

Ecological Appraisal



Land at Old Sarum, Salisbury

26th March 2021

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**Tyler
Grange**

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Summary

- S.1. Tyler Grange Group Ltd (TG) was instructed by Persimmon Homes (Wessex) Ltd to conduct an Ecological Appraisal of Land at Old Sarum, Salisbury, Wiltshire; centred on OS Grid Reference SU 15154 33961; hereafter referred to as the 'site'. The site comprises land parcels at areas A and F and the vacant ground floor units at Block C (Area G). The site is part of a wider outline consent, but a new full planning application is to be made for residential development.
- S.2. An ecological appraisal was conducted of a wider area under Persimmon's control (including the site) in 2019 and this was updated for the site areas only in 2020.
- S.3. No designated sites within the vicinity of the site would be expected to be subject to adverse impacts as a result of the proposed development. As a precaution a Construction Environmental Management Plan (CEMP) to be controlled via a condition, would seek to minimise potential polluting run off, dust deposition and noise resulting from the construction phase.
- S.4. The site comprises habitats of limited ecological interest, none of which are more than site importance being of low diversity and common and widespread grassland and scrub. Immature trees are offsite to the west along the boundary with the football ground. Compensation in the form of new native hedgerow and tree planting is provided within the soft landscape proposals.
- S.5. Isolation of the site from areas of semi-natural habitat by roads and built form together with levels of ambient lighting from the neighbouring football ground and residential development also limits its potential to support protected and priority species. Some priority species could be present in low numbers (e.g. common toad and hedgehog and nesting birds) hence a precautionary method of working is proposed to avoid harm during construction.
- S.6. Fauna will continue to use the site including new residential gardens and proposed native hedgerow planting. Enhancement measures including bird and bat boxes and provision of gaps in fence lines to allow movement of small fauna such as hedgehogs is proposed and could be controlled via a planning condition.
- S.7. With the implementation of the mitigation and enhancement strategy described, to be controlled via a planning condition, the proposed development would conform with national and local planning policy and legislation afforded to wildlife.



Section 1: Introduction and Methodology

Purpose

- 1.1. This report has been prepared by Tyler Grange Group Ltd (TG) on behalf of Persimmon Homes (Wessex) Ltd. It sets out the findings of an Ecological Appraisal of Land at Old Sarum, Salisbury, Wiltshire; centred on OS Grid Reference SU 15154 33961; hereafter referred to as the 'site'. The site comprises land parcels areas A and F and the vacant ground floor units at Block C (Area G) (see Figure 1 below).
- 1.2. The site is part of a wider area which has outline planning consent for a mixed-use scheme (S/2005/0211.) comprising residential, employment, retail and a local centre. The existing outline planning consent in parcels A and F is for provision of employment, however a new detailed planning application is to be submitted for residential development comprising a total of 53 units, of which 46 are to be provided at areas A and F and a further 7 units resulting from the conversion of the vacant ground floor unit at Block C within Area G. The application will also include conversion of block C within parcel G to residential development. The locations of the land parcels are indicated in Figure 1 below.
- 1.3. The layout of the proposed development in parcels A and F is shown on the Soft Landscape Proposals Plan (12115_P13) within this report. As proposals in parcel G comprise internal alterations to existing buildings only (conversion of vacant ground floor units to affordable housing) no such proposals plans are considered necessary.

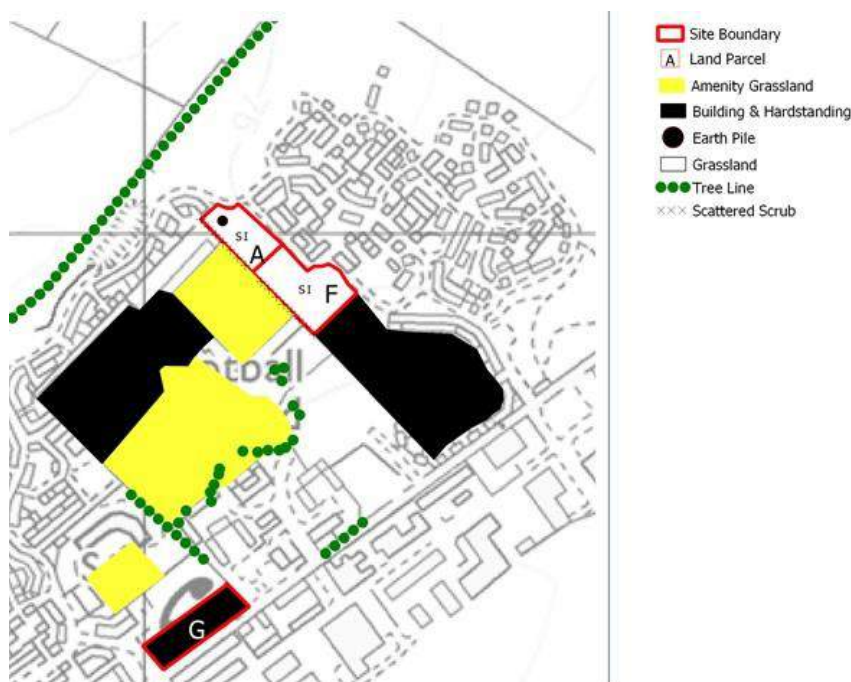


Figure 1: Locations of Parcels A, F and G and surrounding habitats

- 1.4. An ecological appraisal of the site and the wider area was conducted by TG in 2019 including a data search and extended Phase I habitat survey. The habitats illustrated in Figure 1 indicate the habitats recorded during the 2019 survey.



- 1.5. This report updates the 2019 appraisal by:
- Using available background data and results of field surveys to describe and evaluate the ecological features present within the likely 'zone of influence' (Zol)¹ of the proposed development;
 - Considering the likely ecological impacts of the proposals as a result of the proposed development; and
 - Where appropriate, describes mitigation and enhancement proposals, together with planning controls to ensure their delivery, to ensure conformity with planning policy and legislation (as set out in Appendix 1).
- 1.6. This assessment and the terminology used are consistent with the 'Guidelines for Ecological Impact Assessment' (CIEEM, 2018).

Methodology

- 1.7. This ecological appraisal was informed by the following:
- Data search of the site and wider study area (see Appendix 2 for definitions);
 - 'Extended' Phase I Habitat Survey; and
 - Badger Meles meles survey.
- 1.8. The detailed methodologies for these surveys are set out in detail at Appendix 2.
- 1.9. All ecologists at TG are members of CIEEM and abide by the Institute's Code of Professional Conduct.

¹ Defined as the area over which ecological features may be subject to significant effects as a result of activities associated with a project and associated activities



Section 2: Baseline Conditions

Protected Sites

- 2.1 Table 2.1 indicates the designated sites within the study area (as defined at Appendix 2), their distance from the site, reasons for designation and their ecological importance.

Table 2.1: Protected sites within the study area

Site Name and Designation	Distance and Direction from Site (km - N/S/W/E)	Description/Summary of Reason for Designation	Ecological Importance
River Avon Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI)	1.1km E 2.2km W	The primary reasons for site selection are: Habitats: Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachium</i> vegetation; and Species: Desmoulin's whorl snail <i>Vertigo moulinsiana</i> , sea lamprey <i>Petromyzon marinus</i> , brook lamprey <i>Lampetra planeri</i> , Atlantic salmon <i>Salmo salar</i> , and bullhead <i>Cottus gobio</i> .	International
Porton Down Special Protection Area (SPA)	4.3km E	One of the largest uninterrupted tracts of semi-natural chalk grassland in the UK. It is important for downland breeding birds and supports important numbers of stone curlew <i>Burhinus oedipnemos</i> .	International
Salisbury Plain SPA (Note: same location as Porton Down listed above)	4.3km E	The primary reasons for site selection are: Habitats: The largest surviving semi-natural dry grassland in Europe and the most important site for this habitat in the UK. Supports extensive CG3 <i>Bromus erectus</i> grassland, the rare CG7 <i>Festuca ovina</i> - <i>Hieracium pilosella</i> - <i>Thymus praecox</i> grassland, and one of the largest examples of CG6 <i>Avenula pubescens</i> grassland. Juniper <i>Juniperus communis</i> scrub formations are the best remaining example in the UK of lowland juniper scrub on chalk; with semi-natural dry grassland and chalk heath. Species: Marsh fritillary <i>Euphydryas aurinia</i> in chalk grassland - a cluster of large sub-populations where the species breeds.	International
Old Sarum Local Wildlife Site (LWS)	1.5km SW	BAP Key (Priority) Habitats - Lowland calcareous grassland. It is a Hill fort with Roman and Norman archaeology with unimproved calcareous grassland on grazed ramparts, neutral grassland on mown areas	County



Site Name and Designation	Distance and Direction from Site (km - N/S/W/E)	Description/Summary of Reason for Designation	Ecological Importance
		within and rank mesotrophic grassland, scrub and scrub woodland elsewhere.	
Winterbourne Earls Meadow LWS	1.8km E	BAP Key (Priority) Habitats are coastal and floodplain grazing marsh; lowland fens; and wet woodland. It is a former water-meadow adjacent to the River Bourne supporting a mosaic of neutral grassland and fen communities.	County
Bishopdown LWS	2km S	BAP Key (Priority) Habitats are lowland calcareous grassland. It is an urban park with semi-improved calcareous grassland.	County

Habitats

- 2.2 Habitats within parcels A and F of the site are illustrated on Plan 12115/P15 and are described in Table 2.2 below, together with their ecological importance. These should be read in conjunction with the photographic record at Appendix 3.
- 2.3 Parcel G comprises purely buildings and hardstanding of negligible ecological importance.

Table 2.2: Habitats present within the site

Habitat	Description	Ecological Importance
Onsite Habitats		
Poor semi-improved grassland	Parcel A and F is dominated by poor semi-improved grassland. At the time of survey it was tussocky in places with a sward height of 4-5cm. It was shorter at around 2cm along the northern boundary alongside Roger Way. The grassland was dominated by species such as cock's-foot <i>Dactylis glomerata</i> and Yorkshire fog <i>Holcus lanatus</i>. It was also frequented by forb species such as dandelion <i>Taraxacum</i> sp., bristly oxtongue <i>Helminthotheca echioides</i>, broad-leaved dock <i>Rumex obtusifolius</i>, nettle <i>Urtica dioica</i>, white clover <i>Trifolium repens</i>, crane's bill <i>Geranium</i> sp., common vetch, white clover, hogweed <i>Heracleum sphondylium</i>, ribwort plantain <i>Plantago lanceolata</i> and daisy bellis <i>perennis</i>. The hogweed, burdock <i>Arctium</i> sp., common wormwood <i>Artemisia absinthium</i>, dock and nettle tended to stand taller at around 40cm. The grassland around the scrub in the south-eastern corner and surrounding the scrub mound saw a higher proportion of nettle, burdock and hogweed..	Site – low diversity and common and widespread habitat.



Hardstanding	There is an area of hardstanding in the west of parcel A. It was partly covered in waste at the time of surveying.	Negligible – no inherent value
Scrub	There are two sections of scrub in the south-eastern and south-western corners of the site. There is also scrub on the earth mound that is situated roughly in the middle of the site. The scrub is mostly bramble <i>Rubus fruticosus</i> with some ivy <i>Hedera helix</i> underneath in parts. There was also dogwood, blackthorn <i>Prunus spinosa</i> and dog rose <i>Rosa canina</i> . The earth mound was mostly covered in scrub and some grass (same species as already listed).	Site - low diversity and common and widespread habitat.
Offsite Habitats		
Trees	Beyond the western boundary alongside the football stadium stood a treeline. They were mostly young and immature specimens of sycamore <i>Acer pseudoplatanus</i> , dogwood, blackthorn, silver birch <i>Betula pendula</i> and elder <i>Sambucus nigra</i> .	Site - low diversity and common and widespread and immature so easily replaced in the short term.

Fauna

Amphibians and Reptiles

- 2.4 There is one record of common toad *Bufo bufo*, c. 1.8km to the south-west. No permanent waterbodies are present at the site and none were noted within 500m of the site. Four records of slow-worm *Anguis fragilis* were returned within 2km of the site.
- 2.5 Although parcels A and F comprise grassland habitat that may offer opportunities for common reptiles, the habitat is recent in origin (previously being part of a compound area for the development surrounding) and is isolated from other suitable habitat from which reptiles could colonise by buildings and hardstanding. Reptiles are therefore considered unlikely to be present.
- 2.6 There is some potential for occasional use of the site by common amphibians such as common toad; however give the isolation from other suitable habitat and lack of nearby ponds it is unlikely to support a significant population. Great crested newt are also therefore considered absent.

Badger

- 2.7 Three records of badger were returned within 2km of the site, including a 2013 sett record c. 830m south. In the surveys conducted by TG in 2019, evidence of badger activity was recorded in the form of a latrine and two potential sett entrances approximately 780m to the south west.
- 2.8 During the update survey no signs of badger were recorded. Although the site offers some suitable habitat it is largely isolated from other suitable habitat and is unlikely to form an important part of any foraging areas of badger clans within the locality.



Bats

- 2.9 Numerous bat records were returned records within a 4km radius of the site; summarised in Table 2.3 below. None were returned for the site itself.

Table 3.4 – Bat records from the last 15 years within 4km of the site.

Species	Number of records; most recent record	Closest record	Records of definitive signs e.g. droppings*
Brandt's bat <i>Myotis brandti</i>	2 (2006)	3.5km SW	No roosts recorded.
Brown long-eared bat <i>Plecotus auritus</i>	28 (2015)	2km S	Roosts recorded; exact locations withheld. Within 4 km of site.
Common pipistrelle <i>Pipistrellus pipistrellus</i>	74 (2014)	2km SE	Roosts recorded; exact locations withheld. Within 4 km of site.
Daubenton's bat <i>Myotis daubentonii</i>	18 (2016)	2.8km SW	No roosts recorded.
Noctule <i>Nyctalus noctula</i>	17 (2015)	2.2km S	Roosts recorded; exact locations withheld. Within 4 km of site.
Serotine <i>Eptesicus serotinus</i>	13 (2015)	2.6km NW	Roosts recorded; exact locations withheld. Within 4 km of site.
Soprano pipistrelle <i>Pipistrellus pygmaeus</i>	13 (2014)	1.7km S	No roosts recorded.
Unknown species Chiroptera	38 (2015)	2.3km S	Roosts recorded; exact locations withheld. Within 4 km of site.

- 2.10 The site offers limited foraging habitat for bats given the low diversity of grassland and therefore likely low diversity of potential invertebrate prey. Whilst it may offer some potential for use by low numbers of common species, such as pipistrelles, that could roost in nearby residential area, it is unlikely to be fundamental to maintaining the local population. It is also isolated from other more favourable habitats by roads and buildings and is likely subject to light spill from adjacent roads, residences and the adjacent floodlit football ground which may limit its use by bats.

Birds

- 2.11 Records for bird species listed on Annex I of the Birds Directive within 2km of the site were returned; namely golden plover *Pluvialis apricaria* and red kite *Milvus milvus*. Stone curlew *Burhinus oedicephalus*, Annex I species, is known to be present in the wider local area.
- 2.12 Records for species on the Birds of Conservation Concern (BoCC) Red List were returned; namely black redstart *Phoenicurus phoenicurus*, house sparrow *Passer domesticus*, mistle thrush *Turdus*



viscivorus, lapwing *Vanellus vanellus*, starling *Sturnus vulgaris*, and yellow wagtail *Motacilla flava*; all recorded within 2km. Black redstart and red kite are also Schedule 1 species.

- 2.13 Incidental records of starling (a red list species) within off-site mature trees to the south of parcel F were noted during the 2019 survey.
- 2.14 The site habitats offer limited potential for birds and none of the notable and protected birds recorded in the wider area are likely to be present. A common assemblage may use the site for occasional foraging and could utilise the offsite trees for nesting. No notable assemblage is likely to be present.

Dormouse

- 2.15 No records of dormouse *Muscardinus avellanarius* were returned and the site offers suboptimal habitat in the form of scrub, which is completely isolated from other areas of suitable habitat in the wider landscape (woodland and hedgerows). The species are therefore considered to be absent and are not considered further in this report.

European Hedgehog

- 2.16 Sixteen European hedgehog records within 2km of the site were returned; with the most recent record from 2016. The site offers some suitable habitat in the form of rough grassland and scrub and while it is unlikely to be significant in maintaining the local population, it could be used sporadically for foraging and shelter.

Invertebrates

- 2.17 One 2014 record for protected invertebrate species, namely brown hairstreak *Thecla betulae*, was returned within 2km of the site, with the location withheld. The site does not support significant areas of the brown hairstreak's larval foodplant (blackthorn scrub) and hence the species is highly unlikely to be present.
- 2.18 The grasslands, scrub, and trees would be expected to support a common and widespread invertebrate assemblage.

Water Vole

- 2.19 One record of water vole was returned from within 2km of the site. As there is no suitable habitat at the site, this species is unlikely to be present and is not considered further in the report.



Section 3: Impacts and Requirement for Mitigation

Site Proposals

- 3.1. The proposals for parcels A and F of the site are shown at Plan 12115/P15 and include clearance of site habitats to allow construction of 46 new dwellings and associated infrastructure. Proposals for parcel G include the conversion of the vacant ground floor units and minor alterations to the external appearance of Block C to facilitate the intended residential use.
- 3.2. In line with the NPPF and local planning policy requirements (see Appendix 1) and where appropriate, there are opportunities within the scheme to deliver biodiversity net gain by:
- Incorporating native tree, shrub and hedgerow planting;
 - Incorporating landscape planting that is of benefit to wildlife, including within more formal areas; and
 - Incorporating bird and bat boxes within new buildings.

Potential Impacts and Requirement for Mitigation and Enhancement Strategy

- 3.3. The Natural Environment and Rural Communities Act (NERC) 2006 gives the importance of conserving biodiversity a statutory basis, requiring government departments (which includes Local Planning Authorities) to have regard for biodiversity in carrying out their obligations (which includes determination of planning applications) and to take positive steps to further the conservation of listed species and habitats. These articles of legislation require Wiltshire Council to take measures to protect species or habitats from the adverse effects of development, where appropriate, by using planning conditions or obligations.
- 3.4. Where there are potential impacts in the construction and operational stages of the development to the important ecological features described in Section 2, these are described below, together with their potential significance. Where impacts would trigger legislation or planning policy (as set out in Appendix 1), mitigation is noted. As required by planning policy, ecological enhancement to deliver net gains for biodiversity is also described.

Designated Sites

- 3.5. Due to the distances involved, it is considered unlikely that direct impacts could occur to the designated sites described in Section 2 during the construction phase. However this could be reinforced by the production of a Construction Ecological Management Plan (CEMP), written to British Standards (BS42020:2013) and in line with best practice (CIRIA, 2015). This will incorporate standard best practice measures to prevent impacts such as from noise, vibration, air quality, dust and contaminated run-off. Production of a CEMP could be controlled by an appropriately worded planning condition.



- 3.6. The site falls within the 6.4km catchment of the Porton Down SPA and the avoidance strategy states "Where new development is proposed within the visitor catchment which is within overall housing figures set out in the WCS, draft WHSAP and ABP masterplan, the Council may continue to rely upon the conclusions of this strategic level HRA, without the need to carry out individual project level HRAs of individual planning applications (subject to the advice of NE in relation to specific projects)".
- 3.7. The strategic HRA relies on collection of funding for the approved on-site strategy for SPA through collection of funds through the CIL.
- 3.8. The site is c. 1.7km away from the River Avon SAC. Wiltshire Council state that NE have not raised concerns about impacts on the SAC providing the Memorandum of Understanding is implemented. This relates to the requirement for development to be 'phosphate neutral' which might be via on-site control measures/treatment and/or offsets through collection funds through a S106 or CIL.

Habitats

- 3.9. Given there is no inherent ecological importance or potential for protected or notable species presence at parcel G, no impacts are anticipated, and no mitigation is required.
- 3.10. In parcel A and F, the proposals will require the loss of the site habitats including poor semi-improved grassland, scrub and hardstanding. As set out in the TG Arboricultural Impact Assessment report (12115_R03) works within the site are also likely to damage the root zones of the offsite immature trees/shrubs which could result in their loss. Loss of features within and offsite that are of no more than site importance would not trigger policy in respect of protection of ecological features. Nevertheless compensation for the loss of these habitats is provided with the provision of a new native hedgerow on the western boundary and native shrub planting elsewhere within the landscaping scheme (see Plan 12115/P13).

Fauna

- 3.11. If not conducted sensitively the removal of site habitats has the risk of causing harm to notable species that could be present in low numbers including common toad, hedgehog and nesting birds. As such a precautionary method of working (which could be controlled via a planning condition) could be implemented during site clearance. This would include:
- A tool box talk with contractors by a suitably qualified Ecological Clerk of Works (ECoW);
 - Timing of ground level site clearance to avoid the hibernation period for amphibians and hedgehog (avoid November to February depending on weather conditions). Cutting of woody vegetation to a height of 150mm could however be conducted in the winter months to avoid conflict with the nesting bird season, with full root removal when temperatures allow (consecutively >5°C at night); and
 - Hand searches by the ECoW of vegetation prior to removal at any time of year.
- 3.12. Any amphibians or hedgehog found would be moved by the ECoW to a suitable offsite location within the wider Old Sarum area.



- 3.13. The proposed hedgerow and new residential gardens will offer continued opportunities for fauna including nesting birds, bats, invertebrates, amphibians and hedgehog. To allow movement of hedgehogs and other fauna between gardens, 130mm gaps (to be signed off by the ECoW) will be created at the base of garden fences.
- 3.14. No evidence of badger was recorded however given badgers can readily dig new setts an update badger survey will be conducted a maximum of 3 months prior to commencement of construction to ensure no new setts are present that could be affected. If setts are found a suitable mitigation strategy and Natural England licence will be required to facilitate their closure.
- 3.15. Although the site is unlikely to be of importance to bats where lighting is necessary, it should use LEDs of a warm white spectrum (ideally <2700Kelvin) and have an upward light ratio of 0% in order to reduce impacts on any assemblage of bats utilising the site (BCT, 2018).
- 3.16. Further enhancements would be provided in the form of three bat bricks, such as the Schwegler 1FE, and three swift boxes within six of the new houses that back on to the western boundary to provide new roosting/nesting opportunities.



Section 4: Conclusions

- 4.1 The site is of limited ecological importance and has limited potential to support priority and protected fauna. With the mitigation and enhancement strategy described, including production of a CEMP, a precautionary method of works for construction and enhancement measures for wildlife, the site would be in conformity with local and national planning policy as it relates to biodiversity.



Appendix 1: Legislation and Planning Policy

Legislation

- A1.1. Specific habitats and species receive legal protection in the UK under various pieces of legislation, including:
- The Wildlife and Countryside Act 1981 (as amended);
 - The Conservation of Habitats and Species Regulations 2017 (as amended);
 - The Countryside and Rights of Way Act 2000;
 - The Natural Environment and Rural Communities Act 2006;
 - The Hedgerows Regulations 1997; and
 - The Protection of Badgers Act 1992.
- A1.2. The European Council Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, 1992, often referred to as the 'Habitats Directive', provides for the protection of key habitats and species considered of European importance. Annexes II and IV of the Directive list all species considered of community interest. The legal framework to protect the species covered by the Habitats Directive has been enacted under UK law through The Conservation of Habitats and Species Regulations 2018 (as amended).
- A1.3. In Britain, the WCA 1981 (as amended) is the primary legislation protecting habitats and species. SSSIs, representing the best examples of our natural heritage, are notified under the WCA 1981 (as amended) by reason of their flora, fauna, geology or other features. All breeding birds, their nests, eggs and young are protected under the Act, which makes it illegal to knowingly destroy or disturb the nest site during nesting season. Schedules 1, 5 and 8 afford protection to individual birds, other animals and plants.
- A1.4. The CROW Act 2000 strengthens the species enforcement provisions of the WCA 1981 (as amended) and makes it an offence to 'recklessly' disturb a protected animal whilst it is using a place of rest or shelter or breeding/nest site.

National Planning Policy

National Planning Policy Framework (NPPF), February 2019

- A1.5. The National Planning Policy Framework (NPPF) was published in February 2019 and sets out the Government's planning policies for England and how these should be applied. It replaces the first National Planning Policy Framework published in March 2012.
- A1.6. Paragraph 11 states that:

"Plans and decisions should apply a presumption in favour of sustainable development."



- A1.7. Section 15 of the NPPF (paragraphs 170 to 177) considers the conservation and enhancement of the natural environment.
- A1.8. Paragraph 170 states that planning and decisions should contribute to and enhance the natural and local environment by:
- “a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
 - c) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures”
- A1.9. Paragraph 171 states that plans should distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- A1.10. Paragraph 174 states that in order to protect and enhance biodiversity and geodiversity, plans should:
- “a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.”
- A1.11. When determining planning applications, Paragraph 175 states that local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:
- “a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
 - c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁵⁸ and a suitable compensation strategy exists; and
 - d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around



developments should be encouraged, especially where this can secure measurable net gains for biodiversity.”

A1.12. As stated in paragraph 176 the following should be given the same protection as habitats sites:

- a) “potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.”

A1.13. Paragraph 177 states that the presumption in favour of sustainable development does not apply where the planned project is likely to have a significant effect on a habitat site (alone or in combination) unless an appropriate assessment concluded the plan or project will not adversely affect the integrity of the habitats site

Local Planning Policy

A1.14. The site falls within the administrative district of Wiltshire Council. The Council’s planning policies are set out in the Wiltshire Core Strategy (January 2015).

A1.15. Local Policies forming part of the Core Strategy relating to ecology that will need to be considered as part of development proposals are:

- Core Policy 50: Biodiversity and Geodiversity
- Core Policy 52: Green Infrastructure
- Core Policy 55: Air Quality
- Core Policy 57: Ensuring High Quality Design and Place Shaping

A1.16. Core Policy 50 states that; “There is an expectation that such features shall be retained, buffered, and managed favourably in order to maintain their ecological value, connectivity and functionality in the long-term. Where it has been demonstrated that such features cannot be retained, removal or damage shall only be acceptable in circumstances where the anticipated ecological impacts have been mitigated as far as possible and appropriate compensatory measures can be secured to ensure no net loss of the local biodiversity resource and secure the integrity of local ecological networks and provision of ecosystem services.

All development proposals shall incorporate appropriate measures to avoid and reduce disturbance of sensitive wildlife species and habitats throughout the lifetime of the development.

Any development potentially affecting a Natura 2000 site must provide avoidance measures in accordance with the strategic plans or guidance set out in paragraphs 6.75-6.77 above where possible, otherwise bespoke measures must be provided to demonstrate that the proposals would have no adverse effect upon the Natura 2000 network. Any development that would have an adverse effect on the integrity of a European nature conservation site will not be in accordance with the Core Strategy.



Biodiversity enhancement

All development should seek opportunities to enhance biodiversity. Major development in particular must include measures to deliver biodiversity gains through opportunities to restore, enhance and create valuable habitats, ecological networks and ecosystem services. Such enhancement measures will contribute to the objectives and targets of the Biodiversity Action Plan (BAP) or River Basin/Catchment Management Plan, particularly through landscape scale projects, and be relevant to the local landscape character.

Local sites

Sustainable development will avoid direct and indirect impacts upon local sites through sensitive site location and layout, and by maintaining sufficient buffers and ecological connectivity with the wider environment. Damage or disturbance to local sites will generally be unacceptable, other than in exceptional circumstances where it has been demonstrated that such impacts:

- cannot reasonably be avoided
- are reduced as far as possible
- are outweighed by other planning considerations in the public interest
- where appropriate compensation measures can be secured through planning obligations or agreements.

Development proposals affecting local sites must make a reasonable contribution to their favourable management in the long-term.”

A1.17. Core Policy 52 states that; “Development shall make provision for the retention and enhancement of Wiltshire’s green infrastructure network and shall ensure that suitable links to the network are provided and maintained. Where development is permitted developers will be required to:

retain and enhance existing on site green infrastructure

make provision for accessible open spaces in accordance with the requirements of the adopted Wiltshire Open Space Standards

put measures in place to ensure appropriate long-term management of any green infrastructure directly related to the development

provide appropriate contributions towards the delivery of the Wiltshire Green Infrastructure Strategy

identify and provide opportunities to enhance and improve linkages between the natural and historic landscapes of Wiltshire.

If damage or loss of existing green infrastructure is unavoidable, the creation of new or replacement green infrastructure equal to or above its current value and quality, that maintains the integrity and functionality of the green infrastructure network, will be required.

Proposals for major development¹⁰⁷ should be accompanied by an audit of the existing green infrastructure within and around the site and a statement demonstrating how this will be retained and enhanced through the development process.

Development will not adversely affect the integrity and value of the green infrastructure network, prejudice the delivery of the Wiltshire Green Infrastructure Strategy, or provide inadequate green infrastructure mitigation.



Green infrastructure projects and initiatives that contribute to the delivery of a high quality and highly valued multi-functional green infrastructure network in accordance with the Wiltshire Green Infrastructure Strategy will be supported. Contributions (financial or other) to support such projects and initiatives will be required where appropriate from developers.

A1.18. Core Policy 55 states that; "Development proposals, which by virtue of their scale, nature or location are likely to exacerbate existing areas of poor air quality, will need to demonstrate that measures can be taken to effectively mitigate emission levels in order to protect public health, environmental quality and amenity. Mitigation measures should demonstrate how they will make a positive contribution to the aims of the Air Quality Strategy for Wiltshire and where relevant, the Wiltshire Air Quality Action Plan. Mitigation may include:

- landscaping, bunding or separation to increase distance from highways and junctions
- possible traffic management or highway improvements to be agreed with the local authority
- abatement technology and incorporating site layout/separation and other conditions in site planning
- traffic routing, site management, site layout and phasing
- where appropriate, contributions will be sought toward the mitigation of the impact a development may have on levels of air pollutants."

A1.19. Core Policy 57 states that; "...Applications for new development must be accompanied by appropriate information to demonstrate how the proposal will make a positive contribution to the character of Wiltshire through:

ii. the retention and enhancement of existing importance landscaping and natural features, (e.g. trees, hedges, banks and watercourses, in order to take opportunities to enhance biodiversity, create wildlife and recreational corridors, effectively integrate the development into its setting and to justify and mitigate against any losses that may occur through the development."



Appendix 2: Methodology and Definitions

Definitions

- A2.1 The 'site' is defined by the application red-line boundary; see Plan 13690/P0x. The 'study area' extends to a 1km radius for protected and priority species records, 4km radius for bats species, 2km for non-statutory site designations and nationally designated statutory sites and a 10km radius for European statutory site designations.

Scoping

- A2.2 The scope of the ecological appraisal was determined by undertaking a desk-based assessment of available records and published sources, together with an initial site survey. With this information, the Zol of the proposed development was established, together with any further detailed work - such as detailed surveys - that might be necessary to inform the assessment.

Data Search

- A2.3 The aim of the data search is to collate existing ecological records for the site and adjacent areas. Obtaining existing records is an important part of the assessment process as it provides information on issues that may not be apparent during a single survey, which by its nature provides only a 'snapshot' of the ecology of a given site.
- A2.4 The data search covered the study area using the distances defined in paragraph A2.1. It was conducted in April 2019. The following organisations and resources were contacted and consulted:
- Wiltshire and Swindon Biological Record Centre (WSBRC), for protected and priority species and habitats, and locations of non-statutory sites;
 - Multi-Agency Geographic Information for the Countryside (MAGIC) Interactive Maps , for locations of statutory sites, priority habitat areas and European Protected Species (EPS) licence records;
 - Natural England's website for citations of nationally designated sites;
 - Joint Nature Conservation Committee website for citations of internationally designated sites;
 - Wiltshire Local Biodiversity Action Plan (LBAP) for local priority habitats and species subject to conservation action, to assist with the evaluation of ecological features and to inform site enhancement strategies; and
 - Wiltshire Council planning website for details of relevant local planning policies and supplementary planning guidance.
- A2.5 Information supplied by these organisations has, where relevant, been incorporated into the following account with due acknowledgement.



Extended Phase I Survey

- A2.6 An extended Phase I habitat survey of the site was undertaken on 29th March 2019 by Ivi Szaboova and updated on 22nd November 2020 by Grace England. The habitat survey methodology was based on guidance set out in the 'Handbook for Phase I habitat survey' (JNCC, 2010). This entailed recording the main plant species and classifying and mapping broad habitat types present.
- A2.7 Note was taken of the more conspicuous fauna, and any evidence of, or potential for the presence of protected/notable flora and fauna.
- A2.8 A basic inventory of the habitats and a representative species list was produced. Where access allowed, adjacent habitats were also considered, to assess the site within the wider landscape and to provide information with which to assess possible impacts within the context of the site boundary.
- A2.9 The weather conditions during the survey were dry with an air temperature of 7°C, wind speed of 1 (Beaufort Scale) and cloud cover of 70%.

Badger Survey

- A2.10 Badger surveys were undertaken on 8th December 2020. During the survey, any field signs of badger, within the site and within 30m of the boundary where access permitted, were recorded. Typical badger field signs include:
- A2.11 Badger setts;
- Badger pathways;
 - Push throughs (gaps made where badgers regularly push their way through fencing/hedgerows)
 - Latrines and dung pits;
 - Badger hairs;
 - Badger prints; and
 - Foraging Activity (e.g. snuffle holes).
 -
- A2.12 Any sett found was examined and assigned to one of four categories of importance to the badger clan, as defined by Harris et al. (1989). The number of holes comprising each sett was recorded and setts classified as disused, partially used or well-used. Sett descriptions and categories of use are set out below.

Classification of badger setts

- A2.13 Main Setts: These usually have a large number of holes with large spoil heaps, and the setts generally look well used. There will be well-used paths to and from the sett and between sett entrances. Although normally the breeding sett is in continuous use, it is possible to find a main sett that has become disused due to excessive digging or some other reason; it should be recorded as a disused main sett.



- A2.14 Annex Setts: These are often close to a main sett, usually less than 150m away, and are usually connected to the main sett by one or more obvious well-worn paths. They usually have several holes but may not be in use all the time even if the main sett is very active.
- A2.15 Subsidiary Setts: These often only have a few holes. They are usually at least 50m from a main sett, and do not have an obvious path connecting with another sett. They are not continuously active.
- A2.16 Outlier Setts: These usually have only one or two holes, often have little spoil outside the hole, with no obvious path connecting with another sett and are only used sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the actual entrance hole), which is usually at least 250mm in diameter, and is rounded or a flattened oval shape. Fox and rabbit tunnels are smaller and often taller than broad.

Indicators of Use of Badger Setts

- A2.17 Well-Used: Clear of debris and vegetation, obviously in regular use.
- A2.18 Partially Used: Not in regular use, with leaves or twigs in entrance or moss and other plants growing around the entrance.
- A2.19 Disused: Partially or completely blocked entrances, unable to be used without a considerable amount of clearance.

Evaluation

- A2.20 The evaluation of habitats and species is defined in accordance with published guidance (CIEEM, 2018). The level of importance of specific ecological features is assigned using a geographic frame of reference, with international being most important, then national, regional, county, borough, local and lastly, within the site boundary only.
- A2.21 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they are particularly diverse, or a good example of a specific habitat type), other features (such as wildlife corridors or mosaics of habitats) or species populations or assemblages.

Limitations

- A2.22 The species data collated during the data search are only those records submitted to NBRC and therefore should not be taken as a definitive list of the protected and priority fauna to occur within the study area.
- A2.23 The site survey was conducted outside the main growing season for plants when some species would not have been visible or would be difficult to identify. However given the nature of the



habitats and proposals it is considered that sufficient data was collated to allow an assessment of potential impacts to be considered.

Quality Control

A2.24 All ecologists at Tyler Grange are members of CIEEM and abide by the Institute's Code of Professional Conduct.



Appendix 3: Site Photographs



Photograph 1: View of buildings in land parcel G; south-east elevation.



Photograph 2: Parcel A and F grassland and immature trees offsite to the west





Photograph 3: Areas of bare/disturbed ground and hardstanding



Photograph 4: Tree line along western boundary





Photograph 5: Scrub patches



Plans:

Habitat Features Plan (12115 / P15)

Soft Landscape Proposal (12115 / P13)





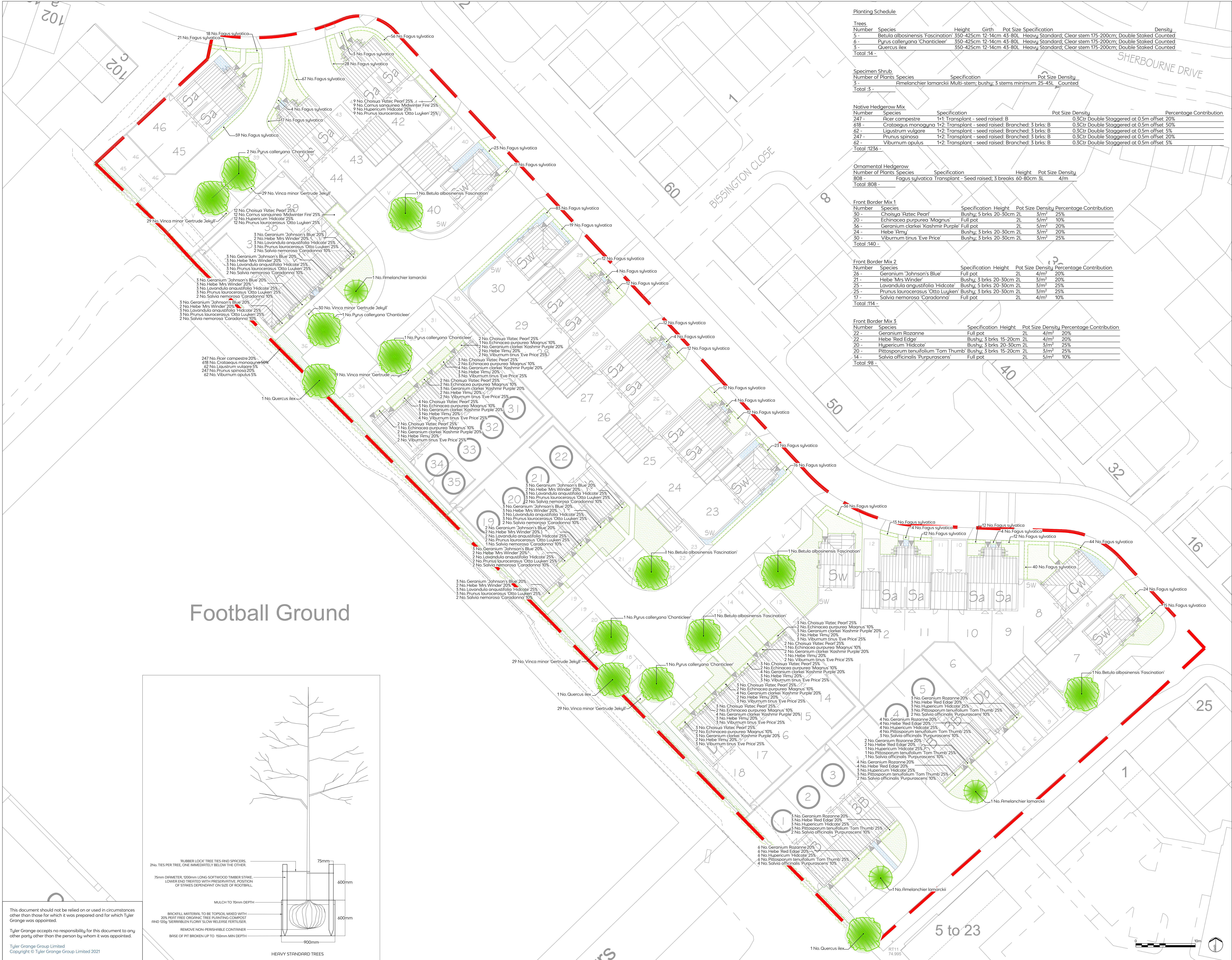
- Site Boundary
- Poor Semi-Improved Grassland
- Hard Standing
- Scrub



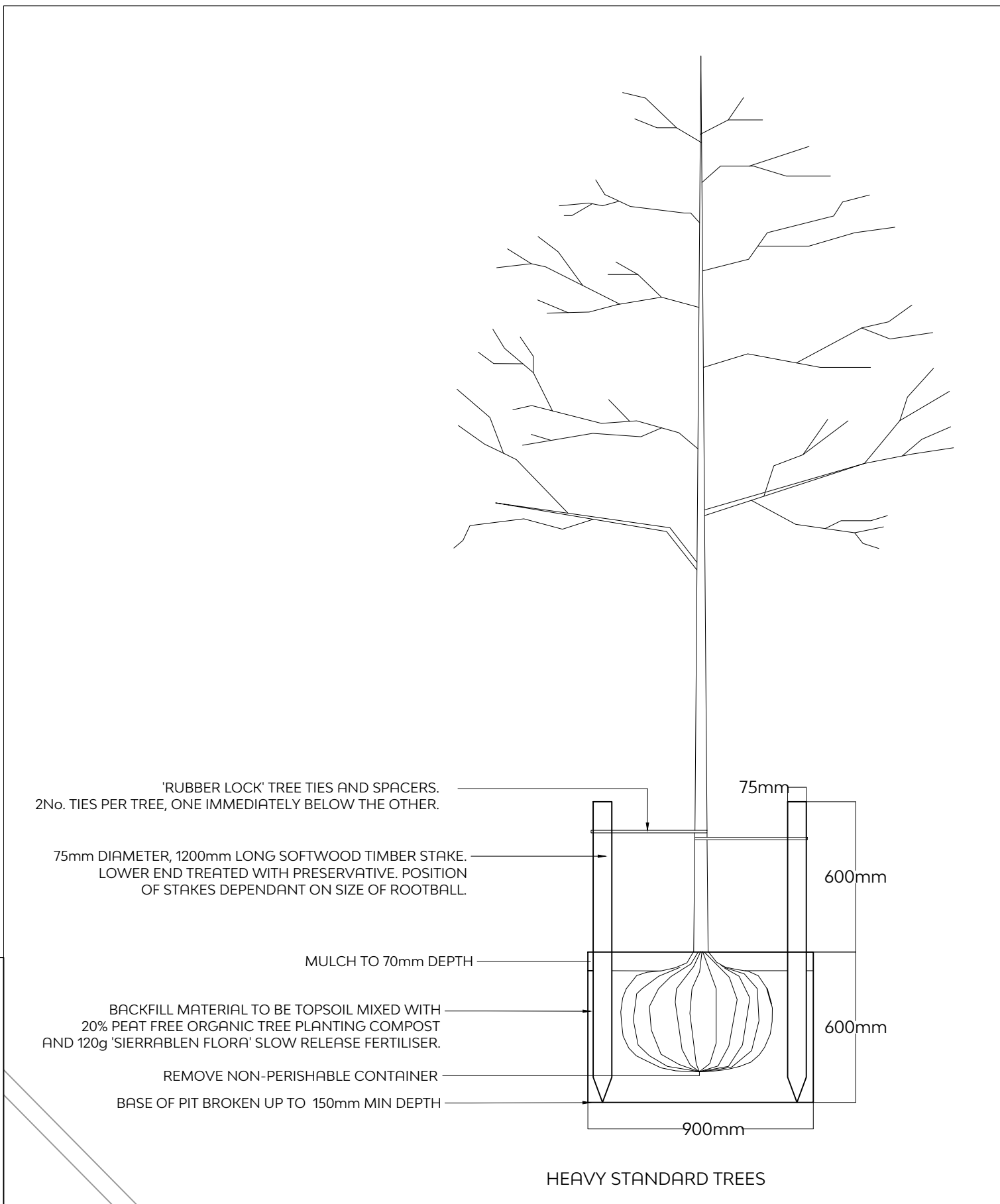
Project	Land at Old Sarum, Old Sarum, Salisbury
Drawing Title	Habitat Features Plan
Scale	Not To Scale
Drawing No.	12115_P15
Date	4th March 2021
Checked	GE/CGS



Marsden Estate, Rendcomb, Cirencester, GL7 7EX
T: 01285 831 804 E: info@tylergrange.co.uk W: www.tylergrange.co.uk



Football Ground



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Planting Schedule

Trees	Number	Species	Height	Girth	Pot Size	Specification	Density
5 -	Betula albosinensis 'Fascination'	350-425cm	12-14cm	43-80L	Heavy Standard; Clear stem 175-200cm; Double Staked	Counted	
6 -	Pyrus calleryana 'Chanticleer'	350-425cm	12-14cm	43-80L	Heavy Standard; Clear stem 175-200cm; Double Staked	Counted	
3 -	Quercus ilex	350-425cm	12-14cm	43-80L	Heavy Standard; Clear stem 175-200cm; Double Staked	Counted	
Total :14 -							

Specimen Shrub	Number of Plants	Species	Specification	Pot Size	Density
3 -	Amelanchier lamarckii	Multi-stem; bushy; 3 stems minimum	25-45L	Counted	
Total :3 -					

Native Hedgerow Mix	Number	Species	Specification	Pot Size	Density	Percentage Contribution
247 -	Acer campestre	1+1: Transplant - seed raised; B		0.3Ctr	Double Staggered at 0.5m offset	20%
618 -	Crataegus monogyna	1+2: Transplant - seed raised; Branched; 3 brks: B		0.3Ctr	Double Staggered at 0.5m offset	5%
62 -	Ligustrum vulgare	1+2: Transplant - seed raised; Branched; 3 brks: B		0.3Ctr	Double Staggered at 0.5m offset	5%
247 -	Prunus spinosa	1+2: Transplant - seed raised; Branched; 3 brks: B		0.3Ctr	Double Staggered at 0.5m offset	20%
62 -	Viburnum opulus	1+2: Transplant - seed raised; Branched; 3 brks: B		0.3Ctr	Double Staggered at 0.5m offset	5%
Total :1256 -						

Ornamental Hedgerow	Number of Plants	Species	Specification	Height	Pot Size	Density
808 -	Fagus sylvatica	Transplant - Seed raised; 3 breaks	60-80cm	3L	4/m	
Total :808 -						

Front Border Mix 1							
Number	Species	Specification	Height	Pot Size	Density	Percentage	Contribution
30 -	Choisya 'Aztec Pearl'	Bushy; 5 brks	20-30cm	2L	3/m²	25%	
20 -	Echinacea purpurea 'Magnus'	Full pot		2L	5/m²	10%	
36 -	Geranium clarkii 'Kashmir Purple'	Full pot		2L	5/m²	20%	
24 -	Hebe 'Amj'	Bushy; 3 brks	20-30cm	2L	3/m²	20%	
30 -	Viburnum tinus 'Eve Price'	Bushy; 3 brks	20-30cm	2L	3/m²	25%	
Total :140 -							

Front Border Mix 2							
Number	Species	Specification	Height	Pot Size	Density	Percentage	Contribution
26 -	Geranium 'Johnson's Blue'	Full pot		2L	4/m ²	20%	
21 -	Hebe 'Mrs Winder'	Bushy; 3 brks	20-30cm	2L	3/m ²	20%	
25 -	Lavandula angustifolia 'Hidcote'	Bushy; 5 brks	20-30cm	2L	3/m ²	25%	
25 -	Prunus laurocerasus 'Otto Luken'	Bushy; 3 brks	20-30cm	2L	3/m ²	25%	
17 -	Salvia nemorosa 'Caradonna'	Full pot		2L	4/m ²	10%	
Total :114 -							

Front Border Mix 3							
Number	Species	Specification	Height	Pot Size	Density	Percentage	Contribution
22 -	Geranium Rozanne	Full pot		2L	4/m ²	20%	
22 -	Hebe 'Red Edge'	Bushy; 3 brks	15-20cm	2L	4/m ²	20%	
20 -	Hypericum 'Hidcote'	Bushy; 3 brks	20-30cm	2L	3/m ²	25%	
20 -	Pittosporum tenuifolium 'Tom Thumb'	Bushy; 3 brks	15-20cm	2L	3/m ²	25%	
14 -	Salvia officinalis 'Purpurascens'	Full pot		2L	5/m ²	10%	
Total :98 -							

- Site Boundary
- Proposed Tree
- Proposed Specimen Shrub
- Proposed Ornamental Planting Area
- Proposed Ornamental Hedgerow
- Proposed Native Hedgerow
- Proposed Turf
- Proposed Hedgerow Grass Seed Mixture (Emorsgate EH1 - Sowing Rate 4g/m²)
- Proposed Gravel laid on Landscape Fabric

Rev	Description	Date
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Head Office: Marsden Estate, Rendcomb, Cirencester, Gloucestershire GL7 7EX
E: info@tylergrange.co.uk
W: www.tylergrange.co.uk

Project title
Old Sarum, Salisbury

Drawing title
Detailed Landscape Proposals

PLAN TO BE PRINTED IN COLOUR
Scale
Date
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19.02.2021

Drawing number
12115_P15

Revision
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XXX
CDM Review XXX



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