CRADLE HILL COMMUNITY PRIMARY SCHOOL EXTENSIONS
SEAFORD, EAST SUSSEX

Ecological Assessment Report

January 2009

NPS Property Consultants Ltd.

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Contents Record

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Approved by: A. P. Leftwich

Signed: _____

Position: Director

Date: _____

CONTENTS

TABLES

FIGURES

1. INTRODUCTION

1.1 NPS Property Consultants Ltd. has commissioned The Ash Partnership to undertake an ecological appraisal of to proposed locations for school extensions at Cradle Hill Community Primary School in Seaford, East Sussex. These are situated to the west and north of the School (= Site A) and to the south-east of the School (= Site B).

1.2 The School lies along Lexden Road and is bound on all sides by residential housing and gardens.

1.3 This Report establishes the range of habitats present in/around each of the Sites, their potential for protected and/or uncommon species, and assesses its suitability for the proposed school extensions.

2. METHODOLOGY

Desk Study

2.1 A Desk Study was not undertaken for this project.

Walkover Surveys

2.2 A walkover survey was completed on 23rd December 2008. A list of flowering plants (or macrophytes) was made along with their relative abundance using the DAFOR Scale, i.e. **D**ominant, **A**bundant, **F**requent, **O**ccasional and **R**are. Where species were localised or patch-forming, the additional term **L**ocal was also applied.

2.3 All plants were identified to species level, wherever possible, using Stace (1997) in accordance with the nomenclature of Preston *et al*. (2003). Their national status assessed using Preston *et al*. (2003) and County status using Hall (1980).

2.4 The survey area was also assessed for its potential to contain protected and/or nationally uncommon species.

BREEAM Assessment

2.5 The development is seeking a 'Very Good' rating under the BREEAM scheme, and this Report specifically addresses the Ecology Credits as set out in the *Assessment Criteria* (BREEAM, 2005).

3. RESULTS

Nature Conservation Context

3.1 Although not confirmed conclusively, based upon Natural England (www.magic.co.uk) there do not appear to be any statutorily protected nature conservation sites within a 1km radius of the Sites.

3.2 No information has been gathered on non-statutory nature conservation designations within a 1km radius of the Sites, but none are considered likely to occur either within or adjacent to the Site based on an assessment of aerial photographic coverage combined with the results of the field walkover.

Survey Conditions

3.3 The survey was undertaken during fine weather, and there was access to all parts of each Site. The walkover survey results should therefore be regarded as a relatively comprehensive assessment unless otherwise stated.

3.4 This time of year is not appropriate for a botanical survey and, given that an area of grassland interest was encountered, the results are not considered satisfactory and require further survey work at a more appropriate time. The next available window would be between April/May to July 2009.

Habitats

3.5 The walkover survey revealed a total of nine principal habitat types based upon JNCC (2003), the majority representing common and widespread habitat types. Figure **1** shows the distribution of these habitat types, and photographs are attached in the rear of the Report.

3.6 A floral list was compiled, see Table **1**, which revealed a combined total of only 61 species of flowering plant even allowing for planted native trees. None of the species encountered would be regarded as uncommon within a national of county context, with the exception of one plant within Site A:

- Knotted Clover *Trifolium striatum*[1] – Described in the county flora as 'occasional' (Hall, 1980) with records apparently clumped around Seaford. The species is present within the area of Semi-Improved Chalk Grassland.

3.7 In addition, there are a number of plants that are considered indicative of Unimproved Chalk Grassland[2] within Site A, all present within the area of Semi-Improved Chalk Grassland. These are:

[1] Unconfirmed, as identified only from leaves.

[2] As defined in *Local Wildlife Sites in Kent: Sites of Nature Conservation Interest – Criteria for Selection and Delineation*. Version 1.1 (Kent Wildlife Trust, 2005).

- Mouse-ear Hawkweed *Pilosella officinarum*, Bulbous Buttercup *Ranunculus bulbosus*, Hairy Violet *Viola hirta* and an unconfirmed hawkbit[1] thought to be either *Leontodon saxatilis* or *L. hispidus*.

3.8 The overall floristic species-richness is regarded as Poor to Moderate, the interest being centred on the area of Semi-Improved Chalk Grassland.

3.9 The breakdown of habitat types is as follows, each of which are then sequentially discussed in the following paragraphs:

- Individual Broad-leaved Trees (**A3.1**);
- Native Scrub (**A2.1**);
- Ornamental Scrub (**J4**);
- Amenity Grassland (**J1.2**);
- Semi-Improved Chalk Grassland (**B3.2**);
- Open Water (**G1**); and
- Bare Ground (**J4**).

3.10 The Site also contains large expanses of hardstanding (**J4**), mostly as tarmac and paving slabs, fences (**J2.4**), walls (**J2.5**) and buildings (**J3.6**). With the exception of buildings, these features are not considered further

Individual Broad-leaved Trees

3.11 There are 4 individual broad-leaved trees within the Site, all situated within the south-eastern Site B, see Table **2**. These include Walnut *Juglans regia*, Sycamore *Acer pseudoplatanus*, a maple *Acer* cf. *pseudoplatanus* and a lime *Tilia* cf. x *vulgaris*.

3.12 The relatively uniform diameter of the trees suggests they are mostly contemporaneous with the layout and construction of the School.

3.13 A Tree Constraints Plan is provided, see Figure **2**.

Native Scrub

3.14 There is a narrow band of native scrub along the western boundary of Site A, mostly consisting of Ivy *Hedera helix*, Bramble *Rubus fruticosus* agg. and localised Sycamore. This is intermixed with Snowberry *Symphoricarpos album* and Stag's-horn Sumac *Rhus typhina*, overlying Red Valerian *Centranthus ruber*.

3.15 A mature stand of scrub, likely to have been planted, is situated at the eastern end of southern boundary, see group G1 on Figure **2**. This contains

[1] Unconfirmed, as identified only from leaves.

a mix of broad-leaved trees such as Field Maple *Acer campestre*, Hawthorn *Crataegus monogyna* and Elder *Sambucus nigra*.

Ornamental Scrub

3.16 There are various blocks/hedges of ornamental shrubs, concentrated within the landscaping around the School. These species are non-native and have no ecological significance, and this habitat type is therefore not considered further.

Amenity Grassland

3.17 The grassland within the Sites is dominated by Perennial Rye-grass *Lolium perenne*, and is tightly mown. This type of grassland is common and widespread, contains a low floristic species-richness. It is regarded as having little or no ecological significance and is therefore not considered further.

Semi-Natural Chalk Grassland

3.18 There is a track along the northern side of School which has been cut into an existing bank, and the spoil mounded between the track and the School. This has resulted in exposed chalky sub-soils on newly created banks.

3.19 The existing bank along the northern boundary of the Site contains a number of neutral/chalk grassland species, intermixed within Amenity Grassland, and would require further survey work in spring 2009 to confirm its botanical interest. This bank is most likely the source of the chalk grassland species along the tracks.

3.20 In addition to the presence of Rough Clover, an uncommon species within the county, and species indicative of Unimproved Chalk Grassland, there were additional chalk grassland species. These include Blue Fleabane *Erigeron acer*, Ox-eye Daisy *Leucanthemum vulgare*, as well as species of drought-prone soil conditions such as Wild Madder *Sherardia arvensis* and Stag's-horn Plantain *Plantago coronopus*. Stands of a cotoneaster *Cotoneaster* sp. have also colonised here.

Open Water

3.21 A small pond is present along the southern side of the School, immediately outside Area B. It measures approximately 4m by 3m and consists of a liner set within brick wall surrounds.

3.22 There were no signs of fish and relatively clear water conditions, although the latter might be anticipated in December. Plants that have been introduced here include the invasive aquatic Parrot's-feather Milfoil *Myriophyllum aquaticum*, a variegated Reed Sweet-grass *Glyceria maxima* and a water-lily *Nuphar* sp.

Bare Ground

3.23 There are skeletal chalky soils along the access road which runs along the northern side of the School, and enters part of Site A. No species of interest were found here.

Protected Species

3.24 There was no evidence of any protected species found within the Sites. No nests were encountered during the Site walkover.

3.25 Species with potential to occur within or around the Sites include bats, amphibians and breeding birds. These are considered below.

Bats

3.26 None of the peripheral trees were regarded as having potential for roosting bats. They lack features that provide such a potential such as cavities, splits and pealing bark.

3.27 The western, northern and south-eastern facades of the brick-built School that face onto Areas A and B were carefully examined suing binoculars for signs of, or potential for, roosting bats. The results were as follows:

- Brickwork in good order, no obvious gaps in the mortar but a few ventilation gaps noted on the south-eastern façade.
- Windows with either old metal frames and flaking paint in places, or with new double-glazed units. No obvious points of entry.
- Plastic weather boarding present in places, tight to the brick surface with no obvious points of entry beneath.
- Flat roofs throughout, no obvious roof voids.

3.28 There is also a second brick-built building to the north-west of Site A, near the School entrance. This has a flat roof, and no suitable ingress points were found during an external inspection.

3.29 The buildings were therefore regarded as unsuitable for bat occupation.

Amphibians

3.30 There is a Low to Negligible potential for amphibians, including the fully protected Great Crested Newt *Triturus cristatus*, to breed within the small artificial pond. This would be either due to a deliberate introduction of these speices, or the presence of one or more of these species in nearby garden ponds.

3.31 The likelihood of amphibians gaining entry into the pond is reduced by the presence of a surrounding vertical brick wall, and no adjacent habitat suitable for refuge or winter hibernation for some considerable distance.

Nesting Birds

3.32 Although no nests were encountered, the two stands of scrub (to the west of Site A, and south-east of Site B) have potential to contain few or no nesting territories during the bird breeding season.

4. EVALUATION & RECOMMENDATIONS

Nature Conservation

4.1 There are no statutory or non-statutory nature conservation designations within any part of the Sites, or in the near vicinity.

Habitats

4.2 With the exception of the Semi-Improved Chalk Grassland within Site A, all of the remaining habitats are regarded as common and widespread, containing a range of typical common plants many of which are arable weeds and introduced species. As such these habitats are regarded as easily re-creatable and therefore have little ecological value.

4.3 The chalk grassland results are difficult to assess as the survey season runs between April/May to July, therefore a December survey would not be regarded as reliable. It is therefore recommended that a further botanical survey is undertaken in 2009 to provide an accurate determination of its ecological value.

4.4 The area of Semi-Improved Chalk Grassland appears to be relatively recent in origin, perhaps up to a decade in age. There are a number of indicators of Unimproved Chalk Grassland present (based on Kent Wildlife Trust, 2005), and plants indicative of drought conditions including the County Uncommon species Knotted Clover. A number of other small clovers were present and require identification during the spring/summer season.

4.5 Based on the botanical survey evidence and its potential for uncommon invertebrates (such as bees, wasps or beetles), this area is considered to be of at least Moderate Ecological Value, and therefore it is recommended that its presence within part of the school extension Area A would warrant either:

1. Excluding from the built area; or

2. Translocation onto the part of the adjacent bank.

4.6 If the boundary of Area A is modified to exclude the Semi-Improved Chalk Grassland, this habitat would still be adversely shaded by the new building. Therefore it is recommended that the proposed extension should either be moved to the east, or concentrated around Area B.

4.7 If translocation is the only option, then it is recommended that the best area to act as a receptor for the grassland would be to the north-east of the access track, where the bank is replaced by a flat expanse of Amenity Grassland. Here the translocated material would remain in contact with the remainder of the Semi-Improved Chalk Grassland on the northern bank.

4.8 With either option, it would be necessary to protect both the impacted area of grassland and the remaining areas from construction impacts such as machine tracking, storage of materials etc. It is therefore strongly recommended that the work area is isolated from these areas by means of

an immovable barrier such as hoarding, or otherwise less favourable solutions such as anchored Heras or chestnut paling/road pins.

Tree Constraints

4.9 Most of the mature trees on the Sites are of similar age, and appear to have been planted as part of the landscaping for the School. None are regarded as being of ecological significance.

4.10 There are only tree constraints associated with Site B, see Tree Constraints Plan – Figure **2**. Under the proposals none of the trees would be lost to the school extension with the exception of Tree T5.

4.11 Assuming these trees can be retained, it is recommended that they are protected with tree protection fencing during construction, of a specification and installation as set out in BS5837:2005.

Protected Species

Breeding Amphibians

4.12 The small pond is assessed as having Negligible to No potential for breeding amphibians. However, it remains remotely possible that Great Crested Newt might occur here and therefore it is strongly recommended that this issue needs to be addressed to reduce any risk to a construction project.

4.13 It is considered reasonable to seek either:

- A hand netting search and drain down of the pond during spring 2009 in advance of any construction work; and/or
- A destructive search of the pond and its immediate surroundings in advance of any construction work.

4.14 Great Crested Newt (GCN) are fully protected in the UK on Schedule 5 of the Wildlife and Countryside Act, 1981 (as amended by the Countryside and Rights of Way Act, 2000), and on Schedule 2 of the Conservation (Natural Habitats &c.) Regulations, 1994.

4.15 Should any life stage of this species be encountered during the searches it would be necessary to halt work and contact Natural England. It is likely that a Natural England Licence would be required and this may also require the results of a spring survey. Delays to the construction programme would certainly result from any such encounter.

Breeding Birds

4.16 Sites A and B have low to negligible potential for breeding birds to occur at along their periphery.

4.17 Assuming the construction work commences between the period September to February, no breeding birds will be present and no subsequent nesting will take place due to the degree of disturbance.

4.18 It is possible that a breeding bird might be present prior to construction should construction commence within the summer breeding period which runs between March and August.

4.19 If this is the case, a prior survey by the Project Ecologist would be appropriate. In the worst case scenario, it would be necessary to delay the project a few weeks whilst the birds fledge. It is therefore recommended that any such vegetation is cleared prior to construction under these circumstances.

PPS9 and Biodiversity Gain

4.20 In order to address PPS9 and its associated Government Circular as well as Section 40 of the Natural Environment and Rural Communities Act 2006, any significant planning work will need to demonstrate a net gain in biodiversity. The Local Authority may also be seeking to address local BAP targets through this mechanism.

4.21 Recommended measures to enhance the ecological value of the Site that could be incorporated within the development might include some of the following selection:

- Incorporating native species within any landscaping, to consist of at least 11 woody species;
- Installation of a minimum of four tree- or wall-mounted Bat Boxes;
- Installation of a minimum of eight tree- or wall-mounted Bird Boxes; and
- A five year Landscape Management Plan, which also includes maintenance and monitoring of the new landscaping and wildlife boxes.

5. BREEAM ECOLOGY CREDITS

5.1 There are seven criteria (**Eco1.1** to **Eco1.5**) that are applied to a development, and these are worth up to 9 Credits. The following paragraphs assess the performance of the development against these criteria.

Eco1.1 – Ecological Value

This aims to encourage development on land that already has a limited value to wildlife and discourage the development of ecologically valuable sites.

5.2 Criteria: One Credit is awarded where the development site is defined as land of low ecological value.

5.3 Compliance Requirements: The Site should be of Low Ecological Value determined either through use of the BREEAM Checklist or by viewing findings of an ecologist's assessment, and the agreed boundaries should remain unchanged thereafter.

5.4 Decision on Compliance: Neither Site A or B can be determined as land of Low Ecological Value, see attached Checklist, for the following reasons

- Site A has species-rich grassland present;
- Site B has a tree present within the proposed footprint; and
- Both Sites will involve at least 20% of the built area extending into regularly cut lawns.

5.5 It is therefore concluded that the proposed extensions should both be awarded **0 Credits**.

Eco 1.2 – Change in Ecological Value

This aims to minimise the ecological impact of a building development project and maximise the enhancement of a site for both new and existing buildings.

5.6 Criteria: Five Credits are available based on the change in ecological value as a result of the development (assessed using the BREEAM 'Change in Ecological Value' calculator).

5.7 Compliance Requirements: This is based upon a "change in ecological value" table, which calculates the areas of each plot type and landscape category. BREEAM measures changes in ecological value (based on number of plant species) using a simple table to assess the number of native species before and after development.

5.8 Decision on Compliance: The number of flowering plants within the combined Sites pre-construction was estimated at 61 species, based on the December 2008 survey – see Table **1**. This confirms the low to moderate floral interest within the combined Sites.

5.9 Based on the BREEAM calculation, Site A (north of School) would be estimated to have an ecological value pre-construction of:

((20 x 8)/10000 x 17.6) for Infertile Grassland, ((15 x 30)/10000 x 11.6) for Amenity Grassland + 0 for buildings/hardstanding = 1.

Similarly, Site B (north of School) would be estimated to have an ecological value pre-construction of:

((30 x 8) + (20 x 12)/10000 x 11.6) for Amenity Grassland + 0 for buildings/hardstanding = 1.

5.10 In both cases the ecological value post-construction would be 0, assuming that all of the proposed extension area would be used for buildings and hard landscaping.

5.11 The change in ecological value for both Sites A and B would therefore be calculated as –1.

5.12 BREEAM Credits are awarded on the basis of the change in native species and therefore each of the proposed developments should be awarded **2 Credits**.

5.13 Should there be provision of landscaping, the proposals would need to include at least 10 species of woody plant, respectively, to achieve the maximum of five Credits.

Eco 1.3 – Ecological Enhancement

This aims to encourage the enhancement of ecological value during development.

5.14 Criteria: One Credit is awarded where the Design Team (or Client) has sought, and acted upon, advice on enhancing value, provided by an ecological consultant.

5.15 Compliance Requirements: A suitably qualified Ecologist's Report is required to demonstrate influence within the development, including recommendations and a written commitment from the Client that the recommendations will be implemented.

5.16 Decision on Compliance: This Report includes recommendations from the Project Ecologist in section 4, see paras. 4.3, 4.5, 4.8, 4.11, 4.12, 4.19 and 4.21.

5.17 Assuming these recommendations will be adopted and hence would influence the design of the development, the proposed extensions for either Site should be awarded **1 Credit**.

Eco 1.4 – Protection of Ecological Features

This aims to protect existing features from substantial damage during the clearing of the Site and completion of construction works.

5.18 Criteria: One Credit is awarded where the contract specification ensures that all trees over 100mm trunk diameter, hedges, ponds, streams etc. are maintained and adequately protected from damage during clearing and construction works.

5.19 Compliance Requirements: A suitably qualified Ecologist's Report including recommendations and a written commitment from the client that the recommendations will be implemented is required.

5.20 Decision on Compliance: Measures to protect the Semi-Improved Chalk Grassland have been presented in section 4. Provided these are adopted, then the school extension within Area A could be awarded 1 Credit. Similarly, provided the adjacent trees to Area B are retained and can be protected in accordance with BS5837:2005 (as set out in section 4), this school extension proposal could also comply with the criteria and would be awarded **1 Credit**.

Eco 1.5 – Long Term Impact on Biodiversity

This aims to minimise the long term impact of the completed development on biodiversity.

5.21 Criteria: One Credit is available where steps have been taken to prevent adverse impacts on biodiversity.

5.22 Compliance Requirements: There are mandatory requirements relating to compliance with UK and EU legislation concerned with protection and enhancement of ecology. A Management Plan covering at least five years post-construction is also required.

5.23 Decision on Compliance: There will be compliance with all relevant UK and EU legislation relating to the protection and enhancement of ecology. Assuming that a Landscape Management Plan is adopted as recommended in section 4, both of the school extension proposals would comply with the criteria and would be awarded **1 Credit**.

6. CONCLUSIONS

6.1 This Report assesses the Semi-Improved Chalk Grassland within part of Area A as being of Moderate Ecological Value. The remaining habitats within both proposed Sites for school extensions are assessed as being of Low to Negligible Ecological Value, with an associated Poor floristic species-richness

6.2 Recommendations with respect to protected species and PPG commitments at both Sites are presented in section 4.

6.3 The BREAAM Ecology Credits that would be awarded to either of the proposed school extension developments in their current form, assuming the adoption of the recommendations in this Report, are outlined in Table **3** below:

Table 3: BREAAM Ecology Credits

Criterion	Credits Awarded	Total Credits Available	% Available Credits
Eco 1.1	0	1	0
Eco 1.2	1	1	100
Eco 1.3	2 (to 5)	5	40 to 100
Eco 1.4	1	1	100
Eco 1.5	1	1	100

6.4 Both Sites would therefore score a minimum of **5 Credits**, up to a maximum of **9 Credits** assuming that all of the recommendations in this Report can be adopted.

TABLE 1 - PROVISIONAL FLORA LIST FOR CRADLE HILL SCHOOL SITE

SPECIES	COMMON NAME	COMPARTMENTS				
		Amenity Grassland	Semi-Improved Chalk Grassland	Roadside Perimeter	Scrub	Ornamental Pond
Grasses, Sedges & Rushes						
Agrostis capillaris	Common Bent	O	R	-	-	-
Dactylis glomerata	Cocksfoot	-	R	-	-	-
Festuca rubra	Red Fescue	O-LF	F	-	-	-
Glyceria maxima (variegated)	Reed Sweet-grass cultivar	-	-	-	-	LF
Lolium perenne	Perennial Rye-grass	F-LA	-	-	-	-
Poa annua	Annual Meadow-grass	R	-	-	-	-
		-	-	-	-	-
Herbs		-	-	-	-	-
Achillea millefolia	Yarrow	O	-	-	-	-
Bellis perennis	Daisy	O-LF	-	-	-	-
Centrathus rubrus	Red Valerian	-	-	F	-	-
Daucus carota	Wild Carrot	O	-	-	-	-
Erigeron acer	Blue Fleabane	-	R	-	-	-
Galium aparine	Cleavers	-	-	O	-	-
Galium mullugo	Hedge Bedstraw	LO	-	-	-	-
Galium saxatile	Heath Bedstraw	-	R	-	-	-
Geranium molle	Soft Crane's-bill	R	-	-	-	-
Glechoma hederacea	Ground-ivy	-	LF	-	-	-
Leontodon cf. saxatilis/hispidus	**A hawkbit**	-	R	-	-	-
Leucanthemum vulgare	Ox-eye Daisy	-	O	-	-	-
Linaria purpurea	Purple Toadflax	-	-	R	-	-
Medicago italica	Spotted Medick	R	-	-	-	-
Myriophyllum aquaticum	Parrot's-feather Milfoil	-	-	-	-	LF
Nuphar sp.	A water-lily	-	-	-	-	O
Picris echioides	Bristly Ox-tongue	R	-	-	-	-
Pilosella officinarum	**Mouse-ear-hawkweed**	-	LF	-	-	-
Plantago coronopus	Stag'-horn Plantain	-	R-LO	-	-	-
Plantago lanceolata	Ribwort Plantain	R	-	-	-	-
Potentilla reptans	Creeping Cinquefoil	LO	-	-	-	-
Prunella vulgare	Self-heal	R	R	-	-	-
Ranunculus bulbosus	**Bulbous Buttercup**	-	R	-	-	-
Ranunculus repens	Creeping Buttercup	O	-	-	-	-
Senecio vulgare	Groundsel	R	-	-	-	-
Sherardia arvensis	Field Madder	-	R	-	-	-
Silene dioica	Red Campion	-	-	-	R	-
Stellaria media	Common Chickweed	R	-	-	-	-
Taraxacum officinale agg.	A dandelion	O	-	-	-	-
Trifolium cf. *striatum*	Knotted Clover	-	R-LO	-	-	-
Trifolium repens	White Clover	R	-	-	-	-
Veronica filiformis	Slender Speedwell	-	R	-	-	-
Viola hirta	**Hairy Violet**	-	R	-	-	-
Trees & Shrubs						
Acer campestre	Field Maple	-	-	R (to 60mm dbh)	F (multi-stemmed)	-
Acer cf. *pseudoplatanus*	A maple	R (to 220mm dbh)	-	-	-	-
Acer pseudoplatanus	Sycamore	R (to 200mm dbh)	-	R (to 60mm dbh)	-	-
Clematis sp.	A clematis	LO	-	-	-	-
Cotoneaster sp.	A cotoneaster	-	R	-	-	-
Crataegus monogyna	Hawthorn	-	-	-	F	-
Forsythia x intermedia	Forsythia	-	-	-	R (multi-stemmed)	-
Hedera helix	Ivy	-	-	F	-	-
Ilex aquifolium	Holly	-	-	-	R (to 1m height)	-
Juglans regia	Walnut	R (to 230mm dbh)	-	-	-	-
Mahonia aquifolia	Mahonia	LO	-	-	-	-
Pinus sp.	A pine	R (to 120mm dbh)	-	-	-	-
Populus sp.	A poplar	-	-	-	R (to 220mm dbh)	-
Populus tremula	Aspen	-	-	-	R (to 120mm dbh)	-
Quercus ilex	Holm Oak	R	-	-	-	-
Rhus tiphina	Stag's-horn Sumac	-	-	R	-	-
Ribes sp.	A currant	-	-	R	-	-
Rubus fruticosus agg.	Bramble	-	-	O-LF	-	-
Sambucus nigra	Elder	-	-	-	F	-
Symphoricarpos album	Snowberry	-	-	LO	-	-
Tilia x vulgaris	Common Lime	R (c. 60mm dbh)	-	-	-	-
Vinca minor	Lesser Periwinkle	-	-	R	-	-

TABLE 2 - PRINCIPLE TREES ASSOCIATED WITH CRADLE HILL SITE

TREE NO. (Shown on Figure 2)	SPECIES	COMMON NAME	TREE FORM	DIAMETER AT BREAST HEIGHT (mm)	CANOPY HEIGHT (metres above g.l.)	CANOPY SPREAD (m)			
						North	East	South	West
T1	*Acer* sp.	A maple	Maiden	220	2	3.5	3	3	3
T2	*Juglans regia*	Walnut	Maiden	170	2	4	3	3	3
T3	*Juglans regia*	Walnut	Maiden	230	2	4.5	4	4	4
T4	*Acer pseudoplatanus*	Sycamore	Maiden	200	3	3	3.5	2.5	3
T5	*Tilia* x *vulgare*	Common Lime	Maiden	60	n/a	1	1	1	1
G6	Various within Tree Group		Maiden & Multi-stemmed	Populus up to 220, Acer campestre to 140 & A. pseudoplatanus to 120	Various	Various			

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FIGURE 1 – PHASE I HABITAT PLAN, CRADLE HILL SCHOOL

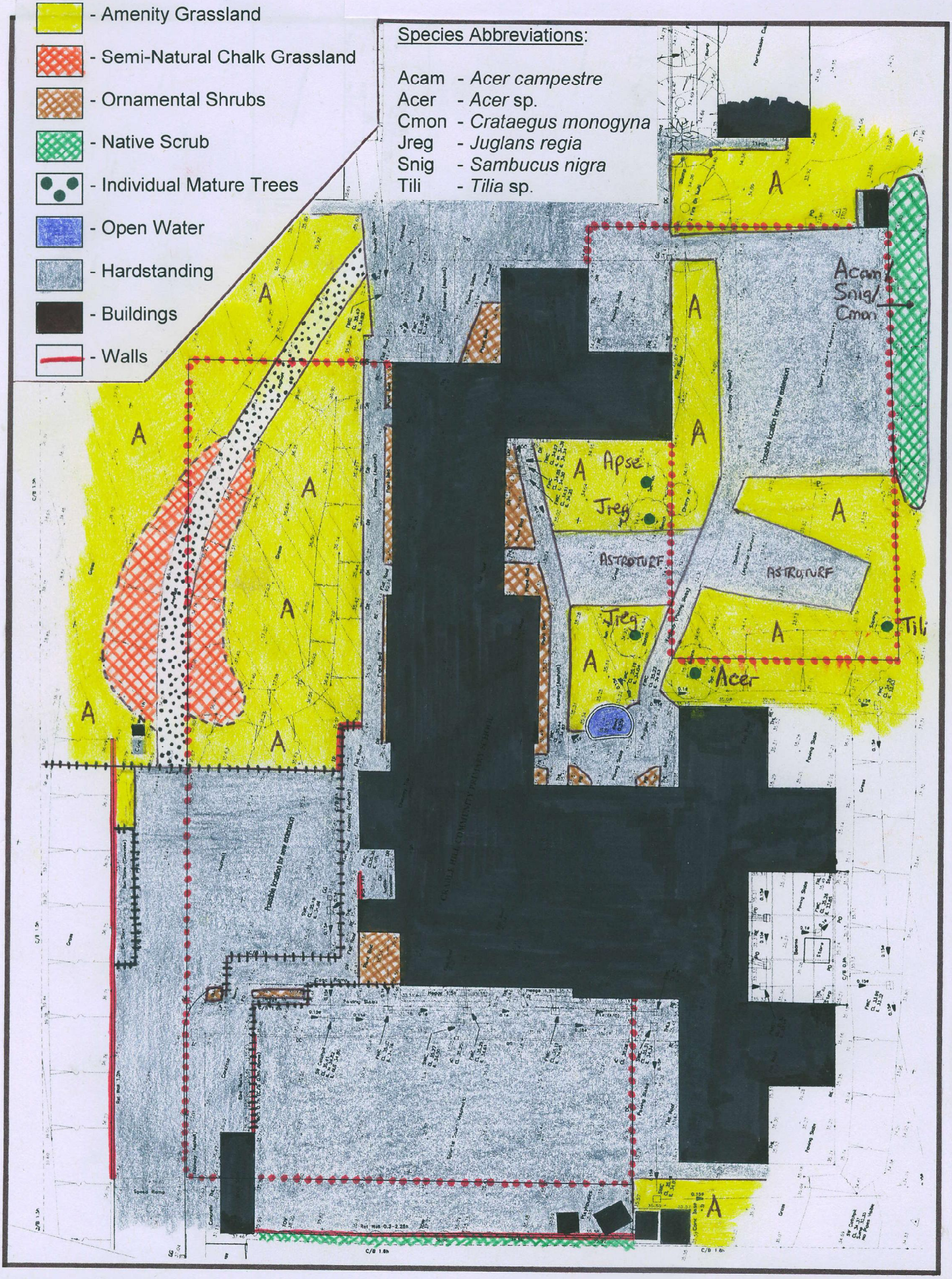

FIGURE 2 – TREE CONSTRAINTS PLAN