



Rampion 2
WIND FARM

Rampion 2 update

Cowfold Parish Council presentation

November 2022

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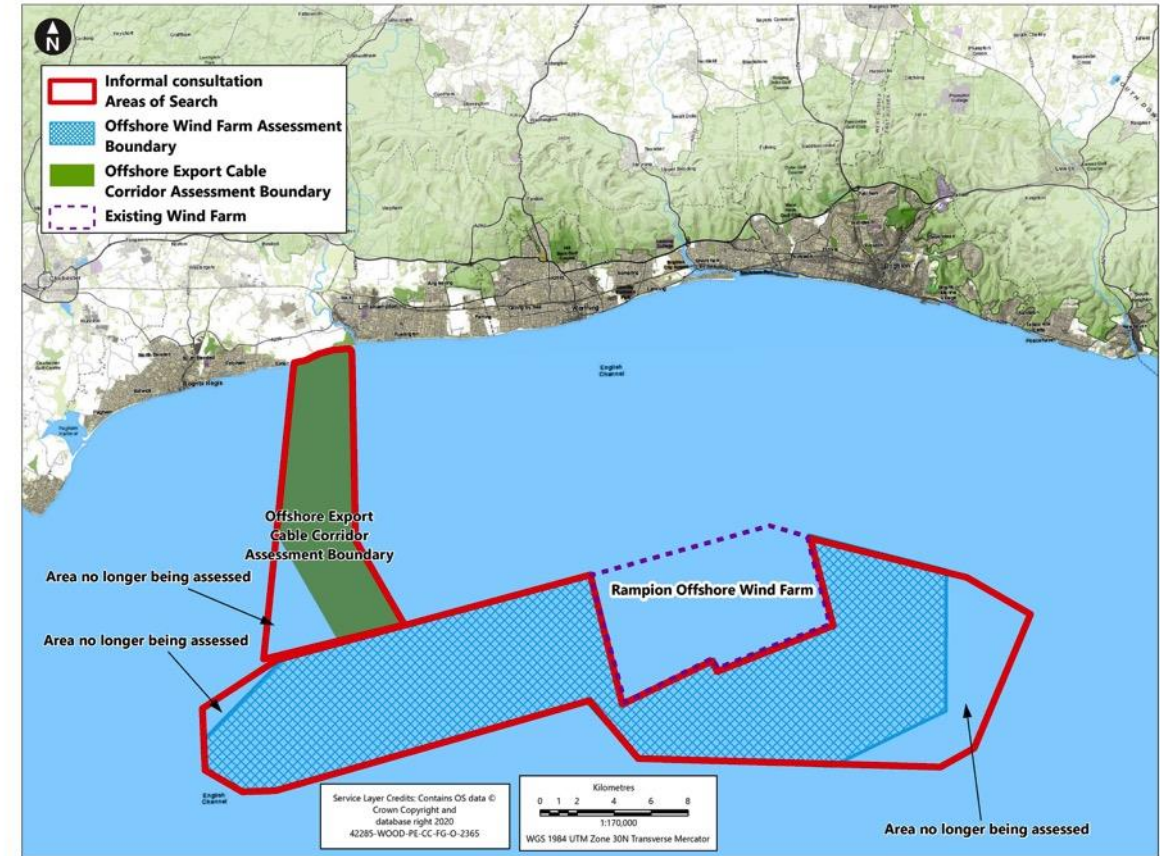
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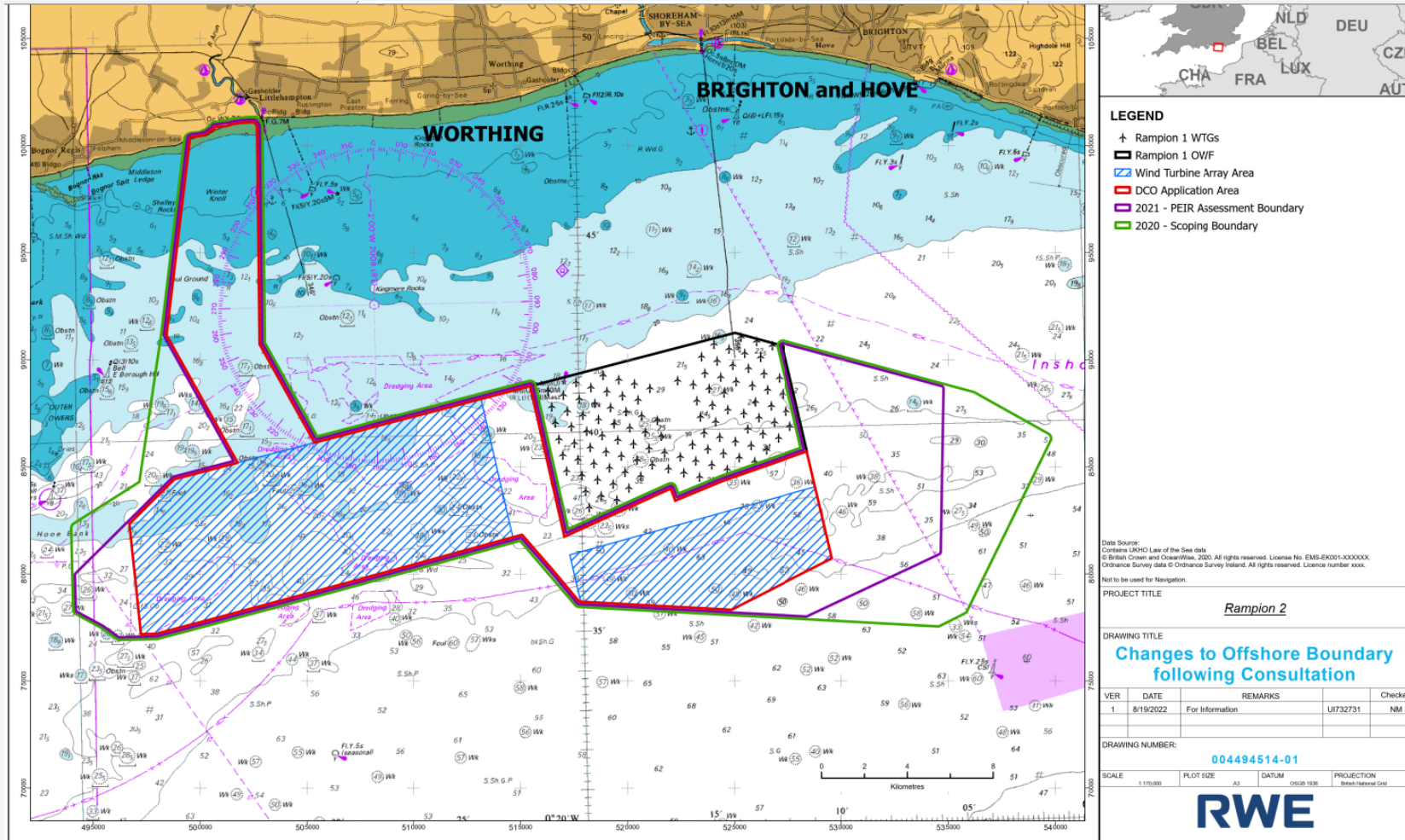
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1. First statutory public consultation - recap

- Formal 9-week consultation 14 July – 16 September 2021
- Attracted 12,500 visits to Rampion2.com to view consultation materials
- A Consultation Feedback Summary is available throughout this consultation at rampion2.com
- Highlights key themes split into four categories: project-wide, onshore, offshore and substation
- Detailed Consultation Report of consultation feedback and our response, forms part of DCO application
- Rampion 2 thanks all those who reviewed our consultation materials and responded to the consultation



Fixed changes - offshore elements



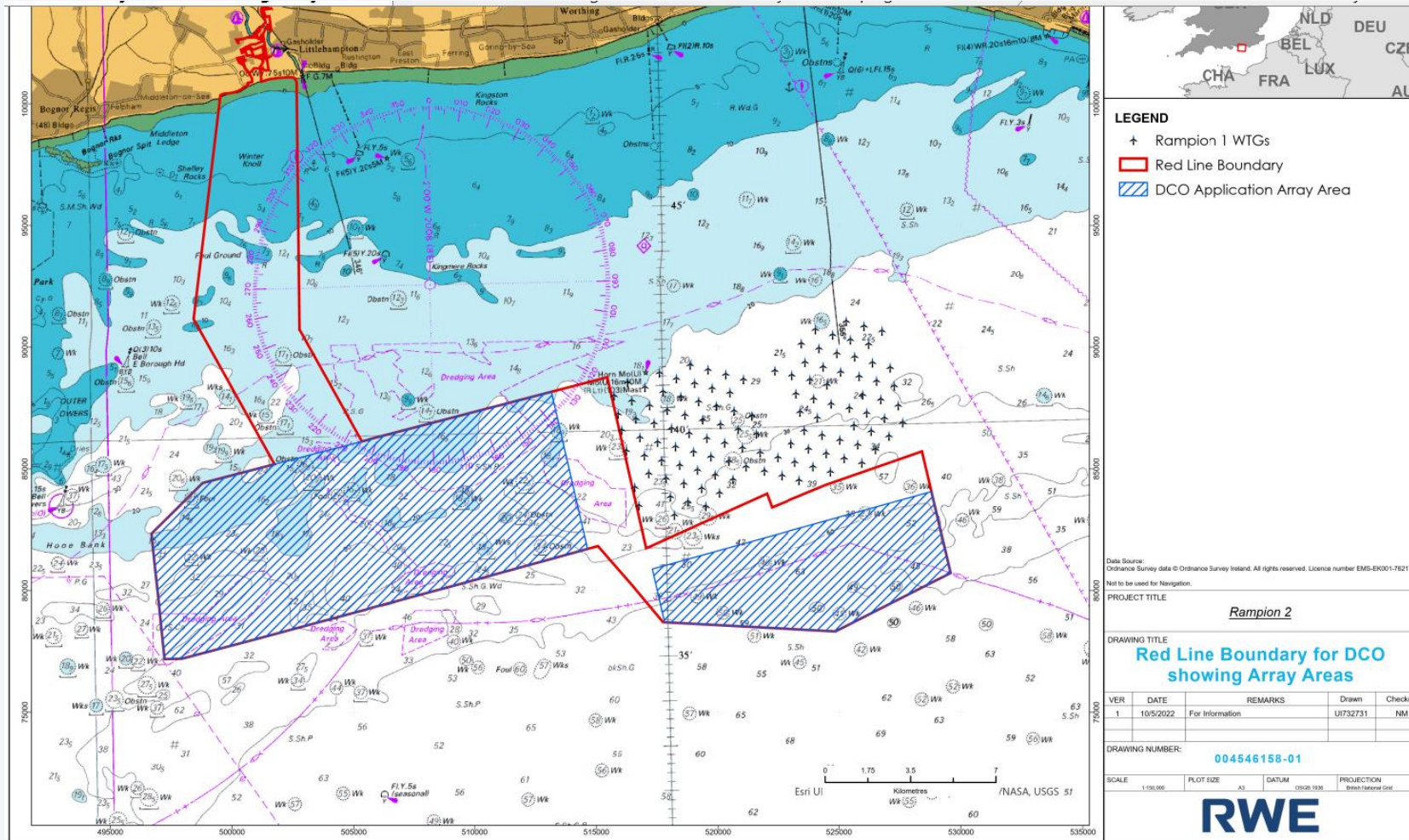
Removed turbine areas from DCO redline boundary

- Eastern area and central area – a large area to the east and southeast of Rampion has been omitted
- Primary concerns from statutory bodies re impact on views from the coast, including SDNP and Heritage Coast (Seven Sisters to Beachy Head) – addressed through 4 “Design Principles”
- Added benefits – new route between TSS and Shoreham Port and further from eastern shipping route
- **Western extent** – Further 10km² omitted
- Mainly driven by navigation and visual impact

New ‘gaps’

- Helicopter Refuge Areas (keep in red line for subsea development e.g. cables)

DCO redline boundary, turbine size & numbers



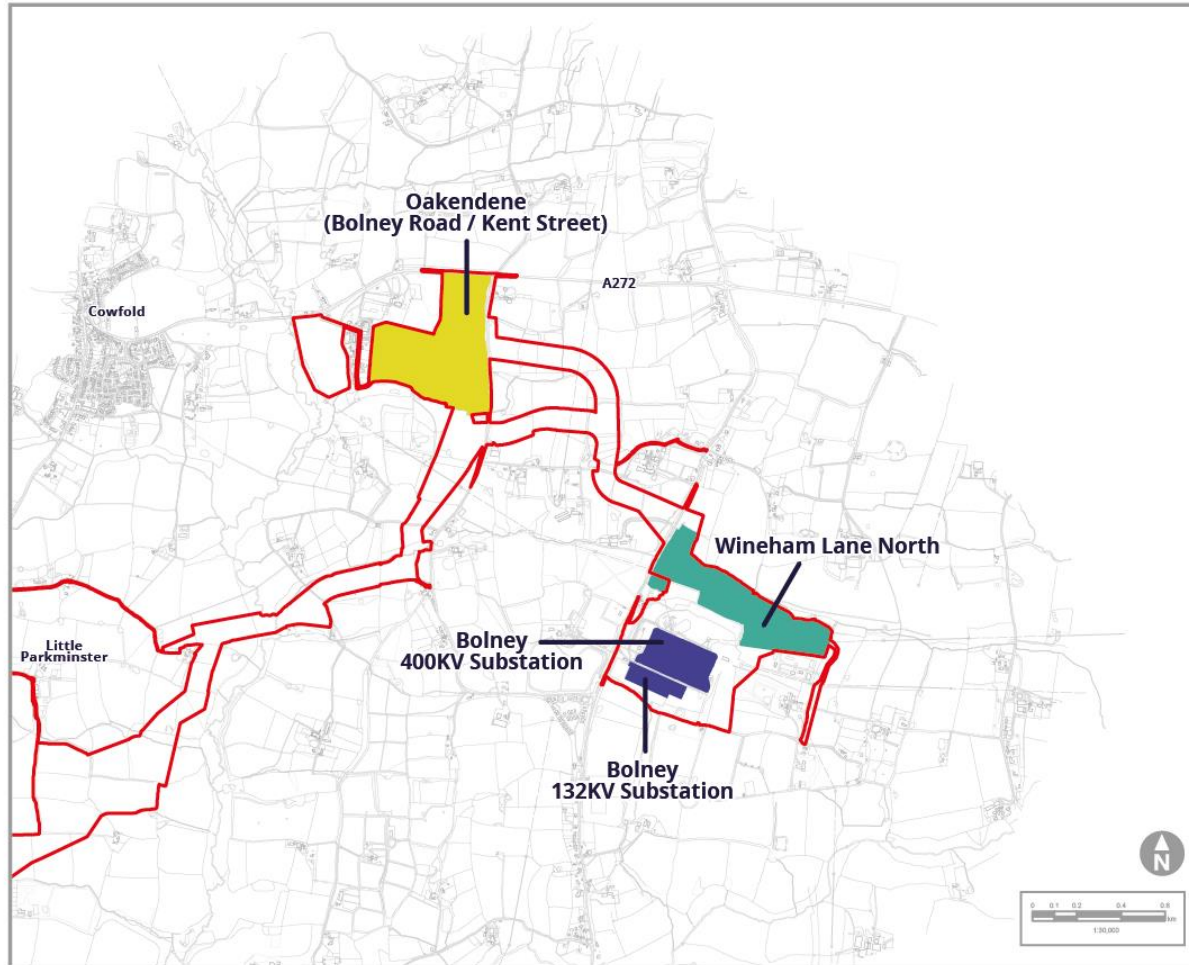
Maximum Scope of redline boundary

- Minimum 8 miles from shore (as Rampion)
- Reminder - can't go further offshore due to shipping lane & TSS
- RLB at Scoping – 315 km²
- RLB at PEIR – 270 km²
- RLB at DCO – 195 km²
- Turbine array area (blue) – 160km² (117km² in West and 43km² in East),

Turbine size and numbers

- Maximum tip height still 325m and maximum blade diameter 295m
- ...to 'futureproof' against likely models available for installation 2027 onwards
- Reduced to a maximum of 90 turbines - 26 fewer than Rampion
- Still capacity to install 1200MW

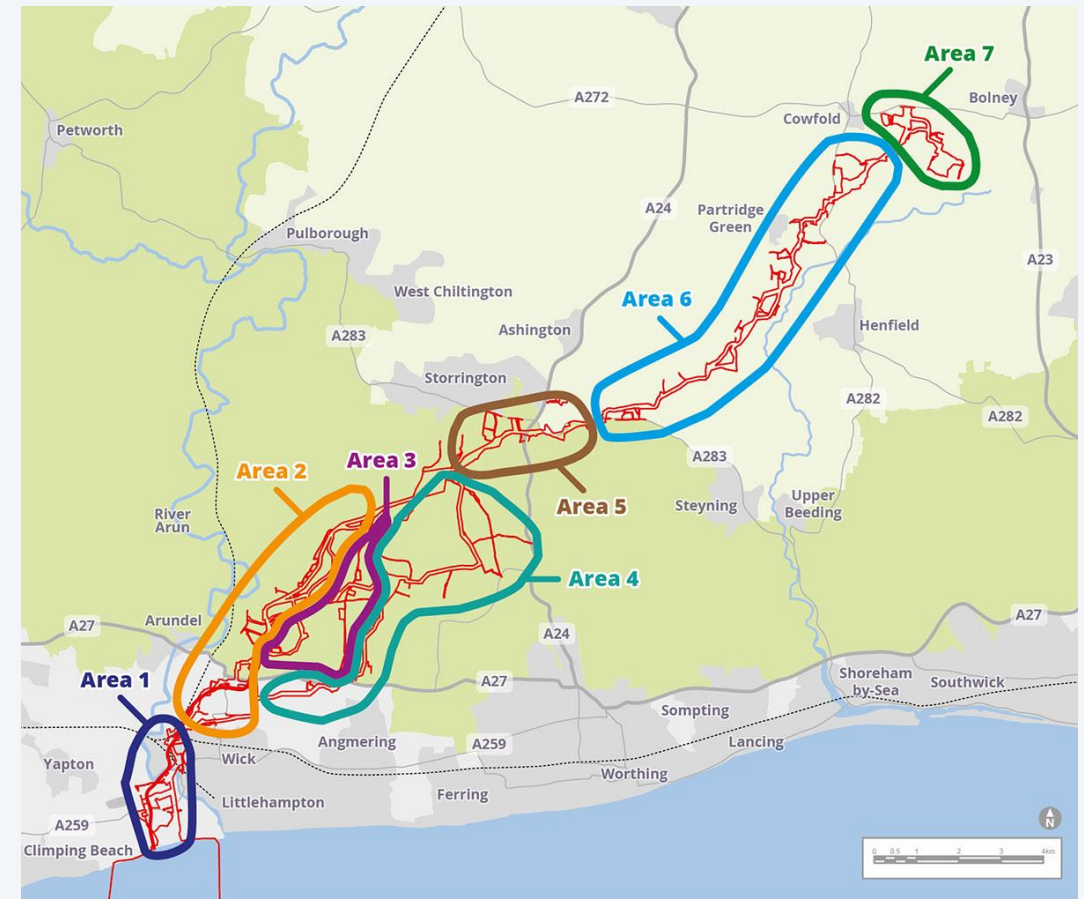
Fixed changes – onshore substation site



- Onshore substation the only permanent above-ground onshore structure for the project
- Wineham Lane North quite constrained in size and shape
- Wineham Lane North attracted more negative feedback from community consultation
- Detailed studies found Bolney Road / Kent Street site better overall from an engineering and environmental perspective
- Bolney Road/Kent Street site selected for onshore substation
- Now named 'Oakendene' as it's near the Oakendene Industrial Estate
- Original cable route options to feed Wineham Lane North site have been omitted
- Cable route options to take the power from our Oakendene Substation Site to the National Grid Substation to connect to the high voltage transmission grid

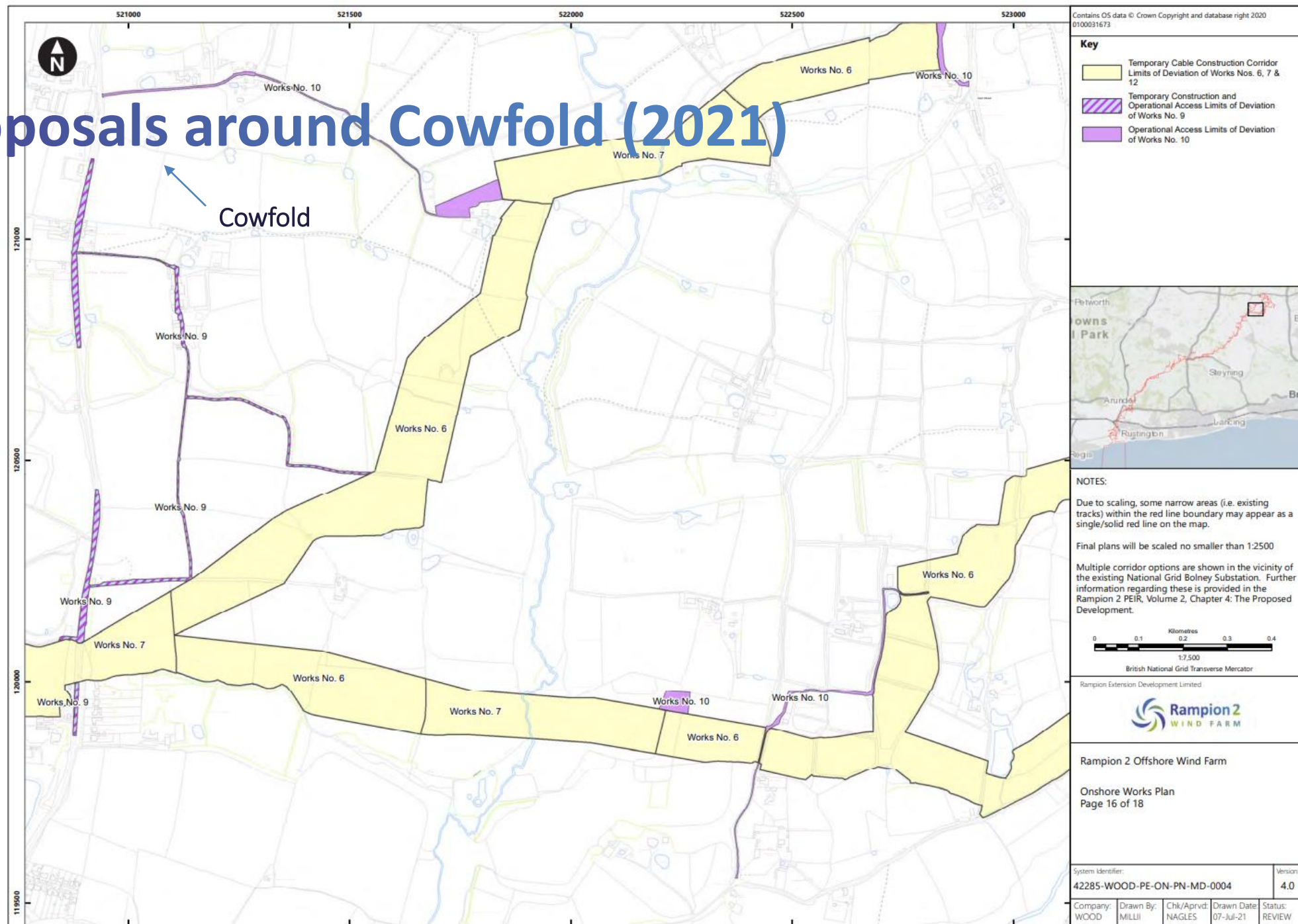
This consultation – onshore cable route

- This consultation presents a number of potential changes to our onshore cable route proposals.
- We invite feedback on these, which we will then consider alongside the feedback on the original route proposals to inform what we take forward as Development Consent Order application.
- We are presenting a number of potential changes for consultation, in the form of alternative and modified cable routes or accesses, or entirely new trenchless crossings or accesses. The new accesses could be for use during construction, operation or both. In some areas we are proposing much longer alternative cable routes.
- We are doing this consultation because of feedback we have received from consultation and ongoing engagement, along with our own engineering and environmental work.



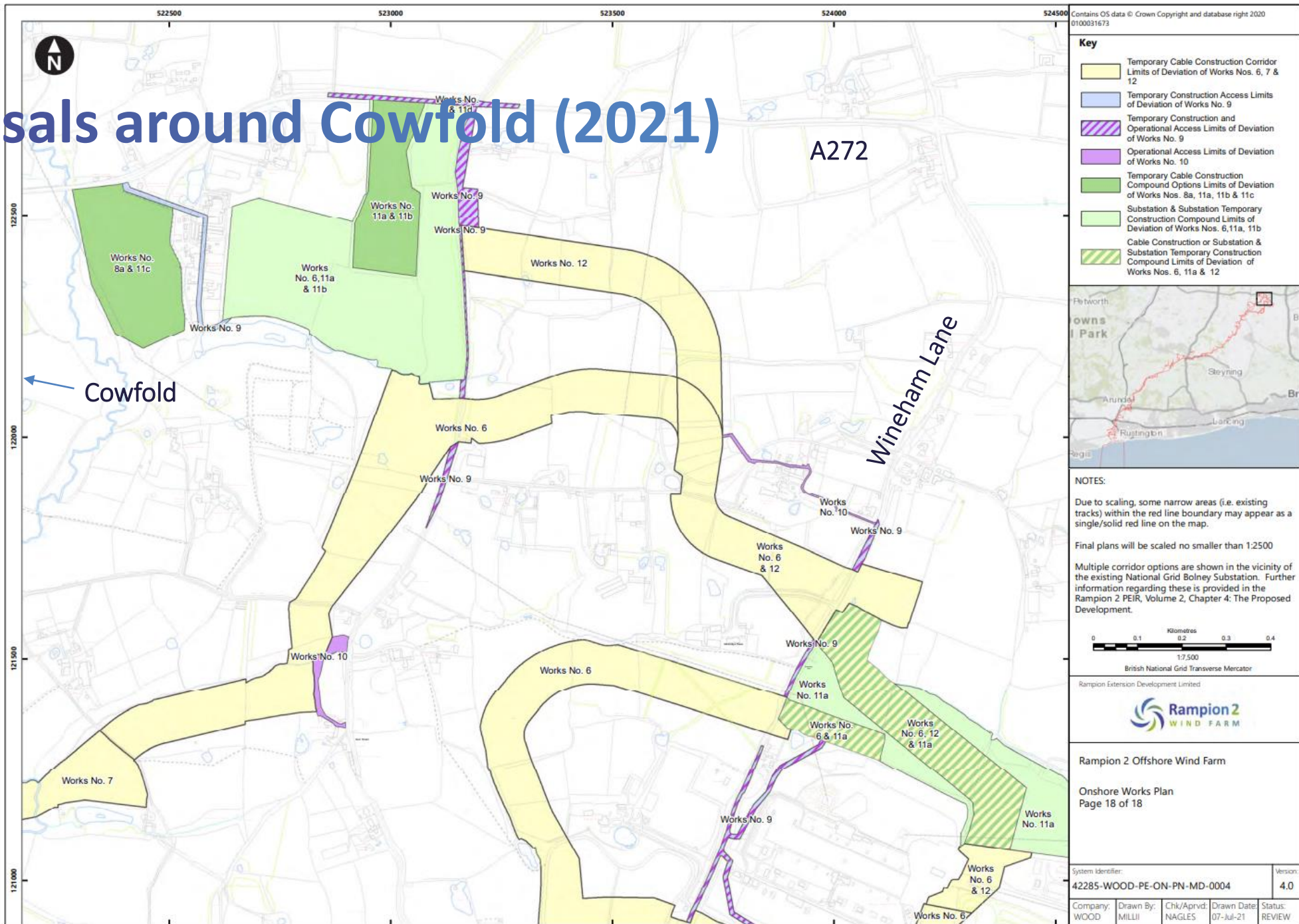
2. Our proposals around Cowfold (2021)

- Works Plan presented at 2021 Consultation
- <https://rampion2.com/wp-content/uploads/2021/07/Rampion-2-PEIR-Works-Plans.pdf>



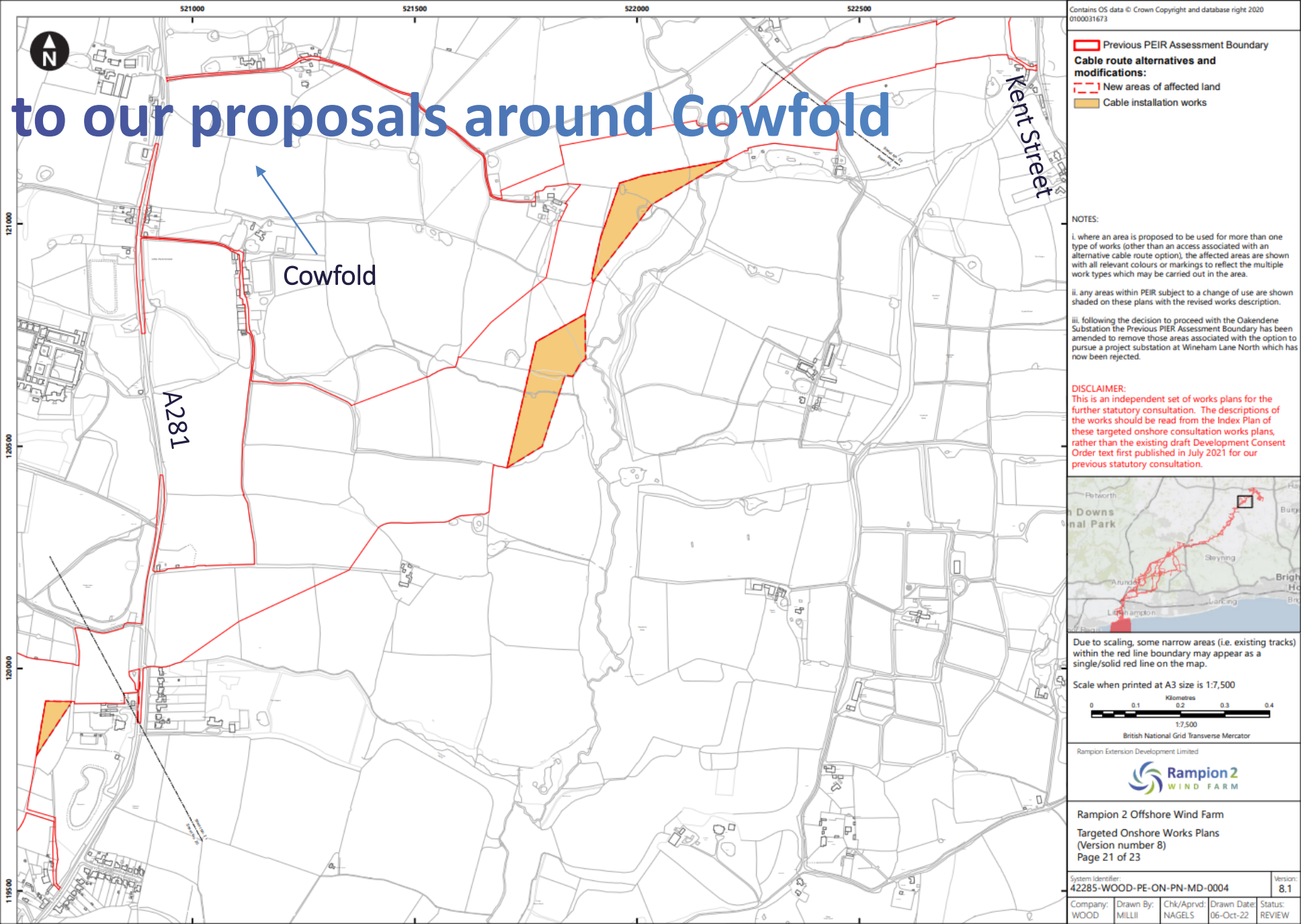
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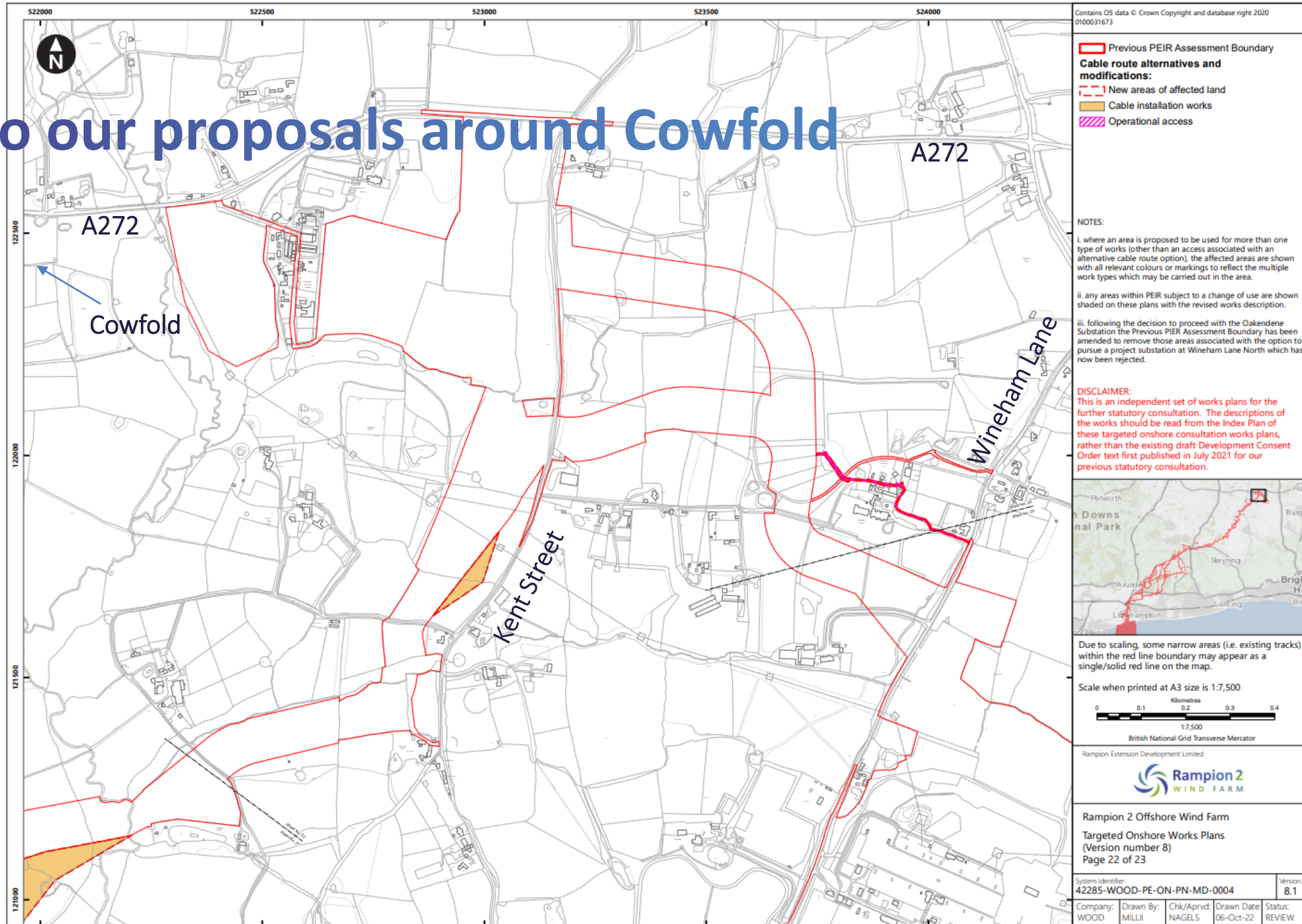
3. Updates to our proposals around Cowfold

- Works Plan presented at 2022 Consultation
- https://rampion2.com/wp-content/uploads/2022/10/42285-WOOD-PE-ON-PN-MD-0004-Rev081_A3.pdf



Updates to our proposals around Cowfold

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Consultation proposals

MR-12 Modified Route and TC-17 Trenchless Crossing

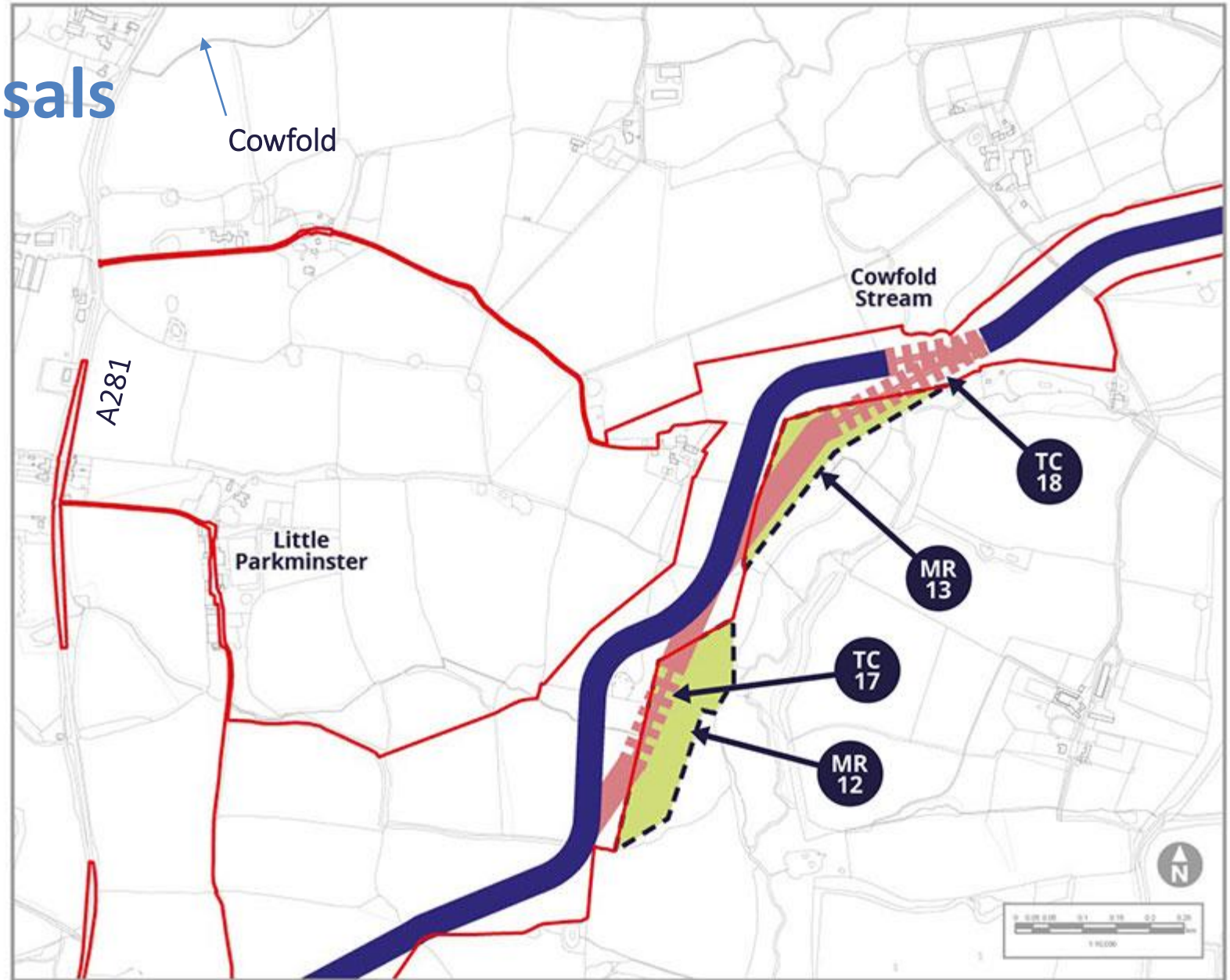
- MR-12 has been introduced to enable the onshore cable corridor to take a more direct route. It includes a trenchless crossing (TC-17) of a tributary of Cowfold Stream and hedgerows classed as Important under the Hedgerow Regulations, so that they are not affected.

Modified Route MR-13

- MR-13 has been added to enable a trenchless crossing (TC-18) of hedgerows, mature trees and the Cowfold Stream. This would also move the corridor further east away from residential properties.

Trenchless Crossing TC-18

- TC-18 would pass under hedgerows, mature trees and the Cowfold Stream to leave them unaffected.



Consultation proposals

Modified Route MR-14

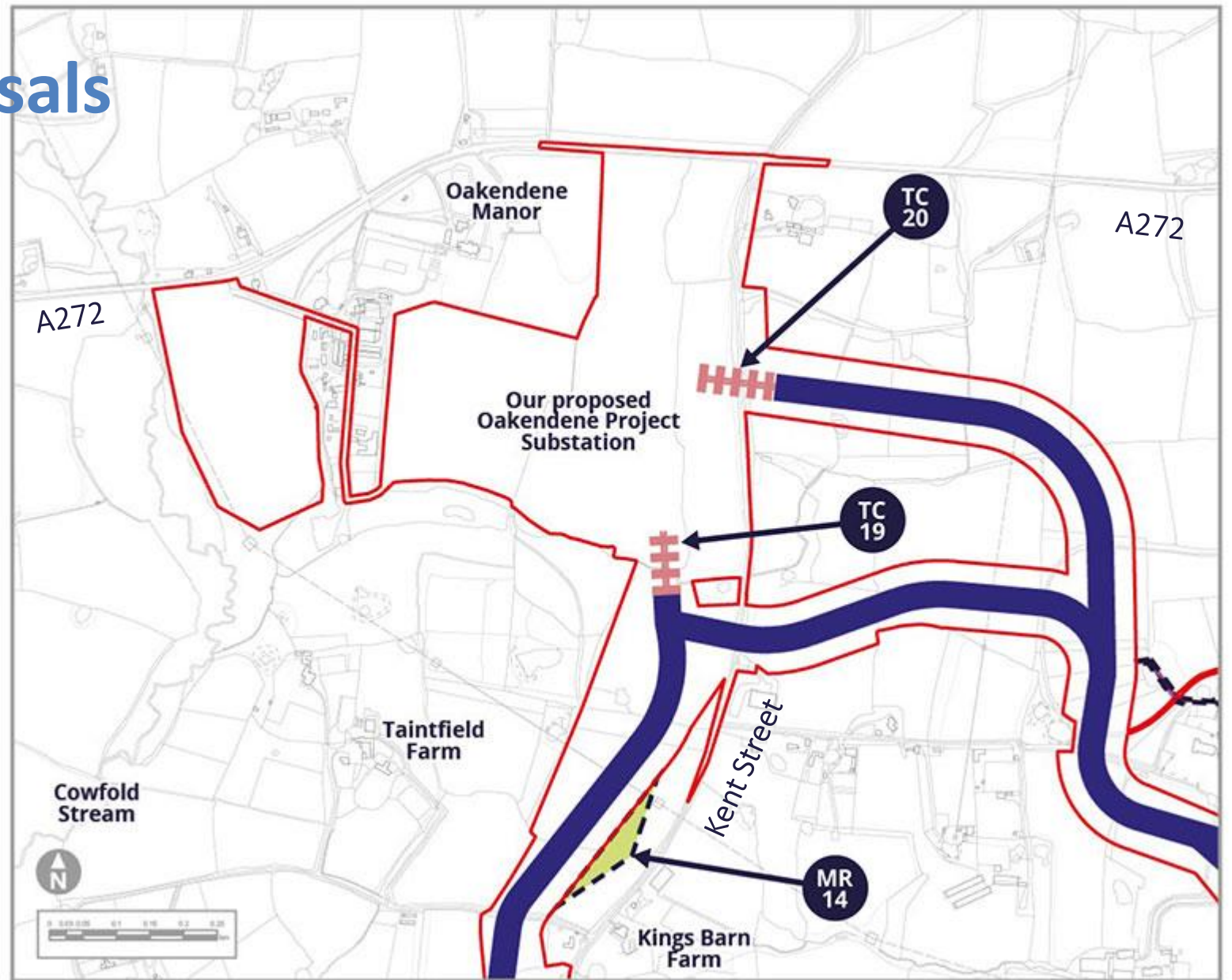
- MR-14 would extend our original cable route eastwards, to allow us to avoid the root protection area of a veteran tree, which we identified during our tree surveys.

Trenchless Crossing TC-19

- TC-19 would pass under a tributary of Cowfold Stream, meaning we wouldn't have to dig through it to reach our Oakendene substation site. Hedgerows and a mature treeline could remain intact.

Trenchless Crossing TC-20

- TC-20 would carry the power under Kent Street. It would also allow a woodland strip and hedgerows to remain intact.



4. Rampion 2 substation proposal

Our onshore substation:

- Is required to step up the voltage to 400kV, so that the power exported from our windfarm is compatible with the National Grid
- Requires up to 5.9ha for permanent infrastructure
- Some equipment will be placed outdoors, others will be housed in buildings or enclosures
- The site will be controlled remotely and will not have staff present every day
- The compound will be set back from the road, and have a landscaped buffer zone around it for screening, flood mitigation and ecology

PEIR Chapter 4: The Proposed Development

- <https://rampion2.com/wp-content/uploads/2021/07/Rampion-2-PEIR-Volume-2-Chapter-4-The-Proposed-Development.pdf>

Graphic 4-24 Indicative layout of the onshore substation

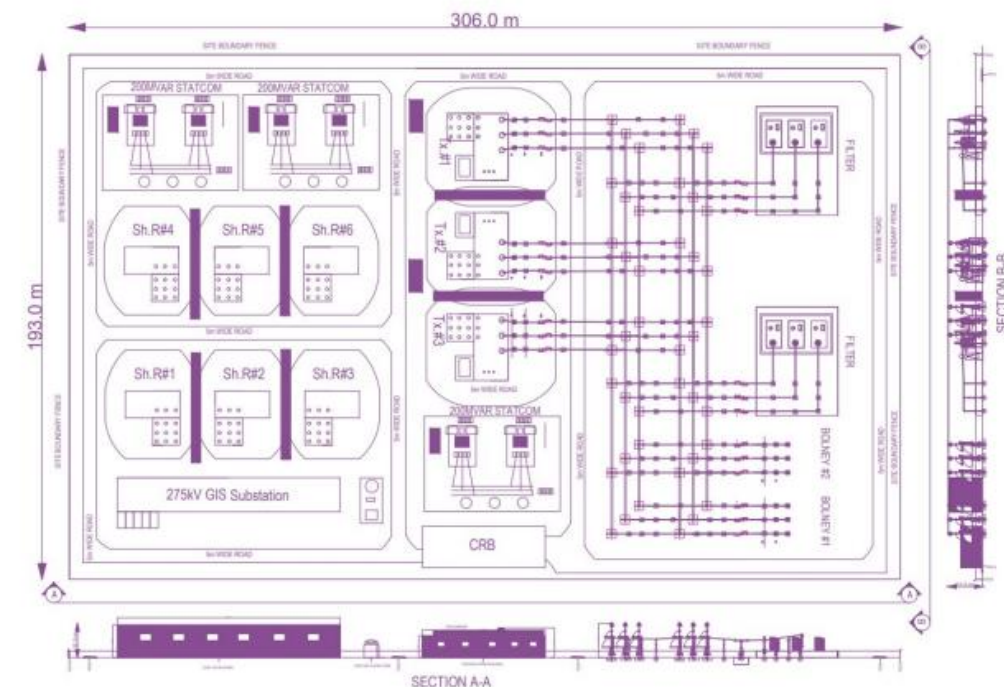


Table 4-22 Maximum assessment assumptions for the onshore substation

Assessment assumption	Maximum value
Permanent area of site for all infrastructure	Up to 5.9ha
Temporary works area	Up to 2.5ha
Maximum building height	12m
Maximum height of fire walls	10m
Lightning protection mast height	12m
Maximum number of buildings	12
Maximum length building	70m
Maximum width of building	20m
Duration of construction	Up to 3 years

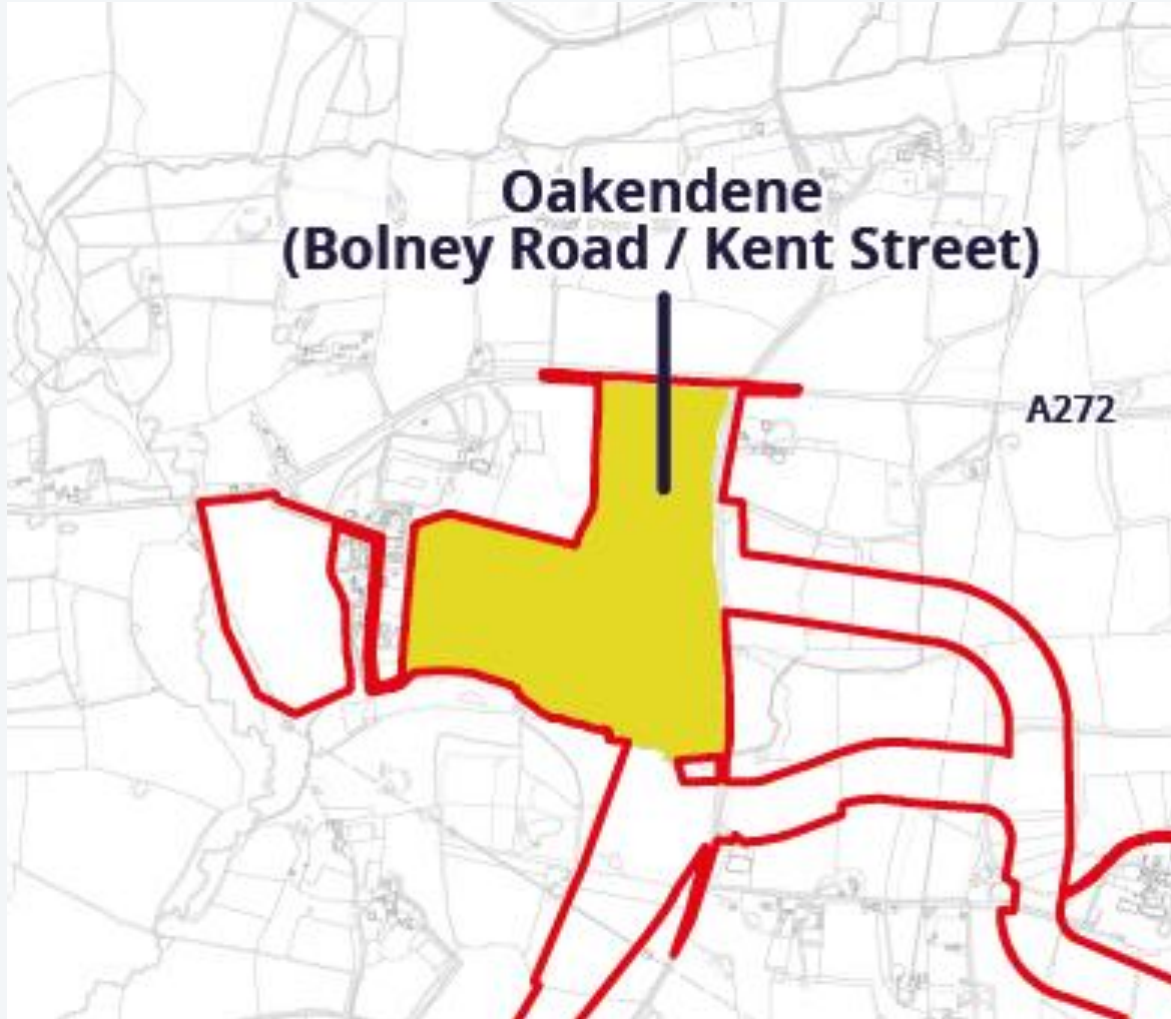
Existing Rampion 1 substation



Existing Rampion 1 substation



Rampion 2 substation land use



- Overall area under consideration (shown yellow) = approximately 21ha
- Maximum area of permanent substation = Up to 5.9ha
- Potential area of temporary works area = Up to 2.5ha (used as construction compound, then restored)
- Other areas for landscaping, potentially including tree planting, earth bunds and rainwater attenuation ponds
- Access track from the road, suitable for large loads
- Decision on final areas and how we constrain ourselves will be in our Development Consent Order (DCO) application
- The DCO is made public and subject to an “Examination” over many months, led by the Planning Inspectorate

5. Rampion 2 substation construction

To build our onshore substation:

- Likely to take up to 3 years
- One of the first sites to start, and commissioning is one of the last tasks to complete
- Will require approximately 9 Abnormal Indivisible Loads (ie very large deliveries of equipment) for transformers and shunt reactors – likely to take place at night to avoid traffic jams
- Approximately 8,050 HGV movements (average 27 per working day or 2.5 per hour over 3 years). These HGV movements will be via the A23 / A272, not via Cowfold
- Restrictions will apply on working hours and working methods to reduce disruption – in accordance with the Code of Construction Practice (CoCP)

Construction compounds

4.2 Working hours

Overview

4.2.1 Core working hours for construction of the onshore components will be 07:00 – 19:00 Monday to Friday, and 08:00 – 13:00 on Saturdays, apart from specific circumstances for which further details are outlined in this Outline COCP.

Construction timing

4.2.2 Indicative hours for the construction work and any construction-related traffic movements to or from any site of the Proposed Development are as follows:

- 07:00 to 19:00 hours Monday to Friday;
- 08:00 to 13:00 hours on Saturday.

4.2.3 No activity outside of these indicative hours including Sundays, public holidays or bank holidays will take place apart from under the following circumstances:

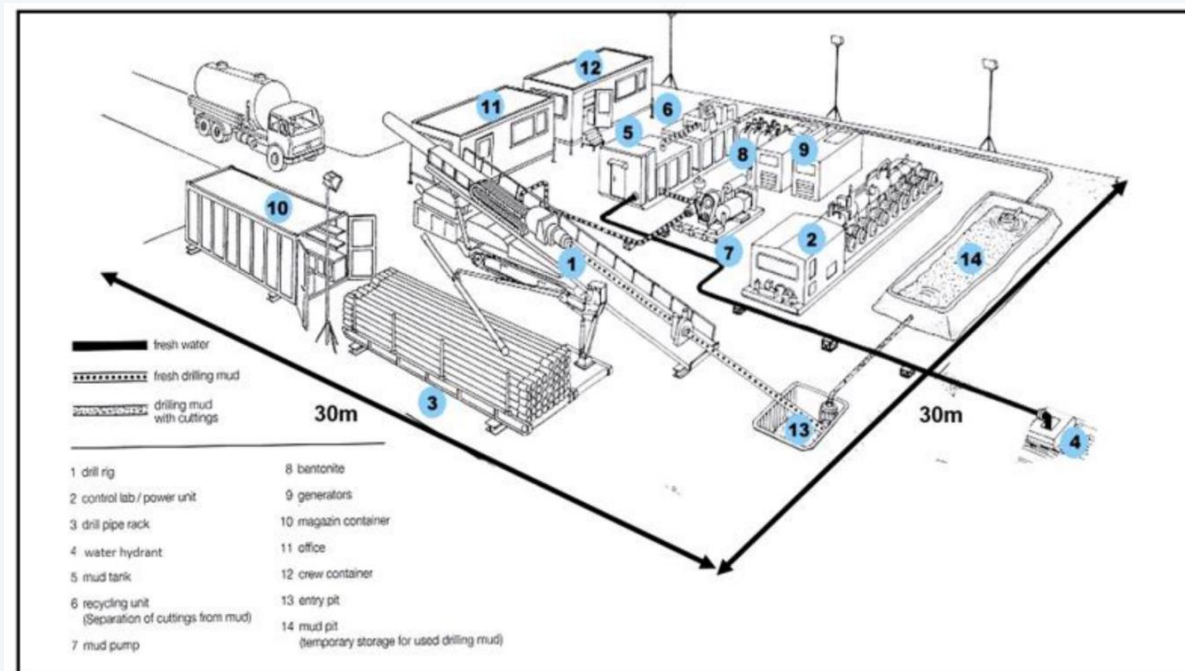
- where continuous periods of construction work are required, such as concrete pouring or directional drilling¹, and West Sussex County Council and the South Downs National Park Authority (for any works within the South Downs National Park) has been notified prior to such works 72 hours in advance;
- for the delivery of abnormal loads to the connection works, which may cause congestion on the local road network, where the relevant highway authority has been notified prior to such works 72 hours in advance;
- where works are being carried out on the foreshore²; and
- as otherwise agreed in writing with West Sussex County Council and the South Downs National Park Authority within the South Downs National Park.

Outline Code of Construction Practice

- <https://rampion2.com/wp-content/uploads/2021/07/Rampion-2-Outline-Code-of-Construction-Practice-.pdf>

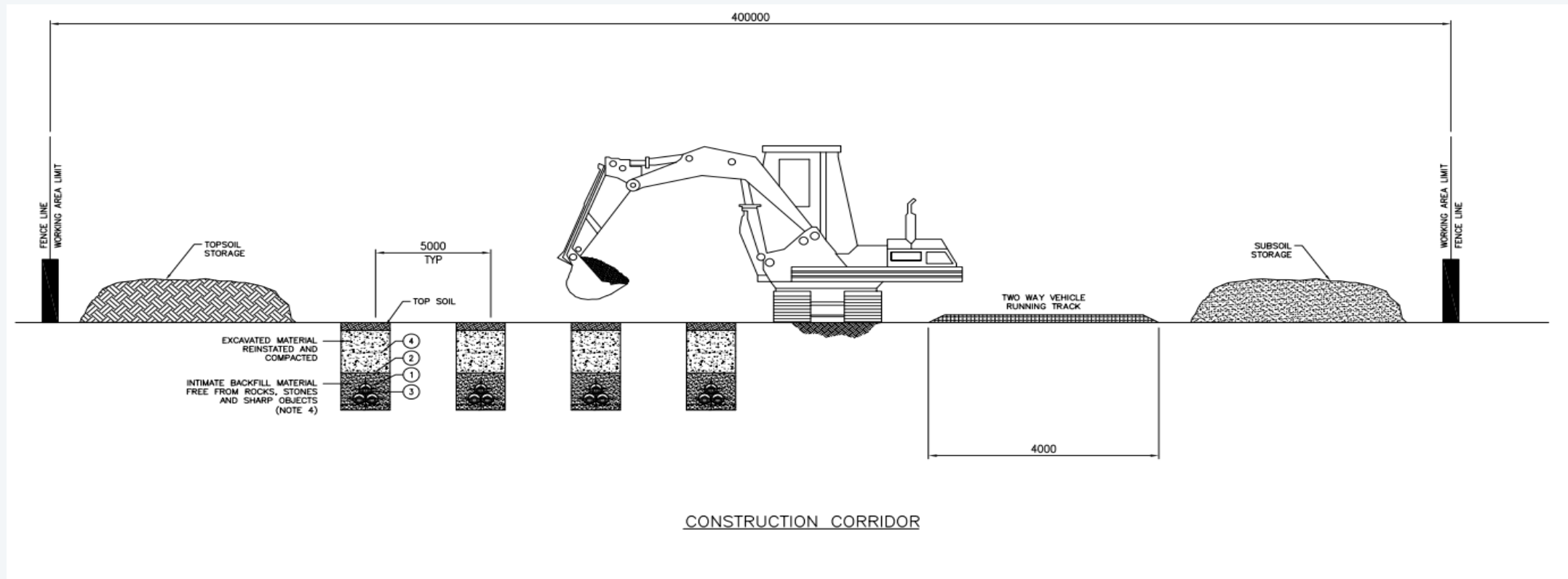
The HDD launch pit construction compound will typically contain the following equipment

- | | |
|---|---|
| 1. Drill rig | 9. Generators |
| 2. Control lab/power unit | 10. Welfare Container |
| 3. Drill pipe rack | 11. Office |
| 4. Water hydrant/bowser | 12. Crew container |
| 5. Mud tank | 13. Entry pit |
| 6. Recycle unit (separation of cuttings from mud) | 14. Mud pit (temporary storage for used drilling mud) |
| 7. Mud pump | |
| 8. Bentonite | |

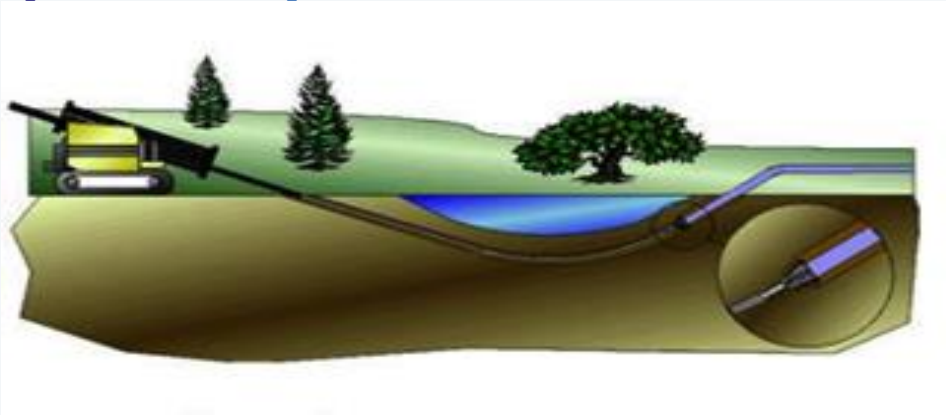


Cable route construction corridor

- The cable route construction corridor will be typically 40 - 50m wide.
- This will be widened locally to accommodate additional space required for constructing HDDs and narrowed when crossing flood plains and other environmentally sensitive locations
- The permanent easements will be 15 - 20m wide.



Horizontal directional drills and public rights of way (PRoW)



Horizontal Directional Drills (HDDs)

- HDDs used to cross major obstacles / infrastructure on route, such as the beach, environmental features, major roads, railways and the River Arun
- Allows cables to be installed without surface ground disturbance and with minimal disruption
- Keeps traffic and trains running and reduces impacts on the ecology and environment



Public Rights of Way (PRoW)

- Vast majority of PRoWs can be kept open for the duration of construction, except for a few inconsecutive days to set up innovative solutions
- Fencing and gateways are set up to operate much like a level crossing. If a construction vehicle needs to cross, the gates will be closed for a few minutes to allow the vehicle to pass through, then reopened to allow users to continue safely along the PRoW

Addition traffic to local roads

PEIR Supplementary Information Report – Appendix J
Transport

- <https://rampion2.com/wp-content/uploads/2022/10/PEIR-SIR-Appendix-J-Transport-PDF.pdf>
- Shows traffic forecast on key ‘links’ and percentage change for all vehicles and HGVs
 - Link 23 – A281 South of Cowfold
 - Link 24 – A281 Cowfold Centre
 - Link 25 – A272 Station Road
 - Link 27 – A272 West of A23

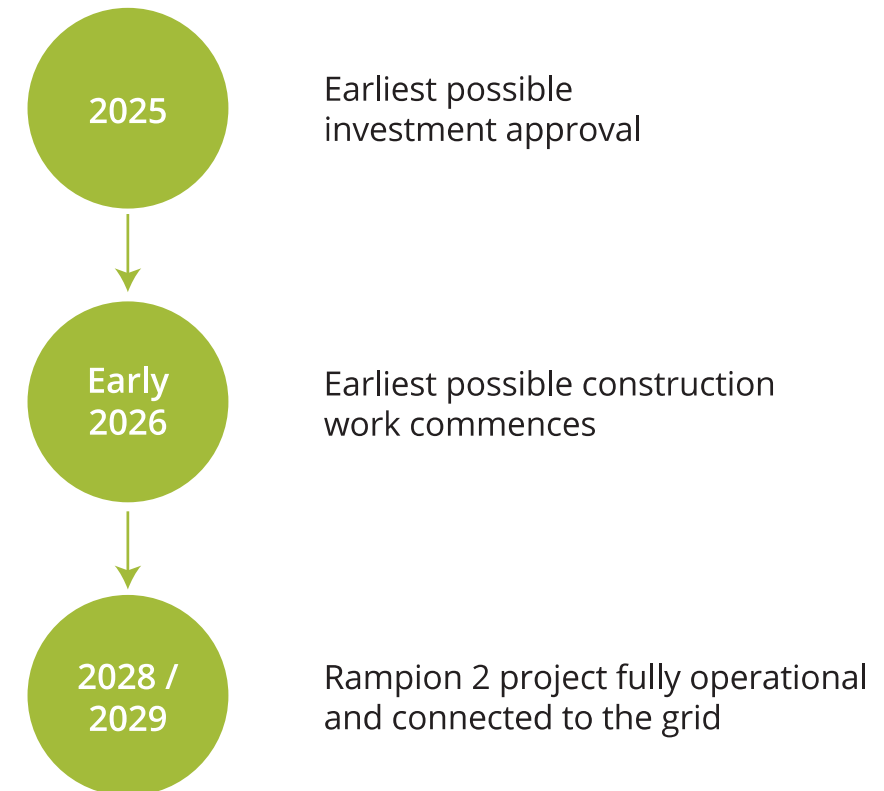
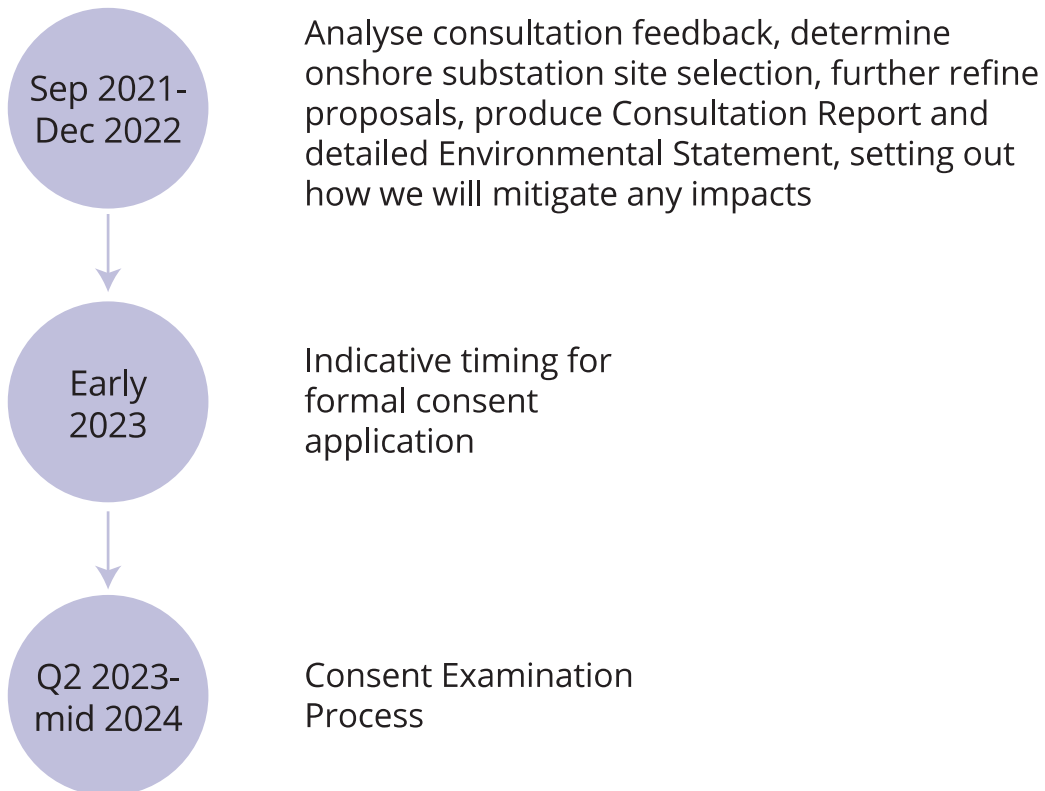
Table J-8 Onshore construction traffic percentage impact per highways link

Link No	Future Year Base Traffic (2026/27)		Peak Week Construction Traffic (per day)		Magnitude of change percentage impact	
	Total Vehicles	HGVs	Total Vehicles	HGVs	Total Vehicles	HGVs
1	2069	338	34	26	1.6%	7.7%
2	11238	1221	278	90	2.5%	7.4%
3	6672	274	24	0	0.4%	0.0%
17	12422	2343	34	00	0.3%	2.4%
18	3858	116	26	14	0.7%	12.1%
19	22776	633	25	0	0.1%	0.0%
20	39448	1772	36	0	0.1%	0.0%
21	7140	398	44	22	0.6%	5.5%
22	8792	378	22	22	0.3%	5.8%
23	6811	155	36	12	0.5%	7.7%
24	25077	1091	58	0	0.2%	0.0%
25	18933	820	58	0	0.3%	0.0%
26	-	-	-	-	-	-
27	18917	797	190	74	1.0%	9.3%
28	80525	4431	50	20	0.1%	0.5%
29	7995	1636	22	22	0.3%	1.3%

5. Indicative timeline*

*Subject to COVID-19 restrictions and other factors

Should consent be awarded in 2024...



6. Community benefit fund

The original Rampion project committed £4 million to a community fund, made up of:

- £3.1 million fund managed by Sussex Community Foundation, for local projects to benefit the Sussex community
- £800,000 invested in the Rampion Visitor Centre located in the refurbished arches on Brighton seafront
- £100,000 donation to local RNLI stations who help save lives at sea

As an example, projects funded in Steyning include

- Bramber Brooks nature reserve
- Steyning Downland Scheme
- Steyning Community Orchard
- Steyning Community Hub

<https://www.rampionoffshore.com/community/benefit-fund/>



7. Q & A

Contact Us

View our draft proposals at rampion2.com

Have your say

Please complete our **Consultation Response Form** at:
rampion2.com/consultation

Consultation responses will also be accepted via email at rampion2@rwe.com or post to **FREEPOST: RAMPION 2**. The email or letter will need to be clearly marked, 'Consultation Response' and include the sender's post code.

Phone or email

For questions or points of clarification about the project or consultation:

Email us at rampion2@rwe.com

Call us on our Freephone number **0800 2800 886**

The public can attend our two remaining **Drop-in events** or join a **public forum**

Should you wish to listen to a presentation and ask questions to members of the Project Team, please visit:
Rampion2.com/consultation/events



Rampion 2
WIND FARM