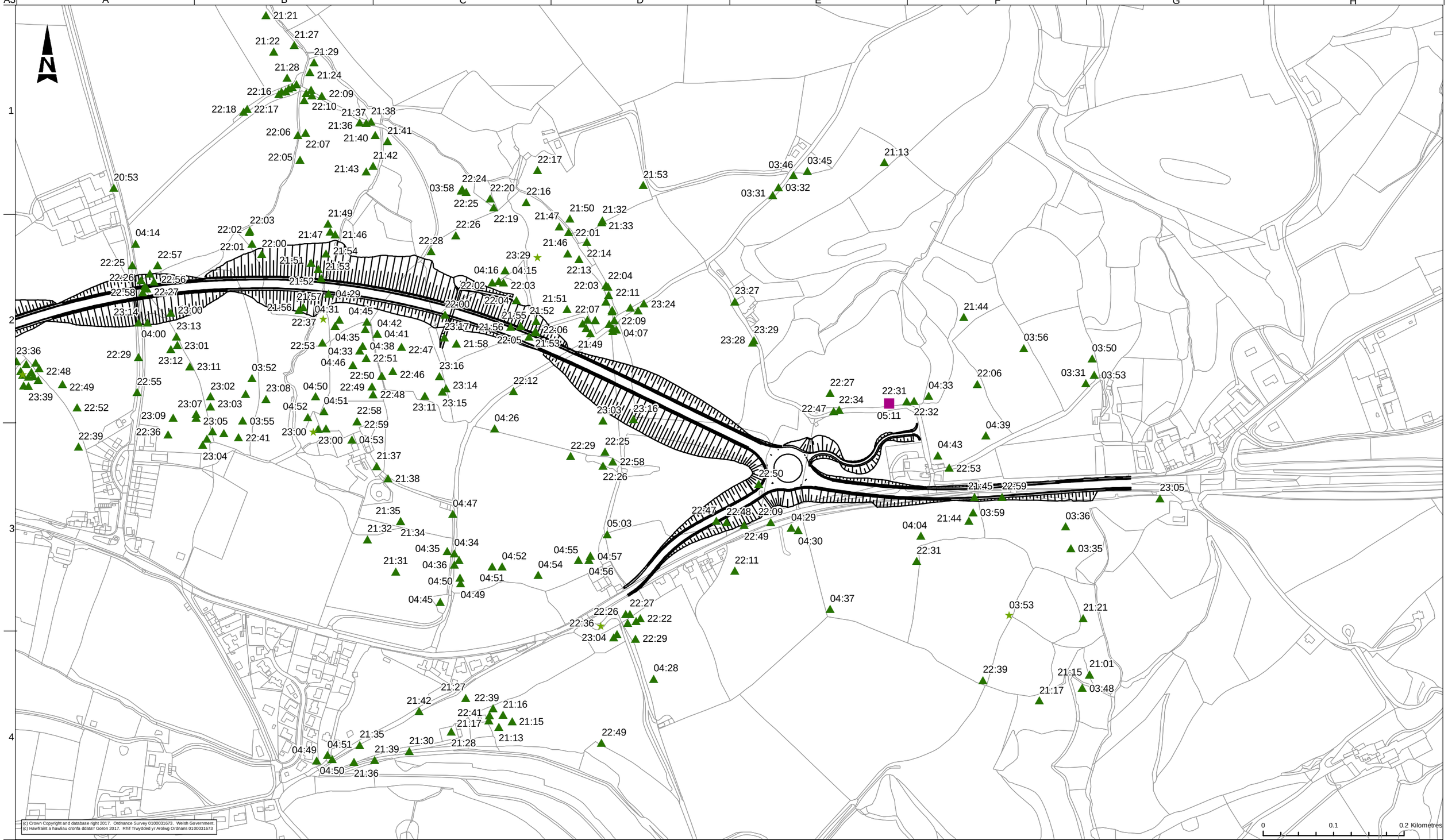
Drawing Title
FIGURE 8.18B
BAT ACTIVITY TRANSECT RESULTS MAY
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0065
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- ★ MYOTIS SPECIES
- ▲ PIPISTRELLE SPECIES
- ■ NOCTULE

INDICATIVE SUNRISE: 04:25:35
INDICATIVE SUNSET: 20:05:27

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

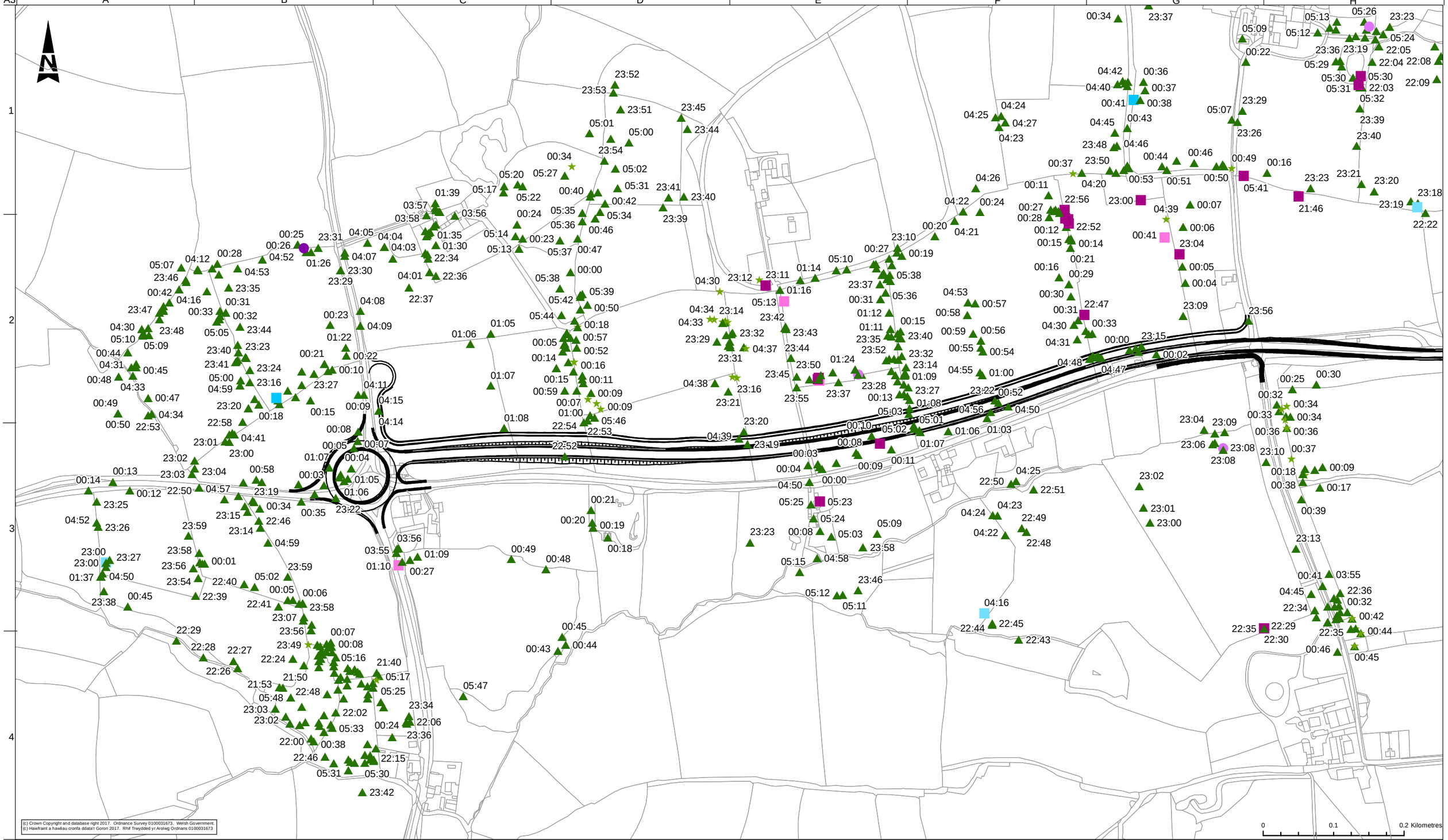
Drawing Title
FIGURE 8.18C
BAT ACTIVITY TRANSECT RESULTS MAY
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0066
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- LESSER HORSESHOE
- NOCTULE
- NYCTALUS SPECIES
- SEROTINE
- LONG-EARED BAT

INDICATIVE SUNRISE: 03:59:38
INDICATIVE SUNSET: 20:38:19

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

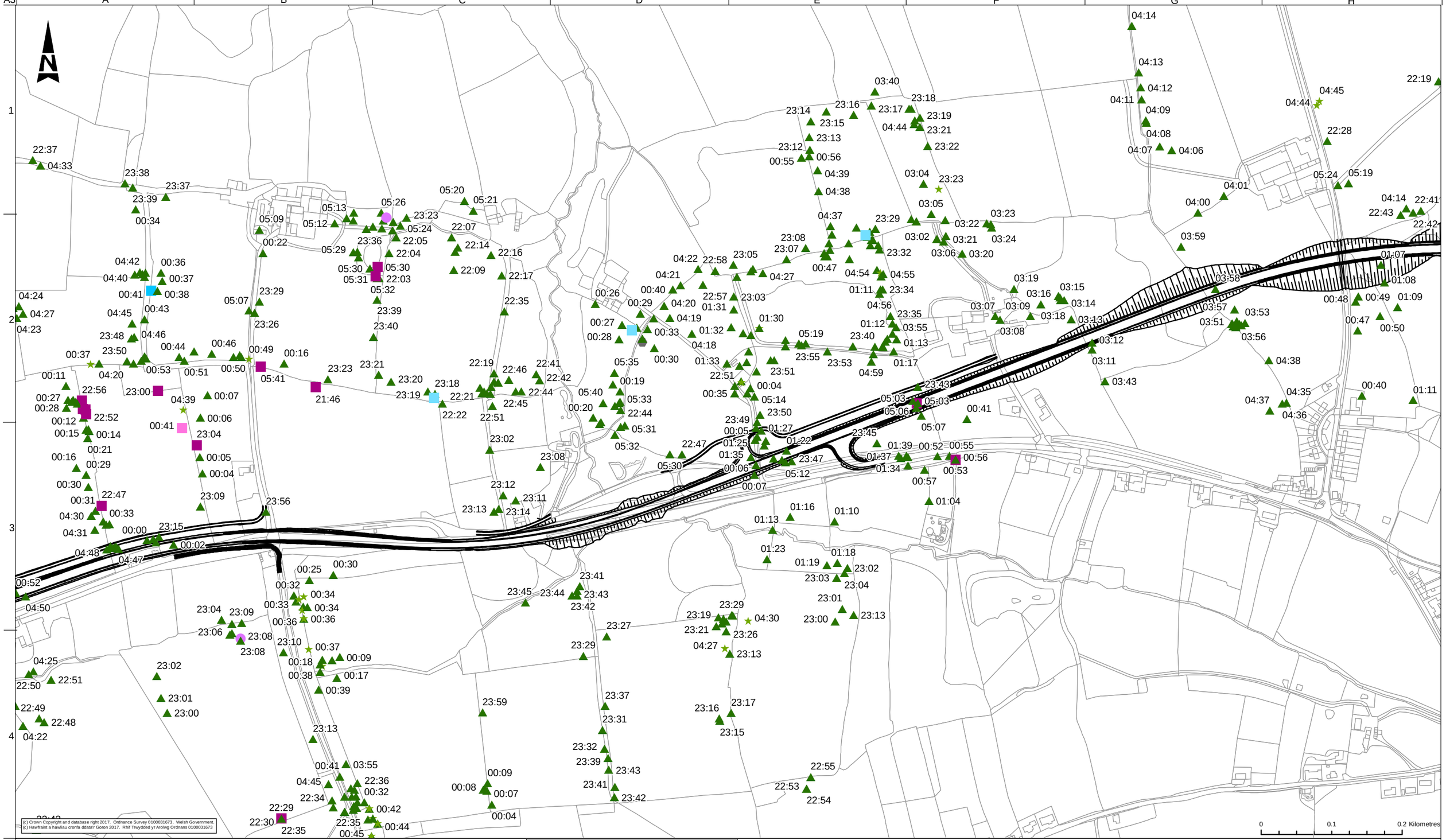
Drawing Title
FIGURE 8.19A
BAT ACTIVITY TRANSECT RESULTS JUNE
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0067
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- LONG-EARED BAT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LESSER HORSESHOE
- NOCTULE
- NYCTALUS SPECIES
- SEROTINE

INDICATIVE SUNRISE: 03:59:38
INDICATIVE SUNSET: 20:38:19

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

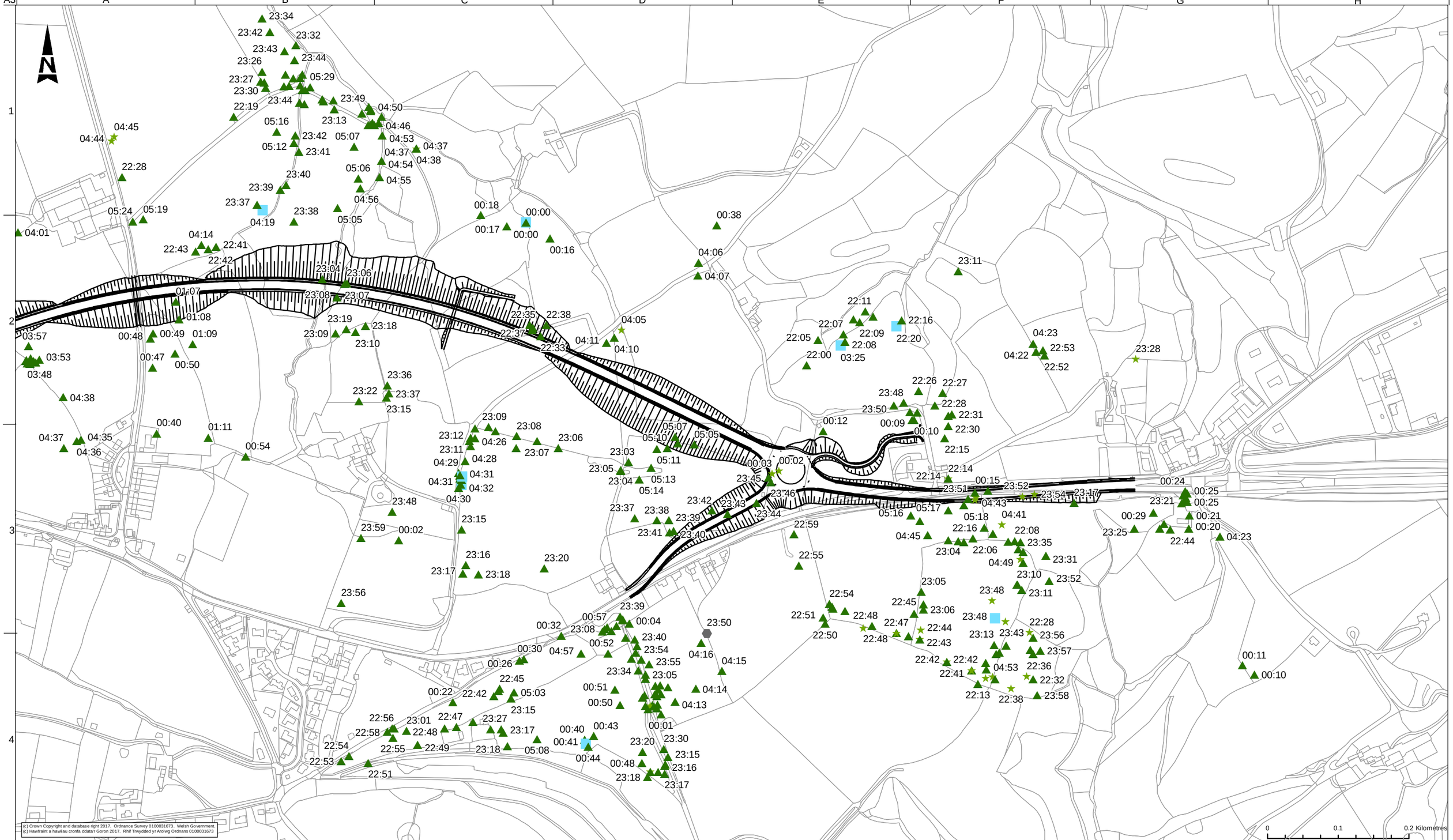
Drawing Title
FIGURE 8.19B
BAT ACTIVITY TRANSECT RESULTS JUNE
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0068
Project | Originator | Volume | Location | Type | Role | Number



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(c) Hawfraint a hawlau cronfa ddata'r Goron 2017. Rhif Trwydded yr Arolwg Ordnans 0100031673

LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 03:59:38
INDICATIVE SUNSET: 20:38:19

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

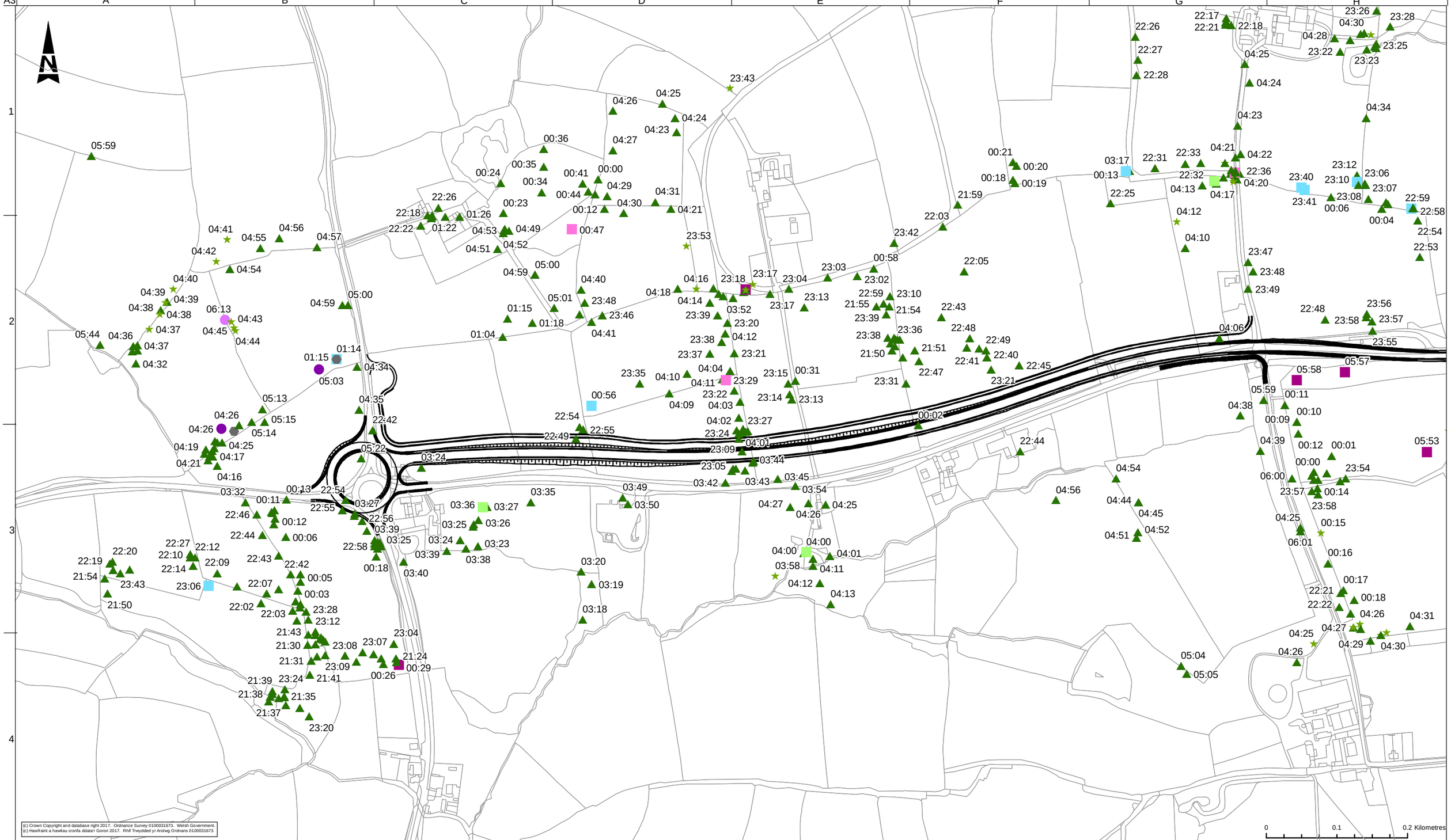
Drawing Title
FIGURE 8.19C
BAT ACTIVITY TRANSECT RESULTS JUNE
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0069
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- LESSER HORSESHOE
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 04:19:48
INDICATIVE SUNSET: 20:28:58

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

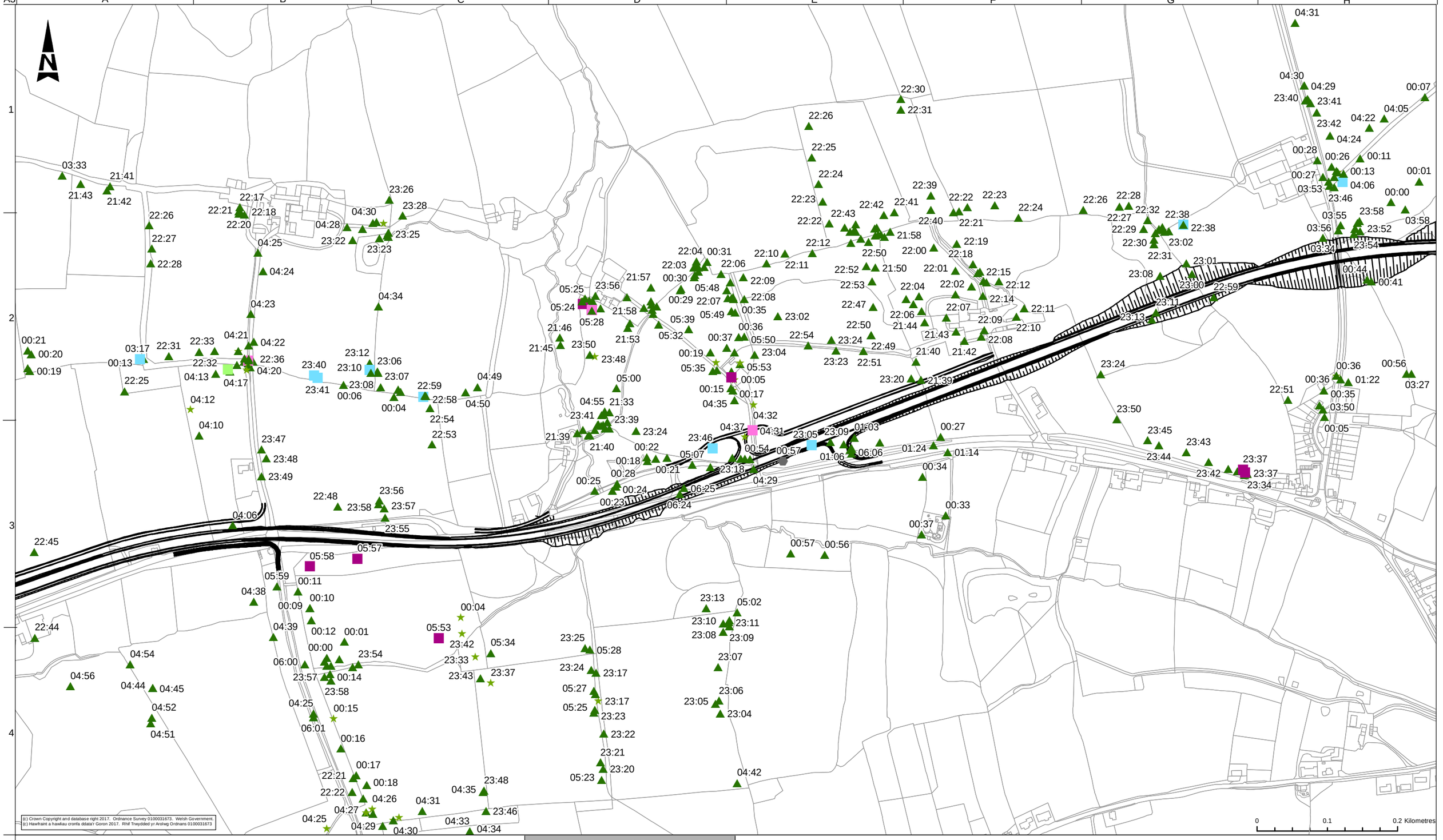
Drawing Title
FIGURE 8.20A
BAT ACTIVITY TRANSECT RESULTS JULY
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0070
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 04:19:48
INDICATIVE SUNSET: 20:28:58

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

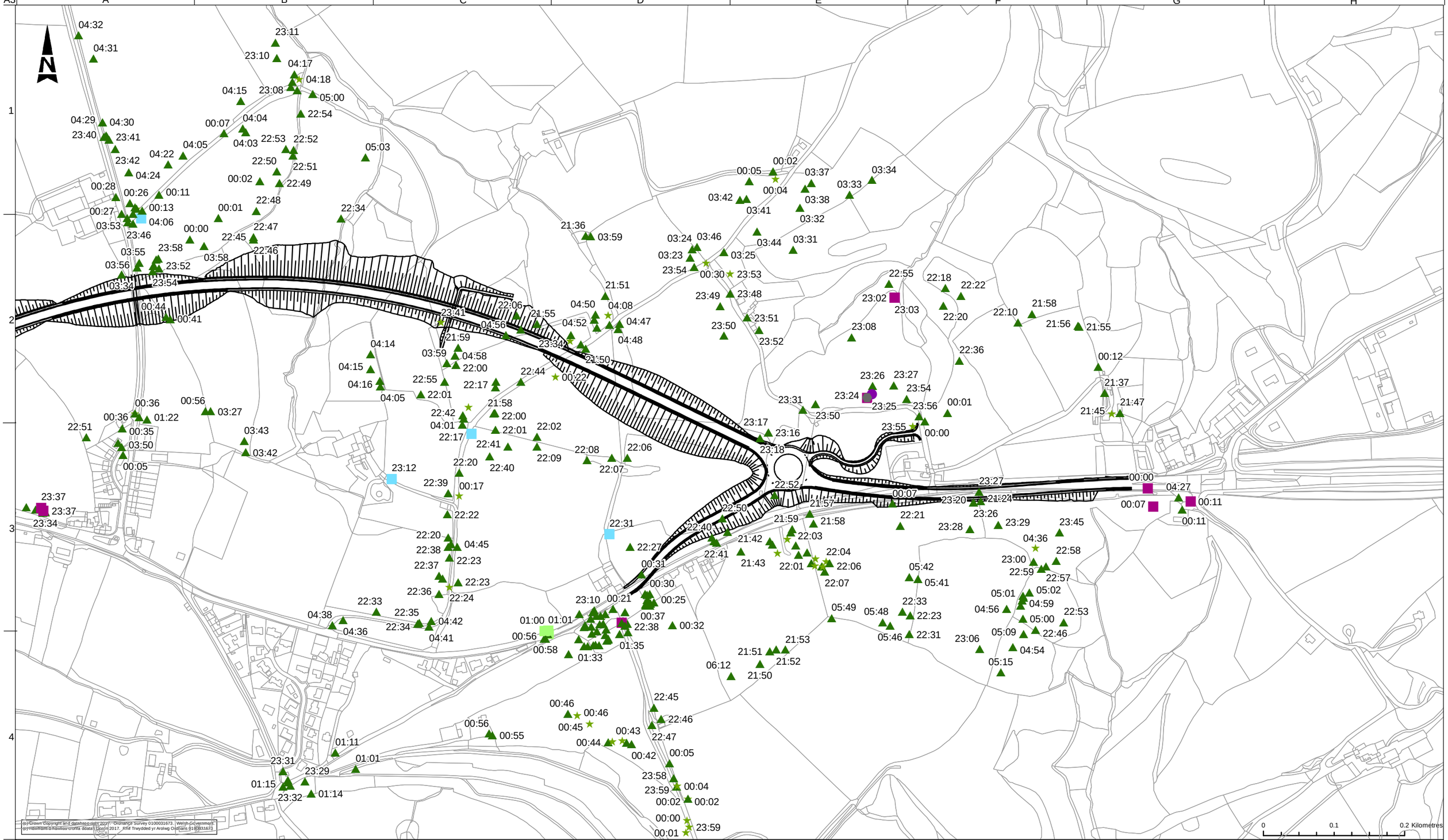
Drawing Title
FIGURE 8.20 B
BAT ACTIVITY TRANSECT RESULTS JULY
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0071
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- LEISLER'S BAT
- NOCTULE
- LONG-EARED BAT

INDICATIVE SUNRISE: 04:19:48
INDICATIVE SUNSET: 20:28:58

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

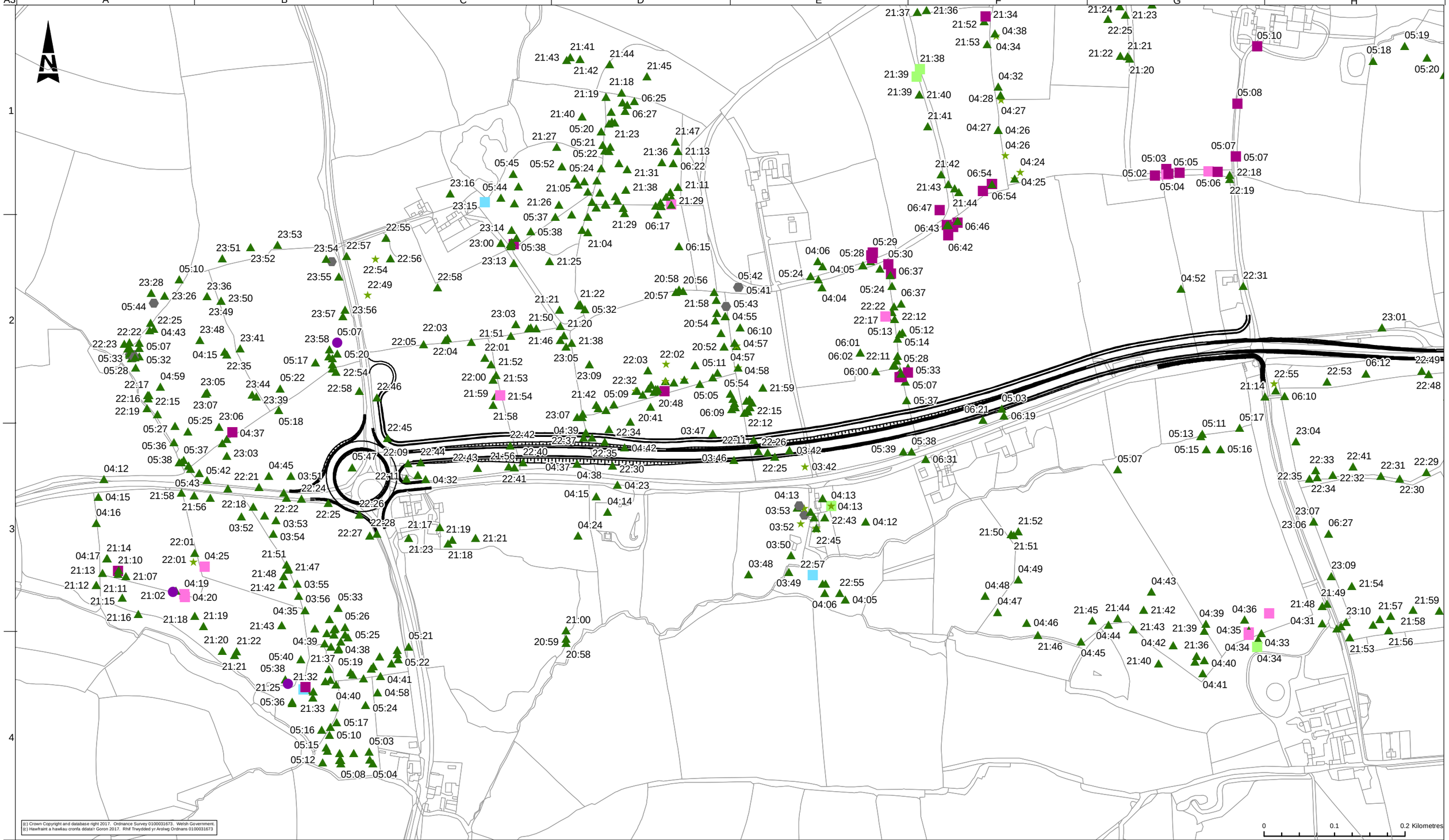
Drawing Title
FIGURE 8.20C
BAT ACTIVITY TRANSECT RESULTS JULY
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0072
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 05:03:19
INDICATIVE SUNSET: 19:42:33

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

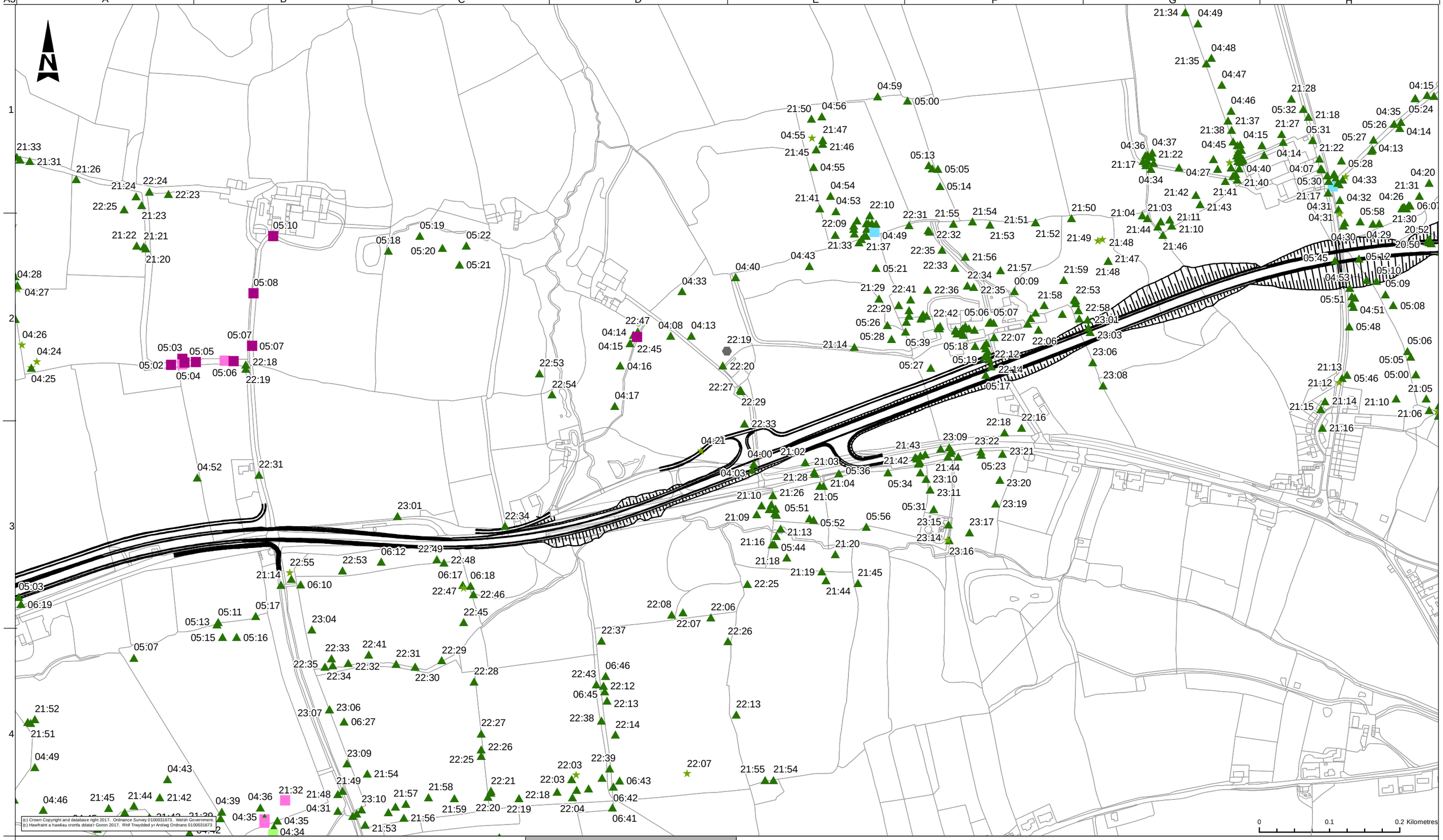
Drawing Title
FIGURE 8.21A
BAT ACTIVITY TRANSECT RESULTS AUGUST
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0073
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 05:03:19
INDICATIVE SUNSET: 19:42:33

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

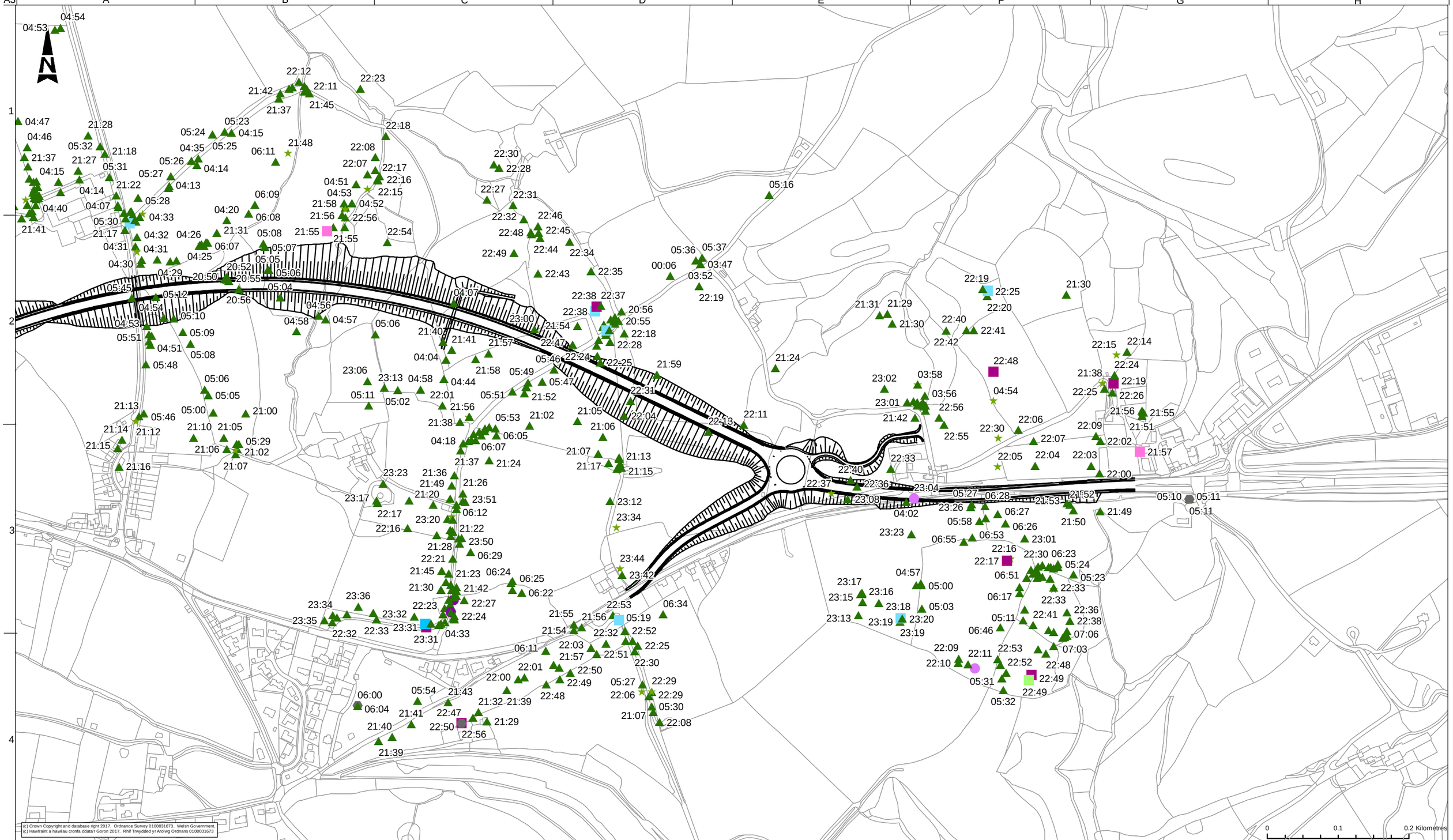
Drawing Title
FIGURE 8.21B
BAT ACTIVITY TRANSECT RESULTS AUGUST
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0074
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- LESSER HORSESHOE
- LEISLER'S BAT
- NOCTULE
- NYCTALUS SPECIES
- SEROTINE
- LONG-EARED BAT

INDICATIVE SUNRISE: 05:03:19
INDICATIVE SUNSET: 19:42:33

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

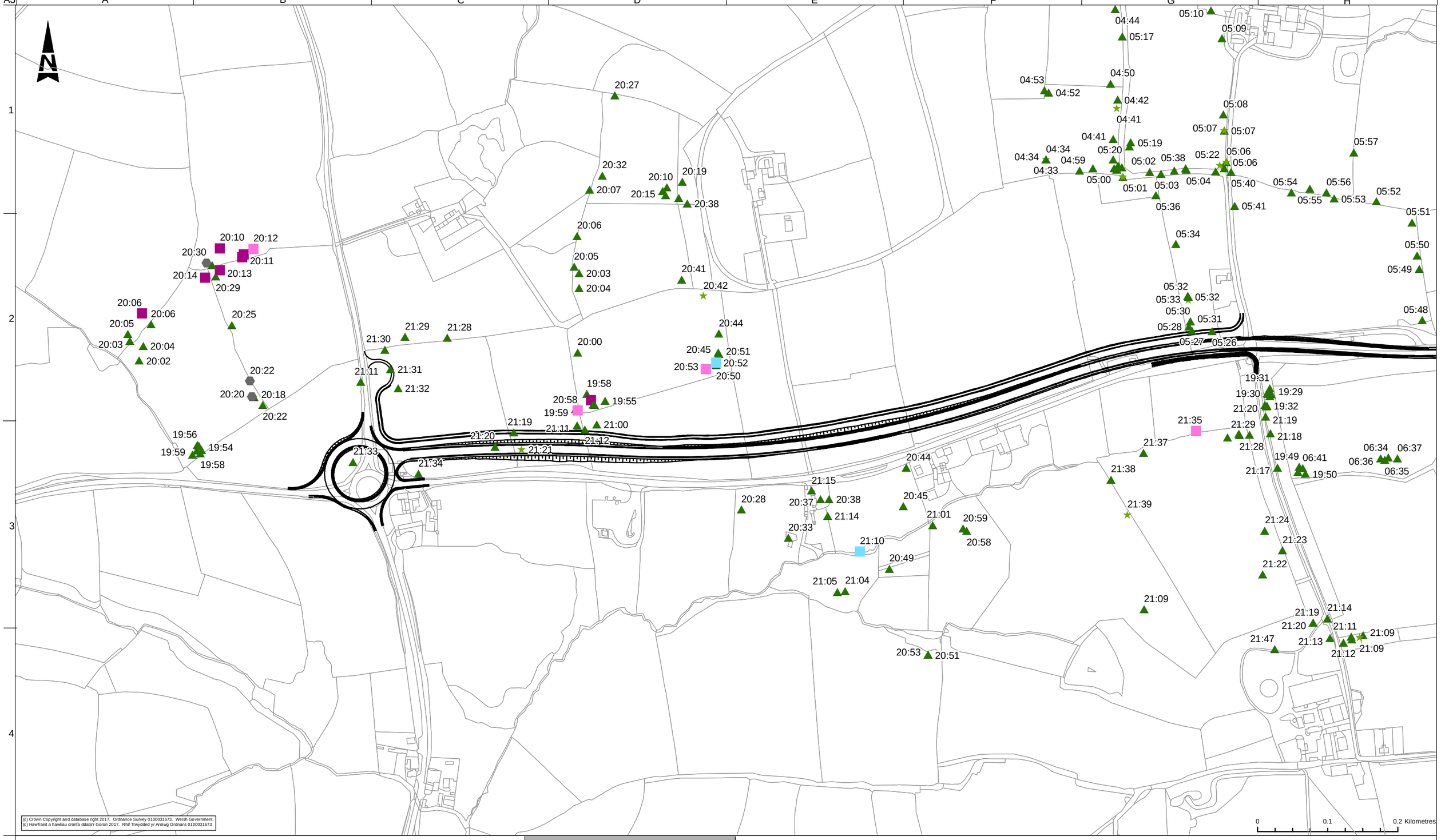
Drawing Title
FIGURE 8.21C
BAT ACTIVITY TRANSECT RESULTS AUGUST
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0075
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 05:48:41
INDICATIVE SUNSET: 18:40:29

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

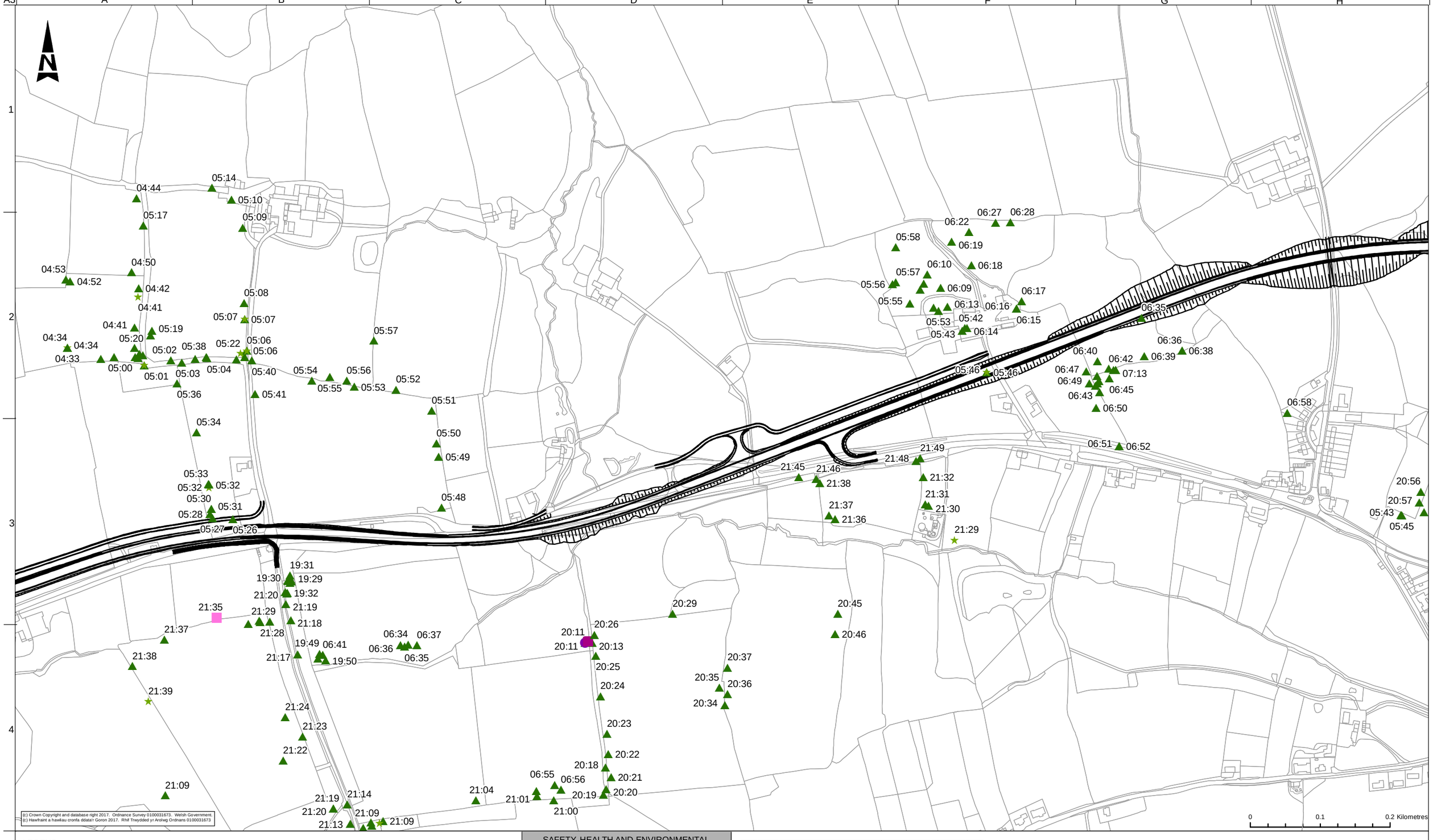
Drawing Title
FIGURE 8.22A
BAT ACTIVITY TRANSECT RESULTS SEPTEMBER
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0076
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- GREATER HORSESHOE
- NOCTULE
- NYCTALUS SPECIES

INDICATIVE SUNRISE: 05:48:41
INDICATIVE SUNSET: 18:40:29

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

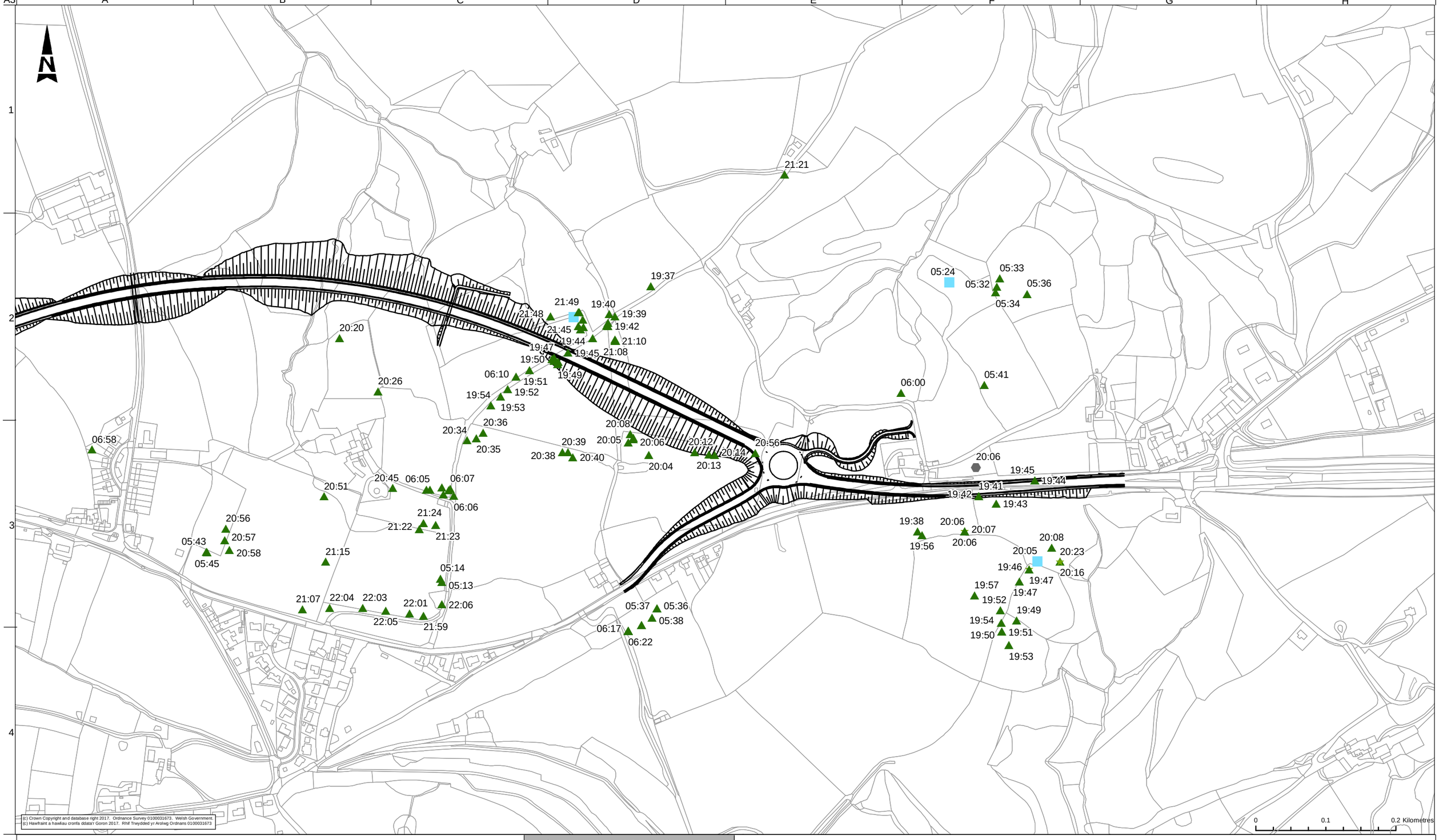
Drawing Title
FIGURE 8.22B
BAT ACTIVITY TRANSECT RESULTS SEPTEMBER
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0077
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 05:48:41
INDICATIVE SUNSET: 18:40:29

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS MOTT MACDONALD ARUP RICHARDS

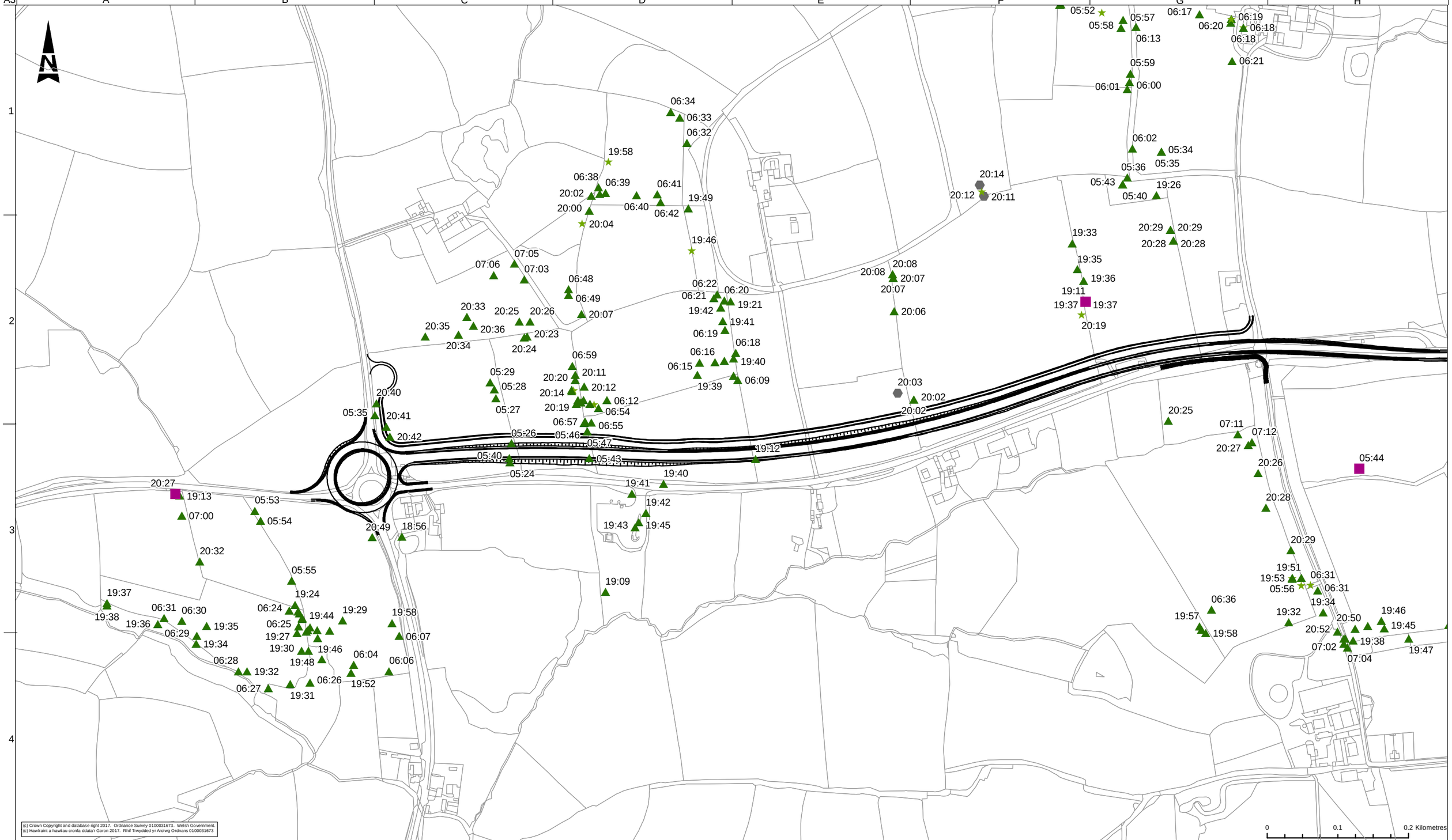
Drawing Title
FIGURE 8.22C
BAT ACTIVITY TRANSECT RESULTS SEPTEMBER
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0078
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- UNIDENTIFIED BAT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- NOCTULE
- NYCTALUS SPECIES

INDICATIVE SUNRISE: 06:30:56
INDICATIVE SUNSET: 17:40:54

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

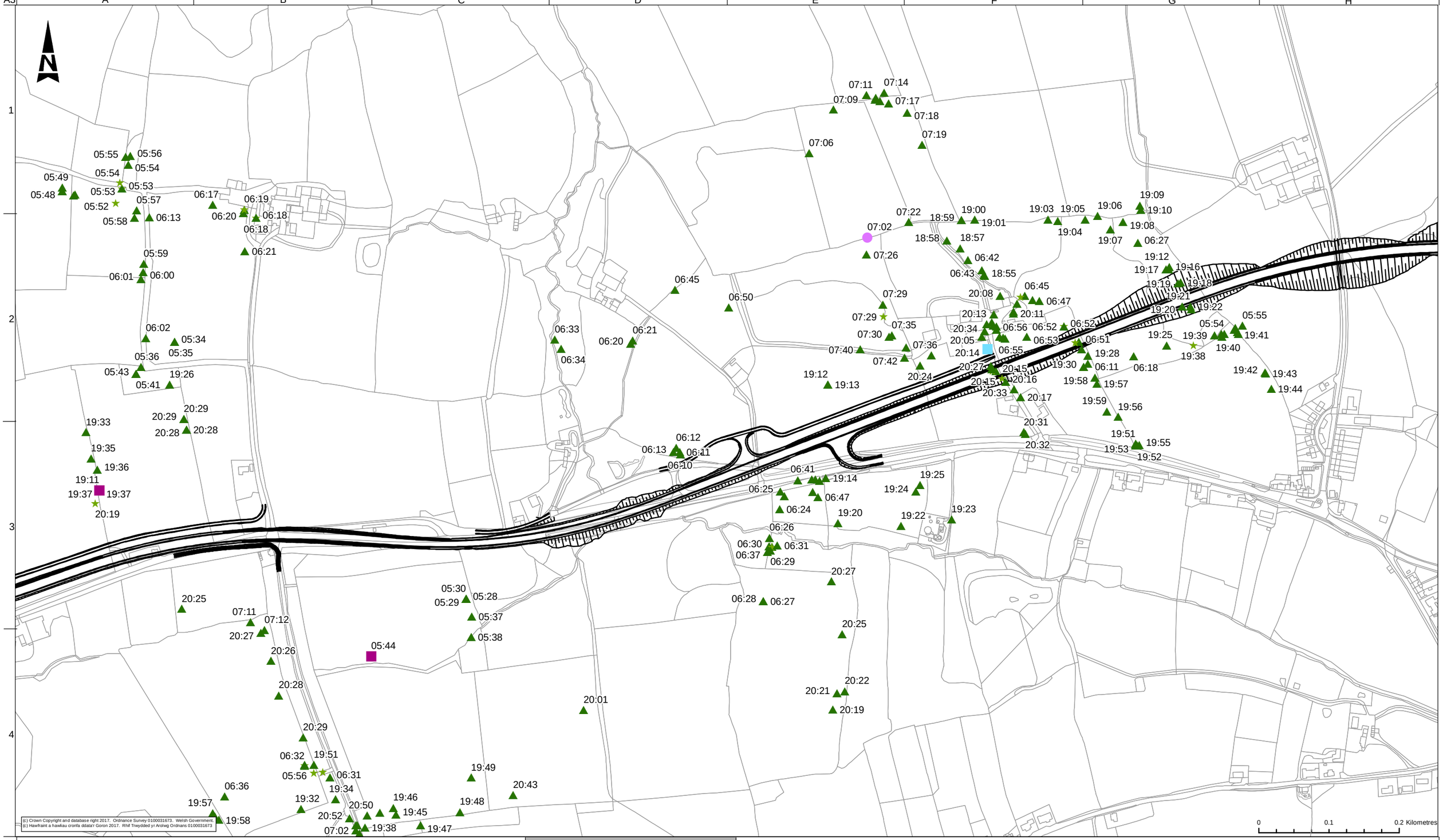
Drawing Title
FIGURE 8.23A
BAT ACTIVITY TRANSECT RESULTS OCTOBER
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0079
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LESSER HORSESHOE
- NOCTULE
- NYCTALUS SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 06:30:56
INDICATIVE SUNSET: 17:40:54

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

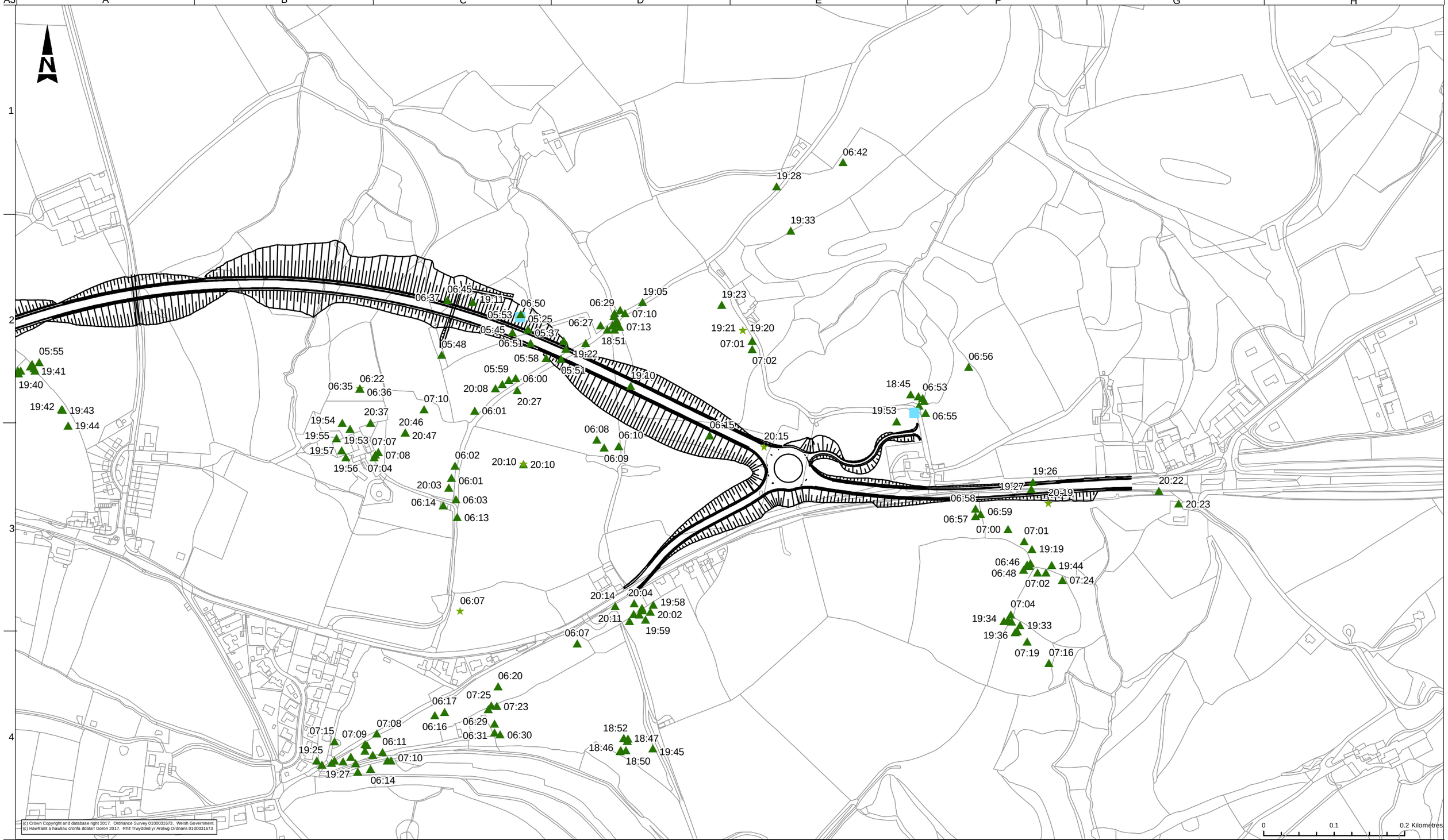
Drawing Title
FIGURE 8.23B
BAT ACTIVITY TRANSECT RESULTS OCTOBER
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0080
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- MYOTIS SPECIES
- PIPISTRELLE SPECIES
- LONG-EARED BAT

INDICATIVE SUNRISE: 06:30:56
INDICATIVE SUNSET: 17:40:54

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.23C
BAT ACTIVITY TRANSECT RESULTS OCTOBER
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0081
Project | Originator | Volume | Location | Type | Role | Number



POINT ID	BAI
0	0.2
1	0.2
2	6
19	19.6
20	0.6
21	3
39	3.2
40	2.6
56	9.2
57	2
58	153.2
131	23.4
132	1065.2
133	1011.8
150	423.6
151	65.4
152	912.6
185	516.6
186	375.6
187	839.8
207	36.2
208	132.6
209	77.2

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.24
2016 STATIC BAT ACTIVITY MONITORING
APRIL: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0049
Project | Originator | Volume | Location | Type | Role | Number



POINT ID	BAI		
0	0.4	113	145.2
1	0.4	114	118.8
2	16.4	115	62.2
3	86.6	134	71.8
4	258.4	135	99.4
5	19	136	122.6
19	1.4	153	831.2
20	14.4	154	41.4
21	2.2	155	41.4
22	55.8	171	479.8
23	48.2	172	47.4
24	52.8	173	6.8
40	2.6	188	152.4
41	33	189	173.2
42	252.8	190	74.8
43	64.4	204	7.2
55	73.6	205	28
56	63.4	206	109.2
57	2.4	225	2.6
58	122.8	226	2
59	315.2	227	1
78	214.4	242	15
79	104.8	243	67.8
80	162.2	244	14.4
96	99.8	260	14.8
97	930	261	54
98	99.8	262	25.4

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Delivery Team

Drawing Title

FIGURE 8.25
2016 STATIC BAT ACTIVITY MONITORING
MAY: ALL BAT SPECIES

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:15,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0050


A3
A
B
C
D
E
F
G
H
1
2
3
4
N
Llanddewi Felffre/
Llanddewi Velfrey
Lampeter Vale
Blackmoor Hill
Longford Bridge
Longford Farm
Caravan Park
Quarries (disused)
Sewage Works
Stonyford
Beechwood Park
Caerau Wood
Caerau Gaer
Stepin Plantation
Henllan
Henllan Cottages
Pen-banc
Cwmilan
Cwmilan Wood
Pen-lan Wood
Castell-gwyndy Wood
Cwm-bryn Wood
Hendre
Cwmmau Wood
Carcoryn Wood
Fron Wood
Pant teg Wood
Gibby's Plantation
Lampeter
Llan-gwathan
Whitley Farm
Redstone Bank
Pant-y-gorphwys
Pen-blewyn
Carmaenau-fawr
Cilrath-fawr
Cilrath-fach
Pen-ca'rmaenau
Pen-troydin-fach
Pen-troydin-fawr
Glan Preseli
Efailwen
Dyffryn
Awel Deg
Brynwyllfa
Maes-y-Rhos
Tir-bach
Parc-y-teg
Brynhafod
Cyncoed
Pencemmau
Llwyndyland
Bancsaeson
Gwyndy
Gwyndy Fach
Bryncoed
Awelfa
Roft Isaf
Meadow View
Upper Fron
Scapin Farm
Vaynor Villa
Balaclava
Pen-lan
Pant-teg
Llandre
Dewi Cottage
The Old Vicarage
Droslyn
Llandybie
Mast
Mound
Spreads
Collects
Issues
Track
Path
Quarry (dis)
Pit (dis)
Sewage Works
Burial Gd
Chapel
Caravan Park
Bounty Farm
Grosvenor Court
Longford House
Grondre House
Grondre-fach
Bryn Hill
Bhos-fach
Ty Hir
Rhyd Hir
Bryn-hyfryd
Brynderwen
Pen-tir
Ffynnon-brodyr
Bryn Dwyrain
Tumulus
Castellowyran
Glan-rhyd
Sheep Dip
Bryn Farm
Hendre
Ton Mariais
Ton Daulan
Llwyn-y-Gaer
Llwyn-y-Gaer
Cwmilfrith
Pen-y-gaer
Pen-y-gaer
Oreircom-fach
Bwlch-bach
Bryn-pen-troydin
Ffynnon Wood
Carmaenau Wood
Gibby's Plantation
Old Garden
Quarry (disused)
Lime Kilns (disused)
Matte
White Hill
Llan-gwathan
Redstone Villas
Limit House
Greenmeadow
Blaen-ffynnonau
Trefanon
Bromilau
Henllan Lodge
Pant-y-gorphwys Bridge
Stonyford Farm
Leamington Cottages
Sewage Works
Ty Sub Sta
Water Gate
Precelly View
Mandre
Track
Collects
Issues
Spr
Spreads
Gable
Mast
Path
Track
Quarry (dis)
Pit (dis)
Sewage Works
Burial Gd
Chapel
Caravan Park
Tumulus
Mound
Matte

A3

POINT ID	BAI	POINT ID	BAI
9	37.2	161	17.6
10	164	177	98.4
28	871.4	178	56.4
29	53.8	179	99.6
30	378.4	194	13.6
44	485.2	195	39.2
45	443.4	196	132.6
46	12.4	210	110.4
66	250.4	211	1.4
67	197.6	212	23.8
68	94	213	42.4
84	11.4	214	24.2
85	70.4	215	122
86	107.2	231	6.2
102	29.4	232	8.8
103	20	233	0.2
104	14.4	248	16.2
119	31.2	249	0.2
120	53.2	250	53.2
121	336.6	266	139.2
140	11	267	6.4
159	54.6	268	61.4
160	368.6		

0 0.3 0.6 Kilometres

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS, MOTT MACDONALD, ARUP, RICHARDS

Drawing Title: FIGURE 8.27
2016 STATIC BAT ACTIVITY MONITORING
JULY: ALL BAT SPECIES

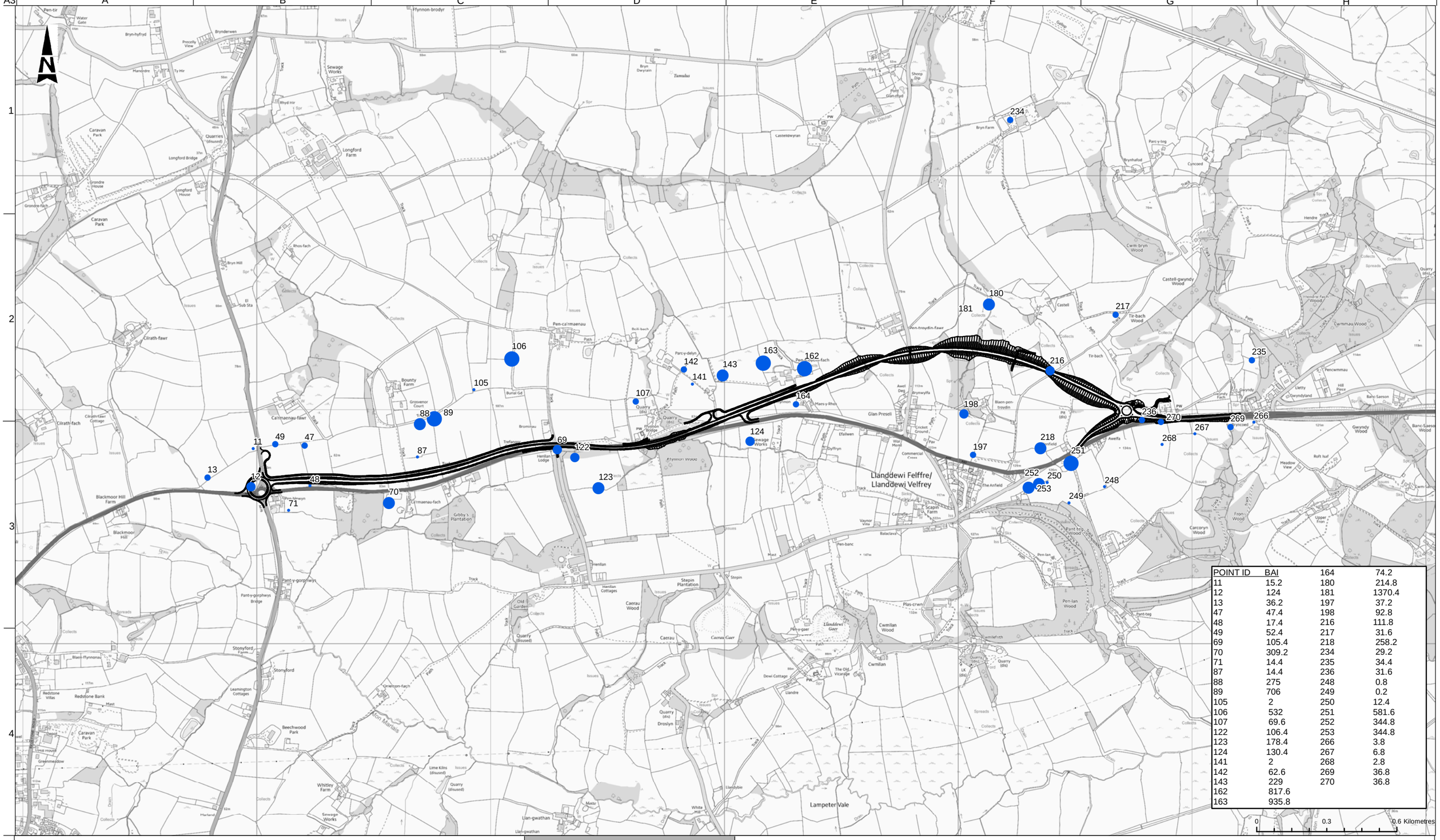
Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:15,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0052

Project | Originator | Volume | Location | Type | Role | Number



POINT ID	BAI		
11	15.2	164	74.2
12	124	180	214.8
13	36.2	181	1370.4
47	47.4	197	37.2
48	17.4	198	92.8
49	52.4	216	111.8
69	105.4	217	31.6
70	309.2	218	258.2
71	14.4	234	29.2
87	14.4	235	34.4
88	275	236	31.6
89	706	248	0.8
105	2	249	0.2
106	532	250	12.4
107	69.6	251	581.6
122	106.4	252	344.8
123	178.4	253	344.8
124	130.4	266	3.8
141	2	267	6.8
142	62.6	268	2.8
143	229	269	36.8
162	817.6	270	36.8
163	935.8		

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.28
2016 STATIC BAT ACTIVITY MONITORING
AUGUST: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:15,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0053
Project | Originator | Volume | Location | Type | Role | Number



POINT ID	BAI		
14	6.6	126	138.4
15	84.4	127	1231.8
34	16.8	128	2.8
35	28.4	129	366
36	341.6	130	366
49	37.4	144	18.4
50	592.6	145	101.6
51	10	146	117.4
72	101.2	147	74.4
73	402.8	148	1.6
74	48.4	149	20.4
90	3.4	165	269.6
91	54.4	166	5.8
92	11.2	167	459.8
93	0.8	182	107.2
94	4.2	183	33.6
95	49.8	184	761
108	5.6	202	20.6
109	1279.2	203	2.6
110	28.8	219	50
111	69.4	220	449.8
112	6.6	221	51
125	858.2	237	19.2
		238	7.6

0 0.3 0.6 Kilometres

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 8.29
2016 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:15,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0054
Project | Originator | Volume | Location | Type | Role | Number



POINT ID	BAI	POINT ID	BAI
16	283.6	201	34.8
17	39	222	11.8
18	31.8	223	33
37	39.6	224	0.2
38	31.4	239	38.4
52	324	240	8.8
53	44.8	241	107.4
54	1.4	257	187.6
75	14.6	258	87
76	4.2	259	23.6
77	8.4	274	138
93	47.8	275	210.8
94	21	276	170.4
95	18	172	47.4
111	1348	173	6.8
112	92.2	188	152.4
128	8.4	189	173.2
129	418.6	190	74.8
130	418.6	204	7.2
147	648.6	205	28
148	41	206	109.2
149	43.6	225	2.6
168	41	226	2
169	42.2	227	1
170	42.2	242	15
199	18.6	243	67.8
200	6.6	244	14.4
		260	14.8

0 0.3 0.6 Kilometres

LEGEND

- PROPOSED ALIGNMENT
- VERY LOW
- LOW
- MEDIUM
- HIGH
- VERY HIGH

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	06/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

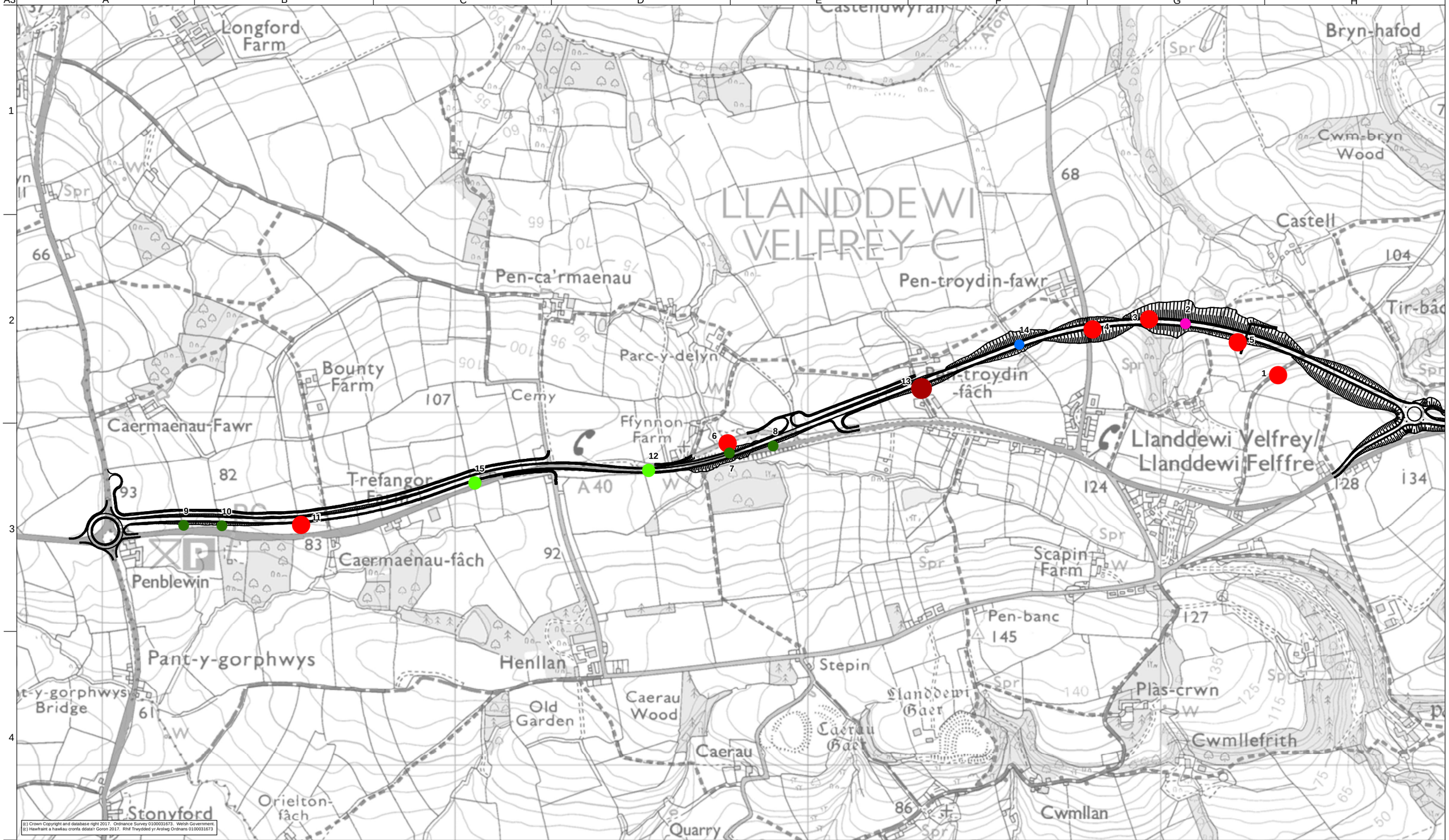
Drawing Title
FIGURE 8.30
2016 STATIC BAT ACTIVITY MONITORING
OCTOBER: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:15,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 06/11/18	Date 06/11/18	Date 06/11/18	Date 06/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0055
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378)
- VERY HIGH (> 378)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	226.2
2	NO ACCESS
3	158.4
4	212
5	135.8
6	307.2
7	27.4
8	6.2
9	11.4
10	3.6
11	220.8
12	53.8
13	556.8
14	NO BATS RECORDED - INTERFERANCE
15	54.6

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

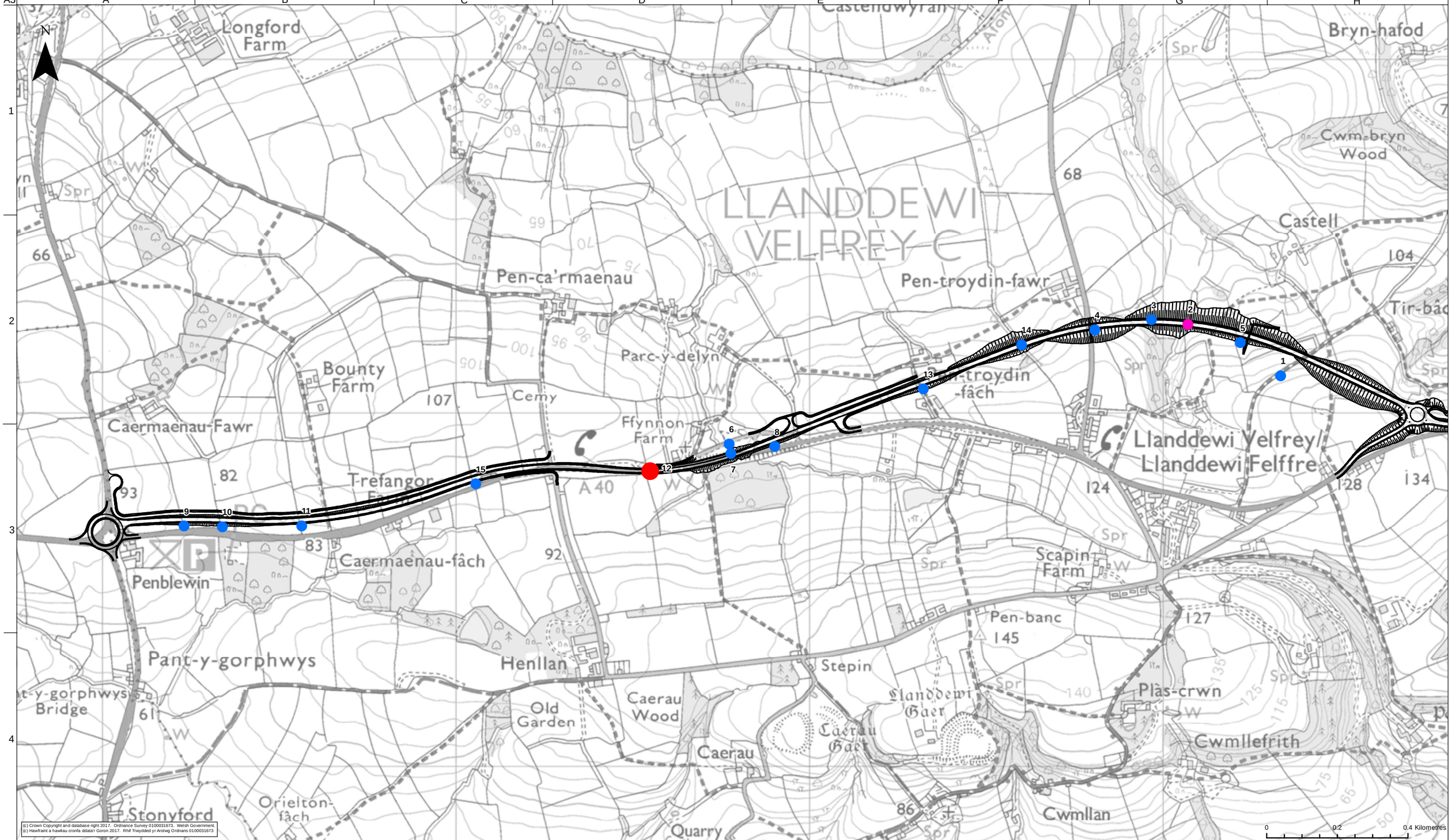
Drawing Title
FIGURE 8.31
2017 STATIC BAT ACTIVITY MONITORING
JUNE: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0008
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0.2
13	0
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

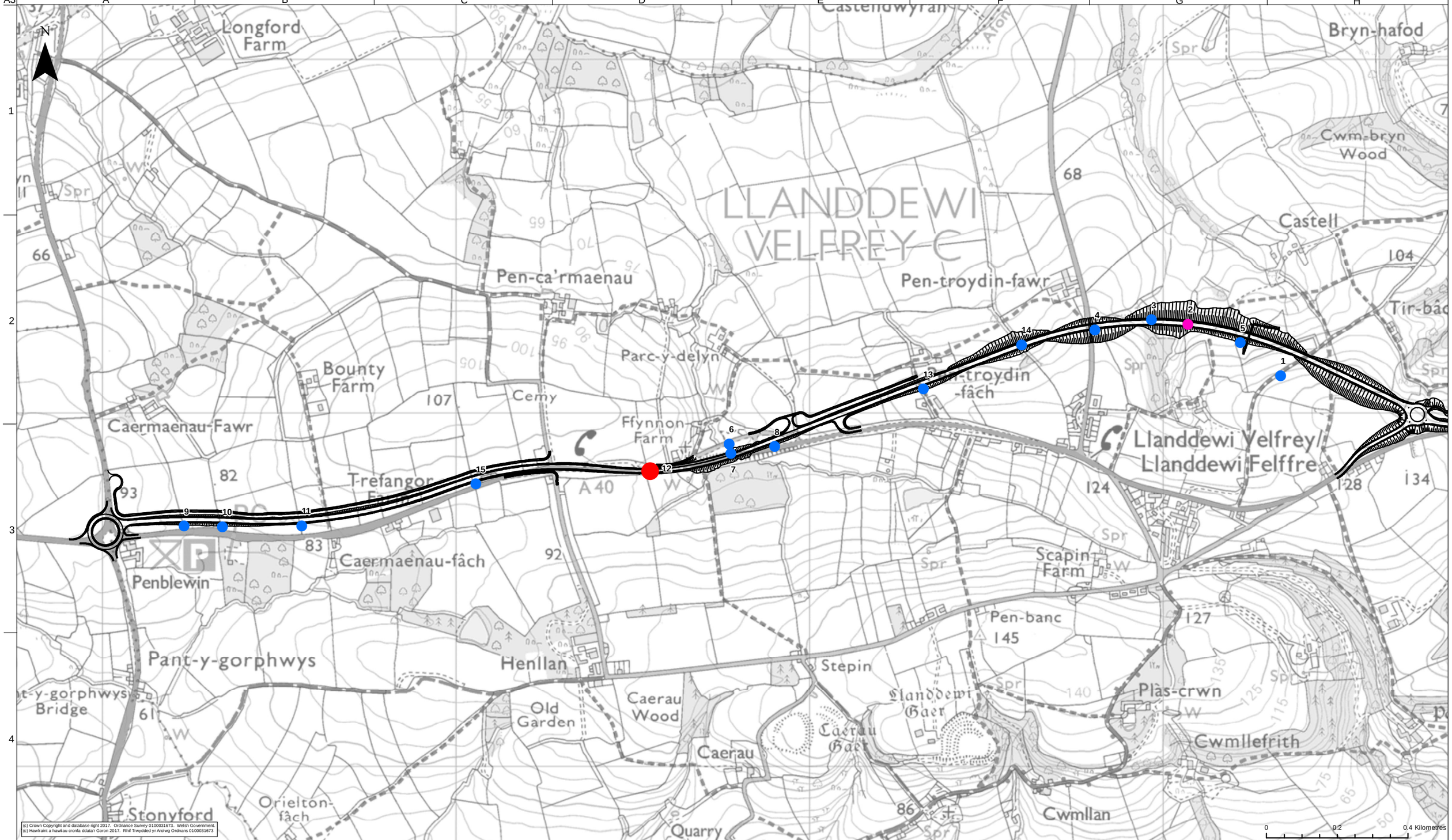
Drawing Title
FIGURE 8.32
2017 STATIC BAT ACTIVITY MONITORING
JUNE: BARBASTELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0009
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	2
13	0
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

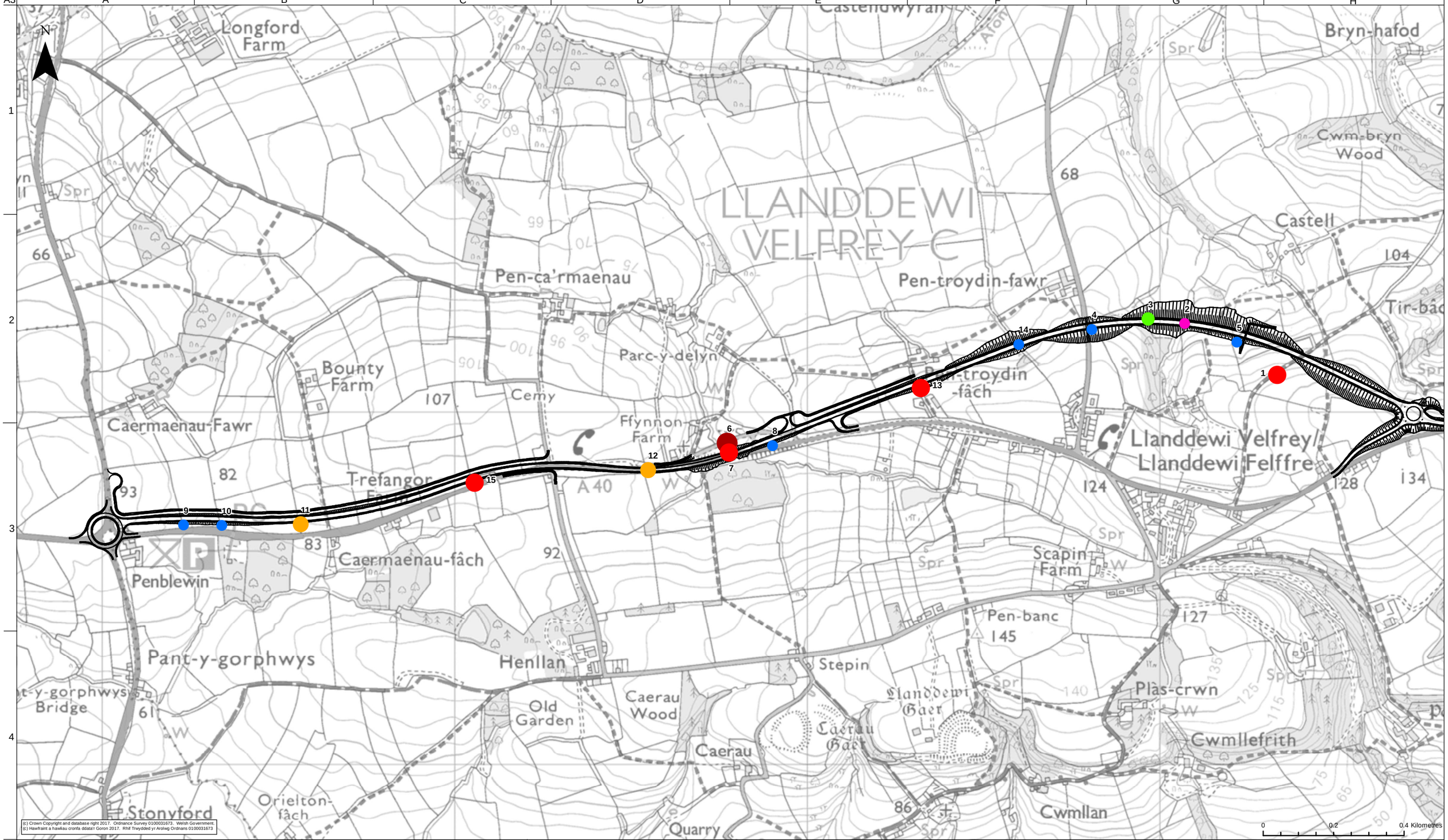
Drawing Title
FIGURE 8.33
2017 STATIC BAT ACTIVITY MONITORING
JUNE: SEROTINE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0010
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- LOW (0.2 - 1)
- MEDIUM (1 - 2)
- HIGH (2 - 12)
- VERY HIGH (> 12)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	6.2
2	NO ACCESS
3	0.6
4	0
5	0
6	37.8
7	3.2
8	0
9	0
10	0
11	1.2
12	1.4
13	3.4
14	NO BATS RECORDED - INTERFERANCE
15	4.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

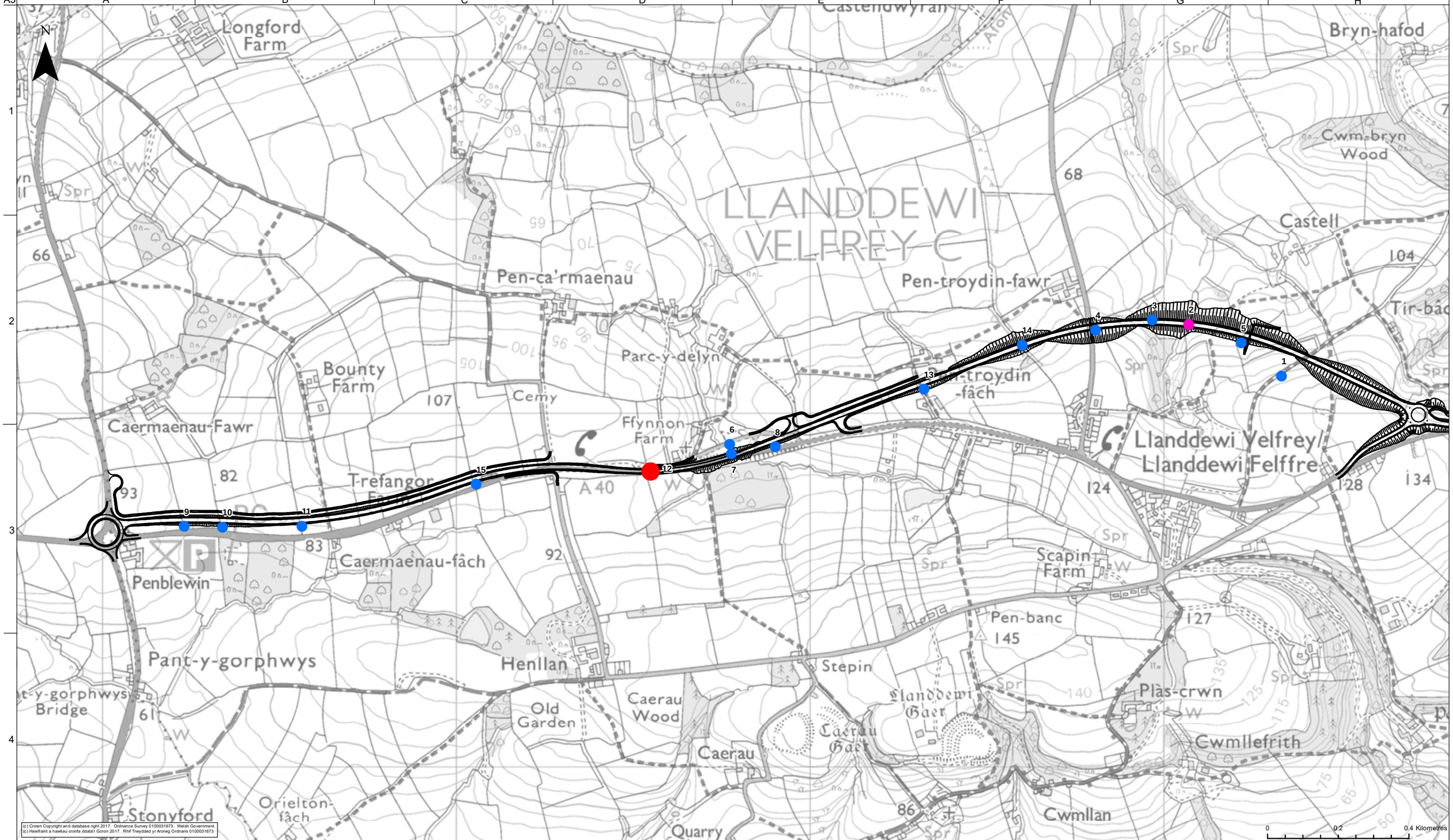
Drawing Title
FIGURE 8.34
2017 STATIC BAT ACTIVITY MONITORING
JUNE: MYOTIS SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0012
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	7.2
13	0
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

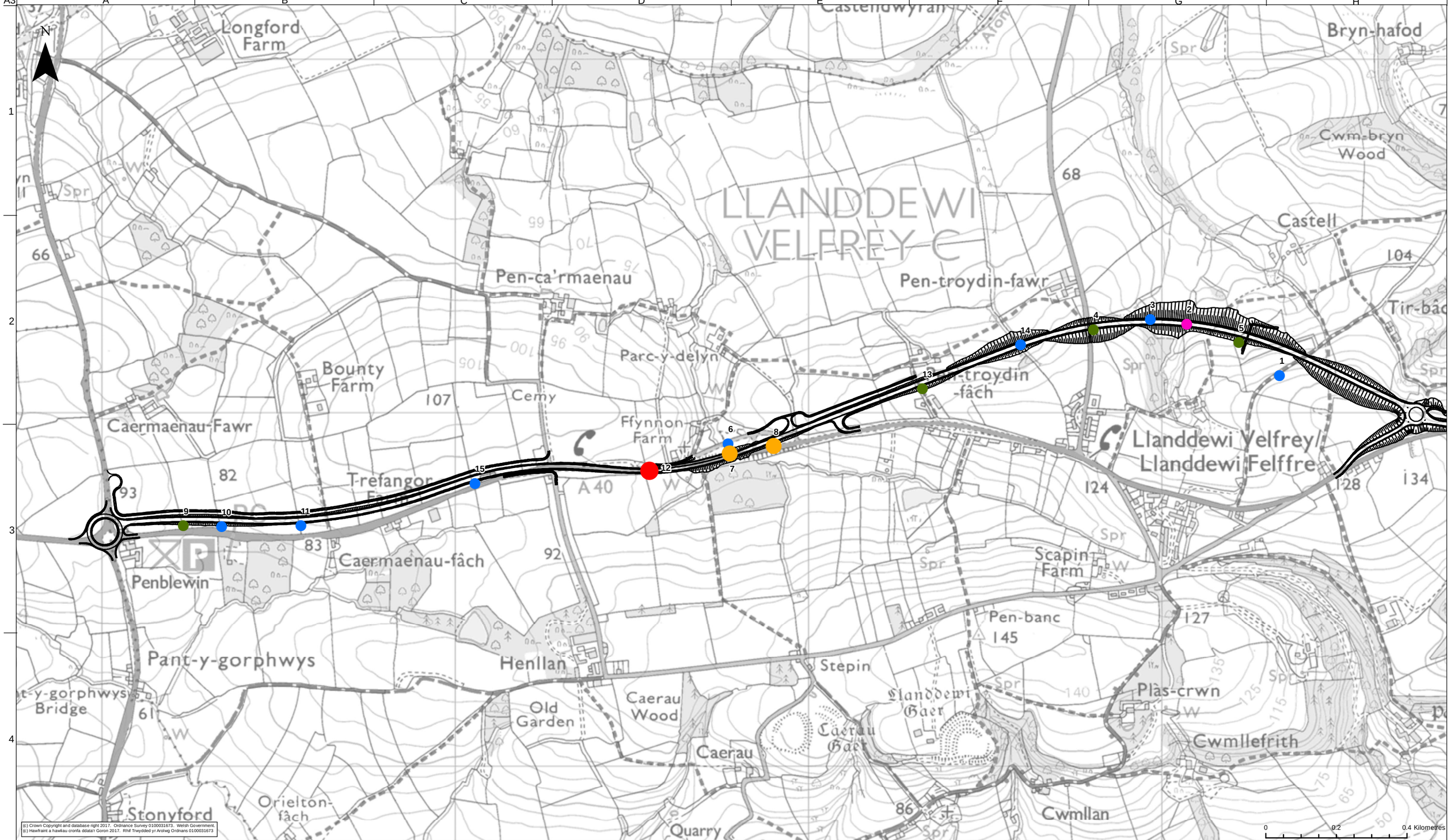
Drawing Title
FIGURE 8.35
2017 STATIC BAT ACTIVITY MONITORING
JUNE: LEISLER'S BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0013
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (<0.4)
- LOW (0.4-0.8)
- MEDIUM (0.8 - 1.4)
- HIGH (1.4 - 7.8)
- VERY HIGH (>7.8)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0.2
5	0.2
6	0
7	1.2
8	1.2
9	0.2
10	0
11	0
12	2.8
13	0.2
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

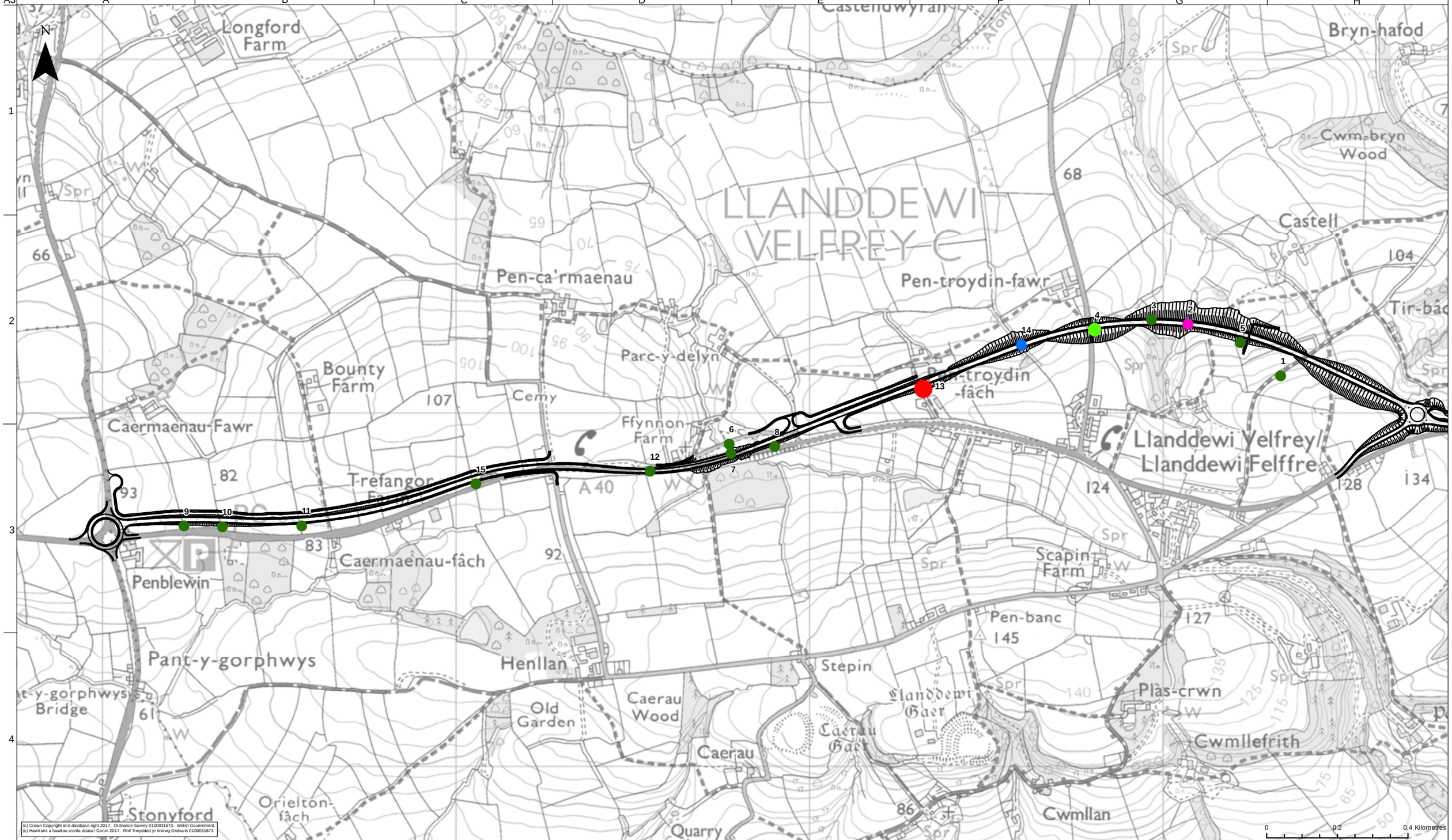
Drawing Title
FIGURE 8.36
2017 STATIC BAT ACTIVITY MONITORING
JUNE: NOCTULE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0014
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	10
2	NO ACCESS
3	2.8
4	57.4
5	12.4
6	3.2
7	1.8
8	1.6
9	1.8
10	1
11	22.4
12	6.4
13	143.4
14	NO BATS RECORDED - INTERFERANCE
15	5

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS, Mott MacDonald, ARUP, Richards

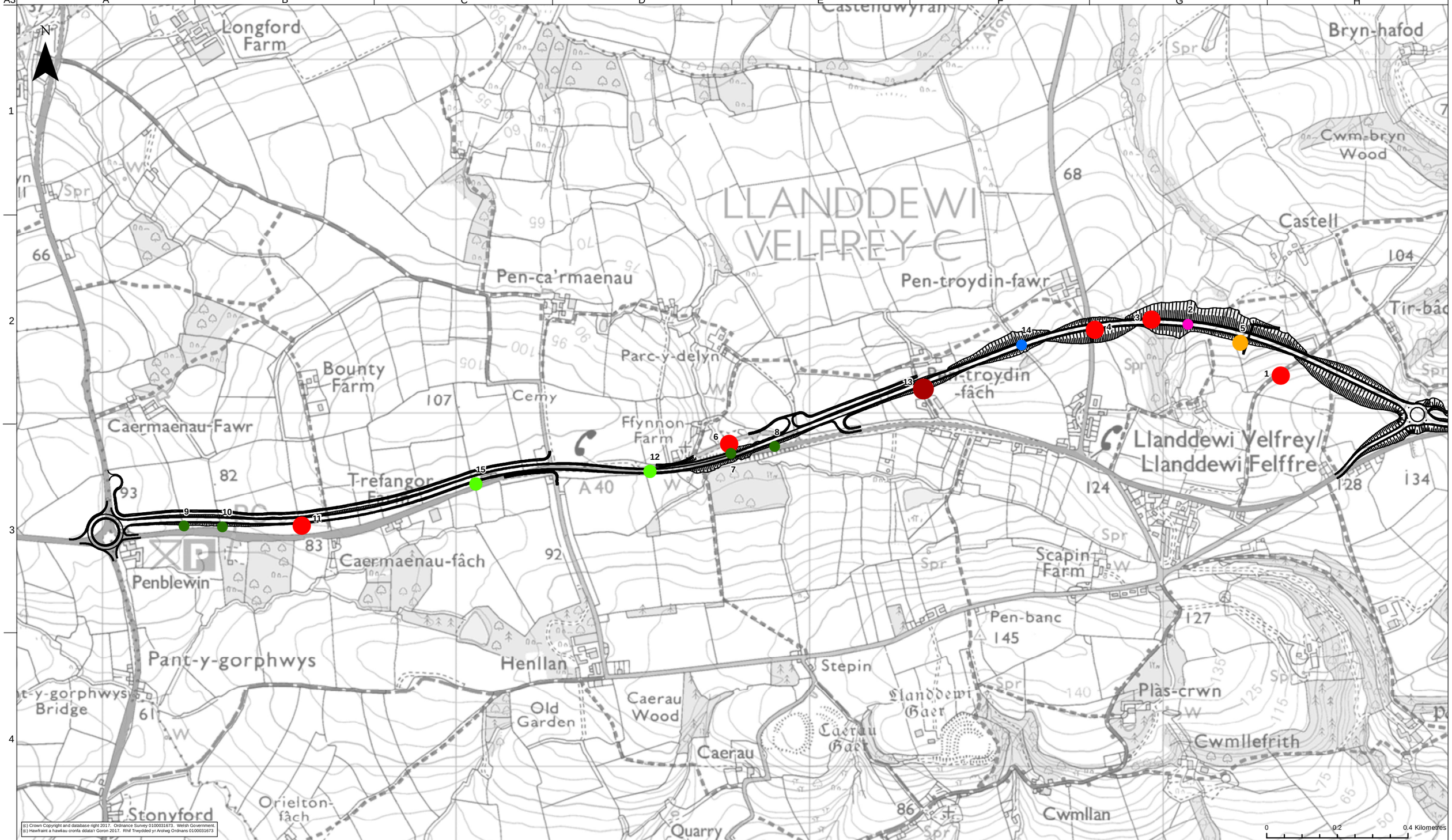
Drawing Title: FIGURE 8.37
2017 STATIC BAT ACTIVITY MONITORING
JUNE: COMMON PIPISTRELLE

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0016
(Project | Originator | Volume | Location | Type | Role | Number)



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	206
2	NO ACCESS
3	154.2
4	146.8
5	177
6	263.4
7	20
8	3.4
9	9.2
10	2.6
11	170.8
12	32.6
13	403.2
14	NO BATS RECORDED - INTERFERANCE
15	44.8

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

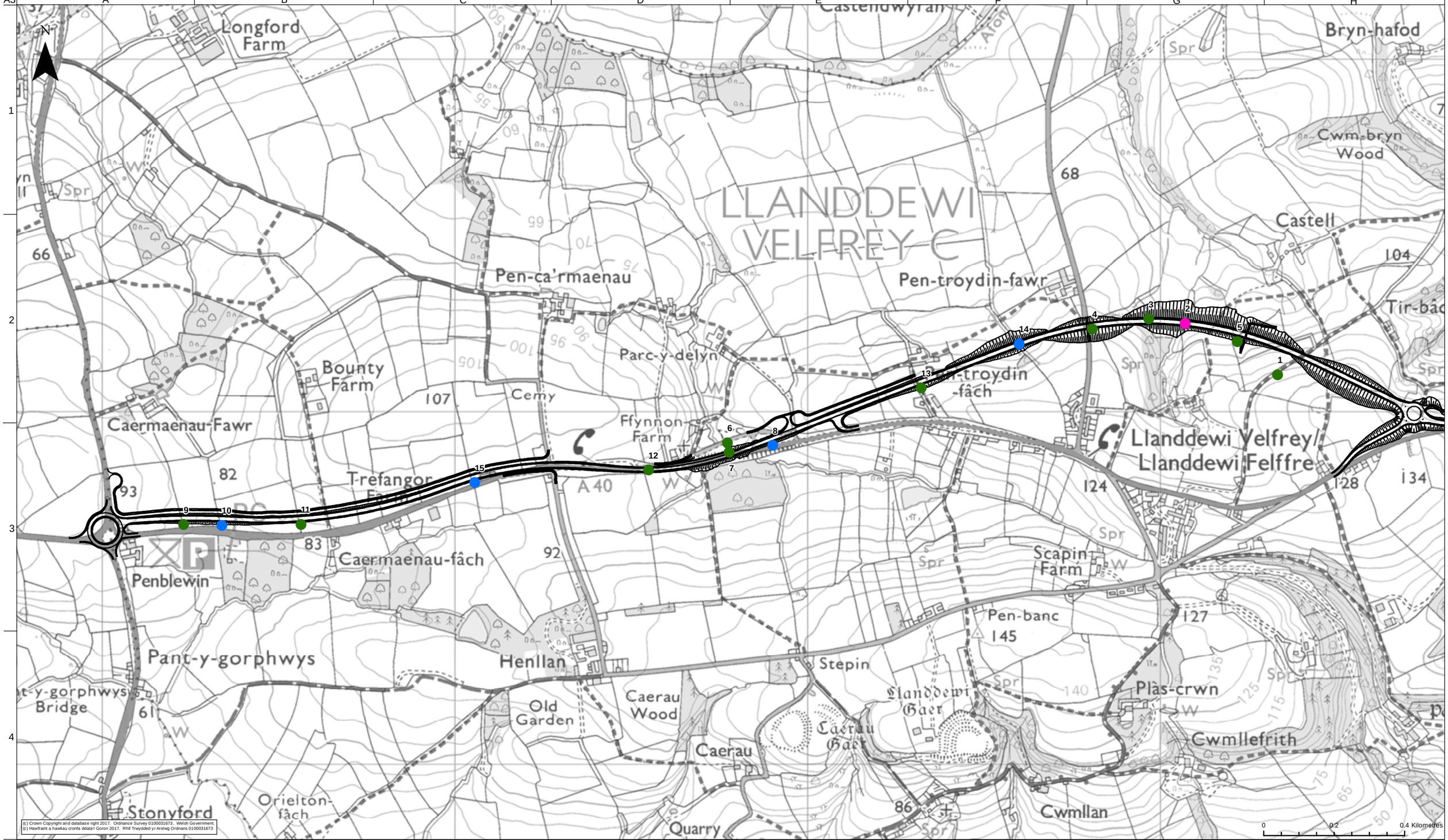
Drawing Title
FIGURE 8.38
2017 STATIC BAT ACTIVITY MONITORING
JUNE: SOPRANO PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0017
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	4
2	NO ACCESS
3	0.8
4	7.6
5	6.2
6	2.8
7	1
8	0
9	0.2
10	0
11	26.4
12	0.8
13	6.6
14	NO BATS RECORDED -

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

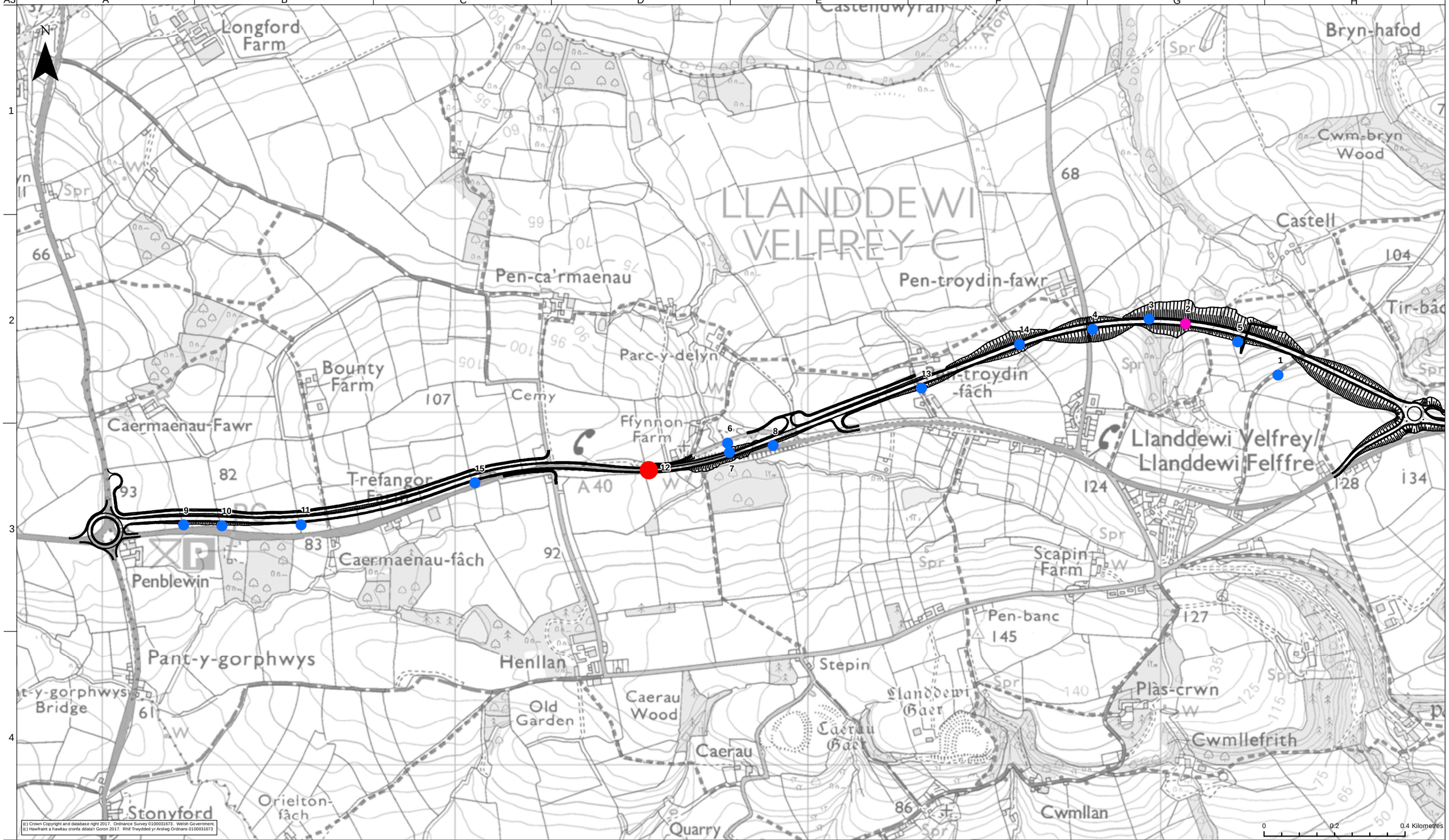
Drawing Title
FIGURE 8.39
2017 STATIC BAT ACTIVITY MONITORING
JUNE: PIPISTRELLE SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0018
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- NO ACCESS
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0.4
13	0
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	15/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

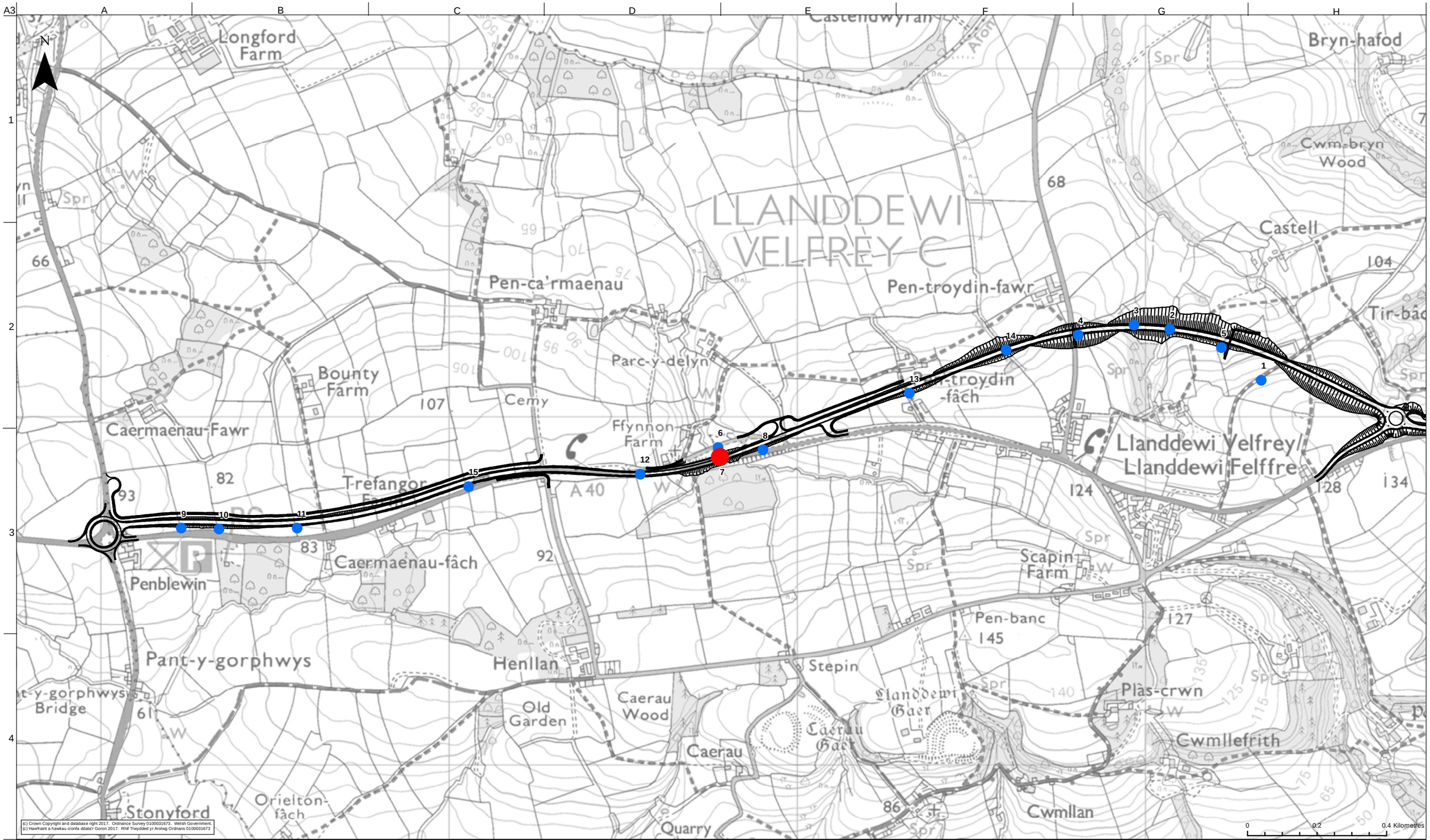
Drawing Title
FIGURE 8.40
2017 STATIC BAT ACTIVITY MONITORING
JUNE: GREATER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 15/11/18	Date 15/11/18	Date 15/11/18	Date 15/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0020
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	NO ACCESS
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0.2
13	0
14	NO BATS RECORDED - INTERFERANCE
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

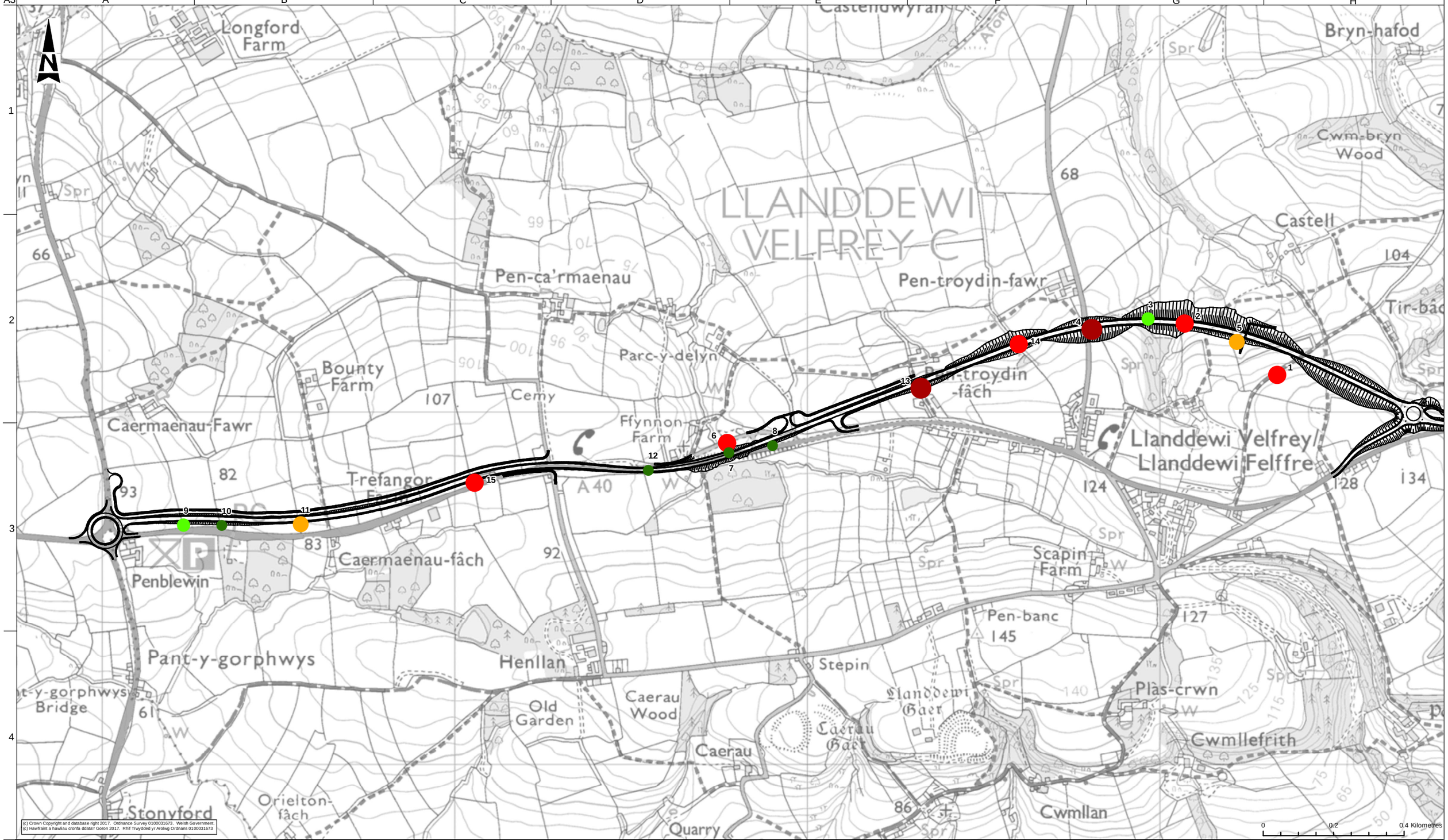
Drawing Title
FIGURE 8.41
2017 STATIC BAT ACTIVITY MONITORING
JUNE: LESSER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0021
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378)
- VERY HIGH (> 378)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	269.0
2	335.8
3	76
4	380.8
5	92
6	176.8
7	22.4
8	10
9	57.6
10	12.4
11	80.8
12	1.8
13	815.2
14	297.6
15	134.8

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

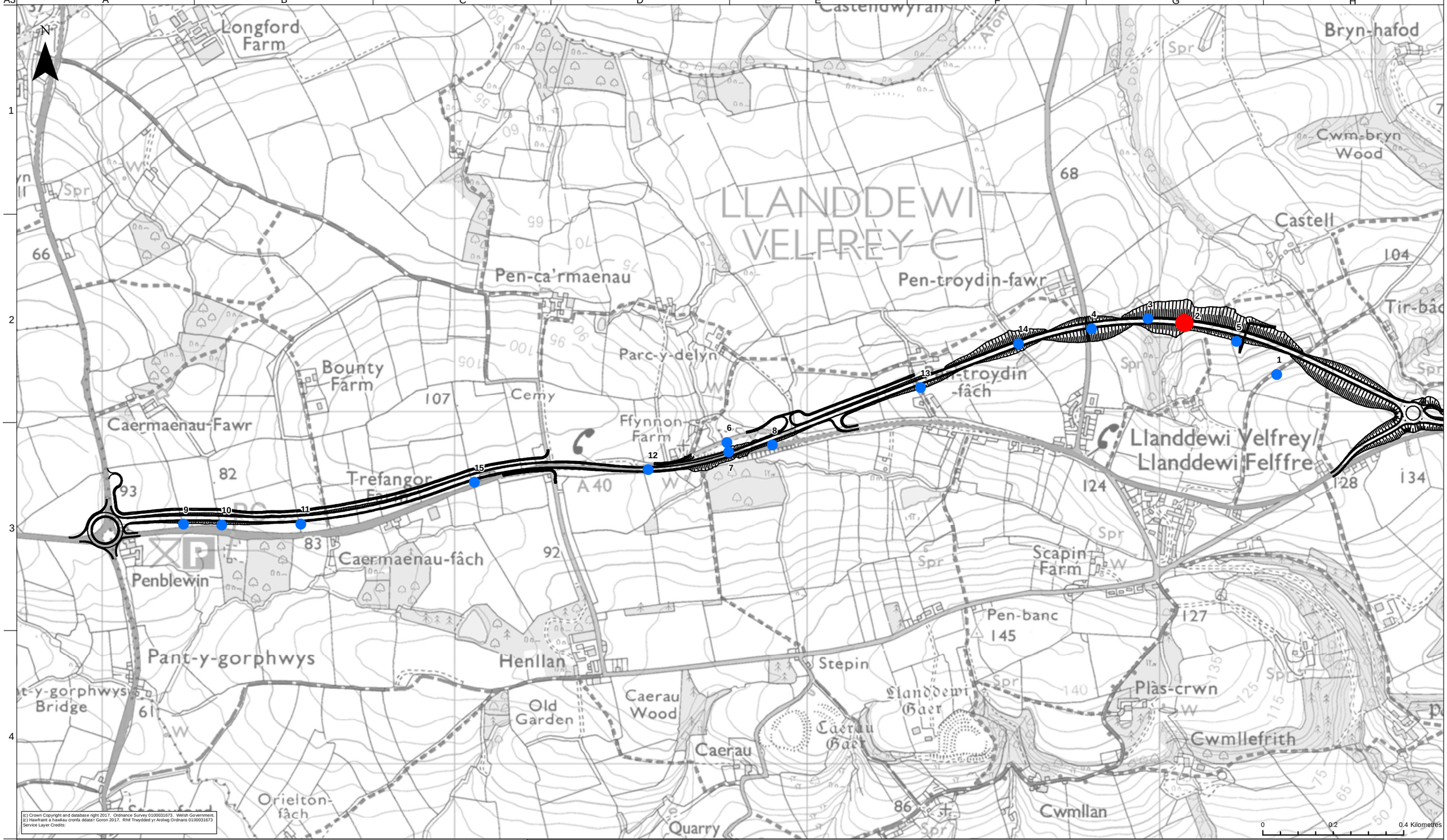
Drawing Title
FIGURE 8.42
2017 STATIC BAT ACTIVITY MONITORING
JULY: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0023
Project | Originator | Volume | Location | Type | Role | Number



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Service Layer Credits:

LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0.2
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

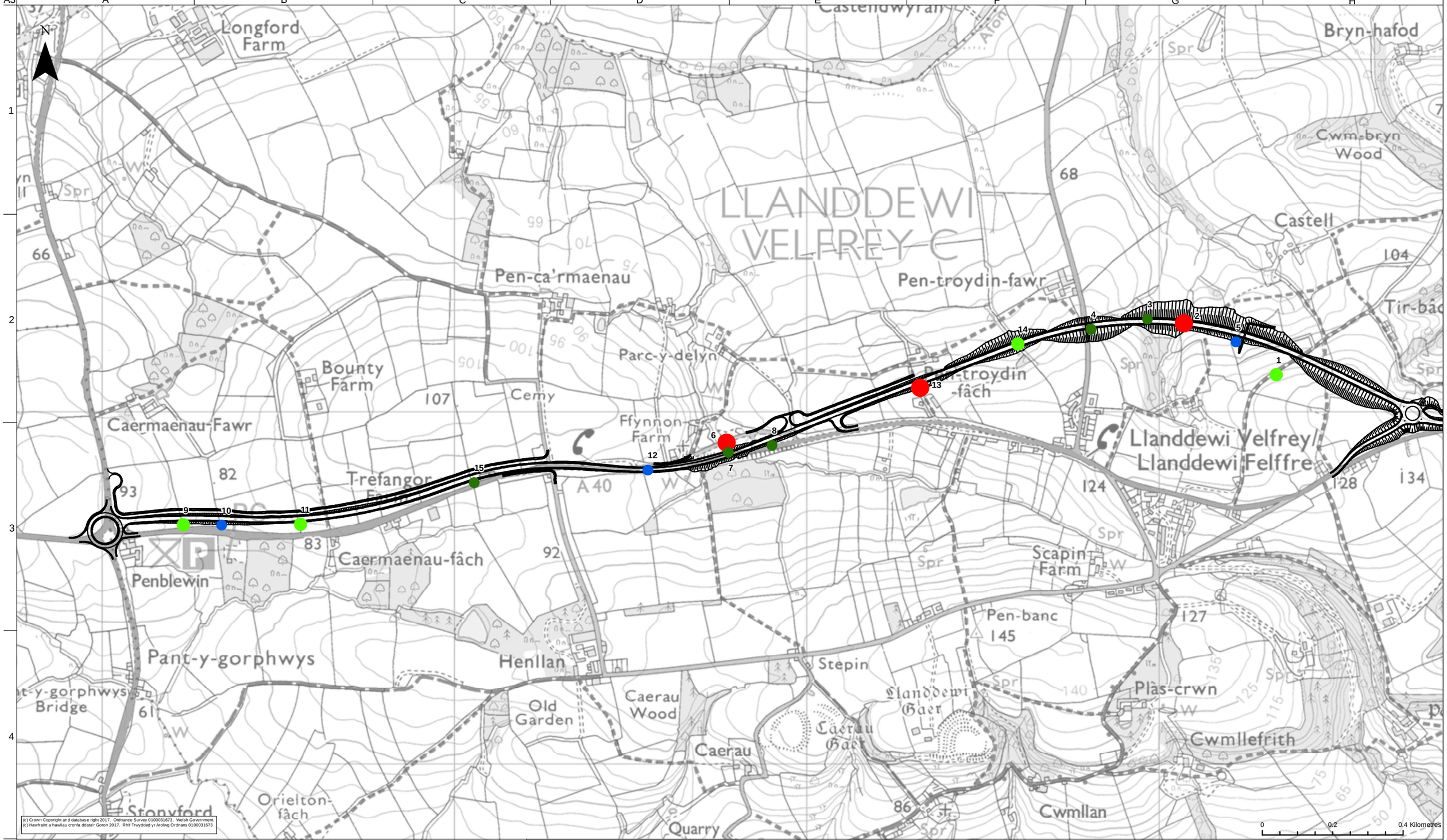
Drawing Title
FIGURE 8.43
2017 STATIC BAT ACTIVITY MONITORING
JULY: BARBASTELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0024
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 0.2)
- LOW (0.2 - 1)
- HIGH (2 - 12)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	1.4
2	11.4
3	0.2
4	0.8
5	0
6	50
7	0.4
8	0.6
9	0.8
10	0
11	5.6
12	0
13	43.6
14	4
15	0.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	09/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

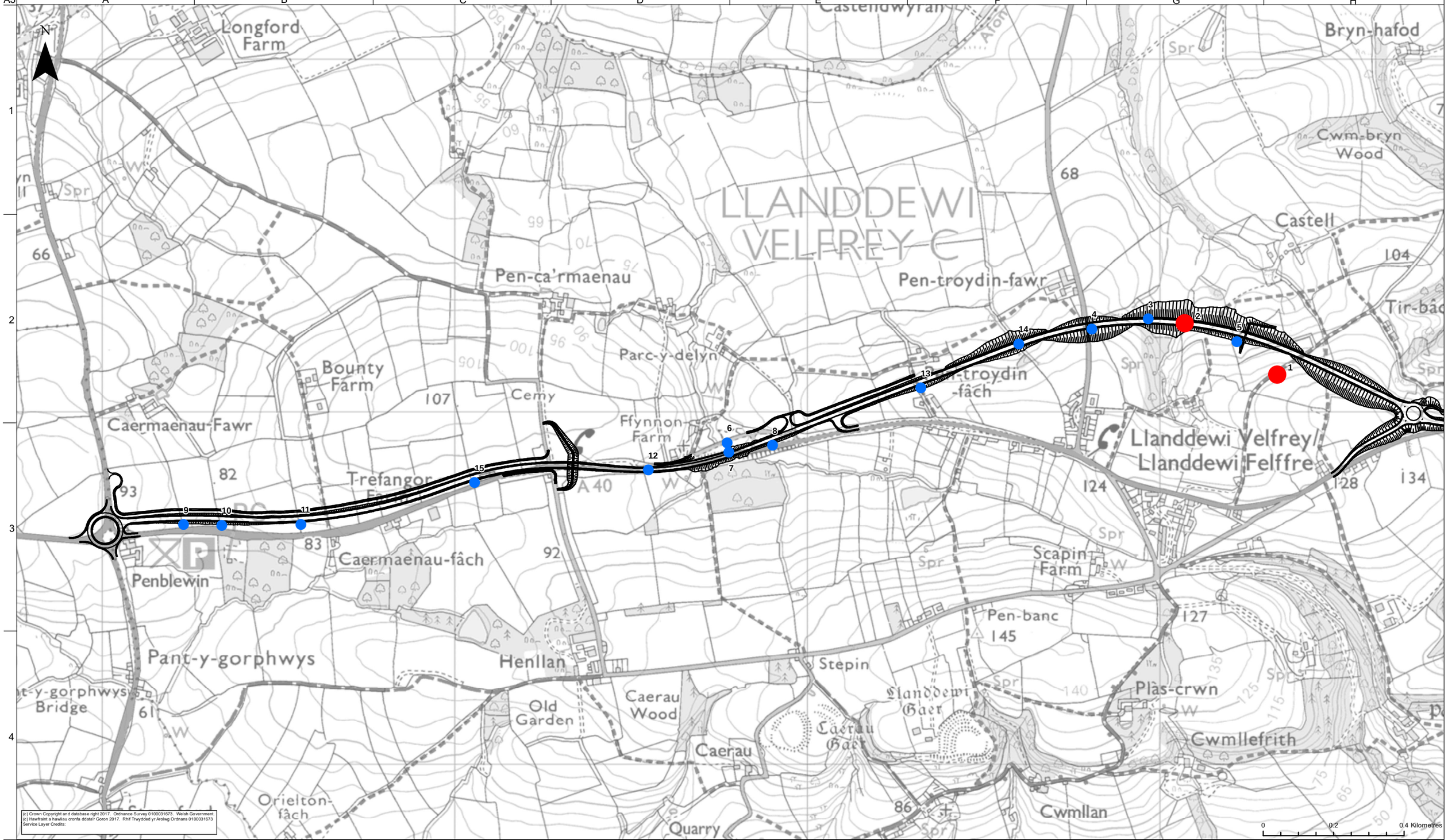
Drawing Title
FIGURE 8.44
2017 STATIC BAT ACTIVITY MONITORING
JULY: MYOTIS SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 09/11/18	Date 09/11/18	Date 09/11/18	Date 09/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0027
Project | Originator | Volume | Location | Type | Role | Number



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Service Layer Credits:

LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.2
2	0.4
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.45
2017 STATIC BAT ACTIVITY MONITORING
JULY: LEISLER'S BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name A40LVP - ARP - VES - SWI - DR - LE - 0028
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- LOW (< 0.8)
- MEDIUM (0.8 - 1.4)
- HIGH (1.4 - 7.8)
- VERY HIGH (> 7.8)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0.8
3	0.4
4	0.4
5	0
6	0.2
7	1.4
8	0.8
9	0.2
10	0
11	0.2
12	0
13	0.2
14	0.6
15	1.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.46
2017 STATIC BAT ACTIVITY MONITORING
JULY: NOCTULE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0029
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	7.2
2	60.6
3	17.4
4	20.4
5	4.4
6	0.6
7	0.8
8	2.2
9	2.8
10	0
11	5.6
12	1.6
13	99.2
14	7
15	30.6

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

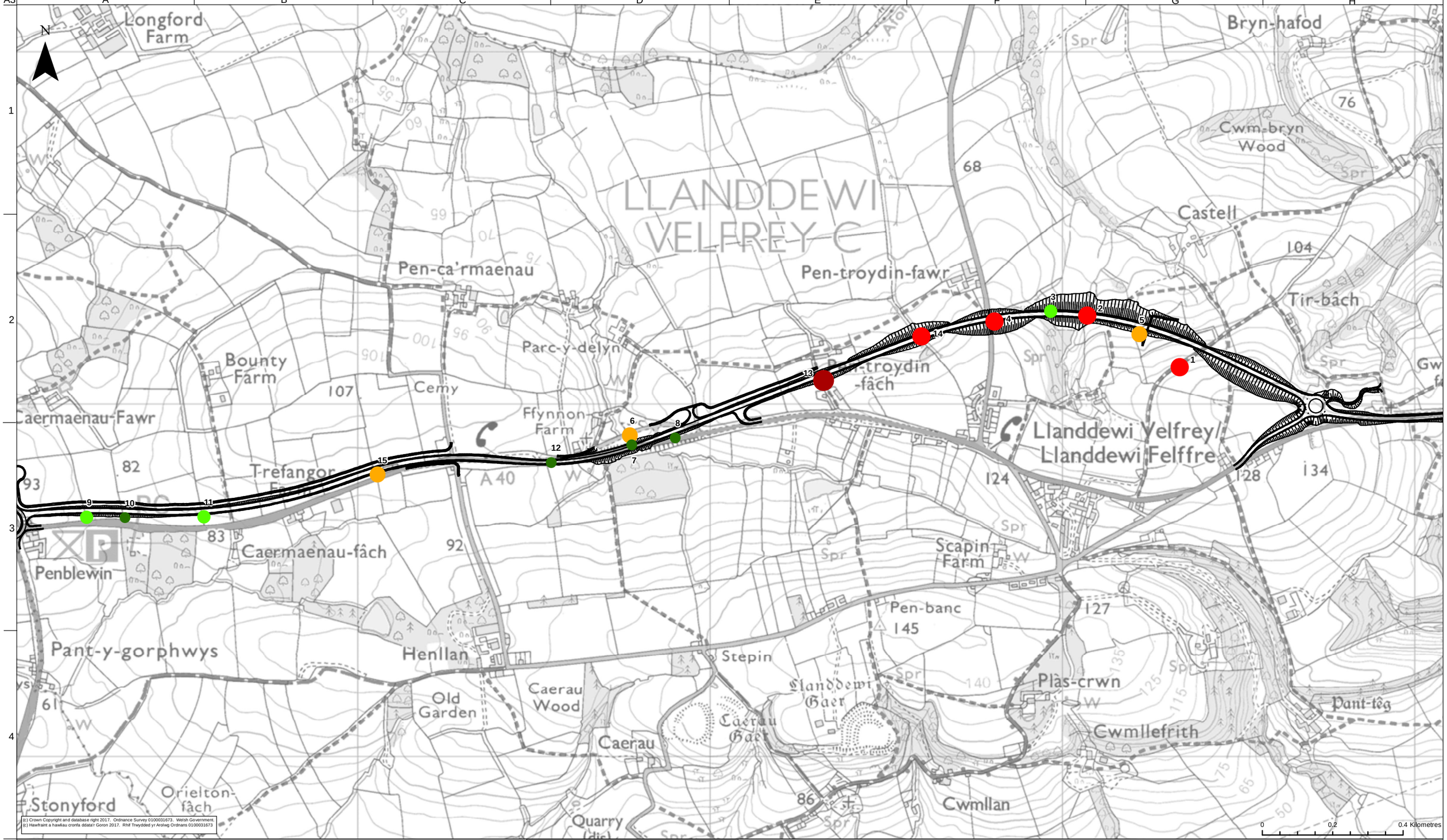
Drawing Title
FIGURE 8.47
2017 STATIC BAT ACTIVITY MONITORING
JULY: COMMON PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0031
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	252.6
2	256.8
3	50.4
4	356
5	79.8
6	123.6
7	19
8	6.2
9	53.6
10	12
11	67.2
12	0.2
13	663.2
14	285
15	102.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.48
2017 STATIC BAT ACTIVITY MONITORING
JULY: SOPRANO PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0032
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	7.6
2	5.6
3	7.6
4	3.2
5	7.6
6	0.2
7	0.6
8	0.2
9	0.2
10	0.4
11	2.2
12	0
13	9
14	0.8
15	0.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS; MOTT MACDONALD; ARUP; RICHARDS

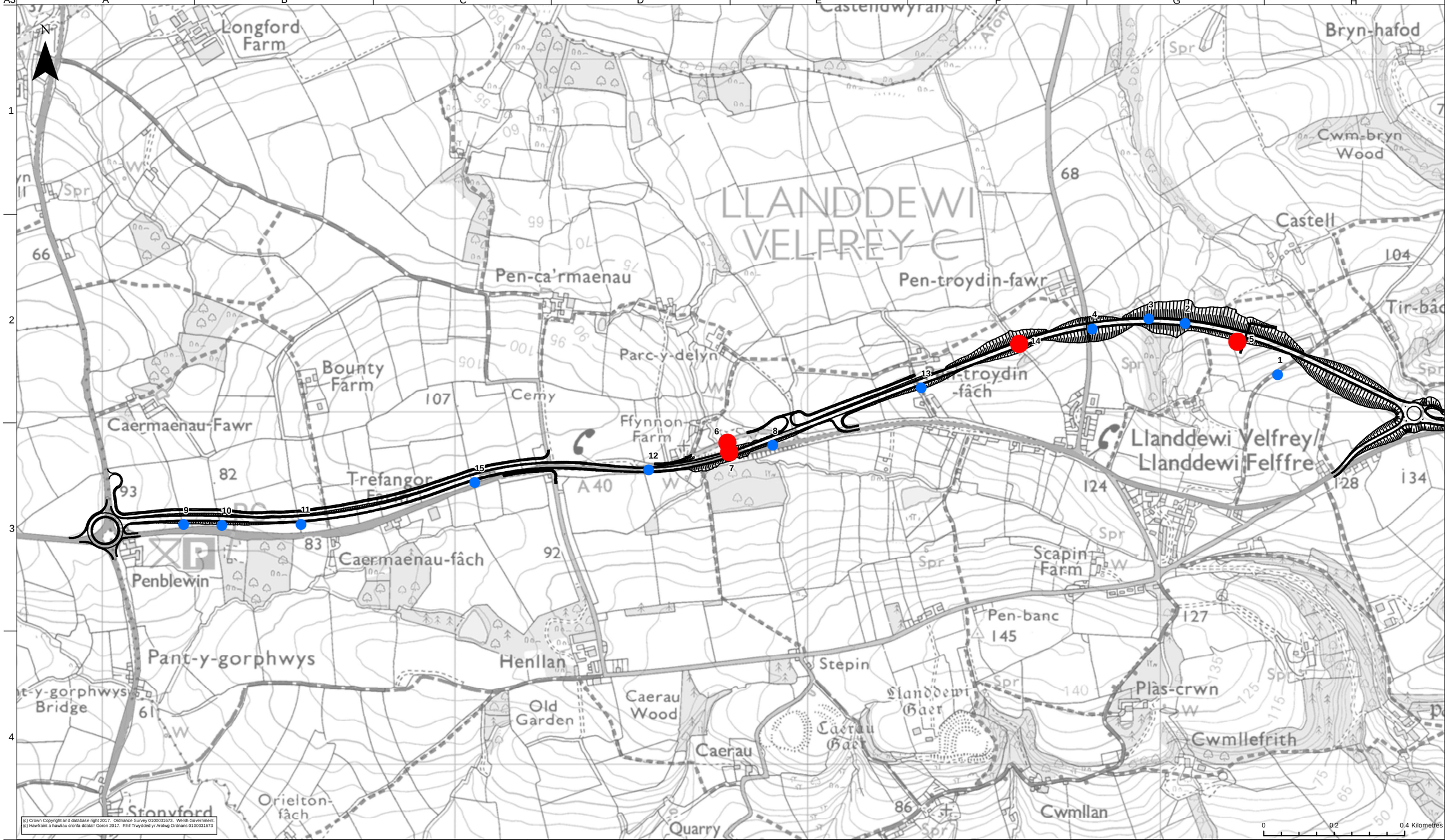
Drawing Title: FIGURE 8.49
2017 STATIC BAT ACTIVITY MONITORING
JULY: PIPISTRELLE SPECIES

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0033
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0
5	0.2
6	2.2
7	0.2
8	0
9	0
10	0
11	0
12	0
13	0
14	0.2
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

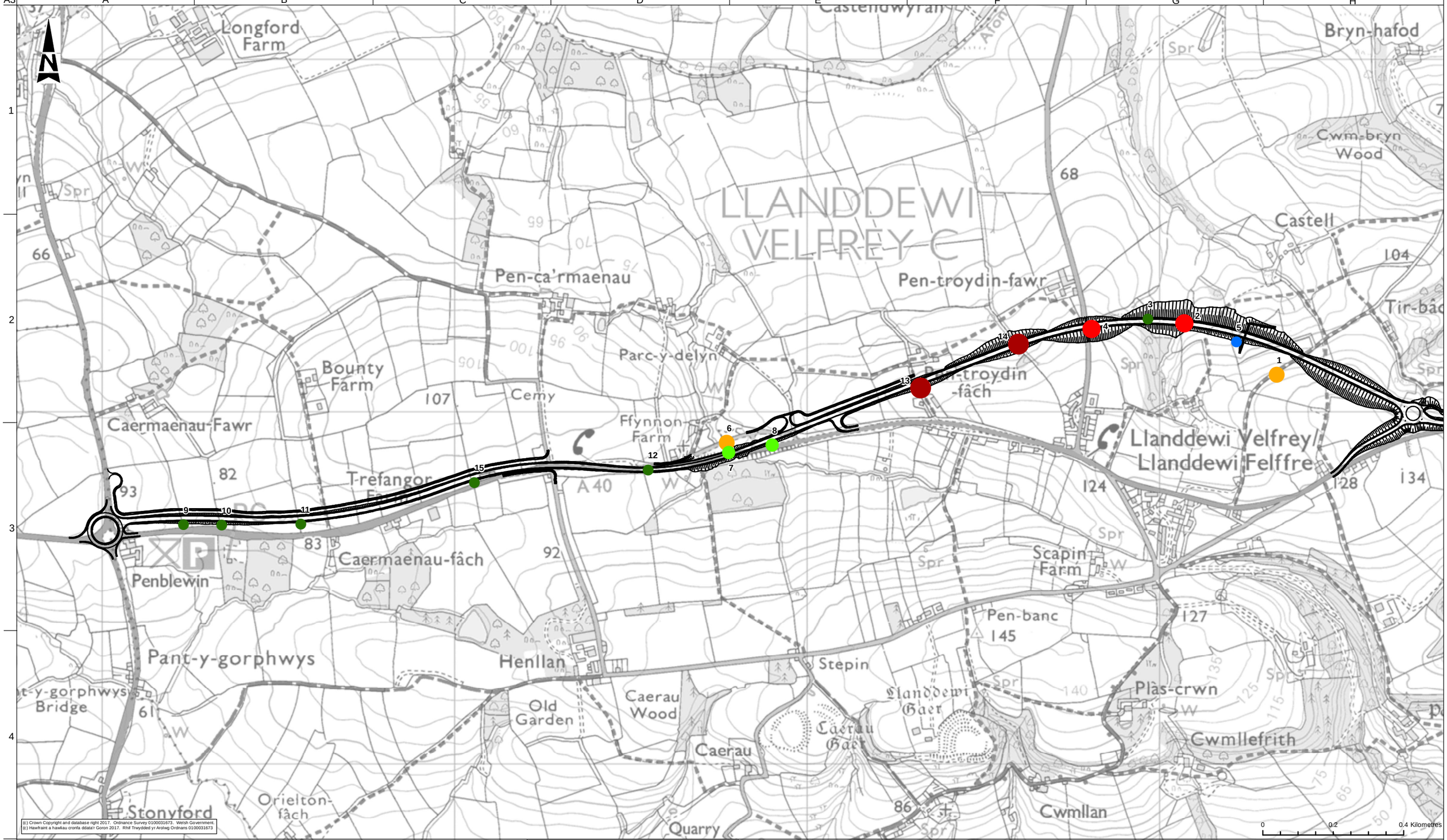
Drawing Title
FIGURE 8.50
2017 STATIC BAT ACTIVITY MONITORING
JULY: GREATER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0035
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378)
- VERY HIGH (> 378)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	92.2
2	291.8
3	1.4
4	320.8
5	No Access
6	104.8
7	29.6
8	29.2
9	8.4
10	25.2
11	6.8
12	4
13	1519.6
14	1426
15	6.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP

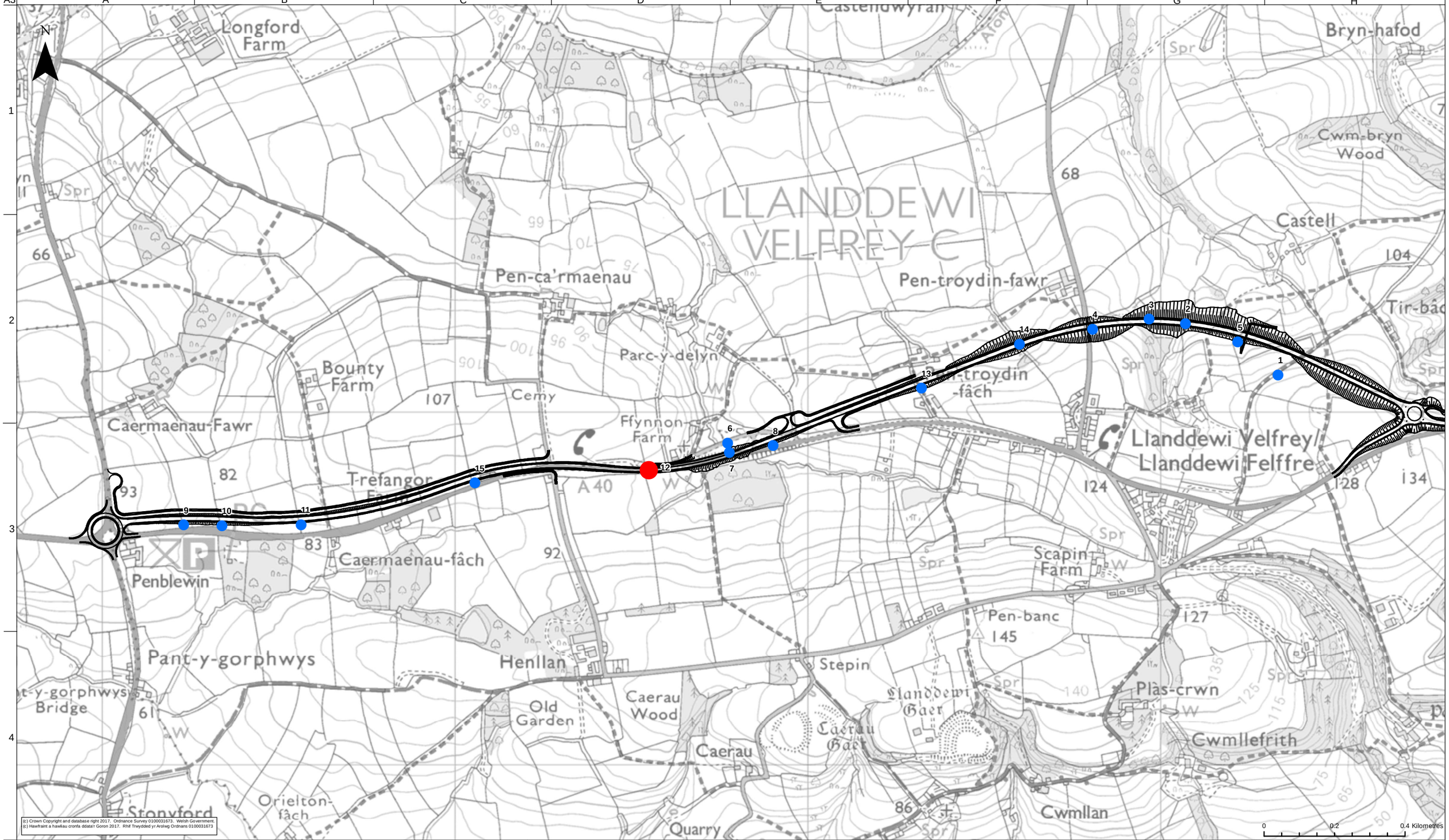
Drawing Title
FIGURE 8.51
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0100
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0.6
5	No Access
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

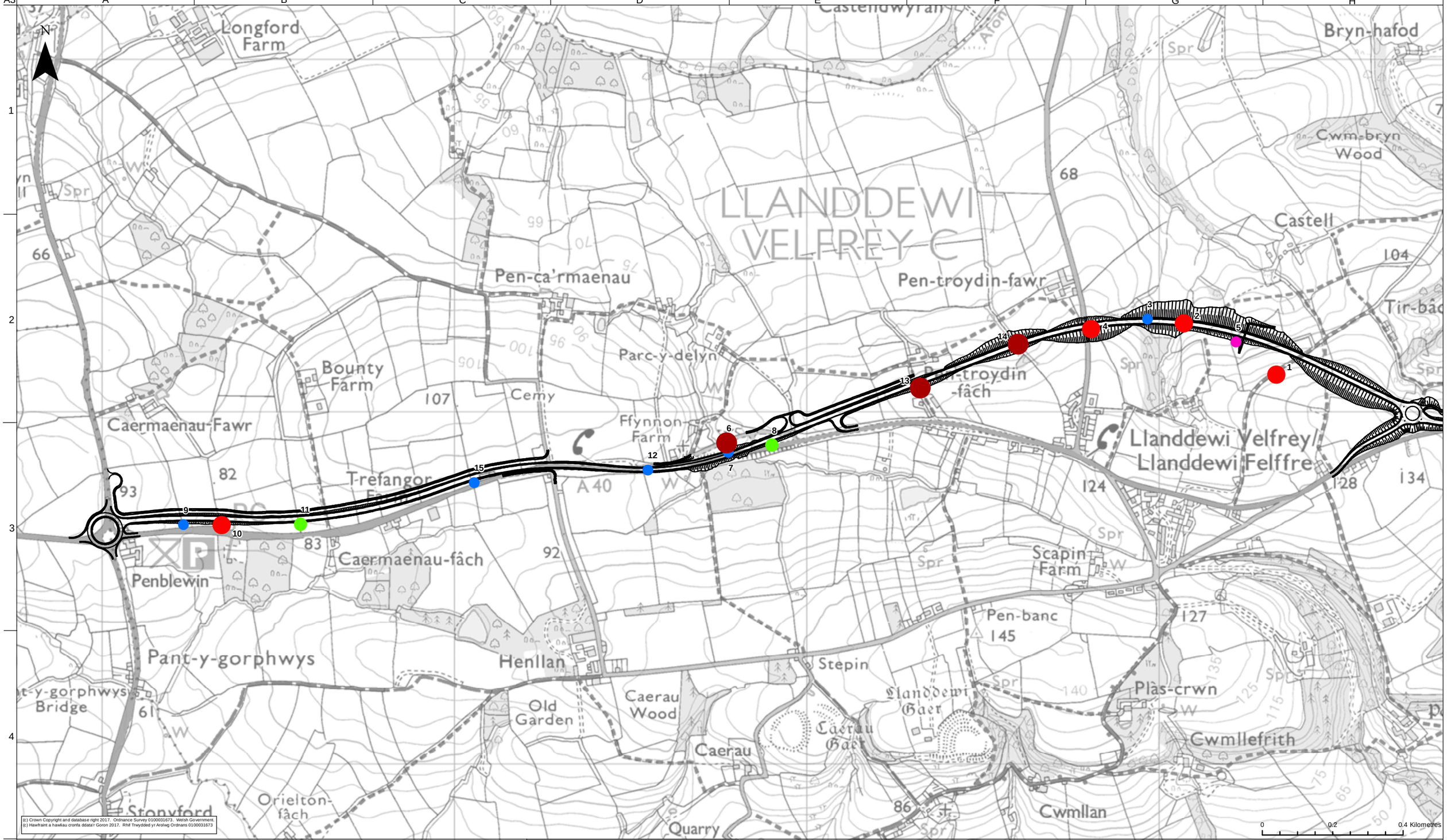
Drawing Title
FIGURE 8.52
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: SEROTINE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0102
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- NO ACCESS
- LOW (0.2 - 1)
- HIGH (2 - 12)
- VERY HIGH (> 12)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	6
2	7.6
3	0
4	3.2
5	No Access
6	34.6
7	0
8	0.4
9	0
10	2.4
11	0.6
12	0
13	81
14	49.4
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

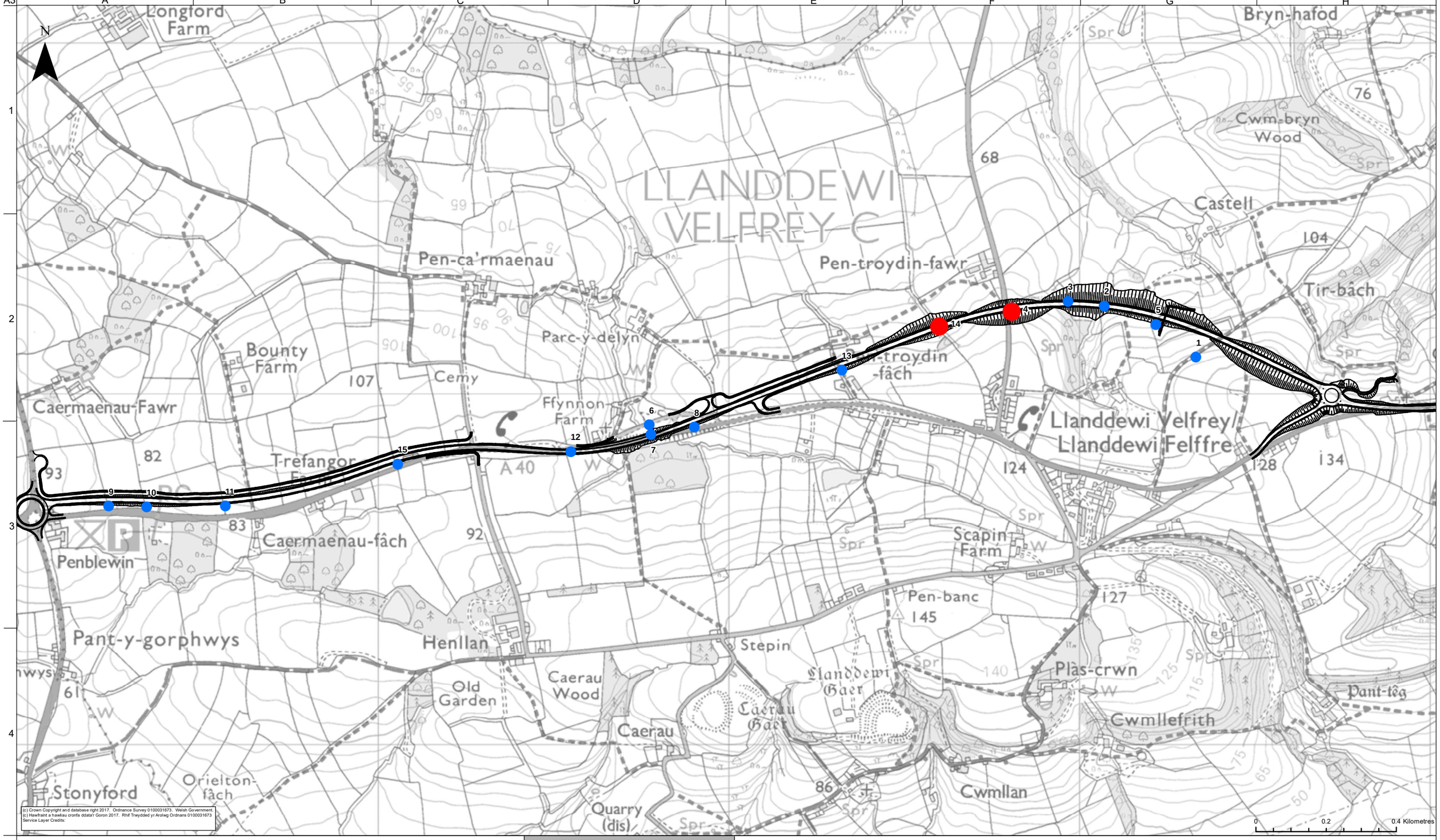
Drawing Title
FIGURE 8.53
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: MYOTIS SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0104
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- NO BATS RECORDED
- BATS RECORDED
- PROPOSED ALIGNMENT

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0.6
5	No Access
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0.2
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

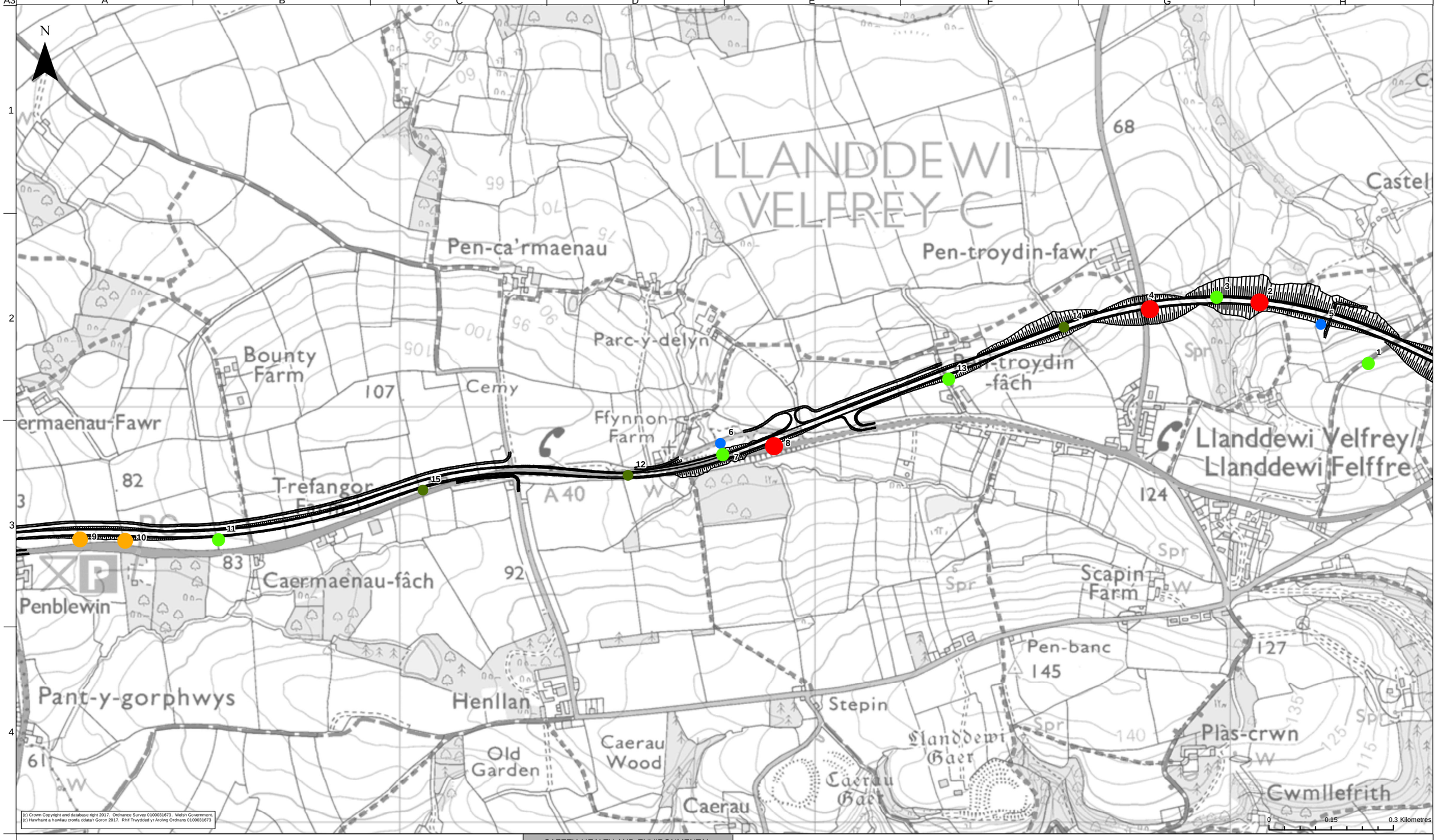
Drawing Title
FIGURE 8.54
2017 STATIC BAT ACTIVITY MONITORING AUGUST: LEISLER'S BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0105
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (<0.4)
- LOW (0.4-0.8)
- MEDIUM (0.8 - 1.4)
- HIGH (1.4 - 7.8)
- VERY HIGH (>7.8)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.6
2	5.8
3	0.6
4	7.2
5	No Access
6	0
7	0.6
8	1.8
9	1
10	1.2
11	0.8
12	0.4
13	0.6
14	0.4
15	0.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS, MOTT MACDONALD, ARUP, RICHARDS

Drawing Title: FIGURE 8.55
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: NOCTULE

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:8,427

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0106

Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	9.4
2	33
3	0.4
4	7.2
5	NO ACCESS
6	1
7	1
8	3.8
9	0.2
10	0.6
11	1
12	1
13	66.4
14	29.6
15	0.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

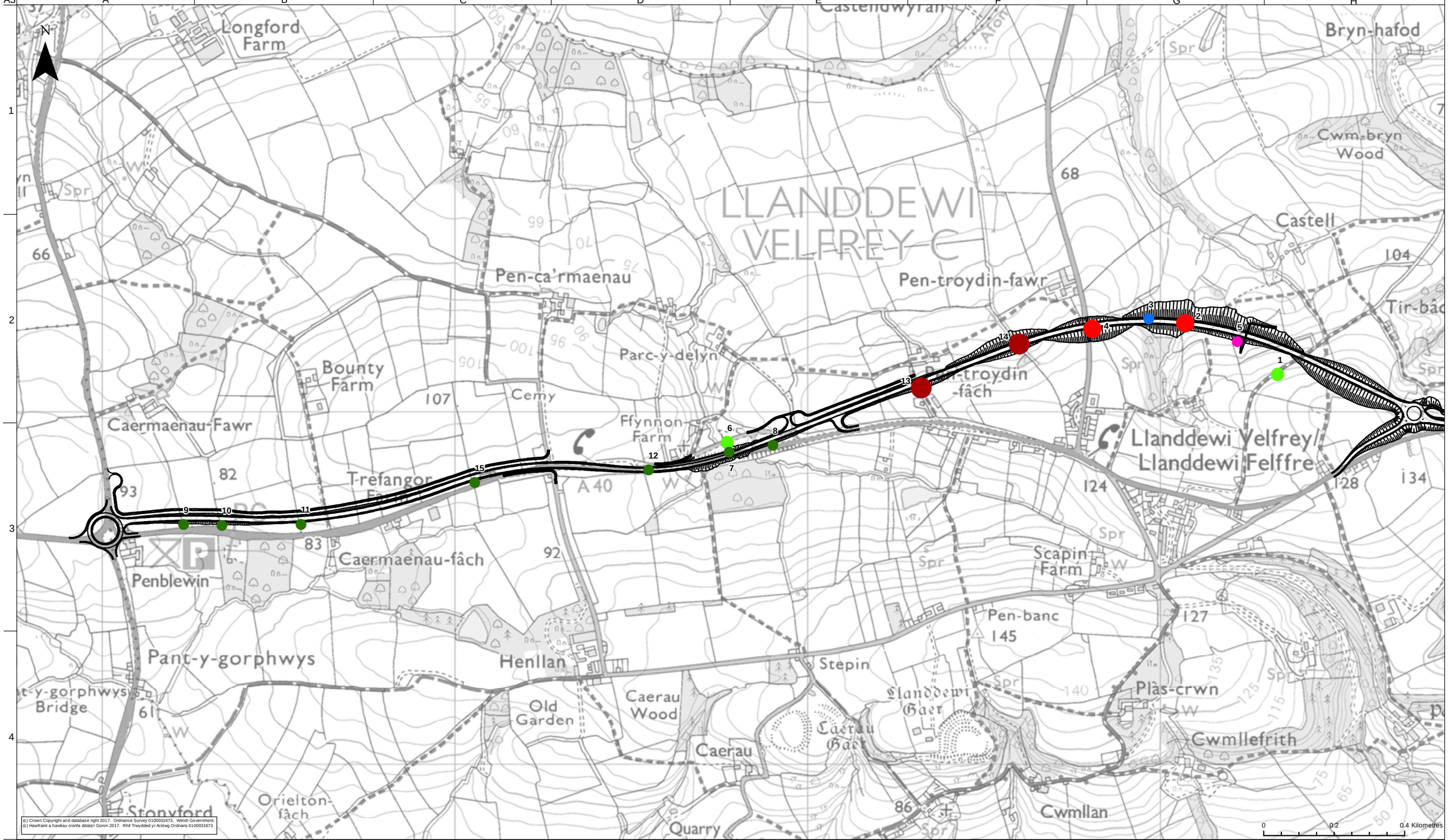
Drawing Title
FIGURE 8.56
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: COMMON PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0111
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	75.8
2	273.6
3	0
4	294.6
5	NO ACCESS
6	67.4
7	27.6
8	20.8
9	7.2
10	20.8
11	4.4
12	2
13	1368.8
14	1337.6
15	5.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

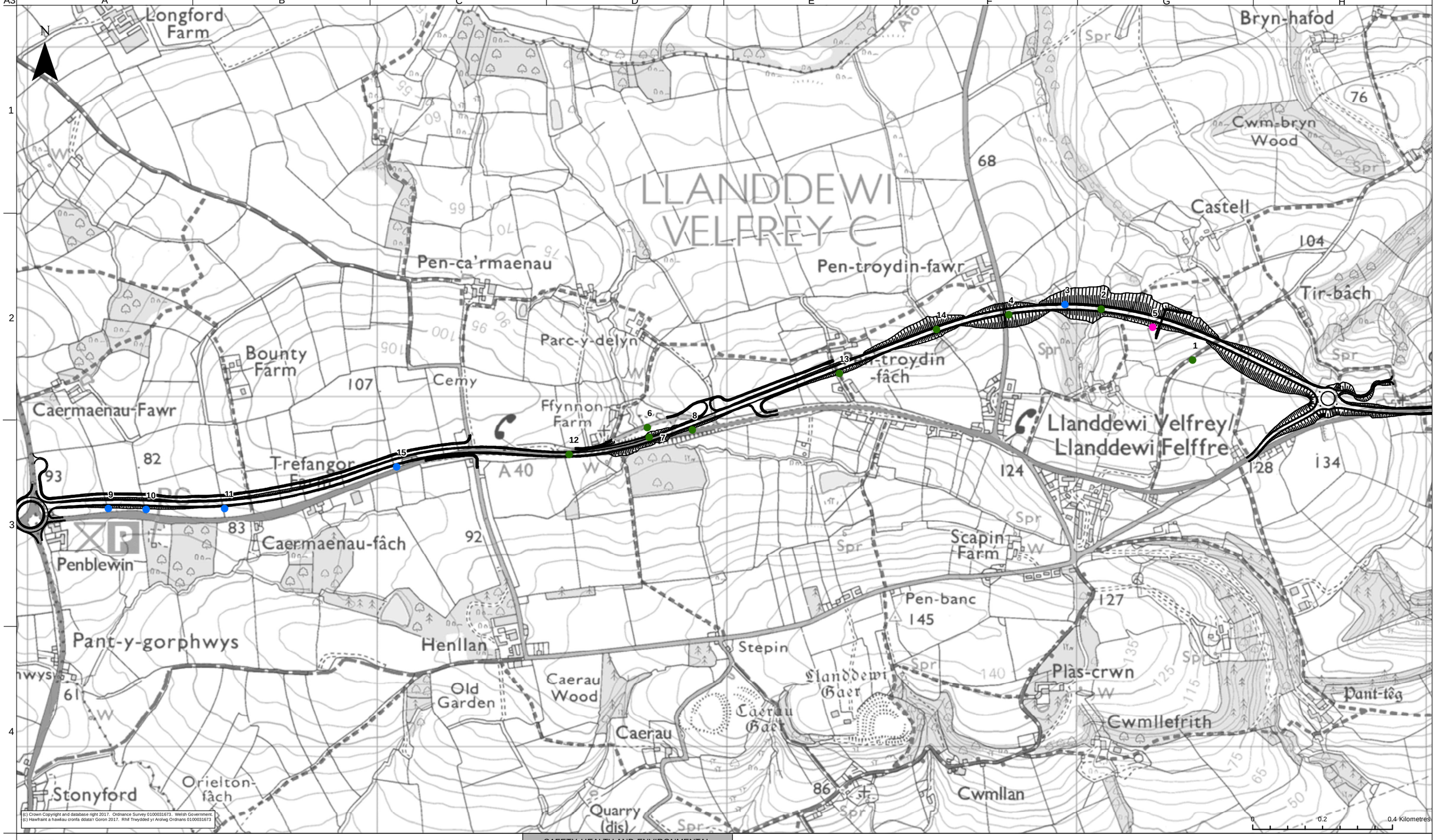
Drawing Title
FIGURE 8.57
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: SOPRANO PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0112
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.4
2	7.8
3	0
4	2.8
5	NO ACCESS
6	0.6
7	0.4
8	1.2
9	0
10	0
11	0
12	0.4
13	2.6
14	7.8
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

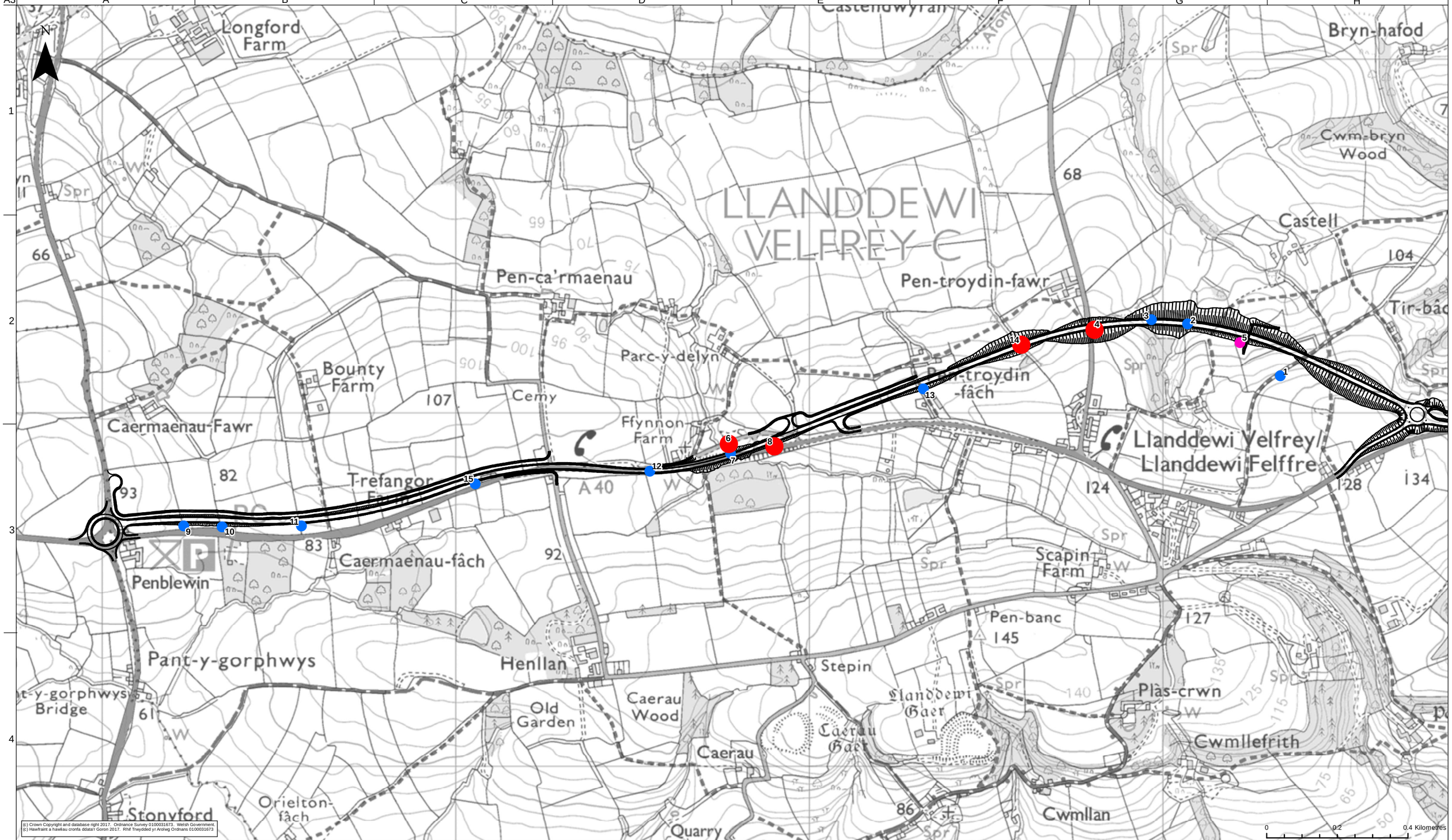
Drawing Title
FIGURE 8.58
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: PIPISTRELLE SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0113
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- BATS RECORDED
- NO BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	4.6
5	NO ACCESS
6	0.4
7	0
8	1.2
9	0
10	0
11	0
12	0
13	0
14	0.8
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

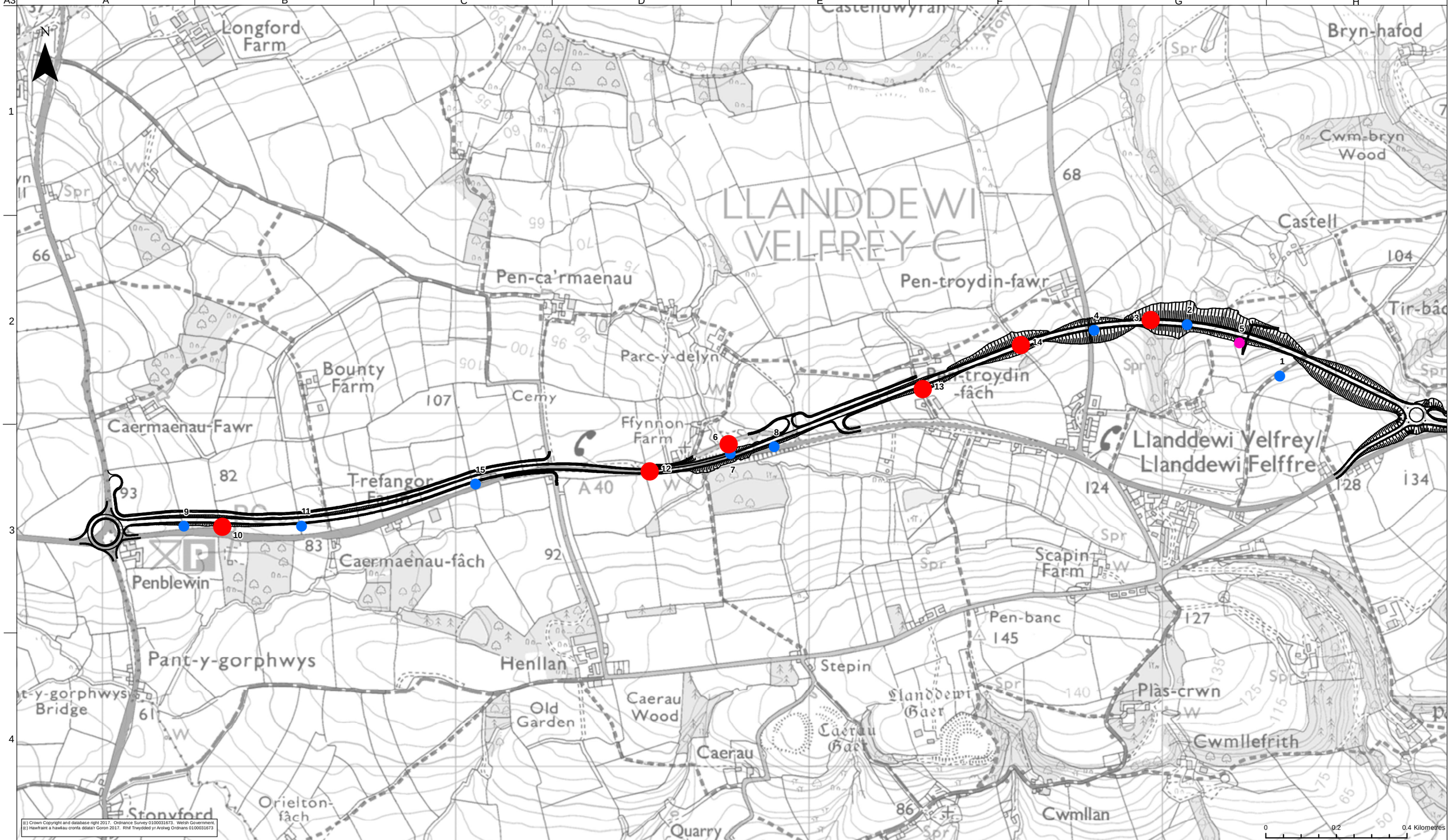
Drawing Title
FIGURE 8.59
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: BROWN LONG EARED BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0114
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO ACCESS
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0.4
4	0
5	NO ACCESS
6	0.8
7	0
8	0
9	0
10	0.2
11	0
12	0.2
13	0.2
14	0.2
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

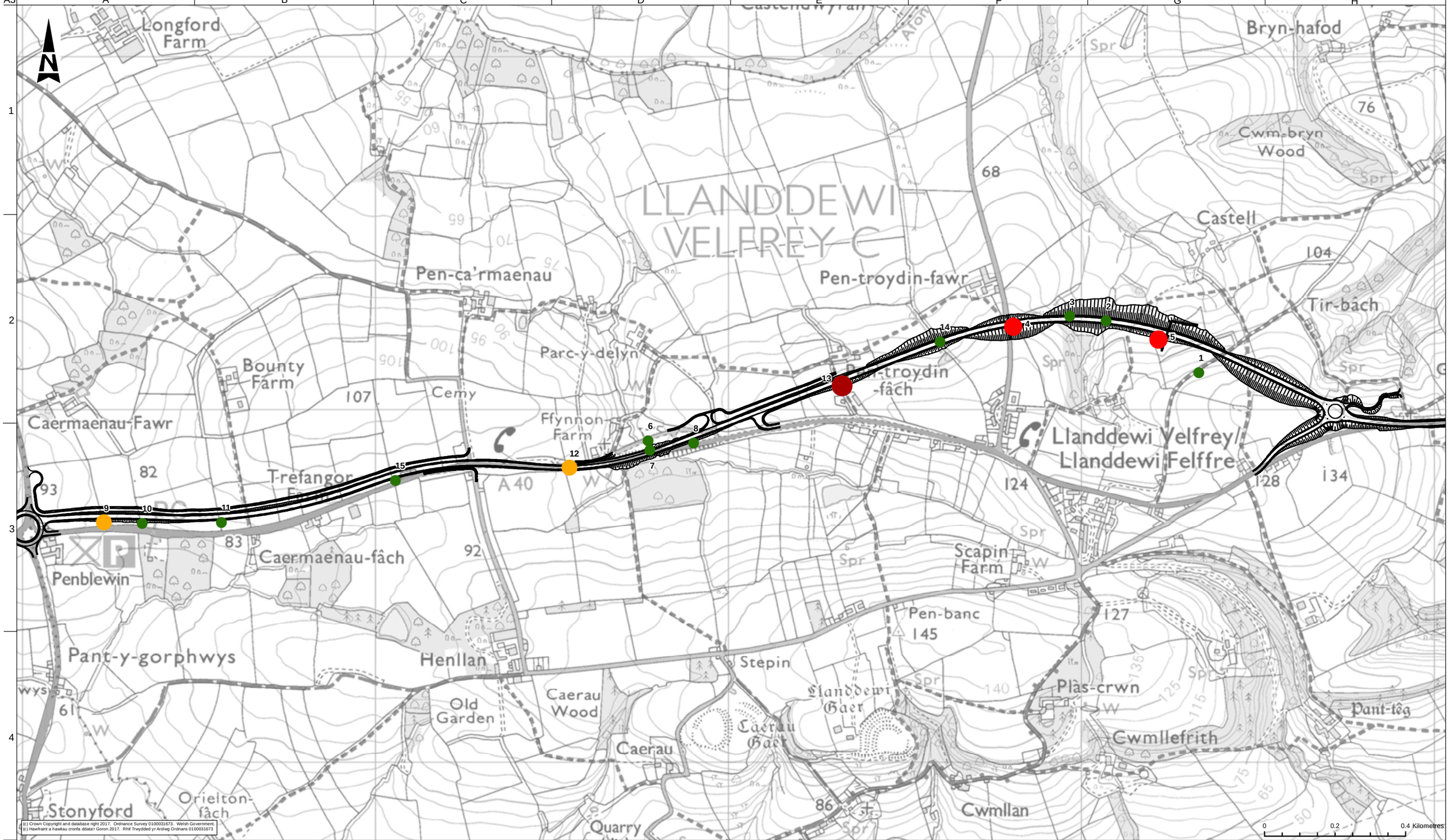
Drawing Title
FIGURE 8.60
2017 STATIC BAT ACTIVITY MONITORING
AUGUST: GREATER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0115
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378)
- VERY HIGH (> 378)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	5.2
2	0.2
3	10.2
4	355.8
5	158.8
6	2.4
7	2.4
8	4.8
9	97
10	2.2
11	15.4
12	86.4
13	905.8
14	7.8
15	16.8

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
(Enter "None" if applicable)

Maintenance / Cleaning
(Enter "None" if applicable)

Use
(Enter "None" if applicable)

Decommissioning / Demolition
(Enter "None" if applicable)

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

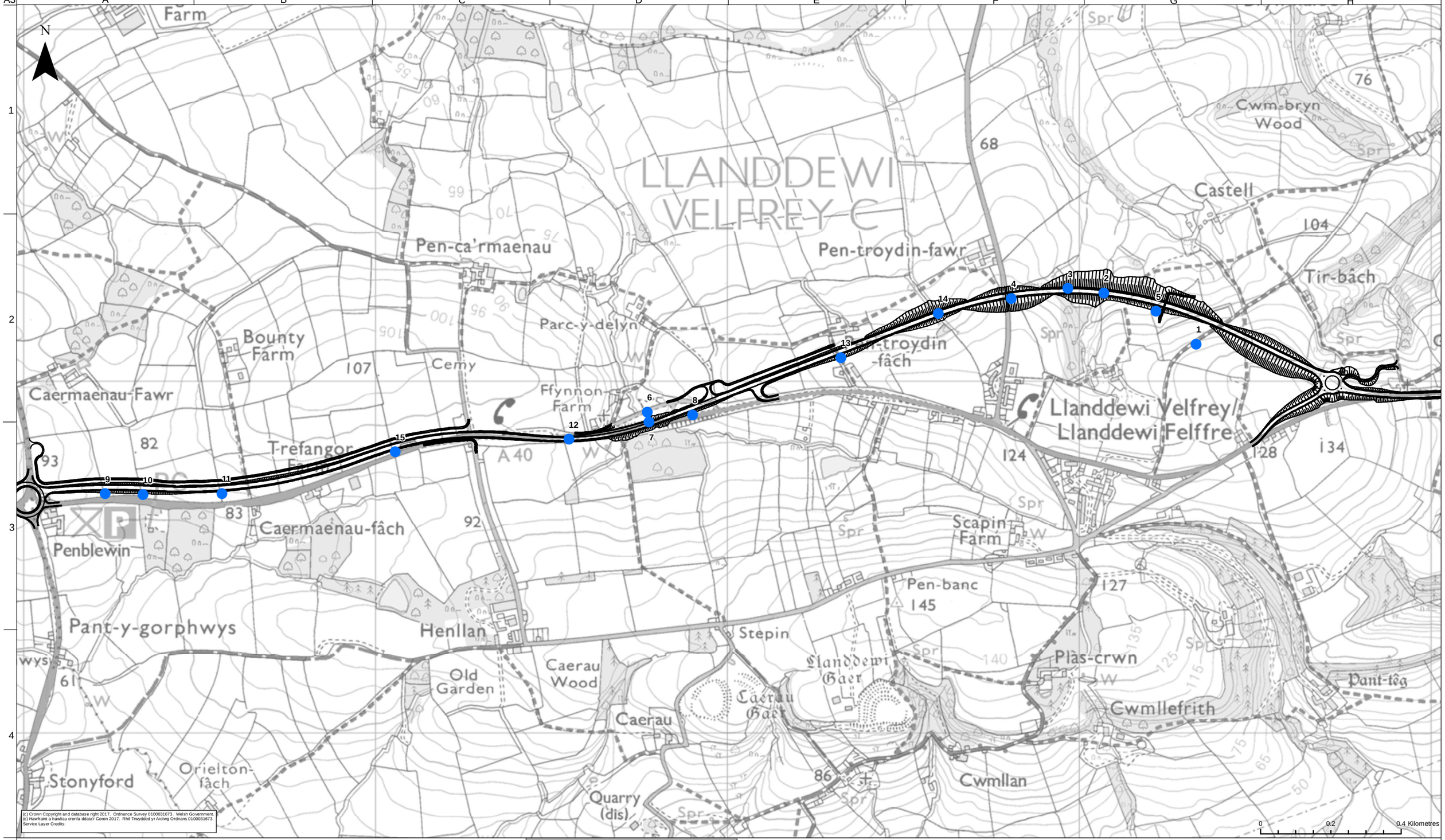
Drawing Title
FIGURE 8.61
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0132
Project | Originator | Volume | Location | Type | Role | Number



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Service Layer Credits:

LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

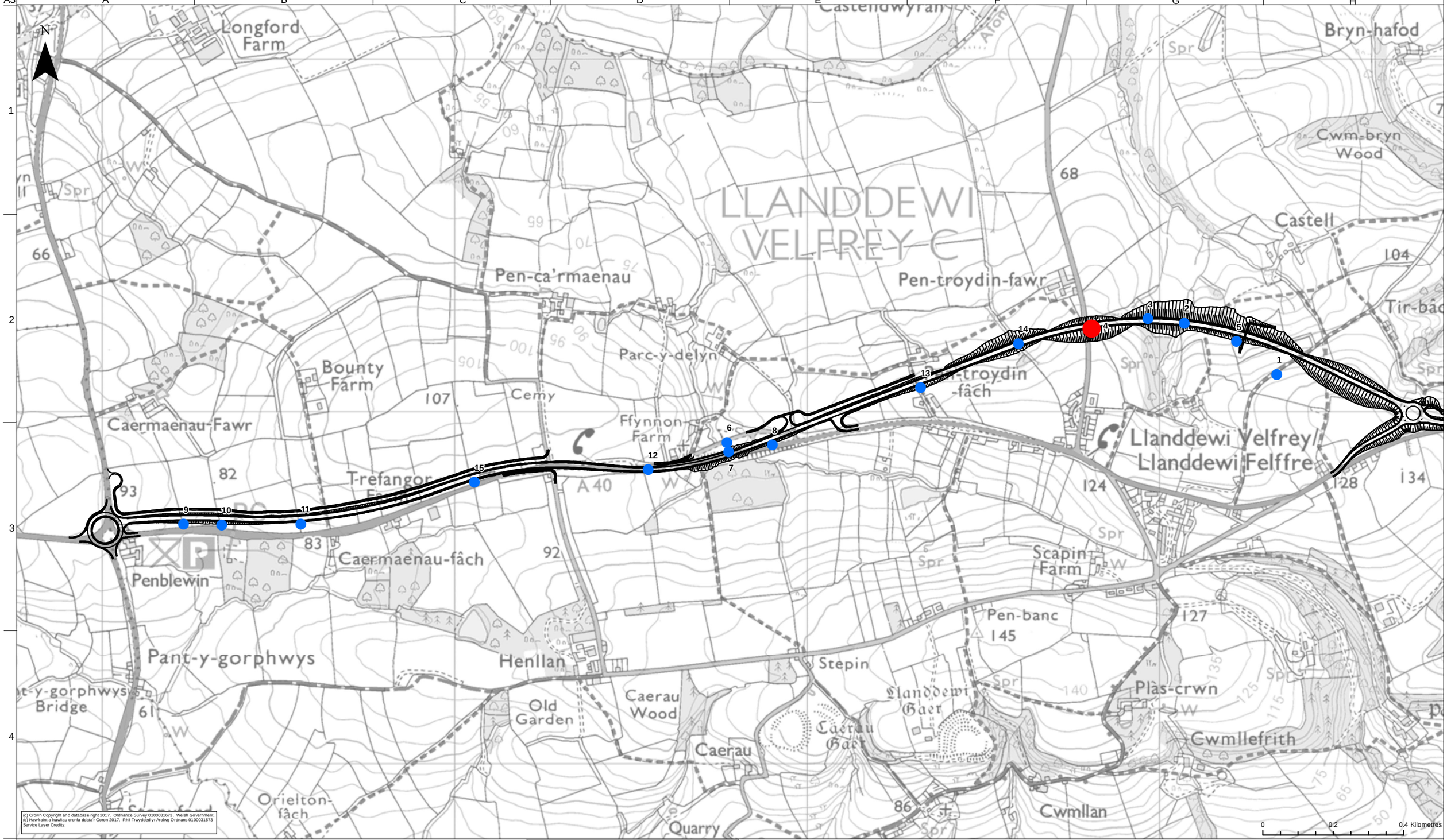
Drawing Title
FIGURE 8.62
2017 STATIC BAT ACTIVITY MONITORING SEPTEMBER: BARBASTELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0118
Project | Originator | Volume | Location | Type | Role | Number



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Service Layer Credits:

LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
1	0
2	0
3	0
4	0.4
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

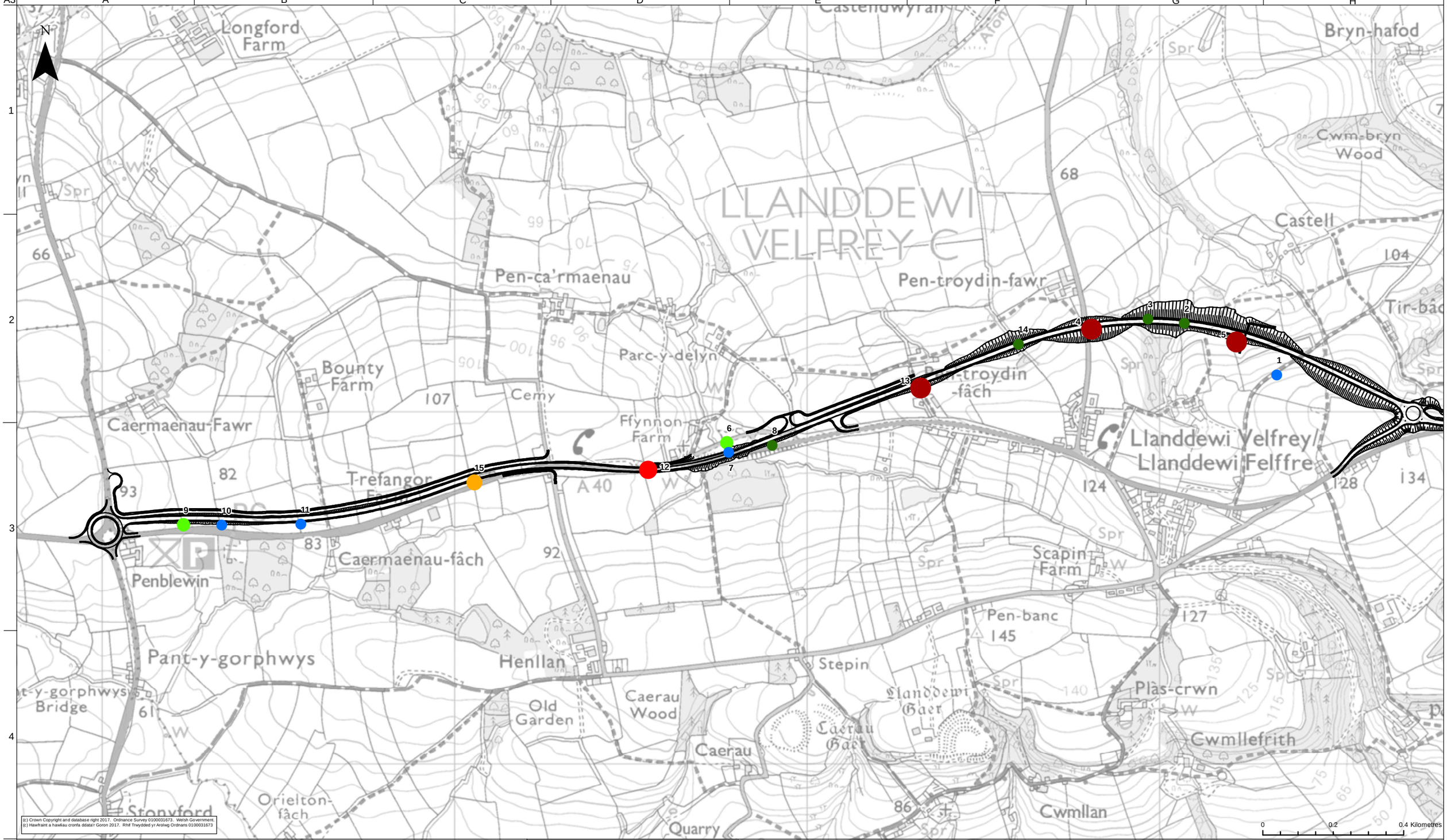
Drawing Title
FIGURE 8.63
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: SEROTINE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0119
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 0.2)
- LOW (0.2 - 1)
- MEDIUM (1 - 2)
- HIGH (2 - 12)
- VERY HIGH (> 12)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0.2
3	0.2
4	21.6
5	19.6
6	1
7	0
8	0.2
9	0.4
10	0
11	0
12	11.6
13	136
14	0.2
15	1.8

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	22/07/19	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

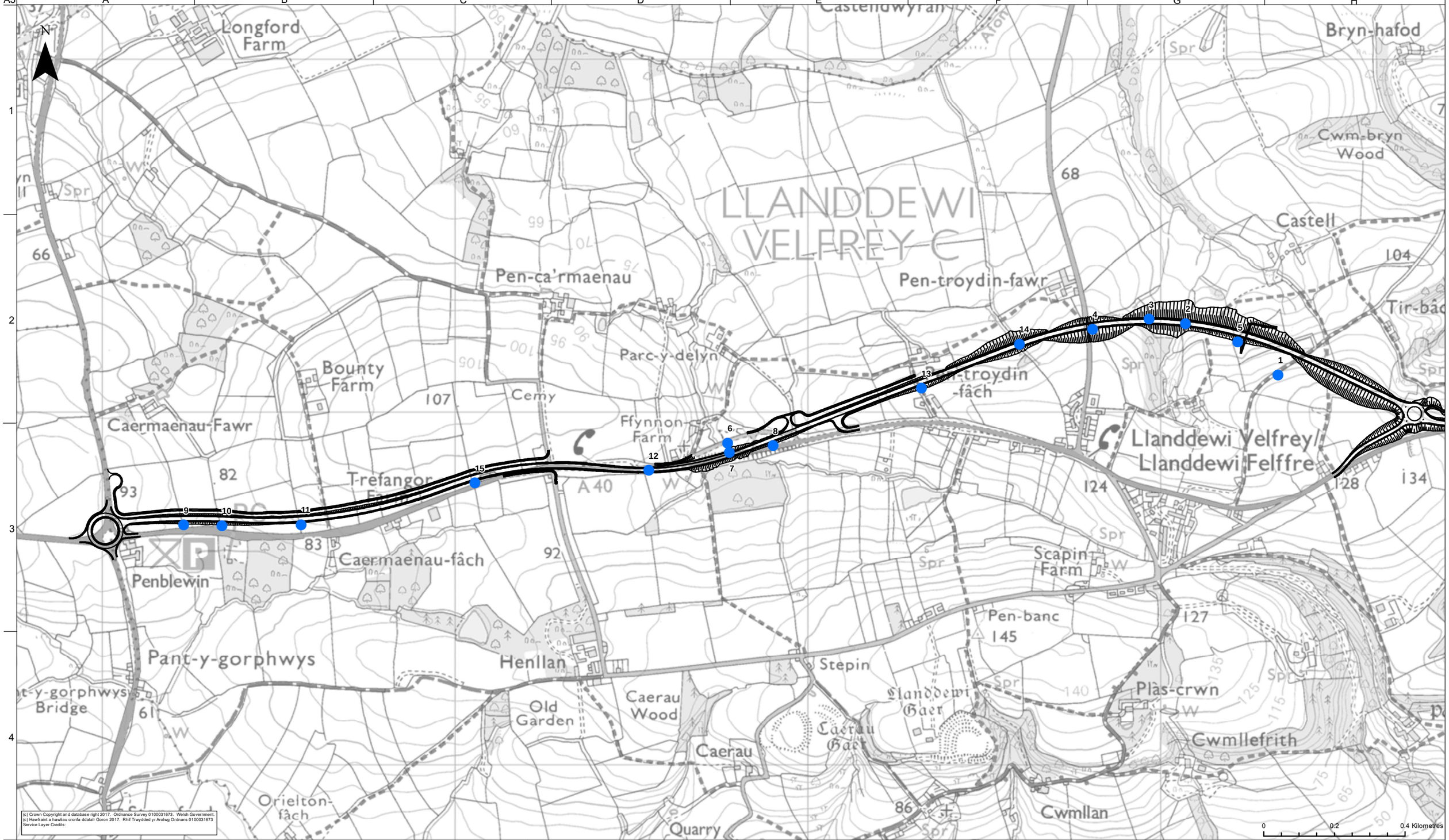
Drawing Title
FIGURE 8.64
2017 STATIC BAT ACTIVITY MONITORING SEPTEMBER: MYOTIS SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 22/07/19	Date 22/07/19	Date 22/07/19	Date 22/07/19

Name
A40LVP - ARP - VES - SWI - DR - LE - 0121
Project | Originator | Volume | Location | Type | Role | Number



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Service Layer Credits:

LEGEND

- PROPOSED ALIGNMENT
- BATS RECORDED
- NO BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

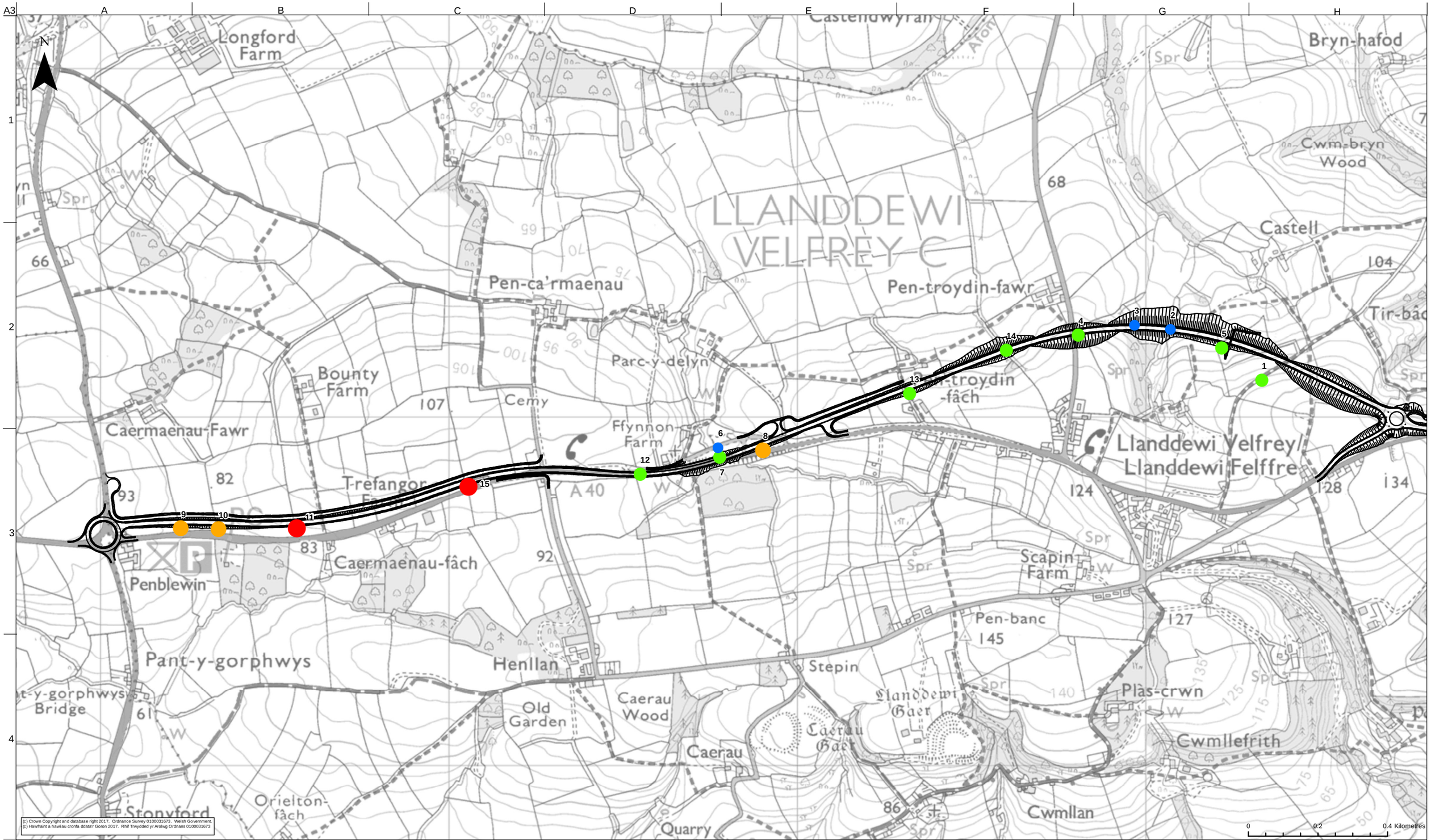
Drawing Title
FIGURE 8.65
2017 STATIC BAT ACTIVITY MONITORING SEPTEMBER: LEISLER'S BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0122
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- LOW (< 0.8)
- MEDIUM (0.8 - 1.4)
- HIGH (1.4 - 7.8)
- VERY HIGH (> 7.8)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.2
2	0
3	0
4	0.8
5	0.2
6	0
7	0.2
8	1
9	1.4
10	1.4
11	3
12	0.8
13	0.2
14	0.2
15	2.8

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

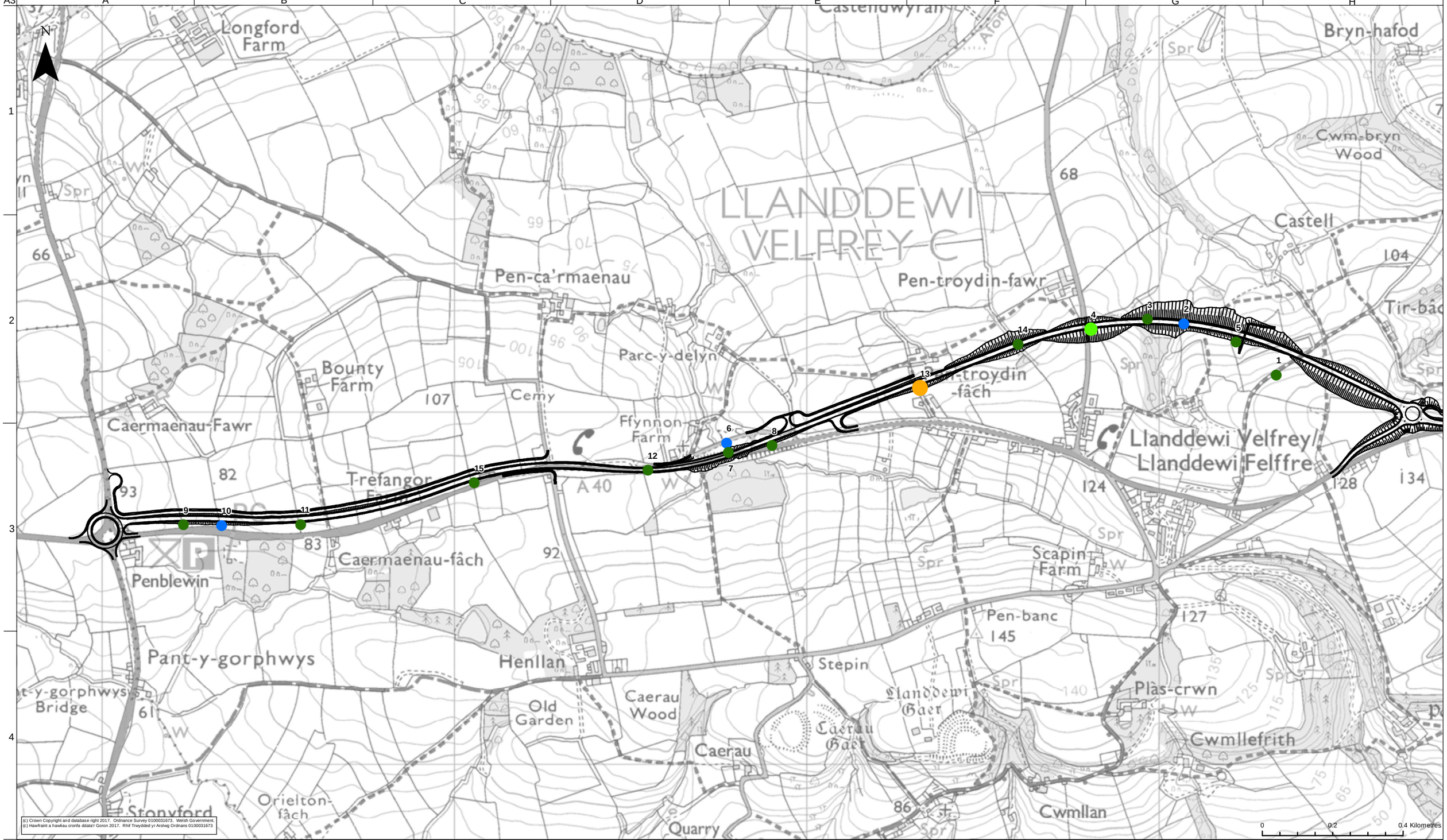
Drawing Title
FIGURE 8.66
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: NOCTULE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0123
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.2
2	0
3	4
4	44.6
5	4.6
6	0
7	0.4
8	1
9	27.4
10	0
11	4.6
12	35.6
13	118.8
14	3
15	1.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

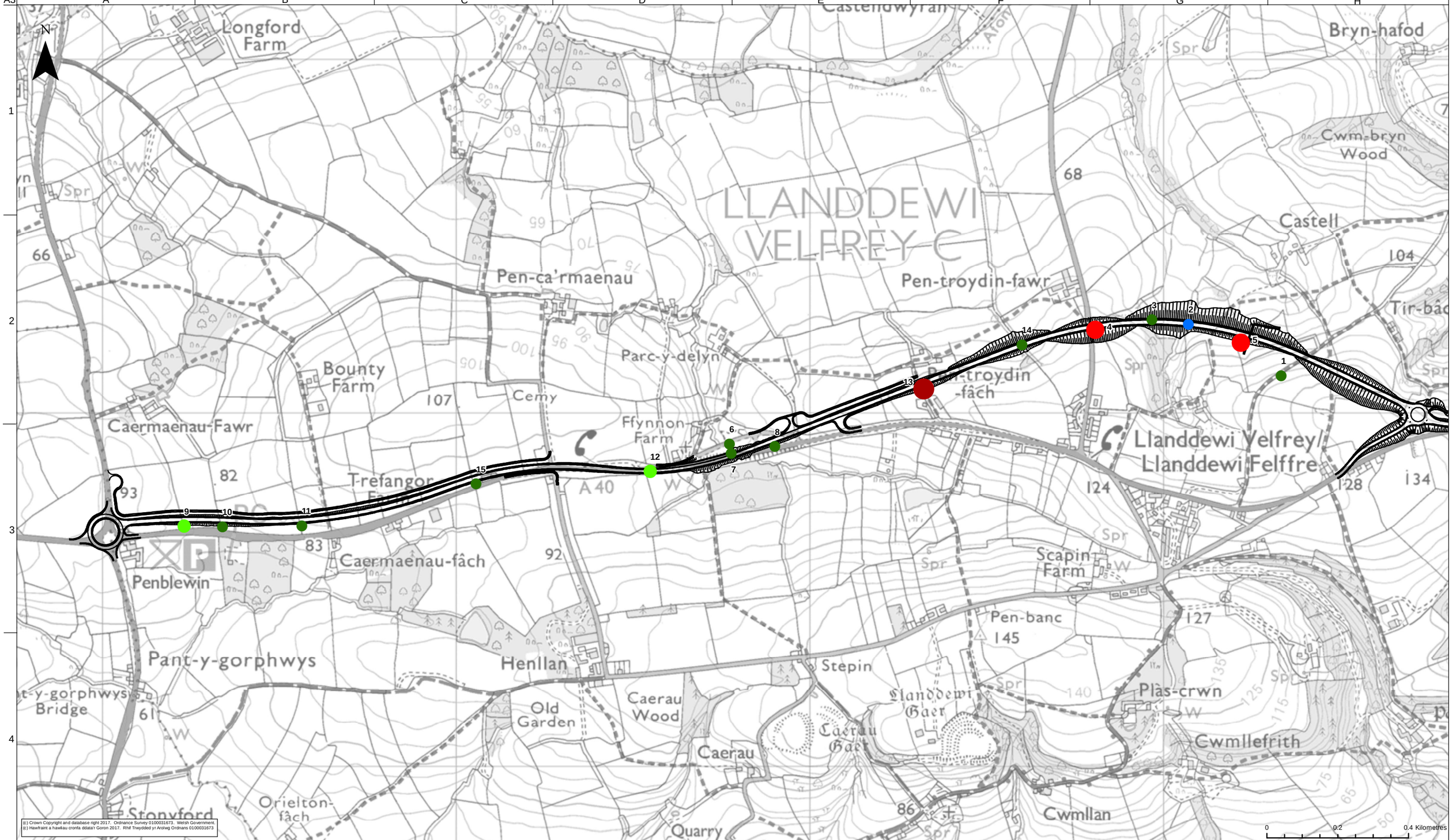
Drawing Title
FIGURE 8.67
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: COMMON PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0125
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)
- NO BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	4.8
2	0
3	4.2
4	288.2
5	138.6
6	1.4
7	1.8
8	2.6
9	67.4
10	0.8
11	7.8
12	47.4
13	647..6
14	4.4
15	11

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

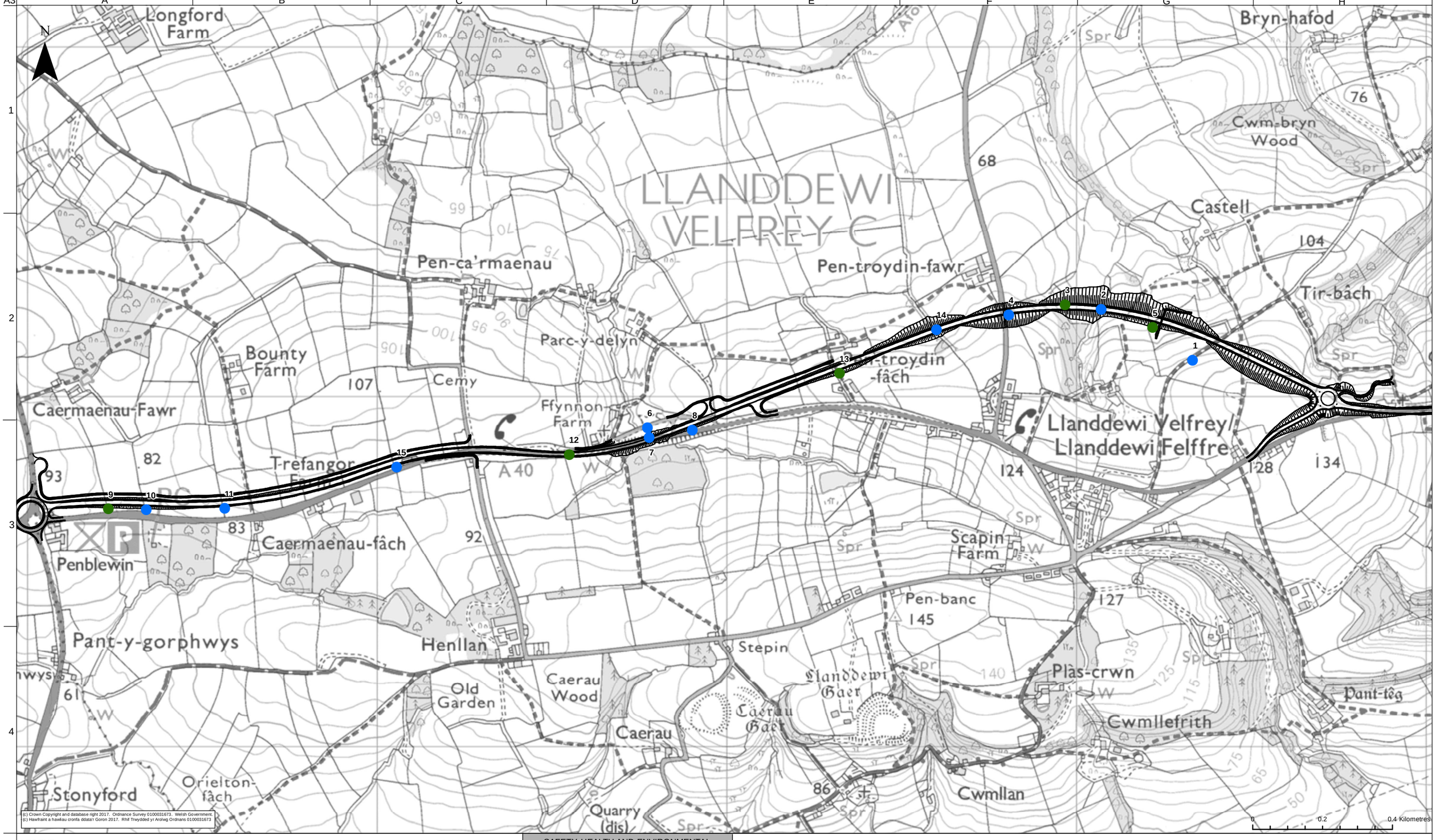
Drawing Title
FIGURE 8.68
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: SOPRANO PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0126
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	1.8
4	0
5	0.2
6	0
7	0
8	0
9	0.4
10	0
11	0
12	1
13	3.2
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

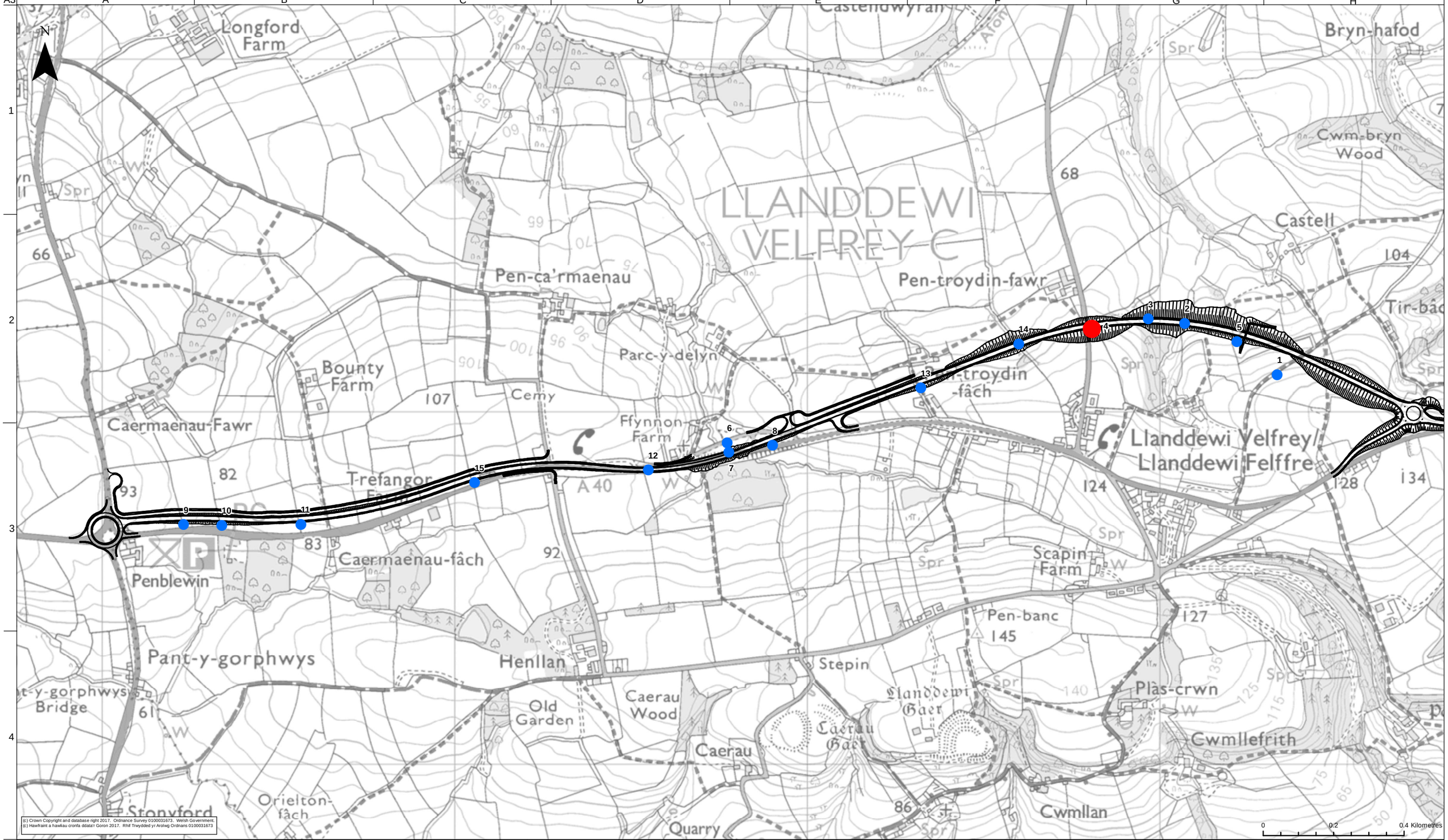
Drawing Title
FIGURE 8.69
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: PIPISTRELLE SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0127
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0.2
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

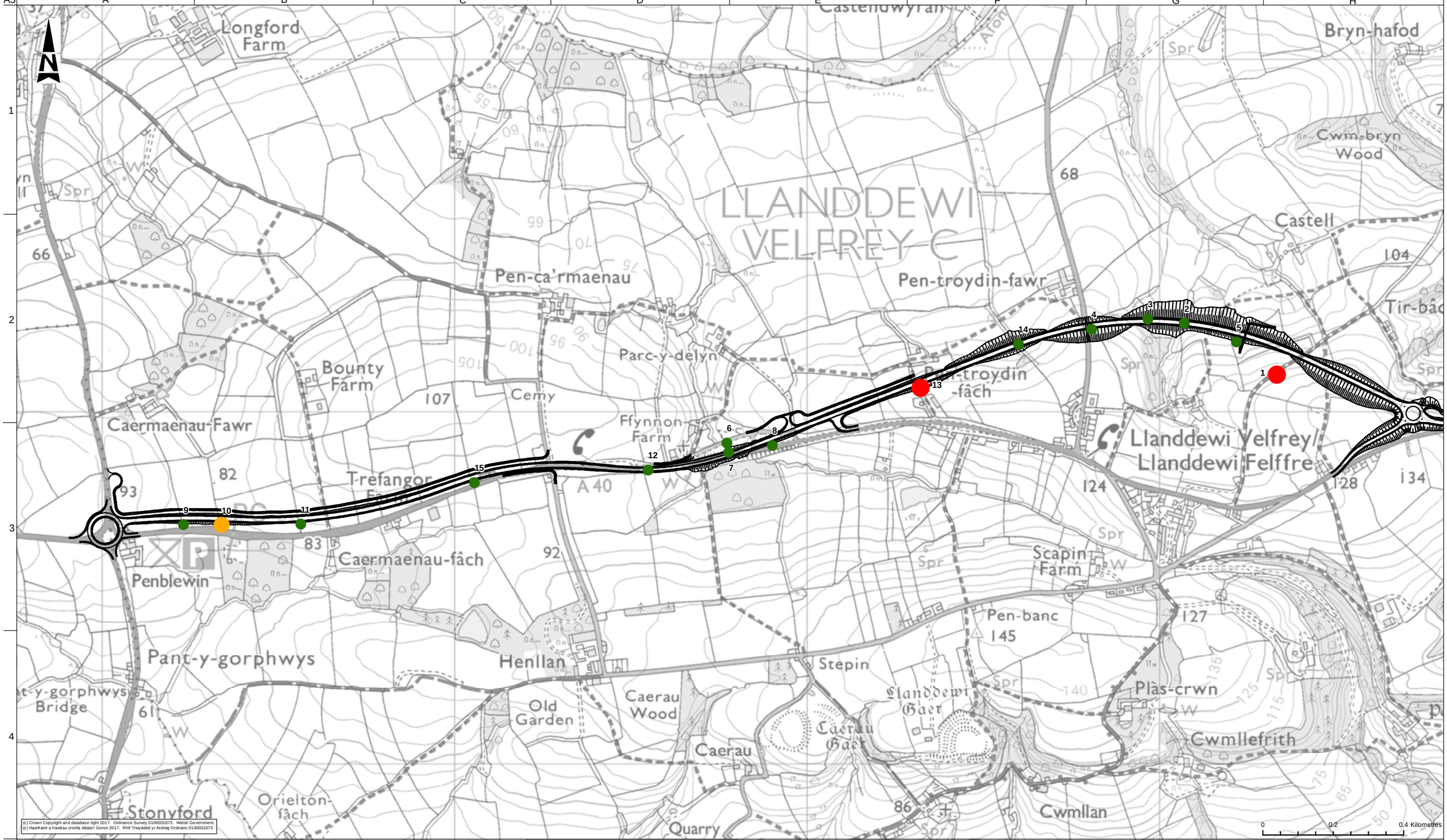
Drawing Title
FIGURE 8.70
2017 STATIC BAT ACTIVITY MONITORING
SEPTEMBER: GREATER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0129
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378)
- VERY HIGH (> 378)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	171.6
2	1.8
3	2
4	2.8
5	2
6	21.6
7	1
8	4.4
9	15.8
10	126.2
11	6.8
12	1.4
13	156.8
14	17.4
15	1.4

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

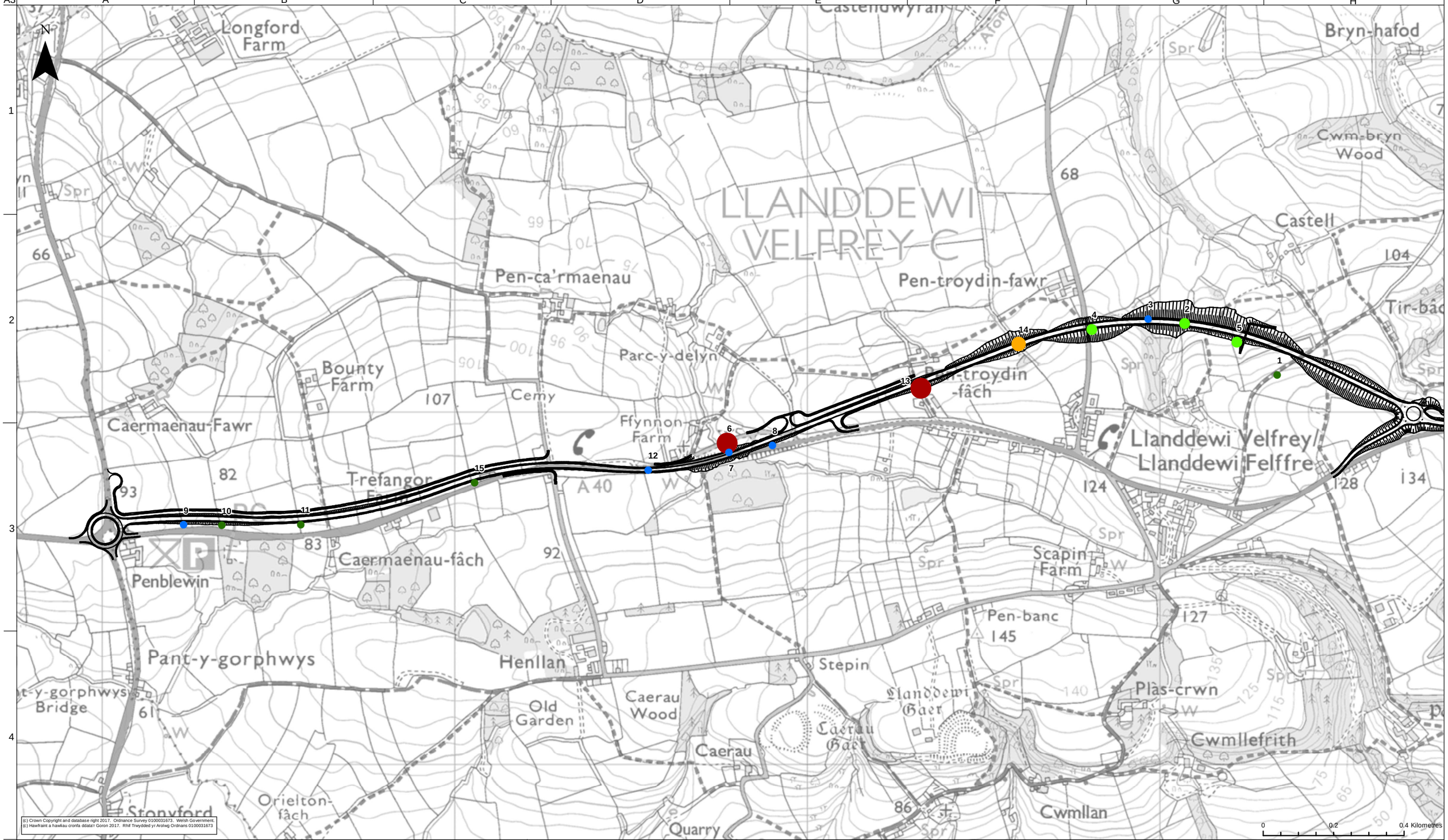
Drawing Title
FIGURE 8.71
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: ALL BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0133
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 0.2)
- LOW (0.2 - 1)
- MEDIUM (1 - 2)
- HIGH (2 - 12)
- VERY HIGH (> 12)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0.2
2	0.4
3	0
4	0.6
5	0.4
6	17.6
7	0
8	0
9	0
10	0.2
11	0.2
12	0
13	1.6
14	0.8
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

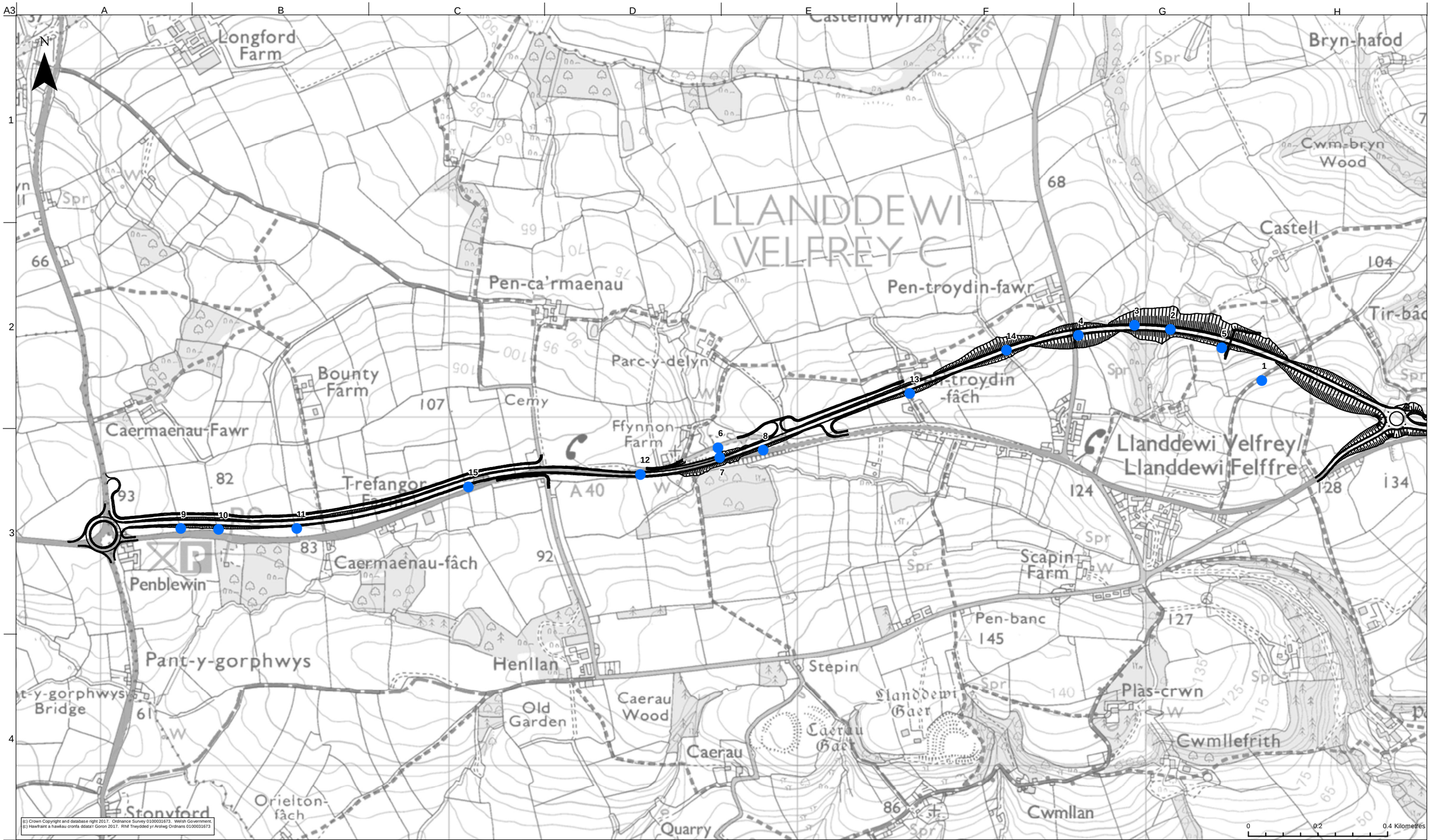
Drawing Title
FIGURE 8.72
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: MYOTIS SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0137
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- LOW (< 0.8)
- MEDIUM (0.8 - 1.4)
- HIGH (1.4 - 7.8)
- VERY HIGH (> 7.8)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

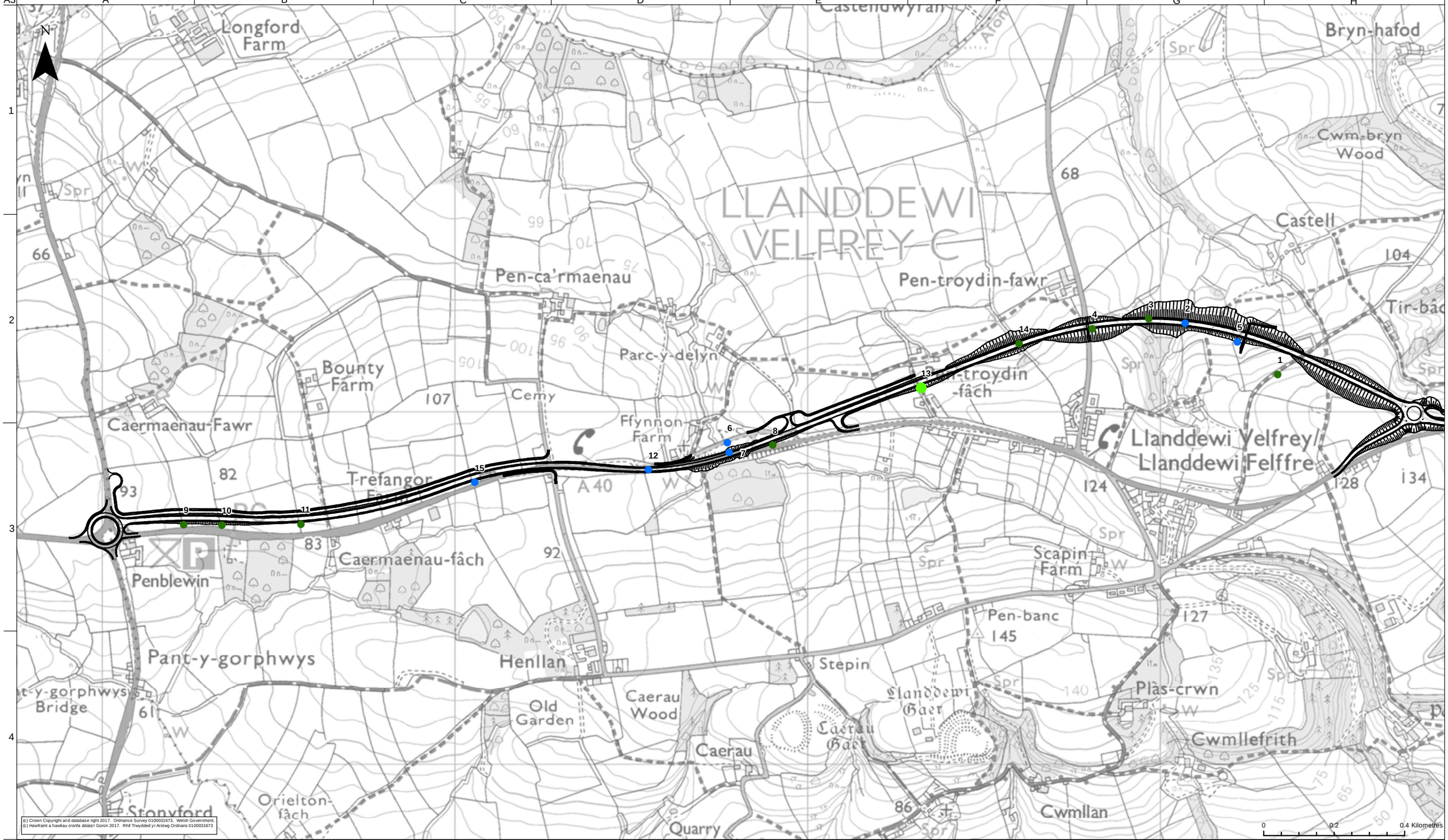
Drawing Title
FIGURE 8.73
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: NOCTULE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0139
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	10
2	0
3	0.4
4	0.4
5	0
6	0
7	0
8	0.2
9	0.2
10	3.4
11	1.4
12	0
13	69.6
14	3
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.74
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: COMMON PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0141
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	161.4
2	1.6
3	1.2
4	1.2
5	2
6	3.8
7	1
8	3.6
9	15.6
10	122.4
11	5
12	1.4
13	72.4
14	13.2
15	1.2

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

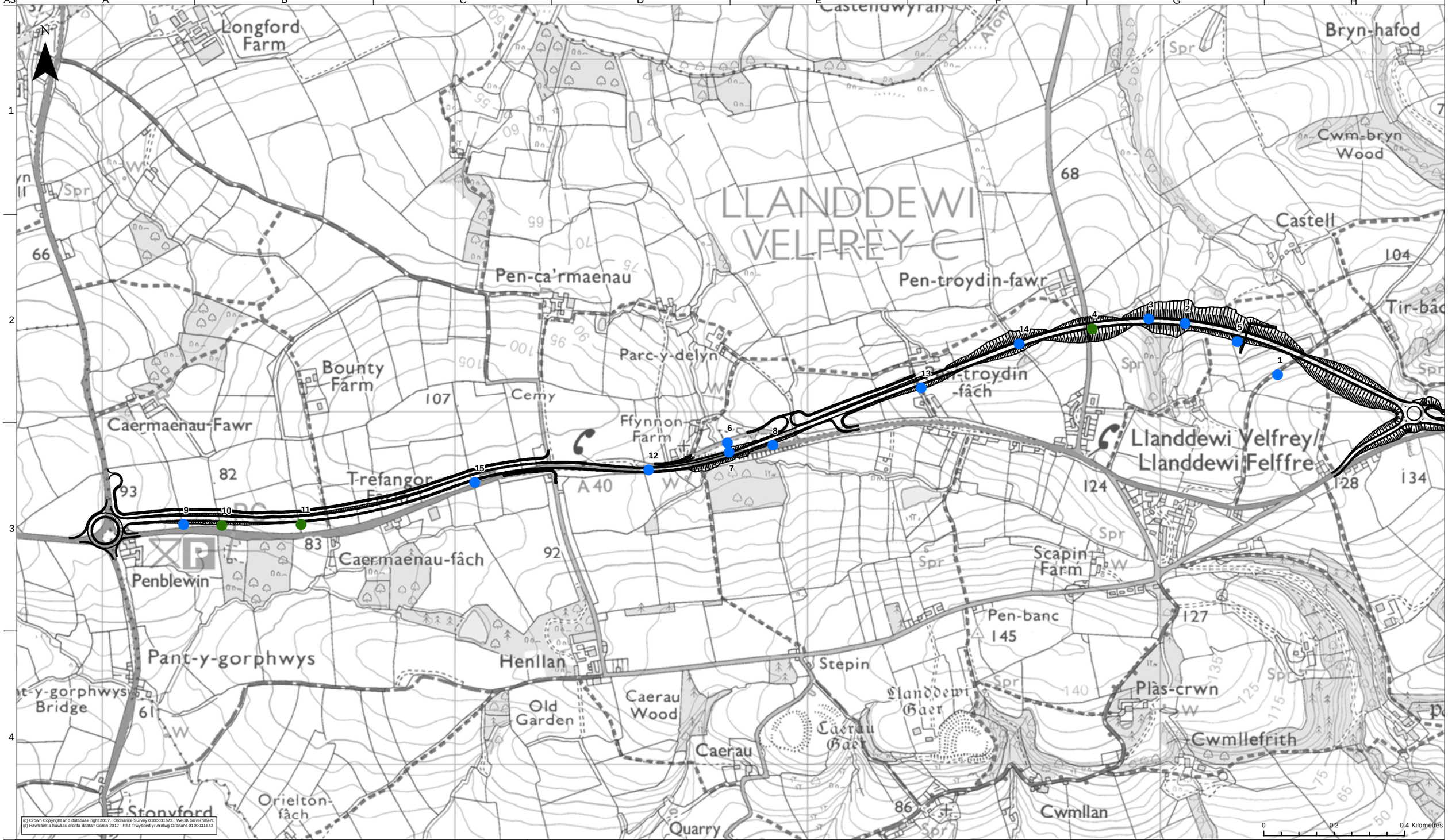
Drawing Title
FIGURE 8.75
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: SOPRANO PIPISTRELLE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0142
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- VERY LOW (< 27.7)
- LOW (27.7 - 76.2)
- MEDIUM (76.2 - 132)
- HIGH (132 - 378.32)
- VERY HIGH (> 378.32)

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0.2
5	0
6	0
7	0
8	0
9	0
10	0.2
11	0.2
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

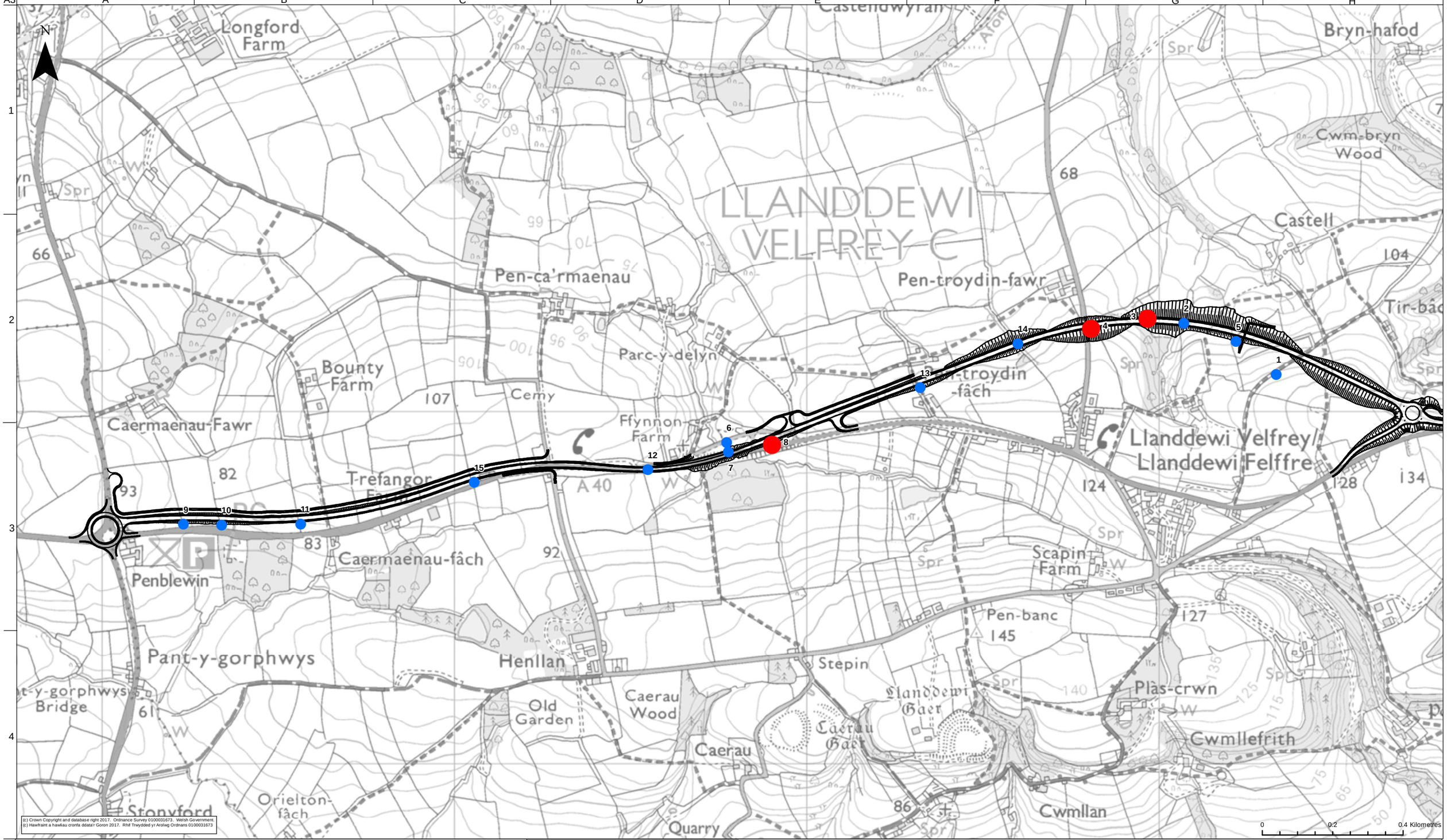
Drawing Title
FIGURE 8.76
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: PIPISTRELLE SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0143
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0.4
4	0.4
5	0
6	0
7	0
8	0.4
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

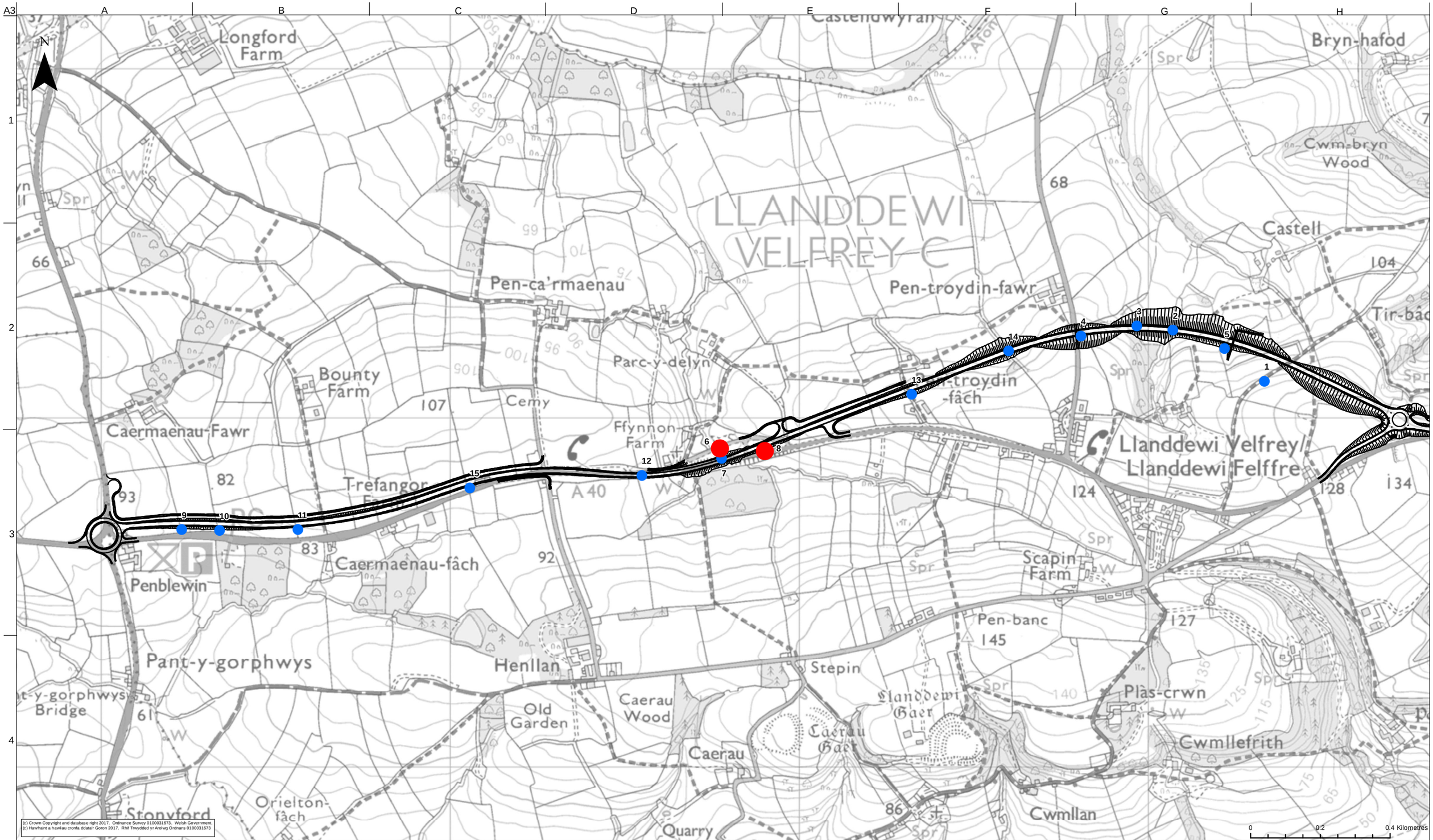
Drawing Title
FIGURE 8.77
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: BROWN LONG-EARED BAT SPECIES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0144
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- NO BATS RECORDED
- BATS RECORDED

LOCATION NO.	BAT PASSES (EQ.) PER NIGHT
1	0
2	0
3	0
4	0
5	0
6	0.2
7	0
8	0.2
9	0
10	0
11	0
12	0
13	0
14	0
15	0

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

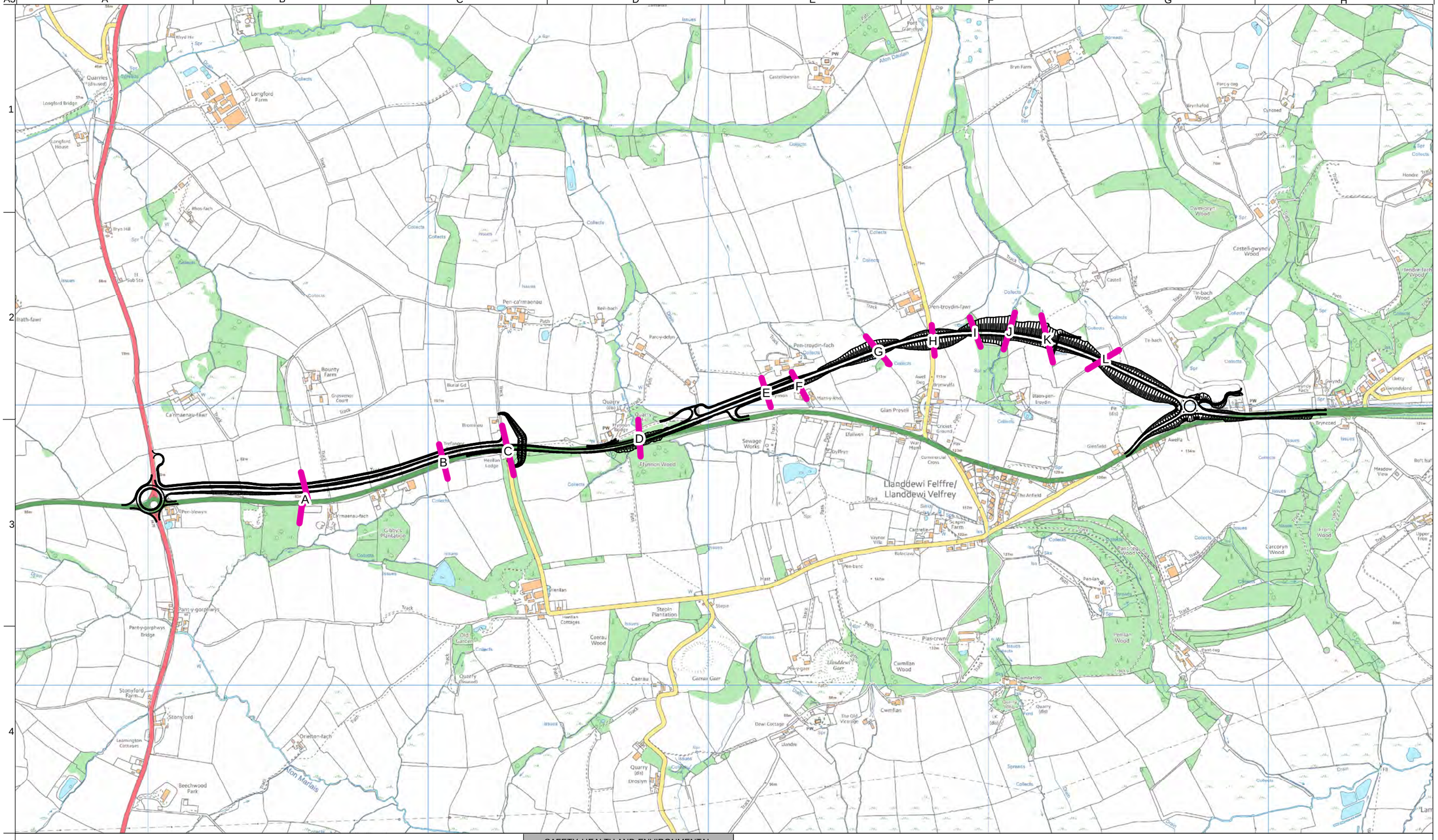
Drawing Title
FIGURE 8.78
2017 STATIC BAT ACTIVITY MONITORING
OCTOBER: LESSER HORSESHOE BAT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0146
Project | Originator | Volume | Location | Type | Role | Number


A
B
C
D
E
F
G
H
I
J
K
L
Llanddewi Felffre/
Llanddewi Velfrey
Longford Farm
Longford House
Longford Bridge
Quarries (disused)
Rhos-fach
Bryn Hill
Pen-ca'rmaenau
Parcy-delyn
Pen-troydin-fach
Pen-troydin-fawr
Bounty Farm
Ca'rmaenau-fawr
Ca'rmaenau-fach
Pen-blewyn
Bromlau
Heolfach
Heollan Lodge
Quarry (dis)
Glyn Presell
Sewage Works
Efellwen
Dyffryn
Elynnon Wood
Cricket Ground
War Horn
Commercial Cross
Glenfield
Awelfa
Blaen-pen-troydin
Brynhafod
Bryn Farm
Parcy-dog
Cwmbryn Wood
Castell-gwyndy Wood
Tir-bach Wood
Gwyndy
Brynwood
Meadow View
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Stonyford Farm
Stonyford
Learnington Cottages
Orielton-fach
Beechwood Park
Afon Marlais
Hendre
Heollan Cottages
Stepin Plantation
Stepin
Old Garden
Quarry (disused)
Ceerau Wood
Ceerau
Ceerau Gwer
Llanddewi Gwer
Pen-gaer
Dewi Cottage
The Old Vicarage
Llandre
Quarry (dis)
Drosiyn
Vaynor Villa
Baleciava
Pen-banc
Scapin Farm
Carmelia
The Anfield
Pen-lan
Pen-lan Wood
Pantiog Wood
Carcoryn Wood
Cwmllan Wood
Cwmllan
Plas-crwn
Pen-lan
Gamblerith
Quarry (dis)
Ford
Sprawas
Drain
Afon Daulan
Castellowyran
Llwyncoy Farm
Llwyndyland
Llwyncoy
Llwyn-y-Gog
Llwyn-y-Gog Wood
Tendre-fach Wood
Cuncoed
Hendre
Tir-bach
Castell
Awel Deg
Brynwylfa
Mansy-rhos
Quarry (dis)
Quarry
Pen-lan
Pen-lan Wood
Pantiog Wood
Carcoryn Wood
Pant-teg
Pen-lan
Pen-banc
Llanddewi Gwer
Llandre
Drain
FB
Track
Path
Collects
Issues
Spr
PW
Dip
Slope
Sprawas
Mast
Ford
Quarry (dis)
Quarry (dis)
Quarry (dis)

A3

LEGEND

PROPOSED ALIGNMENT

WINTER NEST

NEST

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)
Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

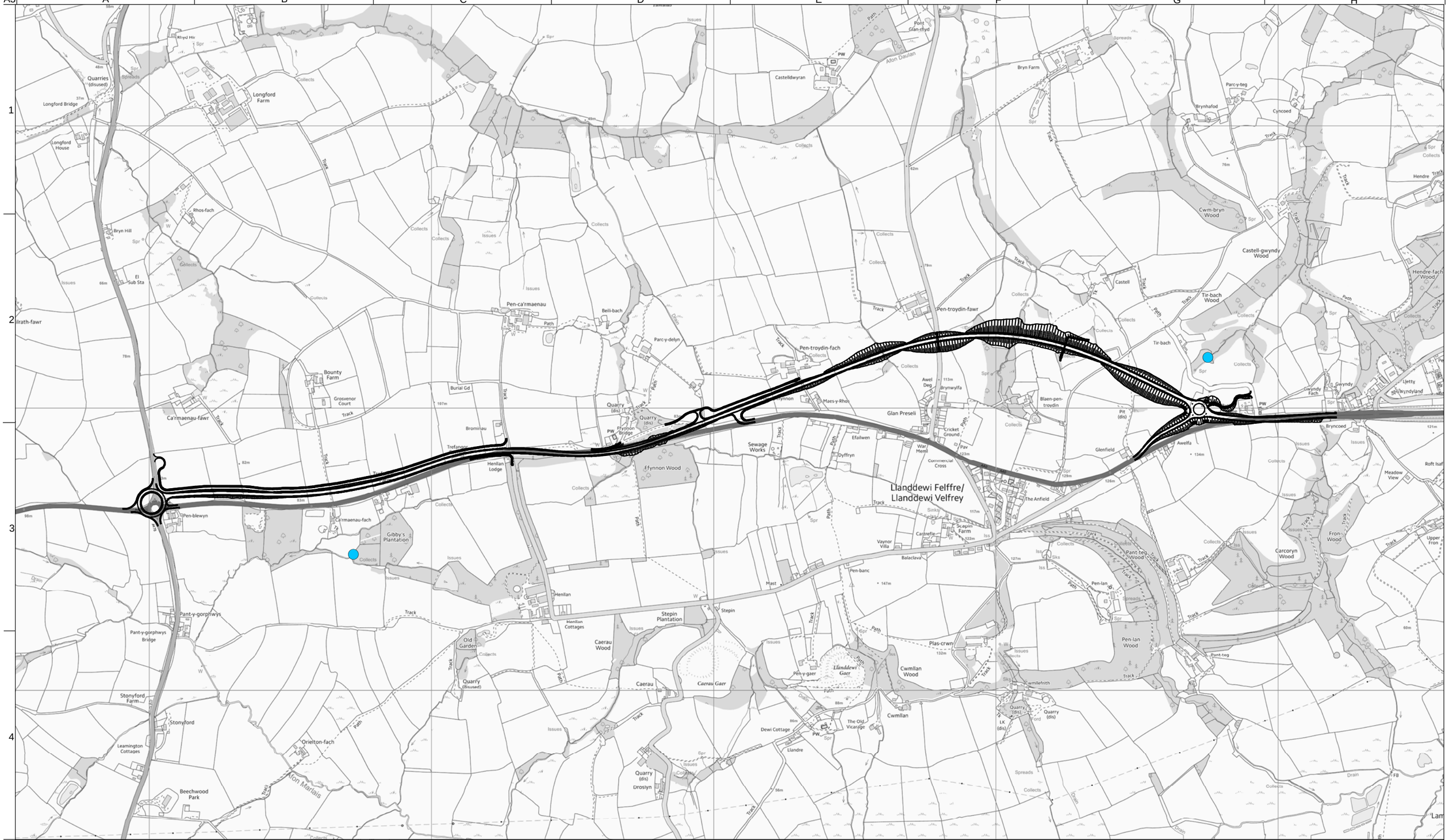
Drawing Title
FIGURE 8.80
DORMOUSE SURVEY RESULTS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:12,500

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0099
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

PROPOSED ALIGNMENT

POTENTIAL HOLTS

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P05	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS

MOTT MACDONALD

Delivery Team

ARUP

RICHARDS

Drawing Title

FIGURE 8.81
OTTER SURVEY RESULTS

Suitability

S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:12,500

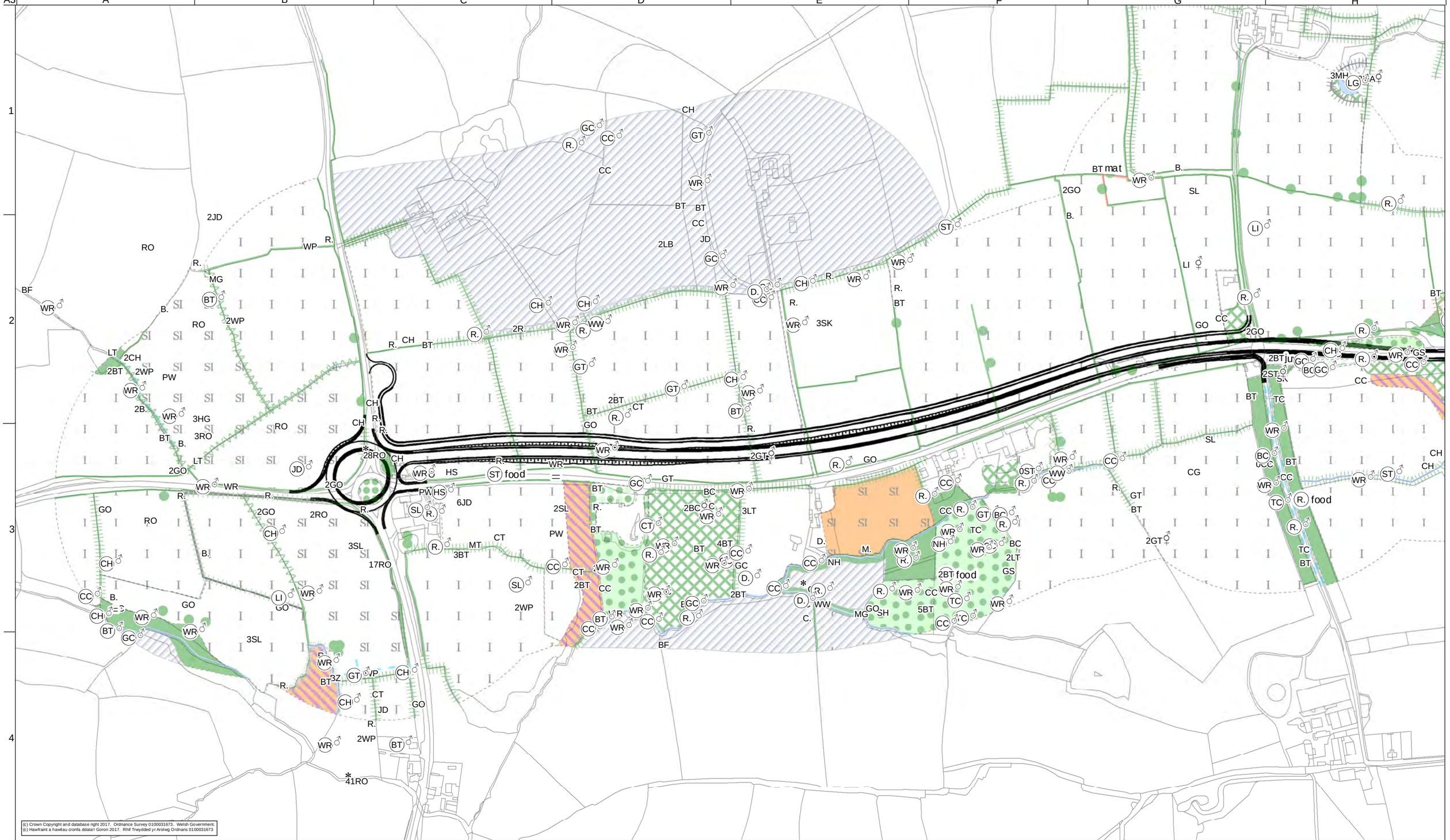
Rev	By	Chkd	Appd	Auth
P05	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name

A40LVP - ARP - VES - SWI - DR - LE - 0098

Project | Originator | Volume | Location | Type | Role | Number

NB: Badger Sett Drawings have been withdrawn from this ES as the information displayed is confidential.



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LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- BZ BUZZARD
- C. CARRION CROW
- CC CHIFFCHAFF
- CG CANADA GOOSE
- CT COAL TIT
- D. DUNNOCK
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HG HERRING GULL
- HS HOUSE SPARROW
- JD JACKDAW
- LB LESSER BLACK-BACKED GULL
- LG LITTLE GREBE
- LI LINNET
- LT LONG-TAILED TIT
- M. MISTLE THRUSH
- MA MALLARD
- MG MAGPIE
- MH MOORHAN
- MT MARSH TIT
- NH NUTHATCH
- PW PIED WAGTAIL
- R. ROBIN
- RO ROOK
- SH SPARROWHAWK
- SK SISKIN
- SL SWALLOW
- ST SONG THRUSH
- TC TREECREEPER
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

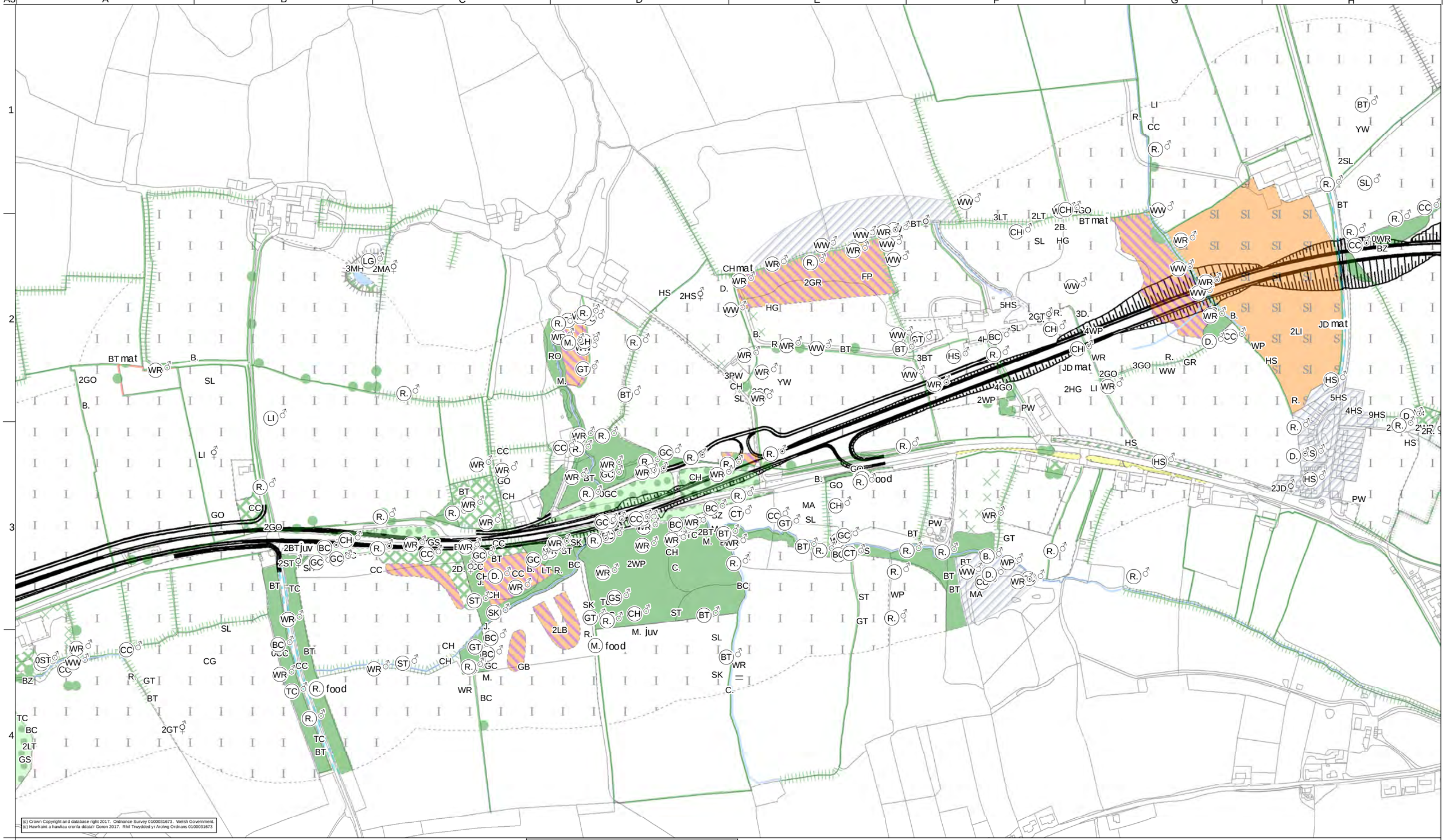
Drawing Title
FIGURE 8.83A
BREEDING BIRDS SURVEY
RESULTS - APRIL
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0086
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂♀ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

B. BLACKBIRD
BC BLACKCAP
BT BLUE TIT
BZ BUZZARD
C. CARRION CROW
CC CHIFFCHAFF
CG CANADA GOOSE
CT COAL TIT
D. DUNNOCK
FP FERAL PIDGEON
GB GREAT BLACK-BACKED GULL
GC GOLDCREST
GO GOLDFINCH
GR GREENFINCH
GS GREAT SPOTTED WOODPECKER
GT GREAT TIT
HG HERRING GULL
HS HOUSE SPARROW
J. JAY
JD JACKDAW
LB LESSER BLACK-BACKED GULL
LG LITTLE GREBE
LI LINNET
LT LONG-TAILED TIT
M. MISTLE THRUSH
MA MALLARD
MG MAGPIE
MH MOORHAN
PW PIED WAGTAIL
R. ROBIN
RO ROOK
SK SISKIN
SL SWALLOW
ST SONG THRUSH
TC TREECREEPER
WP WOOD PIGEON
WR WREN
WW WILLOW WARBLER
YW YELLOW WIGTAIL

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS MOTT MACDONALD ARUP RICHARDS

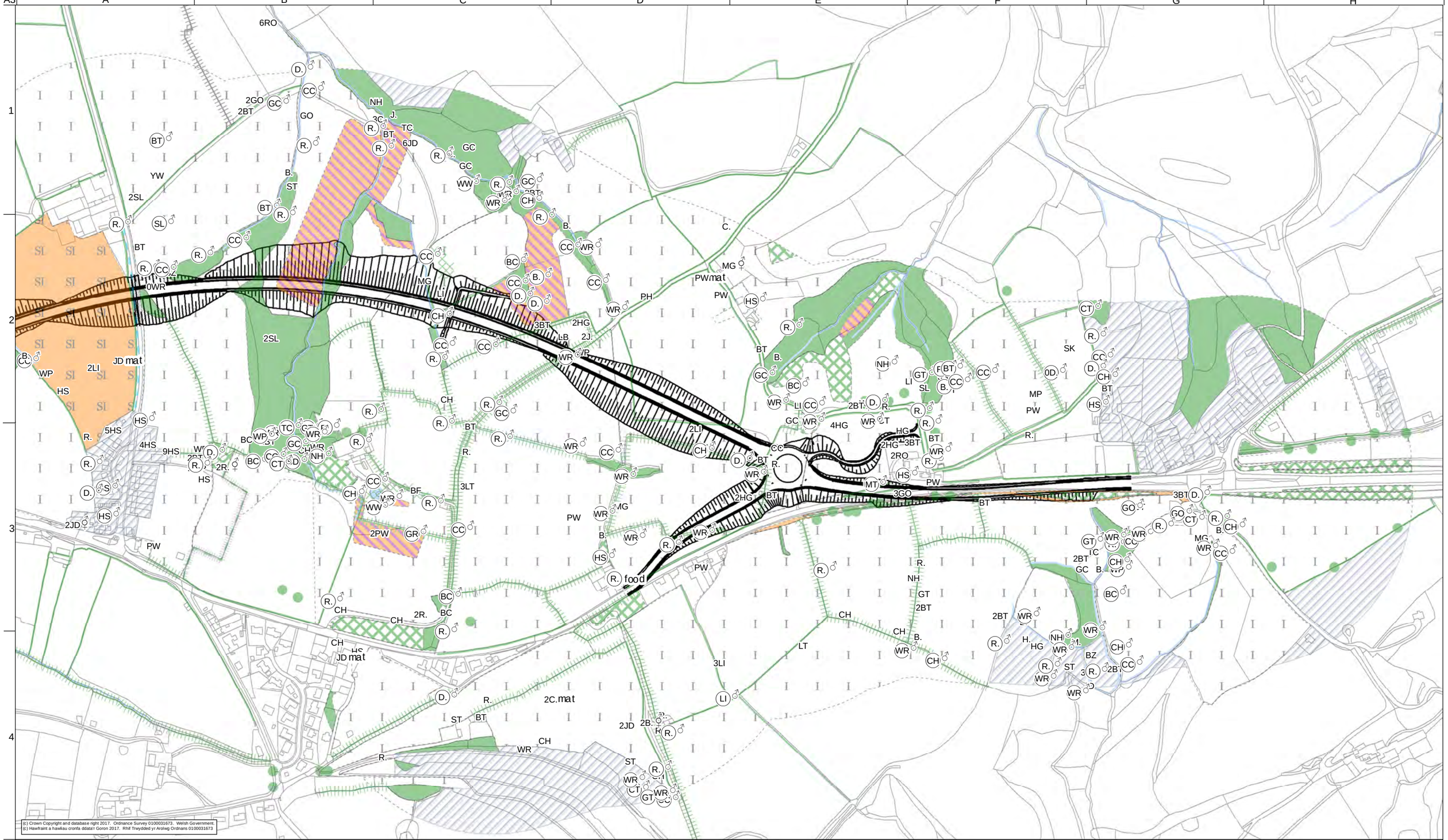
Drawing Title
FIGURE 8.83B
BREEDING BIRDS SURVEY
RESULTS - APRIL
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0087
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- BZ BUZZARD
- C. CARRION CROW
- CC CHIFFCHAFF
- CT COAL TIT
- D. DUNNOCK
- GC GOLDCREST
- GO GOLDFINCH
- GR GREENFINCH
- GT GREAT TIT
- H. GREY HERON
- HG HERRING GULL
- HS HOUSE SPARROW
- J. JAY
- JD JACKDAW
- LB LESSER BLACK-BACKED GULL
- LI LINNET
- LT LONG-TAILED TIT
- M. MISTLE THRUSH
- MG MAGPIE
- MP MEADOW PIPIT
- MT MARSH TIT
- NH NUTHATCH
- PH PHEASANT
- PW PIED WAGTAIL
- R. ROBIN
- RN RAVEN
- RO ROOK
- SD STOCK DOVE
- SK SISKIN
- SL SWALLOW
- ST SONG THRUSH
- TC TREECREEPER
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER
- YW YELLOW WIGTAIL

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.83C
BREEDING BIRDS SURVEY
RESULTS - APRIL
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
Date	12/11/18	12/11/18	12/11/18	12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0088
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♀ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- BZ BUZZARD
- C. CARRION CROW
- CC CHIFFCHAFF
- CT COAL TIT
- D. DUNNOCK
- FP FERAL PIDGEON
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HS HOUSE SPARROW
- JD JACKDAW
- LI LINNET
- LT LONG-TAILED TIT
- M. MISTLE THRUSH
- MA MALLARD
- NH NUTHATCH
- PW PIED WAGTAIL
- R. ROBIN
- RO ROOK
- SD STOCK DOVE
- SL SWALLOW
- ST SONG THRUSH
- TC TREECREEPER
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

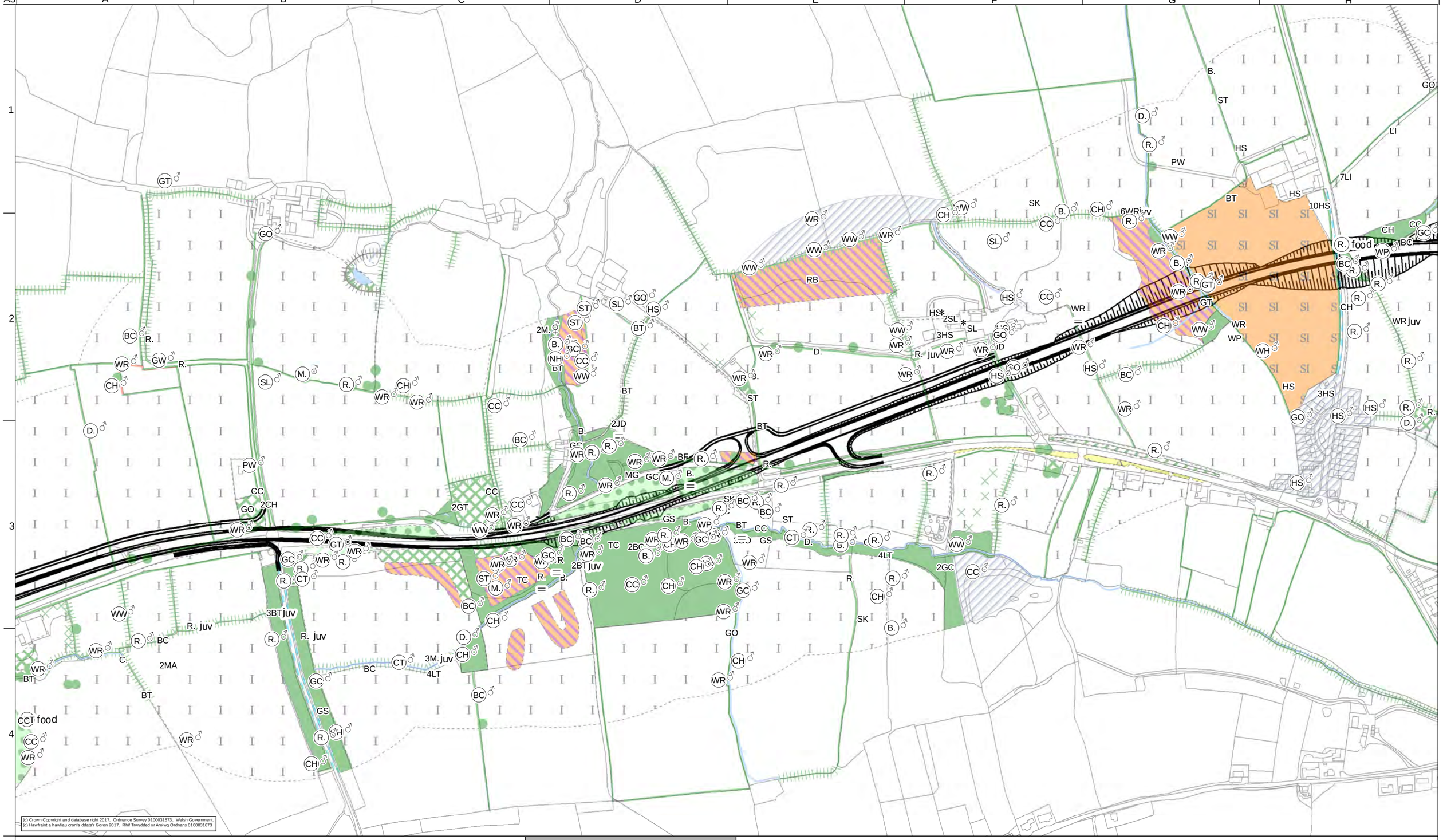
Drawing Title
FIGURE 8.84A
BREEDING BIRDS SURVEY
RESULTS - MAY
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0089
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- — CALLING
- for FORAGING
- * OCCUPIER NEST
- ♀ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- C. CARRION CROW
- CC CHIFFCHAFF
- CT COAL TIT
- D. DUNNOCK
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HS HOUSE SPARROW
- JD JACKDAW
- LI LINNET
- LT LONG-TAILED TIT
- M. MISTLE THRUSH
- MA MALLARD
- MG MAGPIE
- NH NUTHATCH
- PW PIED WAGTAIL
- R. ROBIN
- SK SISKIN
- SL SWALLOW
- ST SONG THRUSH
- TC TREECREEPER
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consttruction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

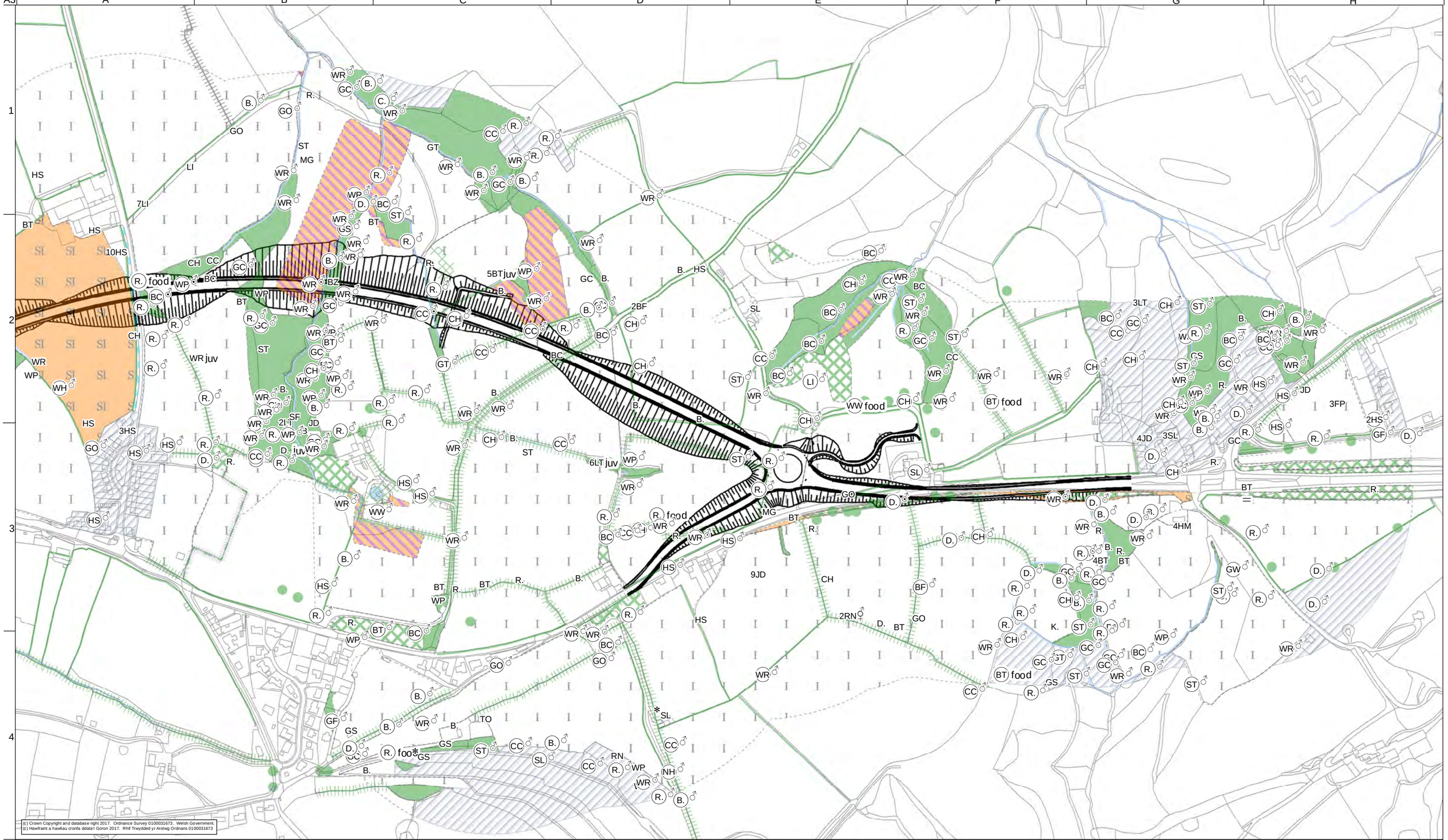
Drawing Title
FIGURE 8.84B
BREEDING BIRDS SURVEY
RESULTS - MAY
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0090
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- — CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- BZ BUZZARD
- C. CARRION CROW
- CC CHIFFCHAFF
- D. DUNNOCK
- FP FERAL PIDGEON
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HS HOUSE SPARROW
- JD JACKDAW
- LI LINNET
- LT LONG-TAILED TIT
- MG MAGPIE
- NH NUTHATCH
- R. ROBIN
- RN RAVEN
- SL SWALLOW
- ST SONG THRUSH
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS, MOTT MACDONALD, ARUP, RICHARDS

Drawing Title: FIGURE 8.84C BREEDING BIRDS SURVEY RESULTS - MAY SHEET 3 OF 3

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0091

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0091



LEGEND

- PROPOSED ALIGNMENT
- — CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂♀ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

B. BLACKBIRD
BC BLACKCAP
BF BULLFINCH
BT BLUE TIT
BZ BUZZARD
C. CARRION CROW
CC CHIFFCHAFF
CT COAL TIT
D. DUNNOCK
GB GREAT BLACK-BACKED GULL
GC GOLDCREST
GO GOLDFINCH
GS GREAT SPOTTED WOODPECKER
GT GREAT TIT
HS HOUSE SPARROW
JD JACKDAW
LB LESSER BLACK-BACKED GULL
LI LINNET
LT LONG-TAILED TIT
M. MISTLE THRUSH
MG MAGPIE
NH NUTHATCH
PW PIED WAGTAIL
R. ROBIN
RO ROOK
SL SWALLOW
ST SONG THRUSH
TC TREECREEPER
WP WOOD PIGEON
WR WREN
WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

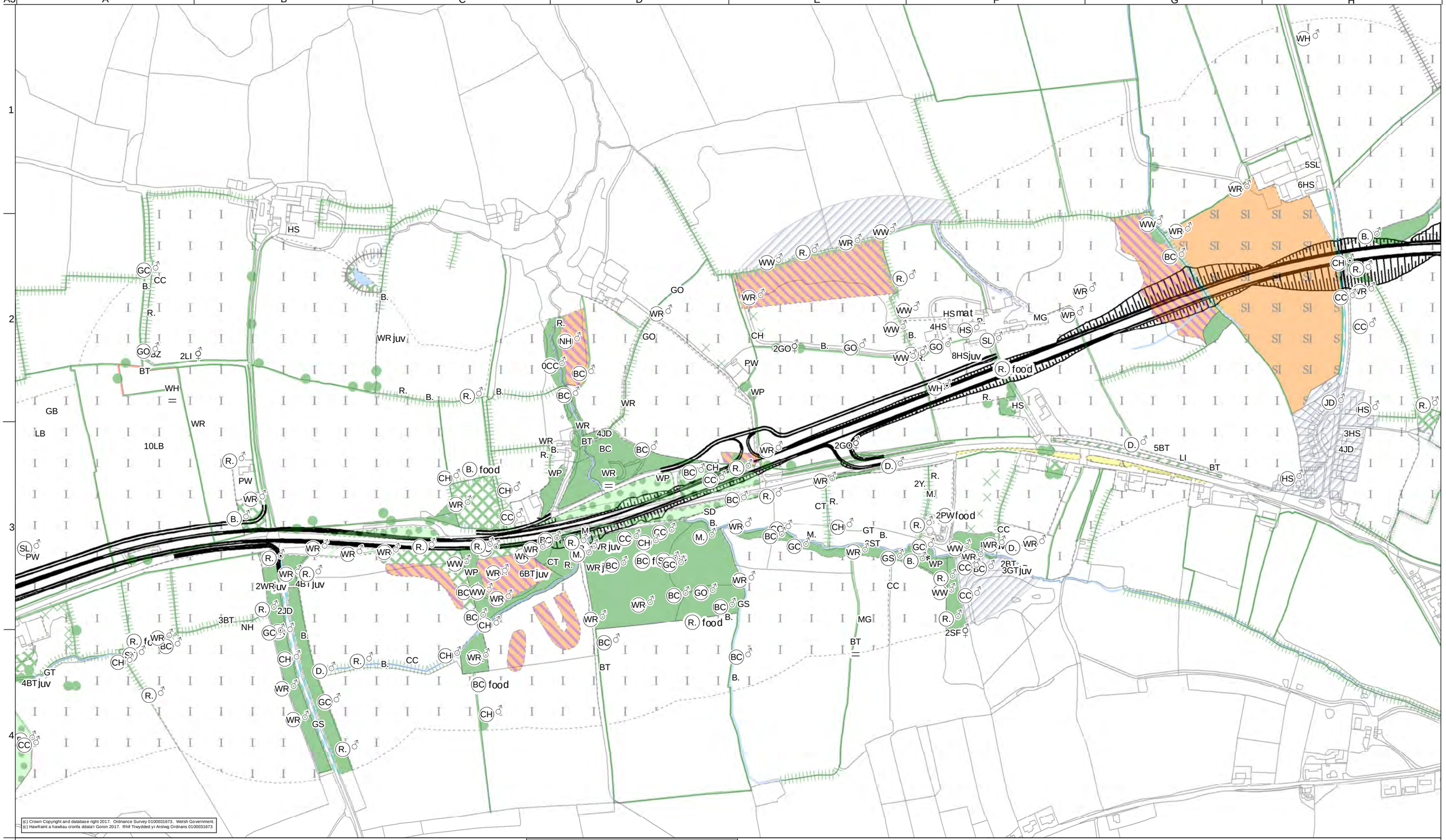
Drawing Title
FIGURE 8.85A
BREEDING BIRDS SURVEY
RESULTS - JUNE
SHEET 1 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0092
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

- PROPOSED ALIGNMENT
- CALLING
- FORAGING
- OCCUPIER NEST
- SIGHT RECORD OF A PAIR
- IN SONG

SPECIES KEY

B. BLACKBIRD
BC BLACKCAP
BT BLUE TIT
BZ BUZZARD
C. CARRION CROW
CC CHIFFCHAFF
CT COAL TIT
D. DUNNOCK
GB GREAT BLACK-BACKED GULL
GC GOLDCREST
GO GOLDFINCH
GS GREAT SPOTTED WOODPECKER
GT GREAT TIT
HS HOUSE SPARROW
JD JACKDAW
LB LESSER BLACK-BACKED GULL
LI LINNET
M. MISTLE THRUSH
MG MAGPIE
NH NUTHATCH
PW PIED WAGTAIL
R. ROBIN
SD STOCK DOVE
SL SWALLOW
ST SONG THRUSH
WP WOOD PIGEON
WR WREN
WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

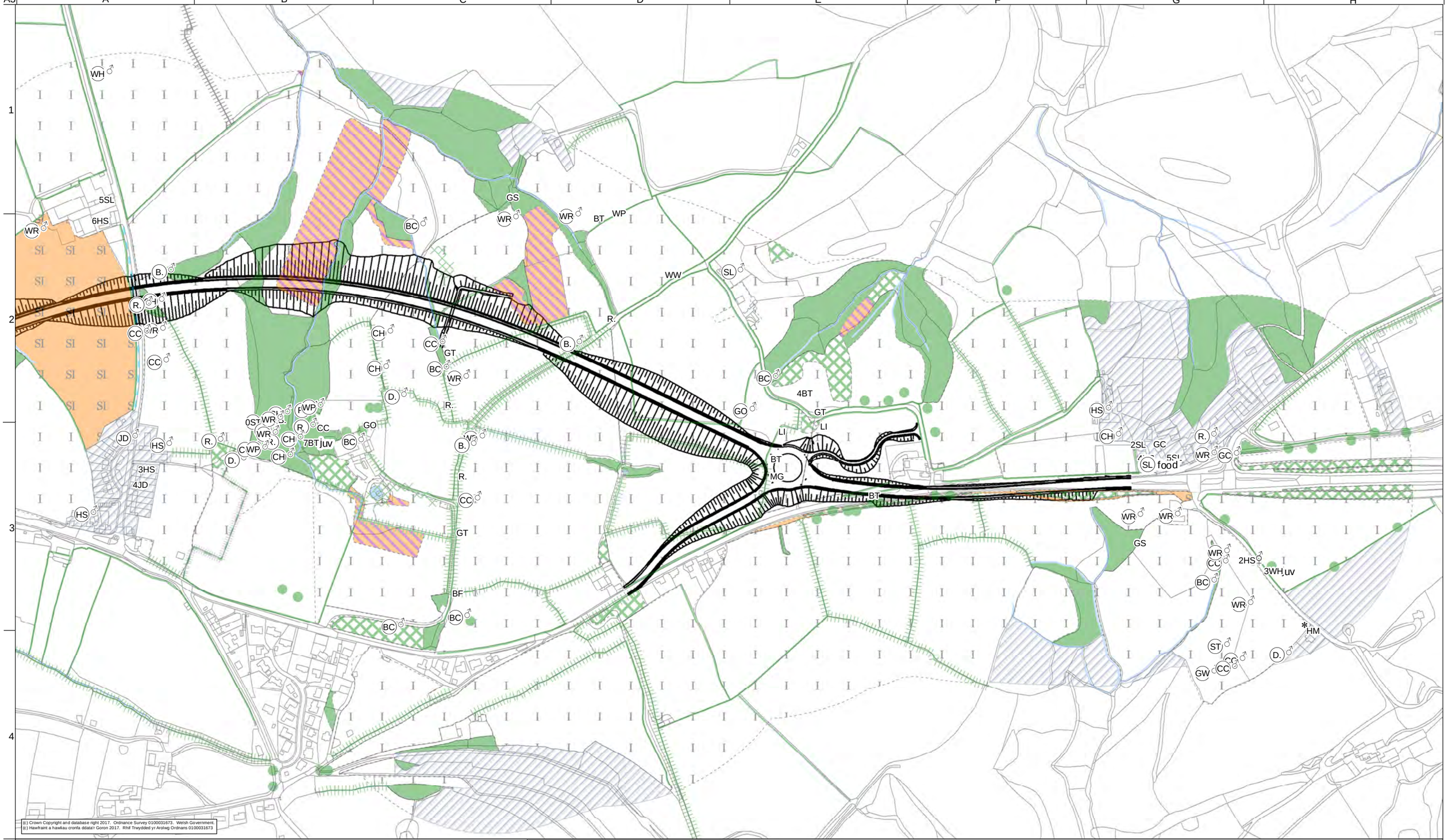
Drawing Title
FIGURE 8.85B
BREEDING BIRDS SURVEY
RESULTS - JUNE
SHEET 2 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0093
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂ SIGHT RECORD OF A PAIR
- ◯ IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- C. CARRION CROW
- CC CHIFFCHAFF
- D. DUNNOCK
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HS HOUSE SPARROW
- JD JACKDAW
- LI LINNET
- MG MAGPIE
- R. ROBIN
- SL SWALLOW
- ST SONG THRUSH
- WP WOOD PIGEON
- WR WREN
- WW WILLOW WARBLER

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Consstruction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.85C
BREEDING BIRDS SURVEY
RESULTS - JUNE
SHEET 3 OF 3

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0094
Project | Originator | Volume | Location | Type | Role | Number

A3

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LEGEND

PROPOSED ALIGNMENT

N.B. NO BIRDS RECORDED IN THIS EXTENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	13/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 8.86A
BREEDING BIRDS SURVEY
RESULTS - JULY
SHEET 1 OF 3

Suitability
S4 | **SUITABLE FOR STAGE APPROVAL**

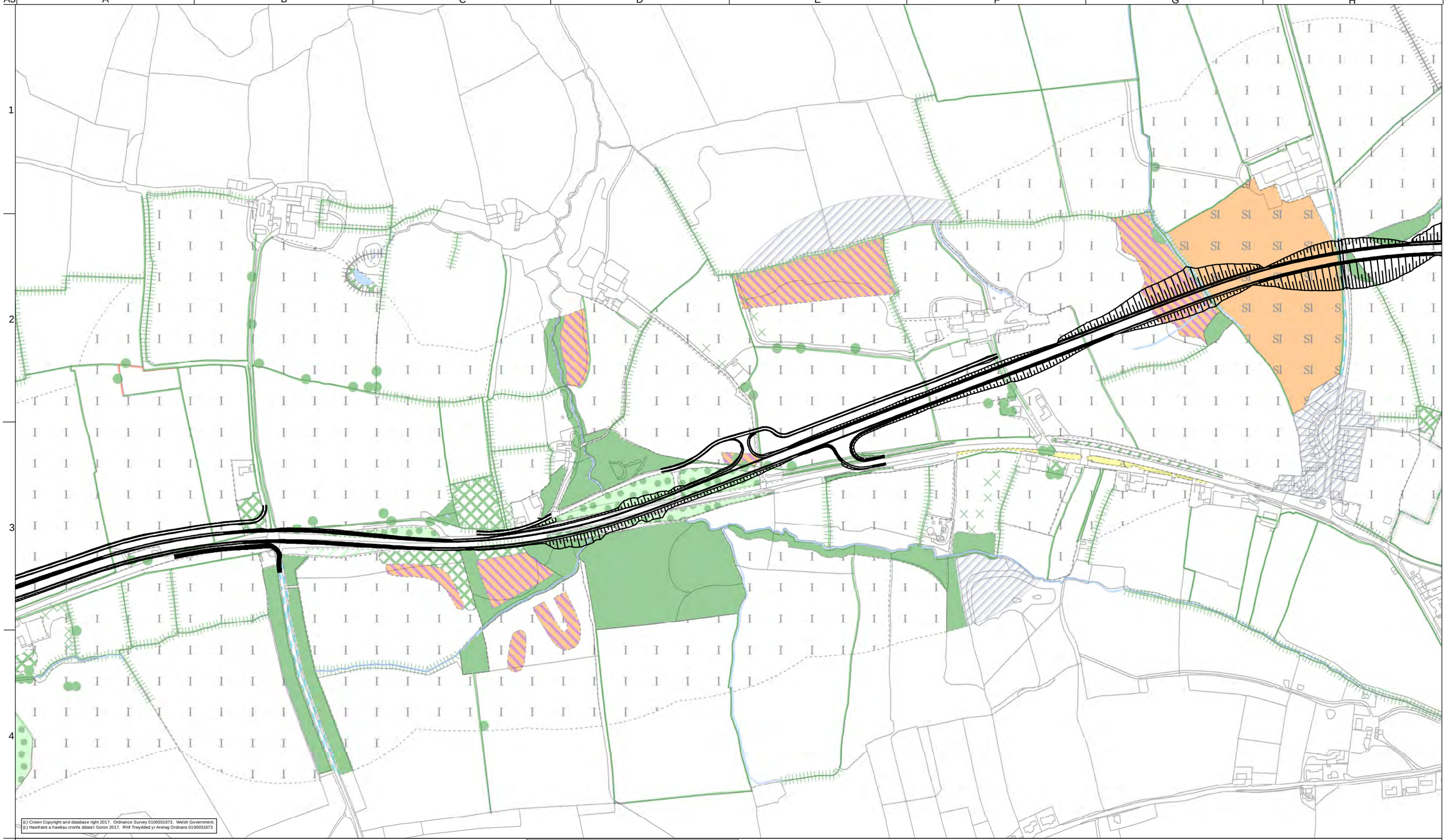
Scale at A3
1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 13/11/18	Date 13/11/18	Date 13/11/18	Date 13/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0095
Project | Originator | Volume | Location | Type | Role | Number

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4



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LEGEND

PROPOSED ALIGNMENT

N.B. NO BIRDS RECORDED IN THIS EXTENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS | MOTT MACDONALD | ARUP | RICHARDS

Drawing Title

FIGURE 8.86B
BREEDING BIRDS SURVEY
RESULTS - JULY
SHEET 2 OF 3

Suitability

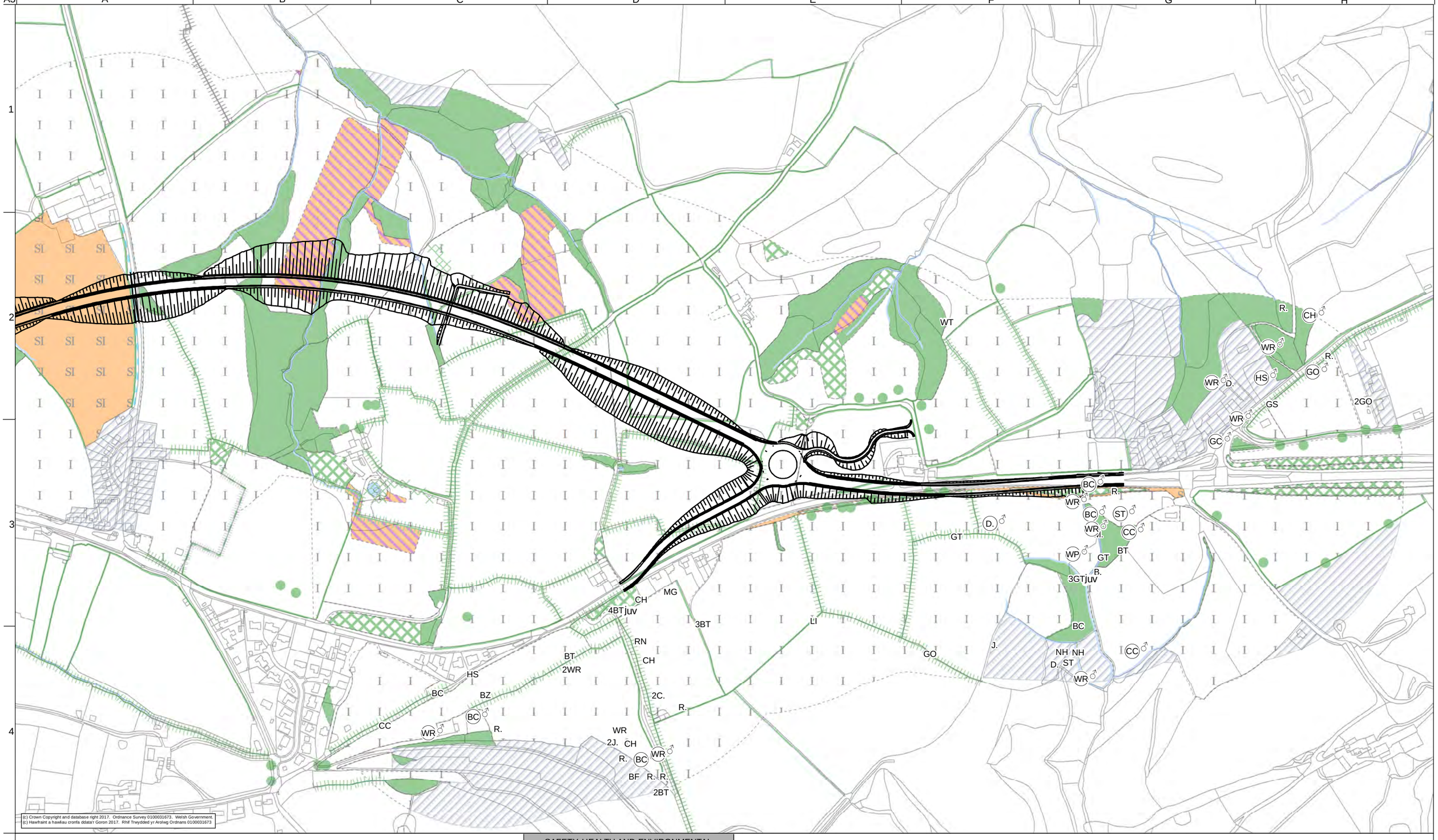
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0096



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LEGEND

- PROPOSED ALIGNMENT
- CALLING
- for FORAGING
- * OCCUPIER NEST
- ♂ SIGHT RECORD OF A PAIR
- IN SONG

SPECIES KEY

- B. BLACKBIRD
- BC BLACKCAP
- BF BULLFINCH
- BT BLUE TIT
- BZ BUZZARD
- C. CARRION CROW
- CC CHIFFCHAFF
- D. DUNNOCK
- GC GOLDCREST
- GO GOLDFINCH
- GS GREAT SPOTTED WOODPECKER
- GT GREAT TIT
- HS HOUSE SPARROW
- J. JAY
- LI LINNET
- M. MISTLE THRUSH
- MG MAGPIE
- NH NUTHATCH
- R. ROBIN
- RN RAVEN
- ST SONG THRUSH
- WP WOOD PIGEON
- WR WREN

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction: None

Maintenance / Cleaning: None

Use: None

Decommissioning / Demolition: None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title: A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client: Llywodraeth Cymru Welsh Government

Delivery Team: ARCADIS, MOTT MACDONALD, ARUP, RICHARDS

Drawing Title: FIGURE 8.86C BREEDING BIRDS SURVEY RESULTS - JULY SHEET 3 OF 3

Suitability: S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:5,000

Rev	By	Chkd	Appd	Auth
P03	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name: A40LVP - ARP - VES - SWI - DR - LE - 0097

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VES	SWI	DR	LE	0097



LEGEND

- PROPOSED ALIGNMENT
- POTENTIAL NEST SITE
- TEMPORARY REST SITE
- OPTIMUM FORAGING HABITAT
- SUB-OPTIMAL FORAGING HABITAT
- POOR QUALITY FORAGING HABITAT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 8.87
BARN OWL SURVEY RESULTS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0085
Project | Originator | Volume | Location | Type | Role | Number

A3

LEGEND

PROPOSED ALIGNMENT

COMMON LIZARD

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)
Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	12/11/18	UPDATE FOLLOWING COMMENTS	HC	PW	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 8.88
REPTILE SURVEY RESULTS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

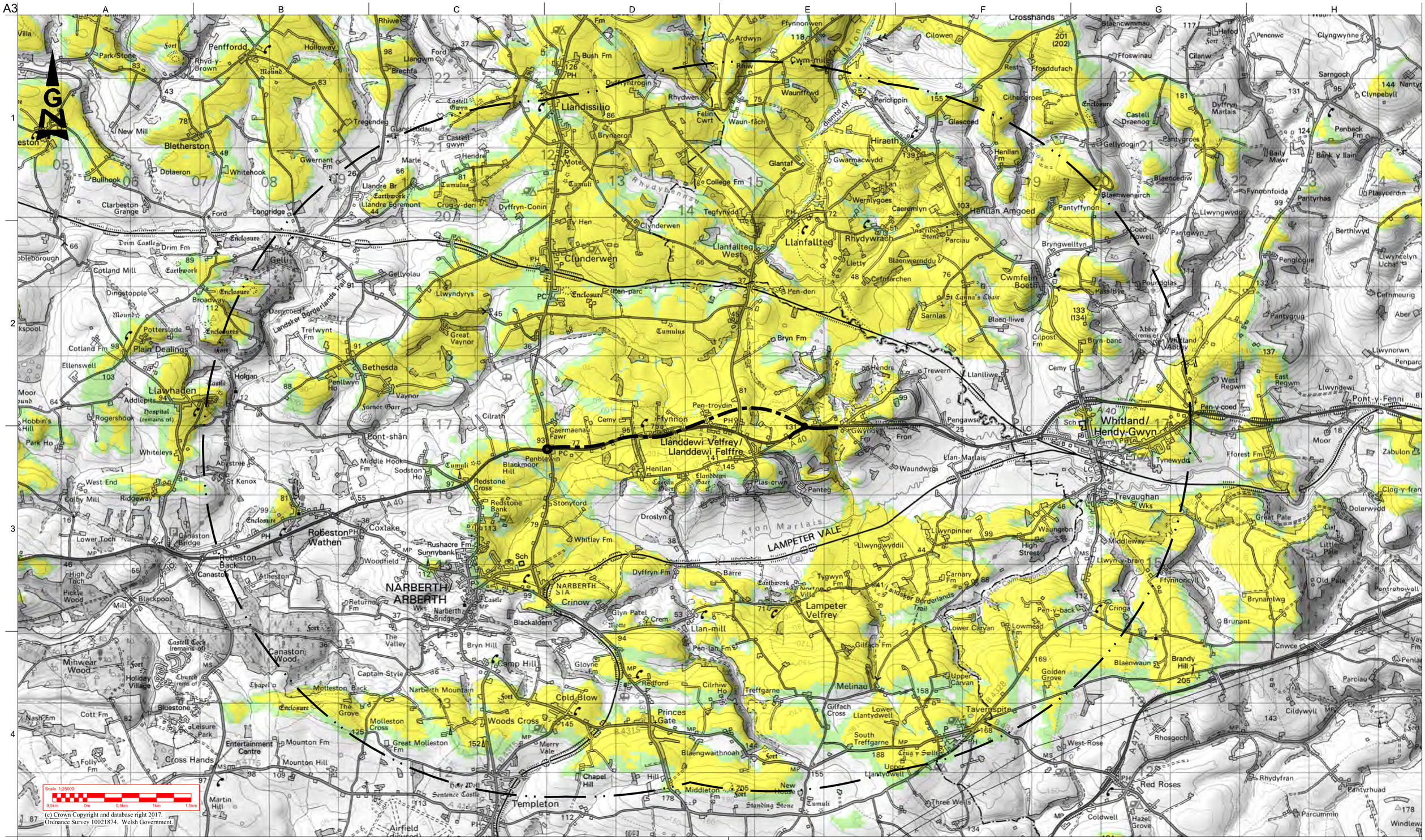
Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P04	HC	PW	TE	GD
	Date 12/11/18	Date 12/11/18	Date 12/11/18	Date 12/11/18

Name
A40LVP - ARP - VES - SWI - DR - LE - 0061
Project | Originator | Volume | Location | Type | Role | Number

NB: Badger Sett Drawings have been withdrawn from this ES as the information displayed is confidential.

A3



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Legend

- Scheme centre-line
- 5 km study area boundary
- Zone of Theoretical Visibility (Road Surface)
- Zone of Theoretical Visibility (Commercial Vehicles)

NOTE:
VISIBILITY TAKES NO ACCOUNT OF BUILDINGS, VEGETATION OR OTHER SURFACE OBSTACLES.

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	AS	GD
P02	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P03	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Delivery Team
ARUP

Drawing Title
FIGURE 9.1
ZONE OF THEORETICAL VISIBILITY

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

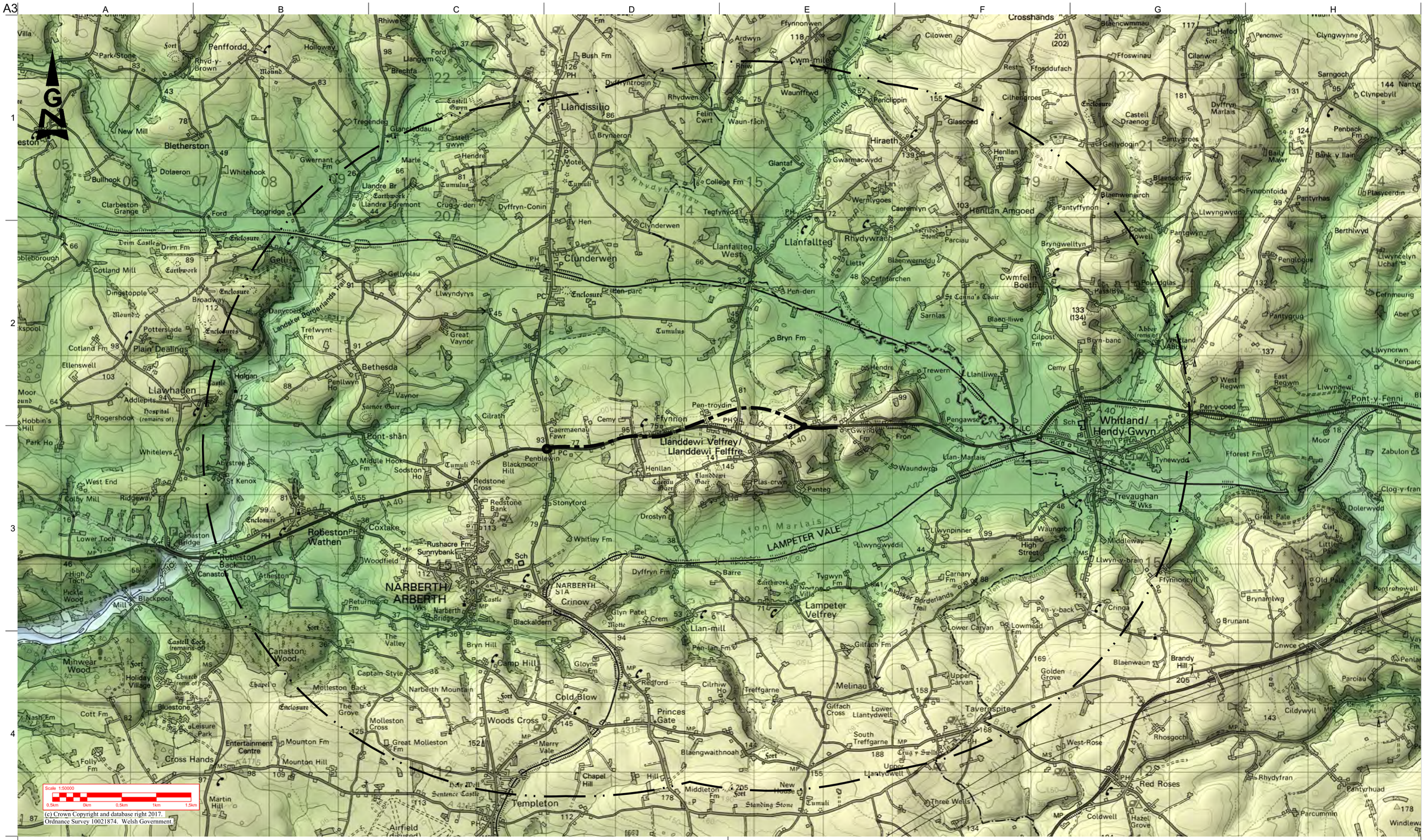
Scale at A3
1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0001
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



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Legend

- Scheme centre-line
- 5 km study area boundary

Level (metres Above Ordnance Datum)

- 400 to 500 mAOD
- 300 to 400 mAOD
- 250 to 300 mAOD
- 200 to 250 mAOD
- 150 to 200 mAOD
- 100 to 150 mAOD
- 75 to 100 mAOD
- 50 to 75 mAOD
- 25 to 50 mAOD
- 10 to 25 mAOD
- sea level to 10 mAOD
- sea level

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	AS	GD
P02	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P03	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Delivery Team
ARUP

Drawing Title
FIGURE 9.2
LANDFORM AND TERRAIN

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name: A40LVP - RML - ELS - SWI - DR - L - 0002
(Project | Originator | Volume | Location | Type | Role | Number)

Do not scale

A3

A B C D E F G H

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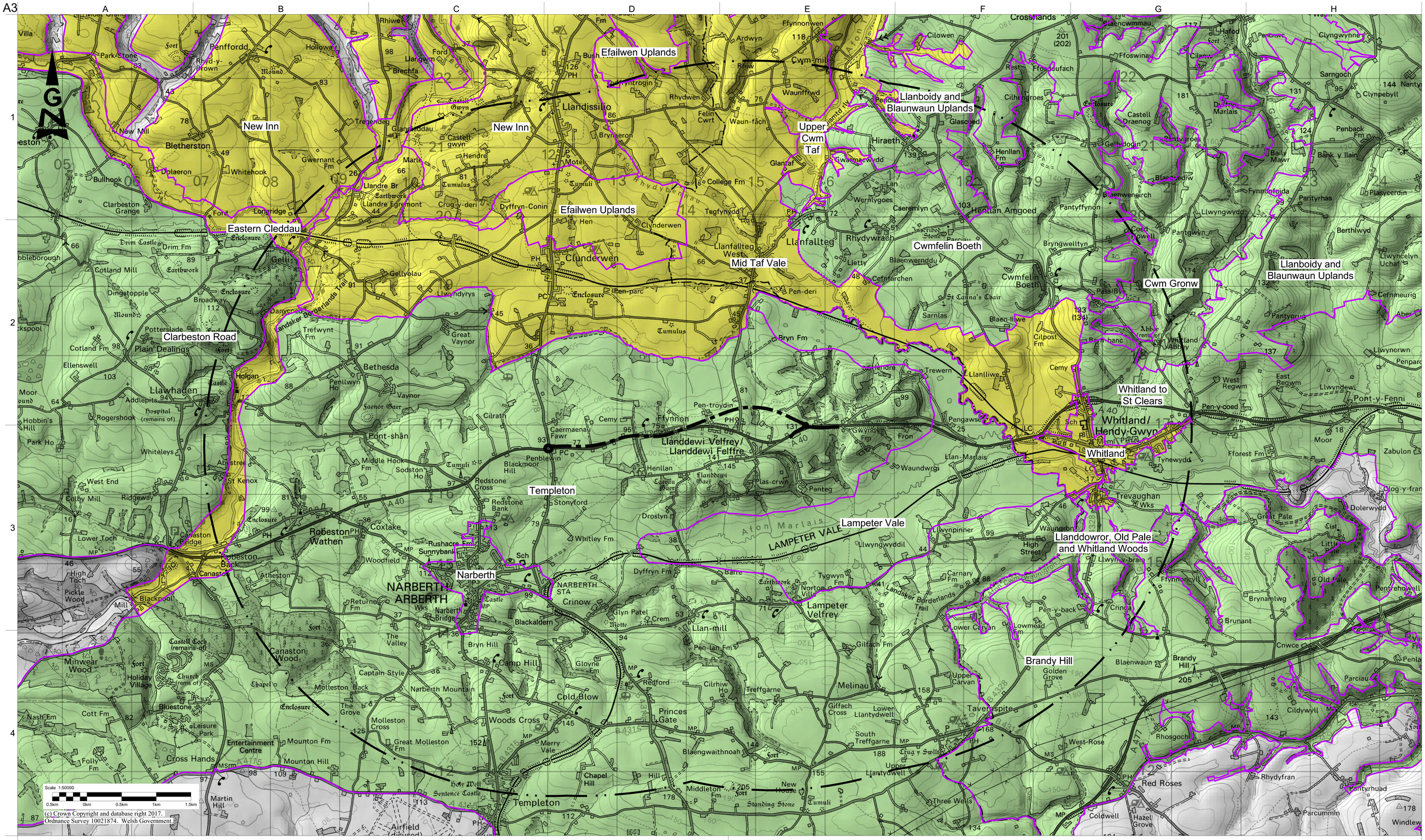

Legend

- Scheme centre-line
- 5 km study area boundary

Visual and Sensory Aspect Areas Overall Evaluation

- Outstanding
- High
- Moderate
- Low

Visual and Sensory Aspect Areas

Pembrokeshire	Carmarthenshire
042 - Clarbeston Road	103 - Brandy Hill
044 - New Inn	115 - Whitland
046 - Eastern Cleddau	119 - Upper Cwm Taf
047 - Templeton	259 - Llanboidy and Blaunwaun Uplands
048 - Narberth	446 - LLanddowror, Old Pale and Whitland Woods
049 - Lampeter Vale	459 - Mid Taf Valley
	718 - Cwm Gronw
	747 - Cwmfelin Boeth
	964 - Efailwen Uplands
	995 - Whitland to St Clears

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P04	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

ARCADIS
MOTT MACDONALD

Delivery Team
ARUP
RICHARDS

Drawing Title
FIGURE 9.3.1
LANDMAP EVALUATION
VISUAL AND SENSORY ASPECT AREAS
SHEET 1 OF 5

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0003
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

Narberth and Llanddewi Velfrey

Scale 1:50000

0.5km 0km 0.5km 1km 1.5km

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Legend

- Scheme centre-line
- 5 km study area boundary

Geological Landscape Aspect Areas
Overall Evaluation

- Outstanding
- High
- Moderate
- Low

Geological Landscape Aspect Areas

Pembrokeshire
195 - Narberth and Llanddewi Velfrey

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P04	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS | MOTT MACDONALD | ARUP | RICHARDS

Drawing Title
FIGURE 9.3.2
LANDMAP EVALUATION
GEOLOGICAL LANDSCAPE ASPECT AREA
SHEET 2 OF 5

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0008
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4

N.E. of Saundersfoot

LAMPETER VALE

Scale 1:50000

0.5km 0km 0.5km 1km 1.5km

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Legend

- Scheme centre-line
- 5 km study area boundary

Landscape Habitats Aspect Areas Overall Evaluation

- Outstanding
- High
- Moderate
- Low

Landscape Habitats Aspect Areas

Pembrokeshire
885 - N.E of Saundersfoot

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P04	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS | M MOTT MACDONALD | ARUP | RICHARDS

Drawing Title
FIGURE 9.3.3
LANDMAP EVALUATION
LANDSCAPE HABITATS ASPECT AREAS
SHEET 3 OF 5

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

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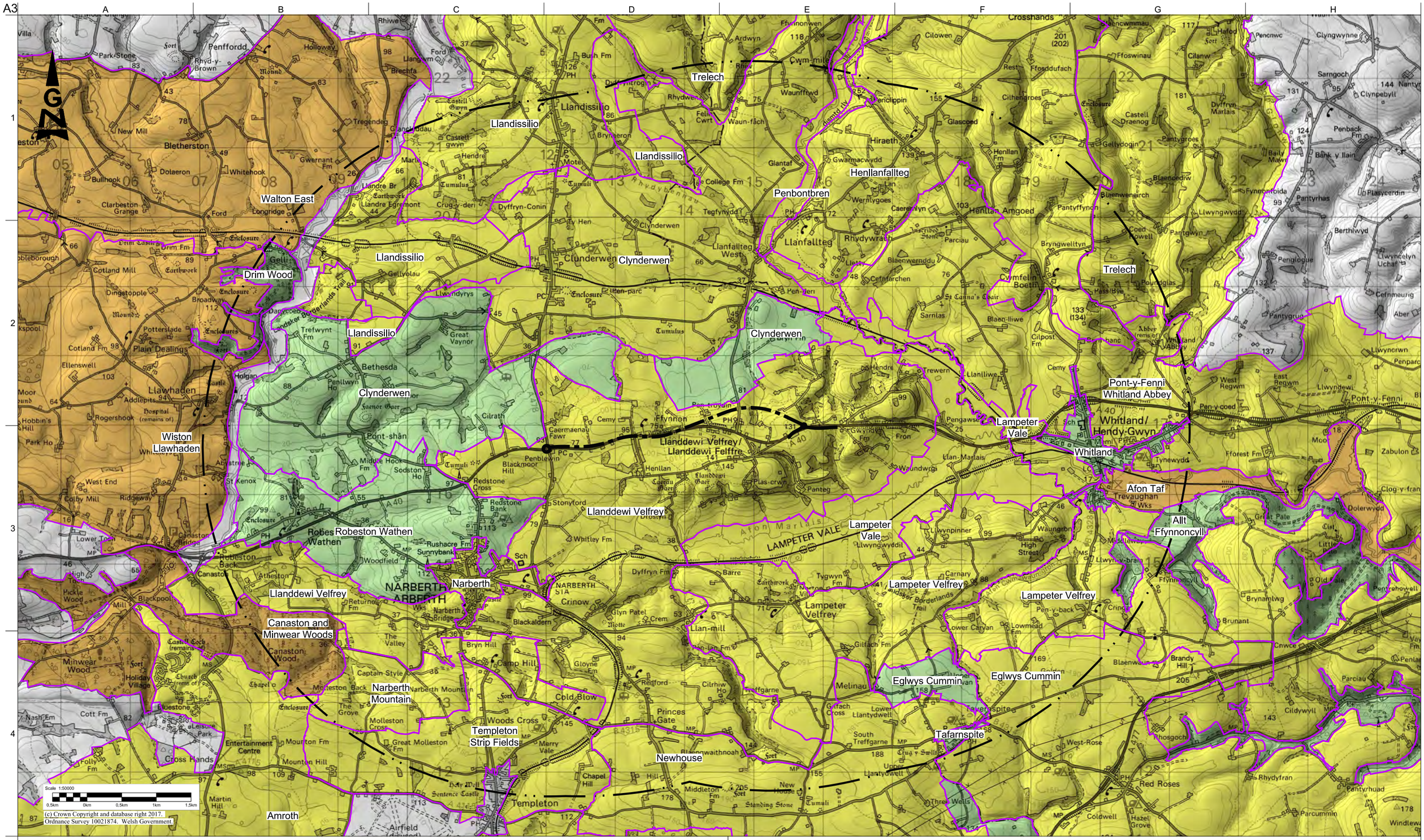
(Project | Originator | Volume | Location | Type | Role | Number)

Do not scale

A3



Legend

- Scheme centre-line
- 5 km study area boundary

Historic Landscape Aspect Areas Overall Evaluation

- Outstanding
- High
- Moderate
- Low

Historic Landscape Aspect Areas

Pembrokeshire
40349 - Lampeter Velfrey
40350 - Eglwys Cummin
40353 - Lampeter Vale
42472 - Llandissilio
42473 - Clynderwen
43906 - Canaston and Minwear Woods
46162 - Amroth
46163 - Tafarnspite
46164 - Newhouse
46166 - Templeton Strip Fields
46168 - Narberth Mountain
46204 - Wlston - Llawhaden
46205 - Robeston Wathen
46206 - Llanddewi Velfrey
46207 - Narberth

Carmarthenshire
40345 - Afon Taf
40346 - Pont-y-Fenni, Whitland Abbey
40347 - Whitland
40348 - Allt Ffynnoncyll
40349 - Lampeter Velfrey
40350 - Eglwys Cummin
40353 - Lampeter Vale
40354 - Penbontbren
42460 - Henllanfallteg
42472 - Llandissilio
42473 - Clynderwen
42474 - Trelech

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P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P04	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 9.3.4
LANDMAP EVALUATION
HISTORIC LANDSCAPE ASPECT AREAS
SHEET 4 OF 5

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0010
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

Lowlands
Railway System
Rural Carmarthenshire
Lowlands
Whitland
Windfarms
M4, A48, A40
Whitland
Swansea to Haverfordwest
Principal Roads
Railway System
Lowlands
Rural Carmarthenshire
Lowlands

Scale 1:50000
0.5km 0km 0.5km 1km 1.5km

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Legend

- Scheme centre-line
- 5 km study area boundary

Cultural Landscape Aspect Areas Overall Evaluation

- Outstanding
- High
- Moderate
- Low

Cultural Landscape Aspect Areas

Pembrokenshire
009 - Railway System
196 - Lowlands
829 - Narberth
977 - Principal Roads

Carmarthenshire
001 - M4, A48, A40
005 - Swansea to Haverfordwest Railway
033 - Windfarms
050 - Whitland
061 - Rural Carmarthenshire

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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
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Project Title
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Delivery Team
ARUP

Drawing Title
FIGURE 9.3.5
LANDMAP EVALUATION
CULTURAL LANDSCAPE ASPECT AREAS
SHEET 5 OF 5

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0011
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



Legend

- Scheme centre-line
- 5 km study area boundary

*Source date reproduced with permission of:

1. Natural Resources Wales
2. Dyfed Archaeological Trust
3. Cadw

Designated Areas

- Pembrokeshire Coast National Park*1
- Historic Landscape Character Area*2
- Registered Historic Park and Garden*3
- Registered Ancient Woodland*1
- Cultural Heritage Designation (SAM)*3
- Nature Conservation Designation (SSSI / SAC / SPA / Country Park)*1

Sites

Pembrokeshire Coast National Park
- A. Mynydd Preseli
- B. Daugleddau
- C. Saundersfoot Settled Coast

Historic Landscapes
- a. Preseli
- b. Milford Haven Waterway
- c. Taf and Tywi Estuary
- d. Tywi Valley

Registered Park and Garden
1. Slebech Park
2. Lanshipping
3. Picton Castle
4. Molleston Baptist Chapel
5. Blackaldern

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P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
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Project Title
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Drawing Title
FIGURE 9.4
OVERVIEW OF DESIGNATED LANDSCAPE

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: N/A

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

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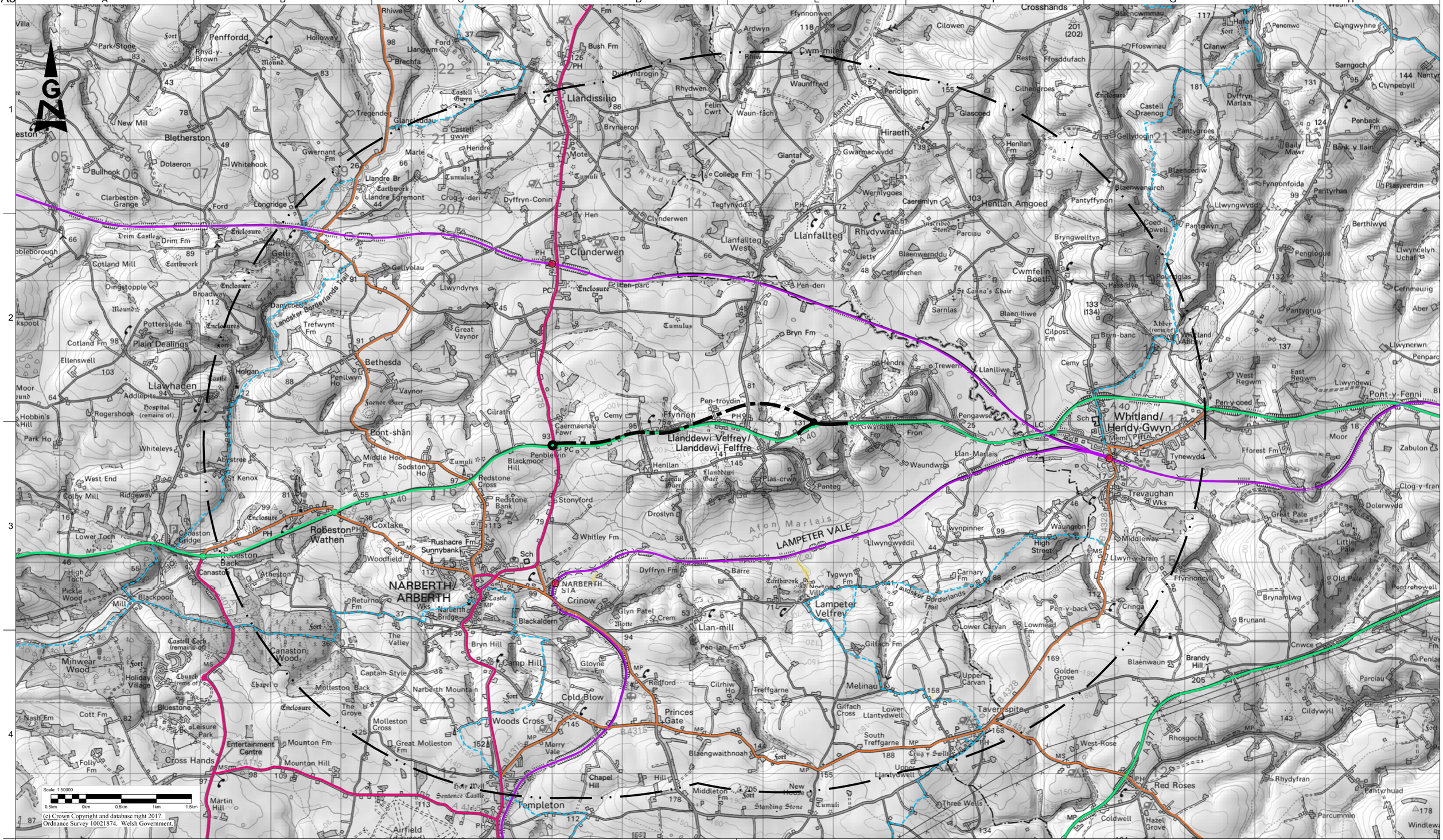
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



Legend

- Scheme centre-line
- 5 km study area boundary

Roads and Recreational Routes/Areas

- A-Road (Trunk Road Network)*1
- A-Road*1
- B-Road*1
- Railway Line*1
- Long Distance Path*2
- Common Land*3

*Source date reproduced with permission of:

1. Ordnance Survey Great Britain
2. Long Distance Walkers Association
3. Natural Resources Wales

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P03	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
P04	18/03/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

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MUTT MACDONALD
RICHARDS

Drawing Title
FIGURE 9.5
ROADS AND RECREATION

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 N/A

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

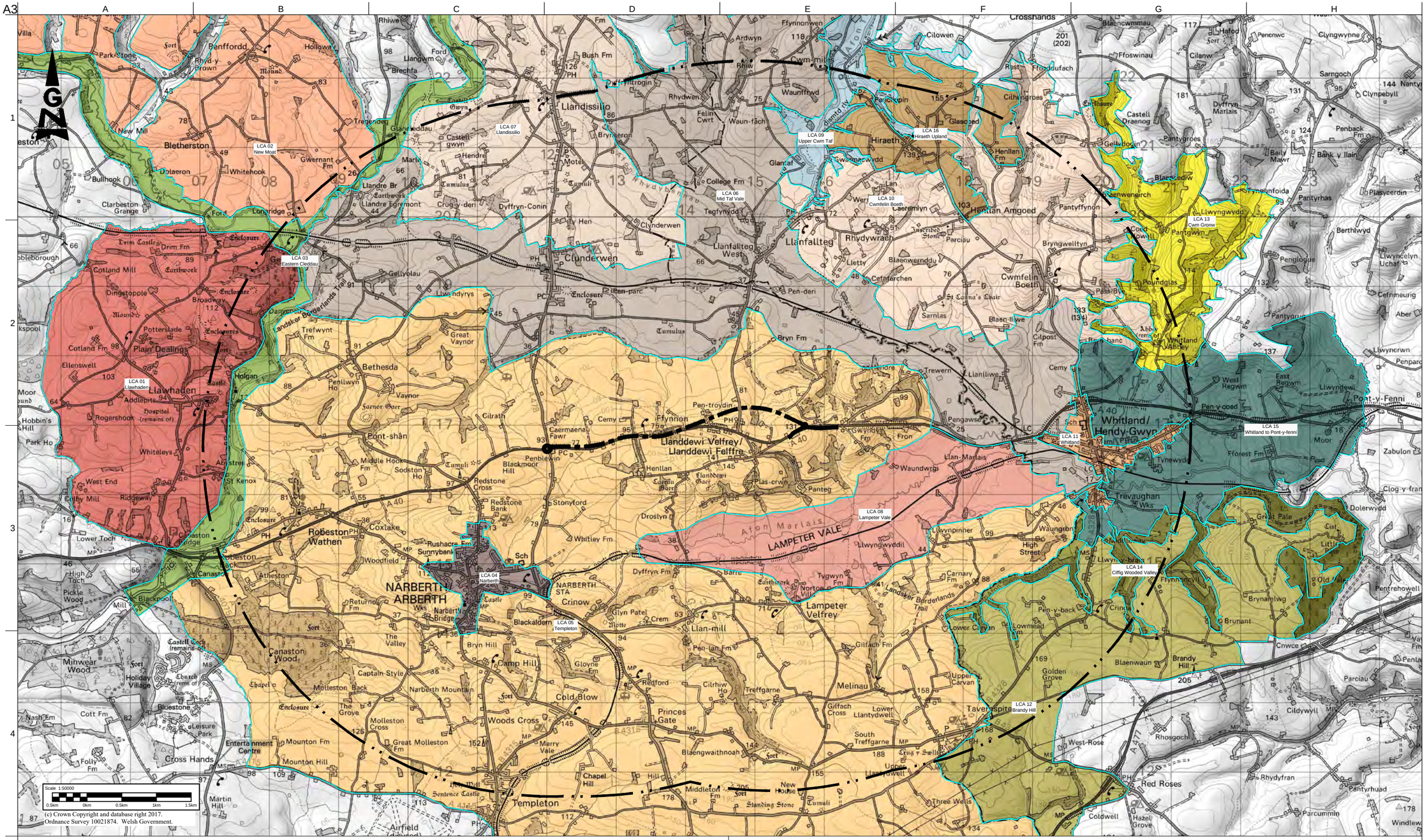
Name
A40LVP - RML - ELS - SWI - DR - L - 0005
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4



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Legend

- Scheme centre-line
- 5 km study area boundary

Landscape Character Areas

01	Llawhaden
02	New Moat
03	Eastern Cleddau
04	Narberth
05	Templeton
06	Mid Taf Vale
07	Llandissilio
08	Lampeter Vale
09	Upper Cwm Taf
10	Cwmfelin Boeth
11	Whitland
12	Brandy Hill
13	Cwm Gronw
14	Ciffig Wooded Valley
15	Whitland to Pont-y-fenni
16	Hiraeth Upland

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	22/01/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD
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Drawing Title
FIGURE 9.6
LANDSCAPE CHARACTER AREAS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:50000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 05/02/19	Date 05/02/19	Date 18/03/19	Date 18/03/19

Name: A40LVP - RML - ELS - SWI - DR - L - 0006
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 4

SHEET 8

SHEET 12

SHEET 16

SHEET 3

SHEET 7

SHEET 11

SHEET 15

SHEET 2

SHEET 6

SHEET 10

SHEET 14

SHEET 1

SHEET 5

SHEET 9

SHEET 13

Clunderwen

Llanddewi Felffrey/ Llanddewi Velfrey

Lampeter Vale

Scale 1:20000

100m 0m 200m 400m 600m

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Legend

- Scheme centre-line
- 500 m offset
- 2 km offset
- Road surface
- Earthworks cutting
- Earthworks embankment

Visual barriers

- Ridge lines
- Tree belts and woodland

Surface contours
- 50 m major interval
- 10 m minor interval

Zone of Theoretical Visibility and Visual Receptors

- Location with theoretical view of proposed road and traffic
- Location with theoretical view of high sided traffic only
- Location of representative viewpoint
- Receptor Buildings (refer to Visual Effects Schedule)
- Right Of Way - Bridleway
- Right Of Way - Public Footpath

Note: ZTV indicates the location where visual effects may be expected. It takes no account of surface features such as buildings and significant vegetation.

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
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ARUP
RICHARDS

Drawing Title
FIGURE 9.7
VISUAL EFFECTS DRAWING
OVERVIEW

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:20000 @ A3

Rev	By	Chkd	Appd	Auth
P02	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
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Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4

SHEET 2

SHEET 5

SP27/2/1

SP9/1/1

7NX.9 7NX.8 7NX.10 7NX.5 7NX.3 7NX.6 7NX.7 7NX.4 7NX.2 7NX.1 7EX.1

Redstone Farm

REDSTONE CROSS

Blaenarisia

Ffynnonau

Rushacre

Eyrowdn Park

Depot

Mill House

Green Meadows

Green Meadows Farm

Grove Garage

Pont-y-gorphwys Bridge

Pont-y-gorphwys

Stoneyford

Stoneyford Cottage

Leamington Cottages

Beechcroft Farm

Whitley Farm

Tumuli

Scale 1:5000

50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
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Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

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RICHARDS

Drawing Title
FIGURE 9.8.1
VISUAL EFFECTS DRAWING
SHEET 1 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

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Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 3

SHEET 1

SHEET 6

SP19/33/1

SP19/31/1

SP19/32/1

SP27/1/1

7EY.3

7EY.1

7EY.2

7HB.4

7NY.1

C

Scale 1:5000

50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Winter Year 0
  - Summer Year 15

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

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A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

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MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.2
VISUAL EFFECTS DRAWING
SHEET 2 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
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	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

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Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 4

SHEET 2

SHEET 3

7HQ.2 7HG.3 7HE.3 7HG.1 7HG.2 7HQ.1 7HQ.3 7HE.2 7HB.3 7HE.1 7HB.6 7HB.1 7HB.2 7HB.5

SP19/34/1

SP19/33/1

Scale 1:5000
50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

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Llywodraeth Cymru Welsh Government

Delivery Team
ARUP ARCADIS MOTT MACDONALD RICHARDS

Drawing Title
FIGURE 9.8.3
VISUAL EFFECTS DRAWING
SHEET 3 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

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Project | Originator | Volume | Location | Type | Role | Number

Do not scale

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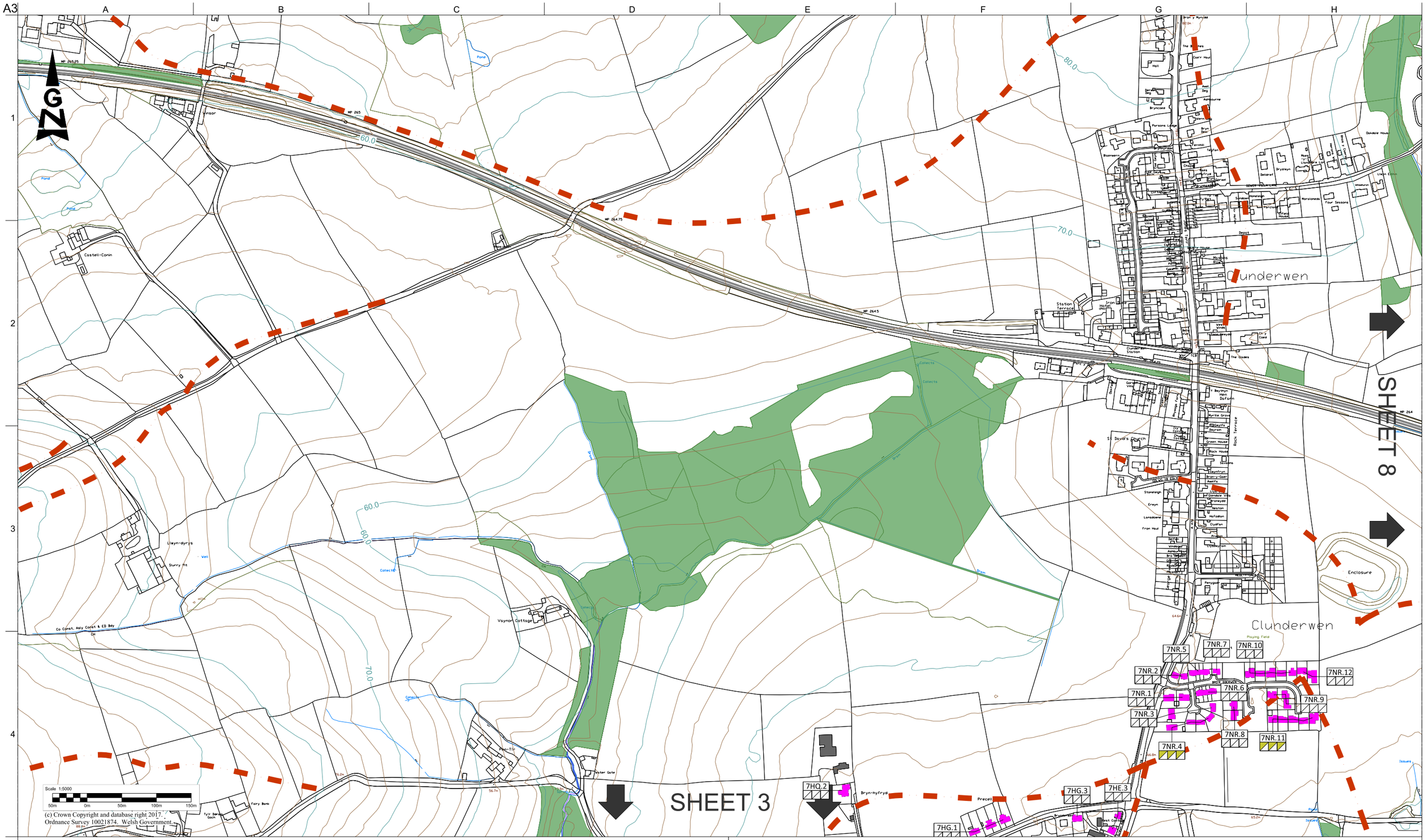

Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
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Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	---	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MUFF MACDONALD
RICHARDS

Drawing Title
FIGURE 9.8.4
VISUAL EFFECTS DRAWING
SHEET 4 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0015
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 6

SHEET 1

SHEET 4

SP19/29/1

SP19/29/2

SP19/29/3

SP19/28/1

SP19/27/1

SP19/39/1

SP19/25/1

SP19/26/2

SP19/26/1

SP19/24/1

SP19/20/2

SP19/20/3

7NZ.1

7NZ.2

8UP.1

8UP.2

8UP.3

8UR.1

Scale 1:5000

50m 0m 50m 100m 150m

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Ordinance Survey 10021874. Welsh Government.

Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
- 10 m major interval
- 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number

Construction — Summer Year 15

Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	---	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP, ARCADIS, MOTT MACDONALD, RICHARDS

Drawing Title
FIGURE 9.8.5
VISUAL EFFECTS DRAWING
SHEET 5 OF 16

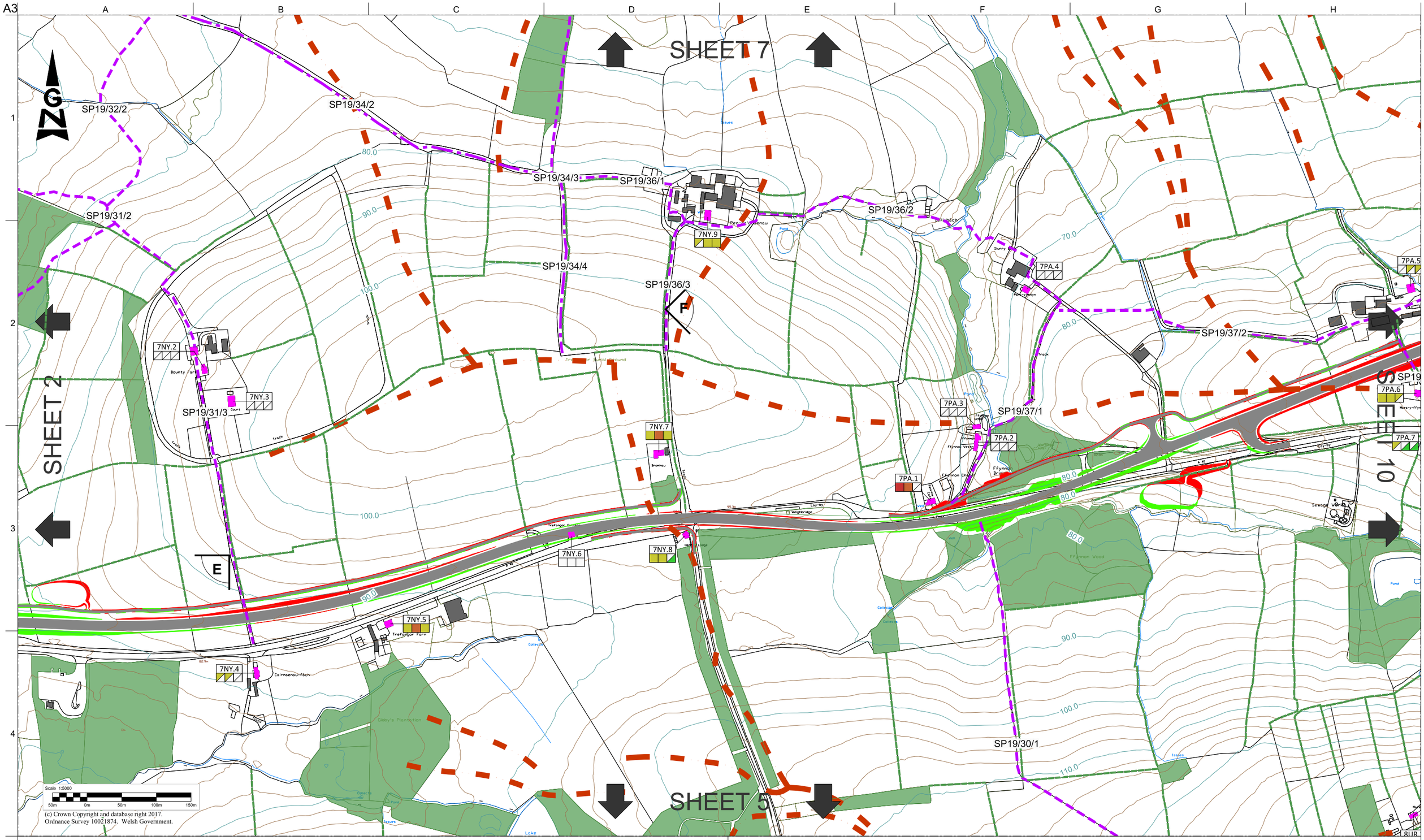
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0016
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
- Construction
- Summer Year 15
- Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

ARCADIS
MOTT MACDONALD

Delivery Team
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.6
VISUAL EFFECTS DRAWING
SHEET 6 OF 16

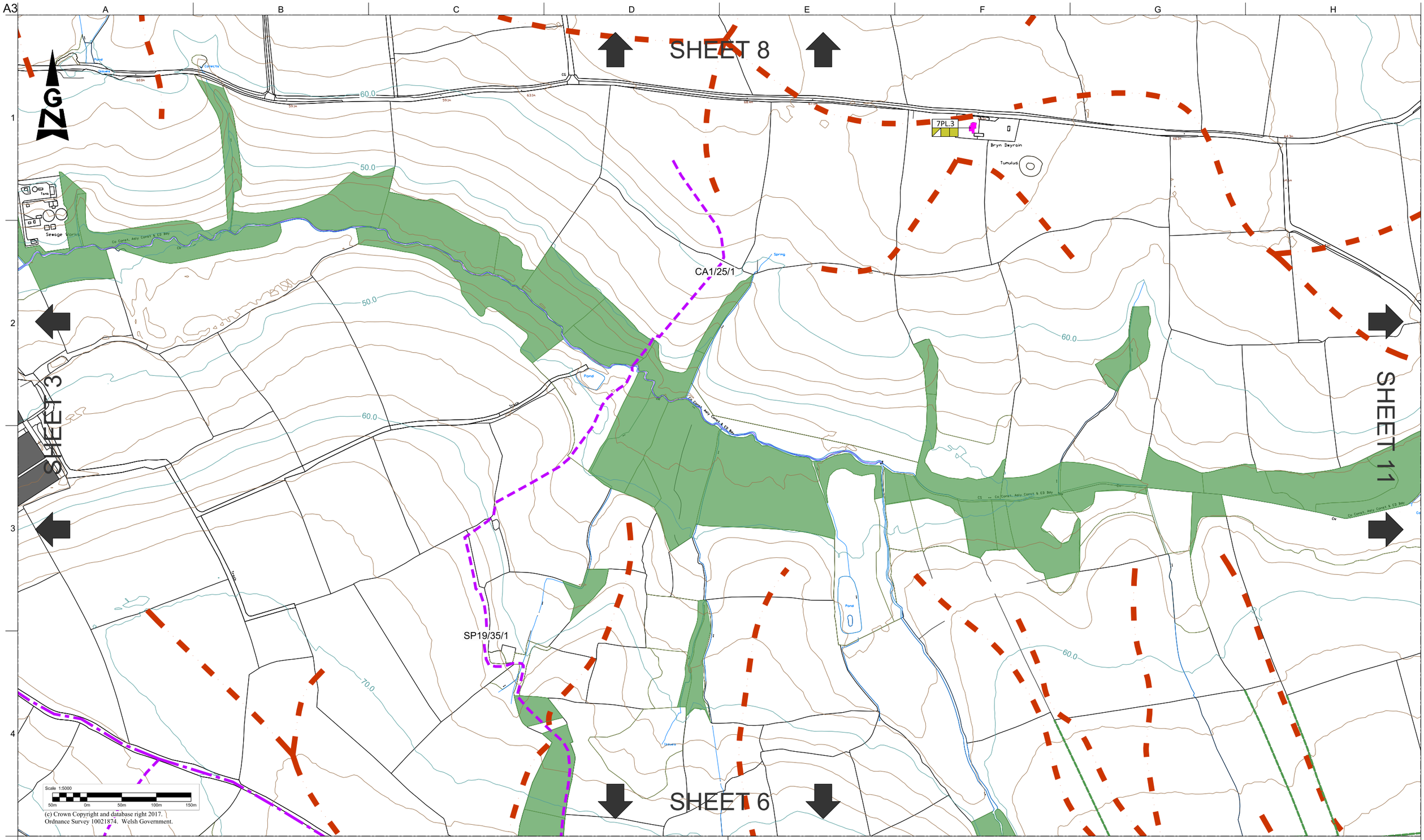
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0017
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
- Construction
- Summer Year 15
- Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

ARCADIS
MOTT MACDONALD

Delivery Team
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.7
VISUAL EFFECTS DRAWING
SHEET 7 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

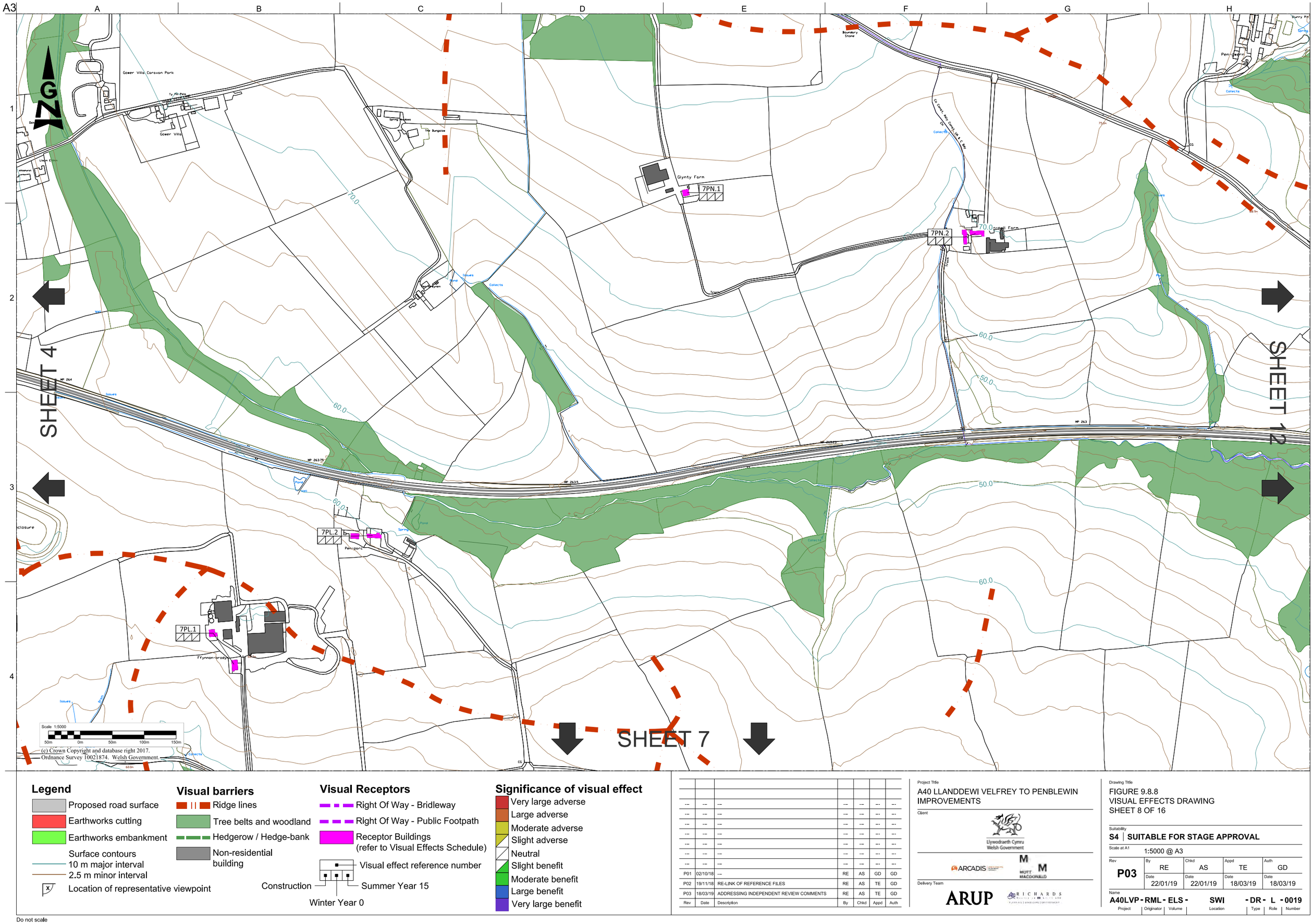
Name
A40LVP - RML - ELS - SWI - DR - L - 0018
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4



Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
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MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.8
VISUAL EFFECTS DRAWING
SHEET 8 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
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Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 10

SHEET 5

SHEET 13

SP19/22/2

SP19/21/1

SP19/22/1

SP19/20/3

SP19/14/1

SP19/18/2

SP19/17/2

SP19/14/2

8UR.1 8UR.2 8UR.3 8UR.4 8UR.5 8UR.7 8UR.8 8UR.9 8UR.10

Scale 1:5000

50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
- 10 m major interval
- 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
- Construction
- Summer Year 15
- Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

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P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 9.8.9
VISUAL EFFECTS DRAWING
SHEET 9 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

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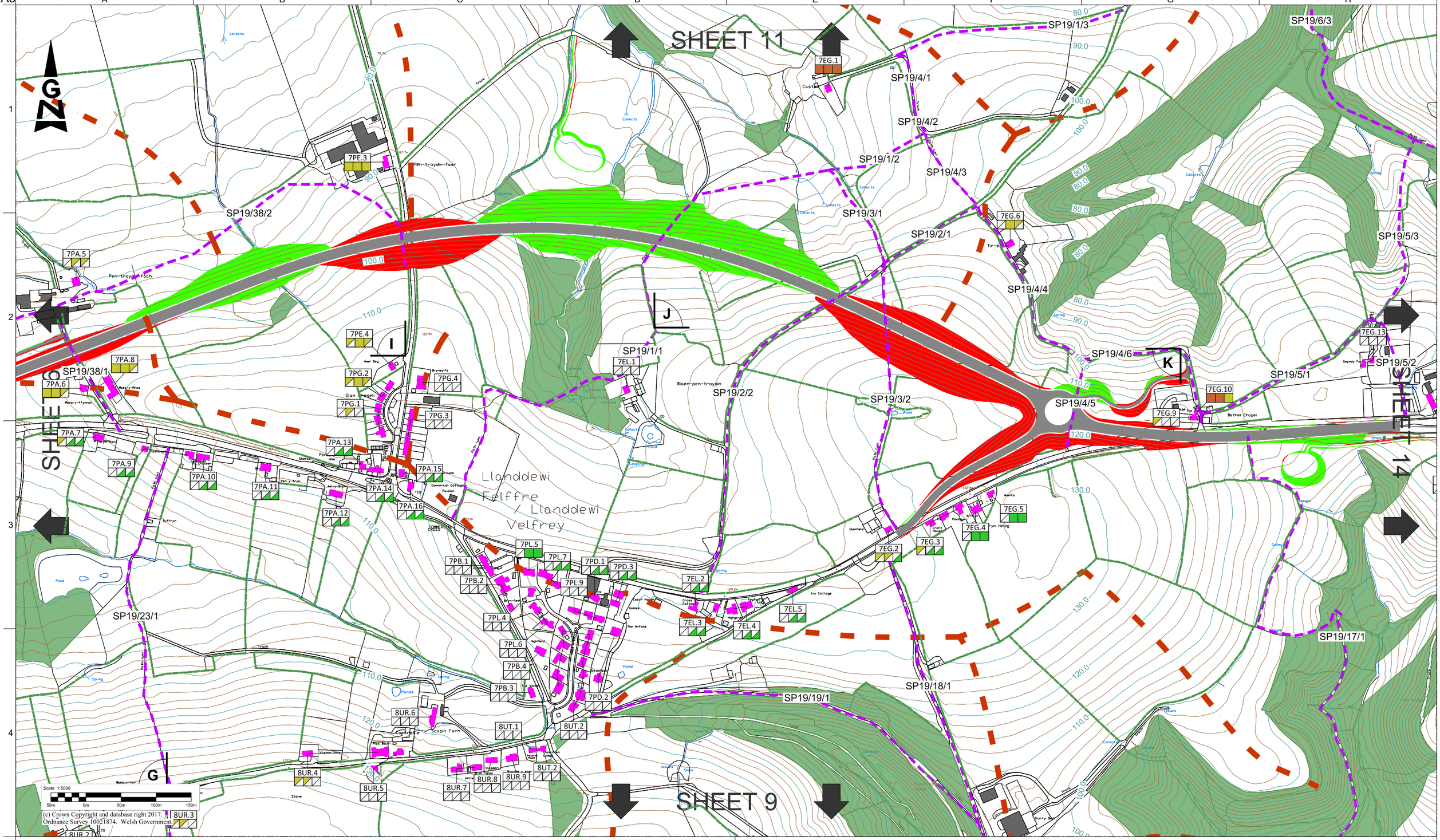
Do not scale



Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP, ARCADIS, MOTT MACDONALD, RICHARDS

Drawing Title
FIGURE 9.8.10
VISUAL EFFECTS DRAWING
SHEET 10 OF 16

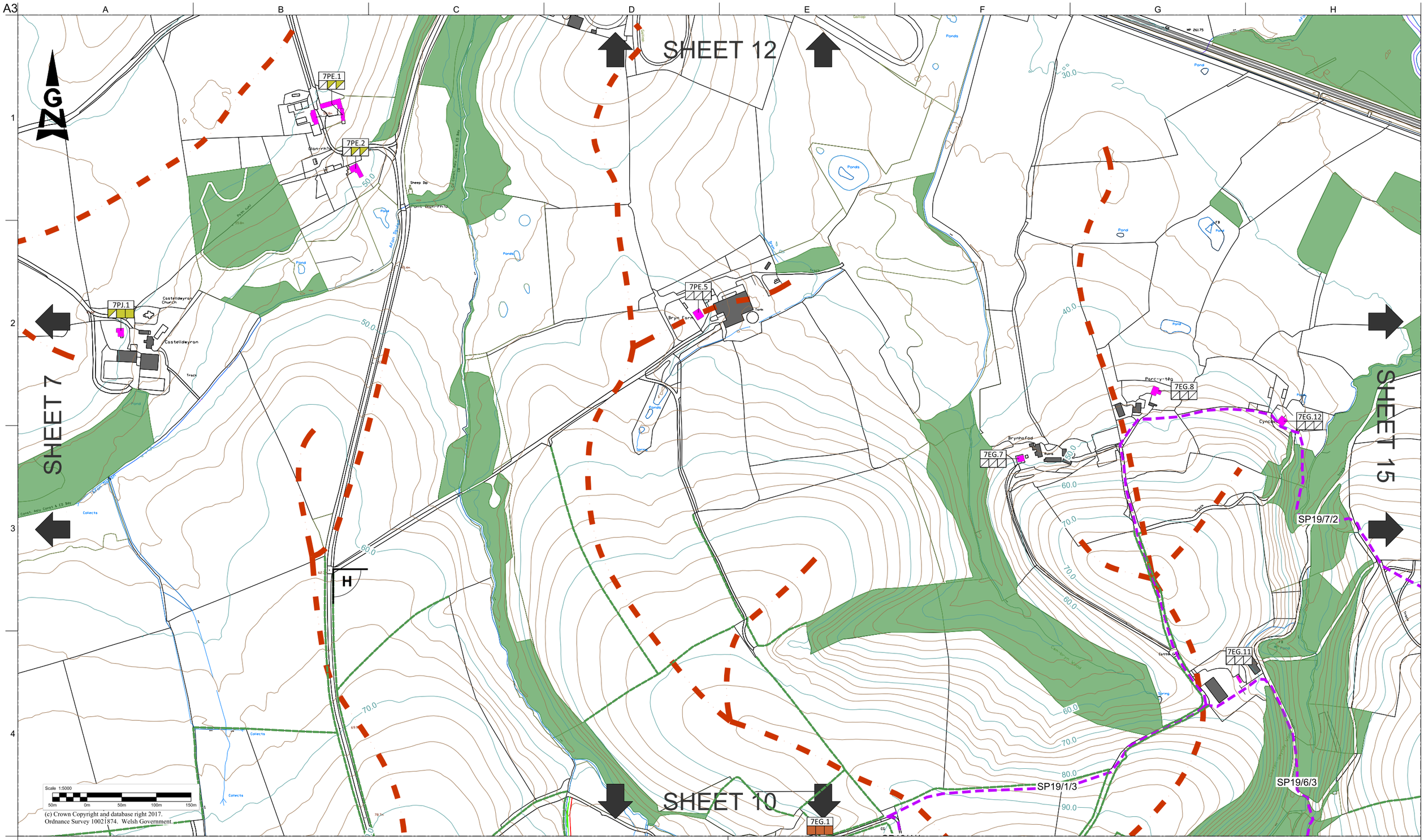
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1: 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
Date	22/01/19	22/01/19	18/03/19	18/03/19

Name: A40LVP - RML - ELS - SWI - DR - L - 0021
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
- Construction
- Summer Year 15
- Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.11
VISUAL EFFECTS DRAWING
SHEET 11 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0022
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

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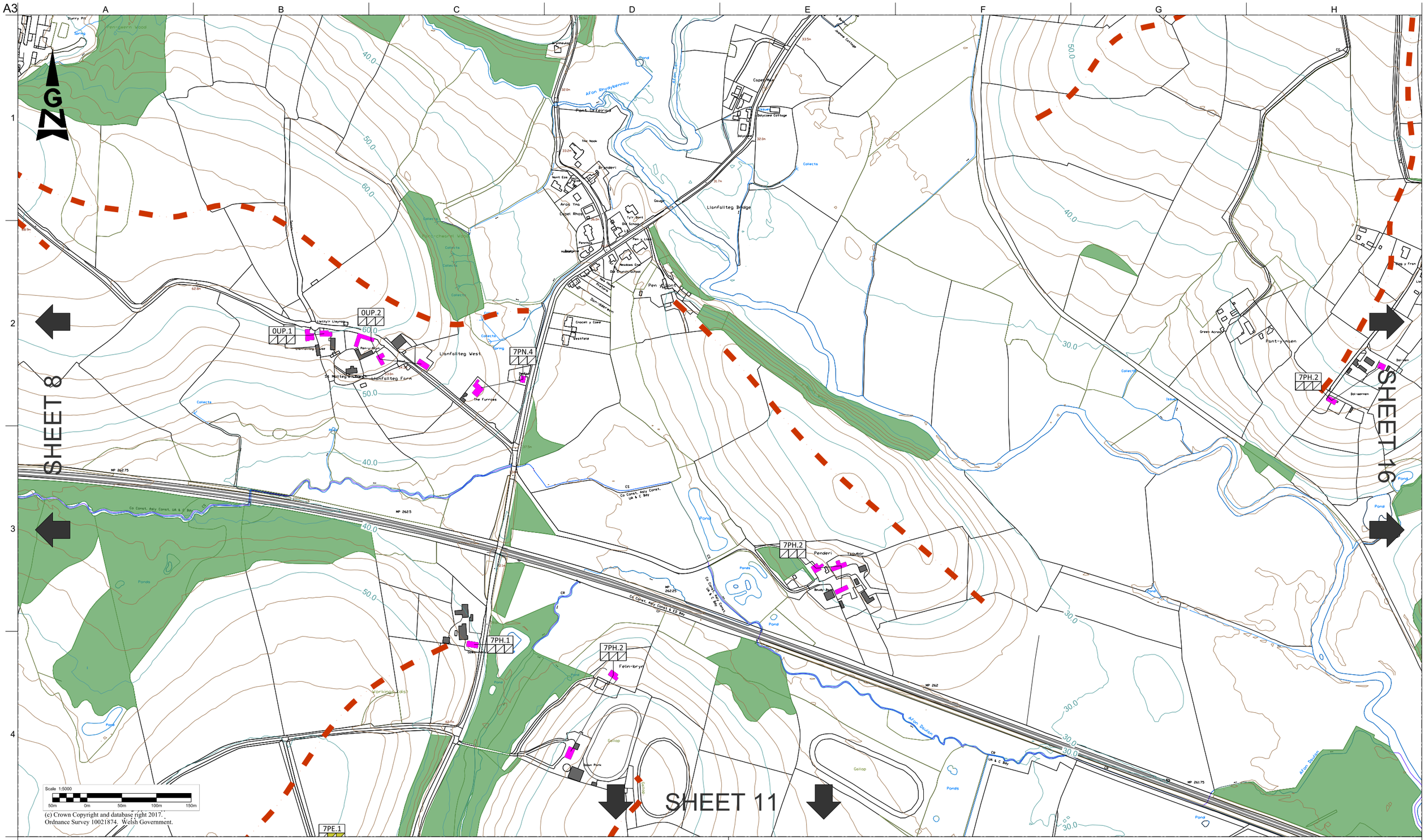

Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Do not scale

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P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
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Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 9.8.12
VISUAL EFFECTS DRAWING
SHEET 12 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0023
Project | Originator | Volume | Location | Type | Role | Number

A3

SHEET 14

SHEET 9

SP19/14/3

SP19/17/2

SP19/17/3

Scale 1:5000

50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
- 10 m major interval
- 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
- Construction
- Summer Year 15
- Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	---	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.13
VISUAL EFFECTS DRAWING
SHEET 13 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0024
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 15

SHEET 14

SHEET 13

SP19/9/1
SP19/8/1
SP19/6/2
SP19/5/3
SP19/6/1
SP19/10/1
SP19/11/1
SP19/12/1
SP19/5/2
SP19/14/5
SP19/16/1
SP19/14/4
SP19/14/3

7EQ.4
7EQ.2
7EL.6
7EH.2
7EH.1
7EQ.3
7EQ.1
0RG.1
0RG.2
0RG.3
7EJ.1
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7EJ.2
7EJ.3

50.0
60.0
70.0
80.0
90.0
100.0
110.0
30.0

Scale 1:5000
50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Summer Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

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P01	02/10/18	---	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MUFF MACDONALD
RICHARDS

Drawing Title
FIGURE 9.8.14
VISUAL EFFECTS DRAWING
SHEET 14 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0025
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

SHEET 16

SHEET 11

SHEET 14

SP19/7/1

SP19/9/1

7EQ.5

Scale 1:5000

50m 0m 50m 100m 150m

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Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Winter Year 15
  - Winter Year 0

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	---	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
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Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 9.8.15
VISUAL EFFECTS DRAWING
SHEET 15 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1 1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0026
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

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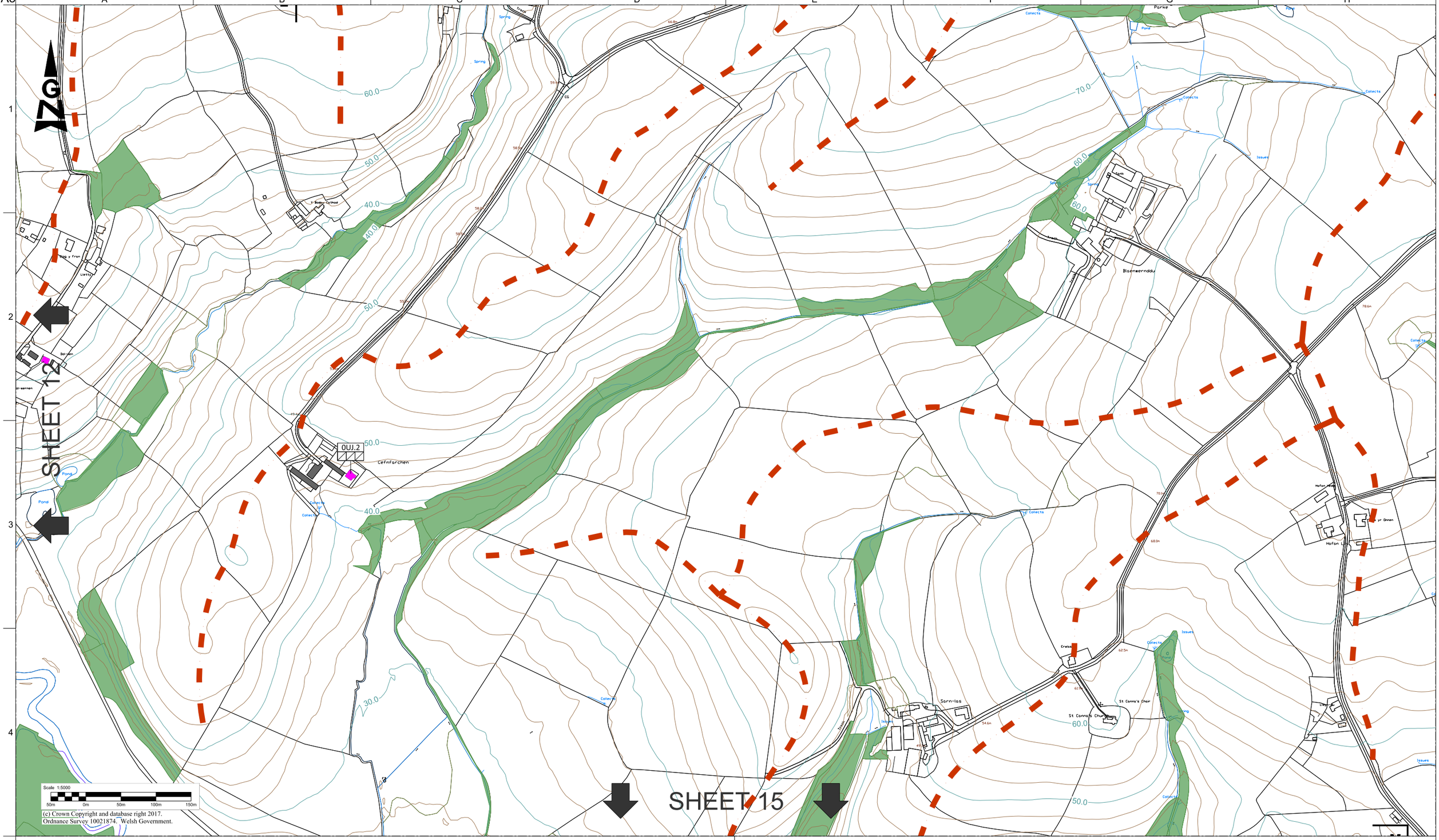

Legend

- Proposed road surface
- Earthworks cutting
- Earthworks embankment
- Surface contours
  - 10 m major interval
  - 2.5 m minor interval
- Location of representative viewpoint

Visual barriers

- Ridge lines
- Tree belts and woodland
- Hedgerow / Hedge-bank
- Non-residential building

Visual Receptors

- Right Of Way - Bridleway
- Right Of Way - Public Footpath
- Receptor Buildings (refer to Visual Effects Schedule)
- Visual effect reference number
  - Construction
  - Winter Year 0
  - Summer Year 15

Significance of visual effect

- Very large adverse
- Large adverse
- Moderate adverse
- Slight adverse
- Neutral
- Slight benefit
- Moderate benefit
- Large benefit
- Very large benefit

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	--	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	ADDRESSING INDEPENDENT REVIEW COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
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Welsh Government

Delivery Team
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ARCADIS
MUFF MACDONALD
RICHARDS

Drawing Title
FIGURE 9.8.16
VISUAL EFFECTS DRAWING
SHEET 16 OF 16

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000 @ A3

Rev	By	Chkd	Appd	Auth
P03	RE	AS	TE	GD
	Date 22/01/19	Date 22/01/19	Date 18/03/19	Date 18/03/19

Name
A40LVP - RML - ELS - SWI - DR - L - 0027
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

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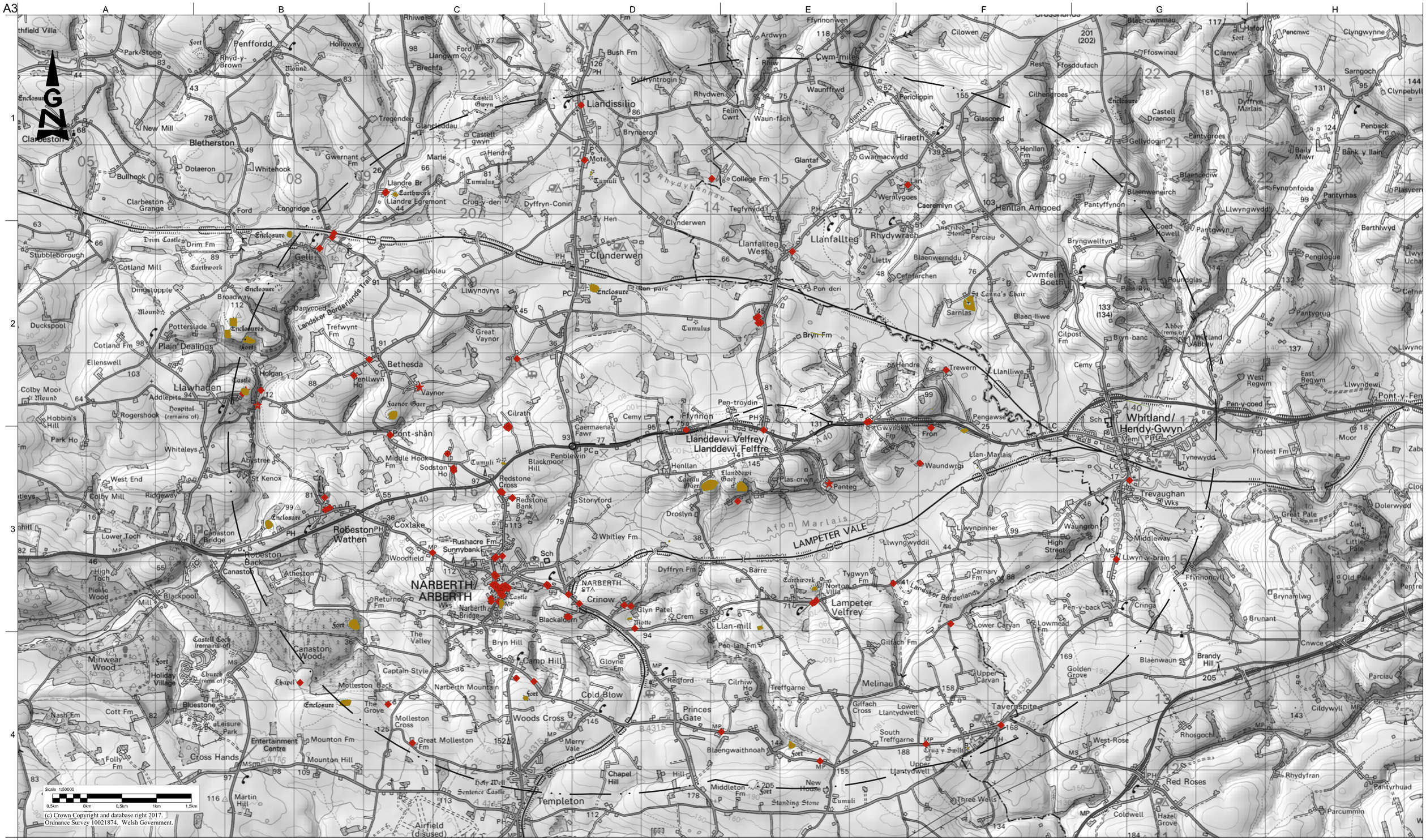

Legend

- Scheme centre-line
- 5 km study area boundary
- Scheduled Ancient Monument
- Listed Building Grade II*
- Listed Building Grade II

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	MARCH 2019 ISSUE	RE	AS	TE	GD
P04	17/04/19	RESPONSE TO ADDITIONAL COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

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MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 10.1
DESIGNATED SITES

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

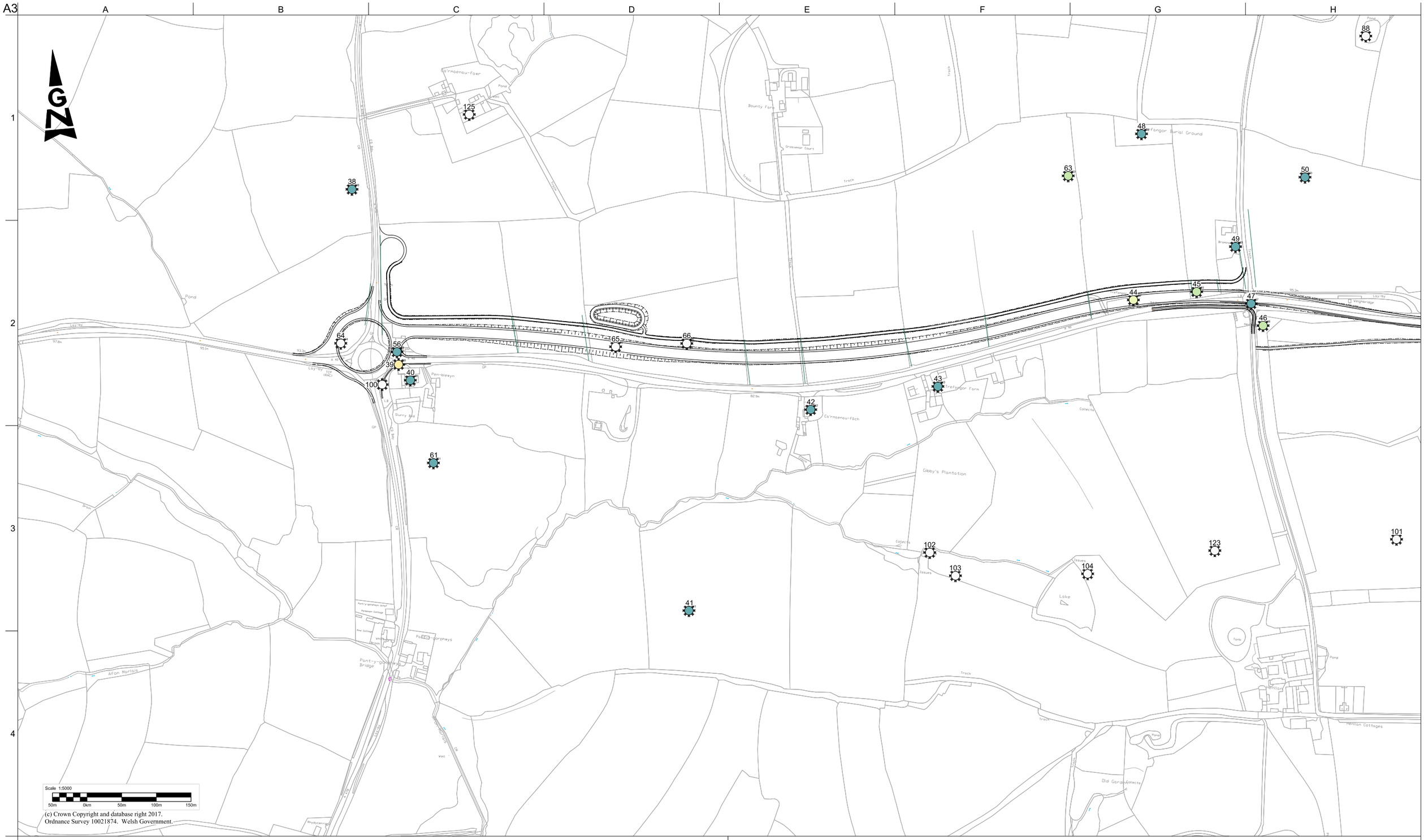
Scale at A3
1:50000

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 16/04/19	Date 16/04/19	Date 17/04/19	Date 17/04/19

Name
A40LVP - RML - EHR - SWI - DR - LH - 0003
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



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Legend

- Scheduled Ancient Monument
- Grade II* Listed Building
- Grade II Listed Building
- Hedgerow Register

Significance of effect

- Very Large
- Large / Very Large
- Large
- Large / Moderate
- Moderate
- Moderate / Slight
- Slight
- Slight / Neutral
- Neutral
- Unknown

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	MARCH 2019 ISSUE	RE	AS	TE	GD
P04	10/07/19	RESPONSE TO COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 10.2A
EFFECTS ON CULTURAL HERITAGE
SHEET 1 OF 4

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:5000

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 18/04/19	Date 18/04/19	Date 18/04/19	Date 10/07/19

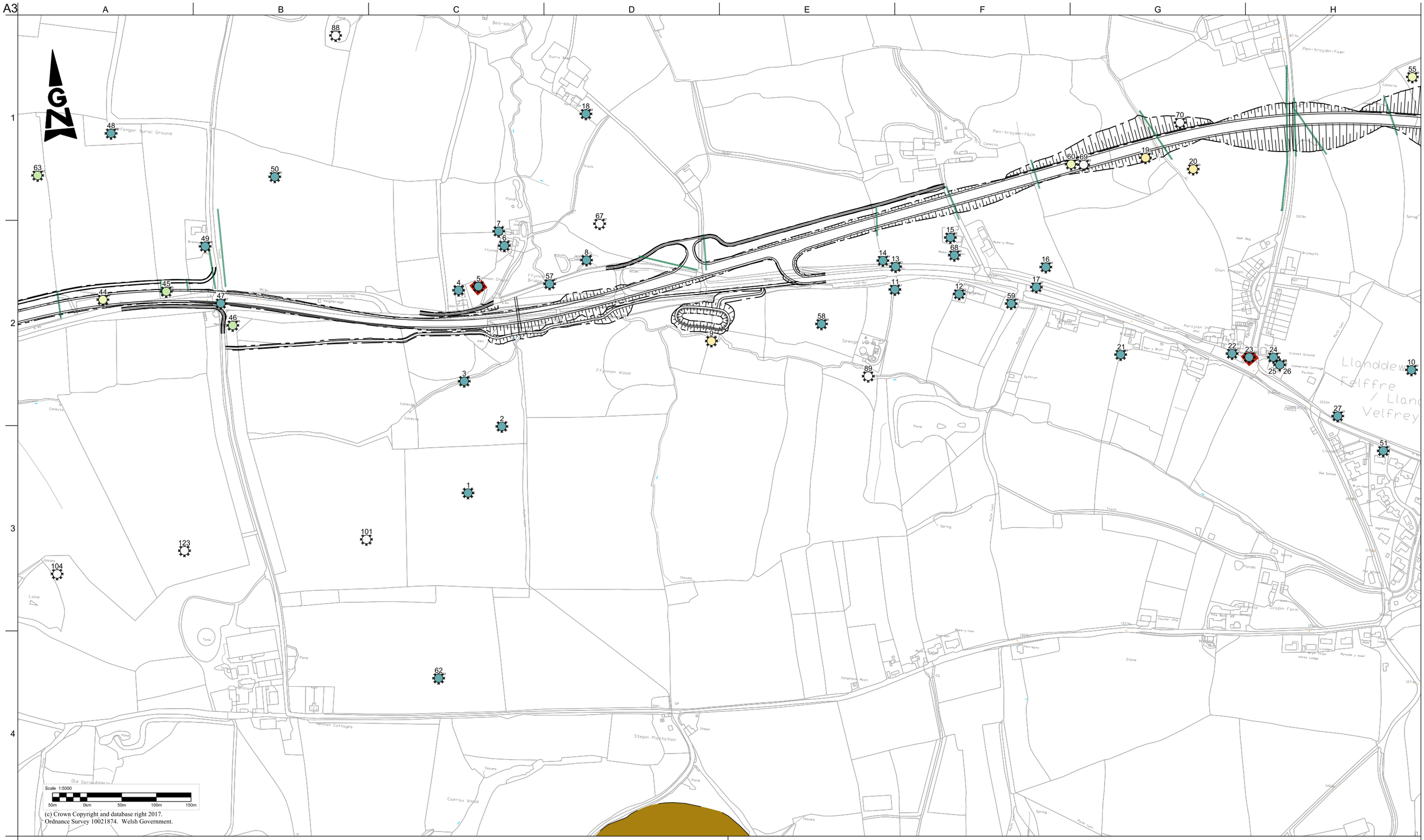
Name
A40LVP - RML - EHR - SWI - DR - LH - 0002
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4



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Legend

- Scheduled Ancient Monument
- Grade II* Listed Building
- Grade II Listed Building
- Hedgerow Register

Significance of effect

- Very Large
- Large / Very Large
- Large
- Large / Moderate
- Moderate
- Moderate / Slight
- Slight
- Slight / Neutral
- Neutral
- Unknown

Rev	Date	Description	By	Chkd	Appd	Auth
P01	02/10/18	FIRST DRAFT ISSUE	AS	AS	GD	GD
P02	19/11/18	RE-LINK OF REFERENCE FILES	RE	AS	TE	GD
P03	18/03/19	MARCH 2019 ISSUE	RE	AS	TE	GD
P04	10/07/19	RESPONSE TO COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
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Welsh Government

Delivery Team
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ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 10.2B
EFFECTS ON CULTURAL HERITAGE
SHEET 2 OF 4

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 18/04/19	Date 18/04/19	Date 18/04/19	Date 10/07/19

Name
A40LVP - RML - EHR - SWI - DR - LH - 0004
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3



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Legend

- Scheduled Ancient Monument
- Grade II* Listed Building
- Grade II Listed Building
- Hedgerow Register

Significance of effect

- Very Large
- Large / Very Large
- Large
- Large / Moderate
- Moderate
- Moderate / Slight
- Slight
- Slight / Neutral
- Neutral
- Unknown

Rev	Date	Description	By	Chkd	Appd	Auth
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P03	18/03/19	MARCH 2019 ISSUE	RE	AS	TE	GD
P04	10/07/19	RESPONSE TO COMMENTS	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 10.2C
EFFECTS ON CULTURAL HERITAGE
SHEET 3 OF 4

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000

Rev	By	Chkd	Appd	Auth
P04	RE	AS	TE	GD
	Date 18/04/19	Date 18/04/19	Date 18/04/19	Date 10/07/19

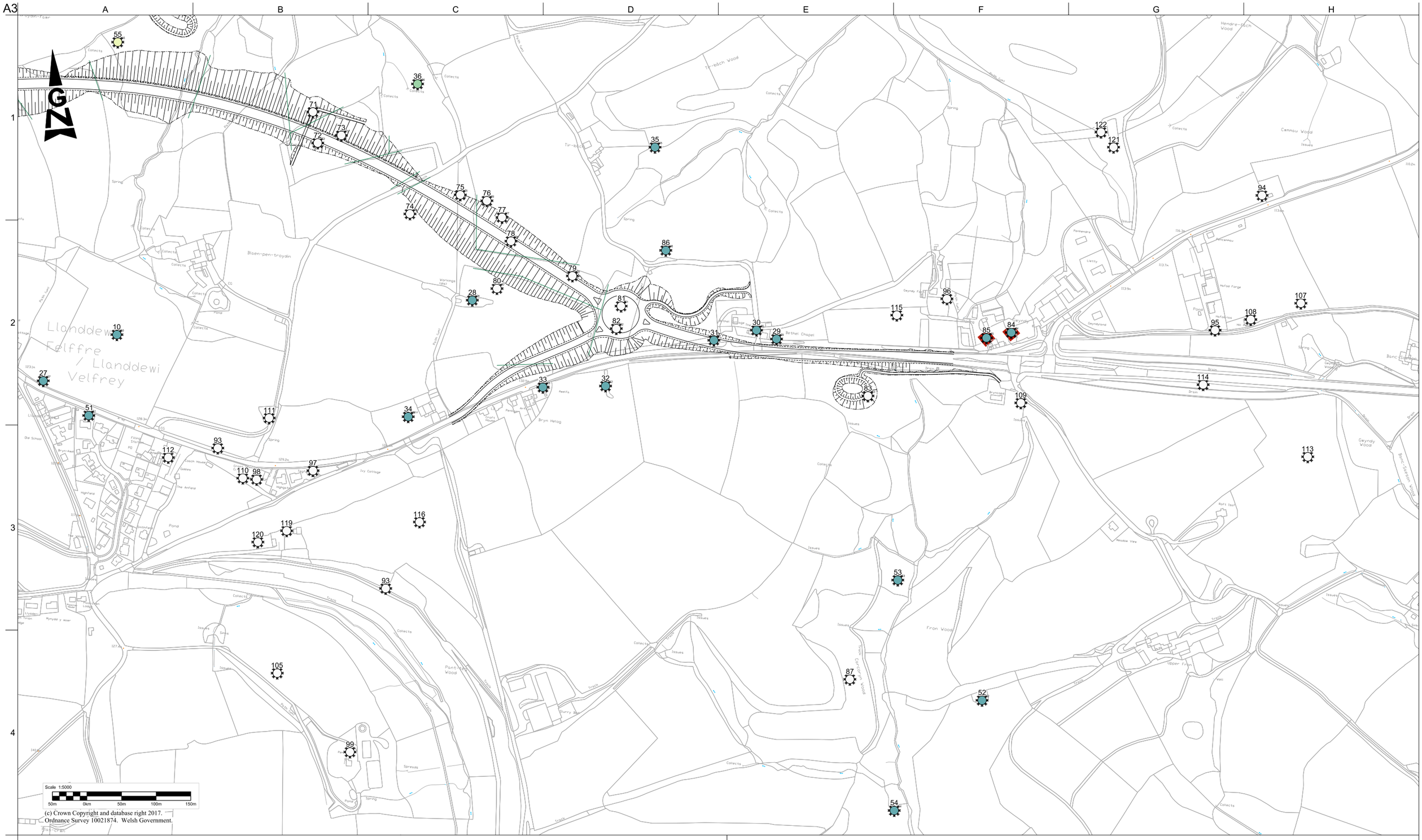
Name
A40LVP - RML - EHR - SWI - DR - LH - 0005
Project | Originator | Volume | Location | Type | Role | Number

Do not scale

A3

A B C D E F G H

1 2 3 4



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Legend

- Scheduled Ancient Monument
- Grade II* Listed Building
- Grade II Listed Building
- Hedgerow Register

Significance of effect

- Very Large
- Large / Very Large
- Large
- Large / Moderate
- Moderate
- Moderate / Slight
- Slight
- Slight / Neutral
- Neutral
- Unknown

Rev	Date	Description	By	Chkd	Appd	Auth
P01	10/07/19	FIRST DRAFT ISSUE	RE	AS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Delivery Team
ARUP

Drawing Title
FIGURE 10.2D
EFFECTS ON CULTURAL HERITAGE
SHEET 4 OF 4

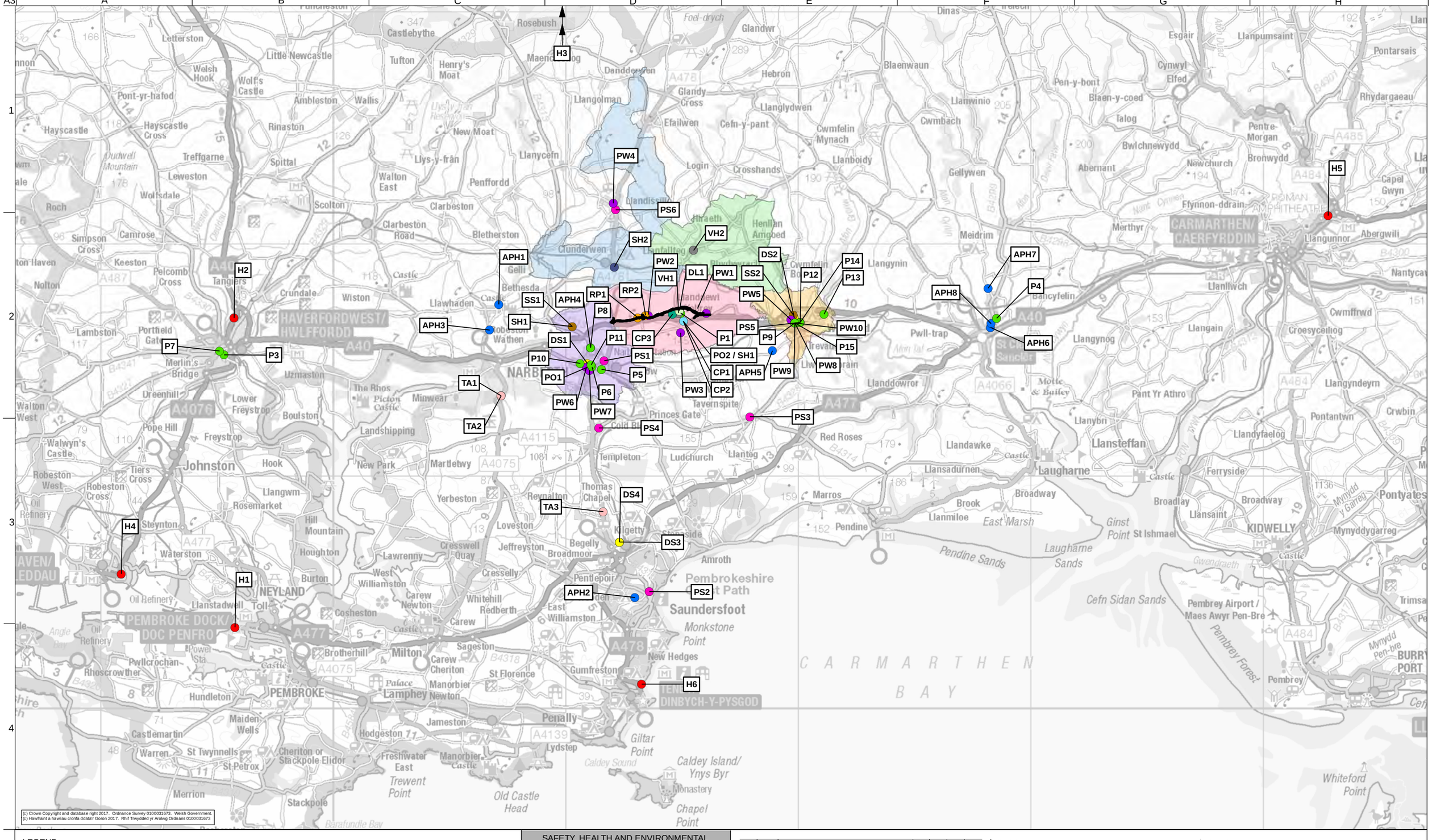
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A1
1:5000

Rev	By	Chkd	Appd	Auth
P01	RE	AS	TE	GD
	Date 18/04/19	Date 18/04/19	Date 18/04/19	Date 10/07/19

Name
A40LVP - RML - EHR - SWI - DR - LH - 0006
Project | Originator | Volume | Location | Type | Role | Number

Do not scale



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LEGEND

- PROPOSED ALIGNMENT
- AGED PERSON HOME (APH)
- COMMERCIAL PROPERTY (CP)
- DEVELOPMENT LAND (DL)
- DOCTOR'S SURGERIES (DS)
- HOSPITALS (H)
- PARKS, PLAY AREAS, SPORTS CENTRES (P)
- PLACES OF WORSHIP (PW)
- POST OFFICES (PO)
- PRIMARY SCHOOLS (PS)
- RESIDENTIAL PROPERTY (RP)
- SECONDARY SCHOOLS (SS)
- SHOPS (SH)
- TOURIST/VISITOR ATTRACTIONS (TA)
- VIILLAGE HALLS (VH)
- CLYNDERWEN
- LLANFALLTEG
- LLANDDEWI VELFREY
- NARBERTH
- WHITLAND

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	10/09/18	UPDATE FOLLOWING COMMENTS	EB	MG	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 11.1
COMMUNITY ASSETS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:150,000

Rev	By	Chkd	Appd	Auth
P02	EB	MG	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - GEN - SWI - DR - G - 0001
Project | Originator | Volume | Location | Type | Role | Number

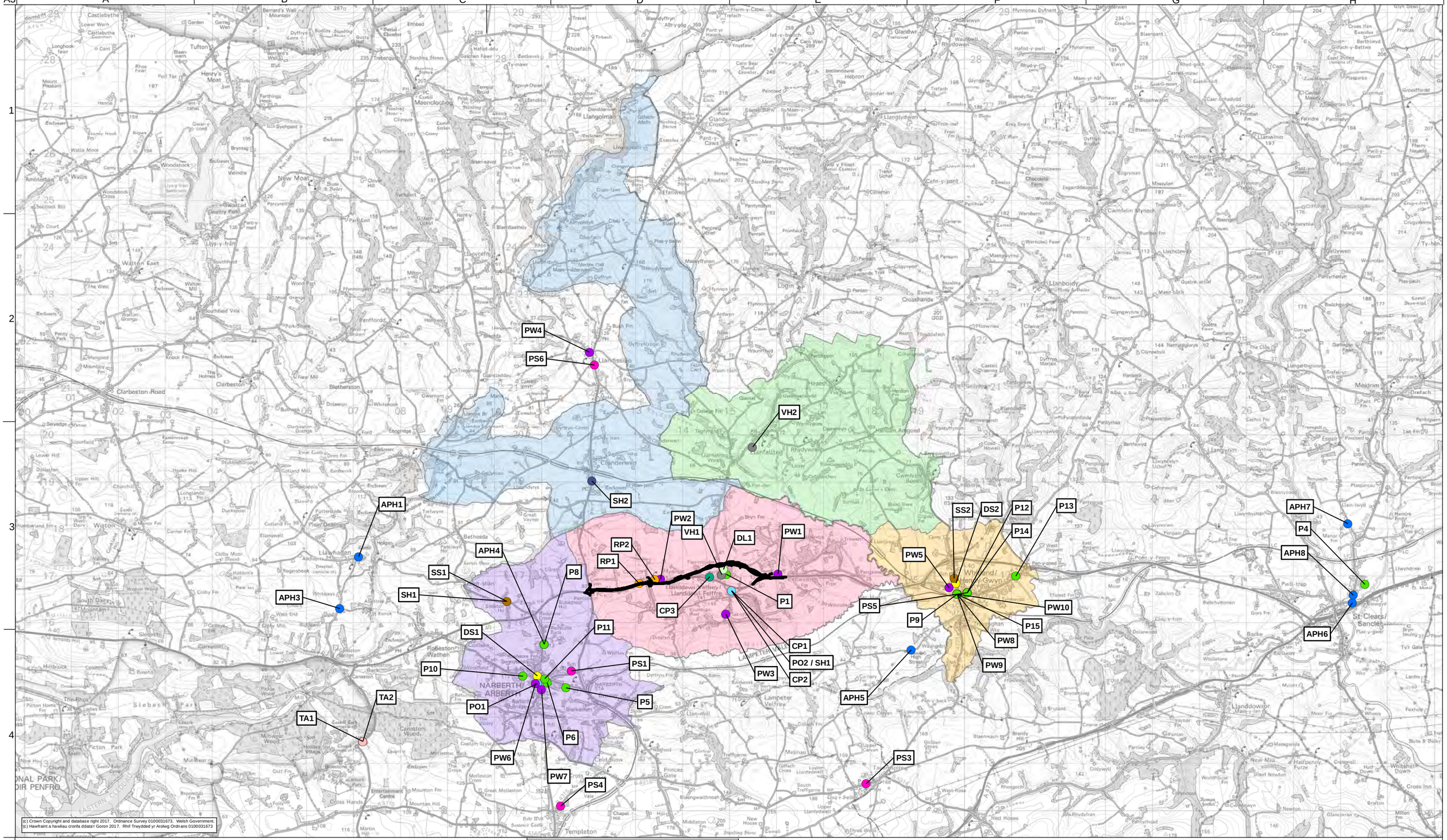
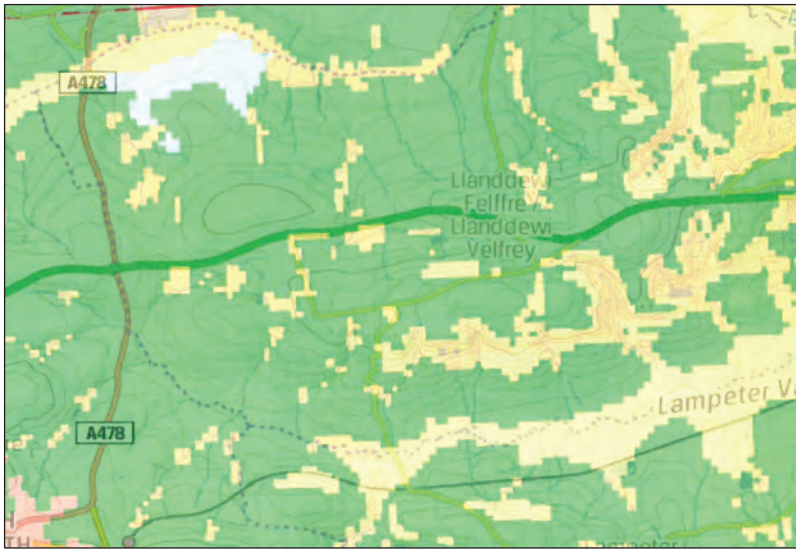

PW4
PS6
VH2
SH2
APH1
PW2
VH1
DL1
PW1
RP2
RP1
APH4
P8
SS1
APH3
SH1
CP3
P1
DS1
P11
CP1
PO2 / SH1
CP2
PS1
P10
PW3
P5
PO1
TA2
TA1
P6
PW6
PW7
PS4
SS2
DS2
P12
P13
P14
PW5
P9
PS5
PW10
P15
PW8
PW9
APH5
PS3
APH7
P4
APH8
APH6
Llanboidy
Llangolman
Llanfallteg
Clunderwen
Templeton
Clarbeston Road
Maenclochog
Crosshands
Cwmfelin Mynach
Meidrim
St Clears/ Sanclêr
Gellywen
Login
Llangynin
Llanwinio
Llanglydwen
Glandwr
Hebron
Blaenwaun
Llandowror
Whitland
New Moat
Letterston
Narberth
Templeton
Penblewin
Llanfallteg West
Hiraeth
Hendre Arogod
Cold Blow
Princes Gate
Lampeter Velfrey
Llan-mill
Robeston Wathen
Walton East
Clarbeston
Bletherston
Henry's Moat
Tufton
Ambleston
Wallis
Woodstock
Scotsbridge
Scotsbridge Mill
Gwastad Country Park
Llys-y-fran
Llys-y-fran Reservoir
Walton Grange
Southfield Villa
Pantfordd
Park Stone
Knock Fm
Mountjoy Fm
Clarbeston Grange
Lambourgh
Severdge
Courtfield
Lower Hill
Dollaston
Hooks Hill
Stubbleborough
Cotland Mill
Drim Fm
Earthwork
Broadmoor
Potterdale
Ducksport
Corner Fm
Wiston
Wiston Park
Wiston Mill
Wiston Dairy
Manor Fm
Plain Dealing
Enclosure
Llwyngwair
Llwyngwair Manor
Penparc
Penparc Fm
Penparc Cross
Penparc Chapel
Penparc Burial Ground
Penparc Stone
Penparc Standing Stone
Penparc Cromlech
Penparc Burial Chamber
Penparc Standing Stones
Penparc Stone Circle
Penparc Stone Row
Penparc Stone Alignment

FIGURE 12.1A

PREDICTIVE AGRICULTURAL LAND CLASSIFICATION MAP (2017)

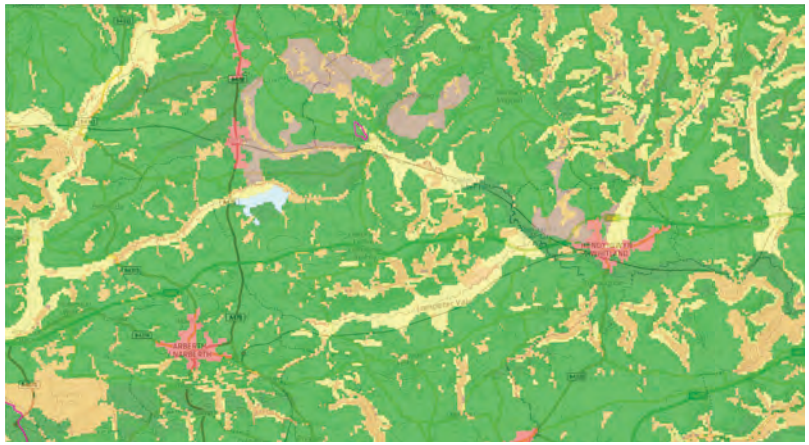


Key

- Grade 1
- Grade 2
- Grade 3a
- Grade 3b
- Grade 4
- Grade 5
- Non Agricultural
- Urban

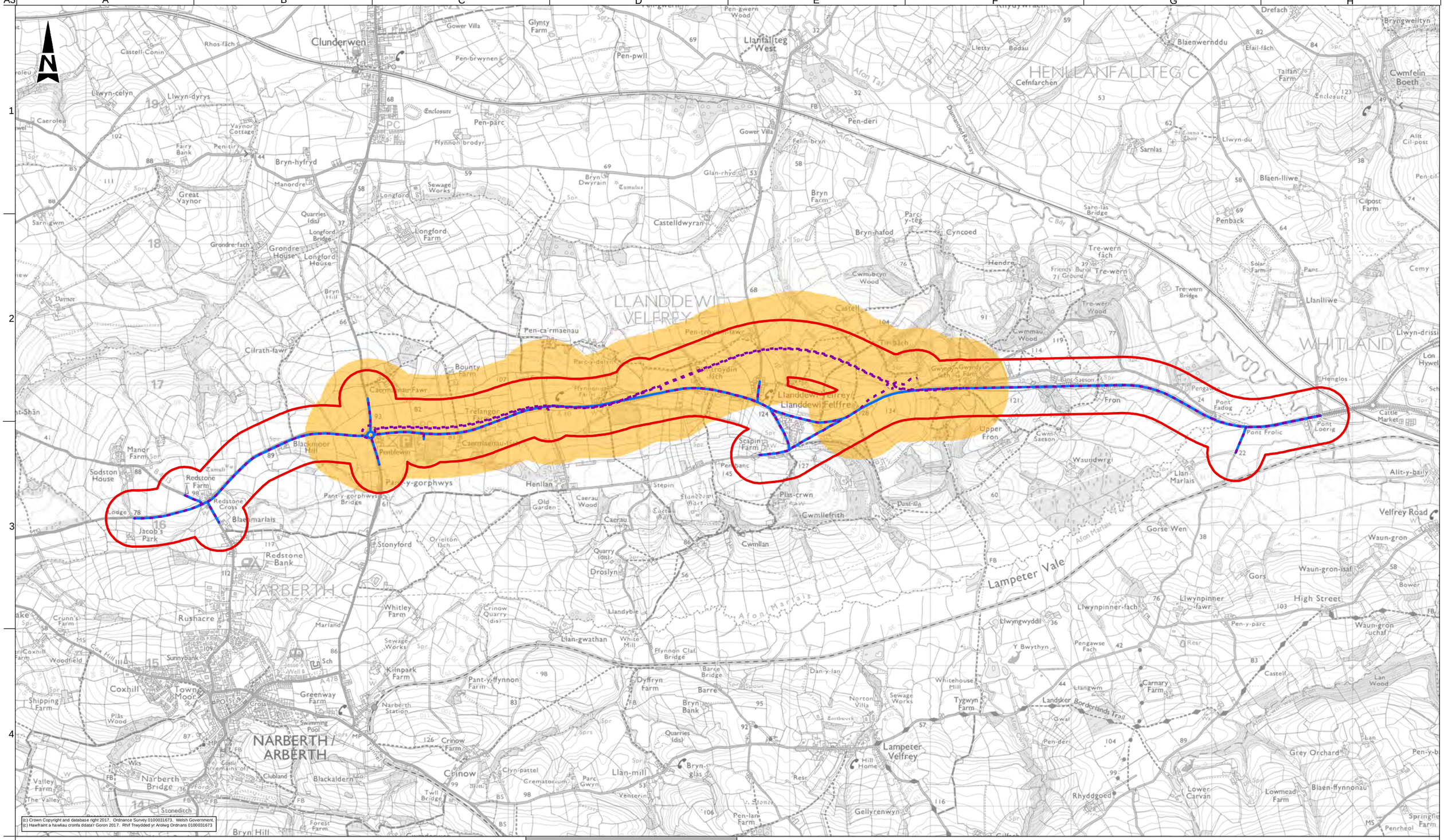
FIGURE 12.1B

WIDER AREA PREDICTIVE ALC MAP (2017)



Key

- Grade 1
- Grade 2
- Grade 3a
- Grade 3b
- Grade 4
- Grade 5
- Non Agricultural
- Urban



LEGEND

- MODELLED ROADS IN BASELINE AND DO MINIMUM SCENARIO
- MODELLED ROADS IN DO SOMETHING SCENARIO
- OPERATIONAL PHASE
- CONSTRUCTION PHASE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

ARCADIS
MOTT MACDONALD

Delivery Team
ARUP
RICHARDS

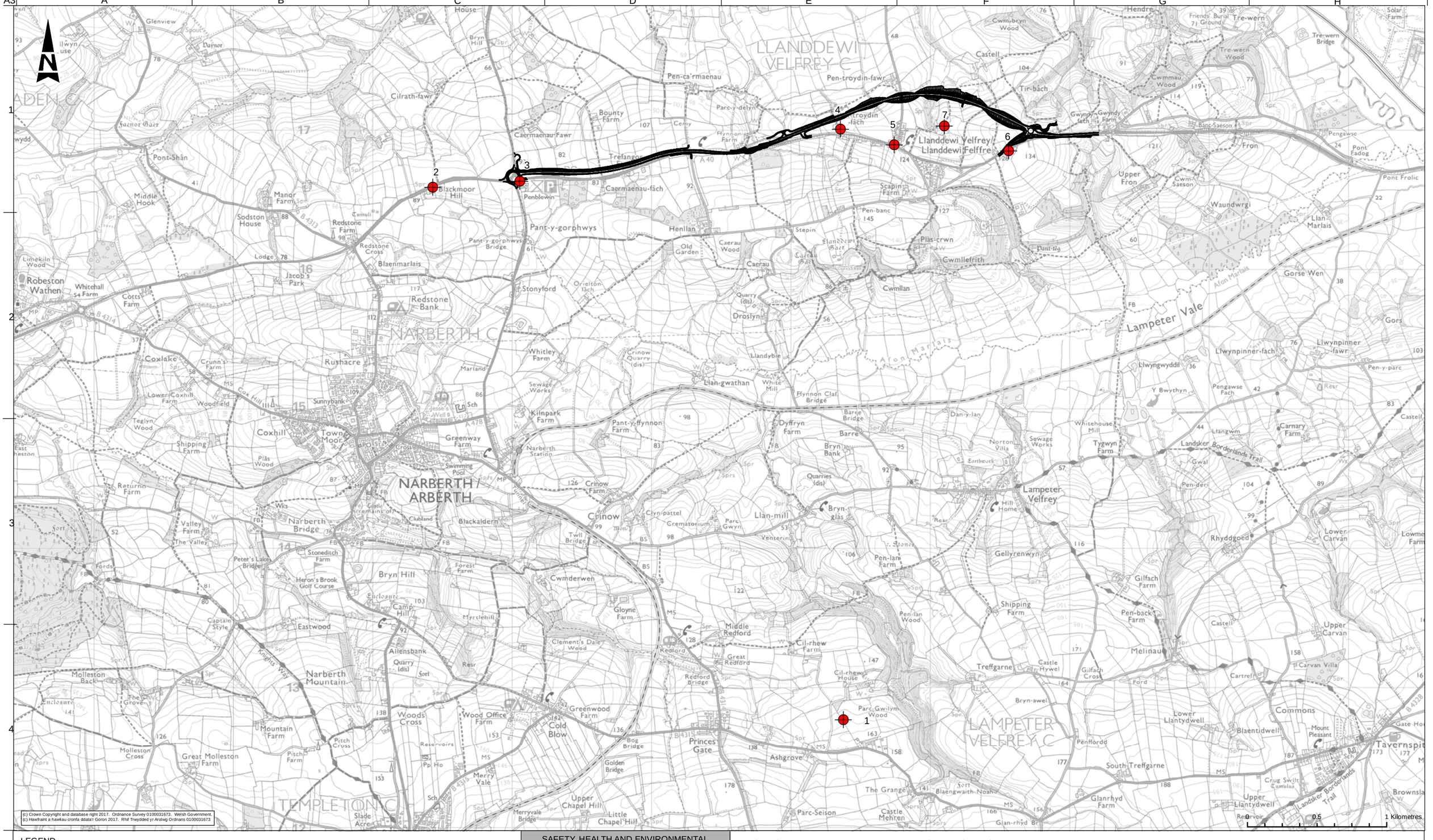
Drawing Title
FIGURE 13.1
STUDY AREA OF THE AIR QUALITY ASSESSMENT

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:25,000

Rev	By	Chkd	Appd	Auth
P03	EB	LAS	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - VAQ - SWI - DR - LA - 0002
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

AIR QUALITY MONITORING LOCATIONS

PROPOSED ALIGNMENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	
None	
Maintenance / Cleaning	
None	
Use	
None	
Decommissioning / Demolition	
None	

Rev.	Date	Description	By	Chkd	Appd	Auth
P05	06/02/19	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	--

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

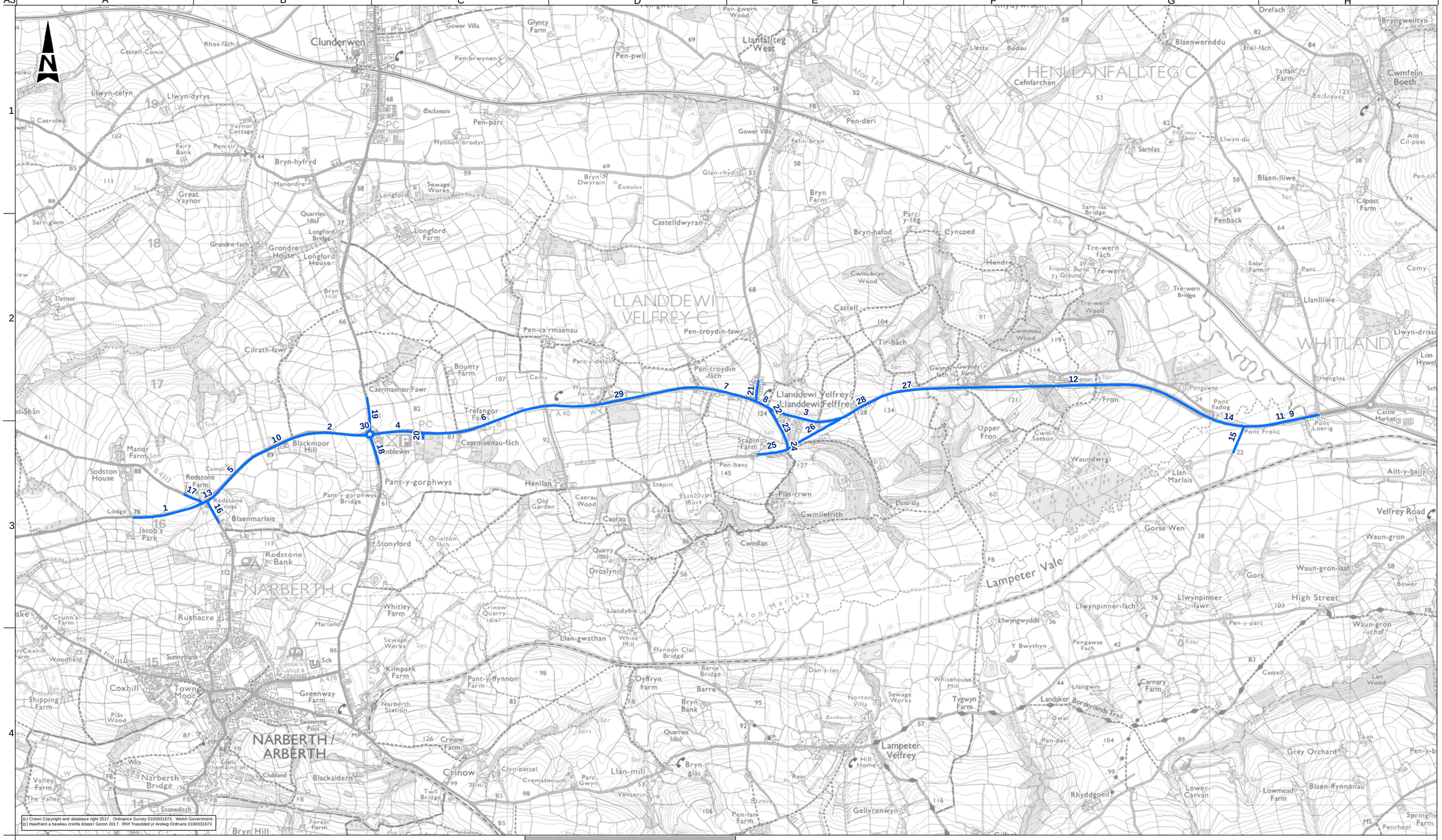
Drawing Title
FIGURE 13.2
AIR QUALITY MONITORING LOCATIONS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:25,000

Rev	By	Chkd	Appd	Auth
P05	EB	LAS	TE	--
	Date 06/02/19	Date 06/02/19	Date 06/02/19	Date --

Name
A40LVP - ARP - VAQ - SWI - DR - LA - 0001
Project | Originator | Volume | Location | Type | Role | Number



LEGEND

MODELLED ROADS IN BASELINE AND DO MINIMUM SCENARIO

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P02	10/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

ARCADIS

MOTT MACDONALD

Delivery Team

ARUP

RICHARDS

Drawing Title

FIGURE 13.4
MODELLED ROADS IN THE BASELINE AND DO MINIMUM SCENARIOS

Suitability

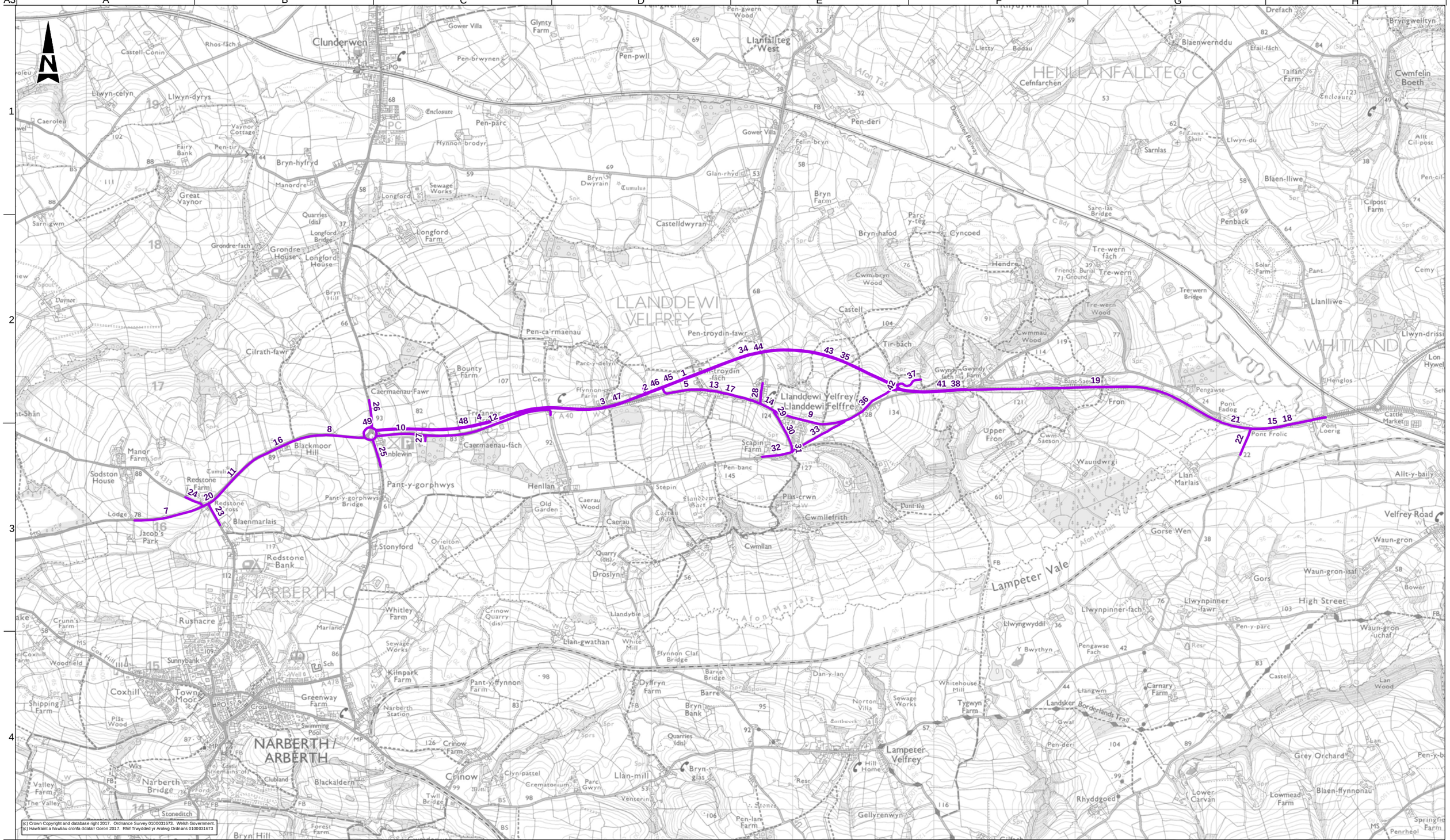
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:25,000

Rev	By	Chkd	Appd	Auth
P02	EB	LAS	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name

Project	Originator	Volume	Location	Type	Role	Number
A40LVP	ARP	VAQ	SWI	DR	LA	0007


A3
A
B
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D
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1
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N
Clunderwen
Llanfallteg West
HENLLANFALLTEG C
LLANDDEWI VELFREY C
WHITLAND C
NARBERTH C
NARBERTH / ARBERTH
Llanddewi Velfrey / Llanddewi Felffre
Lampeter Vale
Lampeter Velfrey
Crinow
Henllan
Whitland
Pen-rhiw
Pen-pwll
Pen-parc
Pen-deri
Bryn Farm
Castelldwyran
Cyncoed
Hendre
Tre-wern
Tir-bach
Castell
Pen-troydin-fawr
Pen-troydin-fach
Caermaenau-Fawr
Caermaenau-fach
Pen-ca'rmaenau
Parc-y-delyn
Cilrath-fawr
Bounty Farm
Longford Farm
Longford House
Grondre House
Great Vaynor
Bryn-hyfryd
Pen-tir
Vaynor Cottage
Llwyn-celyn
Llwyn-dyrys
Caeroleu
Castell-Conin
Rhos-fach
Glynty Farm
Gower Villa
Pen-brwynen
Pen-rwern Wood
Llwyn-du
Sarnlas
Blaen-lliwe
Penback
Cilpost Farm
Allt Cil-post
Cwmfelin Boeth
Blaenwernddu
Cefnfarchen
Drefach
Bryngweiltyn
Llanlliwe
Pant
Cemy
Llwyn-drissi
Lon Hywel
Henglos
Pengawse
Fron
Pont Fadog
Pont Frolic
Cattle Market
Upper Fron
Cwm-saeson
Waundwrgi
Llan-Marlais
Allt-y-baily
Velfrey Road
Gorse Wen
Waun-gron
Waun-gron-isaf
Gors
High Street
Waun-gron uchaf
Bower
Llwynpinner-fawr
Llwynpinner-fach
Llwyngwyddil
Y Bwythyn
Pengawse Fach
Llangwm
Landsker Borderlands Trail
Carnary Farm
Whitehouse Hill
Tygwyn Farm
Norton Villa
Sewage Works
Dan-y-lan
Barre
Barre Bridge
Bryn Bank
Dyffryn Farm
Pant-y-ffynnon
Kilnpark Farm
Greenway Farm
Narberth Station
Swimming Pool
Plas Wood
Shipping Farm
Coxhill
Town Moor
Sunnybank
Woodfield
Crunn's Farm
Rushacre
Whitley Farm
Marland
Sewage Works
Llan-gwathan
White Mill
Flynnon Clai Bridge
Afon Marais
Llandybie
Crinow Quarry (dis)
Quarry (dis)
Droslyn
Cwmllan
Plas-crwn
Pen-banc
Scapin Farm
Stepin
Caerau
Caerau Wood
Old Garden
Pant-y-gorphwys
Pant-y-gorphwys Bridge
Henllan
Stonyford
Orielton-fach
Redstone Bank
Redstone Cross
Redstone Farm
Blaenmarlais
Jacob's Park
Sodston House
Manor Farm
Blackmoor Hill
Penblewin
Caermaenau-fach
Trefangor
Flynnon-Farm
Afon Taf
Afon Daulais
Afon Cynin
Afon Cwm-cerwyn
Afon Cwm-cerwyn-isaf
Afon Cwmgilfachwen
Afon Cwmgilfachwen-isaf
Afon Cwm-bran
Afon Cwm-bran-isaf
Afon Cwm-bran-uchaf
Afon Cwm-bran-fach
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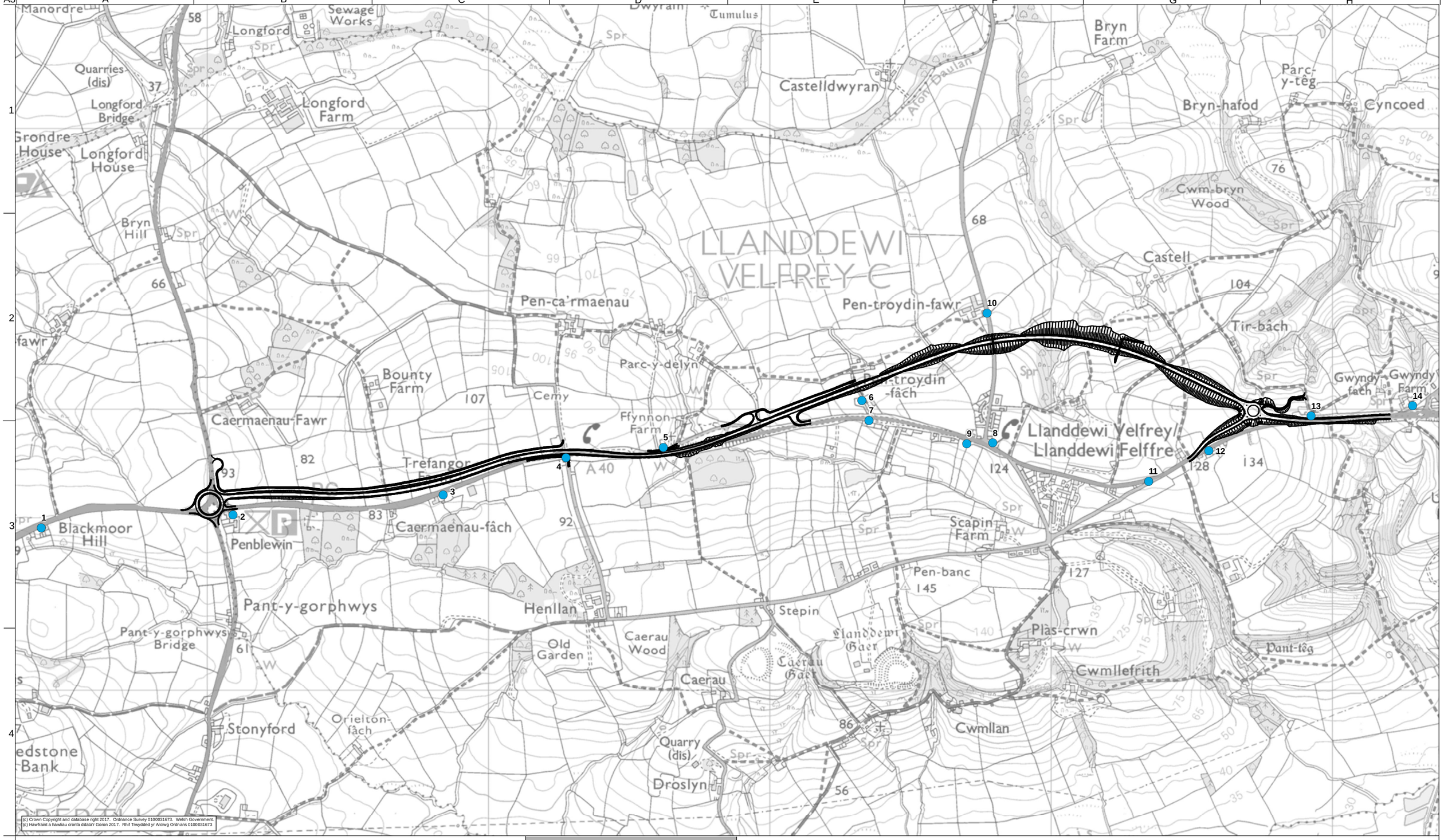


LEGEND

- ASSESSED RECEPTORS
- PROPOSED ALIGNMENT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction

None

Maintenance / Cleaning

None

Use

None

Decommissioning / Demolition

None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	GD

Project Title

A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client

Llywodraeth Cymru
Welsh Government

Delivery Team

ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title

FIGURE 13.7
ASSESSED RECEPTOR LOCATIONS

Suitability

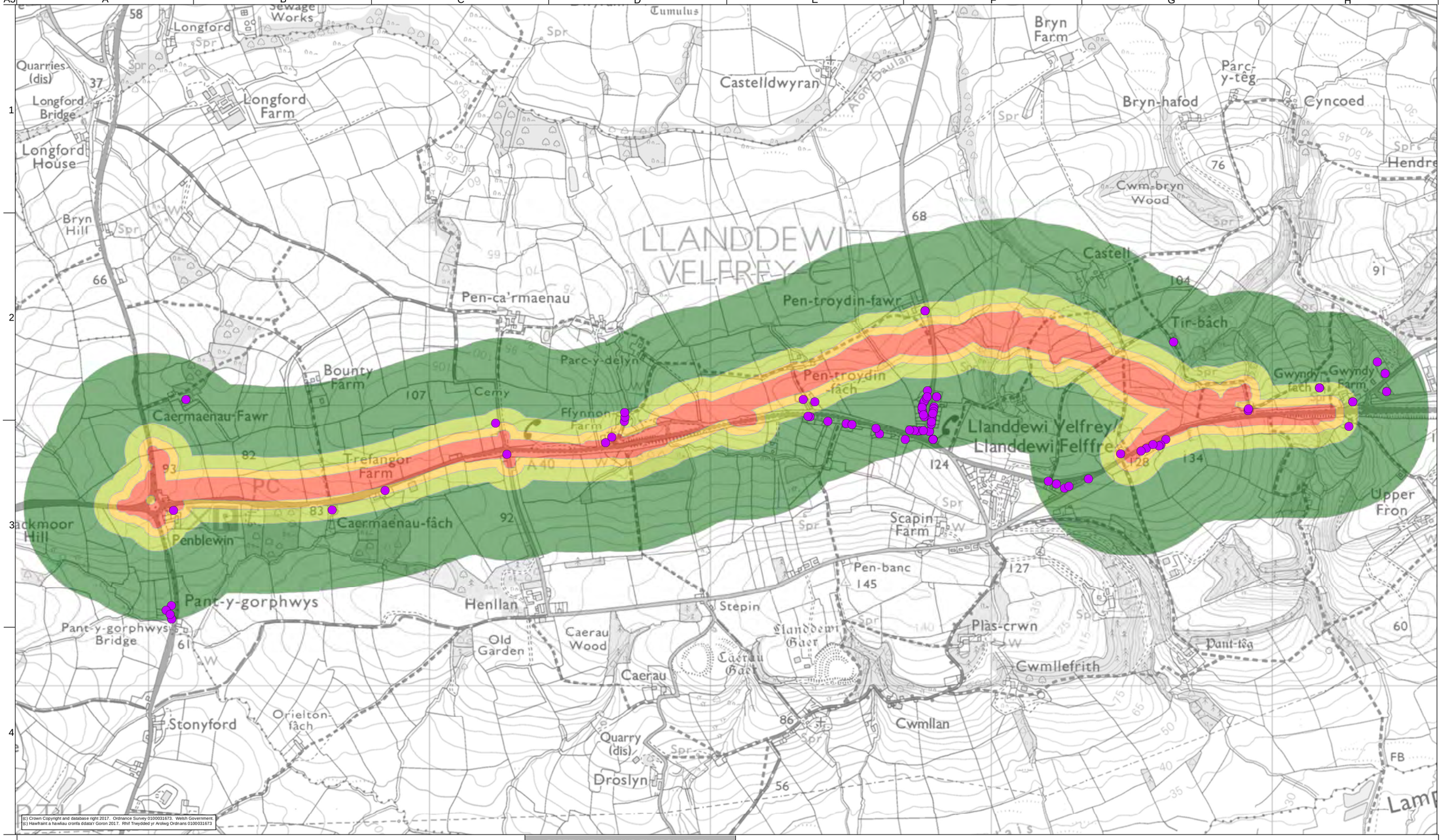
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	LAS	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name

Project	Originator	Volume	Location		Type	Role	Number
A40LVP	ARP	VAQ	SWI	-	DR	LA	0003



LEGEND

- RECEPTORS SENSITIVE TO DUST
- 20 METRES
- 50 METRES
- 100 METRES
- 350 METRES

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

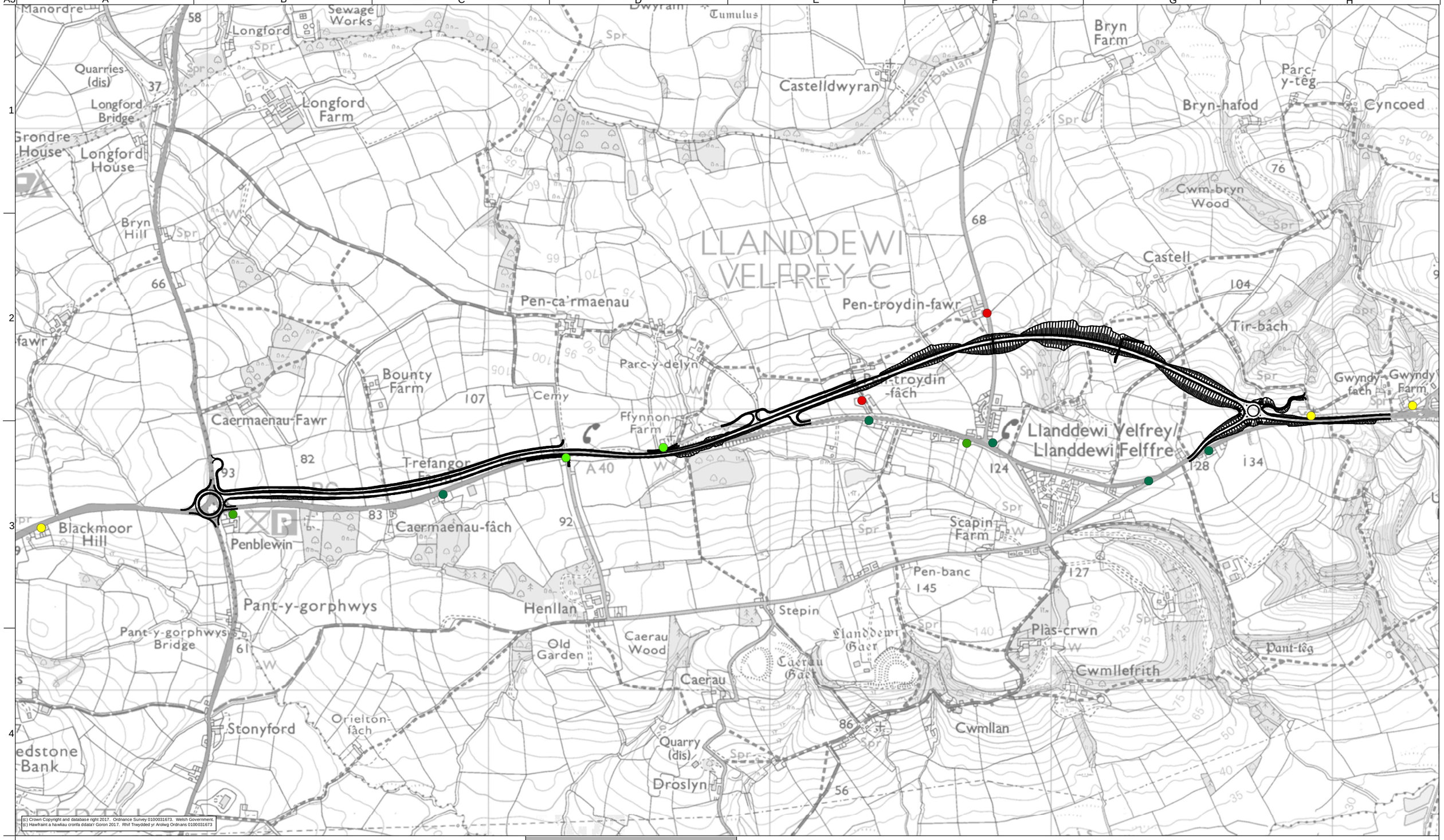
Drawing Title
FIGURE 13.8
CONSTRUCTION DUST BUFFERS

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	LAS	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - VAQ - SWI - DR - LA - 0002
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- PROPOSED ALIGNMENT
- MAJOR BENEFICIAL IMPACT
- MODERATE BENEFICIAL IMPACT
- MINOR BENEFICIAL IMPACT
- NEGLIGIBLE IMPACT
- MINOR ADVERSE IMPACT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	03/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	ME

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

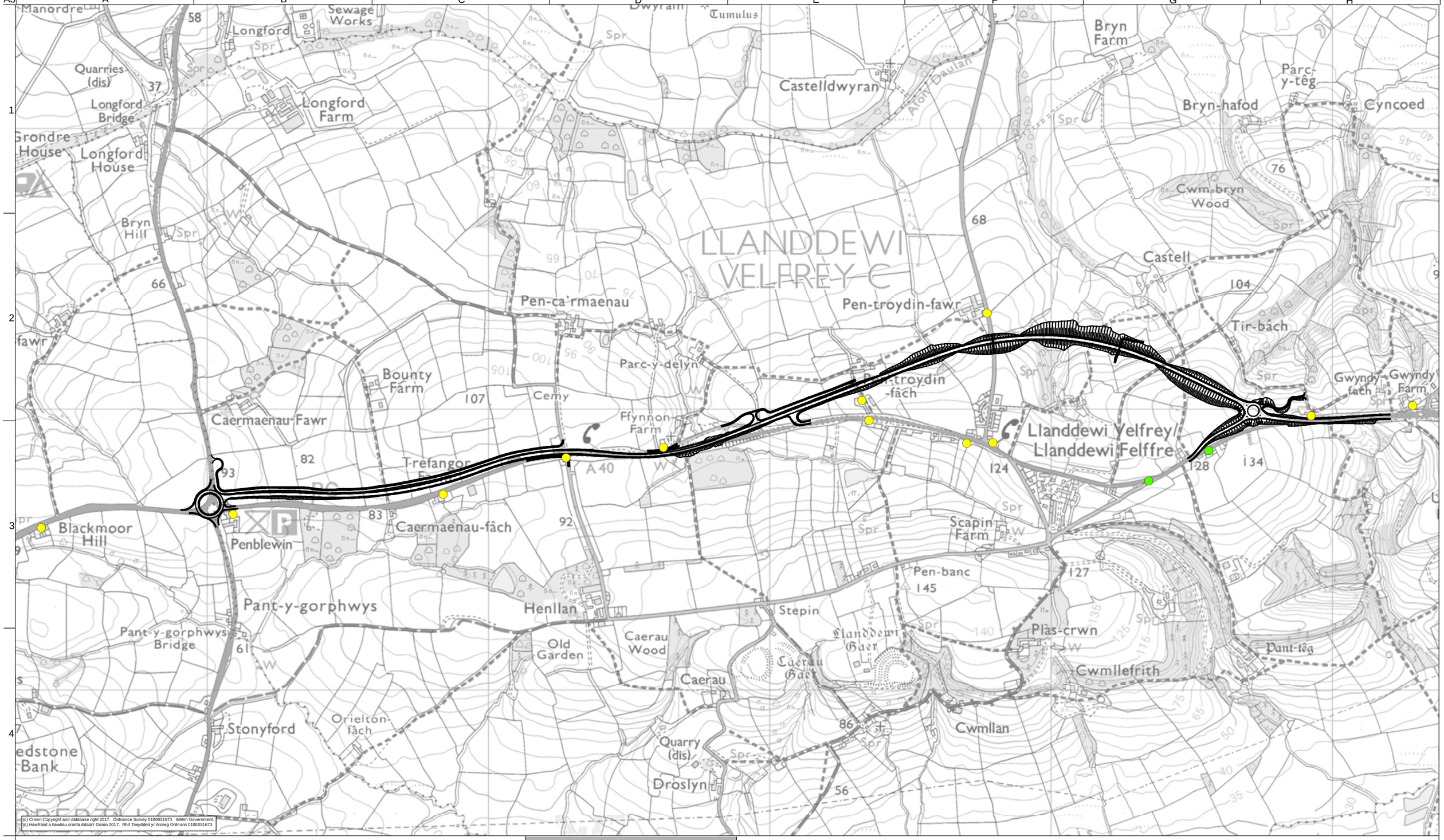
Drawing Title
FIGURE 13.10
IMPACT OF THE SCHEME ON NO_2 CONCENTRATIONS 2020

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	LAS	TE	ME
	Date 03/09/18	Date 03/09/18	Date 03/09/18	Date 03/09/18

Name: A40LVP - ARP - VAQ - SWI - DR - LA - 0005
(Project | Originator | Volume | Location | Type | Role | Number)



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LEGEND

- PROPOSED ALIGNMENT
- MINOR BENEFICIAL IMPACT
- NEGLIGIBLE IMPACT

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	LAS	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 13.11
IMPACT OF THE SCHEME ON PM_{10} CONCENTRATIONS 2020

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:12,500

Rev	By	Chkd	Appd	Auth
P03	EB	LAS	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name: A40LVP - ARP - VAQ - SWI - DR - LA - 0006
Project | Originator | Volume | Location | Type | Role | Number

NOISE SURVEY ID	CONSTRUCTION ID	LOCATION
1	R8	BETHEL COTTAGE
2	-	ARFRYN
3	-	VALLEY VIEW
4	-	CASTELL
5	R7	BLAEN PENTROYDIN
6	R6	PENTROYDIN FARM
7	-	AWEL DEG
8	R5	MAES Y FFYNNON (N)
8a		MAES Y FFYNNON (S)
9	R4	PENRHIW COTTAGE
10	R3	HENLLAN LODGE
11	R2	TREFANGOR FARM
12	R1	PENBLEWIN FARM

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LEGEND

- NOISE ACTION PLANNING PRIORITY AREAS
- 1KM BOUNDARY
- DETAILED NOISE CALCULATION AREA
- RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION
- NON-RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION

NOISE MONITORING LOCATIONS

- ATTENDED
- UNATTENTED LOGGER

PREDICTED BASELINE NOISE LEVEL dB LA10, 18HR FREE-FIELD

< 47
47 - 50
50 - 53
53 - 56
56 - 59
59 - 62
62 - 65
> 65

Note 1. Equivalent façade noise levels can be obtained by adding 2.5dB to the displayed level

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P05	15/01/19	UPDATE FOLLOWING COMMENTS	EB	GH	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 14.1A
NOISE STUDY AREA, NOISE SURVEY AND ASSESSMENT LOCATIONS AND BASELINE NOISE CONTOUR IN 2021

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P05	EB	GH	TE	GD
	Date	Date	Date	Date
	15/01/19	15/01/19	15/01/19	15/01/19

Name
A40LVP - ARP - ENV - SWI - DR - LA - 0001
Project | Originator | Volume | Location | Type | Role | Number

NOISE SURVEY ID	CONSTRUCTION ID	LOCATION
1	R8	BETHEL COTTAGE
2	-	ARFRYN
3	-	VALLEY VIEW
4	-	CASTELL
5	R7	BLAEN PENTROYDIN
6	R6	PENTROYDIN FARM
7	-	AWEL DEG
8	R5	MAES Y FFYNNON (N)
8a		MAES Y FFYNNON (S)
9	R4	PENRHIW COTTAGE
10	R3	HENLLAN LODGE
11	R2	TREFANGOR FARM
12	R1	PENBLEWIN FARM

LLANDDEWI VELFREY VILLAGE HALL

LLANDDEWI VELFREY CRICKET CLUB

BETHEL CHAPEL

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LEGEND

- NOISE ACTION PLANNING PRIORITY AREAS
- 1KM BOUNDARY
- DETAILED NOISE CALCULATION AREA
- RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION
- NON-RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION

NOISE MONITORING LOCATIONS

- ATTENDED
- UNATTENTED LOGGER

PREDICTED BASELINE NOISE LEVEL dB LA10, 18HR FREE-FIELD

- < 47
- 47 - 50
- 50 - 53
- 53 - 56
- 56 - 59
- 59 - 62
- 62 - 65
- > 65

Note 1. Equivalent façade noise levels can be obtained by adding 2.5dB to the displayed level

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P05	15/01/19	UPDATE FOLLOWING COMMENTS	EB	GH	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 14.1B
NOISE STUDY AREA, NOISE SURVEY AND ASSESSMENT LOCATIONS AND BASELINE NOISE CONTOUR IN 2021

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:12,500

Rev	By	Chkd	Appd	Auth
P05	EB	GH	TE	GD
Date	15/01/19	15/01/19	15/01/19	15/01/19

Name
A40LVP - ARP - ENV - SWI - DR - LA - 0005
Project | Originator | Volume | Location | Type | Role | Number

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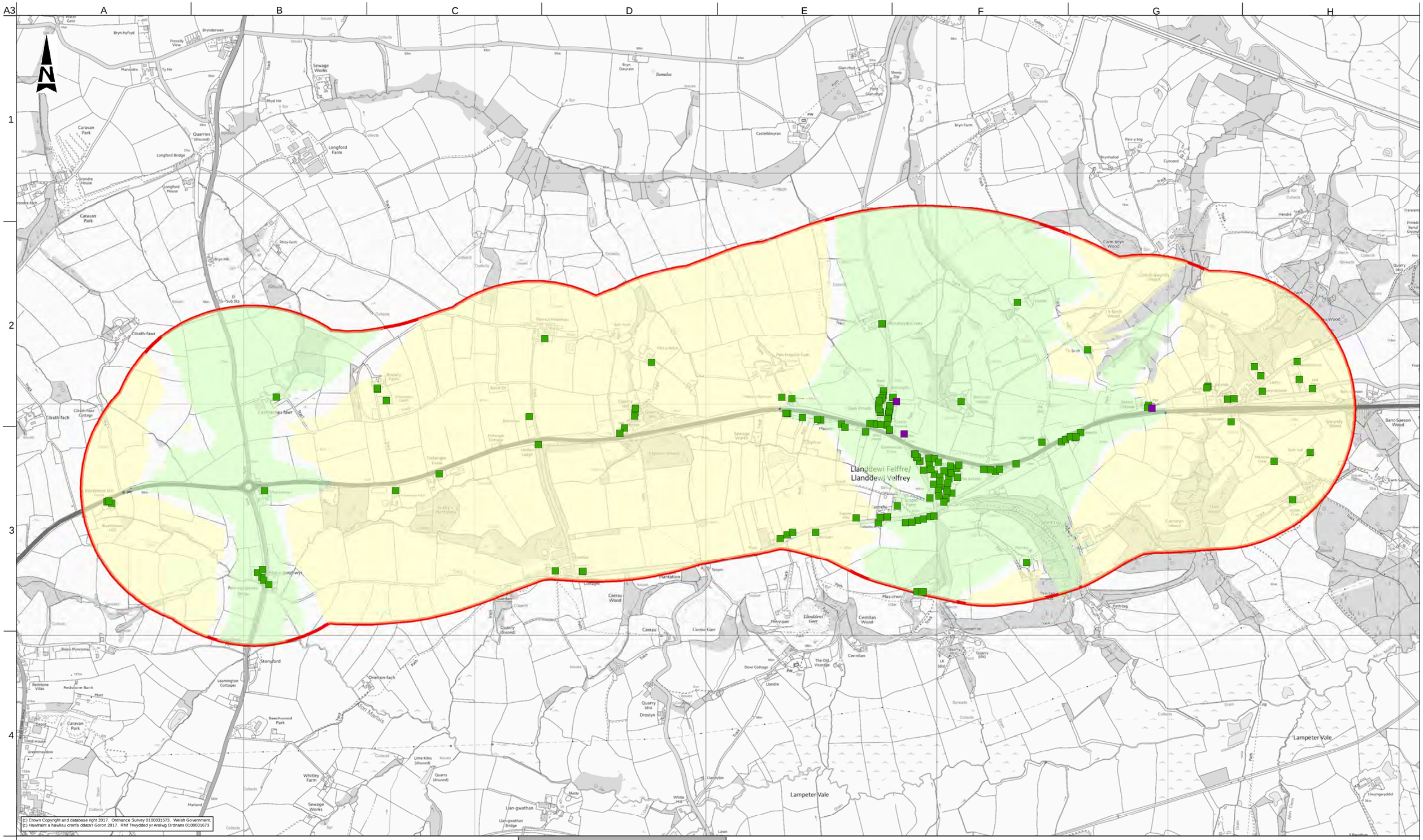


LEGEND

- NON-RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION
- RESIDENTIAL OPERATIONAL ASSESSMENT LOCATION
- DETAILED NOISE CALCULATION AREA

LONG TERM NOISE CHANGE (dB LA10,18HR)

- < 10
- -10 to -5
- -5 to -3
- -3 to -0.1
- -0.1 to 0.1
- 0.1 to 3
- 3 to 5
- 5 to 10
- > 10

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P05	15/01/19	UPDATE FOLLOWING COMMENTS	EB	GH	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 14.2
NOISE CHANGES (LA10,18HR) IN THE FUTURE YEAR WITHOUT THE SCHEME

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:15,000

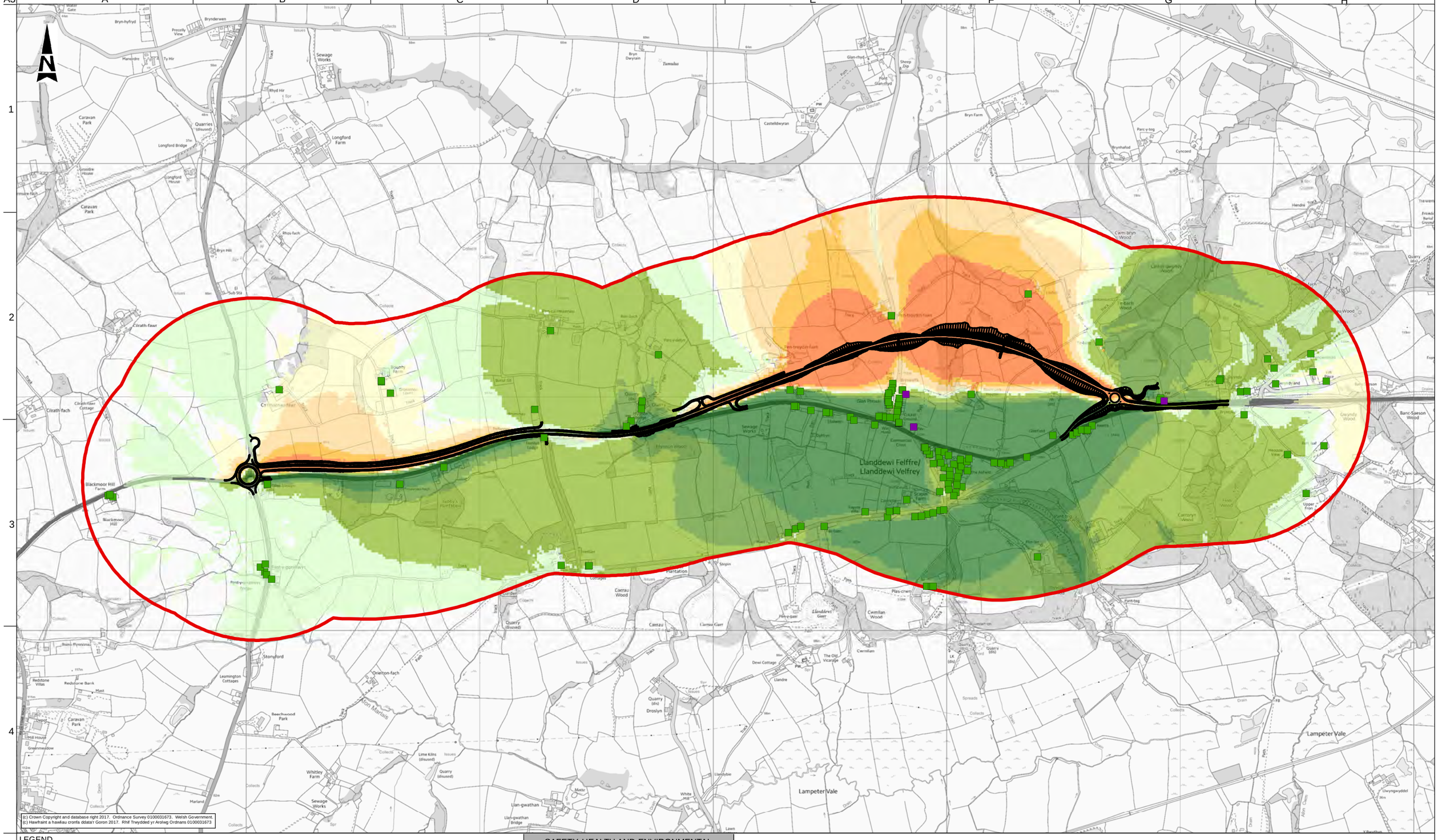
Rev	By	Chkd	Appd	Auth
P05	EB	GH	TE	GD
	Date 15/01/19	Date 15/01/19	Date 15/01/19	Date 15/01/19

Name
A40LVP - ARP - ENV - SWI - DR - LA - 0002
Project | Originator | Volume | Location | Type | Role | Number

A3

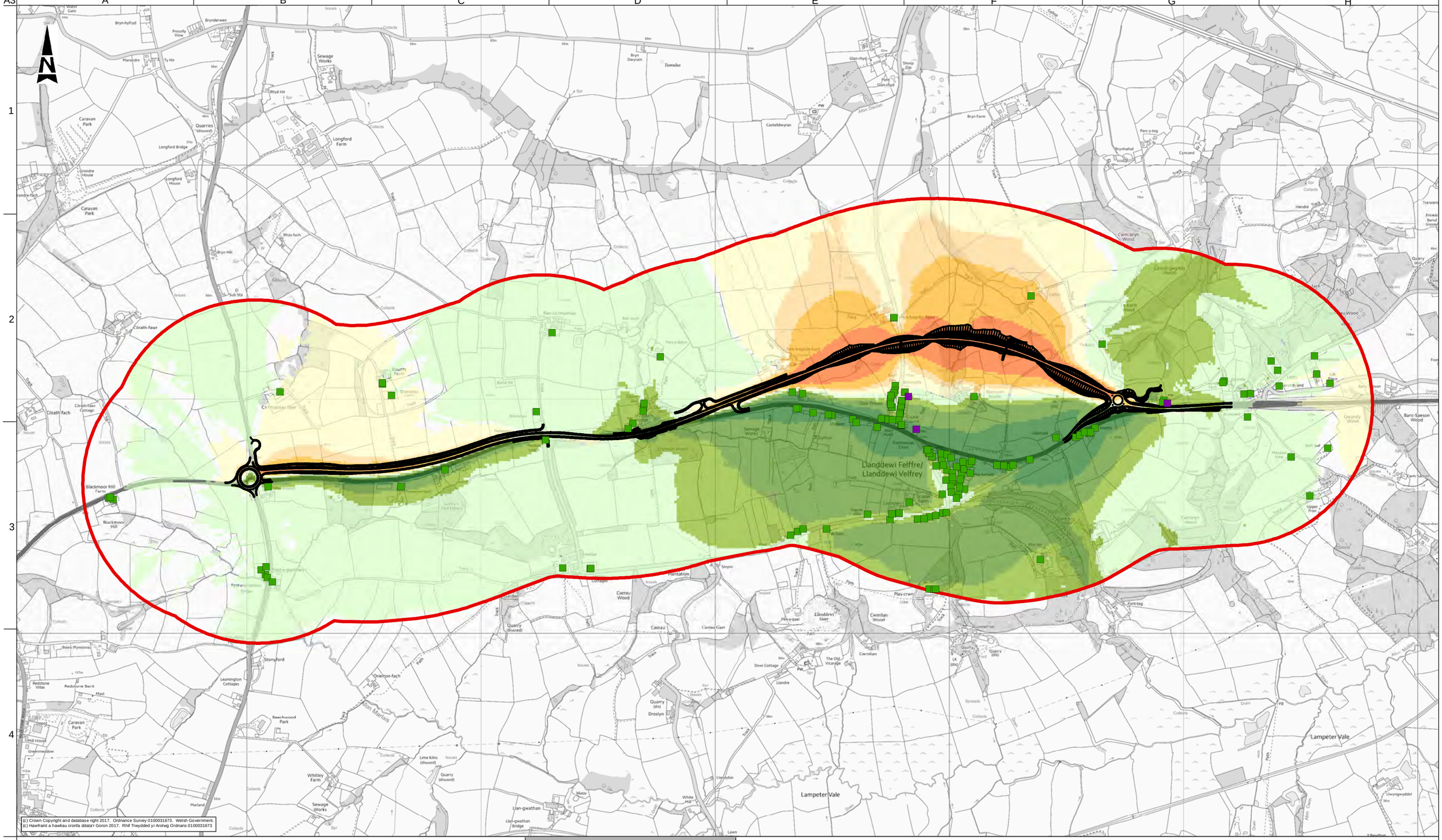
A B C D E F G H

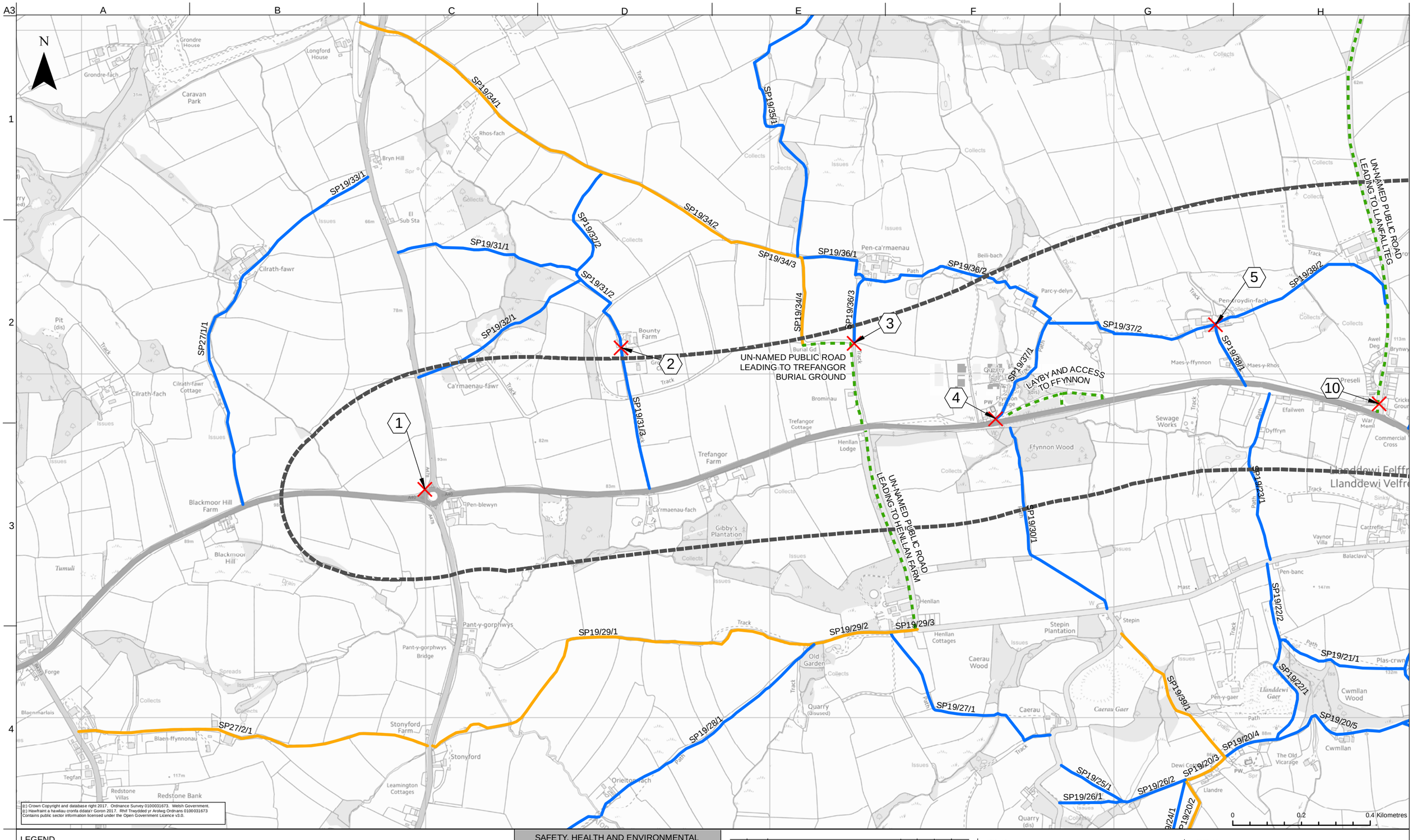
1 2 3 4


N
Llanddewi Felffre/
Llanddewi Velfrey
Lampeter Vale
Caravan Park
Longford Farm
Sewage Works
Quarries (disused)
Longford Bridge
Longford House
Rhyd Hir
Rhyd-fach
Bryn Hill
Cilrath-fawr
Cilrath-fach
Cilrath-fawr Cottage
Blackmoor Hill Farms
Blackmoor Hill
Bryn-hyfryd
Brynderwen
Mandre
Ty Hir
Precelly View
Bryn Dwyran
Tamulus
Glan-rhyd
Sheep Dip
Pont Glan-rhyd
Castelldwyran
Abon Dauan
Bryn Farm
Parc-y-teg
Brynhafod
Cyncoed
Hendre
Cwm-bryn Wood
Tir-barh Wood
Gwyndy Wood
Banc-Saeson Wood
Carrwyn Wood
Upper Fron
Fron-goch
Fron-troydyn-fawr
Fron-troydyn-fach
Pen-y-dalyn
Bounty Farm
Glan Presen
Hyncon Wood
Scoose Farm
Caerau Wood
Caerau
Caerau Garr
Llanddewi Garr
Cwmllan Wood
Cwmllan
Plas-crwn
Plant-teg
Dewi Cottage
Llandre
The Old Vicarage
Quarry (dis)
Droslyn
Stonyford
Orielton-fach
Redstone Villas
Redstone Bank
Leamington Cottages
Beechwood Park
Whitley Farm
Lime Kilns (disused)
Llan-gwathan
Llan-gwathan Bridge
Llandybie
White Hill
Afon Marlais
Marland
Lampeter Vale
Llwyngwyddel
Afon Gwen
Y Beudhon
Drosgol
Gwarallt
Gwarallt Wood
Carrwyn Wood
Tre-wern
Friends Burial Ground
Quarry (disused)
Sewage Works
Spoil Heap
Mast
Greenmeadow
Hill House
Caravan Park
Ffynnon
Pen-rhiw-fawr
Pen-y-garn
Pen-y-garn Bridge
Rhos-ffynnonau
Ffynnon-fach
Bwlch-y-rhiw
Bwlch-y-rhiw Bridge
Cwm-bach
Cwm-bach Bridge
Cwm-bach Cottage
Cwm-bach Farm
Cwm-bach Wood

A3 | A | B | C | D | E | F | G | H

1 | 2 | 3 | 4


N
Llanddewi Felffre/
Llanddewi Velfrey
Lampeter Vale
Caravan Park
Longford Bridge
Longford Farm
Sewage Works
Quarries (disused)
Castelldwyran
Bryn Farm
Cwm-bryn Wood
Gwyndy Wood
Banc-Saeson Wood
Blackmoor Hill Farm
Blackmoor Hill
Caerau Wood
Cwmllan Wood
Caerau
Quarry (disused)
Stonyford
Redstone Villas
Redstone Bank
Leamington Cottages
Beechwood Park
Whitley Farm
Lime Kilns (disused)
Llan-gwathan
Llan-gwathan Bridge
Drielton-fach
Afon Marais
Cilrath-fawr
Cilrath-fach
Cilrath-fawr Cottage
Bryn-hyfryd
Brynderwen
Mandre
Ty Hir
Rhyd Hir
Longford House
Grondre House
Grondre-fach
Rhos-fach
Bryn Hill
Bounty Farm
Cefn-tryoch-fawr
Cefn-tryoch-fach
Parc-y-delyn
Llwyn-y-gaer
Llandre
Dewi Cottage
The Old Vicarage
Quarry (disused)
Drosyn
Lampeter Vale
Llwyngwyddel
Afon Gwen
Hendre
Parc-y-teg
Cyncoed
Brynhafod
Pen-teg
Plas-crwn
Glan-rhyd
Pont Glan-rhyd
Sheep Dip
Bryn Dwyran
Tumulus
Afon Dauan
Stegion
Plantation
Gardens
Cottages
Pen-y-gaer
Caerau Garr
Llanddewi Garr
Lime Kilns
Quarry (disused)
Metir
White Hill
Lawn
Spreads
Collects
Issues
Track
Path
Drain
Fm
FB
PW
LK (dis)
Quarry (dis)
Sewage Works
Bunker
Mast
Greenmeadow
Lhill House
Caravan Park
Marland
Ffynnon-gorllwyn
Ffynnon-gorllwyn Bridge
Pant-y-gorllwyn
Cefn-tryoch-fawr
Cefn-tryoch-fach
Llwyn-y-gaer
Llwyn-y-gaer Wood
Llandre Wood
Llanddewi Garr Wood
Llwyn-y-gaer Wood
Llwyn-y-gaer Bridge
Llwyn-y-gaer Cottages
Llwyn-y-gaer Farm
Llwyn-y-gaer Quarry
Llwyn-y-gaer Quarry (disused)
Llwyn-y-gaer Quarry (dis)
Llwyn-y-gaer Quarry (dis)
Llwyn-y-gaer Quarry (dis



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LEGEND

- STUDY AREA
- PUBLIC RIGHTS OF WAY
- PUBLIC RIGHTS OF WAY (BRIDLEWAY)
- OTHER WALKING, CYCLING AND HORSE-RIDING ROUTES
- 1 COUNT SITE LOCATION

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

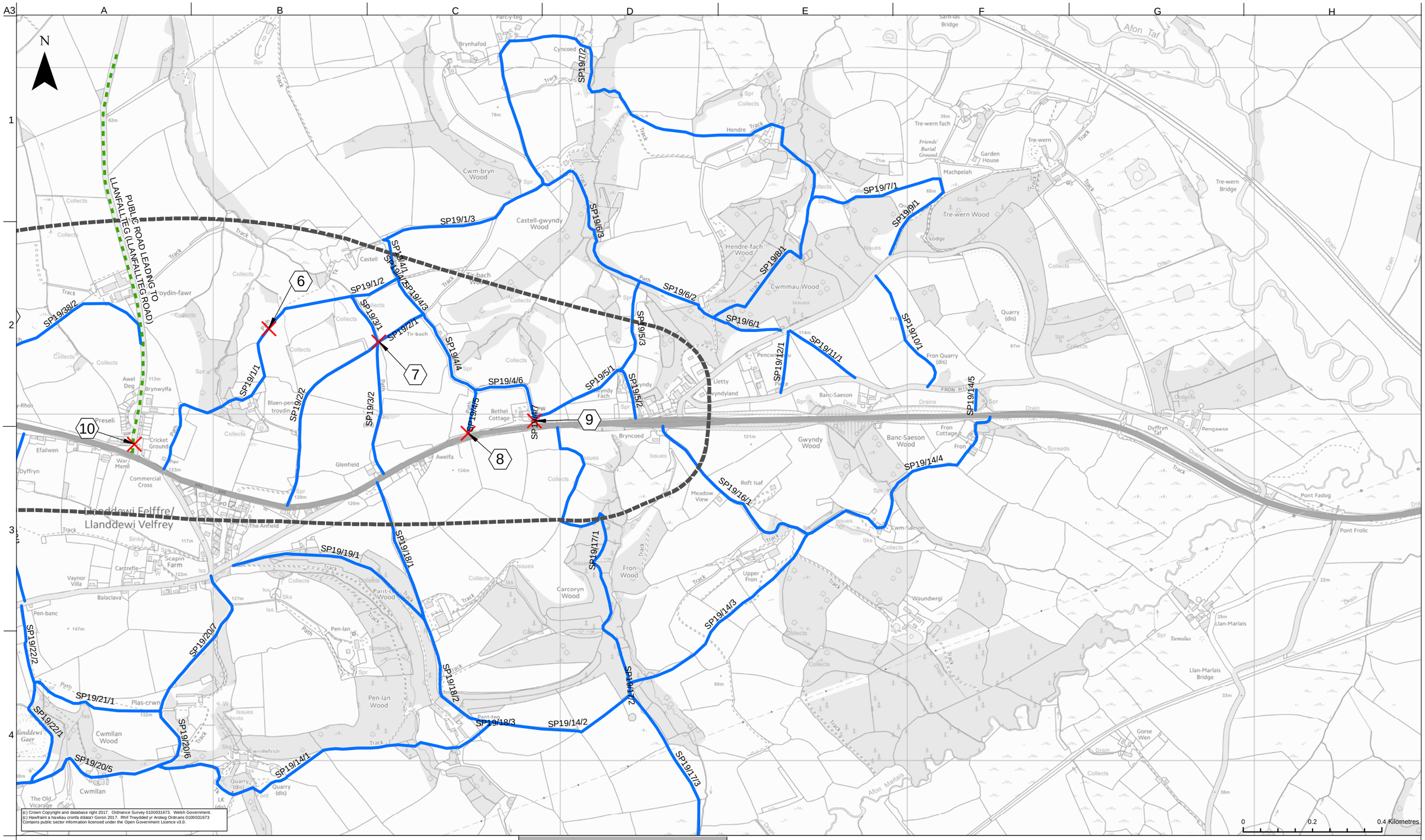
Drawing Title
FIGURE 15.1A
EXISTING PUBLIC RIGHTS OF WAY
AND OTHER ROUTES USED BY
WALKERS, CYCLISTS AND HORSERIDERS (WCHRs)

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3 1:10,000

Rev	By	Chkd	Appd	Auth
P03	EB	TE	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name A40LVP - ARP - ENM - SWI - DR - C - 0011
Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

- STUDY AREA
- PUBLIC RIGHTS OF WAY
- PUBLIC RIGHTS OF WAY (BRIDLEWAY)
- OTHER WALKING, CYCLING AND HORSE-RIDING ROUTES
- 1 COUNT SITE LOCATION

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction	None
Maintenance / Cleaning	None
Use	None
Decommissioning / Demolition	None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	10/09/18	UPDATE FOLLOWING COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru
Welsh Government

Delivery Team
ARCADIS
MOTT MACDONALD
ARUP
RICHARDS

Drawing Title
FIGURE 15.1B
EXISTING PUBLIC RIGHTS OF WAY
AND OTHER ROUTES USED BY
WALKERS, CYCLISTS AND HORSERIDERS (WCHRs)

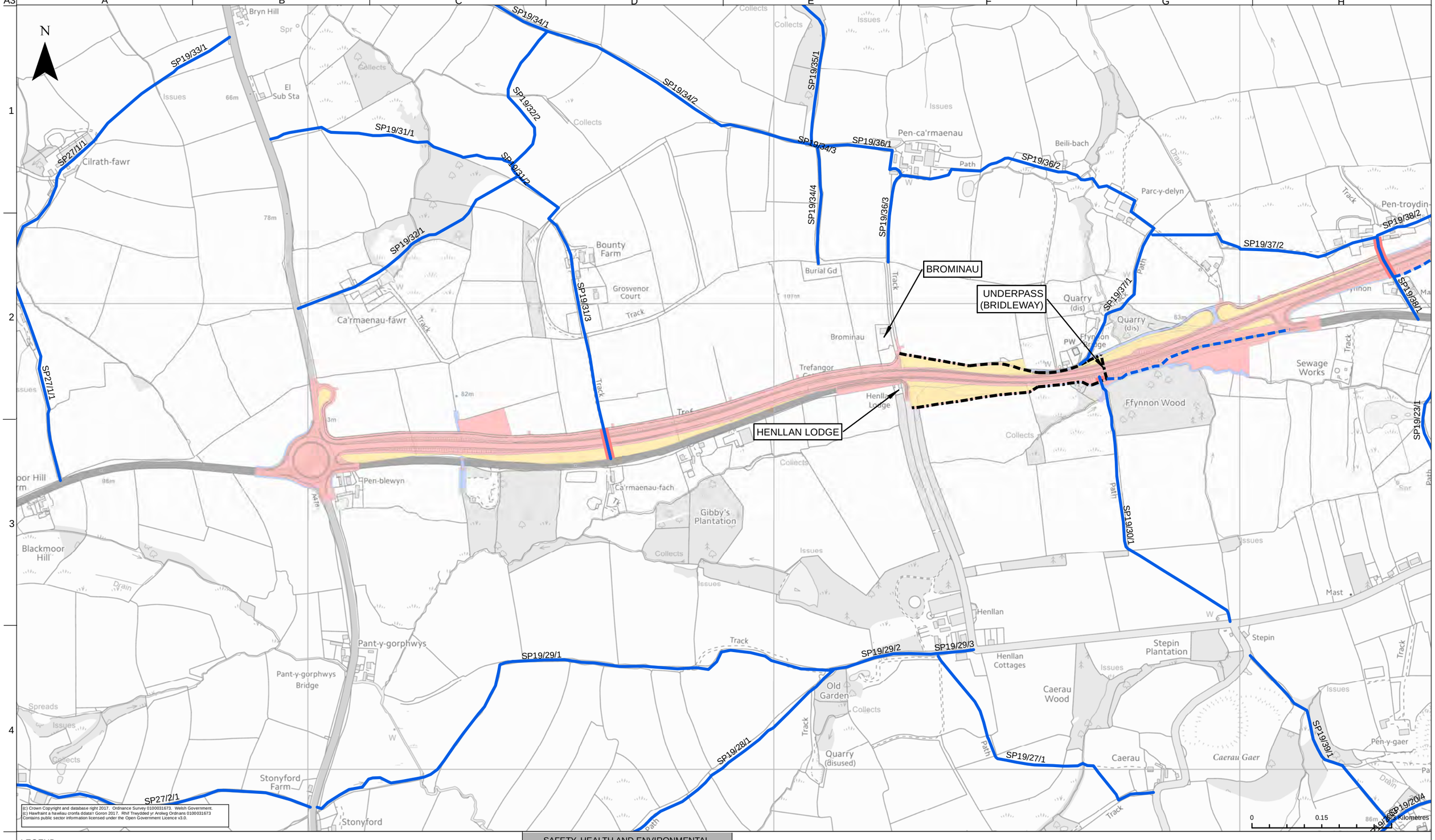
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:10,000

Rev	By	Chkd	Appd	Auth
P03	EB	TE	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - ENM - SWI - DR - C - 0012

Project	Originator	Volume	Location	Type	Role	Number



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LEGEND

- PERMANENT HIGHWAY LAND WITHIN FENCELINE, INCLUDING WATER TREATMENT AREAS
- TEMPORARY CONSTRUCTION LAND
- OTHER PERMANENT LAND TAKE E.G. MITIGATION PLANTING
- NEW SECTION OF TRUNK ROAD
- NO CHANGE
- NEW PUBLIC BRIDLEWAY
- NEW PUBLIC FOOTPATH
- PUBLIC RIGHT OF WAY (PROW) PERMANENTLY DIVERTED
- PUBLIC RIGHT OF WAY (PROW) PERMANENTLY STOPPED UP

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	10/09/18	UPDATE FOLLOWING COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 15.2A
PUBLIC RIGHTS OF WAY AND OTHER ROUTES USED BY WCHRs PERMANENTLY OR TEMPORARILY STOPPED UP AND/OR DIVERTED

Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3: 1:7,500

Rev	By	Chkd	Appd	Auth
P04	EB	TE	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name: A40LVP - ARP - ENM - SWI - DR - C - 0013
Project | Originator | Volume | Location | Type | Role | Number

A3

N

OVERBRIDGE (ROAD)

UNDERPASS (PEDESTRIAN)

UNDERPASS (PEDESTRIAN AND FARM ACCESS)

SP19/37/2
SP19/38/2
SP19/38/1
SP19/1/3
SP19/1/2
SP19/3/1
SP19/2/1
SP19/1/1
SP19/2/2
SP19/3/2 (dis)
SP19/4/1
SP19/4/2
SP19/4/3
SP19/4/4
SP19/4/5
SP19/4/6
SP19/7/2
SP19/6/3
SP19/7/1
SP19/8/1
SP19/6/2
SP19/6/1
SP19/5/3
SP19/5/1
SP19/5/2
SP19/11/1
SP19/12/1
SP19/23/1
SP19/22/2
SP19/22/1
SP19/21/1
SP19/20/1
SP19/19/1
SP19/18/1
SP19/18/2
SP19/17/1
SP19/17/2
SP19/17/3
SP19/16/1
SP19/14/4
SP19/14/3
SP19/14/2
SP19/30/1

Cwm-bryn Wood
Castell-gwyndy Wood
Tir-bach Wood
Hendre-fach Wood
Cwmmau Wood
Fron Wood
Carcoryn Wood
Pant-teg Wood
Pen-lan Wood
Gwyndy Wood

Pen-troydin-fawr
Pen-troydin-fa
Awel Deg
Brynwylfa
Maes-y-Rhos
Blaen-pen-troydin
Tir-bach
Lletty Gwyndyland
Pencwm-llu
Banc-Saeson
Bryncoed
Awelfa
Glenfield
Efailwen
Dyffryn
Sewage Works
Cricket Ground
War Memi
Commercial Cross
Llanddewi Felffre/ Llanddewi Velfrey
The Anfield
Scapin Farm
Cartrefle
Vaynor Villa
Balaclava
Pen-banc
Pen-lan
Pas-crwn
Stepin
Roft Isaf
Meadow View
Upper Fron

Track
Path
Collects
Issues
Spr
Drain
PW
PO
Sks
Iss
Pav
Spreads

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0 0.15 0.3 Kilometres

LEGEND

- PERMANENT HIGHWAY LAND WITHIN FENCELINE, INCLUDING WATER TREATMENT AREAS
- TEMPORARY CONSTRUCTION LAND
- OTHER PERMANENT LAND TAKE E.G. MITIGATION PLANTING
- NEW SECTION OF TRUNK ROAD
- NO CHANGE
- NEW PUBLIC FOOTPATH
- PUBLIC RIGHT OF WAY (PROW) PERMANENTLY DIVERTED
- PUBLIC RIGHT OF WAY (PROW) PERMANENTLY STOPPED UP

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P04	10/09/18	UPDATE FOLLOWING COMMENTS	EB	TE	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 15.2B
PUBLIC RIGHTS OF WAY AND OTHER ROUTES USED BY WCHRs PERMANENTLY OR TEMPORARILY STOPPED UP AND/OR DIVERTED

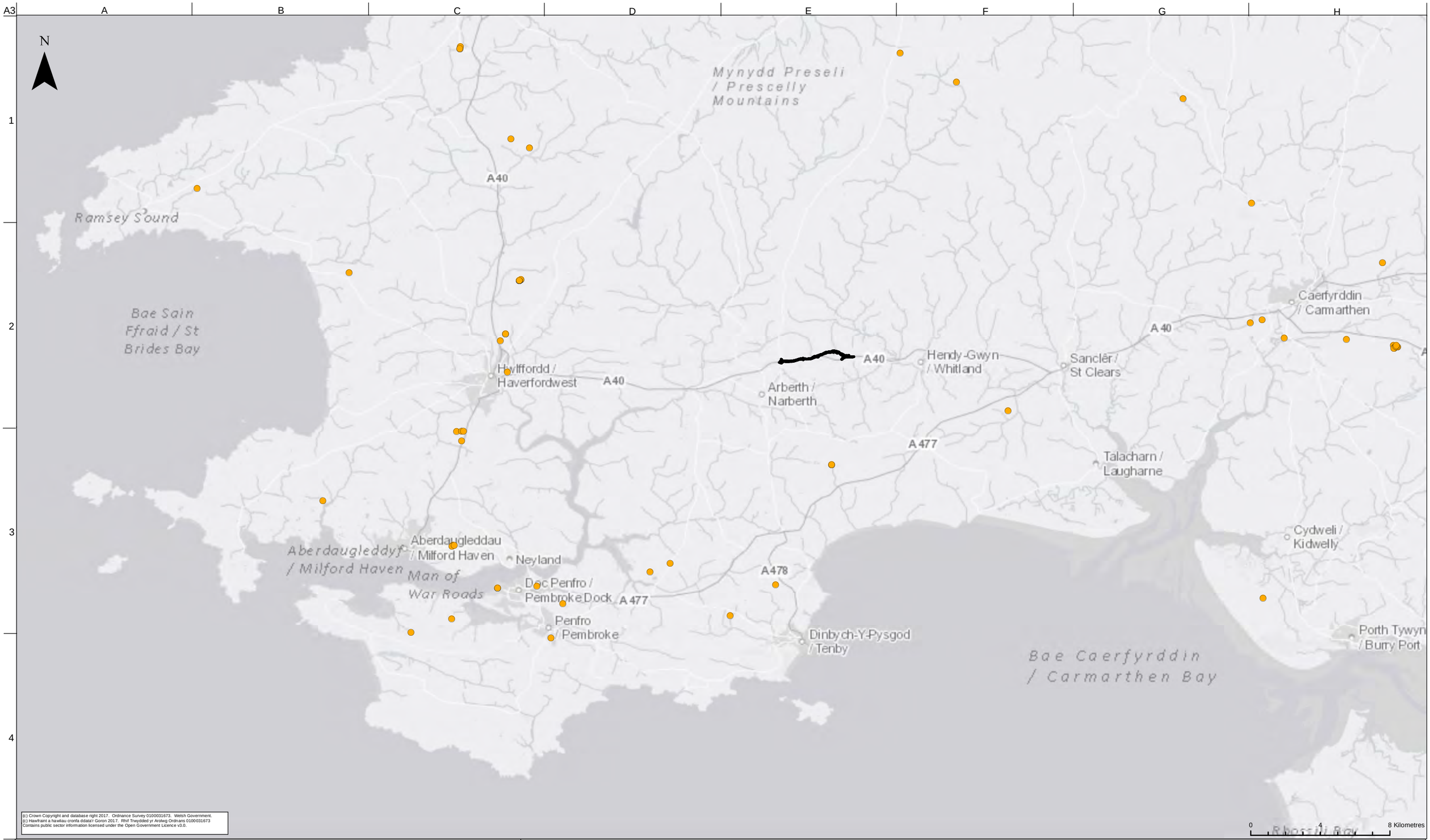
Suitability
S4 | SUITABLE FOR STAGE APPROVAL

Scale at A3
1:7,500

Rev	By	Chkd	Appd	Auth
P04	EB	TE	TE	GD
	Date 10/09/18	Date 10/09/18	Date 10/09/18	Date 10/09/18

Name
A40LVP - ARP - ENM - SWI - DR - C - 0014

Project | Originator | Volume | Location | Type | Role | Number



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LEGEND

PROPOSED ALIGNMENT

WASTE MANAGEMENT FACILITIES

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made to the design hazard log)

Construction
None
Maintenance / Cleaning
None
Use
None
Decommissioning / Demolition
None

Rev.	Date	Description	By	Chkd	Appd	Auth
P03	17/09/18	UPDATE FOLLOWING COMMENTS	EB	MC	TE	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARCADIS · MOTT MACDONALD · ARUP · RICHARDS

Drawing Title
FIGURE 16.1
WASTE MANAGEMENT FACILITIES

Suitability
S4 | **SUITABLE FOR STAGE APPROVAL**

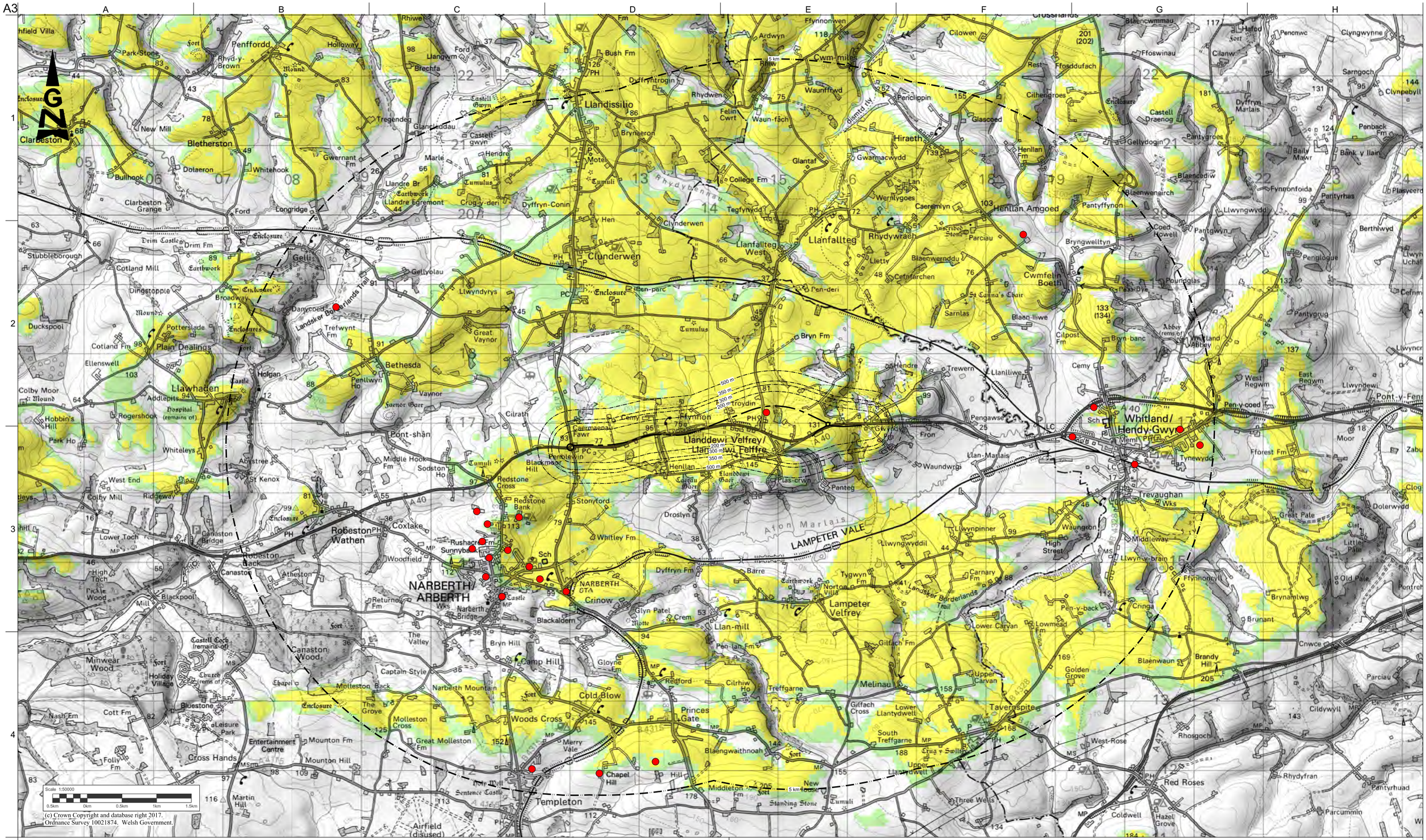
Scale at A3
1:200,000

Rev	By	Chkd	Appd	Auth
P03	EB	MC	TE	GD
	Date 17/09/18	Date 17/09/18	Date 17/09/18	Date 17/09/18

Name
A40LVP - ARP - EGN - SWI - DR - C - 0001

Project	Originator	Volume	Location	Type	Role	Number

A3



Legend

- Matrix 1 Site
- Scheme centre-line
- Zone of influence
- Zone of Theoretical Visibility (Road Surface)
- Zone of Theoretical Visibility (Commercial Vehicles)

NOTE:
VISIBILITY TAKES NO ACCOUNT OF BUILDINGS, VEGETATION OR OTHER SURFACE OBSTACLES.

Zone of influence

Cultural Heritage: 200 m
Noise and Vibration: 300 m
Air Quality: 350 m
Ecology and Nature Conservation: 500 m and within ZTV
Landscape and Visual: 5 km and within ZTV

Rev	Date	Description	By	Chkd	Appd	Auth
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P01	02/10/18	FIRST DRAFT ISSUE	RE	AS	GD	GD
P02	19/11/18	RELINK OF REFERENCE FILES	RE	AS	AS	GD

Project Title
A40 LLANDDEWI VELFREY TO PENBLEWIN IMPROVEMENTS

Client
Llywodraeth Cymru Welsh Government

Delivery Team
ARUP
ARCADIS
MOTT MACDONALD
RICHARDS

Drawing Title
FIGURE 19.1
OTHER PLANNING APPLICATIONS AND ALLOCATED SITES IN THE VICINITY OF THE SCHEME

Suitability
S3 | SUITABLE FOR REVIEW & COMMENT

Scale at A1: 1:50000

Rev	By	Chkd	Appd	Auth
P02	RE	AS	AS	GD
Date	16/10/18	16/10/18	16/10/18	19/11/18

Name: A40LVP - RML - EGN - SWI - DR - LE - 0006
Project | Originator | Volume | Location | Type | Role | Number

Do not scale