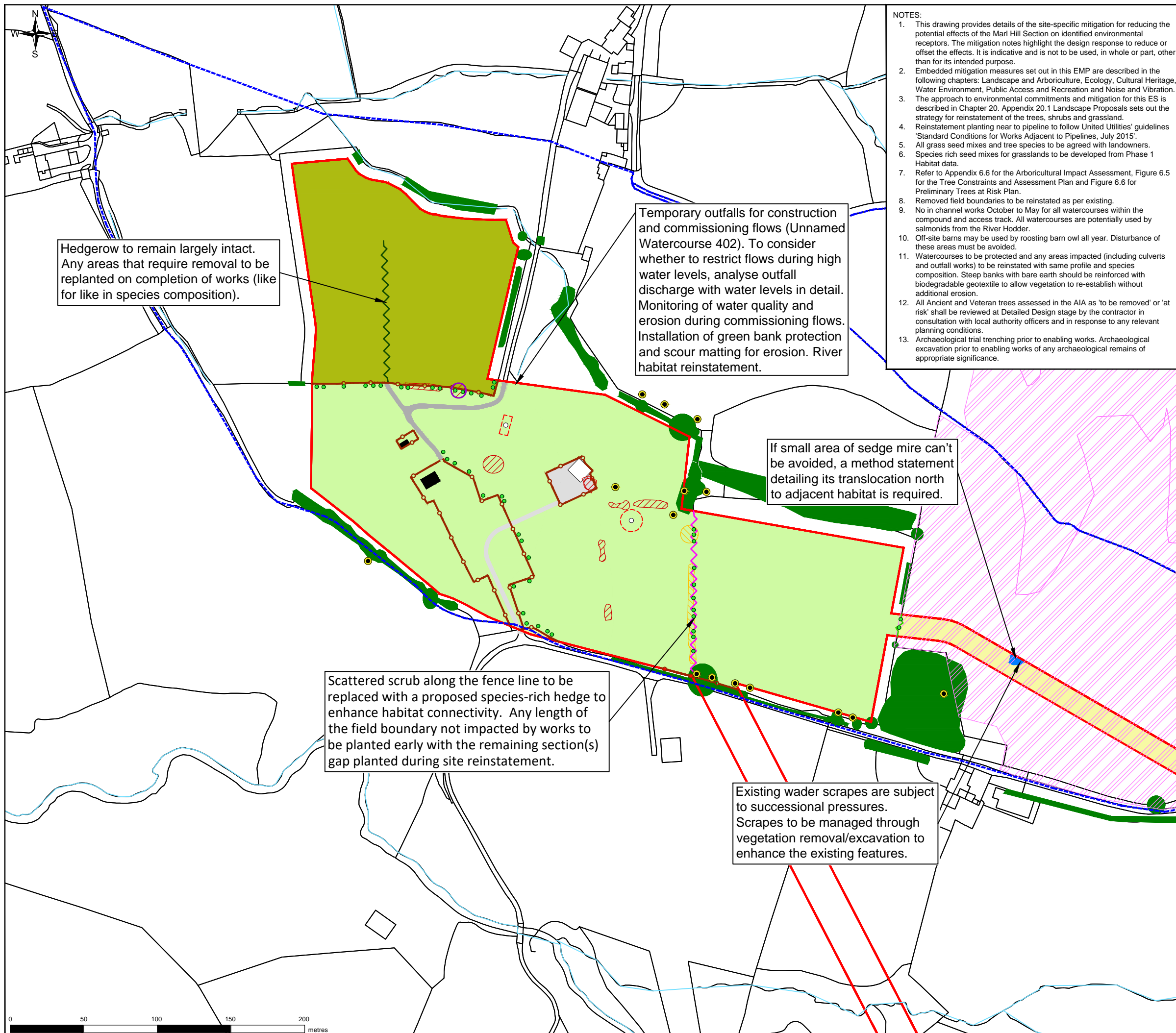


FIGURE 20.1



- NOTES:
1. This drawing provides details of the site-specific mitigation for reducing the potential effects of the Marl Hill Section on identified environmental receptors. The mitigation notes highlight the design response to reduce or offset the effects. It is indicative and is not to be used, in whole or part, other than for its intended purpose.
 2. Embedded mitigation measures set out in this EMP are described in the following chapters: Landscape and Arboriculture, Ecology, Cultural Heritage, Water Environment, Public Access and Recreation and Noise and Vibration.
 3. The approach to environmental commitments and mitigation for this ES is described in Chapter 20. Appendix 20.1 Landscape Proposals sets out the strategy for reinstatement of the trees, shrubs and grassland.
 4. Reinstatement planting near to pipeline to follow United Utilities' guidelines 'Standard Conditions for Works Adjacent to Pipelines, July 2015'.
 5. All grass seed mixes and tree species to be agreed with landowners.
 6. Species rich seed mixes for grasslands to be developed from Phase 1 Habitat data.
 7. Refer to Appendix 6.6 for the Arboricultural Impact Assessment, Figure 6.5 for the Tree Constraints and Assessment Plan and Figure 6.6 for Preliminary Trees at Risk Plan.
 8. Removed field boundaries to be reinstated as per existing.
 9. No in channel works October to May for all watercourses within the compound and access track. All watercourses are potentially used by salmonids from the River Hodder.
 10. Off-site barns may be used by roosting barn owl all year. Disturbance of these areas must be avoided.
 11. Watercourses to be protected and any areas impacted (including culverts and outfall works) to be reinstated with same profile and species composition. Steep banks with bare earth should be reinforced with biodegradable geotextile to allow vegetation to re-establish without additional erosion.
 12. All Ancient and Veteran trees assessed in the AIA as 'to be removed' or 'at risk' shall be reviewed at Detailed Design stage by the contractor in consultation with local authority officers and in response to any relevant planning conditions.
 13. Archaeological trial trenching prior to enabling works. Archaeological excavation prior to enabling works of any archaeological remains of appropriate significance.

- Legend
- Planning Application Boundary
 - Existing watercourse (to be retained)
 - Existing standing water (to be retained)
 - Existing track / hardstanding (to be retained / reinstated)
 - Existing PRoW (to be retained)
 - Existing building (to be retained)
 - Existing vegetation (to be removed)
 - Existing vegetation (to be retained)
 - Existing grassland (to be retained)
 - Existing hedgerow (to be retained)
 - Existing vegetation (at risk of removal)
 - Existing GWDTE
 - Existing veteran tree
 - Bat roost potential tree
 - Proposed tree
 - Proposed reinstated grassland
 - Proposed reinstated species rich grassland
 - Proposed species rich hedgerow
 - Proposed tunnel shafts / chambers
 - Proposed above ground works
 - Proposed reinstated track / hardstanding

Hedgerow to remain largely intact. Any areas that require removal to be replanted on completion of works (like for like in species composition).

Temporary outfalls for construction and commissioning flows (Unnamed Watercourse 402). To consider whether to restrict flows during high water levels, analyse outfall discharge with water levels in detail. Monitoring of water quality and erosion during commissioning flows. Installation of green bank protection and scour matting for erosion. River habitat reinstatement.

If small area of sedge mire can't be avoided, a method statement detailing its translocation north to adjacent habitat is required.

Scattered scrub along the fence line to be replaced with a proposed species-rich hedge to enhance habitat connectivity. Any length of the field boundary not impacted by works to be planted early with the remaining section(s) gap planted during site reinstatement.

Existing water scrapes are subject to successional pressures. Scrapes to be managed through vegetation removal/excavation to enhance the existing features.

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 PAGE 1 OF 4

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