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Tyrer Ecological Consultants Ltd, Roselands, Suite 1, 3 Cross Green, Formby, L37 4BH

Ecological Site Management Plan

November 2025

Project Reference: PR-25-0002

Moreton Inn
Ruabon Road
Ruabon
Wrexham
LL14 6PU

National Grid Reference: SJ 3017 4548



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Author	Mr. B. Richards ACIEEM	
Reviewed by	Mr. J. Pescod ACIEEM	-
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Approved by	Mrs. K. Wilding CEnv MISEP ACIEEM	
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-		

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Table of Contents

1.0 Introduction & Objectives

2.0 Creation & Management Plan

3.0 Monitoring Scheme

4.0 Biodiversity Enhancements

Appendix I: Proposed drainage layout

1.0 Introduction & Objectives

1.1 An approved planning application (Application Reference: P/2023/0095[1]) with Wrexham County Borough Council involves the erection of nine dwellings following the demolition of a former public house, which was completed under a prior notification to the council (Application Reference: RHO P/2022/0210[2]).

1.2 A number of previous ecological documents have been produced in support of the scheme, including the following:

- No.35 Moreton Inn – Preliminary Ecological Appraisal (March 2021),
- No.35 Moreton Inn – Dusk Survey Results (June 2021),
- No.35 Moreton Inn – Further Information Report (September 2021),
- PR-25-0002 Moreton Inn – Pond Creation and Management Plan (August 2025),
- PR-25-0002 Moreton Inn – RAMS for GCN (November 2025).

1.3 This document should be read in conjunction with all of these reports, though notably the RAMS for GCN document which includes initial and ongoing management prescriptions in relation to great crested newt (GCN), and the Further Information Report which details Ecological Compliance Measures, a Biosecurity Risk Assessment and other relevant further information.

1.4 Consent was granted by Wrexham County Borough Council in December 2024, subject to a number of conditions; one of these, Condition 7, relates to a long-term site management plan, and states:

"Within 3 months of commencement of development, a long-term ecological site management plan shall be submitted to and approved in writing by the Local Planning Authority. The management plan shall include, but not necessarily be limited to:

- *defined aims and objectives (including targets that can be used as key performance indicators for monitoring purposes);*
- *habitat management prescriptions for aquatic and terrestrial habitats;*
- *contingency prescriptions if post implementation any fish and/or invasive non-native species (INNS) are detected;*
- *Species surveillance*
- *site liaison, wardening, incident reporting and response arrangements;*
- *detail of the skills and competencies required by those undertaking the works or activities including whether they require European Protected Species licenses for the activities proposed;*
- *current and proposed changes to tenure of the ecology area (freehold tenure of the ecology area to be approved by the discharging Authority in consultation with Natural Resources Wales) to ensure appropriate control over the land is established and the effective targeted delivery of long-term actions;*
- *details of persons or bodies responsible for undertaking management and surveillance together with required skills and competencies;*
- *Financial resource provision; and*
- *provision for periodic review mechanism for the Environment Management Plan;*

[1] See: https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000Tv5DIAS?language=en_GB&c__r=Arcus_BE_Public_Register
[2] See: https://register.wrexham.gov.uk/pr/s/detail/a0lJ7000000TvN5IAK?language=en_GB&c__r=Arcus_BE_Public_Register

The development shall be carried out in strict accordance with the site management plan as maybe approved and no more than 3 dwellings hall be occupied until the long term proposals have been implemented in accordance with the plan which shall thereafter be retained and managed for the life of the development. [sic]"

1.5 Further consultation was made between the applicant (Blueprint Architectural) and the county ecologist at Wrexham (Emma Broad), who stated the following:

"I've managed to speak to the case officer, and we believe the condition you're referring to is to do with the attenuation feature and landscaping on site. There is some reference to the attenuation feature having biodiversity benefit, so we will be after something relatively simple on species to be sown and management details such as sward height or cutting regime. Nothing too onerous, but not the same as the off-site pond."

1.6 This document therefore aims to provide detailed management prescriptions for the areas proposed surrounding the "attenuation feature" on the proposed site plan (see **Figure 1.1** below), for a period of up to 30 years. This report should be read in conjunction with the previously produced pond management plan which details management prescriptions in relation to aquatic habitats.



Figure 1.1 – *Proposed site plan with attenuation feature to the south-west in blue (©Blueprint Architectural)*

Aims

1.7 The general aims for the management and maintenance of the habitats at the site include the following:

- Maintain and manage the newly created / enhanced habitat at the stated target condition for the period of at least 30 years.
- Ensure maintenance of the site habitat in a safe and secure condition.
- Provide an enhanced / novel habitat on the site which will benefit biodiversity both within the site and the immediate vicinity and contributes towards the wider ecological network and nature recovery.

1.8 And by way of the above, satisfy the following areas of Condition 7 as listed in the decision notice (see areas bolded below)

"Within 3 months of commencement of development, a long-term ecological site management plan shall be submitted to and approved in writing by the Local Planning Authority. The management plan shall include, but not necessarily be limited to:

- ***defined aims and objectives*** *(including targets that can be used as key performance indicators for monitoring purposes);*
- ***habitat management prescriptions for*** *aquatic and* ***terrestrial habitats****;*
- ***contingency prescriptions if post implementation any*** *fish and/or* ***invasive non-native species (INNS) are detected****;*
- *Species surveillance*
- ***site liaison, wardening, incident reporting and response arrangements****;*
- ***detail of the skills and competencies required by those undertaking the works or activities*** *including whether they require European Protected Species licenses for the activities proposed;*
- *current and proposed changes to tenure of the ecology area (freehold tenure of the ecology area to be approved by the discharging Authority in consultation with Natural Resources Wales) to ensure appropriate control over the land is established and the effective targeted delivery of long-term actions;*
- *details of persons or bodies responsible for undertaking management and surveillance together with* ***required skills and competencies****;*
- *Financial resource provision; and*
- ***provision for periodic review mechanism for the Environment Management Plan****;*

The development shall be carried out in strict accordance with the site management plan as maybe approved and no more than 3 dwellings hall be occupied until the long term proposals have been implemented in accordance with the plan which shall thereafter be retained and managed for the life of the development. [sic]"

1.9 Information in relation to the management of aquatic habitats and surveillance for invasive species associated with aquatic habitats can be found in the previously issued Pond Creation and Management Plan (Tyrer Ecological Consultants, August 2025), whilst key performance indicators are located within the Further Information Report (Tyrer Ecological Consultants, September 2021). For details as to European Protected Species and the necessity for an EPS licence, refer to the RAMS for GCN report (Tyrer Ecological Consultants, November 2025).

1.10 No further information is provided in this report regarding information relating to the tenure and ownership of the ecology area, or financial resource provision; this will be provided by the developer / agent on request.

1.11 The management company appointed by the developer (Blueprint Architectural) will be responsible for habitat creation, management, and maintenance within the site; at this stage it is unknown whether the monitoring will be undertaken by the local authority or via a private firm. Regular inspection of the site, keeping records of all work, inspections, issues and corrective action will be required. These records will feed into the wider monitoring of the site; a list of Maintenance Operations will be included to help inform the body which takes on the management and maintenance of this landscape.

NB: *The body managing the habitat does not need to be an ecologist, but should be familiar with the Tyrer Ecological report(s) as a minimum, the projected aims and objectives for the site, target habitat conditions, ecological sensitives and have sufficient authority and presence to influence activities. In the event of any uncertainty about ecological issues surrounding the habitat, the body is responsible for contacting an Ecologist.*

Possible Constraints to Creation & Management

1.12 Any management that would result in offences under protective legislation pertaining to wildlife **cannot** be undertaken and additional measures may be required to ensure wildlife is protected. As such, creation and management provisions are devised to ensure conformity with all relevant legislation, which includes (but is not limited to); the Wildlife and Countryside Act (WCA) 1981 (as amended), the Environment (Wales) Act 2016, the Conservation of Habitats and Species Regulations 2017 (EU Exit) (as amended) and the Invasive Alien Species (Enforcement and Permitting) Order (IASO) 2019.

1.13 As mentioned previously, this document should be read in conjunction with the RAMS for GCN report. GCN are fully protected from disturbance, killing, injuring or possession at any life stage, with confirmed breeding ponds and resting places afforded the same protection, under Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579) and the Wildlife and Countryside Act (1981) (as amended). Where necessary, management prescriptions have been designed with this species considered to minimise the likelihood of committing an offence. It should be noted that **if a GCN is recorded on site at any time, then all work should cease, and the ecologist contacted for further advice.**

Baseline Site Conditions

1.14 The site of proposed works at the former Moreton Inn (hereafter referred to as "the site") was described during the initial PEA report as "*a former public house with associated hardstanding car park and garage/outhouse, and a pub garden lawn and shrubbery; there is existing access from the west via the Ruabon Road*."

1.15 Following demolition of the former public house, carried out under prior notification as above, the site now consists of a large expanse of sealed hardstanding, including the former car park and the footprint of the previous structure, alongside areas of rank grassland and scrub to the eastern and southern boundaries.

1.16 In line with the RAMS for GCN document, no pallets, skips or otherwise are to be placed upon areas of dense vegetation and should instead only be placed on flat, cleared ground to avoid animals getting underneath; this is limited to the north-western area of the site.

1.17 Habitat manipulation works will commence on site in March 2026, to avoid the period during which GCN are most vulnerable to harm during their hibernation period; clearance will commence from the north of the site towards the south, in a phased vegetation removal methodology. For specific details, please refer to the RAMS for GCN document.

1.18 Once site clearance has occurred, ongoing management will be required to negate the risk of GCN utilising the site. The site management plan detailed overleaf is therefore proposed to be enacted once development works are completed at the site.

2.0 Creation Scheme

Summary

2.1 The proposed creation and ongoing management prescriptions below have been created to ensure habitats reach the intended habitat type and achieve a positive result for biodiversity on site and are maintained for a period of up to 30 years, to ensure ongoing net benefits for the site. See **Figure 2.1** below for a drainage layout of the site, with a larger version provided in **Appendix I**.

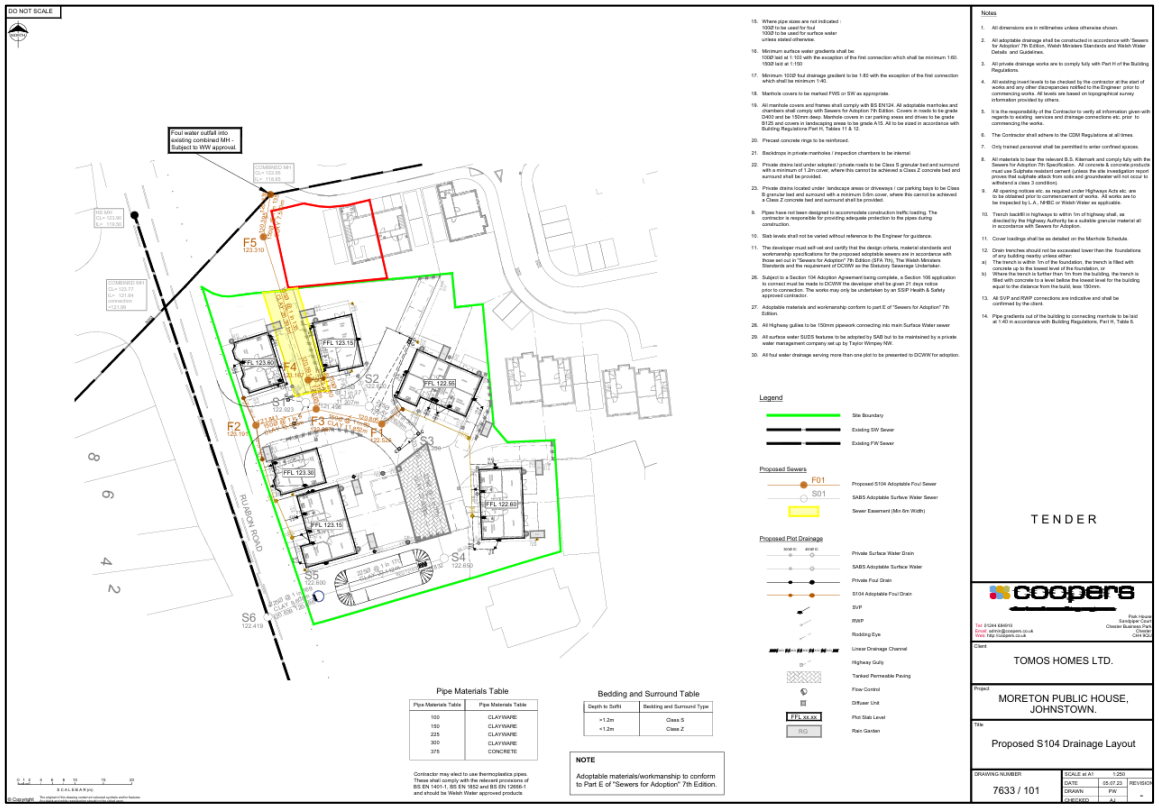


Figure 2.1 – *Site drainage layout (©Coopers Chartered Consulting Engineers)*

2.2 Given the intended nature of the parcel, which is stated on the proposed site plans as an "attenuation area for surface water" and with what appears to be a Sustainable Drainage System (SuDS), it is recommended that the habitat is managed as a wet / marshy neutral grassland habitat, with scrapes and depressions formed to hold water at certain points of the year surrounding the main SuDS pool.

2.3 The method for creating these scrapes will depend on the substrate type at the site; if the ground is largely formed of clay or fine soil, then a number of shallow scrapes can be made with an excavator bucket. These should be formed of varied depths and shapes to be informed by the attending ECoW and contracting team, and any excavated spoil can be used to overlay the hibernacula as described in the enhancement section. If the ground is gravel, or is formed of previously dumped rubble, then the scrape will need to be excavated to a deeper level before being lined with imported clay soil; this will ensure water retention.

2.4 UK Habitats v2.0[3] defines other neutral grassland as the following:

"A neutral grassland that does not meet the definition of either g3a or g3b AND that meets at least three of these four criteria:

1. *>20% cover of broadleaved herbs and sedges;*

[3] Available online: https://ukhab.org/ukhab-documentation/

2. *>8 species per m² (including forbs, grasses, sedges and rushes, and excluding bryophytes);*
3. *≥1 grass species that is not generally sown for intensive agricultural production (ie. Rye-grasses Lolium spp., Timothy Phleum pratense, Cock's-foot Dactylis glomerata, Meadow fescue Festuca pratensis) is at least abundant;*
4. *Cover of Rye-grasses Lolium spp. and White Clover Trifolium repens, where present, is <30%."*

Soil Conditions

2.5 Given the wide range of pH on which neutral grassland can develop, it is considered unlikely that soil conditions will be unsuitable for the establishment of neutral grasslands, with pH within the viable range, though fertility may be higher than desirable. High soil fertility, sometimes as a result of 'modification' through deliberate enrichment such as fertiliser application or other causes including runoff / nutrient input, can be gradually reduced through mowing and removal of cuttings. In the case of the Moreton Inn project, it is therefore considered likely that a mowing regime in combination with removal of cuttings will reduce enrichment over the course of the 30-year management period.

Species Assemblage

2.6 A variety of species are present within the seed mix selected for its suitability in wet / marshy sites, Emorsgate EP1 Pond Edge Mixture[4], including the following (see **Table 2.1** below):

Table 2.1 – Species within selected seed mix Emorsgate EP1

Common Name	Scientific Name
Common Bent	*Agrostis capillaris*
Common Knapweed	*Centaurea nigra*
Corky-fruited Water-dropwort	*Oenanthe pimpinelloides*
Crested Dog's-tail	*Cynosurus cristatus*
Gypsywort	*Lycopus europaeus*
Hedge Bedstraw	*Galium album*
Hemp-agrimony	*Eupatorium cannabinum*
Meadow Barley	*Hordeum secalinum*
Meadow Buttercup	*Ranunculus acris*
Meadow Vetchling	*Lathyrus pratensis*
Meadowsweet	*Filipendula ulmaria*
Purple-loosestrife	*Lythrum salicaria*
Ragged-Robin	*Silene flos-cuculi*
Red Campion	*Silene dioica*
Red Fescues	*Festuca rubra*
Ribwort Plantain	*Plantago lanceolata*
Selfheal	*Prunella vulgaris*
Smaller Cat's-tail	*Phleum bertolonii*
Smooth Meadow-grass	*Poa pratensis*
Star Sedge	*Carex echinata*
Sweet Vernal-grass	*Anthoxanthum odoratum*
Water Avens	*Geum rivale*
Wild Angelica	*Angelica sylvestris*
Wild Teasel	*Dipsacus fullonum*
Yellow Iris	*Iris pseudacorus*

[4] See: https://wildseed.co.uk/product/mixtures/complete-mixtures/special-habitat-mixtures/pond-edge-mixture/

Habitat Creation

2.7 This habitat should be created through direct seeding of the above mix, following Emorsgate guidance on the rate of sowing. Initially, the area should be cleared and any perennial weeds such as common nettle (*Urtica dioica*), docks (*Rumex sp.*) or thistles (*Cirsium sp.*) dug out. The land should then by raked; whilst ordinarily it would be recommended that the ground is flattened, in this case it is recommended that a number of shallow depressions and scrapes are formed within the attenuation area. This will assist with water retention from a drainage perspective, and will also provide a mosaic of shallow, ephemeral pools which will vastly increases niche diversity and provide pockets of suitability for more water-tolerant species listed within the previous seed mix.

2.8 When using a seed mix, the suitable seed mix should be sown on prepared ground, by digging and creating a fine seedbed or scarifying the grass. The seed mix should then be cast over the bare ground (typically in late August or September), ensuring the area is not too wet to avoid the seed sitting in standing water, before being trodden in and watered regularly, but not covered with soil. A sowing rate of four grams of seed per m^2 of habitat should be utilised. These species are generally perennial, and as such will be slow to germinate and grow and will not normally flower during the first season. Raking of seed should be avoided, as this can concentrate the seed distribution or bury the seed too deep. If there is a prolonged dry period, the seeded area may be lightly watered. Birds and other seed predators should be kept off the land as much as possible; deterrents can be installed to discourage predation where required.

2.9 Throughout the first growing season seeded areas should be topped up and mown in regular, two monthly intervals to ensure weeds do not become dominant, cutting height during this first year should be to approximately 50mm with a focus on establishment of grasses and removal of nutrients. For a minimum of two years following this first growing season, a biannual cut should take place to ensure establishment with the first, partial cut in mid-July to September leaving 10-20% uncut, and a second full cut in October removing late-season growth. All cut materials should be removed from site in order to prevent nutrient build-up within the soil. No vegetation management should be undertaken between November – February as this is the period at which GCN are most vulnerable.

Ongoing Management

2.10 Once the grassland is established, an annual varied cut will be carried out using a mower in late summer / early autumn (reducing sward height to no lower than 30mm, and no longer than 100mm, with at least 20% over 70mm and 20% under 70mm) to allow the seeds of late flowering species to fall prior to a cut. Cuttings will remain on-site for three to five days to following the cut to allow seeds to disperse, and then be removed in order to remove nutrients and promote the development of a species-rich sward and placed on habitat piles located on site.

2.11 This annual cut should be carried out in stages, leaving some areas of the parcel with a taller sward height and others cut short, to further increase heterogeneity and niche variation to provide an abundance of microclimates.

2.12 Any undesirable species, such as bracken, bramble or other scrub invading the parcel, should be targeted for removal to ensure that the habitat remains heterogeneous and isn't dominated by any single species. Scrub removal must be carried out outside of the breeding bird season.

2.13 It is additionally recommended that the proposed ecological enhancement area is fenced using timber post fencing to prevent access by inhabitants of the nearby space and / or pets. This will further encourage the development of a diverse and semi-natural habitat.

Schedule of Works

2.14 Inspect grassland annually when vegetation is beginning to flower (typically July-August) to ensure a diverse structure is maintained, check for signs of disease, invasive species and informing ensuing management prescriptions based on target habitat type.

2.15 **Table 2.2** below outlines a yearly calendar for the undertaking of the above management prescriptions.

Table 2.2 – Maintenance operations schedule for grassland

Operation	Months												Notes
	J	F	M	A	M	J	J	A	S	O	N	D	
Visual inspection of grassland							✓	✓					Inspect grassland annually
Year 1 management			a/r										Grassland should be reseeded, watered and mown as required
Scrape formation			a/r										As required during creation efforts
Year 2 onward cutting								✓	✓	✓			Annual cut
INNS and injurious plants removal								✓	✓	✓			Identify invasive plants and notify site manager, remove by hand or with aid of INNS contractor
Remove injurious plants, scrub and bracken										✓			Identify injurious plants and notify site manager, remove by hand
Reseeding / seeding of bare areas								a/r					Following the creation processes

Table Key
One operation per specified month – ✓
As required = a/r

3.0 Monitoring Scheme

3.1 Through the 30-year duration for which this management plan covers, records should be kept of all operations carried out in relation to any part of the management plan. The actual management operations carried out can then be compared to the theoretical plan and any areas where there are discrepancies can be investigated further and changes can be made, either to the operation schedule or to the plan itself, to better reflect the nature of the habitat in question and to improve the efficacy of the scheme.

3.2 In the final year of the plan, the actual progress should be reviewed against the predicted status of the grassland in order to evaluate the effectiveness of the operations carried out up to that point. This information can then be used to inform a subsequent long-term management plan if it is deemed necessary by the local authority and/or site manager.

3.3 All of the species suggested within this plan have been selected in accordance with local suitability, and any plant material which is unsuitable or defective in any other way should not be considered.

Grassland Monitoring Scheme

3.4 Grassland reviews should be undertaken by an Ecologist or other suitably experienced botanist (i.e. FISC 4+) on the second, fourth, and fifth years, and every 5 years subsequent for the lifetime of the management plan, to assess whether the habitats are meeting the specific definitions. The extent of grassland establishment will be monitored, including percentage of ground cover, bare areas and presence of leaf litter. Sward composition will also be reviewed, with grass to herb ratio and indicator species considered. These reviews will then allow any parts of the plan which may not be achieving their objectives to be adjusted to better develop the scheme.

Summary

3.5 For a summary of the monitoring scheme, see **Table 3.1** below:

Table 3.1 – Monitoring timetable for habitat monitoring scheme

Operation	Years										Notes
	1	2	3	4	5	10	15	20	25	30	
Grassland monitoring		✓		✓	✓	✓	✓	✓	✓	✓	See previous

4.0 Biodiversity Enhancements

4.1 In tandem with the proposed habitat works put forward previously, it is recommended that biodiversity enhancement measures are enacted to increase the carrying capacity of the site in relation to amphibians within the ecological area described above.

4.2 To create areas of refuge habitat likely to be used by amphibians, and compensate for areas of habitat loss, the steps outlined below should be followed to create new refuge/hibernation habitat. A Hibernaculum can be made using existing features on site (reclamation) or new features brought to the site, and should be created as to provide shelter with thermal cover (such as tarpaulin or turf) and have discrete access points for small animals (see **Figure 4.1** below).

4.3 To construct a hibernaculum (*Baker et. al*, 2011):

- Remove the turf from the footprint of the hibernaculum and set aside.
- On well-drained soil excavate to a depth of approximately 50 cm and set aside spoil (this is unnecessary on poorly drained soils).
- Fill the footprint or pit with core material. Materials likely to retain moisture are preferable, such as cut timber, brash and grubbed up tree roots. Other material such as inert hardcore, bricks, rocks, and building rubble may also be used. Materials that will decompose should not be placed beneath heavy components such as bricks or rocks, to reduce the risk of collapse.
- Pack the larger spaces within the core materials with wood chippings, loose topsoil or spoil.
- Cover the hibernaculum with the turves removed from the footprint.
- Take care not to create structures that might attract rodents, such as piles of rubble with many entrance holes. There has been no rigorous investigation of the optimum size of hibernacula, but larger hibernacula are probably more useful than small constructions because they contain a variety of different microhabitats and are more likely to maintain stable conditions.
- A suggested minimum size is 4.0 m long by 2.0 m wide by 1.0 m deep. 2.0 x 2.0 x 1.0 metres (length x width x height) as a minimum.
- Place near to the water attenuation area as indicated below.

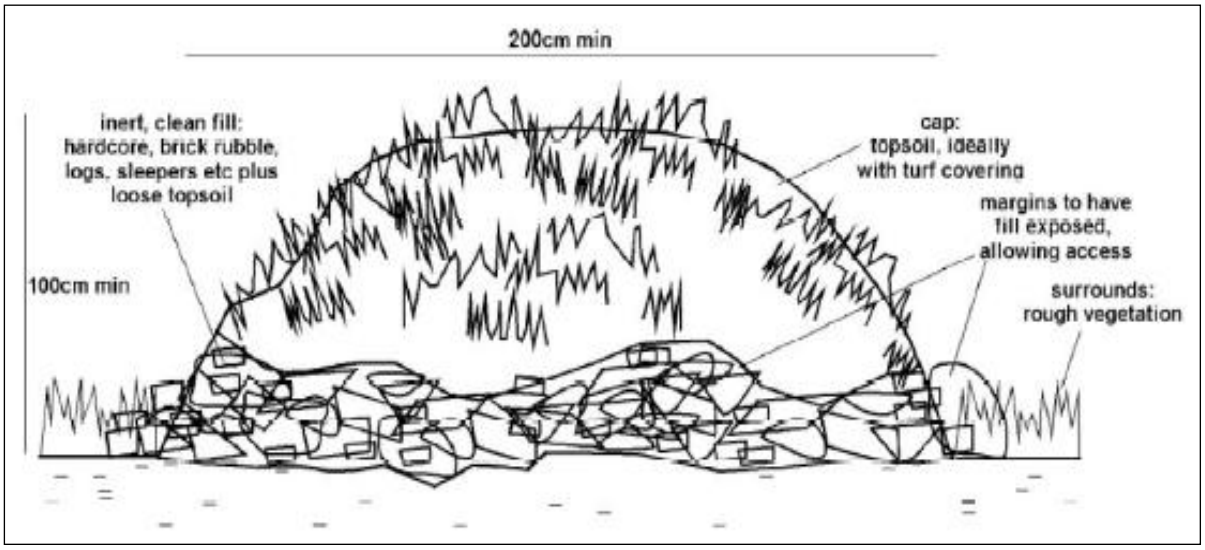


Figure 4.1 – *Suggested hibernaculum design (GCN Mitigation Guidelines)*

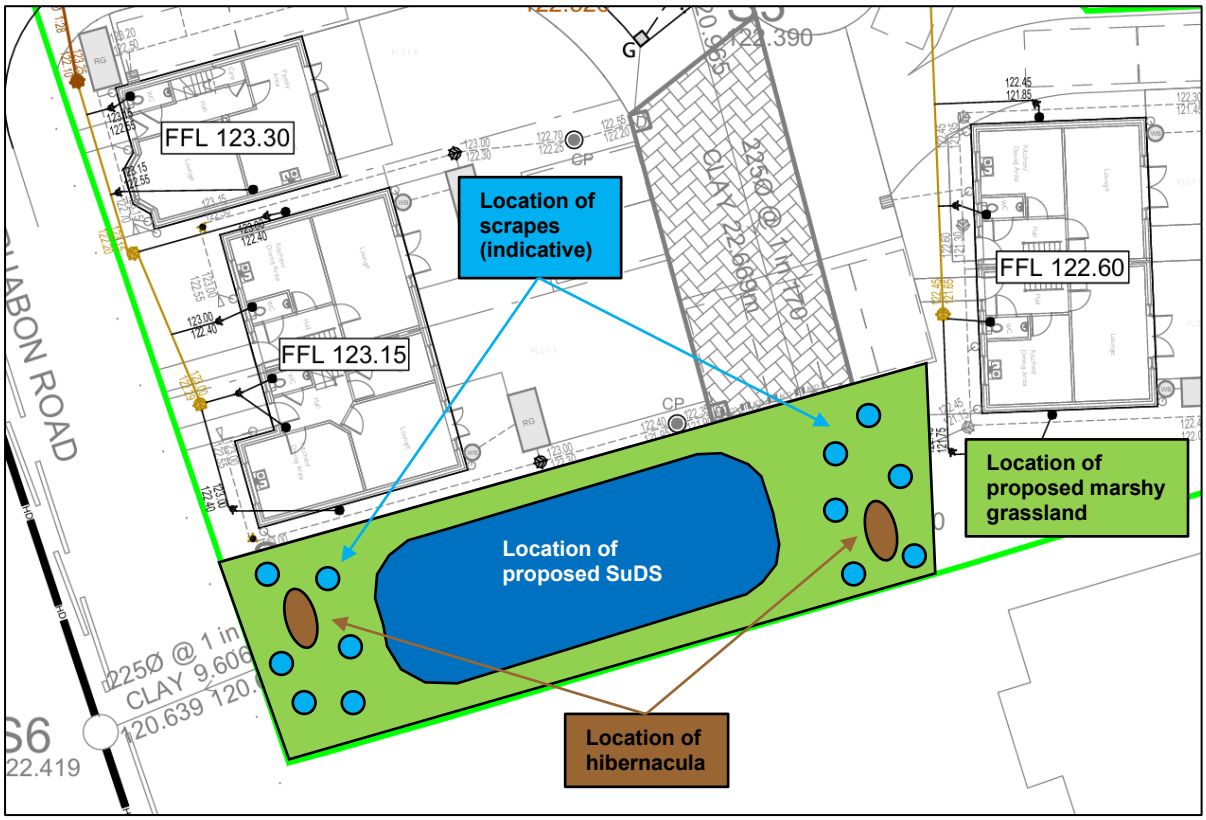


Figure 4.2 – *Proposed enhancement measures (adapted © Coopers Chartered Consulting Engineers)*

4.4 It is further recommended that any new road drainage should incorporate suitable measures to ensure the risks of newts falling into gully pots (roadside drains) is minimised. This should include using permeable surfaces and/or soakaways rather than gully pots where possible or providing a dropped kerb or inset kerb stone immediately adjacent to any gully pots. A distance of ~100mm between the kerb and any gully pots is required, permitting newts to effectively navigate the kerbstones safely (see **Figure 4.3** below):

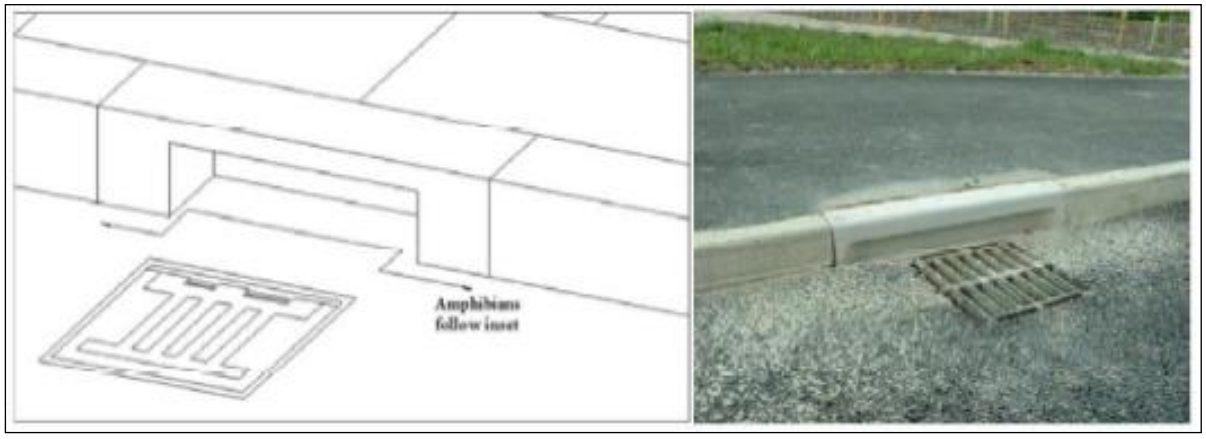
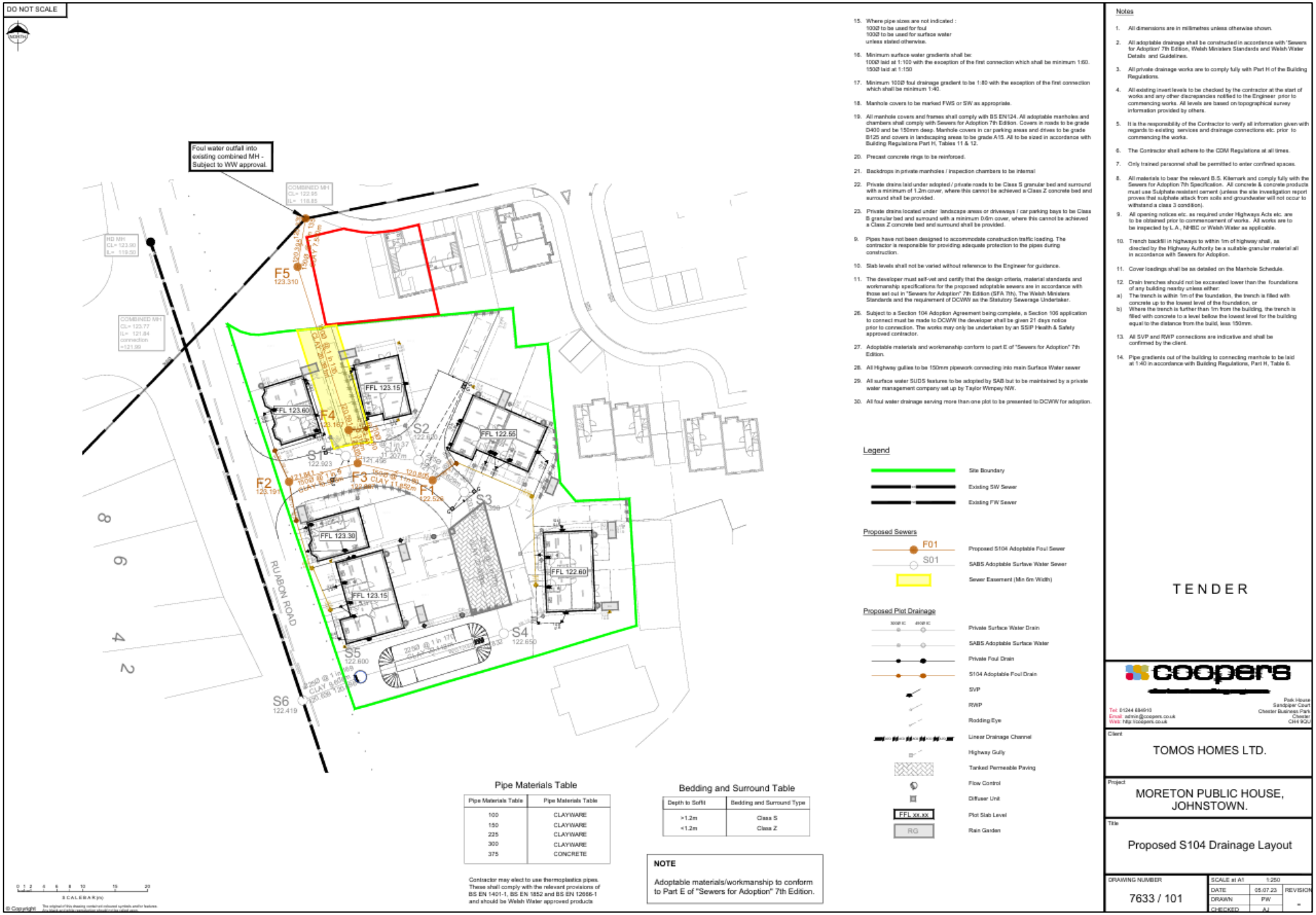


Figure 4.3 – *Suggested kerb/gully pot use*

Appendix I – Proposed Site Drainage Plan



15. Where pipe sizes are not indicated :
100Ø to be used for foul
100Ø to be used for surface water
unless stated otherwise.
16. Minimum surface water gradients shall be:
100Ø laid at 1:100 with the exception of the first connection which shall be minimum 1:60.
150Ø laid at 1:150
17. Minimum 100Ø foul drainage gradient to be 1:80 with the exception of the first connection which shall be minimum 1:40.
18. Manhole covers to be marked FWS or SW as appropriate.
19. All manhole covers and frames shall comply with BS EN124. All adoptable manholes and chambers shall comply with Sewers for Adoption 7th Edition. Covers in roads to be grade D400 and be 150mm deep. Manhole covers in car parking areas and drives to be grade B125 and covers in landscaping areas to be grade A15. All to be sized in accordance with Building Regulations Part H, Tables 11 & 12.
20. Precast concrete rings to be reinforced.
21. Backdrops in private manholes / inspection chambers to be internal
22. Private drains laid under adopted / private roads to be Class S granular bed and surround with a minimum of 1.2m cover, where this cannot be achieved a Class Z concrete bed and surround shall be provided.
23. Private drains located under landscape areas or driveways / car parking bays to be Class B granular bed and surround with a minimum 0.6m cover, where this cannot be achieved a Class Z concrete bed and surround shall be provided.
9. Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.
10. Slab levels shall not be varied without reference to the Engineer for guidance.
11. The developer must self-vet and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition (SFA 7th); The Welsh Ministers Standards and the requirement of DCWW as the Statutory Sewerage Undertaker.
26. Subject to a Section 104 Adoption Agreement being complete, a Section 106 application to connect must be made to DCWW the developer shall be given 21 days notice prior to connection. The works may only be undertaken by an SSIP Health & Safety approved contractor.
27. Adoptable materials and workmanship conform to part E of "Sewers for Adoption" 7th Edition.
28. All Highway gullies to be 150mm pipework connecting into main Surface Water sewer
29. All surface water SUDS features to be adopted by SAB but to be maintained by a private water management company set up by Taylor Wimpey NW.
30. All foul water drainage serving more than one plot to be presented to DCWW for adoption.

Legend

- Site Boundary
- Existing SW Sewer
- Existing FW Sewer

Proposed Sewers

- F01 — Proposed S104 Adoptable Foul Sewer
- S01 — SABS Adoptable Surface Water Sewer
- Sewer Easement (Min 6m Width)

Proposed Plot Drainage

- Private Surface Water Drain
- SABS Adoptable Surface Water
- Private Foul Drain
- S104 Adoptable Foul Drain
- SVP
- RWP
- Rodding Eye
- Linear Drainage Channel
- Highway Gully
- Tanked Permeable Paving
- Flow Control
- Diffuser Unit
- FFL xx.xx — Plot Slab Level
- RG — Rain Garden

Pipe Materials Table

Pipe Materials Table	Pipe Materials Table
100	CLAYWARE
150	CLAYWARE
225	CLAYWARE
300	CLAYWARE
375	CONCRETE

Contractor may elect to use thermoplastics pipes. These shall comply with the relevant provisions of BS EN 1401-1, BS EN 1852 and BS EN 12666-1 and should be Welsh Water approved products

Bedding and Surround Table

Depth to Soffit	Bedding and Surround Type
>1.2m	Class S
<1.2m	Class Z

NOTE

Adoptable materials/workmanship to conform to Part E of "Sewers for Adoption" 7th Edition.

Notes

1. All dimensions are in millimetres unless otherwise shown.
2. All adoptable drainage shall be constructed in accordance with "Sewers for Adoption" 7th Edition, Welsh Ministers Standards and Welsh Water Details and Guidelines.
3. All private drainage works are to comply fully with Part H of the Building Regulations.
4. All existing invert levels to be checked by the contractor at the start of works and any other discrepancies notified to the Engineer prior to commencing works. All levels are based on topographical survey information provided by others.
5. It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works.
6. The Contractor shall adhere to the CDM Regulations at all times.
7. Only trained personnel shall be permitted to enter confined spaces.
8. All materials to bear the relevant B.S. Kitemark and comply fully with the Sewers for Adoption 7th Specification. All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur to withstand a class 3 condition).
9. All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or Welsh Water as applicable.
10. Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Sewers for Adoption.
11. Cover loadings shall be as detailed on the Manhole Schedule.
12. Drain trenches should not be excavated lower than the foundations of any building nearby unless either:
a) The trench is within 1m of the foundation, the trench is filled with concrete up to the lowest level of the foundation, or
b) Where the trench is further than 1m from the building, the trench is filled with concrete to a level bellow the lowest level for the building equal to the distance from the build, less 150mm.
13. All SVP and RWP connections are indicative and shall be confirmed by the client.
14. Pipe gradients out of the building to connecting manhole to be laid at 1:40 in accordance with Building Regulations, Part H, Table 6.

TENDER

coopers
Park House
Sandpiper Court
Chester Business Park
Chester
CH4 9QU
Tel: 01244 684910
Email: admin@coopers.co.uk
Web: http://coopers.co.uk

Client: TOMOS HOMES LTD.

Project: MORETON PUBLIC HOUSE, JOHNSTOWN.

Title: Proposed S104 Drainage Layout

DRAWING NUMBER	SCALE at A1	1:250	
7633 / 101	DATE	05.07.23	REVISION
	DRAWN	PW	-
	CHECKED	AJ	