Informal Guidance



Front Driveway Design Guidance

2023



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Introduction

As part of our commitment to climate change, this document provides guidance on the development and design of driveways and the permeable options to consider when laying hardstanding in a front garden, whilst developing an attractive, secure, sustainable environment.

To accompanying this document we have informal guidance on Dropped Kerbs/Vehicle Crossovers and notes on permitted development for Electric Vehicle Charging Points ¹

The traditional appearance of our streets has changed over time, with many of our front gardens now functioning as utility spaces. This coupled with the decrease in garden sizes of new homes, means that there is less space for flora and fauna to flourish, leading to a marked decline in biodiversity².

Individually paving over a front garden may not make a significant difference, but collectively, paved driveways decrease wildlife, by taking away their natural habitat, and increases the risk of flooding and pollution of our waterways. In extreme downfalls pollutants from hardstanding such as petrol, oil, and brake dust are transported with the surface water run-off via the roadside drainage directly into the sewage network and into our streams and rivers. Polluted water that enters the foul water sewers can overflow and pass as untreated sewage into our watercourses, incidences of which are occurring more frequently.

It is the councils' aim to address the loss of biodiversity and flooding through facilitating good design³ with a flexible approach to driveway development, which reflects the local character and unique features of individual properties and street scenes. Everyone can play their part in tackling climate change, loss of biodiversity and localised flooding by thinking of greener design solutions where planting and parking are combined.

¹ Please note there are instances when installation of a charging point will not be considered Permitted Development

² The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

³ The loss of biodiversity and the effect the proposal has on the character of the property and street scene may outweigh the personal benefits of on-site parking and will be considered when determining a planning application and in an appeal against a planning decision.

Front Driveway - Planning Considerations

"Where planning permission is required, account will be taken of the need for additional off-road parking provision and the following considerations will apply:

- Hardstanding should be proportionate to the size of the dwelling and the relevant car parking standards and avoid paving over a significant amount of the forecourt. Soft landscaped planted border along all boundaries should be provided in all spaces not specifically defined as parking or turning spaces.
- Allow sufficient space between the car and the dwelling to allow access to the front door and side of the property. One metre should be the minimum space between or around car parking spaces.
- Front garden parking must be designed to avoid cars overhanging the pavement. Please refer to the Space Criteria Table minimum measurements required in the KCC <u>application guidance</u>⁴
- Should not include gates. Where gates already exist, they must not open outwards and should allow enough space for them to be opened inwardly (if relevant) whilst a car is parked. Please note: Gates will not receive planning permission unless they are set well back from the edge of the carriageway/footway as they can result in a vehicle obstructing the highway to the detriment of road safety and the free flow of traffic including pedestrians and cyclists. For a car they would need to be set back a minimum of six metres, vehicle plus pedestrian access to gate.
- Gates should enable a pedestrian on the footway to have clear visibility of any vehicle exiting (i.e., they should be railings or have some form of transparency) and should not be of a height that blocks visibility of passing pedestrians and should enable visibility from the footway.
- Avoid removing any existing trees or established hedges and introduce new planting wherever possible.
- Introduce permeable paving to new areas of hardstanding to minimise rainwater run-off issues, as per the requirements of Permitted Development.
- There should be no water run-off from the forecourt onto the public highway
- If loose surfacing is proposed, a minimum 1 metre in depth of non-loose hardstanding should be provided at the front edge of the driveway with the
- $^{4}\ https://www.kent.gov.uk/_data/assets/pdf_file/0003/139485/Dropped-Kerb-Application-Guidance.pdf$

public highway. **Please note**: where an application is proposing the use of loose gravel the Highway Authority will generally only permit gravel at least 5 metres away from the Highway boundary (not carriageway) If deposited on the highway loose gravel is a danger to other road users and is an offence under the Highways Act

- Repair or restore any original decorative tiled paths that are a characteristic or historic feature of the existing dwelling.
- Pedestrian and vehicle visibility splays should be provided.

Aside from the potential need to gain planning permission if a new dropped kerb and crossover is required, applicants must apply for and obtain consent via the relevant landowner (if crossing private / third party land, such as amenity strips) as well as the highway authority."⁵



Avoid removing existing trees and shrubs and paving over a significant amount of the forecourt.



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⁵ https://www.gravesham.gov.uk/__data/assets/pdf_file/0004/1193170/Householder-Extensions-Alterations-Design-Guide-SDP-including-Schedule-of-Representations.pdf

Front Garden Boundary Treatments for Visibility Splays – Planning Considerations

Your property can have a significant visual impact and should be designed to take account of any dominant form of boundary treatment in your street, taking into consideration materials and detailing. Boundaries define the relationship between your dwelling and the street and include garden walls, fences, and hedges. Existing boundary treatments and garden walls should be retained where they allow sufficient visibility splays to avoid open planned front gardens. A strong front boundary treatment should be incorporated into proposals, particularly where this is characteristic of the street. Where hedges and trees are an important feature, these should be kept maintaining the character of the street and sustaining biodiversity.

When planning permission is required, the following considerations will apply:

- Respond to the design of the dwelling.
- Be consistent with the height of other enclosures on the road.
- Avoid the introduction of different styles along the street. Treatments should reinforce the dominant boundary type along the street, ensuring consistency with the style and age of the property.
- Consider well-maintained planting as an alternative solution and retain any hedgerow. Encourage natural surveillance of the street and help design out crime.
- Incorporate visibility splays and sight lines for pedestrian and vehicular safety.
- Hedges are also encouraged given their air quality benefits⁶

Planning permission is not required to plant trees or a hedge as a boundary and they are a good way to increase biodiversity instead of a wall or fence, however when creating a driveway these may be subject to conditions if they obstruct highway visibility or cause potential danger to public highway safety. Remember each planning application is different and considered on its individual merits, therefore development that has been approved elsewhere might not be applicable to your application due to material considerations.



Boundary treatment responding to the style of the dwelling with planting to enhance biodiversity and increase wildlife habitat.



Consider the original garden layout and maintain a sense of place.

⁶ https://www.gravesham.gov.uk/__data/assets/pdf_file/0004/1193170/Householder-Extensions-Alterations-Design-Guide-SDP-including-Schedule-of-Representations.pdf

Front Garden Hardstanding Guidance

Design

The main consideration for driveway design is the effect your proposal will have on the character and appearance of your property and the street scene. Development should be sympathetic and consistent with the local character of your street to maintain a sense of place⁷. Design to compliment your property, not detract from it. Consider its age and any unique features, aim to keep original footpaths and bear in mind colours and shapes of tiles, bricks and render and original existing boundary treatments. These should be incorporated or referenced in your design.

Proportions should be sympathetic to your property and accord with the original layout of your garden. Consider the balance between green space and the amount of hard surface that you need to park and manoeuvre your vehicle. Avoid the loss of biodiversity and use the development as an opportunity to maintain, restore and enhance natural habitats.

Good design is a key to creating a better place for people to live. By facilitating appropriate design, through the planning process, your driveway can make a material contribution to the character and appearance of your property, the street scene and increase biodiversity. (See Appendix 1 for examples of garden/driveway layouts)

If your property is a listed building, in a conservation area or a subject to an Article 4 Direction, there will be a presumption against paving over the entire forecourt for the benefit of parking. New proposals should seek to retain at least half of the garden as soft landscaping. Demolition of a boundary wall may require planning permission or listed building consent. It is advisable to seek advice via the councils Pre-Application service prior to commencing any works

⁷Gravesham's Local Plan Core Strategy 2014 Policy CS19: Development and Design Principles, sets out that new development will be visually attractive, fit for purpose, locally distinctive and conserve and enhance the character of the local built, historic, and natural environment. Design should integrate well with the surrounding local area and meet anti-crime standards The design and construction of new development will incorporate sustainable construction standards and techniques, be adaptable to reflect changing lifestyles, and be resilient to the effects of climate change.



Development in keeping with the local character and street scene.

The importance urban greening

"Together, our gardens are a vast living landscape. With an estimated 24 million gardens in the UK, the way they are cared for can make a big difference to the natural world"

Climate change has increased the frequency of high-volume rainfall events, is heating up our towns and cities and putting pressure on nature. Consequently, there is a need for urban greening to manage surface water flow, to reduce urban heat island (**UHI**) effect⁸ and to help address the decline in biodiversity. Over the years we have lost the trees in streets that provided shade, habitat and removed pollutants from the air. This is being tackled in new developments with the re-introduction of planting trees in streets and targeted green and blue infrastructure, implemented through policies in the Local Plan and National Policies⁹. In older established residential areas trees have been lost on our streets and in our front gardens. By maintaining and increasing the amount of greenery in driveway design we can provide stepping-stones for biodiversity and increase the amount of natural pollutant removal that trees and shrubs provide.

"Urban trees have a great value to the environment, they:

- Benefit mental and physical health,
- reduce surface water run-off,
- provide habitat and connectivity for wildlife,
- lower noise and combat air pollution,
- Increase property values, and
- reduce temperatures in towns and cities "10

⁸ The difference in temperature between urban and less-developed rural areas depends on how well the surfaces in each environment absorb and hold heat. Heat islands contribute to higher daytime temperatures, reduced night-time cooling, and higher air-pollution levels. A consequence of this can lead to higher energy consumption in cooling urban buildings

⁹ NPPF Paragraph 131 (existing trees are maintained wherever possible) https://www.gov.uk/guidance/nationalplanning-policy-framework/12-achieving-well-designed-places

¹⁰Kent County Councils Tree Establishment Strategy 2022-2032 consultation document March 2022





The above street scenes illustrate the restorative impact urban greening has on the street scene.

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Planting

Consider planting a diverse mix of native trees, shrubs and herbaceous plants that have a high wildlife value and attract pollinating insects. Where you are proposing a new hardstanding, introduce permeable paving to new areas of hardstanding to minimise rainwater run-off issues, as per the requirements of Permitted Development.

Replacing grass and flower beds with non-permeable surfaces has reduced the amount of water that soaks into the ground and replenishes our underground aquifers, therefore when drawing up plans to include a driveway and hardstanding to your front garden, we reiterate that it is important to consider the balance between hard and soft landscaping and the use of a permeable surface¹¹. An excessive area of unbroken hardstanding, even if it is permeable, will create a negative impact on the street scene and remove rather than maintain or enhance biodiversity.









Planting native species with a high wildlife value will attract pollinating insects.



¹¹This is a requirement for permitted development, a maximum area of 5m2 is permitted development when using a non-permeable surface.

What is a permeable surface?

A permeable surface allows water to soak through the surface into the underlying sub-base where the water is stored temporarily before it soaks into the ground or flows to a drain. Even when a permeable surface is connected to a drain it acts as a buffer to slow the rate of water flow and therefore reduces the volume of water entering the drainage system. Most of the water that falls on a permeable surface is soaked up into the blocks, asphalt or other material and evaporates back into the air.

There are a variety of <u>methods</u>¹² for creating a permeable (porous) surface (see glossary for details of terms used) as follows:

Please note: where an application is proposing the use of loose gravel the Highway Authority will generally only permit gravel at least 5 metres away from the Highway boundary (not carriageway) If deposited on the highway loose gravel is a danger to other road users and is also an offence under the Highways Act.



There are a wide variety of materials (contemporary and traditional) that can be used to create a permeable surface on your driveway.

 $^{^{12}\} https://www.gov.uk/government/publications/permeable-surfacing-of-front-gardens-guidance/guidance-on-the-permeable-surfacing-of-front-gardens$

Wheel tracks

To keep hard surfaces to a minimum a driveway can be created with two paved tracks where the wheels of a vehicle go. These can be surfaced with blocks, asphalt or concrete but to provide a durable construction should have a sub-base below. The area around the tracks can be surfaced with gravel, planted with grass or low growing plants. Water must drain from the tracks into the surrounding permeable area. Typical tracks are between 300mm and 600mm in width.

Pros:

- Simple to construct,
- reasonably priced,
- easy to combine planting to provide visual enhancement to your driveway layout,
- may not require planning permission if the area covered by the tracks is less than 5sq metres.

Cons:

• Needs maintenance to keep looking tidy when combined with loose gravel. Please refer to Planning Considerations when using loose gravel



Wheel tracks are a simple solution to a driveway.

Reinforced grass

Plastic and concrete reinforcement systems are available that increase the strength of a grass surface and allow cars to drive over it without causing ruts and reduce erosion. The species of grass should be specified by the manufacturer of the system to ensure it is suitable for the intended location. Specific low growing grass that does not need a lot of mowing can be used.

Pros:

- Simple to construct and maintain,
- Attractive, can help to reduce temperatures around the house,
- absorbs pollution and dust and reduces noise.

Cons:

- May need mowing and maintenance to look tidy,
- vehicles parked continuously for extended periods may hinder grass growth

Hard permeable and porous surfaces

Hard surfacing which allows water to soak into it can be built with porous asphalt, porous concrete blocks, concrete, or clay block permeable paving. The material has open voids across the surface or around the edges of blocks that allow water to soak in. It is important that any sub-base is open graded so that it would allow water to pass through or store the water for a while if it cannot soak into the ground as quick as the rain falls (two examples of which are known as 4/20 and Type 3 sub-base).

Pros:

- Hard and durable with a long service life if correctly constructed,
- required little maintenance compared to other surfaces,
- wide variety of shapes and colours are available for concrete blocks.

Cons:

- can be more expensive than other options,
- required knowledgeable contractor to construct correctly (porous asphalt should be provided and laid by a specialist company)









Permeable surfaces are available in a variety of materials and styles.

Rain gardens

A depression to collect and store rainwater running from conventional surfaces (asphalt, concrete, and block paving). Water from a conventional paved surface can be directed onto a border, rain garden or into a soakaway. An area of garden can be formed into a depression to collect and store rainwater from conventional impermeable surfaces (asphalt, concrete, and block paving)., before slowly allowing it to soak into the ground or to flow to the drains. The depressions can be located along the edge of the drive or as a larger area in the garden at a low point. The depression can be planted with suitable plants to help slow runoff or gravel, or cobbles can be used as decorative features. There may be a gravel filled trench below it to increase the storage capacity and allow water to soak into the ground more easily. Soakaways are a similar idea except that water is piped into a gravel filled trench or geocellular box and allowed to soak into the ground. Many houses have the roof downpipes connected to soakaways. They are more suitable for houses with larger front gardens as they require space and need to be located a suitable distance from buildings. Building regulations state you cannot have a soakaway within 5 metres of a building or the highway, which means the front garden would have to exceed 11 metres at least, 5 metres distance from each plus a minimum of one metre for the soakaway.

Any deep excavations close to the highway may require approval from Kent County Council to ensure the fabric of the highway is not damaged. Any works to repair the highway would be at the expense of the applicant or their contractor.

Pros:

• Can use conventional impermeable surfaces such as block paving, asphalt, or concrete draining to the rain garden (although this will require planning permission if over 5m²).

Cons:

- Requires deep excavations,
- requires space to construct,
- requires knowledgeable contractor to construct correctly,
- requires suitable ground conditions (sand or gravel soils)



Building regulations state that you cannot have a soakaway within 5 metres of a building or highway. Deep excavations close to the highway may require approval from Kent County Council.

Soakaways

Where water is piped or directed from impermeable surfacing into a gravel-filled trench or Geo cellular container and allowed to soak into the ground. Building regulations state, you cannot have a soakaway within 5 metres of a building or the highway, which means the front garden would have to exceed 11 metres at least, 5 metres distance form each plus a minimum of one metre for the soakaway

Rainwater harvesting

Water butts and underground rainwater tanks can be used to complement the drainage methods discussed above to reduce runoff from a property. The simplest systems are water butts where the water is used to water gardens or for washing cars. More complex systems use underground tanks and pumps to provide water to outside taps. The underground tanks can collect rainwater from roofs or from permeable driveways. The water can be used inside the house for toilet flushing, but this is more complex, and it is best to consult a specialist rainwater harvesting company (see the UK Rainwater Harvesting Association website). Rainwater harvesting will not only help reduce rainwater runoff into the drains but will also reduce the amount of mains water used. This can contribute to water efficiency and provide a saving on water bills if using metered water.

Pros:

- Reduced demand for mains water,
- water is naturally soft,
- if water is metered it can reduce bills

Cons:

- installation requires specialist understanding,
- can be an expensive option,
- difficult to retrofit,
- overflow required to drains or soakaway

Drainage

The parking area within your property must be built so that water does not drain from it across the highway. Suitable drainage must be provided within the boundaries of your property. The most appropriate of which for dwellings in an urban area or with limited space is via a hard permeable paving, where space permits other types of drainage may be acceptable.

Who can construct permeable and porous driveways?

It is best to use an experienced landscape or driveway contractor. The company supplying materials may also have a list of approved/preferred contractors. Consider obtaining references from previous clients.

Appendix 1

Examples of designs incorporating greenery

If you have decided, you need to park outside your house there are ways to keep your garden green and reduce the impact that paving has on the environment.

A garden with greenery can provide screening and privacy and create an attractive green space, as the examples below show for a Terraced, Semi Detached and Detached properties.

The Terrace

Front garden can be small and needs careful planning to maximise space. To keep hard surface to a minimum, consider parking created with just two-wheel tracks to take the vehicle. The rest of the garden can remain or be mixed with other permeable surfaces.

- trees and shrubs have been planted in dead spaces
- walls covered in climbers

• containers added to bring colour throughout seasons. planting suitable species between the wheeltracks will survive if the car is moved regularly.

Biodiversity can be further enhanced through facilitating habitats and routes for wildlife by incorporating:

- trees*,
- wildflowers,
- bat and bird boxes,
- bee and bird bricks and
- hedgehog highways.

Some plants will tolerate a position underneath a car that is moved on a regular basis, such as thyme and creeping jenny.

*Planting a suitable tree, relevant to the size of your garden, can maximise useable space at ground level whilst providing much needed biodiversity net gain in the trees canopy.'



© RHS



Climbers. border planting and containers soften the hard surfaces on driveways.

Semi Detached

Front gardens are usually larger than terraced properties and may be large enough to accommodate more than one car. The main parking space is in front of the door, while the second is off to the left, although this arrangement means that cars may sometimes need swapping, it illustrates there is room for a garden with all its benefits.

- A low hedge has been planted to filter dust from the street and provide a boundary.
- Trees and shrubs have been planted in spaces not used for vehicles

Biodiversity can be further enhanced through facilitating habitats and routes for wildlife by incorporating:

- trees*,
- wildflowers,
- bat and bird boxes,
- bee and bird bricks and
- hedgehog highways.

*Planting a suitable tree, relevant to the size of your garden, can maximise useable space at ground level whilst providing much needed biodiversity net gain in the trees canopy'





Trees in streets provide shade, habitat and remove pollutants from the air and enhance biodiversity.

Detached Town House

Frontages vary but are usually greater in size. This example shows the possibility of parking three cars. The first sweeps to the right and parks alongside an existing wall and in front of planting helping to screen it from the ground floor rooms. The second car fits on pavers to the left and a third could be parked on the lawn which has been reinforced with plastic mesh.

- Permeable pavers
- Lawn with reinforced grass (for additional parking)
- A low hedge has been planted to filter dust from the street and provide screening
- Existing footpath retained

Biodiversity can be further enhanced through facilitating habitats and routes for wildlife by incorporating:

- trees*,
- wildflowers,
- bat and bird boxes,
- bee and bird bricks and
- hedgehog highways

*Planting a suitable tree, relevant to the size of your garden, can maximise useable space at ground level whilst providing much needed biodiversity net gain in the trees canopy.'







habitats and corridors and provide privacy.

Glossary

Aquifer	A body of porous rock or sediment saturated with groundwater. Groundwater enters an aquifer as precipitation seeps through the soil. It can move through the aquifer and resurface through springs and wells.
Biodiversity Net Gain	Biodiversity Net Gain (BNG) is an approach to development, and/or land management, which aims to leave the natural environment in a measurably better state than it was beforehand.
Classified Road	These are roads with an A, B or C designation
Urban Heat Island	An urban heat island (UHI) occurs when an urban area experiences much warmer temperatures than nearby rural areas. The difference in temperature between urban and less-developed rural areas has to do with how well the surfaces in each environment absorb and hold heat.
4/20 aggregate	See Open graded aggregate or sub-base.
Geocellular box	Plastic crates that are used to make a void in the ground to store rainwater temporarily.
Geotextile	A plastic fabric that is permeable so that water can flow through it, but it will hold soil in place.
Groundwater	Water contained in the soil or rock beneath the ground.
Hardcore	A gravel that is made up of a range of stone sizes including fine material that fills the voids between the larger stones. This makes it hard for water to pass through it quickly.
Impermeable	Surface that will not allow water to pass through it.
Open Graded Aggregate	A gravel that is made up of a limited range of stone sizes so that there are open voids between the individual stones. This allows water to flow freely through it. Typical materials are known as 4/20 and Type 3 sub-base. You may need to contact one of the companies that supply the permeable surfacing to find a supplier of these materials.

Driveway Design Guidance

Permeable surface	Any surface that allows water to soak through it. The surface can be permeable or porous. The surface is made of materials that allow water to soak through e.g., porous concrete and asphalt, gravel or from impermeable materials laid with gaps between blocks.
PD rights	Permitted Development rights PD - Alterations or additions that are allowed to a house and the surrounding gardens and yards that do not require an application for planning permission. Permitted Development rights for householders are set out in the Town and Country Planning (General Permitted Development) Order 1995. A restriction on the paving of front gardens was introduced in an amendment to the order coming into force on 1 October 2008. In some areas of the country, known generally as 'designated areas,' permitted development rights are more restricted. If you live in a Conservation Area, a World Heritage Site, a National Park, an Area of Outstanding Natural Beauty or the Norfolk or Suffolk Broads, you will need to apply for planning permission for certain types of work which do not need an application in other areas. There are also different requirements if the property is a listed building. The general advice is that you should contact your local planning authority and discuss your proposal before any work begins. They will be able to inform you of any reason the development may not be permitted and if you need to apply for planning permission for all or part of the work.
Porous surface	A material that has a lot of fine holes throughout that allows water to pass through it e.g., asphalt, and grassed surfaces.
Rain garden	A landscaped depression in the garden that collects rainwater from a driveway and allows it to soak slowly into the ground or to the drains
Rainwater harvesting	Collection of rainwater from roofs and paved areas to use for non-drinking purposes (e.g., watering the garden and washing cars).
Sub-base	A layer of compacted gravel that spreads the load from wheels so that the soil below is not overstressed.
Soakaway	An underground chamber or gravel filled trench that collects water from the driveway and allows it to soak into the ground.
Type 1 sub-base	A gravel that is made up of a range of stone sizes including fine material that fills the voids between the larger stones. This makes it hard for water to pass through it quickly. It is similar to hard core but of better quality.

Type 3 sub-base See Open graded aggregate or sub-base.

Water butt A small scale garden water storage device which collects rainwater from the roof.

Further Information*

Interpave, the precast Concrete paving and kerb association - https://www.paving.org.uk/

The Planning Portal has teamed up with the Chartered Institute of Architectural Technologists (CIAT), Federation of Master Builders (FMB), the Royal Institute of British Architects (RIBA) and the Royal Town Planning Institute (RTPI) to help you find a professional who can assist you in progressing your project and achieving your aims. https://www.planningportal.co.uk/planning/planning-applications/find-a-trade-professional

The British Association of Landscape Industries is the leading Trade Association representing all landscape professionals - from design, build and maintenance through to supply, training, and education. https://www.bali.org.uk/home/

The Royal Society for the Protection of Birds (RSPB) Planning for wildlife - https://www.rspb.org.uk/birds-and-wildlife/advice/gardening-for-wildlife/ plants-for-wildlife/

Wildlife gardening | The Wildlife Trusts - https://www.wildlifetrusts.org/gardening

The Royal Horticultural Society, advice on plants suitable for driveways - https://www.rhs.org.uk/garden-inspiration/plants-we-love/10-easy-plants-fordriveways

*The details above are correct at the time of publication and are for informational purposes only.

Driveway Design Guidance

