



North Marston Design Code 2020-2035

Guidelines and Principles for high-quality
and locally appropriate development

To accompany North Marston Neighbourhood Plan 2020-2035

Part 2: Designing for North Marston – pages 39 to 93

Refer to Part 1 for full Table of Contents

4. Design Guidelines

This section sets out the guidance that will influence the design of potential new development and inform the retrofit of existing properties in North Marston.

General Design Principles

In all cases, new buildings and extensions to existing buildings should seek to draw inspiration from the varied details of North Marston's existing architecture and materials, the historical context, and the rural environment.

Consideration of design and layout must be informed by the wider context, considering not only the neighbouring buildings but also the streetscape and landscape of the wider surroundings.

New housing should not be viewed in isolation. It is important that any proposal takes account of the local context, and that new building designs embody the existing "sense of place" and meet the aspirations and wishes of people already living in the area. The local pattern of streets and spaces, building traditions, materials, and natural environment should all contribute to the character and identity of all new buildings, while recognising that new technologies may sometimes be acceptable and perhaps more efficient.

Individual buildings with a locally inspired character which are innovative, creative, and site-specific are encouraged. However, any new building or buildings built during the life of the Neighbourhood Plan will need to blend with or complement the materials used in neighbouring properties, and the character of the surrounding environment, particularly with regard to a respect for the historical context of the site and its rural setting.

Any new buildings should seek to enhance and complement features of existing buildings highlighted in this Design Code in innovative and creative ways, while at all times respecting the historical context of the development which is such an important element in the story of North Marston.

Design Principles which should be present in any proposals for housing in North Marston

As general design principles, all new buildings (and extensions to existing buildings where appropriate) in North Marston should:

- Respect the existing settlement pattern in order to preserve its character.
- Respect surrounding buildings and rural character in terms of scale, height, form, and massing
- Reinforce or enhance the established character of streets, greens, and other spaces
- Harmonise with and enhance the existing settlement in terms of physical form, architecture, and land use
- Retain and incorporate existing features, including natural features, into any development
- Use contextually appropriate materials and details
- Provide adequate open space in terms of both quality and quantity
- Aim for high quality, innovative design and eco-friendly buildings while respecting the architectural heritage and tradition of the area
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features
- Integrate with existing paths, streets, and circulation networks
- Ensure all components (for example, outbuildings, landscaping, access routes, parking, and open space) are well related to each other

The North Marston Neighbourhood Plan contains a number of specific Policies and criteria relating to Sustainable Development and Housing Design in addition to Policies aimed at preserving the countryside, natural environment, and historic landscapes surrounding the village.

Any proposals for housing in North Marston should demonstrate an adherence to all relevant Policies and criteria in the Neighbourhood Plan.

Local Housing and Design Policies relevant to building in North Marston

The Local Plan is the Vale of Aylesbury Plan 2013-2033 which was adopted in September 2021.

In the Local Plan, the design of new development is dealt with under **Policy BE2 Design of new development** which is reproduced below.

All new development proposals shall respect and complement the following criteria:

- a. The physical characteristics of the site and its surroundings including the scale and context of the site and its setting*
- b. The local distinctiveness and vernacular character of the locality, in terms of ordering, form, proportions, architectural detailing and materials*
- c. The natural qualities and features of the area, and*
- d. The effect on important public views and skylines.*

More guidance on the detail for the application and implementation of this policy will be provided in the Aylesbury Vale Design SPD.

There are other policies in the Local Plan which deal with differing aspects of design such as the natural environment, landscape, and biodiversity as well as policies determining the approach to historic buildings. These policies are also relevant to building in North Marston.

There is currently no up to date Design Guidance available to complement the Local Plan, although Policy BE2 refers to the production of a new Design Guide being in process.

5. High Quality Design in Future Development

Any future development in North Marston should seek to improve the village by the addition of buildings of high-quality design, and should ensure that the rural character, historic landscapes, and countryside setting of the village is maintained.

Maintaining the current Development Pattern & Context

House types & extensions

A mixture of house types (both detached and semi-detached) would fit best with the existing patterns of housing, with less focus on rows of terraces.

If building more than two houses a variety of sizes and designs should be used.

Barn conversions or barn style dwellings are not typical within the main part of the village (although beyond the village two known examples are Manor Farm Barn and Dancers Farm)

Extensions should remain subservient to the original property where possible.

Existing houses in the centre of the village are generally modest in scale, with larger houses in more modern developments and along the radial roads as shown in these examples.



Differing designs are encouraged where there is more than 1 house- these examples are 2 of a series of 5 houses from elsewhere.



This is an example of a housing development from elsewhere showing smaller houses being interspersed with larger houses. There is a variety in design detailing, but all are of modest scale and rural appearance.



Conversely, this example shows a terrace of houses which creates an urban feel inappropriate to the rural setting of North Marston.



Depth and span of plots

Wider frontage plots which are not as deep are more acceptable in the rural setting because they relate more to traditional rural forms, contributing to rural character.

This also enables homes to be built which take advantage of enhanced natural light levels.

Examples of wide plots from the historic core of the village (right) and a more modern setting elsewhere.



Narrow frontages and deep house designs can appear urban and incongruous in a rural context. These dwellings also tend to have high and bulky roofs. This type of development is inappropriate for North Marston.



As shown here, houses in the village are more often set close to the road with limited front gardens, although there is some space for landscaping or low boundary treatment such as fences or low walls.



Long driveways with the building set well back from the road are not typical of the village, although examples are to be found. In general, these are felt to be less appropriate for new housing.



Scale and proportion

Buildings will need to be of an appropriate modest scale with the detailed elements of the new building or extension being carefully designed and of a suitable proportion for the context of the proposal, particularly in a rural setting.

An example of 3 houses that are different from each other in materials and detail but complement each other in terms of span, spacing and roof slope. These houses are not in North Marston.



Rural character

Size & Massing

Large bulky buildings are not suitable for the village.

Some key features to provide respect for the rural character of North Marston are:

- high solid to void ratios
- vertical emphasis in building heights relative to openings
- minimising the distance between ground and first floor windows
- providing a simple symmetry or rhythm of architectural features

Small, modest scale buildings are typical of the centre of the village but larger footprint buildings have been created by those which have several sections. Extensions can be managed in the same way to complement the context of the property.



3 storey houses are not currently present in the village, and they do convey an overall bulky form. In this example from elsewhere, the houses on the left would be much more appropriate for the village than the higher buildings.



Topography and natural features

Slopes & planting

Whilst much of the village is relatively flat, new development needs to respond appropriately to changes in slope and consider the topography of a site in terms of the visual impact on surrounding properties.

The roof heights of new buildings or extensions should not dominate the landscape when an elevated plot is being built on or an elevated house is being extended.

In any new development, natural features such as existing trees and hedgerows should be incorporated wherever possible, and planting used to provide a soft edge to the site

A banked verge such as this can be used to reinforce the rural character of the village



Mature trees should be retained wherever possible



Boundaries

Hedges, walls, and fences

The village has a variety of front boundary treatments.

In the historic core there are fewer front boundaries, and those that are in place are usually low walls or hedgerows.

Hedgerows can be planted to give a natural boundary to new properties. Properties should have sufficient front garden to allow some planting.



Fencing should be low and preferably of a more rural character. Panel fencing is not appropriate in most settings.



Materials

Roof & wall materials

There is a wide range of materials used for construction in the village.

Historic buildings tend to be rendered and thatched or red brick with a tile roof.

More modern buildings are more typically brick with a tile or timber cladded half fascia.

Where render or pebble dash is painted, it is almost exclusively white or cream.

Red brick and render can be used to good effect to add variety to a new housing development as in this example from outside the village



Render on a building can be full or half. These examples from elsewhere show the different effects.



Brick detail can be used to break up bulky facades or gable ends and has been used to good effect in the village (right).



Locally inspired character

Variety of feature and a rural setting

The village has a wide variety of house types of differing ages, with some styles suiting the rural setting more than others.

It is very important that generic styles are avoided and that designs are led by local character such as the linear nature of the village.

Whilst innovative design is not discouraged, the context of the site and the character of the village needs to be respected. The village is set in the countryside and there are views and glimpses through or over buildings to the landscape beyond.

Buildings with superior environmental performance including orientation on the plot and sustainable energy features are encouraged.

The interesting and innovative use of features such as rooves, windows, chimneys, gables and porches is encouraged provided suitability for the site setting is maintained.

Where roads or access points are curved, buildings can be positioned to maintain the linear character of the village.



Examples of inappropriate innovative design which would not respect the rural nature of the village. These have a discordant roofline, too much bulk, and use unsuitable materials.



More inappropriate design – the conception and massing of these buildings is too urban, being too vertical in shape and with dominant parking on the frontage.



Different roof heights in linked houses would be acceptable – they are common through the historic heart of the village as shown here



Rows of houses with the same roof height and a very shallow roof pitch which does not allow views of the countryside setting are inappropriate for the village.



Atypical roof shapes not found in the village already are not appropriate. This example does not suit a rural setting.



The design of multiple gables that are subservient elements of the main roof can add interest to new buildings as shown here



Rural style often means simple form, but design details and features can add interest provided the rural setting is not compromised.

Individual designs such as this from elsewhere can often split opinion.



In the village small windows are generally more prevalent in older houses whilst those from the Victorian era and more recent times tend to have larger windows often with sashes. Bay windows can provide an attractive feature if in scale with the building.



Feature windows can provide interest and break up the façade of buildings



Porches can add interest to house frontages, but care needs to be taken that they are appropriate in scale. These examples from outside the village show the difficulties arising from porches that are either too narrow or too wide.



The example of an inglenook fireplace from inside the Conservation Area is an integral feature to the house design and adds great interest to the building.

However, adding features like this as an afterthought should be avoided.



Resident movement and connections *(see also Annex 1)*

Footways

There are a limited number of footways/pavements in the village, especially along the roads leading out of the village such as Quainton Road. Wherever possible and appropriate provision of new pavements will be encouraged especially where they can be linked to existing footways and local facilities.

Parking *(see also Annex 2)*

Provision of parking space

Parking provision is very important but can detract from the appearance of properties, dominating both the frontage and the building itself.

Integral garages are almost always used for storage and can dominate the building if not carefully designed. Attached garages are usually a better option.

The dimensions of parking space provided in new buildings should allow for vehicle maneuvering.

The internal dimensions for garages should be generous enough to park modern large vehicles.

Integral garaging should not detract from the visual appearance of the house as in the building on the left. The attached garage to the side of the other building produces a more attractive frontage.



Garages or parking spaces provided to the side of buildings allow space for a front garden in front of all or part of the building itself.



Parking provision should not fill the entire space in front of a house, blocking the view of the building. This creates a very urban setting which is inappropriate for the rural character of North Marston.



Private spaces and domestic paraphernalia

Space for private use

New buildings should ensure that sufficient outside space is provided for private use, garden planting, and the storage of refuse bins and other domestic requirements.

Ground extensions to existing properties should maintain sufficient outside space for the same uses

The use of footpaths and pavements for storing refuse bins is inappropriate for North Marston.



6. Sustainable design and build features to be applied In Future Development

Introduction

The statements of specific design features detailed in this section should apply to all new buildings constructed in North Marston parish during the life of the North Marston Neighbourhood Plan.

These features relate to design elements which are most important to the successful and trouble-free development of any NEW BUILDING in the parish, and many are relevant to the extension or refurbishment of existing properties.

There are 9 headings:

- Energy Efficient Eco-Design
- The use of Solar Roof Panels
- The use of Renewable Energy Sources
- Sustainable Drainage Systems (SuDs)
- Protection from subsidence
- Charging points for electric vehicles
- Bicycle Parking and Storage
- Wildlife-friendly features
- The use of native plants, trees, and hedging

Energy Efficient Eco-Design

Energy efficient eco-design combines all around energy efficient methods of construction, appliances, and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

Starting from the design stage there are strategies that can be incorporated towards passive solar heating, cooling, and energy efficient landscaping which are determined by local climate and site conditions. The aim of these interventions is to reduce the overall home energy use as cost effectively as the circumstances permit.

In addition, eco-design is not an architectural style in itself, but a set of principles that can be applied to a wide range of architectural styles to suit the local context and character of the village.

For NEW BUILD construction in North Marston, energy efficient building includes:

- Achieving high levels of airtightness, and using efficient insulation materials in lofts and walls
- Introducing more fresh air into buildings with mechanical ventilation, heat recovery, and passive cooling systems
- The use of triple-glazed windows and external shading especially on south and west faces
- The use of low-carbon heating sources such as heat pumps or connections to a district heating network
- Maximising water management and cooling methods, including more ambitious water efficiency standards, green roofs and reflective walls
- The incorporation of flood resilience and resistance strategies, for example:
 - raised electrical fittings,
 - concrete floors
 - greening the garden space
 - surface water drainage channels
- The employment of environmentally aware construction methods and site planning including, for example, the use of timber frames and the consideration of sustainable transport options such as cycling.
- Orientating buildings to maximise solar gain. Where practical, the main orientation of the building should be within 30° of south, with trees (planned or existing) to shade the building in the summer.
- The use of solar roofing panels where appropriate

For the redevelopment or extension of EXISTING BUILDINGS in North Marston, energy efficient building includes

- The use of efficient insulation materials in lofts and walls
- The installation of double or triple glazing and the employment of shading strategies, for example, the use of tinted window film, blinds, curtains, and planting of trees.
- The installation of low-carbon heating sources such as heat pumps or connections to a district heating network
- The improvement of draughtproofing for floors, windows and doors
- The use of the most energy- efficient electrical appliances
- The installation of devices which improve the efficiency of or minimise wastage of power resources with the use of low-flow showers and taps, insulated tanks and hot water thermostats
- The maximum utilisation of green space around a property to help reduce the risks and impacts of flooding and overheating
- The awareness of flood resilience and resistance methods, such as the installation of removable air vent covers, the relocation of electrical appliances (for example, installing washing machines upstairs), and appropriate treatment of wooden floors

The use of Solar Roof Panels

Solar panels over a rooftop can have a positive environmental impact but care should be taken with their design and installation, and considering the impact on neighbouring properties, particularly within the North Marston Conservation Area. Solar panels can be added to listed buildings, but they need to be carefully positioned and planning consent will be required.

Wherever solar panels are used, preserving the character of the village should be a priority.

In addition, the most significant challenge for the addition of solar panels to any property is to minimise any adverse impact on the visual character of the building itself, and some suggestions for achieving sensitive implementation of solar roof panels in the village are suggested below:

On NEW BUILD CONSTRUCTION:

- Integrating solar panel features from the start, making them a part of the design concept for the property. Attractive options to consider are solar shingles and photovoltaic slates
- Using the solar panels as a building material in their own right

On retrofits to EXISTING BUILDINGS:

- Analysing the proportions of the building and roof surface in order to identify the best location and sizing of panels
- Considering the introduction of other tile or slate colours to create a sympathetic composition with the solar panel materials, or
- Conversely, aiming to introduce contrast and boldness in proportion. There has been increased interest in black panels due to their more attractive appearance, and with black mounting systems and frames these can be an appealing alternative to standard blue panels
- Taking special care with the location of solar panels on buildings within the North Marston Conservation Area. It will be appropriate to introduce solar panels to areas of the building that are more concealed in order to preserve the character and appearance of the Conservation Area

Few houses in the parish have solar roof panels already installed



The use of Renewable Energy Sources

In accordance with its Clean Growth Strategy, the Government intends to phase out the installation of high carbon fossil fuel heating in both new and existing buildings in areas which do not lie on the natural gas grid before 2030. This applies to North Marston parish.

A Future Homes Standard, to be introduced by 2025, will require new build homes to be future proofed with low carbon heating alternatives and high levels of energy efficiency. One of the following possible alternatives for low carbon heating should now be used in NEW BUILDS or if existing heat sources are changed in EXISTING BUILDINGS:

Air to Water Pumps

- Air to Water Pumps are the alternative most commonly used in the UK. They absorb heat from the outside air and transfer the heat to warm water. An air to water system distributes the heat through a wet central heating system.

Air Source Heat Pumps (ASHPs)

- Air Source Heat Pumps absorb heat from the outside air to heat both home and water. They are capable of extracting heat from the air when temperatures are as low as -15° C.
- Air Source Heat Pumps need electricity to run but their heat output is greater than the energy input making them an energy efficient way of heating the home.

Ground Source Heat Pumps (GHSPs)

- Ground Source Heat Pumps use pipes buried in the ground to extract heat from the ground. The heat can then be used to heat either radiators, underfloor heating, or warm air heating, and water.
- The length of the ground loop required depends on the size of the home and the amount of heat needed.

Air to Air Pumps

- Air to air pumps require warm air to be circulated around the property. They will not provide hot water, nor will they be eligible for the UK Governments Renewable Heat Incentive Scheme

All heat pumps work best when producing heat at a lower temperature than traditional boilers. They also work more efficiently at a lower temperature than a standard boiler, making them more suitable for underfloor heating systems or larger radiators which give out heat at lower temperatures over a longer period of time.

It is essential that the property is well insulated and draughtproofed for any heating system to be effective

Sustainable Drainage Systems (SuDs)

The present drainage situation in North Marston is one that causes concern amongst parishioners and is the service that most respondents thought most needed improvement in the North Marston Parish Questionnaire. It is important, therefore, that NEW BUILDS in particular mitigate potential problems with drainage when being designed.

Sustainable Drainage Systems comprise a range of approaches to managing surface water in a more sustainable way to reduce flood risk and improve water quality whilst improving amenity benefits. An SuD works by reducing the both the amount and rate at which surface water reaches the combined sewer system.

Usually, the most sustainable option is to collect water for reuse, for example in a water butt or rainwater harvesting system, as this has the added benefit of reducing pressure on important water sources.

However, where reuse is not possible there are two alternative approaches using SuDS:

- **Infiltration**, which allows water to percolate into the ground and eventually restore groundwater
- **Attenuation and controlled release**, which holds back the water and slowly releases it into the sewer network. Although the overall volume entering the sewer system is the same, the peak flow is reduced which reduces the risk of sewers overflowing. *Attenuation and controlled release options are suitable when either infiltration is not possible (for example where the water table is high or soils are clay) or where infiltration could be polluting (such as on contaminated sites).*



A rural attenuation pond

The most effective type or design of SuD to use on a particular site will, of course, depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. A number of overarching principles can however be applied:

- Manage surface water as close to where it originates as possible
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water
- Improve water quality by filtering pollutants to help avoid environmental contamination
- Form a '*SuDS train*' of two or three different surface water management approaches
- Integrate an SuD approach into the development process and design practice to improve amenity through early and formal consideration
- SuDS must be designed sensitively to augment the landscape and wherever possible provide biodiversity and amenity benefits. A Risk Assessment covering these aspects of any development is essential

In addition, the following should also be considered:

- SuDS are often as important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream
- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water whilst increasing the biodiversity value of the area
- Best practice SuDS schemes link the water cycle to also help make the most efficient use of water resources by reusing surface water

An SuD Risk Assessment in North Marston

New build houses must carefully assess the risk of surface water runoff and the potential for surface water flooding. Planning applications should include specialist drainage plans for careful consideration by the local authority. These are particularly important, and are a minimum requirement, for sites which are identified as currently being at high or medium risk from UK governmental websites.

The current Flood Risk Map for North Marston can be checked on the Environment Agency website at:

<https://flood-warning-information.service.gov.uk/long-term-flood-risk/map>

When designing a Sustainable Drainage System for a particular site, options for the following should be considered:

Storage and Slow-Release Features

Rainwater harvesting systems allow the capture and storage of rainwater as well as those enabling the reuse *in situ* of grey water. For example, simple storage solutions, such as water butts, can help provide significant attenuation and are also useful for regular tasks in the garden.

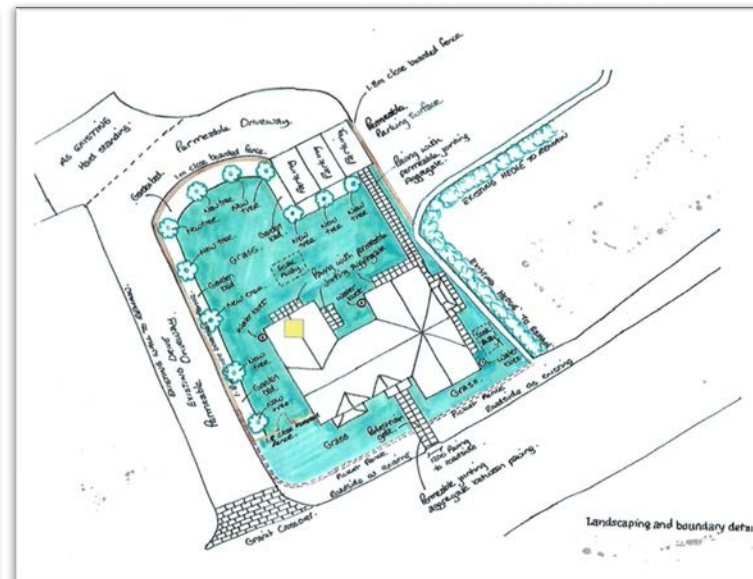
External water storage systems, however, can be unsightly if added without a vision for integrating them in the project's design. Therefore, the following design recommendations are suggested as solutions:

- Concealing tanks by cladding them in materials which complement the surroundings
- Using attractive materials or finishing for pipework
- Combining landscaping and planters with water capture systems
- Using underground tanks
- Utilising existing water bodies for storage

To be able to continue to provide benefits, there has to be some headroom within the storage solution. If captured water is not reused, a slow-release valve allows water from the storage to trickle out, recreating capacity for future rainfall events.



Water butts should be carefully sited for appearance and efficiency



A simple diagram illustrating drainage options and water storage solutions on new sites is helpful

Attenuation ponds and detention basins

As shown above, **attenuation ponds** are permanent bodies of water with stormwater storage capacity above the permanent water level. They must have a natural appearance to complement the rural character of the site. Attenuation ponds can be of great educational benefit to both local schools and the surrounding community.

Detention basins are similar to attenuation ponds, but there is no permanent pool of water. Detention basins provide more attenuation storage per unit surface area than attenuation ponds of the same depth, so may be used when space is more limited. They must be vegetated to provide greater water quality benefits, such as the removal of sediment, and, where appropriate, they should be designed to permit alternative uses when acting as a basin.

Both attenuation ponds and detention basins must actively contribute as new public amenities and green spaces. It must be expected that people will interact with the water and landscaping, so they must be designed for safe public access and not fenced off.

In North Marston, attenuation ponds are preferred due to the greater amenity and biodiversity benefits offered.

Drainage ditches

North Marston has an existing series of drainage ditches which manage excess surface water from fields, and some properties. An integrated drainage ditch should be included on a new site where necessary.



Existing drainage ditches



Pervious paving for paths and driveways

All new paths, pavements, and driveways and parking areas in North Marston must be constructed from pervious surfaces.

Pervious paving provides a surface suitable for pedestrian and or vehicular traffic, while allowing rainfall to infiltrate through the surface and into the underlying structural layers. The water is temporarily stored beneath the overlying surface before use, infiltration to the ground, or controlled discharge downstream.

All pervious materials, together with their associated substructures, are an efficient means of managing surface water runoff close to its source as they intercept runoff, reduce the volume and frequency of runoff, and provide a medium for treatment processes.

Treatment processes that occur within the surface structure, the surface matrix (including soil layers where infiltration is allowed) and the geotextile layers include:

- Filtration
- Absorption
- Biodegradation
- Sedimentation.

There are two types of pervious paving which are defined on the basis of the surfacing materials. These are:

- **Porous pavements** which infiltrate water across their entire surface material. Examples include reinforced grass or gravel surfaces, resin bound gravel, porous concrete, and porous asphalt.
- **Permeable pavements** which have a surface that is formed of a material that is itself impervious to water. However, the materials are laid to provide a void space through the surface to the sub base (*eg standard concrete block paving is specifically designed to allow rainwater falling onto the surface, or runoff discharged over the surface, to permeate through the joints or voids between the blocks into the underlying pavement structure*). Depending on design, paving material, soil type and rainfall, permeable pavements can infiltrate as much as 70% - 80% of annual rainfall.

In addition to their drainage benefits, pervious paving must also:

- Respect the material palette
- Create an arrival statement
- Help to frame the building and define the property boundary
- Be in harmony with the landscape treatment of the property

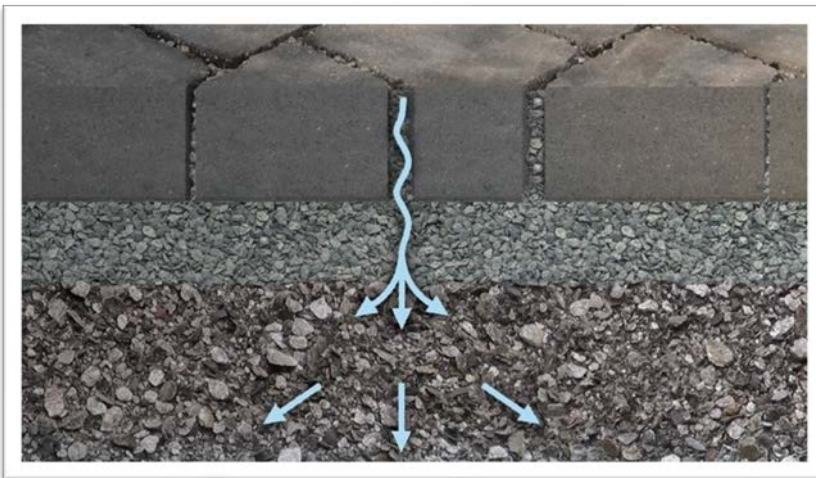
Some examples of pervious paving:

Vegetated grid



A permeable pavement consisting of impervious materials laid with vegetated voids between the stones allowing water runoff to infiltrate into the sub base and underlying structure

Permeable aggregate



A permeable solution allowing runoff to infiltrate voids and be dispersed amongst the sub-base aggregates beneath which have been crushed to allow controlled water dispersal.

Gravel based driveway



A porous paving solution which allows water infiltration across the complete surface of the driveway. There are already numerous examples of gravel based driveways in North Marston.

Green driveway



A solution consisting of an interlaced framework of impermeable material laid together with grass to provide sufficient hard standing for vehicles while allowing maximum infiltration of water runoff

Regulations, standards, and guidelines

There are specific statutory requirements relevant to pervious paving and sustainable drainage, and they are listed below together with references to useful guidelines:

- Flood and Water Management Act 2010, Schedule 3
- The Building Regulations Part H – Drainage and Waste Disposal
- Town and Country Planning (General Permitted Development) (England) Order 2015
- Sustainable Drainage Systems - non-statutory technical standards for sustainable drainage systems
- The SuDS Manual (C753)
- BS 8582:2013 Code of practice for surface water management for development sites
- BS 7533-13:2009 Pavements constructed with clay, natural stone or concrete pavers

Links to other guidelines for pervious paving are:

[CIRIA SuDS Manual - Chapter 20, Permeable Paving](#)

Thorough and in-depth guidance for the specification, installation and maintenance of CBPP (Concrete Block Permeable Pavements) from the Construction Industry Research Information Association.

[Long Term Infiltration Study - Dr Soenke Borgwardt](#)

An independent study demonstrating that the infiltration rate plateaus at an acceptable rate even with no maintenance.

[Design & Construction of CBPP - Interpave guidance](#)

Straightforward installation guidance from the independent body for the UK block paving industry.

[Maintenance of CBPP – Interpave Guidance](#)

Maintenance guidance from the independent body for the UK block paving industry.

[Using SuDS Close to Buildings \(Sept 2012\) - fact sheet by SusDrain](#)

A useful document detailing the use of infiltration systems near to the foundations of buildings.

[Innovation with SuDS & Hard Landscape - Interpave case studies](#)

Some independent case studies involving CBPP and other SuDS features.

Protection from subsidence

Subsidence can be caused by a number of factors including:

Soil Type – Clay soils are particularly vulnerable because they can shrink, crack and shift in hot dry weather subject to their water content. **This is of particular relevance to North Marston Parish where the soil type is typically clay.** There have been several occasions on which underpinning has been required on properties within the parish as a result of clay shrinkage.

Trees and shrubs – Where clay is present in the soil, trees and shrubs can cause a problem if they are too close to the foundations of properties. This is a consequence of some species absorbing a lot more water than others, causing the soil to dry out.

Leaking drains and water mains – Sandy gravelly soils can be washed away by leaking drains and water mains, but this is less of a potential problem in North Marston because of the prevailing clay sub-strate.



Subsidence cracks – sign of a problem

To minimise the risk of subsidence, all NEW BUILD PROPERTIES must be designed and constructed in compliance with all relevant and current building regulations, to ensure they are unlikely to be affected by even minor subsidence.

Trees and Subsidence

Any trees planted in the green space around a NEW BUILDING should be tailored to the size of the garden and planted at a safe distance away from the property and neighbouring properties.

Some native species are unsuitable for planting in smaller spaces:

- Willow trees should be at least 40 metres away from any property. (Willow trees are the worst for causing subsidence problems either by directly affecting the building foundations or by root infestation in drains and water mains.)
- Poplars, oaks, and horse chestnuts should be at least 20 to 30 metres away from any property.

Refer to **Wildlife-friendly Features – Native Trees** below for some suggestions of trees suitable for use in gardens.

Charging points for electric vehicles

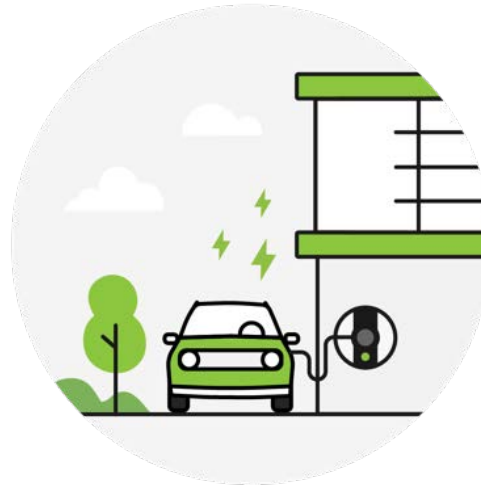
With the mandated change towards electric vehicles moving forward rapidly, and their presence on the roads becoming common, it will be necessary for owners to have easy and reliable access to charging points. In North Marston, where any structure of publicly accessible points is likely to be very limited, or even non-existent, any charging points will need to be in or around the home environment.

Accordingly, every new building constructed in North Marston during the life of the Neighbourhood Plan must have at least one home charging point installed adjacent to car parking areas.

Dedicated home charging points are faster than public points and have built-in safety features.

Notes on home charging points

- A home charger is a compact weatherproof unit that mounts to a wall with a connected charging cable or a socket for plugging in a portable charging cable
- Dedicated home charging points are installed by qualified specialist installers
- Options for either Type 1 or type 2 connectors which are specific to certain electric vehicles need to be considered.
- The option of an EVSE supply cable for a 3-pin plug socket to be used as occasional back up should also be considered



Bicycle Parking and Storage

North Marston is a village which is on a national cycling byway, and which is very popular with local cycling and touring clubs who can often be seen on the village roads, especially at weekends. The Parish Council is also keen to encourage all sustainable means of transport in and around the parish, particularly walking and cycling.

It is important that all village amenities should continue to be accessible to walkers and cyclists. In a small community, sustainable transport methods are an option for many residents, with a resultant reduction in the unnecessary use of motor vehicles.

To encourage cycling, therefore, covered and secured cycle parking will need to be provided within the domestic curtilage in all new residential properties where there is no garage on site. Surrounding planting and the use of smaller trees should be used to mitigate any visual impact.



Example of covered and secured cycle parking

The Parish Council is encouraged to provide bicycle stands in suitable public places and at village amenities such as by the Memorial Hall and Community Shop. These stands should be placed in locations away from pavements and kerbsides.

Wildlife-friendly features

North Marston has a wide variety of wildlife.

Both barn and tawny owls have been seen on the west side of Quainton Road (with two owl nesting boxes *in situ*,) and buzzards, red kites, various types of finches, pied wagtails, bats, badgers, rabbits, and hares are all seen regularly in the skies and fields around the parish. Small native species including hedgehogs, frogs, and toads are often spotted in gardens, together with robins, wrens and goldfinches, and the undisturbed ridge and furrow fields, especially, are home to many different and varied insects, wild plants, and animals as well as offering extensive areas for migrating and winter birds such as redwings to rest and feed on their journeys.

The Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC) has recorded many sites around the parish which designate the presence of rare, protected, or notable species of wildlife and plants in North Marston.

Any new scheme for development within North Marston should demonstrate that reference has been made to the complete record of BMERC designated sites to ensure full conformity with Policy NE2 (Biodiversity) of the Neighbourhood Plan, and development on or adjacent to these sites should be avoided.

*Owl nesting box in
woodland adjacent to
Quainton Road*



Features to be included in all new buildings

All NEW BUILDINGS are required to include the following wildlife-friendly features as a minimum:

Bat boxes

Bats do not like draughts and prefer well insulated boxes where temperature and humidity remain constant. They also need a rough textured wood to cling to. The wood should not be treated because bats are very sensitive to chemicals. A 'bat ladder' or other landing area that leads to an entry slit wide enough to admit bats, but narrow enough to keep out predators is also essential, usually 15 – 20 mm. Once in place, a bat box cannot be opened legally without a licence.

Example of a suitable bat box



Rear boundary treatments which are wildlife permeable

It is important that property boundaries do not create a barrier for small mammals, many of which are beneficial for gardens. New buildings should, therefore, ensure that rear boundaries in particular are permeable for wildlife, either by planting native hedging as a boundary, or by using penetrable fencing incorporating hedgehog friendly gravel boards.

Hedgehog friendly gravel board



In addition, new development proposals of more than 2 houses should include plans for the creation of new habitats and wildlife corridors.

The use of native plants, trees, and hedging

In the designing of green space around new residential buildings, only native shrubs and plants should be used. Native trees should also be incorporated if there is sufficient area available.

Designs should take into account:

- The desired height and spread of the adult planting, and the maintenance required
- The type of soil, position, and situation
- Whether the planting is in the sun or shade
- Hedges and trees already growing successfully in the immediate locality of the green space
- Hedges and plants should attract wildlife providing shelter, food, nectar and pollen.

Hedgerows and hedging

Hedgerows are an important linear habitat which can be found throughout most of Buckinghamshire, and in some areas of intensively managed countryside around the county, hedgerows may represent the only significant wildlife habitat.

There is a very significant proportion of ancient or species-rich hedges around the county, and many of the hedges around North Marston are hundreds of years old.

Notable invertebrates include black and brown hairstreak are associated with the blackthorn hedges which are a common sight around the north of the county, and which are very common around the parish (*Buckinghamshire & Milton Keynes Biodiversity Action Plan - Hedgerows Habitat Action Plan 2.*)

The use of native hedging, therefore, is particularly important to both maintain a consistent environment for native wildlife but also to maintain the established visual setting in the Parish.

A list of possible plants for native hedging can be obtained from the following link:

<https://www.rhs.org.uk/plants/articles/misc/best-native-shrubs-for-hedging>



Detail of a blackthorn hedgerow

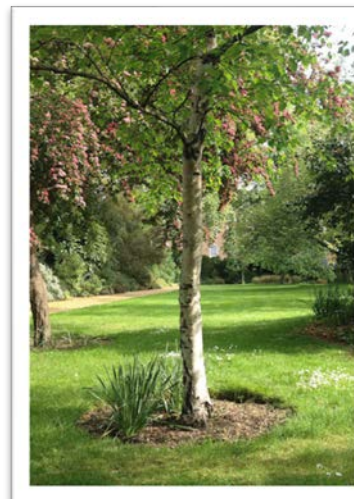
Native Trees

The use of native trees will provide food and shelter for local wildlife and will provide a garden with seasonal interest all year round. At least one native tree should be planted in the green space around new buildings if there is sufficient space for the tree to thrive and not cause problems for the property or neighbouring properties (*Refer to **Protection from Subsidence** above*).

Examples of native trees loved by wildlife which are suitable for use and present around the parish:

- Alder
- Silver Birch
- Blackthorn (also for hedging)
- Bird Cherry
- Wild Cherry
- Crab Apple
- Dog Rose
- Elder
- Hawthorn (also for hedging)
- Hazel

Silver Birch and Cherry in a garden setting



Garden planting

A selection of plants and shrubs which attract bees and butterflies should be planted in new gardens

Plants with single flowers, tubular flowers, or purple flowers are most attractive to bees as they can see the colour purple more clearly than any other colour.

Examples of some flowers attractive to butterflies and which thrive in local conditions:

- Buddleia
- Red Valerian
- Verbena
- Sedum
- Hebe

Sedum



7. Implementing the Design Code

The North Marston Design Code is intended to be a valuable tool in securing suitable, locally appropriate, and high-quality development in the parish of North Marston.

It should be used in different ways by the various participants in the planning and development process as follows:

Applicants, developers, and landowners	<p>As a guide to community and Local Planning Authority expectations on design, providing some certainty.</p> <p>Any planning proposals will be expected to follow the Design Code as planning consent is sought.</p>
Local Planning Authority	<p>As a reference point, embedded in policy, against which to assess planning applications for North Marston.</p> <p>The Design Code should be discussed with applicants during any pre-application discussions.</p>
Parish Council	<p>As a guide when commenting on planning proposals.</p> <p>The Council should ensure that the Design Code is complied with.</p>
Community Organisations	<p>As a tool to promote community-supported development, and to inform comments on planning applications in the parish.</p>
Statutory Consultees	<p>As a reference point when commenting on local planning applications</p>

Annex 1: The challenges for providing pavements and pathways in North Marston

There are three key benefits which pavements and pathways have for communities such as North Marston:

1. the safety of pedestrians
2. the ability to walk to local community facilities and public transport
3. encouraging healthier communities by encouraging more walking.

However, the NMNP Questionnaire from 2018 highlighted concerns regarding the lack of pavements around the village in replies to Questions 38 and 42. Providing a network of pedestrian pathways is becoming increasingly important in a village where there are several well supported local community facilities, and where residents regularly walk around the village and in the surrounding fields and public footpaths.

The map on p87 show the current extent of pedestrian paths and pavements in the village.

Nevertheless, there are many challenges for increased pavement provision in the village as detailed below:

- 1) The pavement is not complete along several roads within proposed Settlement boundary, for example:
 - a) Quainton Road has more residential properties than any other street in the village, but the pavement stops at 37 Quainton Road
 - b) Within the conservation area the pavement runs only as far as 9 Church Street.



End of pavement in Quainton Road



End of pavement in Church Street

Photographs in this Annex courtesy of Google Earth

- 2) Three cul-de-sac developments built in the past 40 years have not provided pavements on both sides of the road:



Dudley Close

– others with only one pavement are Shepperds Close and Carters Meadow

- 3) No pavements are available in the centre of the village, primarily in the historic Conservation Area where the streets are narrow - for example along School Hill leading to the Village School and St Mary's Church



No pavement along School Hill

- 4) The main road through the village, which splits into Granborough Road, High Street, and Portway, is only provided with a footpath on one side of the road for almost all its length.
- 5) On several roads in the village the pavement is not provided consistently on the same side of the road. If walking through the village residents are required to cross over the road to keep to a footpath. This occurs in the transition from High Street to Portway, as well as along Quainton Road and Schorne Lane.



Crossing Quainton Road to stay on a footpath

- 6) There are no pavements directly outside a number of key community facilities including “The Pilgrim”, the Wesley Centre, and St Mary’s Church. Whilst these facilities are not on the main roads that run through the village, the lack of dedicated parking bays for visitors adds to the risk for potential accidents in the absence of pavements.



No pavement or parking spaces outside the Wesley Centre



No pavement or parking spaces outside St Mary's Church

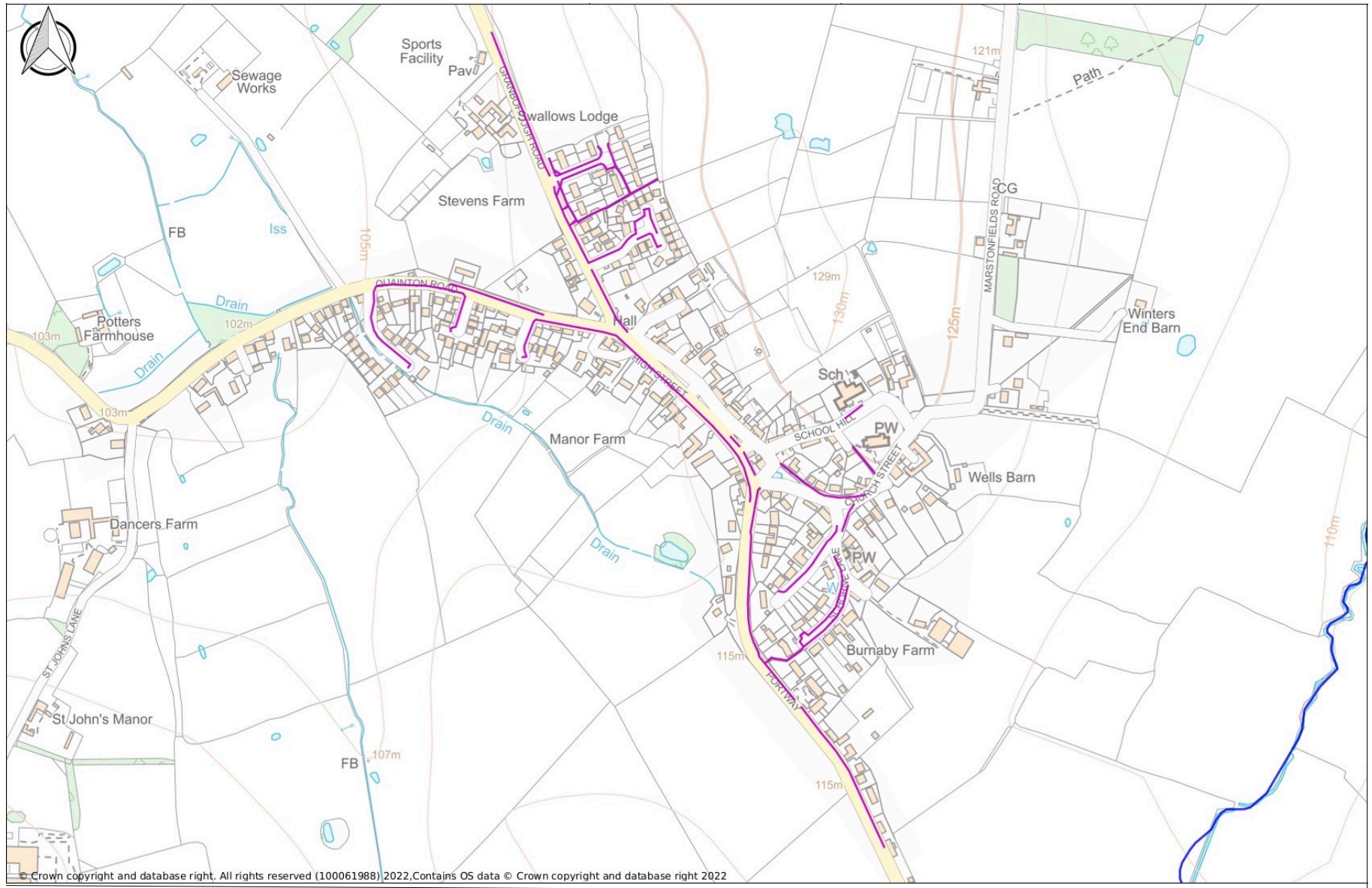


Outside St Mary's Church during a service – cars have nowhere else to park

- 7) Walking access to the village school from all directions is via narrow roads in the immediate vicinity of the school increasing the danger to both parents and children from cars and coaches. School Hill and Townsend are without pavements and Church Street has a pavement for only part of its length. There is a small pavement immediately outside the school with a parking bay for approximately 3-4 cars.
- 8) The lack of off-road parking facilities forces cars to park partly on the pavement along narrow roads, restricting access for pedestrians and buggies. Along the many roads without pavements in the centre of the village cars which have no alternative to parking on the road restrict pedestrian access in the same way.



Lack of off-road parking facilities result in cars necessarily restricting pedestrian access throughout the village



Pedestrian paths and pavements in North Marston at publication of the Neighbourhood Plan

Annex 2 - The challenges for safe vehicle parking in North Marston

This review details the key challenges facing vehicle owners in North Marston for the information of readers. It is recognised, however, that at this time the current situation with respect to parking cannot be changed because of existing restraints of space, and the constraints imposed the existing housing and road provision. The review is not written with any intent of recommending change in present practice.

The NMNP Questionnaire highlighted challenges for parking within the village in the responses to several questions (27, 42,44).

With the demise of a regular public transport bus service following a dramatic reduction in frequency on the local route, the village now relies even more heavily on private vehicles for access to the workplace, for secondary schooling, medical facilities, and post office access.

Whilst the questionnaire highlighted that many villagers enjoyed walking around the village on a daily basis, or used the community shop and other facilities regularly, the results also confirmed that residents need to make frequent trips outside the village by car. All these trips require households to own vehicles, with many owning more than one. All of these cars require parking.

However, there are a number of challenges for safe vehicle parking in North Marston as detailed overleaf.

1) **There is a lack of residential parking provision in many houses throughout the village:**

- a) Several houses on Quinton Road have either no or limited parking provision for multiple car households. As a result, owners need to park cars on the narrow pavements, or, where there is no pavement, park cars in front of houses on the narrow road outside. This has resulted in kerb and verge damage on several occasions from farm traffic attempting to squeeze past.



Parking on Quinton Road

Photographs in this Annex courtesy of Google Earth

- b) Parking is limited in several more modern developments, particularly the culs-de-sac radiating from Quinton Road. As a result, cars in the closes regularly park near the junction with Quinton Road as shown opposite.



Parking in Dudley Close off Quainton Road

- c) There is no option of off-street parking for various houses along the High Street, on School Hill and Church Street. This leads to on-road parking with a number of consequences:
- I. the road width becomes increasingly restricted making it difficult (and sometimes impossible) for other vehicles to pass
 - II. in the absence of a pavement the access for pedestrians is further restricted
 - III. there is potential for blocking other drives and residents' access to properties



"Parking" in High Street

2) There is Insufficient parking for access to community amenities:

- a) There is very little parking for parents outside the school, with only 3 or 4 spaces available. Parents are permitted to use “The Pilgrim” car park and then walk to school up School Hill, but there is no pavement, and this can be difficult with babies and buggies.
- b) The Community Shop car park has no marked spaces encouraging customers to park with more concern for other users.
- c) The Memorial Hall also makes use of the shop car park, but this has a maximum capacity of only about 10 cars, and the Hall’s capacity exceeds 100 people. On-road parking at the Hall is also restricted because of its position at the junction of 3 roads.



Restricted parking at the school gates



No markings on the shop car park

- d) Both St Mary's Church and the Wesley Centre are on narrow roads with no pavement. There is no option for visitors and worshippers other than to park on the roads outside, restricting access for other road users and pedestrians.



St Mary's Church on Church Street



The Wesley Centre on Schorne Lane

- 3) Limited parking provision, necessitating roadside parking, reduces visibility for other drivers especially at night-time. This leads to an increased and known risk of road accidents.**
- a) Cars which need to park along Granborough Road on the road or partly on the pavement can limit visibility for cars driving through the village – particularly around road junctions for those driving into the village from Granborough.
 - b) Cars parked on Portway can limit visibility for other traffic, which is often speeding on its way to Aylesbury, especially near the bends along the road. Accidents have occurred near these bends in recent years with cars being written off following forceful collisions.
 - c) Cars regularly park on Quainton Road close to the junction with the High Street. This is in the direct line of sight for cars turning right into the narrower Quainton road from Granborough Road and can obstruct the visibility of vehicles turning left from High Street.

- 4) Cars parked on the roads around the village centre sometimes block access to pavements completely. This results in great difficulties for everyone wishing to use the pavement, especially mothers with buggies and wheelchair users.**
- 5) The largest parking facility at the Sports Ground is not regularly used as an alternative by residents because of its distance from most houses in the village, and the danger of walking along the busy Granborough Road with no footpath for some of its length.**

On-site parking is provided at the Sports Ground on the outskirts of the village on the road to Granborough. This provides adequate parking for users of the Sports Ground except in exceptional circumstances. However, off-site parking when required can be problematic as cars park on the grass opposite or at the kerbside obstructing visibility and hampering access to and exit from the site itself.