APPENDIX D

Provision Of Children’s Play Areas

General

All children’s play areas must be designed and located in accordance with the National Playing Fields Association’s (NFPA) recommendations contained within their document "The Six Acre Standard" (2001).

The following text either supplements or reinforces the NPFA’s document, but does not replace the developer’s obligation to comply with the recommendations as far as is practically possible.

All play areas must:
- be reasonably flat and well drained
- be sited in open, welcoming locations
- be located to allow informal supervision, for example by being overlooked by nearby houses or from well-used pedestrian routes
- be accessible by hard surfaced footpaths
- be linked as far as possible with other recreational or open spaces, footpath systems, amenity planting areas and other devices to provide maximum separation from nearby residences
- be fenced and have 2 self-closing entrance gates
- have a minimum of 2 benches, (unless otherwise specified), one litter bin and an information sign
- have seats and bins located away from fences (to deter use as a means for access into/out of the play area)
- have bins located away from entrance areas (wasps/rubbish at entrances can discourage users)
- incorporate play equipment that complies with relevant British Standards – equipment shall be predominantly of steel only
- incorporate multi-coloured safety surfacing to relevant British Standards - Play tiles are preferred. Grass or loose surfacing within play areas is not permitted
- provide for children with special needs
- provide metal grills at entrances to discourage dogs
- have adequate safety measures to minimise the risk of road-related accidents and potential dangers from nearby water courses, etc

Note: The provision of play equipment will be dealt with on a site-by-site basis. The developer shall therefore discuss particular requirements with the Local Planning Authority at an early stage.

See Masterplan (Appendix C) for material specifications.
**Purchaser Awareness**

All of the developer’s advertising literature must show the proposed position of play areas within their site (and adjacent off site play areas where applicable). Their literature must state that they will be equipped childrens’ play areas.

At the commencement of house building, a sign must be erected (and subsequently maintained) on the site of all the developer’s play areas which clearly displays to prospective purchasers that it is the future site of an equipped children’s play area.

**Local Areas for Play (LAP’s)**

A LAP is a small area of unsupervised open space specifically designated for young children for play activities close to where they live. LAPs mainly cater for children up to 6 years of age, although they would attract other children in slightly older and younger age groups. LAP design shall discourage their use by older age groups by limiting their size and reducing opportunities for activities for older children.

LAP’s shall be provided throughout the development in accordance with the ‘Six Acre Standard’ published by the National Play Fields Association. In broad terms, this will ensure that every property has a LAP within 1 minute’s walking distance.

LAP’s shall contain features that enable children to identify the space as their own domain, for example, a footprint trail, a mushroom-style seat, or a model of an animal or insect. They shall contain demonstrative features, rather than equipment and shall be designed to encourage informal play and social interaction. They shall also provide opportunities for children to bring and to use their own toys and games.

Traditional bench-style seating shall be avoided.

LAP’s shall be appropriate for low-key games such as tag, hopscotch, French cricket, or play with small toys.

It is recommended that LAP’s shall have an area of around 100sq.m. It may be acceptable to reduce this area, to assist with other site constraints, providing that the LAP still meets its objectives.

A minimum distance of 5 metres must be provided between the edge of the play area and ground-floor windows of adjacent dwellings.

**Local Equipped Areas for Play (LEAP’s)**

A LEAP is an unsupervised play area, catering mainly for children aged 4 to 8, although consideration shall also be given to younger and older children. It shall offer at least 5 types of play equipment.

LEAP’s shall have an area of around 400sq.m.

A minimum distance of 20 metres shall be provided between the edge of the play area and the boundary of the nearest residential property.
Double access maintenance gates and two individual self-closing pedestrian gates shall be provided.

**Neighbourhood Equipped Areas for Play (NEAP's)**
A NEAP is an unsupervised site servicing a substantial residential area, equipped mainly for older children (8-14 yrs), but with opportunities for play for younger children. A NEAP shall typically have an area of around 1000 square metres and a minimum of 8 types of play equipment. Where a LEAP and a NEAP are to be combined, these requirements will be reduced and will ultimately be dependent on the approved layout. A minimum distance of 30 metres shall be provided between the edge of the play area and the boundary of the nearest residential property. Double access maintenance gates and two individual self-closing pedestrian gates shall be provided.

**Teenage Meeting Point and Ballplay Area**
This is an area of public open space aimed to provide a place for teenagers to “hang out”. It is envisaged that it shall incorporate a seating area (youth shelter) where young people can meet and a ballplay area e.g basketball court. Teenagers will be actively engaged in the process of deciding what to provide.

For information - Daventry District Council will be providing the off site LEAP, NEAP, Teenage Meeting Point and Ballplay Area highlighted in para. 4.5 (see also Masterplan, Fig.10).
APPENDIX E

**Highway Design Criteria**

**Maximum Spacing of Speed Restraints**

Access Collectors = 60 metres

Access Areas = 40 metres

**Horizontal Curve Radii**

Minimum horizontal kerb radii = 20 metres

**Traffic Visibility**

Junctions; 4.5m (X) and 33 m (Y) including roundabouts.

Vertical Range of Clear Vision; 0.6m – 2m

Stopping Sight Distance (vertical); 1.05m driver eye height to 0.6m object height.

Stopping Sight Distance (Bend Sight Line); 33 metres, measured 1.5m from channel.

In access areas, it may be acceptable to reduce visibility standards in accordance with DB32.

Adoptable visibility splays to be shown on all layouts.

**Pedestrian Visibility**

Pedestrian visibility splays of at least 2.4m x 2.4m must be provided on each side of vehicular accesses where they meet footways (private and adoptable) and shared surfaces. These measurements are taken from and along the highway boundary. The areas of land forward of these splays must be maintained at a height not exceeding 0.6m above carriageway level.

**Junction Radii**

Typically 6 metres minimum.

**Junction Spacings**

Generally 30-40 metres between adjacent junctions, measured centreline to centreline. No driveways, parking bays, access roads or pedestrian accesses shall be provided within 20 metres of Farnborough Drive.

Daventry District Council operate a fleet of refuse vehicles with lengths of up to 12 metres. It is important that the highway layout takes this into account to enable refuse vehicles to easily
and safely move around and through the area without the need for excessive reversing or shunting. Wherever possible, vehicles shall be able to access all roads within the site.

Frontage Development

Refer to Layout Principles (Plan 2).

Materials

All to be in accordance with the Masterplan (Appendix C). It shall also be noted that some refuse vehicles weigh 32,000kg, therefore all road surfaces must be capable of accommodating this weight.

Street Lighting

To be planned as an integral part of the layout, in accordance with BS5489 and the Masterplan (Appendix C). All columns painted dark blue, in accordance with the Masterplan. (Appendix C)

Carriageway: 5 or 6 metre galvanised tubular steel column with 0.5m bracket set at 5% fitted with 35 watt SOX lighting unit with one-part photocell at 70Lux.

Footpaths & Cycle Tracks: hinged 5 or 6 metre galvanised tubular steel column with 35 watt SOX side-entry lantern with integral spigot adaptor for post-top mounting complete with one-part photocell set at 70Lux.

Special consideration must be given to the illumination of speed control measures.

Column style shall include embellishments in accordance with the Masterplan (Appendix C).

Pedestrians and Cyclists

All shared-use cycle tracks shall be 3.0 metres wide within a (minimum) 5.0 metre wide landscape corridor. Overall, the design of cycleways shall meet the standards set out in DDC’s "Cycling in New Developments", which is available from the Development and Property Team. This document contains standards for cycle visibility splays that the developer must consider from the outset to avoid abortive work.

Footways to be 1.8 metre wide. Routes for pedestrians shall be designed and constructed in accordance with "Guidelines for Providing for Journeys on Foot" (IHT, 2000).

Verges to have a minimum width of 1 metre alongside carriageways.

Gradients

The maximum longitudinal gradient of any new estate road shall be 2.5% (1 in 40) for a distance of 20 metres from the nearside edge of the junction carriageway from which the level
is taken. No junctions with other roads or accesses to driveways are allowed within that 20 metres. Thereafter the maximum gradient may be 7% (1 in 15) and the minimum gradient 1% (1 in 100). Grades shall be connected by vertical curves not less than 10 metres in length.

Cycleway gradients shall be in accordance with DDC’s "Cycling in New Developments.

Footpath gradients shall comply with "Guidelines for Providing for Journeys on Foot", but shall not exceed 5% (1 in 20).

**Private Drives**

The communal area of a shared private drive shall be constructed to a standard not less than Northamptonshire County Council’s specification for heavy duty footways. Single private drives shall be constructed to a standard not less than their specification for normal duty footways.

**Other**

No trees to be planted within 2 metres of the carriageway. Where trees may lie in the sight line, they must have a minimum of 2 metres vertically to the base of the canopy.

Reference shall be made to DB32 for all other design criteria.
Sustainable Showhome

Daventry District Council strongly supports sustainable development. The Council has, for example consistently featured as one of the top performing Councils in England, in terms of its waste reduction and recycling schemes. The Council has incorporated a variety of sustainability principles into both its planning policies and its corporate policies and aims to be a lead authority in promoting sustainability. The sustainable showhome supports the District Council’s aims, in particular its commitment ‘to influence the whole life environmental performance of construction projects’ (Daventry District Council, Environmental Policy 2005).

With this in mind, the developer of site 6 is required to include within their showhome clear information, publicity, examples and samples relating to the sustainability principles that they have incorporated throughout and after the construction process. It is anticipated that this will provide positive marketing for the developer; raise the profile of sustainability techniques to potential homebuyers (who may be able to request sustainable add-ons when purchasing a property, for example solar systems etc) and potentially also to the wider community i.e who can visit to see how sustainability principles could be incorporated into their own homes. The developer is advised that they should work closely with the Council’s Home Energy Conservation Officer and Environmental Co-ordinator (see section 11) when preparing their showhome, as these officers will be able to assist with supplying certain elements of information. The developer is advised at this stage to also refer back to section 5 of the brief.

The following provides a summary of the key principles that the developer is expected to highlight and incorporate within their showhome. The requirements are those set out within the Development Brief and/or as part of Building Regulations i.e no additional requirements have been made. This section has been compiled following research by the Senior Planning Officer, the Environmental Co-ordinator and the Home Energy Conservation Officer (see Section 11). All information, including prices, where they are known were correct to the best of the author’s knowledge at March 2006.

1. **LOFT INSULATION**

   Required for Building Regulations. The developer shall provide information about loft insulation and a small sample for purchasers to view.

   An alternative material for insulation is highlighted below. The developer is encouraged to offer this type of insulation material to the prospective home purchaser, as an alternative to the traditional home insulation material.

   Wool is a natural fibre from a fully renewable resource, consequently the life cycle of the product has an ideal energy balance. Due to its ability to rapidly absorb and release water vapour, wool insulation can help to keep buildings cool in summer and warm in winter.

   When the outside temperature increases and begins to heat the wool, it releases moisture; that has a cooling effect on the fibre, which reduces the flow of heat to the
inside of the building. This can reduce peak temperature by up to 7°C when compared to buildings in which alternative forms of insulation are installed.

Wool, being hygroscopic, can absorb and desorb water vapour without compromising its thermal efficiency. It is therefore ideal for use in roofs and timber-framed walls designed to avoid a damaging build-up of moisture by allowing water vapour to migrate through the structure.

Wool generates heat when it absorbs moisture from the air. When the air is saturated with water vapour, wool absorbs some 40% of its dry weight in moisture, producing 960 kilojoules of heat energy for every kilogram of dry wool. This warmth is not noticeable inside the building but it acts to prevent condensation in construction cavities by maintaining the temperature above the dew-point in damp conditions.

The cleaning, air-laying and thermal bonding processing during the manufacture of Thermafleece consumes minimal energy. Wool uses only 14% of the embodied energy that is used to manufacture glass fibre insulation, therefore paying back its manufacturing energy cost seven times faster than glass fibre. Wool is harmless and can be installed without gloves or protective clothing. It is not irritating to the skin, eyes or respiratory tract and causes no discomfort to site workers during installation.

At the end of its useful life, wool can be recycled for other environmentally friendly applications and contains no permethrin, pyrethroids, pesticides or formaldehydes.

Price estimate for wool insulation: £200

2. **CAVITY WALL INSULATION**

   Required for Building Regulations. The developer shall provide information about cavity wall insulation and a small sample for purchasers to view. 60% of heat can escape through walls. Cavity wall insulation means that temperature heat settings can be set lower, reducing the amount of energy used and therefore the amount of carbon dioxide released into the atmosphere. Cavity wall insulation saves on average £100 every year, and with a Chillout grant it pays for itself in 1½ years.

   Price estimate: £400 approximately. Chillout grants available.

3. **RENEWABLE ENERGY**

   The showhome shall incorporate a minimum of one renewable energy technology, which shall be decided by the developer. The developer shall provide information about this technology and also on the other types of renewable energy technology currently on offer for dwellings. The developer is reminded that if solar thermal or photovoltaic is the chosen technology, the showhome must be correctly positioned to enable this to be successfully incorporated.
There are a variety of renewable energy technologies and it is not the intention to cover them all. Solar energy is therefore referred to to provide just one example. Solar Water Heating (SWH) is a system for heating water using energy from the sun. Solar energy is collected by a panel, which is connected by pipes to a hot water storage device such as a hot water cylinder. Systems can be installed for domestic hot water applications. SWH depends on radiation not direct sunlight so it works even on dull days. However, in winter, although a panel can be effective in helping warm water, the existing hot water heater will be needed to provide most of the water heating needs. These systems are not designed to work in conjunction with central heating radiators - they can only heat water. In the Autumn, Spring and Summer, a solar panel can yield surprising results, often not requiring any support from a boiler. Depending upon the system and how and when hot water is used, the SWH could provide almost all of the hot water needs at these times of the year. Installation is either on a southerly facing roof or two roofs facing east and west, the panel usually sits on top of existing tiles/slates. Grants may be available for this (see Section 11).

Price estimate: Starts at approximately £3,000

1. **WATER**

WCs, washing machines and outdoor use account for about 50 per cent of domestic water consumption. The developer shall include high efficiency fittings and appliances, low flush cisterns, a rainwater storage system and a water butt. Water butts collect rainwater for garden use, hence saving tap water. Rainwater storage systems collect rainwater for use in washing machines and flushing toilets. The developer shall provide information about the different water efficiency items included on their site. This shall include, if applicable, information about permeable paving and ground surfaces.

Price estimate: Water Butt Price is less than £30 for 150 litre storage. A rainwater storage system costs approximately £1,500. Prices of fittings and appliances are unknown at this stage.

5. **WASTE, RECYCLING AND COMPOSTING**

The developer shall include waste/recycling/composting information, plus storage space for the 2 bins and 2 boxes, and the split kitchen bins (para. 5.22).

Composting – In addition, as per Section 5, a compost bin shall be provided. Making compost from garden and household waste is one of the best things any gardener can do. It's easy and costs very little in time or effort. Making compost will help you reduce pollution and cut down on landfill. Plants will grow healthier and it will save money on fertilisers.

Price estimate: Compost bins cost less than £30 (Daventry District Council compost initiative)
6. **BUILDING MATERIALS**
The developer shall provide information about the materials included in the building. This shall include information about how the site has been constructed (see para 5.10) and any sustainability certificates.

Price estimate: Negligible

7. **LOW ENERGY LIGHT BULBS (CFLs)**
The developer shall provide information about low energy light bulbs. Compact Fluorescent Lamps are a modern type of light bulb that will fit into a standard light fitting, usually a bayonet fitting in the UK, but CFLs are also available with Edison screw fittings. Most CFLs either consist of a number of short glass sticks, or two or three small tubular loops. Sometimes, these are enclosed in a glass bowl or made to look like a traditional bulb. CFLs work in much the same way as a fluorescent strip light: the inside is coated with a phosphor that gives off the light and there is an electronic ballast to start the lamp operating.

CFLs are often called low energy lamps because they use less energy than the traditional tungsten filament bulbs that they replace. As they plug in directly to the normal light fittings they work off the UK's standard 230V supply and should not be confused with low-voltage lamps, which do not offer significant energy or cost savings.

Price estimate: £5 per bulb

6. **BIODIVERSITY**
The developer shall ensure that the showhome garden includes elements of wildlife-friendly and drought resistant plant, shrub and tree species. Bat tubes shall also be incorporated in this property. The developer shall provide information about these.

Price estimate: Negligible

7. **ACCESS**
A public transport link has already been established on the Middlemore Development Area, along with pedestrian and cycle links. The developer shall provide information about these facilities, for example details of the bus timetable.

Price estimate: Negligible

8. **OPEN SPACES, PLAY AREAS, RECREATION**
The developer shall provide information about the location of on and off site open spaces, play areas and recreation areas.

Price estimate: Negligible
9. FACILITIES AND SERVICES
The developer shall provide information about on and off site facilities and services, for example the local school, health facilities etc.

Price estimate: Negligible
APPENDIX G

Middlemore Location Plan

KEY

INDUSTRIAL AREAS

RESIDENTIAL AREAS

RESERVOIRS

TOWN CENTRE RETAIL

MIDDLEMORE DEVELOPMENT