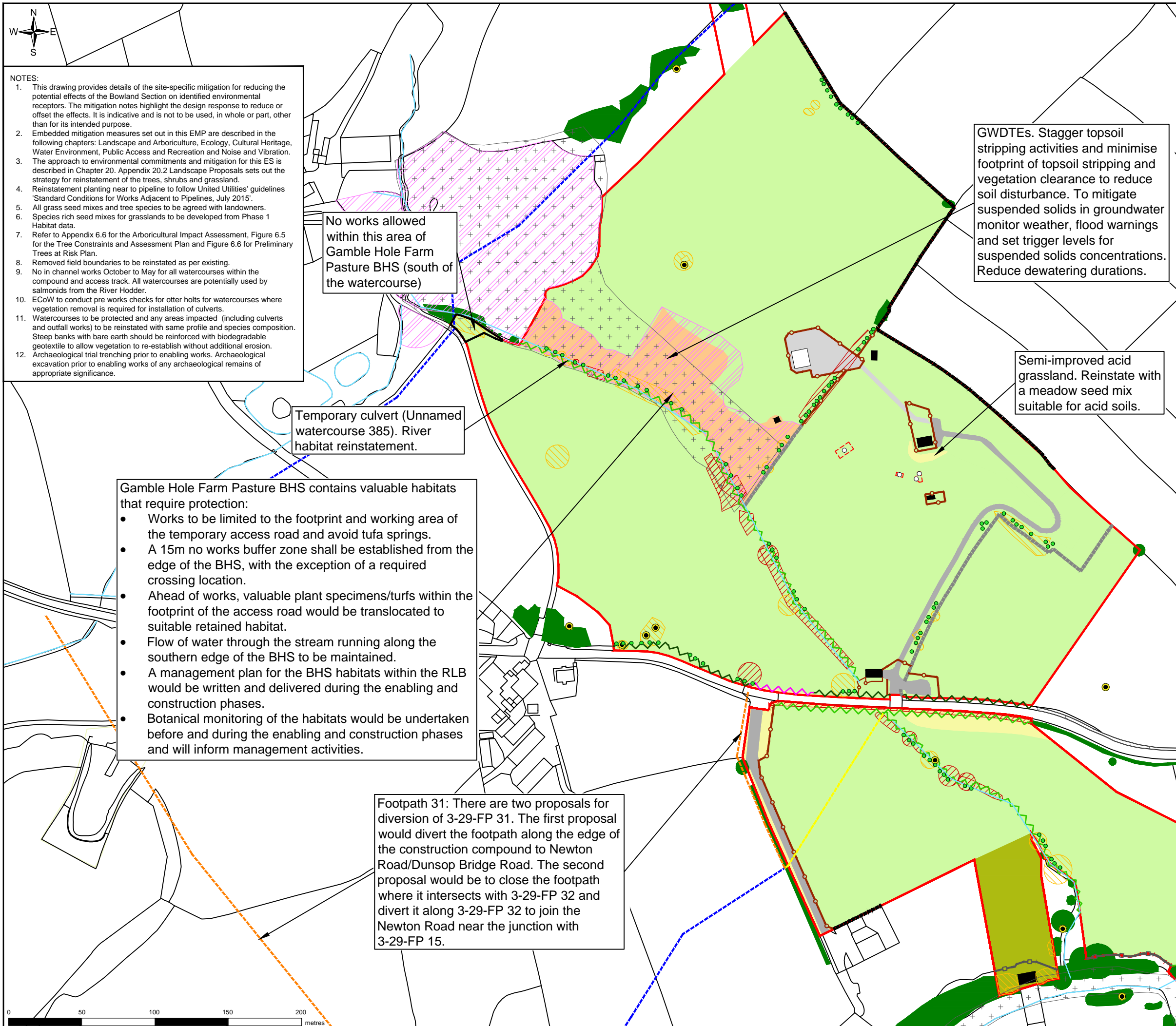


FIGURE 20.1



- NOTES:
- This drawing provides details of the site-specific mitigation for reducing the potential effects of the Bowland 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.
 - 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.
 - The approach to environmental commitments and mitigation for this ES is described in Chapter 20. Appendix 20.2 Landscape Proposals sets out the strategy for reinstatement of the trees, shrubs and grassland.
 - Reinstatement planting near to pipeline to follow United Utilities' guidelines 'Standard Conditions for Works Adjacent to Pipelines, July 2015'.
 - All grass seed mixes and tree species to be agreed with landowners.
 - Species rich seed mixes for grasslands to be developed from Phase 1 Habitat data.
 - 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.
 - Removed field boundaries to be reinstated as per existing.
 - 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.
 - ECoW to conduct pre works checks for otter holts for watercourses where vegetation removal is required for installation of culverts.
 - 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.
 - Archaeological trial trenching prior to enabling works. Archaeological excavation prior to enabling works of any archaeological remains of appropriate significance.

No works allowed within this area of Gamble Hole Farm Pasture BHS (south of the watercourse)

Temporary culvert (Unnamed watercourse 385). River habitat reinstatement.

Gamble Hole Farm Pasture BHS contains valuable habitats that require protection:

- Works to be limited to the footprint and working area of the temporary access road and avoid tufa springs.
- A 15m no works buffer zone shall be established from the edge of the BHS, with the exception of a required crossing location.
- Ahead of works, valuable plant specimens/turfs within the footprint of the access road would be translocated to suitable retained habitat.
- Flow of water through the stream running along the southern edge of the BHS to be maintained.
- A management plan for the BHS habitats within the RLB would be written and delivered during the enabling and construction phases.
- Botanical monitoring of the habitats would be undertaken before and during the enabling and construction phases and will inform management activities.

Footpath 31: There are two proposals for diversion of 3-29-FP 31. The first proposal would divert the footpath along the edge of the construction compound to Newton Road/Dunsop Bridge Road. The second proposal would be to close the footpath where it intersects with 3-29-FP 32 and divert it along 3-29-FP 32 to join the Newton Road near the junction with 3-29-FP 15.

GWDTEs. Stagger topsoil stripping activities and minimise footprint of topsoil stripping and vegetation clearance to reduce soil disturbance. To mitigate suspended solids in groundwater monitor weather, flood warnings and set trigger levels for suspended solids concentrations. Reduce dewatering durations.

Semi-improved acid grassland. Reinstatement with a meadow seed mix suitable for acid soils.

Legend

	Planning Application Boundary
	Existing watercourse (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 vegetation (at risk of removal)
	Existing hedgerow (to be retained)
	Existing wall (to be retained)
	Existing grassland (to be retained)
	Existing fence (to be retained)
	Existing ecologically valuable habitat
	Existing Biological Heritage Site (BHS)
	Existing GWDTE
	Bat roost potential tree
	Proposed tree
	Proposed reinstated grassland
	Proposed reinstated species rich grassland
	Proposed temporary PRoW diversion
	Proposed temporary PRoW closure
	Proposed reinstated wall
	Proposed reinstated fence
	Proposed reinstated hedgerow
	Proposed reinstated important hedgerow
	Proposed tunnel shafts / chambers
	Proposed above ground works

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VERSION	AUTH	CHKD	REVD	REASON FOR ISSUE	DATE



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