

Delegated Budgets

A Guide to the Cost of Highway Works

This guide provides cost information about the type of highways works schemes that Warwickshire County Council commonly receive requests for. It is intended to act as a guide for Members when considering works in their area.

Costs for items are approximate and based on construction cost only. Individual items are not intended to represent a complete scheme and should typically be considered as components of a broader project. ***They do not include fees involved with the design and implementation of a scheme, the cost of any legal procedures involved unless stated, or the traffic management to support the installation of such measures.***

These costs are produced as a guide but, as each site is unique, costs can vary. Therefore scheme costs are confirmed during the design stage, prior to the order for delivery being placed.

In the event of damage, non-standard or decorative assets, such as Glasdon gateways, may be repaired or replaced with standard materials where these serve the same demonstrable function. Bespoke features are maintained in line with standard procedures and are not guaranteed to be retained indefinitely.



Routine schemes

Routine schemes can be agreed with the Highway Area Surveyor (HAS). They require no or minimal additional design work and are highly recommended options as Delegated Budget schemes.

Delivery timescales for routine schemes

Routine schemes will be completed within the financial year when submitted by the Delegated Budget works deadline.

Signage Schemes

Sign cleaning

Cleaning of road signs maximise retro-reflectivity and improves visibility for drivers, increasing likelihood that signs will be seen.

INDICATIVE COSTS

£15 - £170

NB: costs vary by sign type and size and number of signs in works package

Replacement posts

Replacing old or damaged signposts ensures that highway signs are correctly and safely supported.

INDICATIVE COSTS

£183 - 260 per standard post (including cost of removal of existing post).



Replacement signs

Replacing old or damaged signs improve their effectiveness and visibility.

INDICATIVE COSTS

Up to 600m: £30 - £60
750mm - 900mm: £60 - £90
1200mm and over: £130 - £200

Chevrons: £50 - £150
(including cost to remove existing sign)

NB: costs vary by type and size

NB: New signage schemes require a design and so sit under 'Detailed Design Schemes'.

Drainage Schemes

Gully Jetting

Jetting can be carried out to address existing flooding or drainage issues or to improve slow running gullies. Proactive jetting can help prevent flooding issues developing.

INDICATIVE COSTS

£5,320 per week (minimum number of sites required to build week of work).



Drainage investigation and repairs

Drainage repairs can reduce the risk of ponding and improve traffic safety.

INDICATIVE COSTS

To be confirmed on case-by-case basis



Drainage grips

A grip is a shallow excavation in the verge that connects the carriageway to the roadside ditch. It is used to channel water away from the carriageway and into ditches, where there is an absence of drainage systems i.e. in rural areas.

INDICATIVE COSTS

To be confirmed on case-by-case basis

Street furniture schemes

Repair/replace existing street furniture

Repair/replacement of existing street furniture can enhance an outdoor or public space, or to assist pedestrians and other highway users.

INDICATIVE COSTS

Bollards (wooden, cast iron or plastic): **Up to £350**

Pedestrian guardrail:
£100 - £160 per m (plus £60 per m for painting)

Re-paint existing traffic signpost:
£25 per post

Planters: **To be confirmed on a case-by-case basis**

Cycle stands: **To be confirmed on a case-by-case basis.**

Footway, cycleway & carriageway schemes



Kerbing

Road kerbs can be used to prevent over-widening of the carriageway; act as a barrier or demarcation between traffic and pedestrians or verges; provide a physical 'check' to prevent vehicles leaving the carriageway and be used to form channels along which surface water can be drained.

INDICATIVE COSTS

New/Replacement kerbs (standard concrete kerbs):
£50 - £70 per m

Footway/footpath/ cycleway repairs and patching

Stresses from traffic, weather and moisture effect the condition of the footway and can result in defects that compromise pedestrian/ cycle use. Defect repairs help ensure continued unobstructed free use.

INDICATIVE COSTS

($<100\text{m}^2$) **£20 - £135 per m²**



Carriageway repairs and carriageway patching

Stresses from traffic, weather and moisture effect the condition of the carriageway and can result in defects that affect or compromise ride quality and use of the amenity. Defect repairs help ensure continued unobstructed free use.

INDICATIVE COSTS

($<500\text{m}^2$) **£20 - £135 per m²**



Siding out

Siding out removes overgrown verge and detritus from the highway, ensuring continued unobstructed free use and keeps important infrastructure assets e.g. water hydrants, clearly visible and accessible.

INDICATIVE COSTS

Up to £5 per m



Other Highway Works



Hedge Cutting/Flail Verge Moving

Maintenance of hedges and verges adjacent to footways/cycleways/carriageways ensures continued unobstructed free use and can prevent sight lines from being obstructed. Hedges are not cut during the bird nesting season (mid-March to the end of July).

INDICATIVE COSTS

£800 per day

Detailed design schemes

Detailed Design Schemes require design by the Minor Works Team and/or involve significant input from other teams within Warwickshire County Council. Detailed Design Schemes are recommended options as Delegated Budget Schemes but should be agreed early in the financial year to ensure delivery in the same financial year.

Delivery timescales for detailed design schemes

Detailed Design Schemes are highly likely to be completed within 12 months when submitted by the Delegated Budget works deadline.

Footway, cycleway & carriageway schemes

Footway/ footpath/ cycleway resurfacing

When defects in the footway are widespread over an area, resurfacing may be necessary to restore the structural integrity and safety of the pavement. Resurfacing works can also greatly enhance the street scene.

INDICATIVE COSTS

(>100m²) £25 - £90 per m²



Carriageway resurfacing

When defects in the carriageway are widespread over an area, resurfacing may be necessary to restore the safety, structural integrity, and ride quality of the carriageway.

INDICATIVE COSTS

(>500m²) £20 - £80 per m²



Surface treatments

Surface dressing adds thin layer of bitumen and chippings to waterproof and preserve the life of a carriageway and provides a new skid-resistant surface. Works rely on warm weather to be successful and are delivered between May and August only. Additional patching works in advance of dressing are likely to be necessary.

NB: Schemes should be identified in the preceding financial year to ensure their inclusion in the annual programme.

INDICATIVE COSTS

To be confirmed on a case-by-case basis

Dropped crossings

Dropped crossings provide a clear indication of the presence of a preferred crossing location helping footway users recognise the route they should follow when travelling from one side of the carriageway to another. Design is required to ensure that the proposed location is safe and appropriate.

INDICATIVE COSTS

£4,000 - £5,000 per set



Verge hardening

Verge hardening schemes involve the removal of existing soft verges and installation of asphalt or grasscrete and can be used as a solution where parking issues are present. As part of the works other elements typically required to build the job include patching, kerbing, material disposal. Design is required to ensure that the proposed location is safe and appropriate

INDICATIVE COSTS

To be confirmed on a case-by-case basis



Forestry works

Tree planting

New trees can enhance the street scene, provide shade, and habitats for wildlife. Design is required to identify suitability of tree species.

INDICATIVE COSTS

New street tree:

£250 - £450 (varies by species)



Tree grilles and tree pits

Tree grilles and pits can prevent potential damage to the highway by tree roots and protect the tree from damage from the highway environment.

INDICATIVE COSTS

Per grille: **£500 - £2,000**

Per tree pit: **£400 - £500**

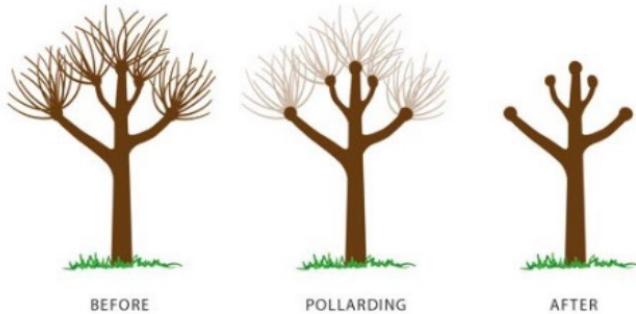


Pollarding

Pollarding is a pruning system involving the removal of the upper branches of a tree, which promotes the growth of a dense head of foliage and branches and a reduction in overall crown size.

INDICATIVE COSTS

From £400 per tree



Crown reduction

Crown reduction reduces the height and spread of trees canopy reducing risk of dead or weak branches causing issues in the public highway during severe weather events.

INDICATIVE COSTS

From £400 per tree



Street furniture works



New bus shelters

Bus shelters keep those waiting for a service protected from the elements, leaving the pavement clear for passing pedestrians. Design is required to ensure that the proposed location is safe and appropriate, and in accordance with existing guidance and policy.

INDICATIVE COSTS

£5,000 - £15,000

New pedestrian guard railing

Pedestrian guardrail can be used to guide pedestrians to safe crossing points, stopping them from entering the carriageway and points where it could be potentially dangerous. Design is required to ensure that the proposed location is safe and appropriate, and in accordance with existing guidance and policy.

INDICATIVE COSTS

£210 per m



New birdsmouth fencing

Birdsmouth fencing is a low wooden fence which provides boundary demarcation. It can be used to discourage highway users from parking or walking in planted borders or lawned areas.

INDICATIVE COSTS

£55 per m



New bollards

Bollards are used to protect pedestrians. They can also be used to help guide vehicles in traffic calming measures and prevent undesirable parking behaviours. Design is required to ensure the appropriate type of bollard is chosen and that the proposal is safe, appropriate, and in accordance with existing guidance and policy.

INDICATIVE COSTS

Wooden: Up to £350 each

Cast iron: £350 each

Plastic: Up to £300 each



New cycle stands

Installation of cycle stands support the authority's active travel strategy by enhancing secure parking options and improving accessibility for bicycle users.

INDICATIVE COSTS

To be confirmed on a case-by-case basis

Road Marking Schemes

Renewal/new road markings (advisory)

Road markings can be used to guide road users, direct traffic flow, improve road safety and help to improve traffic flow efficiency.

INDICATIVE COSTS

Lining: Up to £12 per m

Symbols: Up to £400 per symbol

Letters: Up to £25 per letter

Road studs: Up to £25 per stud

Blacking out of existing lining (non-permanent):
£4 per m

Removal of lining by hydro blasting:
£4,000 per day

NB: Road markings which require a Traffic Regulation Order (TRO) to ensure they are enforceable are 'Complex Detailed Design Schemes.'



Highway drainage schemes

New drainage schemes

Poor drainage can cause water to accumulate in the highway. Design is required to ensure appropriate, site-specific measures are considered.

INDICATIVE COSTS

To be confirmed on a case-by-case basis



Signage schemes

Village gateways

Village gateways include the installation of new entry signs and supporting lining works. These are installed at the start of a 30mph speed limit.

INDICATIVE COSTS

£3,150 - £4,000 per sign including lining

New signs

New warning signs can help provide guidance and warnings to highway users.

INDICATIVE COSTS

Up to 600m: **£30 - £60**
750mm - 900mm: **£60 - £90**
1200mm and over: **£130 - £200**
Chevrons: **£50 - £150**

NB: costs vary by type and size

Directional signs/wayfinding signs/route studies

Directional and wayfinding signs are designed to facilitate safe and efficient navigation of the highway enabling users to efficiently locate destinations and routes.

To be confirmed on a case-by-case basis

Street lighting works

Standard column

Design is required to ensure that the proposed location is safe and appropriate, and in accordance with existing guidance and policy.

INDICATIVE COSTS

£2,000 - £3,000 per column

NB: additional costs for road crossings, trenching and connections all charged as required.





Ornamental column

Where appropriate, ornamental lighting columns can be installed instead of standard lighting columns. Design is required to ensure that the proposed location is safe and appropriate, and in accordance with existing guidance and policy.

INDICATIVE COSTS

£3,000 - £10,000 per column

NB: additional costs for road crossings, trenching and connections all charged as required.

Temporary flashing signs for schools

LED or fibre optic signs can be used to indicate the presence of a school, may indicate advisory speed limits during peak hours and are typically installed with 1-2 signs on each approach. Design is required to ensure that the proposed location is safe and appropriate, and in accordance with existing guidance and policy. Public consultation is also likely to be required

INDICATIVE COSTS

£3,000 - £5,000 each

NB: additional costs for road crossings, trenching and connections all charged as required.



Road crossings, trenching and connections

Road crossings, trenching and connections are necessary enabling works associated with all streetlighting schemes.

INDICATIVE COSTS

£100 - £200 per m

Complex design schemes

Complex Design Schemes require a design by the Minor Works Team and/or involve significant cross departmental collaboration resulting in high levels of staff time. The need for statutory consultation and Traffic Regulation Orders (TRO) means that there is a risk of costs being incurred by Members for the investigation and design of undeliverable schemes.

For deliverable schemes, the need for statutory consultation and TROs still means that there are significant challenges associated with the design and delivery of Complex Design Schemes in the same financial year. Complex Design Schemes are not recommended options for Delegated Budget schemes due to their cost prohibitive nature. If a Complex Design Scheme is desirable, early Member engagement and agreement with officers is essential.

Delivery timescales for Complex Design Schemes

Due to the nature of the works involved, the design and delivery of any Complex Design Schemes will exceed 12 months.

Pedestrian facilities



Pedestrian refuge/ speed control refuge

Refuges can provide safe crossing points for pedestrians. They also narrow the carriageway and, as a result, have a traffic calming effect. Where no pedestrian facilities are included, these are known as speed control refuges. Investigation, survey, and design works to determine viability and suitability, and a Road Safety Audit and statutory consultation, will be required.

INDICATIVE COSTS

£6,000 - £20,000

Traffic calming schemes

Vertical and horizontal traffic calming measures are designed to reduce the speed of vehicles installed on street lit roads subject to a 30mph speed limit or lower. Investigation, survey, and design works to determine viability and suitability, and a Road Safety Audit and statutory consultation, will be required along with necessary signage works.

All traffic calming schemes require a bespoke design and, if desirable, it is suggested a full year's funding allocation is earmarked as an indicative cost. To determine viability a feasibility study can be raised (see Additional Costs).

Examples of traffic calming measures include mini roundabouts, speed cushions, humps and tables, build-outs, and chicanes.

Regulatory schemes

Regulatory schemes such as speed limits and enforceable road markings require investigation, survey, and design works in accordance with existing guidance and policy to determine viability and suitability, and a Road Safety Audit, statutory consultation and Traffic Regulation Order will be required along with necessary signage / lining works

INDICATIVE COSTS

Traffic regulation order amendment:
£6,000, plus line marking £15 per m, and £135 -£200 per sign and post

Footways & cycleways

Shared footway/cycleway

Shared footway/cycleways involve alterations to existing footways to allow for mixed or segregated shared use by pedestrians and cyclists. Investigation, survey, and design works to determine viability and suitability, and a Road Safety Audit and statutory consultation by Highways Act notice, will be required along with necessary.

INDICATIVE COSTS

£150 - £200 per m² (Tarmacked surface)

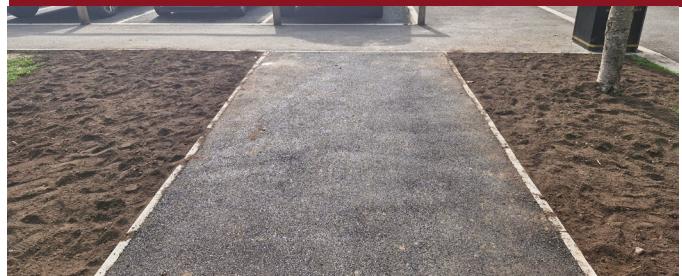


New footway

New footways can provide safe and convenient pedestrian links for local trips. Investigation, survey, and detailed design works to determine viability and suitability, and a Road Safety Audit and statutory consultation, will be required.

INDICATIVE COSTS

**(<500m²) £50 - £90 per m²
(Tarmacked surface)**



Street lighting schemes

Vehicle Activated Sign (VAS)

VAS are LED or fibre optic signs used to address problems of inappropriate speed where conventional signing has not been effective. Investigation, survey, and design works in accordance with existing guidance and policy to determine viability and suitability, and a Road Safety Audit will be required.

INDICATIVE COSTS

£5,000 - £10,000 per sign

NB: additional costs for road crossings, trenching and connections all charged as required.

Additional costs

Additional costs that need to be factored in when looking at the delivery of Routine, Detailed Design and Complex Design Schemes.

Traffic management

Traffic Management allows for the managed safe passage of pedestrian and vehicles and keeps sites safe for working operatives. It is an essential part of highway works schemes and is determined by multiple factors such as road speed, road width, traffic counts etc.

INDICATIVE COSTS

Road closure: **£500 - £600 per day**

Temporary traffic lights: **£500 - £600 per day**

Lane closures: **from £1,600 per day**

Convoy working: **£1,000 - £2,000**

Restricted working - Some roads and streets in Warwickshire have special designation where working hours are restricted. In such cases percentage uplifts between 10% - 46% are applied to the overall cost of a scheme.

Other

Road safety assessments/audits

INDICATIVE COSTS

£500 - £1,500 per Assessment/Audit

Carriageway cores

Necessary when resurfacing a carriageway over 500m². Determines existing pavement structure and will also identify the presence of tar as there are additional costs associated with disposal of hazardous material.

INDICATIVE COST

£1,000 per day

Lining surveys

Lining surveys provide an assessment and record of the lining present along a route. Subsequent lining orders can then be tailored before the beginning of a project to suit need/budget

INDICATIVE COSTS

£100 per survey

Speed surveys

Speed surveys will record vehicle speed of carriageway users over a fixed period. The results of speed surveys are used to determine the extent of speed related issues and inform the design/need of traffic calming schemes.

INDICATIVE COSTS

From £130 per site/week (advised duration 2 weeks)

Topographical surveys

Topographical surveys will record the existing carriageway and footway levels allowing the fall of existing pavements to be determined. Topographical surveys can be used to help determine solutions where drainage or standing water issues are present.

INDICATIVE COSTS

From £600 per survey

Feasibility study

Feasibility studies allow for an engineer to consider the viability and effectiveness of a scheme and provide professional Engineering comment and advice.

INDICATIVE COSTS

£1,000 non-refundable investigation fee

Delegated Budgets

Indicative cost summary sheet

Routine Schemes

Sign cleaning

£15 - £170

Replacement Signs

(including cost to remove existing sign)

Warning/Regulatory signs: £20 - £250 per sign

Replacement Posts

(including cost to remove existing post)

£183 - 260 per standard post

Gully Jetting

£5,320 per week

Drainage repairs

To be confirmed on a case-by-case basis

Drainage grips

To be confirmed on a case-by-case basis

Repair/replace existing street furniture

Remove & replace bollards (wooden, cast iron or plastic): Up to £350

Remove & replace pedestrian guardrail:

£100-160 per m (plus £60 per m for painting)

Re-paint existing traffic signpost £25 per post

Replace planters: to be confirmed on a case-by-case basis

Replace cycle stands: to be confirmed on a case-by-case basis

Footway/cycleway repairs & footway patching (<100m²)

£20 - £135 per m²

Kerbing

Replacement/new kerbing only: £30 - £50 per m (standard concrete)

Carriageway repairs & carriageway patching (<500m²)

Surface Treatment - Bituminous surfaces, Paved surfaces: £20 - £135 per m²

Siding out

Up to £5 per m

Hedge cutting/ flail verge mowing

£800 per day

Detailed Design Schemes

Footway/footpath/cycleway resurfacing

(>100m²)

Surface treatment - Bituminous surfaces, paving slabs, paving blocks: £25 - £90 per m²

Carriageway resurfacing (>500m²)

Surface treatment - Bituminous surfaces, paving blocks, paving slabs: £20 - £80 per m²

Dropped crossings

£3,000 - £5,000

Verge hardening

To be confirmed on a case-by case basis

Tree planting

New street tree £250 - £450 (varies by species)

Pollarding

From £400 per tree

Crown reduction

From £400 per tree

Tree Grills & Tree pits

Per Grille: £500 -£2,000

Per tree pit: £400 - £500

New bus shelters

£5,000 - £15,000

Pedestrian guard railing

£210 per m

Birdsmouth fencing

£55 per m

Bollards Up to £350 (wooden, cast iron or plastic)	Village gateways £3,150 - £4,000 per sign including lining
Cycle stands To be confirmed on a case-by-case basis	Directional signs/wayfinding Signs/route studies To be confirmed on a case-by-case basis
New road markings (advisory) Lining: Up to £12 per m Symbols: Up to £400 per symbol Letters: Up to £25 per letter Road studs: Up to £25 per stud Blacking out of existing lining (non-permanent): £4 per m Removal of lining by hydro blasting: £4,000 per day	Standard column £2,000 - £3,000 per column Ornamental column £3,000 - £10,000 per column Temporary flashing signs for schools £3,000 - £5,000 each
New drainage schemes To be confirmed on a case-by case basis	Road crossings, trenching & connections £100 - £200 per m

Complex Design Schemes Pedestrian refuge/speed control refuge £6,000 – £20,000	Shared footway /cycleway (<500m²) £150 - £200 per m ² (Tarmacked surface)
Traffic calming Feasibility study – see additional costs	New footway (<500m²) £50 - £90 per m ²
Regulatory schemes £6,000 TRO plus up to £15 per m and £135 - £200 per post & sign	Vehicle Activated Sign £5,000 - £10,000 per sign

Additional Costs Traffic management Road closures: £500 - £600 per day Temporary traffic lights: £500 - £600 per day Lane closures: from £1,600 per day Convoy working: £1,000 - £2,000	Carriageway cores £1,000 per day
Traffic regulation order / Highways Act Notice £6,000 + £3,000 per additional notice/order	Lining surveys £100 per survey
Road safety assessments/audits From £500 - £1,500 each	Speed surveys From £130 per site/week
	Feasibility study £1,000 non-refundable investigation fee

