

ANNEX 3

Guide to the Cost of Capital / Highway Work

Introduction

This is a guide to the cost for the provision of highway works. It is intended to help Ward Committees when they are considering such issues in their area. Costs are approximate and do not include the fees involved with design and implementation, which could add about 20% to the costs given. The cost of any legal procedures is not included unless stated. The diversion and protection of public utility apparatus may be required where excavation is required and this can add significant costs.

Procedure

All requests for highways works will be considered in the context of CYC policies and in conjunction with other programmes such as Local Safety Schemes and Speed Management. Proposals need to comply with legislation such as The Highways Act 1980 and The Traffic Signs Regulations and General Directions 2016 and be designed in accordance with national standards.

Any significant changes to the highway will require a number of procedures to be followed. A feasibility study will cost approximately £1,000 and additional surveys are likely to be necessary - both ground surveys and traffic data such as vehicle numbers, speed and pedestrian data. A preliminary design will be required to seek approval from elected members, or the Director of Economy and Place for minor works. This process will include a road safety audit and public consultation, utilities companies will need to determine whether their cables or pipes may be affected and trial holes may be necessary to determine what alterations are required.

Approval of a scheme will be followed by detailed design (materials, kerbs, paving, road markings etc) and further road safety audit (subject to risk assessment) to ensure that a safe design can be constructed.

Once constructed a final road safety audit would check the built facility and this could recommend changes. Inevitably some proposals that are investigated will be found to be undeliverable or inappropriate. Future running and maintenance costs also need to be considered.

Highway Maintenance Works

- Footway tarmac renewal – approx £70 / square metre
- Footway flags replace and relay – approx £70 / square metre
- Carriageway repairs – approx £80 / square metre
- Traffic management may be required and is dependant on each project – approx £200 per week for simple works but could be as much as £2,000 for a complex/lengthy project.
- Kerb replacement £40 per linear meter

Pedestrian facilities

Pedestrian crossing facilities must be considered carefully and may not be appropriate in some locations. Surveys of pedestrian crossing movements and vehicle numbers are likely to be needed to assess what provision may be appropriate. Formal crossing facilities do not necessarily make a crossing point safer, particularly where pedestrian and/or vehicle numbers are low, where there is no natural focal point for crossing movements and where there is no record of recent pedestrian accidents. Pedestrian safety is the prime consideration but the impact on other road users, particularly cyclists must be accounted for.

Formal crossing facilities



Zebra crossing - £20,000 – £25,000

Puffin crossing - £35,000 - £40,000



Toucan crossing (combined pedestrian and cycle crossing) - £40,000 - £50,000 - only appropriate where there are existing off road cycle facilities or they are being provided as part of a scheme.

Informal crossing facilities



Pedestrian refuge - £5,000 - £8,000 provided the road is wide enough - a standard refuge is 2m wide and traffic lanes wide enough for cyclists and cars to pass at the same time should be almost 4m wide.

A road less than 10m wide may require widening which would add a considerable cost. Narrower traffic lanes may be supported where there are very few cyclists.



Dropped kerbs and tactile paving - £1,000 per pair - the crossing point could be further highlighted by including bollards each side of the tactile paving, this increases the cost to approx £1600 per crossing.

Other pedestrian measures



Bus shelter - from £5,000 - not including connection to the electricity supply for lighting within the shelter.

Provision of new footway – a new 1.8m (minimum width) bituminous material footway including kerbs is approximately £125 per linear metre.

Traffic Calming

There are a number of techniques available to achieve traffic calming, every site will require individual consideration via a feasibility study before any scheme can be progressed. Typical scheme costs will range from £10,000 to £100,000.



Village Gateway –



signs, lines and coloured road marking material up to £4000, electrical work is required to illuminate signs or improve street lighting.

Mini roundabout – Without any resurfacing of the carriageway the signs, lines and splitter islands will cost approx. £18,000 to £24,000. It is generally necessary to resurface the carriageway and this will add considerably to the cost which will depend on the area and the existing condition of the road.



Carriageway narrowing - one way priority traffic operation including signs, lines and lighting costs up to £20,000, depending on length



Vehicle Activated Signs - cost £2500 to £7500 depending on size and electrical supply but are only used if the site meets the criteria in CYC policy. Speed surveys are needed to evidence speed management assessments to identify appropriate sites.



Speed table/crossing point - including associated works such as coloured surfacing, street lighting, signing and lining from £10,000 depending on the length and carriageway width.



Raised table junction

with crossing point - including associated works such as coloured surfacing, street lighting, signing and lining from £25,000 depending on the length and carriageway width.



Road humps – without a crossing point a road hump will be from £4000 depending on whether street lighting requires improvement.

Speed cushions – a pair of speed cushions including signs and lines from £2,500 to £6,000 depending on whether street lighting requires improvement

Parking Controls



Vehicle Crossing – approx £2,000 for a 4mx5m concreted crossing in a flagged footway or £1,500 constructed in tarmac footway.



Parking bay - A parking bay for four vehicles within existing highway verge from £10,000 (this type of work will often require utility diversion/protection).



Off Highway Bay – approx £80 / metre constructed in eco grid or tarmac



process is required for the usage of double or single yellow lines, this could cost upto approx £1500 plus the cost of the lines and signs and will depend on length and location. It is more appropriate to request schemes to be included in the annual review and this could be cheaper.

Road Markings - consultation/legal

White / yellow lines - approx £1 per metre, hatching approx £7.50 per square metre for new or refreshed markings. Removal of lines is approx £2 per metre. Road studs are £10 - £20 to provide and install. New provision will require the feasibility to be considered.

Street lighting

Provision of a standard street lighting column £1,000, including service connection but costs may be greater where there are specific issues over connections.

This cost can increase significantly if any extra cabling is needed for electricity supply, up to £60 per linear metre.

Repair/renewal where feasible approx £100 per column.

Signs - to erect a warning sign or regulatory sign on a new post costs £150 - £500 dependant on size.

Direction signs on new posts typically cost £200 - £1000 dependant on size.

Any sign that requires external illumination will cost a further £500 to £1000 for the cost of connection to the electricity supply. Solar powered illumination may be possible as an alternative.



Regulatory signs such as speed limit and No Entry signs require a legal order which involves further costs along with specific design

considerations. Speed limit changes would need to be considered in accordance with the CYC speed management programme.



Bollards - the installation of bollards requires assessment to ensure that they are appropriate to the location and do not create a hazard to vehicles or pedestrians. Wooden bollards are £140 each. Individual requests for other assets will be quoted i.e. ornamental cast iron bollards



Seat/bench - supply and installation £1,000 per bench.

Grit bin – installation of new £500. £50 per refill.



Painting:

Street light- 8m tall primer and top coat, £200



Bollard- Primer and top coat, £75



Sheffield bike rack- single hoop, installed £200



