

## EXHIBIT LIST

Reference No: HOC/10008

Petitioner: Stone IMBR

Published to Collaboration Area: Friday 20-Apr-2018

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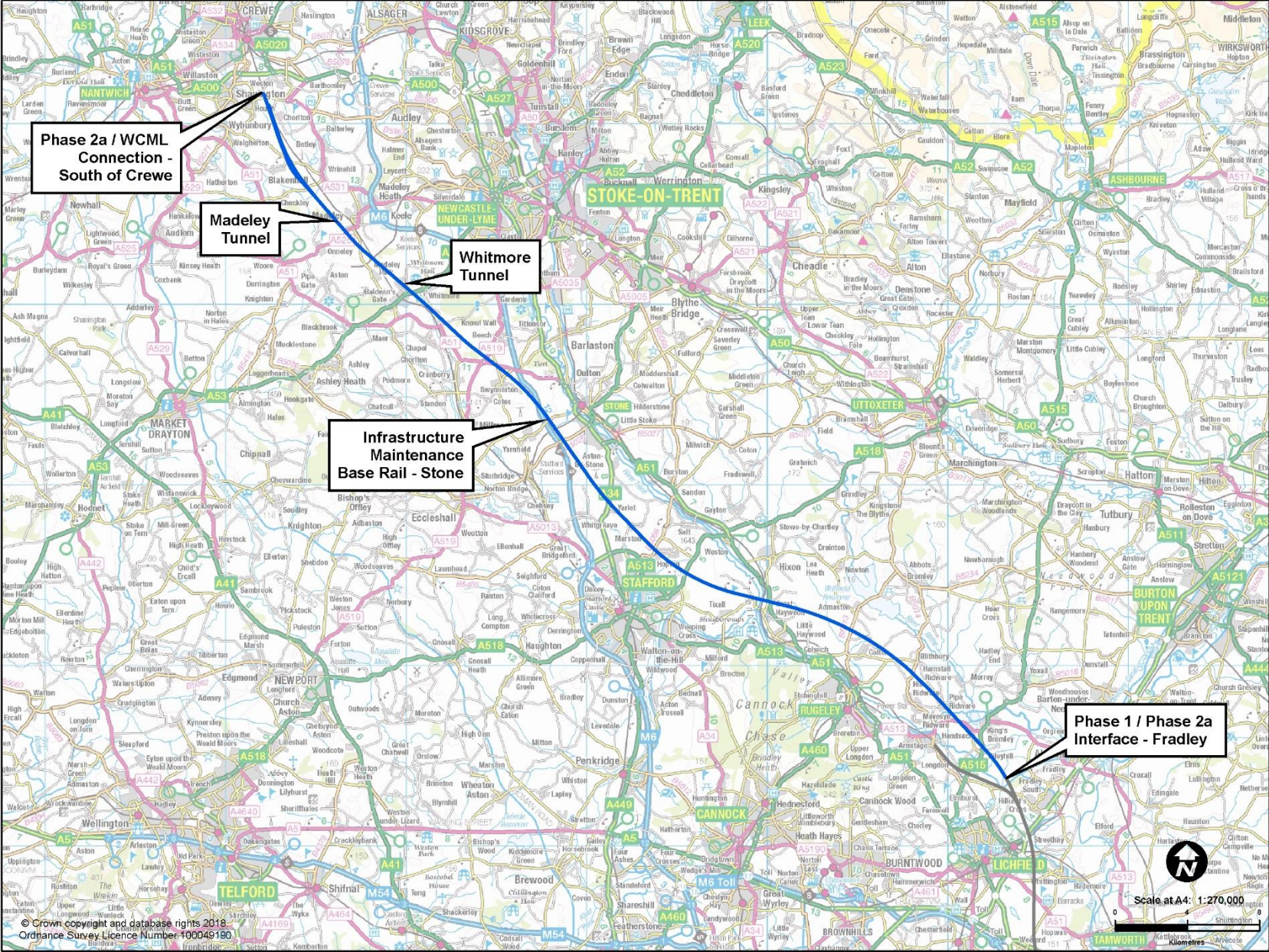
# HS2

## Stone Infrastructure Maintenance Base-Rail (IMB-R) & Aldersey's Rough alternative

April 2018



# Phase 2a Route Overview





# Construction railhead requirements

- Connection to the conventional railway network with capacity for freight trains
- Located away from complex / high risk civil engineering works to allow for a robust construction programme
- Connection to the HS2 main line (preferably in both directions)
- Good connection to the road network
- Suitable space to:
  - i) load and unload trains
  - ii) store construction plant and trains
  - iii) handle and store materials
  - iv) provide management support for the rail systems installation works

# Key advantages of Stone Railhead

- Railhead connects to the Norton Bridge to Stone railway. Direct connection to the existing rail network with good train path availability. Limited impact on existing passenger and freight services, with low associated cost.
- Reduced construction programme risk. Railhead located away from complex civil engineering works at mid point on the Phase 2a route.
- Direct access to the strategic road network via the new permanent and temporary M6 slips.

# Key disadvantages of Aldersey's Rough location for Railhead

- Extensive works required on West Coast Main Line with high disruption to passenger and freight services.
- Significant works required to bring Stoke to Market Drayton line back into use (rebuild railway to modern standards, overbridge replacement).
- Located between two most complex civil engineering elements on Phase 2a (Whitmore Heath tunnel and Madeley tunnel).
- New road access to / from M6 required through Keele Motorway Service Area.
- Road access to / from M6 through Keele Motorway Service Area would require consent from Highways England and departure from Government policy.
- Road access to / from M6 requires upgrade of Three Mile Lane and construction of a new access road.

# Maintenance Base requirements

- Connection to the conventional railway network with capacity for freight trains
- Connection, in both directions, to the HS2 main line
- Good connection to the road network
- Suitable space to:
  - i) load and unload trains
  - ii) store construction plant and trains
  - iii) handle and store materials

# Key advantages of Stone location for Maintenance Base

- Direct access to / from Phase 2a railway with limited shunting movements.
- Direct access to / from M6 via permanent southbound slip roads.
- Local access via Yarnfield Lane for staff and suppliers from the local area.
- Location at mid point of Phase 2a route minimises travel time to maintenance works.
- Bounded by existing transport infrastructure and Phase 2a railway.

# Key disadvantages of Aldersey's Rough location for Maintenance Base

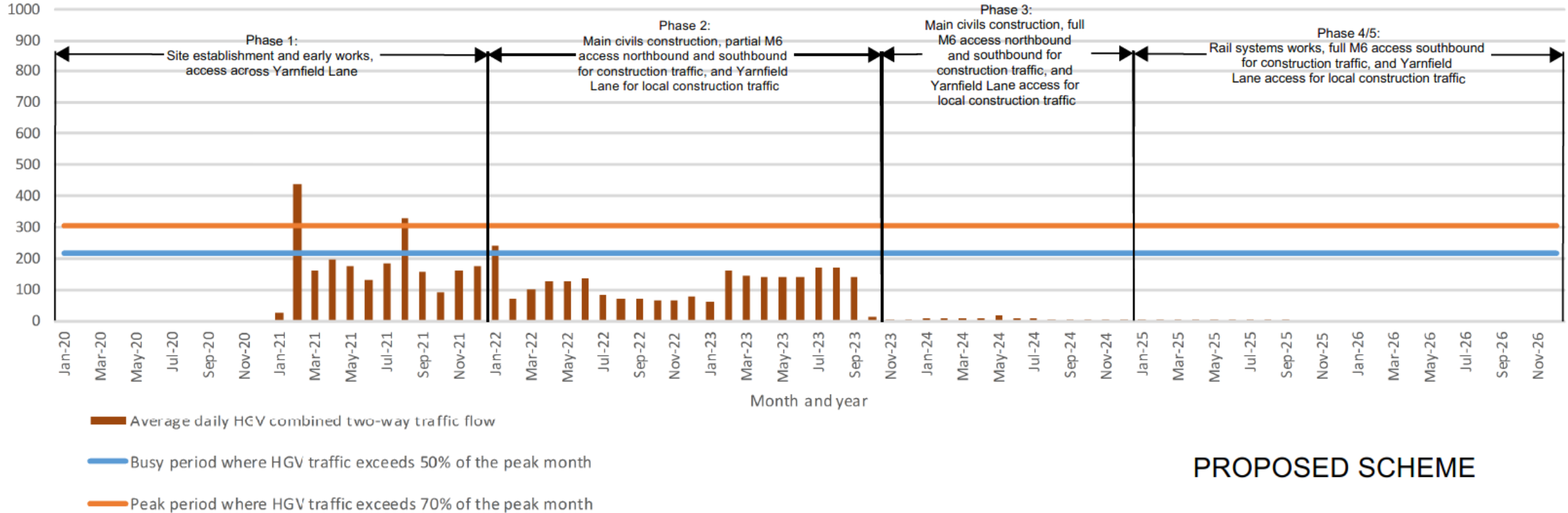
- Rail connection between Maintenance Base and West Coast Main Line.
- Increased requirement for shunting movements.
- Road access to / from M6 Motorway through Keele Motorway Service Area.
- Local road access via Three Mile Lane.

# Yarnfield Lane

- Offline realignment of Yarnfield Lane, incorporating new bridge over M6, allowing public highway to remain open during both construction and operation of the Proposed Scheme.
- Temporary lane restrictions for three months and tie-in works over two weekend closures.
- Short weekend closures will be notified to the local community well in advance.



# Yarnfield Lane traffic histogram

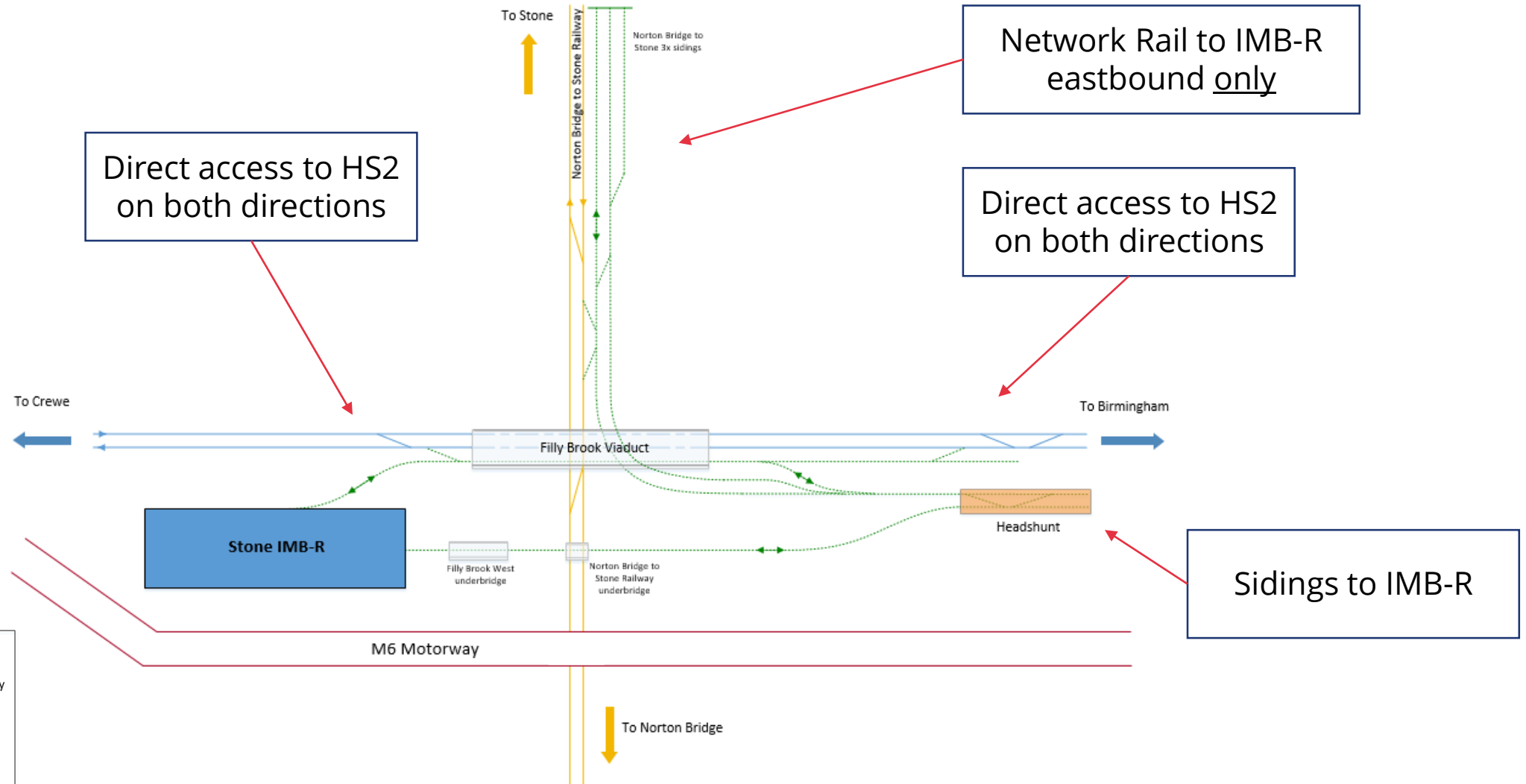


PROPOSED SCHEME

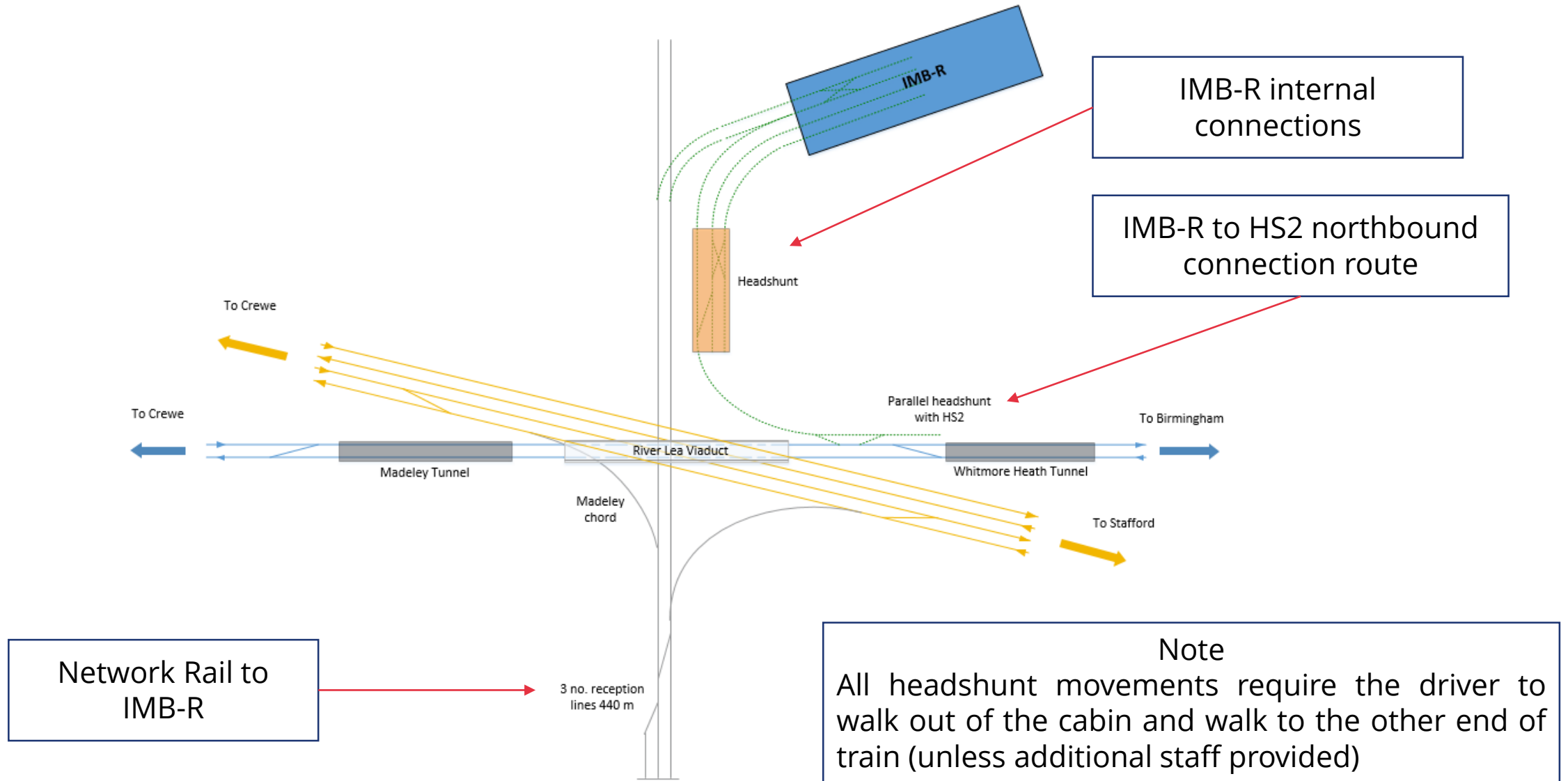
# Key avoidance and mitigation measures for Stone Railhead/Maintenance Base

- Landscape bunds and associated planting will be used to mitigate visual impacts, including views from Stone, Yarnfield, nearby roads and Public Rights of Way
- Earthwork bunds will be graded helping to integrate the Proposed Scheme into the surrounding landscape
- Low level, automated lighting will be used in all external lighting in the Maintenance Base
- Operational noise will be mitigated through the design of buildings and plant
- Noise barrier, up to 2m in height, on eastern side of Norton Bridge to Stone sidings
- Woodland, grassland and wetland habitat creation to compensate for habitat loss
- Flood mitigation, including replacement floodplain storage areas

# Stone – Rail Access



# Aldersey's Rough - Rail Access



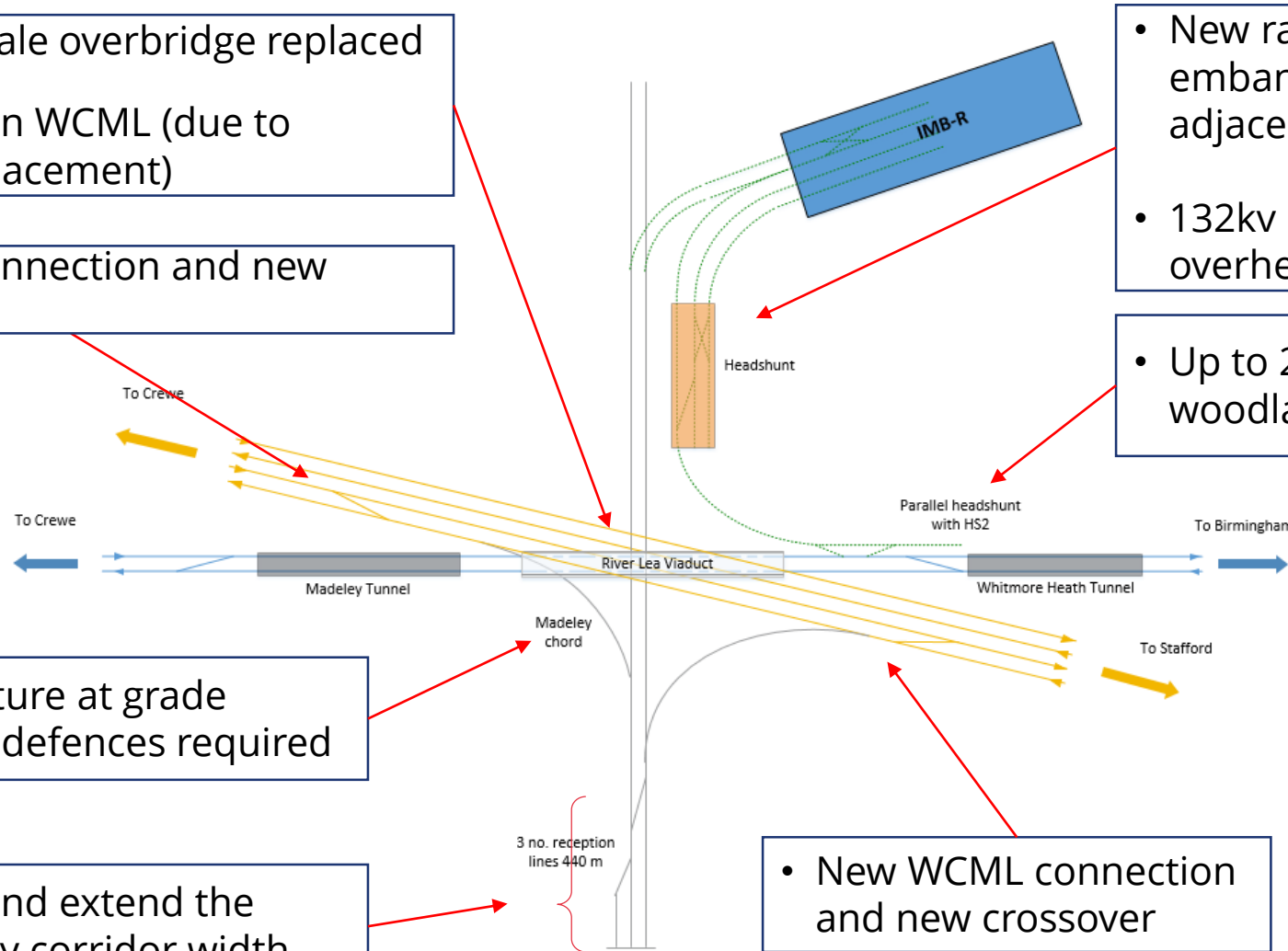
# Aldersey's Rough – Construction Elements

- Existing Silverdale overbridge replaced
- Gantry works on WCML (due to overbridge replacement)

- New WCML connection and new crossover

- New railway corridor on embankment 10m higher than adjacent line
- 132kv lattice tower High Voltage overhead line diversion required

- Up to 25m retaining wall (12m into woodland)



- New infrastructure at grade
- Potential flood defences required

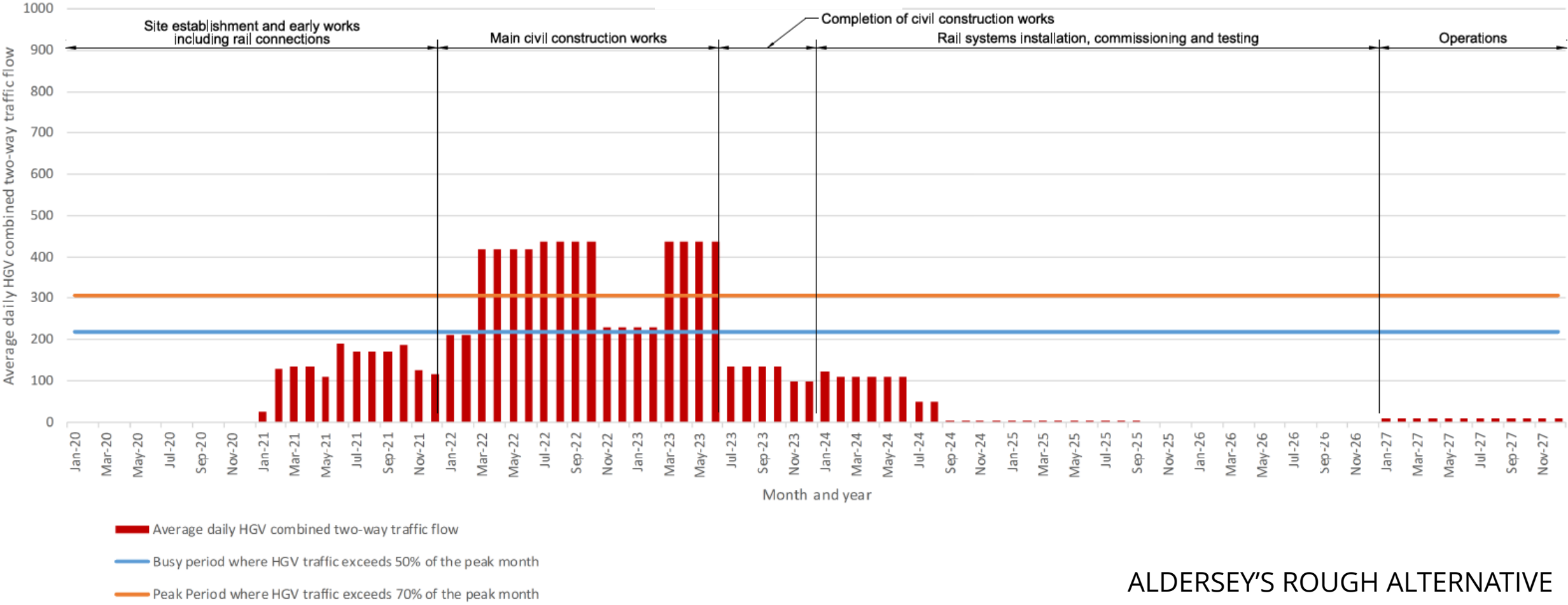
- 2m deep cut and extend the existing railway corridor width

- New WCML connection and new crossover

**Key**

- HS2 main line
- WCML
- Disused railway line
- - - Railhead connection lines
- Tunnel
- Railhead
- Headshunt

# Keele Motorway Services Area traffic histogram



ALDERSEY'S ROUGH ALTERNATIVE

# Environmental impacts comparison

Major improvement	Major worsening
Moderate improvement	Moderate worsening
Minor improvement	Minor worsening
Neutral	N/A

Topic	Construction		Operation	
	Stone Railhead & Maintenance Base	Aldersey's Rough Railhead & Maintenance Base	Stone Railhead & Maintenance Base	Aldersey's Rough Railhead & Maintenance Base
<b>Landscape &amp; Visual</b>	Impact on LCAs & visual impacts	Major worsening on LCA & visual effects	Adverse effects on landscape character and visual receptors. Lighting impact at night.	Greater adverse effects on landscape character and visual receptors. Lighting impact at night.
<b>Ecology &amp; Biodiversity</b>	Impact on 2 LWS, loss of important hedgerows & approx. 7 ponds and potential impact on EPS	Increased loss of ancient woodland and broadleaved woodland, impact on 2 LWS, potential impact on EPS	Impacts on bats and barn owl due to lighting and operation of maintenance trains	Greater impacts on bats and barn owl due to lighting and operation of maintenance trains
<b>Water Resources &amp; Flood Risk</b>	Impact on culverts, provision of flood compensation & channel modification	Potential impacts on culverts, increased flood risk & WFD watercourses	No impacts anticipated	No change compared to baseline
<b>Demolitions</b>	Two residential properties	No demolitions & removal of demolitions at Stone	n/a	n/a
<b>Traffic &amp; Transport</b>	Disruption to M6 and Yarnfield Lane	Additional 158,954 HGV movements. Disruption to M6.	M6 southbound access required. FP33 diverted. Optimal maintenance journey times	Additional operational traffic through Aldersey's Rough, longer journey times for maintenance.
<b>Cultural Heritage</b>	Adverse impact on heritage features	Adverse impacts on heritage features	No impacts anticipated	Increased setting impact
<b>Agriculture, Forestry &amp; Soils</b>	Permanent loss of approx. 80ha of BMV 10 holdings affected	40ha of agricultural land required. Impact on forestry land. 5 holdings affected.	No impacts anticipated	No change compared to baseline
<b>Community</b>	Demolition of two residential properties	Potential new and increased in-combination impacts. Removal of demolitions.	Limited in-combination effects	Potential new and increased in-combination effects
<b>Sound, Noise &amp; Vibration</b>	Impacts on approx. 10 properties	Potential new impacts at approx. 20 properties. Impacts at Stone remain	No impacts anticipated	No change compared to baseline
<b>Socio-Economics</b>	One business unit affected by demolition	Potential indirect effects on sensitive receptors. Removal of demolition at Stone.	No impacts anticipated	No change compared to baseline
<b>Land Quality</b>	Potential contamination sources within footprint	Potential contamination sources in surrounding area	Potential that contamination would require management during operation.	No impacts anticipated
<b>Air Quality</b>	Construction dust and traffic emission impacts	Potential for increased impacts on ecological and residential receptors	Impacts from operational traffic emissions	Impacts from operational traffic emissions
<b>Planning Policy</b>	Railhead/Maintenance Base located within Green Belt	Railhead/Maintenance Base and new access road located within Green Belt	n/a	n/a

# Railhead / Maintenance Base Sift Cost Analysis (1)

## Phase 2a Combined Railhead / IMB-R Sift Cost Analysis

### Aldersey's Rough cost breakdown

The table below shows the cost differences of the Aldersey's Rough alternative (Option A9.5\*) compared to the Proposed Stone Infrastructure Maintenance Base-Rail (IMB-R) Scheme. It should be noted that costs are likely to change following further design development.

Item	Proposed Scheme	Aldersey's Rough
	Stone I-MBR (£ million)	Option A9.5* (£ million)
Civil engineering (excluding earthworks)	49.3	38.0
Depots & stabling (including earthworks)	79.5	77.1
Rail Systems	9.2	12.2
Indirect Costs	22.8	29.6
<b>Sub-total: Construction &amp; Indirect Costs:</b>	<b>160.8</b>	<b>156.9</b>
Sub-total difference:		-3.9
Land & Property (increase against Proposed Scheme)		1.2
Aldersey's Rough – structures & roadworks and associated possession costs (increase against Proposed Scheme)		33.0
Aldersey's Rough – utility diversions, landscaping & planting (increase against Proposed Scheme)		18.9
Efficiency Adjustment		-9.8
<b>Total Difference:</b>		<b>39.4</b>
Contingency (40%)		15.7
<b>Total cost difference from Proposed Scheme:</b>		<b>55.1</b>



# Railhead / Maintenance Base Sift Cost Analysis (2)

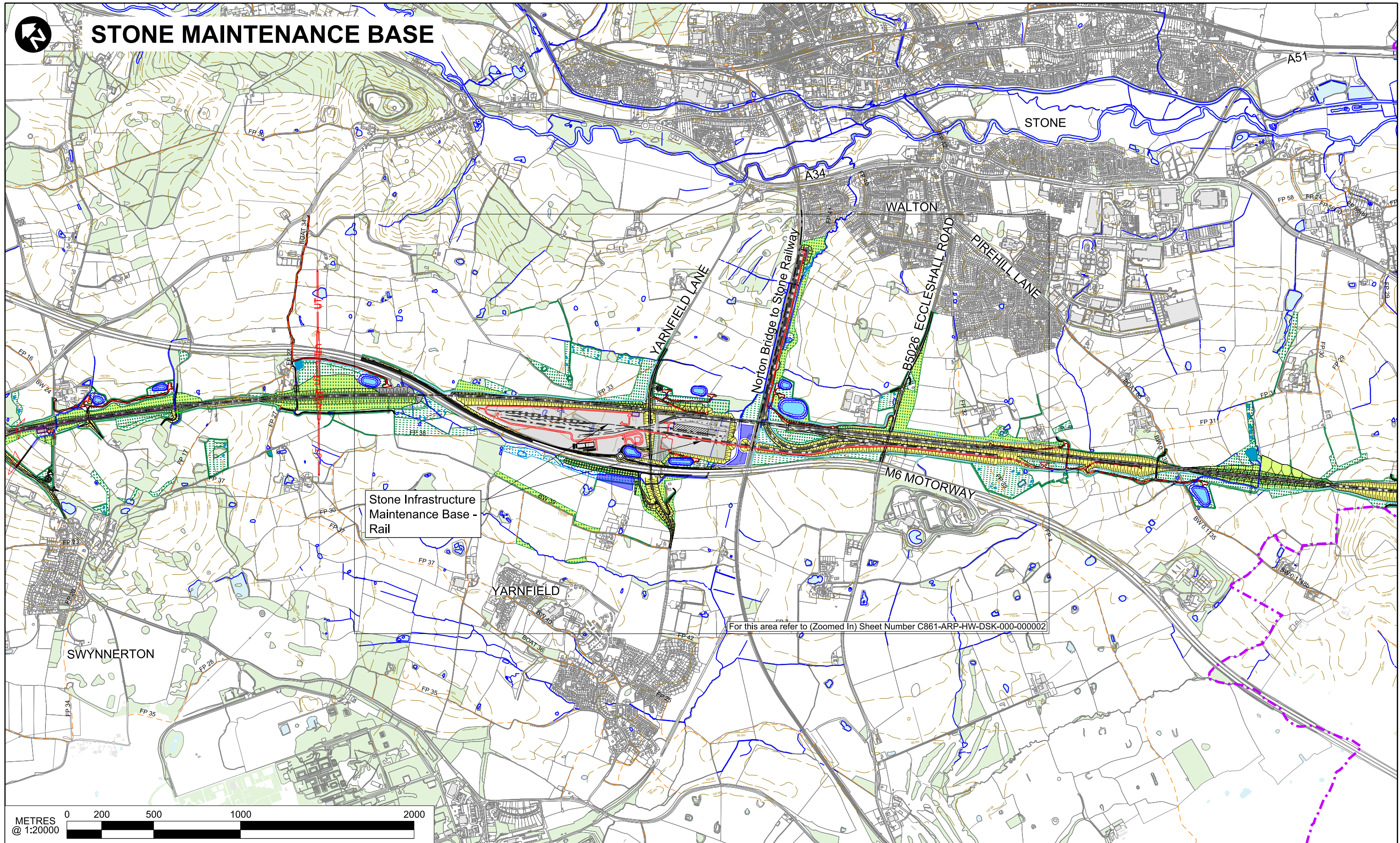
## Notes:

- Aldersey's Rough Option 9.5\* assumes that additional maintenance loops at Pipe Ridware would not be required,
- It is assumed that the landscaping, planting and utility diversion costs included in the hybrid Bill scheme at Stone would still be required for HS2 mainline works if the railhead and IMB-R were to be located at Aldersey's Rough,
- Civil engineering costs include bridges, viaducts & other structures, roads and utility diversions,
- Indirect Costs include HS2 corporate costs, project management, design development & insurances. They are calculated on a % basis,
- The Efficiency Adjustment represents expected opportunity cost savings associated with the direct and indirect costs,
- Contingency (40%) is consistent with the Proposed Scheme and is applied to the Total Difference,
- All costs are stated at base date 1Q 2015,
- Possession costs for connections to WCML are not included.



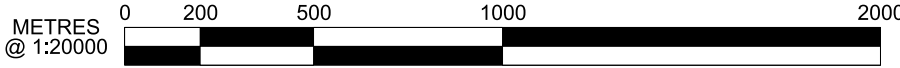


# STONE MAINTENANCE BASE



Stone Infrastructure Maintenance Base - Rail

For this area refer to (Zoomed In) Sheet Number C861-ARP-HW-DSK-000-000002



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LEGEND	
	Balancing pond
	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
	Engineering earthworks
	Landscape earthworks
	Rail alignment
	Rail alignment formation
	Ditches - new
	Hedgerow habitat creation
	Existing public right of way
	Rail alignment
	HS2 Access road



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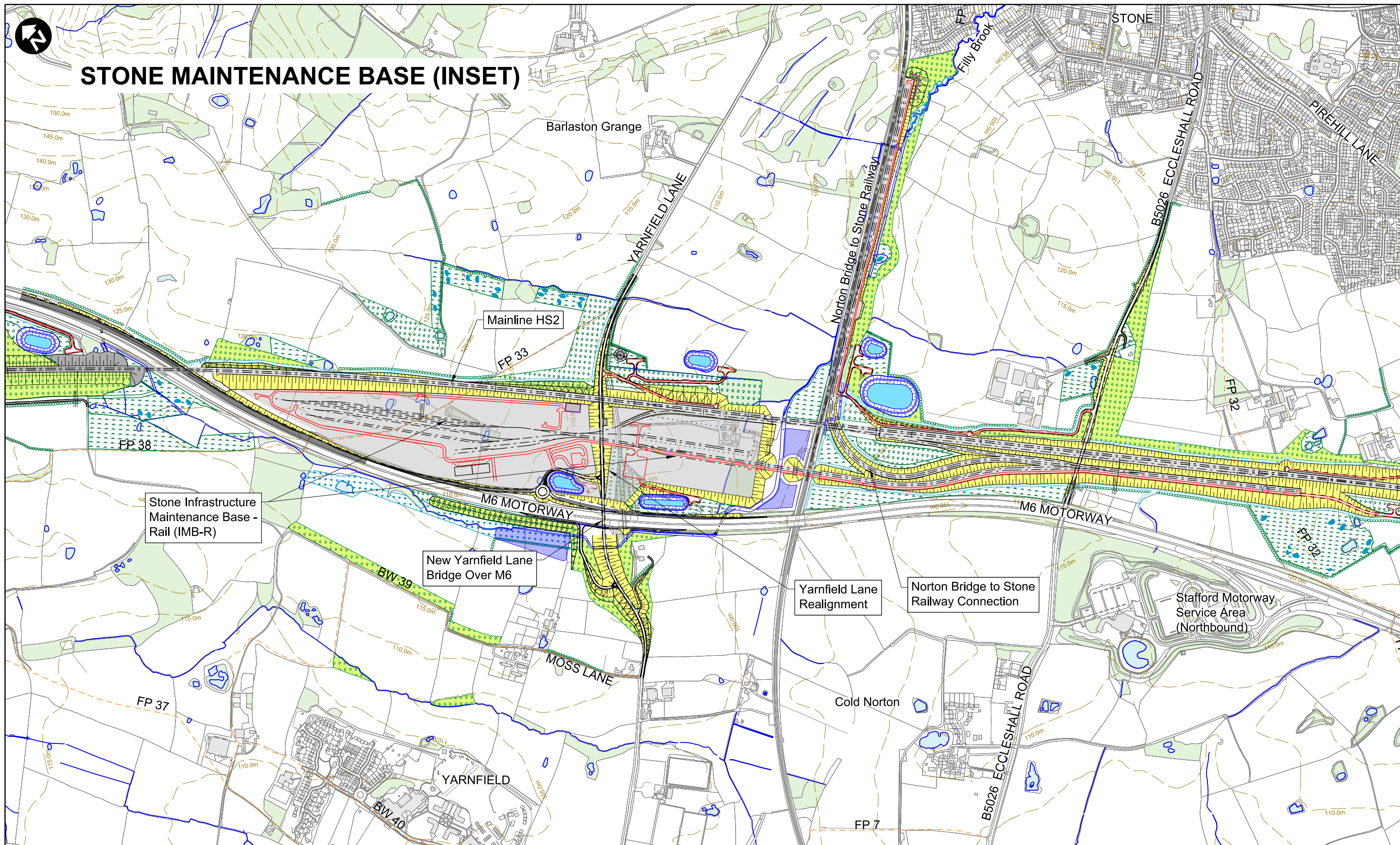
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Design Stage	Design for Petitions		Discipline/Function Engineering		
Drawing Title	Stone Maintenance Base		Drawn	Checked	Approved
	Location Plan		DW	LT	TE
	Date	Scale	Size		
	13/04/18	1:20000	A3		
Drawing No.	C861-ARP-HW-DSK-000-000004				Rev. P01

Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.





# STONE MAINTENANCE BASE (INSET)



Stone Infrastructure Maintenance Base - Rail (IMB-R)

New Yarnfield Lane Bridge Over M6

Yarnfield Lane Realignment

Norton Bridge to Stone Railway Connection

Stafford Motorway Service Area (Northbound)

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LEGEND	
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	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
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	Rail alignment
	Rail alignment formation
	Ditches - new
	Hedgerow habitat creation
	Existing public right of way
	Rail alignment
	HS2 Access road



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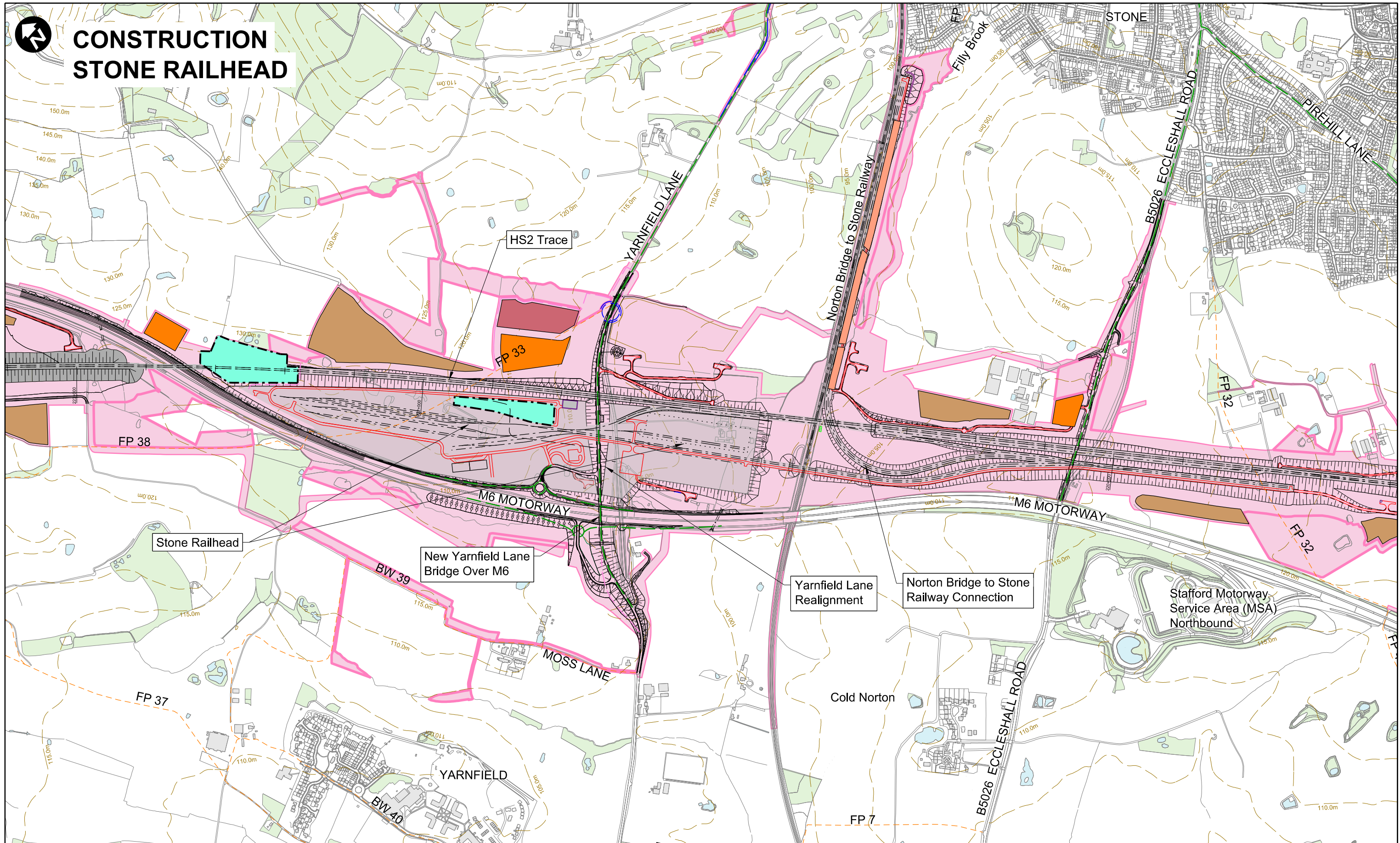
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Design Stage	Design for Petitions	Discipline/Function Engineering		
Drawing Title	Stone Maintenance Base	Drawn	Checked	Approved
	Operational Features	DW	LT	TE
		Date	Scale	Size
		12/04/18	AS SHOWN	A3
		Drawing No. C861-ARP-HW-DSK-000-000003		Rev. P01

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# CONSTRUCTION STONE RAILHEAD



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- LEGEND**
- Existing public right of way
  - Rail alignment
  - HS2 Access road
  - Compound
  - Land potentially required during construction



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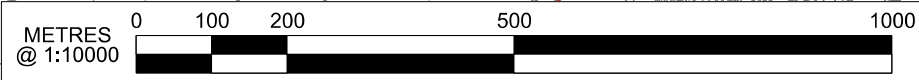
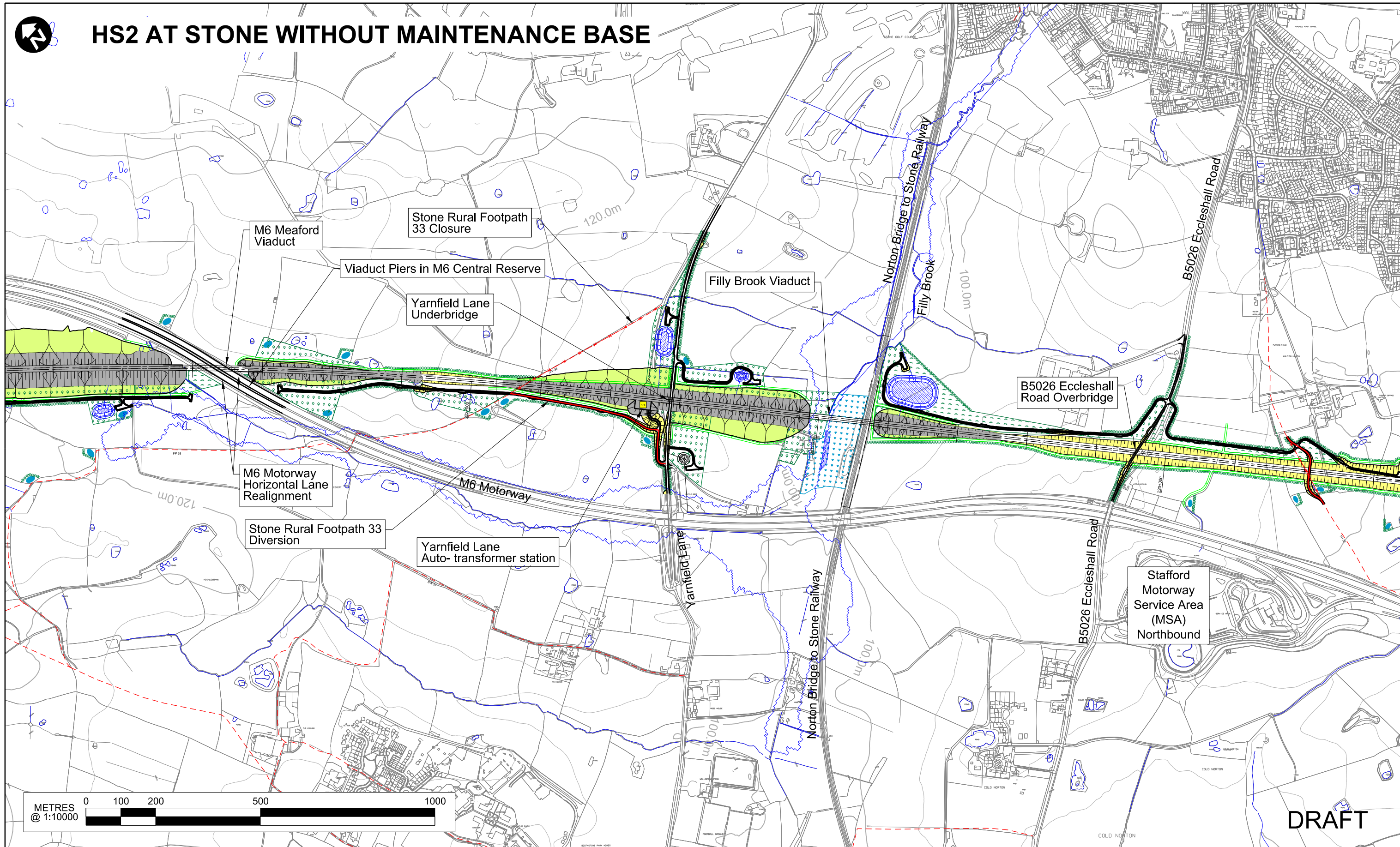
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Design Stage	Design for Petitions		Discipline/Function Engineering		
Drawing Title	Stone Railhead		Drawn	Checked	Approved
	Constructional Features		DW	LT	TE
	Date	Scale	Size		
	12/04/18	AS SHOWN	A3		
Drawing No.	C861-ARP-HW-DSK-000-000002				Rev. P01

Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.





# HS2 AT STONE WITHOUT MAINTENANCE BASE



**DRAFT**

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- Balancing pond
- Grassland habitat creation
- Landscape mitigation planting (scrub / woodland)
- Grassed areas
- Engineering earthworks
- Landscape earthworks
- Rail alignment
- Rail alignment formation
- Ditches - new
- Hedgerow habitat creation
- Existing public right of way
- Rail alignment
- HS2 Access road



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Zone	CA3		Project/Contract		P2A Civils Design & Environmental Services	
Design Stage	Design for Petitions		Discipline/Function			
Drawing Title			Engineering			
Stone Maintenance Base Exhibit Pack			Drawn	Checked	Approved	
Stone Maintenance Base			DW	DH	TE	
			Date	Scale	Size	
			12/04/18	1:10000	A3	
			Drawing No.		Rev.	
			C861-ARP-PT-DSK-000-000011		P01	



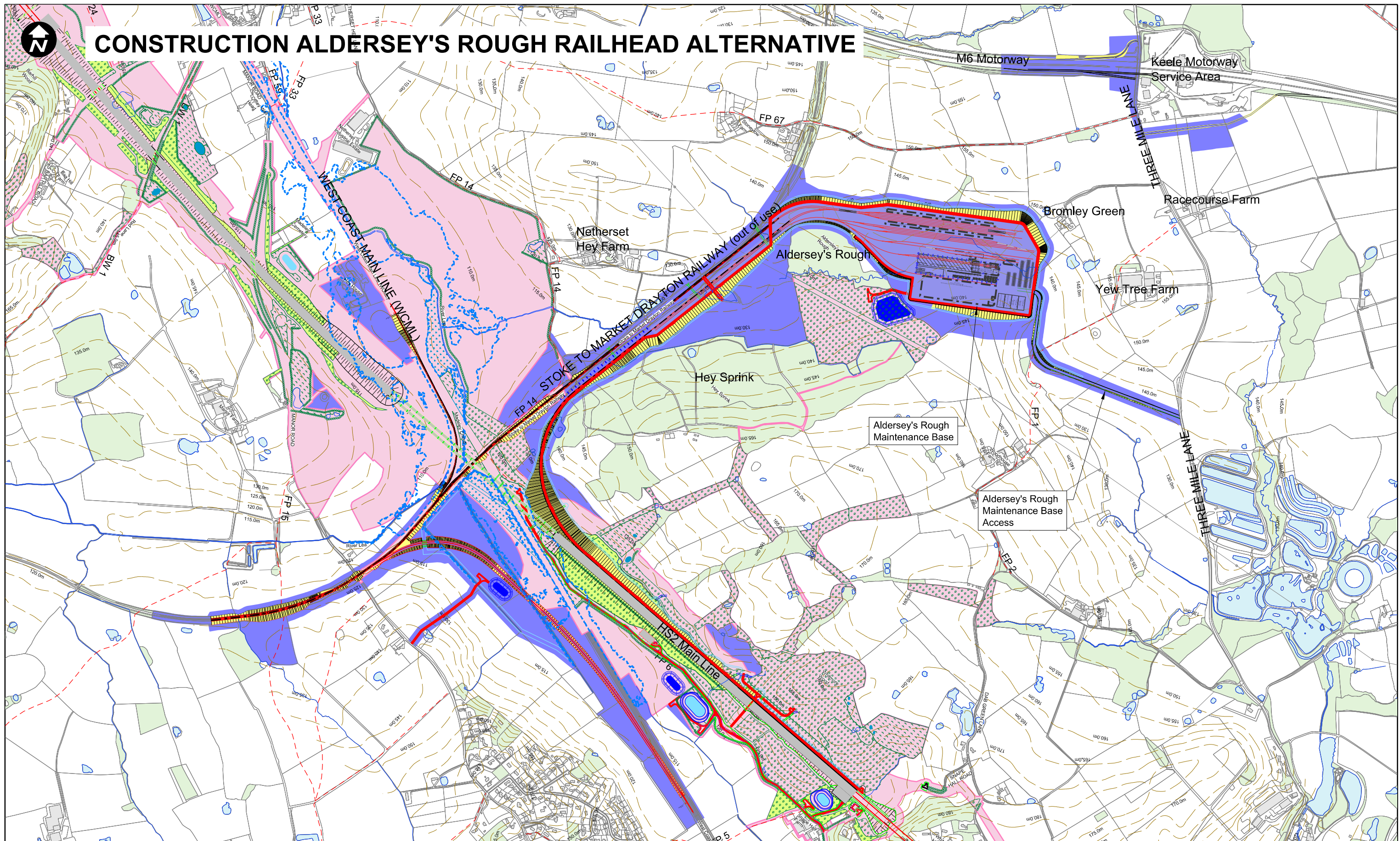








# CONSTRUCTION ALDERSEY'S ROUGH RAILHEAD ALTERNATIVE



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	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.

Legends/Notes:

**Key:**

- Reduced required land
- Additional required land ( Aldersey)
- Land required for The Proposed Scheme



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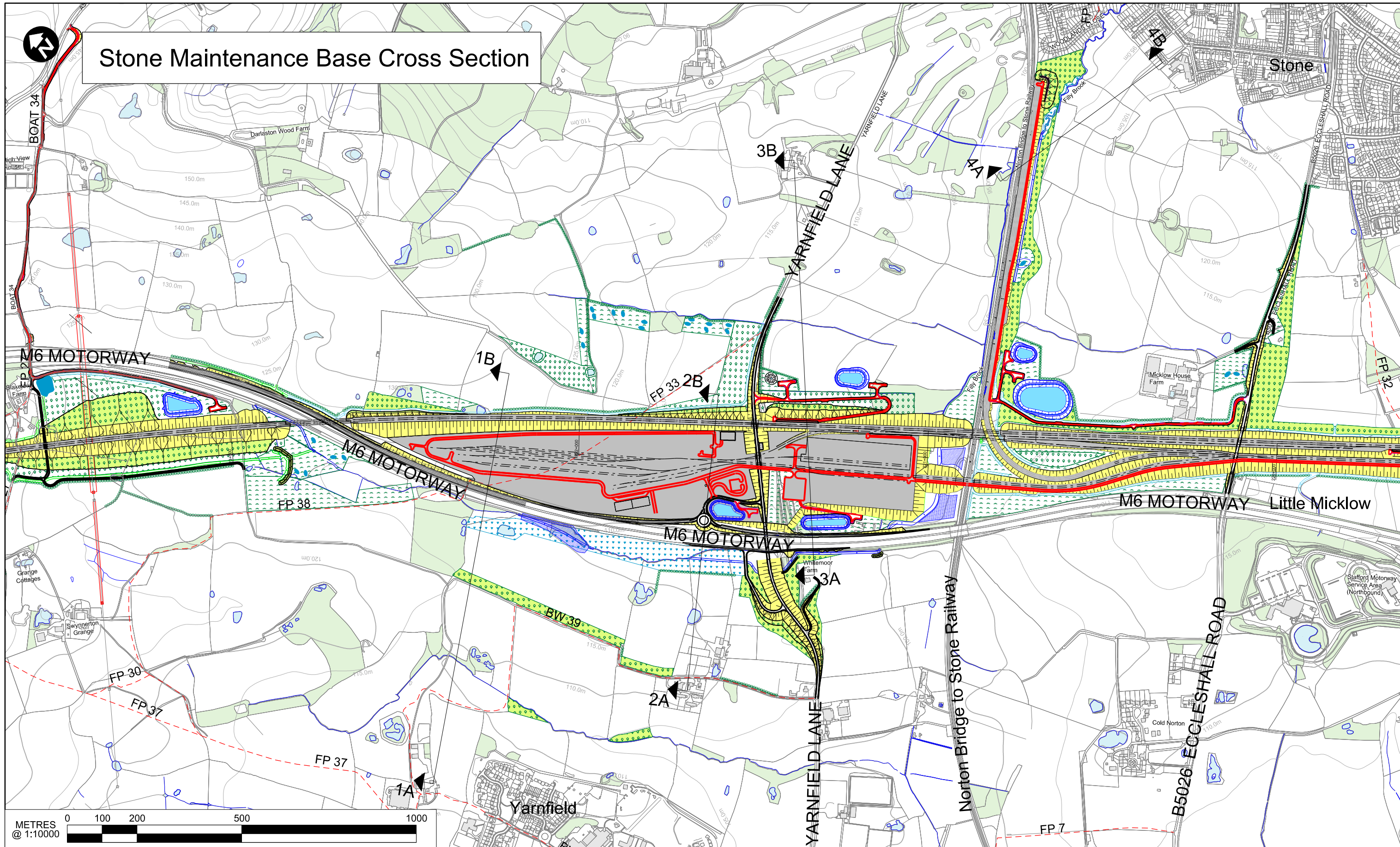
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Zone	CA4
Design Stage	Hybrid Bill Support
Drawing Title	IMBR Exhibit Pack
Construction Aldersey's Rough Railhead Alternative	

Project/Contract			P2A Civils Design & Environmental Services		
Discipline/Function			Construction & Logistics		
Drawn	Checked	Approved	DP	OF	DE
Date	Scale	Size	18/04/2018	NOT TO SCALE	A1
Drawing No.					Rev.
C861-ARP-CL-DSK-020426					P01



# Stone Maintenance Base Cross Section



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	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.

Legends/Notes:	
	Balancing pond
	Grassland habitat creation
	Landscape mitigation planting (scrub / woodland)
	Grassed areas
	Engineering earthworks
	Landscape earthworks
	Rail alignment
	Rail alignment formation
	Ditches - new
	Hedgerow habitat creation
	Existing public right of way
	Rail alignment
	HS2 Access road



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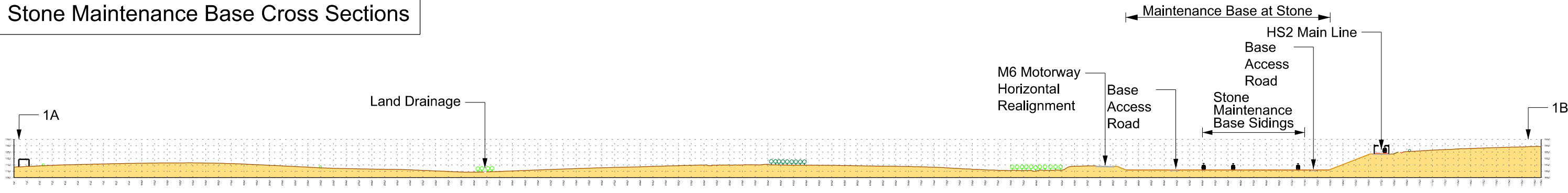
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Zone	Route Wide
Design Stage	Hybrid Bill Support
Drawing Title	IMBR Exhibit Pack Cross Section Plan

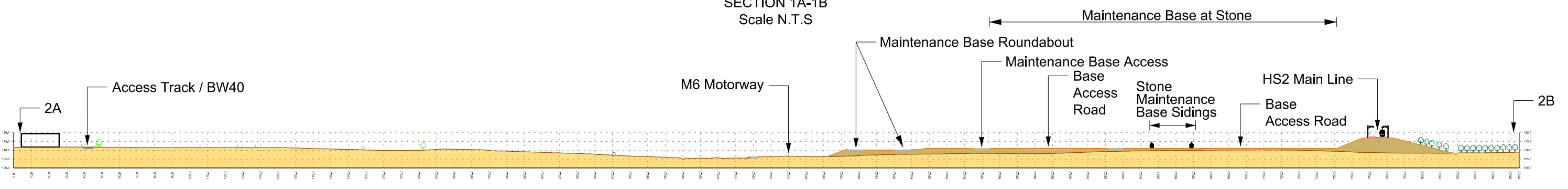
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Discipline/Function		Environmental	
Drawn	Checked	Approved	
JH	DH	TE	
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18/04/2018	AS SHOWN	A3	
Drawing No.		Rev.	
C861-ARP-EV-DSK-000-006115		P02	



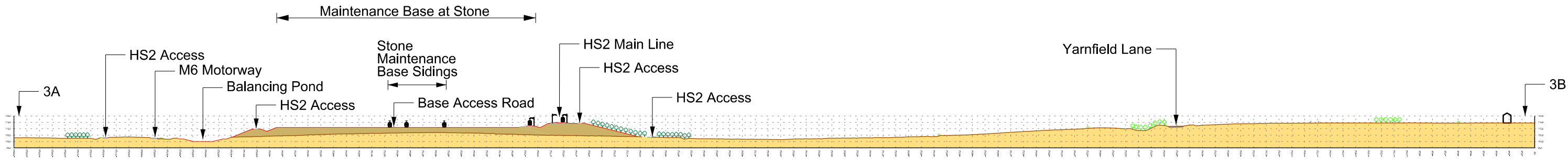
# Stone Maintenance Base Cross Sections



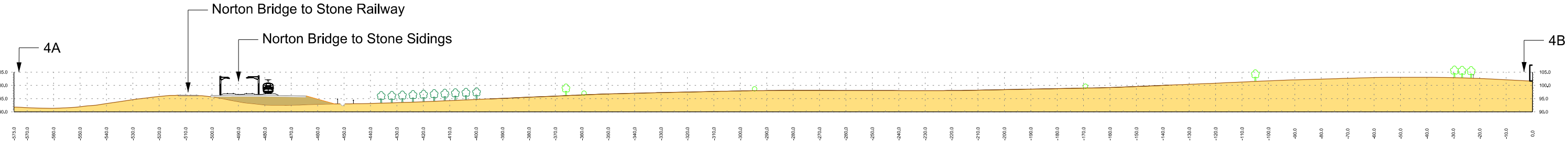
SECTION 1A-1B  
Scale N.T.S



SECTION 2A-2B  
Scale N.T.S



SECTION 3A-3B  
Scale N.T.S



SECTION 4A-4B  
Scale N.T.S

For location of Section refer to Drawing No. C861-ARP-EV-DSK-000-006115

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	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.

Legends/Notes:	
	Proposed mitigation tree planting
	Existing trees
	Proposed hedgerow planting
	Existing hedgerow
	Existing ground
	Proposed HS2 embankment/landscape earthworks
	New Surface
	Existing Surface

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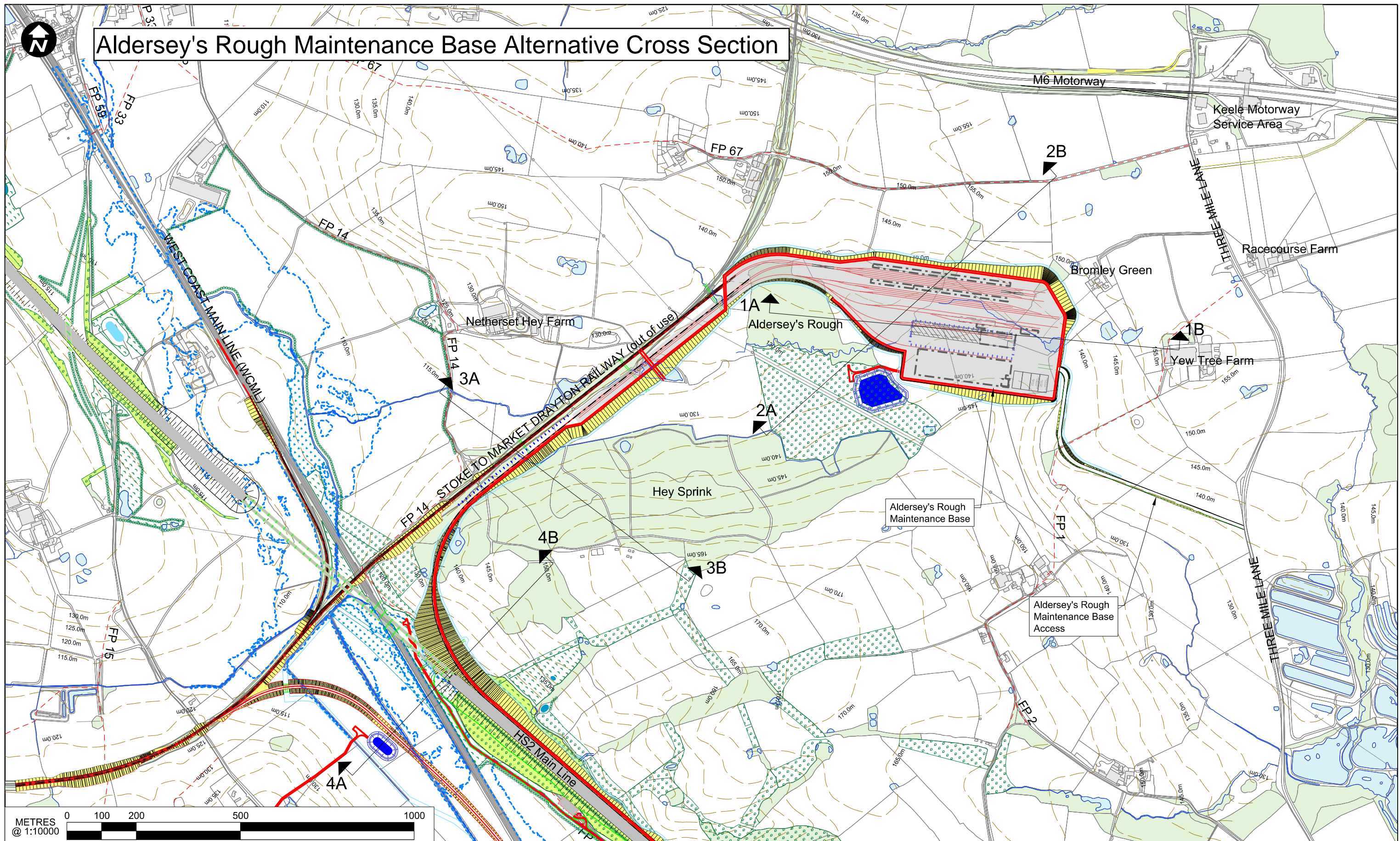
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Zone	Route Wide	
Design Stage	Hybrid Bill Support	
Drawing Title	IMBR Exhibit Pack Cross Section	

Project/Contract P2A Civils Design & Environmental Services		
Discipline/Function Environmental		
Drawn JH	Checked DH	Approved TE
Date 19/04/2018	Scale AS SHOWN	Size A3
Drawing No. C861-ARP-EV-DSK-000-006116		Rev. P03



# Aldersey's Rough Maintenance Base Alternative Cross Section



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Legends/Notes:

hs2

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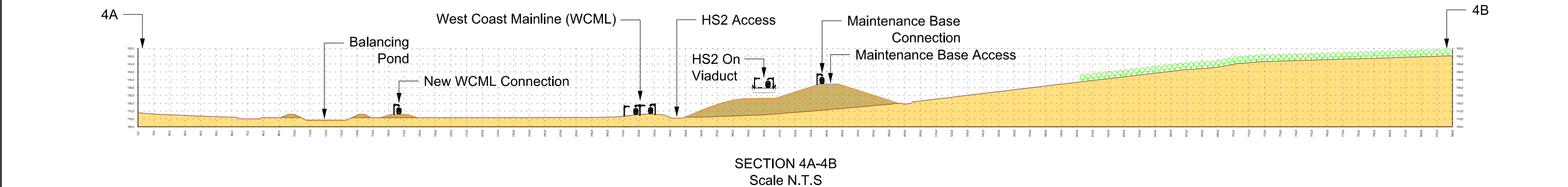
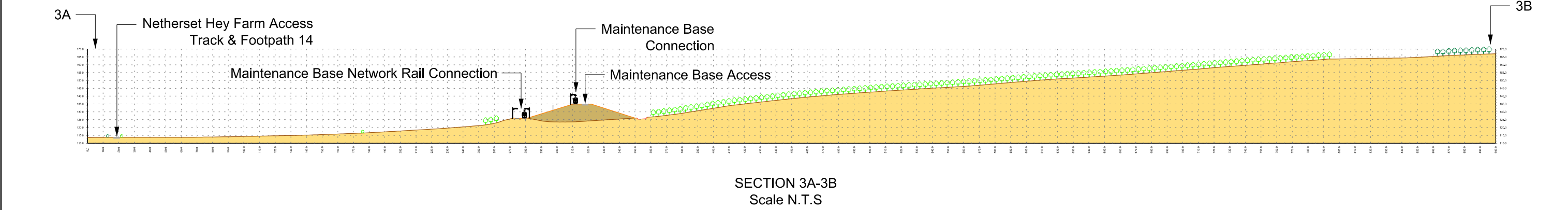
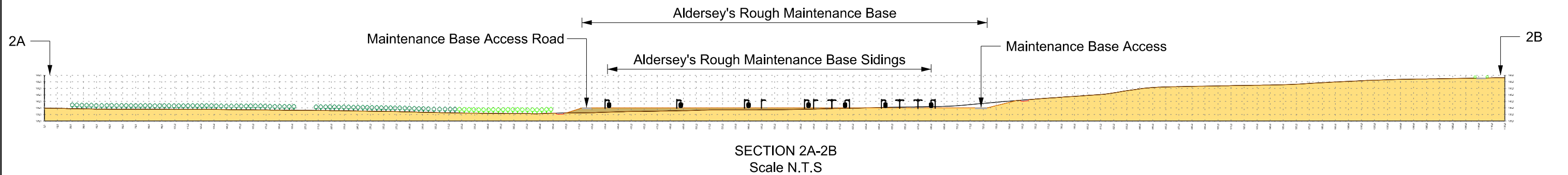
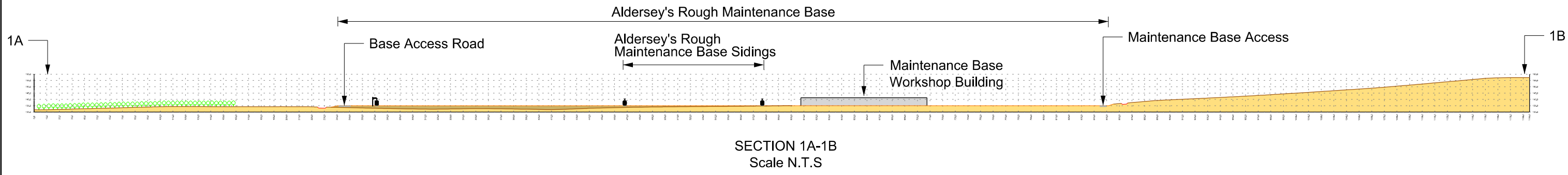
Zone	CA4
Design Stage	Hybrid Bill Support
Drawing Title	IMBR Exhibit Pack Aldersey's Rough IMB-R Alternative

Project/Contract	P2A Civils Design & Environmental Services		
Discipline/Function	Engineering		
Drawn	DW	Checked	CH
Approved	DE		
Date	18/04/2018	Scale	1:10000
Size	A3		
Drawing No.	C861-ARP-PT-DSK-000-000002		Rev.
			P03

Zone	CA4
Design Stage	Hybrid Bill Support
Drawing Title	IMBR Exhibit Pack Aldersey's Rough IMB-R Alternative

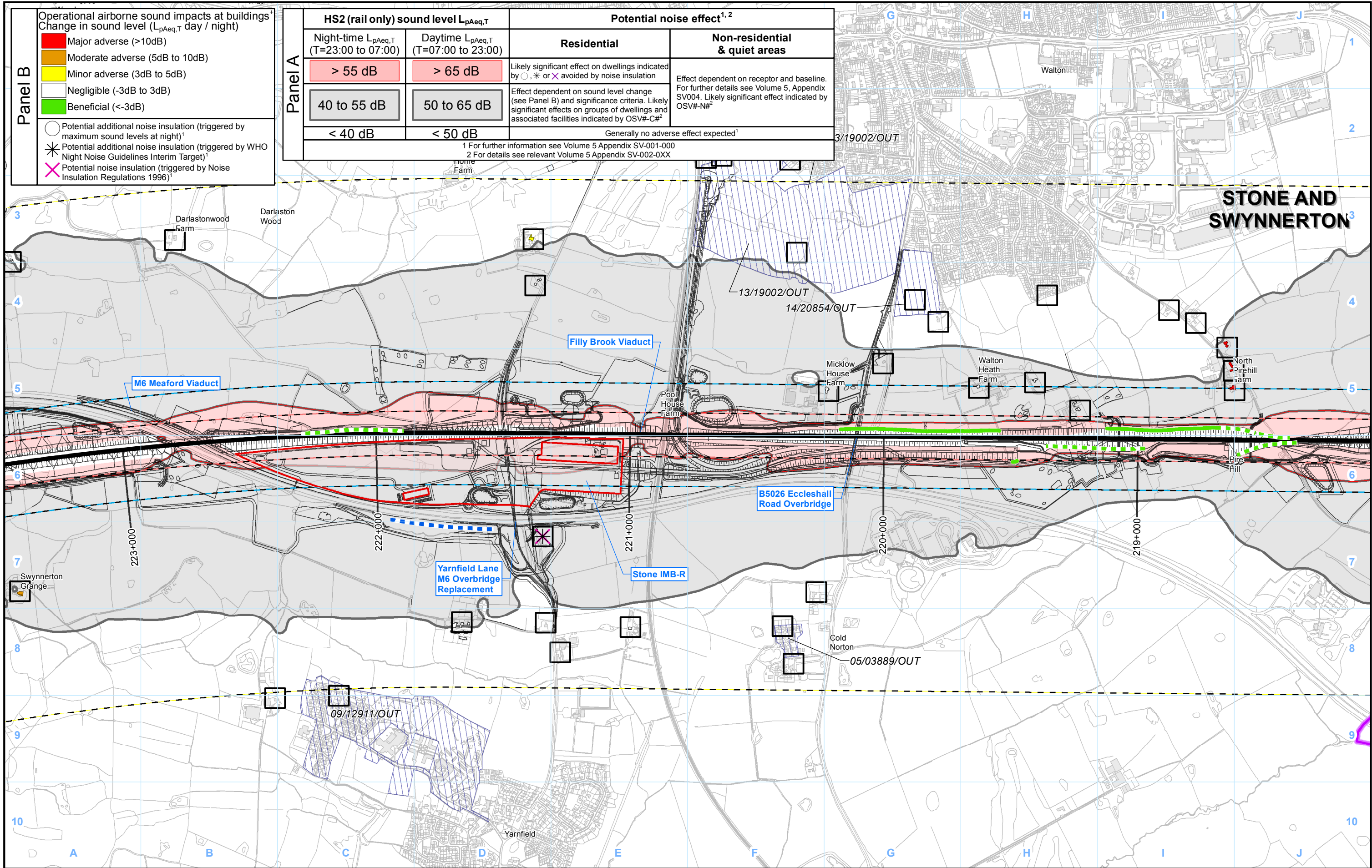


# Aldersey's Rough Maintenance Base Alternative Cross Section



For location of Section refer to Drawing No. C861-ARP-PT-DSK-000-000002

P00.1					HS2 accepts no responsibility for any circumstances which arise from the reproduction of this document after alteration, amendment or abbreviation or if it is issued in part or issued incompletely in any way.	<b>Legends/Notes:</b> Proposed mitigation tree planting Existing trees Proposed hedgerow planting Existing hedgerow Existing ground Proposed HS2 embankment/landscape earthworks New Surface Existing Surface	 Registered in England Registration No. 06791686 Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6GA	Zone	CA4	Project/Contract	P2A Civils Design & Environmental Services					
					© Crown Copyright and database right 2017. All rights reserved. Ordnance Survey Licence number 100049190				Design Stage	Design for Petition	Discipline/Function	Engineering				
					© Crown Copyright material is reproduced with the permission of Land Registry under delegated authority from the Controller of HMSO.				Drawing Title	IMBR Exhibit Pack Aldersey's Rough	Drawn	JH	Checked	DH	Approved	DE
					This material was last updated on 2017 and may not be copied, distributed, sold or published without the formal permission of Land Registry. Only an official copy of a title plan or register obtained from the Land Registry may be used for legal or other official purposes.				Date	18/04/2018	Scale	AS SHOWN	Size	A3		
	Description	Drawn	Checked	Con App	HS2 App	Scale with caution as distortion can occur.	Creator/Originator	Ove Arup & Partners International Ltd			Drawing No.	C861-ARP-PT-DSK-000-000010		Rev.	P02	



**Panel B**

Operational airborne sound impacts at buildings<sup>1</sup>  
Change in sound level (L<sub>pAeq,T</sub> day / night)

Major adverse (>10dB)
Moderate adverse (5dB to 10dB)
Minor adverse (3dB to 5dB)
Negligible (-3dB to 3dB)
Beneficial (<-3dB)

○ Potential additional noise insulation (triggered by maximum sound levels at night)<sup>1</sup>  
 ✱ Potential additional noise insulation (triggered by WHO Night Noise Guidelines Interim Target)<sup>1</sup>  
 ✕ Potential noise insulation (triggered by Noise Insulation Regulations 1996)<sup>1</sup>

**Panel A**

HS2 (rail only) sound level L <sub>pAeq,T</sub>		Potential noise effect <sup>1,2</sup>	
Night-time L <sub>pAeq,T</sub> (T=23:00 to 07:00)	Daytime L <sub>pAeq,T</sub> (T=07:00 to 23:00)	Residential	Non-residential & quiet areas
> 55 dB	> 65 dB	Likely significant effect on dwellings indicated by ○, ✱ or ✕ avoided by noise insulation	Effect dependent on receptor and baseline. For further details see Volume 5, Appendix SV004. Likely significant effect indicated by OSV#-N# <sup>2</sup>
40 to 55 dB	50 to 65 dB	Effect dependent on sound level change (see Panel B) and significance criteria. Likely significant effects on groups of dwellings and associated facilities indicated by OSV#-C# <sup>2</sup>	
< 40 dB	< 50 dB	Generally no adverse effect expected <sup>1</sup>	

<sup>1</sup> For further information see Volume 5 Appendix SV-001-000  
<sup>2</sup> For details see relevant Volume 5 Appendix SV-002-0XX

**Legend - General features**

- Route in bored tunnel
- Route in cut and cover tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community area boundary
- County boundary
- District/Borough boundary

**Legend - Sound related features**

Engineering earthworks:

- Embankment
- Cutting

Non engineering earthworks:

- Embankment
- Cutting

\* Residential buildings only  
 \* Labelled with total barrier height above rail level  
 \*\* HS2 train only L<sub>pAFmax</sub> + 2.5dB façade correction

**Legend - Sound related features**

- Committed developments - SV Only
- Envisaged mitigation to avoid / reduce significant noise effects:
  - Landscaping and/or fence barriers\*
  - Engineering e.g. cuttings (green tunnels separately marked)
- Envisaged measures further reducing noise effects:
  - Other environmental e.g. landscaping
  - Engineering e.g. cuttings
- 1km Airborne sound study area
- Ground-borne sound & vibration study area (residential and non-residential)
- Ground-borne sound & vibration study area (highly sensitive non-residential)
- Ground-borne noise or vibration impact\*
- L<sub>pAFmax</sub> exceeds 60dB façade\*\*

Map Number: SV-05-IMBR

Map Name: Operational Noise and Vibration Impacts and Likely Significant Effects SES and AP ES

Community Area 3: Stone and Swynnerton

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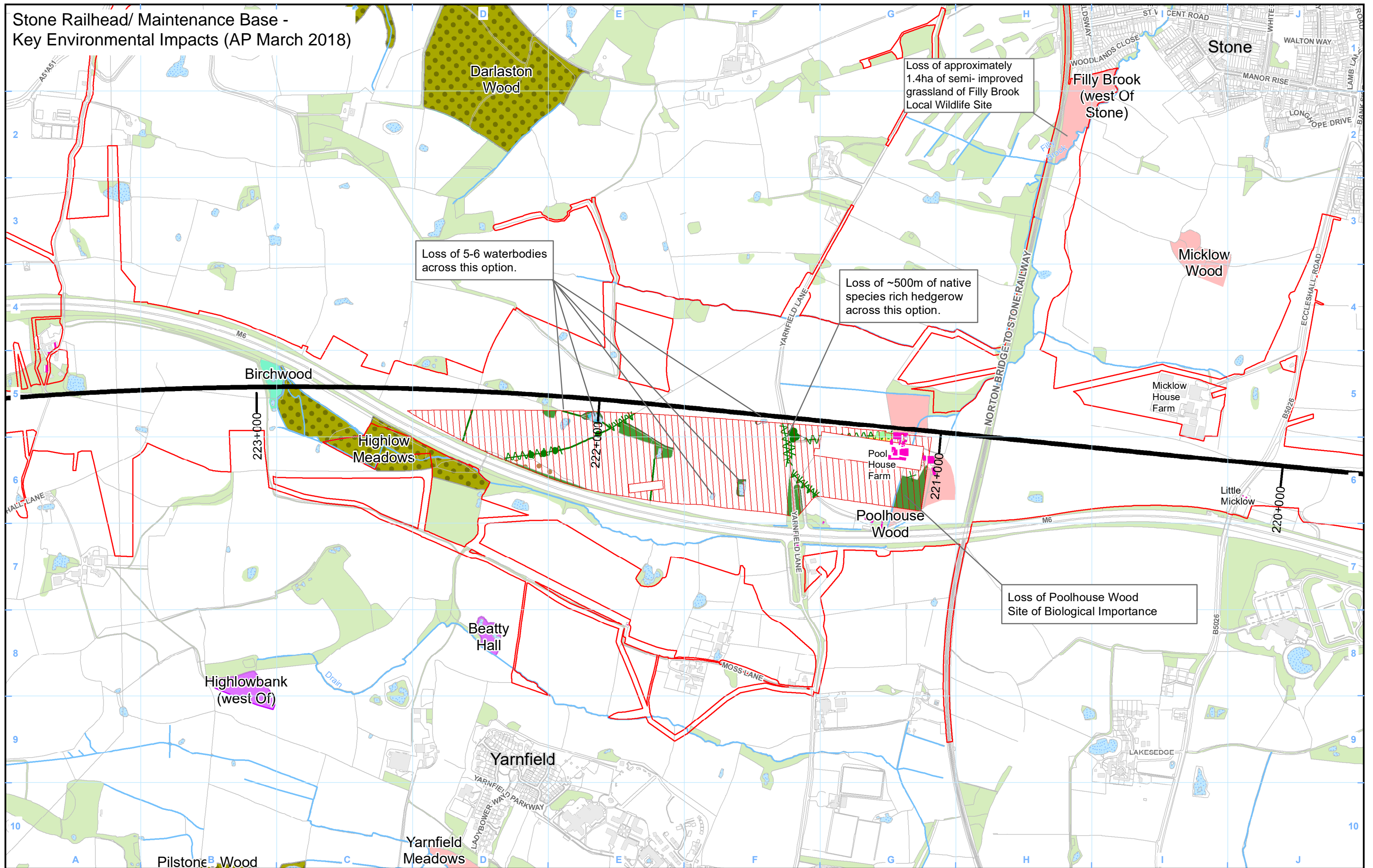
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Stone Railhead/ Maintenance Base -  
Key Environmental Impacts (AP March 2018)



- Legend**
- Route in tunnel
  - Route on surface
  - Depot, station, headhouse or portal building
  - Land potentially required during construction
  - Community area boundary
  - County boundary
  - District/Borough boundary
  - Demolished building
  - Designated sites
  - Local Wildlife Site (LWS)
  - Site of Biological Importance (SBI)
  - Biodiversity Alert Site (BAS)
  - Ancient woodland

Map Name Stone Railhead/ Maintenance Base  
- Key Environmental Impacts (AP  
March 2018)

Community Area 3:  
Stone and Swynnerton

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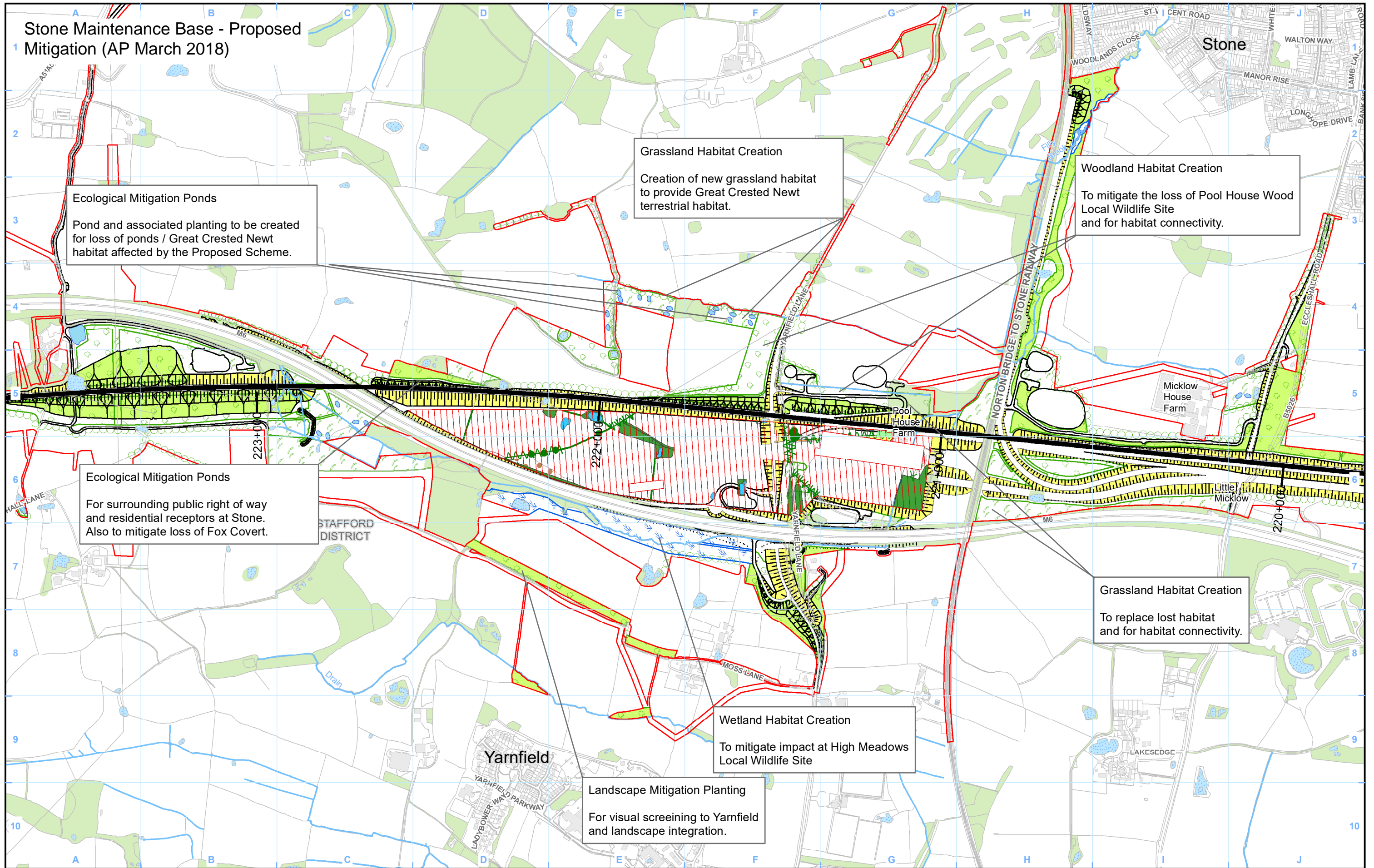
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0 100 200 300 400  
Metres

Doc Number: C861-ARP-EV-DPL-WS10-00002-P02.4



Stone Maintenance Base - Proposed Mitigation (AP March 2018)



**Ecological Mitigation Ponds**  
Pond and associated planting to be created for loss of ponds / Great Crested Newt habitat affected by the Proposed Scheme.

**Grassland Habitat Creation**  
Creation of new grassland habitat to provide Great Crested Newt terrestrial habitat.

**Woodland Habitat Creation**  
To mitigate the loss of Pool House Wood Local Wildlife Site and for habitat connectivity.

**Ecological Mitigation Ponds**  
For surrounding public right of way and residential receptors at Stone. Also to mitigate loss of Fox Covert.

**Grassland Habitat Creation**  
To replace lost habitat and for habitat connectivity.

**Wetland Habitat Creation**  
To mitigate impact at High Meadows Local Wildlife Site

**Landscape Mitigation Planting**  
For visual screening to Yarnfield and landscape integration.

Legend		

Map Name: Stone Maintenance Base - Proposed Mitigation (AP March 2018)

Community Area 3: Stone and Swynnerton

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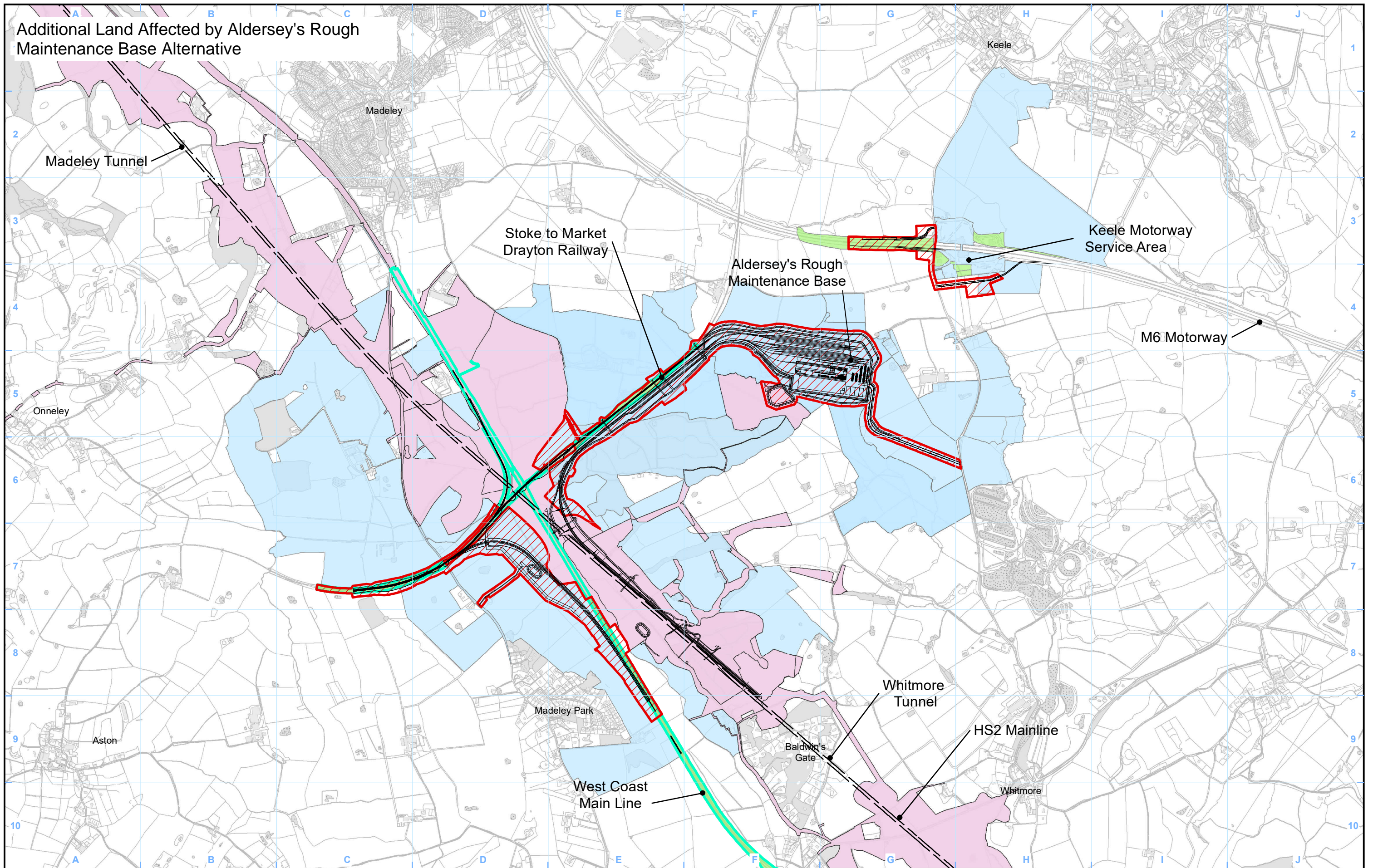
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HOC/10008/0033



# Additional Land Affected by Aldersey's Rough Maintenance Base Alternative



- Legend**
- Phase 2a Alignment
  - ▨ Proposed alternative depot land required
  - ▭ Network Rail Land
  - ▭ Land within Hybrid bill
  - ▭ Privately owned land
  - ▭ Publicly owned land

Additional land affected by Aldersey's Rough Maintenance Base alternative

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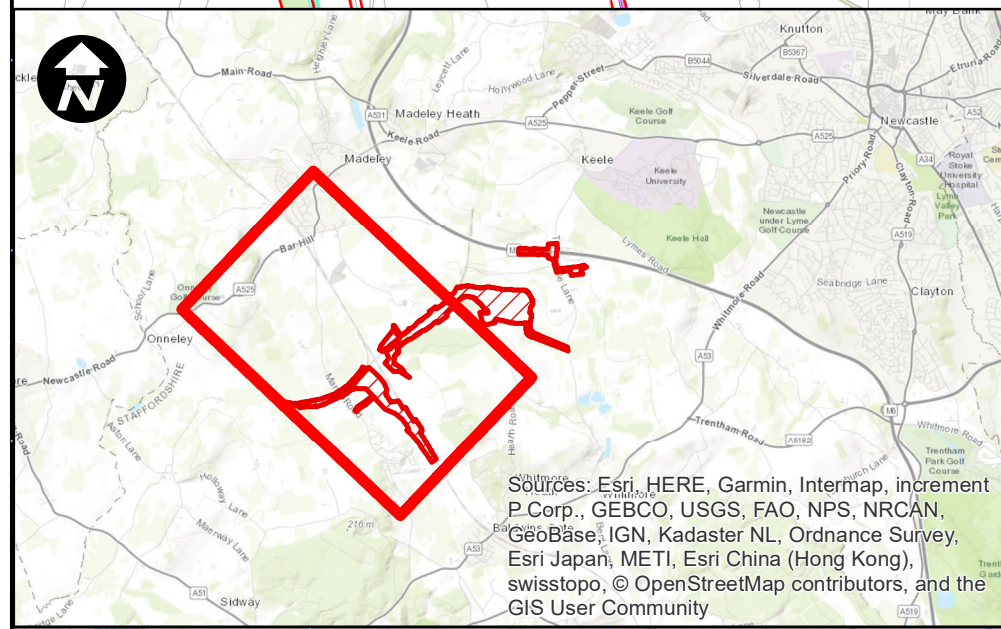
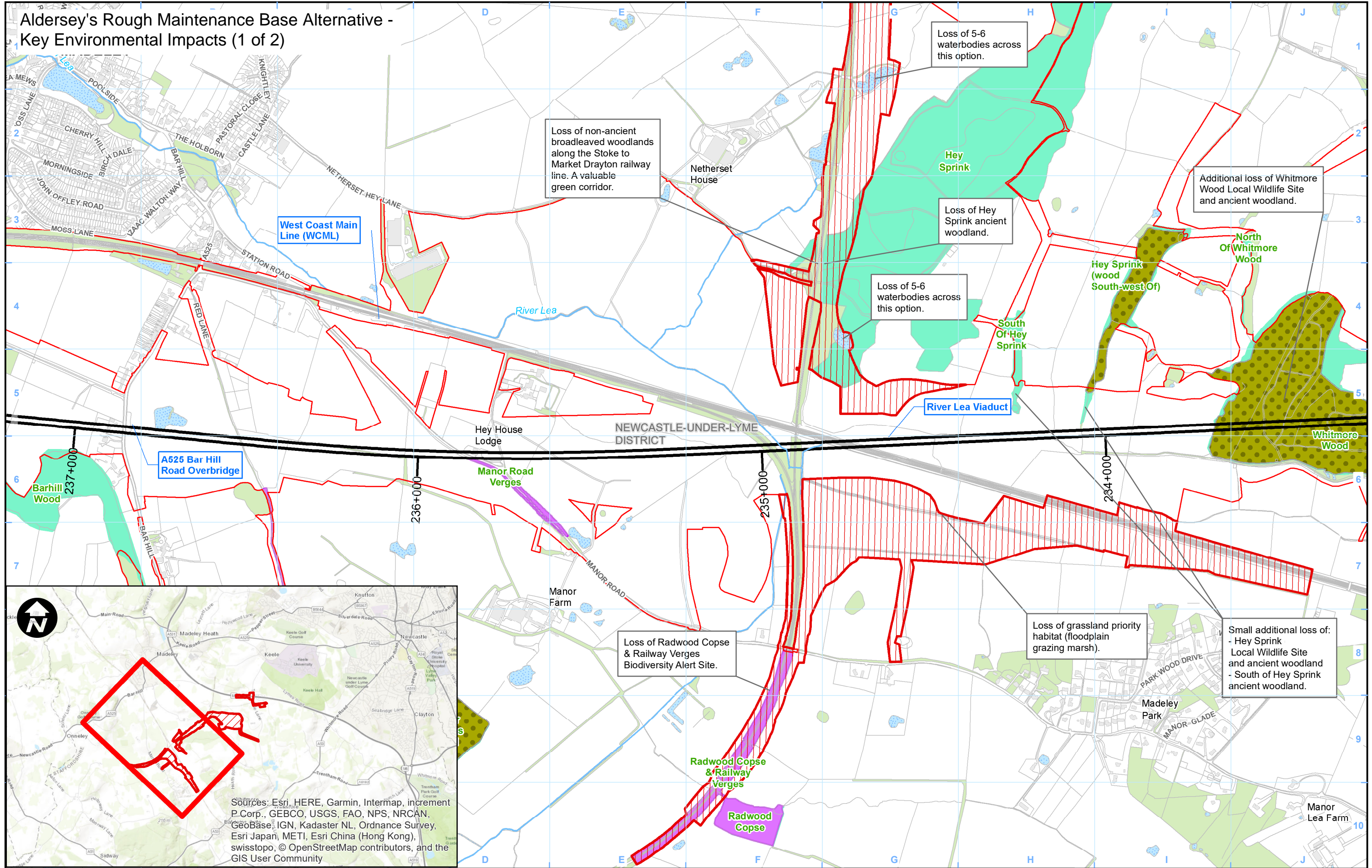
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Scale at A3: 1:20,000

0 200 400 600 800 Metres



# Aldersey's Rough Maintenance Base Alternative - Key Environmental Impacts (1 of 2)



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBasis, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Legend	
	Route in bored tunnel
	Route on surface
	Proposed alternative depot land required
	Land potentially required during construction
	Community area boundary
	County boundary
	District/Borough boundary
	Watercourse
	Water body
	Local Wildlife Site
	Biodiversity Alert Site (BAS)
	Ancient woodland

Map Name: Aldersey's Rough Maintenance Base Alternative - Key Environmental Impacts (1 of 2)

Community Area 4: Whitmore Heath to Madeley

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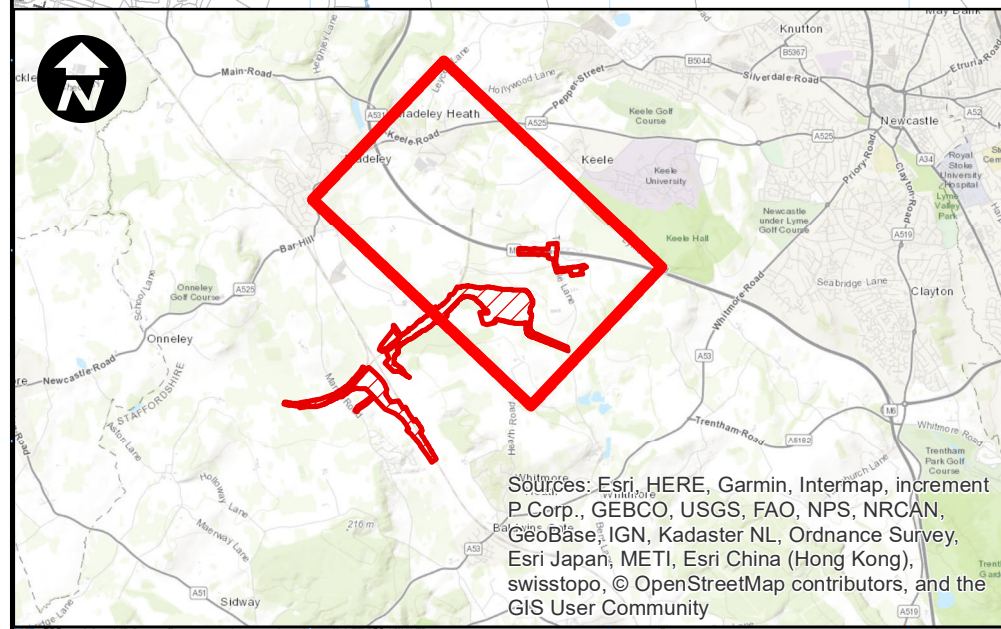
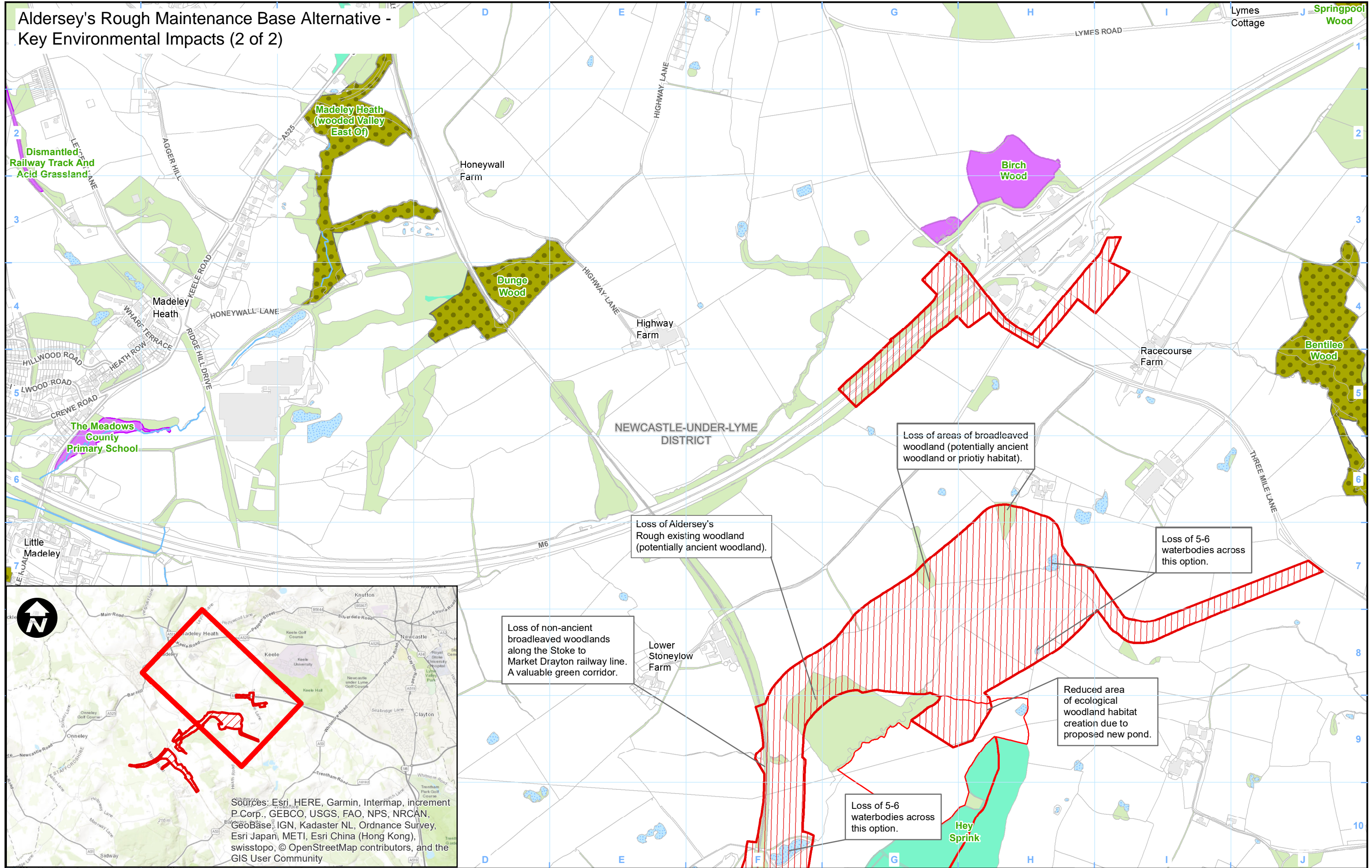
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# Aldersey's Rough Maintenance Base Alternative - Key Environmental Impacts (2 of 2)



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Legend	
	Route in bored tunnel
	Route on surface
	Proposed alternative depot land required
	Land potentially required during construction
	Community area boundary
	County boundary
	District/Borough boundary
	Watercourse
	Water body
	Local Wildlife Site
	Biodiversity Alert Site (BAS)
	Ancient woodland

N.B. Due to the overlapping nature of some ecological designations, and the range of different site designations that occur across the route, individual designations may on occasion be obscured. In all cases where an area of land is covered by more than one ecological designation, as a minimum the ecological designation of highest value is visible.

Map Name Aldersey's Rough Maintenance Base Alternative - Key Environmental Impacts (2 of 2)
Community Area 4: Whitmore Heath to Madeley

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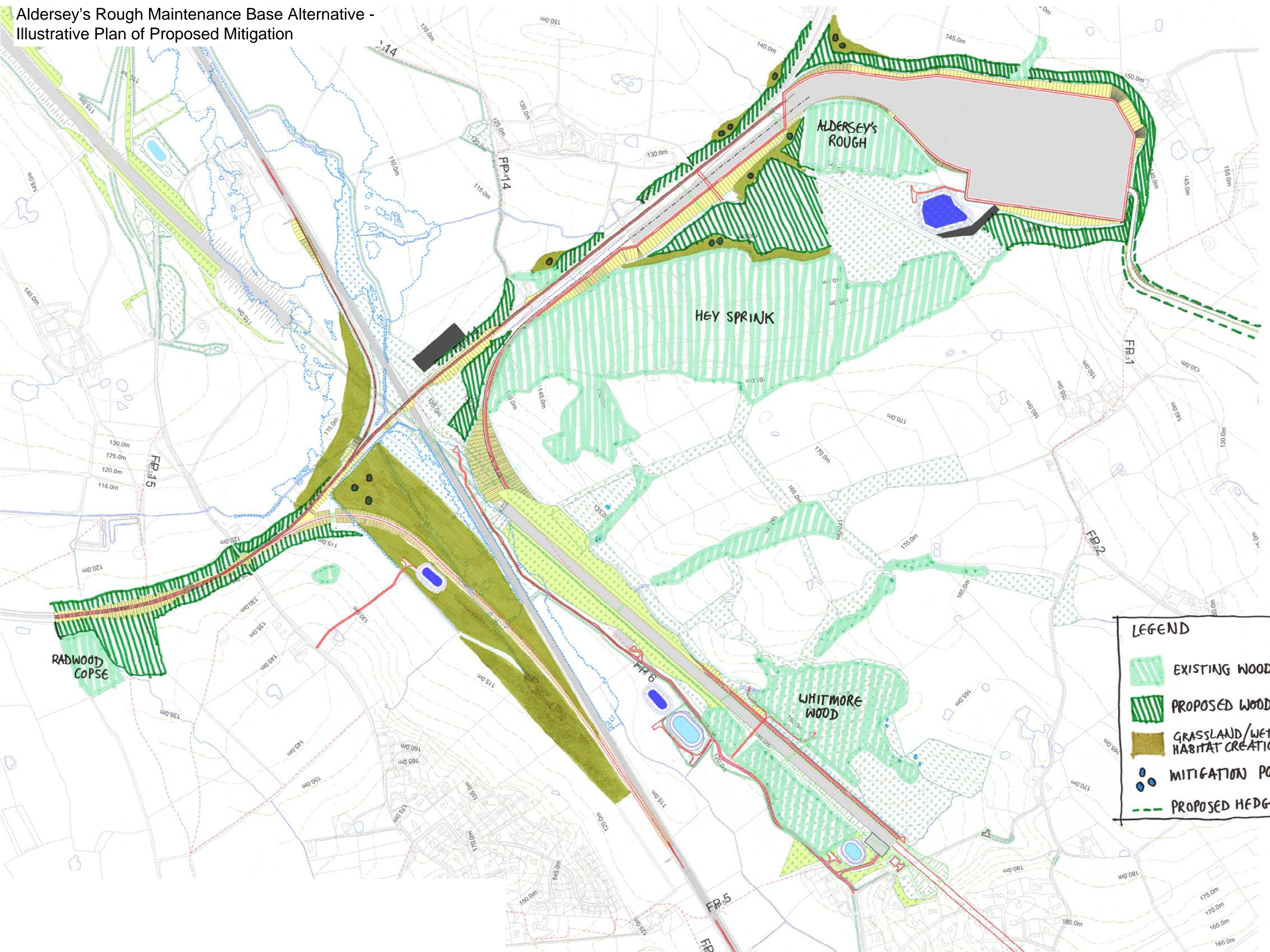
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Scale at A3: 1:10,000

Metres



Aldersey's Rough Maintenance Base Alternative - Illustrative Plan of Proposed Mitigation



**LEGEND**

- EXISTING WOODLAND
- PROPOSED WOODLAND
- GRASSLAND/WETLAND HABITAT CREATION
- MITIGATION PONDS
- PROPOSED HEDGEROW