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Dorset Innovation Park

Construction and Environmental Management Plan (Biodiversity)

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Section 1: Introduction

1.1 This Construction and Environmental Management Plan (CEMP) has been prepared by Tyler Grange LLP on behalf of Purbeck District Council in respect of Dorset Innovation Park (DIP), Winfrith Newburgh, Dorset DT2 8FT (hereafter referred to as the 'site').

1.2 The CEMP has been prepared to support the Local Development Order (LDO), which facilitates and guides re-development of the site. The proposals are shown on the accompanying masterplan submitted with the LDO and incorporate a central parkland running through the centre of the site along with individual development plots.

1.3 The site supports important ecological habitats and is located adjacent to multiple designated sites as detailed in the Landscape and Ecological Management Plan (LEMP) (Tyler Grange, 2018) also supports a range of protected species.

1.4 The CEMP controls the detailed mitigation strategies required to avoid or minimise impacts to important and/or protected ecological features during the construction phase, to be controlled by the Biodiversity Mitigation Plan (BMP) prepared for the LDO area covered by the CEMP. The CEMP includes details regarding timing of works, requirements for ecological supervision, pollution control requirements and working methods.

1.5 The mitigation strategies outlined in the CEMP cover the parkland element of the LDO and the requirements for the individual development plots as the ecological constraints are relevant across the whole site. It will be the responsibility of the developers taking on the individual development plots to review the CEMP in relation to their specific plot to ensure that appropriate mitigation is implemented during construction. The CEMP should also be read in conjunction with the LEMP prepared for the site which describes the enhancement, management and monitoring strategy and the Design Guide.

1.6 This CEMP is set out as follows:

- Section 2 describes the site context and a summary of ecological features present within the site;
- Section 3 sets out the risk assessment of potentially damaging construction activities considering the ecological features identified in Section 2;
- Section 4 details the mitigation strategies required considering the risks identified in Section 3; the roles, responsibilities and monitoring to ensure adequate and appropriate implementation of the CEMP including responsible persons, lines of communication, and appointment of an Ecological Clerk of Works (ECoW).

Section 2: Site Context and Summary of Ecological Features

2.1 This section of the CEMP summarises the existing important ecological features on the site.

Site Location and Context

2.2 The site is centred on National Grid Reference SY 826 864 and is illustrated on **Figure 1**. The site covers approximately 40ha. It was previously a testing facility though now supports a large technology park consisting of buildings, hardstanding, species poor and species-rich grassland, ornamental planting and trees, native trees and woodland, scattered scrub, a stream (mostly in culvert) and a pond.

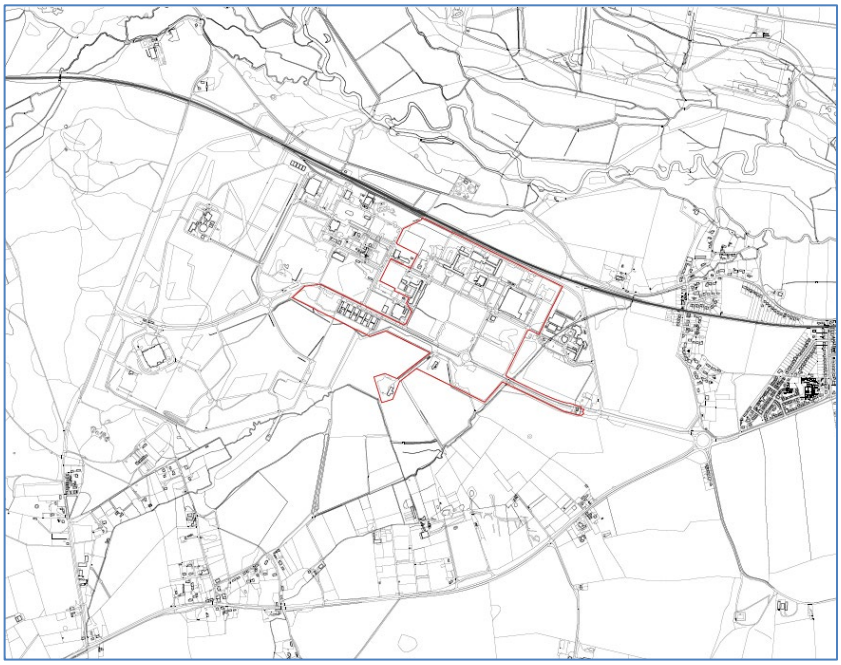


Figure 1: Site location

Land Tenure

2.3 As landowner, the Council[1] are responsible for developing the site and will therefore be responsible for implementation of the CEMP during the initial enabling works stage and for the parkland areas during the construction phase and will continue to be managed by the Council or a successor organisation as part of the common areas of the site. Individual developers will be responsible for the implementation of the CEMP on individual development plots during construction.

[1] Dorset Innovation Park is owned by Dorset County Council (DCC) and Purbeck District Council (PDC) who are due to merge to form part of "Dorset Council" on 1st April 2019. All reference to PDC/DCC will hereafter be referred to as "the Council".

Summary of Ecological Features

2.4 A full ecological assessment, informed by detailed ecological surveys has been undertaken on the site throughout 2017 and 2018 (Lindsay Carrington Ecological Services, 2017 and 2018; Edwards, B., 2016 and 2018). The existing ecological features are shown on the accompanying Phase I Habitat Plan.

2.5 Figure 2 below shows the location of the statutory designated sites in relation to the site boundary and Figure 3 shows the non-statutory sites.

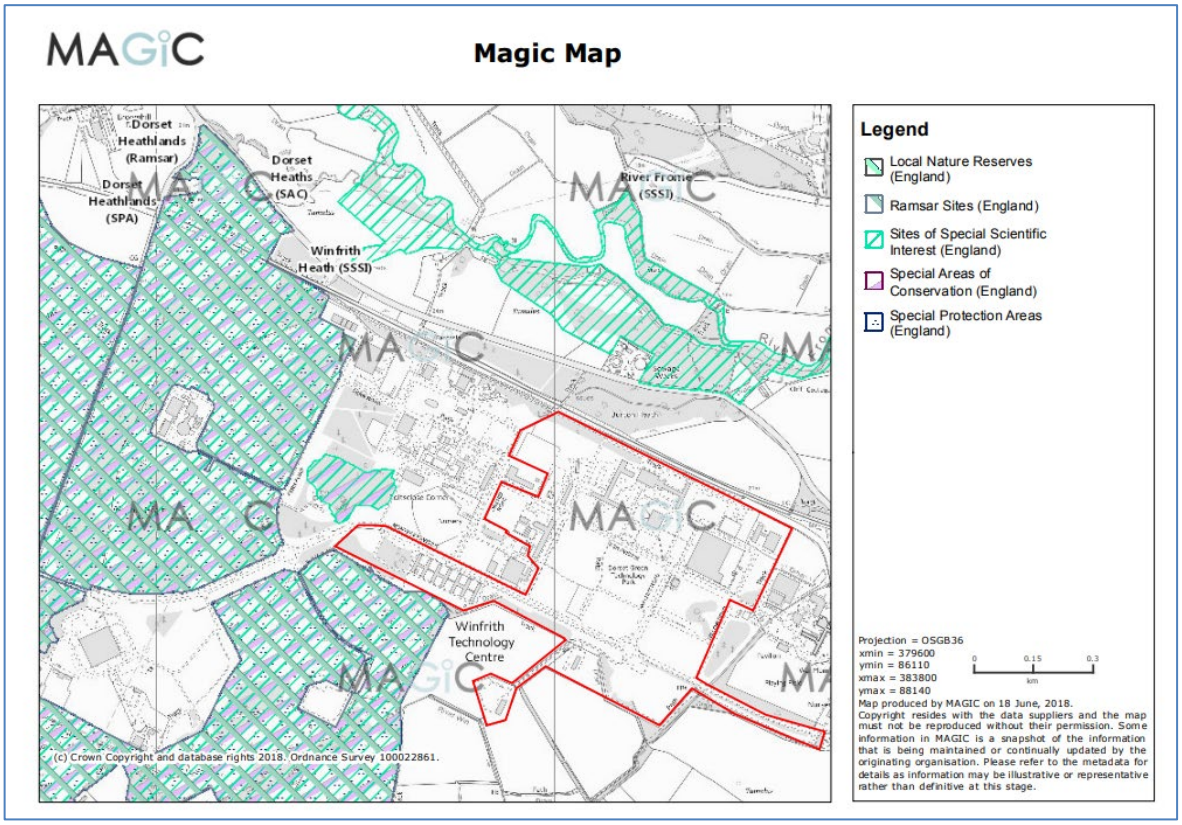


Figure 2: Location of statutory designated sites (Map produced by MAGIC on 18th June 2018. © Crown Copyright and database rights 2018. Ordnance Survey 100022861).

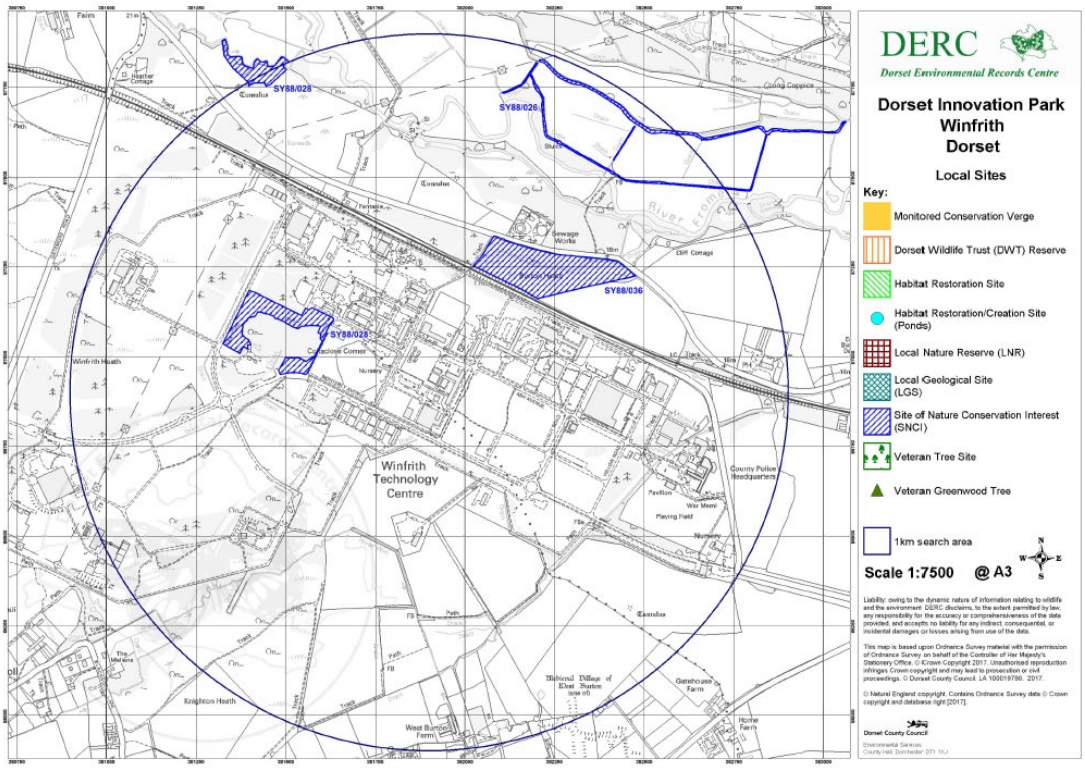


Figure 3: Location on non-statutory sites (provided by Dorset Environmental Records Centre,2017)

2.6 Ecological features relevant to the CEMP are summarised in **Table 2.1** below and a more detailed summary is provided in the associated LEMP (Tyler Grange, 2018).

Table 2.1: Existing ecological features and level of importance based on existing baseline information. *NERC denotes Habitats and Species of Principal Importance, as defined in the Natural Environment and Rural Communities Act 2006; WCA denotes Wildlife and Countryside Act, 1981 (as amended); Habitats Regulations denotes Conservation of Habitats and Species Regulations 2017*.

Feature	Importance	Legal Protection
Dorset Heathlands Ramsar site	International	Habitats Regulations
Dorset Heathlands SPA	International	Habitats Regulations
Dorset Heaths SAC	International	Habitats Regulations
Winfrith heath SSSI	National	WCA
River Frome SSSI	National	WCA
Winfrith SNCI	County	-
Species rich acid grassland	Up to district	NERC
Species-poor semi-improved grassland	Site	None
Other habitats (scattered trees, scrub and pond)	Site	None
Badgers	Negligible	Badger Act 1992
Bats	County	Habitats Regulations; WCA; NERC
Birds	Up to district	Variously WCA Schedule 1, Red List, NERC
Fish	Up to National	Eel Regulations; Salmon and Freshwater Fisheries Act; NERC.
Invertebrates	District	NERC (some)
Otter	District	Habitats Regulations; WCA; NERC
Reptiles	County	Habitats Regulations; WCA; NERC

Section 3: Risk Assessment

3.1 The risk assessment of potentially damaging construction activities in relation to the LDO and the ecological features identified in Section 2 and the associated legislation in Table 2.1, is set out in **Table 3.1**. Requirements for mitigation and the areas where the risk is relevant are also identified.

Table 3.1: Risk Assessment of Potentially Damaging Construction Activities

Ecological Features	Potential Effect	Risk Assessment (in the absence of mitigation measures)	Area to which risk is relevant
Dorset Heathlands Ramsar site	No direct losses anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Whole site
Dorset Heathlands Special Protection Area (SPA)	No direct losses anticipated. No indirect effects on the qualifying features of the SPA as a result of recreational pressure or cat predation as the LDO does not include residential development. Potential indirect effects on the qualifying features of the SPA as a result on noise and pollution during the construction phase, particularly in relation to woodlark *Lullula arborea* which has been recorded breeding in retained habitat on the western boundary on the site.	Effects are **possible** in the absence of mitigation.	South west quadrant of the site – refer to Plan 11288/P17
Dorset Heaths Special Area of Conservation (SAC)	No direct losses anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Whole site
Winfrith Heath Site of Special Scientific Interest (SSSI)	No direct losses anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Whole site
River Frome SSSI	No direct losses anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Whole site
Winfrith Site of Nature Conservation Interest (SNCI)	No direct losses anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Whole site

Ecological Features	Potential Effect	Risk Assessment (in the absence of mitigation measures)	Area to which risk is relevant
Species rich acid grassland	Direct loss required to facilitate development. Potential for damage to retained habitats through vehicle movements and material storage	Effects are **certain** in the absence of mitigation.	Parkland and plot specific – refer to plan Refer to Plan 11286/P12 for locations of retained grassland
Species-poor semi-improved grassland	Direct loss required to facilitate development. Potential for damage to retained habitats through vehicle movements and material storage.	Effects are **certain** in the absence of mitigation.	Parkland and plot specific – refer to plan Refer to Plan 11286/P12 for locations of retained grassland
Other habitats (scattered trees, scrub and pond)	Direct loss required to facilitate development. Potential for damage to retained habitats through vehicle movements and material storage. Potential for pollution of the existing pond during enhancement works.	Effects are **certain** in the absence of mitigation.	Parkland and plot specific – refer to plan Refer to Plan 11286/P12 for locations of retained habitats
Badgers	Disturbance or damage to a new sett.	Effects are **unlikely** given the results of previous survey work; however, **possible** if a new sett is excavated prior to construction taking place.	Whole site
Bats (roosting)	Disturbance/loss of a roost.	Effects are **unlikely** given the results of previous survey work; however, **possible** if a building or tree becomes a bat roost in advance of demolition/ construction taking place.	Existing buildings and mature trees – refer to the Phase I Habitat Plan for locations.

Ecological Features	Potential Effect	Risk Assessment (in the absence of mitigation measures)	Area to which risk is relevant
Bats (Commuting and foraging)	Disruption to bats foraging and commuting from indirect effects as a result of lighting during construction of retained hedgerows / trees / woodland.	Effects are **possible** as a result of lighting.	Refer to Plan 11286/P12 for location of dark corridors.
Birds	Removal of habitat and destruction of nests, eggs and young.	Effects are **likely**, if site clearance is undertaken within the breeding bird season, and in the absence of mitigation.	Whole site
Fish	Damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Refer to Plan 11286/P12
Invertebrates	Direct impacts as a result of habitat loss, movement of vehicles and storage of material.	Effects are **certain** due to direct habitat losses.	Whole site
Otter	No direct impacts on suitable habitat anticipated. Indirect damage to habitats from sediment, dust or pollution run-off from the proposed works. Damage could be significant in the short term.	Effects are **possible** in the absence of mitigation.	Refer to Plan 11286/P17 for location.
Reptiles	Removal of potential habitat and direct effect on individuals.	Effects are **likely** with the removal of grassland and scrub habitat.	Refer to Plan 11286/P17 for location.

Section 4: Roles, Responsibilities and Monitoring

Responsible Persons

4.1. The Council and their appointed contractor are responsible for implementation of the CEMP during the initial enabling works stage and for the parkland areas during the construction phase. Individual developers and their appointed contractor will be responsible for the implementation of the CEMP on individual development plots during construction. On site responsibility will be held by contractor's site manager or a suitable delegate within the contractor's company

Ecological Clerk of Works

4.2. An ECoW will be appointed by the Council and the individual developers as required to liaise with the contractor.

4.3. The ECoW's responsibilities will be to:

- Provide ongoing guidance for the site team in dealing with ecological matters and interpreting the CEMP. Commencing with a tool-box-talk to inform all site contractors of the ecological constraints and protection measures detailed in this CEMP and the appendices;
- Provide on-site supervision of works that require it, as detailed in Section 5 of this report; and
- Develop any additional method statements and/or site protocols as required.

4.4. A copy of the CEMP will be kept on site and will therefore be available for the ECoW and the contractor's site manager, at all times. Should you have any queries regarding this CEMP please contact Tyler Grange LLP on 01285 831 804.

Lines of Communication

4.5. The site manager or foreman of the contractor, the landowner (i.e. the Council or the Developer) and the ECoW will communicate directly over implementation of the mitigation measures and any issues that arise during the works.

4.6. In the unlikely event that any protected or priority species are encountered unexpectedly during site works, including badger, bats, breeding birds and European protected reptiles, works should cease, and the ECoW should be contacted immediately to provide advice on how best to proceed.

Monitoring

4.7. A Landscape and Ecological Management Plan (LEMP) has been produced for the site (Tyler Grange, 2018). As part of the LEMP, habitats and measures for protected and priority species following the construction period in the parkland will be monitored for 5 years by the Ecological Clerk of Works. Monitoring requirements within individual development plots will be outlined in the BMP produced specifically for each plot.

Section 5: Mitigation

5.1 Mitigation strategies to minimise the risks identified in Section 3 are set out below and where relevant appended to this CEMP. Table 5.1 overleaf identifies the practical measures to be employed, location and timing of sensitive works, requirements for ECoW, use of protective fences and ongoing monitoring requirements to mitigate for those effects identified in Table 3.1 above.

Table 5.1: Mitigation Strategy

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Dorset Heathlands Ramsar, Dorset Heathlands SAC, Dorset Heathlands SPA and Winfrith Heath SSSI	Minimise disturbance to habitats and to mobile interest features (woodlark) of the sites.	Existing secure fence in place to remain *in situ* throughout the construction period to prevent vehicle access/material storage.	All year round.	Whole site	The Council
		All **vegetation clearance and construction work** in the south western quadrant of the site for the parkland and the individual plots should be undertaken outside of the breeding bird season if possible (March to August inclusive) to avoid disturbance to breeding pairs of woodlark which are a feature of the SPA. **If this is not possible ECoW will need to undertake regular surveys in the south western quadrant of the site and work will be undertaken at the discretion of the ECoW following the outcome of the surveys**. If breeding woodlark are identified, work involving heavy machinery will cease until the young have fledged as woodlark are a Schedule 1 of the Wildlife and Countryside Act 1981.	October to February if possible.	Refer to Plan 11286/P17	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
		Installation of new 2.2m fence and a secure gate in the south west corner of the site to prevent vehicle access/material storage on the Ramsar and SAC habitats from the site. The fence will be retained during operation to prevent access to the protected habitats. The proposed timing should avoid the potential for impacts on both breeding birds and hibernating reptiles; however, the fence **will be installed under the supervision of the ECoW.** If hibernating reptiles or breeding birds are identified work will cease until the young have fledged and/or the active reptile season has begun. **If any of the European Protected Species (smooth snake or sand lizard) are encountered, work will cease, and advice will be sought from NE.**	September/October or early March	Refer to Plan 11286/P09C (MP5) for approximate location.	The Council

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Dorset Heathlands Ramsar, Dorset Heathlands SAC, Dorset Heathlands SPA and Winfrith Heath SSSI, River Frome SSSI and tributary and Winfrith SNCI	Pollution Prevention	All works to comply with the Environmental good practice on site guide (fourth edition) produced by CIRIA in 2015. Recommendations include: • Installation of temporary fencing to protect important areas (see below); • Ensure vehicle re-fuelling areas, material storage and site compounds are located a minimum of 10m from sensitive features (e.g. watercourses, important grassland). **The ECoW will advise on location on site;** • Ensure spoil piles created from initial clearance are stored in appropriate locations away from sensitive features in sheltered areas (e.g. minimum of 10 m from watercourses). **The ECoW will advise on location on site;** • Ensure vehicles are well maintained and turned off when not in use; • Ensure dampening down of road surfaces and wheel washes are in use when necessary; • Ensure appropriate distances are employed (10m minimum) to prevent surface water run-off into watercourses; and • Ensure a detailed Pollution Incident Response Plan is in place. **Weekly checks to be undertaken by ECoW to ensure compliance**.	For duration of construction period.	Active construction site and access routes	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Species rich acid grassland	To protect retained species rich acid grassland	Most of the species rich grassland on site is being retained or translocated. A detailed methodology for the translocation, including requirements for ecological supervision will be prepared by the appointed contractor in line with the principles outlined in the LEMP (Tyler Grange, 2018) and reviewed and **approved by the ECoW**. All works will need to be carried out in line with the agreed approach. Retained grassland within the parkland or individual plots, or immediately adjacent to construction activities will be temporarily fenced with Heras fencing to ensure no vehicles movements or material storage occur. **Location of fencing will be agreed with the ECoW prior to work commencing.**	October to February Fencing in place for duration of construction period.	Refer to Plan 11286/12 for locations of species rich acid grassland to be retained or translocated.	The Council Developers of individual plots
Species poor semi-improved grassland	To protect retained species poor semi-improved grassland	Retained grassland within the parkland or individual plots, or immediately adjacent to construction activities will be temporarily fenced with Heras fencing to ensure no vehicles movements or material storage occur. **Location of fencing will be agreed with the ECoW prior to work commencing.**	Fencing in place for duration of construction period. No specific timing required.	Refer to Plan 11286/12 for species poor semi-improved grassland to be retained.	The Council Developers of individual plots
Scattered trees and scrub	To protect retained tree and scrub habitat	Protection to be put in place in accordance with best practice guidance detailed in BS 5837:2012 'Trees in relation to design, demolition and construction'.	Fencing in place for duration of construction period. No specific timing required.	Whole site	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Pond	To minimise risk to wildlife using the pond and surrounding habitats.	Leaf litter removal and bank remodelling to be undertaken over winter and **under supervision of the ECoW** to avoid breeding bird season and during the terrestrial phase of common amphibians (palmate newts present within the pond) to avoid harm. Reptiles are not anticipated to be present in this area given the current management of the grassland; however, if any are identified during the removal of tree roots, work will cease in the area where reptiles identified. **Work will continue at the discretion of the ECoW.**	October to February	Refer to Plan 11286/P17	The Council

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
	Pollution Prevention	All works to comply with the Environmental good practice on site guide (fourth edition) produced by CIRIA in 2015. Recommendations include: • Installation of temporary fencing to mark out important areas (see below); • Ensure vehicle re-fuelling areas, material storage and site compounds are located away from sensitive features (e.g. watercourses, important grassland). **The ECoW will advise on location on site;** • Ensure spoil piles created from initial clearance are stored in appropriate locations away from sensitive features in sheltered areas (e.g. minimum of 10 m from watercourses). **The ECoW will advise on location on site;** • Ensure vehicles are well maintained and turned off when not in use; • Ensure dampening down of road surfaces and wheel washes are in use when necessary; • Ensure appropriate distances are employed (10m minimum) to prevent surface water run-off into watercourses; and • Ensure a detailed Pollution Incident Response Plan is in place. **Weekly checks to be undertaken by ECoW to ensure compliance**.	No specific timing required.	Active construction site and access routes	The Council

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Badger	To avoid disturbance / destruction of badger setts.	**The ECoW** will undertake an update badger survey in advance of commencement of site clearance within both the parkland and on individual development plots. If new sett(s) found and would be affected by development an appropriate mitigation strategy and, if relevant, licence from Natural England would be required.	Update survey immediately prior to commencement of vegetation clearance within both the parkland and on individual development plots. Where required, a mitigation strategy to be prepared in advance of commencement of works. Closure of active setts to occur under licence between **July and November**.	Active construction site and access routes	The Council Developers of individual plots
	To avoid injury to individual badgers during construction	During construction, all excavations will be covered or left will suitable egress to allow animals to escape.	For duration of construction period.	Active construction site and access routes	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Bats (roosting)	To avoid disturbance/destruction of bat roosts	Only a single building (B12 – refer to plan 11286/P12) was identified as having any more than negligible potential to support roosting bats but surveys or this and several trees with bat roosting potential confirmed that bat roosts are not currently features of the site. However, given that new features in buildings and trees can form over time, if building demolition has not been undertaken by 2019 a further **check by a licensed bat ecologist will be required**. No trees with bat potential are being removed in line with current plans; however, if this changes, an update **check by a licensed bat ecologist will also be required**. If potential for roosts is identified, further surveys and an appropriate mitigation strategy and licence from NE may be required.	External/internal inspection of buildings pre-demolition, **no time constraints**. Surveys (if required) in active bat season (**April to October, inclusive**).	Refer to Plan 11286/P17 for B12 location. All existing buildings and any additional mature trees requiring clearance identified on site.	The Council Developers of individual plots
Bats (foraging and commuting habitat)	To avoid disturbance to commuting and foraging bats.	All works to be undertaken during daylight hours and no additional lighting during the construction period will be used.	For duration of construction period.	Whole site	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Breeding birds	To avoid disturbance to birds during the breeding season	Woody vegetation clearance (**down to 30cm only to avoid potential impacts on reptiles**) will be undertaken outside of nest bird season (March to August inclusive). If this is not possible, **vegetation will be checked by the ECoW** prior to clearance. If an active nest is present, an exclusion zone will be set up and no clearance will take place until the young have fledged.	October to February if possible.	Whole site	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Fish	Pollution Prevention	All works to comply with the Environmental good practice on site guide (fourth edition) produced by CIRIA in 2015. Recommendations include: • Installation of temporary fencing to mark out important areas (see below); • Ensure vehicle re-fuelling areas, material storage and site compounds are located away from sensitive features (e.g. watercourses, important grassland). **The ECoW will advise on location on site;** • Ensure spoil piles created from initial clearance are stored in appropriate locations away from sensitive features in sheltered areas (e.g. minimum of 10 m from watercourses). **The ECoW will advise on location on site;** • Ensure vehicles are well maintained and turned off when not in use; • Ensure dampening down of road surfaces and wheel washes are in use when necessary; • Ensure appropriate distances are employed (10m minimum) to prevent surface water run-off into watercourses; and • Ensure a detailed Pollution Incident Response Plan is in place. **Weekly checks to be undertaken by ECoW to ensure compliance**.	For duration of construction period.	Refer to plan 11286/P12	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Invertebrates	To minimise disturbance to the invertebrate assemblage	Employ protection measures as outlined above for retained and translocated grassland.	For duration of construction period.	Refer to Plan 11286/12 for locations of grassland to be retained or translocated.	The Council Developers of individual plots
Otter	To avoid damage / destruction of otter resting places / disturbance of otter	No work that will directly affect the watercourse to the east of the site is proposed. Comply with pollution prevention measures outlined above and ensure that all material storage and vehicle re-fuelling areas are located as far as possible from the watercourse. **Locations to be agreed with the ECoW**.	For duration of construction period.	Refer to Plan 11286/P17	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
Reptiles	To avoid killing/injury of reptiles	Reptiles were identified primarily at the boundaries of the site in grassland and scrub habitat. For work within or adjacent to habitats where reptiles have previously been recorded (that will be impacted by the works), the following methodology will need to be followed:	Log piles and reptile hibernacula to be installed prior to any vegetation clearance down to ground/grubbing out of roots occurring.	Refer to Plan 1286/P17	The Council Developers of individual plots

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
		- A toolbox talk will be provided to all contractors on site identifying the reptiles present on site and what they should do if they encounter one on site; - Log piles and hibernacula to be installed within retained boundary habitats prior to any vegetation clearance down to ground/grubbing out of roots occurring. **Locations to be agreed on site with the ECoW**; - The ECoW will undertake a hand search of any suitable habitat to be cleared; - Clearance of suitable habitat to be undertaken during the active season for reptiles (March to September inclusive). This may conflict with breeding bird season so checks by the ECoW will need to be undertaken if this is the case. To avoid this, **clearance over the winter period should be down to c.30cm to make habitats unsuitable for breeding birds but not adversely impact upon hibernating reptiles**; - Clearance will be undertaken in a phased manner with vegetation initially being strimmed from 30cm to 15cm, left at least overnight to allow individuals present to move of their own volition; - Any reptiles identified during these works will be moved in a suitable container by the ECoW to retained suitable habitats in the boundary of the site;	Methodology to be implemented where any suitable habitat present. Vegetation clearance in active reptile season **March to September/October, inclusive**.		

Ecological Feature Identified at Risk	Purpose of Mitigation Measures	Mitigation Measures to be Implemented/ECoW requirements	Timing of Works	Location	Responsibility
		- Once the ECoW has confirmed that the site is clear of reptiles ensure that thereafter the site is kept close mown. **All works to be undertaken under the supervision of the ECoW. If the ECoW considers that numbers being found during the above process are too high for the methodology to be effective work will cease, and the ECoW will produce an updated strategy.** **If any of the European Protected Species (smooth snake or sand lizard) are encountered, work will cease, and advice will be sought from NE.**			

References

Charles, P., & Edwards, P. (Eds.). (2015). *Environmental good practice on site guide (fourth edition).* London: CIRIA.

Tyler Grange (2018). *Dorset Innovation Park. Landscape and Ecological Management Plan (LEMP)*.

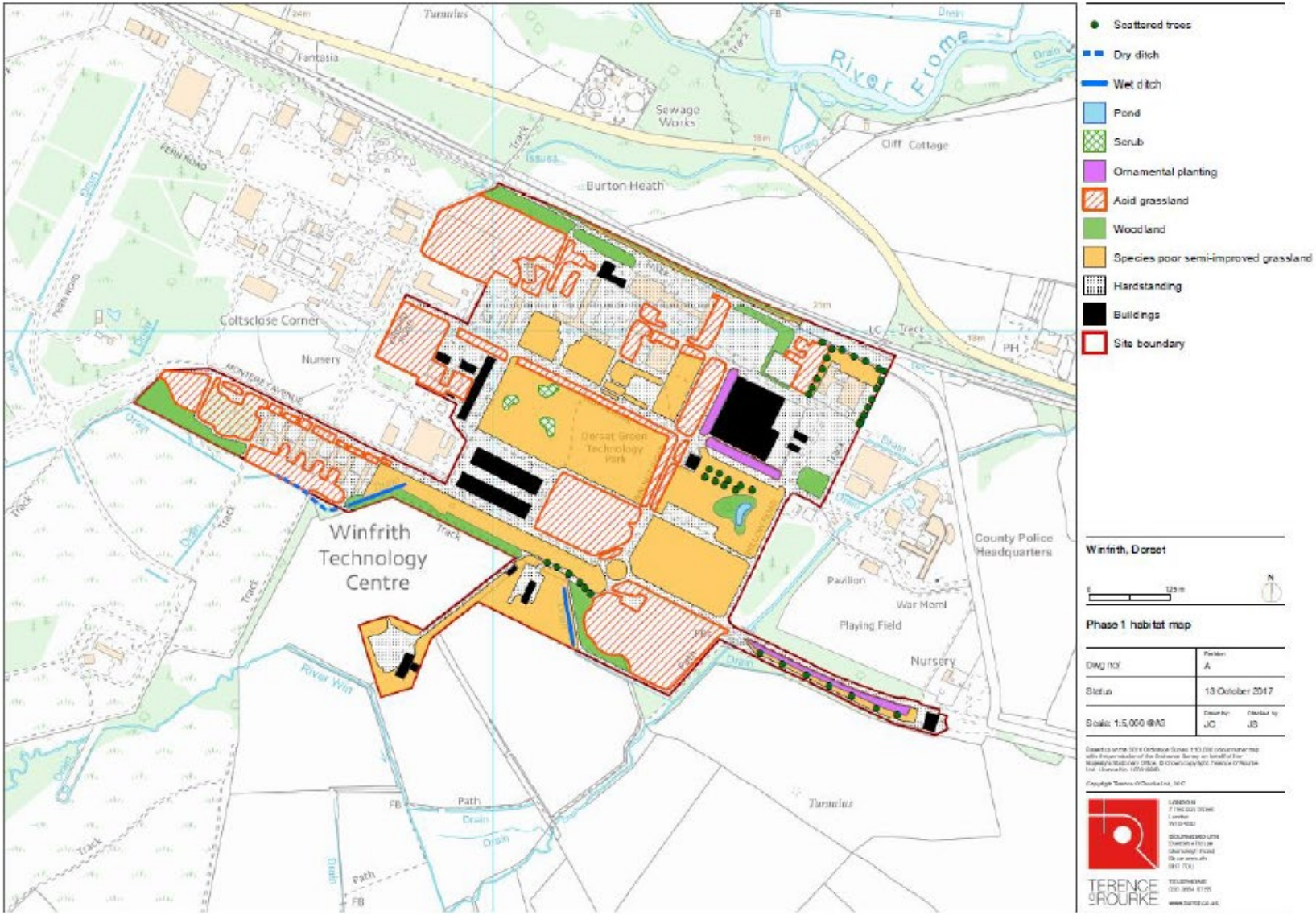
Plans

Phase I Habitat Plan, Lindsay Carrington Ecological Services, 2017

11286/P09c Ecological Mitigation and Enhancement Strategy

11286/P12 Overview of Ecological Mitigation and Enhancement Strategy

11286/P17 Construction Mitigation Plan


Scattered trees
Dry ditch
Wet ditch
Pond
Scrub
Ornamental planting
Acid grassland
Woodland
Species poor semi-improved grassland
Hardstanding
Buildings
Site boundary
Winfrith Technology Centre
Dorset Green Technology Park
River Frome
Sewage Works
Cliff Cottage
Burton Heath
Coltsclose Corner
Nursery
Fantasia
Tumuli
County Police Headquarters
Pavilion
War Mem
Playing Field
Nursery
River Win
Path
Drain
Track
FB
PH
LC
Winfrith, Dorset
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125 m
N
Phase 1 habitat map
Dwg no
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13 October 2017
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Checked by: JB
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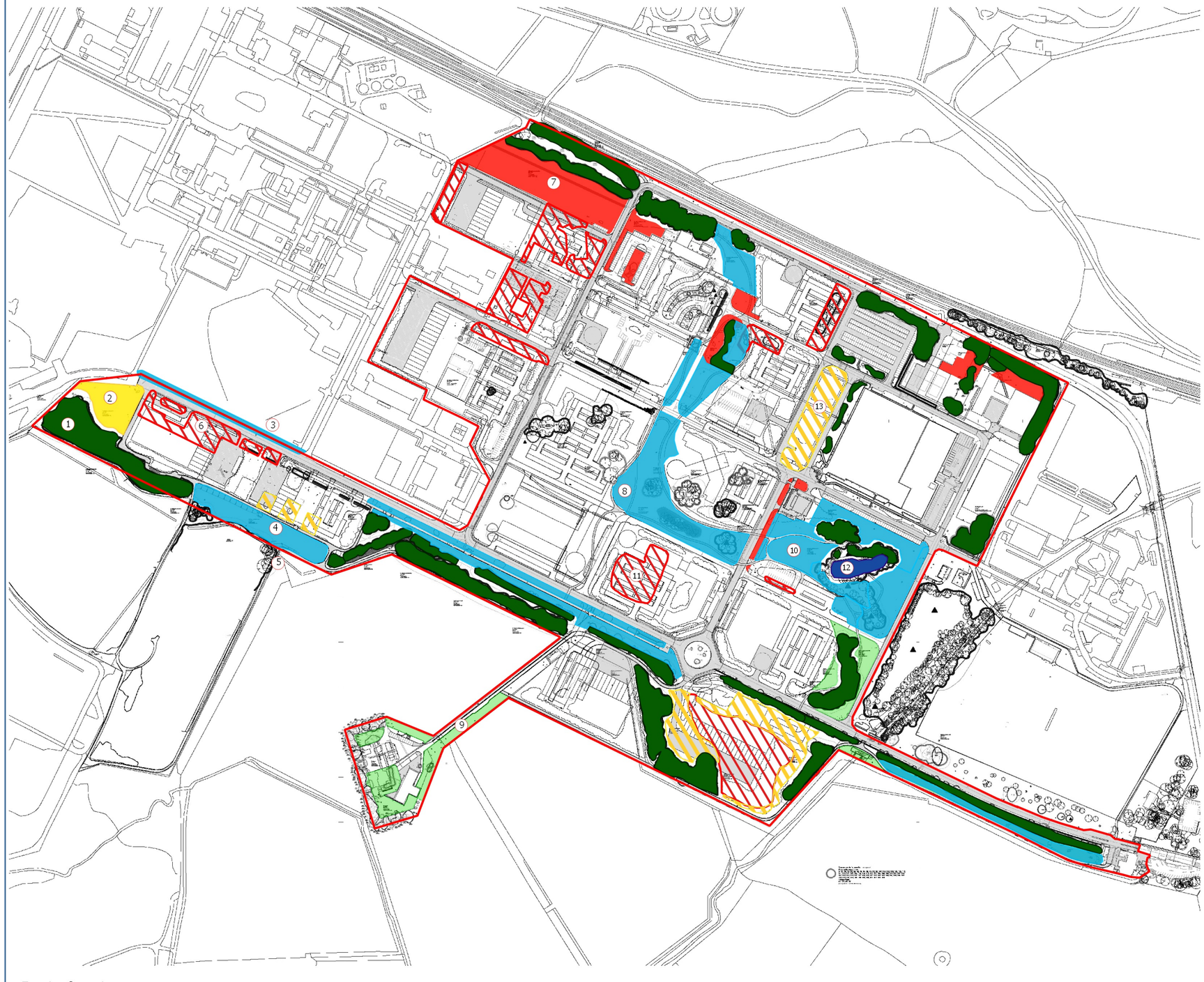

- LDO Boundary
- Retained and managed high importance grassland
- Translocated high importance grassland
- Retained and managed moderate importance grassland
- Translocated moderate importance grassland
- Receptor for translocated grassland
- Existing low importance grassland managed to enhance
- Existing woodland and trees: thinned and managed to prolong longevity; non-natives removed
- Existing pond enhanced by removal of trees and planting of submerged and emergent native flora
- ① Management prescription (MP) - refer to LEMP text

Notes:

- Location of grassland translocation receptor areas is indicative; all are within parkland controlled by the Council

- The ecological mitigation within the parkland to be delivered as an enabling works phase (which should be completed in sub-phases)

- Individual development plots to incorporate biodiversity in accordance with measures proposed in LEMP and Design Guide

- Existing management regime for grassland (as specified in LEMP) to continue in lieu of impacts resulting from future development; arisings composted in designated area or removed

N 0 150 m

Project	Dorset Innovation Park LDO
Drawing Title	**Ecological Mitigation and Enhancement Strategy**
Scale	As Shown (Approximate)
Drawing No.	11286/P09C
Date	July 2018
Checked	PW/JA

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