

# Part 6: Working on existing highways - Section 278 and Section 184 procedures

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## Section WEH1: Introduction

- General
- About Section 278 of the Act
- About Section 184

### General

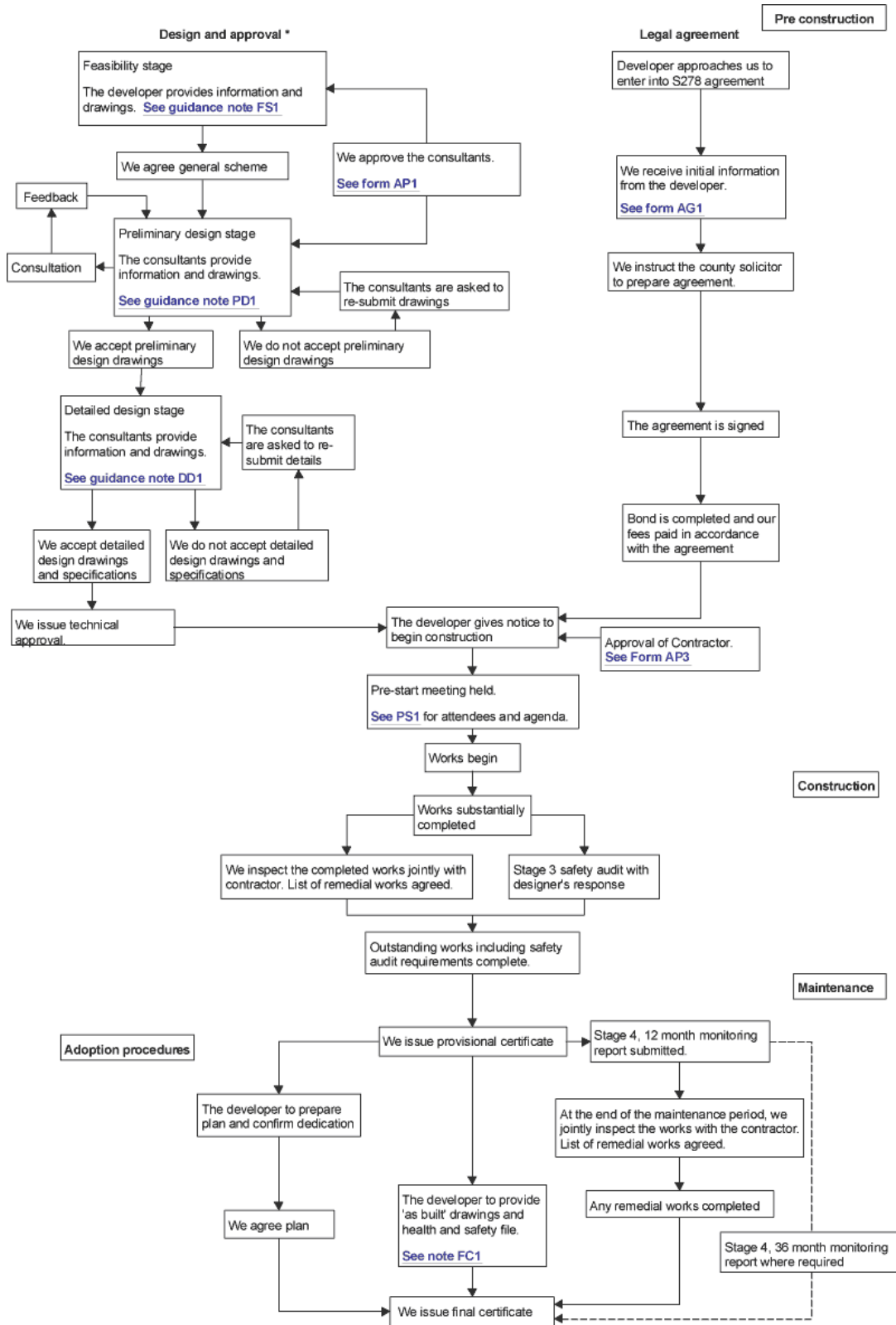
6.1 This Part details our requirements for the construction of works on the existing public highway under Section 278 of the [Highways Act](#) . It covers what we will require from you in terms of:

- technical details, including safety audits and drawings, to enable us to approve your proposed highway works;
- completing a Section 278 legal agreement, to provide for the construction of your highway works
- you constructing and maintaining the highway works before we take over their maintenance; and
- our fees and other payments relating to the construction and maintenance of the road.

*(Note: Please see our ['Highways Status Search'](#) page for details of which existing roads are adopted)*

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## Figure WEH1 Section 278 procedures



\* Note: You must carry out design and approval work before you complete the Section 278 legal agreement with us, we will normally ask you for an 'abortive costs' letter and/ or up-front payment of initial fees. In this letter, you must agree to pay our costs if you do not proceed with your development proposals for any reason. We will not normally carry out design checking and approval unless we have received this letter.

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- 6.2 You should consult both us and the planning authority at an early stage of preparing your development proposals, especially if the proposed highway works are extensive and have potentially significant environmental impacts, for example removal of trees and hedges. This will give an opportunity to resolve any potential problems relating to the works before you submit any planning application.

### Note

Wherever 'the Act' is mentioned in this Part, it refers to the Highways Act 1980 unless otherwise stated.

### About Section 278 of the Act

- 6.3 Where development requires works to be carried out on the existing highway, you will need to complete an agreement with us under Section 278 of the Act.
- 6.4 Section 278(1) of the Act (as amended by the New Roads and Street Works Act 1991) says: "*A highway authority may, if they are satisfied it will be of benefit to the public, enter into an agreement with any person -*
- a) *for the execution by the authority of any works which the authority are or may be authorised to execute, or*
  - b) *for the execution by the authority of such works incorporating particular modifications, additions or features, or at a particular time or in a particular manner, on terms that that person pays the whole or such part of the cost of the works as may be specified or determined in accordance with the agreement.*"
- 6.5 We normally use this section of the Act to allow you, the developer, to employ a contractor and for that contractor to work on the existing public highway in the same way as if we, the highway authority, were carrying out the works instead. You are normally responsible for all aspects of the works on the public highway, from their design, through supervising construction and ensuring that the works are fully and finally completed to our satisfaction.
- 6.6 Section 278(3) of the Act, says: "*The agreement may also provide for the making to the highway authority of payments in respect of the maintenance of the works to which the agreement relates and may contain such incidental and consequential provisions as appear to the highway authority to be necessary or expedient for the purposes of the works.*"
- 6.7 This section of the Act entitles us to seek expenses for future maintenance and we intend to do this through commuted sums. This will allow us greater flexibility to adopt non-standard layouts and materials without placing undue burdens on our maintenance budget or Council Tax payers. However, even if you offer a commuted sum payment, we may still not approve your proposals and allow you to work on the highway if we consider them to be inappropriate or unacceptable on highway-safety grounds. (Please refer to paragraph 6.65 onwards for further details on commuted sums.)
- 6.8 Section 278 agreements are often used together with an agreement under Section 106 of the Town and Country Planning Act 1990. Such agreements, between a planning authority, us (where highway works are covered) and a

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landowner and developer, are used to regulate developments where using planning conditions would not be appropriate. Granting planning consent depends on the landowner or developer entering into a Section 106 agreement. Section 106 agreements may cover a number of matters such as securing off-site highway works, landscaping, phasing the development, paying sums of money and so on.

- 6.9 Both Section 278 and Section 106 agreements operate in the same way in relation to highway works. They follow the procedures involved in the approximate order they occur from initial consultations through to final completion of the highway works.

Advice for developers on Section 184 process can be found [here](#).

### Section WEH2: Completing a Section 278 agreement and providing surety

- The Section 278 agreement
- The Construction (Design and Management) Regulations
- Surety

#### The Section 278 agreement

- 6.10 Before you can enter into a Section 278 agreement you must obtain full planning permission for the development from the planning authority. This must include approval of any reserved matters relating to the highway works.

Note: If you want to start the Section 278 procedures before you receive planning consent, we will only consider this if you agree to refund all of our costs if planning consent is not given or the development does not proceed for any other reason.

- 6.11 The Highway Authority has a standard format for Section 278 agreements. However, at times it will be necessary to make amendments, for example to allow for specific structures and commuted sums.
- 6.12 You will need to supply certain information before our solicitors can begin preparing the agreement. The information required is listed on [guide AG1](#). This will include, where appropriate, a letter confirming that you will be responsible for all our costs if planning permission is not given or the development does not proceed for any other reason.
- 6.13 Once we have received the correct information, we will instruct our solicitors to prepare the agreement. You will be charged a fee for us preparing the agreement. Please see [Section WEH7](#).

#### The Construction (Design and Management) Regulations

- 6.14 Before we sign the Section 278 agreement, you must provide us with written proof that you have informed the Health and Safety Executive in writing that you are appointed client for the works for the purposes of the 'Construction (Design and Management) Regulations' (CDM Regulations). We will **not** sign the agreement until you have provided this proof.

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**(Note:** As defined in the CDM Regulations, *client means any person for whom a project is carried out, whether it is carried out by another person or is carried out in-house.*” The regulations go on to state: *Where the person appointed [as client for the works] makes a declaration [to the HSE that he will act as client for the works for the purposes of these regulations], from the date of the receipt of the declaration by the [HSE], such requirements and prohibitions as are imposed by these Regulations upon a client shall apply to the person so appointed (as long as he remains as such) as if he were the only client in respect of that project.*” In other words, as client for the works, you will be responsible for meeting the Regulations and making sure that the works are designed and constructed in line with the Regulation. This is not our responsibility.

### Surety

6.15 We must be protected against the risk of unforeseen expenditure if you leave the highway works unfinished for any reason. So you should provide us with an estimated cost of the highway works for our approval, including any highway structures, highway drainage, works to service providers equipment (for example, gas, water, cable TV). We will provide a cost for any commuted sums (where applicable). You must provide us with an appropriate surety equal to the approved cost of the highways works including commuted sums. This may be in the form of:

- a bond with a recognised financial institution; or
- the equivalent sum of monies lodged with us.

6.16 For information on the other fees we charge for highway works covered by Section 278 agreements and on commuted sums, please see Section WEH7.



## Section WEH3: Designing your highway works

- General requirements
- Traffic regulation orders
- Traffic calming and other traffic management schemes
- Structures
- Traffic-signal equipment

### General requirements

6.17 The works should normally be designed in line with the standards set out in this document, including [Part 3](#), [Part 4](#) and [our Specification](#). Our [standard conditions](#) applying to highway works for new development provides additional advice, for example on utility equipment (such as gas, water, electricity, and so on). If you have not carried out development in the region before, you should also first read [Part 1](#) and [Part 2](#).

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- 6.18 It is in everyone's interest that the highway works are designed by reputable chartered consulting engineers with experience in designing highway works. So, we must approve the consulting engineers who you choose to design the highway works. At the appropriate time, you must give us details of the consultants you want to use. You can find a list of the information required on [guide AP1](#).
- 6.19 We will require safety audits for all highway works covered by Section 278 agreements. They must be carried out by an accredited safety audit team that is independent from the designers. You will be responsible for commissioning and paying for all safety audits. Please see appendix D for further details on safety audits.
- 6.20 You must comply with all aspects of the Construction (Design and Management) Regulations 1994 and indemnify us (protect us from legal responsibility) against all claims, liabilities and actions if you fail to do so.
- 6.21 Feasibility stage: You should agree the need for any off-site highway works and their general nature with us before you submit a planning application. We will need to be satisfied that any proposed highway works:
- will off-set the highways and transportation impacts of your development; and
  - are possible within the land constraints of the development;
- before we recommend to the planning authority that the development is acceptable.
- 6.22 You will be required to supply key information at the feasibility stage so we can be satisfied that the proposed highway works are possible. You can find a list of the information required in [guide FS1](#).
- 6.23 The preliminary design stage: When we have agreed the general scheme layout at the feasibility stage, we will need your approved consultants to submit a preliminary design. This should minimise the need for a lot of design changes at the later, detailed design stage. You can find a list of the required documentation we need on [guide PD1](#). Once we have received confirmation that you will be responsible for all the costs if planning permission is not given or your development does not proceed for any other reason, we will check your design.
- 6.24 At this stage, you or your consultants should talk to other parties who could have an influence on the design of the works, for example utility providers (for example gas, water, cable TV) or the Environment Agency. You should then analyse any comments you receive and forward them to us (together with your response) for a decision.
- 6.25 In the case of traffic-calming schemes, we will carry out consultations with interested parties in accordance with paragraph 6.31. After we have received and analysed comments, we will forward our decision to you. You must incorporate any changes to the design we ask for as a result of the consultations.
- 6.26 The detailed design stage: When we have approved the preliminary design, we will need your consultants to submit the detailed design. You can find a full list of the requirements on [guide DD1](#).
- 6.27 At this stage we will:

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- serve the appropriate notices to the utility companies under the New Roads and Streetworks Act; · carry out noise assessments if appropriate; and
- design the street lighting.

6.28 When we have accepted the detailed design, we will issue technical approval.

6.29 The agreement will state that we must approve the detailed design before any construction work starts.

### Traffic regulation orders

6.30 Where a development requires changes to an existing traffic regulation order (TRO) or a new order is required, you will normally be required to pay all costs associated with this, including all consultation and legal costs. TROs are subject to statutory procedures and consultations. This can be a very lengthy process and a successful outcome is not guaranteed. You should get advice on the likely timescale and take this into account when you programme your proposals.

### Traffic calming and other traffic management schemes

6.31 Where the works involve traffic calming, we will consult with interested parties, such as the parish or town council and the local county councillor and residents, about the traffic-calming schemes in line with normal Council practice. This may include a public exhibition and other consultations beyond minimum statutory requirements. We also carry out consultations on other traffic management schemes, in line with our normal policies and procedures (which we will advise you of during the design process).

6.32 After we have received and analysed comments, we will forward our decision to you. You must incorporate any changes to the design we ask for as a result of the consultations.

6.33 You must pay the costs of this consultation whether or not the outcome is successful. You should remember that the consultation procedure can be lengthy which will have implications on the programme of works.

### Structures

6.34 Where the highway works involve structures please refer to Part 4, Section MC15 for design requirements.

### Traffic-signal equipment

6.35 Please contact the Highway Authority at an early stage for advice regarding traffic-signal equipment, procedures, design, supply and installation requirements of traffic-control equipment which forms part of the highway works.

6.36 You must pay us a commuted sum towards the future maintenance of the traffic-signal equipment. Please also see Part 4, Section MC18 for further details on our commuted sums policy.

6.37 You must allow us access at all reasonable times to any part of the site on which cables, pipes, ducts or other apparatus associated with the traffic-signal equipment is to be installed or is located. This will enable us to carry out any works we need to do to install and maintain the cables, pipes ducts or other apparatus.

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### Section WEH4: Obtaining our approval for your highway works

6.38 We will only issue a technical approval when:

- we have completed all design checks;
- the stage 1 and 2 safety audit processes have been satisfactorily completed; and
- you have supplied any amended details we require.



### Section WEH5: Constructing the highway works

- Before you begin
- Health and safety
- Site inspection
- Timescale for completing the highway works

#### Before you begin

6.39 Where works are being carried out under a Section 278 agreement, you must not begin construction unless and until:

- we have given you technical approval;
- the Section 278 agreement has been completed and signed and an appropriate surety is set in place;
- you have provided us with written confirmation that you have notified the Health and Safety Executive that you are client for the works for the purposes of the Construction (Design and Management) Regulations (see paragraph 6.14 for further details);
- all necessary fees have been paid to us; and
- the following requirements have also been satisfactorily completed

6.40 Notification of start: You must normally give us at least five weeks' notice in writing of your intention to begin construction work or begin it again.

6.41 Approving your contractor: Your highway works must be constructed by a contractor (including any sub-contractor) who has relevant experience and capabilities. You must not start construction of the highway works until we have approved your contractor. So, you must supply information about the contractor you want to use. You can find a list of the information we need on [guide AP3](#).

6.42 Where you are unable to supply us with satisfactory details, or where we have previously experienced problems with a contractor (for example with quality of workmanship) we will not approve that contractor.



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- 6.43 The contractor's insurance: You must indemnify us (protect us from legal responsibility) against any claims by third parties arising from the highway works. Before we will approve your contractor they must provide us with written evidence that they have, as a minimum, £5 million public liability insurance with no limit on the number of claims.
- 6.44 Pre-start meeting: You must arrange a 'pre-start' meeting with the appropriate Development Approvals engineer, Development Inspections officer and inform residents and the local member. You can find a list of people who should be present at the meeting, and a typical agenda, in [PS1](#).

### Health and safety

- 6.45 You must comply with all aspects of the Construction (Design and Management) Regulations 1994 and indemnify us (protect us from legal responsibility) against all claims, liabilities and actions if you fail to do so. You are also required to submit full details of any traffic management proposals for the construction of the highway works for approval by the appropriate officer.

### Site inspection

- 6.46 You are responsible for the day-to-day supervision of the highway works construction. We will only inspect the works to check that they are being constructed in accordance with the approved drawings and our requirements.
- 6.47 It is in everyone's interests that the works are supervised by a competent engineer who is experienced in site supervision of highway works. So we must approve the supervising engineer. The level of supervision you must provide will depend on the nature and scale of the works. For larger schemes, you must provide supervision at all times. We will discuss and agree the level of supervision you must provide at the pre-start meeting.
- 6.48 You must give our representatives access to the works in progress at all times. These visits do not free you from your responsibility for supervising the work and making sure that it is carried out in a proper and safe manner, and in line with the specification. The agreement will state that you must carry out the highway works to our satisfaction and you must comply with any reasonable requests made by our representatives.

### Timescale for completing the highway works

- 6.49 Once you have begun work on site it is your responsibility to complete the highway works to our satisfaction and within a 'reasonable' period to minimise any potential disruption to highway users.
- 6.50 We impose a time limit on completing highway works. Normally, the works must be completed, that is we have issued a provisional certificate, not later than 12 months after their construction started but this maybe a substantially shorter period on minor schemes.
- 6.51 Where you do not complete the highway works within the specified time limit and we agree an extension of time, the Authority reserves the right to charge you extra fees towards our additional administrative and inspection costs. Please see paragraph 6.63 onwards for further details. We may call on the bond or use the surety monies that you lodged with us to complete the works.



### Section WEH6: Maintaining and adopting the highway works

- Issuing a provisional certificate
- Issuing a final certificate

#### Issuing a provisional certificate

6.52 We will issue a provisional certificate of completion once:

- you have substantially completed the highway works to our satisfaction;
- you have completed all street lighting to our satisfaction and provided appropriate electrical test certificates;
- any planted landscaping areas, grassed areas, trees, shrubs and so on that we are to adopt have been fully planted and established;
- the works (including any existing and new planted landscaping and so on) have been jointly inspected (that is by us, you and your contractor) and no significant defects have been identified, or where they have, you have agreed to remedy them to our satisfaction;
- the stage 3 safety audit has been completed and all changes that we require have been made satisfactorily; and
- you have supplied us with a plan showing any areas of land that are to be dedicated as highway and you must provide any highway boundary markers.

6.53 When we issue a provisional certificate the amount of bond can be reduced, usually to 10% of the original amount. The exception to this is where you are paying us a commuted sum in which case the bond cannot be reduced to a value less than the 'provisional' commuted sums that we have calculated.

6.54 You will then be responsible for maintaining the highway works for a minimum period, usually twelve months. The Authority may require an extended maintenance period for soft landscaping. This allows any defects in the works to become apparent after they are brought into use.

#### Issuing a final certificate

6.55 We will issue a final certificate of completion when the following actions have taken place.

- You must contact us at the end of the maintenance period to arrange a further joint inspection of the highway works (including any landscape planting, trees, grassed areas and so on). We will issue you with a list of any outstanding remedial works we require you to do, which you must then complete to our satisfaction.

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- You must have maintained the highway works to our satisfaction during the maintenance period.
- You must have maintained any existing or new landscape planting, trees, shrubs, grasses areas and so on to our satisfaction during the highway works' maintenance period.
- You must pay us any commuted sums that are required.
- You must pay us any other charges that are required, for example a charge to cover the bulk clean and lamp change for illuminated signs (see Part 4, paragraph 4.114) or to cover similar for street lighting (see Part 4, paragraph 4.129).
- Stage 4 safety audit may be required and if so completed to our satisfaction. We will decide whether to issue the final certificate once the Stage 4 12-month report has been completed. (Please see [appendix D](#) for further information on safety audits).
- You must provide us with 'as built' drawings, preferably in an electronic form on CD, for example Autocad file. See [guide FC1](#).
- You must provide us with the health and safety file, on CD, produced in line with the Construction (Design and Management) Regulations 2007 (CDM).
- The land dedication plan must be agreed.
- Paid all staff costs.

6.56 After all of the above has been done to our satisfaction, we will:

- issue a final certificate of completion;
- inform you that the bond can be cancelled; and
- adopt any areas dedicated to us as highway to be maintained at public expense.

### Section WEH7: Payments to us

- Our fees
- Commuted sums

#### Our fees

6.57 We make a charge for the work involved in:

- preparing and managing the Section 278 agreement;
- checking the design of the highway works, any associated structures and any highway drainage; and
- inspecting the works on site.

6.58 The charge for administration, design checking and site inspection is a fixed percentage based on the estimated cost of the total highway works, as agreed with the authority or actual cost of total highway works, as agreed with the local authority at an early stage to discuss fees.

6.59 We will make additional charges for design checking and site inspection of highway structures based on 'actual' costs. (Please see Part 4, Section MC15 for

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further details on structures.) We will also charge additional fees, based on 'actual' costs, for SUDS and 'non-standard' drainage systems. (Please see Part 4, Section MC8 for further details on drainage.)

- 6.60 We will also charge a separate fee of 10% of any commuted sums towards the costs of our additional administration and inspection work.
- 6.61 There is also an additional fixed fee for each agreement plus disbursements (money we pay on your behalf) to cover legal costs. This fee is fixed by the Legal Department and we review it every year.
- 6.62 If the highway works are still not complete after the time limit specified in the agreement, we will offer you an extension of up to twelve-months; however we will reassess the bond and charge you a further 3% inspection fee based on our assessment of the cost of the outstanding works, with a minimum charge of £1000.
- 6.63 If a period of two years or more has elapsed since we issued the provisional certificate and the final certificate has not yet been issued, we will charge you a further fixed fee of £500 for additional administration and inspection work.

### Committed sums

- 6.64 For some time we have normally required commuted sums to cover maintenance of such items as highway structures, noise fencing, traffic signals and 'heritage' street lighting where they are to be adopted as part of works carried out under a Section 278 Agreement, We have now broadened this requirement in accordance with the Adept guidance document "Committed Sums For Maintaining Infrastructure Assets" to ensure works required to enable new development do not place undue burdens either on our budgets or on Council Tax payers.
- 6.65 You will normally have to pay commuted sums on all works carried out as part of a Section 278 agreement, including:
- all materials (whether or not they are materials outside our usual Specifications);
  - any street furniture;
  - any signing and lining
  - any new landscaping within the highway, including trees; and
  - Sustainable Drainage Systems (SuDS), for example, flow-attenuation devices, swales and storage areas).

Note: Where you are proposing SuDS, you must hold discussions with all relevant parties at an early stage (and certainly before you submit your planning application) to agree ownership and responsibility for the facility.

This is not an exhaustive list. There are other occasions detailed throughout this document where we require the payment of commuted sums, for example vertical traffic calming.

- 6.66 Part 4, Section MC18 gives more details on commuted sums and how we calculate them.

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6.67 Part 4, Section MC18 gives more details on commuted sums and how we calculate them.

### **Section WEH8: The Land Compensation Act 1973 and the Noise Insulation Regulations 1975**

6.68 Under the Land Compensation Act 1973 people can claim compensation if the value of their property is depreciated by noise and other specified physical factors arising from the use of a new or altered highway. The Noise Insulation Regulations 1975 require us to offer noise insulation or grants to occupiers of dwellings subjected to noise at or above the specified level due to the use of a new or altered highway. The agreement contains a clause requiring you to indemnify us (protect us from legal responsibility) against the full costs of any payments we make under these regulations. We will notify you about any claim we receive and also about any offers of noise insulation we are making, if any.

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## Supporting guides to Part 6

- Guide AP1 - Approval of consultants
- Guide FS1 - Section 278 Agreements - feasibility stage
- Guide AG1 - Section 278 Agreements - information to be supplied by developer
- Guide DD1 - Section 278 Agreements - information required at detailed design stage
- Guide AP3 - Required contractor information
- Guide PS1 - Pre-start meeting
- Guide FC1 - Section 278 Agreements - as-built drawing requirements
- Guide PD1 - Section 278 Agreements - information required at preliminary design stage

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## Approval of Consultants Form - Guide AP1

### Information required from developer about the proposed consultants

The level of information we will require will depend, amongst other things, on whether or not your intended consultant has worked before on a project of a similar scale and nature and whether or not we have been satisfied with the way that they have performed. Where the consultant has more than one office, we will need to know which office(s) will be undertaking the project.

#### Company details

- Company name
- Head Office address, telephone and fax numbers
- Local Office address, telephone and fax numbers
- Website
- Contact details
- Brief description of the firm's business
- Statement of the Company's manpower and resources available to them to carry out the design
- Curriculum Vitae of staff who will carry out the design work
- Details of Quality Assurance Accreditation

#### Previous Design work over the past five years

For each scheme give the following:

- Title of Scheme and date
- Brief description
- Cost of Scheme
- Name and address of Client
- Name, address and position of a responsible person within LCC from whom a reference may be obtained

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## Feasibility Stage Guidance Notes - Guide FS1

### Section 278 agreements - feasibility stage

The level of information we will require will depend, amongst other things, on the scale and location of your proposed works.

The information that we require must be submitted along with any other relevant supportive drawings and information to assess the proposed works and overall principals of the design prior to more detailed design being carried out. This will hopefully avoid any abortive design at a later stage.

<b>Key Information - Feasibility Stage</b>
Brief description of intended works/development
1:2500 (or appropriate) scale plan, showing provisional landtake/highway boundaries
Provisional longitudinal section (with k values) of centre line
Any known design constraints e.g. Statutory Undertakers, Land Issues, Structures, Tree Preservation Orders
Any known relaxation/departures from standard to be considered in the design
Design speed selection for each highway link
Justification of highway cross section (carriageway width etc for appropriate traffic flows)
Justification of junction type
Drainage strategy showing intended outfalls
Information on any structures required
Issues identified through the Transport Assessment and Travel Plan i.e. traffic calming, pedestrian requirements, infrastructure works
Pedestrian and cyclist facilities/strategy
Public transport facilities/strategy
Intended treatment of existing Rights of Way
Any special material consideration i.e. street furniture in conservation areas
Safety audit stage 1 (If available)
Environmental assessments
Accommodating works for persons with disabilities i.e. raised bus stops, tactiles
AADT (Annual Average Daily Traffic) figures for design purposes
Consideration for requirements for safety fence
Other specific information



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## Developer Agreement Form - Guide AG1

Section 278 agreements: Information to be supplied by the developer

1. Developer's full name and address
2. Contact details
3. Names and addresses of parties to the Agreement
4. Details of Solicitors
5. Proof of land title
6. Details of planning permission
7. Location of site
8. 6 copies of plan showing application site
9. 6 copies of General Layout plan of works showing limit of works
10. Detailed description of the highway works
11. Estimated cost of the highway works (including Utility Company costs)
12. Whether a Bond or a Cash deposit will guarantee the Agreement
13. Letter to confirm the covering of reasonable (abortive) costs
14. Confirmed that all legal fees will be paid including any abortive costs

## Detailed Design Guidance Notes - Guide DD1

### Section 278 agreements – Information required at detail design stage

The level of information we will require will depend, amongst other things, on the scale and location of your proposed works.

The information that we require must be submitted along with any other relevant supportive drawings and information to assess the proposed detailed design. This will enable the efficient consideration of your proposals and hopefully avoid any abortive work at a later stage.

### General

- 1:1250 plan showing scheme extents, and existing road network. (An alternative scale may be used to suit nature/size of scheme)
- If not already supplied at a preliminary design stage, provide all information normally required for a preliminary design check
- The design basis e.g. LHDG or DMRB

### Detailed design layouts

1:500 Plans showing:

- Site clearance details
- Drainage layout: Pipe runs, manhole and gully positions. Pipes intended for adoption should be highlighted
- Earthwork details

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- Carriageway and footway construction details indicating areas of different pavement types areas of overlay, reconstruction, planing etc.
- Kerbing and edging details
- Traffic sign positions and road markings. Each sign should have an accompanying schedule giving post sizes, mounting heights illumination details, foundation details etc.
- Landscaping proposals
- Road lighting positions
- Fencing proposals showing highway boundary positions and visibility splays
- Safety fence layout
- Structures position and orientation
- Electrical works i.e. trenches and cabling

### Vertical design

- Longitudinal sections showing centreline and channels in relation to existing ground levels
- Proposed gradients and k values for sag and crest of curves, horizontal schematic showing curve radii, transitions
- Cross sections showing proposed levels and profile in relation to existing levels and proposed/existing
- Boundaries

Note: Appropriate exaggerated vertical scales should be adopted for longitudinal and cross sections

### Junction design

#### Roundabouts:

- Provide 1:200 or 1:500 plan showing proposed spot levels, contours and crown lines
- Provide design checklist to ensure geometric compliance with DMRB (Vol. 6) – TD 16/93 – Geometric Design of Roundabouts.
- Provide existing, generated & forecast turning flows for the morning and evening peak periods
- Provide traffic reserve capacity calculations for the AM & PM peak periods using the latest version of ARCADY
- Demonstrate deflection
- Show visibility lines
- Provide segregation for cyclists and pedestrians as required

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## Priority junctions:

- Provide 1:200 or 1:500 plan showing proposed spot levels, contours and crown lines
- Provide design checklist to ensure geometric compliance with DMRB (Vol. 6) – TD 42/95 – Geometric Design of Major/Minor Priority junctions
- Provide design checklist to ensure geometric compliance with DMRB (Vol. 6) – TD 41/95 – Geometric Design of Vehicular Access to All-Purpose Trunk Roads (where appropriate)
- Provide existing, generated & forecast turning flows for the morning and evening peak periods.
- Provide traffic reserve capacity calculations for the AM & PM peak periods using the latest version of PICADY
- Justification for the chosen specific layout
- Provide suitable routes for pedestrians and cyclists as required

## Traffic signal junctions:

- Provide a 1:500 or 1:200 plan on a topographical base showing signal heads, pole position, ducting etc.
- Provide existing, generated and forecast turning flows for the morning and evening peak periods.
- Provide appropriate traffic reserve capacity calculations for AM and PM peak periods using LINSIG or TRANSYT (where appropriate)
- Ensure that design complies fully with DMRB (Vol 6) Standard TD 50/99 – The Geometric Layout of Signal Controlled Junctions & Signalised Roundabouts

## Pedestrian crossing facility

- Provide a 1:500 or 1:200 plan on a topographical base, showing signal heads, pole position, ducting etc.
- Ensure that design complies with the following standards/advisory notes (as appropriate): -
  - a) Traffic Advisory Leaflet – 1/02 The Installation of Puffin Pedestrian Crossings
  - b) Traffic Advisory Leaflet – 04/98 – Toucan Crossing Development
  - c) Traffic Advisory Leaflet – 10/93 – ‘Toucan’ An unsegregated Crossing for Pedestrians and Cyclists
  - d) Statutory Instruments – 1997 No.2400- Road Traffic – The Zebra, Pelican and Puffin Pedestrian Crossings Regulations & General Directions 1997
  - e) Local Transport Note 2/95 – The Design of Pedestrian Crossings
  - f) Design Manual for Roads Bridges (DMRB) (Vol 8) – TA 15/81 – Pedestrian Facilities at Traffic Signal Installations

## Leicestershire Highway Design Guide

- g) DMRB (Vol 6) – TA 86/03 – Layout at Large Signal Controlled Crossings
- h) DMRB (Vol 8) – TD 35/91 – MOVA Traffic Control
- i) DMRB (Vol 8) – TA 12/81 – Signals on High Speed Roads
- j) DMRB (Vol 8) – TA 16/81 – General Principles of Control by Signals
- k) DMRB (Vol 8) – TA 68/96 – Assessment & Design of Pedestrian Crossings

### Statutory Undertakers (for example gas, water, cable TV)

- Plans showing existing apparatus along with any diversion/protection Proposals.

### Structures

Design must comply with agreed Approval in Principle (AIP). All design/check certificates in accordance with BD2/02 shall be supplied to and endorsed by the Technical Approval Authority.

The following drawings are required:

#### General arrangement:

- Detail design – details should include: dimensions, levels, materials and finishes, drainage and service ducts, parapet details, earthwork details, foundation details.
- Reinforcement details showing – cover to steel and reinforcement details in accordance with BS 8666:2000.

#### Geotechnical Information:

- Initial ground investigation proposals
- Desk study information including preliminary deep borehole work
- Ground investigation including detailed proposals with borehole locations, schedules, long sections and laboratory testing philosophy
- Factual report
- Interpretative report including calculations
- Earthworks design including drawings and specification
- Structural foundation design

#### 'Buildability'

- Does the design allow for the contractor's input?
- Provide evidence that construction issues have been addressed in the design, for example 'Beany' blocks constructed to default radii, manholes positioned out of the carriageway

# Leicestershire Highway Design Guide

## Traffic management

- Are road closures required?
- Provide information for both local and heavy diversion routes (where appropriate)
- Give evidence on the provisions made for local transport services during the construction phase

## Drainage design

- Drainage design calculations/output
- Gully spacing design output
- Provide information on the depths of cover of lines
- Provide invert and chamber sizing of access chamber
- Provide discharge calculation at the outfalls
- Provide details of retention storage
- Provide calculations and information on mechanical elements e.g. pumps and throttles
- Provide information on petrol interceptors

## Landscaping

- Provide information on planting strategy
- Provide drawing of planting areas
- Provide planting specifications
- Give information on the preparation works and also soil types to be used
- Provide listing of all species of plants and density
- Provide maintenance regime

## Construction Design and Management Regulations

- Provide all risk assessment and a copy of the pre-tender health and safety plan
- Provide a copy of F10

## Other Supporting Information Required

- Traffic flows
- Carriageway construction design calculation
- CCTV videos of any existing drainage used as outfall/connection
- Sign schedules
- Autotrak plots for HGV manoeuvres at appropriate locations
- Stage 2 safety audit problems, recommendations and designer's responses where appropriate

## Leicestershire Highway Design Guide

- Regional standard drawings: The standard drawings should be used except where no appropriate detail covers the proposal. They are available on the [Highway Design Guide webpage](#). It is not necessary to import the drawings into a consultant's drawing frame, but simply collate them in a binder or booklet.

# Leicestershire Highway Design Guide

## Required contractor information - Guide AP3

### Contractor to supply the following information:

The level of information we will require will depend, amongst other things, on whether or not your intended contractor has worked before on a project of a similar scale and nature in the region and whether or not we have been satisfied with the way that they have performed.

1. Company name
2. Head Office address, telephone and fax numbers
3. Local Office address, telephone and fax numbers
4. Website
5. Contact details
6. Name and address of insurance brokers
7. Employers liability insurance details
8. Public liability (third party) insurance details
9. Brief description of the firms business
10. A statement of the company's tools, plant, technical equipment and manpower available to them for carrying out the works
11. Details of previous similar work (for each scheme give the following)
  - title of scheme and date
  - brief description
  - cost of scheme
  - state whether main contractor of sub-contractor
  - name and address of client
  - name, address and position of engineer supervising the contract from whom a reference may be obtained
12. Details of Quality Assurance Accreditation to BS EN ISO 9000
13. A bankers address for references
14. Health and safety questions:
  - name and position of senior person within the company with responsibility for co-ordinating health and safety

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- copy of the most recent health and safety policy statement including the organisation in place, and a list of the arrangements in force (the contents page may suffice as a list of arrangements)
- name, health and safety qualifications and experience of safety advisor
- are formal systems in place to ensure that all plant, equipment and vehicles used on site are regularly inspected and adequately maintained? Enclose a recent example of an inspection/ maintenance report.
- has the company developed permit to work systems, safe systems of works, safety procedures etc appropriate to the work undertaken by the company? Enclose a recent example
- are specific resources allocated for safety supervision, training and safety equipment as appropriate to the work undertaken by the company? Give details.
- are risks assessed, assessments recorded and control implemented as appropriate, prior to commencement of work?
- has the company been prosecuted or served with a prohibition and/or improvement notice for any breach of health and safety in the last three years?



# Leicestershire Highway Design Guide

## Pre-start meeting - Guide PS1

### Pre-start meeting

The level of detailed to be discussed at the meeting will depend, amongst other things, on the scale and location of your proposed works.

**Development Approvals Engineer to Chair.**

**Items in red require developer/contractor information at prestart meeting.**

### Attendees:

Representatives from:

- Highways Development Management
- District Engineer/Highway Design
- Consultant
- Developer
- Contractor
- Police if appropriate

### List of matters to be considered for the agenda

#### 1. Introductions

- a) Introductions – name/role/company
- b) Attendance list – contact details
- c) Out of hours/emergency contact

#### 2. Scheme details

- a) Brief description of works
- b) Approved drawings (as per Technical Approval letter)
- c) Clarification of any queries on approved drawings
- d) Are LCC structures required in this agreement
- e) Street lighting status.
- f) Site access arrangements
- g) Associated agreements e.g. s50 licence, permit to work in the highway
- h) Associated public utility works

# Leicestershire Highway Design Guide

## 3. Legal matters

a) Legal agreements:

Fees paid: in full/part (delete as appropriate)

Bond in place: yes/no (delete as appropriate)

Agreement signed: yes/no (delete as appropriate)

Commuted sum value:

b) RSA requirements

c) Completion of any necessary associated consents, easements or wayleaves, ordinary watercourse consent, s184 permit, s50 licences

d) Impact on any existing Public Rights of Way? TTRO/TRO/Diversion Order in place?

e) Contractors valid public liability insurance

## 4. Site Inspection

a) Site induction required/PPE requirements?

b) Site inspection checklist handover to developer

c) Associated bond reductions/Certificates

d) Notification required for inspections (48 Hours)

e) Routine maintenance requirements

f) Mud, materials and equipment on the highway

g) Protection of trees

h) Running surfaces – PSV/limestone/stone size

# Leicestershire Highway Design Guide

## 5. Traffic management

- a) Road space booking approved?
- b) If appropriate, TTRO in place?
- c) Advance signing
- d) Approval of any proposed directional signing/ unauthorised signs
- e) Any specified construction traffic routes
- f) Street works noticing requirements- notice of works form

## 6. Contractual matters

- a) Proposed start date and Contractors programme
- b) Details of any works carried out on site to date
- c) Phasing of works
- d) Principal Contractor
- e) Working hours as awarded in the developer planning permission
- f) Health and safety plan/file – F10/GS6

## 7. Customer care

- a) Liaison with affected parties
- b) Letter drop to affected residents/businesses (including description of works, traffic management proposals, start date, anticipated duration, working hours etc.) **To be approved by LCC Development Inspections prior to issue**
- c) Work boards e.g. “work start here (date) for (xx) weeks. Delays possible”
- d) Identification of staff (logo etc.)

## Leicestershire Highway Design Guide

### Section 278 Agreements: As-built drawing requirements - Guide FC1

#### Section 278 agreements - As built drawing requirements

The level of information we will require will depend, amongst other things, on whether or not your intended contractor has worked before on a project of a similar scale and nature in the region and whether or not we have been satisfied with the way that they have performed.

Delays in providing the required information will delay issue of the final certificate and cancellation of the bond.

We require 1:500 (or other appropriate) scale as built drawings showing:

- drainage
- highway boundaries
- construction details
- visibility splays
- signing and lining,
- street lighting
- dedication drawings
- any features to be adopted with maintenance implication outside the highway boundary (e.g. outfalls)

In addition to drawings, you must provide the calculations for any structures.

# Leicestershire Highway Design Guide

## Section 278 Agreements: information required at preliminary design stage - Guide PD1

The level of information we will require will depend, amongst other things, on the scale and location of your proposed works.

The information that we require must be submitted along with any other relevant supportive drawings and information to assess the proposed works and overall principals of the design prior to more detailed design being carried out. This will hopefully avoid any abortive design at a later stage.

<b>Key Information - normally required at the Preliminary Design Stage</b>
<b>General</b>
- Details of planning consent and conditions
- Current state of S278/S38 agreement where appropriate
- Details of any residential properties likely to result in Part 1 claims or noise insulation as part of Land Compensation Act
- Stage 1 safety audit with designers response
- Details of pedestrians/cyclist/public transport provision
- Intended treatment of existing Rights of Way
- Traffic flows or traffic study reports
- Evidence of public participation or meetings with relevant third parties
- If not already submitted provide information normally required at the feasibility stage
<b>Layout</b>
- Any known relaxations departures from design standards to be identified in the design
- Design speed selection for each highway link
- Justification of highway cross section (carriageway width etc) for appropriate traffic flows where not already agreed or approved (by us or the planning authority)
- Justification of junction type where not already agreed or approved (by us or the planning authority). Agree any traffic signal geometric requirements
- 1:1250/1:500 horizontal plans of existing and proposed layout
- Provisional highway boundary position ensuring that signage, street lighting, maintenance are provided for
- Areas intended for landscaping and provisional proposals
- Provisional longitudinal sections of centreline with k values
- New cross sections or typical cross sections showing relationship of proposed profiles with existing ground level
- Visibility splays
- Consideration for requirements for safety fence
<b>Drainage</b>
- Drainage strategy showing intended outfalls
- Environment Agency approval for discharge of drainage
- Easement if present or proposed
- Proposals for pumps or throttles and temporary storage areas
- Drainage longitudinal sections and indication of those pipes to be adopted by the Council
<b>Earthworks</b>
- Details of borrow pits and or temporary storage areas
- Sources of imported material
- Recycling or other environmental strategy
- Ground investigation reports and identification of any special features or geotechnical aspects

# Leicestershire Highway Design Guide

## Section 278 Agreements: information required at preliminary design stage - Guide PD1

<b>Key Information - normally required at the Preliminary Design Stage</b>
<b>Signing</b>
- Direction signing strategy
<b>Structures</b>
- Structures. General arrangement of structures and AIP Document in accordance with BD 2/02
<b>Statutory undertakers (for example, gas, water, cable TV)</b>
- If it is appropriate at this stage to serve a provisional NRSWA Notice, provide 25 plans suitable for this purpose
<b>Environmental aspects and heritage</b>
- Identification
- Permit to work and licenses
- Reports and findings of surveys and searches

# Leicestershire Highway Design Guide

## Section 184 - Advice for Developers – Guide s184

Section 184 of the Highways Act 1980 deals with the formation of vehicle crossings over footways and verges. There will be no change in the existing procedure for domestic or minor accesses which are dealt with by the relevant area office. However, alterations to existing, and formation of new, vehicular crossings that cannot be covered by Leicestershire County Council standard drawings SD/11/10 and SD/11/11 will now be categorised as ‘major’ or ‘non-domestic’ S184 applications and will be dealt with by Highways Development Control at County Hall.

The reason for this is to provide a consistent approach throughout the County and to ensure fees are imposed which cover the time spent on the applications. We will ensure accesses are constructed fit for purpose and meet the requirements of any relevant planning conditions. ‘Major/non-domestic’ S184 applications will typically consist of:

- New access on industrial developments.
- Accesses that require radius kerbs.
- Accesses that require tactile crossing points.
- Accesses to multiple properties or units.

### What needs to be done before any works commence?

- The cost of the works should be secured in the form of a bond, or a cash deposit.
- Our inspection fee of £1500 should be paid.
- Detailed engineering plans are submitted to and technically approved by a highways officer.
- Following technical approval a S184 permit is issued.
- Statutory undertakers should be contacted to locate any issues with existing services (Form VA5).
- You must indemnify us (protect us from legal responsibility) against any claims by third parties arising from the highway works. Before we will approve your contractor, they must provide us with written evidence that they have, as a minimum, £5 million public liability insurance with no limit on the number of claims.
- A pre-start meeting should be arranged with the relevant area inspector (details will be provided with notification of technical approval). At least five working days notice should be given before any works commence.

For Leicestershire County Council please contact [road.adoptions@leics.gov.uk](mailto:road.adoptions@leics.gov.uk)

### How can I get the S184 deposit/bond returned quickly?

The process of reaching technical approval of the plans should be completed well before any works commence. The works should be constructed to our standard and inspected by the relevant member of the area office. When the Inspector, on behalf of the Highway Authority, is satisfied that the access has been constructed fit for purpose a provisional certificate of completion will be issued and the deposit/bond will be

## Leicestershire Highway Design Guide

reduced to £1500 or 10% (whichever is greater). The remainder will be returned after a 1-year maintenance period.

### **Can I have my bond reduced if I carry out partial construction of the works?**

No. A provisional certificate that will enable reduction of the bond will only be issued if all the works are completed to the satisfaction of the relevant inspector.

### **What is a satisfactory construction standard?**

For the design requirements see the Leicestershire Highway Design Guide (LHDG) –

For construction standards that apply within the highway boundary, please see Part 4 table MC4 and Part 4, table MC5.

We will also ask for the private access drive and any turning space to be surfaced with tarmacadam, concrete or similar hard bound material (not loose aggregate) for a distance and depth, dependent on the use, behind the highway boundary. This is to reduce the possibility of deleterious material being deposited in the highway (loose stones etc.).

### **How do I get Technical Approval for my access?**

You will be required to submit plans showing the following items:

- Details of access onto the highway including gradients (generally 1:10 max.).
- Details of surface water such that it does not run onto the public highway.
- Clearly defined delineation details showing extent of public highway.
- Prominently located signs/street nameplates with the words “Unadopted Private Drive”
- Standard construction details to Leicestershire County Councils specifications.
- Any additional site specific details & requirements of the planning permission.



# Leicestershire Highway Design Guide

